

REPAIR MANUAL

DACIA *SuperNova*

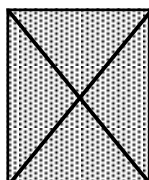
RM 524-1 MECHANICS
ENGINE: E7J
GERBOX: JH3
TAPV: B41A, B41B, B41D

The reparation methods prescribed by the manufacturer in the present document are established subject to technical specifications in force at the document issuing date.

These are subject to modifications brought by the manufacturer at the fabrication of different assemblies, subassemblies or accessories of its vehicles.

All rights reserved to SC Automobile Dacia SA.

Reproduction or translating even partially of this present document is forbidden without the written authorisation of **AUTOMOBILE DACIA S.A.**



0 General poinds vehicle

01 SPECIFICATIONS

Engine – Clutch - Gearbox.....	01-1
Vehicle identification..	01-2

02 LIFTING

Mobile jack - Protection route;.....	02-1
Elevator positioned under the carriage body...	02-3

03 TOWING

All types.....	03-1
----------------	------

04 LUBRICANTS CONSUMABLES

Condition.....	04-1
----------------	------

05 DRAINING – FILLING

Engine.....	05-1
Gearbox.....	05-2

07 VALUES AND SETTINGS

Dimensions.....	07-1
Capacity - Qualities.....	07-2
Driving belts tightening and accesories.....	07-3
Distribution belt tension.....	07-4
Cylinder head tightening.....	07-5
Wheels and tyres.....	07-6
Brakes.....	07-7
Dimensions under carriage body.....	07-8
Checking values of the front axle angles.....	07-9
Checking values of the rear axle angles.....	07-10

1 Moteur et peripherics

10 ENGINE AND LOWER ENGINE UNITS

Ingredients.....	10-1
Motor-propelling group.....	10-2
Separation - Dismantling.....	10-7
Characteristics.....	10-10
Recovery engine.....	10-17
Lowervcrankase.....	10-37
Oil pump.....	10-38
Tightening moments.....	10-39

11 UPPER AND FRONT ENGINE UNITS

Distribution belt.....	11-1
Cylinder head fitting.....	11-3

12 FUEL MIXTURE

Characteristics.....	12-1
Clapper body.....	12-4
Intake colector.....	12-5
Exhaust collector.....	12-6

13 PUMP SUPPLY

Breaking fuel supply	13-1
Injection pump.....	13-2
Petrol filter.....	13-3
Pupm flow.....	13-4
Supply pressure.....	13-5

14 ANTI-POLLUTION

Petrol vapours-aspiration	14-1
---------------------------------	------

16 STARTING AND CHARGING

Alternator.....	16-1
Starter.....	16-7

17 IGNITION AND INJECTION

Ignition system.....	17-1
Sparking plugs.....	17-2
Peculiarities.....	17-3
Placing of elements.....	17-4
Idling regime adjustment.....	17-9
Adjustment of the fuel mixture enriching.....	17-11
Enriching adaptive correction.....	17-12
Diagnosing-Introduction.....	17-15
Diagnosing-Interpreting the defects.....	17-17
Diagnosing-Conformity test.....	17-49
Diagnosing-Interpreting the states.....	17-55
Diagnosing-breakdown localization algorithm.....	17-66

19 COOLING - EXHAUST - FUEL TANK

Characteristics.....	19-1
Filling and draining	19-2
Control.....	19-3
The schema.....	19-4
Radiator dismantling and remounting.....	19-5
Cooling fan replacement for vehicles with air conditioning.....	19-6
Cooling fan diagnostic for vehicles with air conditioning.....	19-7
Resistance cooling fan replacement for vehicles with air conditioning.....	19-9
Cooling fan replacement for vehicles without air conditioning.....	19-10
Cooling fan diagnostic for vehicles with air conditioning.....	19-11
Water pump.....	19-12
Dismounting- remounting exhaust.....	19-14
Emptyng of tank.....	19-16
Tank fuel description.....	19-17
Tank fuel.....	19-20
Electric petrol pump.....	19-21

20 CLUTCH

Identification.....	20-1
Diagnostic.....	20-3
Clutch disc mechanism.....	20-9

2 Transmission

21	MANUAL GEARBOX	
	Sections.....	21-1
	Identification.....	21-2
	Tightening moments.....	21-3
	Ratios.....	21-4
	Capacity, lubricants.....	21-5
	Particularities.....	21-6
	Ingredients.....	21-7
	Parts of systematic replacement.....	21-8
	Special tools.....	21-9
	Gearbox dismounting.....	21-10

29	DRIVE SHAFTS	
	Front transversal transmission.....	29-1
	Bellows - Bearing assembly to the gearbox.....	29-4
	Bellows to wheel.....	29-7
	Bellows to gearbox.....	29-12
	Bellows to wheel.....	29-15

30	GENERAL	
	General principle schedule of the brake circuit.....	30-1
	Tightening moments.....	30-2
	Composition and dimensions of the main braking system elements.....	30-6
	Braking system diagnostic.....	30-7
	Brake connections and sewerage.....	30-12
	Brake fluid.....	30-13
	Braking circuit purging.....	30-14
	The influence of the front axle angles on the road behavior (vehicle compartment) and on tyres wear.....	30-16
	Preliminary checking.....	30-17
	Checking of the front axles adjustment.....	30-19

3 Chasis

31	FRONT BEARING ELEMENTS	
	Characteristics.....	31-1
	Suspension arm.....	31-2
	Elastic bushings of suspension arm.....	31-4
	Suspension ball joint.....	31-5
	Brake gaskets.....	31-6
	Brake caliper.....	31-7
	Brake disk.....	31-9
	Steering knuckle.....	31-10
	Steering knuckle bearing.....	31-12
	Front suspension.....	31-13
	Shock absorber, Sprint.....	31-14
	Spring assembly shock absorber.....	31-15
	Anti-roll bar.....	31-17

33	REAR BEARING ELEMENTS	
	Characteristics.....	33-1
	Rear axle.....	33-2

	Rear suspension.....	33-4
	Shock absorber.....	33-5
	Spring.....	33-6
	Brake drum.....	33-7
	Brake cylinder.....	33-8
	Brake shoes.....	33-10
	Bearing (25 x 52 x 37).....	33-12

35	WHEELS AND TYRES	
	Characteristics.....	35-1
	Wheels balancing.....	35-4

36	STEERING ASSEMBLY	
	Axial ball joint.....	36-1
	Steering box.....	36-3
	Pusher.....	36-4
	Noise absorber bearing.....	36-5
	Bellows.....	36-6
	Deformable lower shaft.....	36-7
	Steering weel position adjustment.....	36-9

37	MECHANICAL ELEMENTS CONTROLS	
	Brake pump.....	37-1
	Servobrake.....	37-6
	Air filter – servobrake retainer valve.....	37-9
	Handbrake adjustment.....	37-10
	Handbrake control lever.....	37-11
	Handbrake secondary cable.....	37-12
	Brake flexible hoses.....	37-14
	Brake pressure controller.....	37-16
	clutch hydraulic control.....	37-19
	The gear control.....	37-23
	Pedals support.....	37-25
	Acceleration pedal.....	37-26
	Acceleration control cable.....	37-27

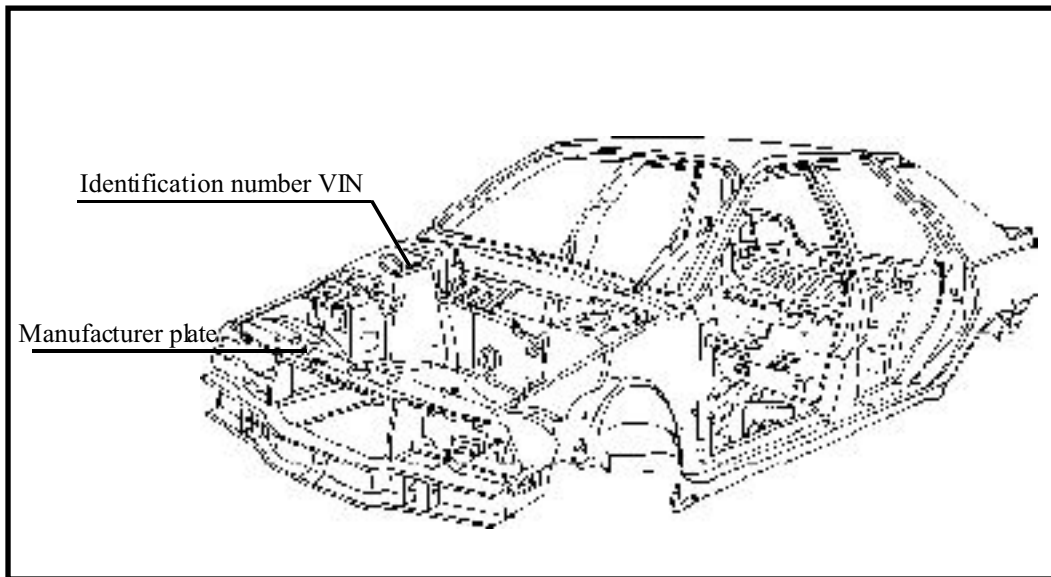
SPECIFICATIONS

01

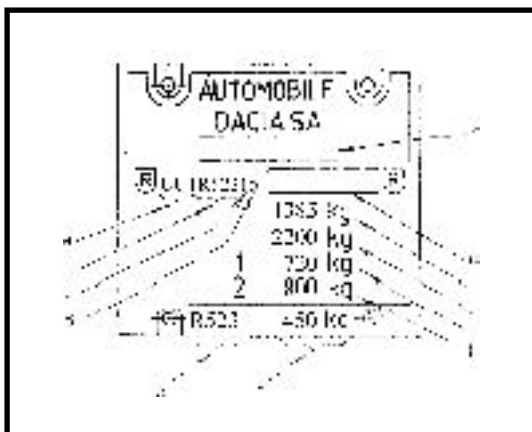
ENGINE - CLUTCH - GEARBOX

Vehicle type	Engine		Clutch type	Gearbox type
	Type	Cylinder capacity (cm ³)		
DACIA SuperNova	E7J-260	1390	215 CPOE 3500	JH3 – 050

THE PLACE OF THE MANUFACTURER PLATE, IDENTIFICATION NUMBER (VIN), LABEL WITH HOMOLOGATION MARKS



MANUFACTURER PLATE

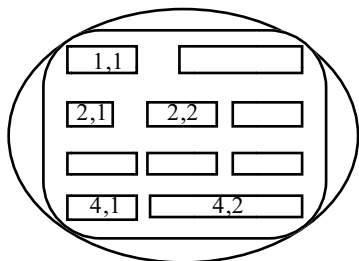


VEHICLE IDENTIFICATION

- a.. Manufacturer identification code;
- b. Code of the vehicle;
- c. Gearbox type code;
- d. Engine type code and driving location (according to VIN code structure);
- e. Vehicle code;
- f. Trailer maximum authorized weight without braking system;
- g. Homologation number for the importer country;
- h. VIS sign-one character for year modd code + 7 characters for the chassis manufacturing number;
- i. Maximum technical admissible weight of the loaded car;
- j. Maximum admissible weight with trailer with braking system;
- k. Maximum technical admissible weight on front axle;
- l. Maximum technical admissible weight on rear axle.

LABEL TYPE OVAL PLATE

The self- adhesive label type oval plate is stuck on the right lateral side surface of the dashboard. This enables the identification of the vehicle type and of its equipment, being exclusively used for after-sale activity.



The reading of he codes marked on the oval plate type label

Caption:

Line 1

1.1 Cod type auto APV (after-sale):

B41A (EU96)	B41B (EU00)	B41D (15.04)
--------------------	--------------------	---------------------

B = represents body type

A,B,D = represents engine type E7J, 1397 cmc, front wheel drive type, mechanical gearbox.

Line 2

2.1 Level of equipping: E0, E1, E2, E3

2.2 Options equipping code:

Line 4

4.1 Technical definition code, driving place.

S2 : Left hand drive

4.2 Options equipment code:

A: Normal suspension

C: Temperate climate

E: Warm climate

F: Normal heating

G: Air conditioning

K: Without pre-filter

M: Steering mechanical system

R: Without variable shock absorber

T: Without plate corrector

V: Without wheels anti blocking (ABS)

Attention

Do not unstuck or damage the label from the lateral side surface of the dashboard. This label represents the only way of vehicle identification needed to the after sale services, for a period of 8 (eight) years from the purchasing date.

VIN IDENTIFICATION NUMBER

Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CODE	U	U	1	R	5	2	3	1	5	*	*	*	*	*	*	*	*

Position	Characters explanation
1 – 3	- manufacturer identification UU1 - AUTOMOBILE DACIA SA, ROMÂNIA
4	- Vehicle type R - vehicle for persons transportation
5	- engine-gearbox unit location 5 - transversal front engine and front drive
6	- chassis type 2 - hatch – bach
7	- payload location 3 - five places : 2 front places + 3 rear bench places
8	- gearbox type 1 - gearbox with 5 + 1 steps (JH3 050)
9	- engine code and vehicle driving location - left hand drive 5 - RENAULT engine, 1400 cm ³ engine, spark ignition (E7J - 260)
10	- year model code y – 2000 1 – 2001 2 – 2002
11 - 17	- chassis manufacturing number

MOBILE JACK - PROTECTION ROUTES



Safetysign

(particularly cautionsto be observed in caseof an intervention)

SPECIAL TOOLS

DENOMINATION	CODE
Protectionroute	Cha 280-02
Adjustingsocketon mobilejack	Cha 408-01 or Cha 408-02



The use of a mobile jack impliesthe necessity of using protectionroutes.

It absolutelyforbiddenthe vehiclelifting usingthe front suspensionarms or the rear axle as supportingpoints.

The following type of mobile jack isusing the sockets, the support Cha 408 – 01 or Cha 408 – 02 in order to place the route Cha280 – 02.

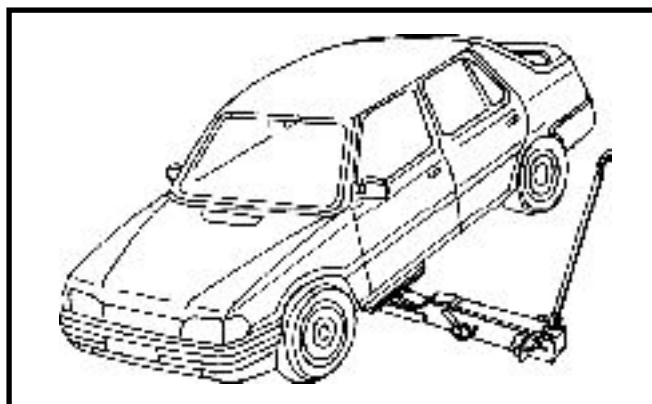
In order to lift the front or rearpart of the vehicle, take as support the liftingpoints used also for the vehiclejack.

LATERAL MOBILE JACK

Use the **CHA 280** hold.

Place it on under the thresholdat the front door level.

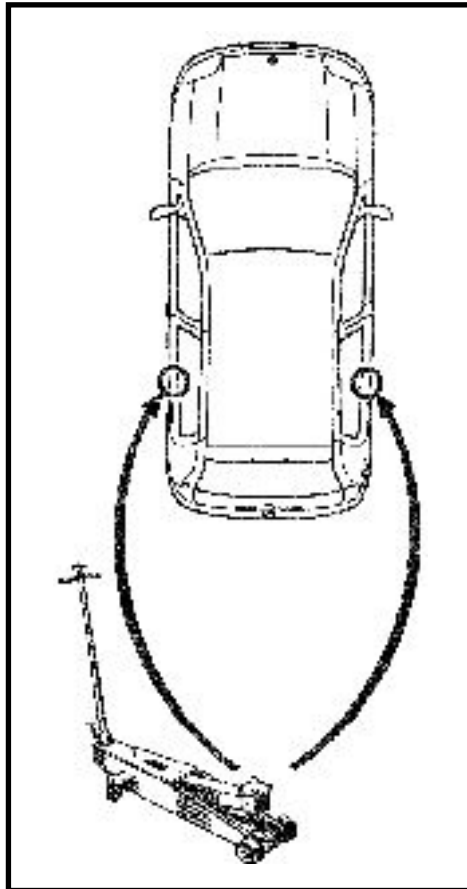
The floorclosingplate shall be positionedin the channel of the hold.



PROTECTION ROUTES

In order to place the vehicle on the protection routes, these are to be obligatory placed either under the reinforcements provided for the lifting vehicle with the vehicle jack, or under the supports placed in behind the reinforcement.

The positioning of the protection routes in the vehicle rear areas is performed by lateral lifting of the vehicle.



Safety sign:

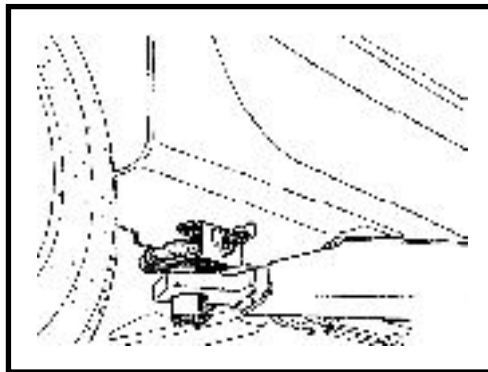
1. THE DISMOUNTING OF VEHICLE COMPONENTS CASE .

When there are not available four column elevators, two column elevators may be used, in this case, lifting slides shall be placed under the floor closing plate, at the supporting points level of the vehicle jack.

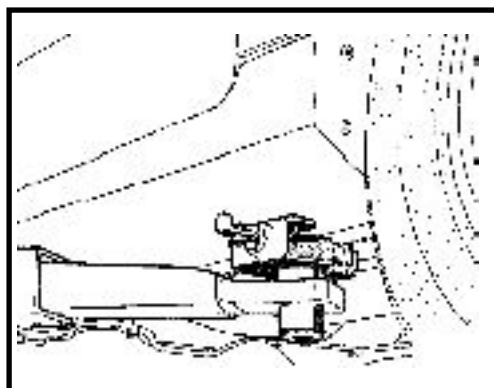
2. THE PARTICULARLY CASE OF DISMOUNTING – REMOUNTING OF THE ENGINE-GEARBOX ASSEMBLY.

In this specific case, the vehicle carriage body shall be consolidated with the two columns elevator arms using special slides.

Front



Rear



These must be obligatory placed at the right of the supporting points of the vehicle jack and must be locked in the holes/windows made in the floor closing plate.

NEVER USE AS TOWING POINTS, THE TRANSMISSION AXLES (PLANETARYSHAFTS)

The towing points, front, or rear, are to be used only for vehicle towing on wheels.

These points cannot be anyhow used for drawing out the damaged vehicle from a trench (hole), or for direct or indirect vehicle lifting on a transport platform.



Front (right)



Rear (left)

CONDITIONS

Product	Place where it is used
OILING (GREASING)	
MOLYKOTE "BR2" (LOCTITE 8103)	Front transmission pinion grooves
Grease ELFCARDREXARNT2	Right transmission joint G.I Transmission joint G.E.
Grease MOLYKOTE 33M	Gearbox control protection bellows
Grease Li Ca Pb tip II cu MoS ₂	Steering rack, pinion, oil sealing (steering box)
SEALING	
LOCTITE 518	Water pump Support thermostat Crankshaft half crankcase Gearbox half crankcase assembling Thread of the reverse driving contact. Crankshaft no.1 bearing cap
LOCTITE 5900 (RHODORSEAL 5661)	Engine lower crankcase
SOLDERING	
LOCTITE 270 (FREN BLOC)	Nut of primary shaft Screw of secondary shaft Speed V fix pinion grooves Speed V hub grooves
LOCTITE 549 (AUTOFORM)	Flywheel seating surface on the crankshaft
CLEANING	
LOCTITE METALLREINIGER (DECAPJOINT)	Cylinder head gasket surface cleaning

Specialtools – wrench MOT 1018

DRAINING: plug (1)



FILLING: plug (2)

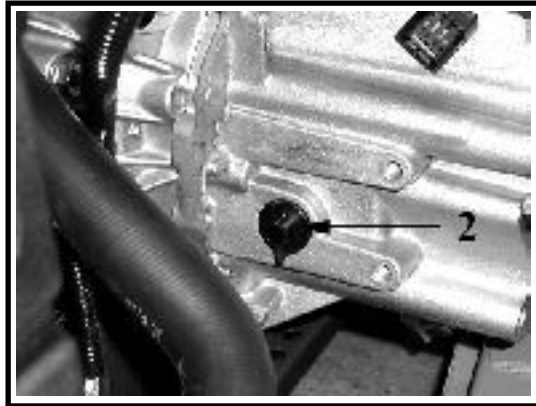


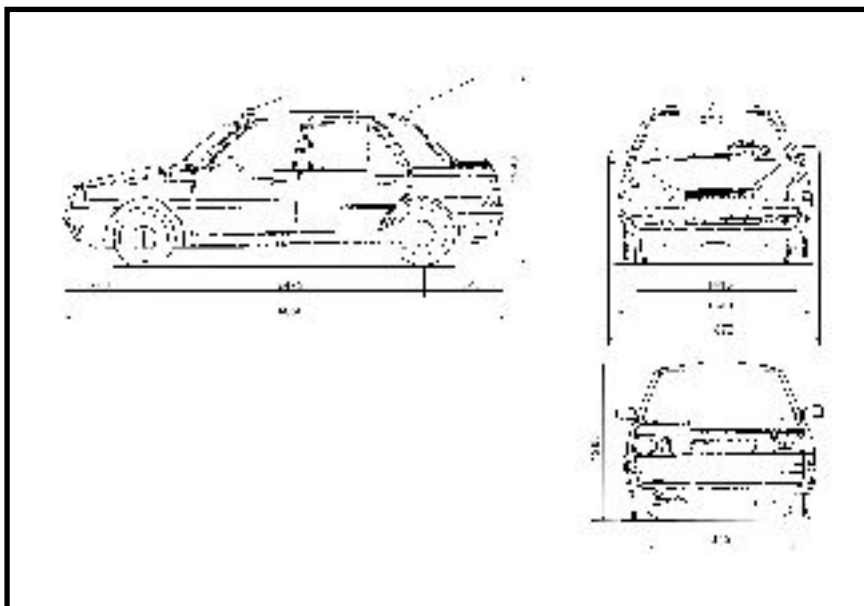
Specialtools – wrench MOT 1018

DRAINING: plug (1)



FILLING: plug (2)





DIMENSIONS (mm)		WEIGHTS (kg)	
Total length (B)	4030		
Total width (G)	1640	Unloaded vehicle weight:	
Total height (H)		* on the front axle	545
* empty	1395	* on the rear axle	405
* with lifted hatchback (H1)	1940	* total	950
Wheel base (A)	2475	Maximum authorized load	
Front wheel track width (E)	1410	* on the front axle	715
Rear wheel track width (F)	1345	* on the rear axle	670
		* total	1385
Ground clearance (K)		Authorized payload	
* loaded	134		425
Hatchback free height (Q)	925	Load with trailer with own brake	
			815
Turning radius		Load with trailer without own brake	
* Between footways	4950		450
* Between walls	5000		

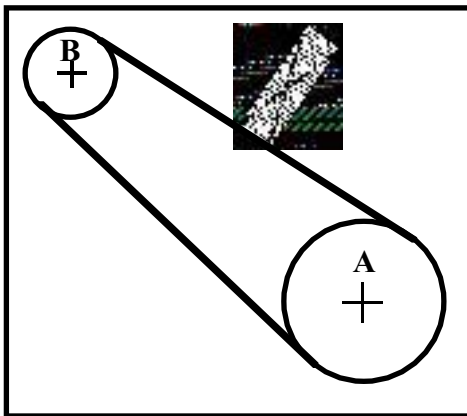
DENOMINATION	CHARACTERISTICS	CAPACITY (liters) (approximate)*
Engine oil DACIA OIL EXTRA	SAE 10 W 40; API SJ/CF	2,9*
Gearbox oil DACIA OIL EXTRAGEAR	SAE 75 W 80 W; API GL 5	3,5
Breaking fluid	SAE J 1703; DOT 4	0,650
Cooling fluid	50% cooling fluid GLACEOL RX tip D 50% distilled water	6
Refrigerant (AC)	HFC – 134 a	0,590 kg
Compressor oil	PAG SP 10 sau SP 20	135 cm ³

* To be adjusted at dipstick

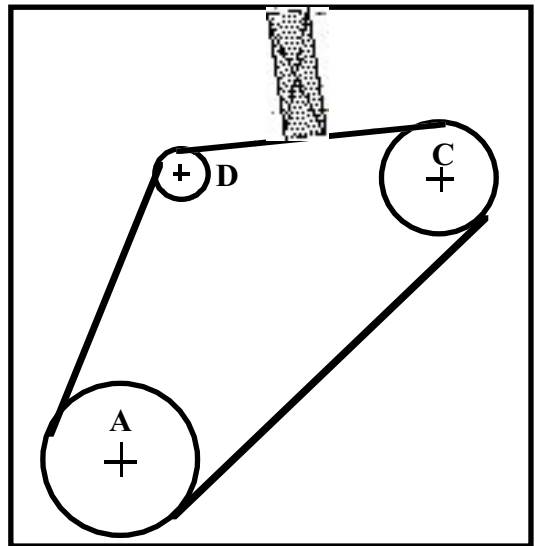
SPECIAL TOOLS

MOT 1505 - TENSIONCHECKING DEVICE

Altematorbelt



Compressor belt



- A - crankshaft
- B - alternator
- C - compressor
- D - tightener

 Control point of tension

Altemator belt tension: 263 Hz +/- 10 %

Compressor belt tension: 222 Hz +/- 10 %

NECESSARY SPECIAL TOOLS

MOT 1505 - belt tension checking device
MOT 1135 - 01 distribution belt tensioning device

DISTRIBUTION BELT TENSIONING

Cold engine (ambient temperature)

Mount the new belt, the distribution being at setting point (P.M.S.).

Place the tensioning cam and tighten the distribution belt by means of the MOT 1135-01 device.

Block the tensioning cam.

Place the reading head of the MOT 1505 device in the measuring area (at a distance of 5... 10 mm from the belt); Any of the two captors may be used on the understanding that not both of them are simultaneously in front of the belt.

Make the distribution belt vibrating (the measurement is validated by a "bip" of the device).

Tighten the belt, by acting upon the tensioning cam, until obtaining a value within the range 210...275 Hz.

Block the tightener and tighten its nut at the required moment of 3 daNm.

Rotate 5 and a half turns the crankshaft.

Unscrew the cam nut.

Tighten again the belt until obtaining a value between 145 and 185 Hz.

Obligatory tighten the tensioning cam nut at 5 daNm.

NOTE

If the value is higher than 275 Hz, the distribution belt is to be replaced with a new one.

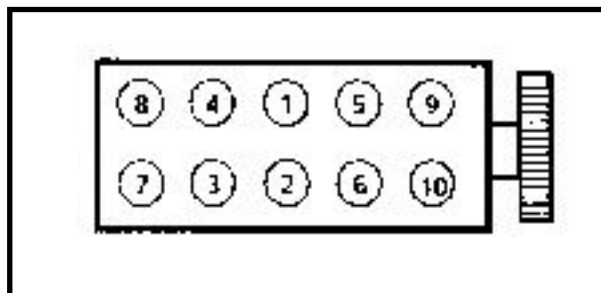


CYLINDER HEAD TIGHTENING METHOD

1. Cylinder head pre-settling

Tighten all screws at the required moment of 2 daNm, than at 97 grd +/- 2 grd as per sequenceshownin the drawing.

Wait 3 minutes, stabilization time.



2. Cylinder head tightening

Unscrew the screws 1 – 2 until total releasing.

Tighten the screws 1 – 1 at the required moment 2 daNm, than at 97 grd +/- 2 grd.

Repeat the tightening/unscrewing operation for the groups of screws 3-4-5-6 than 7-8-9 10.

The cylinder head cannot be re tightened.

VEHICLE	RIMS	TIRES	PRESSURE (daN/cm ²)	
			FRONT	REAR
DACIA SUPERNOVA	5,5B x13 5,5 Jx13H2	165 / 70 R 13	1,9	2,0

Tightening moments of the wheels nuts 7.5 daNm.

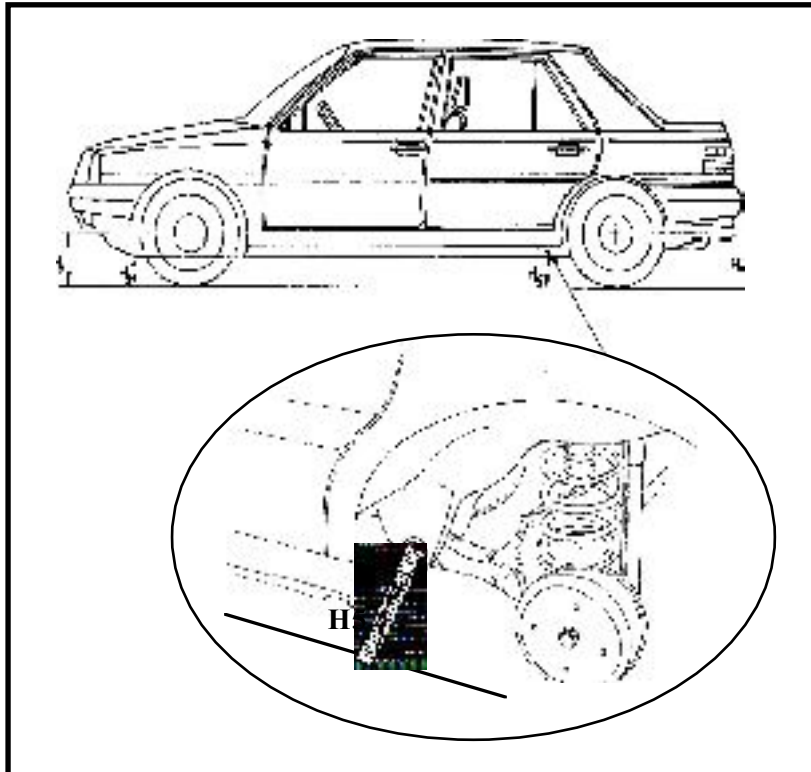
Axial run out : max 1 mm

Radial run out : max 1 mm

BRAKES

Vehicle	The width of brake disk and drum diameter (mm)				The maximum axial run out of disk	
	Front		Rear			
	Normal	Minim	Normal	Maxim	Front	Rear
DACIA SuperNova	20	19	228	229	0,1	-

Vehicle	The thickness of gaskets (mm)				Brake fluid
	Front		Rear		
	Normal	Minim	Normal	Minim	
DACIA SuperNova	14	7	5	0,5mm above the rivets	SAE J 1703 DOT 4






**DIMENSIONS UNDER CARRIAGE BODY CONDITIONING
ADJUSTMENT OPERATIONS OF THE STEERING ANGLES**

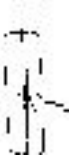


H1, H4 - distance between the wheel center to the ground.

H2 - distance from the girder lower part at the ground to the front wheel axis level.

H5 - distance from the attachment screw axis of the rear axle arm, to the ground

CHECKING VALUES OF THE FRONT AXLE ANGLES

ANGLES	VALUES	POSITION OF THE FRONT AXLE	ADJUSTMENTS
<p>CAMBER ANGLES</p> 	<p>$2^{\circ} \pm 30'$ Maximum difference between left wheel camber angle and the right one = 1°</p>	<p>H5 - H2 = 20 mm - at half load</p>	<p>Not adjustable</p>
<p>CASTER ANGLES</p> 	<p>$0^{\circ} \pm 30'$ Maximum difference between left wheel caster angle and the right one = 1°</p>	<p>H1 - H2 = 80 mm - at half load</p>	<p>Not adjustable</p>
<p>TRANSVERSAL BALL JOINT ANGLE</p> 	<p>$12^{\circ}45' \pm 30'$ Maximum difference between left wheel ball joint transversal angle and the right one = 1°</p>	<p>H1 - H2 = 80 mm - at half load</p>	<p>Not adjustable</p>
<p>PARALLELISM</p> 	<p>Toe in 0 - 2 mm lat half load or 1 ± 1 mm</p>	<p>H1 - H2 = 80 mm - at half load</p>	<p>Adjustable by rotating the tie rod of the steering rod; one rotation 1 tur = $15'$ (1,5 mm)</p>
<p>TIGHTENING POSITION OF THE ELASTIC BUSHINGS</p> 		<p>H1 - H2 = 80 mm - at half load</p>	

ANGLES	VALUES	REAR AXLE POSITION	ADJUSTMENTS
CAMBER (negative) 	0° ... 0° 30'	Release	Not adjustable
PARALLELISM (toe in) 	1 +/- 0,5 mm	Release	Not adjustable
TIGHTENING POSITION OF THE ELASTIC BUSHINGS 		H4 - H5 = 20	

For the values checking of the front axle angles, consequently the rear axle angles, the vehicle must:

- to be placed with the wheels on the rotating plates (of the bench) being in horizontal plane;
- to ensure its braking;
- to check its suspension for vehicle setting at its free height;
- to compress its front axle at half loading (by means of the compressing device DIR 500);
- to check its suspension for vehicle setting at its free position;
- steering brought at middle point and the steering box blocked in this position;

These operations are followed by the optical device attachment on the vehicle, observing the instructions of the steering angles checking bench manufacturer.

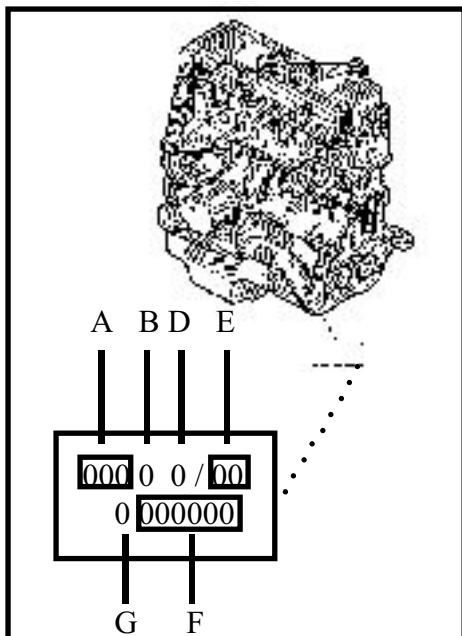
INGREDIENTS

TYPE	ORGANS
Engine oil DACIA OIL EXTRA 10 W40; APISJ/CF	Engine oiled
RHODORSEAL 5661	Lower casing, crankshaft bearing cap
Loctite FRENETANCH	Crankshaft pulley screws, flywheel screws
Exhaust Pipe Paste	Exhaust pipe sealing
Loctite 518	Water-pump, thermostat stand, crankshaft closing end casing
Loctite AUTOFORM	Flywheel face for mounting on crankshaft
Decapjoint	Cylinder head gasket surface cleaning

IDENTIFICATION

Type / Mark	Engine	Gearbox	Cylinder capacity (cm ³)	Cylinder Bore (mm)	Stroke (mm)	Volumetric Ratio	Depdlutio Norm
SuperNova	E7J -A-2/60	JH3 - 050	1390	75,8	77	9,5/1	EURO 2
	E7J-260-MB						EURO 3

Identification is done by means of a plate located on the cylinder casing.



It includes:

- A:** type of engine
- B:** engine approval letter
- D:** identity RENAULT
- E:** index of engine
- G:** engine mounting plant
- F:** engine manufacturing serial number

COUPLES FOR SCREW-FIXING (daNm)



Screws for fixing right-side stand on engine	6,2
Hydro-elastic buffer attachment nut	3,7
Screw-nut for left-side elastic buffer	6,2
Wheel screws	7,5
Screws for fixing motor-propelling group-battery stand	2,1
Screw-nut for fixing small connecting rod on steering traverse	6,2
Screw for fixing anti-swing connecting rod on gearbox case	10,5
Control bars attachment screw on gearbox connecting rods	2,7

Dismounting and re-mounting the motor-propelling group is done at the upper part of the engine compartment by means of a moving lifting device.

DISMOUNTING

Car is placed on a lift-stand with two columns;

The following are taken down: battery, air-filter case, engine bonnet, front wheels;

Oxygen probe connector is taken off;

Dismantle: thermic protection screen, catalytic converter on the exhaust collector;

The following are evacuated:

-the cooling circuit at the bottom part of the radiator;

-the oil in the gearbox;

-the oil in the engine, if necessary.

The following are taken down:

-engine shield;

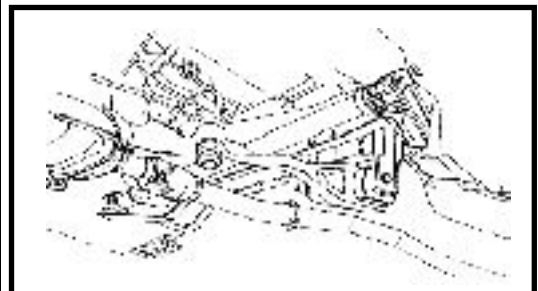
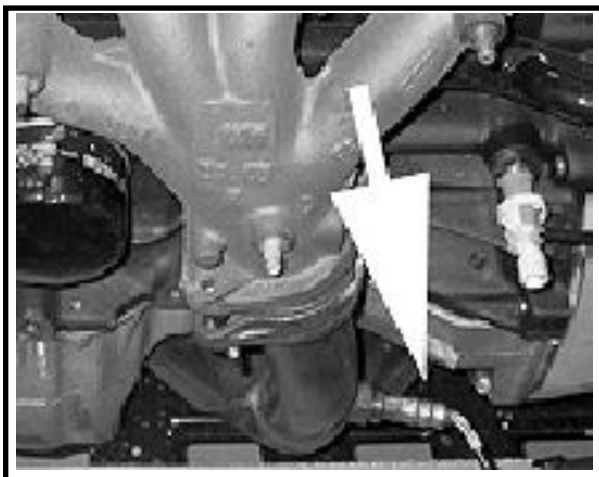
-the screws that fasten the catalytic converter on the stand;

-the pipe-collar between the catalytic converter and the trigger;

-the catalytic converter;

-the anti-swing auxiliary connecting

rod.



Disconnect the wiring connector from the reverse driving contact.

The right-side planetary transmission is uncoupled as follows:

- the brake-stirrup set is dismantled;
- disconnect the wire for the brake pads wear indicator;
- the two screws for fixing the shock-absorber of the steering-swivel stand are taken off;



The steering-swivel stand is tipped up and the planetary transmission is taken out from the planetary pinion of the gearbox;

The left-side planetary transmission is uncoupled as follows:

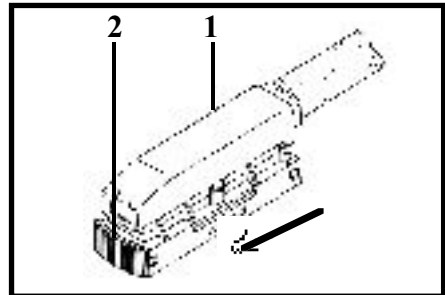
- the steering-swivel screw-nut is dismantled;
- the screws for fixing the planetary transmission on the gearbox are taken off;
- the brake-stirrup set is dismantled;
- the electric wire of the wear-and-abrasion light-indicator is taken off;
- the two screws for fixing the shock-absorber of the steering-swivel stand are taken off;

-the steering-swivel stand is tipped up and the planetary transmission is taken out;

The fuse-box in the engine compartment is dismantled.

The following are disconnected:

- connector 1 from the UCE injection (pull flap 2, then disconnect);



- the front cabling of the engine;
- the connector of the shock-sensor;
- the ventilator connector;
- the mass wire on the gearbox.

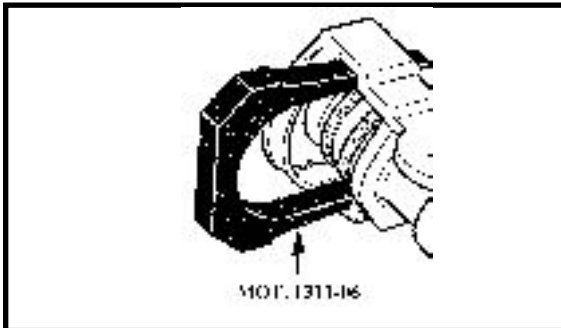
The battery protection screen is dismantled.



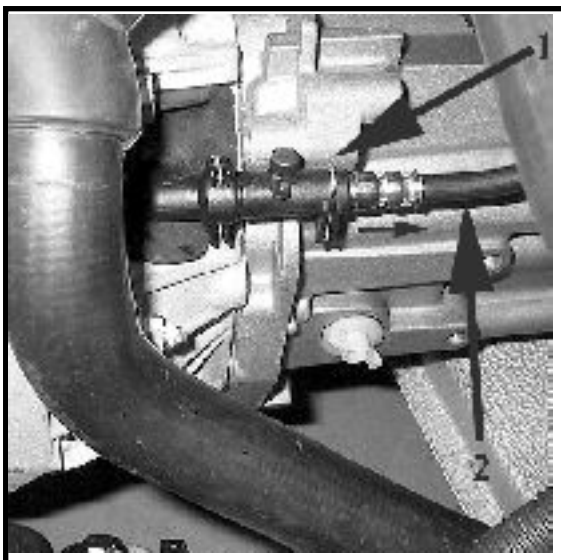
The following are taken off:

- the linking pipes coming from the radiator, by using the pincers for elastic pipe-collars **MOT.1202-01B**;
- the linking pipes coming from the degassing vessel, by using the pincers for elastic pipe-collars **MOT.1202-01B**;
- the pipes for air-conditioning coming from the thermostat stand and the water-pipe;

- the linking pipes coming from the carbon canister and the canister-draining valve;
- the fuel supply pipes (both the going- and the return one) from the injection ramp, by using MOT.1311-06;



- the hydraulic command conduit of the clutch; fastener 1 is taken out and supply pipe 2 is withdrawn in the direction shown by the arrow.



The screw linking the gear-bar and the auxiliary connecting rod to the gearbox is dismantled.



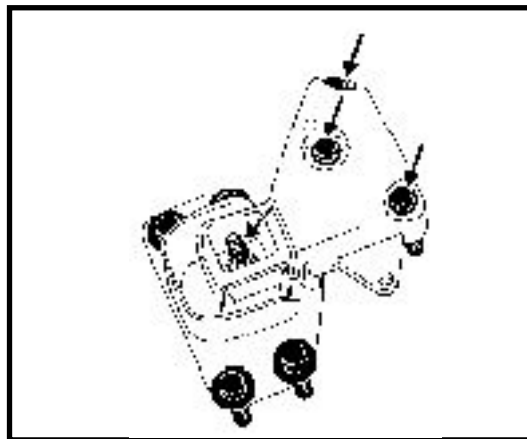
The following are uncoupled:

- the end of acceleration cable 1 from the command lever of the clapper; it is then extracted off muff 2 in the stand;

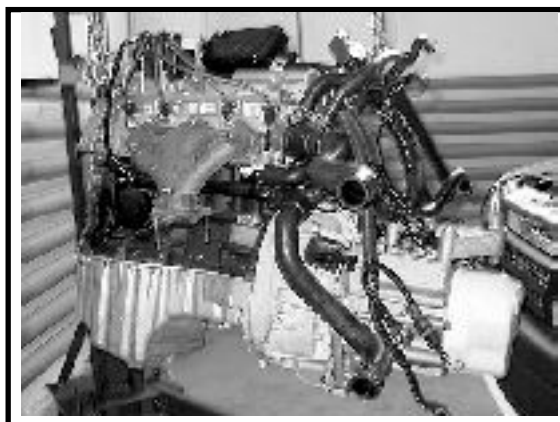


- the mileage cable: the two clamps are pressed, and the cable is extracted;
- the right-side headlight adjustment cable, which is then positioned by the car bodywork;

The Motor-Propelling set is upheld by the two handles, by means of a moving lifting device (a mobile crane); The four screws fixing the Motor-Propelling set battery stand are taken off, as well as the screw-nut of the elastic buffer;



The Motor-Propelling set is taken out and then placed on a stand.



The screw-nut of the hydro-elastic buffer is taken off (right);

Re-Mounting

The steps are taken in the reverse order (see dismantling / taking apart).

To do:

-the filling-up and the drainage of the cooling circuit (see Chapter “Filling-up and Draining”).



CAUTION! USE ONLY TYPE **D** ANTIFREEZE.

- filling-up the engine and the gearbox with oil;
- filling-up and draining the clutch hydraulic command circuit (see Chapter “Draining of the clutch hydraulic command circuit”);

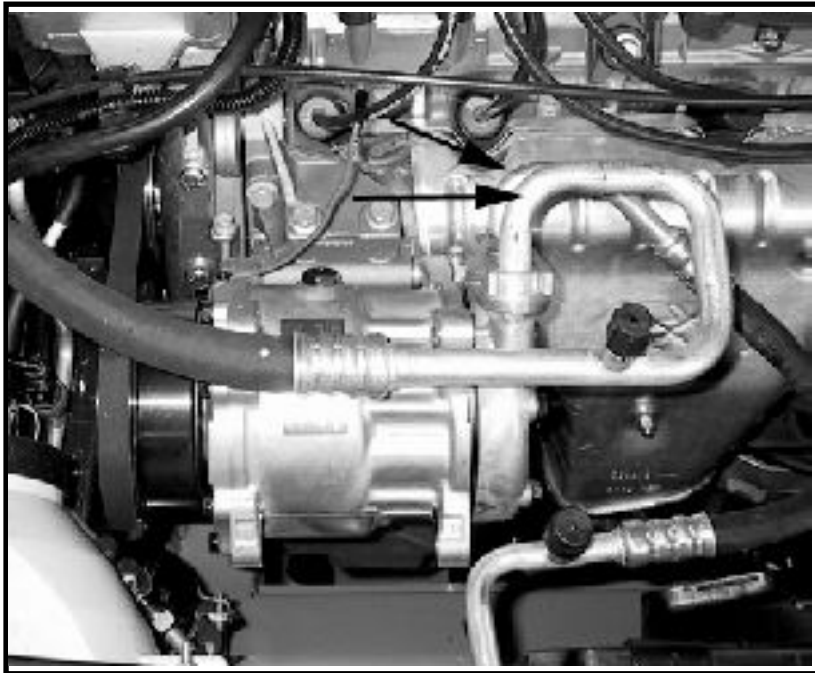
The liquid to use is brake fluid type **SAE J 1703, DOT 3, DOT 4**.

The screws and the screw-nuts of the couple are fastened back.

When mounting, line up markings from hoses and related parts.

ADDITIONAL DIRECTIONS FOR AIR-CONDITIONED CARS**DISMOUNTING**

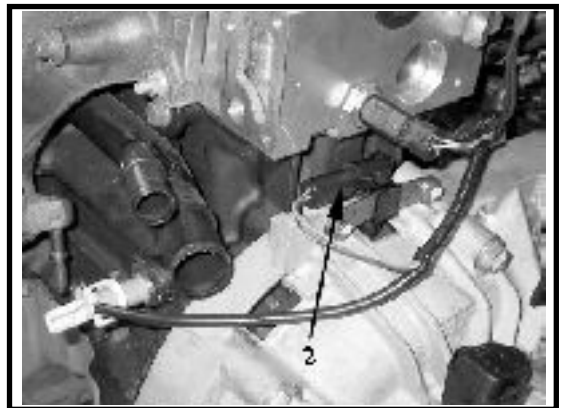
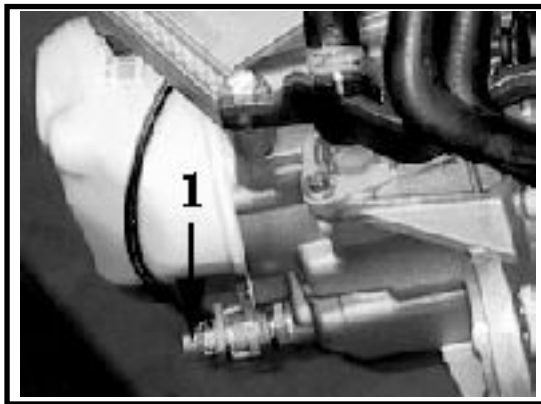
The Freon in the air-conditioning circuit is emptied.
The compressor-coming conduits are dismantled.

**RE-MOUNTING**

The dismantling (taking apart) operations are done in the reverse order.
The screw fixing the compressor conduits to the couple is fastened (**1.2 daNm**).
The air-conditioning circuit is filled (**0,61 kg**) with **HFC 134 a** refrigerating agent.
(see chap. Conditioned air).


SEPARATION ENGINE - GEARBOX

- Rotation sensor **2** is taken off;
- The electric connections of the starter are undone;
- The starter is taken off;
- Electric connector **1** of the backwards motion contactor is taken off;
- The engine cabling fastening to the gearbox is dismantled;
- The screws and screw-nuts of the gearbox assembly are taken off;



RE-ASSEMBLY ENGINE - GEARBOX

- The separation operations are executed in the reverse order;
- The screws and screw-nuts are tightened onto the couple.

TIGHTENING COUPLES (daNm)	
Rotation sensor	0,8
Screws of the starter	4,4
Fixing the gearbox onto the engine:	
- screw-nuts M 10	4,4
- screws M 10 - 90	4,4
- screws M 10 - 35	2,1

ENGINE DISMOUNTING

The following are taken off:

- the alternator and its belt;
- the induction coil and the plugs of the sparks;

- the pipe of the oil-level indicator;

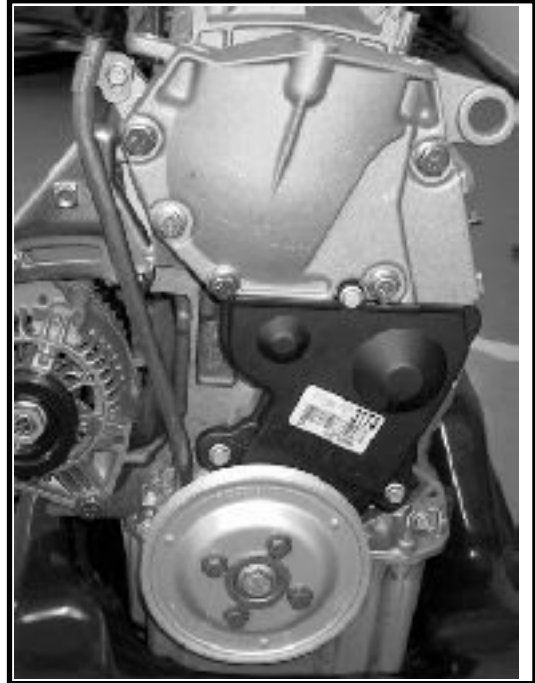
- the mechanism of the clutch disc.

The electric connectors are taken off and the engine cabling is dismantled.

Then the following are taken off:

- the clapper body;

- the injection ramp;



- the intake collector;
- the thermic screen and the exhaust collector;

- the water intake pipe;

- the thermostat stand;



Pentru automobilele echipate cu instalație de aer condiționat se demontează:

- rola de întindere, prin desfacerea șuruburilor **F** și **G**;

- cureaua compresorului;

- conectorul electric al compresorului;


- compresorul;

- suportul compresorului și suportul intermediar.



ENGINE MOUNTING

The dismantling (taking apart) operations are done in the reverse order;
The screws and screw-nuts are tightened to the couple.

TIGHTENING COUPLES (daNm)		
Fixing the alternator:		
-M 10-125 screw		5
-M 10-35 screw		2,1
Clutch mechanism		2
Intake collector		2,,5
Exhaust collector		2,5
Fixing the compressor		4
Compressor stand		4
Intermediate stand		2
Stretching spool		2



IT IS COMPULSORY TO CHANGE ALL THE DISMANTLED FITTINGS!

COMBUSTION HEAD

The combustion head is not restricted. Adjustment of rocker arms is done only in cool mode, and only when there are engine interventions which have an influence on their play.

The adjustment values are:

- for intake: 0.10
- for exhaust: 0.25

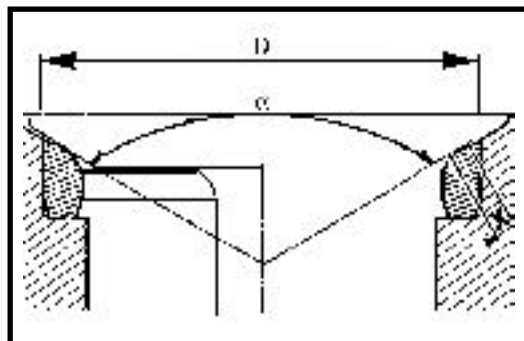
Combustion head height	113 +/- 0,05 mm
Maximum distortion of the plane of the fitting No rectification is authorized	0,05 mm
Volume chambers (with valves and spark plugs)	26,25 cm ³ +/-0,6
Couple of spark plug tightening	2,5 - 3 daNm

VALVES

Diameter of base	7 mm
Angle of sealing face	
-intake	120 ^o
-exhaust	90 ^o
Diameter of platter	
-intake	37,5+/-0,1 mm
-exhaust	33,5+/-0,1 mm

VALVE STOOLS

Angle of sealing face (a)	
-intake	120°
-exhaust	90°
Length of sealing face (x)	
-intake	1,7+/-0,1mm
-exhaust	1,7+/-0,1mm
Outer diameter (D)	
-intake	38,5 mm
-exhaust	34,5 mm

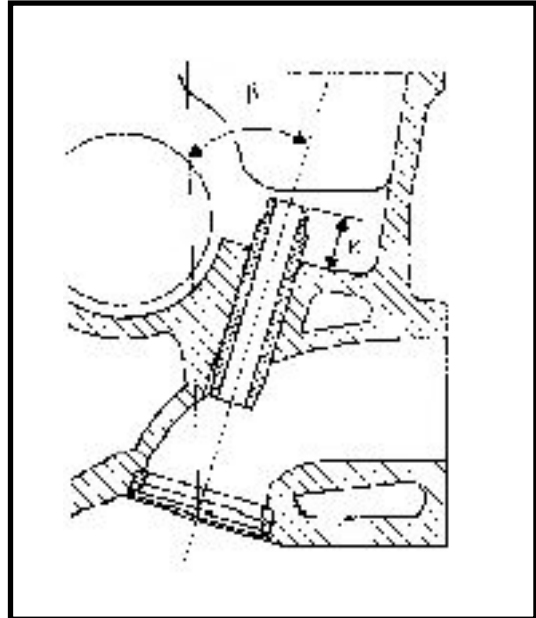
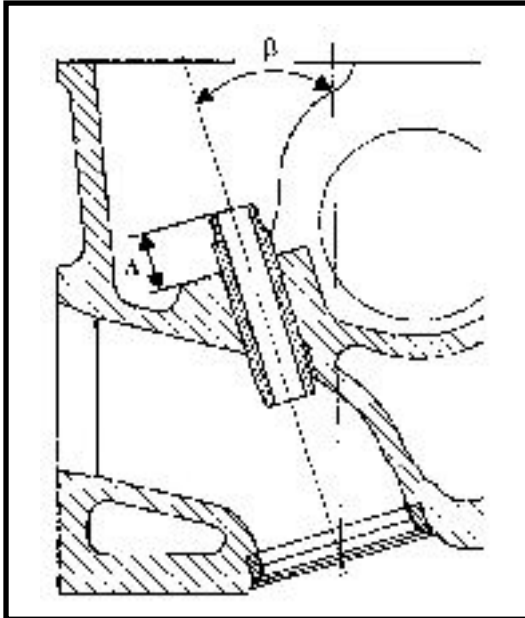


VALVE GUIDES

The intake and the exhaust guides are equipped with oil-sealings, which have to be replaced for every dismantling (taking apart) of the valves.

Inner diameter	7 mm
Outer diameter	12 mm
Position in relation to the side of the spring placement on the combustion head:	
-intake (A)	12,34 mm
-exhaust (E)	12,34 mm
Înclinarea față de verticală (b)	17°

CHARACTERISTICS

**THE SPRING OF THE VALVES**

They are identical for both intake and exhaust.

Length when free (mm)	44,93
Length under load at:	
- 27 daNm	37
- 53,6 daNm	-
- 65 daNm	27,6
Length of whirls - when joined together (mm)	26,01
Whirl diameter (mm)	4
Inner diameter (mm)	21,5

CAM SHAFT

Axial play (mm)	0,06 - 0,15
Number of bearings	5
Distribution diagram:	
-advance of intake opening	-5°
-delay of intake closing	35°
-advance of exhaust opening	41°
-delay of exhaust closing	-5°

PISTONS

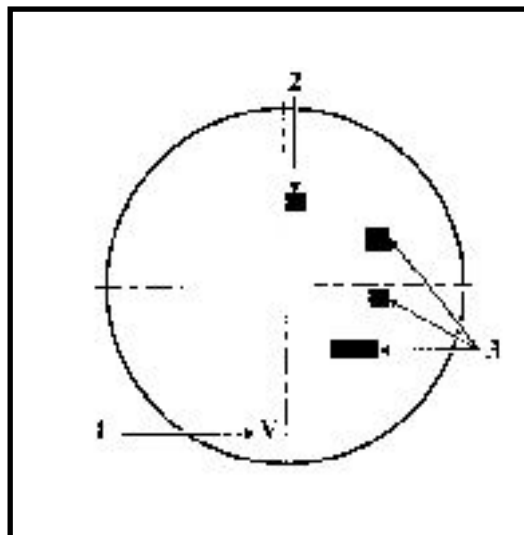
The bolt is steady in the connecting rod and loose in the piston.

Direction of mounting: with the arrow towards the flywheel.

There are three classes of association with the jacket.

Markings on the pistons:

- 1 - arrow towards the flywheel
- 2 - class of piston (A-B-C)
- 3 - line-up marks used by the supplier.

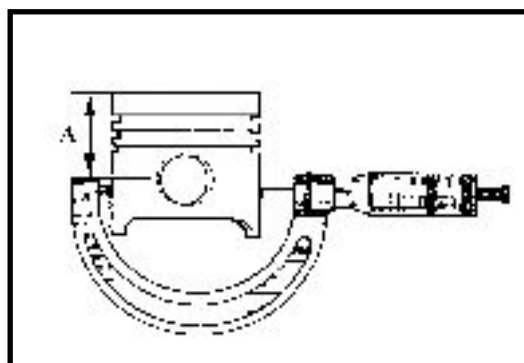


Piston line-up marks	Piston diameter (mm)	Jacket diameter (mm)
A	75,765 - 75,775*	75,8 - 75,75,81*
B	75,775 - 75,785*	75,81 - 75,82*
C	75,785 - 75,795	75,82 - 75,83

* - the respective values are not included in the classes

The piston diameter is measured for the mark:

A = 46 mm.



CHARACTERISTICS

BOLTS

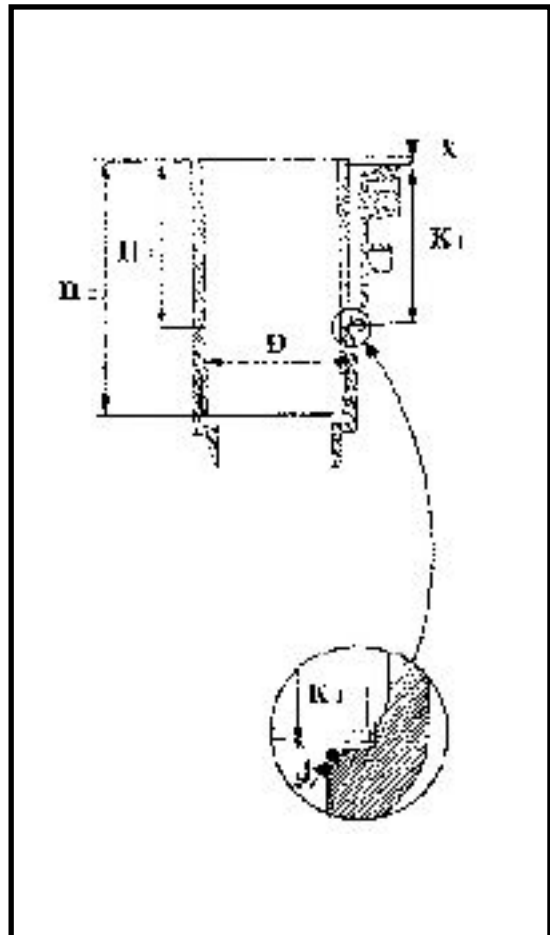
Length (mm)	60
Outer diameter (mm)	19
Inner diameter (mm)	11

CYLINDER JACKETS

They are of the type: movable, wet.

The seal fitting is the type: rubber ring J.

Inner diameter (mm)	$75,8^{+0,03}$
Jacket height(mm) H2	130
Centring diameter (mm) D	80,6
Extra height without a fitting (mm) X	0,02-0,09
Jacket height (mm) H1	$91,5^{+0,035}_{+0,005}$
Depth in the cylinder crank-case K1	$91,5^{-0,015}_{-0,055}$



RINGS

Thickness (mm):

-compression ring	1,5
-sealing ring	1,75
- oiling ring (scraper)	3

CONNECTING RODS

The horizontal play of the connecting rod end: from **0.310 to 0.572**



CAUTION!

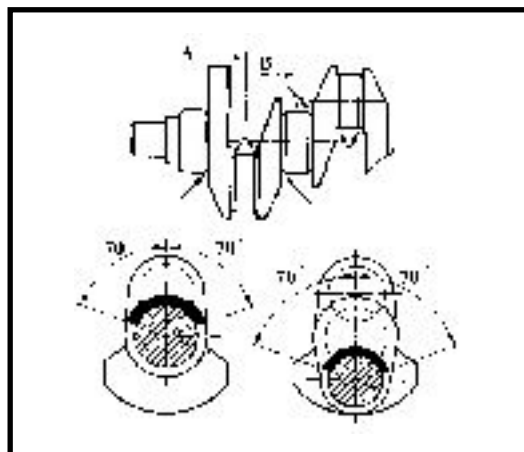
Do not use numbering punchers because of the risk of creating the beginning of fissures. Use an indelible pen.

CRANKSHAFT

Number of bearings	5
Bearing diameter (mm)	- nominal: 54,795 +/- 0,01 - repair: 54,550 +/- 0,005
Crankpin diameter (mm)	- nominal: 43,98 ⁰ _{-0,02} - repair: 43,73 ⁰ _{-0,02}
Axial play (mm)	- 0,045 - 0,852 cu uzură - 0,045 - 0,252 fără uzură

In case a rectification is made, the runner course must remain the same along at least 140° out of the bearing and crankpin circumference.

These areas are defined in sections A and B as shown in the adjoined scheme.



OIL PUMP

The amount of oil to be introduced in the engine is 2.7 liters - without replacing the oil-filter - or 2.9 liters, after replacing the filter.



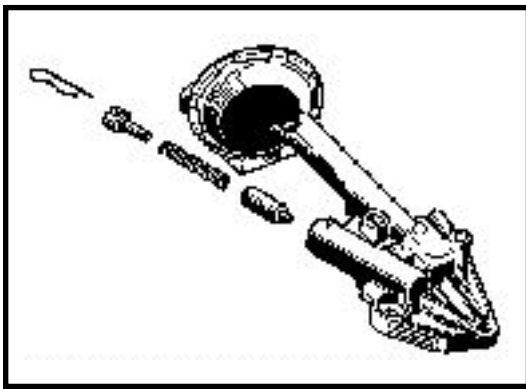
* TO BE ADJUSTED TO THE GAUGE

The minimum oil pressure at 80° is:

- in the idle mode **1 bar**
- at 4000 rot/min **3 bar**

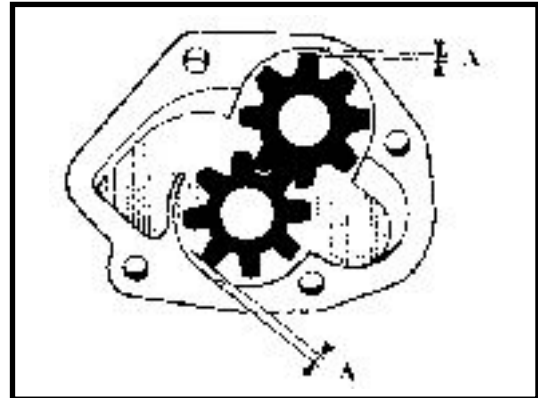
The oil pump belongs to the “gearwheel” type.

Take off the cap and also the clapper of the oil-pump.



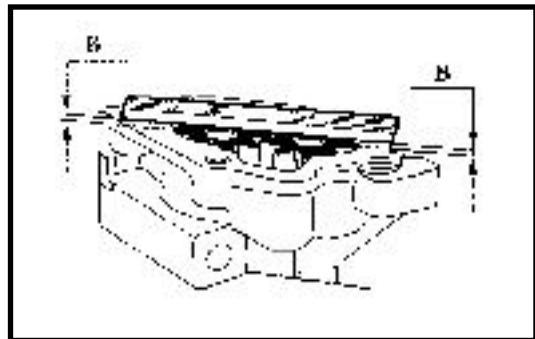
To check:

- * play A (mm):
- min. 0.110
- max. 0.294



* play B (mm):

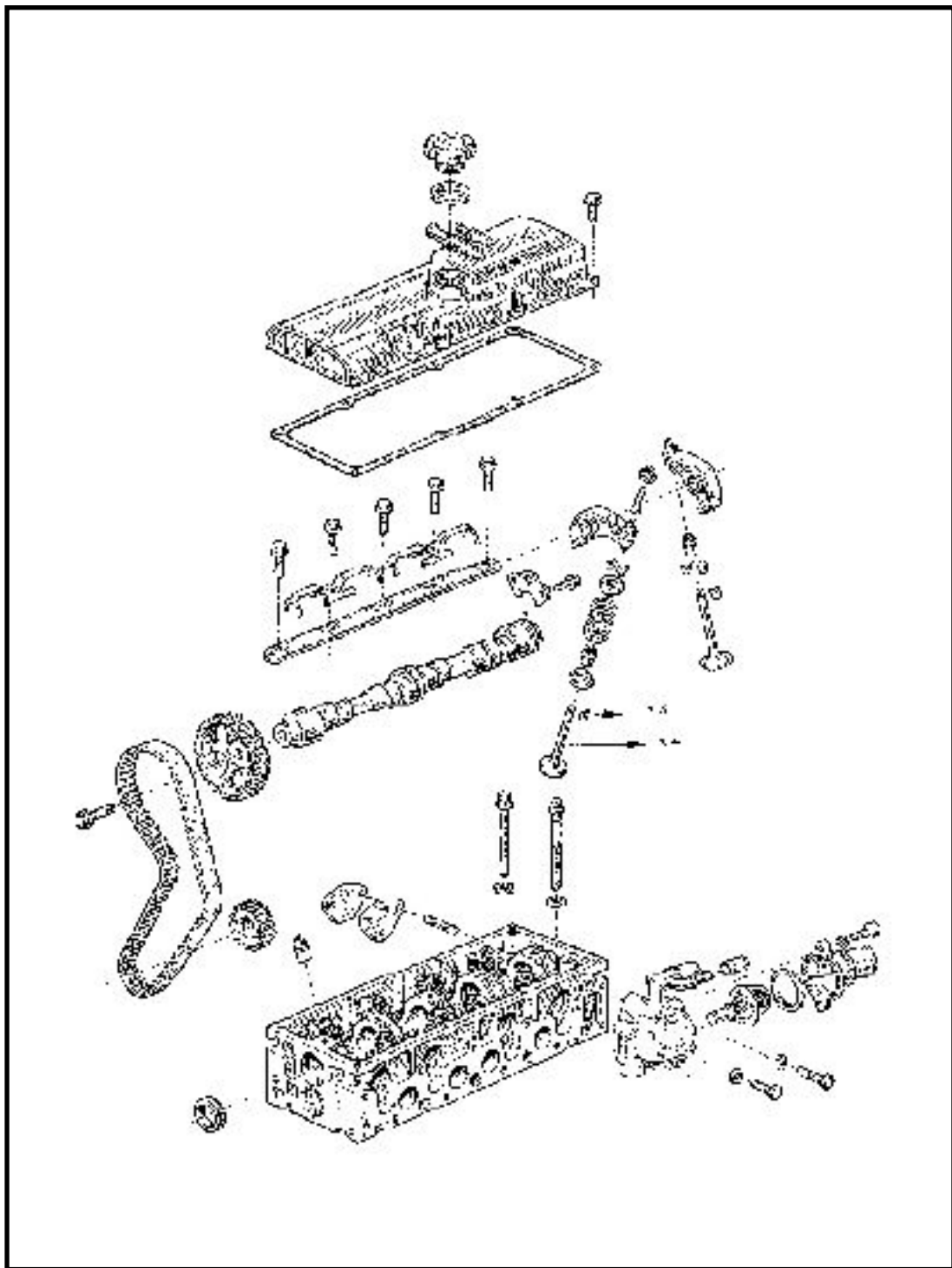
- min. 0.02
- max. 0.86.



CAUTION!

Protect the distribution and alternator belt in order to avoid water- or cleaning substance projection on them.

DISMOUNTING AND RE-MOUNTING
THE CYLINDER HEAD



CYLINDER HEAD

DISMOUNTING

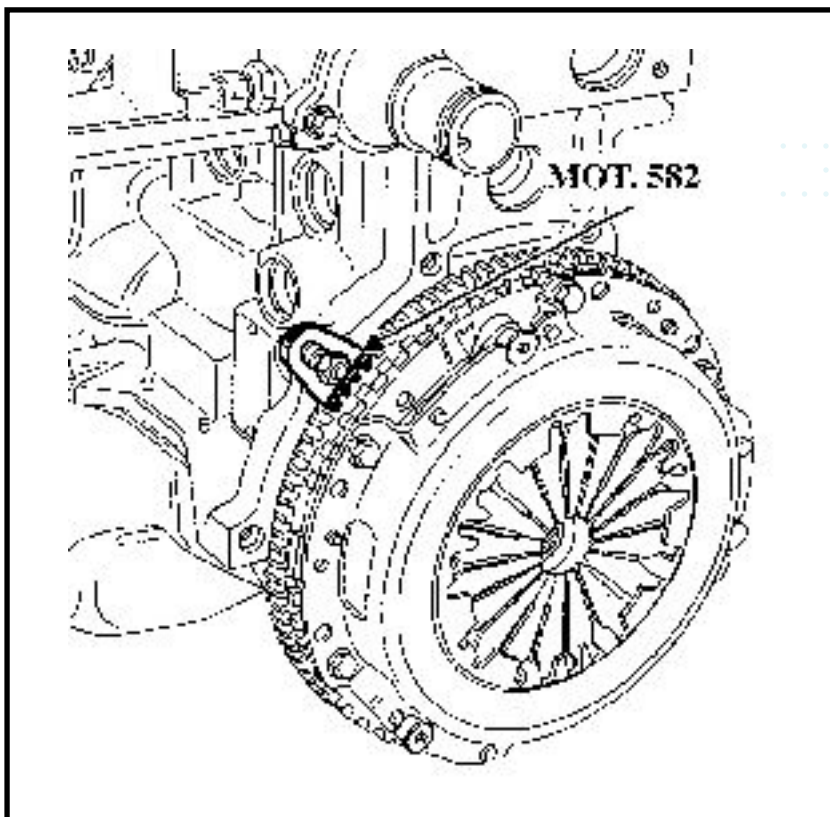
The oil and the cooling fluid are emptied.

To be taken off:

-the electric connections;

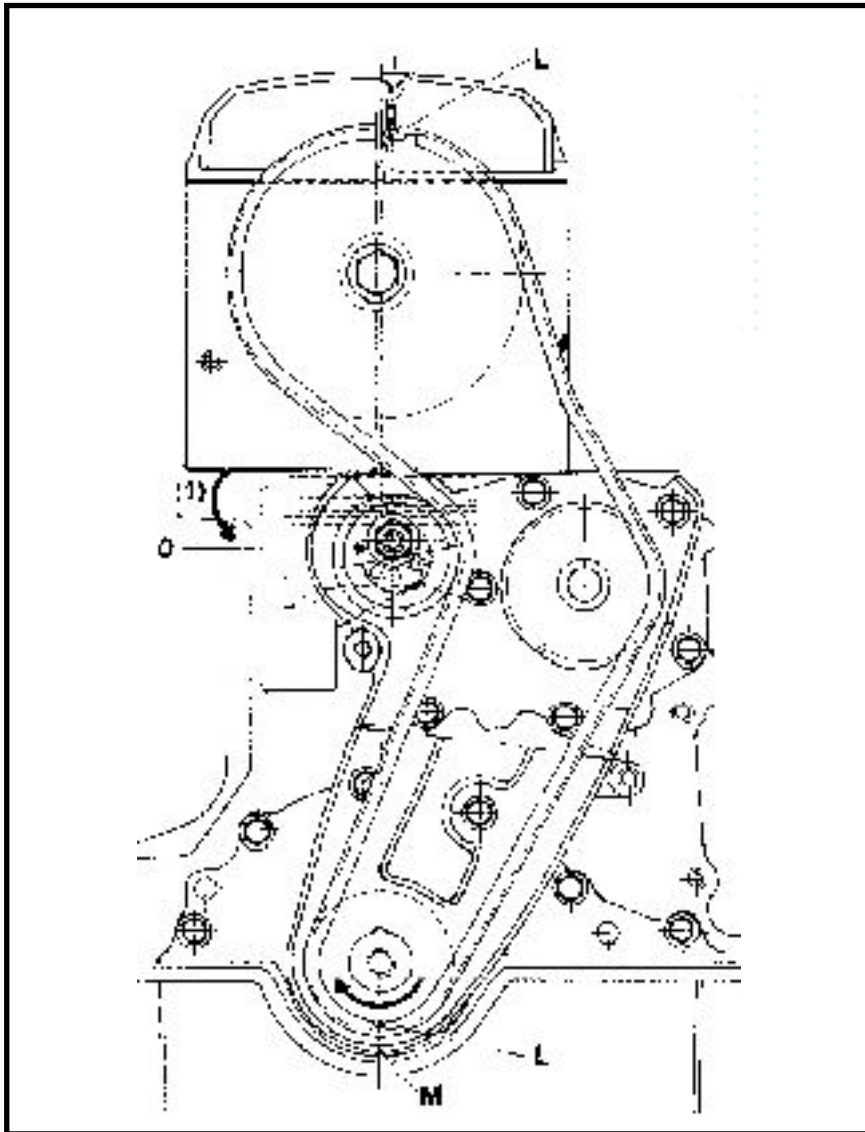
-the alternator and its belt;

-the pulley of the crankshaft (in order to do that, the flywheel is blocked with the **MOT 582** device)



-the protection cap of the distribution belt

The engine is brought to the tuning point, by aligning the line-up mark on the crankshaft pinion L with the fixed marks M (the L mark is held with the cams upwards).
The screw-nut of the stretching runner is undone, then the belt is taken off.



(1) The stretching direction of the stretcher.

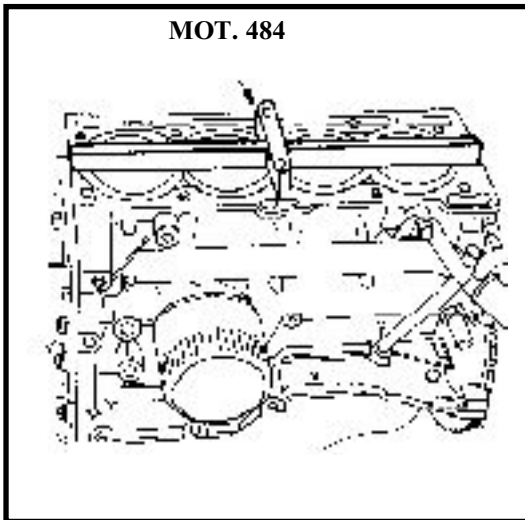
CYLINDER HEAD

DISMOUNTING

The following are to take off:

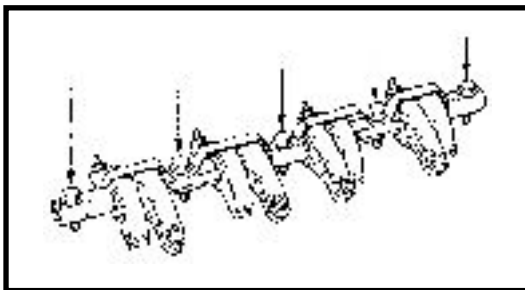
- the cylinder head cap;
- the intake and exhaust collectors;
- the cylinder head screws, except the screw where the centring jack is; this one is only loosened;
- the cylinder head is revolved round the screw which was left in place;
- the cylinder head is taken off;
- the jacket-maintaining device - **MOT.484** - is mounted.

MOT. 484



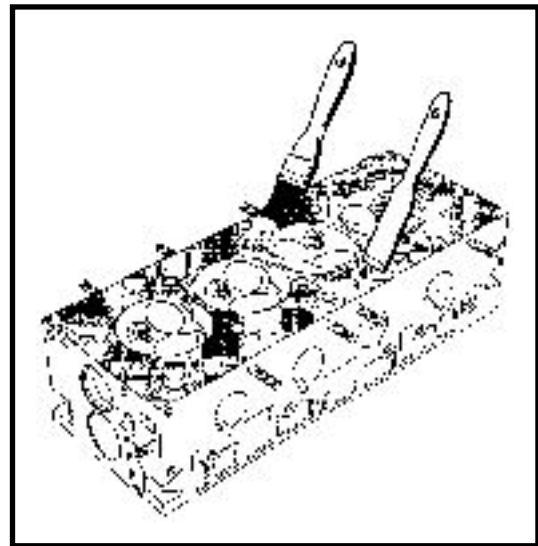
To be mounted:

- the rocker arm ramp:



- the oil-sealing of the cam-shaft;
- the flange of the cam-shaft;
- the pinion of the cam-shaft, which is blocked with **MOT 799 - 01**;
- the cam-shaft;
- the stand of the thermostat;
- the sparking plugs;
- the springs of the valves;
- the valves;
- the oil-seals of the valves, by using the **MOT. 1335** pincers.

The cylinder head is cleaned of the fitting which is left stuck to it.



It is very important not to get the positioning surface of the fittings scratched.

Use **Decapjoint** to remove the remains of fittings that are left stuck.

The above product is applied on the cleaning area; wait **ca. 10 minutes**, then clean by means of a wooden spatula.

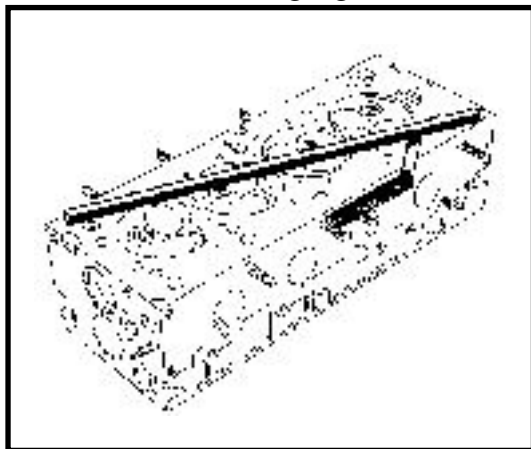
CYLINDER HEAD



CAUTION!

Avoid introducing foreign bodies into the oil grooves and tubes; you may risk blocking up the holes of the rocker arms and rapidly deteriorating the cams and the gliding parts of the rocker-arms.

The checking of the planeness of the cylinder head is to be done with a ruler and a set of thickness gauges



Maximum distortion allowed: **0.05 mm**
No rectification of the combustion head is authorized.

RE-MOUNTING

Oil all the parts.

Mount the valve oil-seal rings no. 2 by means of a tubular-wrench of 11 size onto the valve guides no. 3;

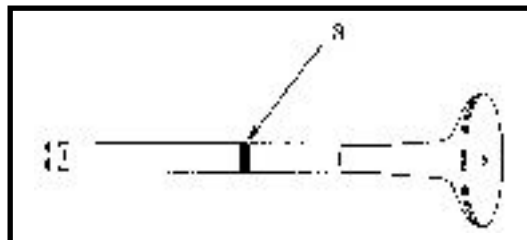
Mount in the following order:

- the washers no. 1 at the base of the valve springs;
- the new valves no. 4.



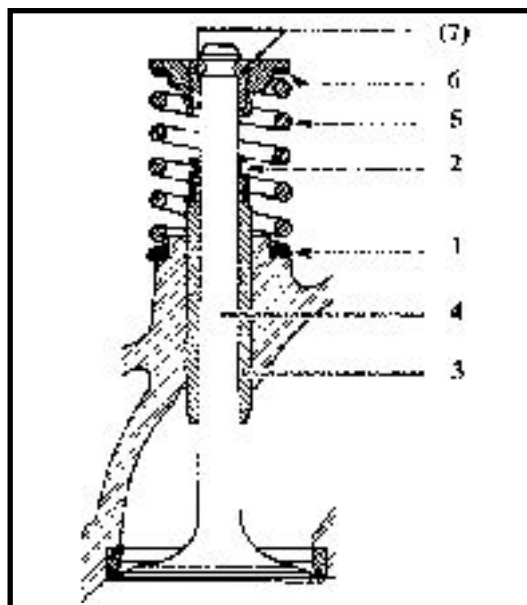
CAUTION!

They must have the same line-up marking (8) as the old ones in order to avoid the destruction of the valve-stool set.



- the springs no. 5 are identical for both intake and exhaust;
- caps no. 6;

Compress springs no. 5, then mount the semi-cones no. 7, which are identical for both intake and exhaust.



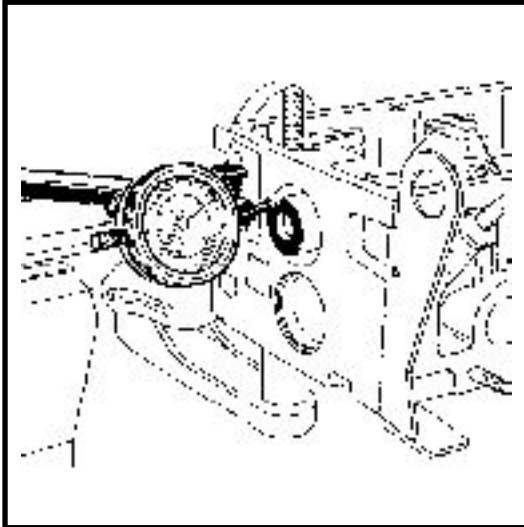
CYLINDER HEAD

RE-MOUNTING

Oil the cam-shaft.

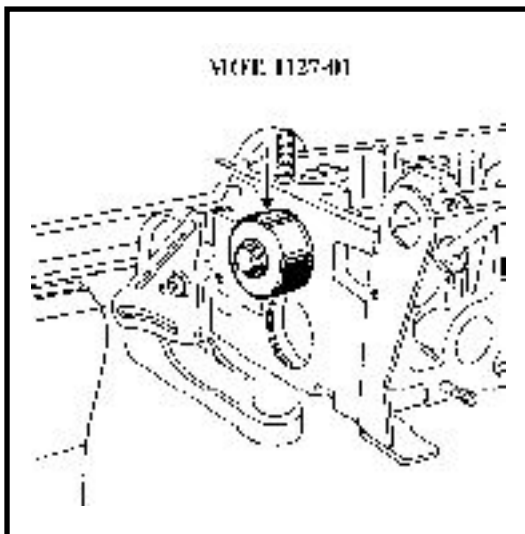
Mount the cam-shaft and its flange.

Check the axial play, which has to be within **0.06 mm** and **0.15 mm**; in case it does not fit, check the flange or the cam-shaft.



To mount:

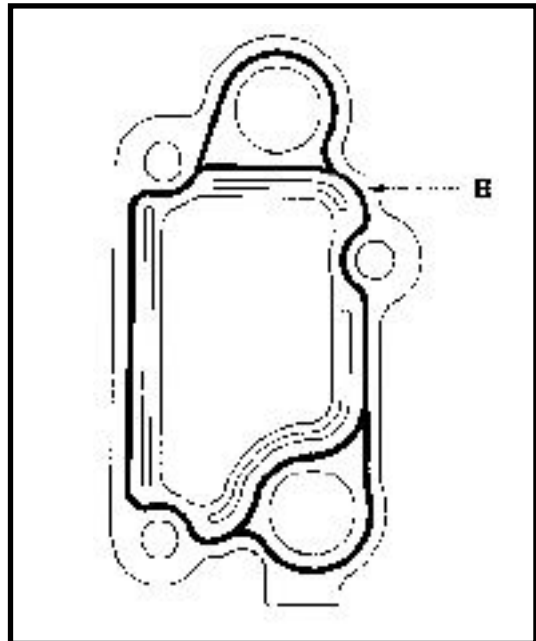
-camshaft annular oil seal by means of the MOT 1127-01 device;



-the thermostat stand.

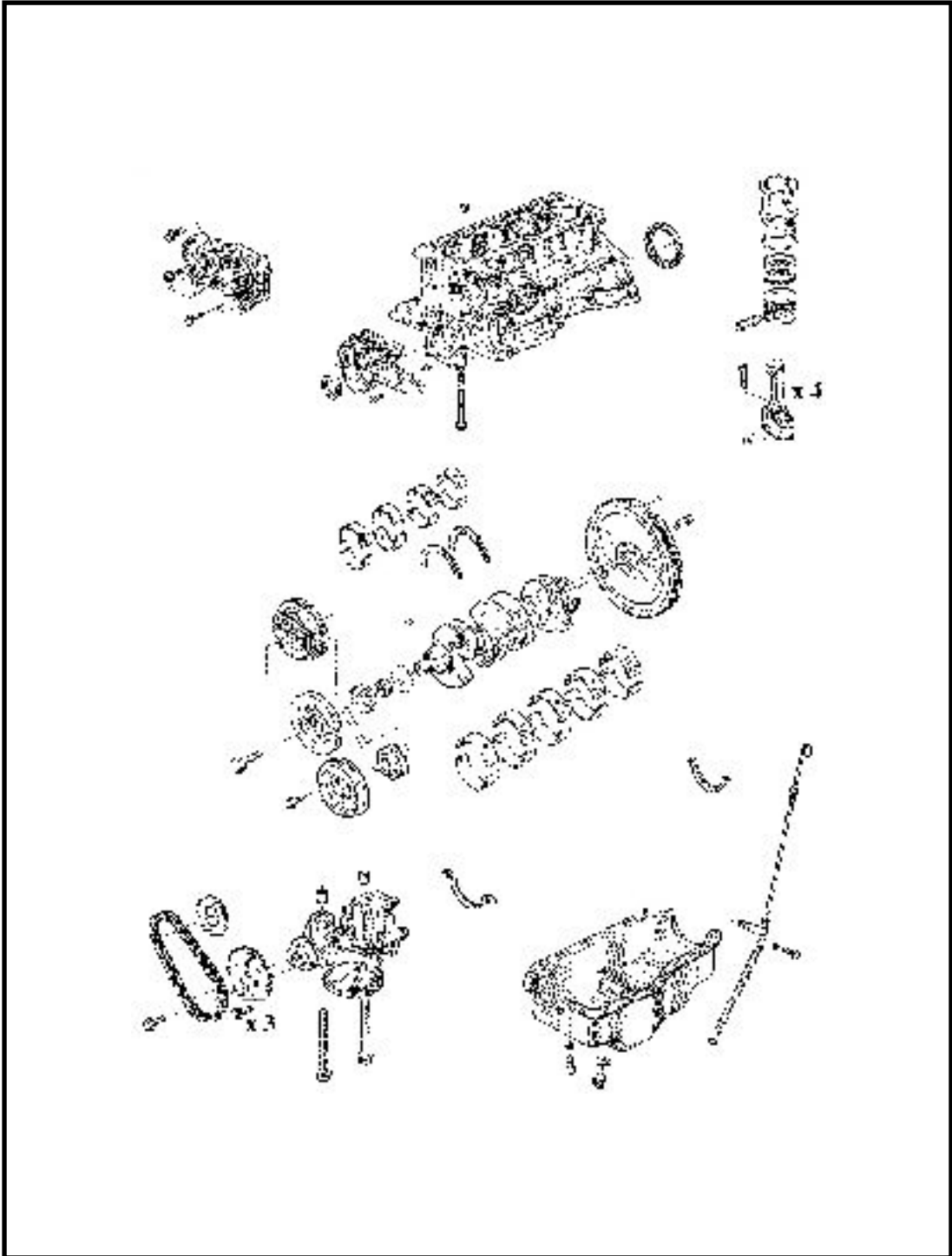
For watertight sealing, use **Loctite 518**.

Girdle **H** must be **0.6mm** up to **1 mm** thick; it is applied in keeping with the following schema:



-the pinion of the cam-shaft is fixed with the **MOT 799-01** device, then the thread and the end of the screw are oiled and the screw is tightened at **4.5 daNm**.

THE CYLINDER CRANKCASE

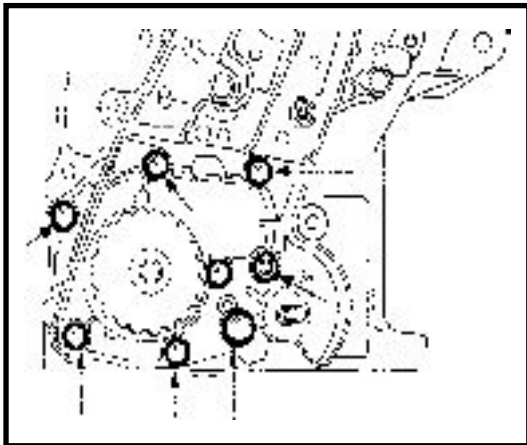


THE CYLINDER CRANKCASE

DISMOUNTING

The following are dismounting:

- the water conduit and the oil-level-gauge guide; their watertight sealing is done with rubber rings which must be replaced for every dismantlement;
- the clutch;
- the engine flywheel, blocked by means of **MOT 582**;
- the lower crankcase;
- the pinion of the crankshaft;
- the stretching runner/pulley;
- the water-pump;



-the oil-pump

Perform connecting rods caps identification in regards to connecting rod body.

**CAUTION!**

Do not use punchers for line-up marking in order to avoid fissures; use an indelible pen.

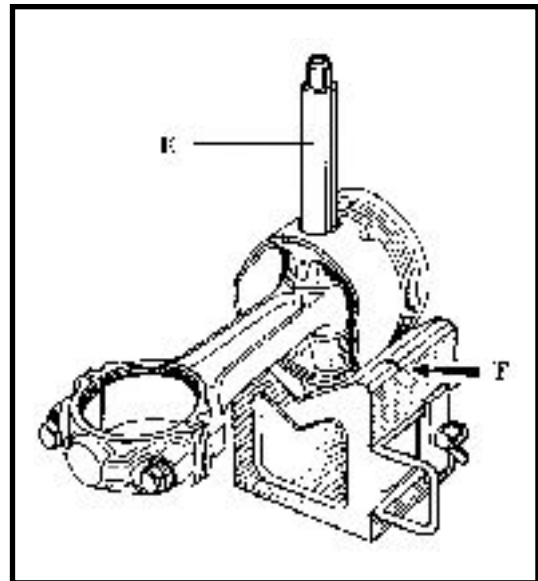
To be taken off:

- the caps of the connecting rod and the bushes;
- the jacket-maintaining device;
- the jacket-piston-rod set;
- the bearing caps and their bushing;
- the shaft and the axial play bushes;
- the bushes on the block.

The axes of the pistons are taken apart.

The piston is placed on its stand, after positioning the piston bolt (axis) with the release hole (two lines **T** for position-finding the centre of the hole will make alignment easier).

The bolts are taken off in a pressing-machine by means of the **E** extraction



THE CYLINDER CRANKCASE

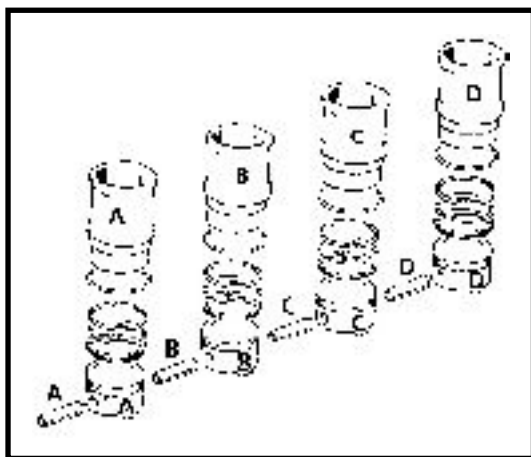
Re-Mounting

Clean the crankcase, especially the jacket-sealing part.

Preparation of the piston-and-jacket set

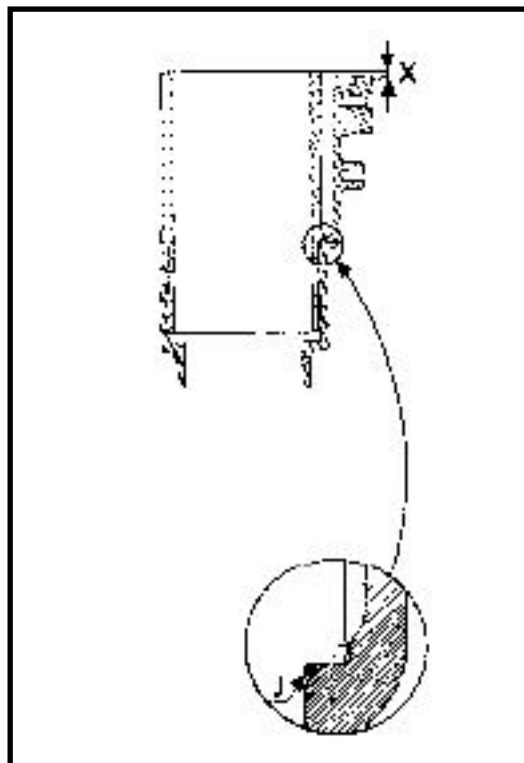
The parts supplied in the collection are matched.

Do the line-up marking of the set, from **A** to **D**, in order to keep the parts matched.



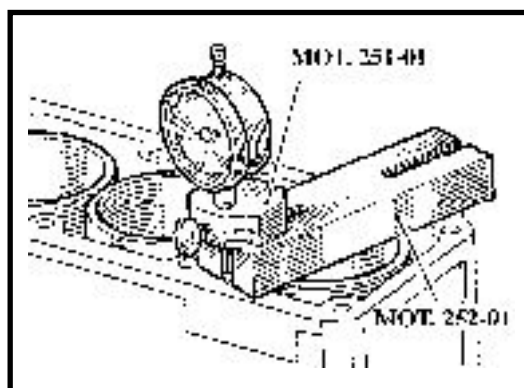
Remove completely the anti-rust film; never erase the parts.

These engines are equipped with rubber rings for jacket watertight-sealing; these rings ensure only watertight-sealing condition. The jackets lean directly against the cylinder crankcase; extra height **X** is achieved by the manufacturer.



The checking-up of the jacket extra-height is done in the following way:

- the jackets are placed in the block without their sealing-ring;
- extra-height **X** is checked by means of the **MOT.251** and **MOT.252-01** devices.

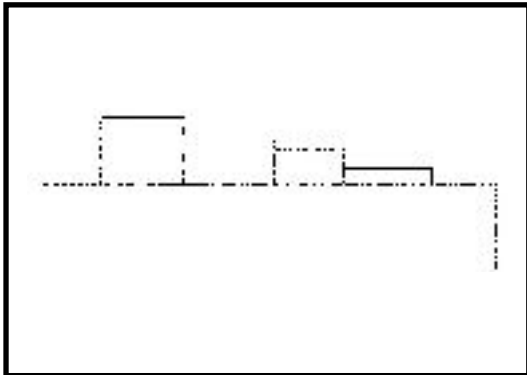


THE CYLINDER CRANKCASE

RE-MOUNTING

The jackets are positioned such a way as:

- the difference between two successive jackets should be max. 0.05 mm;
- the extra-height should be placed in ascending order between cylinders 1 and 4.



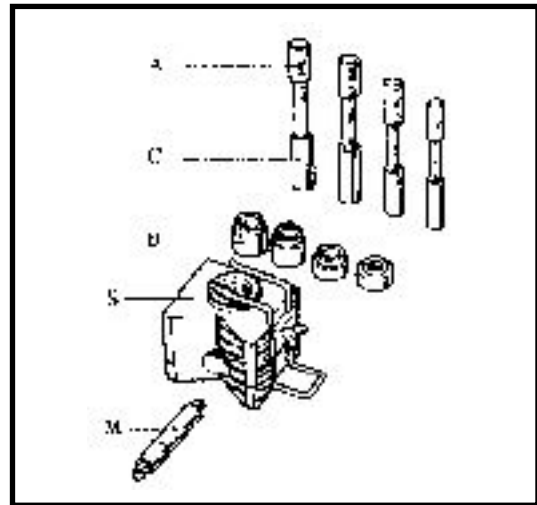
-the extra-height **X** must be within **0.02 mm** and **0.09 mm**;

-in case there is an erroneous extra-height, it is checked again by means of a new set of jackets in order to see whether the cause is the block or the jacket; if not, check the theoretical values of both the block and the jackets.

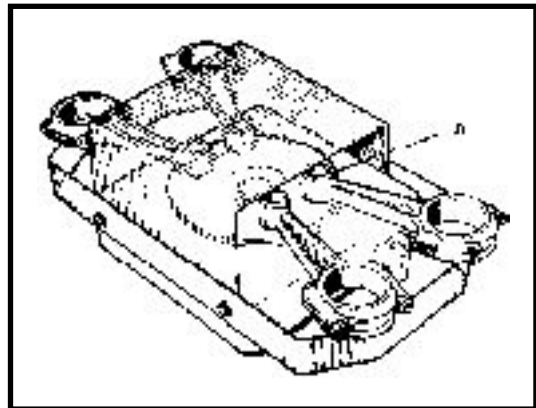
The **A**, **B**, **C**, **D** set is done over with the correct extra-height obtained, then the jackets, the bolts and the pistons are numbered from **1 to 4** (no. 1 towards the fly-wheel), so that the concordance with the corresponding connecting rods is found.

The axes of the pistons are mounted by means of the **MOT 574-22** device.

The axes of the pistons are fixed in the rod, and loose in the pistons.



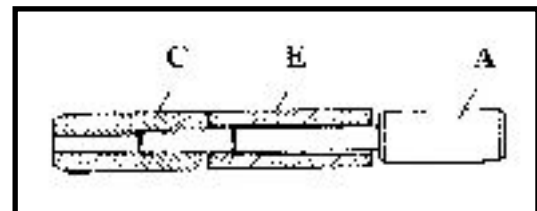
In order to heat the connecting rods an electric range of **1 500 W** is used.



Check if the axes of the pistons slide freely in the new corresponding pistons.

The axis of piston **E** is mounted on the mounting axis **A**.

The **C** centring device is screwed up to the end and then unscrewed a quarter of a rotation.



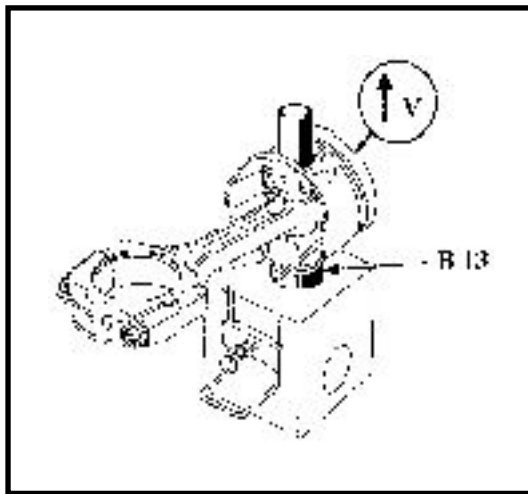
THE CYLINDER CRANKCASE

The arrow marked by the end of the piston must be directed towards the flywheel.

The connecting rods do not have a mounting direction, but the spurs of the semi-bushes will be positioned on the same side.

For the assembly of the piston and the connecting rod, the following directions will be observed:

-jack **B13** is set onto the stand and the piston (with the arrow pointing upwards) is fixed on the jack;



-the centring device and the axis of the piston are oiled with motor oil;

-the free sliding of the piston axis is checked, as well as the positioning of the piston.

When the base of the connecting rod reaches the needed temperature (**ca. 250°**), the speedy mounting of the piston axis should be done in the following manner:

-the centring guide is introduced in the piston;

-the rod is positioned in the piston;

-the piston axis is pressed up to the end.

It should be checked if the piston axis remains retracted as to the outer diameter of the piston for any position of the connecting rod in the piston.

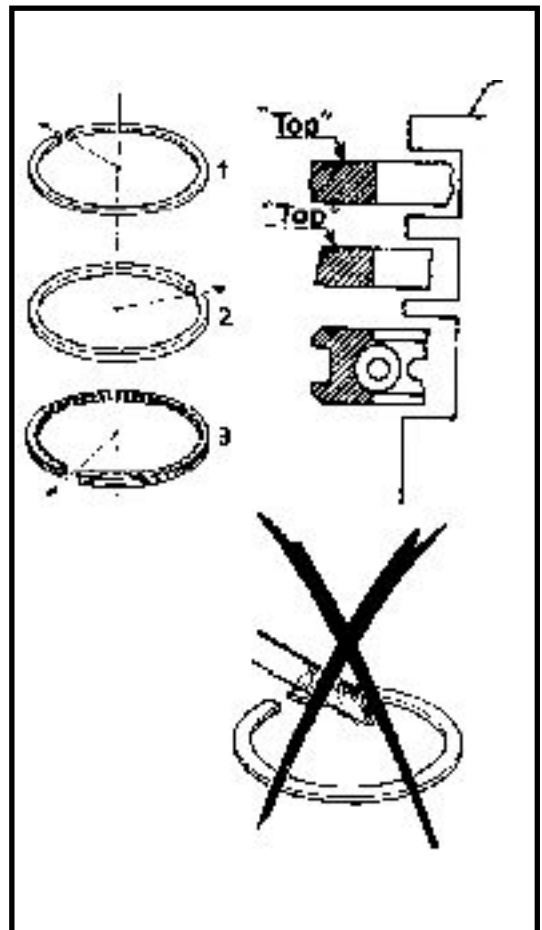
The rings are mounted:

-the oiling ring;

-the watertight-sealing ring (with the “**TOP**” mark pointing upwards);

-the compression ring (with the “**TOP**” mark pointing upwards).

The slits of the rings being adjusted, they shall never be altered; they are oiled and the rings are positioned; the slit of the oiling ring will be placed opposite a full part of its channel.



The “rod-piston-ring” sets are mounted in the cylinder jackets by using the mounting jack.

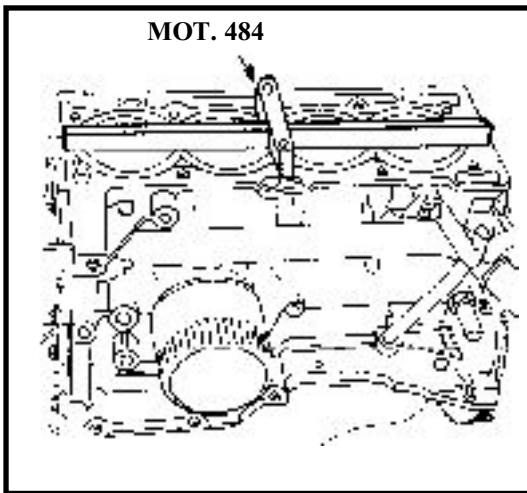
The watertight-sealing fittings are mounted onto the cylinder jackets.

THE CYLINDER CRANKCASE

The sets is mounted in the crankcase in the previously established order, and it is made sure that a **0.1 mm**-long wedge passes between the jackets



The jackets are blocked by means of **MOT.484** stand.



Take up the bearings of bearing on the housing cylinders. Half-bearing liners that are to be mounted on crankshaft bearing are provided with oiling holes.

Bearing liners are matching with the crankshaft in two classes, as follows :

Marking on bearing liners	Marking on crankshaft
Red	A
Blue	B

Identification of matching classes on crankshaft is done by marking on the counter-balance from number 5 bearing liner.

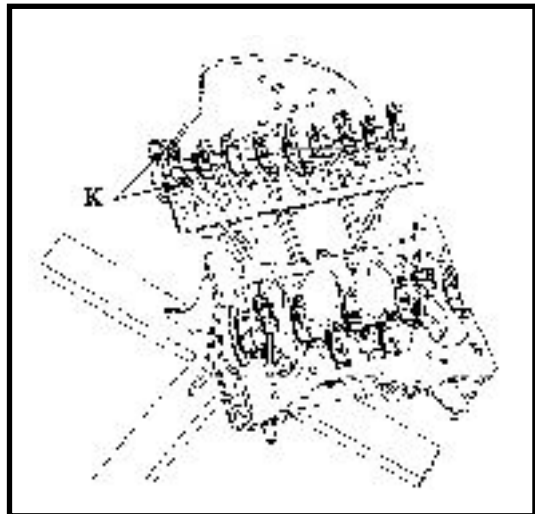
Crankshaft marking example :



Mount connecting-rod bearings (connecting rod bearings are identical).

The crankpins and the bearings are oiled.

The bearing caps are mounted. On no. 1 cap (**in the K area**) a thin layer of **RHODORSEAL 5661** is applied.

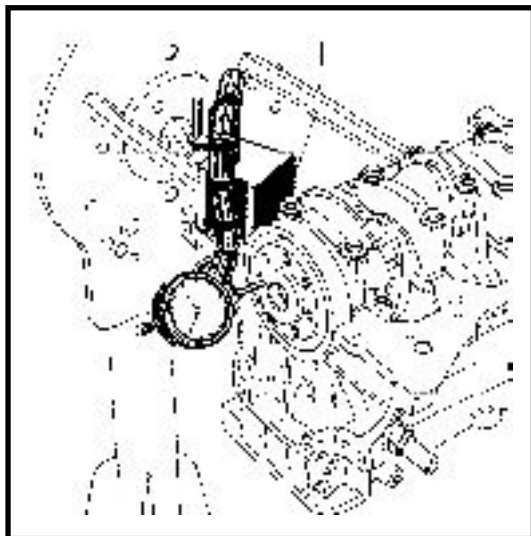


The screws are tightened at **2.5 daNm**, and then at an angle of **43°+/-6°**.

The axial play of the crankshaft is checked; it must be within:

- * **0.045 and 0.852 with wear;**
- * **0.045 and 0.252 without wear.**

THE CYLINDER CRANKCASE



The axial bushes can have: **2.80 mm, 2.85 mm, 2.90 mm, 2.95 mm.**

The rod caps are mounted and tightened at **4.2 daNm.**

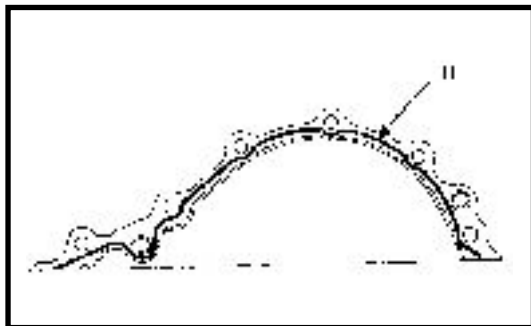
To check:

- the horizontal play of the rods;
- the rotation of the whole set.

To mount:

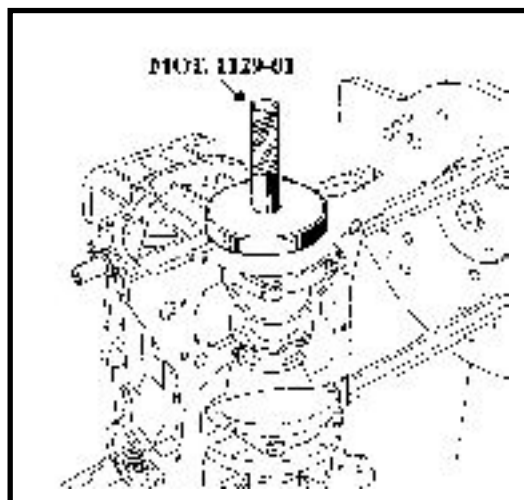
-the oil-pump (check the existence of the centring jacks); the screws are tightened at **2.5 daNm**;

-the pinion and the carrying chain of the oil-pump;

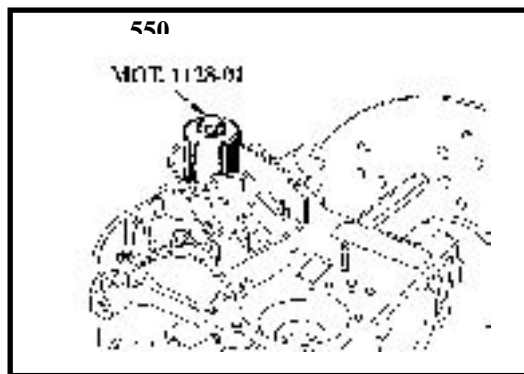


-the front cap of the crankshaft; the watertight-sealing is done with **LOCTITE 518** (the girdle must be **0.6 - 1mm** thick);
-the oil-seal ring on no. 1 bearing - by means of **MOT 1129 - 01.**

The brim and the outer part of the oil-seal ring are oiled.



-the oil-seal ring on the front cap (which is oiled), by means of the **MOT 550** device;



LOWER CASE

RE-MOUNTING

Mount the lower casing and tighten the screws at a moment of 1 daNm.

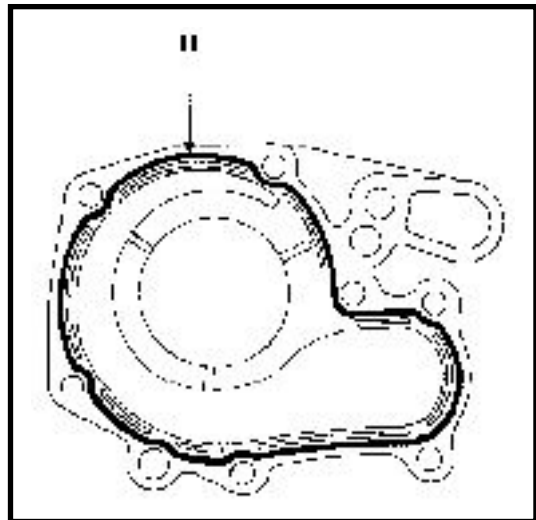
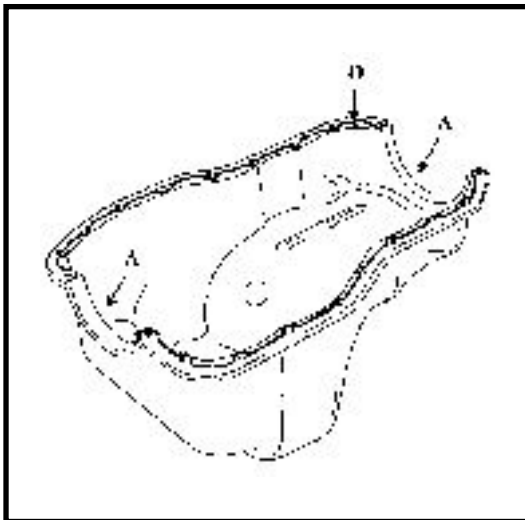
The watertight-sealing is done with **RHODORSEAL 5661**; girdle **D** must be **3 mm** thick

Do not forget to replace the two crescent-shaped fittings (in the A area) with new ones.

-the flywheel: beforehand oil the face for the placing of the flywheel on the crankshaft, using **LOCTITE AUTOFORM**; apply on the screws one drop of **LOCTITE FRENETANCH** and tighten them at **5 - 5.5 daNm**, after having blocked the flywheel by means of the cogged sector **MOT 582**.

-the clutch (be cautious about the centring): screws are tightened at **2 daNm**;

-the water-pump (the watertight-sealing is done with **LOCTITE 518**, the **H** girdle must be of **0.6 - 1 mm**). The screws are tightened at a couple of **1 - 2 daNm**.



THIS OPERATION IS ALSO VALID IN CASE THE CRANKCASE IS RE-MOUNTED ON THE CAR (SEE PAGE 10-36)

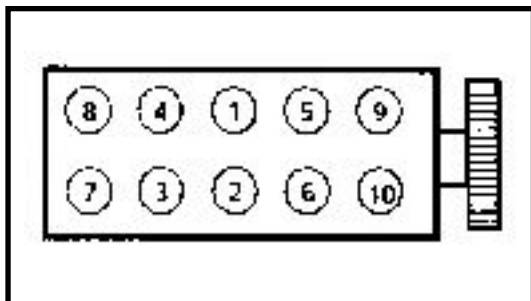
CYLINDER HEAD RE-MOUNTING

- The following are to be mounted:
 - the jack for cylinder-head centring on the block;
 - the new cylinder-head fitting;
 - the cylinder-head (after the stand has been taken apart); the joining surface cylinder crankcase- cylinder-head is carefully cleaned;
 - the cylinder-head screws (whose threads and screw-ends are oiled).

THE METHOD OF TIGHTENING THE CYLINDER-HEAD

1. Pre-compressing the fitting

- all the screws are tightened at 2 daNm, then at $97^{\circ} \pm 2^{\circ}$, in the order below:



- wait for 3 minutes - the stabilization delay.

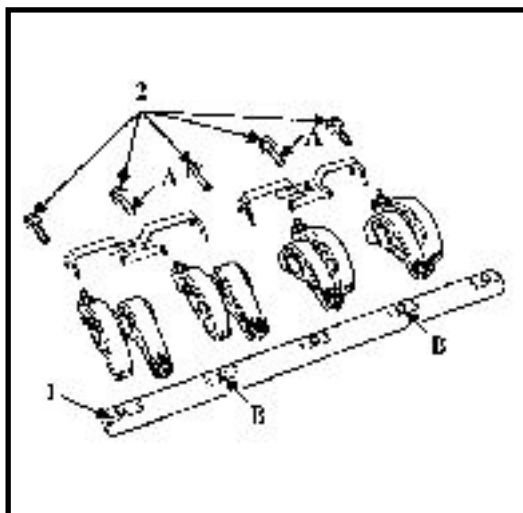
2. Combustion-head tightening

- screws 1 - 2 are loosened till they are totally free;
- screws 1 -2 are tightened at 2 daNm, then at $97^{\circ} \pm 2^{\circ}$;

- the operation of loosening and tightening is repeated for the screw groups 3-4-5-6-, then for 7-8-9-10.

The cylinder head is not restricted.

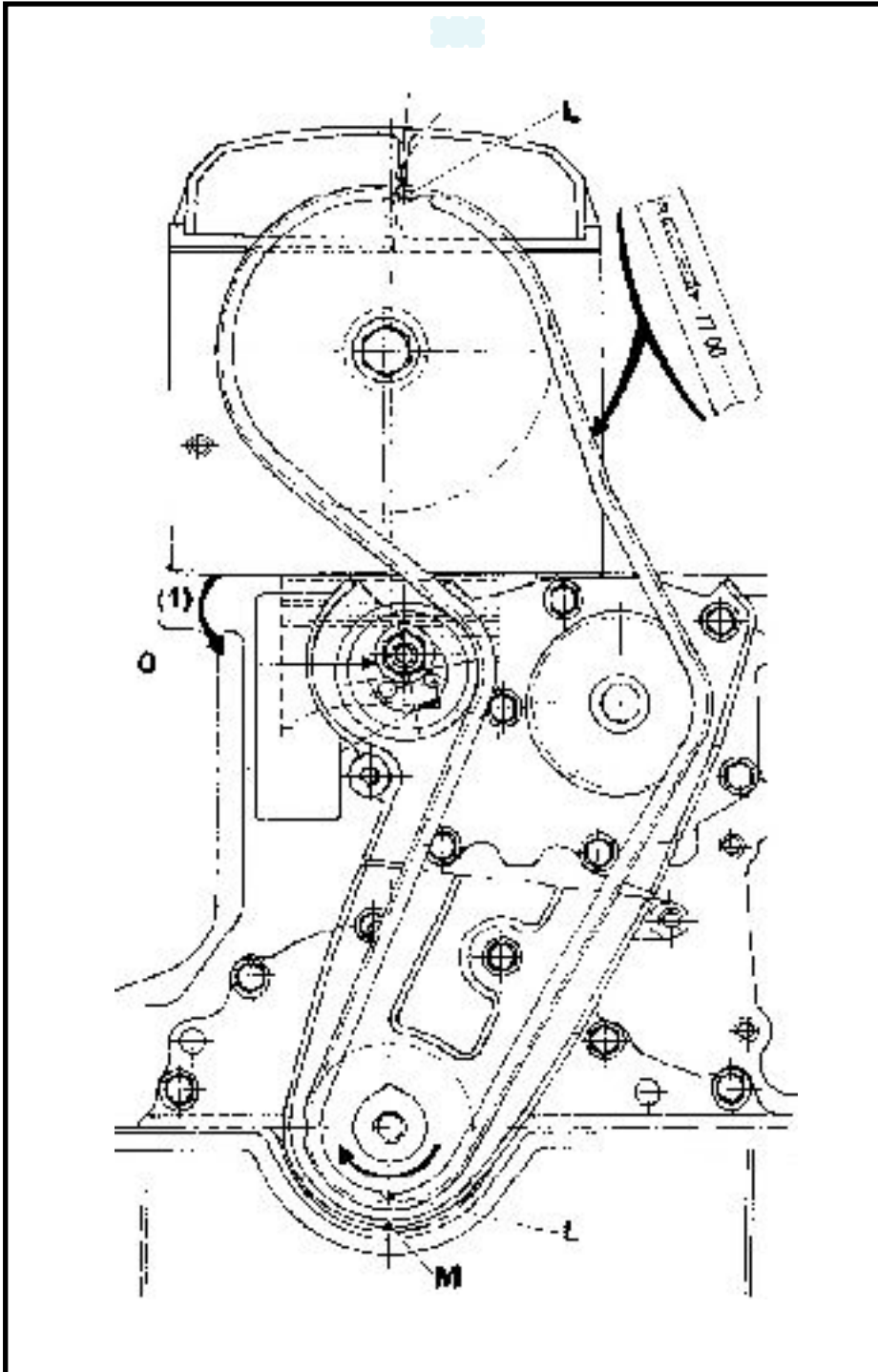
- To be mounted subsequently:
 - the rocker-arm ramp, by positioning marking no. 1 on the axis towards the distribution;



- Screws no. 2 are tightened at 2.3 daNm, but not before oiling the threads.

- the cylinder-head cap, without tightening it (in order to be able then to set/tune the distribution);
- the pinion of the crankshaft.

DISTRIBUTION



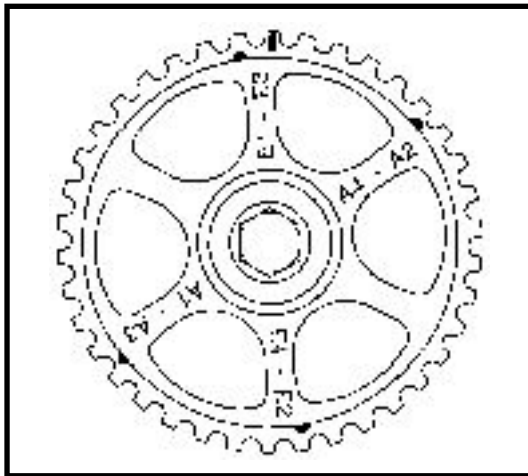
DISTRIBUTION

On the back of the belt there is an arrow indicating the direction of rotation, and two tuning marks;

-the L line-up marks on the crankshaft pinion are aligned with the fixed mark M; (the mark on the pinion of the cam-shaft in down)

**CAUTION!**

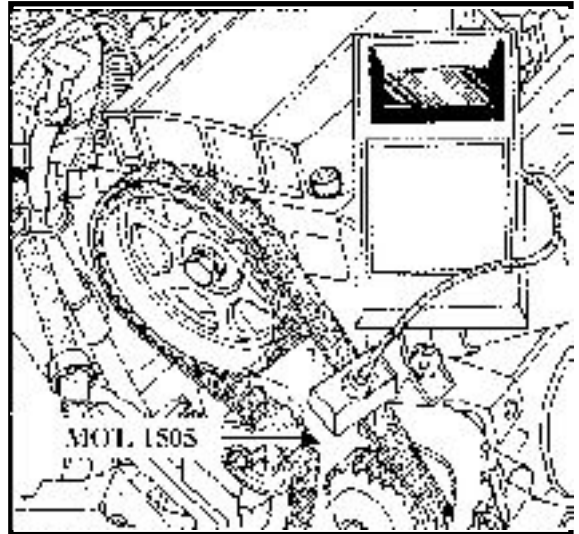
The pinion of the cam-shaft can have five line-up marks: it is only the rectangular-shaped mark on the face of a cog that represents the Upper Centre Point, all the others serving to adjust the rocker arms.



-the marks on the belt are aligned with those on the pinions, observing the direction of mounting and beginning from the pinion of the crankshaft;

-the captor of the **MOT 1505** apparatus is placed (held in the position indicated in the schema) at **5-10 mm** to the belt.

Any of the two captors can be used on condition the two of them should not be placed simultaneously in front of the belt.



The distribution belt is set in vibration (the measurement is validated by a beep of the apparatus).

-the belt is stretched by operating the stretching runner/pulley, until a value within **210 and 275 Hz** is obtained;

-the stretching device is blocked, and its screw-nut is tightened at **3 daNm**

-the crankshaft is wound $5 \frac{1}{2}$ rotations (no. 2 cylinder in the position of rocker-arm adjustment);

-the screw-nut of the runner/pulley is stretched until a value between **145 and 185 Hz** is obtained.

**CAUTION!**

If the value of 275 Hz is exceeded, the belt can no longer be used, and it has to be changed.

-the screw-nut of the runner/pulley is tightened at 5 daNm.

If not, this may get dismounted, risking the engine damaging.

GENERAL DIRECTIONS

The stretching of the belt should only be done for the cold engine mode (i.e. ambient temperature);
-a belt which has been taken off must not be re-mounted - it will have to be replaced by a new one

ADJUSTMENT OF ROCKER-ARMS

It is done only for the cold engine mode.

The adjustment values are:

-intake 0.10 mm

-exhaust 0.25 mm

1. Cam-Shaft pinion without line-up marks

a) The method called "in balance"

The cylinder valves in balance (end of exhaust; start of intake)	The cylinder rocker-arms are adjusted
1	4
3	2
4	1
2	3

b) The method called "exhaust valve opened to the maximum"

The engine is wound (clockwise, as seen from the distribution) till the exhaust valve of cylinder no. 1 reaches maximum opening, and the play is adjusted for the intake valve of cylinder no. 3, and also for the exhaust valve of cylinder no. 4.

The same is done for the other cylinders, as in the chart:

Exhaust valve open to the maximum	Intake valve to be adjusted	Exhaust valve to be adjusted
1	3	4
3	4	2
4	2	1
2	1	3

ADJUSTMENT OF ROCKER-ARMS

2. Cam-Shaft pinion with line-up marks:

The engine is wound until it reaches the Upper center point (cylinder no. 1 at ignition), then further up to the first line-up mark.

-what is adjusted: **exhaust 1**
exhaust 3

-for the second mark:

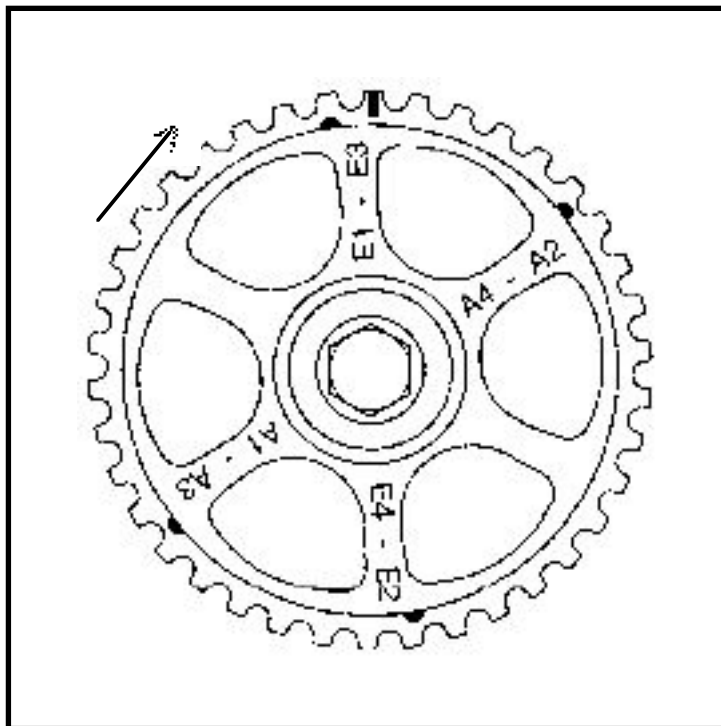
-what is adjusted: **intake 1**
intake 3

-for the third mark:

-what is adjusted: **exhaust 2**
exhaust 4

-for the fourth mark:

-what is adjusted: **intake 2**
intake 4



After the tuning of the distribution and the adjustment of the rocker-arms, the following are further re-mounted:

- the cylinder-head cap, fitted with a new fitting; the screws are tightened at 1 daNm;
- the water-intake conduit and the oil-level gauge guide (with new watertight-sealing rings);
- the cap of the distribution;
- the pulley of the crankshaft; the screw is first tightened at 2 daNm, then at $68^{\circ} \pm 6^{\circ}$.



CAUTION!


If the screw is not duly tightened, it can come undone, which can result in the oil-pump not being operated and the distribution being disrupted, thus causing serious damage to the engine.

- the intake and exhaust collectors: the screws are tightened at 2.5 daNm;
- the belt(s) of accessories: the same method as that for the distribution belt is used.

The stretching values are:

- | | |
|--|-----------------|
| * alternator belt | 263 \pm 10Hz |
| * Air-Conditioning (A.C) compressor belt | 222 \pm 10Hz. |

LOWER CRANKCASE MOUNTED ON THE CAR

TIGHTENING COUPLES (daNm)	
Screws for fixing at front of motor-propelling frame	6.2
Screws for fixing at back of motor-propelling fram	10.2
Lower crankcase screws	1
Screws for fixing steering wheel lower axis	1.4
Screws of wheel	7.5
Screw of the ball-and-socket joint	5.5
Screw-nut of the steering ball-and-socket joint	3.5
Screw for fixing anti-swing auxiliary connecting rod (on frame)	6.2
Screw for fixing anti-swing auxiliary connecting rod (on gearbox)	10.5

DISMOUNTING

The car is placed on a lifting stand with two columns;

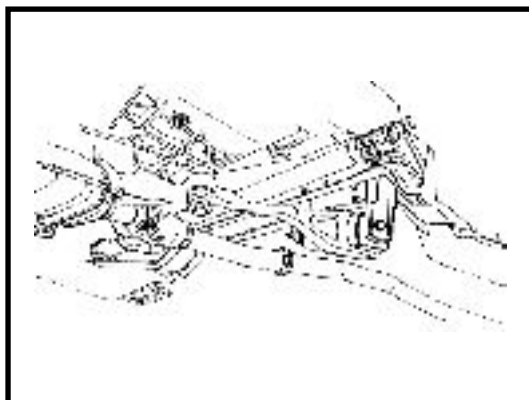
The battery is disconnected;

The engine is emptied of oil;

The engine-shield is taken apart;

To take apart:

- front wheels;
- screw-nut for fixing the lower steering wheel axis on the pinion of the steering case;
- the steering ball-and-socket joints and the arm ball-and-socket joints;
- side clearance devices;
- thermic protection screen;
- catalytic converter;
- front bumper bar;
- anti-swing auxiliary connecting rod.



The screws for fixing the motor-propelling set frame are taken apart, and the frame is lowered;

The lower crankcase is taken apart.

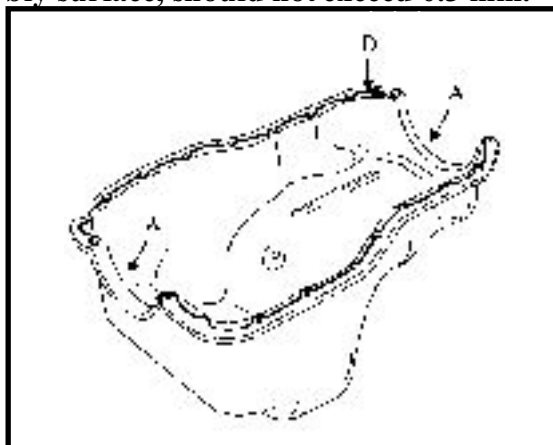
RE-MOUNTING

The lower crankcase is cleaned.

A ca. 3 mm-thick girdle of **RHODERSEAL 5661** is applied, as in the adjoining drawing.


Do not forget to replace the two crescent-shaped fittings at the ends of the crankcase.

Mind that the relative displacement between the lower crankcase and the cylinder crankcase, along the gearbox-assembly surface, should not exceed 0.3 mm.



OIL-PUMP

OIL-PUMP ON THE CAR

TIGHTENING COUPLES (daNm)		
Screws for fixing oil-pump	2.5	
Screws for fixing oil-pump cap	1	

DISMOUNTING

The oil in the engine is emptied.

The following are taken apart:

- Motor-Propelling set frame;
- lower crankcase.

The screws for fixing the oil-pump on the crankcase are taken apart;

The carrying chain is taken off the oil-pump pinion;

The cap of the oil-pump is taken apart.

The play of the pinions in the oil-pump is checked.

RE-MOUNTING


The dismantling operations are done in the reverse order.


Motor-oil filling-up is done.

The pressure of the oil at 80° is checked:

idle mode: 1 bar

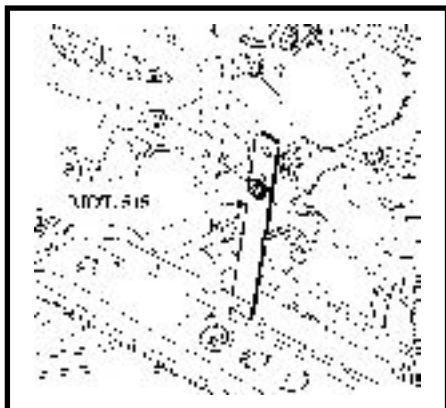
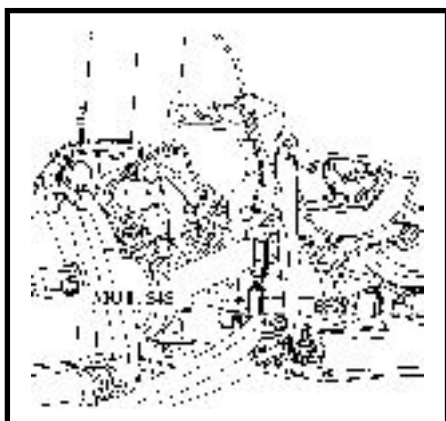
4000 rot/minute 3 bar

TIGHTENING COUPLES (daNm)	
Screws for fixing combustion-head cap	1
Screw-nut for stretching distribution belt runner/pulley	5
Screws and screw-nuts M 6 for water-pump	1
Screws and screw-nuts M 8 for water-pump	2.2
Screw of the crankshaft pulley	2+68°+/-6°
Screw of cam-shaft pin	4.5
Screws of rocker-arm ramp	2.3
Screws of flywheel	5 - 5.5
Screws of oil-pump	2.5
Screws of oil-pump cap	1
Screws of bearing caps	2.5+43°+/-6°
Screws of combustion-head	2+97°+/-2°
Screws of the exhaust gallery	2.5
Screws of the intake gallery	2.5
Sparking plugs	2.5 - 3
Screws of the oil-crankcase	1
Screws for rocker-arm adjustment	1.5
Emptying jack	2
Screws of the connecting rod caps	4.2
Oxygen probe	4.5

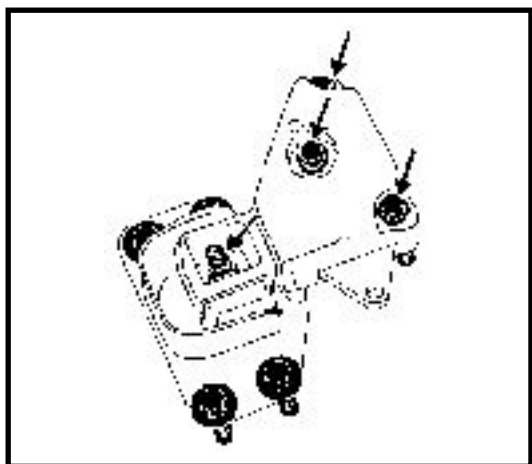
Tightening couples (daNm)	
Screws of wheels	7.5
Screw of the crankshaft pulley	2+68 ^o +/-6 ^o
Screw-nut of stretching runner	5
Screws right-side stand	6.2
Screw-nut hydroelastic buffer	3.7

DISMONTING

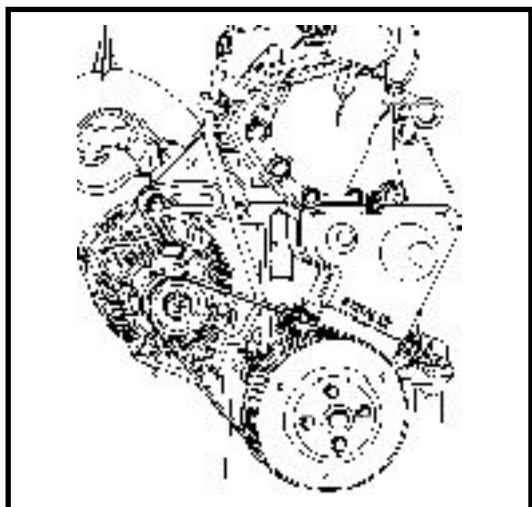
The car is placed on a lifting stand.
The fore part of the engine is propped on the frame using the MOT.545 device.



The following are taken apart:
-front right-side wheel;
-the right-side pendular suspension;



- the alternator belt;
- the carrying belt of the compressor (AC);
- the pulley of the crankshaft and its hub;
- the carrying pulley of the compressor;
- the distribution crankcases.



The engine is set at the tuning point (see Chapter 10, pages 10-19);
The screw-nut of the stretching runner is loosened;
The distribution belt is taken off.

RE-MOUNTING

A new distribution belt is mounted (see Chapter 10, pages 10-33);
The tension in the distribution belt is checked and adjusted, by means of MOT.1505 device, at the value of **145-185 Hz**.



The operations are done in the reverse order of those in the dismantling process;
The screws are tightened at the couple;
It is compulsory to tighten the crankshaft pulley at a **2 daNm** couple plus an angle of **68°+/-6°**;
The compressor pulley (AC) is re-mounted;
The belt of the alternator and that of the compressor are stretched, observing the values of the mounting tension:

Alternator: **263 Hz+/- 10%**
Compressor: **222 Hz+/- 10%.**

SPECIAL TOOL-AND-CHECK SETS

MOT.1202-01	-"CLIC" collar-pincers
MOT.1505	-Device for measuring belt tension
MOT.484	-Device for jacket maintaining
	-Wrench for angular tightening
	-Pincers for elastic collar

TIGHTENING COUPLES (daNm)



Screw-nut of stretching runner/pulley	5
Screw of crankshaft pulley	2+68°+/-6°
Screws of pendular suspension stand	6.2
Screw-nut of hydro-elastic buffer	3.7
Wheel Screws	7.5
Combustion-head Screws	2+97°+/-2°

DISMOUNTING

The car is placed on a two-column lifting stand;

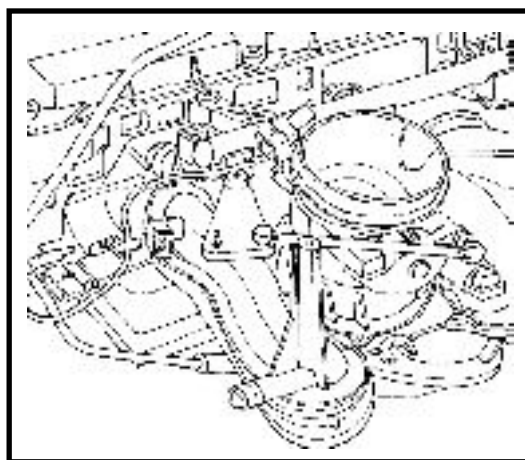
The battery is disconnected;

The cooling circuit is emptied at the jack situated at the lower part of the radiator;

The distribution belt is taken apart (see Chapter Distribution Belt);

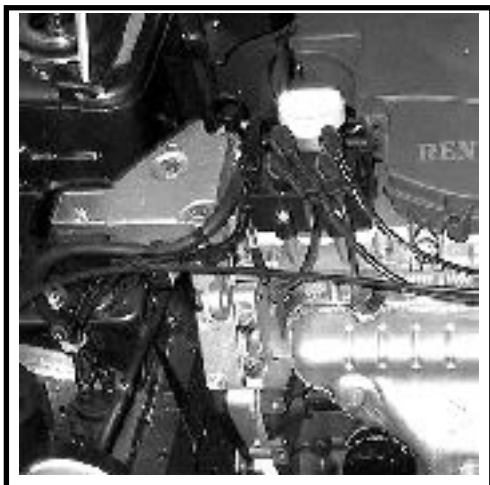
The following are taken apart:

- air-filter;
- the connector of the clapper-position potentiometer (1);
- the acceleration cable;
- the connector of the atmospheric pressure sensor (2);
- the connector of the step-by-step engine (3);
- the connector of the air temperature sensor (4) on the intake collector;



To take apart:

- the connector of the induction coil;
- the fuel hoses (the going- and return circuit);
- the connectors of the injectors;
- the plugs of the sparks;
- the induction coil.

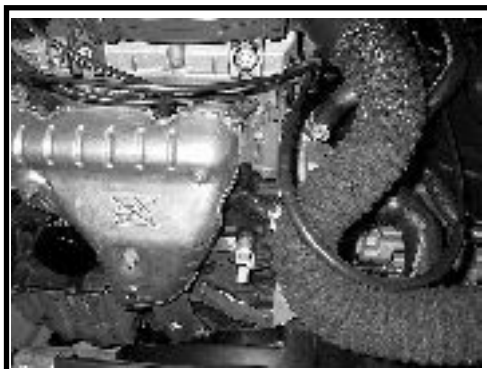


The hoses of the thermostat stand are disconnected;



To take apart:

- the thermic screen;
- the exhaust collector;
- the alternator;
- the guide of the oil-level gauge;



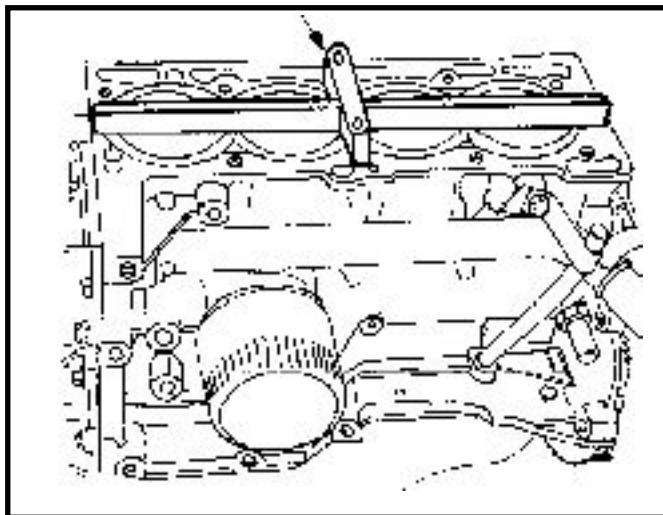
To take apart:

- the combustion-head screws, except the screw corresponding to A position, which is only loosened, then the combustion-head is turned round the remaining screw;
- the cylinder-head;



The jacket-maintaining **MOT.484** device is mounted.

Check the plane of the cylinder-head.



RE-MOUNTING

The plane of the fitting is cleaned and checked.

Mount the cylinder head with a new gasket.

The taking-apart operations are done in the reverse order.

The combustion-head is tightened (see Chapter 10, pages 10-31).

The distribution belt is mounted (see Chapter 10, pages 10-33);

It is mounted in the reverse order of the taking-apart process;

The filling-up and the airing of the cooling circuit is done (see Chapter “Filling-up and draining”);

The rocker-arms are adjusted.

NOTE

At each operation requiring battery disconnection, when reconnecting, introduce the radio code, which is written on the vehicle-buying invoice.

Car	Gearbox	ENGINE					Volumetric ratio
		Type	Index	Cylinder bore (mm)	Stroke length (mm)	Cylinder volume (cm ³)	
SuperNova	JH3-050	E7J	A-2/60	75,8	77	1390	9,5/1

Motor		Check-ups in idle mood*					Fuel (minimum octanic number)
		Mode (rot/min)	Emisii poluanți			Lambda l	
Type	Index		CO(%) (1)	CO ₂ (%)	HC ppm		
E7J	A-2/60	750+/-50	0,5 max	14,5 min	100 max	0,97....1,03	Unleaded petrol (CO95)

(1) at 2500 rot/min the **CO** value must be max. **0.30%**;

* For water temperature over 80°C and after stabilizing at **2500rot/min** for **30 seconds**; then turn back into idle mode and the level of fumes is measured.

The water-temperature and air-temperature sensors are type NTC (negative temperature coefficient), and the variation of their resistance as to temperature has the following evolution:

T (°C)	0	20	40	80	90
Air-T sensor R (Ohm)	11970 - 7470	4045 - 3060	1600 - 1315	-	-
Engine T sensor R (Ohm)	8000 - 6700	3000 - 2600	1300 - 1100	300 - 270	215 - 200

DENOMINATION	PARTICULARITIES		
Computer	90-ways connector		
Injection system	Multi-point sequential		
Ignition Static with a double coil	PINIS	R W	
	Computer controlled ignition R_{A-C} R_{B-C} R_{1-4} 7+/-1KW R_{2-3}	R_{A-B} 0,5 W 0,5 W	1W
Detonation sensor	Piezoelectric type SAGEM Tightening moment = 2 daNm		
RPM SENSOR	ELECTRICFIL or SIEMENS R = 200.....270 W		
Spark plugs	EYQUEM - type RFN 58 LZ CHAMPION - type RC 87 YCL		
Fuel filter	For EURO 96: Attached under the vehicle in front of the fuel tank Replacement on the occasion of the scheduled inspections For EURO 00: Into the fuel tank, attached on the fuel pump assembly. It is not replaced separate.		
Fuel pump	Immersed in the fuel tank For EURO 96: - Flow: 1,3 l/min - Pressure: 3 bars at 12V tension For EURO 00: - Pressure: 3,5 bars at 12V tension		
Pressure controller	For EURO 96: Pressure controller attached on the injection ramp Controlled pressure: - 3 +/- 0,2 bars at zero depression - 2,5 +/- 0,2 bari at a depression of 500 mbars For EURO 00: Mounted into fuel tank on the fuel pump assembly Controlled pressure: 3,5 bars		
Electric injectors	SIEMENS R = 14,5 +/- 1 W la 20°C + 12 V supply		
Step by step engine	$R_{A-D} = 52 +/- 5 W$ $R_{B-C} = 52 +/- 5 W$		

DENOMINATION	PARTICULARITIES												
Valve potentiometer	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"><i>Resistance</i> <i>Idle</i></th> <th style="width: 30%;">Idle</th> <th style="width: 40%;">at maximum acceleration</th> </tr> </thead> <tbody> <tr> <td>A - B</td> <td style="text-align: center;">1300 W</td> <td style="text-align: center;">1300 W</td> </tr> <tr> <td>A - C</td> <td style="text-align: center;">1500 W</td> <td style="text-align: center;">2000 W</td> </tr> <tr> <td>B - C</td> <td style="text-align: center;">2000 W</td> <td style="text-align: center;">1300 W</td> </tr> </tbody> </table>	<i>Resistance</i> <i>Idle</i>	Idle	at maximum acceleration	A - B	1300 W	1300 W	A - C	1500 W	2000 W	B - C	2000 W	1300 W
<i>Resistance</i> <i>Idle</i>	Idle	at maximum acceleration											
A - B	1300 W	1300 W											
A - C	1500 W	2000 W											
B - C	2000 W	1300 W											
Canister purging valve	<p>SAGEM Supply tension= +12 V R = 26 +/- 4W la 23° C</p>												
Oxygen sensor	<p>NGK For EURO 96: an oxygen sensor attached on upstream of catalyzer Generated tension at 8500C: - rich mixture 750 +/- 50mV - salt mixture 150 +/- 50 mV Heating resistance $R_{A-B} = 3 \dots\dots 15 \text{ W}$ For EURO 00: two oxygen sensors attached one on upstream and the othder one on downstream of catalyzer</p>												
Atmospheric pressure sensor	<p>DELCO ELECTRONICS Stopped engine – shows an atmospheric pressure of 950...1050 mbar Idle engine - 330 +/- 40 mbar</p>												

DISMOUNTING

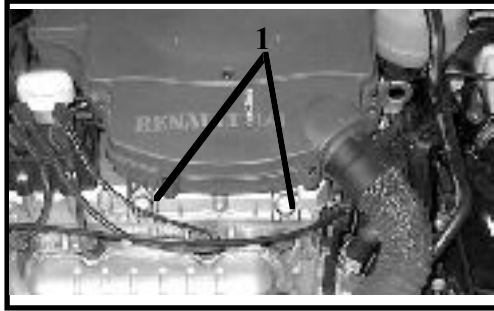
The battery is disconnected.

The air tube is taken off the battery-protecting screen.

The four screws (1) for air-filter fixing are taken off.

The hose connecting the combustion-head cap and the air-filter is disconnected.

The air-filter is taken apart



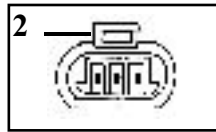
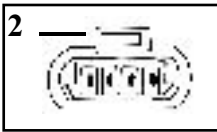
To disconnect:

-the acceleration cable (the end of the cable is uncoupled from the command lever of the clapper, and then it is taken off the sleeve on the stand);

-the connectors:

I. of the step-by-step engine;

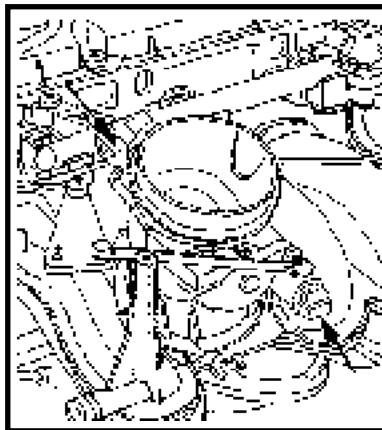
II. of the clapper potentiometer.



(no. 2 clamp is pulled upwards and the connector is taken off)

The command lever is uncoupled off the body of the clapper;

The clapper body is taken apart.



RE-MOUNTING

The fitting of the clapper body is replaced;

The same steps are taken as in the case of the dismantling, only in the reverse order.

TIGHTENING COUPLE (daNm)	
Screws and screw-nuts for intake collector 2.5	



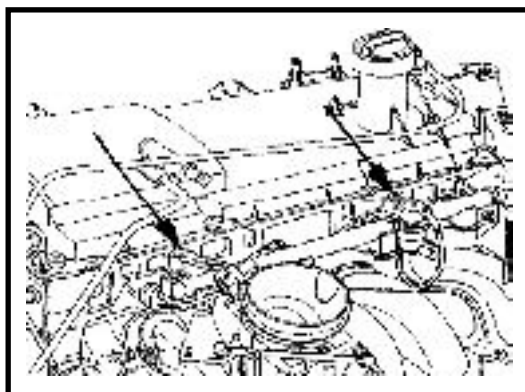
DISMOUNTING

The following are taken apart:

- air-filter;
- acceleration cable;
- injection ramp (see **Chapter Injection ramp**);

The electric connectors are uncoupled:

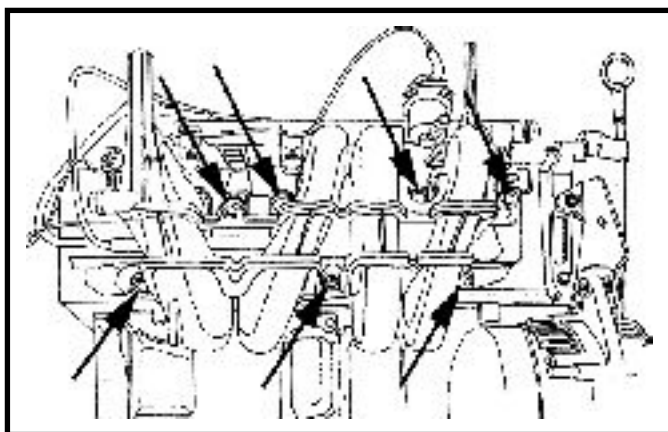
- atmospheric pressure sensor;
- air temperature sensor;
- step-by-step engine;
- clapper potentiometer.



The fuel supply conduits are taken apart (both going- and return);

The clapper command lever is uncoupled and the body of the clapper is taken off;

The screws and screw-nuts fixing the intake collector are taken apart.




RE-MOUNTING

The fittings of the intake collector are replaced;

The same steps are taken as in the case of the dismantling, only in the reverse order.

Tighten the inlet manifold screws and nuts at the required moment of 2.5 daNm.

TIGHTENING COUPLE (daNm)	
Screws for collector fixing	2.5

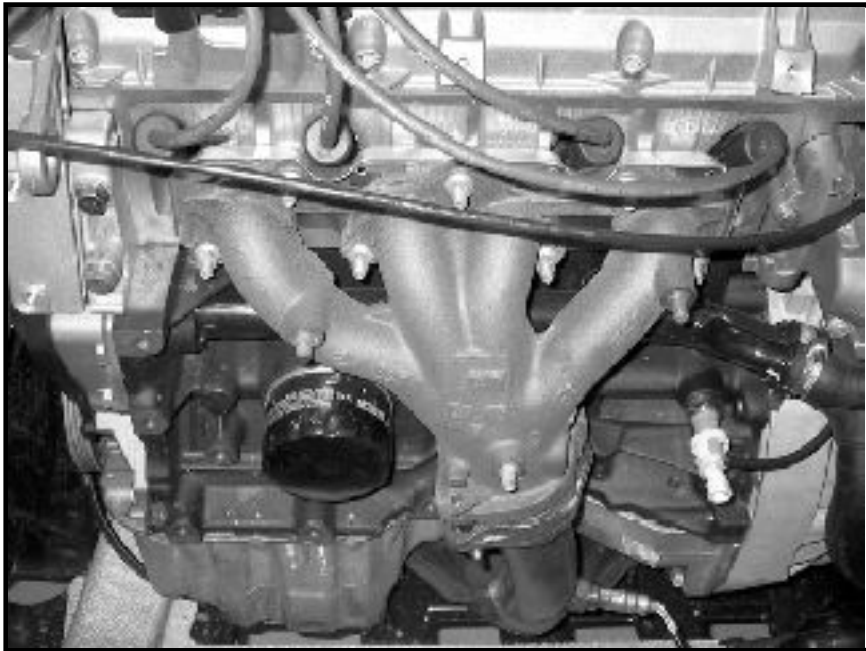


DISMOUNTING

The thermic screen is taken apart;

The connection between the exhaust collector and the exhaust pipe is taken off;

The exhaust collector is taken apart



Re-mounting

The same steps are taken as in the case of the dismantling, only in the reverse order.

The screws are tightened at the couple.

AIM:

To avoid accidental fires owing to fuel leaks, which can be caused by an accident.

FUNCTIONING:

The shock-sensor lies in the engine compartment: it is mounted on the left-side shock-absorber column.

During a shock, the ball of the sensor goes out of its slot, and thus achieves the breaking of the electric circuit between the relay commanding the petrol-pump and the petrol-pump itself.

**PLACING BACK THE SHOCK-SENSOR IN OPERATIONAL MODE**

In order to resume the functioning of the shock-sensor it will suffice to press its top, and thus replace the ball in its former position.

**CAUTION!**

When the fuel circuit is opened, any petrol jet due to residue pressure must be averted by means of a gauze.

DISMOUNTING

The battery is disconnected.

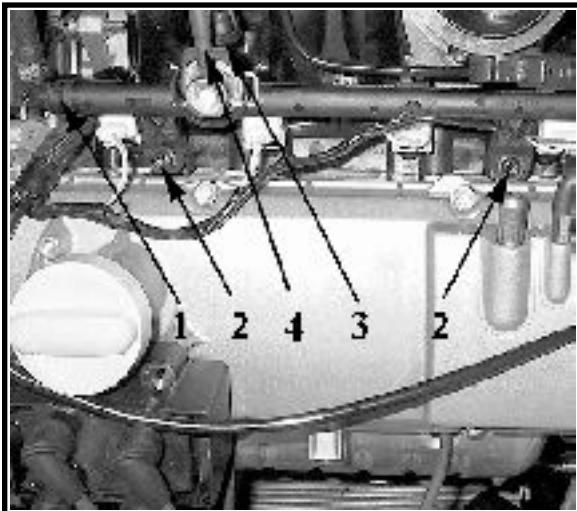
The air-filter is taken out.

To disconnect:

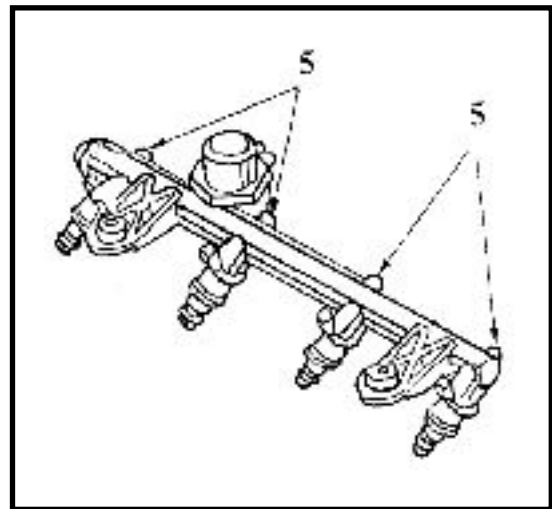
- no. 1 fuel supply tube;
- no. 3 return fuel tube;
- no. 4 pressure-regulator tube.

Injection ramp Screws no. 2 are taken off.

The ramp is taken apart.



In order to take apart an injector, withdraw clamp no. 5 and then pull the injector.

**RE-MOUNTING**

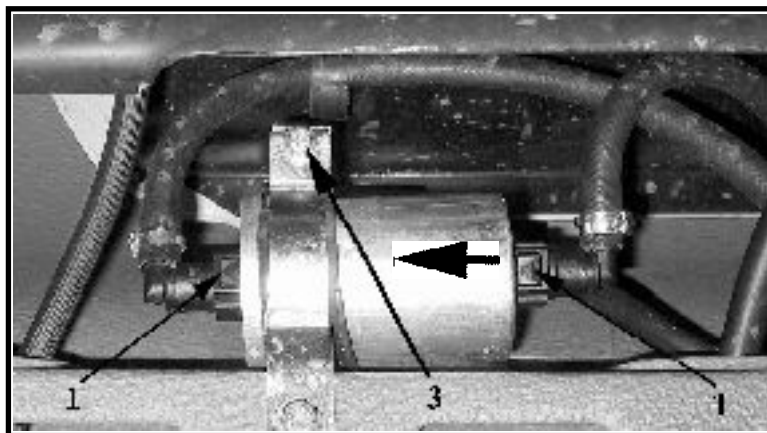
Replace the torric fittings at the base of the injectors (if the injector has been taken apart as well as the fitting at the end of the injector).

For the supply junctions and the return petrol tubes to be correctly coupled a click must be heard the moment the coupling is done.

The rest of the operations are done in the reverse order as that of the taking apart.

LOCATION

The petrol filter is mounted under the car, in front of the petrol tank.

**REPLACEMENT**

The replacement of the petrol filter is recommended for any overhauling or for max. 20,000 kilometers.

**CAUTION!**

When the fuel circuit is opened, any petrol jet due to residue pressure must be averted by means of a gauze.

DISMOUNTING

Before every taking-apart operation, prevent fuel from leaking.
Clamps no. 1 are pushed and the speedy junctions are disconnected.
Screw no. 3 is taken off and the petrol filter is taken apart.

RE-MOUNTING

Observe the flowing direction of the fuel (which is shown by an arrow inscribed on the filter).

Connect the speedy junctions back, by hand-pushing.

A correct coupling of the speedy junctions is ensured when there is a click at the moment of the coupling.

SPECIAL DEVICES

Tuning pincers "CLIC"

It is recommendable to do the inspection of the fuel pump-flow through the return fuel hose which is connected on the pump-level transmitter set.



IMPORTANT!

During these operations it is compulsory:

-not to smoke or handle incandescent objects at the working place;

-to ensure protection from the petrol projections due to residue pressure left in the channeling during the taking-apart.

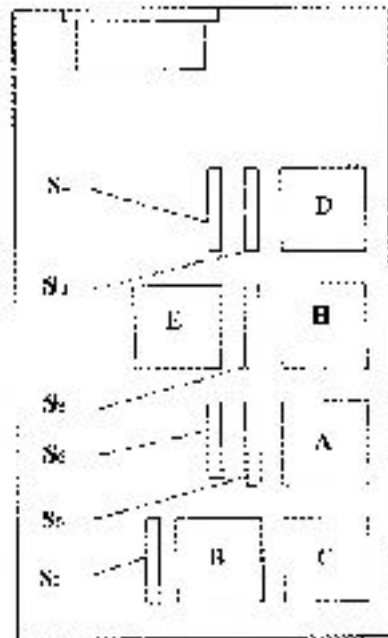
PUMP-FLOW INSPECTION

The return channeling no. **1** of the fuel supply is disconnected.

A hose is connected on the junction whose end is introduced in a graded vessel (from **0 to 2000 ml**)

Terminals **3** and **5** of **H** relay (lying in the fuse-box of the motor-compartment) of the petrol pump are shunted.

Within a minute, the flow of the pump must be min. **1.3 liter** at the voltage of **12 V**.



If the flow is not correct, the supply voltage of the pump is inspected (the flow decreases by approx. **10%** for a **1 V** voltage-decrease).

SUPPLY PRESSURE CONTROL

SPECIAL DEVICES	
MOT 1311-01	Control Kit for petrol pressure
MOT 1311-04	J Junction
MOT 1311-06	Junction-disconnecting device



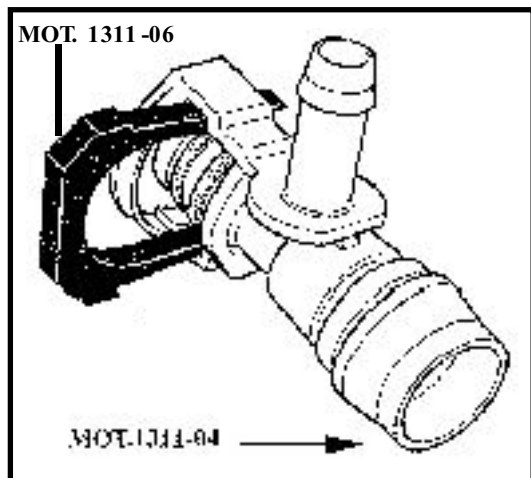
CAUTION!

When the fuel circuit is opened, any petrol jet due to residue pressure must be averted by means of a gauze.

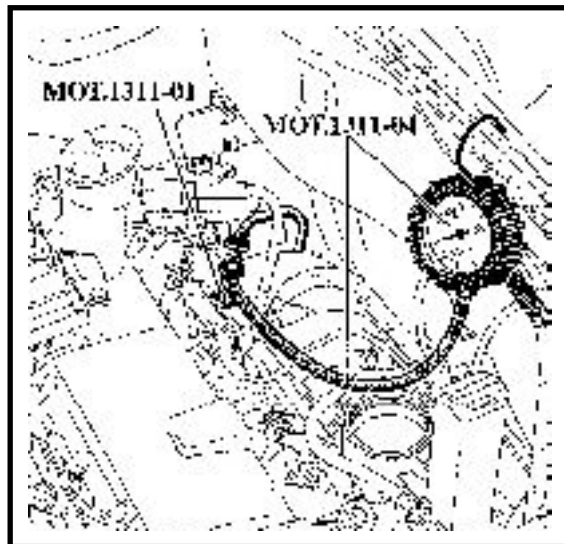
The air-filter is taken apart.

The fuel supply hose is disconnected.

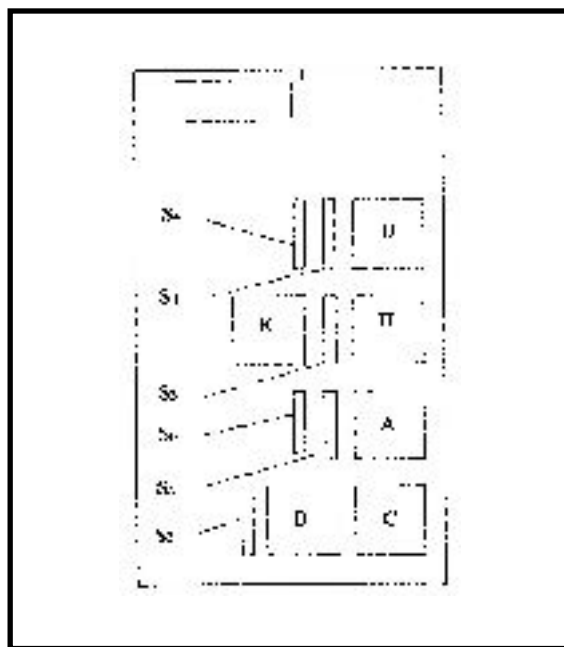
The **MOT1311-04** derivation junction is connected onto the ramp, then the fuel-supply channelling is re-connected onto the junction.



The manometer 0-10 bar, as well as the flexible hose **MOT1311-01** are mounted.

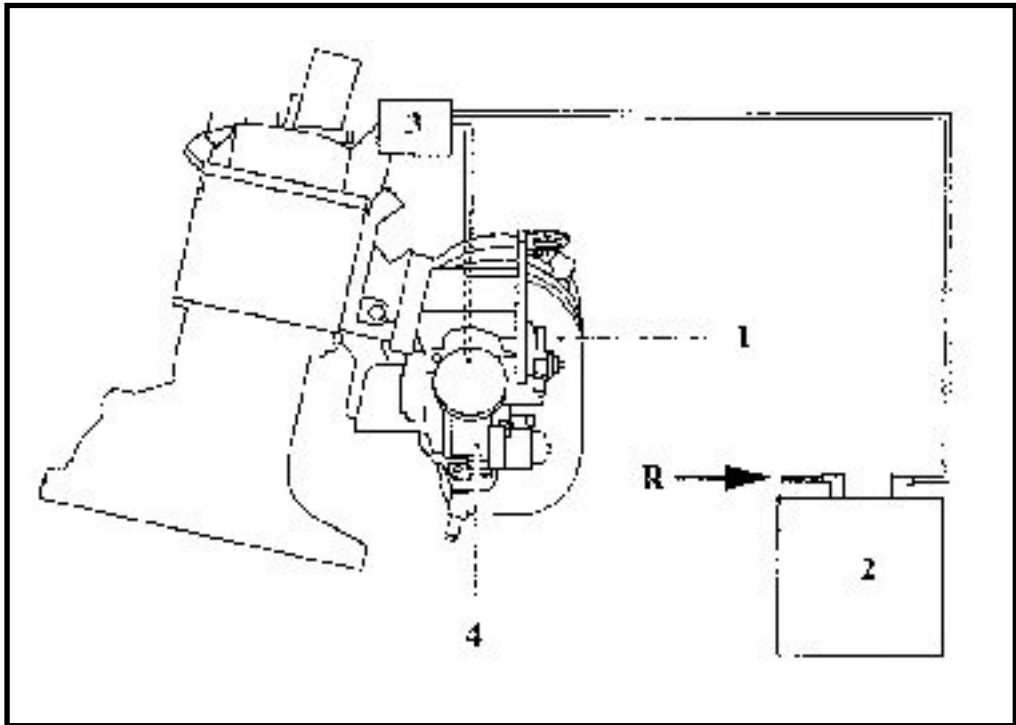


Terminals no. 3 and 5 of the **H** fuel-pump relay (located in the engine fuse-box) are shunted.



Pressure must be **3+/-0.2 bar**.

By applying a **500 mbar** depression on the pressure-regulator, the pressure of the fuel must be **2.5+/-0.2 bar**.

FUNCTIONING SCHEMA

1. INTAKE COLLECTOR
 2. CARBON CANISTER
 3. DRAINING VALVE
 4. CLAPPER BODY
- R. CHANNELING FROM THE TANK

RE-ASPIRATION CONDITIONS

The canister-purging valve is controlled by pin 4 of the UCE injection, when :

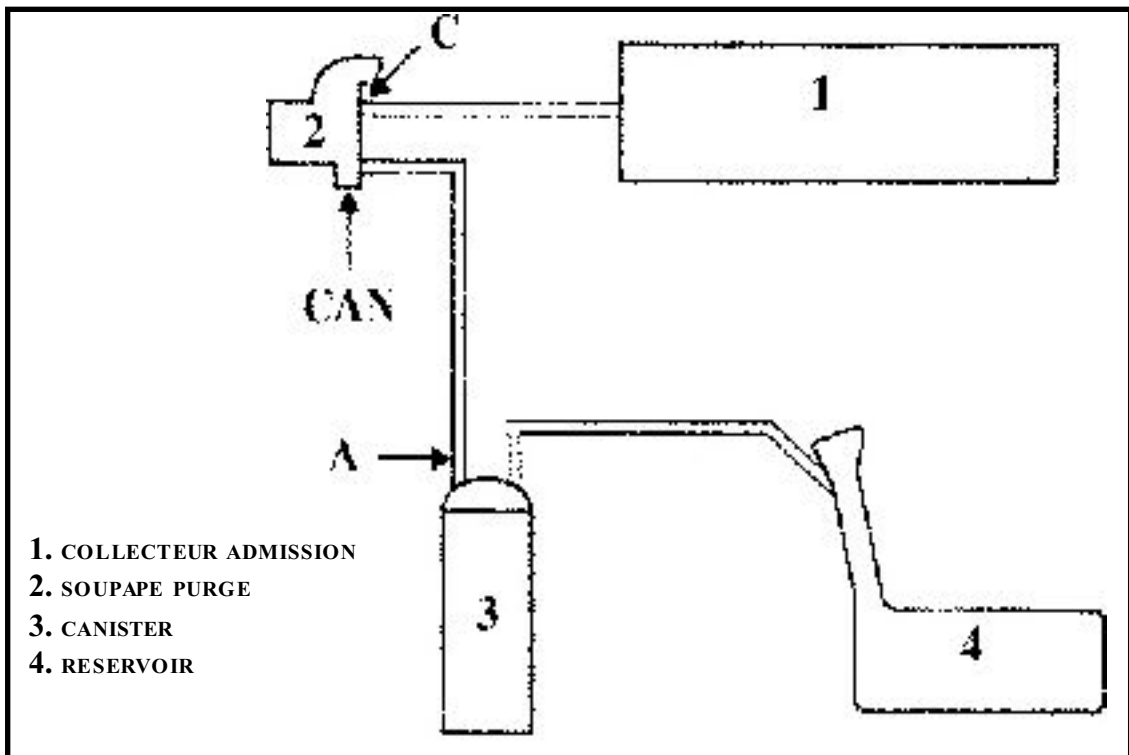
- water temperature > 50°C;
- air temperature > 15°C;
- the valve position outside idle position.

It is possible the reading of the RCO value (opening cyclic ratio) of the canister purging valve, by means of the CLIP tester.

THE CHECKING OF THE CANISTER PURGING VALVE OPERATION

A non-operation of the petrol vapors re-aspiration system may lead to the fuel consumption increase and to a unstable idling.

It is necessary to check if the purging valve exit is correctly connected to the carbon canister. Check also the piping condition between the canister and the fuel tank (sealing, clogging on layout).



Check at idling if there is a depression, by fitting a pressure gauge (-3...+ 3 bars) at the purging valve exit (B) towards canister.

Is there any depression?

YES - Set off the contact . Using a vacuum pump, apply a 500 mbars depression at the (C) connection of the purging valve. The value of the read depression must not vary more than 10 mbars within 30 seconds. If change is more than 10 mbars, then purging valve is damaged and must be replaced. Valve cleaning of small active carbon particles may be tried, by low-pressure compressed air blowing at the valve (B) connection

NO - When conditions of purging valve controlling are accomplished and this one does not open, check its control electric circuit (between UCE injection pin4 and purging valve), from continuity or short-circuit point of view.

The RCO value of the signal received by the purging valve from the computer, may be read by means of the CLIP tester in PROL 23. The minimal value is of 0.7% (corresponding to the closed position of the purging valve).

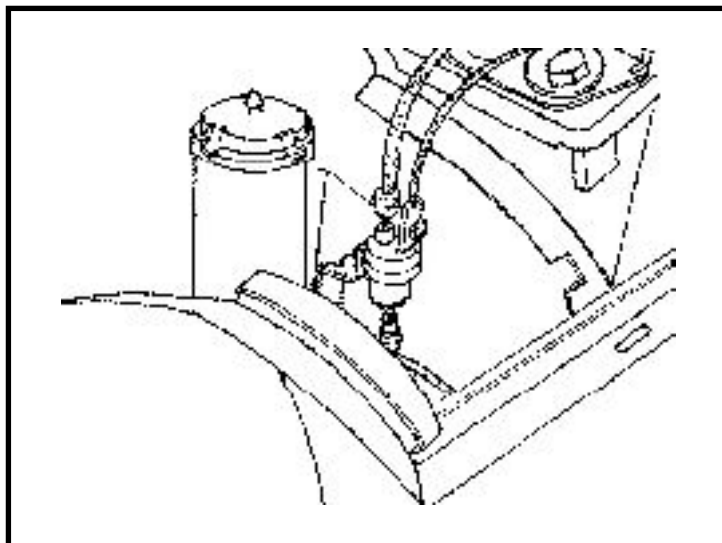
PLACING - DISMOUNTING

Both the carbon canister and the draining valve are mounted by means of a stand on the lining of the right-side front wing of the car.

The channellings of the canister and the electric conector commanding the draining valve are disconnected;

The sleeve for fixing the draining valve is taken off and the valve is taken apart.

The carbon canister is taken apart.



REMOUNTING

Perform in the reverse order the dismounting operations.

IDENTIFICATION

ENGINE	ALTERNATOR	INTENSITY
E7J - A-2/60	VALEO A11 VI 87	75A
	VALEO A13 VI 212	80A

INSPECTION

After 15 minutes' warming under a **13.5 V** voltage.

ENGINE REVOLUTION RATIO (rot/min)	ALTERNATOR 75 A (A)	ALTERNATOR 80A (A)
1000	46	54
2000	68	75
3000	71	80
4000	72	82

FUNCTIONING AND DIAGNOSING

These cars are equipped with internal ventilation alternators, with in-built voltage regulator and on-board light indicator, which must work as follows:

- when the contact is on, the light is on;
- when the engine starts, the light goes out;
- if the light is on again as the engine is running, then it indicates a charging dysfunction.

SHOOT - FINDING INCIDENTS

A. The light does not turn on when the contact is on.

To check:

- if the electric connections are done properly;
- if the light of the board indicator is working properly (when the circuit is set to the mass, the light must turn on).

B. The light turns on when the engine is running

This indicates a charging fault, the cause of which may be:

- the carrying belt of the alternator is broken, the charging conductor is cut (+ continuous);
- a fault with the alternator (rotor, stator, diodes or brushes);
- a fault with the voltage regulator;
- a voltage surge (overvoltage).

C. The customer / user claims a fault with the charging, as the on-board light works correctly.

If the regulated voltage is less than 13.5 V, the alternator is checked. The cause of the defect may be:

- a burnt diode;
- disconnected or cut live wire;
- the coal powder or the wear of the collector.

CONTROL OF VOLTAGE

A voltmeter is connected across the terminals of the battery and the voltage value is read.

The engine is run until the needle of the voltmeter settles at the regulated voltage. This value should be within 13.5 and 14.8 V.

The maximum of consumer devices are connected: the voltage should remain between 13.5 and 14.5 V.

***CAUTION!***

In case electric arc welding is being done on the car, the battery and the voltage regulator will be compulsorily disconnected (the alternator).

DIAGNOSING

Special device: **Tester CLIP - SAGEM** and accessories for physical measurements.

INSPECTION OF CHARGING CIRCUIT

The **CLIP - SAGEM** tester allows the inspection of the alternator, by measuring the voltage and the current supplied with, and without electric consumers.

NOTE: The Ampere pincers are of the inductive type (0-1000 A). Its mounting will be done without disconnecting the battery, thus allowing for the memorized data and the adapting values in the injection calculator to be preserved.

Mount the ammeter clamps directly to the alternator exit, having the arrow oriented towards this one.

The measurements are effected in three steps:

- measuring the battery voltage without contact on;
- measuring the regulated voltage and the current supplied without consumers;
- measuring the regulated voltage and the current supplied with a maximum of consumers.

The values obtained as a result of the measurements lead to the following interpretations:

-the voltage of the 'empty' battery < **12.3 V**: so, the battery is flat;

With no consumers:

-regulated voltage > **14.8 V**: so, the regulator is faulty;

-regulated voltage ('empty') < **13.2 V** or charging current < **2 A**: so, there is a defect of charging.

With consumers:

-regulated voltage > **14.8 V**: so, the regulator is faulty;

-regulated voltage ('empty') < **12.7 V**: the alternator charging current in regard to its characteristics must be checked.

INTENSITY (A)	ENGINE	E7J	
Rated intensity		75	80
Minimal intensity, which has to be supplied by the alternator to all working consumers		51	60

If the measured output is too little, the following will be checks:

- wear of alternator (collector brushes, etc.);
- battery connections;
- the mass braid of the engine;
- conformity of alternator;
- tension of carrying belt.

If the measured output is correct and the regulated voltage is too little, the cause may be:

- the car has too many electric consumers;
- the battery is flat.

SPECIAL DEVICES**MOT 1505** BELT TENSION MEASURING DEVICE**DISMOUNTING**

The car is set on a two-column lifting stand;
Disconnect the electric connections from the battery.

The fuel supply conduit is uncoupled;

The following are taken off:

- air filter;
- the oil-gauge tube;
- the top screw of the alternator;
- the alternator belt;
- the stretching flange of the alternator.

The car is suspended.

The electric connectors of the alternator are uncoupled;

Dismount the alternator lower attachment screw.

Lower the vehicle.

The alternator is taken out at the top.

**RE-MOUNTING**

The mounting operations are done in the reverse order;

The carrying belt of the alternator is stretched to get the recommended (**263 Hz \pm 10%**) mounting voltage;

The position of the alternator is blocked.

The engine is revolved three and a half crankshaft turns;

The reading end of the **MOT. 1505** measuring device is placed in the measuring area;

The tension in the belt is measured;

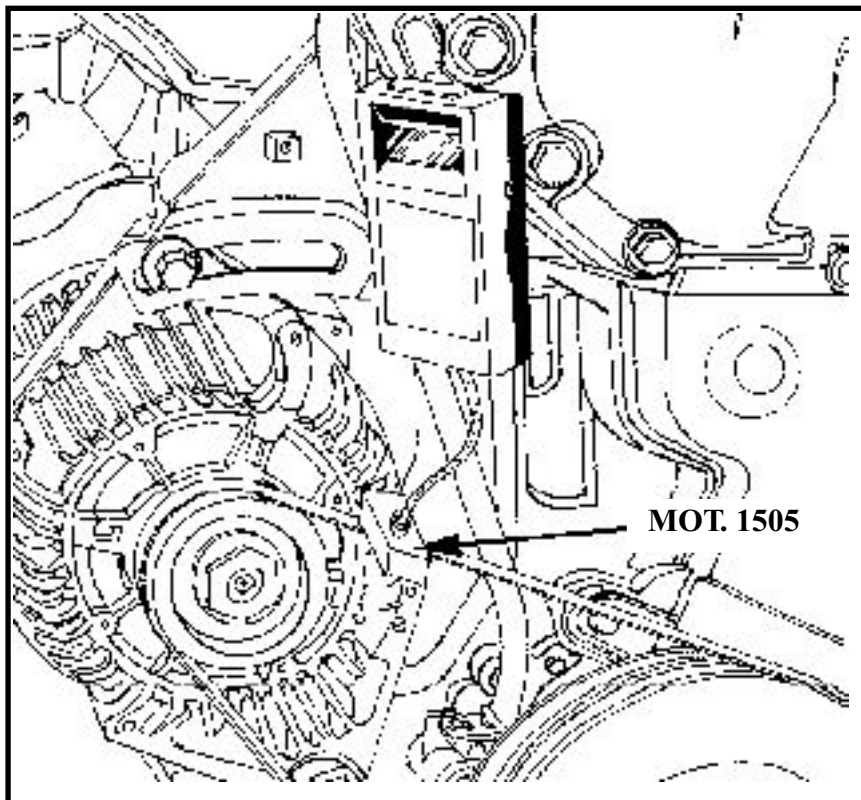
It is checked whether this fits into the mounting tension tolerance; if not, the belt will be stretched again until the recommended tension (**263 Hz +/- 10%**) is reached.

The inspection and the adjustment of the belt are done with the engine at ambient temperature.

Tighten at the required moment, the alternator attachment screws :

- screw M10(lower attachment)-5 daNm
- screwM10 (upper attachment)-2.2 daNm.

Remark: Once dismantled, a belt is not to be remounted, but replaced.



DISMOUNTING
(in the air -conditioning variant)

The car is placed on a two-column lifting stand;

The electric connections are uncoupled from the battery;

The following are taken apart:

-the top screw of the alternator;

-the belt of the alternator;

The right-side front wheel of the car is taken apart;

The car is suspended;

The two screws fixing the shock-absorber on the steering swivel stand are taken off;

The steering swivel stand is lowered and the right-side planetary transmission is taken off the planetary pinion of the gearbox;

The electric conductors of the alternator are disconnected;

The screw of the alternator is taken off;

The alternator is taken apart laterally past the right-side planetary transmission.

RE-MOUNTING

The taking-apart operations are done in the reverse order;

The carrying belt of the alternator is stretched to obtain the mounting tension recommended (**263 Hz +/- 10%**);

The position of the alternator is blocked;

The engine is revolved three and a half crankshaft turns;

The reading end of the **MOT. 1505** measuring device is placed in the measuring area;

The tension in the belt is measured;

It is checked whether this fits into the mounting tension tolerance; if not, the belt will be stretched again until the recommended tension (**263 Hz +/- 10%**) is reached.

The inspection and the adjustment of the belt are done with the engine at ambient temperature.

Tighten at the required moment, the alternator attachment screws :

- screw M10 (lower attachment)-5 daNm

- screw M10 (upper attachment)-2.2 daNm.

Remark: Once dismantled, a belt is not to be remounted, but replaced.

IDENTIFICATION

ENGINE	STARTER
E7J - A-2/60	D 907 - M00 2T 13581

DIAGNOSTICATION

Special device: **CLIP - SAGEM-TECHNIC TESTER** which measures the battery voltage and the intensity absorbed by the starter.

ANOMALOUS FUNCTIONING THAT CAN BE SETTLED

-Battery failure –contact drop on the starter when starting the engine.

-Blocked starter (the absorbed current is very high);

Coupling relay defect (the current absorbed is very weak).

In order to do the measurements one must carry the engine in starter mode, thus preventing the engine to run.

To do that, the revolution sensor (located in the clutch crankcase) should be taken apart.

Remark: After doing these tests, erase the possible defects memorized by the calculator with the tester.

DISMOUNTING

The car is put on a two-column lifting stand;

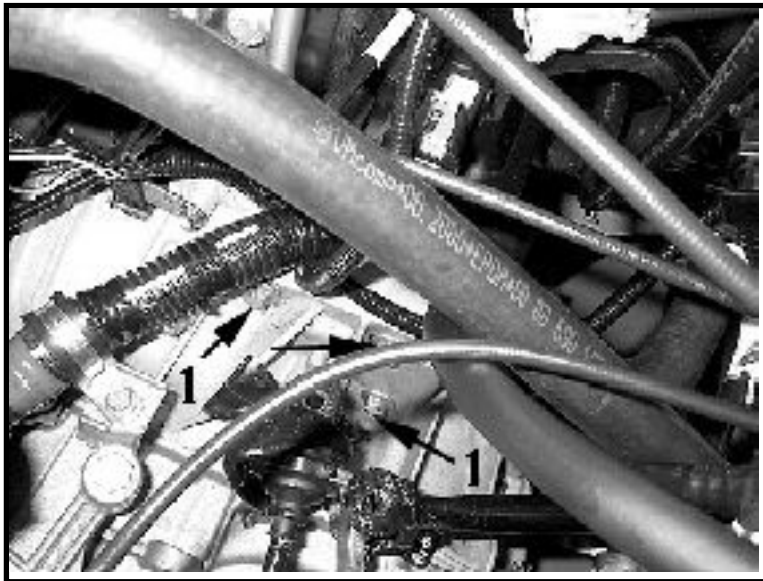
The battery of storage cells is disconnected;

The screw-nuts fixing the degassing vessel are taken apart.

The degassing vessel is removed (without disconnecting the link conduits) to the fore part of the car in order to facilitate access to the screws fixing the starter;

The screws fixing the command bar on the connecting rod of the gearbox are taken off (the jack is retrieved);

The screws no. 1 fixing the starter are taken;



The car is suspended;

The electric connectors of the starter are disconnected;

The starter is taken out through the bottom of the engine compartment.

RE-MOUNTING

The taking-apart operations are done in the reverse order.

The screws are tightened at a 4.4 daNm couple.

STATIC IGNITION

PRESENTATION

- The system is made up of:
- electronic control unit;
 - double ignition coil;
 - four sparking plugs;
 - spark plugs.



DESCRIPTION OF FUNCTIONING PRINCIPLE

According to the data received from various sensors, but essentially according to the revolution ratio and the load of the engine, the electronic control unit will determine the ignition advance; it will also identify the cylinders that are set at the upper center point and, consequently, will command the respective coil.

This causes the spark at the level of the two cylinders that are at the upper center point, thus interrupting the mass-setting of the respective coil.

THE COIL

The system contains a double coil, controlled by the calculator.

Coil no. 2 has an electric connector (1) with four ways, which simultaneously produce sparks at cylinders nos. 1 and 4, when it is commanded by pin no. 32 of the injection calculator, and on cylinders no. 2 and 3 when it is commanded by pin no. 1 of the same calculator.

ELECTRIC CONNECTOR

Pins	Function
A	Commands ignition at cylinders nos. 1 and 4
B	Commands ignition at cylinders nos. 2 and 3
C	Fuel supply (+DC)

inter - pin check	Rezistența între pini
A-B	1 W
A-C	0,5 W
B-C	0,5 W
HT - HT	11 KW

SPARKING PLUGS

Engine	Make	Type
E7J - A-2/60	EYQUEM CHAMPION	RFN 58 LZ RC 10 PYC
Distance between electrodes:		0,9 mm
Tightening couple:		2,5 - 3 daNm
Plane stool with fitting		

INJECTION SYSTEM

Peculiarities of the multi-point system

90-pin calculator made by **SIEMENS**.

Multi-point sequential injection. It commands an injector at a time, in turns.

Static ignition with double ignition coil.

Canister-draining valve controlled in a cyclical relation to the opening.

Correction of idle mode system in keeping with:

- air-conditioning (AC);

- battery voltage.

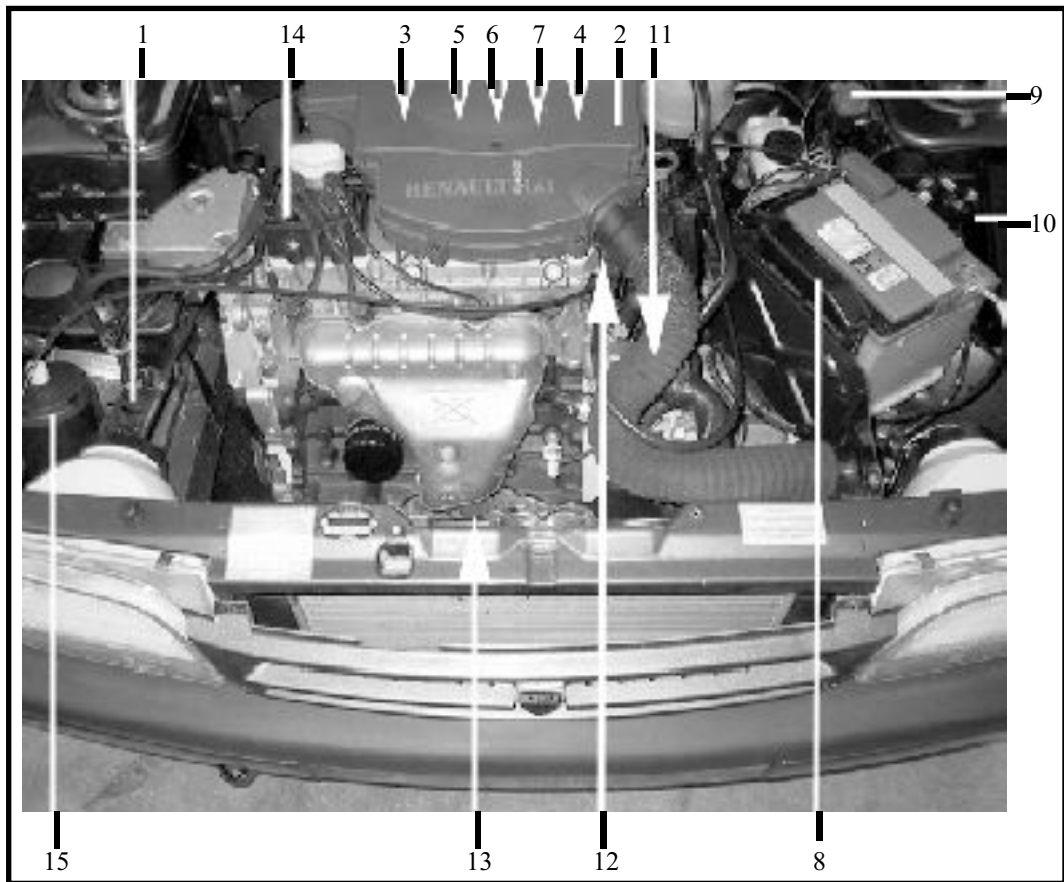
On-board injection light indicator;

Maximal load / regimen:

- 6200 rot/min** for gears: I, II, and III;

- 6000 rot/min** for gears: IV and V.

PLACING OF ELEMENTS

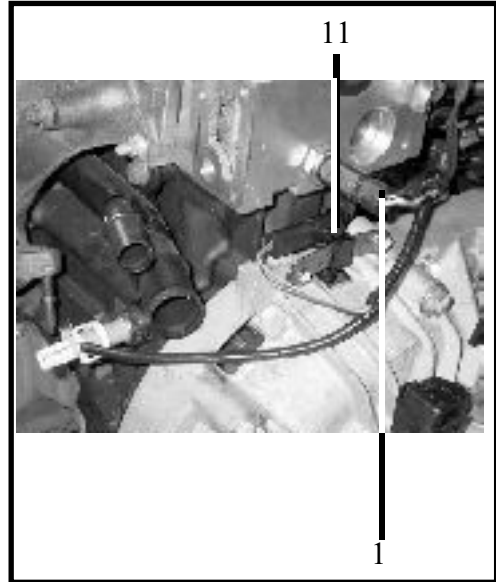


1. Canister-draining valve;
2. Air-filter;
3. Detonation sensor (tightening couple: 2.5 daNm);
4. Atmospheric air-pressure sensor;
5. Step-by-step idle mode-adjustment engine;
6. Clapper position potentiometer;
7. Air-temperature sensor;
8. Injection calculator;
9. Shock-sensor;
10. Fuse-and-relay box;
11. Revolution sensor;
12. Water-temperature sensor;
13. Oxygen sensor (tightening couple: 4.5 daNm);
14. Ignition coil;
15. Carbon canister.

- 8. Injection calculator;
- 9. Shock-sensor;

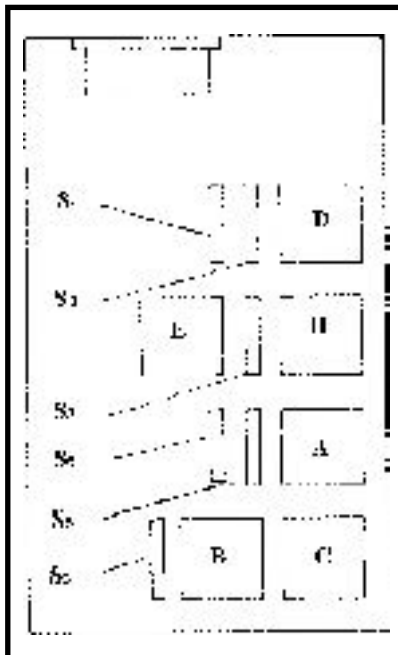


- 10. Revolution sensor;
- 11. Water-temperature sensor.



The following relays can be identified in the fuse-box;

- B = Motor-ventilator group relay (with Air-Conditioning)**
- H = Fuel-pump relay**
- C = Motor-ventilator group relay (without AC).**



The water - temperature sensor

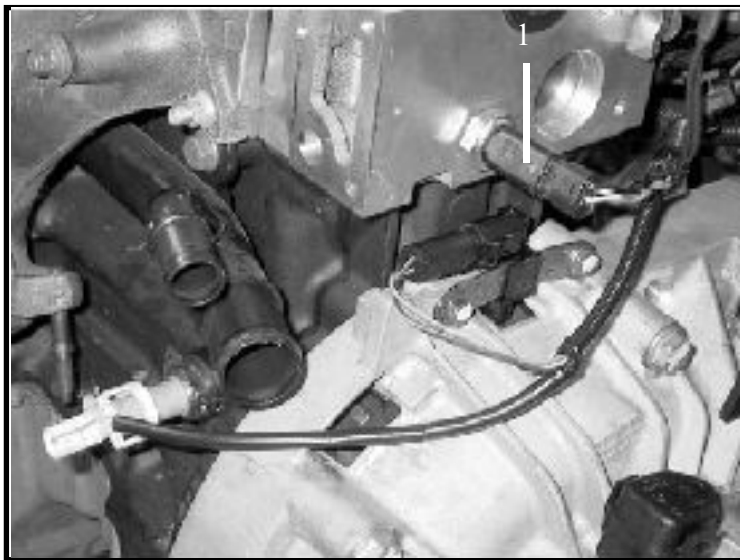
This sensor (no.1) sends the information concerning the water temperature to the calculator, and other information is sent to the on-board indicator, which will display water temperature.

In case of emergency regarding water temperature, the calculator will command the lighting of the water-temperature alert indicator on the board.

In keeping with the water-temperature information received by the calculator, it will command:

- the injection system;
- the relays for the command of the motor-ventilator engine cooling group.

When setting the contact on, the water temperature indicator, placed on the instrument panel, shall be lighted for 3 seconds then it shall turn off.



So, after setting the contact off, during next 2 minutes from engine stopping, the water temperature reaches the value of 102 C and the injection computer is then controlling the cooling blower starting at low speed.

When the temperature is lowering at 96 C, the blower will be stopped ; its operation must not be over 10 minutes after engine stopping.

INJECTION-DISRUPTION LIGHT INDICATOR**THE SYSTEM PARTICULARITIES (ANTI-STARTING INDICATOR)**

On setting the contact, the injection calculator receives from UCE DECODING DEVICE a code, which is then compared with the one previously memorized; if the two codes are the same, then the starting of the engine is authorized.

After the setting of the contact, the anti-start light indicator, which until then was flashing on and off, will turn on for 3 seconds, and then it will turn off, thus confirming the recognition of the key.

If the key is wrong, after it has been put in the contact the light will turn on and off quicker, and the engine starting will be impossible.

Observation:

For details regarding the vehicle anti-starting system, see chapter « Anti-starting System » from the Workshop manual SuperNova – vol.2, ed.I)

THE ANTI-START FUNCTION

REPLACING UCE INJECTION CALCULATOR

The UCE injection calculator is delivered without a code, but it is able to memorize a code.

When mounting a new calculator, it will have to memorize the code anti-start function singularity of this car, then one has to check if the anti-start function is operational. In order to do that, the following operations must be done:

- the contact is set for a few seconds, then it is taken out;
- after taking out the key, the anti-start function is activated.

INSPECTING THE ANTI - START FUNCTION

Take the key out of the contact and after 10 seconds the anti-start light indicator on the board must begin to flash on and off.

When setting the contact on, the anti-starting indicator must turn off.

THE INFLUENCE OF THE AIR-CONDITIONING ON THE INJECTION SYSTEM

The air-conditioning installation (AC) uses a variable cylinder-volume compressor.

There are the following connections between the air-conditioning and the petrol injection system:

-pin no. **46** of the injection calculator receives the information "solicit accelerated idle mode" when the button for the air-conditioning installation is pressed and the pressure of the freon in the installation is above a limit.

-the information "absorbed power" does not influence the idle mode regime, but lets the calculator know about the value of the couple taken by the compressor, and the calculator will operate the step-by-step engine, through pins nos. **12, 41, 42** and **72**, in order to compensate for the couple fall. With the tester it can read in the menu : « Parameters list » the power absorbed by the compressor, which will be between **300** and **5000 W**. The value that is read will be of minimum **300 W**, irrespective of the coupled / uncoupled state of the compressor.

-pin no. **10** of the injection calculator will command the E relay located in the fuse-box of the engine compartment, which will couple the compressor.

The injection calculator can prohibit the coupling of the AC compressor:

- it does not allow the coupling of the compressor before 10 seconds after the starting of the engine;
- according to the couple required from the engine by the driver - and in certain situations according to the power absorbed by the compressor - the calculator can forbid or authorize the starting of the compressor;
- if the water temperature is higher than, or equal to **115°C**, the thermic protection is operated, which will not authorize the starting of the compressor;
- the overload protection does not permit the coupling of the compressor when the revolution ratio of the engine is over **5900 rot/min**.

IDLING REGIME ADJUSTMENT DUE TO BATTERY VOLTAGE

The idle mode of the engine is influenced by the voltage of the battery with a view to compensating the voltage fall caused by the coupling of the consumers when the battery is poorly charged; this imposes an increase in the idle mode revolution ratio, so the ratio of the alternator will be increased by increasing the charging voltage. The lower the voltage, the more significant the correction applied, which begins under **12.7 V**.

The idle mode regime can thus be increased up to **830 rot/min**.

If the injection calculator receives the information “command AC coupling”, then the idle mode revolution ratio will go up to **850 rot/min**.

VALUES « IDLING RCO « AND « IDLING RCO ADAPTATION «

PRINCIPLE:

In order to use the information related to the parameters value “PR 021= RCO idling” and “ PR 022= RCO idling”, the CLIP tester is to be used, which will be connected at the diagnosis socket and at the vehicle battery (or lighter socket).

Select on testermenu “COMPUTERS TEST”, then “PETROL INJECTION”. Find then “FUNCTIONS TEST” and read here the progress of the PR 021 and PR 022 parameters.

In normal operation conditions, warm engine, the value RCO idling (PR 022) is changing between a maximal and a minimal value, so that nominal idling RPM is obtained. It is possible that further to an operation dispersion (running in, engine choking up, etc) the value “RCO idling” to get closer to the minimal or maximal value.

The adaptive correction (PR 021) on “RCO idling” (PR 022) is allowing reaching at slow variations of the engine air necessities, so that “RCO idling” is set on an average nominal value. The parameters PR 021 and PR 022 are progressing among the following limits :

RATED IDLE MODE REGIME (PR 006)	RCO idling (PR 022)	RCO idling (PR 021)
750 rot / min	5% £ X £ 12 %	-3 %+7 %

In case of an excess (false air, non-conforming attachment of the valve body, etc) the idling regime will increase and the value “RCO idling” will lower, returning so, at the nominal idling regime.

The value of the (PR 021) parameter will decrease in order to realign idling RCO (PR 022) within the optimal range. In case of a lack of air (choking up, etc) the reasoning is conversely : RCO idling (PR 022) will increase, and the value is adjusting RCO idling (PR 022) on a average nominal value.

IMPORTANT

After battery disconnection/reconnection, it is obligatory engine starting and maintain it for several minutes in order to perform a correct resetting of the adaptive correction of the RCO idling.

The catalyst efficiency is maximal when the air excess value (λ) is within the limits $\lambda = 0,97 \dots 1,03$.

The injection computer is adopting the adjustment strategy of the fuel mixture enriching in order to observe the a.m. condition. In order to inform the computer about the enriching degree of the mixture, the oxygen sensor is used, which is sending an electric signal of a value oscillating between 150 and 800 mV.

When the engine is warm and operating in the « closed loop » stage, the tension generated by the oxygen sensor must quickly oscillate between 150 ± 50 mV, corresponding to the poor mixture and 750 ± 50 mV corresponding to the enriched mixture. The maximal-minimal range must be as large as possible (at least 500 mV), confirming the sensor good operation.

The correction of the mixture enriching may be seen by means of the CLIP tester, in the menu “FUNCTIONS TEST”, sub-menu “ENRICHING ADJUSTMENT” by the parameter PR 035 = enriching correction value.

The correction value has as limits 0 and 255, the average value being placed at 128.

The interpretation of the parameter PRO 35 value, is the following :

- when it is greater than 128 the computer is requesting the mixture enriching- so, the mixture has been poor.

- when it is smaller than 128, the computer is requesting the mixture penury- so, the mixture has been rich.

The entrance in the enriching adjustment is effective after a timing, due to water temperature greater than 10C when the acceleration throttle is free (idling engine) and the oxygen sensor is enough warm (over 350 C). Until the moment of entering in this stage, the enriching correction value (PRO 53) will be 128.

In the enriching stage, the injection computer will not take into account the values furnished by the oxygen sensor, in the following situations :

- acceleration pushed at maximum
- sudden acceleration
- at decelerating, with free acceleration pedal information.
- in case of a damaged oxygen sensor.

“DEGENERATED” OPERATION WAY IN CASE OF THE OXYGEN SENSOR DAMAGE

When the tension furnished by the oxygen sensor is not correct (is changing a little bit or not at all), during enriching adjustment, the computer will not pass to the »degenerated « operation way unless the damage has been recognized as being present for at least 10 minutes. Only in this case, the damage will be memorized.

When a damage at the oxygen sensor is detected and if the damage has been already memorized, then it will pass directly to the « open loop » operation (enriching correction = 128).

ENRICHING ADAPTIVE CORRECTION

PRINCIPLE

In the “closed loop” stage, the enriching correction value (PR 035) is adjusting the injection times in order to obtain a ratio as close as possible to the enriching value = 1.

The correction value is close to 128, having as limits 0 and 255; nevertheless, dispersions of the injection system components may occur, that are giving the correction a displacement towards 0 or 255, in order to obtain the enriching value 1.

The adaptive correction is allowing the injection chart displacement in order to re-focus the enrichment adjustment (PR 035) on the 128 value.

The values of the adjustment correction may be read by means of the CLIP tester, as follows :

- connect the tester to the vehicle diagnosis socket and to the battery (or to the lighter socket).
- select “COMPUTERS TEST” , then “PETROL INJECTION”
- in the menu “FUNCTIONS TEST”, access “ENRICHING ADJUSTMENT”, where you can find parameters PR 030= enriching adapting in operation (the adaptive correction for the partial and large charges area) and PR 031= enriching adapting at idling (adapting correction at idling and in small charges area).

PARAMETER	FIELD
Enriching adapting in operation (PR 030)	80% £ X £ 176 %
Enriching adapting at idling (PR 031)	80% £ X £ 176 %

If values PR 030 and PR 031 are fixed on value 128 (after battery disconnecting/reconnecting) then it is necessary to perform a specific road test, observing the following conditions.

The adaptive corrections are active only when the engine is warm in the « closed loop » stage (when PR 035 is variable) on an exact range of the depression from the inlet manifold. It is necessary that engine has been run in « closed loop » in more than one areas of the inlet pressure, for which the adaptive corrections begin to progress in order to compensate the enrichment from the engine operation.

ROAD TEST

This is performed in the following conditions :

- warm engine (water temperature greater than **75° C**)
- engine RPM not greater than **4800 rot/minute**

driving on road, for a normal drive, on 5... 10 km distance.

For this test, it is recommended to start from an engine low regime, in III-d or IV-th gear, with a gradually acceleration so that desired pressure gets stabilized in the inlet manifold for 10 seconds in each area, as per the following table :

Area 1 (mbar)	Area 2 (mbar)	Area 3 (mbar)	Area 4 (mbar)	Area 5 (mbar)
247-----	351 -----	481 -----	611 -----	741 -----873
Average 255	Average 416	Average 546	Average 676	Average 807

Further to this road test, the corrections must become valid.

Read again the values of the PR 030 and PR 031 parameters. These, initially being at 128, have been changed after this road test. If not, perform again this operation, strictly observing the test performing conditions.

ROAD TEST RESULTS INTERPRETATION

In case of fuel lack (choking up injectors, pressure and fuel flow too small, etc) the value of the PR 035 parameter shall increase, in order that an enrichment as close as possible to 1 is obtained, and the values PR 031 and PR 030 shall increase so that PR 035 is reaching a value around 128.

For a correct operation it is recommended chemical or ultrasonic cleaning of the injectors each 30 000 km.

In case of a fuel excess (not sealed injectors or their needle is not properly closing ..) the reasoning is conversely: the values of PR 035, PR 031 and PR 030 parameters shall decrease to enable bringing the PR 035 to a value around 128.

OBSERVATION

The values read for PR 030 and PR 031 are offering an opinion about the air/petrol mixture the engine is running with. In order to be useful at diagnosis, we can not conclude unless the values are on maximum or on minimum and their displacement is in the same direction. These values must be analyzed only in case of a client claiming an operation defect and if they are on the maximum or minimum values, related with the PR 035 values, greater than 175 or smaller than 80.

INTRODUCTION

In order to achieve the communication between the injection calculator and the diagnosing tester SAGEM CLIP, the following operations will be performed:

- the glove compartment is opened and the plastic shield of the diagnosing plug, located at the top of the compartment, is taken off;
- the tester is connected at the diagnosing plug and across the terminals of the car battery;
- the type of the vehicle is selected on the tester;
- the option “Calculator test” is then selected;
- the menu “Injection” is selected.



CAUTION!

- 1. Connecting or disconnecting the injection calculator to the car cabling will only be done when the engine is stopped and the car is off-contact.*
- 2. If the contact is on or the engine is running, the terminals of the battery will not be loosened or disconnected. Replacing the battery on the car is not allowed if the engine is running or the contact is on.*
- 3. Loose or oxidized contacts are not allowed at the terminals of the battery, or imperfect connections at the injection system cabling.*
- 4. Starting the engine with the battery connected to a starting robot is not allowed.*
- 5. Recharging the battery will only be done after disconnecting it from the car cabling, and it will be done using a 12V charging-station.*

STEPS IN DIAGNOSING**INSPECTION OF DEFECTS**

This stage is the indispensable starting-point before any intervention on the car. If the defect is indicated by the tester, then remedy it; if no defect has been signalled by the tester, a conformity inspection will have to be made, thus helping to spot the possible causes.

To do that check on the following elements:

- the electric circuit corresponding to the defect which has been signalled;
- the electric connectors along the circuit (oxidized spots, deformed plugs, etc.);
- the electric resistance that is not in keeping with the element connected to that electric circuit;
- the state of the plugs (cut or worn-out insulation, areas with traces of pressing, etc.).

CONFORMITY INSPECTION

Its aim is to check on the various states and parameters, to detect some anomaly when the tester failed to find defects.

This phase allows:

- to diagnose a breakdown or failure without displaying the defect corresponding to a deficient functioning of the parts or following complaints from the user.
- to check the good functioning of the injection system and to ensure no breakdown or failure will appear immediately after the repair has been made.

So, this heading concerns a diagnosing of the various states and parameters, under certain inspection conditions.

If a state is defective or a parameter is beyond tolerance, the corresponding diagnose page will have to be consulted.

LOCALIZING A DEFECT AFTER USER'S COMPLAINT

If after the inspection of the injection system by means of the CLIP tester (inspection of defects and inspection of conformity) the cause of the user's complaint has not been eliminated, then the logical schema of finding out of the possible causes of the problem will be used.

These schemas will only be used under the following circumstances:

- no defect has been shown by the tester;
- no anomaly has been signalled by the inspection of conformity;
- the car does not work properly.

DEFECTUL

- 1 Lack of communication with the calculator
- 2 Calculator
- 3 Supply
- 4 Circuit of command actuator relay
- 5 Circuit of command petrol-pump relay
- 6 Circuit of 1 cylinder injector
- 7 Circuit of 2 cylinder injector
- 8 Circuit of 3 cylinder injector
- 9 Circuit of 4 cylinder injector
- 10 Circuit of 1 and 4 ignition coil
- 11 Circuit of 2 and 3 ignition coil
- 12 Revolution ratio sensor information
- 13 Anti-start device
- 14 Failure to memorize the anti-start code
- 15 Circuit of atmospheric pressure sensor
- 16 Circuit of idle mode adjustment
- 17 Circuit of clapper potentiometer
- 18 Circuit of water-temperature sensor
- 19 Circuit of air-temperature sensor
- 20 Circuit of canister draining valve
- 21 Circuit of oxygen probe
- 22 Circuit of oxygen probe heating
- 23 Circuit of detonation probe
- 24 Car speed information
- 25 Circuit of command air-conditioning compressor relay
- 26 Water-temperature warning circuit
- 27 Circuit of command low-speed ventilator relay (air-conditioned c
- 28 Circuit of command high-speed ventilator relay (air-conditioned c
- 29 Circuit of command ventilator relay (air-conditioned car)
- 30 Functional failure of oxygen probe
- 31 Pollutant combustion misfire / Disruptive combustion misfire
- 32 Combustion misfire at cylinders 1, 2, 3 and 4

1. LACK OF COMMUNICATION	<u>LACK OF COMMUNICATION WITH THE CALCULATOR</u>
SUGGESTIONS	—
<p>Try the tester on a different car</p> <p>Check:</p> <ul style="list-style-type: none"> - the connection between the tester and the diagnosing plug (state of the cable) - the fuses S3 and S4 in the engine compartment, and S15 in the passenger cabin. <p>Remedy if necessary.</p> <p>Check at the diagnosing plug the presence of +12V for pin 16 and the mass for pin 5. Remedy if necessary.</p> <p>Connect the 90-way terminal-tester instead of the injection calculator and check the insulation, the continuity and the absence of parasitic resistances along the following circuits:</p> <ul style="list-style-type: none"> -pin 28 of calculator ♦ mass -pin 33 of calculator ♦ mass -pin 3 of calculator ♦ mass -pin 56 of calculator ♦ pin 7 of diagnosing plug -pin 28 of calculator ♦ pin 15 of diagnosing plug -pin 28 of calculator ♦ fuse S3 in the engine compartment -pin 28 of calculator ♦ fuse S4 in the engine compartment. <p>Remedy if necessary.</p>	
AFTER REPAIR	—

2. DEFECT PRESENT	<u>COMPUTER</u> 1. Breakdown computer 2. Breakdown zones memory of protection 3. Breakdown zones memory antistarting up
-------------------------	--

SUGGESTIONS	—
-------------	---

1.	Non-conforming or faulty calculator Change the calculator
2.	Do not immediately change the calculator Perform the following procedure: - set the contact and enter a dialogue with the calculator - erase the defect memorized by the calculator - take contact and wait till the dialogue with the calculator is lost - set contact and enter a dialogue with the calculator. If the defect is still there, redo this procedure. If after the fifth attempt of erasing the “calculator” defect is still there, change the injection calculator.

AFTER REPAIR	Erase memorized defects.
--------------	--------------------------

3. DEFECT PRESENT OR MEMORIZED	<p><u>SUPPLY</u></p> <ol style="list-style-type: none"> 1. Breakdown + 12V after the actuator relay 238 (D) 2. Breakdown + 12V after the contact (D.C)
SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -take the contact and wait till dialogue with the tester is lost -put the contact and enter dialogue.</p> <p>Conditions of performing the diagnosing: -defect is present.</p>
1.	<p>Check the state of the battery and the connections to the mass. Remedy if necessary.</p> <p>Check the connecting and the state of the connector of 238 relay. Change the connector if necessary.</p> <p>Check the presence of +12V at the pole 3 of 238 relay. Remedy the circuit to fuse S₁.</p> <p>Take plug 5 out of the connector of 238 relay. Check, after setting the contact, the presence of +12V at the pole 5 of 238 relay. Change relay if necessary.</p> <p>Check insulation and the continuity of the circuit: pin 66 of calculator ® pole 5 of actuator relay 238. Remedy if necessary.</p> <p>Disconnect an element at a time (injector, canister draining valve, probe O₂) and check the presence of +12 V for each of them. Change the faulty element.</p>
2.	The defect is not active because it causes the loss of dialogue with the tester
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

4. DEFECT PRESENT	<u>CIRCUIT OF COMMAND ACTUATOR RELAY</u>
	<ol style="list-style-type: none"> 1. Circuit of command or short-circuit to the mass of the circuit towards pin 39 of the calculator 2. Short-circuit at 12V along the circuit towards pin 39 of the calculator

SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -take the contact and wait till dialogue with the tester is lost -put the contact and enter dialogue. <p>Condition of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present. <p>REMARK: This defect has priority and should be dealt with before the following ones.</p>
-------------	--

Check the state of the battery and the connections to the mass.
 Remedy if necessary.

Check the connecting and the state of the connector of 238 relay.
 Change the connector if necessary.

Check the presence of +12V at the pole 1 of 238 relay.
 Remedy the circuit to fuse S₁ in the engine compartment.

Check the coil of the 238 actuator relay.
 Change relay if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit:
 pin 39 of calculator ♦ pole 2 of actuator relay 238.
 Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>
--------------	---

5. DEFECT PRESENT	<u>CIRCUIT OF COMMAND PETROL PUMP</u> 1. Open circuit or short-circuit to the mass of the circuit towards pin 68 of the calculator 2. Short-circuit at 12V along the circuit towards pin 68 of the calculator
-------------------	---

SUGGESTIONS	Conditions of breakdown detection by the calculator: -take the contact and wait till dialogue with the tester is lost -put the contact and enter dialogue. Condition of performing the diagnosing: -defect is present. REMARK: This defect has priority and should be dealt with before the following ones.
-------------	---

Check the connection and the state of the 236 petrol pump connector.
Change connector if necessary.

Check, after setting the contact, the presence of +12V at the pole 1 of 236 petrol pump.
Remedy if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit:
pin 68 of calculator ♦ pole 2 of the 236 petrol pump.
Remedy if necessary.

Check the coil of the 236 petrol pump.
Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	Erase defects memorized by the computer. Perform the steps under "Suggestions" to confirm the repair. Remedy other possible defects.
--------------	--

6.	<p style="text-align: center;"><u>CYLINDER 1 - INJECTOR CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to the pin 59 of the calculator (injector command) 2. Short-circuit to the mass along the way to pin 59 of the calculator (injector command) 3. Open circuit along the way to the pin 59 of the calculator (injector command)
SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -the engine is started</p> <p>Condition of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state.</p>
<p>Check the resistance of injector 1. Change injector if necessary.</p>	
<p>Check, after setting the contact, the presence of 12V at the pin 1 of injector 1. Remedy, if necessary, the circuit up to the 238 actuating relay.</p>	
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 59 of calculator ♦ pin 2 of injector 1. Remedy if necessary.</p>	
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>	
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

7. DEFECT PRESENT OR MEMORIZED	<u>CYLINDER 2 - INJECTOR CIRCUIT</u>
	<ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to the pin 90 of the calculator (injector command) 2. Short-circuit to the mass along the way to pin 90 of the calculator (injector command) 3. Open circuit along the way to the pin 90 of the calculator (injector command)

SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the engine is started <p>Condition of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state.
-------------	--

Check the resistance of injector 2.
Change injector if necessary.

Check, after setting the contact, the presence of 12V at the pin 1 of injector 2.
Remedy, if necessary, the circuit up to the 238 actuating relay.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit:
pin 90 of calculator ♦ pin 2 of injector 2.
Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>
--------------	---

8. DEFECT PRESENT OR MEMORIZED	<u>CYLINDER 3 - INJECTOR CIRCUIT</u>
	<ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to the pin 60 of the calculator (injector command) 2. Short-circuit to the mass along the way to pin 60 of the calculator (injector command) 3. Open circuit along the way to the pin 60 of the calculator (injector command)

SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the engine is started <p>Condition of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state
-------------	---

Check the resistance of injector 3. Change injector if necessary.	
Check, after setting the contact, the presence of 12V at the pin 1 of injector 3. Remedy, if necessary, the circuit up to the 238 actuating relay.	
Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 60 of calculator ♦ pin 2 of injector 3. Remedy if necessary.	
The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.	

AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>
--------------	---

9. DEFECT PRESENT OR MEMORIZED	<p style="text-align: center;"><u>CYLINDER 4 - INJECTOR CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to the pin 89 of the calculator (injector command) 2. Short-circuit to the mass along the way to pin 89 of the calculator (injector command) 3. Open circuit along the way to the pin 89 of the calculator (injector command)
--------------------------------	--

SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the engine is started <p>Condition of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state.
-------------	--

Check the resistance of injector 4.
Change injector if necessary.

Check, after setting the contact, the presence of 12V at the pin 1 of injector 4.
Remedy, if necessary, the circuit up to the 238 actuating relay.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit:
pin 89 of calculator ♦ pin 2 of injector 4.
Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects</p>
--------------	--

10.	DEFECT PRESENT OR MEMORIZED	<p style="text-align: center;"><u>CYLINDERS 1 AND 4 IGNITION COIL CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to the pin 32 of the calculator (cylinders 1 and 4 coil command) 2. Open circuit or short-circuit to the mass along the way to pin 32 of the calculator (cylinders 1 and 4 coil command).
	SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -the engine is started or turned with the starter for 10 seconds</p> <p>Condition of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state.</p>
<p>Check the resistance of coil between the outlets for cylinders 1 and 4. Change the coil if necessary.</p>		
<p>Check, after setting the contact, the presence of +12V at the pole 1 of oil pump 236 relay. Remedy it if necessary.</p>		
<p>Connect the 90-way terminal-tester instead of the injection calculator and check the insulation and the continuity along the circuit: pin 32 of calculator ♦ pinA of ignition coil Remedy if necessary.</p>		
<p>Check: -connection and state of the 236 oil-pump relay -the presence of +12 V, after contact, at the 1 pole of the 236 relay -the circuit between the 2 pole of the 236 relay and pin 68 of the injection calculator -the coil of the 236 oil-pump relay. Remedy if necessary.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
	AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

11. DEFECT PRESENT OR MEMORIZED	<u>CYLINDERS 2 AND 3 IGNITION COIL CIRCUIT</u> 1. Short-circuit at 12 V along the way to the pin 1 of the calculator (cylinders 2 and 3 coil command) 2. Open circuit or short-circuit to the mass along the way to pin 1 of the calculator (cylinders 2 and 3 coil command).
SUGGESTIONS	Conditions of breakdown detection by the calculator: -the engine is started or turned with the starter for 10 seconds Condition of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state.
Check the resistance of coil between the outlets for cylinders 2 and 3. Change the coil if necessary.	
Check, after setting the contact, the presence of +12V at the pole 1 of oil pump 236 relay. Remedy it if necessary.	
Connect the 90-way terminal-tester instead of the injection calculator and check the insulation and the continuity along the circuit: pin 1 of calculator ♦ pin B of ignition coil. Remedy if necessary.	
Check: -connection and state of the 236 oil-pump relay -the presence of +12 V, after contact, at the 1 pole of the 236 relay -the circuit between the 2 pole of the 236 relay and pin 68 of the injection calculator -the coil of the 236 oil-pump relay. Remedy if necessary.	
The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.	
AFTER REPAIR	Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.

12.	DEFECT PRESENTOR MEMORIZED	<p style="text-align: center;"><u>INFORMATION ROTATION SENSOR</u></p> <ol style="list-style-type: none"> 1. Faulty cogs of the engine flywheel 2. Absence of flywheel signal.
SUGGESTIONS	<p>In order to do this type of diagnosing, the sensor for atmospheric pressure must not be faulty</p> <p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the contact is taken and the dialogue with the calculator is waited for to be lost, then the dialogue with the calculator is re-entered and the memorized defects are erased -operate the starter for 10 seconds or start the engine and keep it in idle mode. <p>Condition of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state. 	
<p>Check the connection and the state of the rotation sensor</p> <p>Change the connector if necessary.</p>		
<p>Check the resistance of rotation sensor.</p> <p>Remedy rotation sensor if necessary.</p>		
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits:</p> <ul style="list-style-type: none"> pin 54 of calculator ♦ pin A of rotation sensor pin 24 of calculator ♦ pin B of rotation sensor. <p>Remedy if necessary.</p>		
<p>Check the condition of the cogs of the engine flywheel.</p>		
<p>Change the rotation sensor if the incident persists.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed.</p> <p>CAUTION! The destruction of the calculator has probably been caused by an electric shock.</p> <p>The cause of the destruction must be found before mounting a new calculator.</p>		
AFTER REPAIR	<p>Erase defects memorized by the computer.</p> <p>Perform the steps under “Suggestions” to confirm the repair.</p> <p>Remedy other possible defects.</p>	

13.	DEFECT PRESENT	<u>ANTI-STARTER</u> Electric problem along the line transmitting the anti-starter code.
-----	-------------------	--

SUGGESTIONS	—
-------------	---

Check the connection and the condition of the connectors along the circuit to pin 58 of injection calculator
Change the faulty connector if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity of the circuit:
pin 58 of calculator ♦ pin A6 of UCE decoding device.
Remedy if necessary.

If the incident persists, refer to diagnosing anti-starter.

AFTER REPAIR	Erase defects memorized by the calculator. Remedy other possible defects.
-----------------	--

14.	DEFECT PRESENT	<u>FAILURE TO MEMORIZE ANTI-STARTER CODE</u>
-----	-------------------	--

SUGGESTIONS	—
-------------	---

This defect indicates the failure to memorize the anti-starter code by the injection calculator or the intentional erasing of this code from the injection calculator.
If need be, refer to diagnosing the anti-starter system.

AFTER REPAIR	—
--------------	---

15.	<p>DEFECT PRESENTOR MEMORIZED</p>	<p style="text-align: center;"><u>THE ATMOSPHERIC PRESSURE CIRCUIT</u></p> <p>1. Pressure defect of the intake collector.</p>
SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the contact is taken, wait for the dialogue with the calculator to be lost, then resume the dialogue with the calculator. -run the engine and maintain it at a rotation ration greater than 600 rot/min for at least 10 seconds. <p>Conditions of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state. 	
<p>If the defect is only present when the engine runs, check the correctness of the clapper position parameters when the acceleration pedal is free, and when it is fully pressed. Gently press the acceleration pedal (all the way) and check whether the position of the clapper is constantly increasing.</p> <p>If it is not so, the information is not correct. Treat the diagnose of the clapper potentiometer.</p>		
<p>Check the atmospheric pressure sensor. Remedy atmospheric pressure sensor if necessary.</p>		
<p>Check the correct connecting and the condition of the linking tube between the sensor and the intake gallery.</p>		
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits:</p> <ul style="list-style-type: none"> pin 16 of calculator ♦ pin B of the atmospheric pressure sensor pin 15 of calculator ♦ pin A of the atmospheric pressure sensor pin 78 of calculator ♦ pin C of the atmospheric pressure sensor. <p>Remedy if necessary.</p>		
<p>Change the atmospheric pressure sensor if the incident persists.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>	

16.

DEFECT
PRESENTIDLE MODE ADJUSTMENT CIRCUIT

Faulty idle mode adjustment

SUGGESTIONS

—

Check the connection and the condition of the engine step-by-step connector for idle mode adjustment.

Change the connector if necessary.

Check the resistance of the step-by-step engine.

Change it if necessary.

Check the insulation, the continuity and the absence of contact resistance along the circuits:

pin 12 of calculator ♦ pin B of step-by-step engine

pin 41 of calculator ♦ pin A of step-by-step engine

pin 42 of calculator ♦ pin C of step-by-step engine

pin 72 of calculator ♦ pin D of step-by-step engine.

Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.

CAUTION! The destruction of the calculator has probably been caused by an electric shock.

The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR

Erase defects memorized by the computer.

Perform the steps under "Suggestions" to confirm the repair.

Remedy other possible defects.

17.	DEFECT PRESENT OR MEMORIZED	<p style="text-align: center;"><u>CIRCUIT OF CLAPPER POTENTIOMETER</u></p> <p>Breakdown of clapper position.</p>
	SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -the contact is set and kept like that for 10 seconds, without pressing the acceleration pedal -determine a slow variation in the position of the clapper potentiometer, by slowly operating the acceleration pedal -keep the pedal pushed to the end for 10 seconds. <p>Conditions of performing the diagnosing:</p> <ul style="list-style-type: none"> -the defect is present -the defect has been memorized but is recorded in the “present” state.
		<p>Check the connection and the condition of the clapper potentiometer. Change the connector if necessary.</p>
		<p>Check the resistance of clapper potentiometer (in case there is a certain defect, its value will be 0 or “infinite”). Check that the resistance of the clapper potentiometer is in accordance with its variation curve, in keeping with the evolution of the clapper angle all through its operation range. Check whether the clapper correctly drives the potentiometer. Remedy or change the clapper potentiometer if necessary.</p>
		<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits:</p> <ul style="list-style-type: none"> pin 75 of calculator ♦ pin A of clapper potentiometer pin 74 of calculator ♦ pin B of clapper potentiometer pin 73 of calculator ♦ pin C of clapper potentiometer. <p>Remedy if necessary.</p>
		<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>
	AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

18. DEFECT PRESENTOR MEMORIZED	<u>WATER TEMPERATURE SENSOR CIRCUIT</u> Breakdown of water temperature sensor
SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -set the contact -if the defect is only memorized, start the engine and keep it run till the first start of the cooling engine ventilator. <p>Conditions of performing the diagnosing:</p> <ul style="list-style-type: none"> -the defect is present -the defect has been memorized but is recorded in the “present” state.
<p>Check the connection and the state of the water temperature sensor Change the connector if necessary.</p>	
<p>Check that the resistance of the water temperature sensor is not 0 or “infinite” (i.e. certain breakdown of the sensor). Change the sensor if necessary.</p>	
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits: pin 73 of calculator ♦ pin B1 of the water temperature sensor pin 13 of calculator ♦ pin B2 of the water temperature sensor. Remedy if necessary.</p>	
<p>Check that the alteration of the resistance of the sensor for various temperatures is in keeping with its variation curve. Change the sensor if necessary.</p>	
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>	
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

19.	DEFECT PRESENTOR MEMORIZED	<p style="text-align: center;"><u>AIR TEMPERATURE SENSOR CIRCUIT</u></p> <p>Breakdown of air temperature sensor</p>
SUGGESTIONS		<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -set the contact -if the defect is only memorized, start the engine and keep it run till the first start of the cooling engine ventilator. <p>Conditions of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state.
<p>Check the connection and the condition of the air temperature sensor Change the connector if necessary.</p>		
<p>Check that its resistance is not 0 (i..e. certain breakdown). Remedy the sensor if necessary.</p>		
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits: pin 77 of calculator ♦ pin 2 of air temperature sensor pin 49 of calculator ♦ pin 1 of air temperature sensor. Remedy if necessary.</p>		
<p>Check that the alteration of the resistance of the air temperature sensor for various temperatures is in keeping with its variation curve.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>	

20.	<p>DEFECT PRESENT</p>	<p><u>CANISTER DRAINING VALVE CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to pin 4 of calculator (draining valve command) 2. Short-circuit at mass along the way to pin 4 of calculator (draining valve command) 3. Open circuit along the way to pin 4 of calculator (draining valve command)
-----	------------------------------	---

SUGGESTIONS	—
-------------	---

Check the connection and the condition of the canister draining valve connector
Change the connector if necessary.

Check the resistance of draining valve.
Change the valve if necessary.

Check, after setting the contact, the presence of +12V at pin 1 of the canister draining valve.
Remedy if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit:
pin 4 of calculator ♦ pin 2 of canister draining valve
Remedy if necessary.

Change canister draining valve

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>
--------------	---

21.	DEFECT PRESENTER MEMORIZED	<u>OXYGEN PROBE CIRCUIT</u> Breakdown of oxygen probe signal
SUGGESTIONS		Conditions of breakdown detection by the calculator: -set the contact -start the engine and wait for the enrichment adjustment to be active for at least 5 minutes. Conditions of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state.
Check the connection and the condition of the oxygen probe Change the connector if necessary.		
Check if there is any “false air” caused by cases of lack of watertightness along the exhaust-probe circuit.		
If the car has been running a lot out of town proceed to probe-cleaning		
Check, after setting the contact, the presence of +12 V at pin A of the oxygen probe. Remedy if necessary		
Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits: pin 45 of calculator ♦ pin C of oxygen probe pin 80 of calculator ♦ pin D of oxygen probe. Remedy if necessary.		
Change the oxygen probe if the incident persists		
The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.		
AFTER REPAIR	Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.	

22. DEFECT PRESENT OR MEMORIZED	<u>OXYGEN PROBE HEATING CIRCUIT</u> <ol style="list-style-type: none"> 1. Short-circuit at 12 V along the way to pin 63 of calculator (heating oxygen probe command) 2. Short-circuit at mass along the way to pin 63 of calculator (heating oxygen probe command) 3. Open circuit at 12 V along the way to pin 63 of calculator (heating oxygen probe command) 4. Breakdown of the probe fuse heating power.
--	---

SUGGESTIONS	Conditions of breakdown detection by the calculator: -start the engine Conditions of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state.
-------------	---

Check the connection and the condition of the oxygen probe connector
 Change the connector if necessary.

Check the heating resistance of the oxygen probe.
 Change the oxygen probe if necessary.

Check the presence of +12V at pin A of the oxygen probe.
 Remedy the electric circuit up to the actuating relay 238 if necessary

Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuit:
 pin 63 of calculator → pin B of the oxygen probe.
 Remedy if necessary.

The problem is not yet solved! Consequently, the injection calculator must be changed.
CAUTION! The destruction of the calculator has probably been caused by an electric shock.
The cause of the destruction must be found before mounting a new calculator.

AFTER REPAIR	Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.
--------------	--

23.	DEFECT PRESENT OR MEMORIZED	<u>DETONATION SENSOR CIRCUIT</u> Breakdown of detonation signal
SUGGESTIONS		Condition of breakdown detection by the calculator: -do a route-test, with the engine heated and under high rotation ratio. Condition of performing the diagnosing: -the defect is present -the defect has been memorized but is reorded in the“present” state.
Check the connection and the condition of the detonation sensor Change the connector if necessary.		
Check the mounting of the detonation sensor on the engine block. Tighten to the couple the detonation sensor.		
Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits: pin 20 of calculator -> pin 1 of detonation sensor pin 79 of calculator -> pin 2 of detonation sensor pin 79 of calculator -> detonation sensor screening. Remedy if necessary.		
If the incident persists, change the detonation sensor.		
The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.		
AFTER REPAIR	Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.	

24.

DEFECT PRESENTOR MEMORIZED	<u>CAR SPEED INFORMATION</u> Car speed breakdown
----------------------------------	---

SUGGESTIONS	<p>Conditions of breakdown detection by the calculator:</p> <ul style="list-style-type: none"> -do a route-test, watching the car speed -continue the route-test running at constant speed -continue the route-test, running up-hill with the engine in idle mode. <p>Conditions of performing the diagnosing:</p> <ul style="list-style-type: none"> -defect is present -the defect has been memorized but is recorded in the “present” state.
-------------	--

Check the connection and the condition of the connectors along the way to the speed translator.

Change the connectors if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuit:

pin 53 of calculator -> pin 1 of speed translator.

Remedy if necessary.

If the incident persists, change the speed translator and the mileage cable.

AFTER REPAIR	<p>Erase defects memorized by the computer.</p> <p>Perform the steps under “Suggestions” to confirm the repair.</p> <p>Remedy other possible defects.</p>
-----------------	---

25.	DEFECT PRESENT	<p><u>AIR-CONDITIONING COMPRESSOR RELAY COMMAND CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Open circuit or short-circuit to mass of the way to pin 10 of the calculator 2. Short-circuit at 12 V along the way to pin 10 of the calculator
	SUGGESTIONS	<p>Condition of breakdown detection by the calculator: -take the contact, and wait for the dialogue with the tester to be lost then set the contact and resume dialogue.</p> <p>Condition of performing the diagnosing: -defect is present -the defect has been memorized but is recorded in the “present” state</p> <p>Note: The calculator will command the compressor relay only if the conditions are met which allow the good operational mode of the air-conditioning installation (pressure of refrigerating agent in installation, working electric circuit between calculator and A.C. start switch). Refer to directions of A.C installation repairing.</p>
<p>Check the connection and the condition of the 584 compressor relay. Change the connector if necessary.</p>		
<p>Check the presence of +12 V at pole 3 of the 584 compressor relay. Check fuse S6 in the engine compartment. Remedy it if necessary.</p>		
<p>Check the presence of mass at pole 2 of the 584 compressor relay Remedy if necessary.</p>		
<p>Check that the insulation and the continuity of the circuit: pin 10 calculator ♦ pole 2 of the 584 compressor relay. Remedy if necessary.</p>		
<p>Check the coil of the 584 relay. Change relay if necessary.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
	AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

<p>26.</p> <p>DEFECT PRESENTOR MEMORIZED</p>	<p><u>WATER TEMPERATURE ALERT CIRCUIT</u></p> <ol style="list-style-type: none"> 1. Open circuit or short-circuit to mass of the way to pin 9 of the calculator 2. Short-circuit at 12 V along the way to pin 9 of the calculator.
<p>SUGGESTIONS</p>	<p>Condition of breakdown detection by the calculator: -start the engine and keep it at over 1500 rot/min for at least 10 seconds.</p> <p>Conditions of performing the diagnosing: -the defect is present -the defect has been memorized but is recorded in the “present” state.</p>
<p>Check the connection and the condition of the connectors along the circuit: pin 9 of calculator → water temperature alert light indicator (on board). Change connectors if necessary.</p>	
<p>Check the condition of water temperature alert light indicator on board. On setting the contact, it must flash for 3 seconds, then it turns off. Remedy if necessary.</p>	
<p>Check if the electric bulb of the water temperature alert light indicator has 12V, after setting the contact. Remedy if necessary.</p>	
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 9 of calculator → water temperature alert light indicator (on board). Remedy if necessary.</p>	
<p>AFTER REPAIR</p>	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

27.	DEFECT PRESENT	<p><u>LOW SPEED VENTILATOR RELAY COMMAND CIRCUIT</u> (for A.C. cars)</p> <ol style="list-style-type: none"> 1. Open circuit or short-circuit to mass of the way to pin 8 of the calculator 2. Short-circuit at 12 V along the way to pin 8 of the calculator.
	SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -take the contact and wait for the dialogue with the tester to be lost -set the contact and enter dialogue.</p> <p>Condition of performing the diagnosing: -defect is present</p> <p>Note: this defect has to be correlated with the diagnosing of the water temperature sensor circuit and the air-conditioning installation.</p>
<p>Check the connection and the condition of the low-speed 700 ventilator connector Change the connector if necessary.</p>		
<p>Check, after setting contact, the presence of +12 V at pole 1 of the 700 relay. Remedy it if necessary.</p>		
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 8 of calculator ♦ pole 2 of the low-speed 700 ventilator relay. Remedy if necessary.</p>		
<p>Check the coil of the low-speed 700 ventilator relay. Change relay if necessary.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
	AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under “Suggestions” to confirm the repair. Remedy other possible defects.</p>

28. DEFECT PRESENT	<p><u>HIGH SPEED VENTILATOR RELAY COMMAND CIRCUIT</u> (for A.C. cars)</p> <ol style="list-style-type: none"> 1. Open circuit or short-circuit to mass of the way to pin 38 of the calculator 2. Short-circuit at 12 V along the way to pin 38 of the calculator.
SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -take the contact and wait for the dialogue with the tester to be lost -set the contact and enter dialogue.</p> <p>Condition of performing the diagnosing: -the defect is present</p> <p>Note: this defect has to be correlated with the diagnosing of the water temperature sensor circuit and the air-conditioning installation.</p>
<p>Check the connection and the condition of the high-speed 234 ventilator connector Change the connector if necessary.</p>	
<p>Check, after setting contact, the presence of +12V at pole 1 of the 234 relay. Remedy it if necessary.</p>	
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 38 of calculator @ pole 2 of the low-speed 234 ventilator relay. Remedy if necessary.</p>	
<p>Check the coil of the low-speed 234 ventilator relay. Change relay if necessary.</p>	
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>	
AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under "Suggestions" to confirm the repair. Remedy other possible defects.</p>

29.	DEFECT PRESENT	<p><u>VENTILATOR RELAY COMMAND CIRCUIT</u> (for cars having no A.C.)</p> <ol style="list-style-type: none"> 1. Open circuit or short-circuit to mass of the way to pin 8 of the calculator 2. Short-circuit at 12 V along the way to pin 8 of the calculator.
	SUGGESTIONS	<p>Conditions of breakdown detection by the calculator: -take the contact and wait for the dialogue with the tester to be lost -set the contact and enter dialogue.</p> <p>Condition of performing the diagnosing: -the defect is present</p> <p>Note: this defect has to be correlated with the diagnosing of the water temperature sensor circuit.</p>
<p>Check the connection and the condition of the connector of the 234 cooling ventilator relay. Change the connector if necessary.</p>		
<p>Check, after setting contact, the presence of +12V at pole 1 of the 234 relay. Remedy it if necessary.</p>		
<p>Connect the 90-way terminal-tester instead of the calculator and check the insulation and the continuity along the circuit: pin 8 of calculator ♦ pole 2 of the 234 cooling ventilator relay. Remedy if necessary.</p>		
<p>Check the coil of the 234 cooling ventilator relay. Change the relay if necessary.</p>		
<p>The problem is not yet solved! Consequently, the injection calculator must be changed. CAUTION! The destruction of the calculator has probably been caused by an electric shock. The cause of the destruction must be found before mounting a new calculator.</p>		
	AFTER REPAIR	<p>Erase defects memorized by the computer. Perform the steps under "Suggestions" to confirm the repair. Remedy other possible defects.</p>

30. DEFECT PRESENT OR MEMORIZED	<p style="text-align: center;"><u>FUNCTIONAL BREAKDOWN OF THE OXYGEN PROBE</u></p> <p>Lack of coherence of the information received from the oxygen probe.</p>
---------------------------------	--

SUGGESTIONS	—
-------------	---

Check that there is no “false air” caused by the lack of watertightness along the exhaust circuit up to the oxygen probe
Remedy if necessary.

If the car has been running for a long while in town, clean the oxygen probe.

Check the connection and the condition of the oxygen probe connector.
Change connector if necessary.

Check the heating resistance of the oxygen probe.
Change oxygen probe if necessary.

Check, after setting the contact, the presence of +12V (after the actuating realy) at pin A of the oxygen probe.
Remedy if necessary.


Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuits:
pin 45 of calculator ♦ pin C of oxygen probe
pin 80 of calculator ♦ pin D of oxygen probe.
Remedy if necessary.

Connect the 90-way terminal-tester instead of the calculator and check the insulation, the continuity and the absence of contact resistance along the circuit:
pin 63 of calculator ® pin B of oxygen probe.
Remedy if necessary.

If the incident persists, replace the oxygen probe.

AFTER REPAIR	<p>Note down other functional defects. Erase the defects memorized by the calculator. Remedy other possible defects.</p>
--------------	--

31.	DEFECT PRESENT	<p><u>POLLUTING COMBUSTION MISFIRE</u> <u>DESTRUCTIVE COMBUSTION MISFIRE</u></p> <ol style="list-style-type: none"> 1. Combustion misfire during the last running done 2. Confirmed combustion misfire.
SUGGESTIONS		<p>Combustion misfire at cylinder 1 Combustion misfire at cylinder 2 Combustion misfire at cylinder 3 Combustion misfire at cylinder 4. Furnishes information concerning the nature and location of breakdown.</p>
<p>Connect the tester and select “Test of ignition”. Watch the indications and replace the necessary parts.</p>		
<p>Connect the tester and select “Test of compression”. Watch the indications and replace the necessary parts.</p>		
<p>Connect the tester and check the cogs of the flywheel. Remedy if necessary.</p>		
<p>If no defect is found out, then there is a problem with the fuel-supply circuit. You must check:</p> <ul style="list-style-type: none"> -petrol filter -flow and pressure of fuel -condition of petrol pump -if there are impurities inside the tank -condition of injectors. <p>Remedy the elements of the fuel-supply circuit that are faulty.</p>		
AFTER REPAIR		<p>Note down other functional defects. Erase the defects memorized by the calculator. Remedy other possible defects.</p>

32. 	<u>COMBUSTION MISFIRE AT CYLINDER 1</u> <u>COMBUSTION MISFIRE AT CYLINDER 2</u> <u>COMBUSTION MISFIRE AT CYLINDER 3</u> <u>COMBUSTION MISFIRE AT CYLINDER 4</u>
SUGGESTION	<p>It must be said that in infrequent cases the indication of the faulty cylinder is not exact; the calculator can declare cylinder 1 as not working, while it is not faulty. So, you have to check this cylinder as a priority, and if everything is correct, the other cylinders will be checked. These indications will only be used if the polluting or destructive combustion misfires are present.</p>
CYLINDER 1 IS DECLARED FAULTY	<p>In this case, the problem is probably caused by an element which acts only on this cylinder:</p> <ul style="list-style-type: none"> -its injector -the spark plug of this cylinder -the plug of the spark for that cylinder.
CYLINDERS 1 AND 4 OR CYLINDERS 2 AND 3 ARE DECLARED FAULTY	<p>In this case, the problem is probably caused by an element which acts only on this couple of cylinders (1 and 4 or 2 and 3):</p> <ul style="list-style-type: none"> -the high-tension part of the ignition coil for cylinders 1 and 4 or for cylinder 2 and 3 -the command part of the ignition coil for cylinders 1 and 4 or for cylinder 2 and 3.
FOUR CYLINDERS ARE DECLARED FAULTY	<p>In this case, the problem is probably caused by an element which acts on all the cylinders:</p> <ul style="list-style-type: none"> -the petrol filter -the petrol pump -the quality of the petrol.

Finally, the testing of the various states and parameters of the system will be done, in the following situations:

- A - With the stopped engine, and with contact set**
- B - With the hot engine, in idle mode, without consumers**
- C - During a route test.**

SUGGESTIONS	A- With the stopped engine, and with contact set
-------------	---

LIST OF STATES

Nr. crt:	Function	Characteristics	Visualizing and Remarks	Diagnosis
1.	Battery voltage	State: +After Contact to calculator Parameter: Supply voltage of injection calculator Actuating relay command	Confirmed state 11.8V<X<13.2V	If further problems arise, refer to the diagnosing of that parameter
2.	Injection calculator configuration	State: Connection for AC	Confirmed state if the car is equipped with AC	
		State: Configuration with anti-starter	Confirmed state	If further problems arise, refer to the diagnosing of those states
		State: Connection with speed translator	Confirmed state	
3.	Anti-starter	State: Anti-starter	Not confirmed state	If further problems arise, refer to the diagnosing of that state
4.		Acceleration pedal let free State: position of clapper when the acceleration pedal is raised Parameter: position of clapper Acceleration pedal slightly pushed State: position of clapper when acceleration pedal is raised State: position of clapper when acceleration pedal is completely pushed Acceleration pedal completely pushed State: position of clapper when acceleration pedal is completely pushed Parameter: position of clapper	Confirmed state 0<X<45 Not confirmed state Not confirmed state Confirmed state 200<X<240	If further problems arise, refer to the diagnosing of those parameters

LIST OF PARAMETERS

5.	Water temperature sensor	Parameter: water temperature	X= Engine temperature +/- 5°C	If further problems arise, refer to the diagnosing of that parameter
6.	Air temperature sensor	Parameter: air temperature	X= Temperature under engine hood +/- 5°C	If further problems arise, refer to the diagnosing of that parameter
7.	Pressure sensor	Parameter: collector pressure Parameter: atmospheric pressure	X= Atmospheric pressure X= Atmospheric pressure	If further problems arise, refer to the diagnosing of those parameters
COMMAND OF ACTUATORS				
8.	Petrol pump	Command: relay of petrol pump	Functioning of petrol pump must be heard	If further problems arise, refer to the diagnosing of that command
9.	Cooling ventilator	Command: low speed cooling ventilator Command: high speed cooling ventilator	Functioning of low speed ventilator must be heard Functioning of high speed ventilator must be heard	If further problems arise, refer to the diagnosing of that command If further problems arise, refer to the diagnosing of that command
10.	Step-by-step engine	Command: idle mode adjustment engine	Put hand under the engine to feel its functioning	If further problems arise, refer to the diagnosing for lack of conformity to idle mode adjustment
11.	Canister draining valve	Command: Canister draining valve	Valve must be functional	If further problems arise, refer to the diagnosing defects along the draining valve circuit
12.	Air conditioning (AC)	Command: AC must be operated through the board switch	Compressor must couple	If further problems arise, refer to the diagnosing of the states of air conditioning
13.	Water temperature alert light indicator	Command: Water temperature alert light indicator on board		

SUGGESTIONS	B - With the hot engine, in idle mode, without consumers
-------------	---

LIST OF STĂTES

1.	Battery voltage	State: +After Contact to calculator Parameter: Supply voltage of calculator If the parameter: Supply voltage of calculator Then the parameter: Engine rotation ratio	Confirmed state $13V < X < 14.5V$ $X < 12.7$ $750 < X < 850$ rot/min	If further problems arise, refer to the diagnosing of that parameter
2.	Petrol pump command	State: Petrol pump relay command	Confirmed state	
3.	Command of actuators	State: Command of actuators' relay	Confirmed state	
4.	Rotation signal	State: Rotation signal	Confirmed state	If further problems arise, refer to the diagnosing of the rotation signal information defect
5.	Recognition of the 1 cylinder	State: Recognition of the 1 cylinder	Confirmed state	If further problems arise, refer to the "Diagnosing Conditions"
6.	Heating of oxygen probe	State: Heating of oxygen probe	Confirmed state	
7.	Clapper potentiometer	State: Position of clapper of acceleration pedal: free (raised)	Confirmed state	If further problems arise, refer to the diagnosing of that parameter
8.	Idle mode adjustment	State: Idle mode adjustment Parameter: engine rotation Parameter: Tolerance of idle mode regimen Parameter: Idle mode RCO Parameter: Idle mode RCO adaptation.	Confirmed state $725 < X < 75 \text{ rot/min}$ $-25 < X < +25 \text{ rot/min}$ $5 \% < X < 12 \%$ $-3 \% < X < 7 \%$	If further problems arise, refer to the diagnosing of that state

LIST OF PARAMETERS

9.	Pressure circuit	Parameter: Collector pressure Parameter: Atmospheric pressure	$290 < X < 370$ mbar $X = \text{Atmospheric pressure}$	If further problems arise, refer to the diagnosing of those parameters
10.	Anti-detonation circuit	Parameter: Detonation signal	$30 < X < 70$	If further problems arise, refer to the diagnosing of that parameter

LIST OF STATES

11.	Enrichment adjustment	State: enrichment adjustment Parameter: tension of oxygen probe Parameter: enrichment adjustment correction	Confirmed state $20\text{mV} < X < 840$ mV $0 < X < 255$ Average = 128	If further problems arise, refer to the diagnosing of that state
12.	Air-conditioning (board-commanded AC)	State: Air-conditioning requirement	Confirmed state Light indicator is on when AC commands coupling of compressor	If further problems arise, refer to the diagnosing of those states
		State: Accelerated idle mode	Confirmed state Light indicator is on when accelerated idle mode is active	
		State: AC compressor	Confirmed state Light indicator is on when injection authorizes coupling of compressor	
		Parameter: engine rotation ratio Parameter: power absorbed by AC compressor	$750 < X < 850$ rot/min $300 < X < 5000$ W	
		State: Air-conditioning requirement State: Accelerated idle mode State: AC compressor	Not confirmed state Confirmed state Not confirmed state If the injection does not authorize coupling of compressor $750 < X < 850$ rot/min $X < 250$ W	
		Parameter: engine rotation ratio Parameter: power absorbed by AC compressor		
		State: Low speed ventilator	Confirmed state Ventilator must have low rotation ratio	

13.	Canister draining valve	State: canister draining valve Parameter: canister draining valve RCO	Confirmed state detonation $X < 0,7 \%$ Canister draining not allowed Draining valve stays shut	
14.	G.M.V.	State: low speed ventilator Parameter: water temperature State: high speed ventilator Parameter: water temperature	Not confirmed state Ventilator must run when water temperature is over 96°C Confirmed state Ventilator must run when water temperature is over 102°C	

SUGGESTION	C - During a route test.
------------	---------------------------------

LIST OF STATES

1.	Canister draining valve	Parameter: canister draining valve Parameter: canister draining valve RCO	Confirmed state Canister draining is authorized $X > 0,7 \%$ and has variations	
----	-------------------------	--	--	--

LIST OF PARAMETERS

2.	Speed translator	Parameter: Car speed	$X =$ speed read on the gauge as km/h	If further problems arise, refer to the diagnosing of that parameter
3.	Detonation sensor	Car under load Parameter: Detonation signal Parameter: Anti-detonation correction	X is variable and different from 0 $0 < X < 7^{\circ}RAC$	If further problems arise, refer to the diagnosing of that parameter

4.	Enrichment adaptation	After memorization Parameter: enrichment adaptation under load Parameter: enrichment adaptation in idle mode	$80 < X < 176$ $80 < X < 176$	If further problems arise, refer to the diagnosing of those parameters
5.	Polluting fumes	At 2500 rot/min after keeping for 30 seconds In idle mode, after settling rotation ratio	$CO < 0,3 \%$ $CO_2 > 13,5 \%$ $O_2 < 0,8 \%$ $HC < 100 \text{ ppm}$ $0,97 < l < 1,03$ $CO < 0,5 \%$ $HC < 100 \text{ ppm}$ $0,97 < l < 1,03$	

STATE	<u>CONNECTION SPEED TRANSLATOR</u>
-------	------------------------------------

SUGGESTIONS	There should be no defect present or memorized
-------------	--

Change the injection calculator if the car is unable to run at more than 40 km/h.
 If further problems arise, refer to the diagnosing of the car speed parameter.

AFTER REPAIR	Perform again the conformity test.
--------------	------------------------------------

STATE	<u>ANTI-STARTER</u>
-------	---------------------

SUGGESTIONS	There should be no defect present or memorized.
-------------	---

Check if the anti-starter device is defect.
 If the cause is the anti-starter device, remedy the defect before doing this diagnosing.

Check the insulation and the continuity of the cabling along the circuit from pin 58 calculator.

If the defect has not been eliminated, refer to the diagnosing of the anti-starter device.

AFTER REPAIR	Perform again the conformity test.
--------------	------------------------------------

STATE	<u>IDLE MODE ADJUSTMENT</u>
SUGGESTIONS	There should be no defect present or memorized
<p>Check the resistance of the step-by-step engine for the idle mode adjustment. Change it if necessary.</p> <p>Check the insulation and the continuity of the cabling along the circuits:</p> <ul style="list-style-type: none"> - pin 12 calculator ♦ pin B step-by-step engine - pin 41 calculator ♦ pin A step-by-step engine - pin 42 calculator ♦ pin C step-by-step engine - pin 72 calculator ♦ pin D step-by-step engine <p>Remedy if necessary, and then go on with the diagnose, watching the tolerance value of the idle mode rotation ratio.</p>	
The idle mode rotation ratio < minimal limit.	The idle mode rotation ratio is too small.
<ul style="list-style-type: none"> -Check the functioning of the enrichment adjustment. -Clean the air supply circuit (clapper body, step-by-step engine) as they seem to be dirty. -Check the oil level of the engine (too high a level causes splash lubrication) -Check the pressure of petrol (see if it is not too small) -Check engine compression with the “CLIP TEHNIC” tester -Check the adjustment of the rocker-arms and the settling of the distribution. -Check the ignition system -Check the injectors. <p>If all the above are correct, then the step-by-step engine will have to be replaced.</p>	
AFTER REPAIR	Perform again the conformity test.

The idle mode rotation ratio > maximal limit.	The idle mode rotation ratio is too great.
---	--

<ul style="list-style-type: none">- Check the oil level of the engine- Check the good functioning of the atmospheric pressure sensor.- Check the tubes connected to the admission collector.- Check the fittings of the admission collector- Check the watertightness fittings of the clapper body- Check the watertightness of the power-brakes.- Check the presence of the nozzles of the oil-vapour re-aspiration circuit- Check petrol pressure.- Check the adjustment of the rocker-arms and the settling of the distribution. <p>If all the above are correct, then the step-by-step engine will have to be replaced.</p>

AFTER REPAIR	Perform again the conformity test
--------------	-----------------------------------

STATE	<u>ENRICHMENT ADJUSTMENT</u>
SUGGESTIONS	There should be no defect present or memorized.
<p>Check the connection and the condition of the oxygen probe connector. Remedy if necessary.</p>	
<p>Check the presence of + 12V at pin A of oxygen probe after setting the contact. Check insulation and continuity along the circuits: pin 45 calculator ♦ pin C oxygen probe pin 80 calculator ♦ pin D oxygen probe. Remedy if necessary.</p>	
<ul style="list-style-type: none"> - Check the ignition system - Check the watertightness of the connections to the canister draining valve and to the canister (lack of watertightness in these locations considerably perturbs enrichment). - Check the watertightness of the exhaust (i.e. exhaust-pipe) circuit. - Check the watertightness of the intake collector. - If the car only runs in town, the probe can be clogged (try to do a loaded running) - If the idle mode running is unstable, check the adjustment of the rocker-arms and the settling of the distribution. - Check petrol pressure - Check the injectors (the petrol flow and the shape of the flow). <p>If necessary, replace the oxygen probe.</p>	
AFTER REPAIR	Perform again the conformity test.

STATE	<u>AIR CONDITIONING AC COMPRESSOR REQUIREMENT</u>
SUGGESTIONS	No defect should be present or memorized
The compressor clutch does not couple	Check the insulation and continuity along the circuit towards pin 10 injection calculator. Remedy if necessary. If the incident persists, refer to the diagnosing of he air-conditioning.
AFTER REPAIR	Perform again the conformity test
PARAMETER	<u>CALCULATOR POWER VOLTAGE</u>
SUGGESTIONS	No defect should be present or memorized. No consumer should be turned on.
The contact is set	<p>If the voltage < the minimal voltage, then the battery may be flat. Check the charging circuit, in order to detect the cause of the problem.</p> <p>If the voltage > the maximal voltage, then it is possible that the battery may be overcharged. Check the charging voltage to be correct, with and without consumers.</p>
In idle mode	<p>If the voltage < the minimal voltage, then the charging voltage is too small. Check the charging circuit, in order to detect the cause of the problem.</p> <p>If the voltage > the maximal voltage, then the charge of the battery is too high. The voltage regulator is faulty. Remedy this problem, and then check the level of the electrolyte in the battery.</p>

Remark:

The testing of the battery and the charging circuit can be done with "TECHNIC CLIP" and does not require disconnecting the battery, so it allow the conservation of the calculator memory.

AFTER REPAIR	Perform again the conformity test.
--------------	------------------------------------

PARAMETER	<u>CLAPPER POSITION</u> <u>MEMORIZED VALUE FOR</u> <u>FREE POSITION OF ACCELERATION PEDAL</u>
-----------	---

SUGGESTIONS	No defect should be present or memorized. The contact is set or the engine is started.
-------------	---

The value is memorized at limit or failure to detect the free pedal position, or failure to detect the completely pushed down position	Check if the mechanic limitation of the potentiometer has been altered. Check the command of the acceleration (friction, obstacles).
	Check the resistance of the clapper potentiometer. Change potentiometer if necessary.
	Check the insulation, the continuity and the absence of contact resistance along the circuits: pin 43 of calculator ♦ pin C of clapper potentiometer pin 74 of calculator ♦ pin B of clapper potentiometer pin 75 of calculator ♦ pin A of clapper potentiometer. Remedy if necessary.

The position, of the clapper is fixed	Check the resistance of the clapper potentiometer during the operation of the clapper.
	If the resistance varies, check the electric circuits connected to the potentiometer.
	If the resistance does not vary, check if the potentiometer is mechanically coupled to the clapper. Change the potentiometer if necessary.

AFTER REPAIR	Perform again the conformity test.
--------------	------------------------------------

PARAMETER	<u>WATER TEMPERATURE</u>
SUGGESTIONS	No defect should be present or memorized
<p>If the value read is not real, check if the sensor for water temperature correctly follows the “standard curve of the resistance according to temperature”.</p> <p>Replace sensor if there are deviations.</p> <p>REMARK: a sensor displaying deviations regarding the normal evolution of its parameters has previously undergone an electric shock.</p>	
<p>Check the insulation, the continuity and the absence of contact resistance along the circuits: pin 13 of calculator ♦ pin B2 of water temperature sensor pin 73 of calculator ♦ pin B1 of water temperature sensor.</p> <p>Remedy if necessary.</p>	
AFTER REPAIR	Perform again the conformity test.

PARAMETER	<u>AIR TEMPERATURE</u>
SUGGESTIONS	No defect should be present or memorized
<p>If the value read is not real, check if the sensor for air temperature correctly follows the “standard curve of the resistance according to temperature”.</p> <p>Replace sensor if there are deviations.</p> <p>REMARK: a sensor displaying deviations regarding the normal evolution of its parameters has previously undergone an electric shock.</p>	
<p>Check the insulation, the continuity and the absence of contact resistance along the circuits: pin 49 of calculator ♦ pin 1 of air temperature sensor pin 73 of calculator ♦ pin 2 of air temperature sensor.</p> <p>Remedy if necessary.</p>	
AFTER REPAIR	Perform again the conformity test.

PARAMETER	<u>COLLECTOR PRESSURE</u> <u>ATMOSPHERIC PRESSURE</u>
SUGGESTIONS	No defect should be present or memorized
Collector pressure not real after setting contact. Collector pressure < Min. in idle mode. Atmospheric pressure not real	<p>Check the insulation, the continuity and the absence of contact resistance along the circuits:</p> <ul style="list-style-type: none"> pin 15 of calculator ♦ pin A of atmospheric pressure sensor pin 16 of calculator ♦ pin B of atmospheric pressure sensor pin 78 of calculator ♦ pin C of atmospheric pressure sensor. <p><u>Remedy if necessary.</u></p> <p>If all the above are correct, replace the atmospheric pressure sensor</p>
Collector pressure < Max. in idle mode.	<p>Check:</p> <ul style="list-style-type: none"> - watertightness of tube between the atmospheric pressure sensor and the intake collector - adjustment of rocker-arms - canister draining valve, which should be closed in idle mood - cylinder compression, controlled with "CLIP TEHNIC" <p>If all the above are correct, replace the atmospheric pressure sensor</p>
AFTER REPAIR	Perform again the conformity test.

PARAMETER	<u>DETONATION SIGNAL</u>
-----------	--------------------------

SUGGESTIONS	No defect should be present or memorized
-------------	--

The detonation sensor should generate a signal, the amplitude of which must differ from 0, a proof of the fact that it perceives the mechanical vibrations of the engine.
 If the signal = 0:
 - check if the sensor is well fixed
 - check the insulation and continuity of cabling along the circuits:
 pin 20 of calculator ♦ pin 1 of detonation sensor
 pin 79 of calculator ♦ pin 2 of detonation sensor
 pin 19 of calculator ♦ pin 1 of detonation sensor screening.
 Replace detonation sensor if necessary.

AFTER REPAIR	Perform again the conformity test
--------------	-----------------------------------

PARAMETER	<u>ADAPTATION OF ENRICHMENT WHILE RUNNING</u> <u>ADAPTATION OF ENRICHMENT IN IDLE MODE</u>
-----------	---

SUGGESTIONS	No defect should be present or memorized. Do initialization.
-------------	---

Make sure the canister draining valve is watertight.

Erase memory of the injection calculator.
 With the engine hot, in the stage of the idle mode adjustment, watch these parameters and notice:
 - if one of the parameters drifts to the MAX limit, then there is no enough petrol
 - if one of the parameters drifts to the MIN limit, then there is too much petrol.

Ensure the cleanness and the good functioning of:
 - petrol filter
 - petrol pump
 - petrol supply circuit
 - petrol tank.

AFTER REPAIR	Perform again the conformity test.
--------------	------------------------------------

COMMAND	<u>PETROL TANK</u>
SUGGESTIONS	No defect should be present or memorized
<p>Check that the shock sensor has the inner contact shut. Push in order to perform the closing of the shock sensor, if necessary.</p>	
<p>Check, while the injection calculator commands the petrol pump, the presence of 12V at pin 3 of the shock sensor. If there is no 12V at pin 3 of the sensor, then remedy the circuit between pin 3 of sensor and pole 5 of petrol pump relay.</p>	
<p>Check the continuity between pin 1 and pin 3 of shock sensor. If necessary, replace shock sensor.</p>	
<p>Check the integrity of the cabling and the presence of mass at pin A1 of the connector on the cap of the petrol tank.</p>	
<p>Check the insulation and the continuity of the cabling along the supply circuit +12V: -pin 1 shock sensor ♦ pin B1 petrol tank connector. Remedy if necessary.</p>	
<p>If the incident persists, replace petrol pump.</p>	
AFTER REPAIR	Perform again the conformity test

COMMAND	<p><u>LOW SPEED VENTILATOR</u> <u>HIGH SPEED VENTILATOR</u></p>
SUGGESTIONS	<p>No defect should be present or memorized</p>
<p>The ventilator does not turn at low speed</p>	<p>Check the insulation and the continuity of the cabling along the circuit to pin 8 of calculator. Remedy if necessary.</p>
	<p>If the incident persists, check on the basis of the electrical schema: - the supply of the ventilator (700) and of the GMV ventilator - the connection to the mass of the GMV ventilator - the state of the GMV (700) relay - the state of the fuse (321) located between the relay 700 and the GMV ventilator - the state of the GMV ventilator. Remedy if necessary.</p>
<p>The ventilator does not turn at high speed</p>	<p>Check the insulation and the continuity of the cabling along the circuit to pin 38 of calculator. Remedy if necessary.</p>
	<p>If the incident persists, check on the basis of the electrical schema: -the supply of the ventilator (234) and of the GMV ventilator -the connection to the mass of the GMV ventilator -the state of the GMV (234) relay -the state of the GMV ventilator. Remedy if necessary.</p>
AFTER REPAIR	<p>Perform again the conformity test.</p>

1.

STARTING PROBLEMS

SUGGESTIONS

Do not use this information before having done the complete check-up with the tester!

Check the fuel



Check if there is petrol in the fuel tank (do not rely on the on-board indices). Check if it is the fuel recommended by the manufacturer.



Check the tubes and hoses



Check if there are no broken tubes.



Check the fuel-supply circuit



Check the flow and the pressure of the fuel: the condition of the petrol-pump, of the pressure regulator. Check the injectors (flow, shape of jet)



Check the exhaust system



Check if the exhaust circuit is not strangled-up and the catalyst is not stopped-up.



Check the ignition



Check the state of the sparking plugs and the ignition coil.



Check the canister draining valve



Disconnect the tube between the draining valve and the intake collector and strangle it up. If the disturbances disappear, the cause was the draining valve.



Check the engine compression



Connect the "CLIP TEHNIC" device to do this test in accordance with the usual manner of work.



Check the engine flywheel



Connect the tester "CLIP" and do the test corresponding to the check-up of the rotation signal.



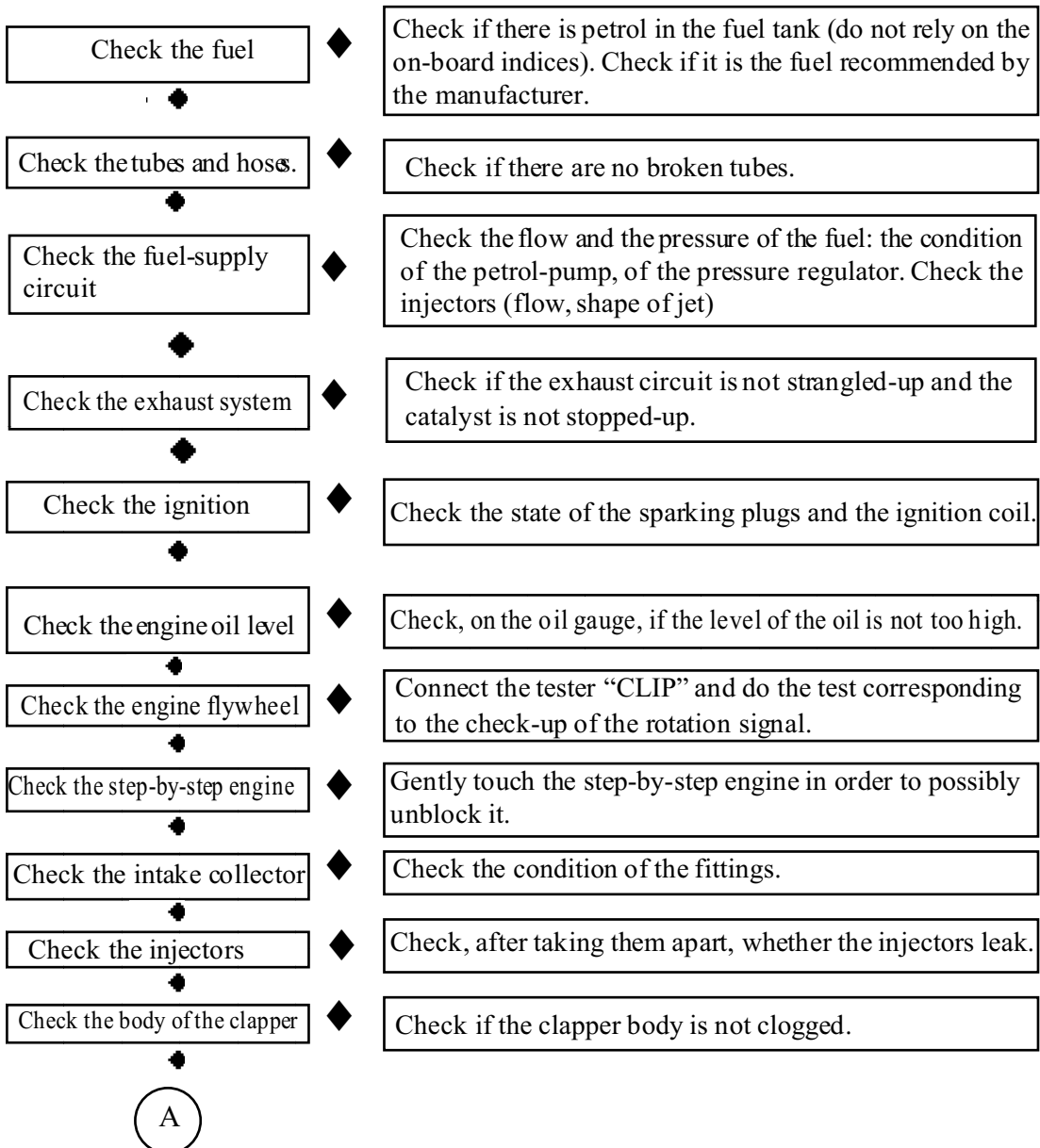
Check the step-by-step engine

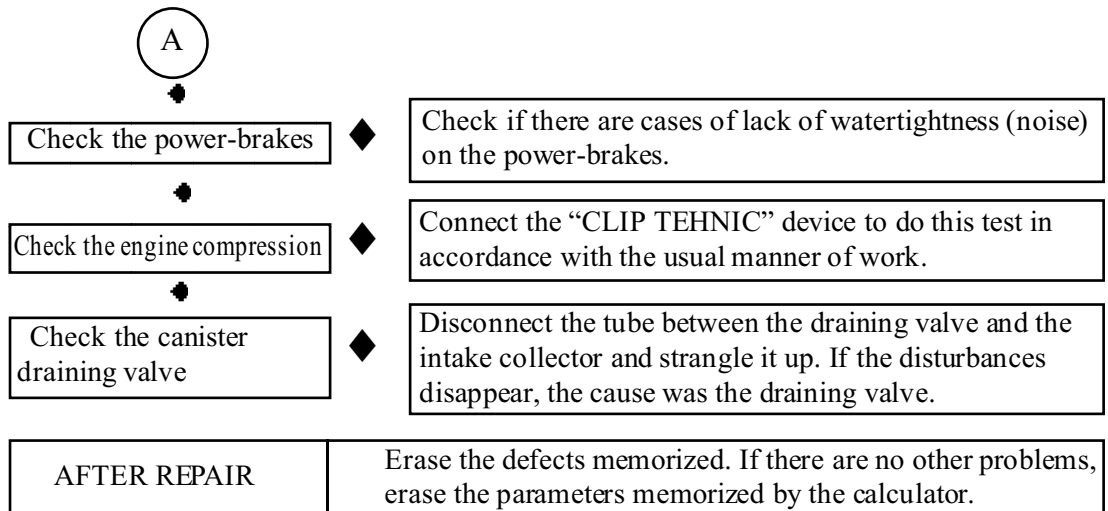


Gently touch the step-by-step engine in order to possibly unblock it.

2.	IDLE MODE PROBLEMS
----	--------------------

SUGGESTIONS	Do not use this information before having done the complete check-up with the tester!
-------------	---





3.	RUNNING PROBLEMS
----	------------------

SUGGESTIONS	Do not use this information before having done the complete check-up with the tester!
-------------	---

- | | | |
|------------------------------------|---|---|
| Check the air filter
♦ | ♦ | Check if the air filter is not deformed. |
| Check the fuel
♦ | ♦ | Check if there are no broken tubes |
| Check the tubes and hoses.
♦ | ♦ | Check if there are no broken tubes |
| Check the fuel-supply circuit
♦ | ♦ | Check if there is petrol in the fuel tank (do not rely on the on-board indices). Check if it is the fuel recommended by the manufacturer. Check if there are no broken tubes. |
| Check the exhaust system
♦ | ♦ | Check if the exhaust circuit is not strangled-up and the catalyst is not stopped-up. |
| Check the ignition
♦ | ♦ | Check the state of the sparking plugs and the ignition coil. |
| Check the engine oil level
♦ | ♦ | Check, on the oil gauge, if the level of the oil is not too high. |
| Check the intake collector
♦ | ♦ | Check the condition of the fittings. |
| Check the exhaust collector
♦ | ♦ | Check if the exhaust collector is watertight. |
| Check the injectors
♦ | ♦ | Make sure that, after taking them off, the injectors do not leak. |

(A)

A

Check the body of the clapper



Check if the clapper body is not clogged.

Check the power-brakes



Check if there are cases of lack of watertightness (noise) on the power-brakes.

Check the engine flywheel



Connect the tester "CLIP" and do the test corresponding to the check-up of the rotation signal.

Check the running train



Check if the spurs, the brake cylinders and the wheel ball-rings are not seized-up.

Check the cooling of the engine



Check if there is enough engine cooling.

Check the canister draining valve



Disconnect the tube between the draining valve and the intake collector and strangle it up. If the disturbances disappear, the cause was the draining valve.

Check the engine compression



Connect the "CLIP TEHNIC" device to do this test in accordance with the usual manner of work.

AFTER REPAIR

Erase the defects memorized. If there are no other problems, erase the parameters memorized by the calculator.

COOLING - EXHAUST - FUEL TANK
CHARACTERISTICS

19

QUANTITY AND QUALITY OF COOLING LIQUID

TYPE ENGINE	QUANTITY (L)	QUALITY	PECULIARITIES
E7J	6	Anti-freeze type D GLACEOL RX	Protection up to -40°C

THERMOSTAT

TYPE ENGINE	START OF OPENING (°C)	END OF OPENING (°C)	DRIVE (MM)
E7J	89	101	7,5

FILLING AND DRAINING

The heating radiator does not have a tap.

The circulation of the cooling liquid is done continuously within the heating radiator, which contributes to the heating of the engine.

FILLING

The tightening of the emptying stopper is checked.

The draining screw placed on the tube between the engine and the air-conditioning radiator is taken off.

The circuit is filled through the hole of the de-gassing pot.

The draining screw is fastened when the liquid flows in a continuous jet.

The engine is set into motion (**2500 rot/min**).

The level is adjusted for approx. 4 minutes.

The stopper of the de-gassing pot is closed.

DRAINING

The engine is let to run for **10 minutes at 2500 rot/min** until the motor-ventilator starts (i.e. the time for the automatic de-gassing).

Check if the level of the liquid is close to “**Max**”.

Do not open the draining screw when the engine is running.

Fasten again the stopper of the de-gassing pot with the engine still hot.

1. CHECKING WATERTIGHTNESS OF CIRCUIT

The **MS 554-01** adapter is mounted instead of the valve of the de-gassing pot.

The **MS 554-07** device is connected to the adapter.

The engine is heated, and then stopped.

the pump is used in order to put the circuit under pressure.

The pumping is stopped at a value **0.1 bar** smaller than the tare value of the valve (**1.2 bar**).

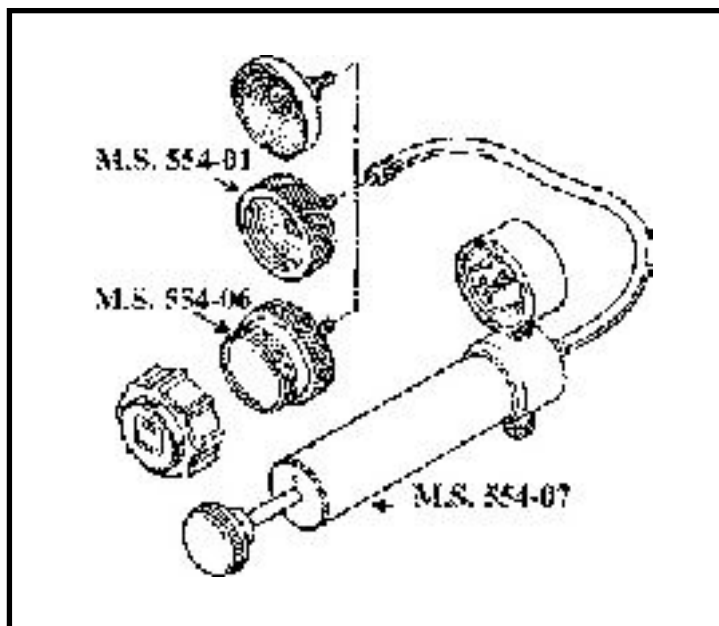
The pressure must not go down; otherwise, the leak is looked for.

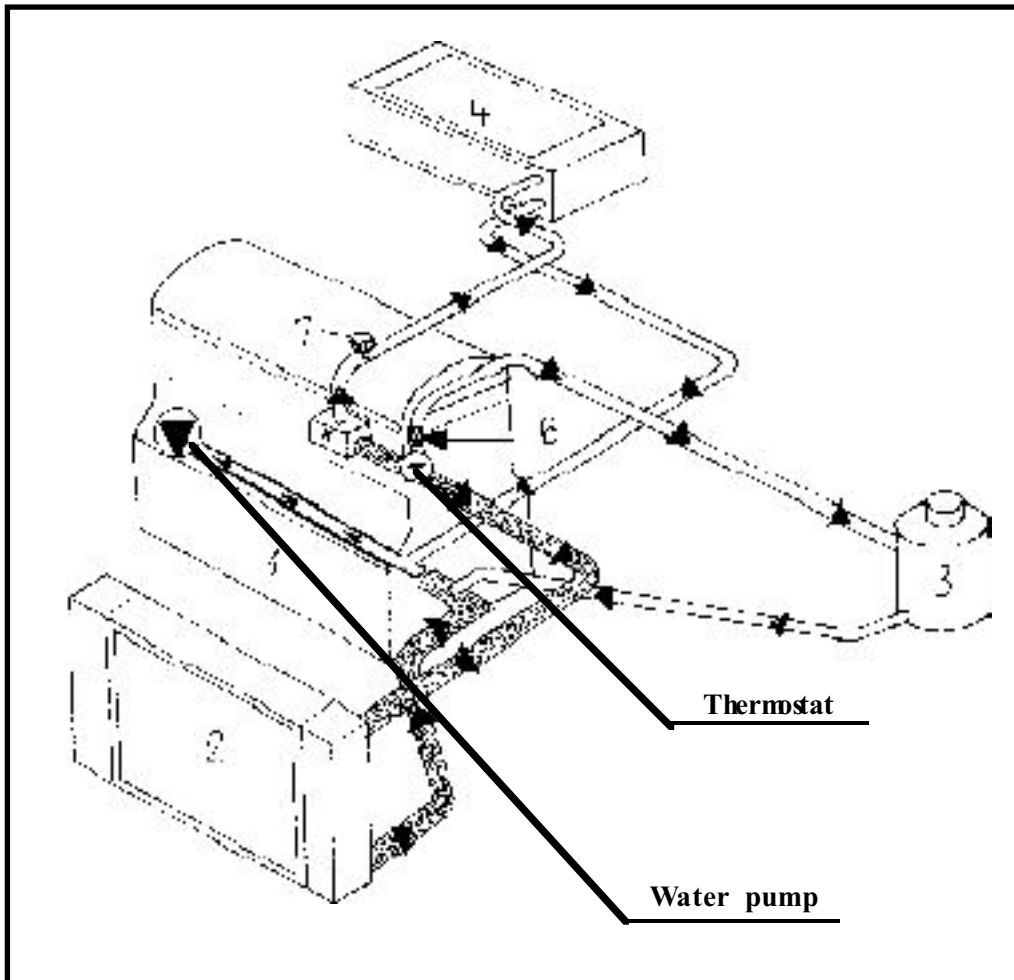
The junction of the device for cooling system decompression is progressively unscrewed, then the apparatus is taken off and the valve of the de-gassing pot, equipped with a new fitting, is mounted.

2. CHECKING WATERTIGHTNESS OF CIRCUIT

The **MS 554-06** device, then the pressure in the circuit is reestablished; this pressure must become stable at the tare value of the valve with the control tolerance of **+/-0.1 bar**.

The tare value of the valve of the de-gassing pot: **1.2 bar**.



**Components:**

1. Engine
2. Radiator
3. De-gassing pot
4. Air-warming device
5. Thermostat stand
6. Nipple $\varnothing 3$
7. Draining screw

RADIATOR

SPECIAL TOOLS

MOT 1202 - 01	Pliers for elastic collars
MOT 453	Tubes' plug

DISMONTING

The battery is disconnected.

The tubes of the radiator are stopped up with the **MOT 453** devices.

Dismount the hoses from the radiator by means of the elastic collar pliers **MOT 1202-01**.

The two screws of the stand are taken off the upper traverse of the radiator and the radiator is taken off.

The radiator is emptied and the cooling liquid is retrieved.

REMOUNTING

Check the existence of the supporting bushings.

The radiator is mounted.

The jacks for the fixing on the radiator are mounted, as well as the radiator stands, and the fixing screws are fastened (0,57 daN).

The **MOT 453** devices are taken off.

The tubes that have been taken off are mounted back and the collars are tightened.

Note : When mounting, line up the marks from the hoses and the related parts.

The battery is connected.

The filling and the draining of the cooling circuit is done.

Tightening moments:

- the screws for the radiator stands (M6- 2 pieces) - 0,57 daN.

DISMOUNTING

Disconnect the (-) plug of the battery.

Disconnect the cooling fan connector (5).

Disconnect the cooling fan resistance connector (1). Mark the mounting position identification of the two connectors.

Detach the wiring from clip (6).

Cut the clip attaching the wiring on the cooling fan assembly in point (7).

Dismount the four-attachementscrews (3) of the cooling fan on the radiator, recovering the washers (2) and (4).

Remove the cooling fan assembly.

REMOUNTING

Check the condition of the fan propeller, cooling fan electric motor, washers.

Tighten the attachment screw (3) of the assembly.

Replace the clip from point (7).

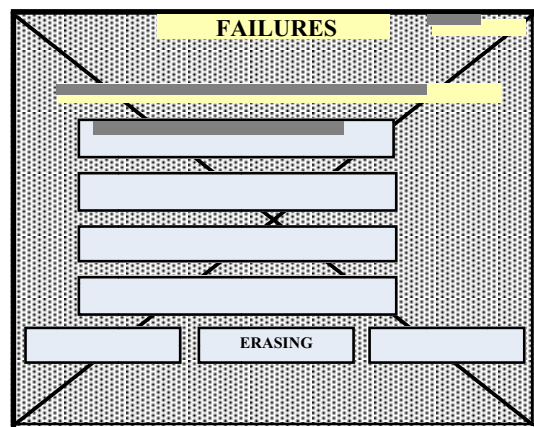
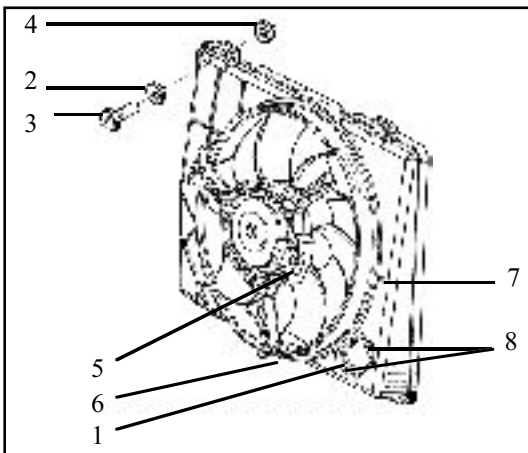
Mount the wiring of the cooling fan assembly taking into the consideration the mounting position marked before dismounting. This is to be fixed by means of a clip in point (7) and will pass through the clip (6).

Connect the cooling fan resistance connector (1).

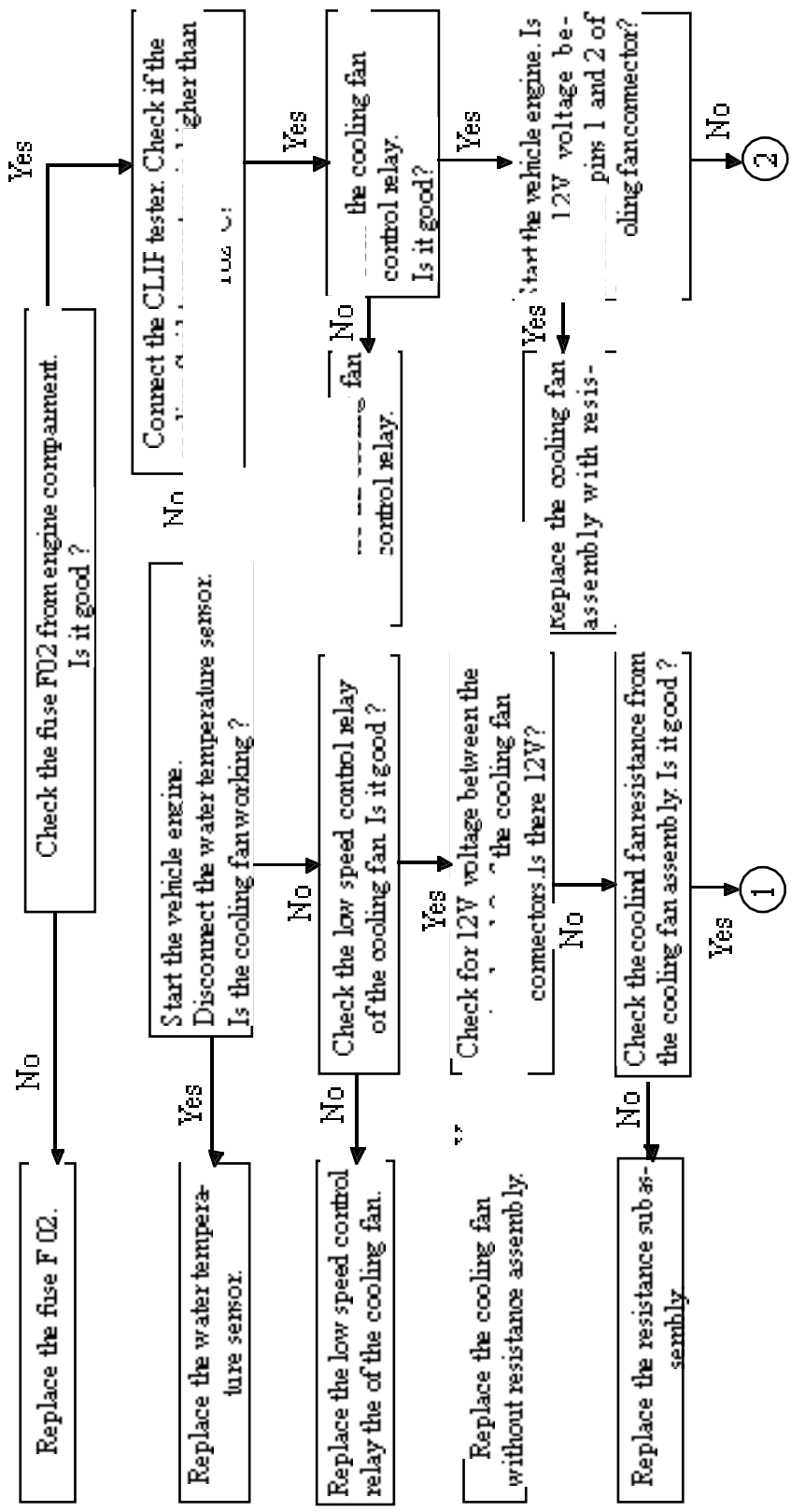
Connect the cooling fan connector (5). Observe the mounting position identification of the two connectors.

Connect the battery plug (-). In case the vehicle is equipped with programmable radio-cassettes, electronic clock, etc, these are to be reset before returning the vehicle to the client.

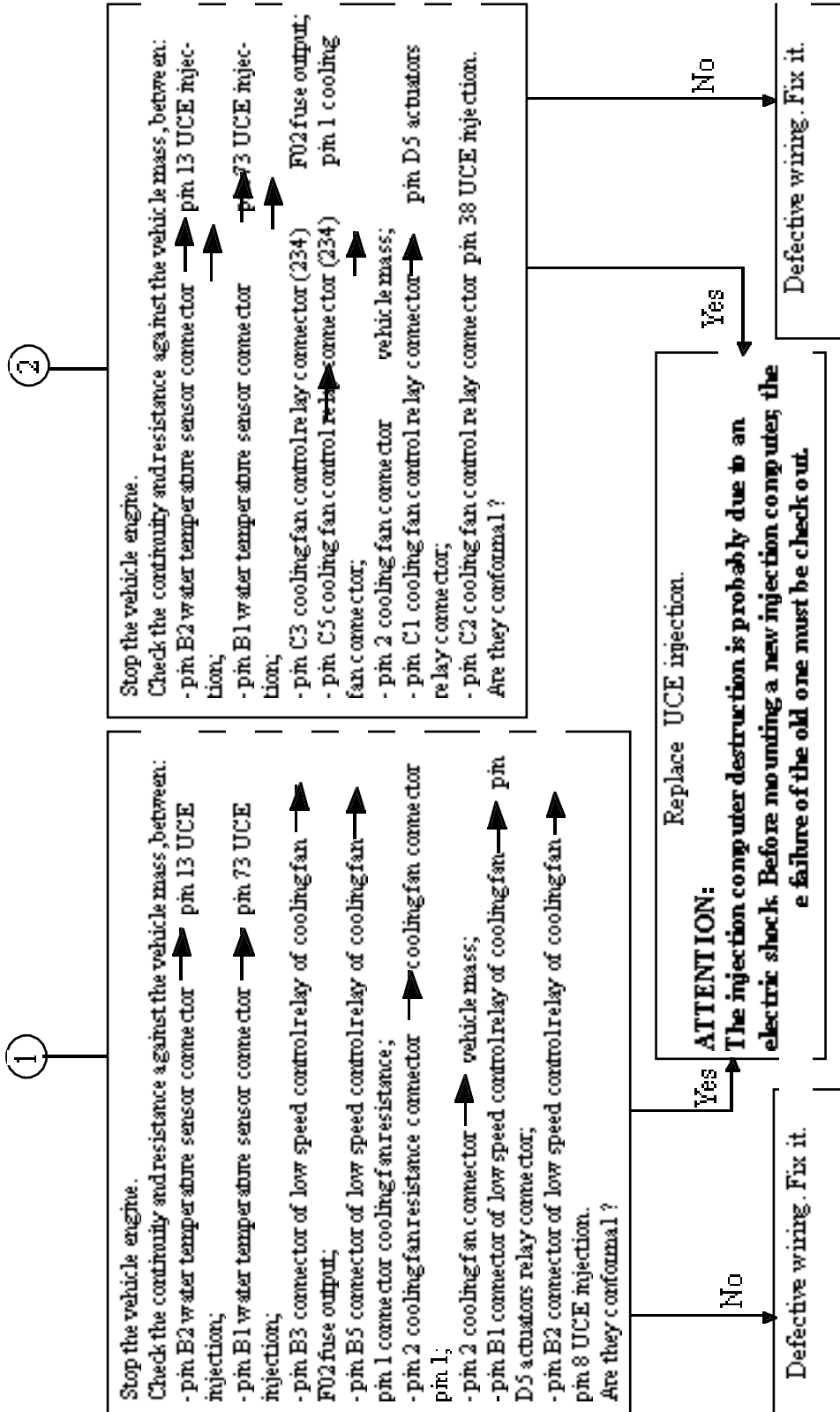
Check the cooling fan operation: start the vehicle engine and disconnect the water temperature sensor. The cooling fan must start. Reconnect the water temperature sensor, then by means of the CLIP tester, erase the memorized failure related to the water temperature sensor.



COOLING FAN NOT WORKING
 (for vehicles with air conditioning)



COOLING FAN NOT WORKING
(for vehicles with air conditioning)



**COOLING - EXHAUST - FUEL TANK
RESISTANCE COOLING FAN REPLACEMENT
for vehicles with air conditioning**

19

Description of the operation:

Disconnect the battery (-) terminal.

Disconnect the resistance connector.

Dismount the two attachment screws of the resistance.

Position the new resistance assembly.

Mount the two attachment screws of the resistance (tightening moment 4.5 Nm).

Connect the resistance connector.

Connect the battery (-) terminal. In case the vehicle is equipped with programmable radio-cassettes player, electronic clock, etc, those are to be re-programmed before returning the vehicle to the client.

Check the engine motor fan operation.

DISMOUNTING

Disconnect the (-) plug of the battery.

Disconnect the cooling fan connector (7).

Dismount the three attachment screws (6) of the cooling fan on the radiator, recovering the attachment buffers (2), cross-pieces (3) and the washers (4) and (5).

Remove the cooling fan assembly (1).

REMountING

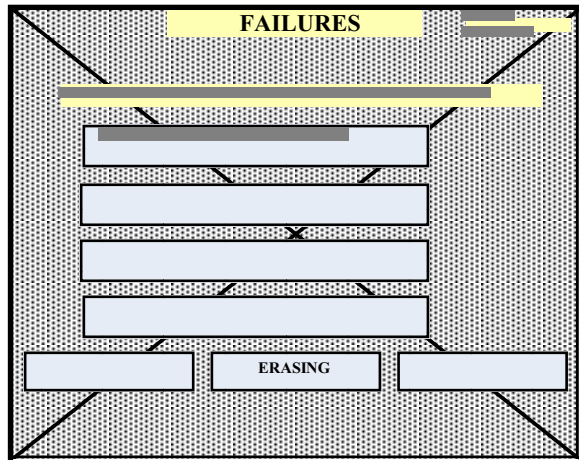
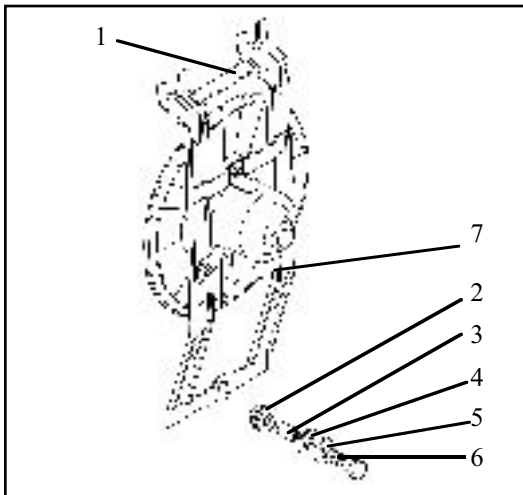
Check the condition of the fan propeller, cooling fan electric motor, bushings and washers.

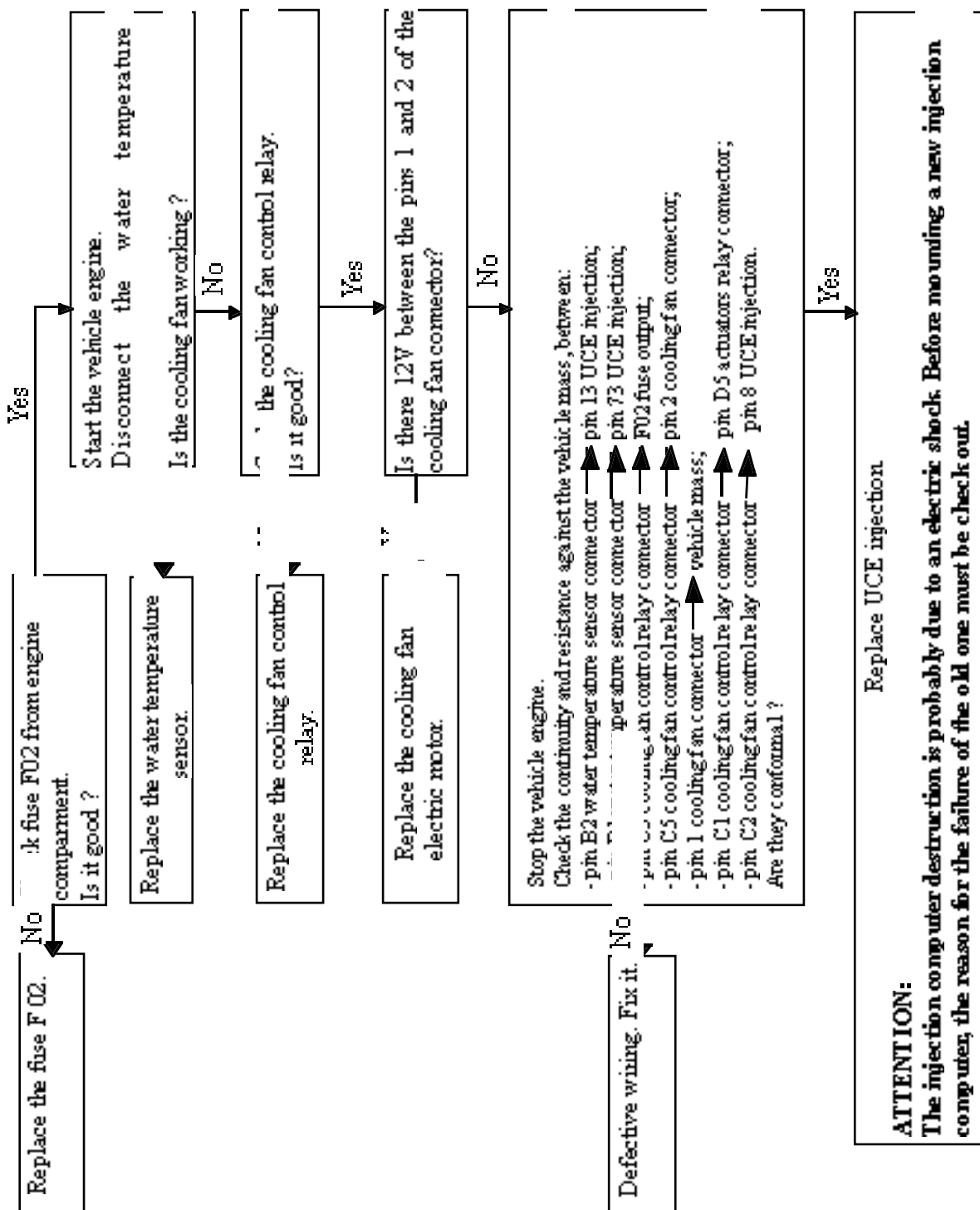
Tighten the attachment screw (6) of the assembly.

Connect the cooling fan connector (7).

Connect the battery plug (-). In case the vehicle is equipped with programmable radio-cassettes, electronic clock, etc, these are to be reset before returning the vehicle to the client.

Check the cooling fan operation: start the vehicle engine and disconnect the water temperature sensor. The cooling fan must start. Reconnect the water temperature sensor, then by means of the CLIP tester, erase the memorized failure related to the water temperature sensor.





SPECIAL DEVICES

MOT. 1202-02	Pincers for elastic collars
MOT. 1505	Device for measuring the belt tension

TIGHTENING COUPLES (daNm)



Screw-nut for extending pulley / runner	5
Screw for the crankshaft pulley	2+68°+/-6°
Screws for right-side pendular stand	6.2
Screw-nut for hydro-elastic buffer	4.4
Screws for water-pump	2.2
Screw-nuts for water-pump	1
Screws for wheels	7.5

DISMOUNTING

The car is set on a two-column lifting stand.

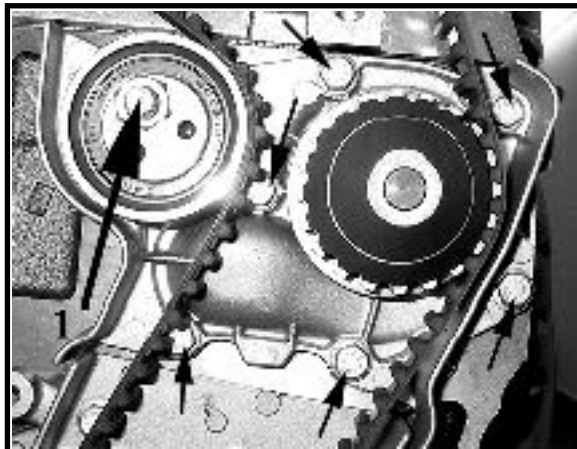
The battery is disconnected.

The cooling circuit is emptied at the filling stopper placed at the lower part of the radiator.

The following are taken apart.

- the distribution belt (see Chapter “**Distribution belt**”);
- the extending pulley / runner (1);
- the fixing screws of the water-pump.

The water-pump is taken out at the upper end of the engine compartment.



CLEANING

It is very important that the fitting surfaces of the aluminum parts should not be scratched. Use **Decapjoint** to dissolve the particles of fitting that are left stuck to them.

The paste is applied onto the cleaning surface and then you wait for approx. 10 minutes, then it is removed with a wooden spatula.

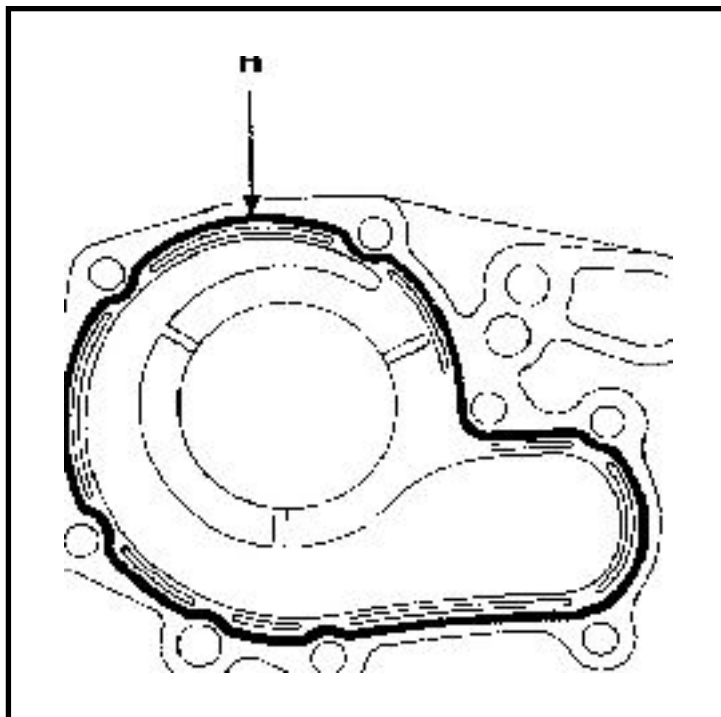
During this operation you should use protection gloves.

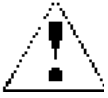
REMOUNTING

The watertightness of the water-pump is done with **LOCTITE 518**; the **H** cord has the thickness of 0,6-1 mm and must be applied according with the chart below.

The distribution belt is re-mounted (see Chapter “**Distribution belt**”).

The cooling circuit is filled and drained (see Chapter “**Filling and Draining**”).





The catalytic converter, when in operation, reaches high temperatures, and consequently must not come in touch with flammable materials, which would lead to self-combustion.

The catalytic converter will be kept out of mechanic shocks.

DISMOUNTING

In order to take apart the noise-damper system **1**, the following operations are to be performed:

The screw-nuts **2** of the fixing collar, between holder **3** and noise-damper **1**, are loosened;

The two elastic fixing stands of the damper are taken apart, at the back on the car bodywork;

The noise-damper system is pulled and taken out.

In order to take apart the assembled holder **4**, the following operations are to be performed:

Collar **4** is taken off and the assembled holder is disconnected from the catalytic converter;

The elastic stands of the assembled holder are taken off;

The screw-nuts of the fixing collar **2** are loosened and the assembled holder is taken out by gently rotating, and pulling it towards the front.

In order to take apart the catalytic converter system **6**, the following operations are to be performed:

The engine shield is taken apart;

The two screw-nuts **7** for the fixation of the engine shield on the two stud-bolts on the exhaust gallery flange;

The fixing screws of converter stand **5** are taken off;

The oxygen probe is taken apart;

Collar **4** is taken apart, and the catalytic converter assembled on the assembled holder is disconnected;

The catalytic converter is taken out.

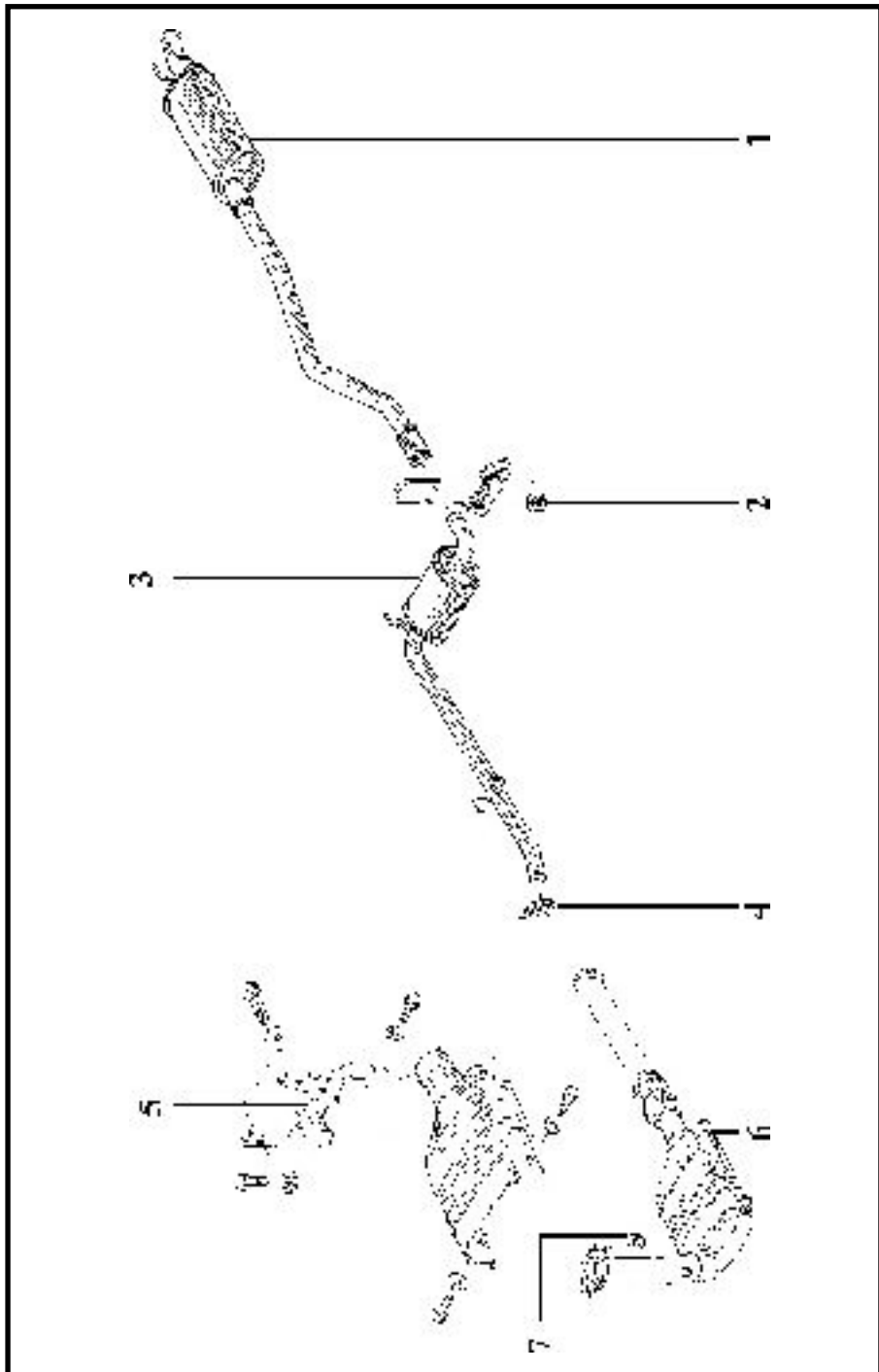
REMONTARE

The mounting operations are performed in the reverse order.

Make sure there perfect watertightness between the elements of the exhaust system, by using the **Wurth** watertightening paste, along the (inner part of the) joining stretch, between the gas expansion chamber and the catalytic converter (**0.014 kg**), and between the noise-damper and the expansion chamber (**0.013 kg**);

The fittings of the oxygen probe will be replaced for each taking-apart operation;

The tightening couple between the damper and the holder: **3.5 daNm +/-0.5**.



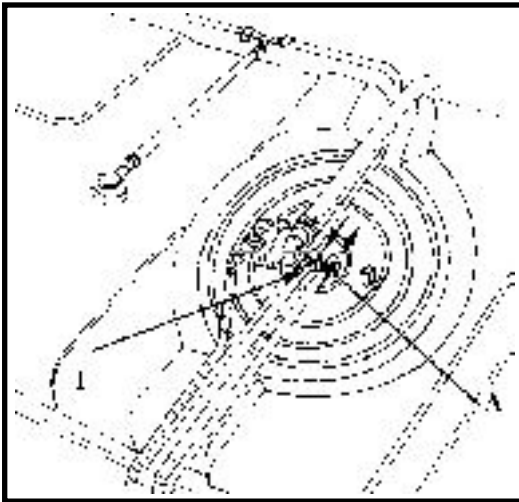
**IMPORTANT**

During the interventions affecting the petrol tank and the fuel supply circuit one must not smoke or bring incandescent parts near the work-place.

The emptying of the tank does not require taking apart the tank. Access is allowed through the inside of the car (i.e. the boot).

To take apart:

- the carpet of the boot;
- the lid of the visiting mouth (by taking off the four screws);
- the click-collar 1 is taken out by means of the **MOT 1202** device;
- a tube is adapted to the A outlet, which should be long enough to be introduced into a vessel outside the car.

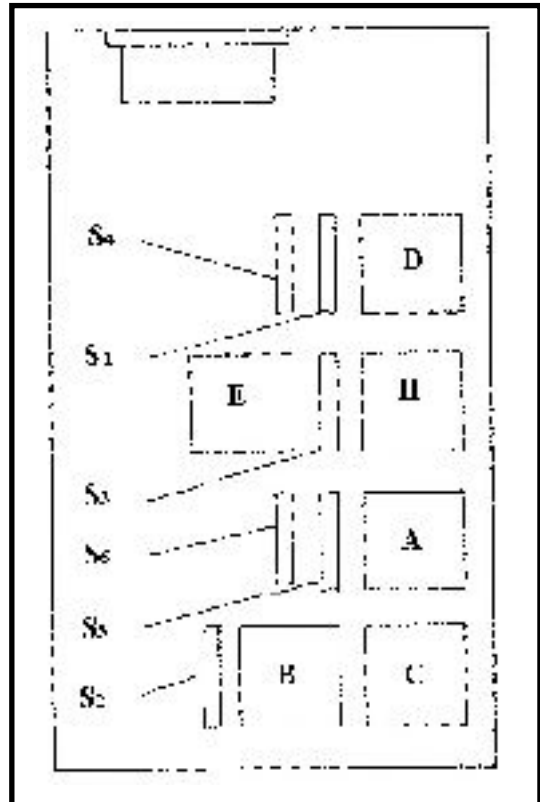


The **H** relay of the petrol-pump is taken out of the fuse box located in the engine compartment, and terminals **3** and **5** of the relay connector are shunted, thus ensuring the operation of the petrol pump (12 V).

The operation of the pump will be stopped when an intermittent leakage of the petrol is noticed.

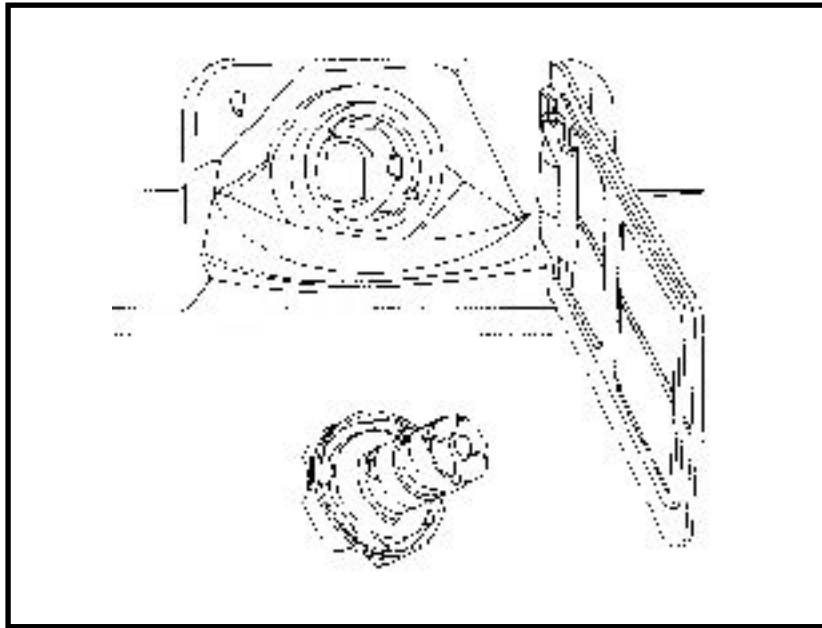
The shunt is taken off.

The relay is mounted.



TANK FUEL DESCRIPTION

The fuel tank has a watertight stopper; the inlet for the filling with unleaded fuel has a filling orifice incompatible with a classical filling gun (as lead has a negative effect on the anti-pollution system, the oxygen probe and the catalyst).

**THE ANTI - TILT VALVE**

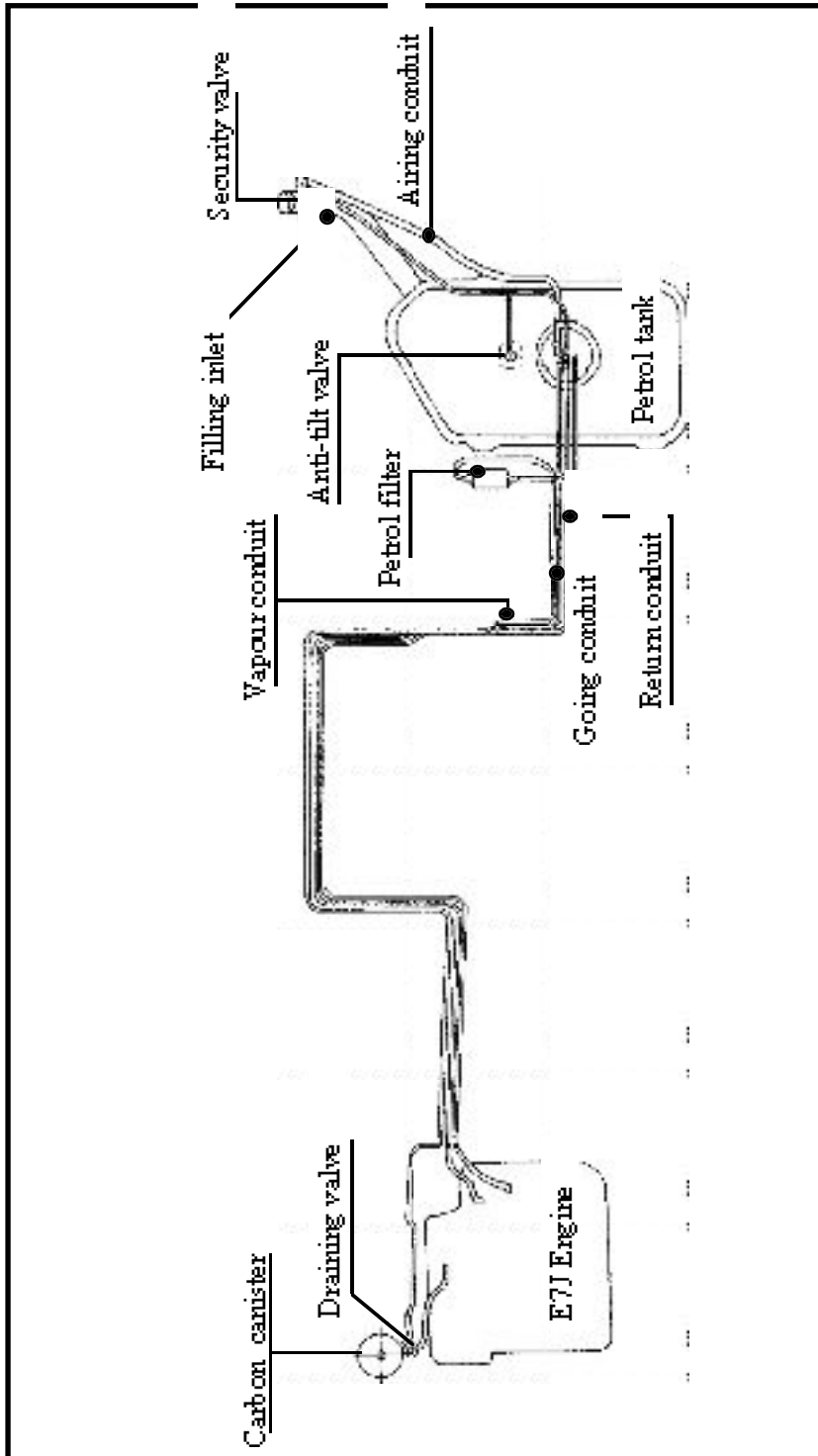
In case the car is tilted / overthrown, the valve gets blocked, thus avoiding petrol from spilling towards the carbon canister or the filling inlet.

THE SECURITY VALVE

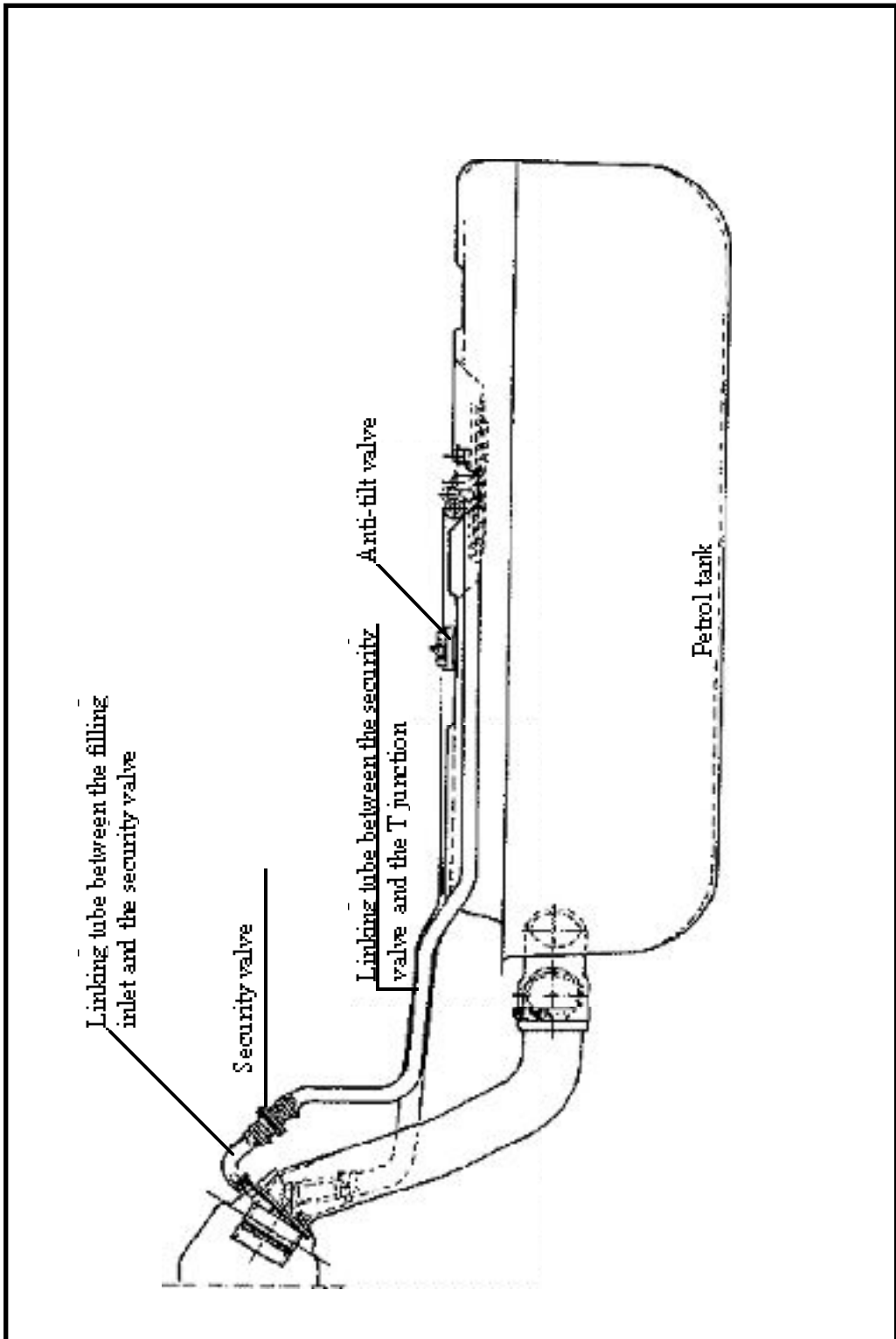
In case the petrol vapour recycling circuit is stopped up, the security valve avoids over-pressure or under-pressure in the tank.

It is mounted with the red-marked end towards the joining tube "T", and with the white-marked end towards the tube linking it to the filling inlet.

TANK FUEL DESCRIPTION



TANK FUEL DESCRIPTION



DISMOUNTING

In order to take apart the petrol tank from the car the following operations are in order:

The battery is disconnected;

The tank is emptied of fuel;

The carpet in the boot is taken out;

The cabling case of the fuel-level transmitter is taken off;

The collar fixing the airing conduit on the tank lid is taken off;

The junctures of the fuel-supply conduits (going- and return-) are taken off the tank lid;

The driving axis of the spare-wheel stand is taken off;

The car is suspended on an elevator;

The spare-wheel is taken out of its holder;

The screws fixing the protection screen of the tank, and then the tank itself, are taken off;

The collars fixing the anti-tilt valve juncture are taken off.

REMOUNTING

It is done in the reverse order of the taking apart operations.

**IMPORTANT**

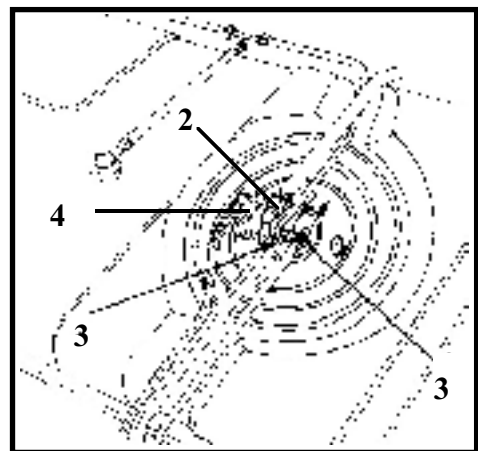
During the interventions affecting the petrol tank and the fuel supply circuit one must not smoke or bring incandescent parts near the work-place.

TAKING APART

The taking apart of the petrol pump does not require the taking apart of the tank; access is allowed through the inside (the boot) of the car.

To be taken apart:

- the carpet of the boot;
- the visiting inlet lid, by taking off the four screws 1;



Collar **2**, which fixes the airing conduit on the lid of the tank, is taken apart;
Junctures **3** of the fuel-supply conduits (going- and return-) are taken apart from the lid of the tank;

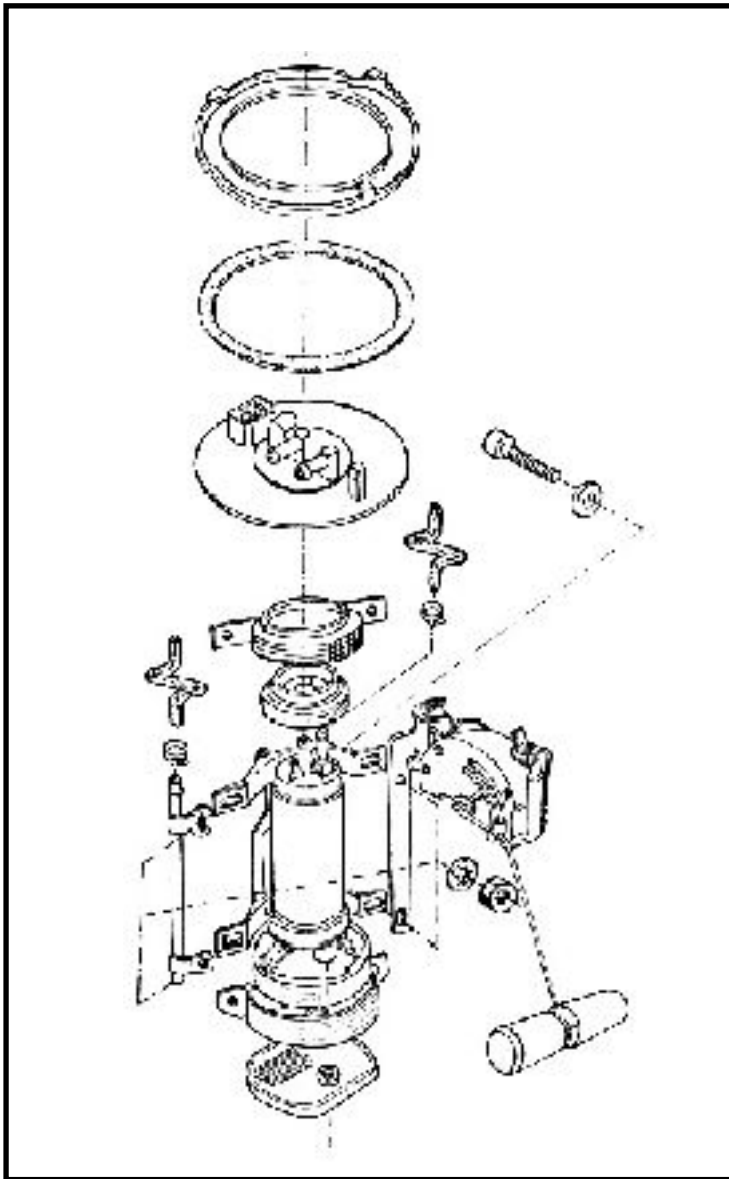
Electric connector **4** is disconnected from the lid of the petrol tank.

The lid of the tank is taken apart, together with the fitting.

The petrol pump is disentangled by unclamping off from the stand of the protecting vessel.

RE-MOUNTING

It is done in the reverse order of the taking apart operations.



IDENTIFICATION

It is a dry mono-disc clutch with hydraulic command.

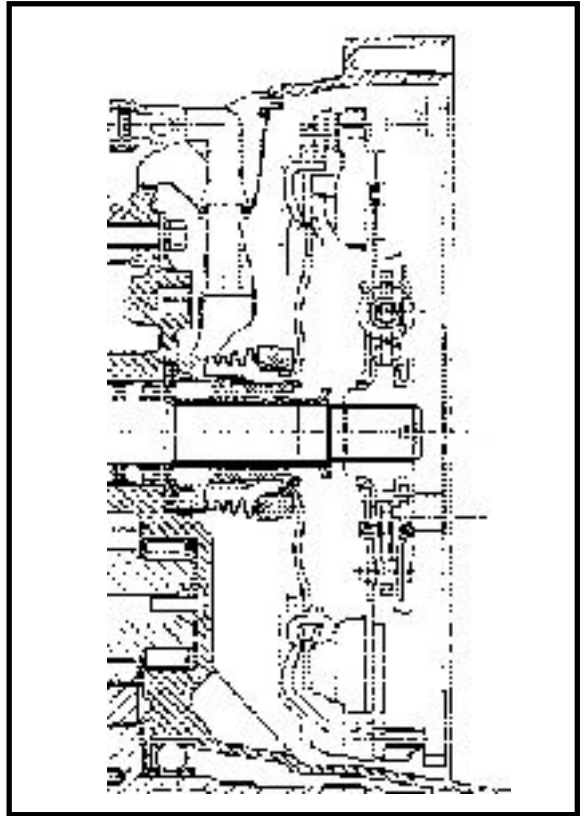
The clutch mechanism has a diaphragm spring.

The clutch disc has an elastic hub.

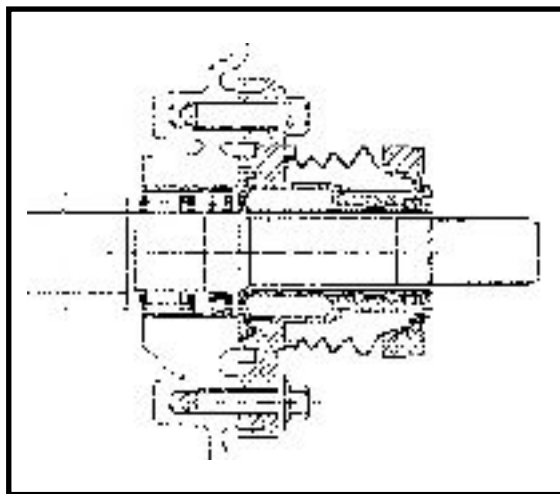
The supply of the hydraulic circuit is done with liquid from the brake-liquid tank.

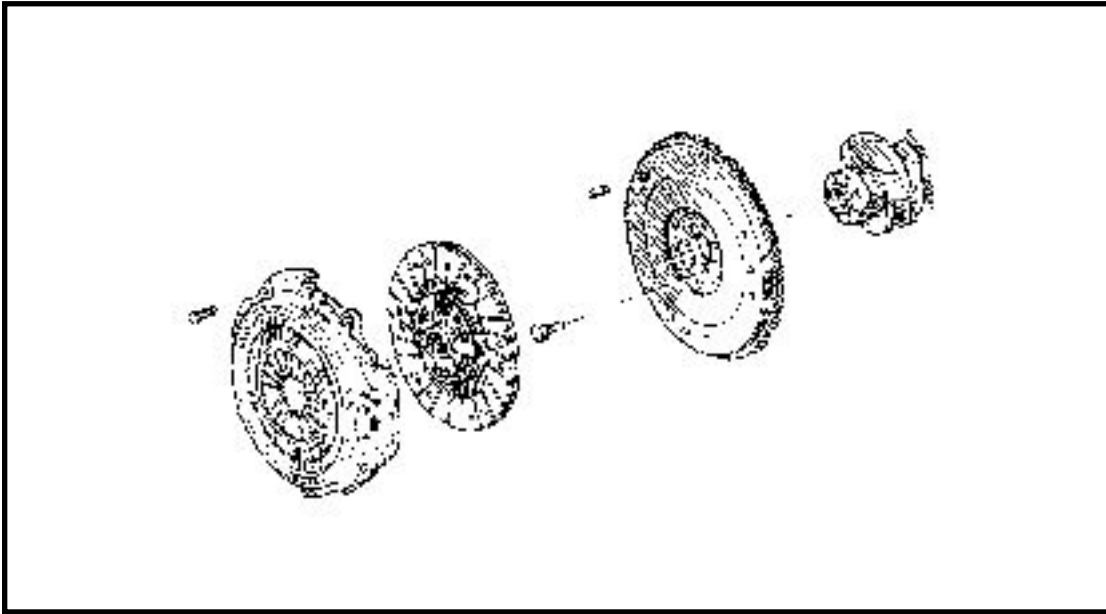
The principle of this command is the same as that of a brake command.


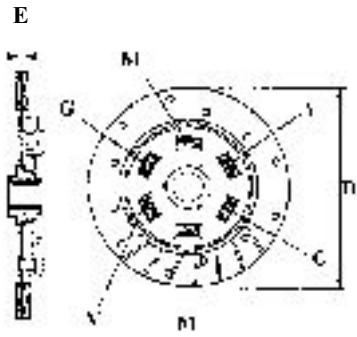
The clutch pedal operates on the emitting cylinder, which transmits the liquid under pressure to a concentric hydraulic receiver, the mobile part of which acts directly on the diaphragm spring.

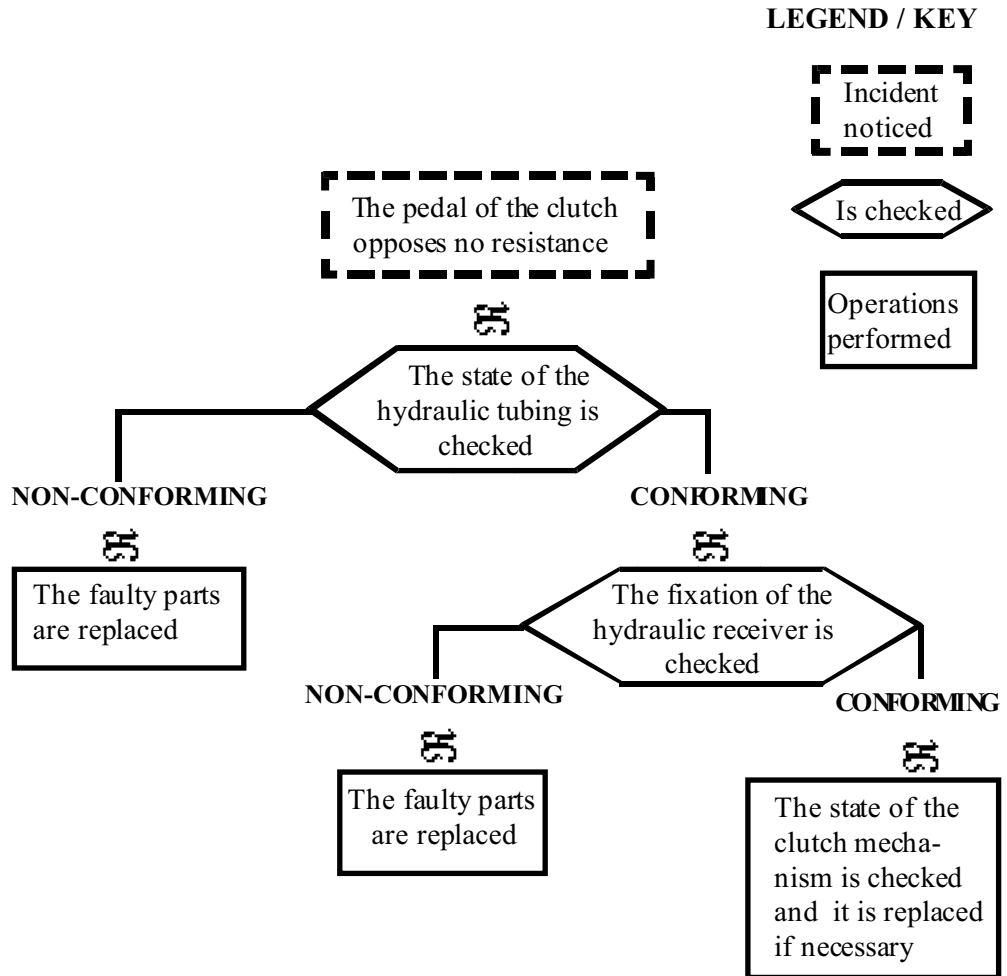


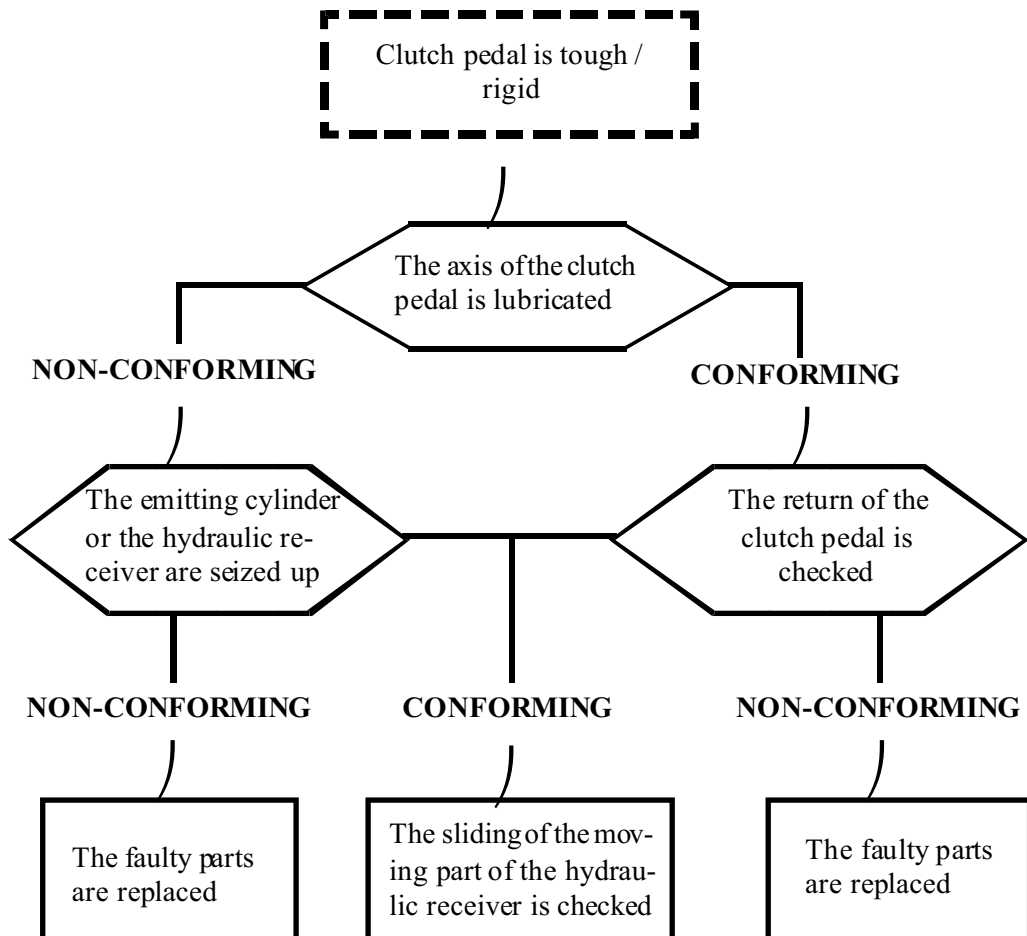
The hydraulic receiver is fixed on the clutch crankcase through the agency of two screws.

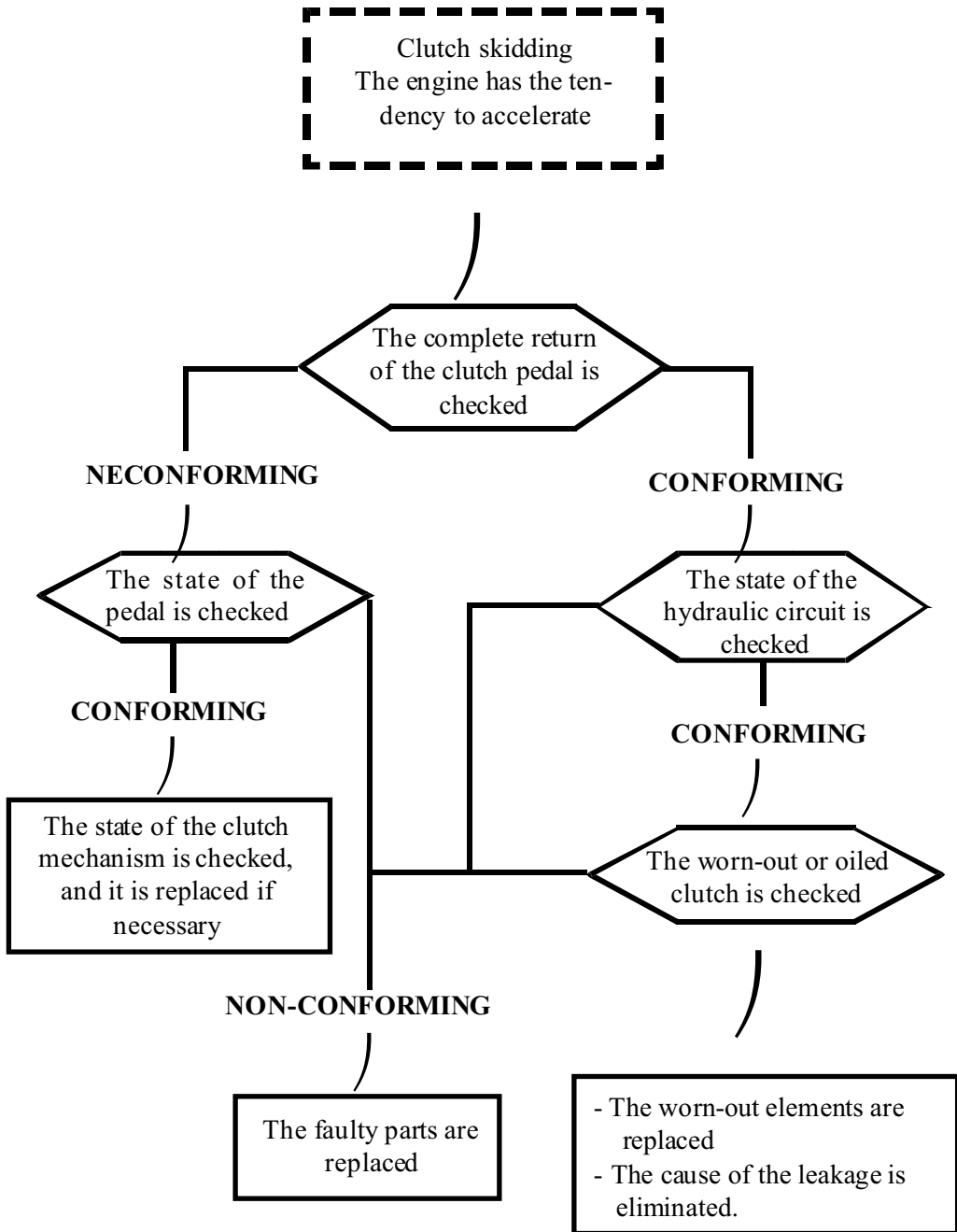


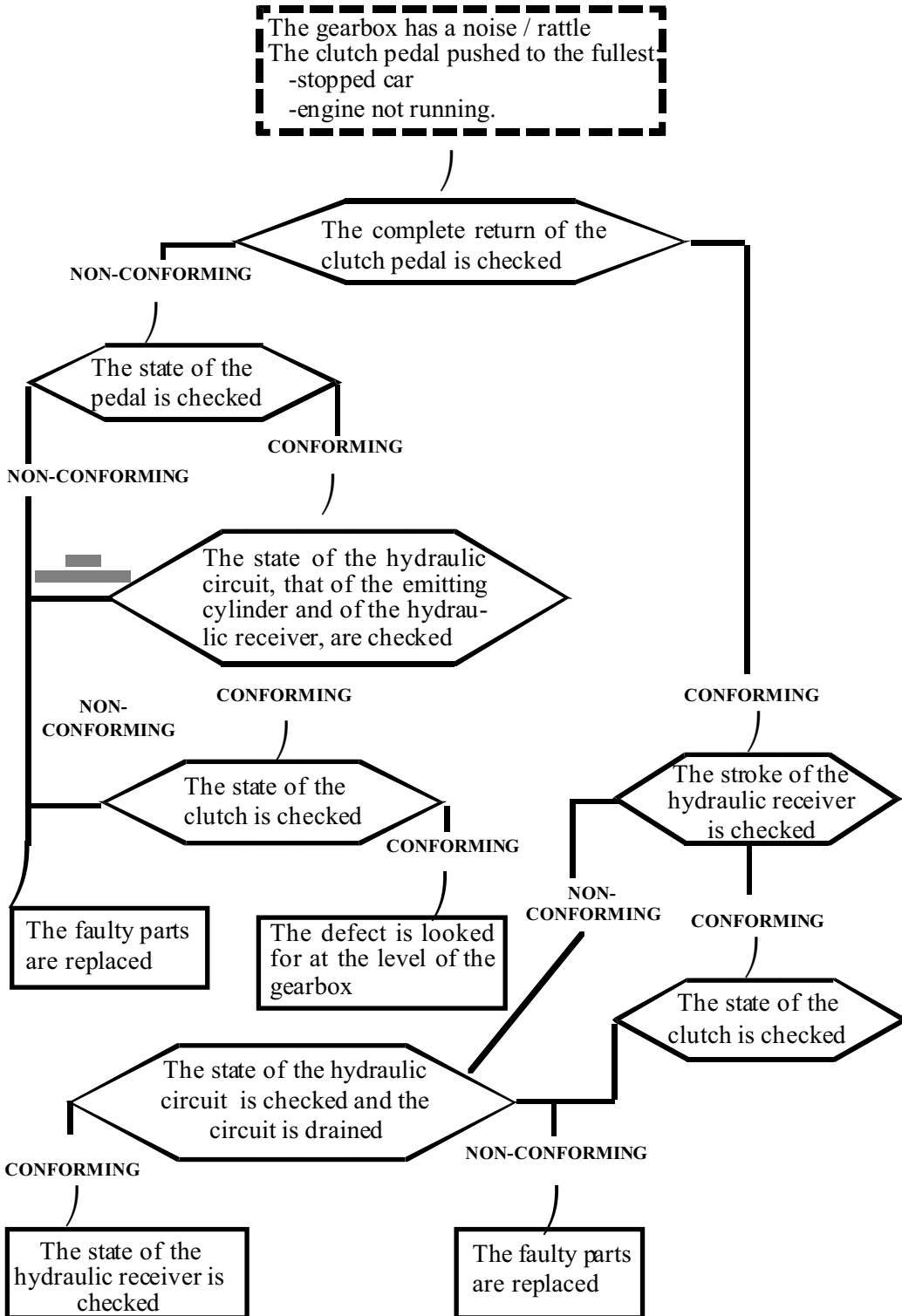


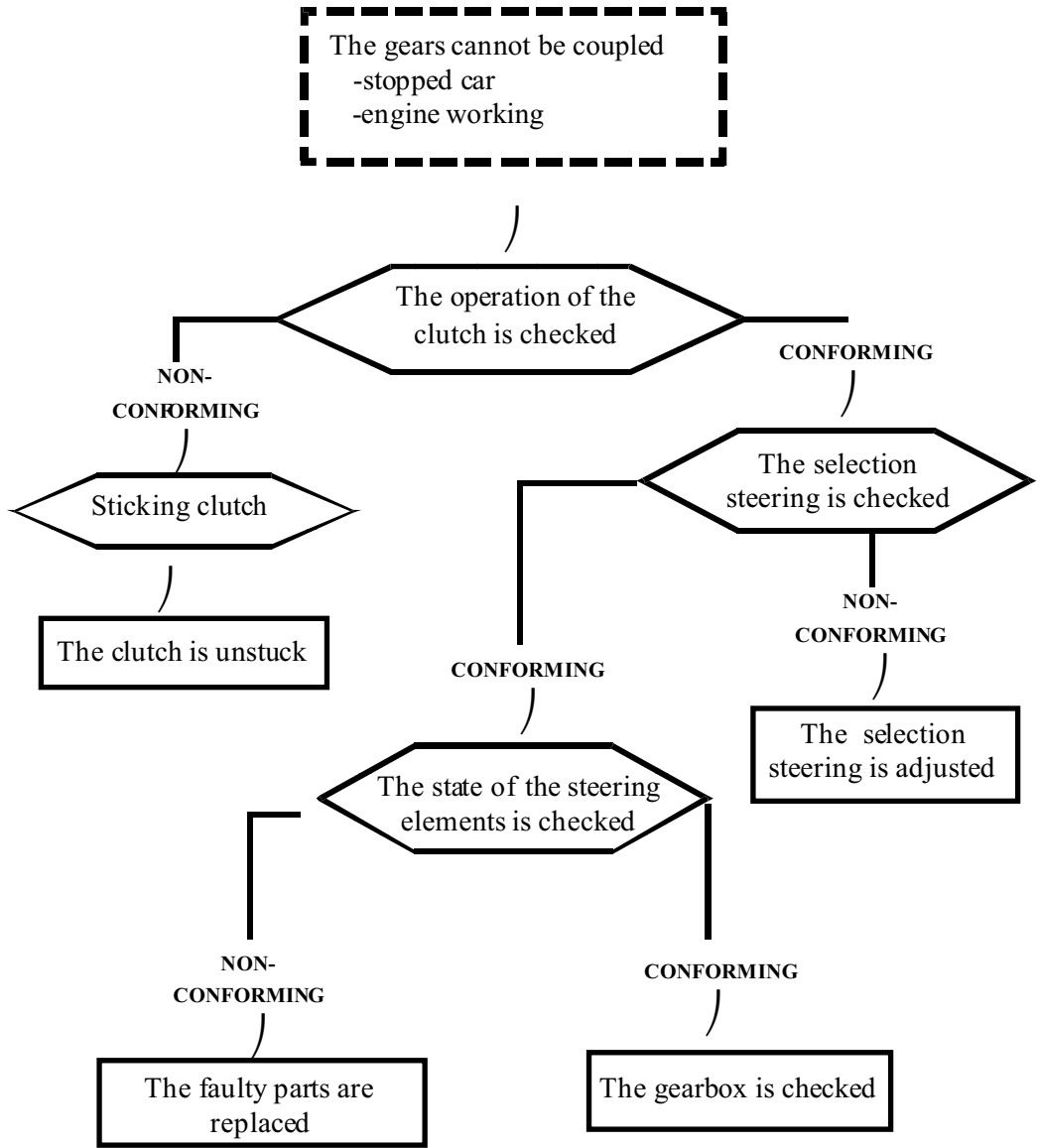
TYPE OF VEHICLE	TYPE OF ENGINE	MECHANISM	DISC						
SuperNova	E7J	<p>215 CP OE 3500</p> 	 <table border="1"> <tr> <td>26 groves</td> <td>M = violet</td> </tr> <tr> <td>V = green</td> <td>D = 215 mm</td> </tr> <tr> <td>G = gray</td> <td>E = 7 mm</td> </tr> </table>	26 groves	M = violet	V = green	D = 215 mm	G = gray	E = 7 mm
26 groves	M = violet								
V = green	D = 215 mm								
G = gray	E = 7 mm								





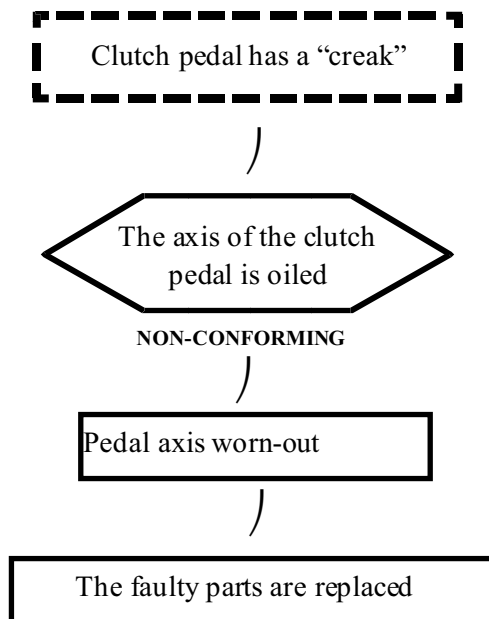
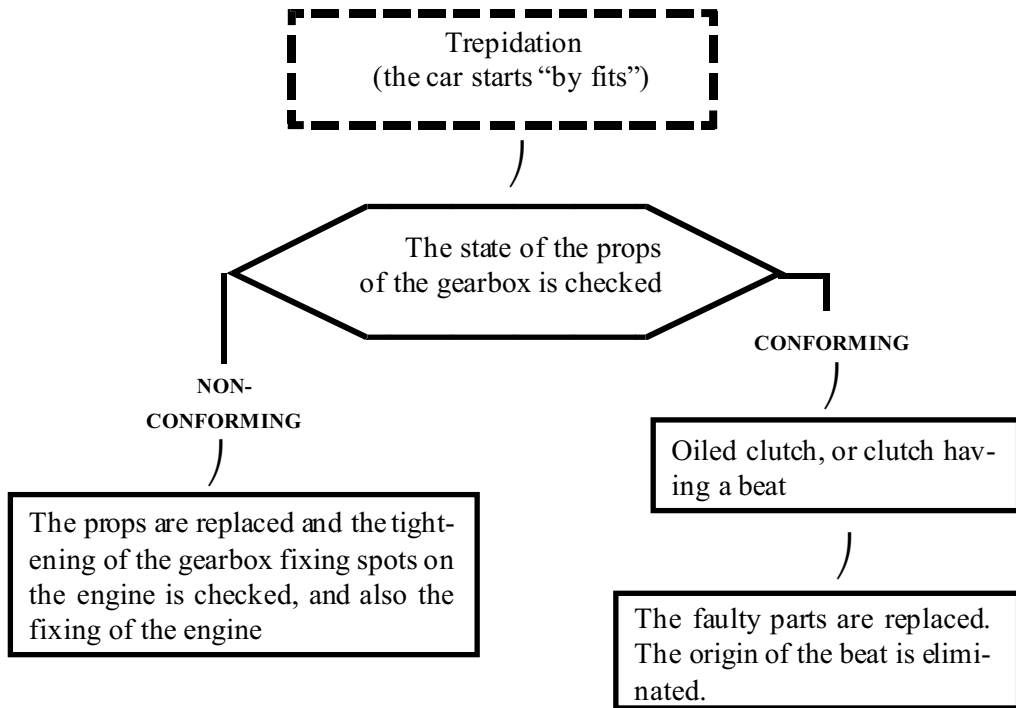






CLUTCH

DIAGNOSTIC



CLUTCH DISC MECHANISM

REPLACEMENT

This operation is done after taking apart the engine - gearbox ensemble and after their separation.

SPECIAL DEVICES	
MOT 582	Flywheel immobilizing sector
AMB 1518	Clutch centering device

TIGHTENING COUPLES (daNm)		⊖
Clutch mechanism screws	2	

The stopping sector **MOT 582** is mounted.

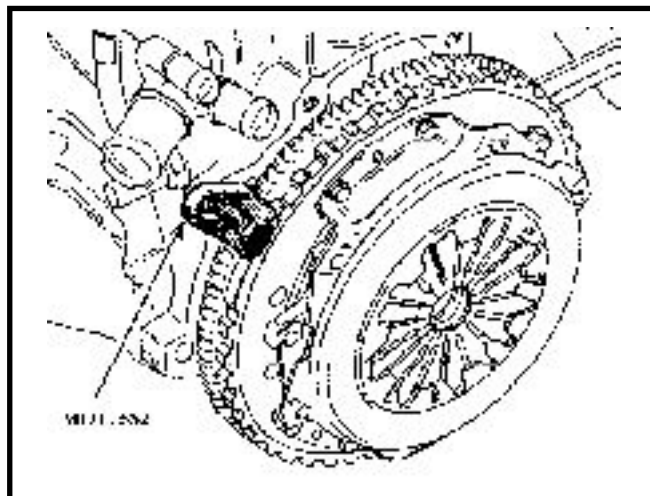
The screws fixing the mechanism are taken off.

The mechanism and the clutch disc are taken apart.

Visual inspection is done:

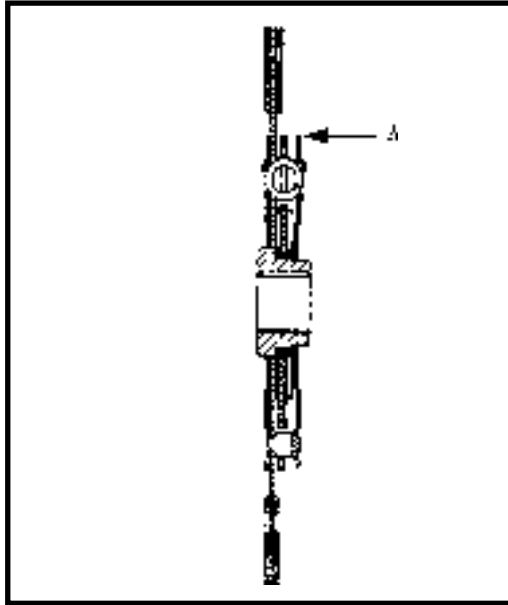
- wear of engine flywheel;
- condition of the starter crown;
- watertightness at the level of the crankshaft fitting;
- condition of the flywheel surface (it must not have scratches).

The faulty parts are replaced and the grooves of the clutch shaft are cleaned.

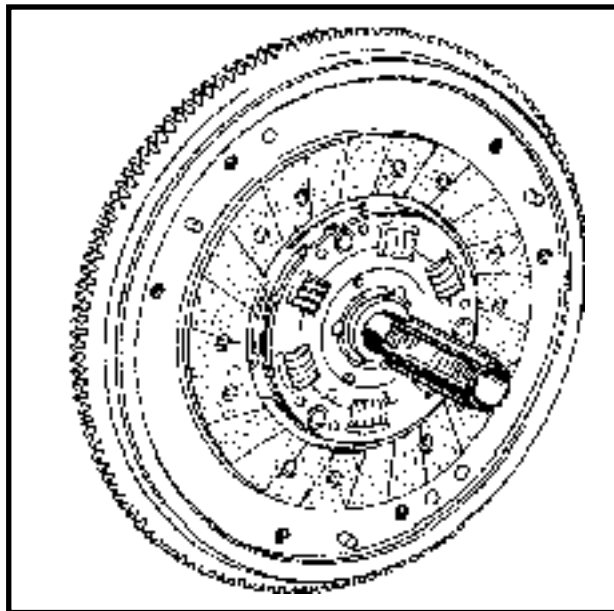


CLUTCH DISC MECHANISM

The clutch disc is mounted with the A damping flange towards the gearbox



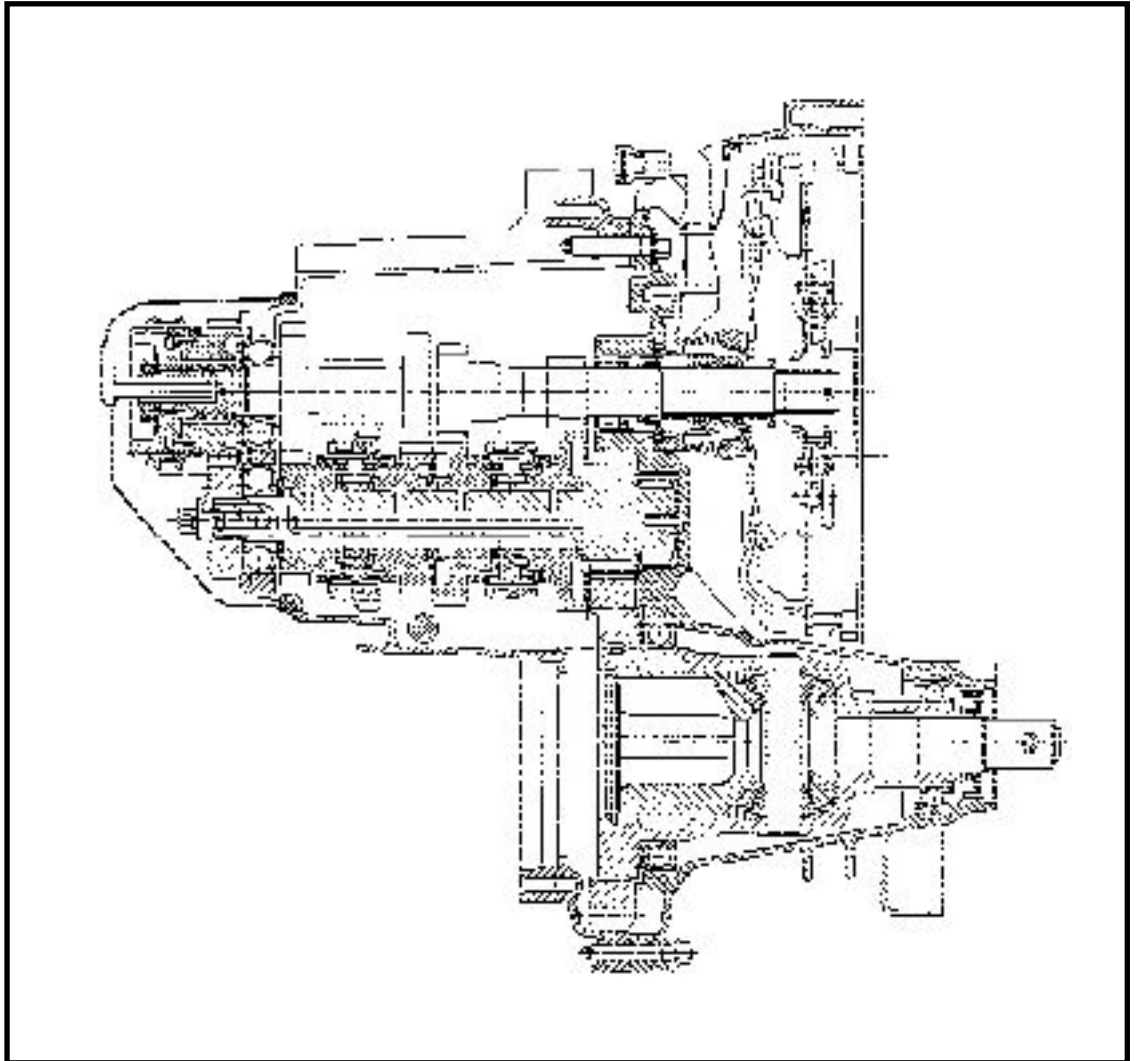
The clutch disc is centered with the **AMB 1518** centering device



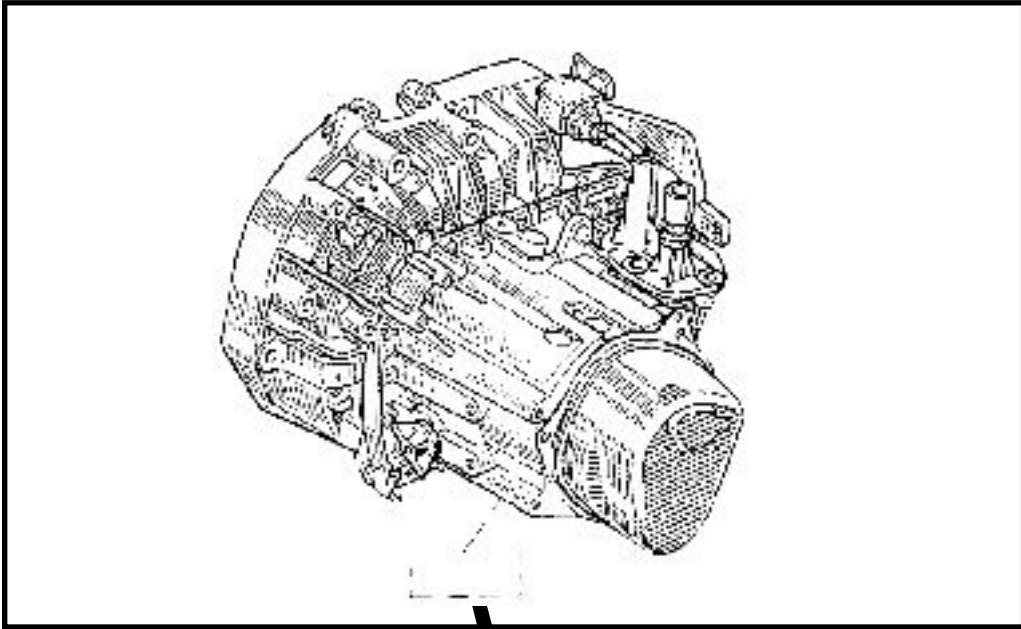
The clutch mechanism is mounted;

The fixing screws are progressively put on the thread of the mechanism, then they are tightened to the couple;

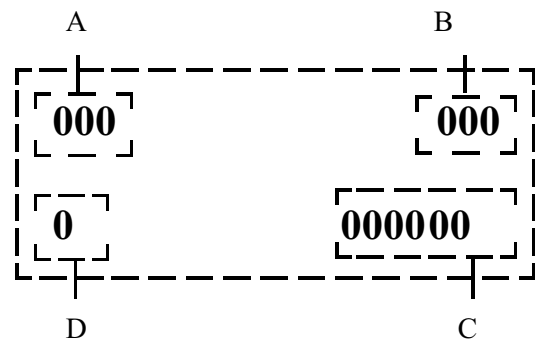
The **MOT 582** flywheel-stopping sector is taken off.



IDENTIFICATION



- A - type of gearbox
- B - index of gearbox
- C - manufacturer's number
- D - manufacturing factory



DESCRIPTION	MOMENT (daNm)
Attachment screws of the mechanism crankcase on the clutch – differential case	2,5
Secondary shaft screw	7
Primary shaft nut	19
Back cap fixing screws	2,5
Oil draining plug	2,5
Reverse driving contact	2,5
Screws for fixing the bellows – left transmission cap assembly	2,5
Screws for fixing gearbox on engine case (M10 – 90)	4,4
Screws for fixing gearbox on engine case (M10 – 35)	2,1
Screws for fixing gearbox on engine	4,4
LOCTOU fixing screw	0,5
Screws for fixing the RPM sensor on the clutch case	0,8
Screws for fixing the control axle assembly	2
Screws for fixing hydraulic receiver on clutch case	2,1

RATIOS

RATIOS

GB INDEX	VEHICLE	MAIN TRANSMISSION	MILEAGE GEARING
JH3-05	SuperNova	15/56	21/19

GEARSTEP	I	II	III	IV	V	M.I.
NR.OFTEETH	41/11	43/21	39/28	35/34	31/39	39/11
RATIO	3.727	2.048	1.393	1.029	0.795	3.545

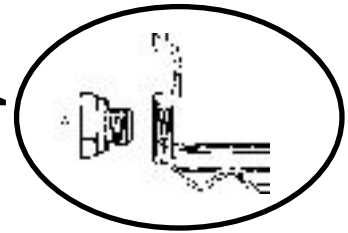
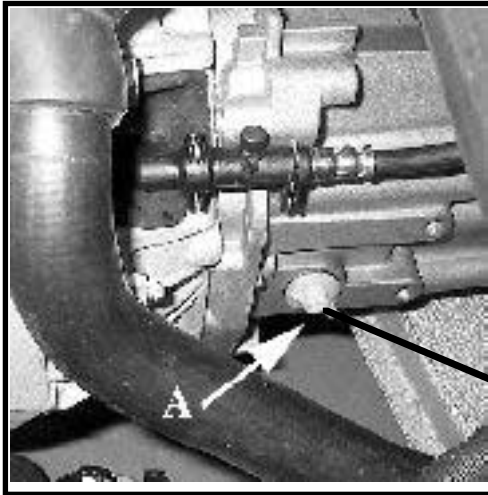
CAPACITY, LUBRICANTS

Oil used : **75 W – 80 W; API GL5.**

The quantity of oil needed for the gearbox operation is **3.5 liters .**

The oiling of the gearbox parts is done by splash lubrication.

Checking of the oil level is done through the filling plug **A.**



PARTICULARITIES

The gears grid is similar to that of the gearboxes previously mounted on the **DACIA SuperNova** vehicles, the only difference being the reverse driving, which is located on the right side and backwards.

The synchronizers are **BORG – WARNER** type.

The synchronizing hub – sliding collar, and the synchronizing hub – shaft assemblies are composed of matching parts.

The synchronizing hubs are freely mounted on the secondary shaft and are maintained axially through safety devices of the ring type.

The cylindrical moment of the differential is not adjustable.

The differential assembly is supported on the gearbox crankcases by means of the bearings.

The primary and secondary shafts support at the clutch side is done by means of roll – bearings, which get into direct contact with the shaft (the bearings do not have inner ring, its purpose being taken over by the shafts).

The reverse driving pinion is delivered mounted on the shaft.

INGREDIENTS

TYPE	USE
Molykote "BR 2"	Grooves of the differential planetary pinion
Loctite 518	Crankcase assembling Thread of reverse driving contact
Loctite FRENBLOC	Grooves of fixed pinion of 5 Th gear Grooves of 5 Th gear hub Primary shaft nut Secondary shaft screw

PARTS OF SYSTEMATIC REPLACEMENT

The following parts shall be replaced, if they have been dismantled:

- oil seal rings;
- fastening rings;
- elastic pins;
- primary shaft nut
- the bushing under the pinion of the 5 – th step;
- the outer safety devices of the bearings of the primary and the secondary shafts;
- the gaskets.

NECESSARY SPECIAL TOOLS

C.V. 22-01	Bearings extractor body
C.V. 945	Chuck for mounting the right planetary pinion oil ring
C.V. 946	Chuck for safety mounting
C.V. 551	Device for mounting/dismounting bearings of mechanism casing
C.V. 949	Device for mounting and taking apart the elastic pins of the forks
C.V. 1000	Extractor for the fixed pinion of the 5 th step of the secondary shaft
C.V. 1059	Bushing kit for mounting/dismounting the differential bearings
C.V. 1170	Hub extractor of the 5 th step on the primary shaft
C.V. 1175	Screw for mounting the fixed pinion 5 th step
C.V. 552	Device for extracting the bearing of the secondary shaft on the clutch – differential crankcase.
C.V. 31-01	Set of punches for elastic pins F 5
C.V. 1162	Chuck for replacing command axle bushings
C.V. 553	Device for dismounting – remounting the clutch shaft bearing
C.V. 554	Bushing for depressing the differential case assembly from the differential crankcase.

**OBSERVATION :**

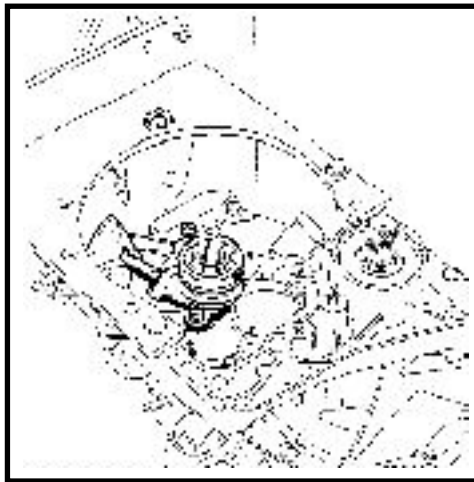
The dismantling and checking of the spare parts must be done on a surface coated with rubber or soft plastic.

Before taking apart the gearbox from the vehicle, drain the oil from the gearbox.

DISMOUNTING

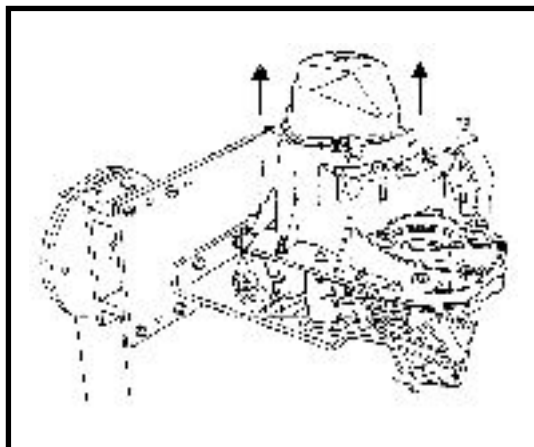
Dismant :

- hydraulic receiver cylinder;
- the screws locate inside the crankcase.



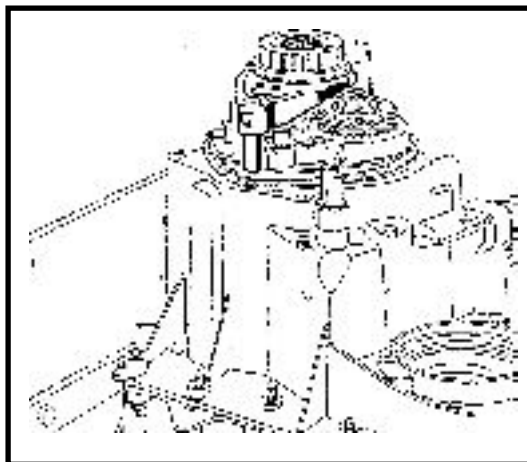
Dismounting the cap attachment screws.

The back cap of the gearbox is extracted so that its setting surface should stay parallel to the conjoined surface of the gearbox, because this cap contains an oiling groove situated in the cylinder bore of the primary shaft.

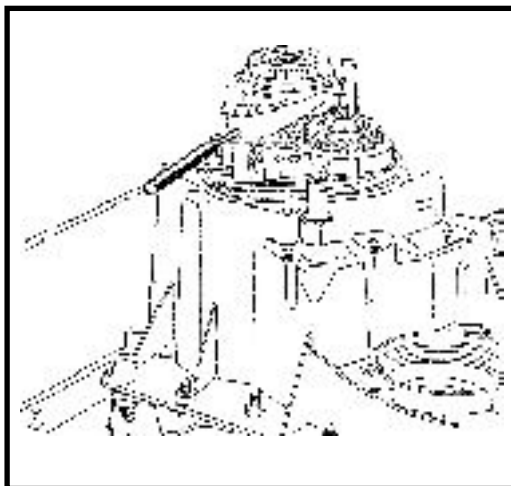


Engage the 1-St gear with the control lever and the reversedriving by operating the 5-th gear fork on its axle.

Dismount the primary shaft nut and the secondary shaft screw.

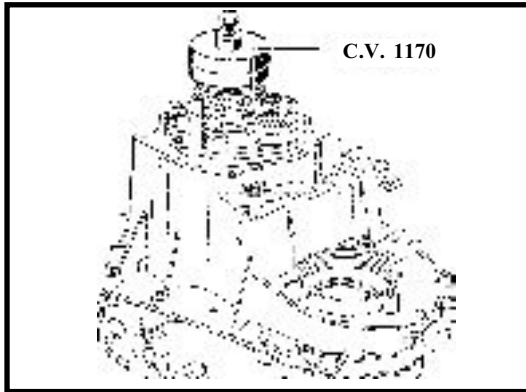


Dismount the elastic pin of the 5th step, by means of the C.V. 3 – 01 mandrel.

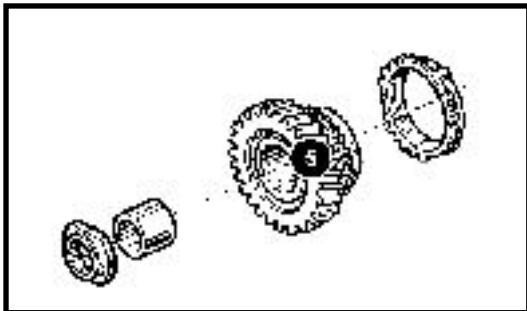


Dismount the fork and the sliding collar of the 5th step.

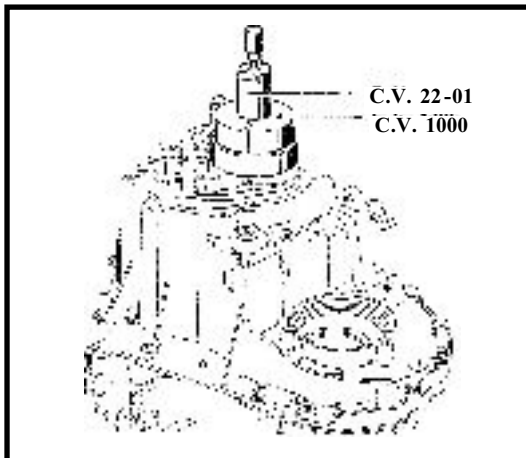
The hub of the 5th step synchronizer is extracted by means of the C.V. 1170 extractor.



Dismount the synchronizer ring of the 5th step, the inner bushing of the pinion, the pinion and its supporting washer.



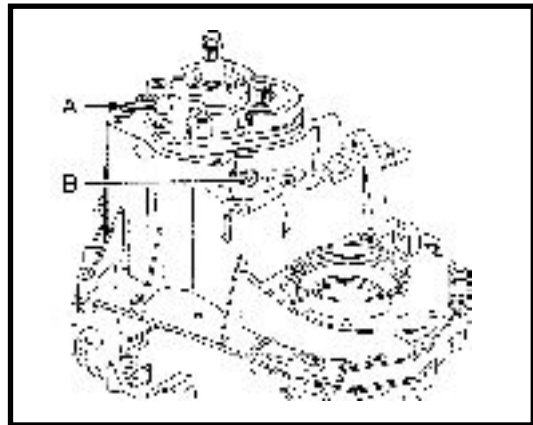
Dismount the fixed pinion of the 5th gear by means of the C.V. 1000 extractor and the body extractor C.V. 22-01.



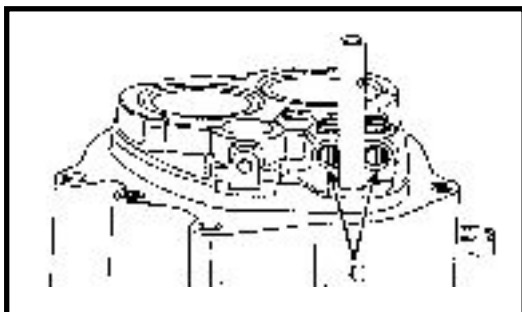
The gearbox is set in the dead point, then engage the 3rd step.

Dismount the external screws fixing the crankcase of the mechanisms and blocking pin of the reverse driving pinion axle.

Dismount the reverse driving contact (B).

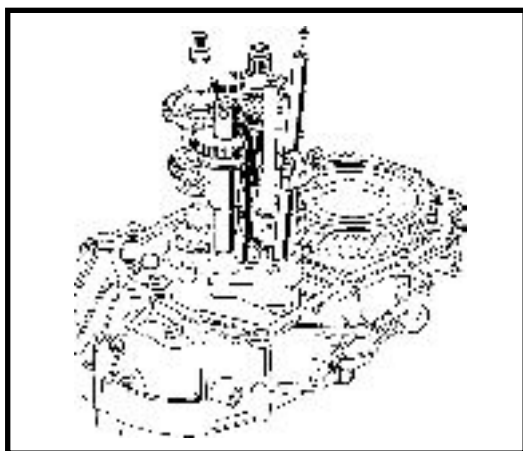


In order to recover the balls and the locking springs of the shafts, two magnets placed in the C orifices are used.



Pull the control shaft towards exterior.
The crankcases are separated.

Rotate to the left the shaft – reverse driving pinion assembly and dismount the control reverse driving shaft velocity 5-th step.

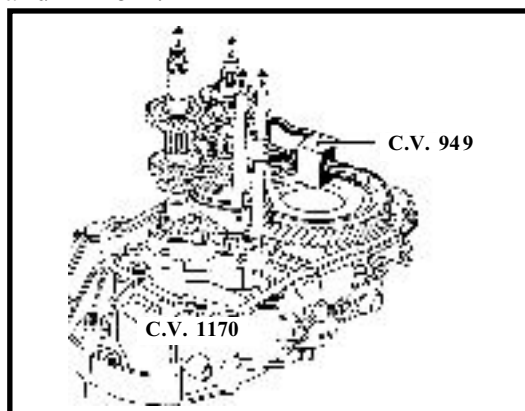


Easy lift the primary shaft and dismount the shaft and reverse driving pinion assembly



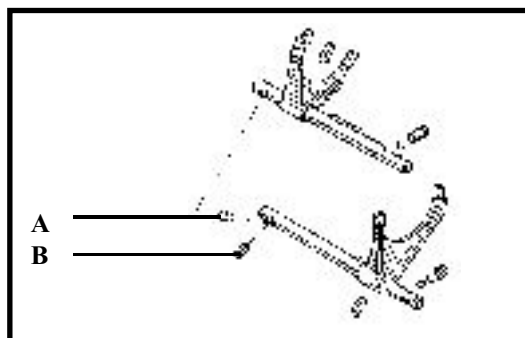
Take out the fork pin 3-4 by means of the C.V. 949 device and dismount the axle and 3-4 fork assembly.

Simultaneously, dismount the primary shaft and secondary shaft assembly with the axle and 1-2 fork.



Place vertically the secondary shaft, with the pinion of the 1 step downwards, so that the other pinions will not fall.

Recover the locking pins (A) and (B) of the command axles.



THE PRIMARY SHAFT

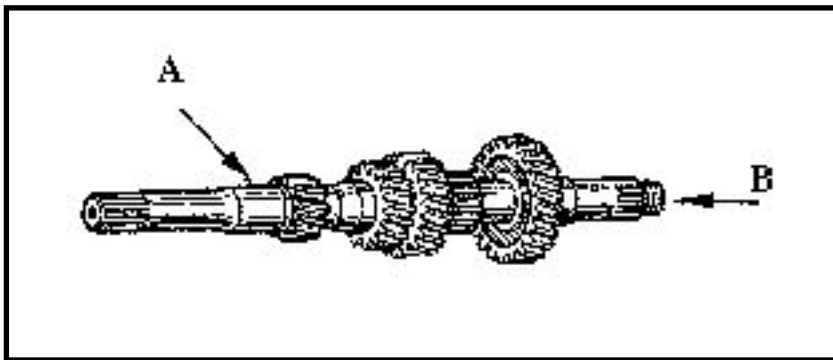
The primary shaft shall not be repaired and is not adjustable.

The shaft has a spray nozzle (B) which cannot be dismantled.

Clean the oiling-groove of the 5th step

The oil sealing in front of the shaft and the bearing caps are in direct contact with the shaft.

Check the state of the shaft in the operation area (A) of the oil seal; ring, and if this shows ridges or irregularities, it will be replaced.



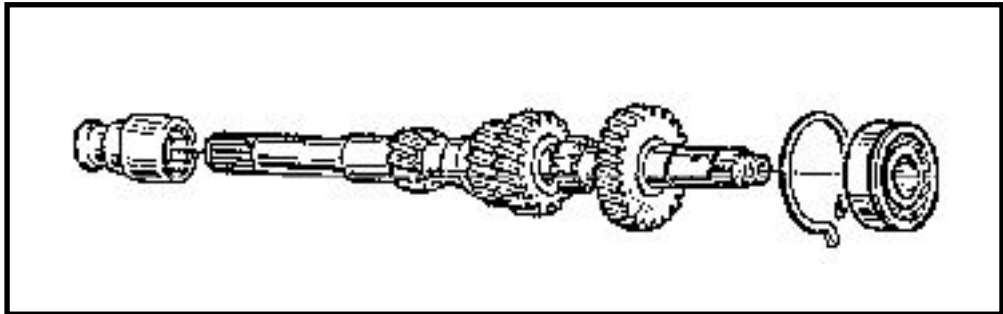
REPLACING THE BEARINGS OF THE PRIMARY SHAFT

The bearings of the primary shaft are freely mounted on it.

There are two types of bearings:

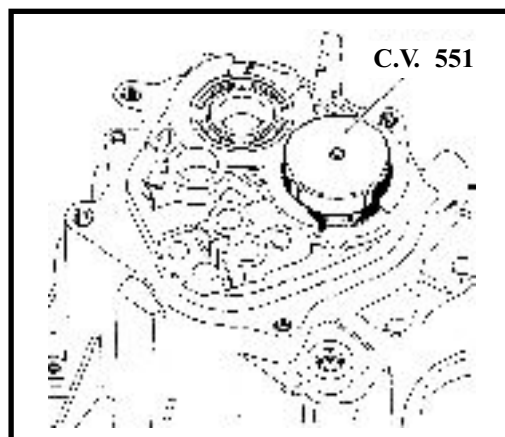
- a cylindrical one with balls, pressed into the crankcase of the mechanism;
- a cylindrical one with rolls, pressed into the crankcase of the clutch-differential, together with the clutch shaft oil sealing

The bearings replacement is performed only with identical bearings with the original ones.



BEARING DISMOUNTING OF THE MECHANISMS CRANKCASE

The safety ring of the bearing (the holding ring) is widened by means of a pair of safety pincers, then the bearing is extracted from the crankcase by hammering towards the inside of the mechanisms crankcase, by means of the **C.V. 551** device.



BEARING REMOUNTING OF THE MECHANISMS CRANKCASE

Replace the safety of the bearings with a new one, then it is introduced into its groove in the mechanisms crankcase, so that it keeps its position as compared to the crankcase (the safety shows a shoulder).

The bearing lying at the outside of the crankcase of the mechanism is pressed towards the inside of it, until the safety fits into the groove carved on the outer ring of the bearing.

Mounting the bearing is performed by means of the **C.V. 551** device.

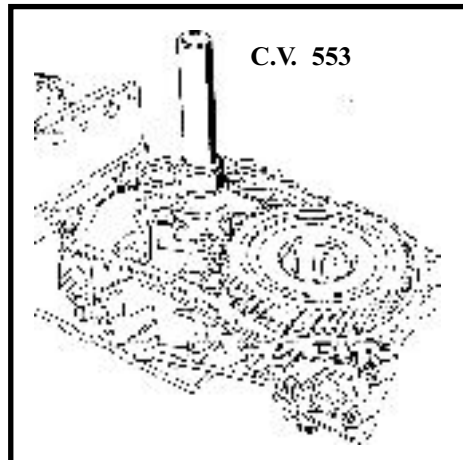
BEARING DISMOUNTING FROM THE CLUTCH – DIFFERENTIAL CRANK-CASE

The roll bearing in the crankcase is dismounted in the opposite direction to the clutch, by means of the **C.V. 553** device.

Ensure that device is well fixed upon depressing the bearing.

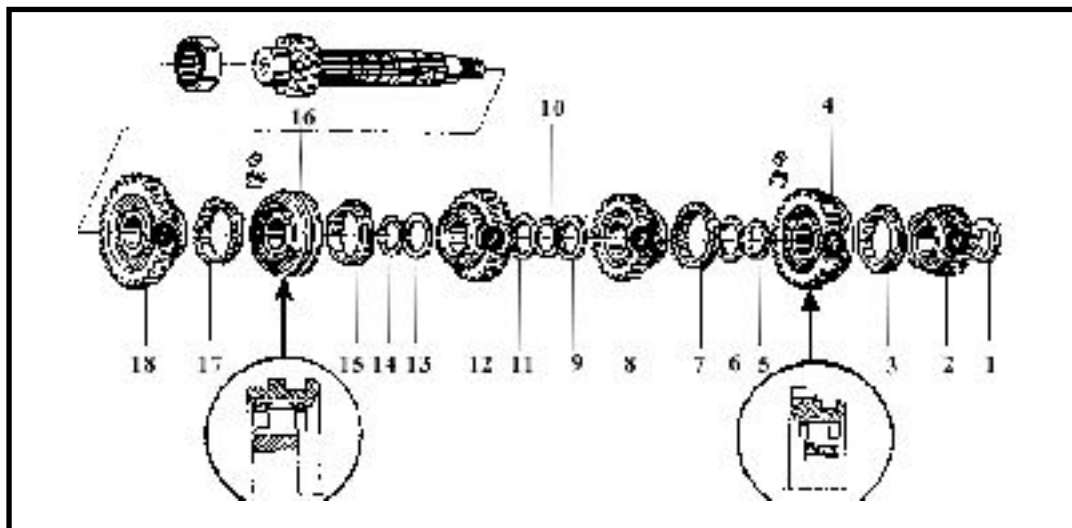
BEARING REMOUNTING FROM THE CLUTCH – DIFFERENTIAL CRANK-CASE

The remounting shall be performed using the same **C.V. 553** device, the mounting directions of the bearing being towards the clutch.



SECONDARY SHAFT

SECONDARY SHAFT DISMOUNTING

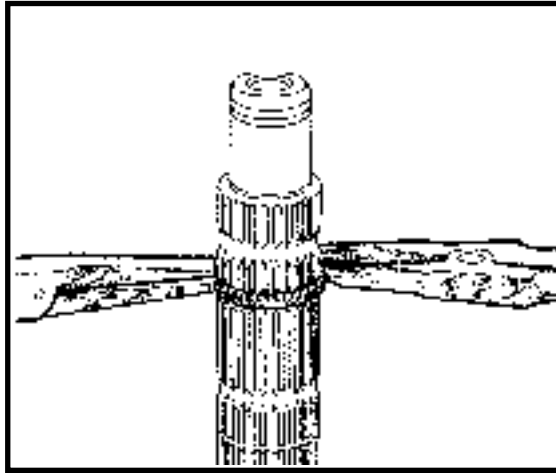


Dismounting of the secondary shaft is performed starting from the 4th step.
Dismount the elements, in the following order:

1. - the support washer
2. - gear IV pinion
3. - synchronizing ring
4. - synchronizer for gear III and IV
5. - stopping ring
6. - grooved washer
7. - synchronizing ring
8. - pinion of gear III
9. - grooved washer
10. - stopping ring
11. - grooved washer
12. - step pinion II
13. - grooved washer
14. - stopping ring
15. - synchronizing ring
16. - synchronizer for steps I and II
17. - synchronizing ring
18. - step I pinion.

The stopping rings are replaced after each dismounting.

For mounting and dismounting the stopping rings, a pair of safety pincers to keep the ends apart, and, on the opposite side, a pair of flat tipped pincers to prevent the stopping ring breaking, are to be used.



SECONDARY SHAFT REASSEMBLING

Before reassembling the secondary shaft, perform the parts checking, as follows:

- the pinions and claws tooth must not show chips or excessive wear,
- ensure that working surfaces of the shafts and the inner parts of the pinions do not show traces of gripping or abnormal wear.

When reassembling, clean the oiling grooves made in the secondary shaft and all its component parts are pre-oiled.

Take into consideration that synchroniser hubs are matched with the sliding.

It is recommended to mark the positions of the sliding compared to the hubs.

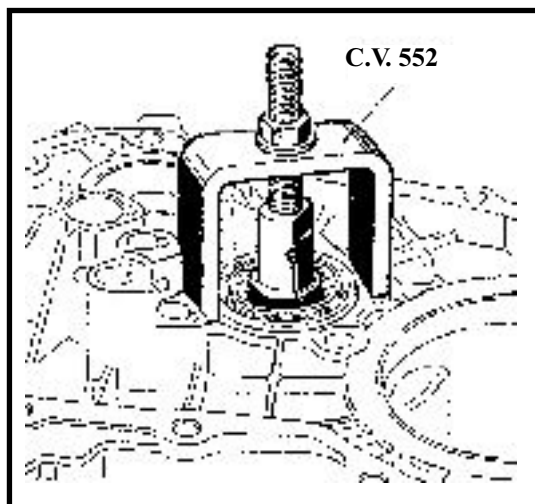
The stopping rings shall be replaced after every dismounting.

Reassembling of the secondary shaft shall be performing the dismounting operations in the reverse order.

REPLACEMENT OF THE SECONDARY SHAFT BEARINGS

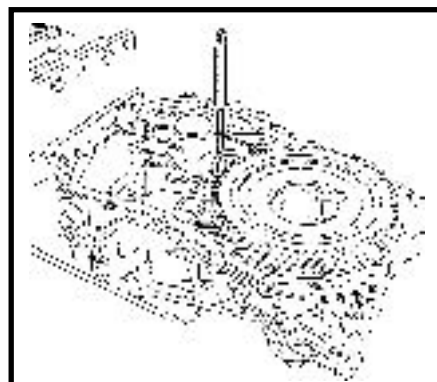
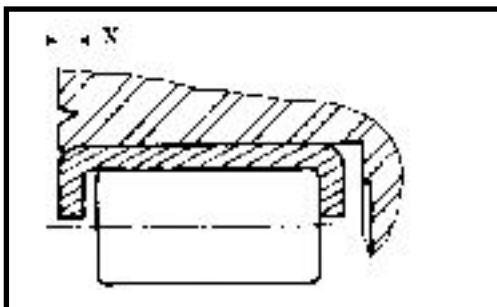
The secondary shaft bearing from the mechanism crankcase is identical to the one from the primary shaft so that its dismounting and remounting are performed in the same way as for the primary shaft.

Bearing dismounting and mounting in the clutch crankcase is performed by means of the C.V. 522 device.



The bearing is crimped by means of a mandrel (puncher) in four equidistant points on a 55 mm diameter.

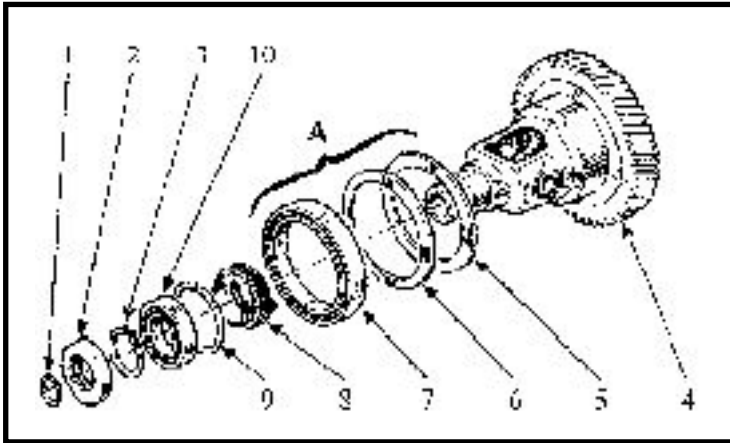
$$x = 0,9 \cdot 1,3 \text{ mm}$$



NOTE:

When dismounting the bearing from the clutch-differential crankcase, the deflector located behind the bearing will be damaged, being necessary its replacement with a new one (this is ensuring the inner oiling of the secondary shaft).

DIFFERENTIAL



The differential of the **JH3050** gearbox is the simple type (with two satellites and two planetary wheels, one of which making a common body with the tulip of the planetary transmission).

This differential is supported in the clutch– differential crankcase by means of two cylindrical bearings equipped with balls of various sizes.

The two bearings are pressed in the clutch– differential crankcase.

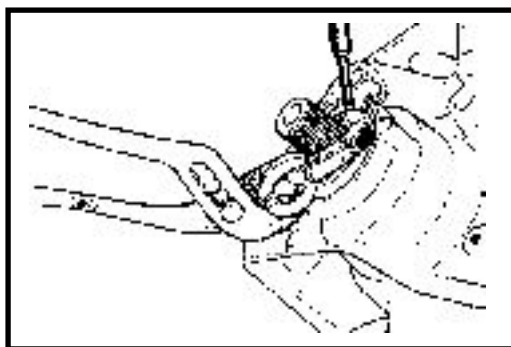
The crown of the main transmission is assembled by hooping, on the differential crankcase.

DIFFERENTIAL DISMOUNTING

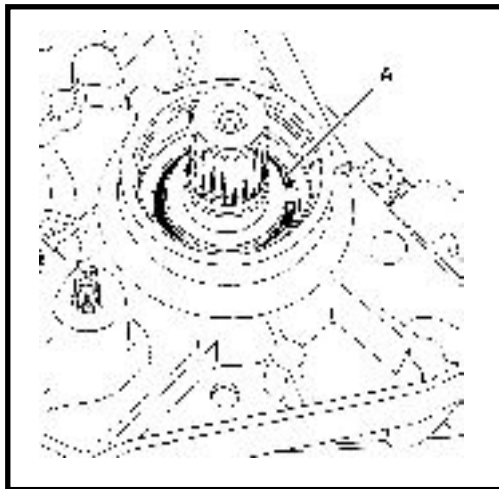
This operation is performed after separating the crankcases.

The zeroring (**1**) is removed from the right planetary shaft, then by means of a pins extractor and a hammer, the sealing gasket (**2**) is gently hit with a hammer in order to make it pivoting.

The oil seal ring is carefully pulled along the grooved part of the planetary pinion in order not to deteriorate the grooves.



The stopping safety device (A) is extracted, by means of a pinners from the differential crankcase (press on clutch crankcase in order to release the safety ring).



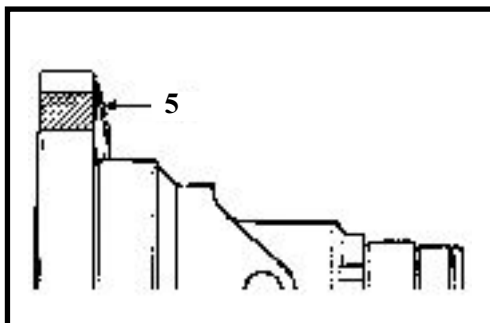
The differential assembly is dismantled using a press, by means of a bushing C.V. 554 (the bushing is pressing on the differential crankcase).

Dismount the spacer washer (5) and the elastic concave washer (6).

The crown of the speedometer (8) is dismantled from the outside of the differential frame.

REMOUNTING THE DIFFERENTIAL

Remounting of the differential assembly is performed in the reverse order of the dismantling operations, only this time the spacer that is mounted between the lateral surface of the crown and the support bearing, shall be positioned with the concave side towards the crown.

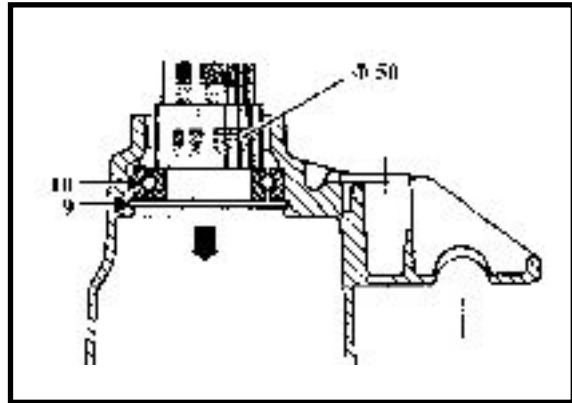
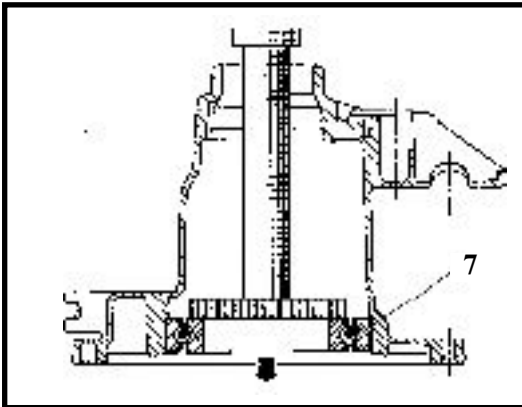


DIFFERENTIAL BEARINGS REPLACEMENT

DISMOUNTING

In order to extract the big bearing (7), of the differential from the clutch-differential crankcase, a profiled metallic strap is used, which is pressed by means of an extension, at a press.

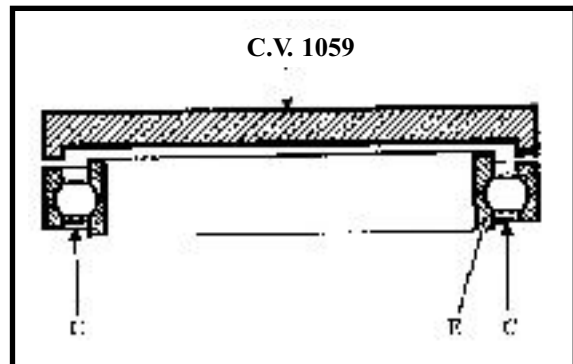
In order to dismount the other bearing (10), first extract the safety (9), then press with a press on the bearing by means of a sleeve with the outer diameter of 50 mm, towards the inside of the clutch-differential crankcase.



DISMOUNTING

In case of the bearing (7), its cage C must be oriented towards the opposite side of the differential crown

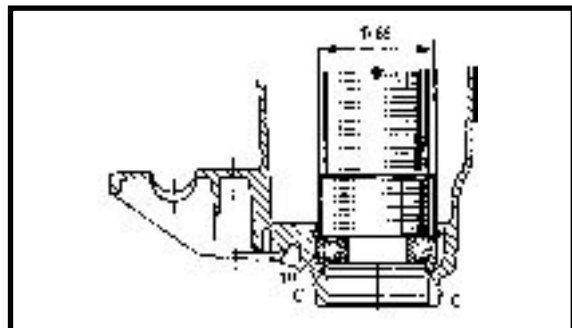
In order to press this bearing into the clutch crankcase, the C.V. 1059 device is used, which is pressing on the outer ring of the bearing.



When remounting the other bearing (10), its cage C must be oriented towards the opposite side of the differential crown.

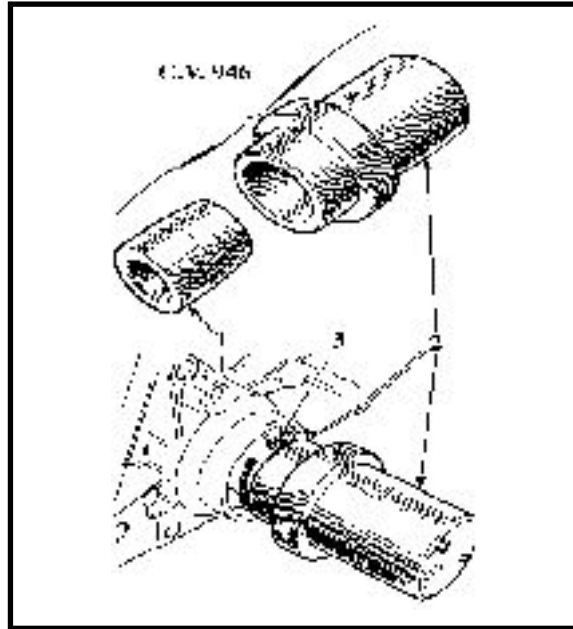
For pressing, the 65 mm diameter sleeve of the C.V.1059 device is used, which is pressing on the outer ring of the bearing

Remount the bearing maintaining safety.



DIFFERENTIAL ASSEMBLY MOUNTING IN THE CLUTCH CRANKCASE

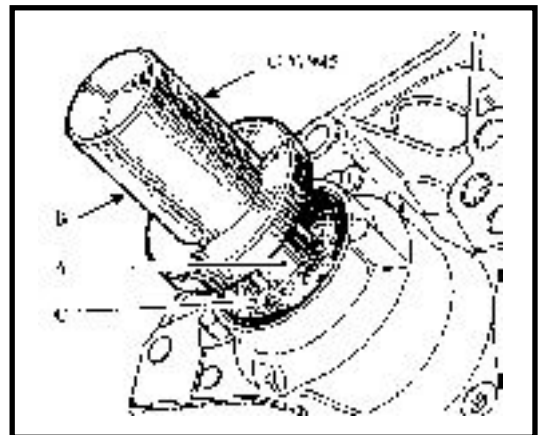
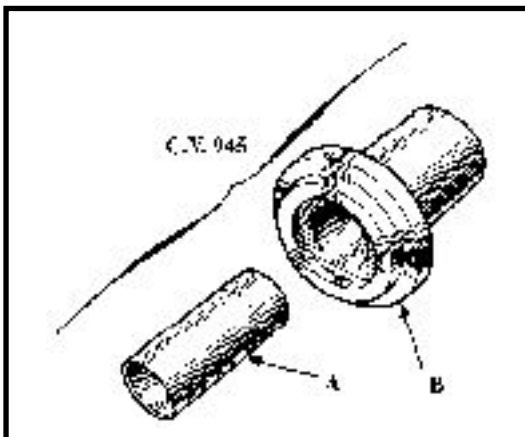
The differential assembly is pressed into the crankcase, then the stopping safety device (3) is mounted on the planetary shaft by means of the **C.V. 946** device.



Rotate the differential assembly and check the speedometer pinion rotation.

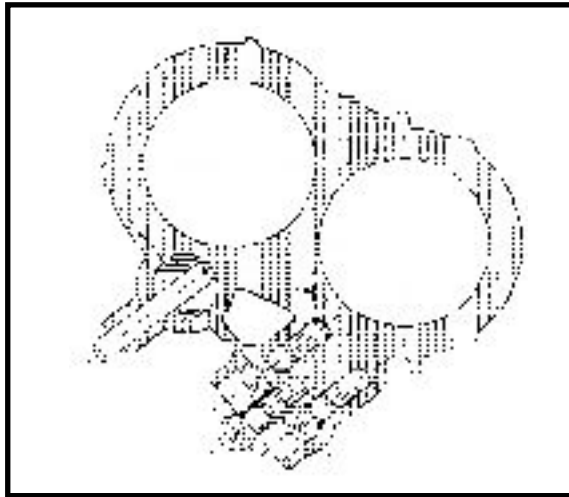
Remounting of the **C** planetary oil sealing is performed after this has been oiled, by means of the **C.V. 945** device and the **A** protector.

Mount the oiled protector **A**, on the planetary pinion and position the oiled seal (**C**) by means of the **B** device.

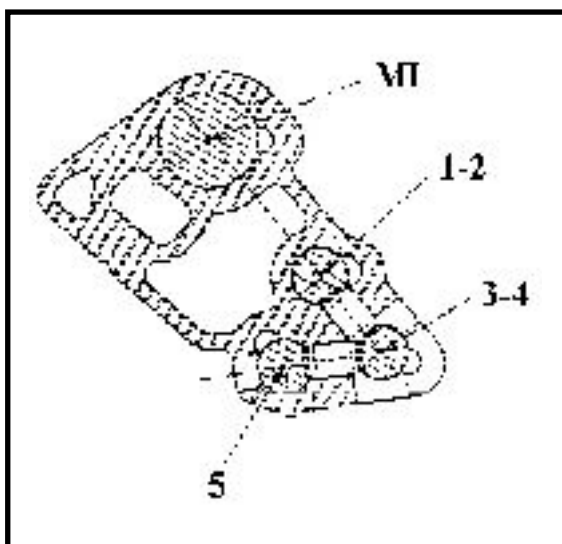


The internal control axles must not show any deformations or wear on the milling for locking ball, and their sliding on bearings must be done freely, without excessive clearance. The contact surfaces of the forks with collar of the rocking must not show either deformations or wear.

Ensuring of the control forks axle is performed by means of the balls and springs located in the holes made in the mechanism crankcase.



The locking of the control axles is done by means of some cylindrical rolls mounted inside the clutch-differential crankcase.



INTERNAL CONTROLS

CONTROL AXLE DISMOUNTING

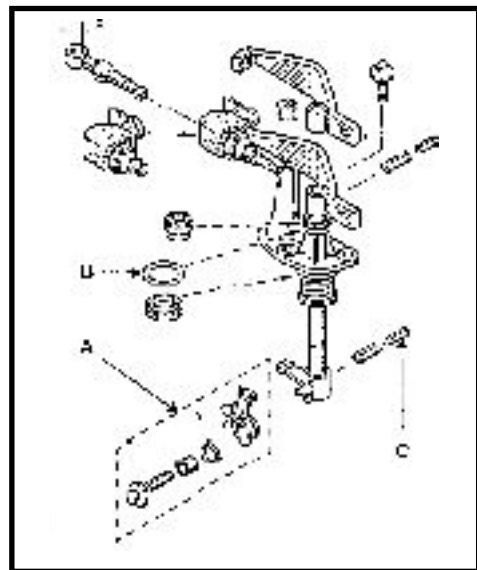
This operation is to be performed after crankcase separation.

The control axle is provided with a stopping flap LOCTOU- (A) attached on the crankcase.

The sealing is ensured by means of the gasket (B).

Remove the elastic pin of the selection finger (C), then dismount the attachment screws, and retrieve the control axle assembly

In order to replace the gallery bearing bushings of the control axle, the **C.V. 1162** device, or a tube with the outer diameter **16.5 mm** are to be used. Before mounting the bushings shall be oiled.



CONTROL AXLE REMOUNTING

When remounting the control axle, replace the selection finger pin with a new one.

Remounting is done by performing the dismounting operations in the reverse order, after all parts have been oiled with oil.

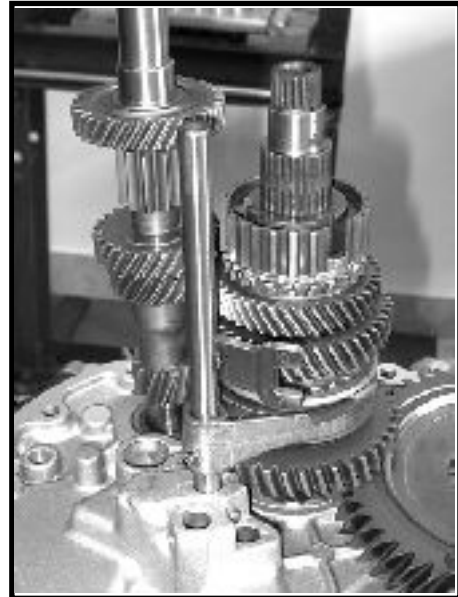
CRANCKASE ASSEMBLING

The assembling surfaces must be flat (small imperfections can be eliminated by means of a thin file).

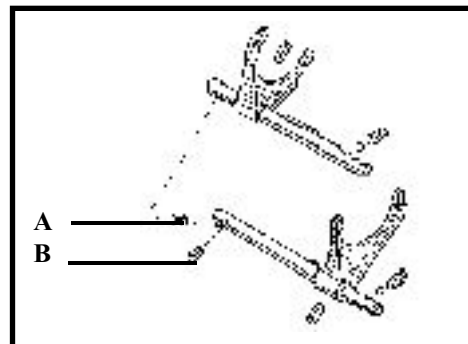
Place the axle and 1-2 fork assembled on the 1-2 sliding collar of the secondary shaft.

The two shafts (primary and secondary) are taken together with the fork and 1-2 axle and positioned at the same time into the clutch-differential crankcase.

The crown and the secondary shaft are rotated until the end of the secondary shaft fits into the bearing.



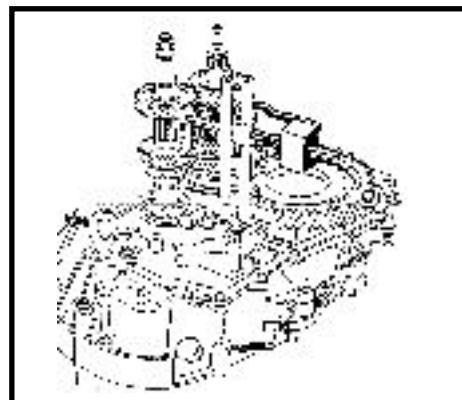
Mounting the blocking roll of the shaft ° (A).



With the 1 – 2 axle in free position, the following are mounted:

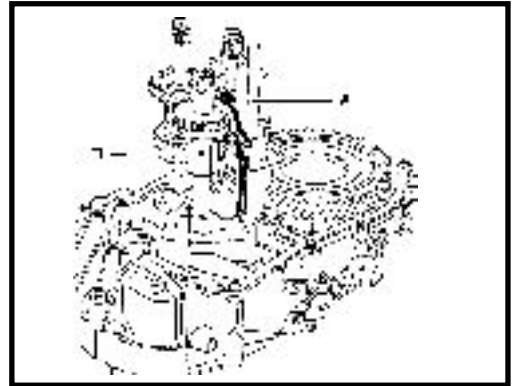
- synchronizing assembly 3–4 together axle and 3–4 fork;
- mount the for pin 3 – 4 by means of the CV 949 device.

Mount the blocking roll of the 5 th step axle (B).



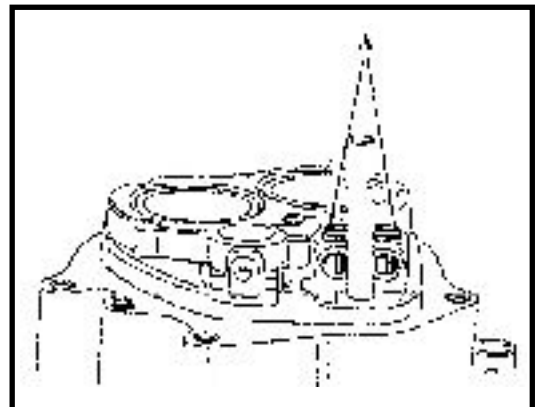
Then mount the following:

- the control axle for the **5** gear and reverse driving (**A**);
- the axle and the reverse driving pinion (**B**) assembly by easy lifting the primary shaft.



Ensure the correct positioning of the two centering bushings and of the magnet

Mount the springs and the locking balls **1-2** and **3-4** in the mechanism's crankcase, then the false axes A with a **13 mm** diameter are introduced.



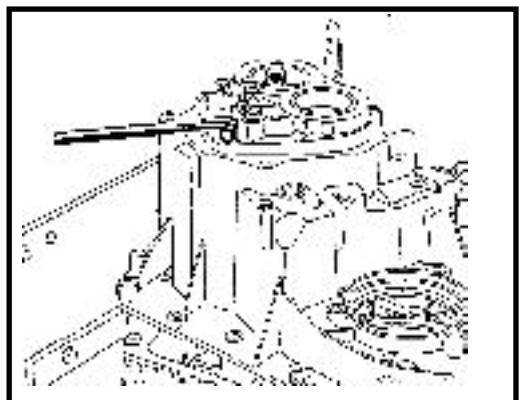
Check the positioning of the **5 th** gear oiling collector and of the aerating connection. Additionally ensure (check) if the aerating tube is not damaged or clogged.

Apply a layer of **LOCTITE 518** on the gasket surface between the clutch crankcase and the mechanism crankcase.

Engage the **3-d** gear step.

Mount the spring and the **5 th** gear step locking ball into the crankcase of the mechanism.

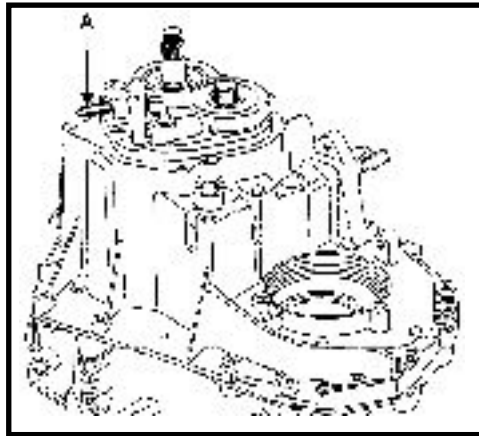
Press the locking ball and mount the mechanism's crankcase.



Mount the attachment screws and tighten them at a **2,5 daNm** moment, after rotating the primary shaft in order to ensure a correct bearings setting.

Retrieve the false axes.

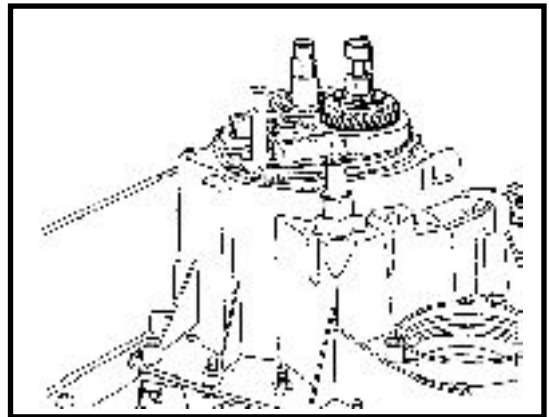
Mount the locking pin of the reverse driving pinion (A).



REMARK :

The tightening at the required moment of all the screws must be done in no more than 30 minutes after the mounting of the mechanisms crankcase, because of the polymerization of LOCTITE 518.

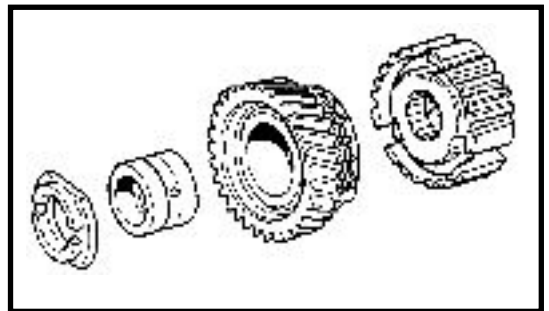
Three drops of **LOCTITE FRENBLOC** are applied on the grooves of the fixed pinion for the **5th** gear, then this is mounted by means of the **C.V. 1175** device on the secondary shaft.



Dismount the **C.V. 1175** device and mount the secondary shaft screw oiled with 3 drops of **LOCTITE FRENBLOC**.

On the primary shaft remount the following sequence:

- the support washers (with the larger side towards the pinion)
- the bushing under the pinion;
- the free **5th** pinion equipped with its synchroniserring ;
- the **5th**-th gear stephub equipped with its spring after the hub grooves have been oiled with **LOCTITE FRENBLOC**;
- the fork together with the **5th** sliding collar

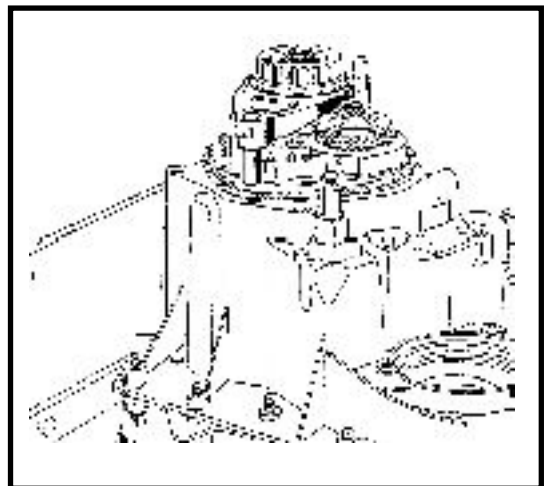


Engage the 1-st gear with the gear lever and the **5th** gear by sliding the **5th**-th gear step fork on its axle.

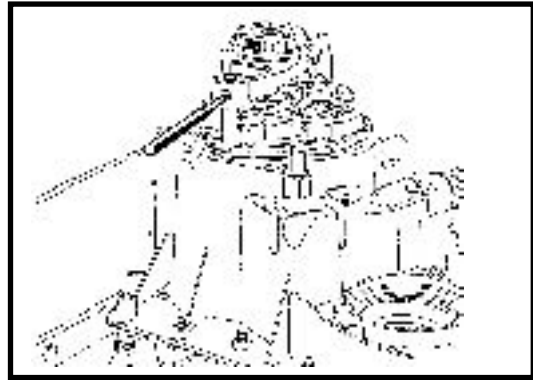
Apply 3 drops of **LOCTITE FRENBLOC** on the primary shaft nut.

Mount the nut and the screw and tighten them at the required moment:

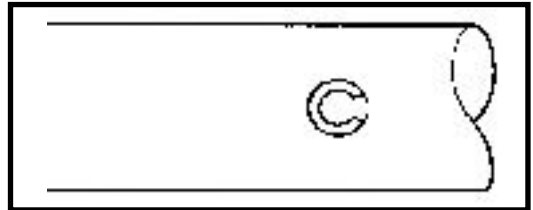
- primary shaft nut : **19 daNm**
- secondary shaft screw : **7 daNm**



Mount the pin of the 5th gear fork by means of the C.V. 31 01 device as for dismounting.



Observe the mounting direction, the pin slot must be oriented towards the back cap.

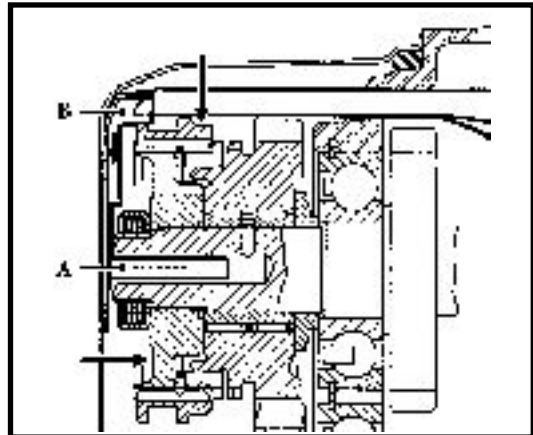


Bring the gearbox in the free position.
Mount a new gasket to ensure the back cap sealing.

Mount the back cap with the A groove in the primary shaft, and the oiling collector in the (B) oil bringing groove, and tighten the screws at a moment of 2,5 daNm.

Check the correct gears shifting.

Mount the reverse driving connector.



Mount the clutch control receiver cylinder and tighten the screws at the required moment (2,1 daNm).



FRONT TRANSVERSAL TRANSMISSION

SPECIAL TOOLS

- RO 604-01 Hub immobilizing device
- PF 476 Ball joint extractor

TIGHTENING MOMENTS (daN/m)

- Transmission nut	21
- Screw for fixing the bellows lid on the gearbox	2,5
- Wheels attachment screw	7,5
- Screws/nuts for fixing the steering knuckle on the shock absorber	7,5
- Screw for fixing the caliper on the steering knuckle	6,5
- Nut for steering ball joint	4

DISMOUNTING - THE SIDE TO WHEEL

Loosen the left wheel screws.

Lift the vehicle on an elevator with two columns.

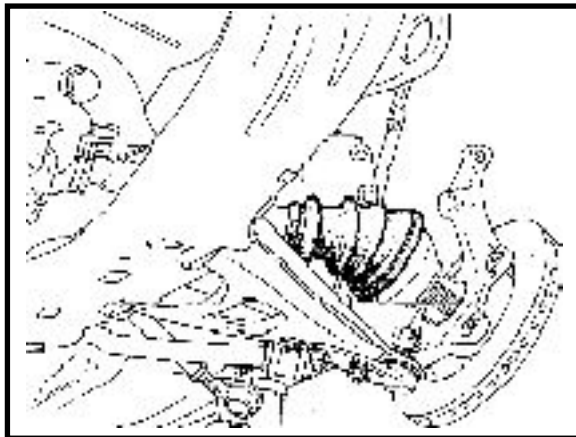
Dismount the wheels.

Dismount the screws that attach the brake disk assembly on the steering knuckle.

Unscrew the transmission nut by means of the RO 604 – 01 device.

Dismount :

- the nut of the steering ball joint;
- steering ball joint from the steering knuckle, by means of the PF 476 extractor; the attachment screws of the steering knuckle on the shock absorber end.



Push the transmission in the steering knuckle and incline the latter.

Dismount the transmission, the wheel side.

DISMOUNTING – THE SIDE TO THE GEARBOX**The right side**

Due to the solution assumed by the manufacturer, the transmission joint (the tulip of the transmission) with the transmission shaft of the gearbox shall be performed only by means of the grooves.



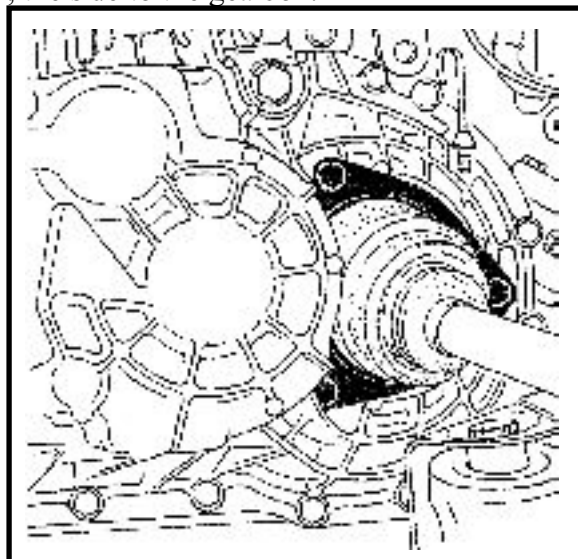
The dismounting of the transmission, the side to the gearbox, shall be performed by axial displacement - extract the transmission tulip from the transmission shaft.

The left side

Drain the oil of the gearbox.

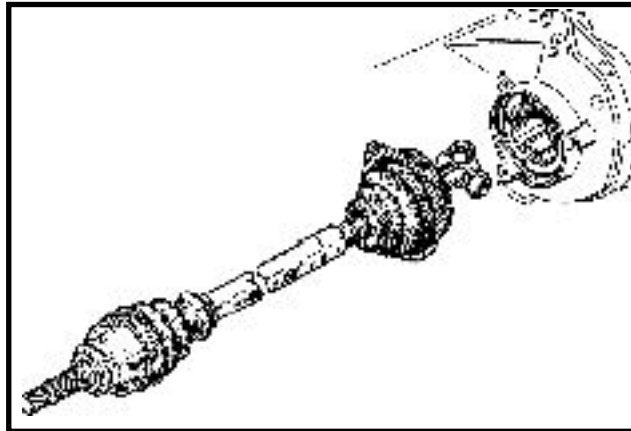
Dismount :

- the three screws for fixing the bellows – lid assembly on the gearbox;
- the transmission, the side to the gearbox.



REMOUNTING – THE SIDE TO THE GEARBOX**The left side**

Engage the transmission GI joint in the gearbox (the transmission position as horizontally as possible).



Mount the three attachment screws of the bellows lid on the gearbox.

The right side

Grease the tulip frame grooves (the grooves area) and the transmission shaft of the gearbox with transmission oil.

Engage the transmission GI joint (the tulip) on the transmission shaft of the gearbox (the transmission position must be as horizontally as possible).

REMOUNTING – THE SIDE TO THE WHEEL**For both sides**

Engage the transmission in the steering knuckle, this one being necessary to freely enter, so that threaded area of the steering knuckle is allowing to remounting the transmission nut.

Perform then the dismounting operations in the reverse order.

Observe the tightening moments.

Remount the brake disk assembly.

Refill the gearbox with oil.

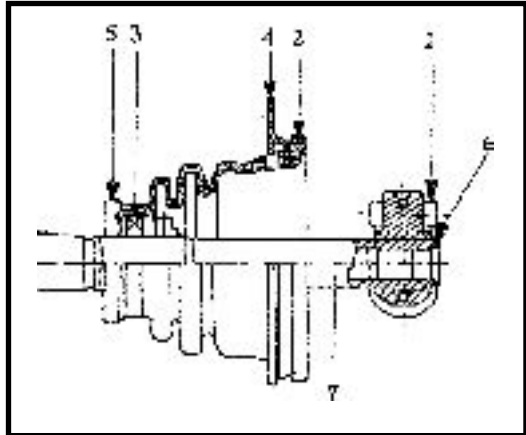
Press several times the brake pedal to enable caliper piston coming in contact with the brake pads.

THE JOINT TO THE GEARBOX - GI

SPECIAL TOOLS

Bearing mounting chuck on the shaft	PF 1331
-------------------------------------	---------

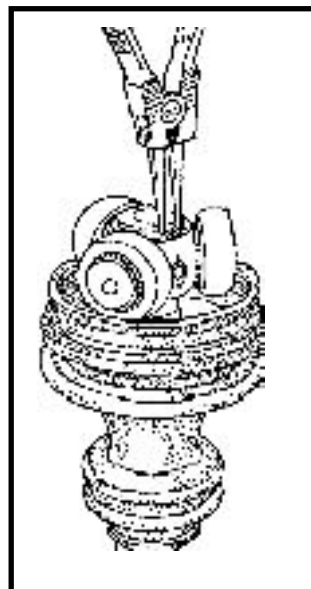
1. Tripod assembled
2. Bellows
3. bearing
4. bellows attachment lid
5. deflector
6. blocking ring
7. transmission shaft



DISMOUNTING

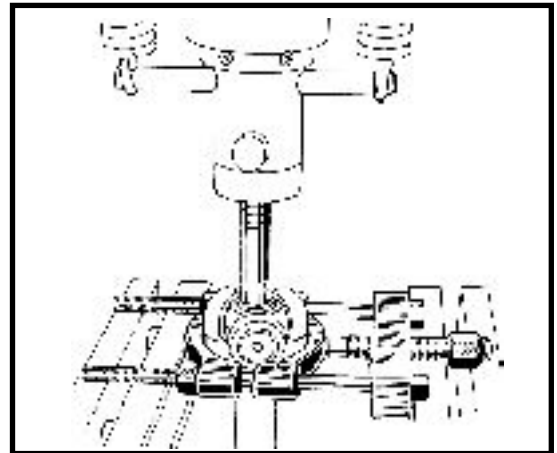
It is forbidden to use thinner for components parts cleaning.

Dismount the blocking ring from the groove made on the transmission shaft, using a special pincers for these types of rings.

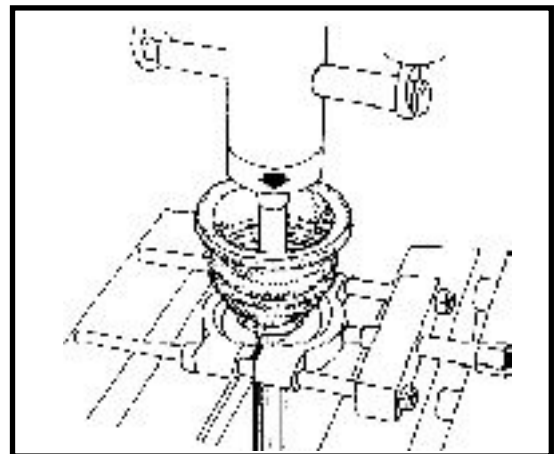


Using a press, extract the assembled tripod, sustained it on an extractor, FACOM U 53 G type, protecting the tripod clogs.

Before extracting, mark the position of the tripod compared to the transmission shaft end.

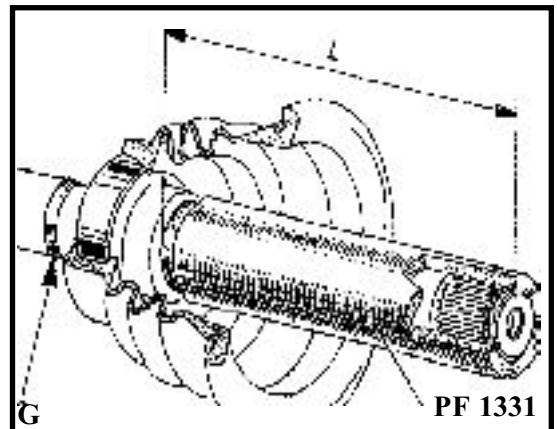


Dismount the bellows - deflector bearing in the same manner like tripod dismounting.



REMOUNTING

In order to be correctly positioned on the shaft, the bearing must be pressed to achieve the value $L = 118 \pm 0.2$ mm between the backside of the bearing and the shaft extremity. This value is obtained by means of the PF 1331 device, when mounting, its extremity is at the level of the shaft.



IMPORTANT

In order to avoid the deformation of the bearing, which includes a sealing gasket (annular oil seal), the pressing effort must be constant (do not hammer).

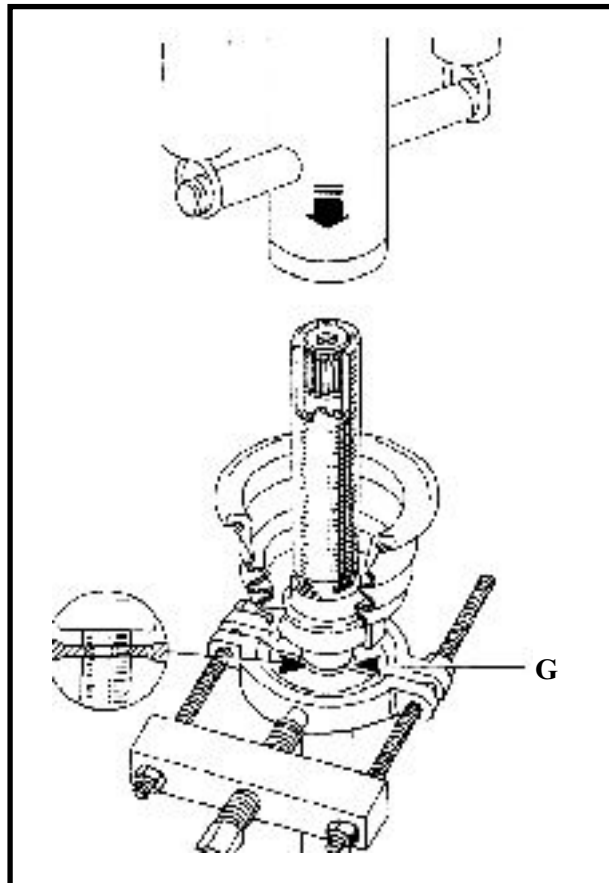
Maintaining the transmission on the press, on both sides, shall be ensured on the G groove made on shaft, by means of a device type FACOM U 53 G, (the flat side towards bellows) in order to avoid the deflector damages on the wheel side.

The pressing effort of the bearing on the transmission shaft has the value of = 100 – 700 daN.

Press again the assembled tripod on the transmission shaft observing the marks made when depressing.

The press effort of the tripod assembly on the grooved area of the shaft end, shall be between 60 – 600 daN.

Remount the blocking ring (Zeger lock) in the groove made on the transmission shaft.

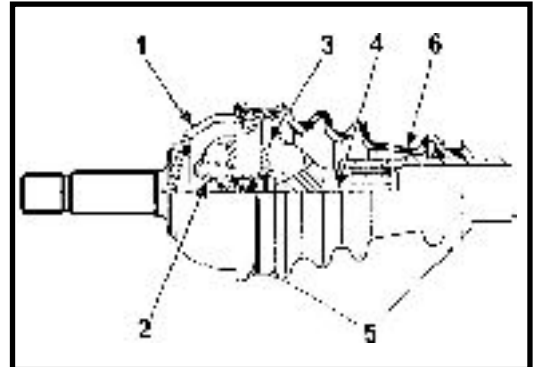


JOINT TOWARDS WHEEL

SPECIAL TOOLS

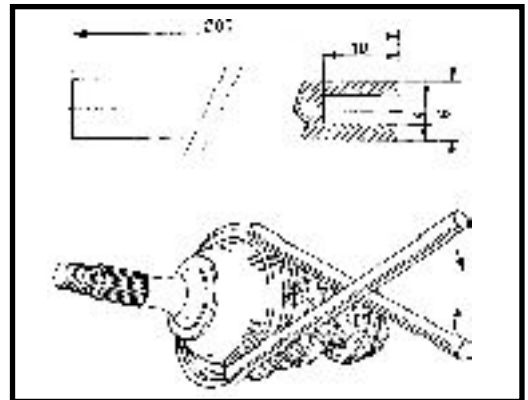
GE 86 joint bellows replacement device PF 537-03

1. Steering knuckle casing ass.
2. Retainer star
3. Tripod to the wheel
4. Tulip shaft
5. Maintaining collars
6. Rubber protection bellow



DISMOUNTING

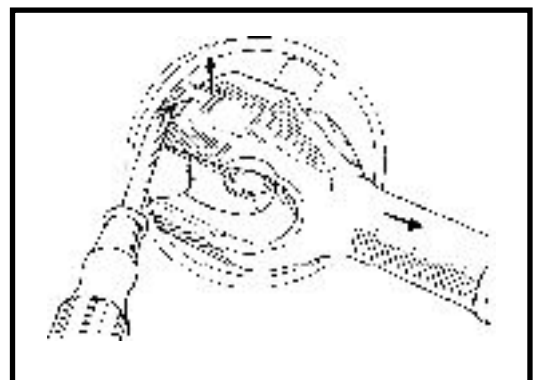
Dismount the two maintaining collars off the bellows by means of two rods, locally manufactured (see the drawing)
Cut and remove the damaged bellows.
Remove as much grease as possible.



Mark one of the groove routes of the shaft subject to its working corresponding clog by marking with a centre punch on casing outer consequently on the shaft.

Detach the connection between the transmission shaft and the steering knuckle casing, lifting one by one the arms of the retaining star from the three stamps performed on the petals of the shaft tulip.

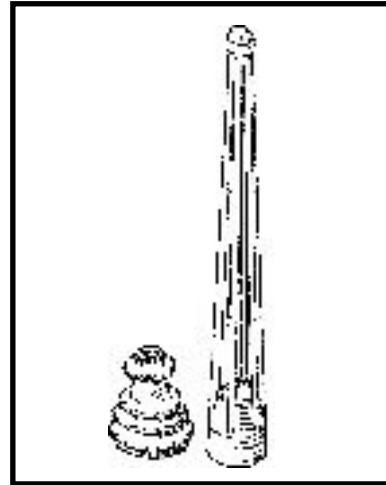
WHEN DISMOUNTING DO NOT DEFORM THE ARMS OF THE RETAINING STAR



Retrieve the head and the spring from the tripod to wheel.

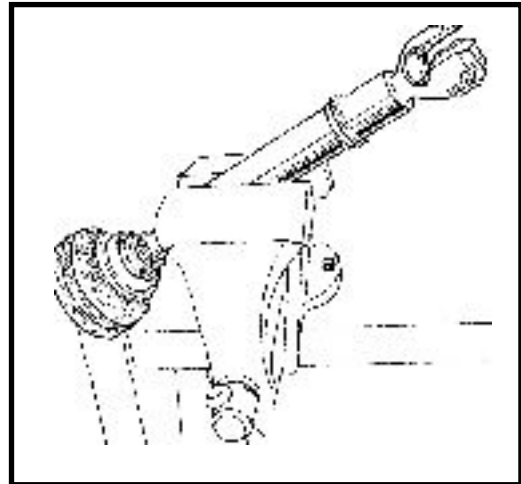
REMOUNTING

The mounting of the new bellows is to be performed by means of the PF 573 – 03 device.



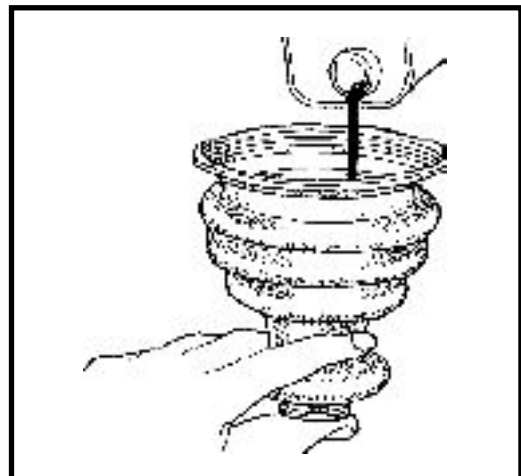
Catch the inclined transmission in a vice with soft jaws in order to avoid the shaft damaging.

Engage the PF 537 – 03 device over the tulip of the transmission shaft.

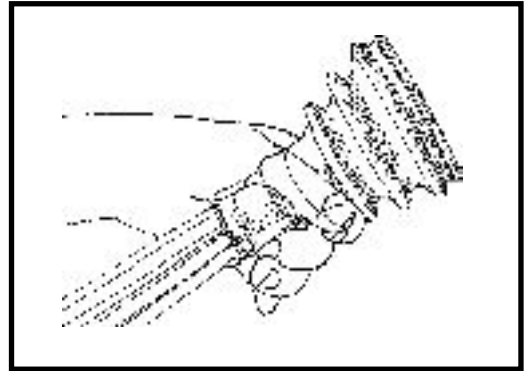


Obturate the small extremity of the bellows and, abundantly grease with automatic transmission oil or ELF CARDREXA RNT 2 grease:

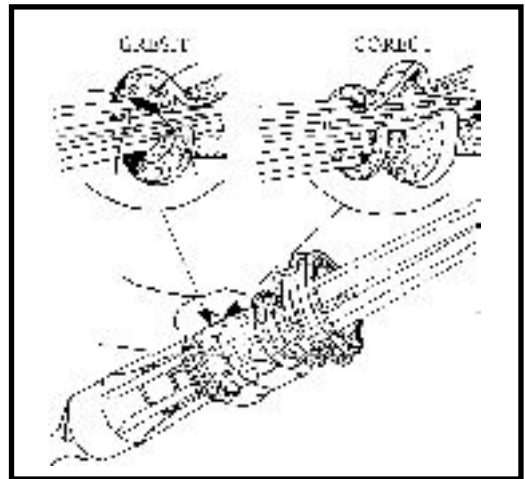
- the all outer surface of the PF 537 – 01 device
- the inner part of the bellows, especially its smaller diameter part (this operation is performed for slipping help).



Introduce the smaller diameter of the bellows on the PF 537 – 03 device.



Cover a hand with clean gauze and place it on the bellows in such a way as to stretch the first fold.



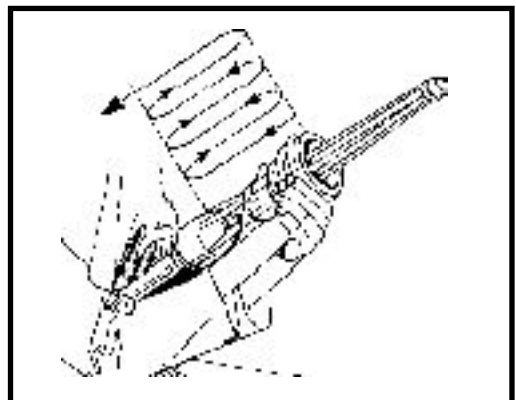
Take support with the hip on the edge of the vice (lateral side).

Place the other hand around the first one and strongly pull it, taking care that first fold is not huddled together.

Bring the bellows as close as possible to the device cylindrical part and let it release till half stroke.

It is recommended to perform many times this operation (maximum 5 times).

When easy slipping is noticed, make so that bellows is passing over the device cylindrical part, the operation being performed without stopping.

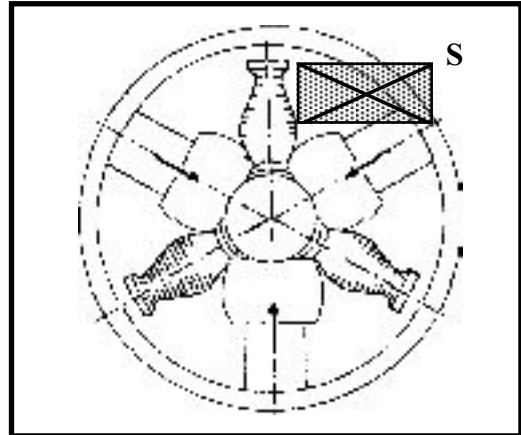


Catch the steering knuckle casing in a vice with soft jaws.

Put the spring and head in the tripod groove.

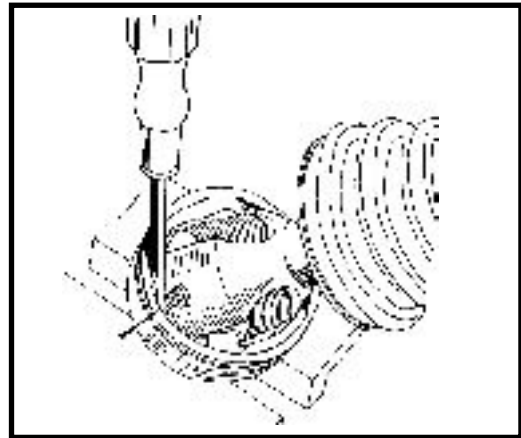
Brings the clogs to the center.

Position the retaining star (s), and each of its arms, being at the bisecting lines of the angles formed by the tripod arms.



Introduce the transmission shaft in the steering knuckle casing, positioning it, subject to the marks (the three clogs penetrating in the three rolling routes of the shaft).

Slide slowly the transmission shaft, in order to engage one arm of the retaining star in the marked point of the transmission shaft, and press it for correct centering.



Placing the other retaining star two arms, it will be made easy by a screwdriver, with its end modified as per drawing:

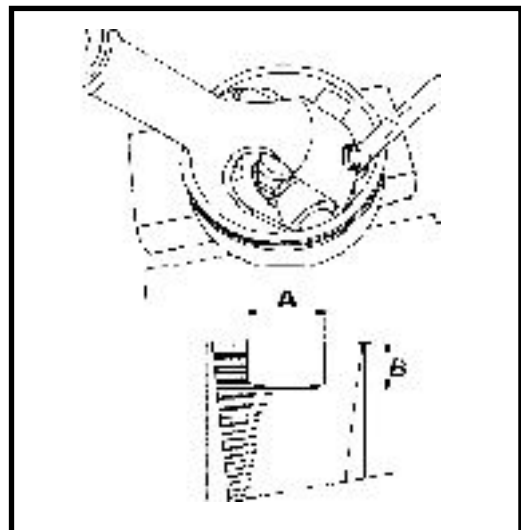
$A = 5 \text{ mm}$ $B = 3 \text{ mm}$

Ensure that retaining star arms are correctly positioned in the shaft marks.

Check by hand, the joint operation.

Must not exist any hard point.

Distribute in the bellows and in the steering knuckle casing the grease prescribed dosage.



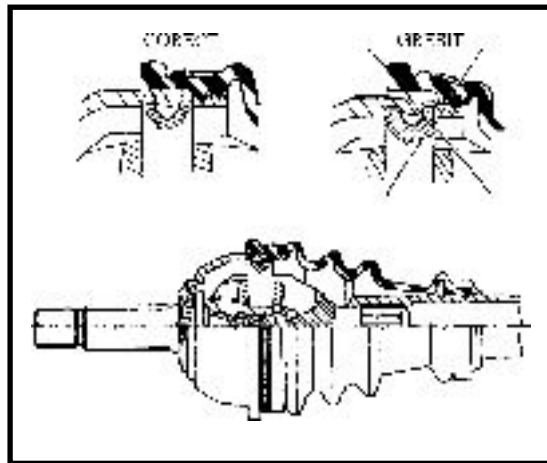
NOTE

It is obligatory to observe the quantity and type of the prescribed grease, 2l+1 cl, ELF CARDREXA RNT 2.

Position the two bellows beads in the grooves of the steering knuckle casing, consequently on the transmission shaft tube.

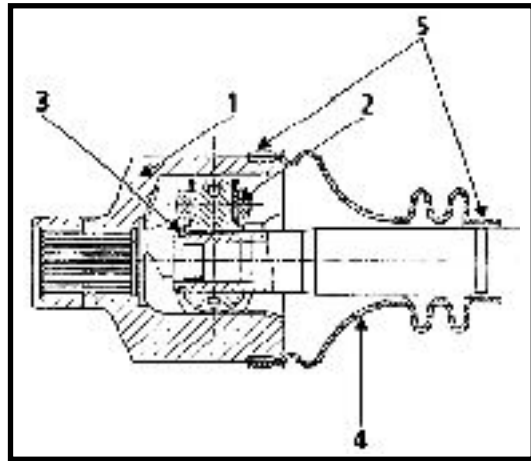
Place a non-cutting, round headed rod between the transmission shaft and the bellows in order to dose the amount of air inside.

Mount the two collars, by means of the two rods used also at the dismounting operation.



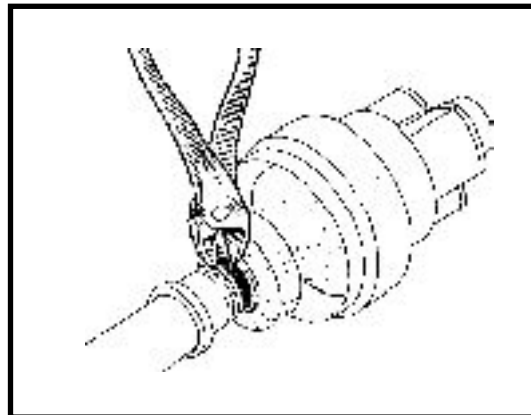
JOINT TOWARDS GEARBOX - GI

1. Tulip
2. Tripod
3. Blocking ring
4. Rubber bellows
5. Maintaining collars

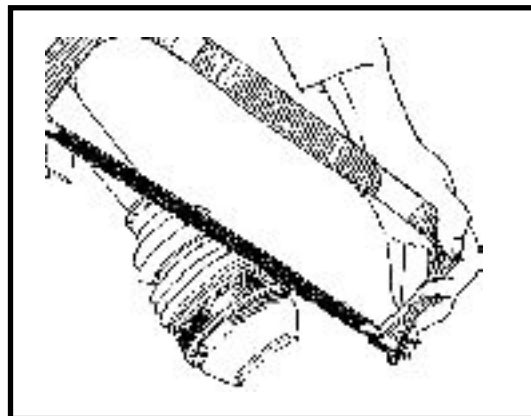


DISMOUNTING

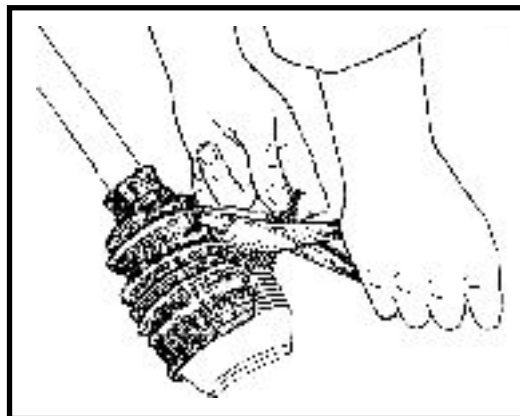
Cut the maintaining collar.



Cut by means of a saw the existent collar, taking care not to scratch the tulip in the mounting area with the bellows.



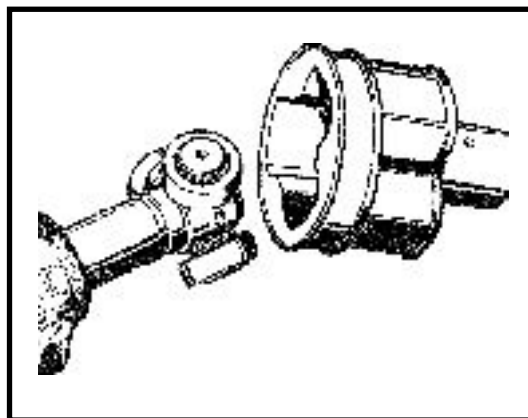
Cut the bellows.



Remove maximum of grease.

NOTE :

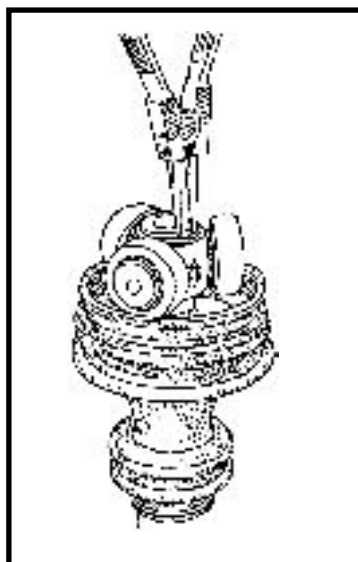
The tulip not being equipped with a hood having retaining wings, dismounting is to be performed without forcing.



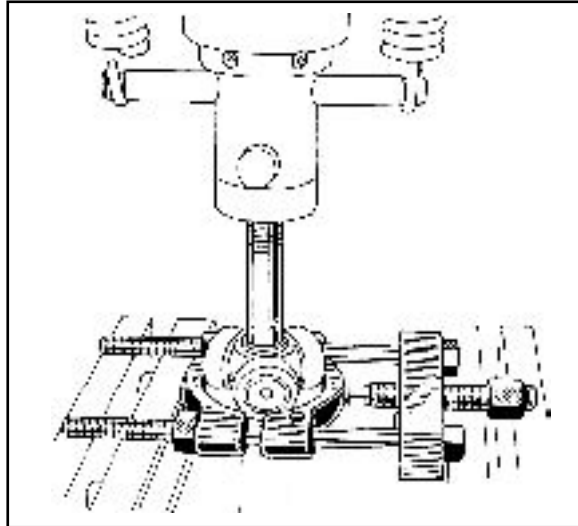
It is avoided the cams exit from the trunnions (tripod arms) because the roll-needles and the cams are paired and must be not reversed.

Never use thinner to wash the component parts.

Dismount the blocking ring.



Using a press, extract the assembled tripod, sustain it on an extractor type FACOM U 53 G, protecting the clogs of the tripod.



REMOUNTING

Grease the transmission shaft to help the protection bellows putting back (positioning of the smallest diameter of the bellows on the transmission shaft).

The tripod is fixed and mounted in the position marked on dismantling.

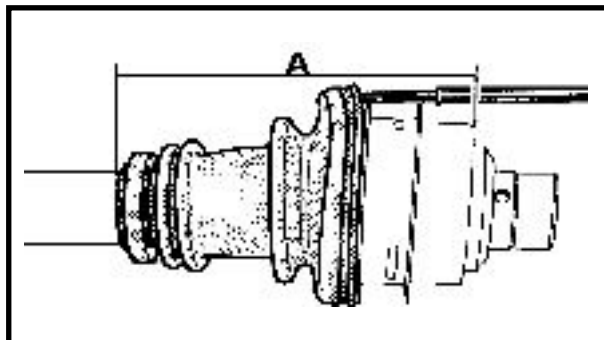
Three points of crimping are made at 120 °C by metal heading of the transmission shaft grooves.

Distribute the grease prescribed quantity in the bellows and in the tulip casing.

Correctly position the bellows in the tulip-casing place.

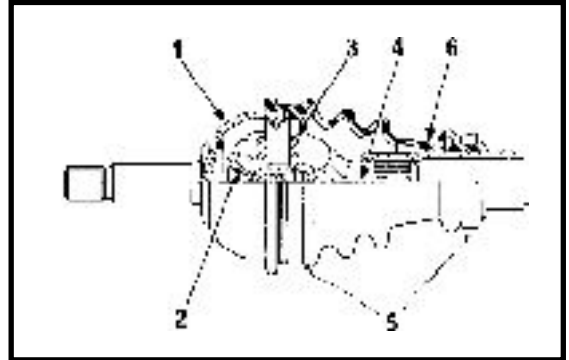
A non-cutting, round-headed rod is introduced between the bellows and the tulip casing to dose the air amount contained inside the bellows.

Lengthen or compress the bellows until value $A = 190 \text{ mm}$ is obtained (the value between the extremity of the bellows and the extremity of the tulip casing) then from this position extract the rod and remount the collars.



JOINT TOWARDS THE WHEEL – GE

1. Steering knuckle casing assembled
2. Retaining star.
3. Tripod to wheel
4. Tulip shaft
5. Maintaining collars
6. Protection rubber bellows



DISMOUNTING

Dismount the two maintaining collars using two rods locally produced (see the method previously described for dismounting the joint GE, left transmission).

Cut and remove the damaged bellows.

Take out maximum of grease.

In order to replace the joint GE protection bellows, it is necessary to dismount/remount the GI joint parts (see the method previously described).

REMOUNTING

Grease the rod of transmission shaft with grease.

Introduce the protection bellows of the GE joint.

Distribute the prescribed dosage of grease for GE joint.

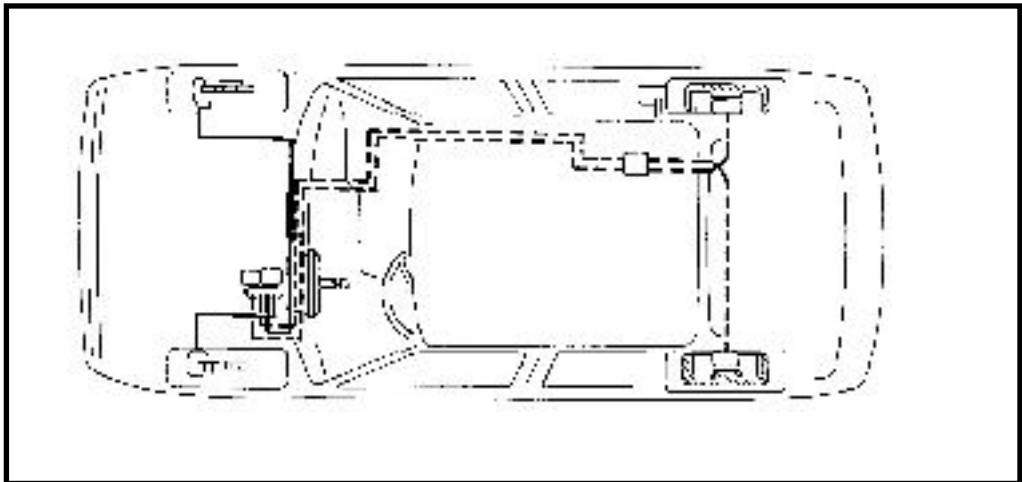
Position the bellows beads in the grooves of the steering knuckle casing, consequently on the transmission shaft tube and mount the collars (see the method described at mounting GE joint bellows, left transmission).

NOTE :

The following schedule is a general principle schedule and it cannot be considered as reference for the brake circuit failures and damages. When replacing one of the vehicle brake circuit element, the ducts must be identified before dismount them, in order to be able to reconnect them obligatory in their initial positions.

BRAKE IN PARALLEL WITH BRAKE LIMITER

**SCHEDULE OF HYDRAULIC BRAKE SYSTEM IN PARALLEL
WITH BY-PASS CIRCUIT**

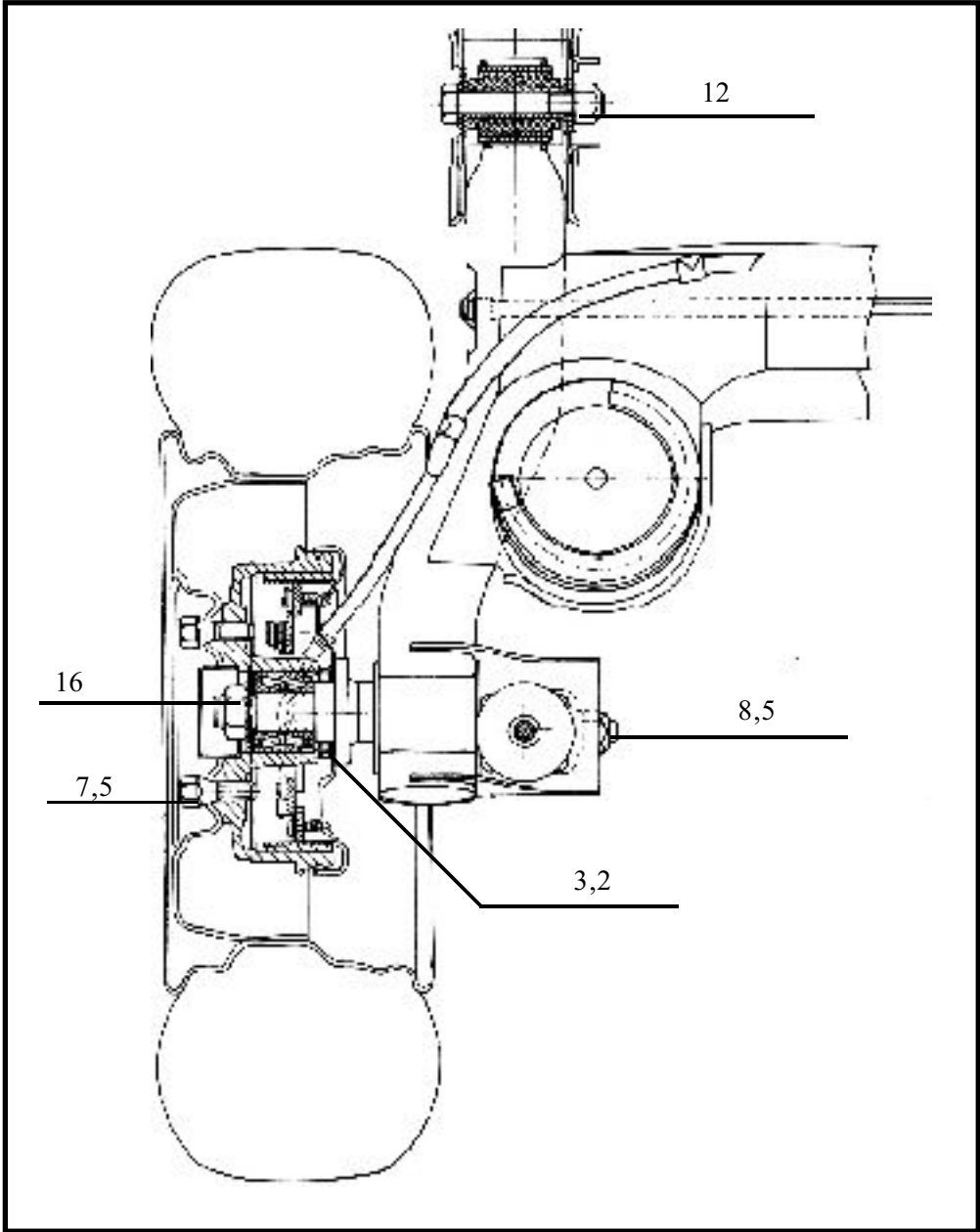


* front brake circuit: —————

* rear brake circuit - - - - -

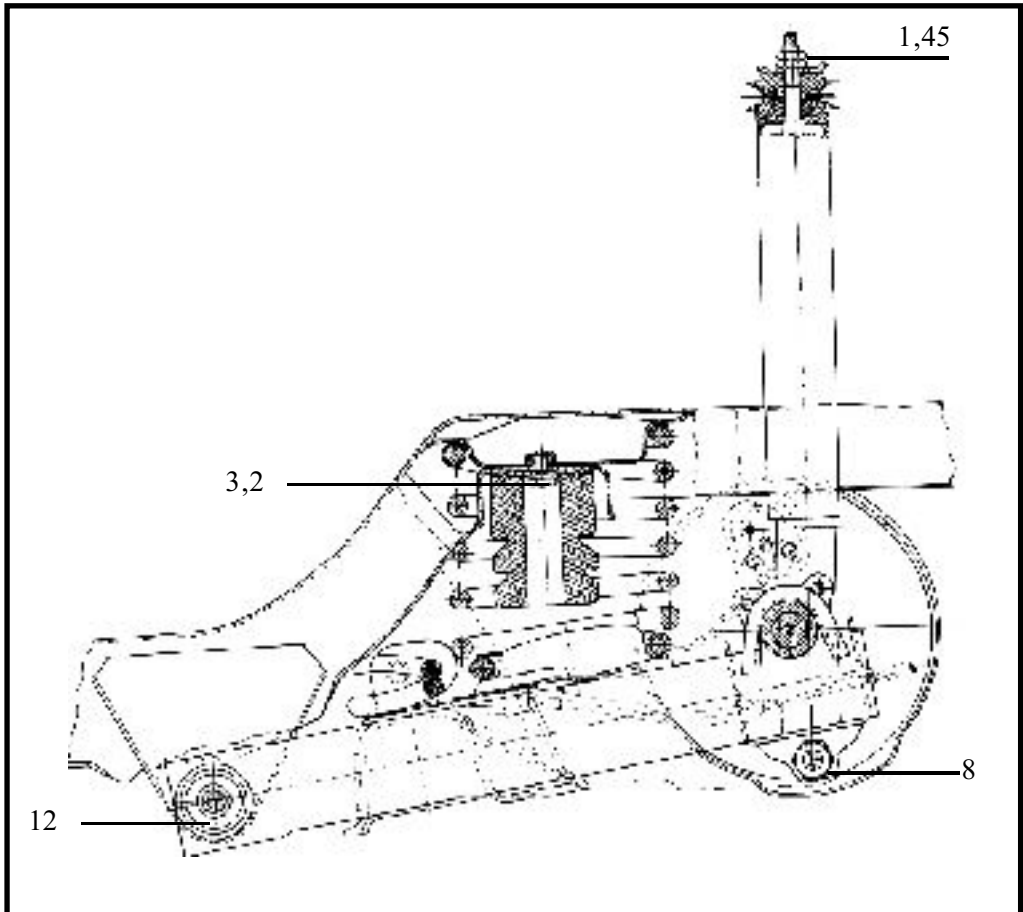


FRONT HALF AXLE



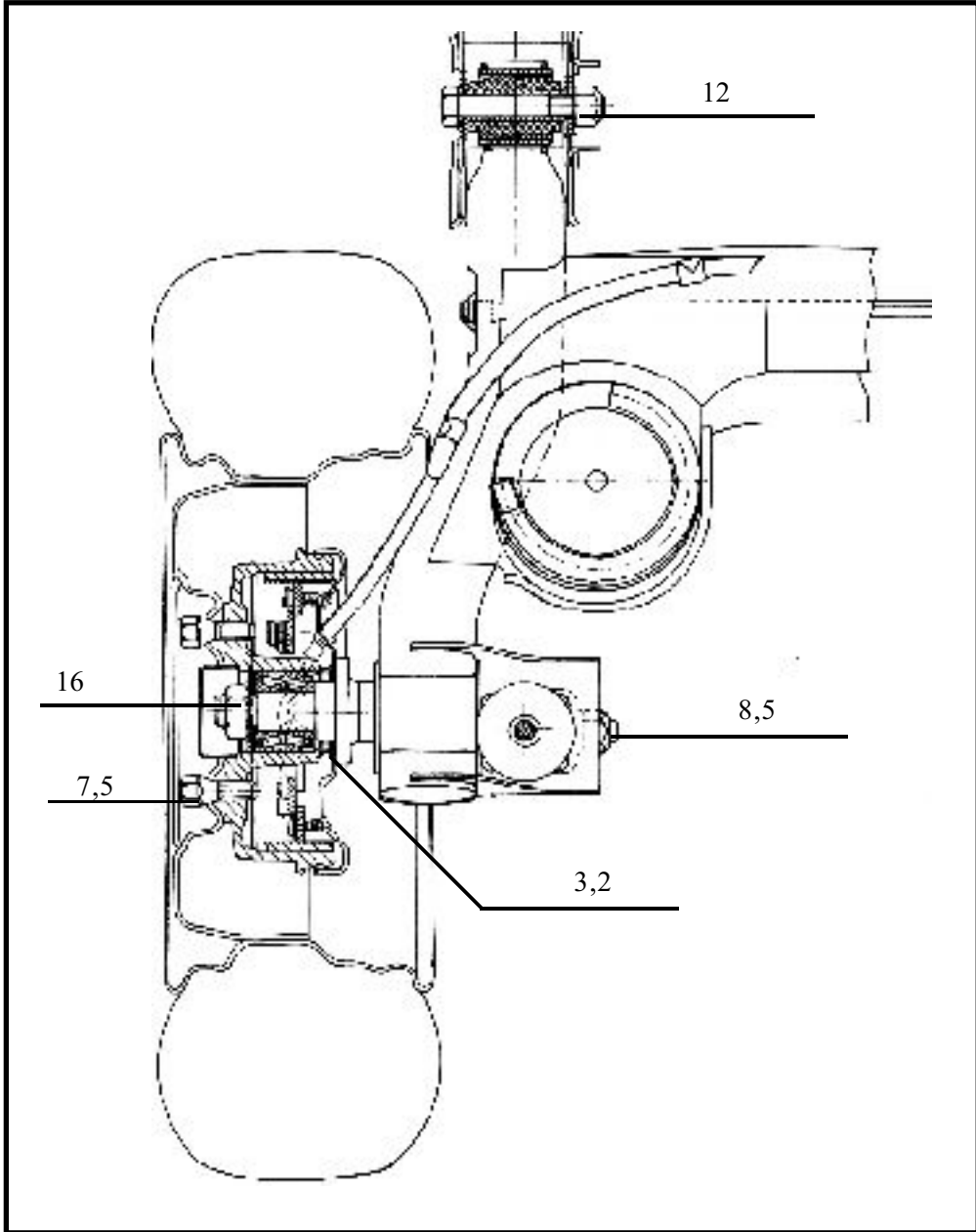


FRONT HALF AXLE



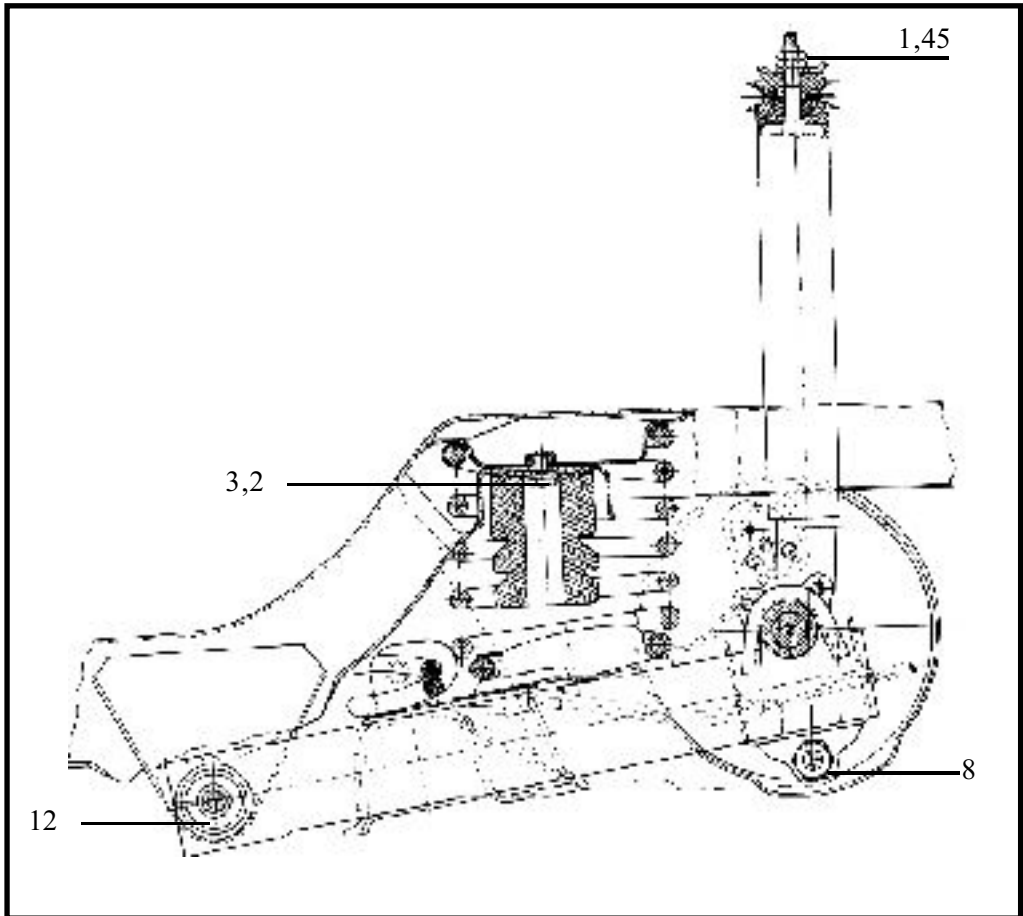


REAR AXLE





REAR AXLE



Front brake

Brake caliper bore diameter	F 54 mm
Aerated brake disk diameter	F 235 mm
The axial run out of the disk measured at $\text{Æ}215$	0,1 mm
Brake disk maximum thickness	20 mm
Brake disk minimum thickness	19 mm
Braking pad thickness (support included)	14 mm
Minimal brake pad thickness (support included)	7 mm

Rear brake

Wheel braking cylinder bore diameter	F 22 mm
New drum diameter	F 228 mm
Drum diameter after grinding	F 229 mm
Shoe braking lining width	40 mm
Braking lining thickness	5 mm
Minimal accepted braking lining height above rivets	0,5 mm

Master brake pump cylinder

Bore diameter	20,6 mm
Pump maximum stroke	32 mm

Brake fluid reservoir

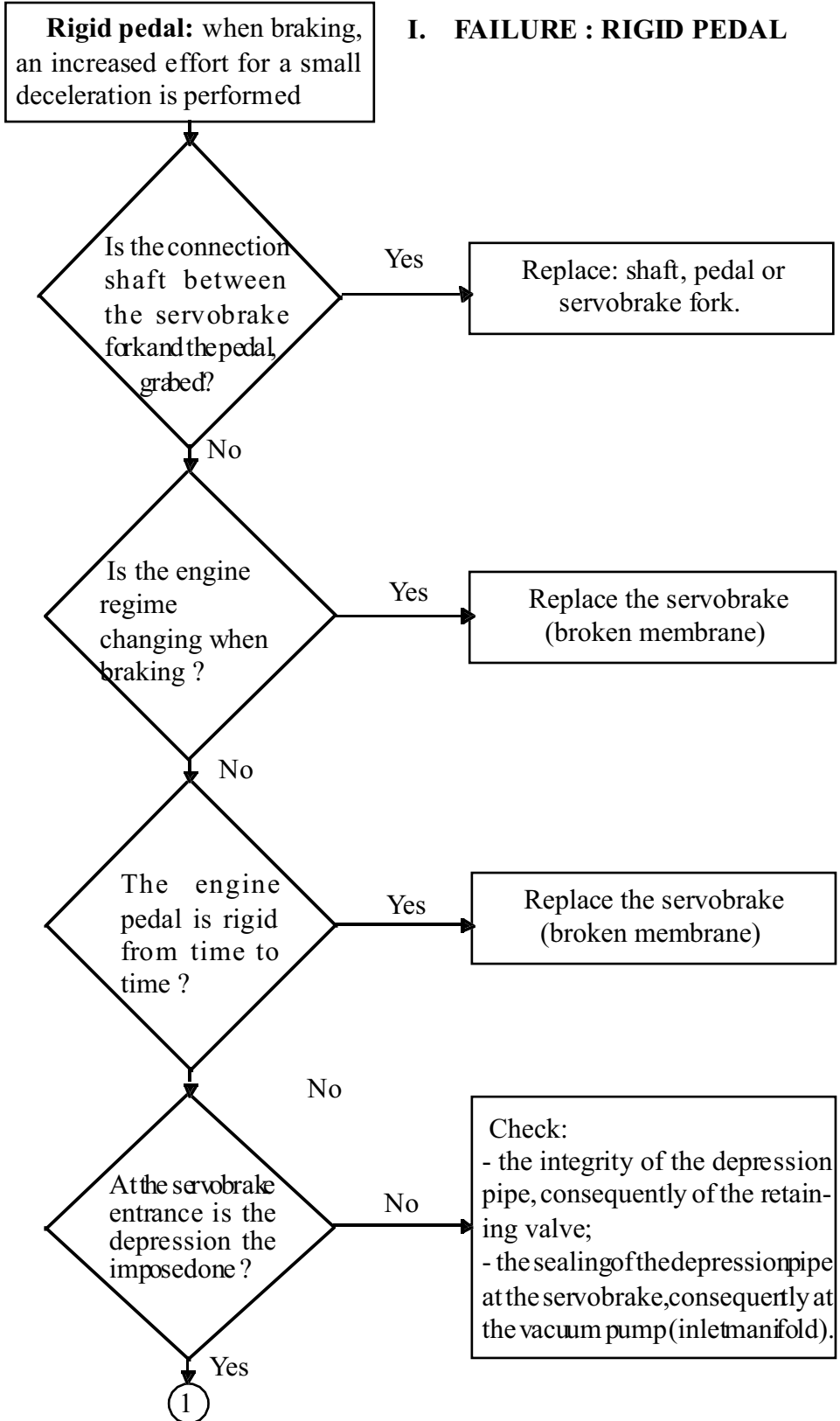
Without level alert sensor

Pressure limiter

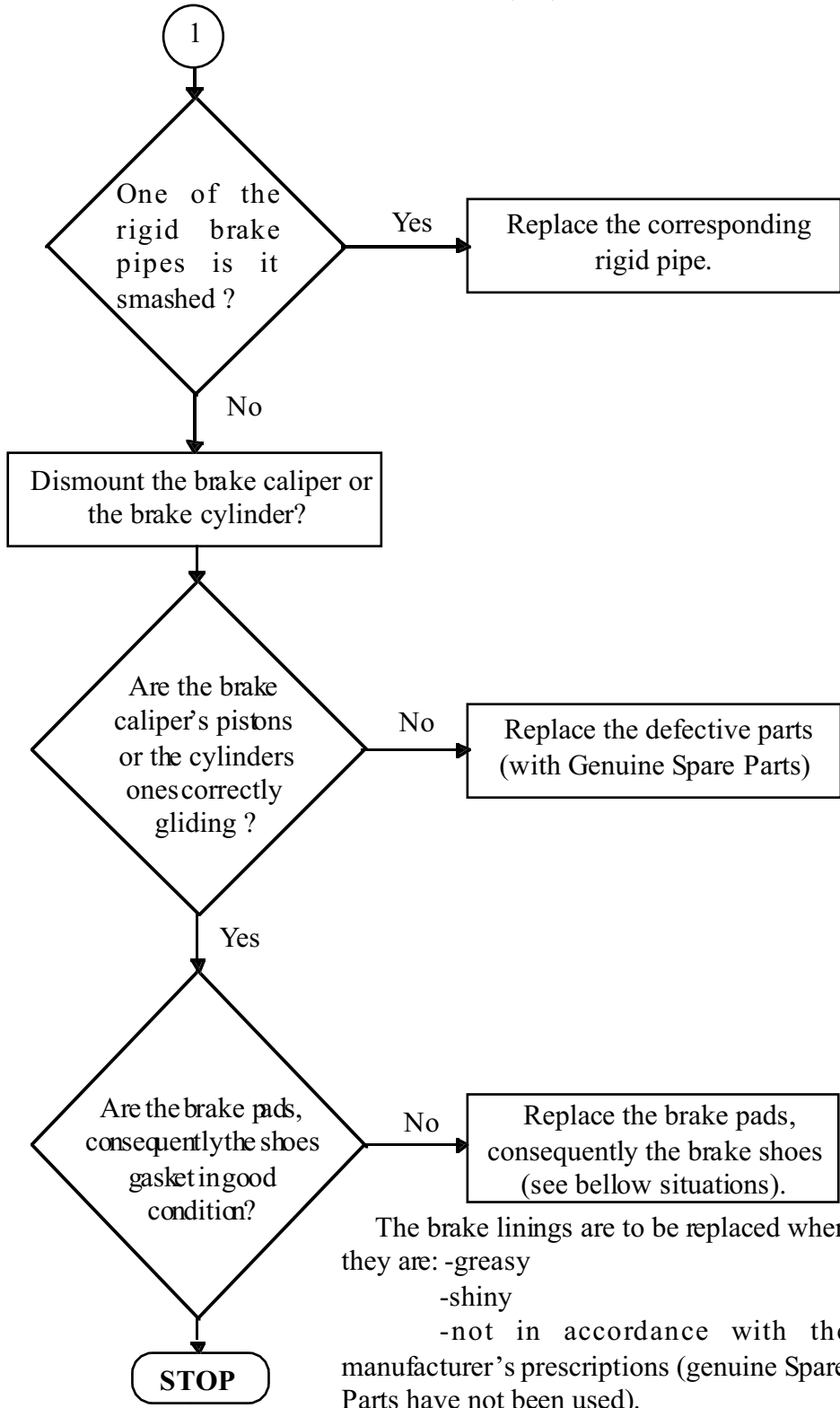
For parallel circuit

Servobrake master vac 7"	177,8 mm
--------------------------	----------

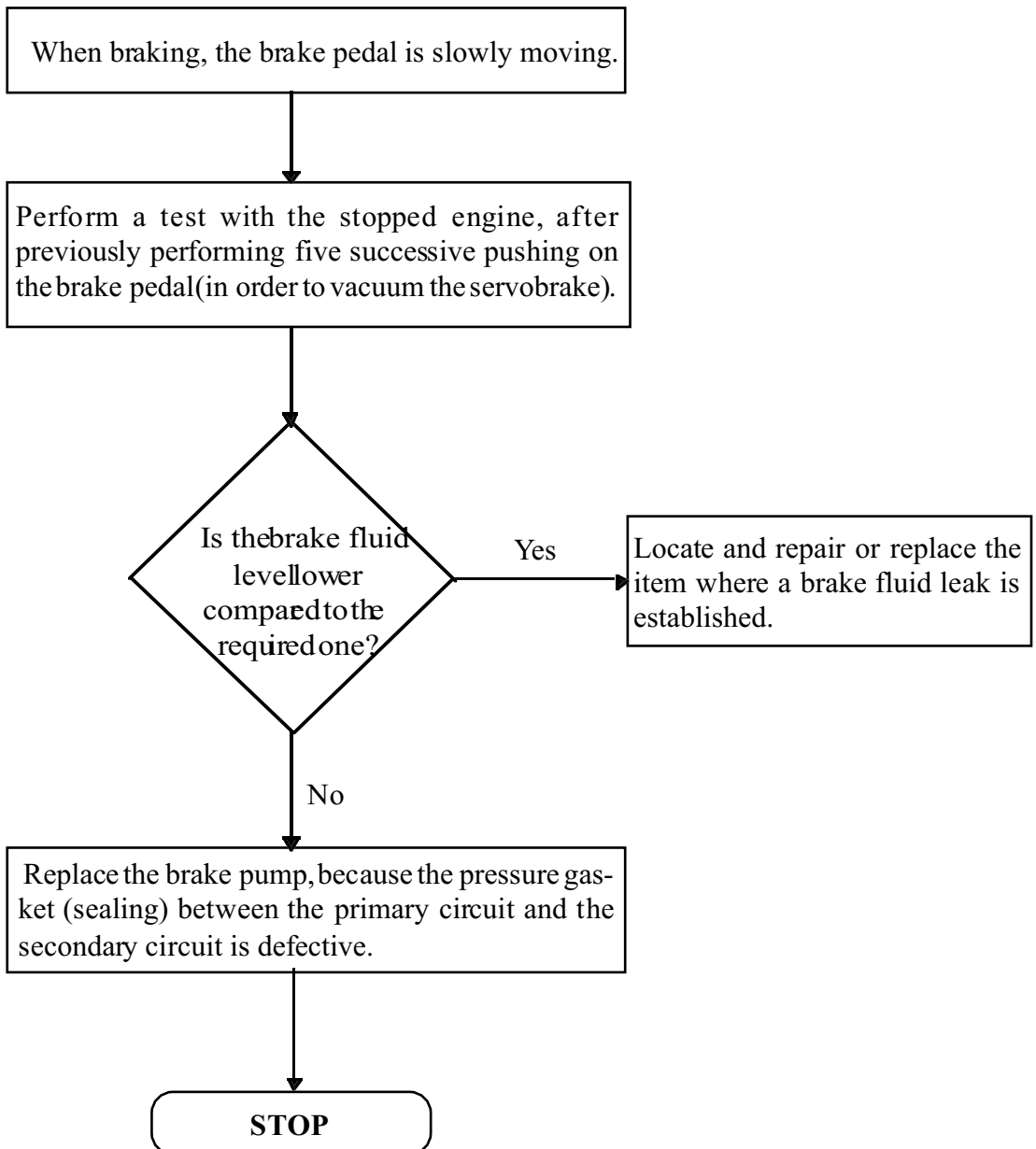
BRAKING SYSTEM DIAGNOSTIC



I. FAILURE : RIGID PEDAL (ctd)



II. FAILURE : LONG PEDAL



GENERAL
BRAKING SYSTEM DIAGNOSTIC

I. CONSTANT EFFECT TO THE PEDAL

EFFECTS	POSSIBLE CAUSES
<p>Tough pedal: High effort for small deceleration.</p>	<ul style="list-style-type: none"> - Assistance defect - Brake linings: <ul style="list-style-type: none"> - greasy - stacking to the disk (non-conform) - heating, prolonged braking with constant pedal press - Stuck piston - Rigid duct narrowed (flattening)
<p>Elastic pedal In order to diagnose, an incident where the use was normal is to be analyzed and two tests are to be performed:</p> <p>1. While driving the vehicle : Interpretation test: pedal stroke/ deceleration rate.</p> <p>2. While vehicle is stopped, engine cut. Additional test of brake pedal press: Perform five consecutive pressings on the brake pedal in order to vacuum the servobrake, before taking into consideration the test result.</p>	<ul style="list-style-type: none"> - Air presence in the circuit: defective purging - Internal leak in the braking circuit. - Leak of fluid from reservoir (external fluid leak from braking circuit).
<p>Long pedal The test is to be performed with stopped vehicle and cut engine.</p> <p>REMARK: It is necessary to perform five consecutive pressings on the brake pedal, in order to vacuum the servobrake before taking into consideration the test result.</p>	<p>Automatic adjustment : hand brake cable too tighten.</p> <ul style="list-style-type: none"> - Important and asymmetric wear of the brake linings - Stroke too ample between the servobrake pushing rod and the brake pump - Brake fluid having high temperature.
<p>Floor pedal The test is to be performed with stopped vehicle and cut engine.</p> <p>REMARK : Perform five consecutive pressings on the brake pedal, in order to vacuum the servobrake before taking into consideration the test result.</p>	<ul style="list-style-type: none"> - Hydraulic leak (check the sealing of the braking system components) - Sealing gaskets defects of the two brake pump circuits. - Brake fluid having high temperature

II. CONSTANT EFFECT AT BEHAVIOUR

EFFECTS	POSSIBLE CAUSES
Brakes not accomplishing the required braking distance	<ul style="list-style-type: none"> - Non-uniform worn brake linings (backing off); - Brake linings slightly greased; - Springs with modified characteristics.
Vibrating brakes	<ul style="list-style-type: none"> - Brake disks with high wobbling; - Inconstancy brake disks width; - Particles abnormal deposit on brake disks (oxidation between linings and disk).
When braking, the vehicle (front part) is left/right deviating	<ul style="list-style-type: none"> - Front axle suspension, steering (to be checked); - Stuck piston; - Tires – wear, inflation pressure; - Rigid duct narrowed (flattening).
Braking	<ul style="list-style-type: none"> - Stuck piston; <p>Automatic adjustment : hand brake cable very tighten.</p> <p>REMARK : <i>Automatic recovering is performed by means of the brake pedal, if there is no abnormal tension in the hand brake cable when released (hand brake released).</i></p> <ul style="list-style-type: none"> - Return spring.
Heating brakes	<ul style="list-style-type: none"> - Insufficient hydraulic stroke of the brake pump, not allowing the return at rest of the brake pump pistons (brake pump remaining under pressure); - Stuck pistons or hardly returning; - Rigid duct narrowed (flattening); - Defective adjustment of the hand brake control.

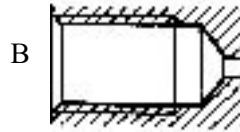
The sewerage connection between the brake pump, brake calipers, pressure limiter is performed by means of the threaded connections with METRIC PITCH. Therefore it is important to use only original spare parts, recommended in the Spare Parts Catalogue, specific for this type of vehicle.

Spare parts identification

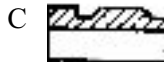
The cupping shape of the steel ducts (A)



The shape of the threaded lengths on parts (B)



Connections of ducts (C)



PERIODICITY OF THE BREAK FLUID CHANGE

The manufacturing conception of the brakes equipping the Dacia vehicles, especially the disks brake type (F 54 inner empty pistons, low quantity of fluid in the cylinders, sliding calipers avoiding existence of a fluid reserve in the less cooled area of the wheel) enable the maximum rejection of fluid vaporization risk, even in case of intensive using of brakes (mountain area).

The current brake fluids are subject in all cases to a slight degradation during the first months of use by a slight humidity absorption series (see the Vehicle Warranty and Maintenance Booklet, for brake fluid change)

LEVEL COMPLETION

The wear of brakes pads and shoes generate a gradually diminution of brake fluid level in its reservoir. It is useless to compensate this diminution, because the level will be restored in the moment of next changing the brake pads and shoes. Obviously, in the meantime, the level of brake fluid in reservoir must not go down bellow the minimal mark.

HOMOLOGATED BRAKE FLUIDS

The mixture in the braking circuit of two non compatible brake fluids may leads to loss important risks mainly due to gasket damage

In order to avoid such risks, it is obligatory to use brake fluids checked and approved by our laboratories and which are according to Norm SAEJ 1703, DOT 4.



**AIR ELIMINATION FROM THE HYDRAULIC
CIRCUIT (PURGING)**

The air existence in the hydraulic circuit may be noticed by an elastic displacement of the brake pedal, sometimes even, close to the floor. This fact is more evident with the engine stopped.

GENERAL RECOMMENDATIONS

Always use for completion or total changing, the brake fluid Norm SAE J 1703 , DOT 4. In case of changing the brake fluid, it is necessary to wash the system with one liter of industrial alcohol (diluted).

During the purging, the brake fluid from the reservoir must not go down below the minimal level marked on the reservoir.

To perform the operation, one person will stay on the driver place, to push the brake pedal and the other one will perform the purging (bleeding) at the wheels using a 500 ml vessel, a transparent plastic tube and brake fluid for completion.

NOTE

The brake fluid resulted after performing the purging operation, IS NOT TO BE RE-USED but only after 48 hours, in order to avoid air-bubbling generation on the hydraulic circuit which shall have as effect an elastic brake pedal.

WORKING PROCEDURE

Place on the purging screw, a transparent tube with its end in a vessel with brake fluid and proceed as follows:

- press the brake pedal slowly, dismount the purging screw, maintaining the full stroke of the pedal, then tighten the screw and slowly release the brake pedal. Repeat the same procedure until complete cease of air bubbles. Proceed in the same way also for the other purging places. (take into consideration the existence all the time of the brake fluid in the reservoir)

Observation:

Before beginning the purging procedure, dismount the I.C.P. indicator from the pump, which shall be remounted at the end of the operation.

It is important to observe the following sequence of the purging places:

PROCEDURE IN PARALLEL SYSTEM

- 1.,6. Main cylinder with I.C.P. incorporated
2. Left rear wheel brake cylinder
3. Right rear wheel brake cylinder
4. Caliper of front right wheel
5. Caliper of front left wheel

WORKING CONDITIONS

The vehicle is on wheels.

If the fuel tank is empty, place on the rear bench of the vehicle one or two persons to enable the possibility of the circuit opening (the passing of a larger fluid flow through the brake limiter).

CHECKING THE BRAKE SYSTEM SEALING

After purging the front and rear circuits, check if the level of brake fluid in reservoir is within the minim and maxim range, than press the brake pedal, then during about 30 seconds, no pedal displacement must be noticed.

CAMBER ANGLE $0^{\circ} \pm 30'$

It is formed by the wheel plane with the vertical that crosses the wheel axis.

A difference higher than 1° between the two angles leads to :

- the deviation from the trajectory that must be adjusted by means of the steering wheel.
- abnormal wear of the tires and bearings.

The angle is not adjustable.

THE BALL JOINT ANGLE $12^{\circ}45' \pm 30'$

It is formed in transversal plane between the axe connecting the attachment point of the shock absorber with the ball joint center and the vertical passing through the wheel axis. The ball joint angle is generating a negative offset, allowing the maintaining of the vehicle route when the braking is unequal distributed.

The angle is not adjustable.

THE CASTER ANGLE $2^{\circ}30'$

It is formed in longitudinal plane, between the axis connecting the attachment point of the shock absorber with the suspension ball joint center and the vertical axis passing through the wheel axis.

A difference higher than 1° between the two angles leads to :

- the deviation from the trajectory that must be adjusted by means of the steering wheel.
- a normal wear of the tires.

The angle is not adjustable.

STEERING BOX POSITIONING

The steering box must be at a certain height from the attachment points of the steering auxiliary connecting rod ball joints. The position of the steering box (choking) is influencing the variation of the parallelism. The steering box is mounted in the position for which the variation is minimal.

The modification of the parallelism between left side and right side leads to:

- the deviation of the vehicle, in one sense, upon accelerating;
- the deviation of the vehicle in the opposite side upon braking.
- the deviation of the trajectory on the hilly ground;
- the premature wear of the tires.

The horizontally of the steering box is ensured by the producer.

PARALLELISM
(TOE-IN OR ANGULAR SPREAD ANGLE)

It is measured in horizontal plane as a difference between the front and rear part of the same axle wheels. The wheels are divergent. The value of the opening is between 0 – 2 mm (1 ± 1 mm).

ATTENTION:

A too much opening causes the wear of the tires on the inner part of the camelback.

A too much closing causes the wear of the tires on the exterior part of the camelback.

The parallelism is adjustable by rotating the tie bar of the steering connecting rod.

Before checking and adjustment of the front axle geometry, perform the followings operations:

- * The checking of tires concerning:
 - dimensions
 - air pressure
 - the state of wear;

NOTE :

The tires must be of same type, with the same state of wear, air pressured at the prescribed pressure.

*The check of joints:

- the wear of elastic bushings
- the steering ball joints clearance
- the wheels bearings clearance.

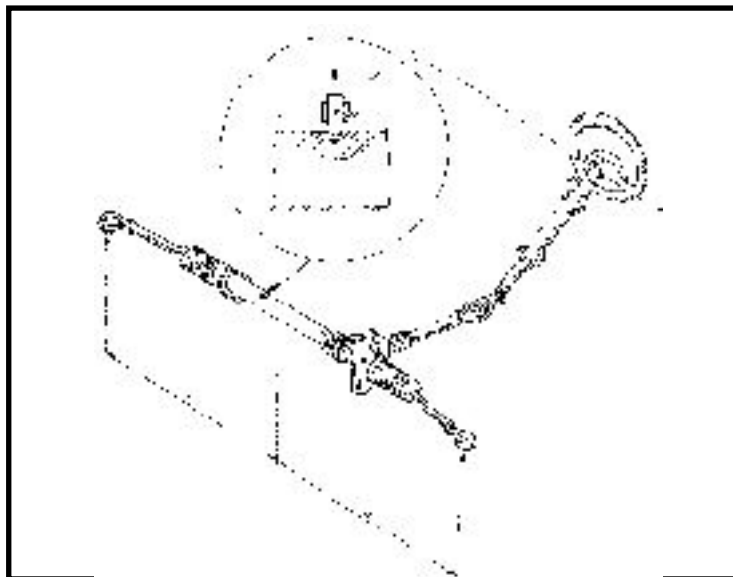
NOTE :

The axial clearance of the bearings must be in admissible limits.

ESTABLISHING OF THE STEERING CENTRAL POINT

In order to perform a front axle checking and adjustment, it is necessary to establish the central point in order to avoid measurement errors.

To do that, bring the steering wheel so that device DIR 500 for steering box rack blocking is entering in the orifice placed at its right upper part.



Due to the geometric conception of the front axle, the modification of one of one-side angles (castor, camber, ball joint) has no major impact on the value of other side angles (the parallelism being the one directly influenced).

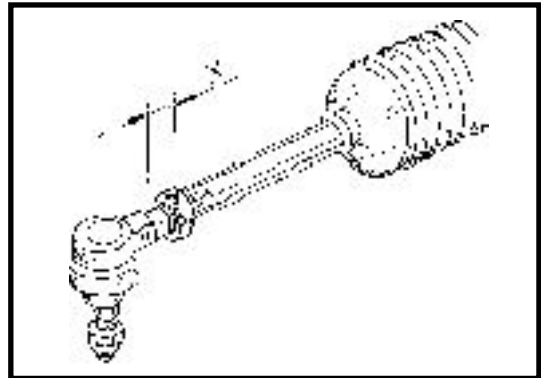
The modification of these angles does not occur during vehicle exploitation, but only as a consequence of a vehicle accident.

It is important to observe the following sequence :

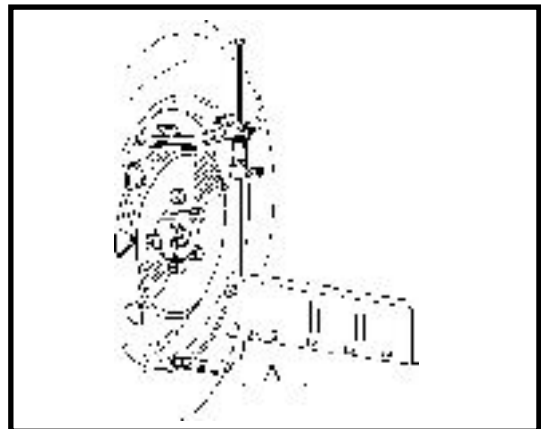
- placing the vehicle on rotating plates;
- braked vehicle
- suspension checking for placing the vehicle at its free height;
- establishing the steering central point and steering box blocking.
- attachment of the optical devices on the vehicle, observing the manufacturer instructions.

REPARTITION CHECKING AND ADJUSTMENT

Check the “X” dimension symmetry of the connecting rods.



Reading of the “A” value on the scale.



Case 1:

The symmetry dimension “X” is correct-the value “A” is equaled distributed.

Case 2:

The symmetry dimension “X” is incorrect-read the value “A” on each side, adds it, and calculate the average value, establishing the value for each side.

Example:

Right side value : **A = 16;**

Left side value : **A = 10;**

16 + 10 = 26; 26 : 2 = 13;

Operating the steering rods tie bar, restore the same value for both sides **A = 13.**

In this position, lock the rotating plates at zero point.

Check in the following sequence:

- camber angle;
- caster angle;
- parallelism;
- ball joint angle.

Ⓢ PARALLELISM ADJUSTMENT

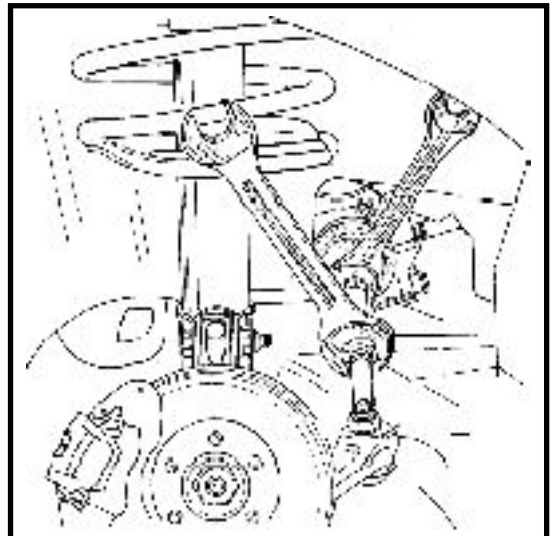
Loosen the lock nut (1) maintaining the tie rod of steering connecting rod (2) in a fixed position.

Act upon the tie rod of steering connecting rod taking into account its rotation sense of in order to obtain the convergence or divergence and also the fact that one of its complete rotation leads to an axial displacement of **1,5 mm.**

OBSERVATION

The opening between the wheel's front and rear is measured on a F=340 mm.

After obtaining the correct parallelism, tighten the lock nut at the required moment of **5 daNm.**



Three situations may appear:

PARALLELISM	REPARTITION	CORRECTION WHICH MUST PERFORMED
1. CORRECT	INCORRECT	Perform the same rotation number of the tie rod connecting rod on left side and on the right side until obtaining the same value "A".
2. INCORRECT right	CORRECT	Adjust the parallelism at the same value for left and side ensuring the same value "A" on both sides.
3. INCORRECT	INCORRECT	Perform first the repartition in order to balance the value "A" on each side, then adjust the parallelism (see Case 2).

CHECKING OF THE FRONT AXLE ADJUSTMENT

DIAGNOSIS

THE DEVIATION TO THE LEFT OR TO RIGHT AT STABLE SPEED

Perform the preliminary checking:

Wheels (front, rear) :

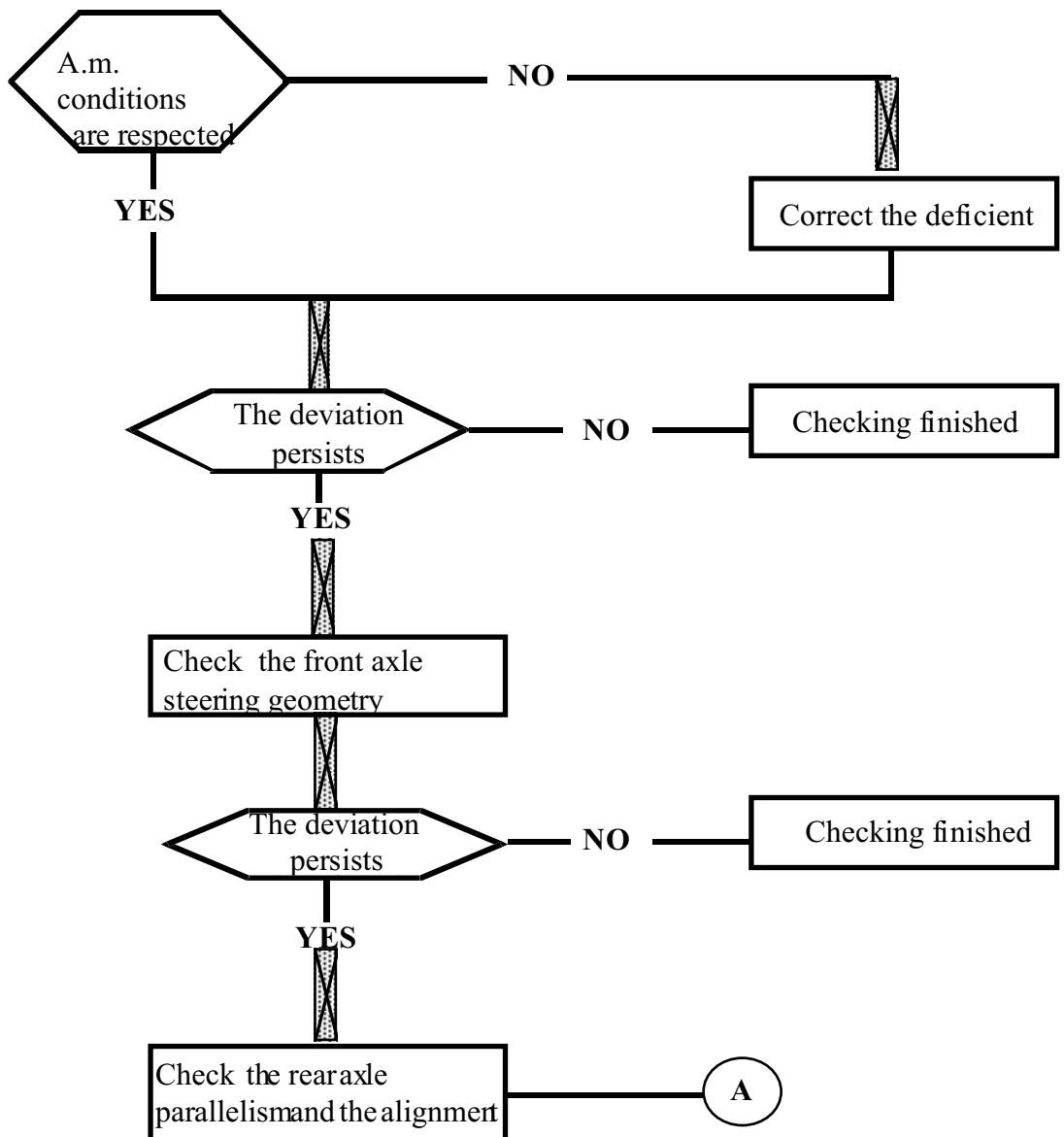
- pressure
- dimensions
- types
- balancing

Joints clearance:

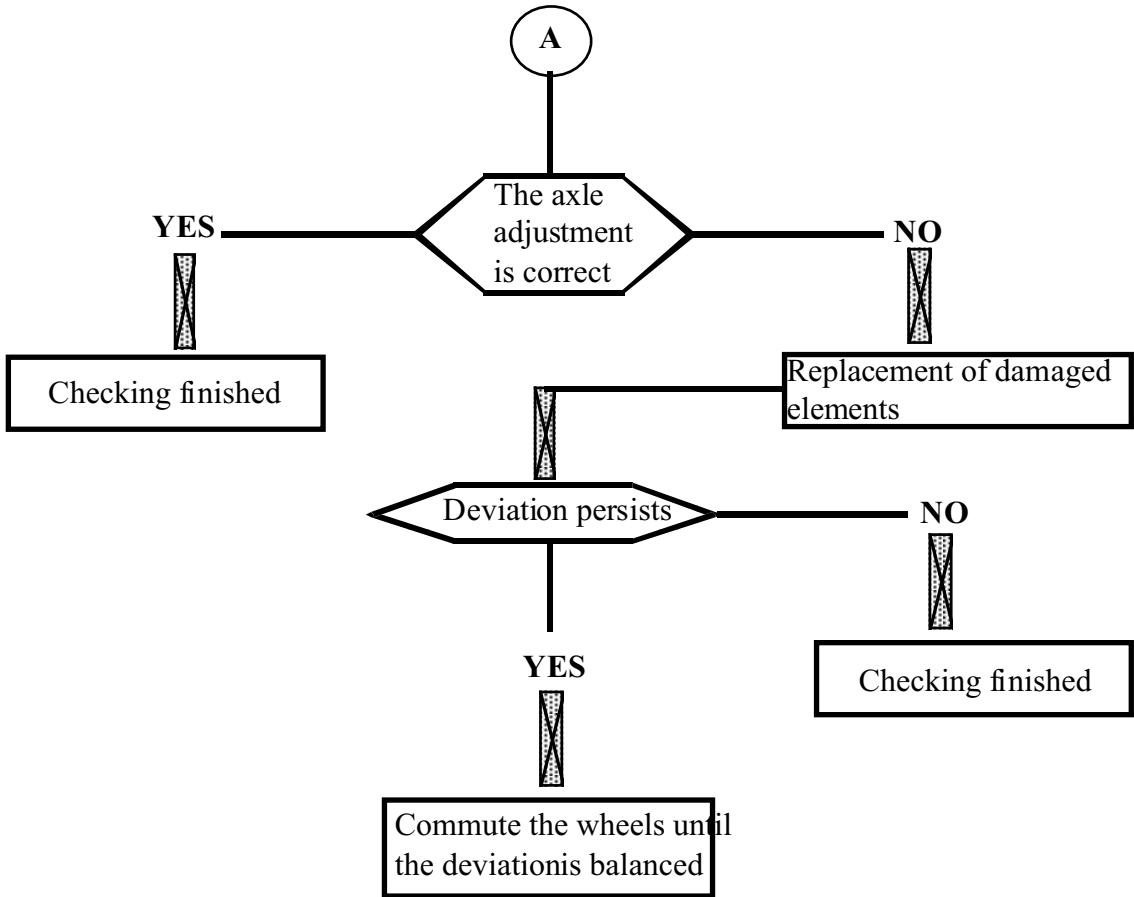
- bushings

Checking points heights

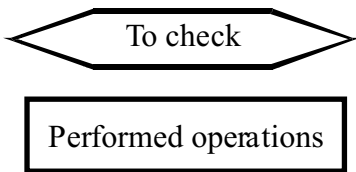
- simetrie



DIAGNOSIS



CAPTION :



CHARACTERISTICS


The front axle is composed of two joint half axles with independent wheels, designed for the suspension type McPherson.


The joints of front half axle arm are done by means of an elastic bearing (chassis side) and by means of a suspension ball joint (wheel side)

The transmission of the motion to the wheels is done by means of two planetary axles, not equal, with homocinetic tripod joints.

The wheel hub is assembled in the steering knuckle by means of a preset and sealed bearing.

The brake disks are aerated.

Tightening moments (daNm)	
Wheel attachment screw	7,5
Suspension arm shaft nuts	7,5
Attachment nut of the ball joint screw	5,5
The nut of the attachment screw of the steering knuckle with the shock absorber	7,5
Transmission nut	21,0
Steering ball joint nut	4,0
The attachment anti roll bar nut	2,5
The connecting strap screw	2,7
The attachment screw of the suspension ball joint on the arm	7,5
The attachment screws of the disk on the hub	2,5
Aux. connecting rod- assembled connecting rod end stop nut	5,0
Assembled connecting rod end- rack joint body	5,0

Tightening moments (daNm)	
Wheels attachmentscrews	7,5
Suspensionarm shaft nuts	7,5
Attachmentnut of the balljoint screw	5,5
Anti-roll bar bearings nuts	2,5
Balljoint attachmentscrews nuts on the arm	7,5
Strap screw	2,7

NOTE

The dismantling-remounting operations are identical for both half axles.

DISMOUNTING

Lift the vehicle on an elevator with two columns.

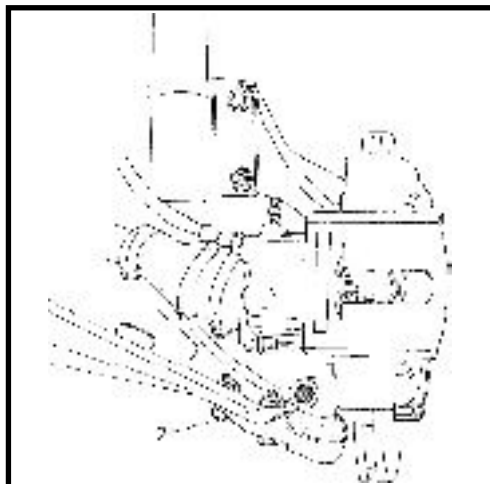
Dismount the two wheels.

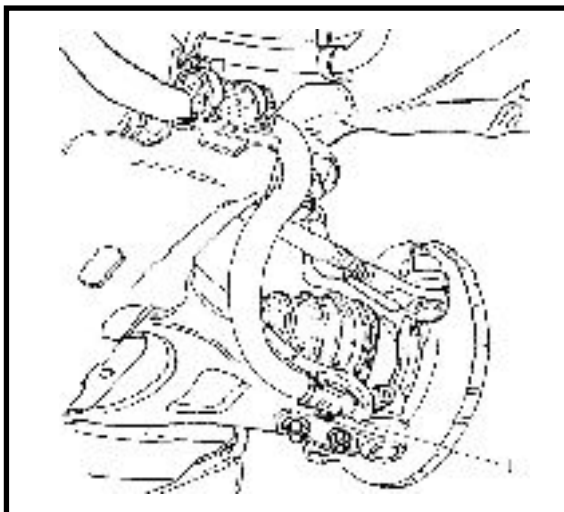
Loosen the attachment nuts (1) of the antiroll bar on the suspension arms.

Detach downward the antiroll bar.

Dismount :

- the suspension upper ball joint screw (2) and nut on the steering knuckle;
- the strap screw ;
- the nuts (3) and the arm attachment axles on the frame ;
- the arms.





RE MOUNTING

NOTE :

Ensure the presence of the protection plate (A) on the suspension ball joint axle.

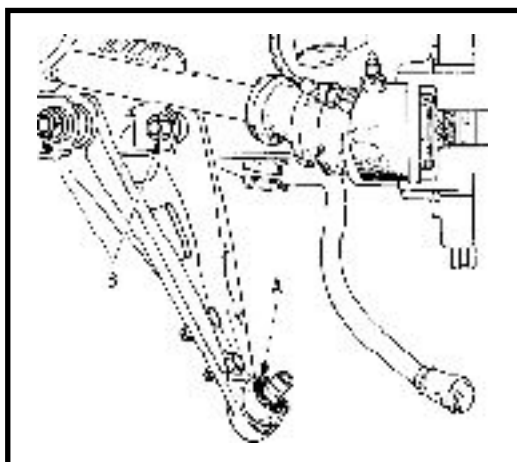
Perform the operations in following sequence:

- position the arm to the chassis without tightening the axle nuts (3).
- mount the ball joint in the steering knuckle
- fix the attachment screw and tighten its nut at the required moment;

Mount the wheel the with the vehicle on wheels continue with:

- remounting the antiroll bar by tightening at the required moment the attachment screws.
- tightening of the shaft arm nuts and fixing the strap to the upper part..

The tightening to the required moment of the elastic bushings of the suspension arms is performed observing the value $H1 - H2 = 80 \text{ mm}$.



SPECIAL TOOLS

P.F. 601	Mounting bushings device
P.F. 602	Bushing extractor

REPLACEMENT

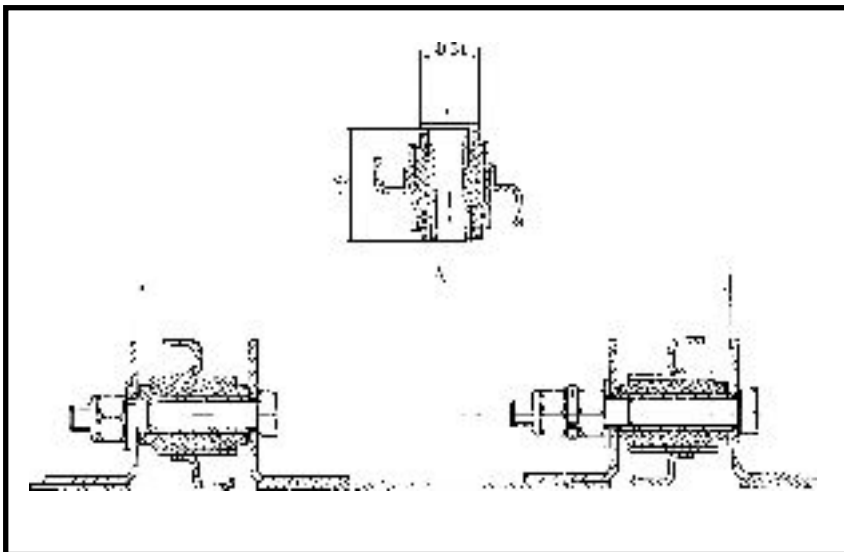
This operation implies bushings replacement one by one, in order to maintain their centering as to the arm shaft.

Dismount one of the bushings, by means of the TF 602 device, using a 31-mm outside diameter rod.

Mount the new bushing, observing the value $A = 239 \pm 0,5$ mm.

Dismount the other bushing, proceeding in the same shown way, in order to maintain the value $A = 239 \pm 0,5$ mm

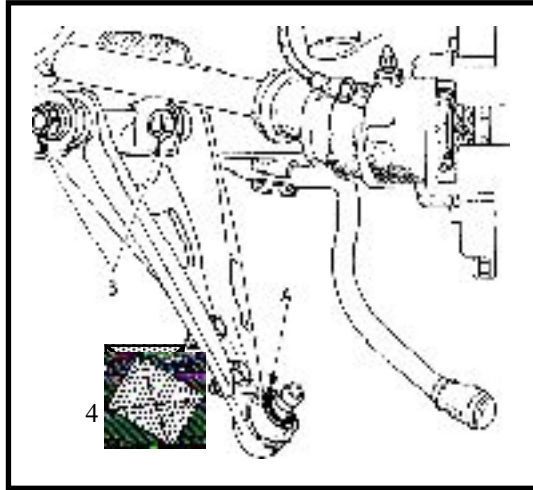
Mounting of the elastic bushings is performed by means of the device TF 601.



DISMOUNTING

Perform the same operations like dismounting the suspension arm.

Unscrew the two attachment nuts (3) of the arm shafts, without dismounting them.

**DISMOUNT :**

- the two ball joint attachment screws (4) on the arm;
- the ball joint.

REMOUNTING**NOTE :**

Ensure the presence of the protection plate (A) on the suspension ball joint axle.

Mount the suspension ball joint on the arm, by means of the two attachment screws and tighten their nuts at the required moment.

Perform then, the same operations as for suspension arm remounting.

BELLOWS REPLACEMENT

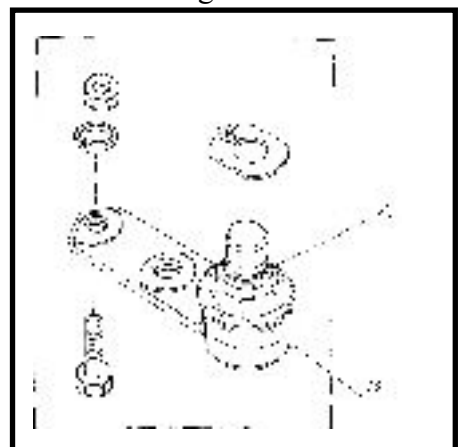
Dismount the damaged bellows.

Clean the ball joint in the area covered by the bellows (ball joint body and pin)

Fill the new bellows with approximate 3 g MOS2 special grease

Mount the new bellows on the ball joint

Place on the bellows by means of a resistant thread, the fixing clip (B), then the fixing clip A (F = 19).



SPECIAL TOOLS

FR 500 Pushing piston device

NOTE

In order to maintain the brake efficiency, the replacement of the brake pads shall be made only in complete kit.

Never fit brake pads of different makes and different qualities.

DISMOUNTING

Lift the vehicle by means of a two columns elevator;

Dismount the front wheel;

Disconnect the wear sensor wire;

Dismount : - the safety of the wedges (1);
- the wedges, by sliding them.

Detach the caliper assembly from the fork together with the flexible hose;

Remove : - the elastic blades
- the brake pads

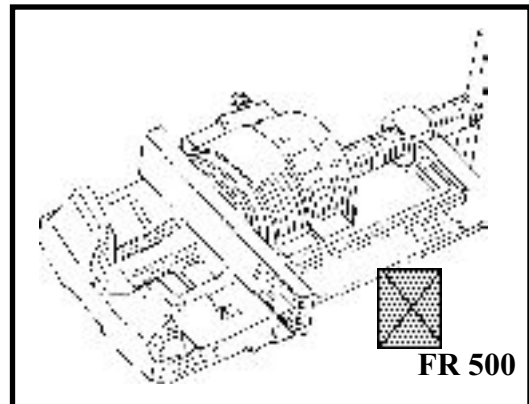
**NOTE**

It is forbidden to push the brake pedal after the calipers were dismantled from the fork.

If the brake pads are not fully used but on their friction surface, especially in the middle pad channel, there are material traces, it is recommended the cleaning of these surfaces in order to avoid the noise when braking.

REMOUNTING

Push the caliper piston by means of the **FR 500** special tool.



Remount :


- the brake pads in their places in the fork;
- the elastic blades;
- the caliper;
- the wedges and their locks.

Reconnect the wear sensor wire.

Press several times the brake pedal.

Mount the wheels.

Get down the vehicle from the elevator to the ground.

TIGHTENING MOMENTS (daNm) 	
Wheelnuts	7,5
Rigid duct on front flexible screw	1,5
Purging screw	1
Flexible hose - caliper	2

DISMOUNTING

Lift the vehicle by means of a two columns elevator.

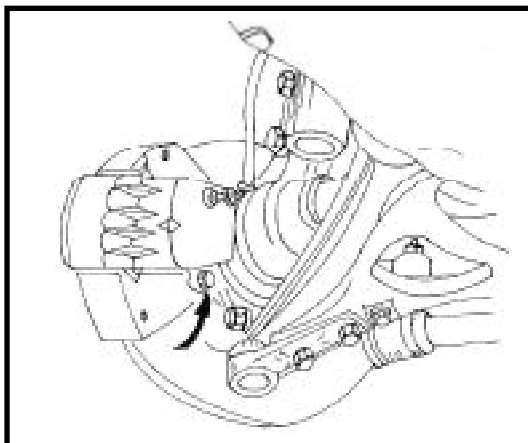
Dismount the wheel.

Disconnect the wear sensor wire

Drain the brake fluid from the reservoir

Remove the locks and the caliper wedges;

Unscrew the rigid duct screw from the brake flexible hose and detach the caliper assembly.



NOTE

If it is necessary to dismount the caliper fork, unscrew the two attachment screws M 12.

When remounting the fork, replace the Grower washers, tighten the screws at the required moment of 6.5 daNm then seal them with FIXAMED R 58.

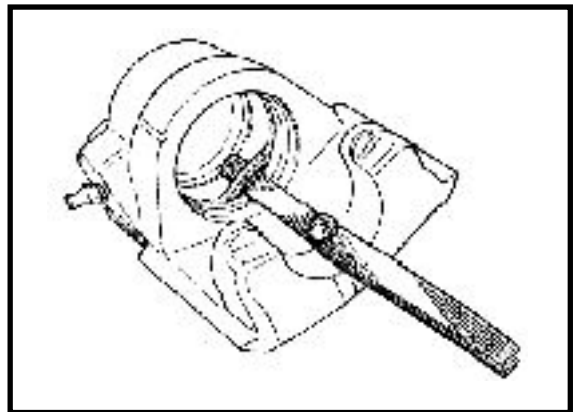
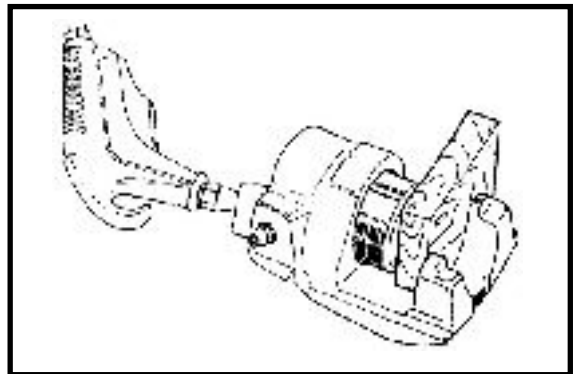
REPAIRING

Dismount the protection gasket.

Extract the piston using a wooden wedge and a compressed air source.

Remove the sealing gasket from its seat in the caliper groove by means of a steel blade.

Clean with alcohol the parts, replace the damaged ones, mounting being performed in the dismounting reverse order, after previously all parts have been oiled with brake fluid.



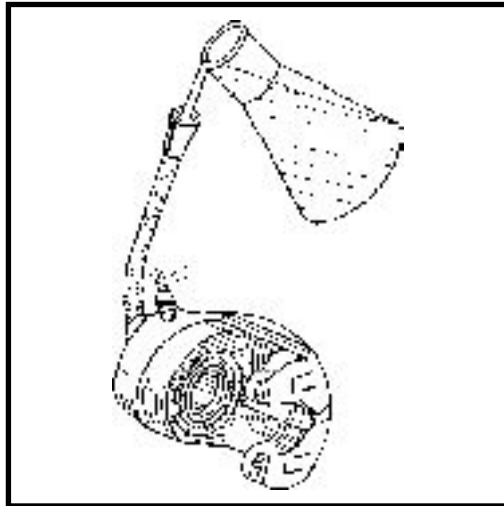
NOTE

Before remounting to the wheel, check the sealing of the caliper assembly.

REMOUNTING

Perform the dismounting operations in the reverse order plus the following operations:

- fill the caliper with brake fluid in order to facilitate the brake system purging;
- purging the brake system.

**BRAKE CALIPER SEALING CHECKING**

Connect to the caliper, a pressure gauge attached to a compressed air source.

Place a wooden wedge in order to block the piston.

Create a 0,3 bars pressure in the caliper.

Dip the caliper into a vessel with alcohol.

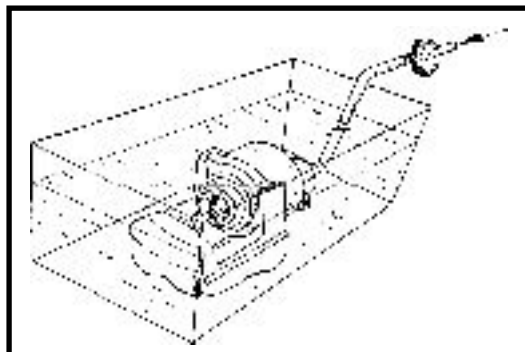
Move the piston several times to remove the air from the sealing gasket seat.

Check the sealing of the brake caliper at various pressures, without exceeding the pressure of 2 bars.

If the brake shows air leaks by the piston, perform at its dismounting.

Replace the piston, the gasket, or the caliper body, as the case stands.

Perform again the sealing test.



The brake disks can be not rectified.

A bigger wear or an important mark on the brake disk braking surfaces impose obligatory its replacement.

- The minimal accepted thickness: **19 mm**
- The maximum accepted axial deviation **0,1 mm** on a diameter of **F 215**.

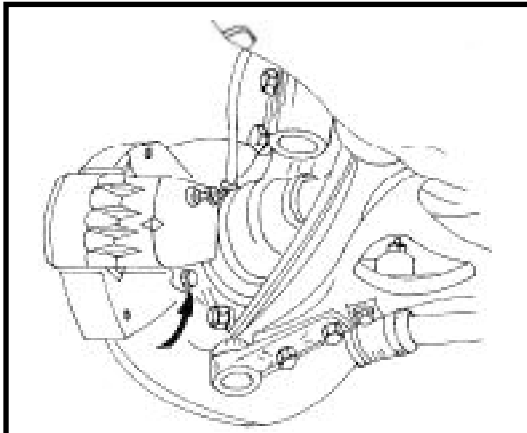
TIGHTENING MOMENTS (daNm)	
steering nuckle	6,5
Disk attachment screw on the hub	2,5
Front wheel steering knuckle nut	21
Wheel screws	7,5

DISMOUNTING

Lift the vehicle by means of a two column elevator.

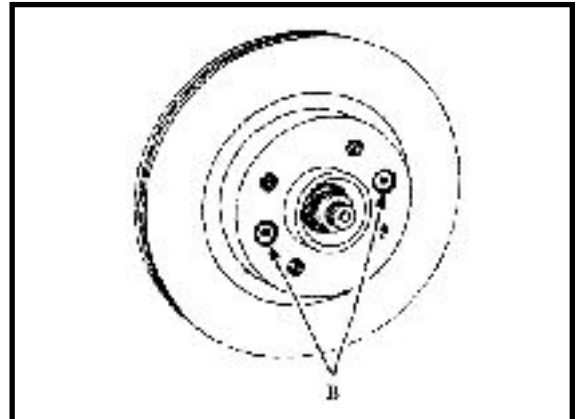
Dismount :

- the wheel;
- the two attachment screws M 12 (B) of the brake disk assembly on the steering knuckle;
- the brake pads;
- the two sunk screws attaching the disk on the hub.



Before remounting, check:

- the wear of the flexible hose;
- the wear of the brake pads and replace them if necessary.



REMountING

Remount :

- the disk on the hub by means of the two sunk screws M8 and tighten them to the required moment;
- the brake disk assembly on the steering knuckle, tightening the M 12 screws at the required moment.

Press the brake pedal several times, in order to bring the piston in contact with the brake pads.

NOTE :

In case of replacing the brake disk it is absolutely necessary to replace the brake pads.

SPECIAL TOOLS

Hub disk extractor	PF600
Ball joint extractor	PF476

TIGHTENING MOMENTS (daNm) 

Wheel attachmentscrew	7,5
Steering ball joint nut	3,5
Transmission nut	21
Attachmentforkscrew onsteeringknuckle	6,5
The screw nut of the steering knuckle attachment withthe shock absorberleg	7,5
The attachmentscrew nut of the ball jointwiththe steering knuckle	5,5

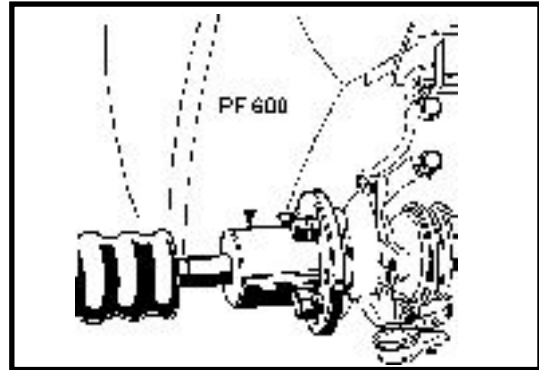
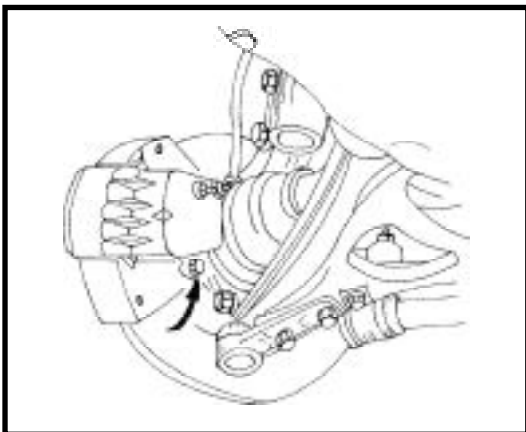
DISMOUNTING

Disconnect the battery.

Lift the vehicle by means of an elevator with two column.

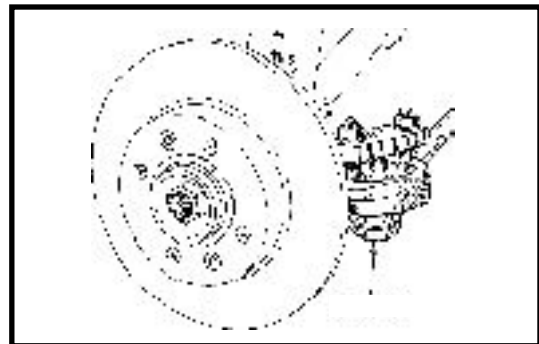
Dismant :

- the wheel
- the brake disk assembly together with the flexibleconnection.
- the transmission gear nut.
- the brake disk assembly by means by means of the **PF 600** extractor.



Continue by dismantling the steering knuckle, observing the operations sequence:

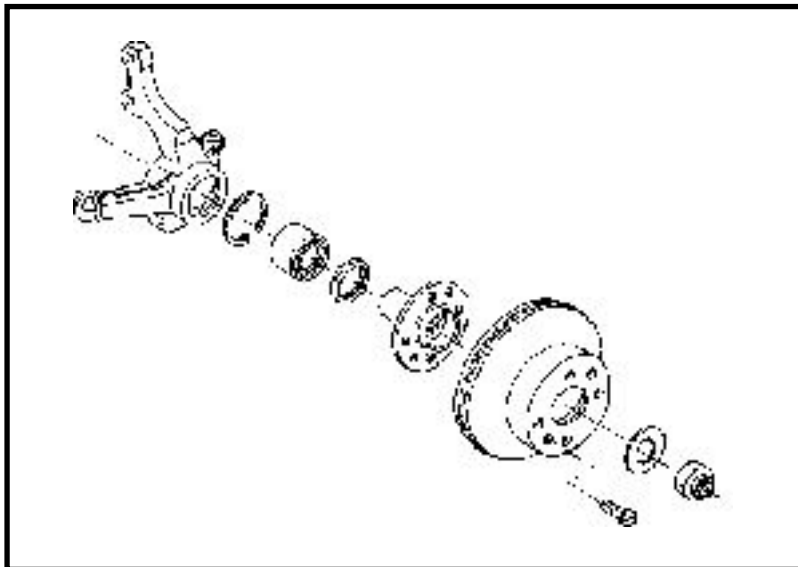
- dismount the steering ball joint nut;
- depress the steering ball joint by means of the **PF 476** extractor;
- dismount the two screws that attach the steering knuckle on the shock absorber;
- dismount the attachmentscrews that attach the steering ball joint – steering knuckle;
- detach the steering knuckle.



REMOUNTING**NOTE :**

*Before remounting check the wear of the bearing.
The bearing shall be replaced when the grease is flown.*

Position and press the steering knuckle together with the “hub – disk” assembly performing the operations in the reverse order after previously having greased the steering knuckle grooves.



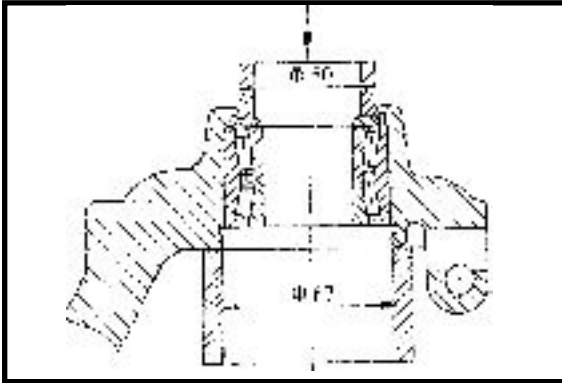
DISMOUNTING

Dismount the steering knuckle (see chapter "Dismounting steering knuckle")

Remove the safety ring from the interior of the steering knuckle;

Depress the bi-conical bearing, using a \varnothing 50 mm outer diameter rod.

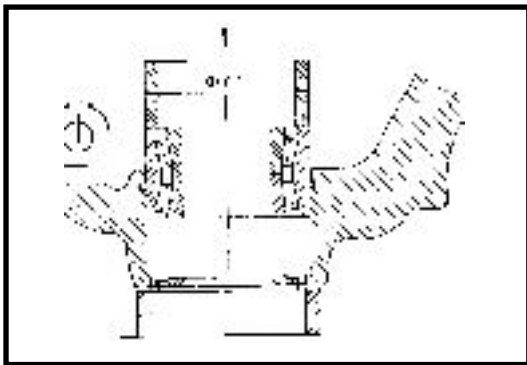
Place the steering rod using a bushing with inner diameter **F 67 mm**.

**REMOUNTING**

Introduce in the steering knuckle the bearing support washer

Press the bearing in the steering knuckle, by means of a 63 mm diameter bushing.

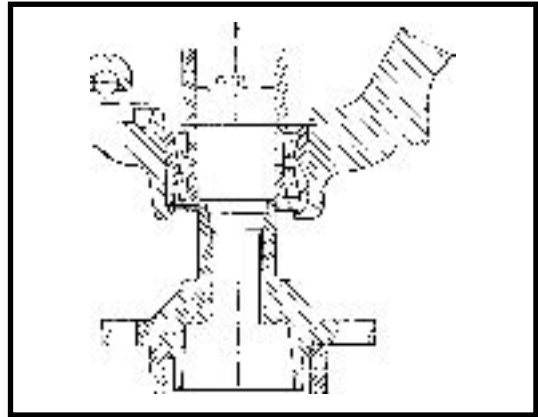
Mount the safety ring in the steering knuckle

**NOTE:**

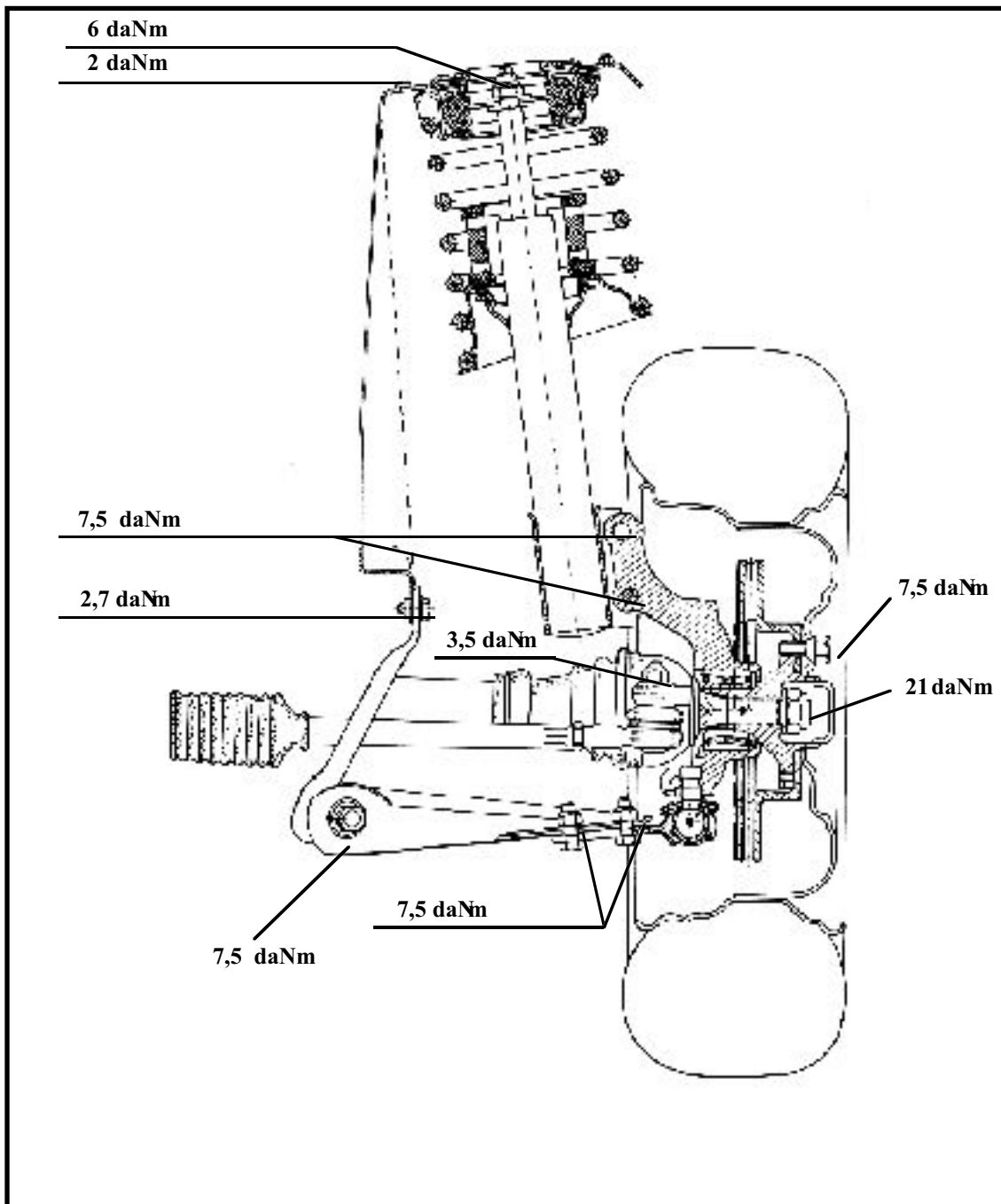
The operation shall be performed so that bushing is not pressed on the bearing support washer, in order to perform a correct mounting and not to damage the bearing.

The steering knuckle-bearing assembly shall be placed above the hub-disk assembly and after centering the support washer, press the bearing on the hub, using a bushing with the inner diameter of **F 36 mm** and an exterior diameter of **F 40 mm**.

Continue with the mounting of the steering knuckle assembly on the vehicle (see the chapter "Remounting steering knuckle")



Helical springs, hydraulic shock absorber with double effect and anti-rollbar.

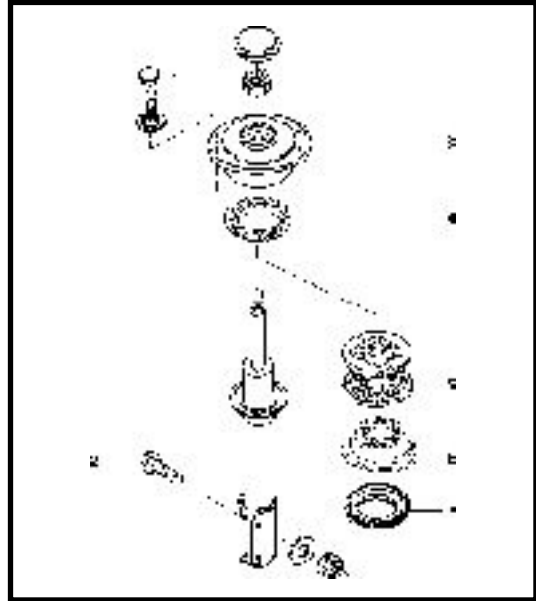


TIGHTENING MOMENTS (daNm) 

Shock absorber rod nut	6
Shock absorber lower attachment nut	7,5
Shock absorber upper attachment screws	2

The shock absorbers are stored in the spare parts warehouses/shops in horizontal position. In these conditions, it is possible that shock absorbers working vertically to get depressed.

Therefore, before mounting on the vehicle, it is sufficient to perform the shock absorbers pressing, by alternatively shifting the shock absorber rod (upwards and downwards), the shock absorber being in vertical position.

SHOCK ABSORBER

1. Upper attachment nut
2. Lower attachment screw
3. Upper catch
4. Upper plate
5. Shock buffer
6. Lower plate
7. Axial bearing

FRONT SPRING

Coil diameter (mm)	Length under load (mm)
F 12,5	194 +/- 10 / 330 daN

NOTE :

It is necessary that the springs of every axle have the same characteristics.

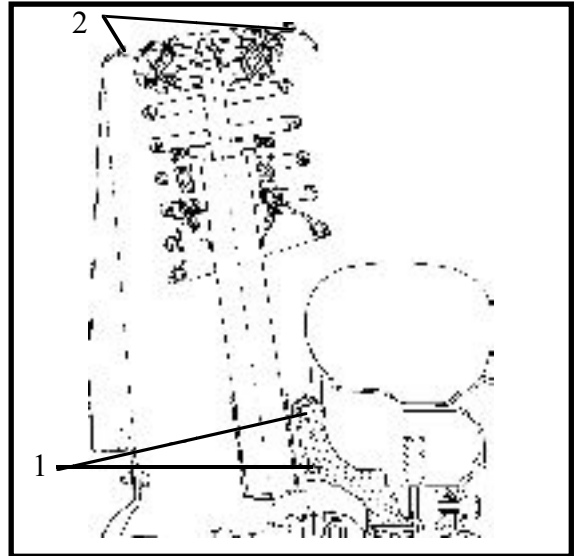
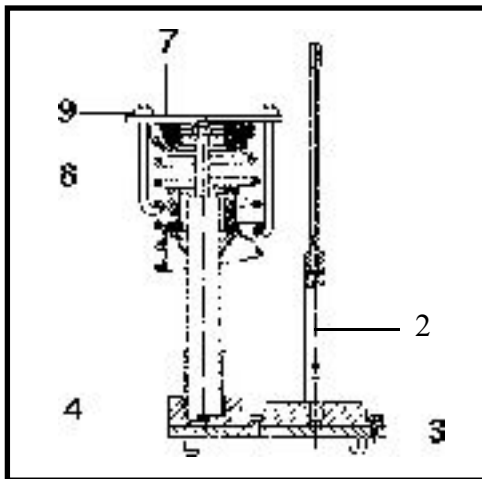
DISMOUNTING SPRING-SHOCK ABSORBER ASSEMBLY OFF THE VEHICLE

Lift the vehicle in the part where performing the dismantling

Dismant:

- the wheel
- the two lower attachment screws of the shock absorber leg (1).
- the two upper attachment screws of the shock absorber on the carriage body (2).

Take out the assembly spring – shock absorber, by pressing on the lower arm in order to avoid the shock absorber came in contact with the transmission bellows.

**SEPARATE SPRING FROM SHOCK ABSORBER**

Place the shock absorber on the shock absorber support (4), of the base plate (3) of the SUS 600 device.

Place the compression plate (7) on the spring upper catch and position the rods grips (8) on the spring lower last but one coil.

Compress the spring by alternatively tightening the nuts (9) till release it from the lower plate of the shock absorber.

Dismant the upper attachment nut of the shock absorber by means of the SUS 601 wrench.

Take out the spring.

Place the spring on the SUS 600 device shaft (2).

Put on the shaft the lock bushing (6), the spacer (5), and tighten to the required moment the crank (1) till the lock bushing (6) comes into contact with the upper catch of the shock absorber.

Unscrew alternatively the nuts (9) and take out the plate (7) and the rods grips (8).

Release the spring by means of the crank (1) and detach from the shaft (2), the upper catch of the shock absorber, the upper plate, and the spring.

SPRING-SHOCK ABSORBER REMOUNTING ON THE VEHICLE

Place the spring on the **SUS 600** device shaft (2).

Position on the spring the upper plate and the upper catch of the shock absorber.

Put on the shaft the lock bushing (6), the spacer (5).

Compress the spring by means of the crank (1).

Place the compression plate (7) on the upper catch and position the rods grips (8) on the spring last but one coil.

Tighten the nuts (9) till the rods grips (2) came in contact with the spring coil.

Release the crank (1) and detach the compressed spring from the shaft (2).

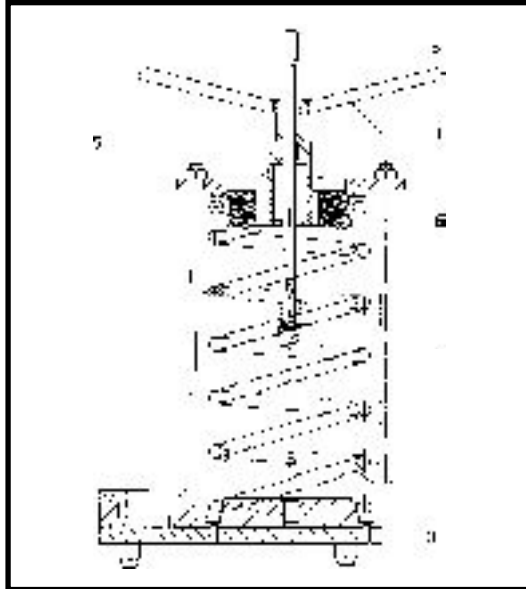
Place the shock absorber in the support (4).

Place on the shock absorber the axial bearing, the lower plate, the buffer, and the spring.

Mount the upper attachment nut of the shock absorber by means of the SUS 601 wrench and tighten at the required moment.

Unscrew the nuts (9) and take out the plate (7) with the rods grips (8).

Mount the spring-shock absorber assembly on the vehicle in the reverse order of dismounting.



TIGHTENING MOMENTS(daNm)

Screws for attaching the elastic bushings clamps on longitudinal girder	2,5
Clamps screws for attaching bushings on arm	2,5

FRONT ANTI-ROLL BAR

Diameter (mm)

Φ 24

DISMOUNTING

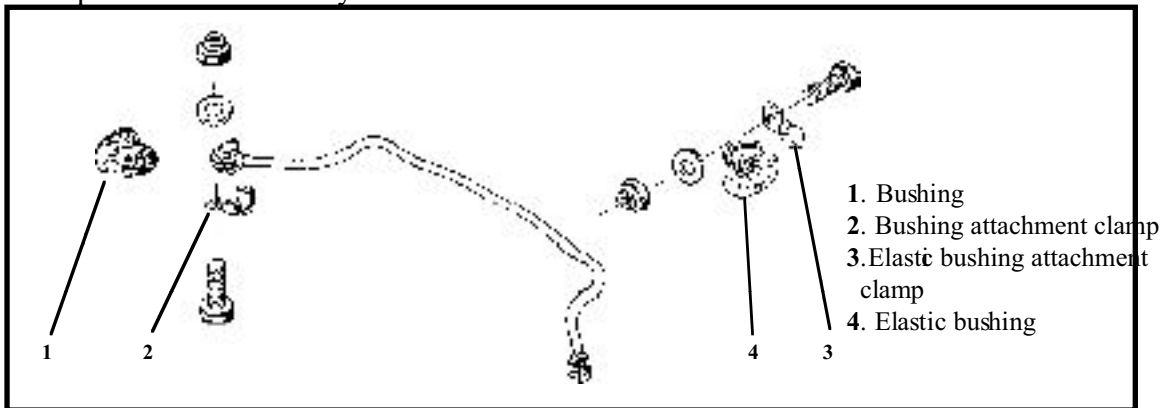
Unscrew:

- the screws of the elastic bushings attachment clamp on longitudinal girders;
- the attachment clamps screws on arm.

Dismount the anti-roll bar.

Check the state of the elastic bushings and bushings.

Replace them if necessary.



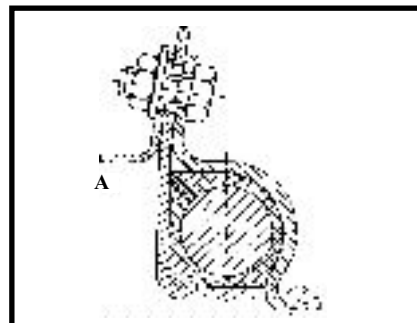
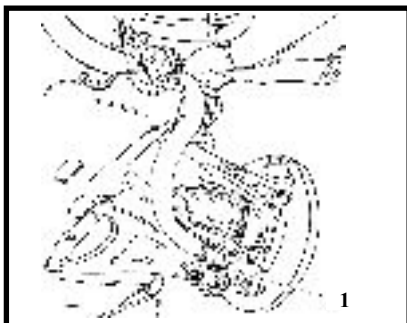
REMOUNTING

Mount the bushings and anti-roll bar attachment elastic bushings.

Mount the anti-roll bar.

Press the front axle at half load.

Tighten at the required moment, the screws of bushing attachment clamps on the arm and those of the elastic bushings attachment on longitudinal girder (the mounting position of the elastic bushings shall be with the slot (A) towards the clamp attachment screw on frame).



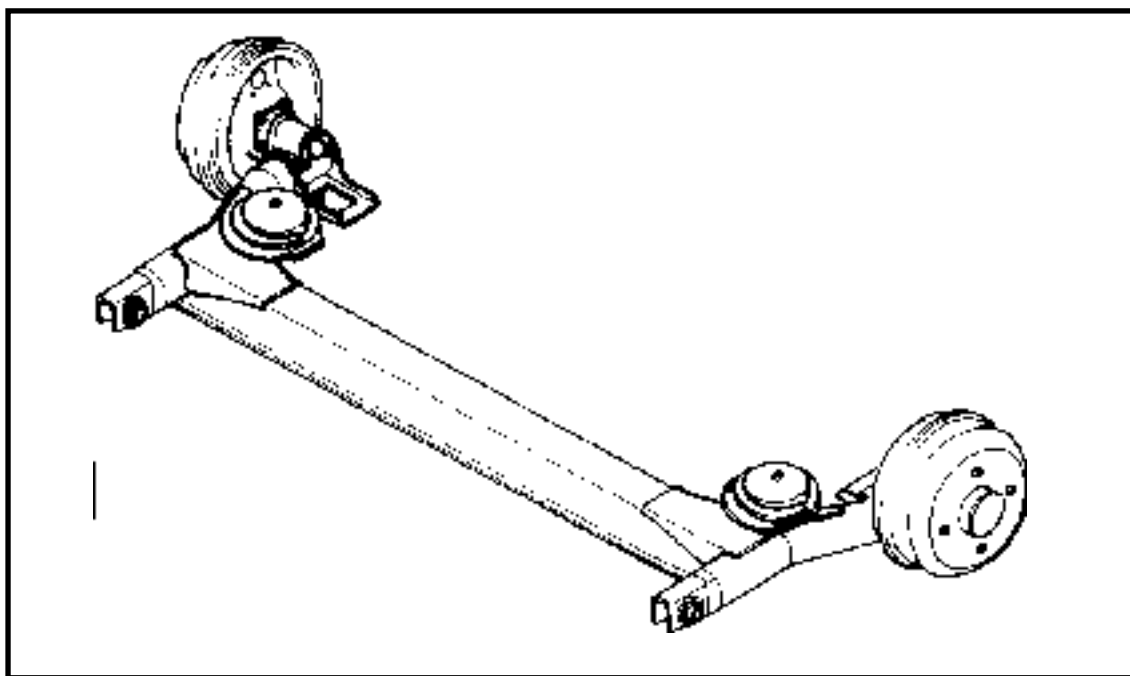
CHARACTERISTICS

The rear axle is composed of an axle having a “U” shaped torsion profile to which arms are welded.

For the transversal stability and the resistance fatigue improvement of the cross- bar, the axle is equipped with a **F 21-mm** diameter stabilizer bar. The bar is inserted by welding on both ends in the axle side arms.

The connection of the axle with the chassis is realized by elastic bushings of the spiral spring and the double effect telescopic shock absorber.

The drum and the hub constitute a common body, and are mounted on the steering knuckle by means of a be-conical bearing, sealed and pre-set.



SPECIAL TOOLS

DENOMINATION	CODE
Drum cover pliers	R0 441
Hub extractor	PF 600
Dismounting pliers for shoes return spring	FR03
Shoes protectors	FR09
Pliers for maintaining brake cylinders pistons	FR05A
Dynamometric wrench	MOT30
Comparing dial gauge	R054A

TIGHTENING MOMENTS (daNm)	
Wheel attachment screw	7.5
Axle attachment nut	8.5
Shock absorber bottom attachment nut	8.0
Rear axle arm elastic bushing axle nut	12.0
Brake rigid piping connection screw	1.5
Purging screw	1.0

DISMOUNTING

Lift the vehicle on two columns elevator.

Dismount the two rear wheels.

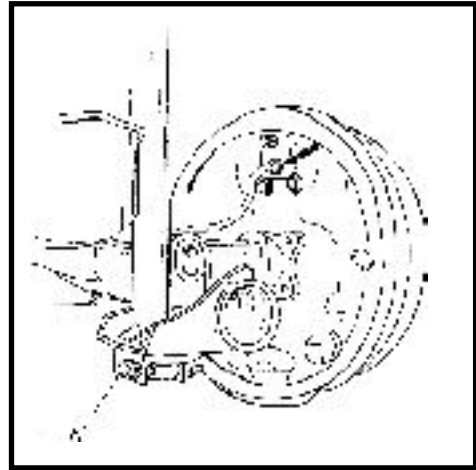
Drain the braking system.

Dismount the brake drums.

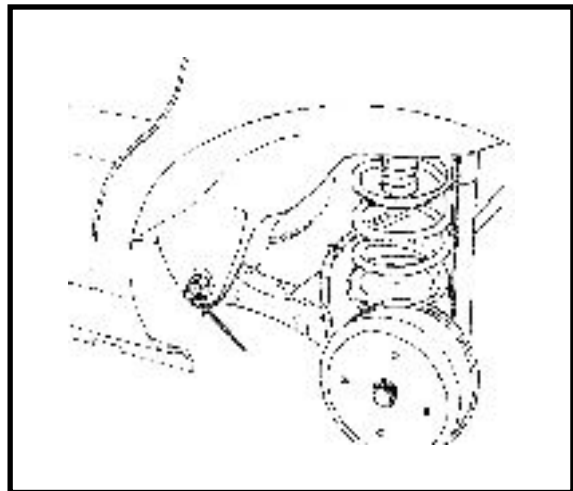
Disconnect the two-connector screws of the brake rigid piping of the brake cylinder.

Loosen the connections of the secondary cable from the hand brake levers and remove the cable from the brake plates.

Dismount the operating rod support of the brake limiter from the right side axle arm, after previously both arms protectors have been dismantled.



Dismount the lower attachment screws (A) of the shock absorber with the rear axle. Push upward the shock absorbers. Dismount the springs.



Dismount the connecting screws (B) between the rear axle arms and the chassis. Dismount completely the rear axle. Check the elastic bushings condition.

REMOUNTING

Before remounting, grease with grease the attachment screws of the rear axle shock absorber bottom and the chassis, consequently, the connecting screws rear axle-chassis.

Line up the arms bearings right to the chassis supports, mounting them without tightening at the moment, the nuts with the screws, assembling the axle to the chassis.

Remount the springs.

Compress the axle so that rear springs bear on the tray and set back the shock absorber inner attachment screws.

Tighten at the prescribed moment the connecting screws.

Perform the dismounting operations in the reverse order.

Check the maximum allowed axial clearance of the bearing using a dial gauge and the support RO541A.

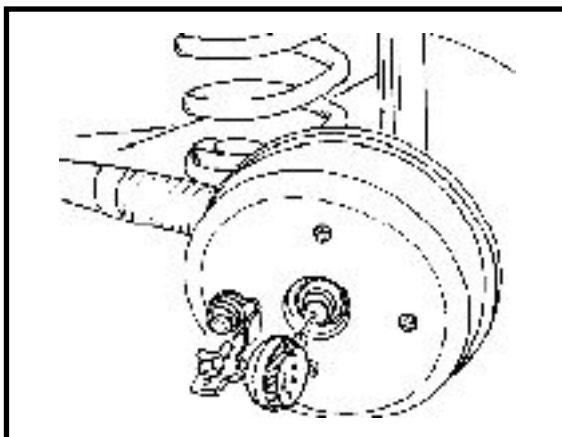
Note

The maximum allowed axle clearance of the bearing is 0.05mm.

Mount the rear wheels, lower the vehicle on the ground.

Refill with fluid the brake assembly.

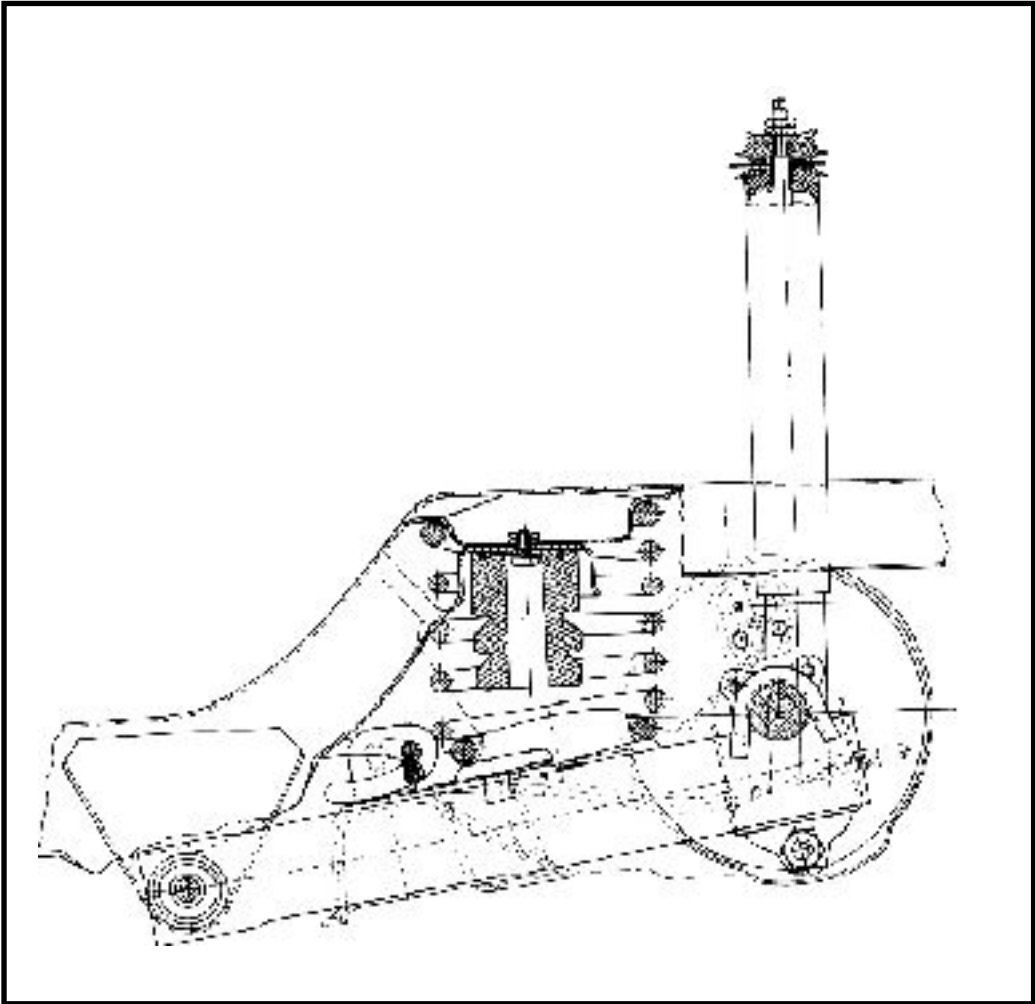
Purge the braking system.



Check and adjust the hand brake cable.

Adjust the clearance at the limiter operating rod (see chapter 37- Brake limiter adjustment).

Spiral spring and double effect shock absorber.



SHOCK ABSORBER

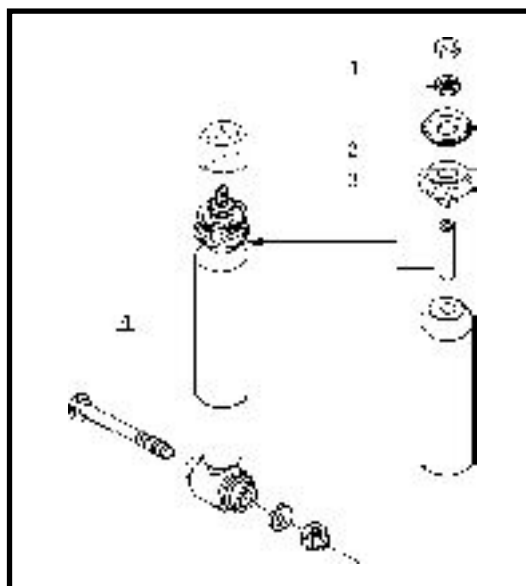
TIGHTENING MOMENTS	
Shock absorber inner attachment nut	8
Shock absorber upper attachment nut	1,45+/-0,3



NOTE
The storage of the shock absorbers in the spare parts shops is made in horizontal position.

In these conditions, the shock absorbers, which are vertically functioning, may de-strike.

So, it is enough that before mounting on the vehicle, to proceed on striking the shock absorbers by alternative moving up and down of the shock absorber rod in vertical position.



1. Upper attachment nuts
2. Protector
3. Upper buffer
4. Inner attachment screw.

DISMOUNTING

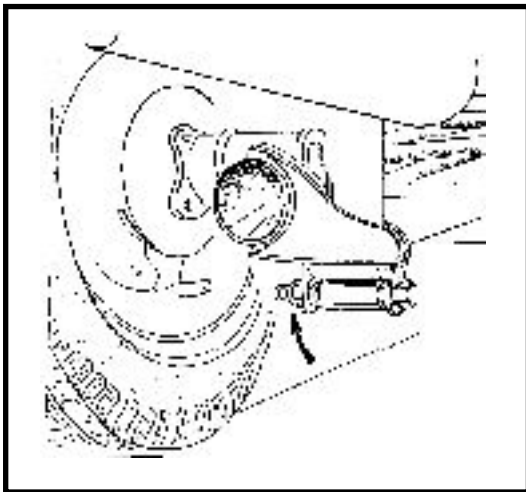
- Remove the shock absorber protector (2).
- Dismount the upper attachment screws (1) (through the trunk).
- Loosen the screws of the wheel.
- Dismount the wheel.
- Lift the vehicle by means of an elevator and dismount the inner attachment screw (4).
- Dismount the shock absorber.

REMountING

- Perform in reverse order the dismounting operations.
- Remount:
 - the shock absorber at the lower side;
 - the shock absorber at the upper side.
- Tighten the nuts at the required moment.

REAR SPRING	
Coil diameter (mm)	Length under load (mm)
F 14,3	230 +/- 10 / 330 daN

DISMOUNTING



Place the locking clamp of the **SUS 600** device in order to maintain the spring compressed.

Loosen the screws of the wheel on the side where the dismounting is performed.

Dismount the wheel.

Dismount the shock absorber lower attachment nut and screw.

Push the axle and remove the spring.

REMOUNTING

Perform in reverse order the dismounting operations.


NOTE

Make sure that springs of each axle have the same characteristics.

The two brake drums having the same diameter; the rectifying of one of them obligatory implies the same operation for the other one.

SPECIAL TOOLS

DENOMINATION	CODE
Plug extracting pliers	RO441
Drum extractor	PF600

TIGHTENING MOMENTS (daNm)	
Wheel attachment screw	7.5
Steering knuckle nut	16

DISMOUNTING

Extract the plug out of the drum using the extracting pliers **RO441**.

Release the hand brake, loosening the secondary cables in order to allow the hand brake lever return.

Pass a screwdriver through the wheel attachment hole from the drum and operate on the brake lever sector loosening the its gearing with the hand brake lever.

Dismount:

- the steering knuckle nut and washer;
- the drum using **PF600** extractor.



REMOUNTING

Clean the drum and the brake plate assembly by means of a cleaner (vacuum cleaner) for brake.

Place back:


- the drum;
- the steering knuckle washer and nut tightening them at the required moment;
- the drum plug.

Adjust:

- the shoes by applying a repeated pressure to the brake pedal;
- hand brake (see **chapter 37-“Controls”**).

SPECIAL TOOLS

DENOMINATION	CODE
Dismounting pliers for shoes return spring	FR03
Plug extractor pliers	RO441

TIGHTENING MOMENTS (daNm)	
Wheel attachment screw	7.5
Rear wheel steering knuckle nut	16
Purging screw	1
Brake rigid piping connection screw	1.5

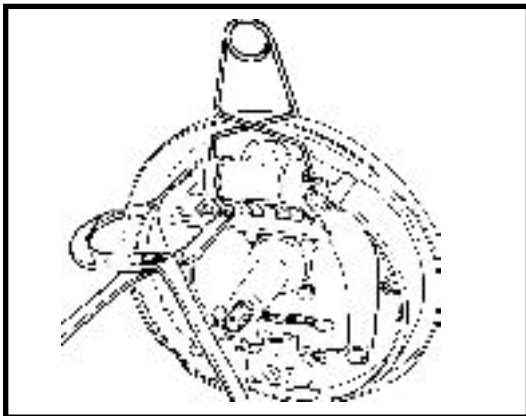
DISMOUNTING

With the vehicle placed on an elevator with two columns, dismount:

- the wheel;
- the drum plug;
- brake drum;
- upper spring of shoes return, using

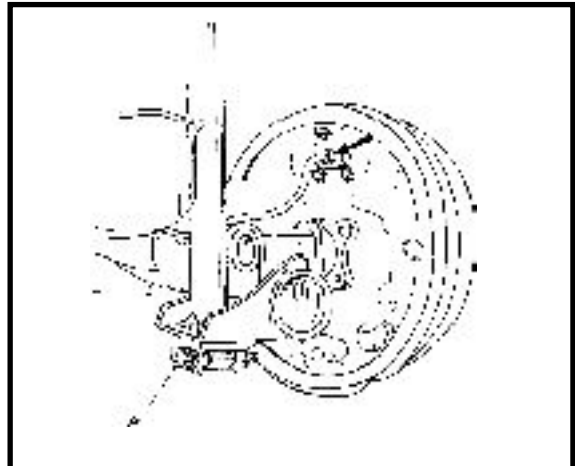
pliers **FR03**.

Space the brake shoes.



Unscrew:

- the rigid piping connection on the brake cylinder by means of an open-end wrench;
- the two attachment screws of the brake cylinder on the brake plate, loosening the connection.



Check the condition of the shoes brake gaskets; if oil traces are present, replace them.

REMOUNTING

Clean the drums and the brake shoes assembly by means of a cleaner (vacuum cleaner) for brake.

Perform in reverse order the dismounting operations.

Purge the braking system (see chapter 38).

BRAKE CYLINDER

Adjust:

- the shoes, by applying a repeated pressure to the brake pedal;
- the rear axle bearing clearance.

Mount the wheel.

Lower the vehicle from the elevator.

Purge the braking system (see chapter 38).

Adjust the hand brake.

REPAIRING

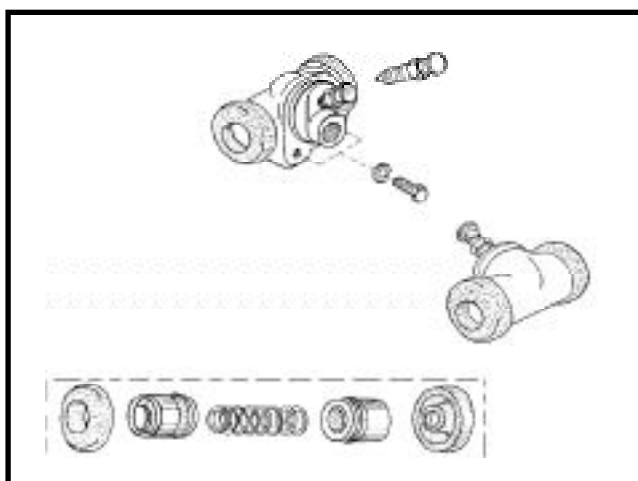
DISMOUNTING

Dismount the brake cylinder off the vehicle;

Dismount:

- the purging screw;
- the protection bellows;
- the Ö22 pistons assembled with the pressure gaskets.

Check the condition of the cylinder boring, any trace of wear, oxidation or scratches implies the replacement of the assembled brake cylinder.



If the cylinder components are in a good condition, lubricate them with brake fluid and mount them in the reverse order of dismounting.

Check the easy moving of the assembled pistons in the cylinder boring.

Mount the brake cylinder on the plate;

Mount the wheel brake drum.

Check the adjustment of the hand brake.

Purge the braking system.

SPECIAL TOOLS

DENOMINATION	CODE
Plug extracting pliers	RO441
Dismounting pliers for shoes return spring	FR03
Pliers for maintaining brake cylinders pistons	FR05A

TIGHTENING MOMENTS (daNm) 

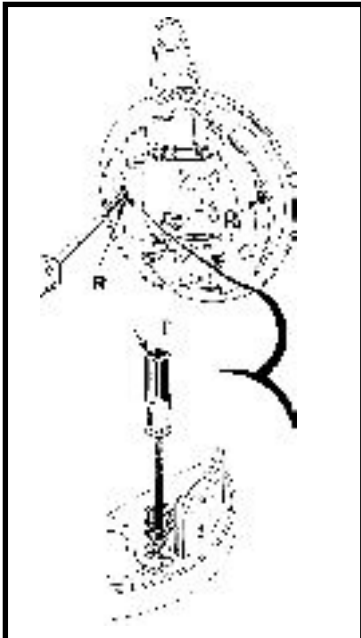
Wheel screw	7.5
Rear wheel steering knuckle nut	16

DISMOUNTING

The replacement of brake shoes must be performed in complete set, never mount the brake shoes equipped with brake linings of different brands and qualities.

Dismount :

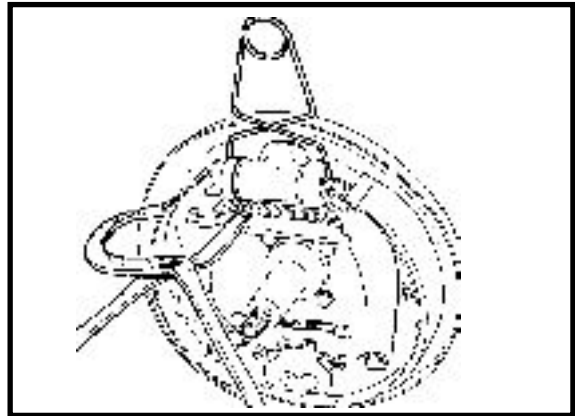
- the brake drum (see the corresponding paragraph);
- the two maintenance springs (R) of the shoes with a brake cylinder rod (T).



By means of the pliers FR05A the brake cylinder pistons are immobilized.

Remove the return upper spring of the shoes using the pliers FR03.

Release the end of the hand brake cable off the hand brake lever.

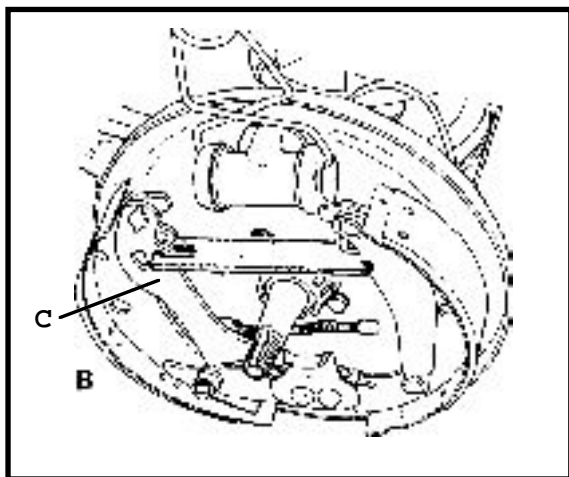


Swing the adjustment lever (C) up to the moment it comes into contact with the rear wheel steering knuckle.

Distance the shoes from the plate.



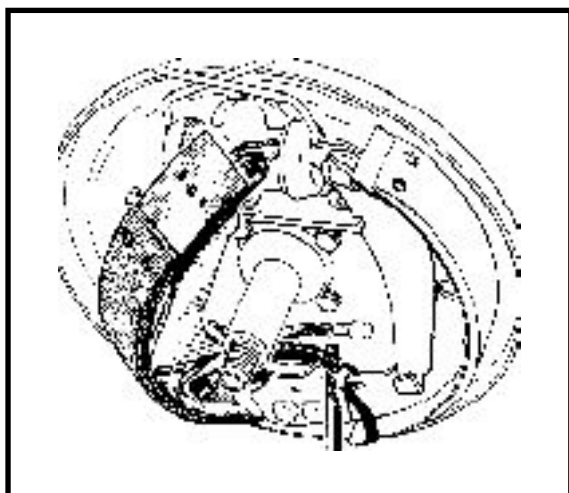
Dismount the auxiliary connecting rod (B) connection from the adjustment lever (C).



Bring the adjustment lever in the initial position.

Rotate the compression shoe with 90 degrees.

Dismount the lower spring.



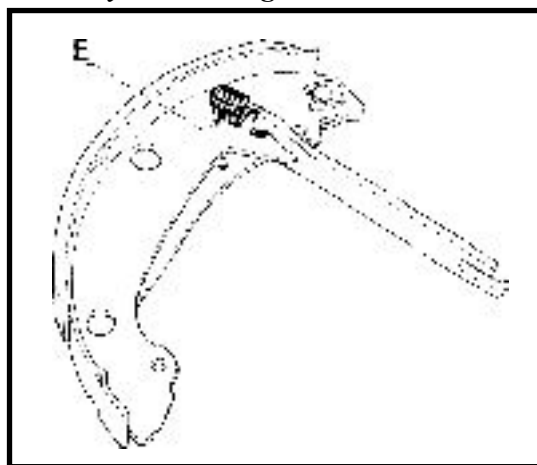
Remove the (front) compression shoe, then the tensioning one.

REMOUNTING

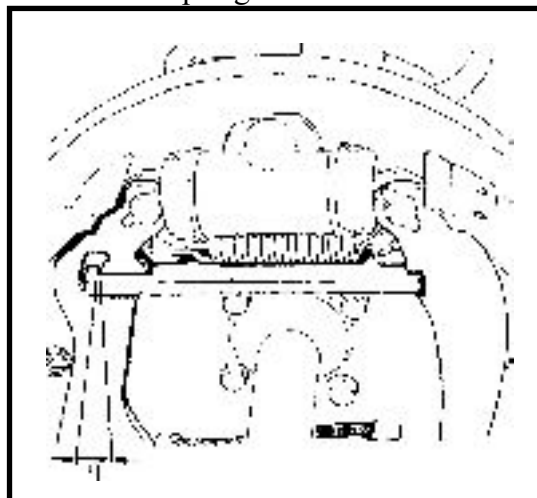
Perform in reverse order the dismounting operations.

NOTE

The adjustment of the device for the automatic clearance taking over, is depending of the spring tensioning caught between the rear shoe and the auxiliary connecting rod.



Measure the value $H=1\text{mm}$, between the auxiliary connecting rod and the front shoe. If the value H is not correct, replace the auxiliary connecting rod spring and the shoes return springs.



SPECIAL TOOLS

DENOMINATION	CODE
Plug extracting pliers	RO441
Drum extractor	PF600

TIGHTENING MOMENTS (daNm)	
Steering knuckle nut	16
Wheel attachment screw	7.5

CHECKING

Check by means of a comparing device attached on the drum, the axial clearance:
0 – 0.15 mm max after mounting and tightening at the moment of **16 daNm**.

DISMOUNTING

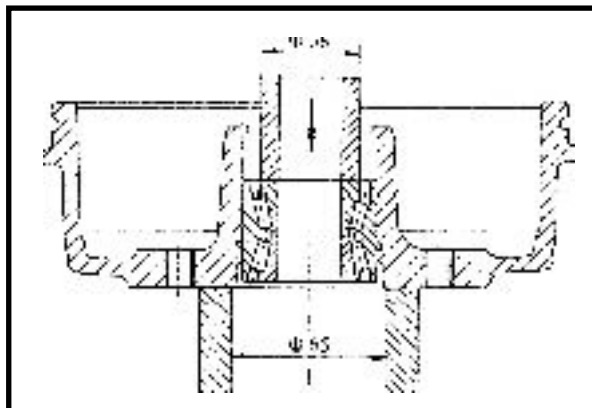
Dismount:

- the drum plug by means of the extracting pliers **RO441**;
- rear wheel steering knuckle nut;
- the drum (see the corresponding paragraph).

Dismount from the drum:

- the boring lock;
- the bearing by means of a tube **F38mm**.

If necessary, use the extractor **CV28A**, in order to extract the bearing inner ring, remained on the steering knuckle.



REMOUNTING

By means of a tube with the outer diameter **Ö51mm** and a press, mount the bearing up to the connection with the drum support surface (carefully not to damage the sealing ring).

Set back:

- a new lock;
- the drum on the steering knuckle, previously greased with grease;
- a new nut **M20 x 1.5** and tighten at the required moment;
- the drum plug.

Adjust:

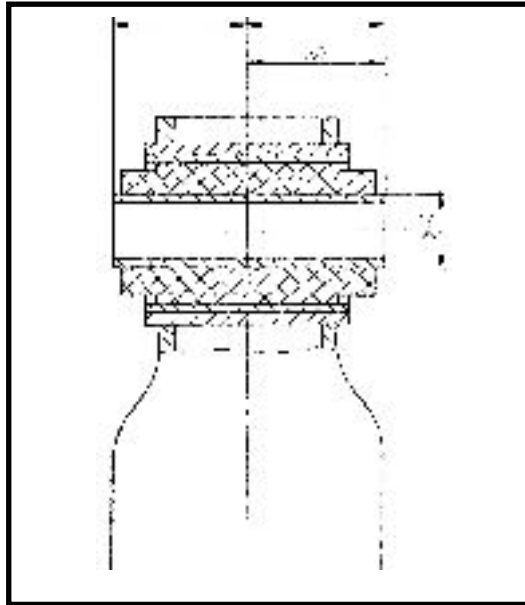
- the shoes by applying a repeated pressure on the brake pedal;
- hand brake (see chapter 37-“Controls”).

ELASTIC BUSHING REPLACEMENT

Dismount by means of a press, the worn bushing, using a sleeve with the outer diameter **D=39mm**.

Press the new bushing.

When pressing, observe the value : **A=30mm**.

**NOTE**

For the elastic bushing mounting use the PS701 device, and for dismounting the extractor PS700.

RIMS

The wheels identification marking is represented in two ways:

- engraved marking for steel rims
- cast marking for aluminum rims

The marking enables acknowledgment of the main wheels dimensions criteria. This marking may be:

complete,

Example: 5 1/2 B 13 4 CH 46 ; 5 1/2 J 13 4 H2 46

or simplified,

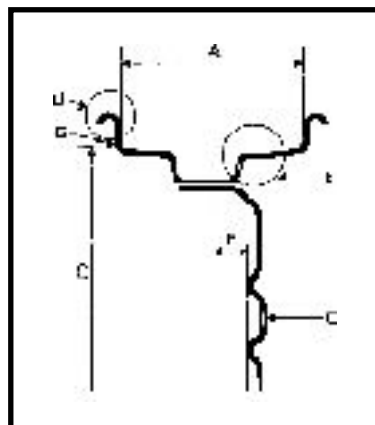
Example: 5 1/2 B 13 ; 5 1/2 J 13 H2

	A	B	C	D	E	F
Wheels type	Width (in inches)	The rim edge profile	Æ Nominal rim (in inches)	Number of wholes under the tire bead	Tire staffing profile	Offset (in mm)
5 1/2 B 13 4 CH 46	5 1/2	B	13	4	CH	46
5 1/2 J 13 4 H2	5 1/2	J	13	4	H2	46

The wheel bolts (studs) are situated on a diameter of **100 mm**.

Maximum axial runout : **1 mm** measured on the rim edge (in G).

Maximum radial runout : **1 mm** measured on the supporting side of the tires beads.



TIRES

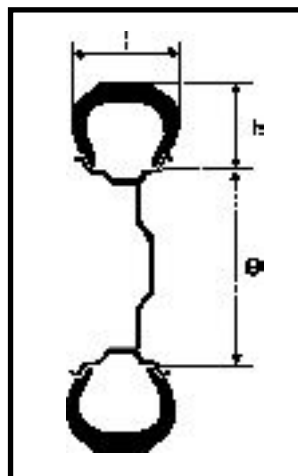
Identification marking examples: 165/70R13 79T

165 / 70 R 13 79 T

○ 1 ○ 2 ○ 4 ○ 5 ○ 6 ○ 3



- 1 - 165 - Tire width in mm (1)
- 2 - 70 - h/l height/width ratio;
- 4 - R - Radial structure
- 5 - 13 - Inner diameter in inches (Æ);
this is corresponding with the rim diameter
- 6 - 79 - Charging index
- 3 - T - Speed index max. 190 km/h



Symbol speed
Max speed

R		170
S		180
T		190
U		200
H		210
V		240
ZR	more than	240

Structure types :

Diagonal	No marking
Radial	R
Diagonally belted	B

RIMS – TIRES

Vehicle	Rim	Tires	Air filling pressure (barr) at cold	
			Front	Rear
R52315	5,5 B13	165/70R13	1,9	2,0
	5,5 J13	165/70R13		

The wheelsscrewstighteningmoment: 7,5 daNm.

The inflatingpressure mustbe checkedat cold.

The temperature raisingduringdriving, leadsto a pressure increasefrom 0.2. to 0.3 bars.

In case temperature checkingis done at warm, take into accountthis pressure increase and neverdeflateit.

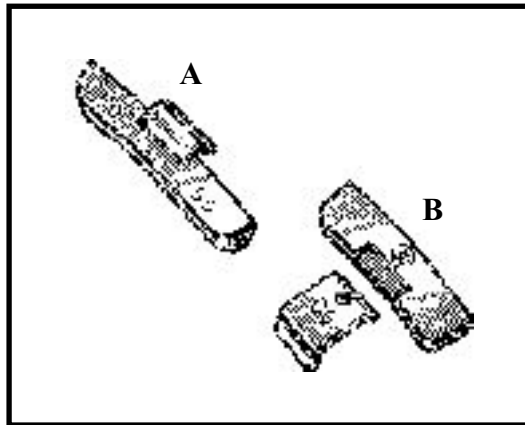
BALANCING WEIGHTS

Use exclusively the weights delivered as spare parts:

- fixed by means of clamp on steel rims (clamps included in weights)
- fixed by means of clamps (plate clamps) for aluminum rims

A = steel balancing weights for steel rims

B = steel balancing weights for aluminum alloy rims.



AXIAL BALL JOINT

The steering mechanism is rack - and - gear drive type, unattended.

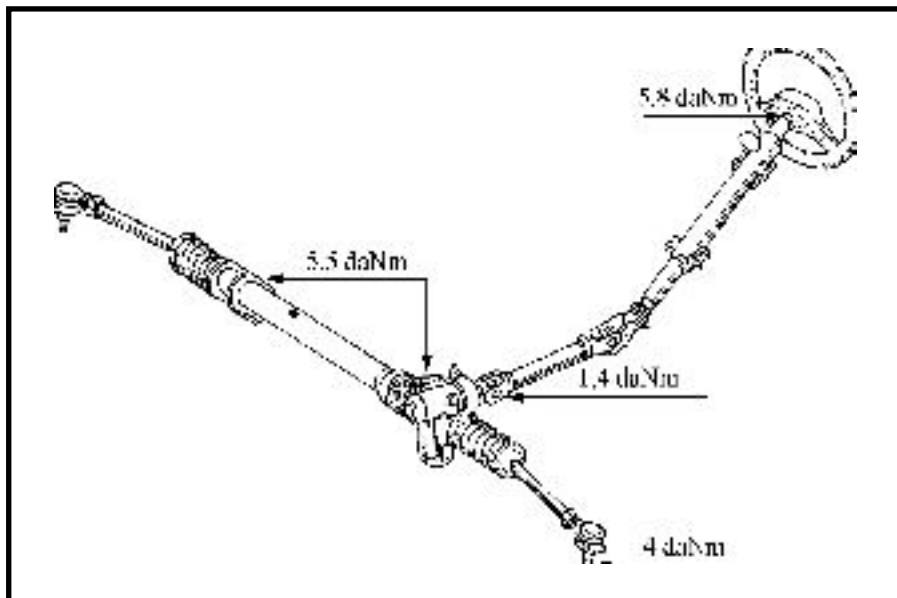
The steering mechanism is composed of: steering wheel, steering column, steering box, and steering auxiliary connecting rods.

The diameter of the maximum turning circle:

- between walls: **10m**

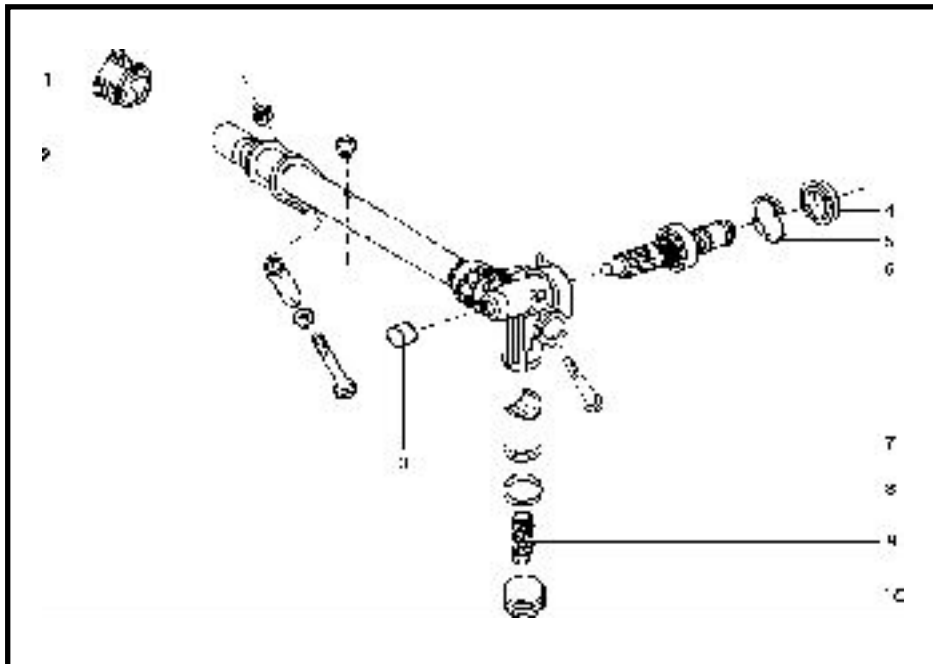
The steering wheel number of rotations: **4.26**

Of multiplication: **21:1**.



NOTE

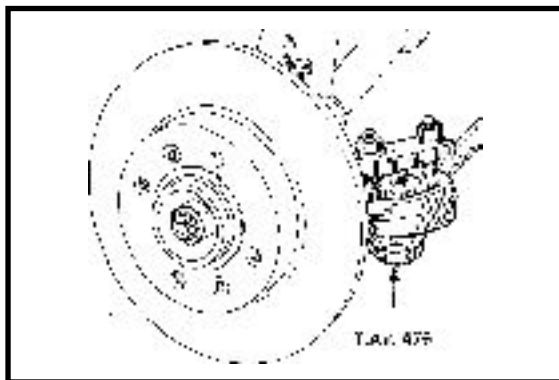
The replacement or the dismounting-remounting of the steering box, requires parallelism adjustment.



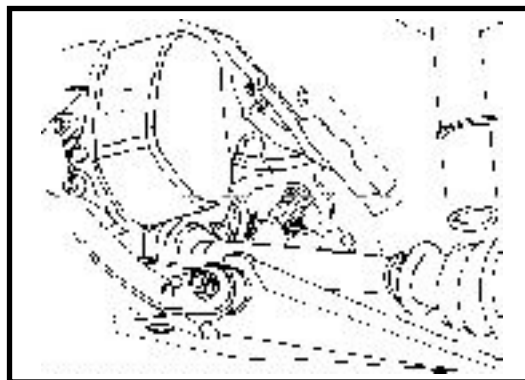
1. Noise absorber bearing
2. Assembled case bearing
3. Needle case
4. Annular oil ring
5. Safety ring
6. Assembled gear
7. Pusher
8. "O" ring
9. Pusher spring
10. Assembled threaded plug

DISMOUNTING

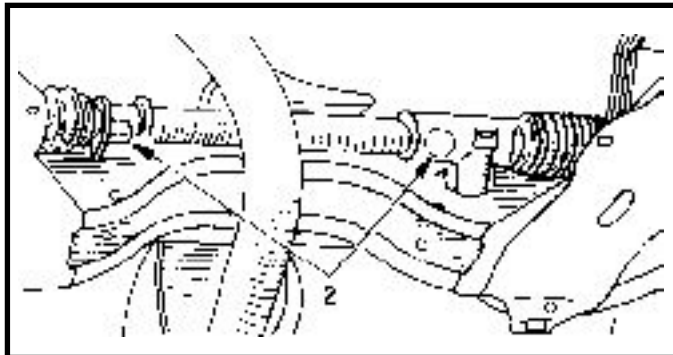
Loosen the screws of the wheel;
Lift the front part of the vehicle;
Dismount the wheel;
Dismount the ball joints of the steering auxiliary connecting rods.



Dismount the attachment screw of the steering wheel shaft (1) from the steering box.



Dismount the steering box attachment screws (2) on the crossmember.
Dismount the steering box together with the steering auxiliary connecting rods.

**NOTE**

Do not ever dismount the axial ball joints from the rack, unless they need to be replaced.

REMountING

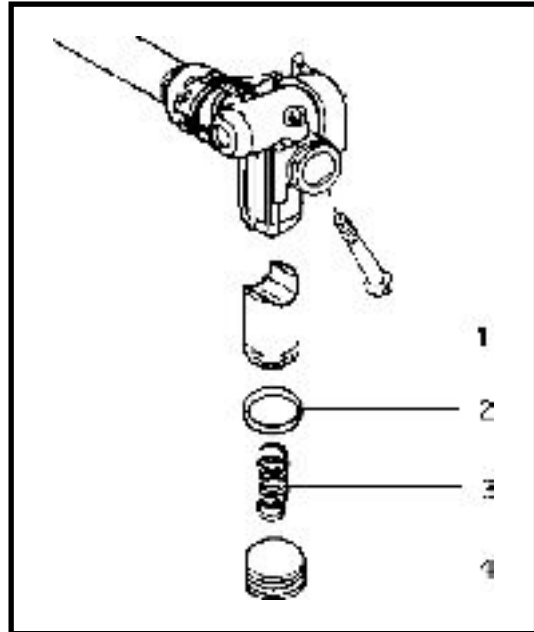
Perform the dismounting operations in the reverse order:
Grease the joints with special grease containing **MoS₂**.
Check the condition and the attachment of the protection bellows.
Tighten at the required moment the nuts of the steering auxiliary connecting rod - in the case of the dismounting of an auxiliary connecting rod.
Mount the steering box and the auxiliary connecting rods assembly, on the vehicle.
Check the parallelism.

PUSHER ADJUSTMENT

The pusher adjustment shall be performed taking into consideration, the wear degree of the rack and the pusher.

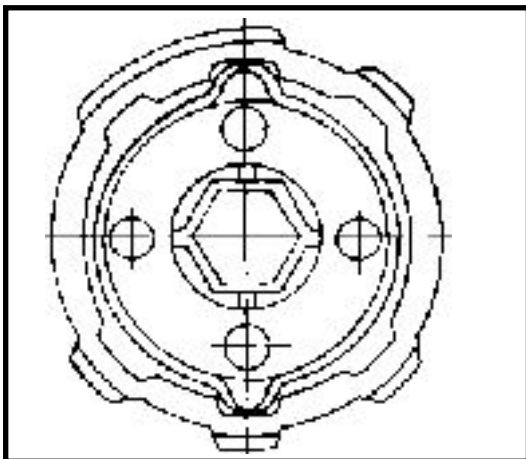
1. Pusher
2. "O" ring
3. Pusherspring
4. Assembled threaded plug

When mounting distribute $23 \pm 5 \text{ cmc}$ of grease **II Li Ca Pb** with **MoS2** for: the rack, the gear, the pusher and the spring, the inner surface



ADJUSTEMENT METHOD

The clearance adjustment of the pusher is performed by tightening the threaded plug at the required moment of $1 \pm 0,2 \text{ daNm}$ and unscrewing it \sim round.



The moment for the gear rotation will be about $0,15 \text{ daN.m}$ (maximum accepted $0,25 \text{ daN.m}$) on the whole length of the rack or the rack gliding effort of 25 daN (maximum accepted 40 daNm) without rigid points.

Securing of the unscrewing of the threaded plug is performed by the distortion of the securing element of the assembled threaded plug towards the casing in two antipodal points.

DISMOUNTING

Loosen the screws of the wheel;

Lift the front part of the vehicle

Dismount the wheel on the opposite side of the steering column;

Dismant :

- casing protection bellows;

- the steering auxiliary connected rod.

Rotate the steering wheel until the rack is withdrawn.

Remove, by means of a screwdriver the noise absorber bearing.

REMOUNTING

Carefully clean the rack and the noise absorber bearing seat and grease with special grease containing **MoS₂**.

In the same way as at the dismantling, place back the noise absorber bearing paying attention to fix the three pins (**A**) in their seats.

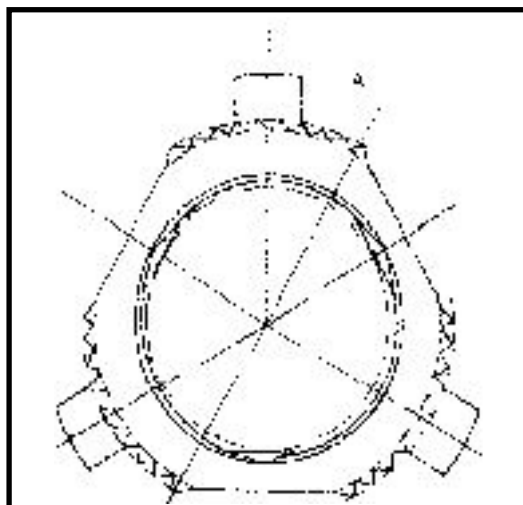
Rotate the steering wheel in the opposite direction until the rack stands out the bearing.

Remount on the rack:

- the steering auxiliary connecting rod (mount a new safety washer);

- protection bellows.

Check and adjust the parallelism, if necessary.



DISMOUNTING

Lift the front part of the vehicle.

Dismount the wheel.

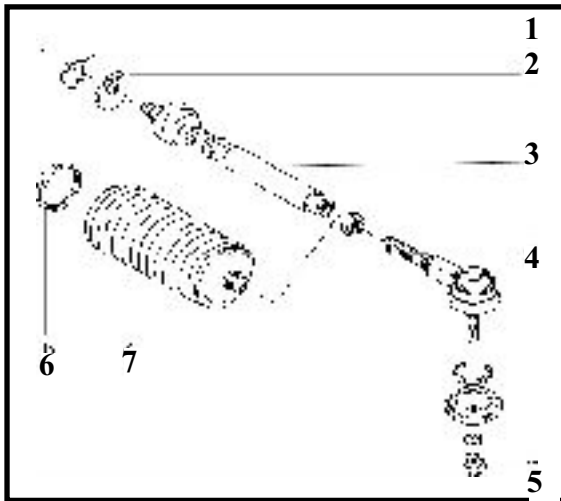
Loosen the attachment nut (5) of the auxiliary connecting rod ball joint to the steering knuckle support and depress the ball joint (4).

Remove the attachment collar (6) of the bellows on the steering casing box.

Remove the bellows (7) from the steering casing box.

Straighten the edges of the safety washer.

Unscrew the steering connecting rod from the rack, using the special wrench and remove it out together with the safety washer (2) and the locking washer (1).



1. Locking washer
2. Safety washer
3. Assembled end of the auxiliary connecting rod
4. Assembled auxiliary connecting rod funnel
5. Attachment nut
6. Attachment collar of the bellows
7. Bellows

REMOUNTING

Fold the bellows towards the connecting rod funnel.

Before assembling the rack with the steering auxiliary connecting rods (the threaded parts being free from any traces of grease) apply a layer of **FIXAMED R 58- C.S. 1/82** on the threaded parts of the auxiliary connecting rods.

Place the safety washer and the locker washer (in this order) on the threaded shaft of the steering auxiliary connecting rod, passing the curved pin of the safety washer through the slot of the locking washer.

Screw the steering auxiliary connecting rod in the rack.

Tighten the joint body at the moment of **5 daNm** by means of the **6902-4105** special wrench.

Bend the safety washer in the opposite part to the pin in at least one of the cuts made on the ball joint body.

Mount the bellows in its channel from the steering casing.

Mount the auxiliary connecting rod funnel in the steering knuckle support.

Check the tightening of the nut (5) at a moment of **4 daNm**, on the vehicle.

TIGHTENING MOMENTS (daNm)



Attachmentscrews of lowershaftconnection 1,4

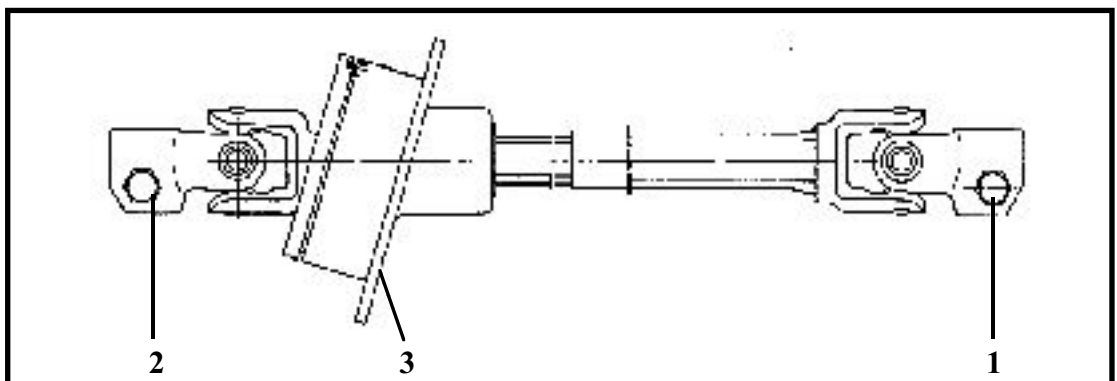
I. DIAGNOSTIC OPERATION

A. Incidents occurring at the deformable lower shaft of the steering column:

- a) Vibrations and steering wheel clearance (**I1, I2, I3**);
- b) Noises in steering system operation (**I2, I3**);
- c) Heavily turning blocking tendencies (**I4**)

B. Corrective measures which are imperative to resolve the defects:

Incident code	Incidents (failures) established	Corrective measures
I ₁	Clearance in one or both cardanic joints.	Replace the assembled deformable lower shaft
I ₂	Clearance in the splined assembled area between ass.intermedary shaft and ass.intermedary pipe.	Replace the assembled deformable lower shaft
I ₃	Clearance between lower bushing and ass. intermediary shaft.	Replace the assembled deformable lower shaft
I ₄	Tough points of the cardanic joint, blocking tendencies.	Replace the assembled deformable lower shaft



DISMOUNTING

Disconnect the battery.

Mark the steering wheel position (straight line driving position).

Dismount the connection screw (1) between the deformable lower shaft and the steering wheel shaft.

Loosen the screws of the front left wheel.

Lift the vehicle by means of a two-column elevator.

Dismount the left front wheel.

Dismount the connection screw (2) between the deformable lower shaft and the gear shaft of the steering box.

Dismount the sealing gasket (3) from the cowl panel.

Extract the lower shaft.

REMOUNTING

Clean the steering box gear shaft and grease it with grease UM 185 Li2 or UM 180 Li2.

Perform the dismantling operations in the reverse order. Tighten the connection screws between the lower shaft and the steering box gear shaft, consequently between the lower shaft and the steering wheel shaft to the required moment of **1.4 daNm**.

ATTENTION!

It is forbidden the damaging of the lower shaft and of the connection parts from the steering system (steering box gear, steering wheel shaft) when dismantling/remounting the lower shaft.

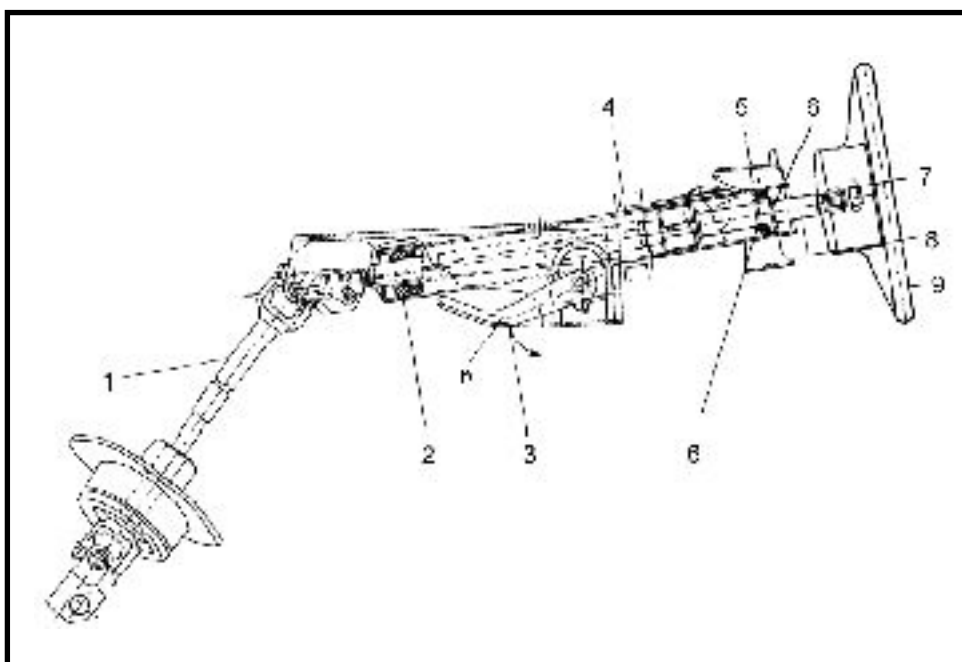
STEERING WHEEL POSITION ADJUSTMENT

The steering wheel adjustment on vertical, is performed as follows:

- control downwards the adjustment handle (3) placed under the steering wheel lower casing
- bring the steering wheel in the desired position and maintain it in this position
- control upwards the adjustment handle.



It is forbidden to perform this adjustment during driving.



1. Steering lower shaft
2. Lower bushing
3. Adjustment handle
4. Assembled steering support
5. Bearing
6. Lock for shaft
7. Steering wheel attachment nut
8. Steering upper shaft

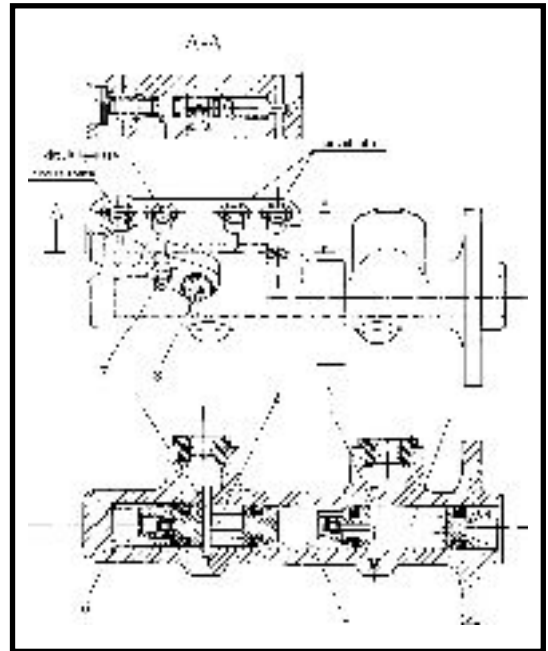
BRAKE PUMP

BRAKE PUMP WITH PRESSURE DROP INDICATOR (ICP) INCLUDED

COMPONENTS

1. Assembled primary piston with gaskets
2. Assembled secondary piston with gaskets
3. Primary piston pin.
4. Secondary piston pin.
5. Primary piston return spring
6. Secondary piston return spring
7. Purging screw
8. ICP transducer

A – A ICP assembly section



OPERATION

A. BRAKING

THE FRONT BRAKE CIRCUIT

The primary piston is controlled by the pushing rod. A part of the brake fluid under pressure will operate together with the spring on the secondary piston, and the other part of the brake fluid shall penetrate through the ducts to the upper floor towards both exits leading to the front brake calipers.

THE REAR BRAKE CIRCUIT

The secondary piston is continuing its movement, conducting the brake fluid under pressure, through the ducts, to the upper floor, towards the exit to the pressure-reducing valve. During all this time, the linings-pistons assembly will be balanced due to the two side springs.

B. DE-BRAKING

After effort ending, the two pistons resume their initial position under the effect of the retainer springs, while the fluid is coming back and the pressure is decreasing in both circuits.

PRIMARY CIRCUIT – PRESSURE LOSING

Lack of pressure in the primary circuit leads to the following situation

The primary piston is advancing up to the pin, so is controlling mechanically the secondary piston. The secondary piston reaches a fluid pressure that shall operate on the piston – linings assembly moving it to the right, opening also the second exit of the rear circuit (the by-pass circuit) increasing the pressure for this circuit.


In this moment, by means of the transducer, the warning light on the instrument panel is on.

SECONDARY CIRCUIT – PRESSURE LOSING

Both pump pistons go on. The caliper cylinders of the front brake shall normally operate.

The secondary piston reaches its respective pin, but the pressure will decrease (due to the failure).

BRAKE PUMP

TIGHTENING MOMENTS (daNm)	
Rigid pipe connection	1,5
Nut attachment P.C. with servobrake	1,3
I.C.P. (pressure drop indicator)	2

DISMOUNTING

Close the connection pipe between the brake fluid reservoir and clutch transmitter cylinder by means of the MOT 453 device.

Disconnect the battery.

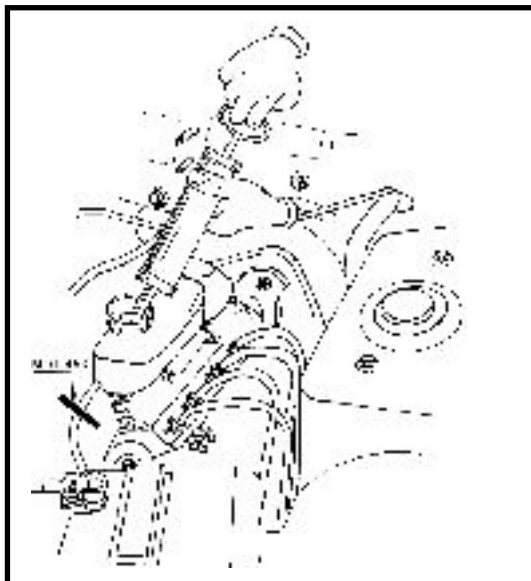
Drain the brake fluid reservoir.

Disconnect the connection pipe between the brake fluid reservoir and clutch transmitter cylinder.

Dismount the brake fluid reservoir off the brake pump (avoiding fluid leakage).

Dismant :

- the rigid pipe screws from the brake pump and mark their position;
- the two attachment nuts of the brake pump on the servobrake .



REMOUNTING

Perform the dismounting operations in reverse order.

Check the length of the pushing rod, value $X = 9$ mm and correct if necessary.

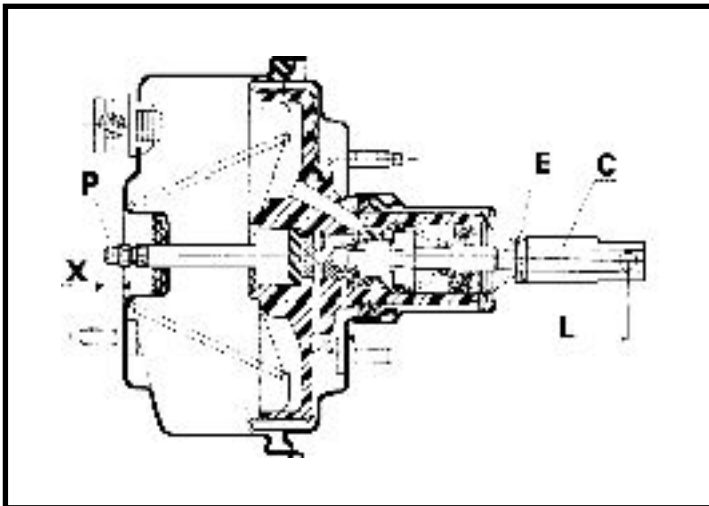
Before remounting, check the servobrake pushing rod stroke (min. 30 mm).

After assembling the brake with the fluid reservoir and filling with brake fluid, no leakage must occur in the surface of separation between the two elements

IMPORTANT

The I.C.P. transducer is mounted after the braking system purging.

ICP sub-assembly is not reparable (ICP – pressure-decreasing indicator)



BRAKE PUMP

 BRAKE PUMP REPAIRING

The operation is performed after dismantling the central pump off the vehicle.

DISMOUNTING

Dismount the brake fluid reservoir, recovering the two sealing gaskets of the brake fluid reservoir.

Dismount the transducer and the purging screw.

Clamp a **3,5 mm** drill in the vice.

Introduce the drill in the elastic pin

Rotate and draw the pump until the pin is extracted;

Extract the secondary piston elastic pin, in the same way.

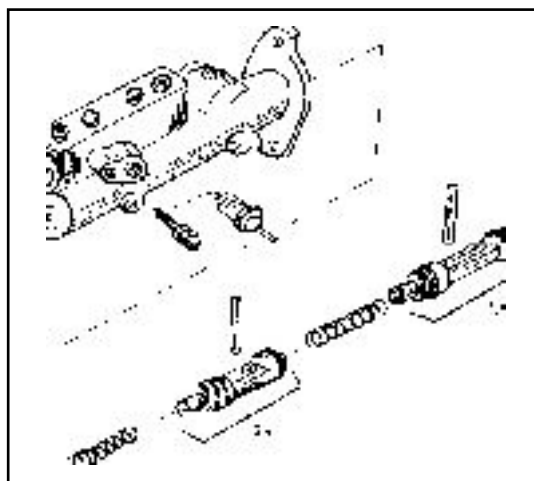
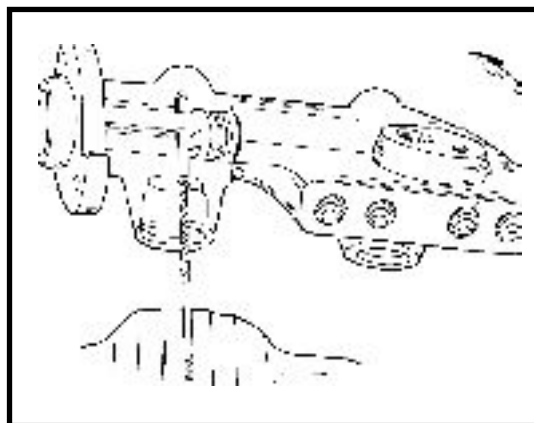
Remove from the pump:

- the Pp primary piston assembled;
- the primary piston return spring
- the Ps secondary piston assembled;
- the secondary piston return spring

Wash the parts with alcohol and blow them with compressed air.

Check

- the pump bore
- the piston gaskets
- the springs



The parts of the “primary piston” Pp and those of the “secondary piston” Ps, cannot be repaired. In case one of these parts is damaged, replace the whole kit “primary piston” and “secondary piston”, primary piston return spring, secondary piston return spring.

REMOUNTING

Before remounting, the parts and the pump bore will be lubricated with brake fluid.


Mount the “secondary piston” and “primary piston” assembly

Compress the pistons and introduce the elastic pins; the pins slot shall be oriented towards the pump attachment flange.

Mount the purging screw;

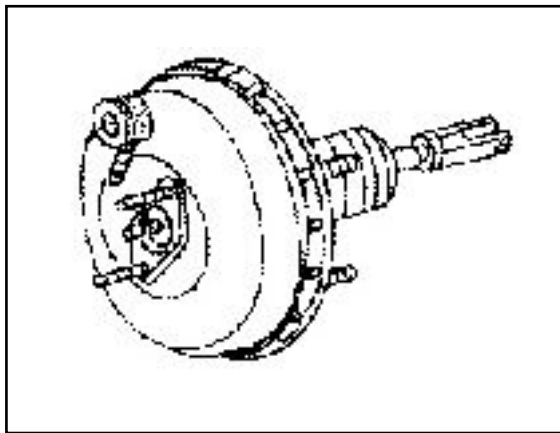
Purge the brake circuit and remount the ICP transducer.

SERVOBRAKE

TIGHTENING MOMENTS (daNm)	
Brake pump nut on servobrake	1,3
Servobrake attachmentnut on the cowlpanel	2,0

MASTER VAC 7 SERVO MECHANISM

The "Master-Vac 7" servobrake is a brake booster with the objective of reducing the driver effort on the brake pedal.

**OBSERVATION**

In case one circuit is damaged, the pedal stroke shall be longer, the braking being done only by the circuit still working.

**ATTENTION**

The servobrake cannot be repaired.

The only items of the servobrake which are to be replaced are the air filter and the retainer valve.

DISMOUNTING

Close the pipe between the brake fluid reservoir and the clutch transmitter cylinder by means of the MOT 453 device.

Drain the liquid out of the reservoir.

Disconnect from the reservoir the feeding pipe of the clutch transmitter cylinder.

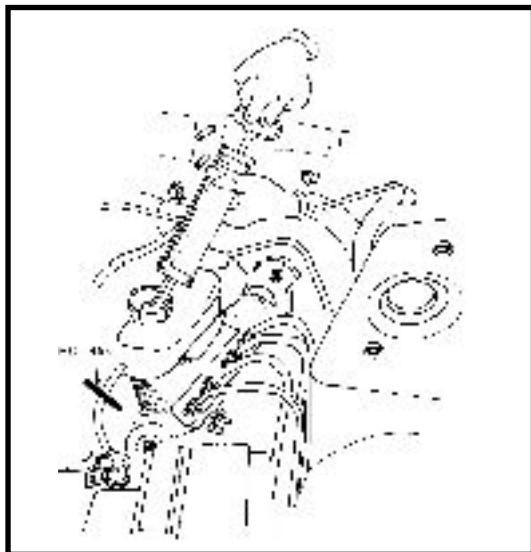
SERVOBRAKE

Detach the four rigid brake ducts from the main brake pump.

Disconnect the electrical contact from ICP transducer.

Dismount the main pump from the servobrake.

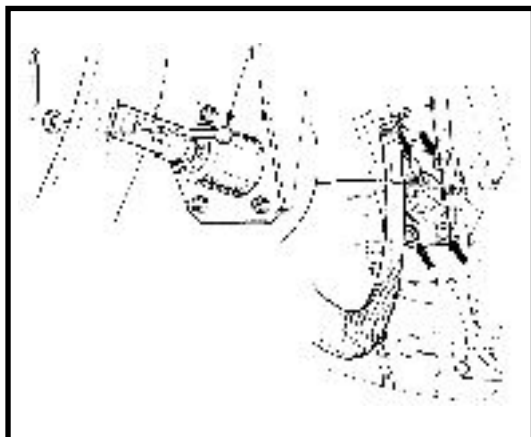
Disconnect the suction hose off the servobrake.



Dismant :

- the connecting shaft (1) between the coupling fork and the pedal;
- the attachment nuts of the servobrake on the cowl panel.

Dismount the servobrake .



REMOUNTING

Before remounting, check:

- the adjustment of the main cylinder stroke, which is obtained by acting on the pushing rod nut in order to obtain value $X = 9\text{ mm}$, between the pushing rod end and the rest surface of the main cylinder.

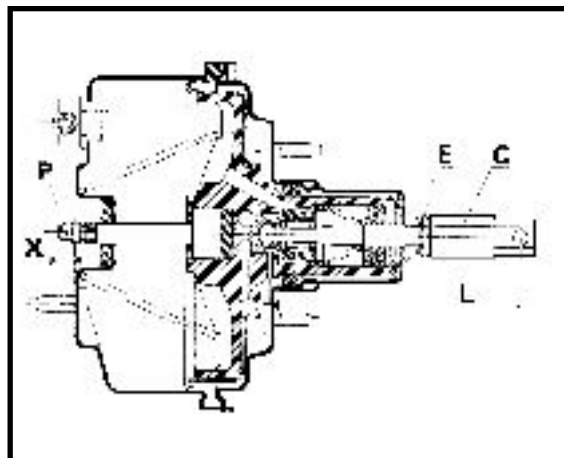
- the adjustment of the coupling fork on the brake pedal side, which is obtained by unscrewing the lock nut **E** and by acting on the coupling fork in order to obtain the value $L = 117 + 0,5\text{ mm}$.

For remounting, perform the dismantling operations in the reverse order.

Purge the brake circuit.

Mounting the I.C.P. transducer.

Mount the electric connector at the I.C.P.

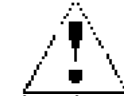


SPECIAL TOOLS

Shutter

MOT 453

TIGHTNESS CHECKING



The tightness of the servobrake is checked on the vehicle, with the hydraulic circuit under operation.

Connect the vacuum meter between the servobrake and the inlet collector by means of a “T” type connector.

The connecting hose of the vacuum meter shall be as long as possible.

Start the engine and let it idle run for **1 min.**

Block the air suction hose by means of the **MOT 453** device.

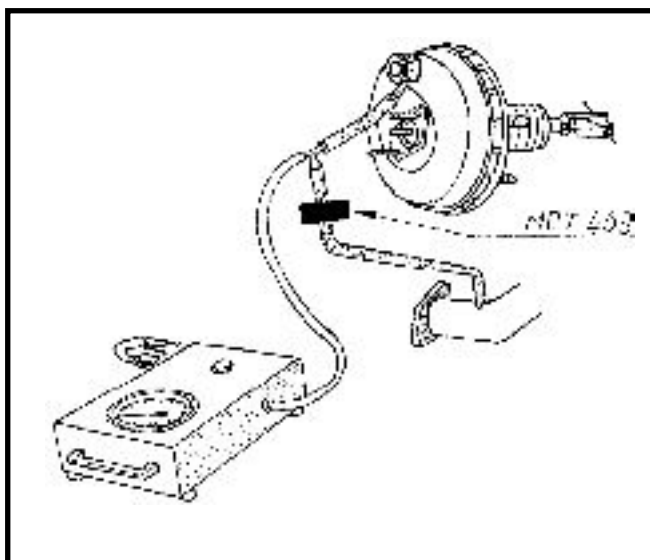
Stop the engine.

If air suction lowers with more than **33 mbar (25Hg)** in a 15 seconds period, it means there is a loss at the retainer valve (replace the valve) or at the servobrake membrane (replace the servobrake)

Dismount the **MOT 453** device

Dismount the vacuum hose

Reinstate the connection between the servobrake and the inlet collector by means of the vacuum hose.



AIR FILTER REPLACEMENT

DISMOUNTING

Dismount the servobrake off the vehicle.

Loosen the lock nut (E) and dismount:

- the coupling fork;
- the lock nut.

Remove the washer filter F.

RE MOUNTING

Mount the new washer filter

Mount:

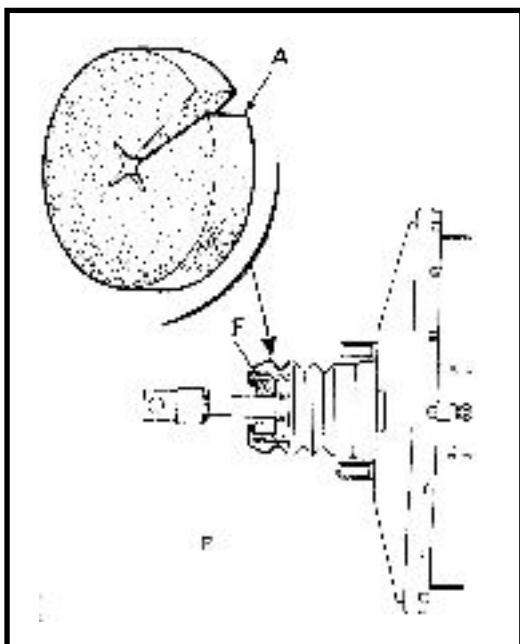
- the lock nut;
- the coupling fork.

Adjust the value $L = 117 + 0,5 \text{ mm}$.

Tighten the lock nut E on the coupling fork

Mount the servobrake on the vehicle.

Purge the braking circuit.



SERVOBRAKE RETAINER VALVE REPLACEMENT

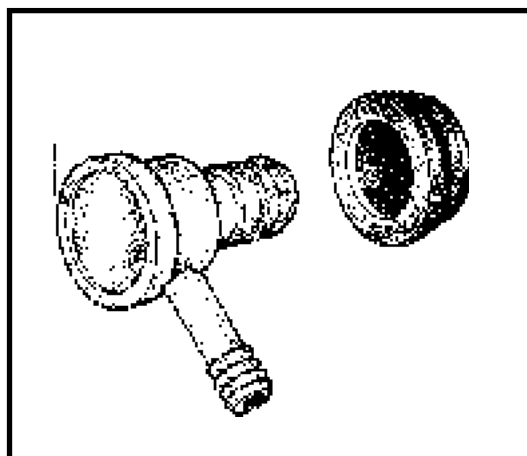
The operation is performed without dismantling the servobrake off the vehicle.

DISMOUNTING

Disconnect the connection of the air suction hose with the servobrake retainervalue.

Dismount the valve by rotating and then pulling it.

Dismount the retainervalue gasket.



RE MOUNTING

Check the state of the retainervalue gasket and replace it if necessary.

Mount the new retainervalue gasket.

Attach and mount the new retainervalue.

Connect the air suction hose.

The adjustment of the hand brake shall be performed with the vehicle lift on a two columns elevator.

NOTE

The adjustment is obligatory performed anytime the shoes and secondary cables have been replaced.

Release the control lever of the hand brake (release position).

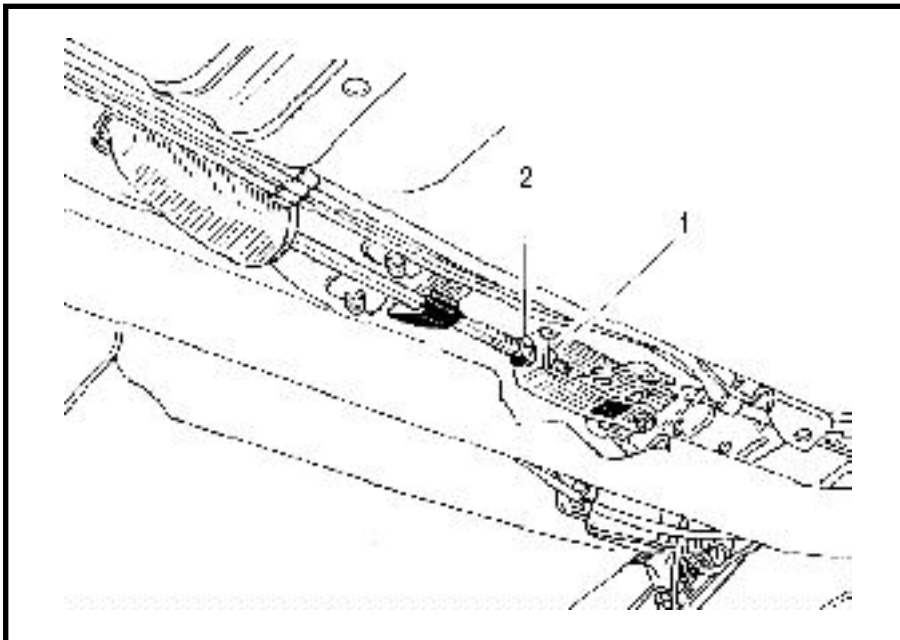
Unscrew the lock nut (2).

Tighten the nut (1) until the shoe gaskets come lightly into contact with the brake drum.

The adjustment shall be performed so that is insuring a hand brake lever stroke of min. 12 teeth until the blocking of the wheels.

Tighten the lock nut (2) at the required moment of 2 daNm.

Lower the vehicle from the elevator.



HAND BRAKE CONTROL LEVER

DISMOUNTING

Disconnect the battery.

Lift the vehicle by means of a two columns elevator;

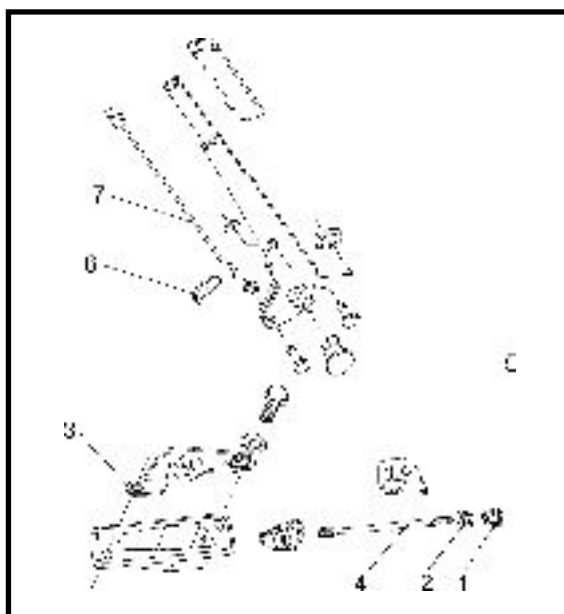
Release the hand brake control lever.

Detach the fork end rod by unscrew the lock nut (2).

Dismant:

- the hand brake ornament;
- the lever support with toothed part (3);
- the end shaft rod (4);
- the lever shaft (5);
- the claw shaft (6);
- the claw control rod (7).

Detach the lever.

**RE MOUNTING**

Grease the shafts with **UM 185 Li 2** grease.

Perform the dismounting operations in the reverse order.

Check and adjust the adjustment if necessary.

HAND BRAKE SECONDARYCABLE

SPECIAL TOOLS	CODE
Wheel drum covertongs	Ro 441
Hub extractor	Fr. 600
Dynamometer wrench	Mot 30

DISMOUNTING

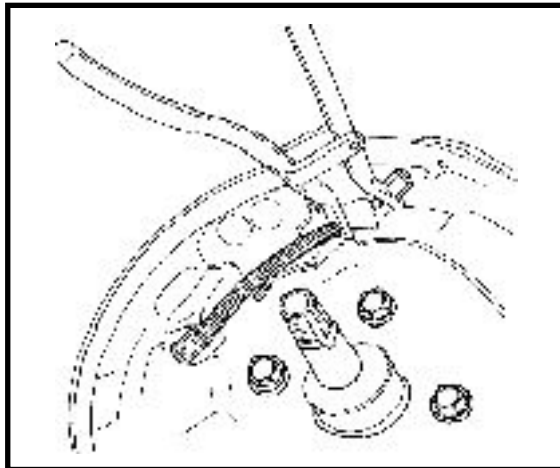
Release the hand brake control lever (release position);

Dismount the drum;

Release the secondary cable end from the hand brake control lever, dismantle the sheathes stops from the brake plate ;

Dismount the rudder bar shaft.

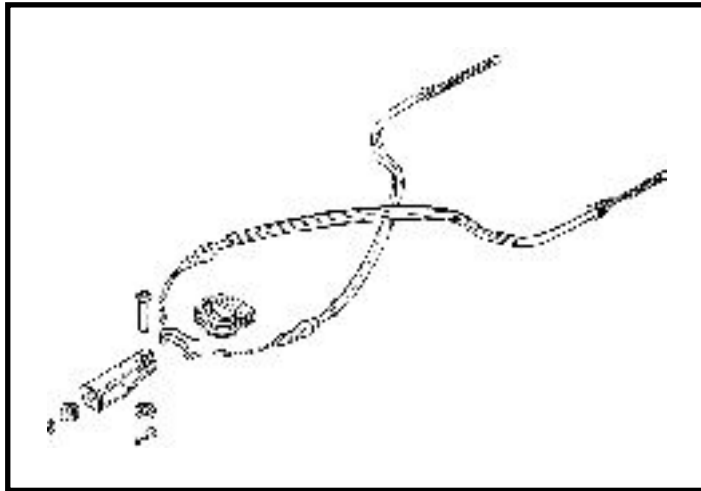
Remove the secondary cable.



RE MOUNTING


Grease the cable with UM 185 Li2.

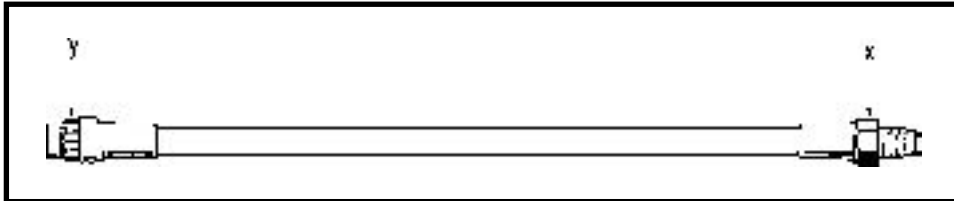
Perform the dismounting operations in the reverse order.



Adjust the hand brake control lever stroke.

The SUPERNOVA vehicles are equipped with flexible hoses with copper gaskets in order to ensure the sealing.

TIGHTENING MOMENTS (daNm) 	
X (caliper flexible)	2,0
Y (the attachment connection screw of the rigid pipe on the flexible)	1,5

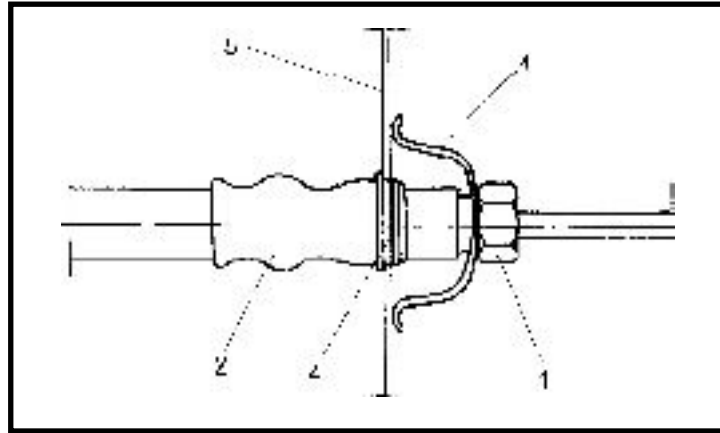


**PRECAUTIONS IMPOSED TO BE RESPECTED WHEN
DISMOUNTING – REMOUNTING A RECEIVER
OR A BRAKE FLEXIBLE HOSE**

Due to security reasons, in order to avoid brake flexible hose twisting and the risk to get in contact with the suspension elements, it is necessary to observe the following operations sequence.

DISMOUNTING

Unscrew the connection (1) (wrench) of the rigid pipe on the flexible hose till the moment when the spring (3) is relaxed, having releasing the splinted area (4) of the sustaining bed.



Unscrew the flexible from the caliper and eventually dismount the caliper.

REMOUNTING

Assemble the caliper with the caliper fork, mount the wedges and then screw the flexible in the caliper, then tighten at the moment of 2 daNm.

The flexible must be mounted when the half axle is in the position:

- symmetric wheels (mounted suspension)
- train in line (straight wheels)

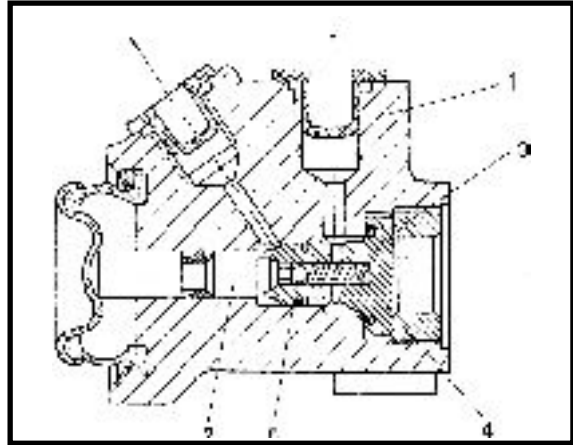
Position the female end of the flexible on the sustaining bed (5) without twisting forcing and check if the splinted area (4) is freely coupling in the bed splints, then place back the spring (3) and screwing the rigid pipe on the flexible avoiding twisting.

Tighten the connections screw at a moment of 1,5 daNm.

Purge the brake circuit.

Brake pressure controller, load sensitive, avoiding the rear wheels blocking.

1. Pressure controller body
2. Valve
3. Plug
4. Spring
5. Ball
6. Piston



OPERATION PRINCIPLE

The brake pressure controller enables the rear circuit pressure “modulation” according to two parameters:

- the pressure value in the front circuit
- the load on the rear axle

The pressure controller is operating on the principle of pressure compensation in two enclosures, separated by means of a ball and spring valve.

The back pressure at the valve level is created by means of the force developed by the continuous action compensating spring and of the control spring acting in proportion as the rear axle load is increasing.

The pushing rod is transmitting the force of the lever spring to the pressure controller piston, which is controlling the valve ball being in the open normal position (position P1).

BRAKING MOMENT


In the same time with pressure increase when entering in the pressure controller, this will act upon the ball, forcing it to overcome the continuous acting spring force and by uncovering the valve hole, to facilitate the releasing of this pressure. In the braking moment, due to position changing of the vehicle body compared to the rear axle, by means of the acting levers, the limiting piston is moving toward the interior, reducing the fluid exit diameter, leading to the obtaining in this way of the pressure reduction in the rear circuit.

DE BRAKING MOMENT

In the moment of fluid inlet pressure restoring (by leg lifting from the brake pedal), the piston will come back in the initial position, gradually and quickly allowing the same diameter existent at the beginning of the braking for which the valve is open (position P1).

NOTE

The brake pressure controller is not to be repaired.

 TIGHTENING MOMENTS (daNm)	
Pressure controller attachmentscrews on support	0,58 daNm
Pipetighteningconnectionscrewsto the pressure controller	1,5 daNm

DISMOUNTING

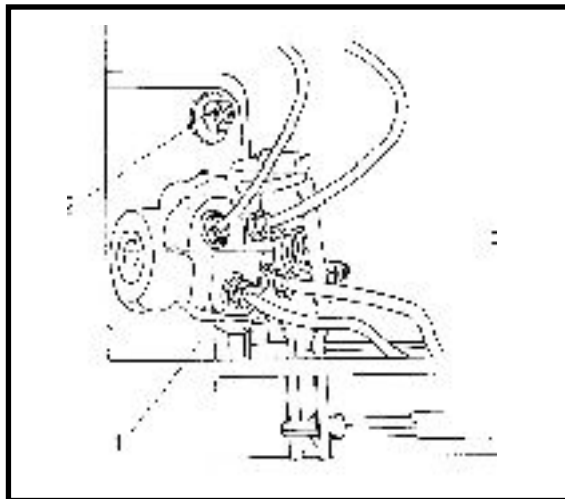
Drain the circuit, recover the fluid;

Detach the four connections (1) of the rigid pipes.

Dismount the two M6 attachmentscrews of the pressure controller support on the floor (2).

Remove the support together with the pressure controller from the fixing clips.

Dismount the pressure controller off the support.

**REMOUNTING**

Mount the pressure controller attachmentscrews on the support.

Attach the support-pressure controller assembly on the floor.

Mount:

- control lever
- the four connectionscrews of the brake pipes

Purge the braking circuit and adjust the pressure controller.

ADJUSTMENT OF THE BRAKE PRESSURE CONTROLLER FOR THE PARALLEL BRAKING SYSTEM

Conditions :

- the vehicle on wheels
- empty truck
- one person on board

ADJUSTMENT

Mount the flexible connection of the FR501 device at the purging screw of one rear wheel cylinder.
Purge the manometer.

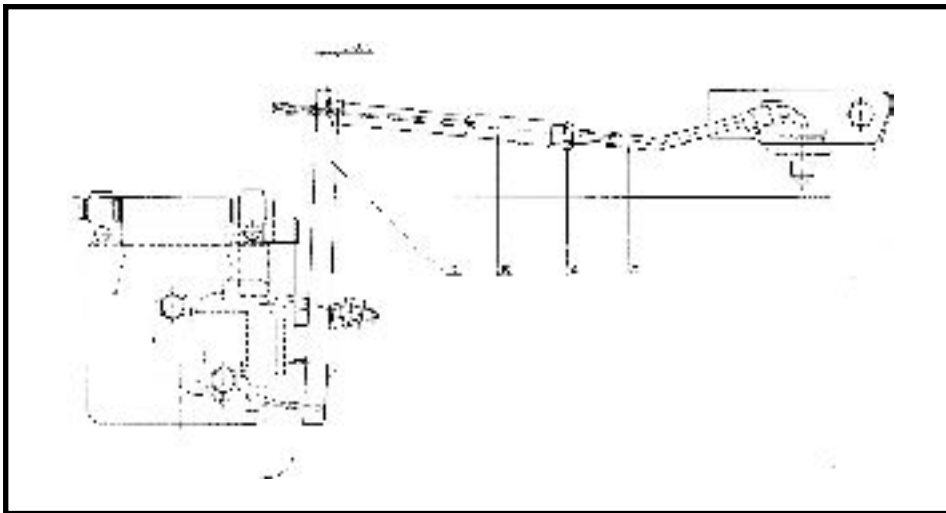
Push the brake pedal to enable reading several times the limiting pressure obtained on the rear wheel cylinders.

Unscrew the adjustment nut (A) to distance it from the pushing rod end (B).

Act upon the rod end (B):

- by unscrewing it towards the pushing rod (C) in order to increase the pressure in the rear circuit
- by screwing it towards the pushing rod (C) in order to decrease the pressure in the rear circuit.

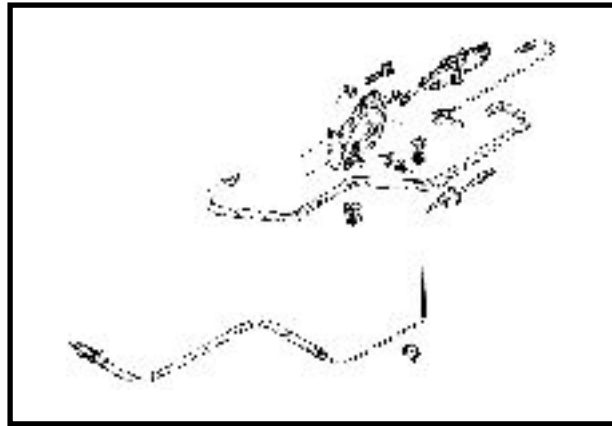
Tighten at the required moment (0,35 daNm) the adjustment nut (A) next to the pushing rod end (B) so that between the lever end and the lever (D) a clearance of $L = 0,5 \text{ mm}$ to be ensured.



Check several times the limiting pressure obtained on the rear wheel cylinders : 30_{-2}^{+0} bar.
Dismount the manometer and purge the braking circuit.

For the purging of the hydraulic circuit and the pressure control, the FR501 device is to be used.

The working principle of this control is similar to the one of a brake control, having the same working fluid: **SAE J 1703 DOT 4**.



TRANSMITTER CYLINDER REPLACEMENT

DISMOUNTING

Disconnect the battery.

Drain the clutch control hydraulic circuit; for this purpose, open the purging connection and connect to this a transparent hose for draining.

Dismant :

- dashboard lower part ;
- the feeding pipe 1 with brake fluid from the reservoir;
- the hydraulic pipe of the transmitter cylinder 2.

Detach the cylinder rod from the control pedal bolt (dismounting effort : **min 5 daNm**).

Dismount the transmitter cylinder 3 as follows: by means of **24 mm** wrench, rotate the transmitter cylinder from the right to the left approx. **45°** and extract the cylinder (dismounting moment: **min 0.2 daNm**).



REMountING

Perform the dismounting operations in the reverse order ;

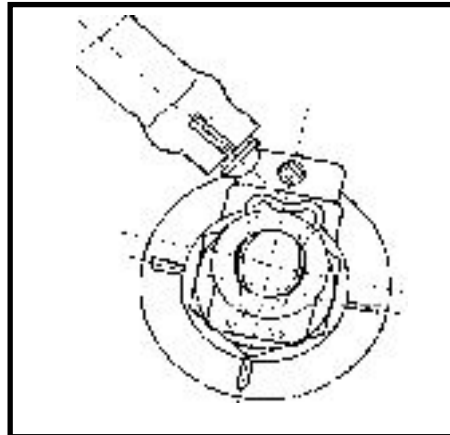
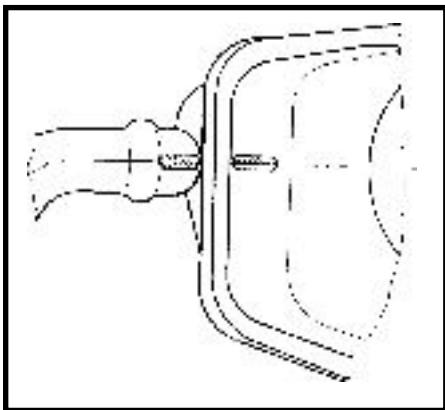
- transmitter cylinder mounting moment on the support – **max 0.5 daNm**
- cylinder rod mounting moment on the pedal bolt – **max. 5.0 daN**

Refill the brake fluid reservoir and purge the clutch control circuit by means of the purging connection

Adjust the level in the brake fluid reservoir.

**Attention**

When remounting the feeding pipe at the brake fluid reservoir and at the transmitter cylinder, observe the positioning markings.



HYDRAULIC RECEIVER REPLACEMENT

This operation shall be performed after dismounting of the engine-gearbox assembly and after disconnecting of the engine from the gearbox

DISMOUNTING

Dismount the two attachment screws and dismount the hydraulic receiver.

REMOUNTING

Perform the dismounting operations in the reverse order.

Tighten the screws at the required moment of **2.1 daNm**.



HYDRAULIC CIRCUIT PURGING

1. CIRCUIT REFILLING

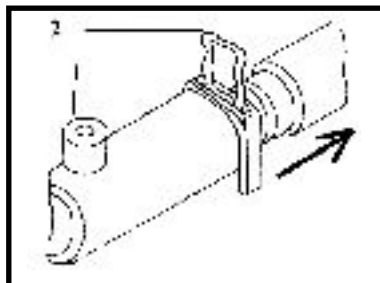
Check if the clutch pedal is in the “up” position, maintain it by hand if necessary.

Fill the reservoir with brake fluid.

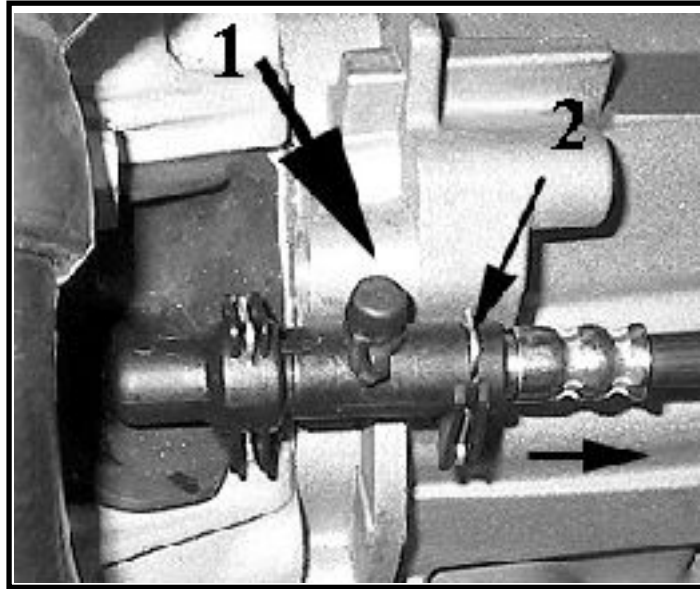
Remove the protection cap of the purging connection 1.

Connect a transparent hose at the purging connection to recover the brake fluid.

Retrieve the clip 2 (do not definitely remove it in order to limit the movement of the feeding pipe).



- Retrieve the feeding pipe (towards the arrow) to enable the fluid passing through the connection 1.
 Bleed a little bit of fluid.
 Close the purging connection (move the feeding pipe in reverse way).



2. FINAL PURGING OF THE CIRCUIT

a) Slowly push the clutch pedal to maximum position and keep it pushed.

Wait approx. 10 seconds then open the purging connection.

b) Close the purging connection, release the clutch pedal, and slowly lift it by hand to the upper position (if the pedal does not come back itself in this position).

Repeat the operations **a** and **b** till bubbles are not coming out through the purging connection, then repeat five more times these operations in order to be sure about a good circuit purging.

These repeated purging allow “the cleaning” of the circuit from the air bubbles eventually remained in the circuit after the circuit filling and purging.

An air bubble as little may be, remained in the circuit, may lead to operating deficiencies such as: defective clutch pedal return or gears change noise being able to lead to a wrong diagnosis or an inopportune replacement of a part of the clutch circuit.

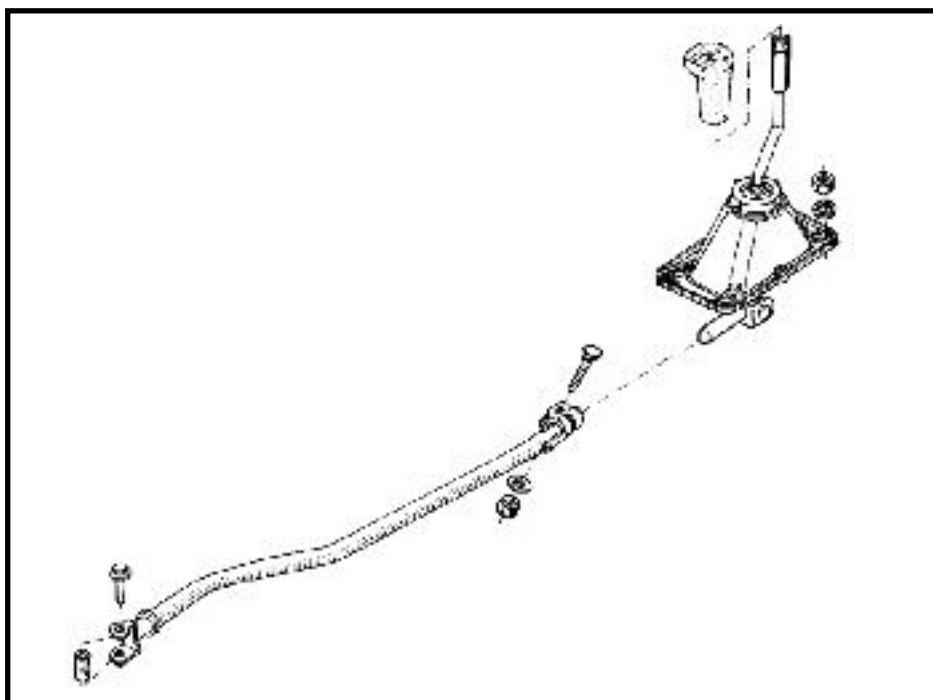
DISMOUNTING

The dismounting of the gears changing levers shall be performed after dismounting the central case .

Dismount under the vehicle the control lever.

Dismount under the vehicle the four attachment screws of the central case.

Dismount the assembly composed of control case and gears control lever.

**REMOUNTING**

Perform the dismounting operations in the reverse order.

Tighten at the required moment:

- the control case attachment screws 1.2 daNm
- the control bar connection screw with the GB connecting rod 2.7 daNm
- the connection screw of the control bar with the control lever 1.2 daNm

Grease the parts of the joint composed of control bar and GB connecting rod with MOLYKOTE 33M grease.

Introduce in the protection bellows approx. 10 ml of grease.

**NOTE**

The tightening of the connection screw of the control bar with the control lever shall be performed after adjustment of the gearbox control.

SPECIAL TOOLS

CV 550

Linkage adjusting device

GEARS CONTROL ADJUSTMENT

This is to be performed after mounting the engine-gearbox assembly and the assembly lever-control case every time when:

- dismounting of the engine-gearbox assembly, the control bar or the assembly lever-control case;
- establishing of failures such as: gear change impossibility or unexpected gear uncoupling gear blocking

For the gear control adjustment the **CV 550** device is to be used;

Mount the CV 550 device on the assembly lever-control case;

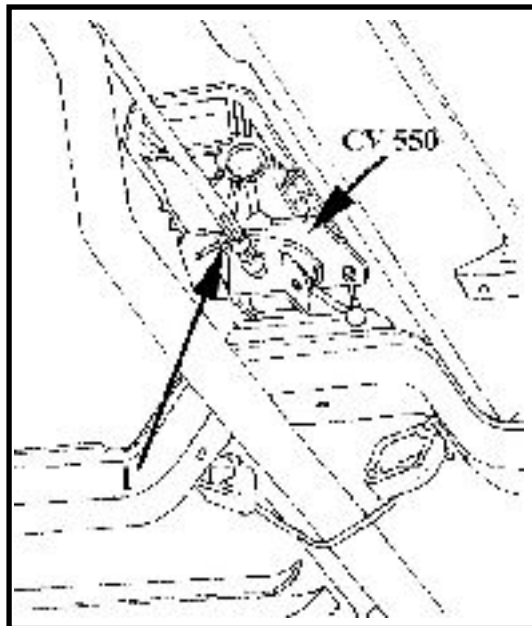
Attach the control bar to the control lever end;

Place the gear lever in the device seat and fix it in this position by means of the device handle;

Tighten the attachmentscrew **1** of the bar to the lever at the required moment of **1.2 daNm**;

Dismount the **CV 550** device from the control box.

Check the gears coupling

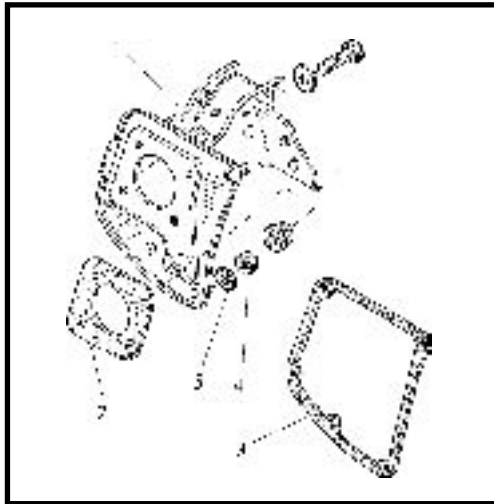


DISMOUNTING

Dismount the acceleration, clutch, and brake pedals.

Dismount the attachment nuts (4) and washers (5) of the pedals support on the cowl panel.

Remove the spacer (2) and the gasket (3).



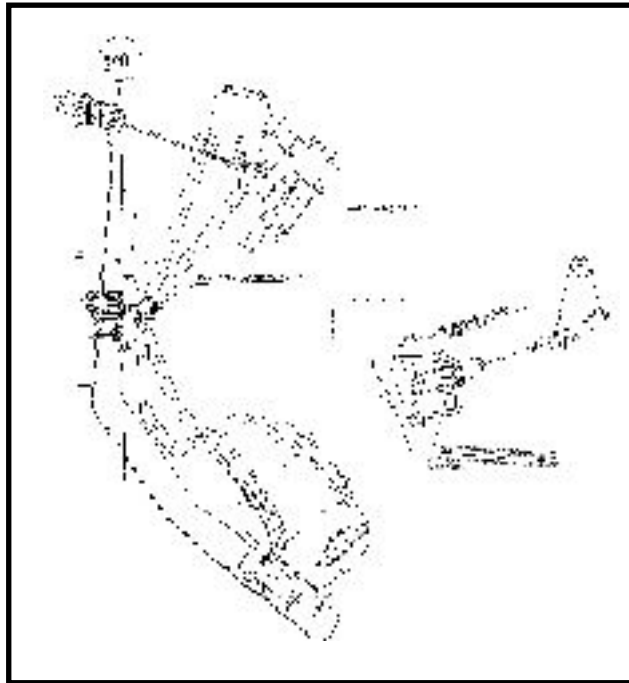
REMOUNTING

Perform the dismounting operations in the reverse order, by screw tightening at a moment of 1,5 – 2,5 daNm.

DISMOUNTING

Release the acceleration pedal (3) from its attachment with the acceleration cable by compressing the two wings of the attachment clip (1).

Dismount the bearing attachment screw (2) and release the pedal (3).



REMOUNTING

Perform the dismounting operations in the reverse order. The tightening moment of the bearing attachment screw is of $C = 0,45 \text{ daNm}$.

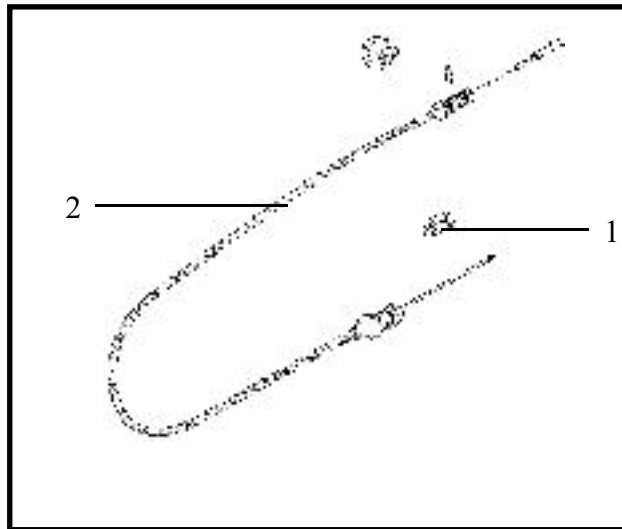
Check the 3,5 mm pedal stroke between the pedal pressure controller (5) and the pedal (3) by means of the threaded pin adjusting (4) subject to valve maximum opening and cable tightening.

NOTE

The buffer (6) is attached to the support before cable mounting.

DISMOUNTING

Act upon the cable attachment clip of the acceleration control lever and for the cable release (2) from its attachment on the acceleration pedal, act upon the clip (1).

**REMOUNTING**

Perform the dismounting operations in the reverse order.

REPAIR MANUAL

DACIA *SuperNova*

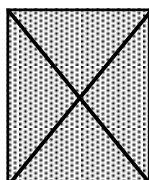
RM 524-2 BODY
ENGINE: E7J
GERBOX: JH3
TAPV: B41A, B41B, B41D

The reparation methods prescribed by the manufacturer in the present document are established subject to technical specifications in force at the document issuing date.

These are subject to modifications brought by the manufacturer at the fabrication of different assemblies, subassemblies or accessories of its vehicles.

All rights reserved to SC Automobile Dacia SA.

Reproduction or translating even partially of this present document is forbidden without the written authorisation of **AUTOMOBILE DACIA S.A.**



4 Body

40	GENERAL	
	Designation of parts (blow-up).....	40-1
	Openings clearance.....	40-4
	Repairing general conditions.....	40-5
	Welding types and parameters.....	40-6
	Collision diagnosis.....	40-8
	Carriage body checking/ Straightening bench CELETE type.....	40-12

41	LOWER STRUCTURE	
	Front longitudinal girder assembly.....	41-1
	Rear longitudinal girder.....	41-2

42	UPPER FRONT STRUCTURE	
	Front wing.....	42-1
	Carriage body front part.....	42-2
	Front wing lining.....	42-3
	Radiator upper cross bar.....	42-4
	Headlamp support.....	42-5
	Aeration grill.....	42-6

43	UPPER SIDE STRUCTURE	
	Front pillar lining.....	43-1
	Front pillar.....	43-2
	Middle pillar.....	43-3

44	REAR UPPER STRUCTURE	
	Side panel.....	44-1
	Inner rear wheel passage.....	44-2
	Rear panel.....	44-3

45	TOP OF BODY	
	Roof.....	45-1

47	LATERAL OPENINGS	
	Front/Rear door.....	47-1

48	NON SIDE OPPENING ELEMENTS	
	Front bonnet.....	48-1
	Hatchback.....	48-2

5 Mechanisms and accessoires

51	SIDE OPPENING ELEMENTS MECHANISMS	
	Lock and front door lock cylinder.....	51-1
	Lock and rear door lock cylinder.....	51-3
	Window and front door window regulator (with cable).....	51-5
	Window and rear door window regulator (with cable).....	51-6

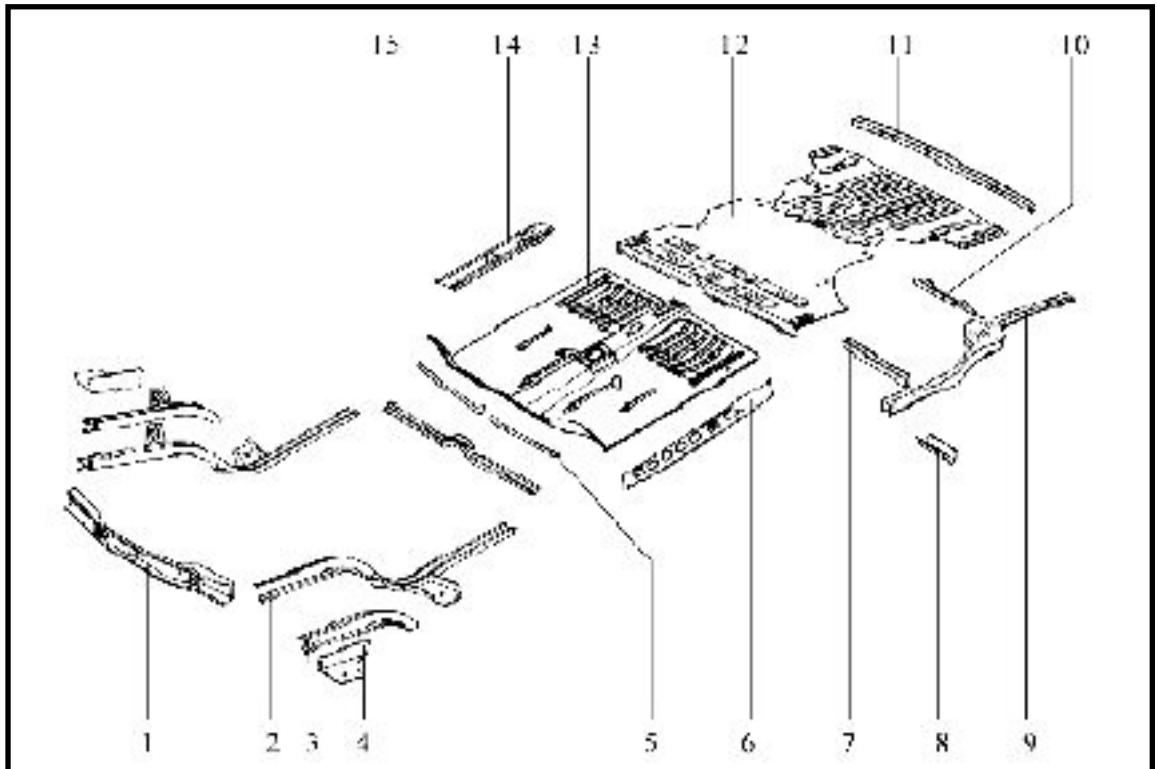
52	NON SIDE OPPENING ELEMENTS MECHANISMS	
	The composition of the front hood locking system.....	52-1
	Front hood locking system.....	52-2
	Hatchback locking system.....	52-3
	Hatchback balancing device.....	52-5

54	WINDOWS	
	Windscreen and hatchback glass.....	54-1
	Hatchback glass replacement.....	54-3

55	EXTERNAL PROTECTIONS	
	Front bumper.....	55-1
	Rear bumper.....	55-2

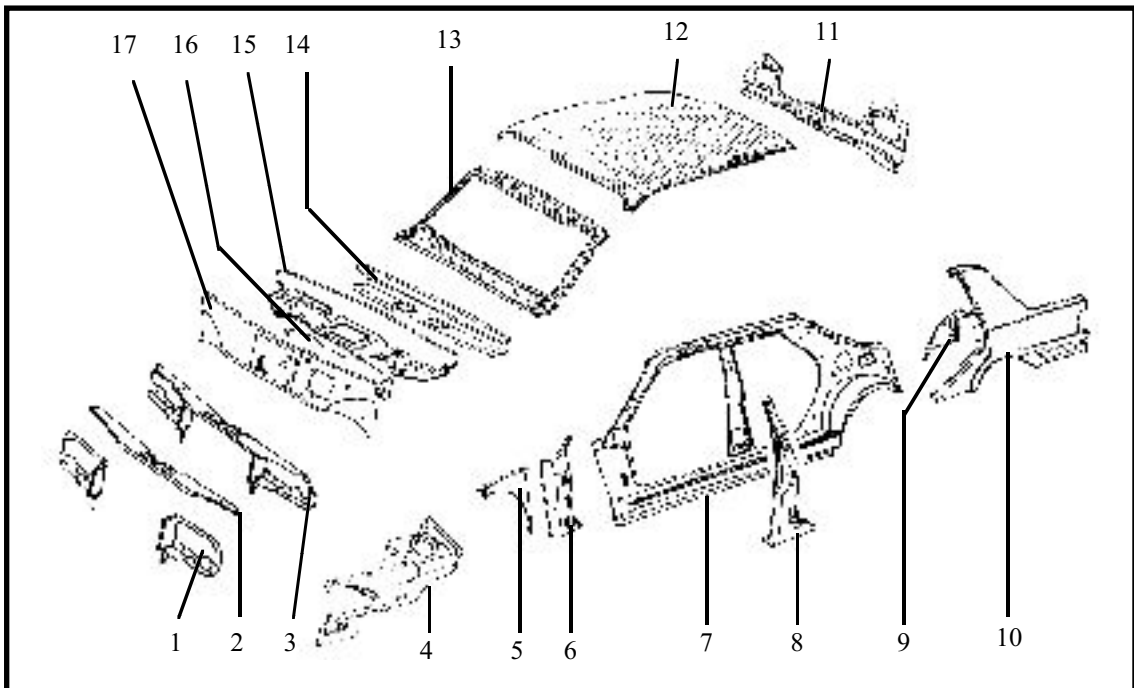
56	EXTERNAL ACCESSOIRES	
	Outside accesories.....	56-1
	Aileron.....	56-2

LOWER STRUCTURE COMPOSING ELEMENTS



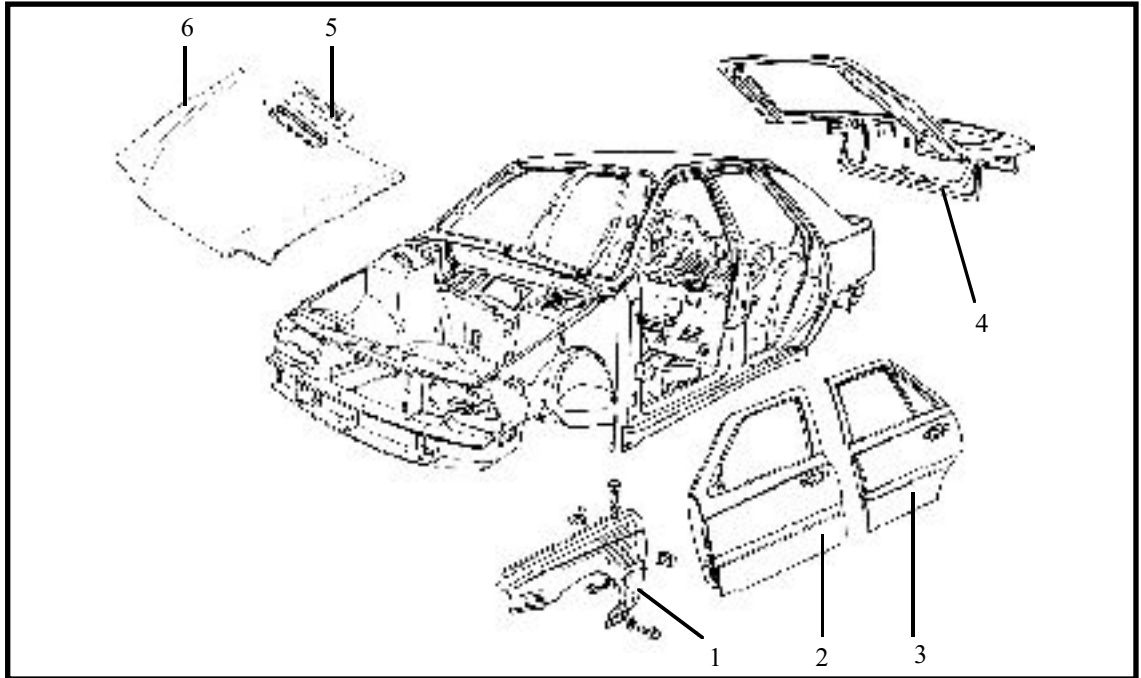
1. Front cross member
2. Front longitudinal girder assembly
3. Upper front longitudinal girder
4. Longitudinal girder closing plate
5. Floor cross member
6. Floor side plate
7. Tank front cross member
8. Rear side cross member
9. Rear longitudinal girder assembly
10. Tank rear cross member
11. Rear extreme cross member
12. Rear floor
13. Middle floor
14. Tunnel lining
15. Middle cross member

UPPER STRUCTURE COMPOSING ELEMENTS

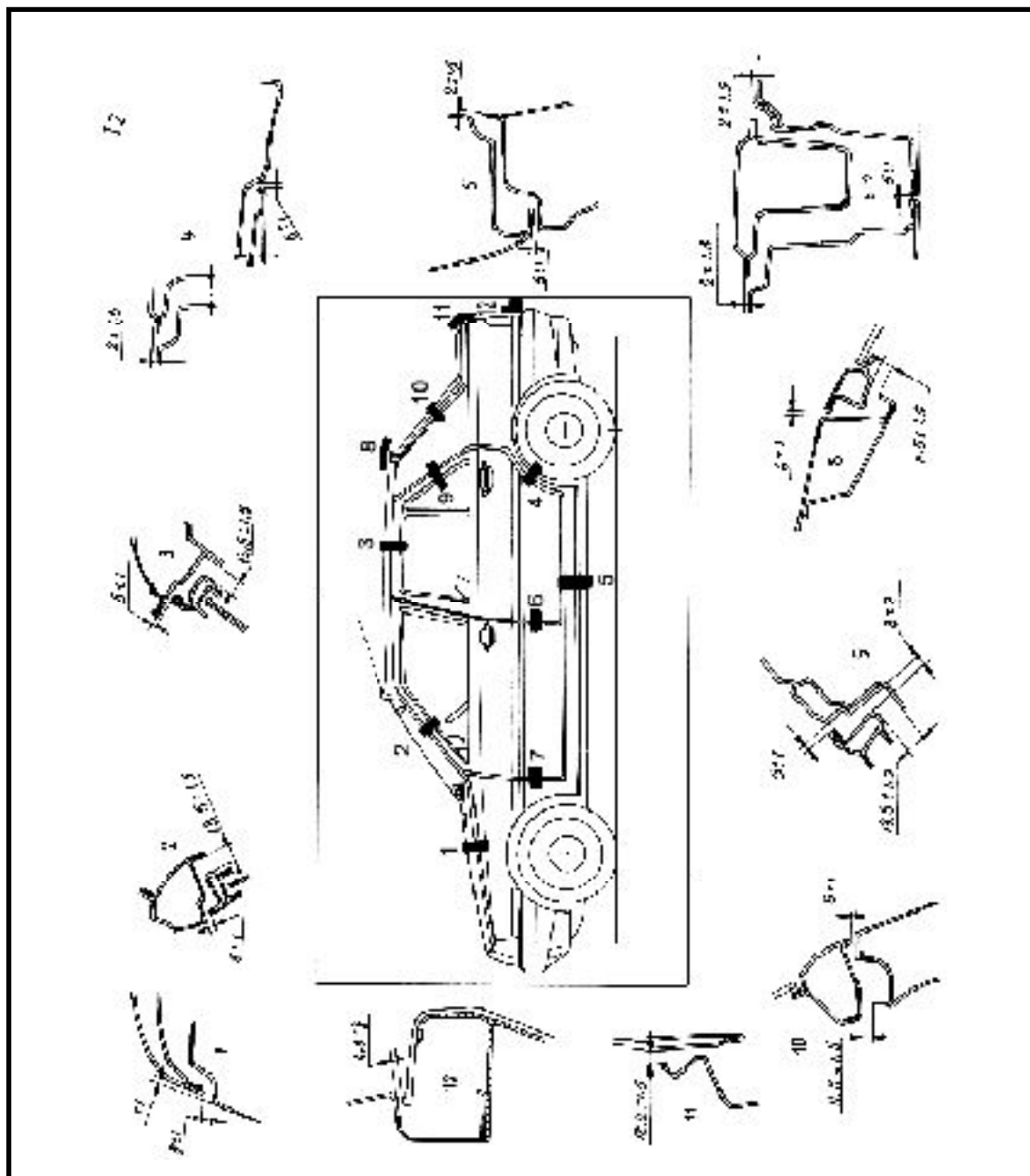


1. Headlamp support
2. Upper radiator cross bar
3. Front grill
4. Front wing lining
5. Front pillar lining
6. Front pillar
7. Side frame lining
8. Middle pillar
9. Inner wheel passage
10. Side panel
11. Rear panel
12. Ceiling
13. Windscreen frame
14. Windscreen lower cross bar
15. Climate control box
16. Climate control box central part
17. Cowl panel

CARRIAGE BODY REMOVABLE ELEMENTS



1. Front wing
2. Front door
3. Rear door
4. Hatchback
5. Aerating grill
6. Front bonnet



The replacement (reparation) operations of the weldable elements described in this chapter are specified subject to: cutting out of the parts to be replaced; the access to the welded elements, tools and checking devices accessibility, etc.

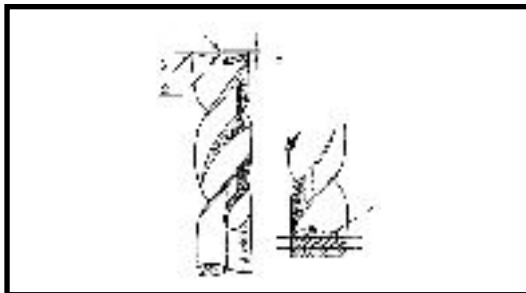
In case the vehicle body has suffered important deformations it is recommended the straightening of the damaged body elements, by means of some hydraulic presses, the operation being performed slowly and at cold.

For this range of vehicles, the elements resistance structure which are affecting the vehicle security, are not to be partially replaced (not to be cut), but entirely.

After welding detaching, the body elements must remain straight, without breakage or cracks, the possible holes being covered out with filling material or by tinning. The body elements surfaces are to be pickled (to eliminate possible oxidation marks) , dried and initially applied a paint layer.

The electric welding detaching of the body elements, is performed as follows:

- with a well sharpen chisel, this method may lead to parts deformation or even parts breaking.
- by using some extractors equipped with steel cutter type Brendeo or Pickvant max. 6 mm, having the cutting head as per shape shown in pict.1.



1. Centering point
2. Sharpen slope
3. Drill acting edges
4. Gap for catching the welding material
P = aprox. 0.4 mm

Whatever method is used, the remaining element must be in good order and to allow performing of a good quality welding point.

The plates cutting it is recommended to be performed (subject of importance and thickness) using manual scissors or pneumatic portable tools for plates cutting.

During cutting or welding of the body elements it is necessary to protect the electric wiring from the interior of the body structure.

The cutting, welding, or strengthening operation done on body welded elements, are to be performed on body checking/ straightening bench type CELETTE .

IMPORTANT

When removing or straightening the body resistance elements it is forbidden the total or partial heating, in order to avoid the mechanical resistance and metal elasticity decreasing.

At the reparation of the welded body elements, three welding categories may be used: protection gas welding (CO₂), electric spot welding and filling materials welding (autogenous).

At the autogenous welding, it is recommended that flame must be slightly inclined so that arch can be seen and the flame extremity to be maintained at aprox. 5 mm from the part to be welded.

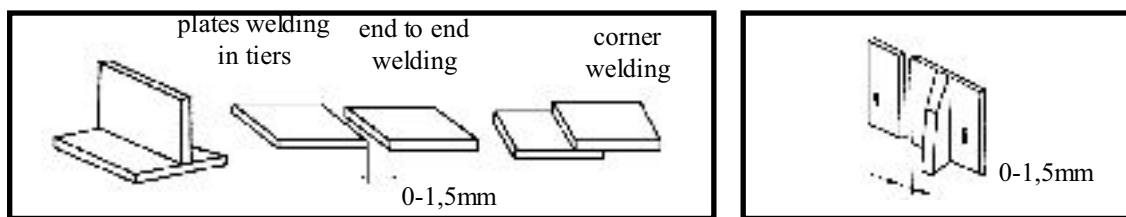
1. Spot welding resistive parameters for steel plates with carbon content $C < 0,15 \%$.

Plate thickness (mm)	Welding current (KA)	Welding time (per)	Tightening force (dNm)
0,5	6,5	5	130
0,8	8,0	8	200
1,0	9,5	10	250
1,25	10,5	10	295
1,5	10,0	14	310
2,0	12,0	16	350

NOTE

1 period = 1/50 part of a second

2. Welding parameters for the welding in protector gas for carbon steel plates or low-alloyed steel.



Horizontal welding position (pict.1)

Plate thickness (mm)	0,6	1,0	1,5	2,0
Electrode diameter (mm)	0,6 0,8	0,8 1,0	0,8 1,0	0,8 1,0
Welding wire speed (m/min)	2,5 1,9	3,2 2,4	4,4 3,8	5,7 4,4
Welding current (A)	35 35	55 80	80 120	100 130
Welding speed (m/min)	0,25 0,25	0,35 0,33	0,33 0,50	0,45 0,45
Welding voltage (V)	17 17	18 18	19 19	20 20
Protection gas flow (l/min)		12 - 17		
Electrode free length (mm)		6 - 12		

NOTE

In case of using the Ar + CO₂ mixture, the welding voltage will decrease with 2 V.

Vertical welding position (obligatory from top to bottom) pict. 2

Plate thickness	0,6	12	2,0
Electrode diameter (mm)	0,6 0,8	0,8 1,0	0,8 1,0
Welding wire speed (m/min)	2,5 1,9	3,3 3,2	5,7 4,4
Welding current (A)	35 35	70 100	100 130
Welding speed (m/min)	0,25 0,25	0,38 0,48	0,50 0,50
Welding voltage (V)	17 17	18 18	20 20
Protection gas flow (l/min)	12 - 17		
Electrode free length (mm)	6 - 12		

COLLISION DIAGNOSIS

During the vehicle exploitation, the carriage body may suffer different distortions, that lead many times to the wheels setting angles change, body elements breakage, vibrations or even mechanical parts wear.

In these conditions, before performing the vehicle body reparation, some checking is necessary:

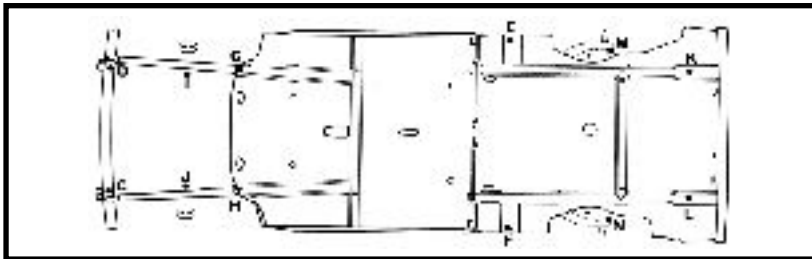
Visual checking - consisting in the examination of the mechanical elements attachments and of the distortions occurring in the vehicle damaged areas.

Checking with the bar (control gauge) – consisting in comparing the measurements done in symmetric points.

The geometry checking of the rolling transmissions – this checking is the only one enabling to find out if the body damage was not affecting the vehicle road behavior.

IMPORTANT

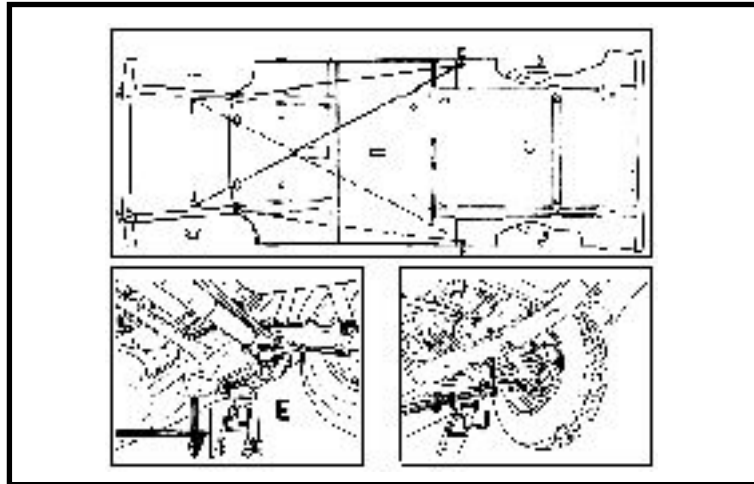
This checking must be not ignored, except some border-line cases, the checking of the rolling transmissions leading to the identification of the distortions occurred further to an accident.



CENTRAL PART CHECKING

This checking is performed in the purpose to establish if one of the distortions is not affecting this floor part, from where the checking starts.

Compare the followings lengths : $EI = FJ$; $EJ = FI$.

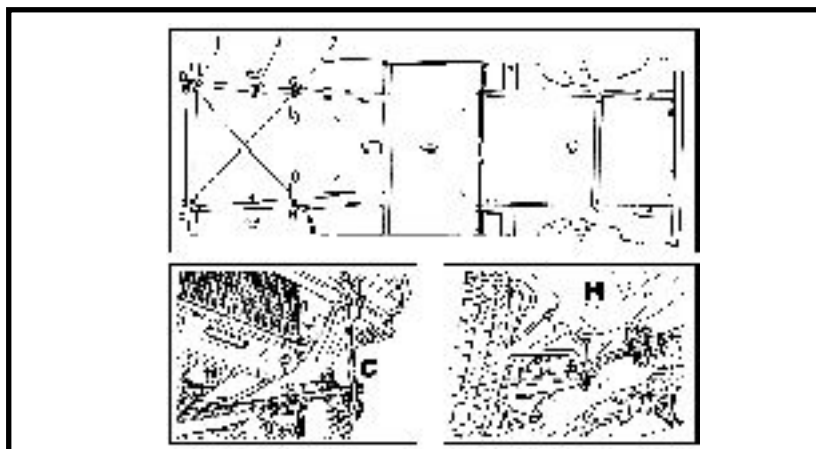


FRONT LONGITUDINAL GIRDERS CHECKING

Compare the followings lengths: $CG = DH$; $CH = DG$.

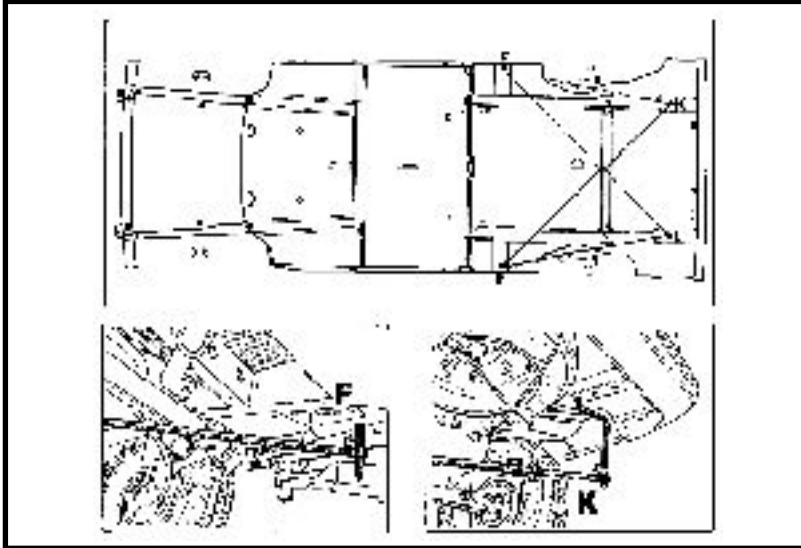
If the lengths ($CH - DG$) and the diagonals ($CG - DH$) are not identical, check again the point (3).

If points (1) and (2) are good, the front axle angles may be checked.



REAR LONGITUDINAL GIRDERS CHECKING

Compare the following lengths: $EK = FL$; $EL = FK$.

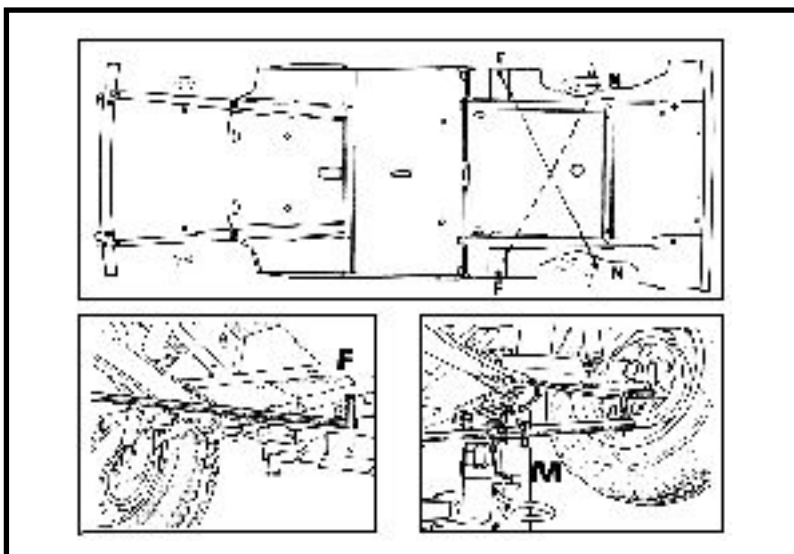


REAR ARM CHECKING

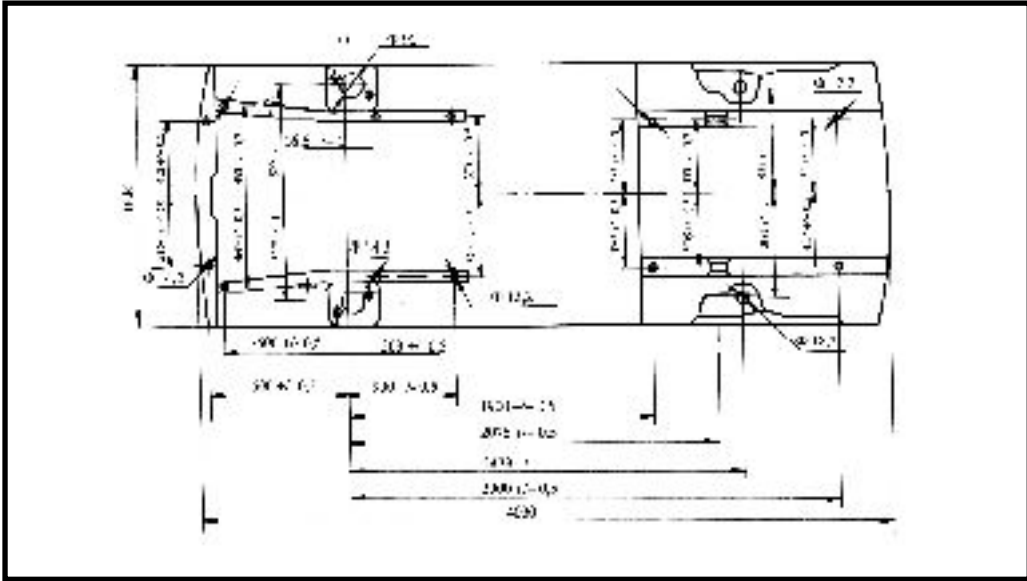
Compare the following lengths: $FM = EN$.

If a difference is noticed when measuring the lengths ($FM - EN$), the rear arms are to be replaced.

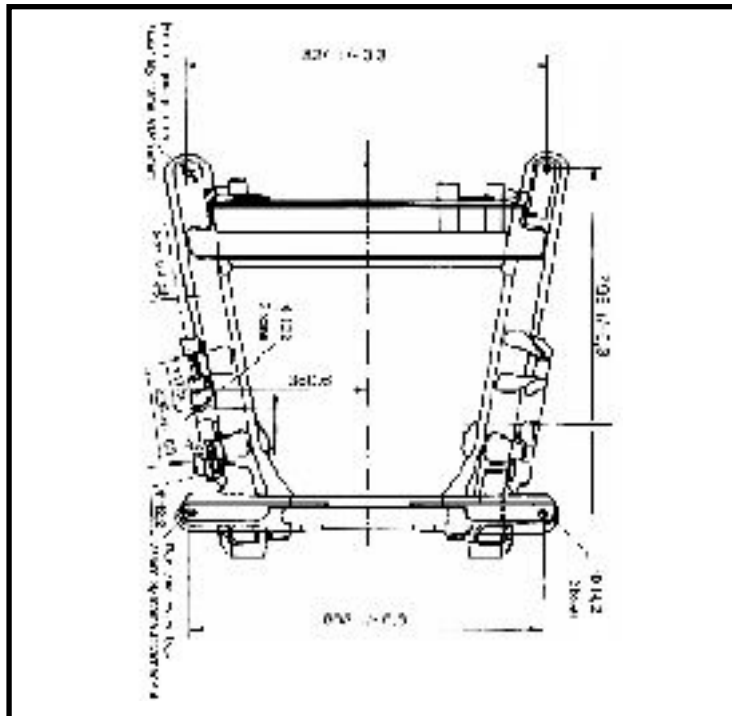
The checking operation of the rear arms is followed by a checking performed with the gauge fixed on the arm and on the central longitudinal girder.



FLOOR FRAME CHECKING



G.M.P. SUPPORT ASSEMBLY CHECKING



For checking, straightening or repairing the DACIA vehicles bodies, the use of the CELETTE bench is recommended.

The checking/straightening bench type CELETTE (service code CAR500) is composed of:

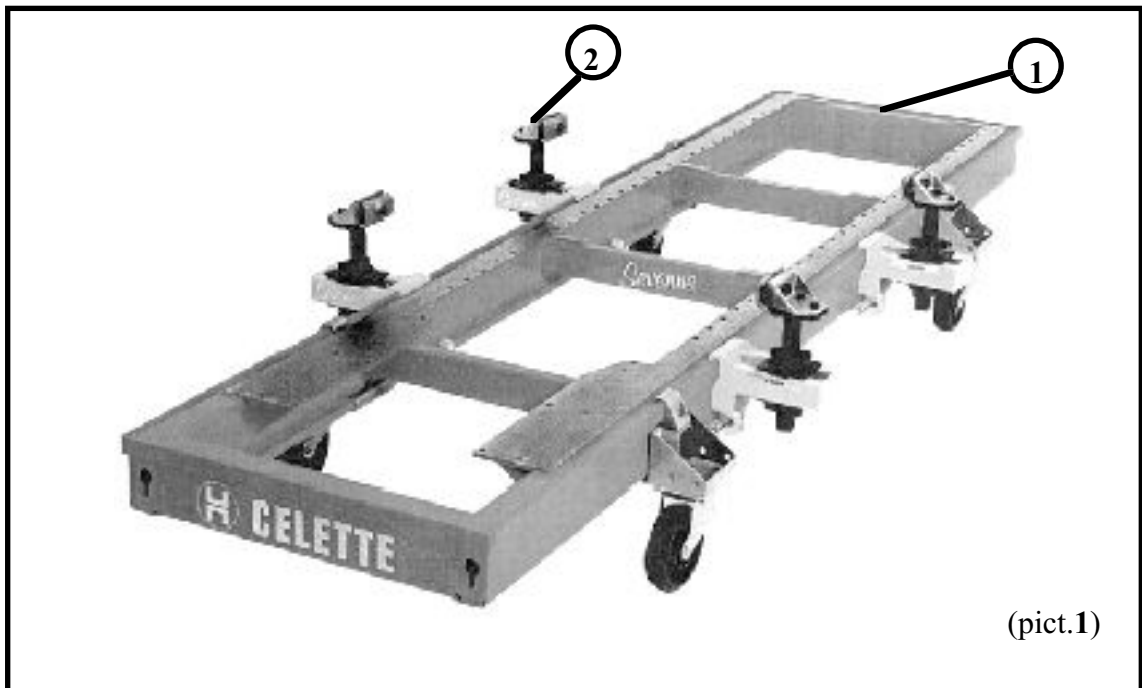
- CAR 501 (1 mobile bench with four wheels, four parts for vehicle anchoring, one traction arm of 10 t, type "CAIMAN").
- CAR 502 - set modular cross bars
- CAR 503 - set of 22 towers MZ
- CAR 504 - set accessories for traction
- CAR 505 - set of specific supports for DACIA BI, Bk
- CAR 506 - set of specific supports for DACIA 1304, 1307
- CAR 507 - set of specific supports for DACIA NOVA.

NOTE

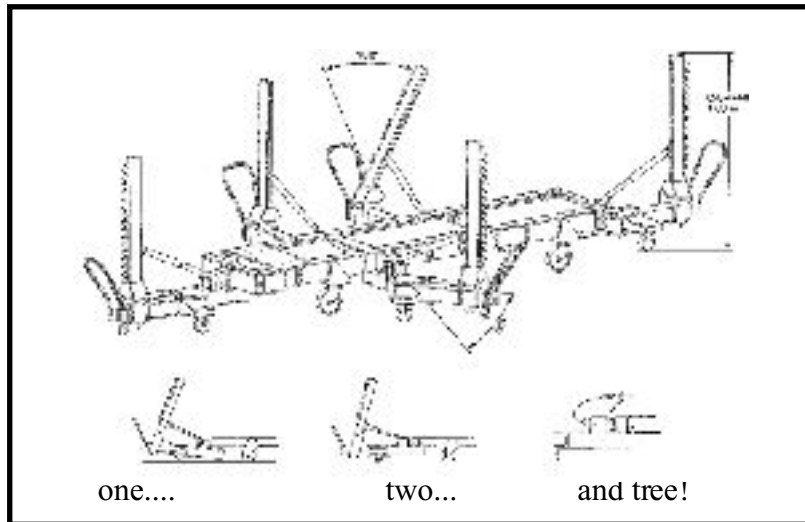
The purchase of the checking / straightening bench - CELETTE type- is to be done through Automobile Dacia S.A.

1. CAR 501

The mobile bench (1) is provided with four anchoring parts (2) - (fig 1), which can be used when a carriage body straightening operation is performed.



To straighten the vehicle body, CELETTE bench is provided with a traction arm of 10 tons, Caiman type, 250-mm stroke of the hydraulic cylinder, with rapid anchorage on any side of the mobile bench (pict. 2).



(pict. 2)

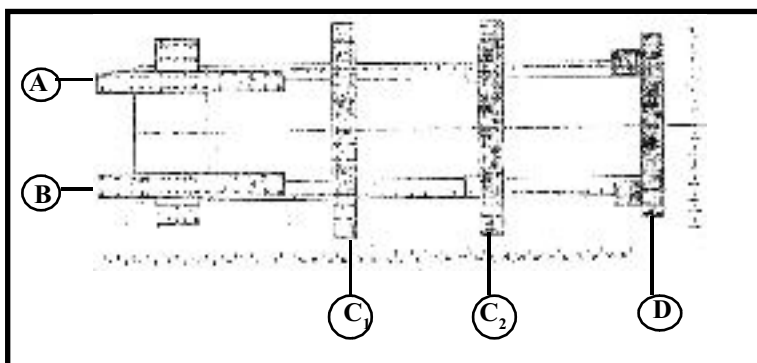
2. CROSS BARS MODULAR SET (CAR 502)

CELETTE bench has in its composition, five modular cross bars (pict.3), as follows:

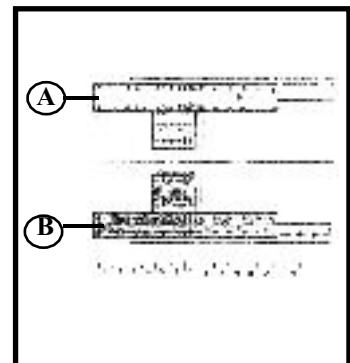
- two front cross bars A and B (T shaped) which are always in the same position (towards front of bench) - pict. 4 .

- two straight cross bars C1 and C2 and one D cross bar (U-shaped) which may be placed in different positions subject to the vehicle type.

The marked figures (14.....36) are engraved on the mobile bench, every mounting being supplied with a drawing indicating the exact position of the modular crossbars subject to the vehicle type.



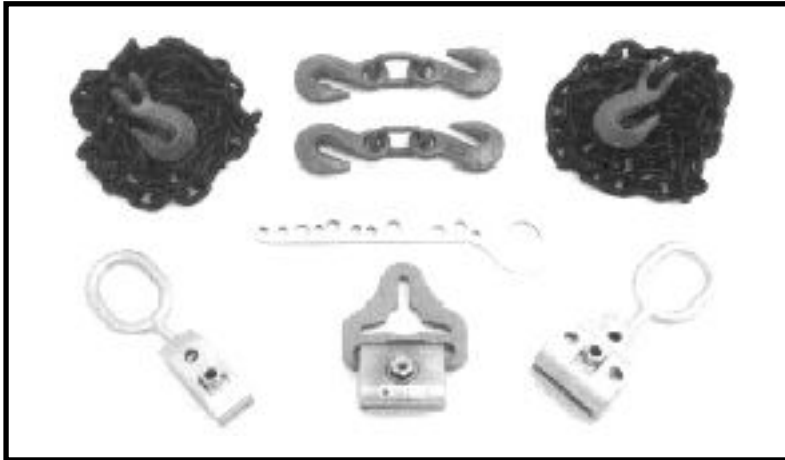
(pict.3)



(pict.4)

3. TRACTION ACCESSORIES SET (CAR 504)

CELETTE bench is equipped with a traction accessories set CAR 504, which allows the operator to achieve different anchoring when a body strengthening is performed (pict.5).

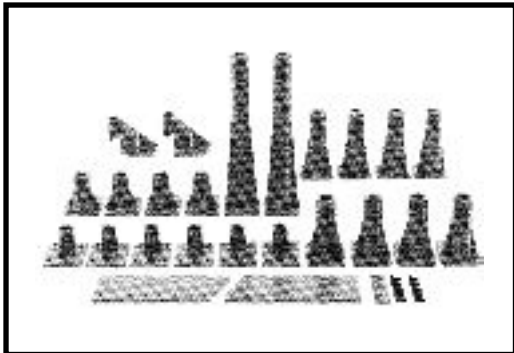


(pict. 5)

4. SET OF MZ TOWERS AND SPECIFIC SUPPORTS (CAR 503 +CAR 507)

This kit represents a MZ system and consists of two elements:

- kit of 22 MZ towers, universal CAR 503 – (see pict.6)
- kit of specific supports CAR 507



(pict.6)

Each MZ tower has an arrow, which settles its orientation on the cross bar and a MZ reference (pict.7)

Example – MZ 080, where:

MZ- measurement on OZ axle of the vehicle.

080 – MZ tower height (in mm)

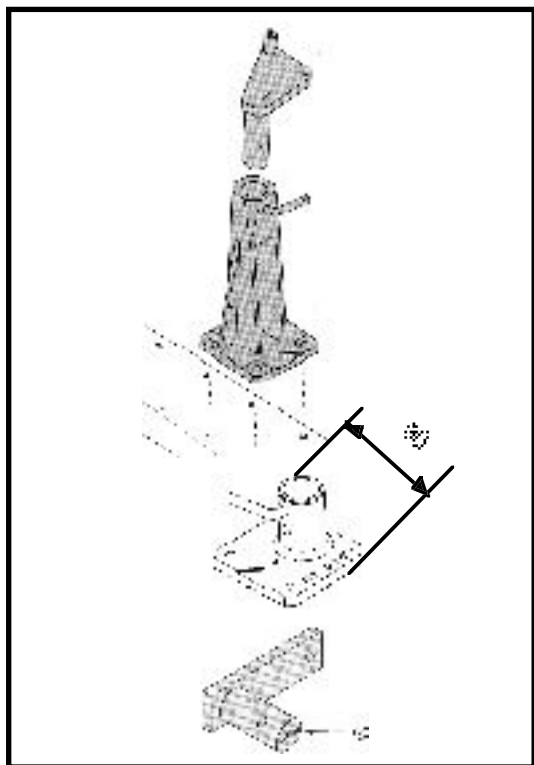
In the same way as for COMPACT assembly, the arrow (1) marked on the specific support must be oriented towards the bench front part, as follows:

→ attachment on the right part of the mobile bench

← attachment on the left part of the mobile bench

NOTE

The MZ towers may be used also for the checking/ straightening of the carriage bodies of other vehicles types, being then necessary the purchasing of the specific supports for each type of vehicle.



(pict.7)

Each specific support is identified by a number (2) marked at the lower part and has one or two attachments holes in the MZ tower (in this case you should take into consideration the specific diagram from the assembly drawing supplied together with the kit.

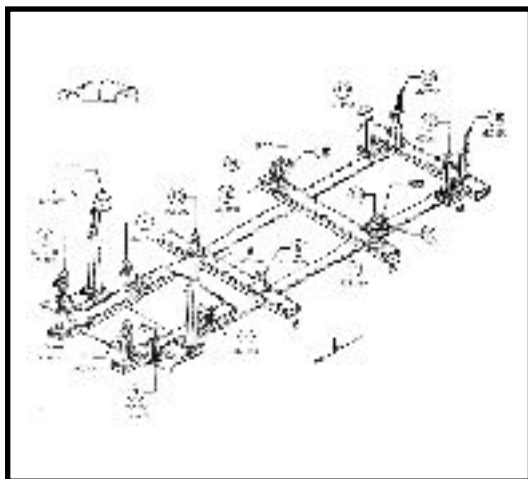
Symbols:

1 – with or without dismantled mechanical elements.

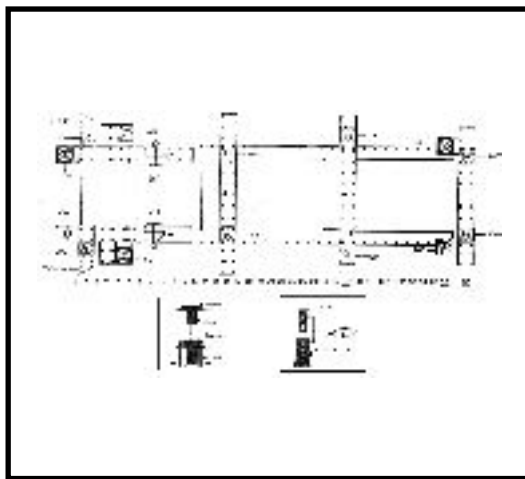
④ – with dismantled mechanical elements.

NOTE :

Identification and mounting of the towers on different modular cross bars and of the specific supports in the MZ towers (1...20), when repairing a Dacia SuperNova body, is to be performed as per mounting drawing (pict.8 and pict.9) which is supplied together with this kit.



(pict.8)



(pict.9)

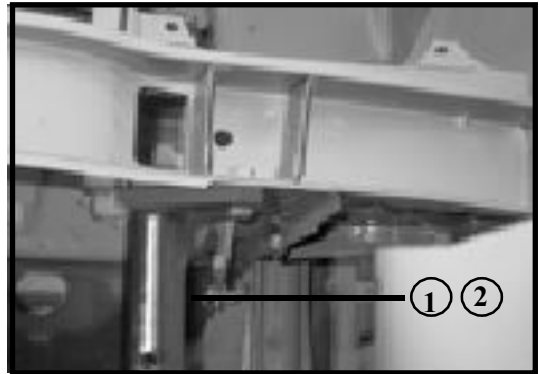
REFERENCE POINTS ON VEHICLE

GMP frame fixing on the lower cross member

The specific supports (1) and (2) are used in front straightening, front mechanic elements dismantled, enabling the positioning of the lower cross member, consequently the front fixing of the GMP frame (pict. 10).

NOTE

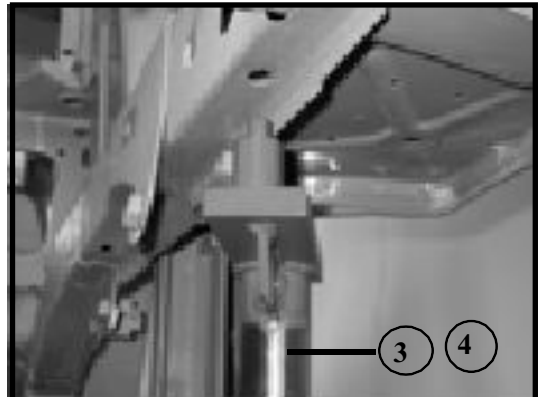
These holes are for main reference for the vehicle front part.



(pict.10)

Centering under front longitudinal girder

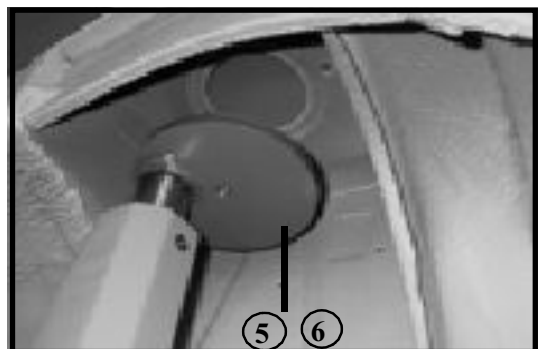
The specific supports (3) and (4) are used for positioning, centering, and alignment of the front longitudinal girders. They are to be used for all reparation cases because they are a main reference of vehicle setting on the bench (pict. 11).



(pict.11)

Upper fixing on front shock absorber(shock absorber column)

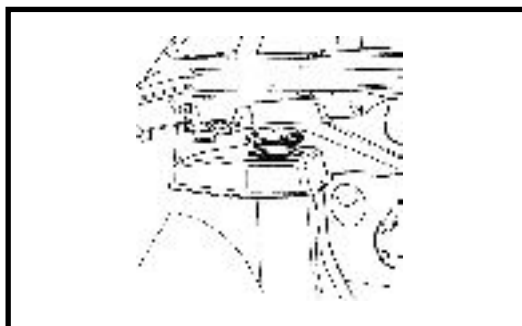
Specific supports (5) and (6) are used in front strengthening, mechanical elements dismantled, enabling the positioning of the shock absorbers ends, consequently the front linings positioning (pict.12).



(pict.12)

Their centering in the shock absorbers ends is performed by means of the centering washers (1)- (pict.13).

The centering washers are used when straightening a body and also when replacing the front wing lining or the body front part.

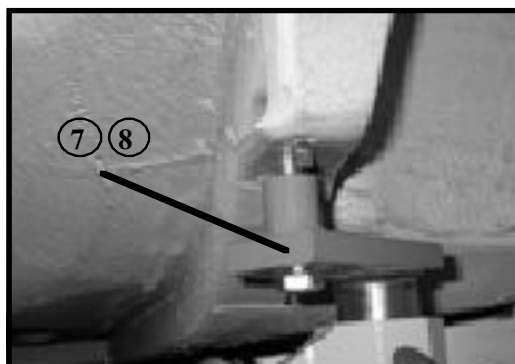


(pict.13)

GMP frame rear fixing on front longitudinal girder

The specific supports (7) and (8) are used in the front straightening, enabling the positioning of the front longitudinal girder and consequently the rear fixing of the GMP frame.

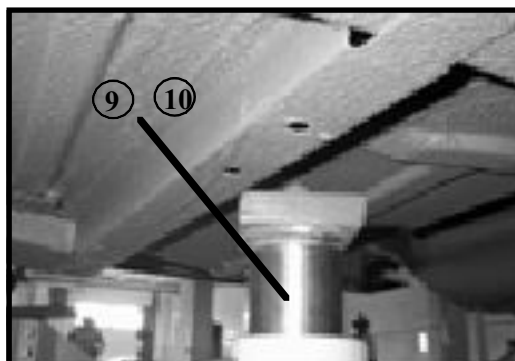
In case of the rear straightening, these are enabling the front alignment of the vehicle on the bench. (pict.14).



(pict.14)

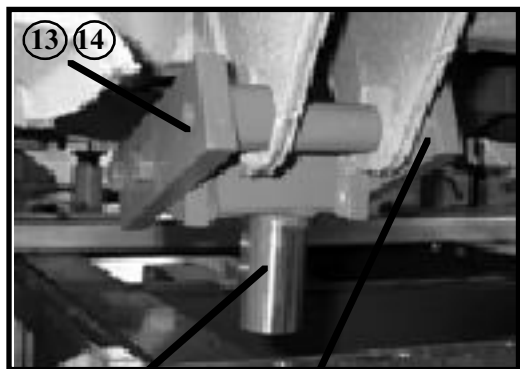
Centering under the central floor

The specific supports (9) and (10) have the purpose of positioning, centering and alignment of the front longitudinal girders. These are to be used in all cases because they are a setting reference of the vehicle on the bench. (pict. 15).



(pict.15)

Rear axle arm fixing

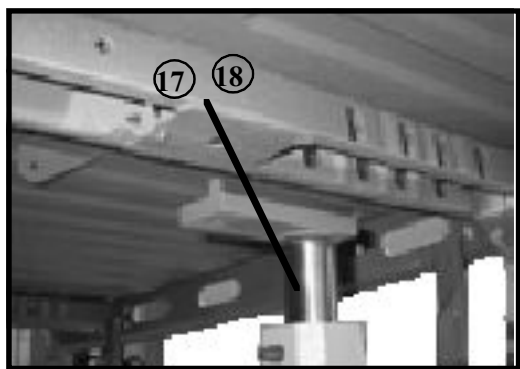


(11) (12) (15) (16) (pict.16)

The specific supports (11), (12), (13), (14), (15) and (16) are enabling the positioning, centering and rear alignment of the vehicle on the bench in case of a straightening.

These are to be used in all cases, being a main reference for vehicle setting on the bench.

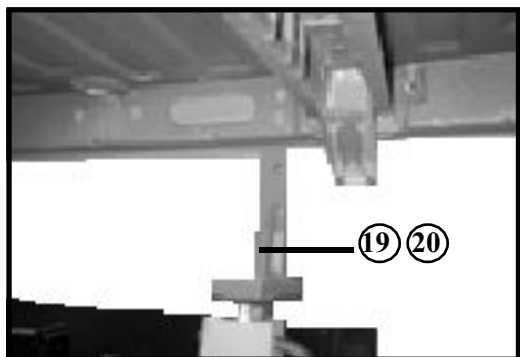
Centering under rear longitudinal girder



(pict.17)

The specific supports (17) and (18) are enabling the positioning, centering, and alignment of the rear longitudinal girders (pict.17).

Rear plate fixing



(pict.18)

The specific supports (19) and (20) used in the rear straightening, for rear plate positioning is used in the same time for the vehicle alignment in the front straightening when the vehicle front part is replaced (pict. 18).

REPLACEMENT

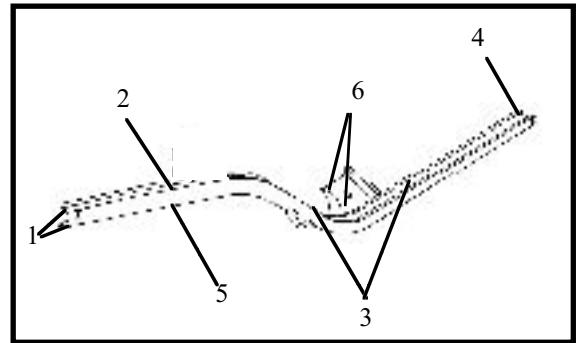
This operation shall be performed only on the repair bench. For the specific supports mounting on the bench, please see the 40 sub-chapter.

DISMOUNTING

In order to reduce the distortion risk of the front longitudinal girder, for the welding points detaching it is recommended the use of steel cutter.

Dismount the damaged elements, which are in contact with the front longitudinal girder.

Proceed to a straightening on the body checking/straightening Celette type, until bringing it, as closed as possible to the initial shape.



Detach the welding points of the front longitudinal girder which are in connection with:

- the front cross bar in the area (1);
- the front wing lining in the area (2);
- the central floor in the area (3);
- the central cross bar in the area (4);
- the upper longitudinal girder closing plate in the area (5).

Detach the welding points of the cross bar with the floor closing plate and the central floor in the area (6).

Remove the damaged element.

Straighten the areas resulted by dismounting.

Grind the areas resulted by dismounting

REMOUNTING

Position and center the new element.

Perform an electric welding (by spots and under gas protection) as follows:

- in the area (1) connecting the front longitudinal girder with the front cross bar;
- in the area (2) connecting the front longitudinal girder with the front wing lining;
- in the area (3) connecting the front longitudinal girder with the central floor;
- in the area (4) connecting the front longitudinal girder with the front cross bar;
- in the area (5) connecting the front longitudinal girder with the upper girder closing plate;
- in the area (6) connecting the front longitudinal girder with the cowl panel.

Protect the new element with a corrosion preventing and noise absorbent product.

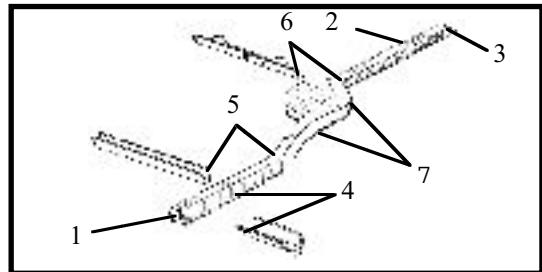
REPLACEMENT

This operation shall be performed only on the repair bench. For the specific supports mounting on the bench, please see the 40 chapter.

DISMOUNTING

Dismount the damaged elements, which are in contact with the rear longitudinal girder.

Proceed to a straightening on the body checking/straightening Celett type, until bringing the vehicle as closed as possible to the initial shape.



Detach the welding points of the rear longitudinal girder (1) which are in contact with:

- the central floor in the area (1);
- the rear floor in the area (2);
- the rear end floor in the area (3);
- the rear side cross bar in the area (4);
- the tank front cross bar in the area (5);
- the tank rear cross bar in the area (6);
- the inner wheel passage in the area (7);

Straighten the areas resulted after dismounting.

Grind the areas resulted after dismounting

REMOUNTING

Position and center the new element

Weld the rear longitudinal girder following the assembling outlines 1, 2, 3, 4, 5, 6 and 7 (spots and under gas protection welding)

Protect the new element with a corrosion preventing and noise absorbent product.

DISMOUNTING

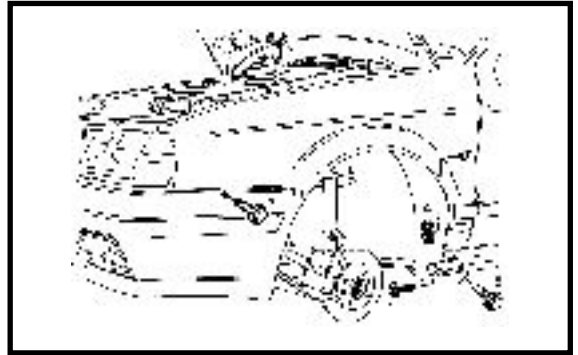
Dismount partially the front bumper.

Dismount the side-signaling lamp from the front wing.

Dismount the attachment screws (1) of wheel passage protection.

Dismount the attachment screws (2), (3), (4) and (5) of the wing on the vehicle body.

Dismount the front wing.



FRONT WING PREPARATION

Apply by means of a brush a layer of thermo-weldable product **cls. 33 b, cs 4603 – 202** on the contact areas of front wing with:

- the contact area with the front wing lining
- the contact area with the side frame lining on the wing upper edge;
- the contact area with the wing fixing supports on the front pillar;
- the contact area of the wing rear lower part with the side frame lining;
- the contact area with the front part wing fixing support.

Apply also a sealant material layer **type 223** in the contact area of the front wing with: the front wing lining the side frame lining and the front pillar.

REMOUNTING

Perform the dismounting operations in the reverse order.

REPLACEMENT

This operation shall be performed only on the repair bench. For the specific supports mounting on the bench, please see the 40 chapter

DISMOUNTING

Dismount the damaged elements, which are in contact with the front part body.

Perform a straightening on the body checking/repairing bench, until bringing the carriage body almost at the initial shape.

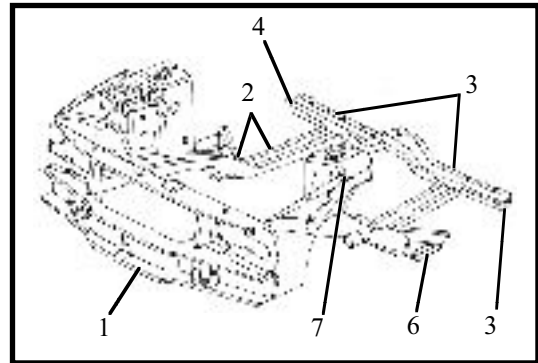
Detach the welding points from to front part of carriage body (1) as follows :

- in (2) joining area of the front longitudinal girders with the central floor;
- in (3) joining area of the front cross bar with the central floor;

- in (4) joining area of the central cross bar with the floor closing plate;
- in (5) joining area of the front wing linings with the cowl panel;
- in (6) joining area of the cross bar with floor closing plate;
- in (7) joining area of the front wing linings with the front pillar linings.

Straighten the areas resulted by dismounting.

Grind the areas resulted by dismounting



REMOUNTING

Position and center the new element on the repairing bench.

Check the correct positioning of the front part carriage body.

Weld the front part carriage body, following the assembling outlines **2,3,4,5,6 and 7** (spots welding under gas protection).

Protect the welding with a corrosion-preventing product.

Apply noise absorbent product on the whole surface: front wings linings, front pillar linings, cowl panel and the central floor.

By means of a spraying gun, apply on the whole surface corrosion protecting products through the front crossbar and front longitudinal girder holes.

Perform the sealing of the front PART carriage body.

Mount the front wings, the front grill, and the front bonnet.

REPLACEMENT

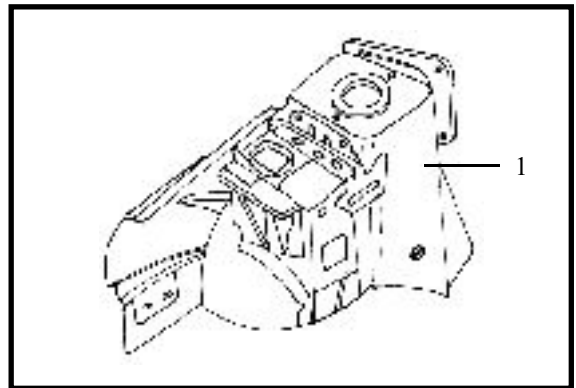
This operation shall be performed only on the repair bench. For the specific supports mounting on the bench, please see the 40 sub-chapter.

DISMOUNTING

Dismount the damaged elements, which are in contact with the front wing lining.

Detach the welding points from the front wing lining (1) which are in contact with:

- the upper longitudinal girder in (2) area;
 - the front cross bar in the area (3);
 - the front grill in the area (4);
 - the closing plate in the area (5);
 - the floor in the area (6);
 - the cowl panel in the area (7);
- the climate control box in the area (8).



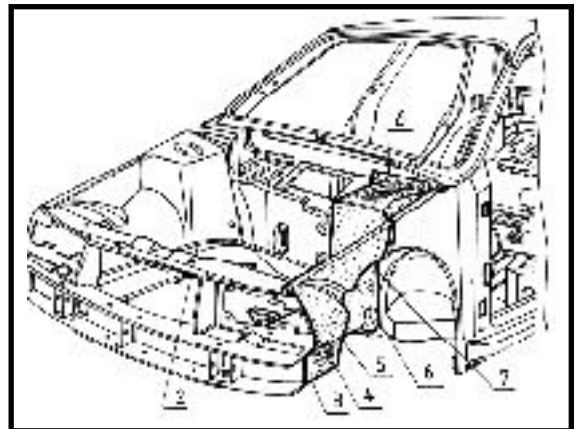
REMOUNTING

Position and center the new element.

Check the correct positioning of the front wing lining.

Weld the front wing lining (1) following the assembling outlines 2, 3, 4, 5, 6, 7 and 8.

Protect the new element with a corrosion preventing and noise absorbent product.



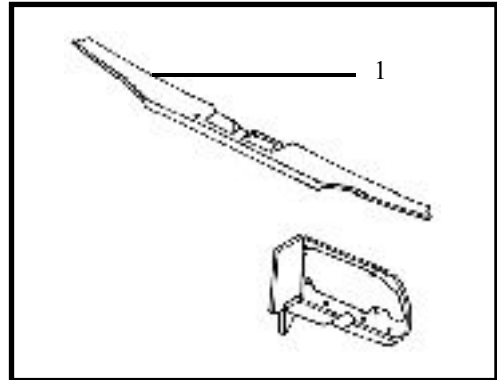
DISMOUNTING

Dismount the elements, which are in contact with the radiator upper cross bar.

Detach the welding points of the radiator upper cross bar (1) which are in connection with:

- the front wing lining in the area (3);
- the headlamp support in the area (4);
- the sidewall in the area (5);

Straighten the areas resulted by dismounting.
Grind the areas resulted by dismounting



REMOUNTING

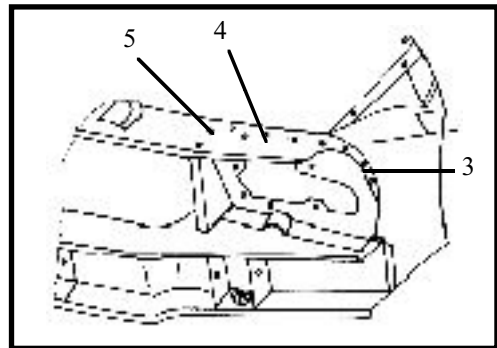
Position and center the new element.

Check the correct positioning of the radiator upper cross bar.

Weld the radiator upper cross bar (1) following the welding outlines (3), (4) and (5).

Protect the welds with a corrosion preventing product.

Mount the elements, which are in connection with the radiator upper cross bar.



DISMOUNTING

Dismount the elements, which are in contact with the headlamp support.

Detach the welding points of the headlamp support (2) which are in connection with:

- the front wing lining in the area (6);
- the radiator upper cross bar in the area (7);
- the front cross bar in the area (8).

Straighten the areas resulted by dismounting.

Grind the areas resulted by dismounting

REMOUNTING

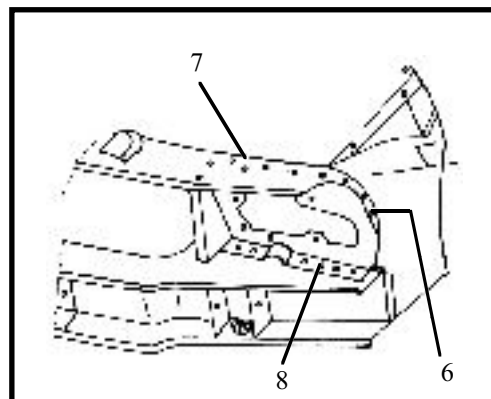
Position and center the new element.

Check the correct positioning of the headlamp support.

Weld the headlamp support (2) following the welding outlines (6), (7) and (8).

Protect the welding with a corrosion-preventing product.

Mount the elements, which are in connection with the headlamp support.

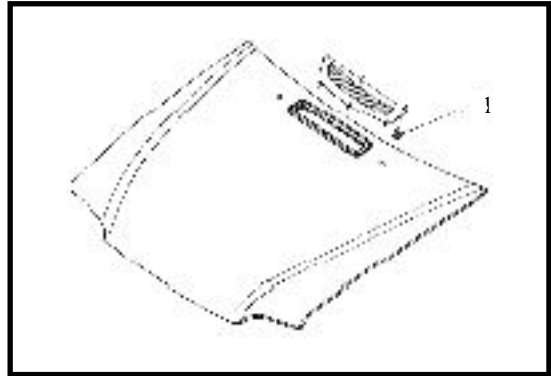


DISMOUNTING

Take out the clips (1) from the front grill grippers taking care to prevent their distortion or damaging.

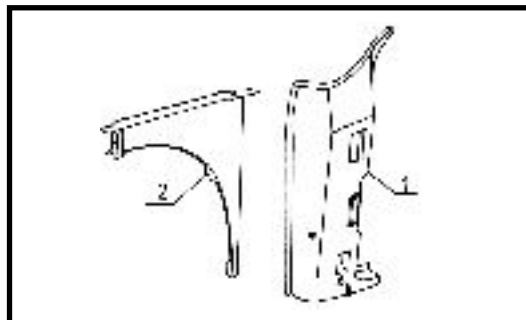
REMOUNTING

Perform in the reverse order the dismounting operations.



FRONT PILLAR LINING

1. Front pillar
2. Front pillar lining



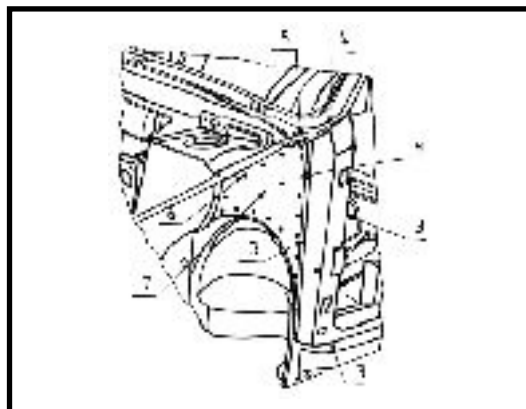
DISMOUNTING

Dismount the elements that are in contact with the front pillar lining.

Detach the welding points of the front pillar lining (2) which are in connection with:

- side frame lining in the area (8);
- windscreen lower crossbar in the area (5);
- front wing lining in the area (6);
- climate control box in the area (7).

Straighten the areas resulted by dismantling.
Grind the areas resulted by dismantling



REMOUNTING

Position and center the new element.

Check the correct positioning of the front pillar lining.

Weld the front pillar lining (2) following the assembling outlines (5), (6), (7) and (8).

Protect the new element with a corrosion preventing and noise absorbent product.

DISMOUNTING

Dismount the elements that are in contact with the front pillar.

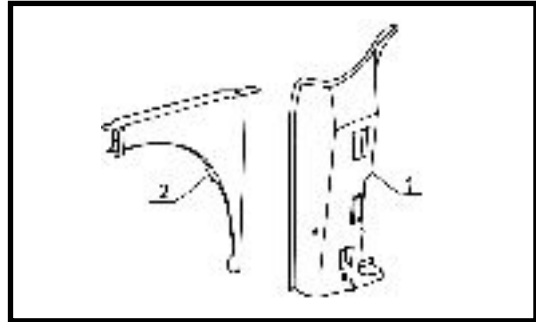
Detach the welding points of the front pillar

(1) which are in connection with:

- side frame lining in the area (3);
- roof in the area (4).

Straighten the areas resulted by dismantling.

Grind the areas resulted by dismantling



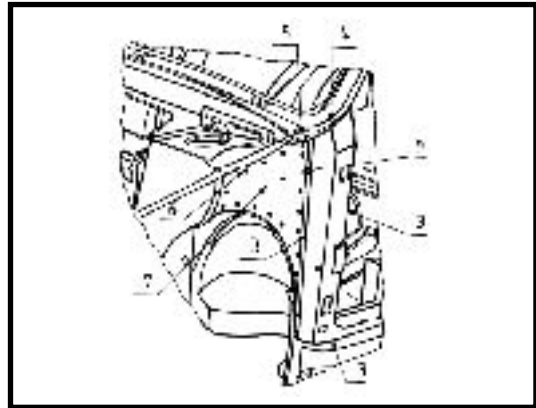
REMOUNTING

Position and center the new element.

Check the correct positioning of the front pillar.

Weld the front pillar (1) following the assembling outlines (3) and (4).

Protect the new element with a corrosion preventing and noise absorbent product.



DISMOUNTING

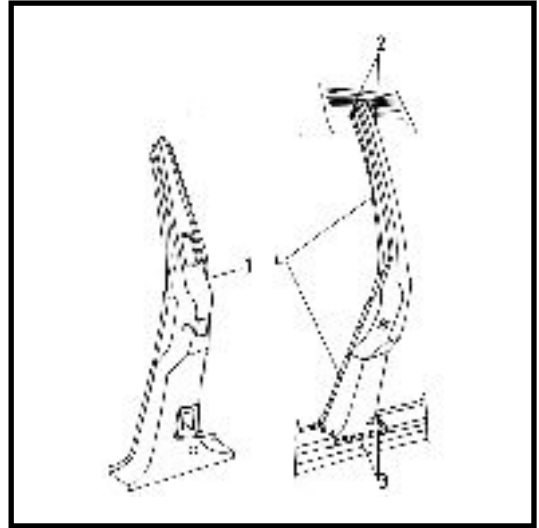
Dismount the damaged elements, which are in contact with the middle pillar.

Detach the welding points of the middle pillar (1) which are in connection with:

- side frame lining in the area (4);
- front lower panel in the area (3);
- roof belt in the area (2).

Straighten the areas resulted by dismantling.

Grind the areas resulted by dismantling



REMOUNTING

Fit temporary the middle pillar (1).

Check the correct pillar positioning using the door as geometric gauge.

Weld the middle pillar following the welding outlines (2), (3) and (4).

Perform a straightening gas protection welding in the areas (2).

Protect the welding with a corrosion-protection product.

Mount in the reverse order the elements, which are in connection with the middle pillar.

DISMOUNTING

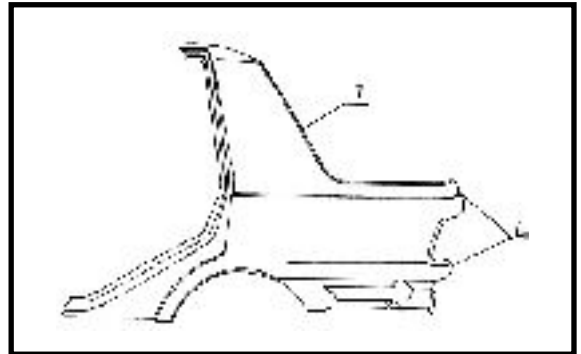
Dismount the elements, which are in contact with the side panel.

Detach the welding points of the side panel (1) which are in connection with:

- side frame lining in the area (2);
- roof in the area (3);
- rear panel in the area (4);
- rear end cross bar in the area (5).

Straighten the areas resulted by dismantling.

Grind the areas resulted by dismantling



REMountING

Apply a layer of 5322 size material on the joint areas of the side panel with the side frame lining and the rear panel.

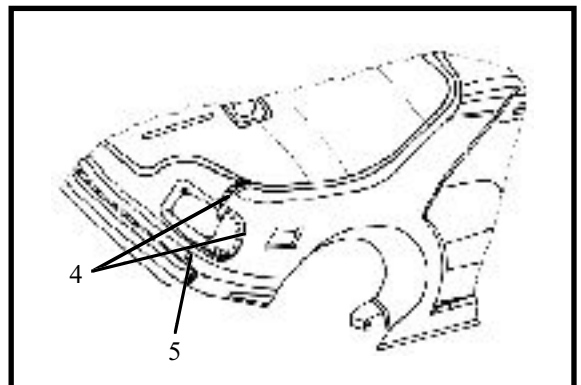
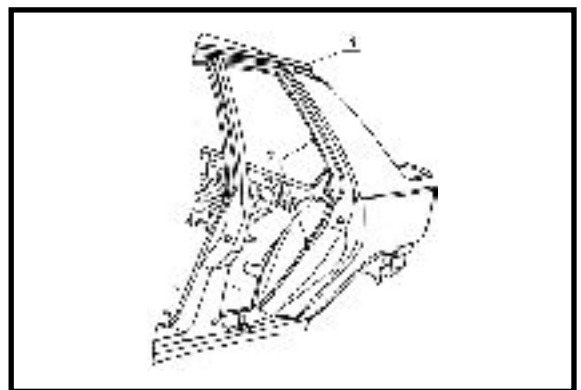
Position and center the new element.

Check the correct positioning of the side panel.

Weld the side panel (1) following the welding outlines 2, 3, 4, and 5.

Protect the welding with a corrosion-preventive product.

Mount in the reverse order the elements in connection with the side panel.



DISMOUNTING

Dismount the elements, which are in contact with the inner rear wheel passage.

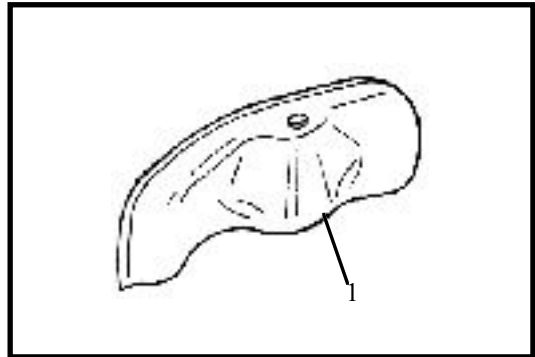
Detach the welding points of the two rear safety belt supports.

Detach the welding points of the rear wheel passage (1) which are in connection with:

- side frame lining in the area (2);
- side panel in the area (3);
- rear longitudinal girder in the area (4).

Straighten the areas resulted by dismounting.

Grind the areas resulted by dismounting

**REMOUNTING**

Position and center the new element.

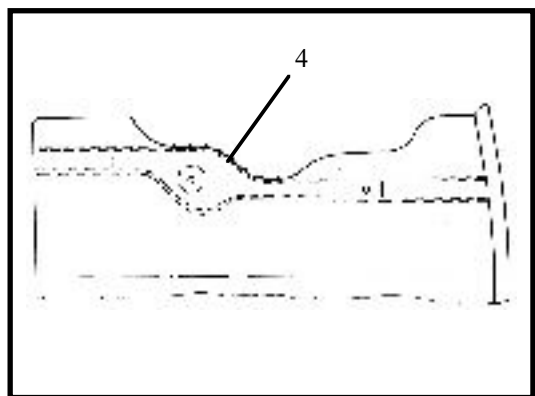
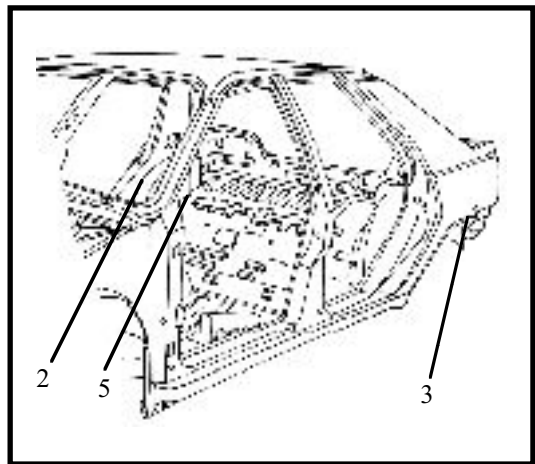
Check the correct positioning of the rear wheel passage.

Weld the rear wheel passage (1) following the assembling outlines 2, 3 and 4.

Weld the rear safety belt supports on the rear wheel passage.

Protect the welding with a corrosion-preventing product.

Apply a layer of sealant material PLASTISOL 4, in the contact area (5) of the rear wheel passage with the rear floor.



DISMOUNTING

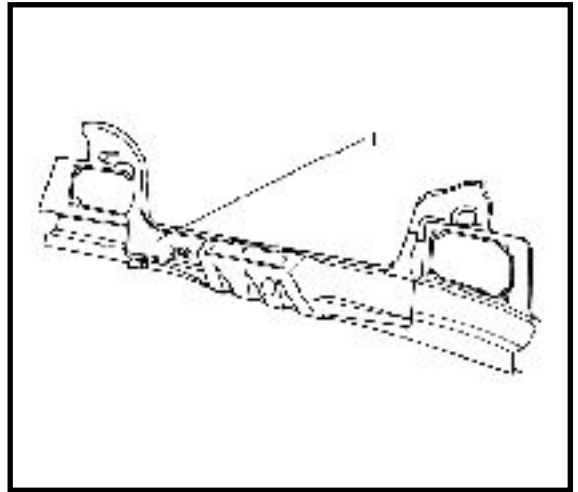
Dismount the elements that are in contact with the rear panel.

Detach the welding points of the rear panel **(1)** which are in connection with:

- side panel edge in the area **(2)**;
- side panel (rear lamps area) in the area **(3)**;
- side panel in the area **(4)**;
- rear end cross bar in the area **(5)**.

Straighten the areas resulted from dismantling.

Grind the areas resulted from dismantling.



REMOUNTING

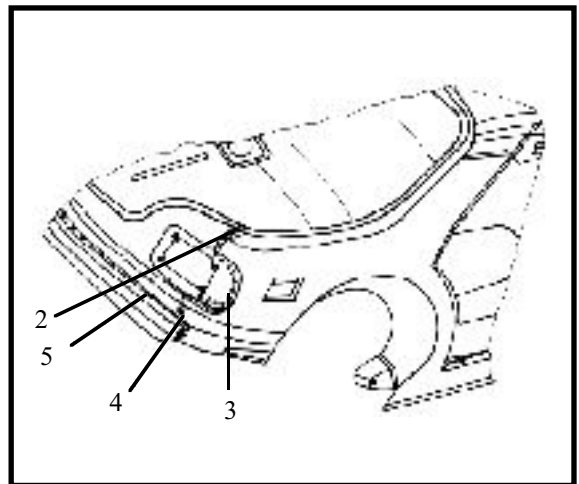
Position and center the new element.

Check the correct positioning of the rear panel.

Weld the rear panel **(1)** following the welding outlines **(2), (3) and (4)...**

Protect the welding with a corrosion preventive product.

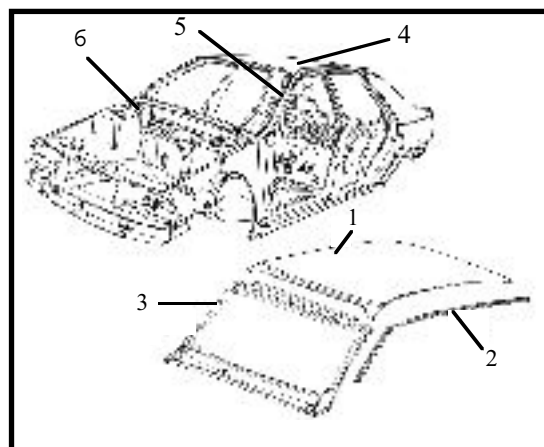
Mount in the reverse order the elements that are in connection with the rear panel.



1. Roof
2. Roofbelt
3. Windscreen frame

DISMOUNTING

Dismount the elements, which are in contact with the roof (front/rear doors, windscreen, rear glass, roof sealing of the ceiling and window gaskets)



Detach the welding points of roof (1) which are in connection with:

- roof belt in the area (4);
- side frame lining in the area (5);
- windscreen lower cross bar in the area (6);
- front pillar in the area (7).

Straighten the areas resulted by dismounting.

Grind the areas resulted by dismounting

REMOUNTING

Position and center the new element.

Check the correct positioning of the roof.

Weld the roof (1) following the welding outlines (4), (5), (6) and (7).

Mount in the reverse order the elements, which are in connection with the roof.

DISMOUNTING

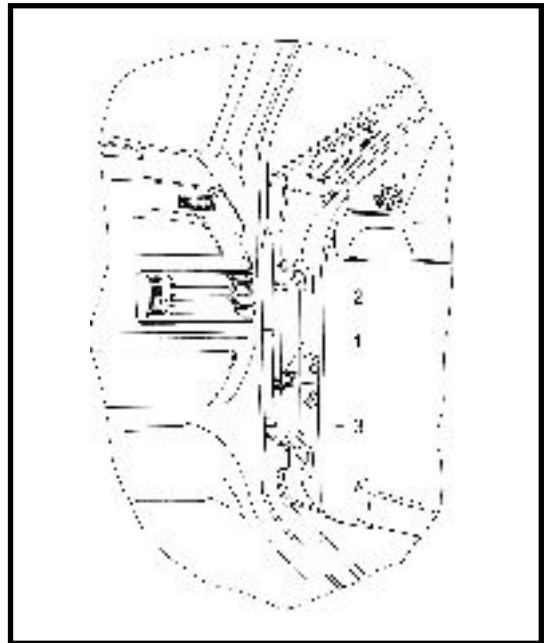
Dismount the elements, which are in connection with the front/rear door.

Dismount the attachment screw (1) of the limiting mechanism of the front/rear door.

Dismount the upper hinge (2) and lower hinge axles (3).

REMOUNTING

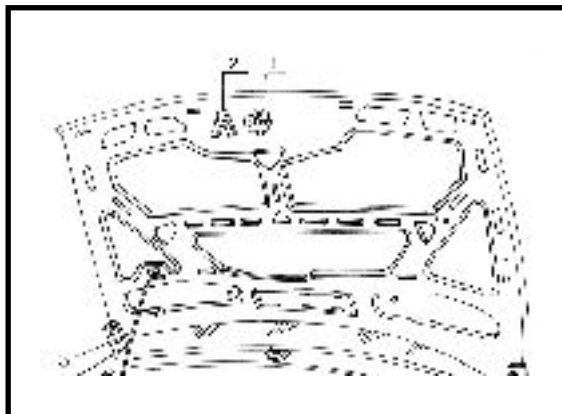
Perform in the reverse order the dismounting operations.



DISMOUNTING

Dismant :

- the aeration grill;
- the windscreen washer jets and hoses;
- the front bonnet locker (1);
- the safety hook (2);
- the attachment screws (3) of the hinges;
- front bonnet.

**REMOUNTING**

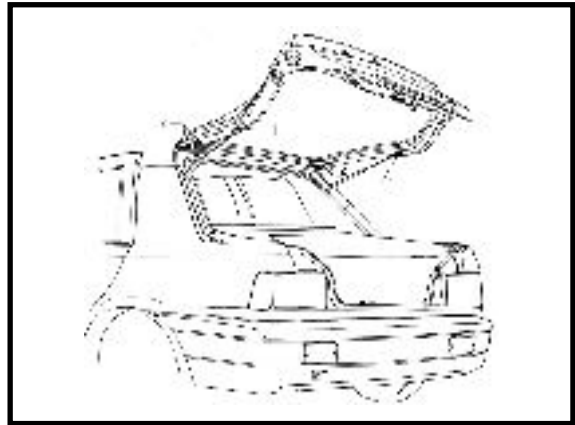
Perform in the reverse order the dismantling operations.

DISMOUNTING

Dismount the elements that are in connection with the hatchback.

Dismount the hatchback attachment ball-shaped joints (1) and the attachment screws of the hinges.

Dismount the hatchback.

**REMOUNTING**

Perform in the reverse order the dismounting operations.

LOCK AND FRONT DOOR LOCK CYLINDER

MECHANISM WITH ELECTRIC CONTROL FOR
FRONT DOOR OUTSIDE OPENING

DISMOUNTING

For the dismantling of the front door assembled plate with electric control, dismantle:

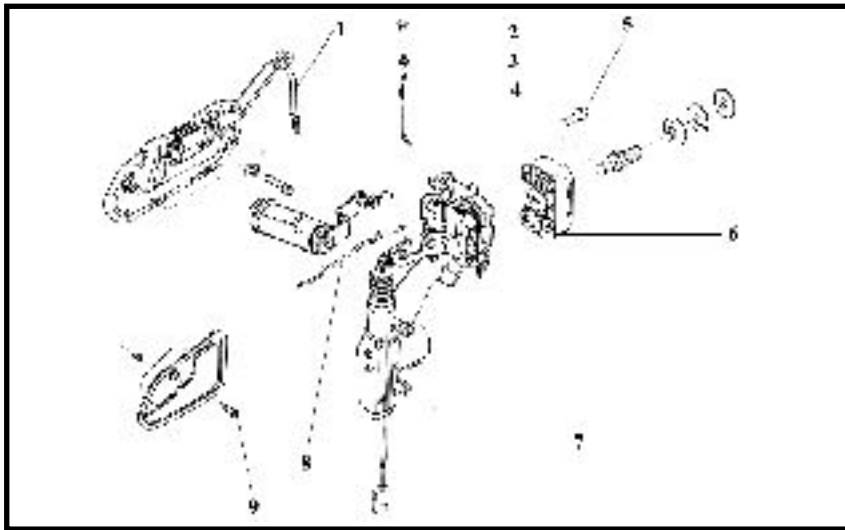
- the window lifting crank, inner opening mechanism, by detaching from it, the control rod (8) of the front door opening, the rod which is fixed with the other end on the plate;
- the locking button (2) and the guiding case (3);
- the attachment screw (9) of the locking handle;
- the door panel.

Disconnect the actuator connector. (7)

Dismount the attachment screws (5) of the box (6) from the caisson of the door.

Remove the electric control assembled plate assembly through the technological opening from the caisson of the door.

Dismount the attachment screws of the outside opening mechanism on the external panel of the door.



REMOUNTING

Perform in reverse order the dismantling operations, taking into account the following recommendation:

- for the lock control mounting, the lock rod (4) will be placed in the position where the lock is blocked;
 - for the front door plate mounting, the connecting fork (1) of the outside opening mechanism will be fixed on the existing ball joint on the lock;
- mount the button (2) by self-threading on the rod (4).

FRONT DOOR LOCK AND OUTSIDE OPENING MECHANISM

DISMOUNTING

For the front door lock dismounting and the outside opening mechanism, beforehand dismount:

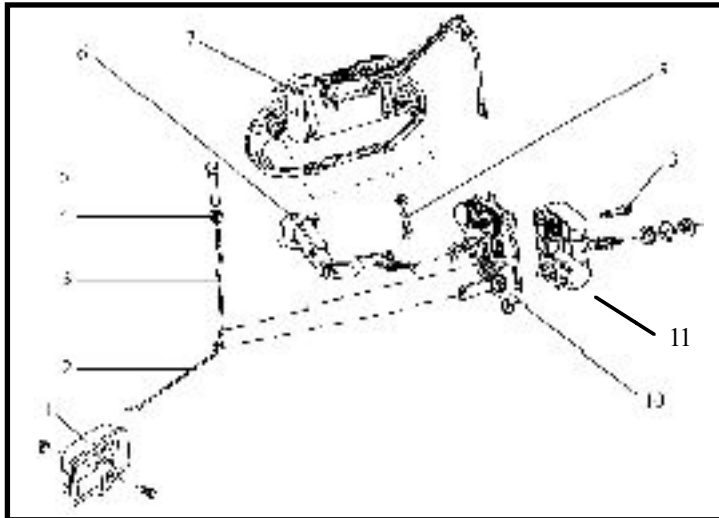
- the window lifting crank;
- the arm rest;
- the inside opening mechanism (1);
- the door panel inner ornament;
- the door panel upper ornament, the locking button (5) and the guiding case (4);
- the door panel.

After these operations dismount:

- the lock attachment fork (6) and the lock (11) from the door;
- the front door lock attachment screws (9) on the door caisson;
- the door opening control rod (2) from the lock.

Remove the lock assembly through the technological opening from the door caisson.

Dismount the attachment screws (8) of the outside opening mechanism (7) on the front door outside panel.



REMOUNTING

Perform in the reverse order the dismounting operations, taking into account the following mounting instructions:

- for the lock control mounting, the lock rod (3) will be placed in the position where the lock is blocked;
- introduce the locking rod through the caisson hole, in the panel guide, then fix it on the lock by the attachment element;
- mount the button (5) by self-threading on the rod (3);

for the front door lock mounting, the connecting fork (6) of the outside opening mechanism will be fixed on the existing ball joint on the lock.

LOCK AND REAR DOOR LOCK CYLINDER

MECHANISM WITH ELECTRIC CONTROL FOR
REAR DOOR OUTSIDE OPENING

DISMOUNTING

For the dismantling of the rear door plate with electric control and of the outside opening mechanism, beforehand dismantling:

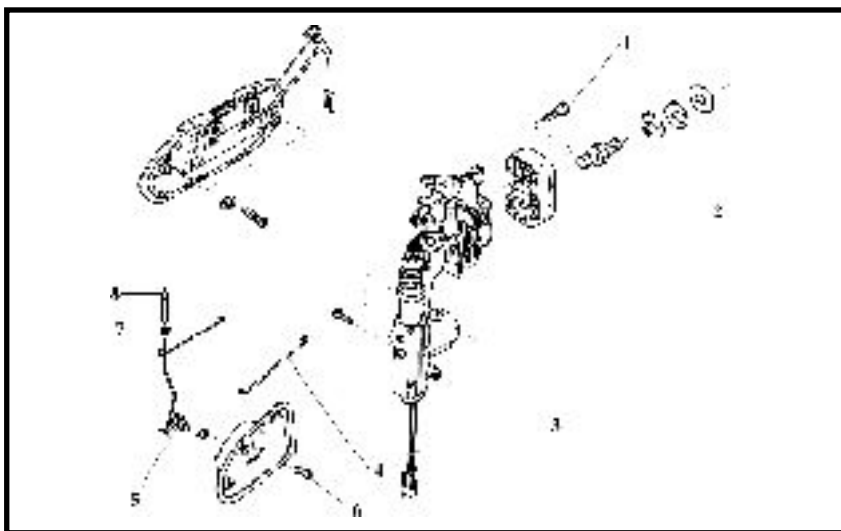
- the window lifting crank, inner opening mechanism;
- the locking button (8) and the guiding case (7);
- the attachment screw (9) of the locking handle (6);
- the door panel.

Disconnect the actuator connector (3).

Dismount the attachment screws (1) of the box (2) on the caisson of the door, and then detach an end of the locking rod (4) from the existing ball joint on the plate, and the other end from the direction change device (5).

Dismount the direction change device (5) by dismantling the assembly attachment nut on the caisson of the door.

Dismount the attachment screws of the outside opening mechanism on the external panel of the door.



RE-MOUNTING

Perform in reverse order the dismantling operations, taking into account the following recommendation:

- for the direction change device mounting (5), the lock rod will be placed in the position where the plate is blocked;
 - the locking button (8) will be mounted by self-threading on the locking rod;
- tighten the screws (1) at the moment of 0,4 da Nm.

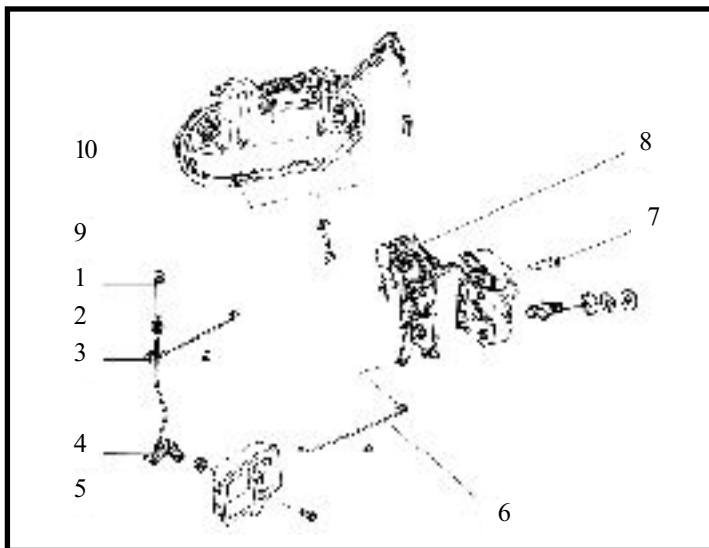
REAR DOOR LOCK AND OUTSIDE OPENING MECHANISM

DISMOUNTING

For the rear door lock dismounting and the outside opening mechanism, beforehand dismount: the ash tray box by detaching from clips, the window regulator crank, the arm rest, the inner opening mechanism (5), the door panel lower and upper ornament, the locking button (1), the guiding case (2), the door panel.

Then dismount:

- the rear door lock attachment screws (2) on the door caisson, and then detach an end of the locking control rod (6) from the existing ball-joint on the lock, and the other end from the direction change device;
- the direction change device (4), by releasing the nut and the attachment washer assembly on the door's caisson;
- the rear door opening rod (3) on the lock (8);
- the attachment screws (9) of the outside opening mechanism (10) on the rear door outside panel.



REMOUNTING

Perform in reverse order the dismounting operations, taking into account the following recommendations:

- for the direction change device mounting (4), the lock rod will be placed in the position where the lock is blocked;
- move the assembly so that free arm will be introduced on the control rod (5), and then the control rod will be introduced through the caisson hole in the door panel guide; mount the button (1) by self-threading on the rod.

WINDOW AND FRONT DOOR WINDOW REGULATOR(WITH CABLE)

DISMOUNTING

For the dismounting of the window and the regulator window assembly perform the following operations:

Remove the outside wiper of the window from its attachment clips, using a common screwdriver.

Dismount the attachment screw (2) of the regulator at the upper side and the attachment nut (3) at the lower side.

Lift the window in the position $P = 85 \text{ mm}$.

Dismount the attachment screws of the window base on the regulator slide, then remove the window (together with the window base).

Dismount the attachment screws (4) of the activation mechanism (1) and then the regulator.

REMOVING

Fix the window outside wiper by means of the five attachment clips.

Introduce the regulator in the caisson through the technological opening (A) and fix it on the caisson in the activation mechanism area (1), by nuts (4).

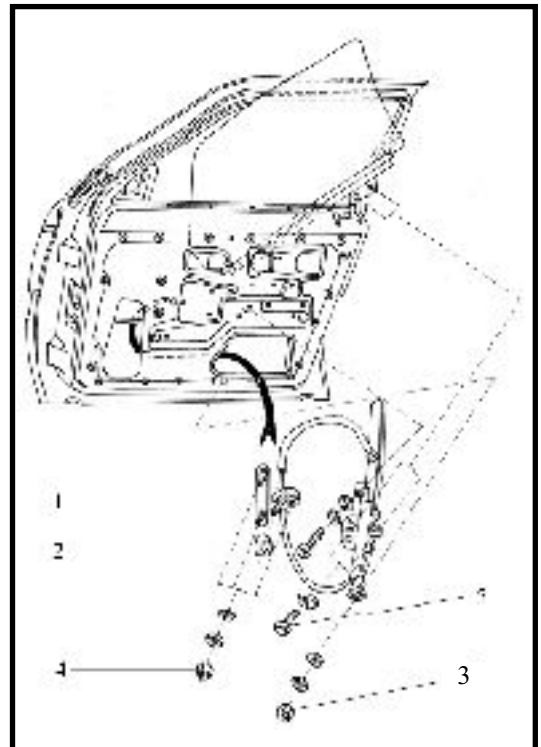
Fix the regulator guiding system on the upper side by screw (2) and by nut (3) on the lower side.

Introduce the window where beforehand was mounted the window base and fix it on the slide by two screws (5).

Check the regulator operation by rolling up and down the window.

Mount the door panel by clipping

Mount the regulator's crank and the window inside wiper.



DISMOUNTING

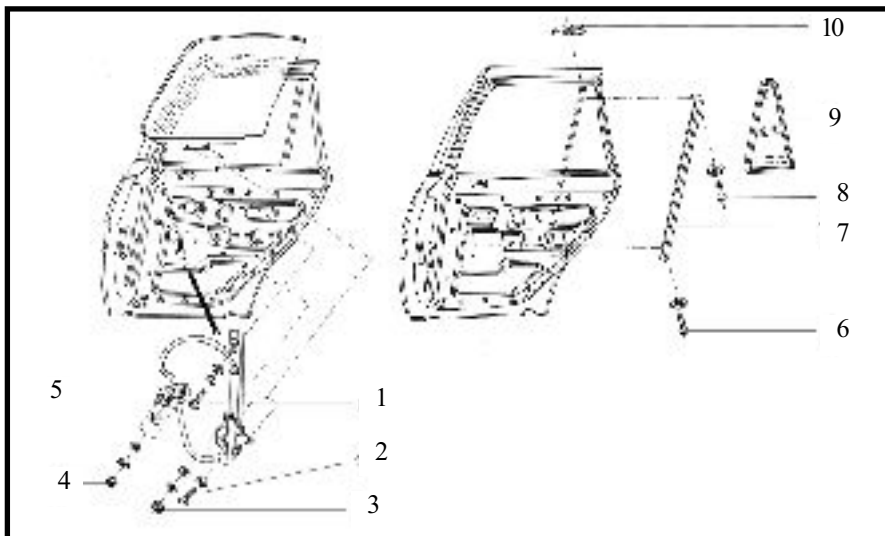
For the dismantling of the window and the regulator window assembly, perform the following operations:
Remove the outside wiper of the window from its attachment clips, using a common screwdriver.

Dismount the attachment screw (1) of the regulator at the upper side and the attachment nut (3) at the lower side.

Dismount the attachment screws (2) of the window base on the regulator slide and then remove the window (together with the window base).

Dismount the nuts (4) from the activation mechanism bolts (5) and then the regulator.

Dismount the window guiding (7) and the fix window (9).



REMOUNTING

For the remounting, perform the following operations:

Place on the window guide (7) the fix window (9) where beforehand was mounted the window gasket.

Fix the guide without tightening at the lower side on the caisson by means of the screw (6), and on the upper part, on the back door frame, by means of the screw (8) and the fast nut (10).

Fix the window outside wiper in the attachment clips.

Introduce the regulator in the caisson through the technological opening (A).

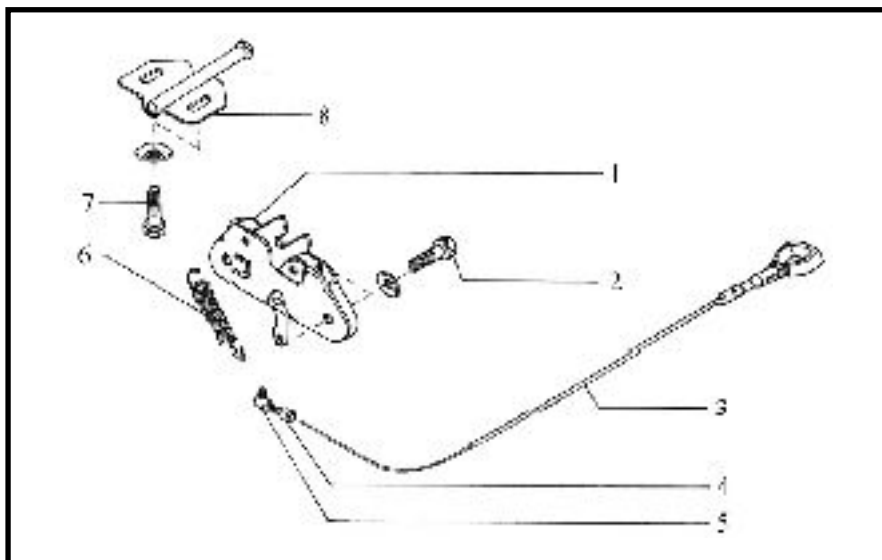
Fix the regulator by nuts (4) in the activation mechanism area.

Mount the regulator attachment screw (1) on the upper side and the attachment nut (3) on the lower side.

Introduce the window in the caisson (where beforehand was mounted the window base) and fix it on the slide by screws (2).

Check the regulator operation by rolling up and down the window.

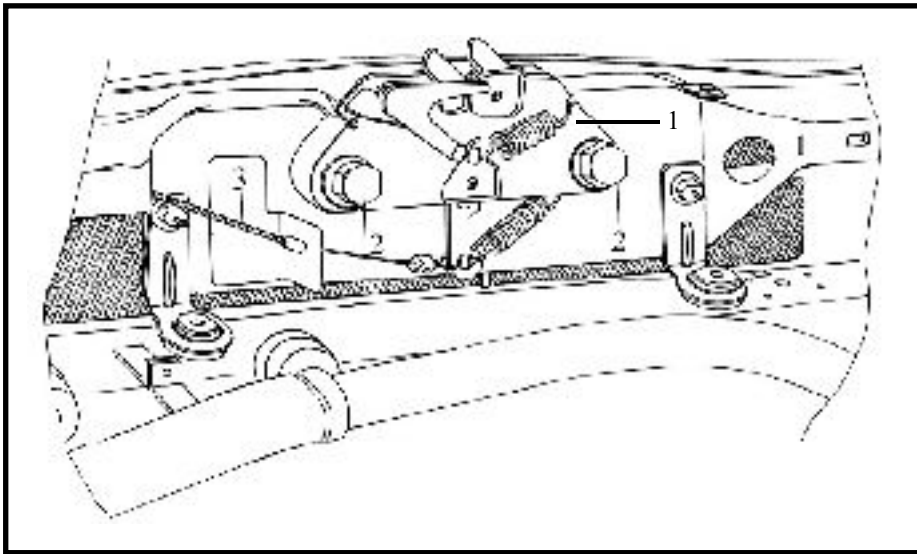
Mount the door panel by clipping, the regulator's crank and the window inside wiper.



1. Front hood lockingsystem
2. Screw **M8-25**
3. Front hood opening control
4. Sleeve stopper
5. Cable attachmentelement
6. Spring
7. Screw **M6-20**
8. Lockassembly

DISMOUNTING

Dismount: the front hood opening control cable(3), the attachmentscrews (2) and the front hood locking system(1).

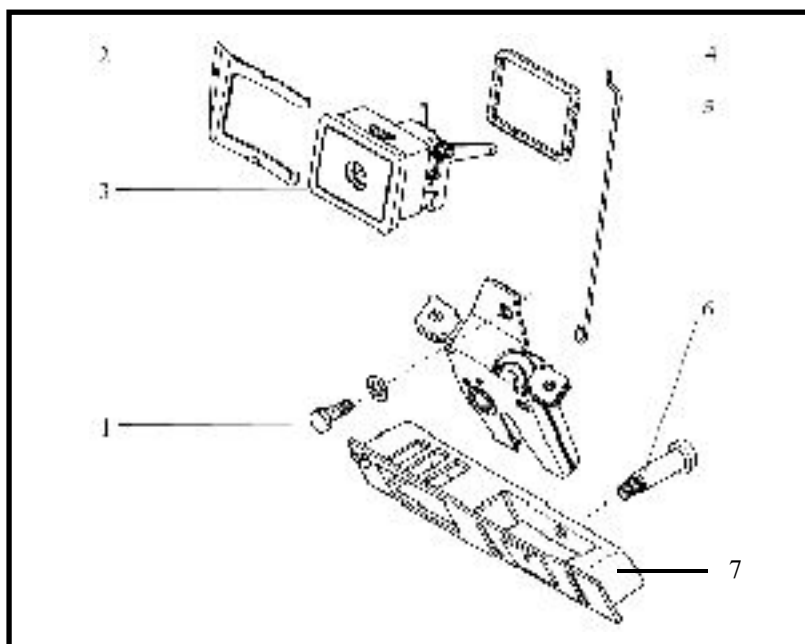


REMOUNTING

Perform in the reverse order the dismounting operations by tightening the screws (4) at the moment of $C=16Nm$.

HATCHBACK LOCKING SYSTEM (old model)**DISMOUNTING**

Loosen the screw for rod length adjustment (5) of the hatchback opening and detach the rod;
Remove the fork (2) and the gasket (4) releasing the hatchback opening control assembly (3)
Dismount the screws (1) and the special axle (6), releasing the guiding case (7).

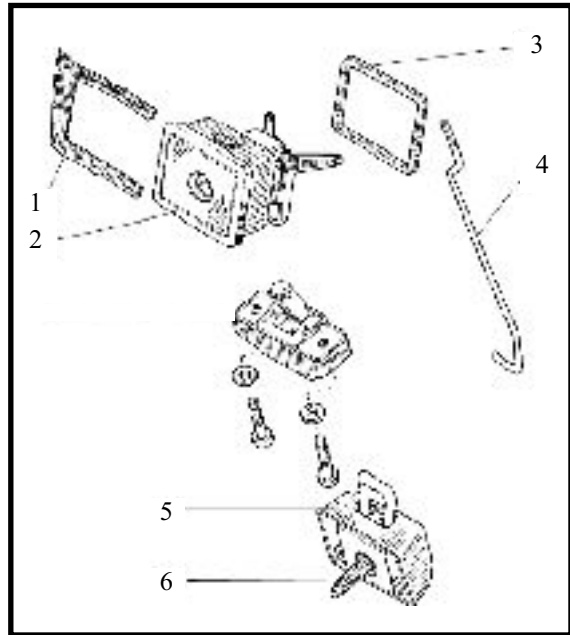
**REMOUNTING**

Perform in the reverse order the dismounting operations, the opening rod length adjustment being performed with the hatchback opened and the lock blocked, in order that after three consecutive drives, the rod mechanism control shall remain permanently tensioned

HATCHBACKLOCKING SYSTEM(after June 1st 2001)**DISMOUNTING**

Dismount the hatchback opening control assembly (2) by removing the fork (1) and the gasket (2).

Dismount the special screw (6) and release the assembled lock (5), while beforehand the rod (5) was released.

**REMOUNTING**

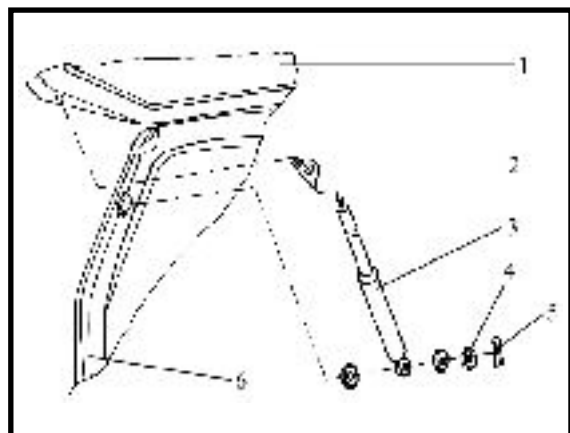
Perform in the reverse order the dismounting operations.

HATCHBACK BALANCING DEVICE**DISMOUNTING**

Dismount the ball joint (2) of the balancing device fixing (3) on the hatchback (1).

Dismount the balancing device attachment on the hatchback frame (6), by removing the locker (5) and the washer (4).

Release the balancing device.

**REMOUNTING**

Perform the dismounting operations in the reverse order.

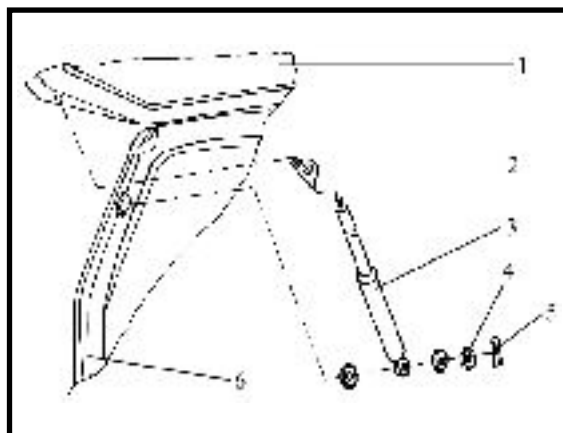
HATCHBACK BALANCING DEVICE

DISMOUNTING

Dismount the ball joint (2) of the balancing device fixing (3) on the hatchback (1).

Dismount the balancing device attachment on the hatchback frame (6), by removing the locker (5) and the washer (4).

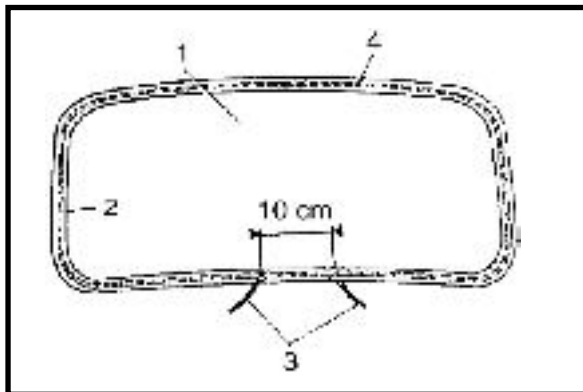
Release the balancing device.

**REMOUNTING**

Perform the dismounting operations in the reverse order.

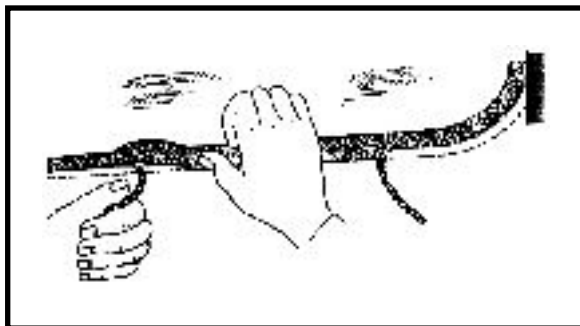
WINDSCREEN AND HATCHBACK GLASS REPLACEMENT

The replacement of these glasses is performed in case they are broken, when they are not according to the required overall dimensions or when they have manufacturing defects (image distortions, cracks, etc).



DISMOUNTING OF A BROKEN GLASS

If the glass or part of it did not fall, the dismantling and the clearing of the window gaskets by the pieces of the broken glass will be easier to be made by sticking a sheet of paper on each surface.



PREPARING FOR MOUNTING

Position the gasket (2) around the glass (1) and place the assembly on a protection plate.

Place in the gasket channel all around the gasket frame; a cotton cord (4) of 3 – 4 mm diameter, leaving at its free ends (3) about 20 cm of cord, and between the ends, the distance shall not be more than 10 cm.

MOUNTING OF THE WINDSCREEN

Mount on the carriage body, the windscreen – cord - glass gasket assembly so that the cord ends are placed towards the inside of carriage body.

From the inside of the vehicle, successively draw each end of the cord, the drawing direction being parallel with the glass surface, towards the surface inner part, perpendicular on the frame, beginning with the lower part, in this way the gasket edge is lifted and then lowered on the frame.

At the outside, the gasket is seated by slightly and successively pressing it on glass, so that the tightening is uniform on the whole windscreen contour and frame.

The cord must be always removed through the upper part of the windscreen.

Each time a windscreen is mounted, ensure the uniform setting of the whole assembly on the carriage body by tapping several times with a rubber hammer, on the edge of the glass frame.

NOTE

Do not tap the glass on corners and on the two vertical sides.

After the windscreen mounting check out carefully the uniformity of the whole assembly and then its water-proofing by splashing with a jet of water.

HATCHBACKGLASSREPLACEMENT

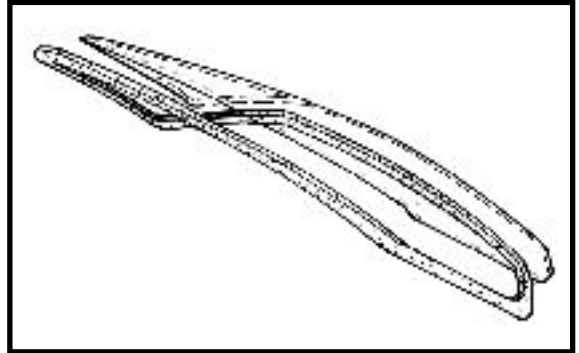
Dismount the luggage compartment table.

Disconnect the mass connection and the hatchback defrosting supply connection

Remove the glass together with the gasket, by pushing it from the inside of the vehicle.

Clean the gasket and place the glass in its new gasket.

The mounting of the hatchback glass– gasket assembly, is performed in the same way with the windscreen mounting

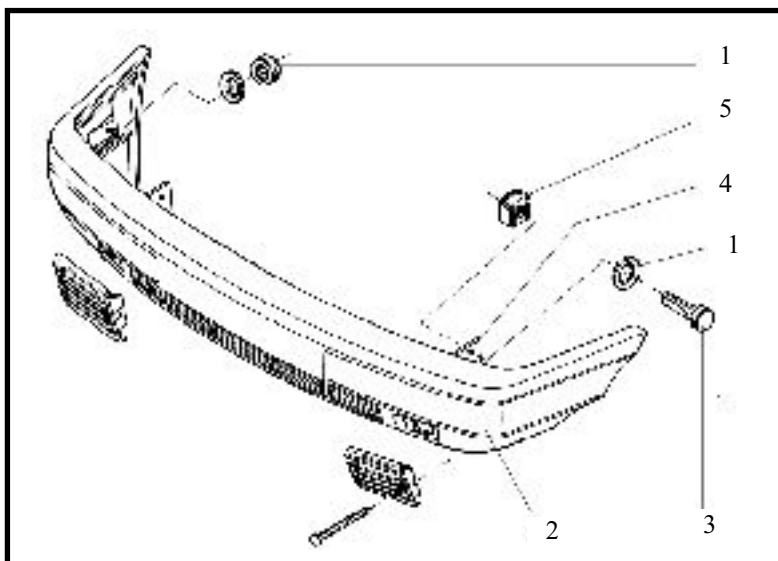


DISMOUNTING

Disconnect the fog projectors.

Dismant:

- the attachment nut (1) of the front bumper (2) on the carriage body
- the attachment screws (3) and the cage nuts (5) of the bumper on the front cross bar.
- the lateral supports (4) are fixed by nuts on the iron core mounted in the front bumper.

**REMOUNTING**

Perform in the reverse order the dismantling operations.

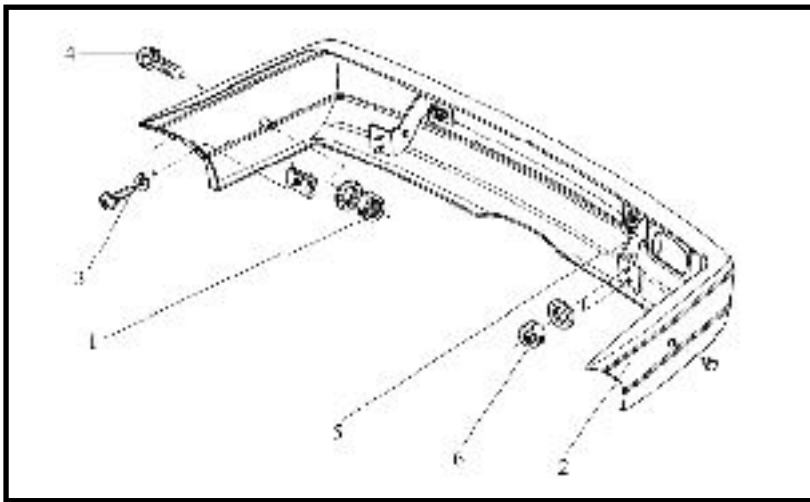
DISMOUNTING

Disconnect the rear fog spotlights, from the rear wiring.

Dismount:

- the nuts (1) and the attachment screws (3) of the rear bumper (4) on the carriage body, by means of lateral supports (2), respectively by the bumper ends on the rear wheels passage.
- the attachment nuts (7) of the counterblade (6) on the carriage body.

Detach the rear bumper (5).

**REMOUNTING**

Perform the dismounting operations in the reverse order.

FRONT/REAR BUMPER PAINTING/REPAINTING PROCEDURE

The necessary materials for the repainting operation are the following:

-Abrasive paper gr 220; 4001 sheet/4 bumpers;	-Same color enamel
-Extraction petrol S27 0,05 kg./bumper;	-For opaque
-Gauze 0,05 mp./bumper;	-opaque enamel S 5505 180gr./bumper
-Primer P572-22 10-15 gr./bumper;	- catalytic agent S 3538 45gr./ bumper
-Fuller P565-777 80 gr./ bumper ;	-thinner S 4300 35 gr./bumper
-Catalytic agent P850-142 40 gr./bumper;	-For metallic paint
-Thinner 15 gr./bumper;	-metal enamel S 5901 175 gr./bumper
	-thinner S 5900 35 gr./bumper
	-catalytic agent S 493242 65 gr./bumper
	-lacquer thinner 362077 35 gr./bumper
	-Lacrit lacquer 28050 30 gr./bumper

WORKING PROCEDURE

Smooth the margins of the exfoliated area (dry abrasive paper 220 grams; 400) and slightly depolish the whole bumper.

Ungrease with extraction petrol.

Using a gun, spray on exfoliated areas, Primer (liability ground)

Apply by spraying on the exfoliated areas, full till equalization then spray on a thin layer on the whole bumper.

In case after 20 minutes of fuller layer exposing in the air, the applied Fuller film does not present painting defects, spray using a gun two layers, wet + wet enamel in the vehicle color.

If the film presents painting defects, remove them by grinding and depolish the rest of the surface. The operation will be performed after 6 hours of air drying, and after 20-30 minutes when there is the possibility of drying at 60gr. C.

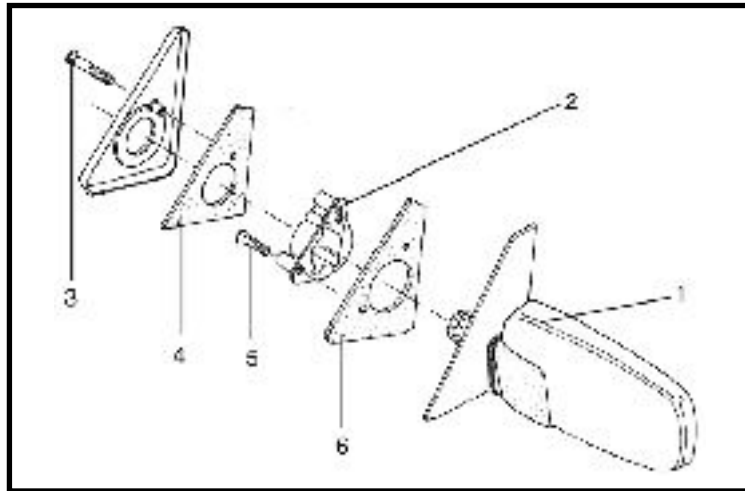
NOTE

For this operation, the dismantling of the bumper is not necessary with the condition that the areas, which might be exposed to the used materials, should be protected.

EXTERNAL REAR VIEW MIRROR

DISMOUNTING

Dismount the attachment screw (3) for the interior ornament(4) and release the ornament;
Dismount the cross piece (2) attachment screws (5) and the ornament(6), releasing so, the outside rear view mirror (7).



REMOUNTING

Perform in the reverse order the dismounting operations.

AILERON

DISMOUNTING

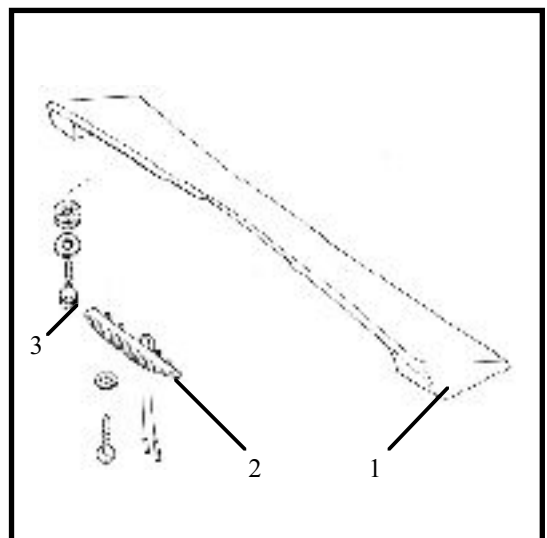
Open the hatchback and disconnect the lamp supply connectors (2).

Dismount the attachment screws (3) of the aileron (1) on the hatchback.

Release the aileron.

REMOUNTING

Perform in the reverse order the dismounting operations.



AILERON

DISMOUNTING

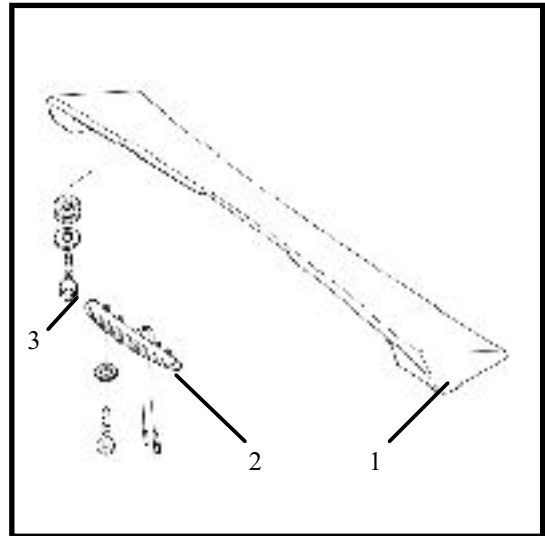
Open the hatchback and disconnect the lamp supply connectors (2).

Dismount the attachment screws (3) of the aileron (1) on the hatchback.

Release the aileron.

REMOUNTING

Perform in the reverse order the dismounting operations.



REPAIR MANUAL

DACIA *SuperNova*

RM 524-3 SEALING, ELECTRICITY

ENGINE: E7J

GEARBOX: JH3

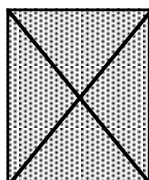
TAPV: B41A, B41B, B41D

The reparation methods prescribed by the manufacturer in the present document are established subject to technical specifications in force at the document issuing date.

These are subject to modifications brought by the manufacturer at the fabrication of different assemblies, subassemblies or accessories of its vehicles.

All rights reserved to SC Automobile Dacia SA.

Reproduction or translating even partially of this present document is forbidden without the written authorisation of **AUTOMOBILE DACIA S.A.**



5 Mechanisms and accessories

57 LOWER INTERNAL ACCESSORIES

Dashboard.....	57-1
Dashboard upper part.....	57-3
Central console.....	56-4
Documents compartment.....	57-5
Steering wheel axle half-cases.....	57-6
Inside rear view mirror.....	57-7
Sun visors.....	57-8
Turning handles.....	57-9
Handbrake case.....	57-10

59 SAFETY ELEMENTS

Front safety belts.....	59-1
Rear safety belts.....	59-2

6 Climatisation

61 HEATING

Climate control assembly.....	61-1
Housing manifold.....	61-2
Heating radiator.....	61-3
Climate control blower.....	61-4
Diagnosis.....	61-5

62 AIR CONDITIONING

Generalities.....	62-1
AC unit operating diagram.....	62-4
Evaporator.....	62-5
Compressor.....	62-7
Condenser.....	62-8
Pressure controller.....	62-9
Dryer filter tank.....	62-10
Unit piping.....	62-11
Climate control unit.....	62-12
Diagnosis.....	62-13

65 SEALING OPENING ELEMENTS

Carriage body sealing.....	65-1
----------------------------	------

66 SEALING WINDOWS AND SCREENS

Glasses sealing.....	66-1
Inside wipers.....	66-2
Outside wipers.....	66-3

7 Garnishing and tack room

71 INTERNAL BODY TRIM

Carriage body coverings.....	71-1
Front door threshold covering.....	71-2
Upper front pillar covering.....	71-3
Rear door threshold covering.....	71-4
Middle pillar covering.....	71-5
Rear passage covering.....	71-6
Rear wheel passage covering.....	71-7
Middle pillar lower covering.....	71-8
Rear side panel covering.....	71-9
Roof gasket.....	71-10

Carpets.....	71-11
Cowl panel noise absorbent.....	71-12

72 SIDE OPENING ELEMENTS TRIM

Front door panel.....	72-1
Rear door panel.....	72-2

74 BACK SEAT TABLES AND PARCEL SHELVES

Upper back panel replacement.....	74-1
-----------------------------------	------

75 FRONT SEATS FRAMES AND RUNNERS

Front seats.....	75-1
Front seat slides guides.....	75-2
Front seat armature.....	75-3

76 REAR SEATS FRAMES AND RUNNERS

Rear bench.....	76-1
Bench seats.....	76-2

77 FRONT SEAT TRIM

Seats upholstery dismantling.....	77-1
Back rest upholstery dismantling.....	77-2

78 REAR SEAT TRIM

Seats upholstery dismantling.....	78-1
Back rest upholstery dismantling.....	78-2

8 Electric equipment

80 BATTERY - FRONT HEADLIGHTS

Battery.....	80-1
Headlamp assembly.....	80-4
Fog lamps.....	80-5
Bulbs replacement.....	80-6
Headlamps adjustment.....	80-7

81 REAR AND INTERIOR LIGHTING

Bulbs replacement.....	81-1
Bulbs.....	81-2
Diagnostic.....	81-3
Cockpit fuse box.....	81-6

82A HORN - ENGINE IMMOBILISER

Generalities.....	82A-1
Key head replacement.....	82A-6
E.C.U. decoder replacement.....	82A-7
Antistarting bushing replacement.....	82A-8
RF remote control for blocking/unlocking the doors.....	82A-9
Electric control unit injection replacement..	82A-10
Procedures.....	82A-11
Diagnostic.....	82A-17

82B	HORN - ENGINE IMMOBILISER	
	Generalities.....	82B-41
	System functioning.....	82B-42
	The pin code.....	82B-43
	The system's memory.....	82B-44
	Functional checking of the system.....	82B-45
	Table 1.....	82B-47
	Table 2.....	82B-49
	Dismounting - remounting of the antiintrusion UCE.....	82B-51
	Sirene dismounting - remounting.....	82B-52
	Dismounting - remounting of the hood contact	82B-53
	Volume sensor dismounting - remounting.....	82B-54

83	INSTRUMENT PANEL	
	Instrument panel (until 01.06.2001).....	83-1
	Connectors (until 01.06.2001).....	83-2
	Instrument panel (after 01.06.2001).....	83-3
	Connectors (until 01.06.2001).....	83-4
	Instrument panel replacement.....	83-5
	Dismounting/remounting speedometer cable (flexible shaft).....	82-7
	Diagnostic.....	83-9
	Fuel level transmitter.....	83-10

84	CONTROLS - SIGNALLING	
	Anti theft mechanism.....	84-1
	Under wheel control module.....	84-3
	Fog lamps switch.....	84-5
	Rear windows defrosting switch (impulsional type).....	84-6
	Hazard switch.....	84-7
	Doors closing switch.....	84-8
	AC starting buton.....	84-9

85	WINDSCREEN WIPERS	
	Windscreen wiper mechanism.....	85-1
	Diagnostic.....	85-5

86	RADIO	
	General.....	86-1
	Connectors.....	86-4

87	ELECTRICAL ASSISANCE EQUIPEMENT	
	Windscreen washing.....	87-1

89A	ELECTRICAL DIAGRAMS	
	Generalites.....	89A-1
	Functional diagrams list.....	89A-10
	Electric components index.....	89A-12
	Couplings list. Mass index.....	89A-14
	Location of electric coupling on the vehicle Mass attachments on the vehicle.....	89A-15

	Location of electric coupling on the vehicle.....	89A-16
	Cockpit fuse box.....	89A-18
	Fuse box from engine compartment.....	89A-22
	Wires functions index in connectors and couplings.....	89A-24
	Connectors and connections wires function..	89A-27
	Wires functions explanation.....	89A-102

89B	ELECTRICAL DIAGRAMS	
	Functional diagrams list.....	89B-1
	Electric components index.....	89B-3
	Couplings list. Mass index.....	89B-4
	Location of electric coupling on the vehicle Mass attachments on the vehicle.....	89B-5
	Location of electric coupling on the vehicle.....	89B-6
	Cockpit fuse box.....	89B-8
	Fuse box from engine compartment.....	89B-12
	Wires functions index in connectors and couplings.....	89B-14
	Connectors and connections wires function..	89B-17
	Wires functions explanation.....	89B-90

89C	ELECTRICAL DIAGRAMS	
	Functional diagrams list.....	89C-1
	Electric components index.....	89C-3
	Couplings list. Mass index.....	89C-4
	Location of electric coupling on the vehicle Mass attachments on the vehicle.....	89C-5
	Location of electric coupling on the vehicle.....	89C-6
	Cockpit fuse box.....	89C-8
	Fuse box from engine compartment.....	89C-12
	Wires functions index in connectors and couplings.....	89C-14
	Connectors and connections wires function..	89C-17
	Wires functions explanation.....	89C-90

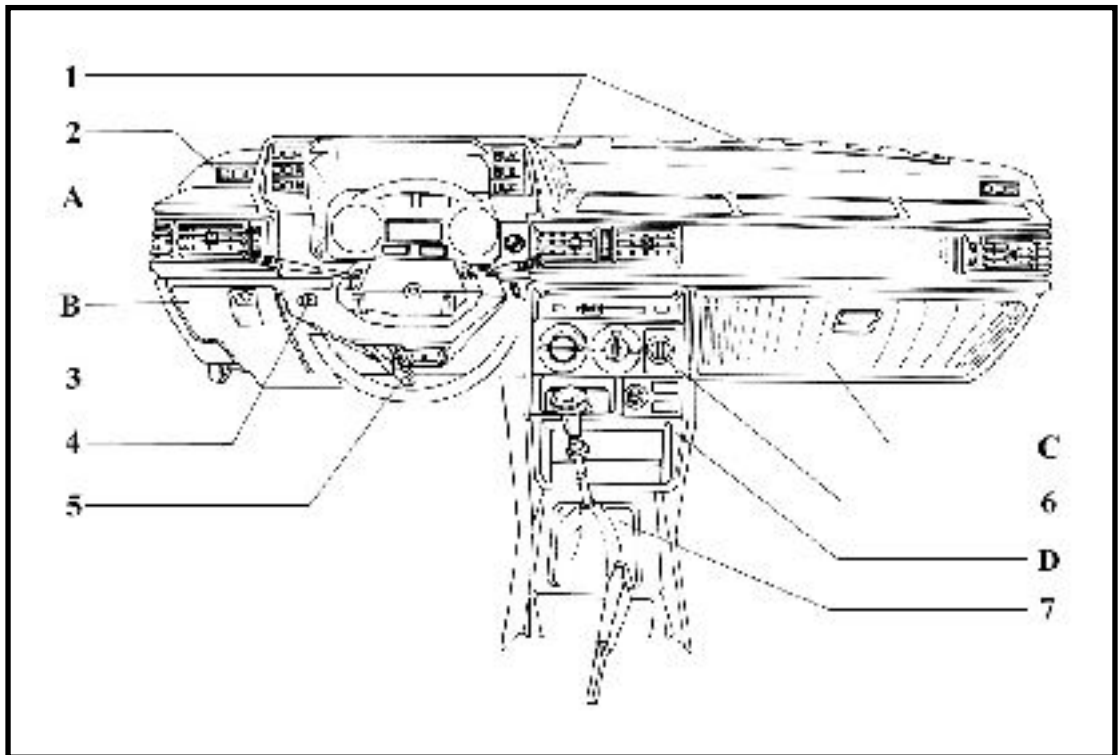
89D	ELECTRICAL DIAGRAMS	
	Generalites.....	89D-1
	Functional diagrams list.....	89D-6
	Electric components index.....	89D-8
	Couplings list. Mass index.....	89D-9
	Location of electric coupling on the vehicle Mass attachments on the vehicle.....	89D-10
	Location of electric coupling on the vehicle.....	89D-11
	Cockpit fuse box.....	89D-13
	Fuse box from engine compartment.....	89D-17
	Wires functions index in connectors and couplings.....	89D-19
	Connectors and connections wires function..	89D-22
	Wires functions explanation.....	89D-91

DASHBOARD

DASHBOARD

The dismantling of the dashboard assembly is performed without the dismantling of the windscreen, the assembly being composed of:

- the upper part (A) where there are: the aeration grills of the windscreen (1); the aeration grills of the lateral windows (2); the instrument panel; the lateral aerators and central aerator; control and checking instruments;
- lower casing (B) containing: fuse box, front hood opening control (3), starter control (choke) (4), the adjustment handle of the steering wheel (5);
- central console (D) where there are mounted the controls: climate system control (6), the ash tray, the cigarette lighter, radio equipment and speed changer lever protector (7);
- the documents compartment (C).



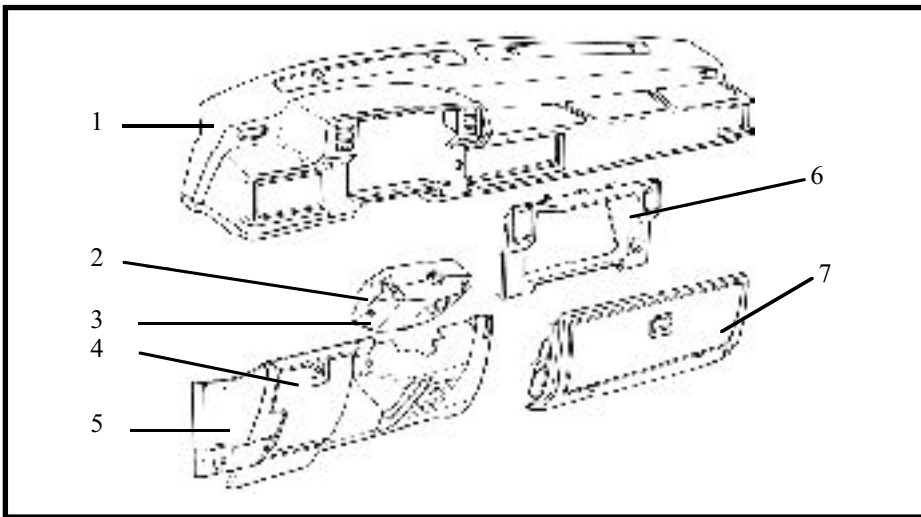
DISMOUNTING

For the dismantling of the dashboard assembly perform the following operations:

Disconnect the battery.

Dismant:

1. - the steering wheel and the steering wheel half-cases;
2. - dashboard visor;
3. - central console and the climate control assembly;
4. - dashboard lower casing;
5. - documents compartment;
6. - upper dashboard.

**DASHBOARD VISOR**

Dismount by frontal withdrawal and detachment.

LOWER DASHBOARD CASING**DISMOUNTING**

Disconnect the front wiring connectors from the fuse box fixed by means of four screws on the door (4) of the lower casing (5) and disconnect the choke cable.

Dismount the screw and the cage nut, which fix the lower casing on the front hood opening control support.

Loosen the three screws that fix the lower casing on the lower side of the dashboard.

REMOUNTING

Perform in the reverse order the dismantling operations.

DASHBOARD UPPER PART**DISMOUNTING**

Loosen from the central and the lateral aerators, the airflow pipes, mounted on the climate control group.

Disconnect the instrument panel, the counters from the dashboard and detach the mileage counter cable from the instrument panel.

Dismount the screws that are attaching the dashboard by means of the lateral attachment supports, on the climate control box.

Remove the four metal attachment screws of the dashboard on the windscreen lower cross bar, after previously, the two windscreen defrosting grills, were detached from the dashboard.

Remove the upper part of the dashboard. **(1)**

DISMOUNTING

Remove from the central console the attachment frame (13) of the gearbox lever bellows by detaching it from clips.

Loosen the attachment screws (8) of the central console (12) from the climate control group.

Dismount the two metal screws (14) and the fastnuts (15) of the central console attachment, in the lower part, on the control box of the gearbox lever.

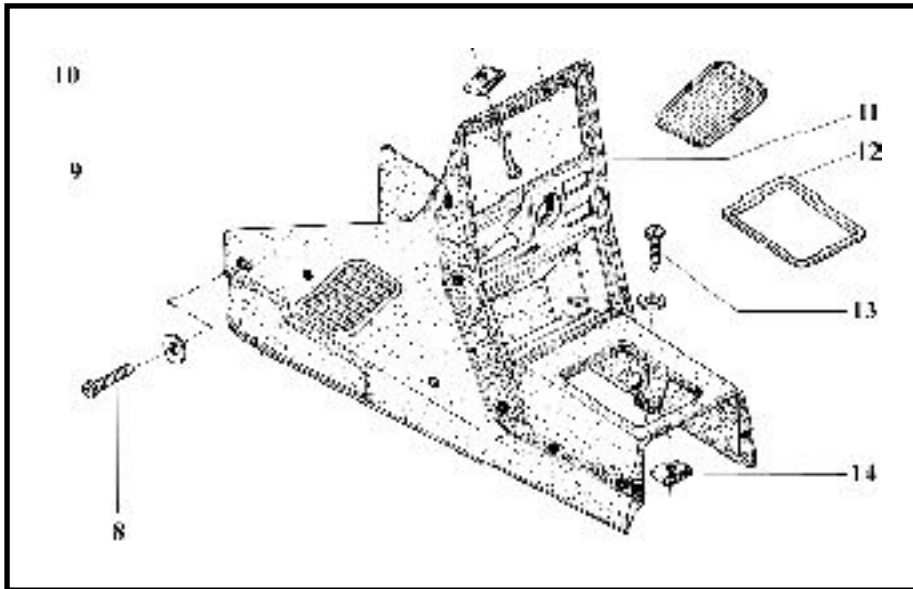
Loosen the screws (9) and the attachment nuts (10) of the central console, on the upper side, on the dashboard.

Dismount the climate control assembly from the central console.

Disconnect from the electric cigarette lighter, the wires from the dashboard wiring.

Disconnect the radio equipment.

Remove the central console.



REMOUNTING

Perform in the reverse order the dismounting operations, when mounting the central console, engage the gearbox lever in different gears.

DISMOUNTING

Dismount the attachment screw of the documents compartment (7) on the right support of the dashboard upper part, the two screws and the fastnuts which attach the hood on the dashboard. Disconnect the supply wires of the documents compartment lighting

REMOUNTING

Perform in the reverse order the dismounting operations.

DISMOUNTING

Loosen the screws which fix the lower half-case (3) on the steering support and the attachment screws of the lower half-case on the upper half-case (2).

REMOUNTING

Fix the upper half-case (2) on the steering support.

Place the lower half-case (3) on the upper half-case and fix it by means of four screws.

Fix the lower half-case on the steering support by means of three screws.

INSIDE REAR VIEW MIRROR

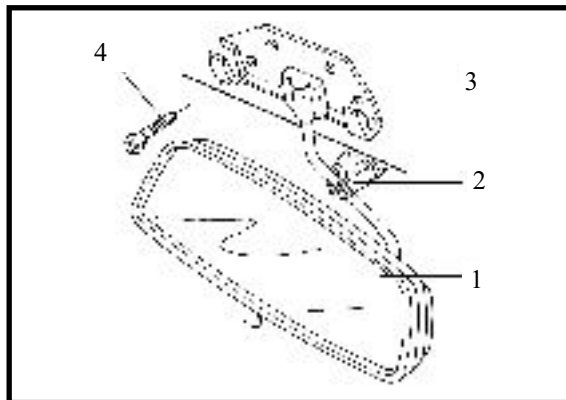
DISMOUNTING

Dismount the rubber buffer (2); from the rear view mirror rod (1).

Detach from clips the sun visors rods from the inside rear view mirror support;

Dismount the protector support (3).

Dismount the attachment screws (4) of the rear view mirror on the windscreen frame and release the mirror.



REMOUNTING

Perform the dismounting operations in the reverse order.

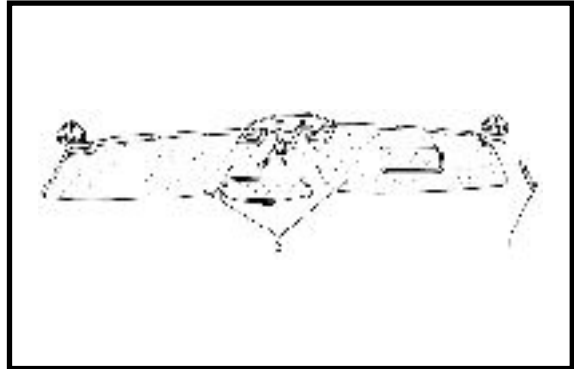
DISMOUNTING

Detach the sun visor rods from the inside rear view mirror support.

Dismount the attachment screws (1) on the windscreen frame and release the sun visors (2).

REMOUNTING

Perform the dismounting operations in the reverse order.



TURNING HANDLES

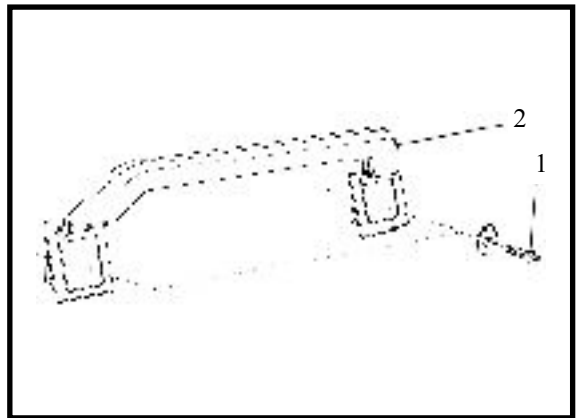
DISMOUNTING

Dismount the turning handles attachment screws **(1)** from the roof stretcher.

Release the turning handles. **(2)**

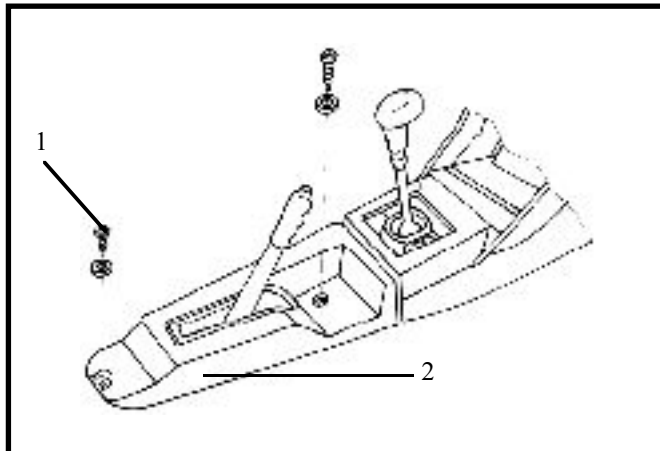
REMOUNTING

Perform the dismounting operations in the reverse order.



DISMOUNTING

Dismount the attachment screws (1) of the handbrake case (2) on the central floor. Remove the handbrake case off the cockpit.

**REMOUNTING**

Perform in the reverse order the dismounting operations.

DISMOUNTING

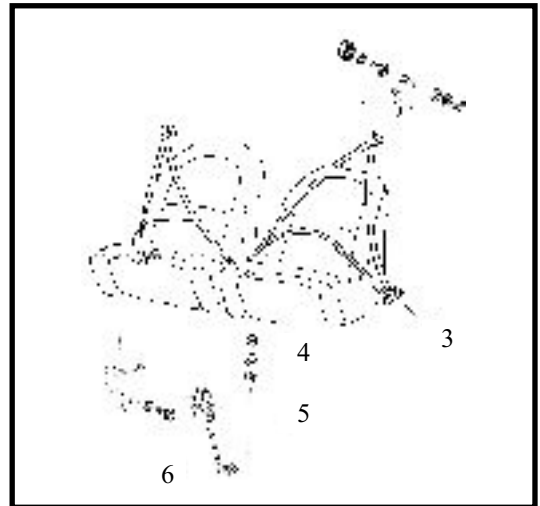
Dismount the protectors (1) of the attachments front safety belts screws on the upper middle pillar

Dismount the attachments front safety belts screws (6) on the lower middle pillar lining.

Dismount the attachment screws (4) of the lock attachment (5) on the tunnel lining.

REMOUNTING

Perform the dismantling operations in the reverse order.



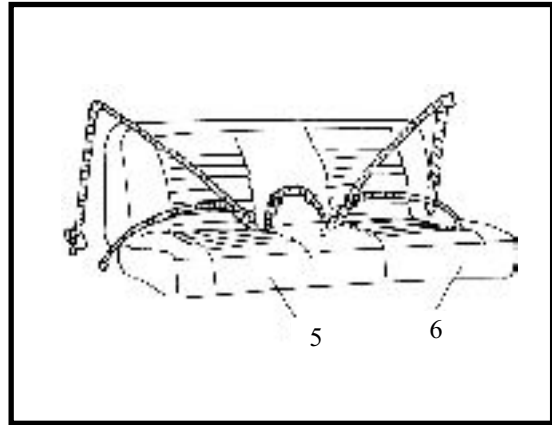
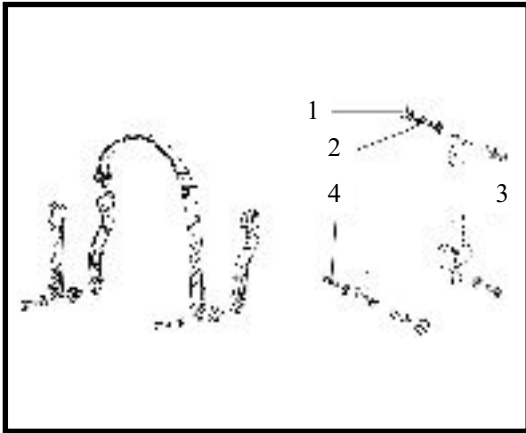
DISMOUNTING

Fold the seats (5) and (6) and remove them from supports.

Dismount the protectors (1) of the attachment rear safety belt screws (2) on the rear side panels.

Dismount the attachment screws (3) on the lining lateral frame.

Dismount the attachment screws (4) of the rear belts lock on central floor

**REMOUNTING**

Perform the dismounting operations in the reverse order.

The safety belts attachment screws are to be tightened at a moment of 2.7 daNm.

DISMOUNTING

Disconnect the battery.

Dismount the documents compartment.

Dismount the attachment clip of the mixing flow flap control cable, **(8)** (from the climate control unit).

Remove the right aeration grill (from the right side of the central console).

Dismount the attachment clip of the distribution flow flap control cable, **(7)** (from the climate control unit).

Dismount the attachment metal screws **(5)** of the climate control assembly **(6)** on the central console of the dashboard.

Remove the climate control assembly from its seat.

Disconnect the connection box of the climate control switch.

Disconnect the connection box of the instrument panel lighting.

Dismount the attachment clip of the recycling flow flap control cable **(9)** and remove it from its seat.

Remove: the mixing flow flap control cable **(8)** from the heating control button **(2)** and the distribution flow flap control cable **(7)** from the distribution control button **(3)**, by releasing the clips attachment screws.

Remove the climate control switch **(4)** out of its seat by detaching from clips.

Dismount the four lighting bulbs.



REMOUNTING

Perform in the reverse order the dismounting operations, taking into account the following recommendations:

- the flow flaps control cables are first fixed to the board with the jacket, in axial contact with the limiting support and then pass the panel button and the similar flow flap on the corresponding position, then clamp the cable to the unit support;

- check if the levers from the climate unit and from the distribution box, have the adequate strokes to ensure the close-opening of the flow flaps;

- if yes, mount the assembly **(6)** on the central console, the documents compartment and the aeration grill;

- if not, set the sleeve length of each control cable to the mounting bracket of the climate unit and the distribution box.

- the maximum moment for the full flow flaps opening is **1,9 Nm**.

DISMOUNTING

Disconnect the battery.

Drain the cooling system.

Dismount the attachment collar of the hoses on the heating radiator.

Clog the hoses of the heating radiator by means of the device **MOT 453**.

Dismount the documents compartment.

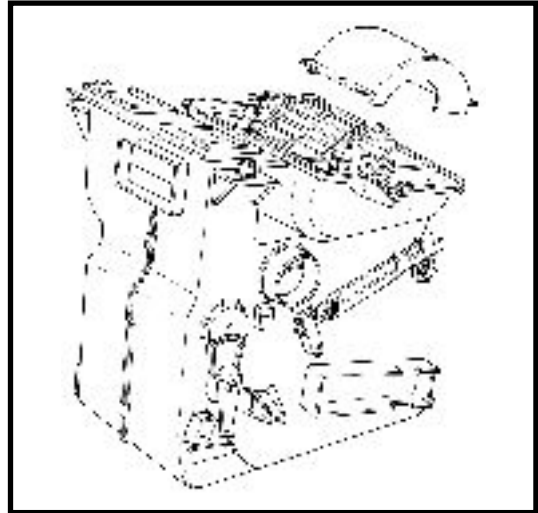
Dismount the central console.

Dismount the control climate control.

Disconnect the airflow pipes from the climate control unit.

Dismount the nuts and the attachment screws of the climate control unit from the carriage body.

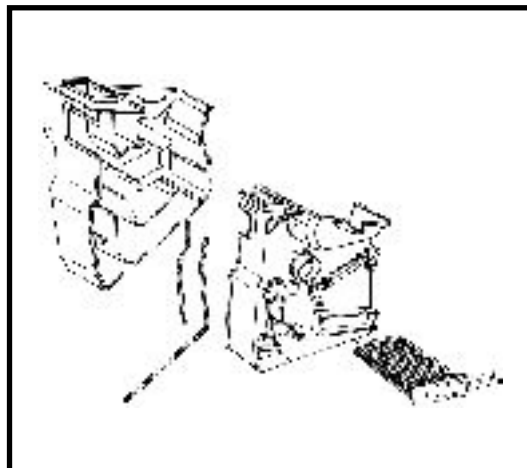
Release the climate control unit.

**REMOUNTING**

Perform in the reverse order the dismounting operations.

DISMOUNTING

Disconnect the climate control unit.
Dismount the attachment clips and release the left- right cases.
Release the heating radiator.

**REMONTARE**

Se efectuează în ordine inversă operației de demontare.
În cazul deteriorării garniturilor, ele se vor înlocui.

DISMOUNTING

Release the climate maintenance assembly from under the dashboard, dismantling beforehand the central console, the documents compartment, the lower casing, the dashboard.

Unscrew the attachment screws of the turbine deflector.

Unscrew the attachment screws of the blower.

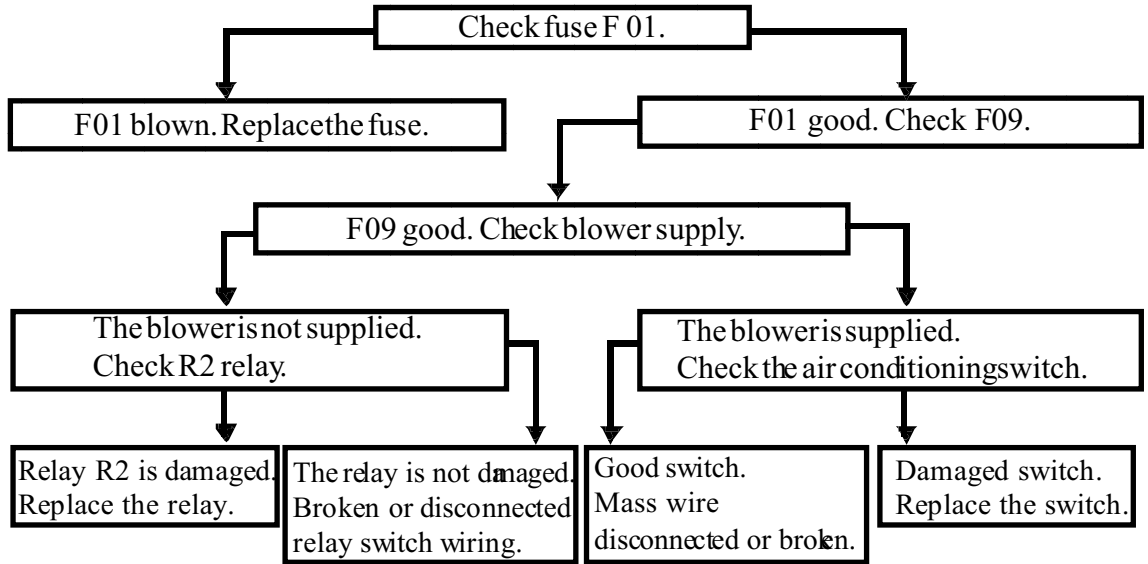
Disconnect the blower from the blower wiring.

REMOUNTING

Perform in the reverse order the dismantling operations.



CLIMATE CONTROL BLOWER DOES NOT WORKING



GENERALITES

The purpose of the air conditioning unit is to produce a decrease of the temperature in the passengers compartment and to obtain a lower value temperature compared to the external environment one, reducing in the same time the air moisture.

MAINTENANCE

For a vehicle equipped with air conditioning, it is recommended a frequent checking of the refrigerating agent level. During the year it is recommended

- the checking of the refrigerant fluid filling
- the cleaning and the air-blowing of the condenser and the cooling radiator fins;
- the checking of the condensation removal pipe in order not to be clogged.

For important leakage repair, for any components replacement (compressor, condenser, etc) and if moisture was noticed in the air conditioning circuit, the dryer filter tank is to be replaced and the unit draining is to be performed. The same is valid also in case the conditioning circuit remains open without protection covers more than 10 minutes.

IMPORTANT

During winter, it is recommended the frequent start of the system, in order to prolong the lifetime of the compressor and of the whole system.

The vehicle equipped with an air conditioning system shall be not exposed for more than 20 minutes in painting cabin where there are temperatures higher than 80 °C.

It is obligatory the use of the refrigerating agent and compressor oil type prescribed by the manufacturer.

It is absolutely forbidden to perform welding on the elements of the air condition circuits.

The filling of the air conditioning system can be performed only by means of charging units and observing the instructions of the manufacturer. For mechanical or body operations it is recommended piping protection in order to avoid their disconnection by accident.

Avoid the drip of the oil compressor on the painted vehicle body.

For component replacement implying the circuit draining, it is absolutely necessary the use of new parts and of a special oil for compressor.

AIR CONDITIONING UNIT

DISMOUNTING

Make the unit functioning for at least 10 minutes (if the unit permits)

Drain the circuit at the filling equipment

Measure the quantity of recovered refrigerated fluid.

Release the access to the component that is needed to be changed.

Disconnect the connections.

In order to avoid the moisture infiltration, protect with protection covers.

Dismount the component.

REMOUNTING

Put special compressor oil on the new element thread and on the gaskets.

**ATTENTION**

The new components must be obligatory provided with protection covers.

Remove the protection covers, connect the new component on the free connection, and tighten it by hand.

Place the component correctly.

Tighten it at couple.

Refill with refrigerant fluid and oil.

The filling up with oil for different repairs is to be performed as follows: add in the charging equipment container, the recovered oil quantity, plus an oil quantity, as it follows:

- sudden damaged of one of the unit's element or leakage	100ml
- condenser replacement	30 ml
- evaporator replacement	30 ml
- dryer filter replacement	15 ml
- pipe replacement	10 ml

For compressor dismounting/remounting without replacement add 120 ml.

If there are signs of moisture in the air conditioning circuit, replace the dryer filter tank.

DRAINING/FILLING THE REFRIGERANT CIRCUIT

DRAINING

Connect the charging equipment piping to the filling-draining valves.

Perform the vacuuming of the air condition unit with the recovering of the oil and the refrigerant fluid.

Close the hoses valves.

Disconnect the charging equipment piping and stop the equipment.

FILLING

Attach the draining – filling hoses of the equipment to the air conditioning unit valves.

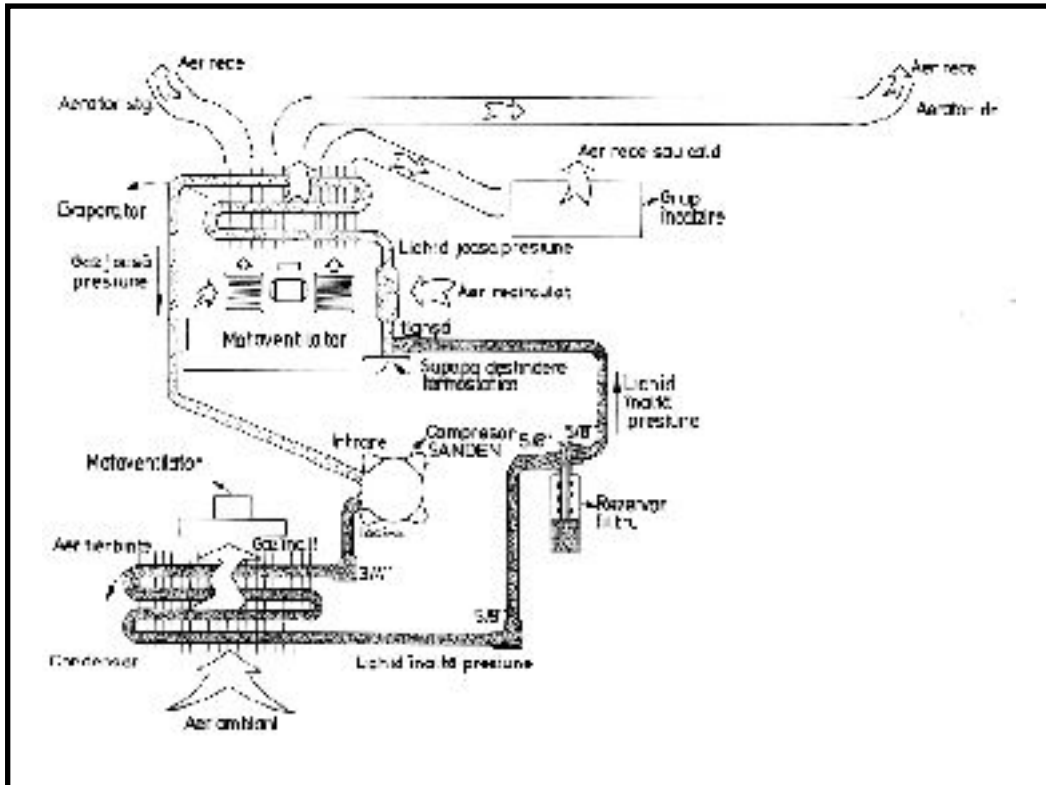
Put compressor specific oil type **SP10** in the charging equipment vessel.

Set the quantity of the refrigerant fluid that must be charged (**0,590kg**).

Observe the filling instructions prescribed by the equipment producer.

AIR CONDITIONING

AC UNIT OPERATING DIAGRAM



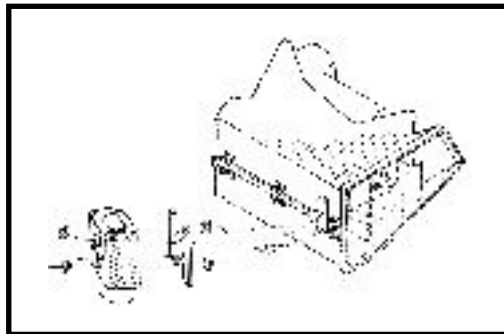
Basically, the air conditioning unit is formed of a closed circuit, composed by the following main elements:

- evaporator
- compressor
- condenser
- thermostatic expansion valve
- connection pipes.

The evaporator is the component that extracts the heat from the passengers compartment and is generally placed in the passengers compartment. In order to cool the passengers compartment the hot air must be absorbed, the heat extracted and the “cooled” air redistributed. The hot air is passing through the evaporator to who is giving part of the temperature reducing so, its own temperature. The cooled air is so conveyed in the passengers compartment, progressively reducing the temperature.

In the same time, the refrigerant fluid which goes into the evaporator, is absorbing the heat, from air passing through the evaporator and at the same temperature, is transforming it from liquid into vapors. At the evaporator exit, the refrigerant fluid is in vapor condition.

The evaporator is placed in the climate control unit and is protected by cases.



EVAPORATOR CASES ASSEMBLY REPLACEMENT

DISMOUNTING

Disconnect the battery.

Drain the refrigerant circuit

Dismount the sealing gasket on the climate box outliner.

Dismount the thermostatic expansion valve.

Dismount the climate case locking plate.

Disconnect the pipes evaporator – compressor and evaporator – tank filter.

Dismount the evaporator case attachment nuts, on the right side.

Release the evaporator cases.

Replace the assembly

REMOUNTING

Perform the dismounting operations in the reverse order.

Fill the refrigerant circuit and check the good operation of the climate control system.

NOTE

Ensure that evaporator finned plates are not deformed and they are not excessive dirty.

The tightening nuts for the climate and conditioning assembly, the connections for piping, condenser and filter tank, must have the following tightening moments:

- thread 3/4" – 16 pitch/1" – at the moment 18-20 Nm;
- thread 5/8" – 18 pitch/1" – at the moment 14-20 Nm.

The tightening moment of the compressor flange attachment screw - 12 +/- 1,2 Nm.

The tightening moment of the thermostatic probe attachment screw - 5,7 +/- 0,5 Nm.

The tightening moment of the pressure capture - 20,7 +/- 2 Nm.

NOTE

After each operation that implies the disconnection of the battery, at its reconnection, introduce the radio code that is written on the vehicle-selling invoice.

The compressor is absorbing the vapors coming from the evaporator at low pressure and temperature, is compressing them and convey the gas at high temperature and pressure.

The refrigerant fluid in high pressure and temperature vapor condition is entering in the second heat exchanger, which by condensation is transmitting the heat to the external environmental.

At the exit from the condenser, the refrigerant fluid is in liquid condition, at high pressure and temperature.

Type of compressor: SD 7Y15

Compressor oil : PAG SP 10 or SP20, volume –135 cmc.

Refrigerant: HFC 134 a, quantity of refrigerant : 0.590 kg



COMPRESSOR REPLACEMENT

DISMOUNTING

Disconnect the battery.

Drain the refrigerant circuit

Disconnect the compressor's connection.

Disconnect the pipes from the compressor.

Dismount the belt tensioning screw and release the belt.

Dismount the compressor attachment screws.

Dismount the compressor.

Replace the compressor.

REMOUNTING

Perform in the reverse order the dismantling operations.

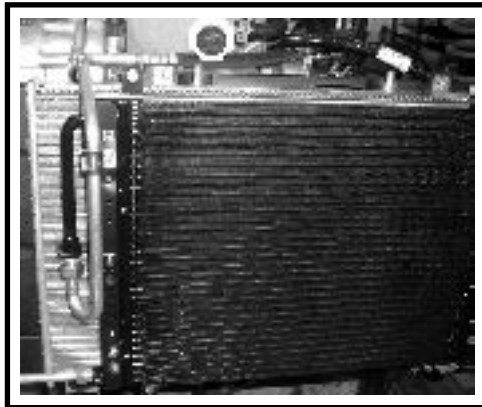
Tension the belt and tighten at the required moment the tightening attachment screw.

Fill the refrigerant circuit and check the good operation of the climate control system.

THE CONDENSER

The condenser is placed on the cooling radiator, in the front part of the vehicle and is ensuring the exhaust of the refrigerant heat accumulated at compression.

In order to grant the optimum condenser operation, frequently check if its outside surfaces are always clean and the air penetration is not stopped. Also, check the condenser pipes in order not to show deformations.



CONDENSOR REPLACEMENT

DISMOUNTING

Disconnect the battery.

Drain the cooling circuit.

Dismount the pipes connected to the condenser.

Dismount the radiator-condenser assembly.

Separate the cooling radiator from the condenser.

ATTENTION:

Avoid the possible deformation of the ducts and finned plates.

Replace the condenser.

REMOUNTING

Perform the dismounting operations in the reverse order.

PRESSURE CONTROLLER (low pressure, high pressure, medium pressure, in accordance with the specification) or pressure capture

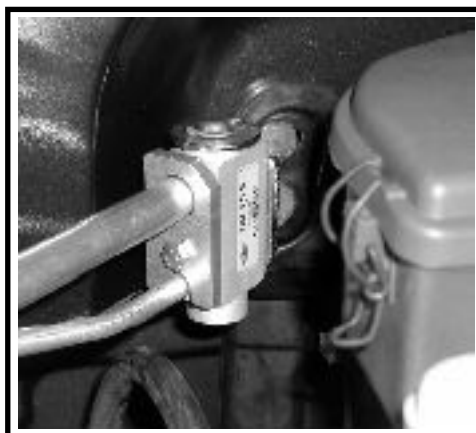
- low pressure – disconnect when the pressure in the low pressure circuit is lower than $1,96 \pm 0,2$ bar, reestablishing at a higher pressure than $2,16 \pm 0,2$ bar;
- high pressure – disconnect when the pressure in the high pressure circuit is higher than $31,4 \pm 2$ bar, reestablishing at a higher pressure than $25,5 \pm 2$ bar;
- medium pressure - starts the blower on the second level speed, when the pressure is higher than $17,7 \pm 1$ bar and stops the blower at a lower pressure $13,7 \pm 1,2$.



Thermostatic expansion valve allows the reduction of the refrigerant liquid pressure which is coming from the condenser, passing through the tank filter and is continuously adjusting the refrigerant flow from the evaporator, to reach the compressor in vapor condition.

The good operation of the air conditioning unit is ensured by a dryer filter tank that has the purpose to protect the unit. The filter's purpose is to absorb the eventually solid particles found in the oil and refrigerant liquid circulation.

The interception is needed as they might block the operation of the thermostatic expansion valve or may produce the compressor mobile parts worn or gripping.



DETECTION OF REFRIGERANT FLUID LEAKAGE

In order to detect the refrigerant liquid leakage, it is used a detector, calibrated to detect leakage of 9 gr./year.

DRYER FILTER TANK

The dryer filter tank has a triple function in the air conditioning unit:

- filtering the refrigerant fluid from the unit;
- absorbing the moisture from the unit;
- it is a buffer storage tank of refrigerant fluid.

**DRYER FILTER TANK REPLACEMENT****DISMOUNTING**

Disconnect the battery.

Drain the refrigerant circuit

Dismount the piping and protect the threads.

Disconnect the connector of the air conditioning pressure controller.

Dismount the receiver tank filter from the collar support.

Replace the tank filter.

REMOUNTING

Perform the dismounting operations in the reverse order.

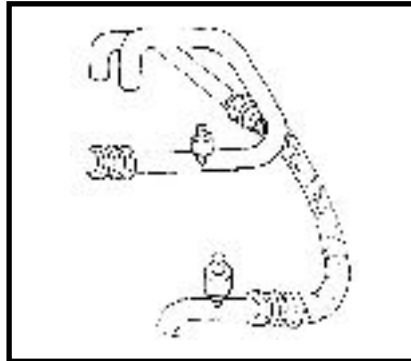
Fill the refrigerant circuit, check the leakage and the good operation of the unit.

ATTENTION

Do not mount dryer filter tanks that do not have protection covers.

The air conditioning unit piping is ensuring the refrigerant fluid circulation between the unit components. When piping is replaced, check the existence of the protective covers, the lubrication of the connections and gaskets with compressor oil as well as filling up with compressor oil.

The unit filling and draining valves are placed on the compressor piping and they have different diameters, so that they can not be reversed.



NOTE

For tightening or loosening the unit piping connections where the refrigerant fluid is passing through, no special wrenches are to be used, in order to balance the moments' twist.

CLIMATE CONTROL UNIT REPLACEMENT**DISMOUNTING**

Disconnect the battery.

Release the lateral and central console.

Disconnect the wires from the dashboard wiring.

Disconnect the distribution flow flap control cables and the mixing flow flap from the control lever and the recycling flow flap cable from the climate control panel.

Disconnect the air flow pipes.

Dismount the screws from the front side of the climate box.

Dismount the nuts from the welded screws in the backside of the climate box.

Release the climate control unit.

Replace the climate control unit.

REMOUNTING

Perform in the reverse order the dismounting operations.

**AIR INLET ASSEMBLY REPLACEMENT****DISMOUNTING**

Dismount the sealing gasket on the climate box outliner.

Dismount the climate box locking plate.

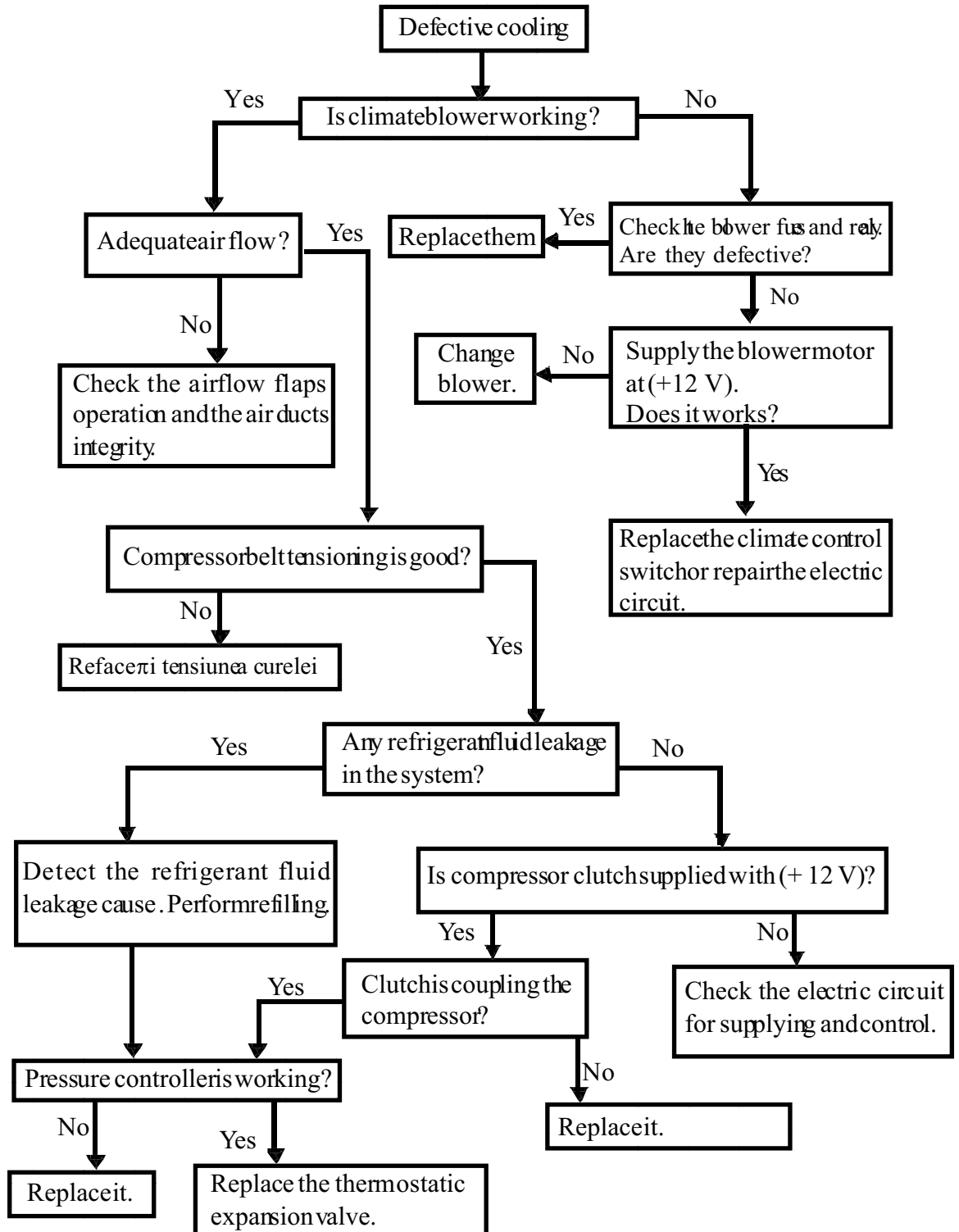
Dismount the nuts from the right side of the climate box.

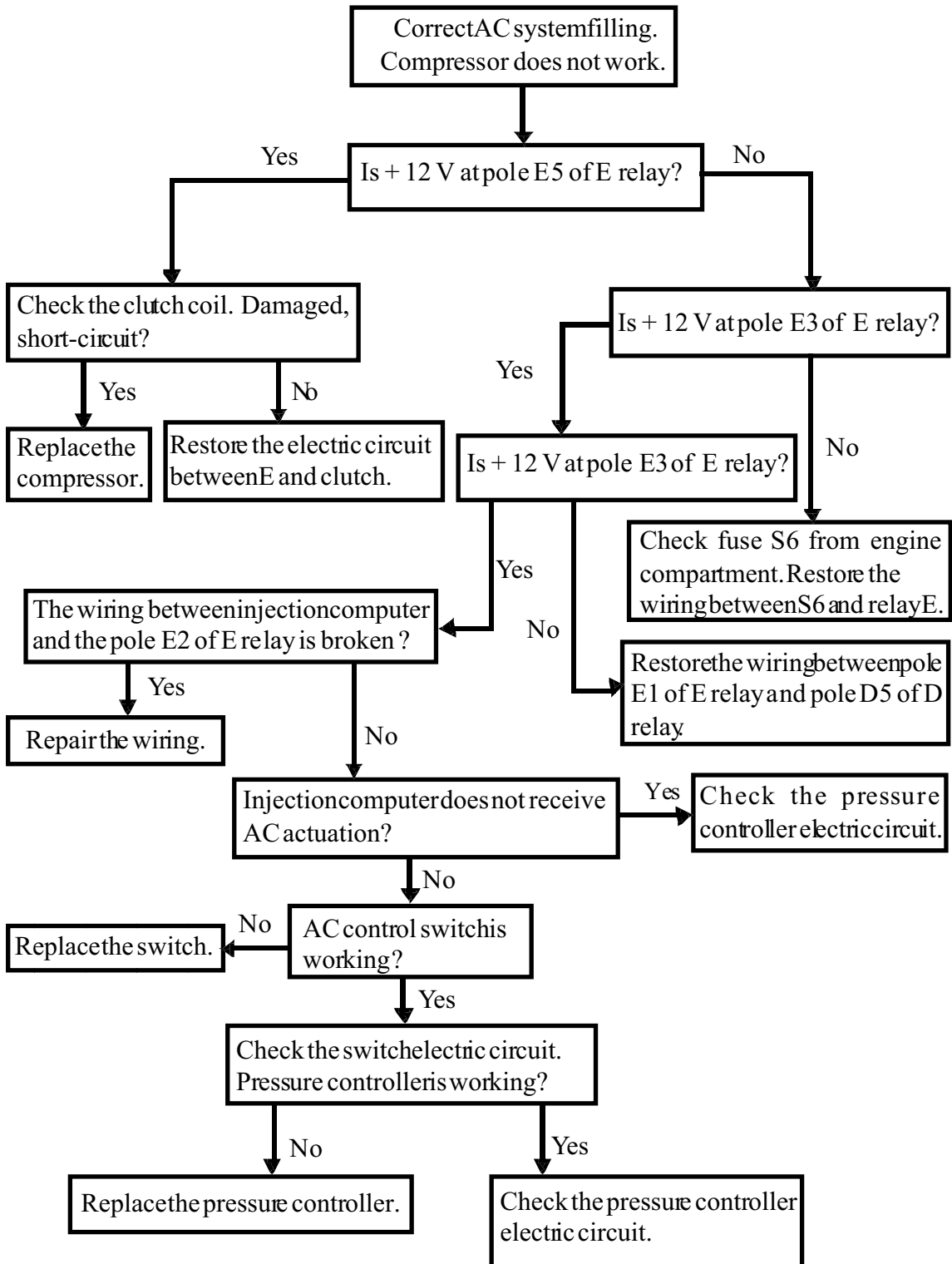
Release the air inlet assembly

Replace the assembly

REMOUNTING

Perform in the reverse order the dismounting operations.

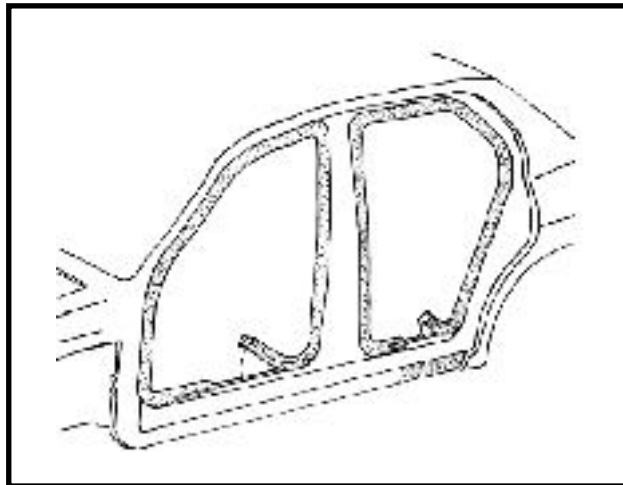




DOOR FRAMES GASKETS

DISMOUNTING

Dismount the front and rear frames gaskets following the doors outliners, by drawing towards outside of one of their ends.

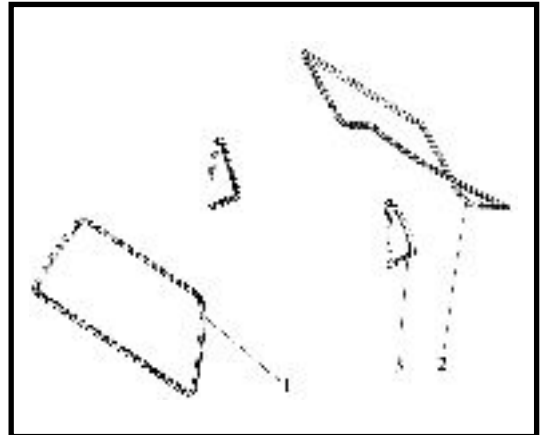


REMOUNTING

Perform in the reverse order the dismounting operations.

The mounting of the sealing gasket on frames is performed by tapping with a rubber hammer.

1. Windscreen gasket
2. Hatchback gasket
3. Fix window gasket



DISMOUNTING

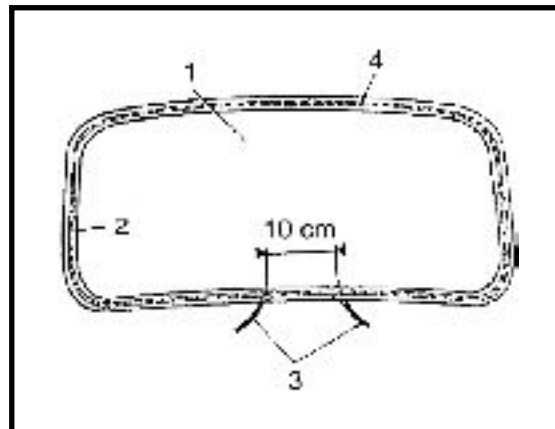
Dismount the windscreen glass (1), hatchback (2), or fix (3), together with the gasket by pushing from the inside of the vehicle.

The glass gasket shall be cleaned, reused, or replaced with a new one.

REMOUNTING

Position the gasket (2) around the glass (1) and place the assembly on a protection plate.

Place the gasket (2) all around the glass (1) where a cotton cord of 3 – 4 mm diameter has been previously introduced, leaving at the ends (3) about 20 mm of cord, and between the ends, the distance shall be not more than 10 mm.



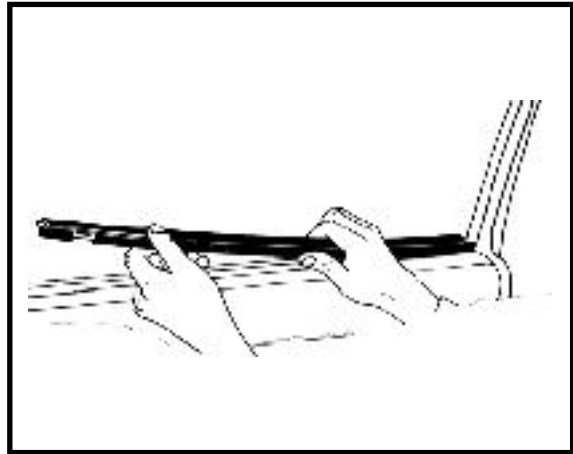
DISMOUNTING

Dismant:

- opening handle
- window regulator crank
- door opening mechanism
- door blocking button
- panel attachment screws

Detach the panel.

Remove the inside wiper.

**REMOUNTING**

Perform in the reverse order the dismantling operations.

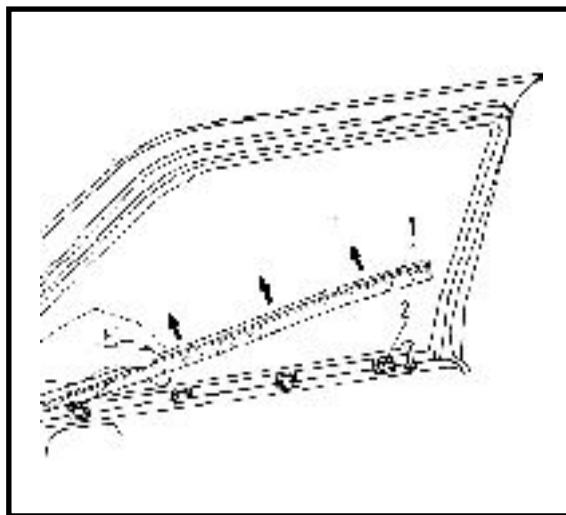
DISMOUNTING

Lower the window in the minimum position.

Dismount the outside wiper (1), by detaching it from the clips (2).

REMOUNTING

Perform in the reverse order the dismounting operations.



1. Front door thresholdcovering
2. Rear door thresholdcovering
3. Upper front pillarcovering
4. Middlepillarlowercovering
5. Middlepillarcovering
6. Rear passagecovering
7. Rearsidepanelcovering
8. Rear wheelpassage covering



INTRENAL BODY TRIM

FRONT DOOR THRESHOLD COVERING

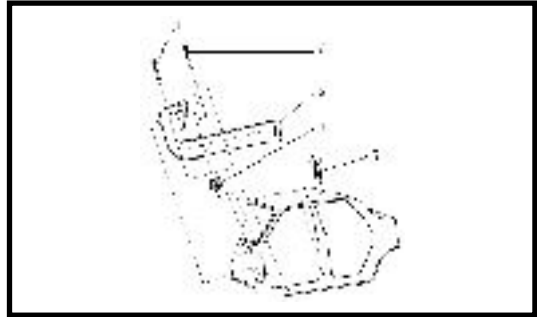
DISMOUNTING

Dismount:

- the attachment screw of front door threshold covering on the front pillar;
- the screws **(2)** and plastic nuts **(4)**;
- release the front door threshold covering.

REMOUNTING

Perform in the reverse order the dismounting operations.



UPPER FRONT PILLAR COVERING

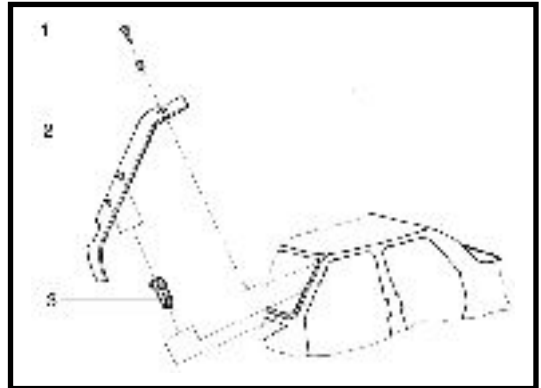
DISMOUNTING

Dismant:

- the attachment screw (1) of the upper front pillar covering (2) on the roof lining
- detach from clips (3) the upper front pillar covering and release it.

REMOUNTING

Perform in the reverse order the dismantling operations.



INTRENAL BODY TRIM

REAR DOOR THRESHOLD COVERING

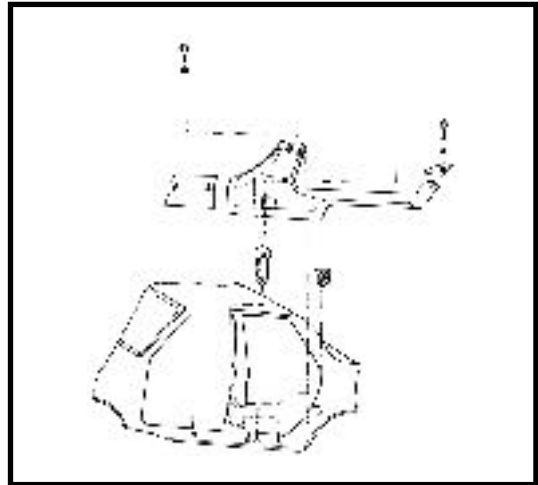
DISMOUNTING

Move the front seat in the most advanced position and dismount:

- front/rear belts attachment screws (1) of rear door threshold covering on the middle pillar lining, respectively the lateral frame lining;
- screws (2) and attachment clips (3) of the rear door threshold covering on the lateral frame lining;
- release the rear door threshold covering (5).

REMOUNTING

Perform in the reverse order the dismounting operations.



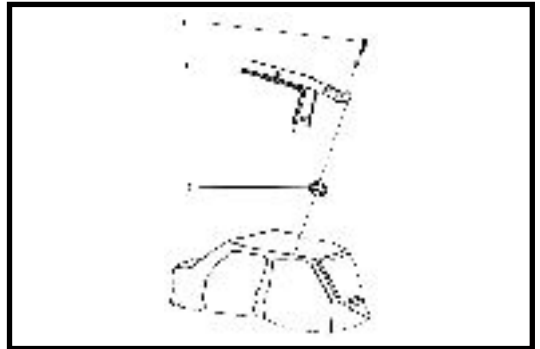
DISMOUNTING

Dismant:

- screw (2) and attachment clips (3) of the middle pillar covering on the middle pillar lining;
- release the middle pillar covering.

REMOUNTING

Perform in the reverse order the dismantling operations.



DISMOUNTING

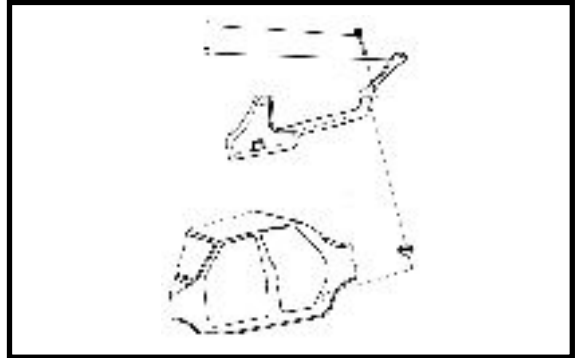
Push the unlocking buttons and swing out the bench seat back.

Dismant the attachment screw (1) of the rear passage covering (2) on the lateral frame lining.

Remove the rear passage covering below the rear side panel gasket.

REMOUNTING

Perform in the reverse order the dismantling operations.



INTRENAL BODY TRIM
REAR WHEEL PASSAGE COVERING

71

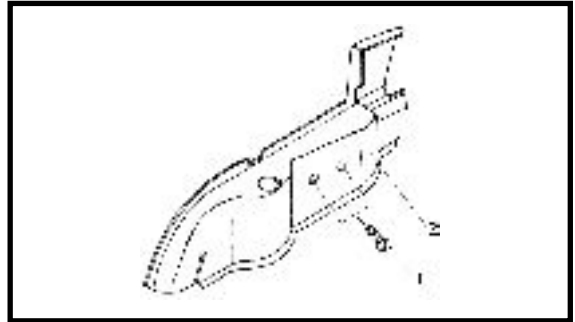
DISMOUNTING

Detach from the two attachment clips (1) the rear wheel passage covering.

Release the rear wheel passage covering.

REMOUNTING

Perform in the reverse order the dismounting operations.



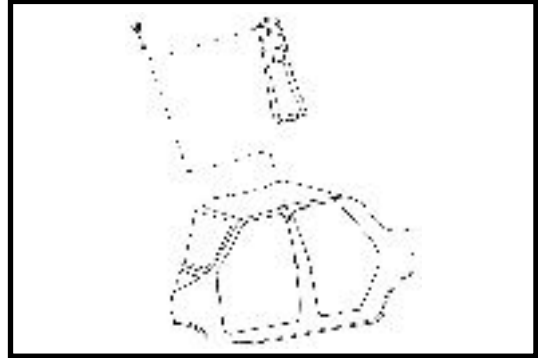
DISMOUNTING

Dismant:

- the obturator **(2)**;
- the attachment screws **(1)** of the middle pillar lower covering **(3)** from the upper and lower area of the safety belt mounting.

REMOUNTING

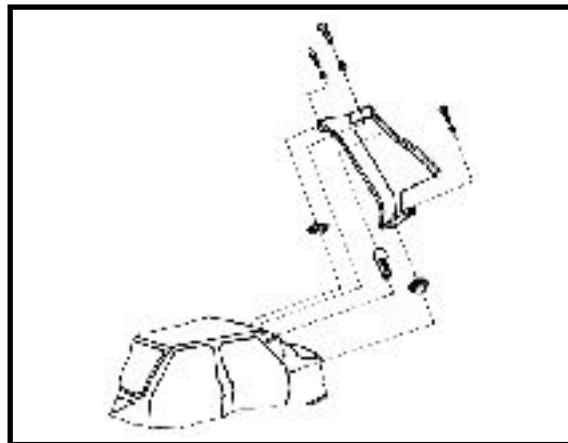
Perform in the reverse order the dismantling operations.



DISMOUNTING

Dismant:

- rear door frame gasket;
 - hatchback frame gasket;
 - the attachment screws (1) and (2) of the rear side panel covering (3) on the panellining.
 - the protecting and the attachment screw of the rear safety belt on the rear side panel.
- Detach from clips (4) and (5) and release.



REMOUNTING

Perform in the reverse order the dismounting operations.

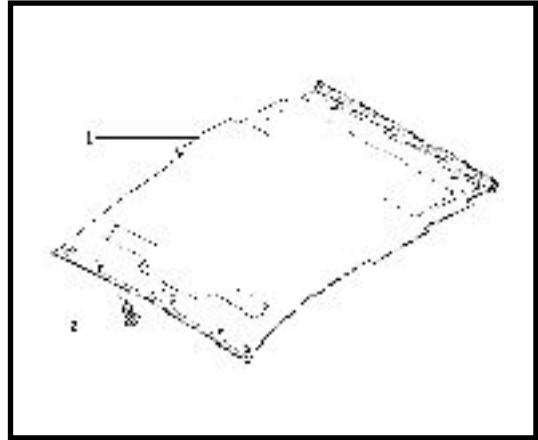
DISMOUNTING

Dismount: the turn handles, front/rear safety belts attachment on the upper area, ceiling lamps, interior rear view mirror, sun visors, stop lamp, volumetric sensors and the upper covering on the roof outliner.

Dismount the roof gasket (1) by detaching from the clips (2).

REMOUNTING

Perform in the reverse order the dismounting operations.



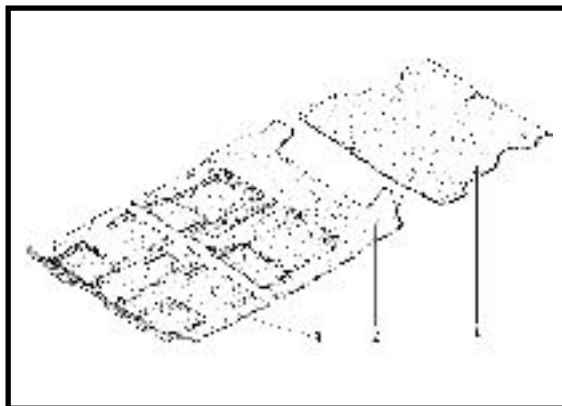
DISMOUNTING

Remove :

- the complete trunk carpet **(1)**;
- the rear carpet **(2)** after dismounting the left/right rear coverings;
- the front carpet **(3)** after the dismounting of the left/right door thresholds coverings.

REMountING

Perform in the reverse order the dismounting operations.



INTRENAL BODY TRIM

COWL PANEL NOISE ABSORBENT

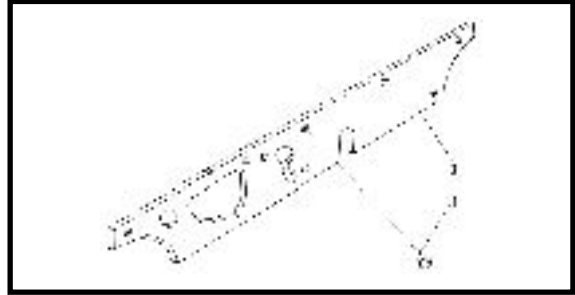
DISMOUNTING

Detach the attachment clips (1) of the noise absorbent pad (2) on the cowl panel.

Release the noise absorbent pad.

REMOUNTING

Perform in the reverse order the dismounting operations.



DISMOUNTING

Front door panel replacement is performed without the dismantling of the door, and the operations that must be performed are the following:

Dismount the window regulator crank (2) that is mounted by clips attachment on the window regulator axle.

Dismount the inner opening mechanism (3), by dismantling the screw (4) and detaching from the inner opening mechanism, the front door opening control rod, this rod being fixed on the plate with the other end.

Dismount the locking handle (8).

Dismount the screws (5) and remove the panel by clips detaching from the caisson of the door. Dismount the guiding case (6) and the locking button. (7).

REMOUNTING

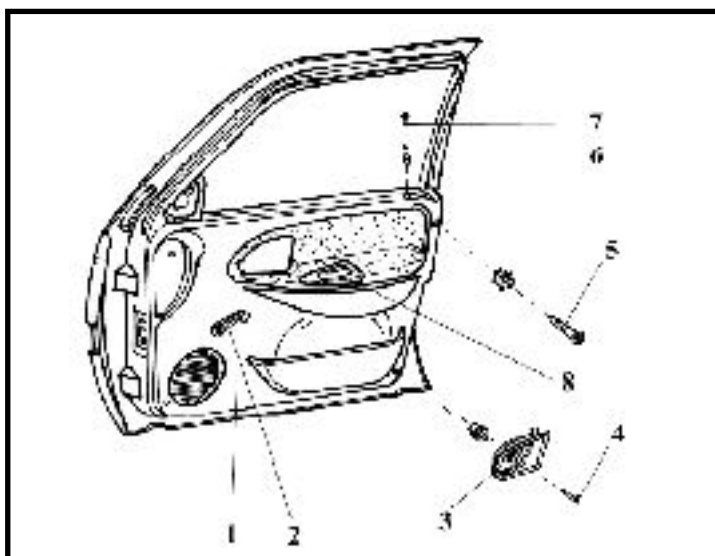
Perform in the reverse order the dismantling operations taking into account the following recommendations:

- for the mounting of the inner opening mechanism, the opening control rod will be placed in the position where the assembled plate with electric control is unblocked.

- after mounting, check the operation of the inner opening mechanism and its alignment with the front door panel.

NOTE

The window regulator crank must be placed in horizontal position with the button oriented toward front, the window being closed.



DISMOUNTING

Rear door panel replacement is performed without the dismantling of the door, and the following operations are to be performed:

Dismount the window regulator crank (2) that is mounted by clips attachment on the window regulator axle.

Dismount the inner opening mechanism (3), by dismantling the screw (4) and detaching from the inner opening mechanism, the rear door opening control rod, which is fixed on the plate with the other end.

Dismount the locking handle (5).

Dismount the screws (6) remove the panel by detaching it from the caisson of the door.

Dismount the guiding case (8) and the locking button (7).

REMOUNTING

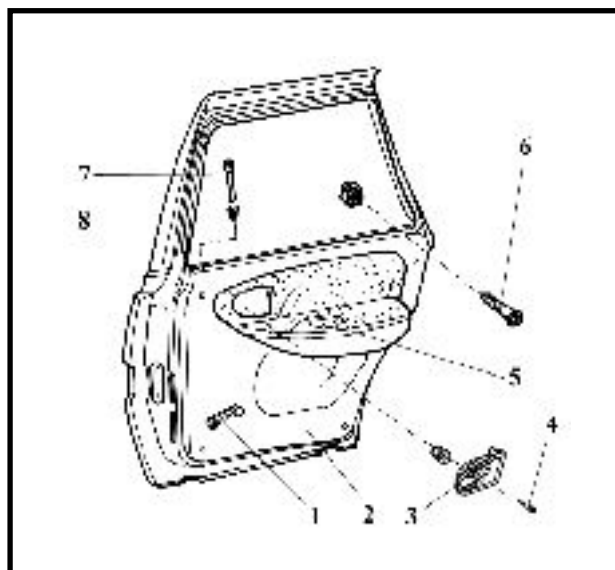
Perform in the reverse order the dismantling operations taking into account the following recommendations:

- for the mounting of the outside opening mechanism, the opening control rod will be placed in the position where the assembled plate with electric control is unblocked.

- after mounting, check the operation of the internal opening mechanism and its alignment with the rear door panel.

NOTE

The window regulator crank must be placed in horizontal position with the button oriented toward front, the window being closed.



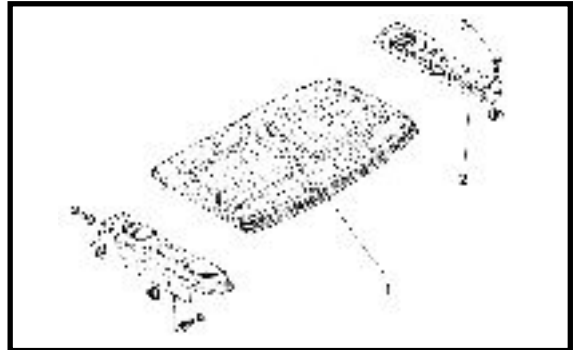
DISMOUNTING

Extract the panel (1).

Dismount the attachment screws (3) of the lateral supports (2) on the lateral frames linings.

REMOUNTING

Perform in the reverse order the dismounting operations.



CONTROL/ADJUSTMENT

The front seats, equipping **DACIA NOVA** vehicles, have two possibilities of adjustment:

- front or rear longitudinal movement, which can be performed by lever's operation **(1)**;
- seatback overturning up to the horizontal position, by rotating the round button **(2)**.

DISMOUNTING

For dismounting, the seat will be placed in the middle position by lever's **(1)** lifting and perform the following operations:

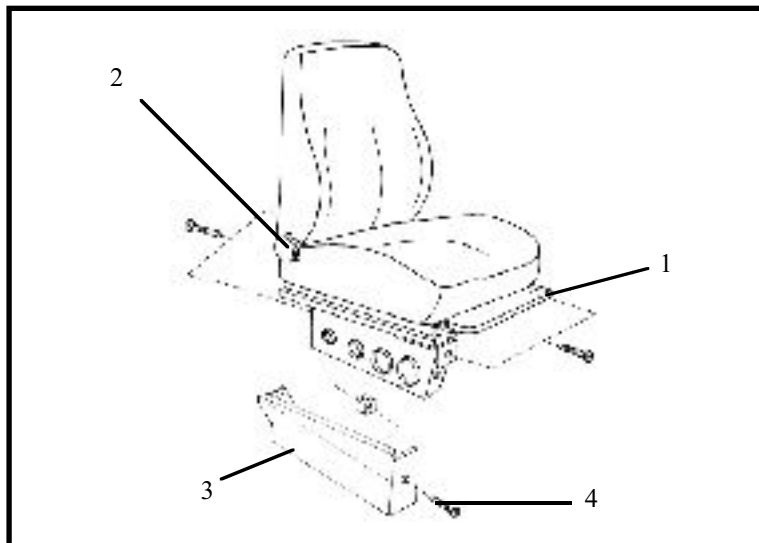
Remove the lateral crossbar protector **(3)** by dismantling the metal screws **(4)**.

Dismount screws **(5)**, which are fixing the seat on the central and lateral cross bar.

Release the front seat.

REMOUNTING

Perform in the reverse order the dismounting operations.



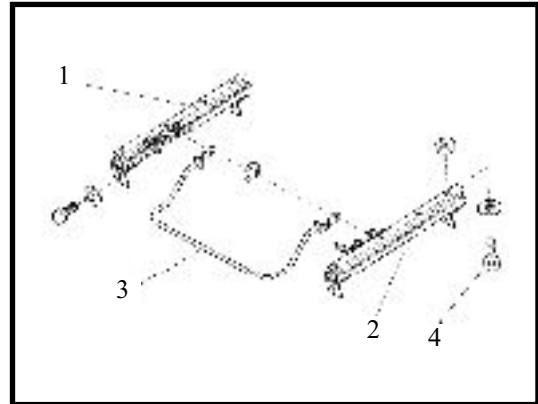
DISMOUNTING

Dismount the attachment screws (4) of the slides guides (1) and (2) on the front seat, by acting upon the control lever (3) and move the slideguides in one way or the other as required.

Releaseslidesguides from the front seat.

REMOUNTING

Perform in the reverse orderthe dismounting operations.



FRONT SEAT ARMATURE

DISMOUNTING

Dismount the front seat off the vehicle.

Dismount slides guides from the seat.

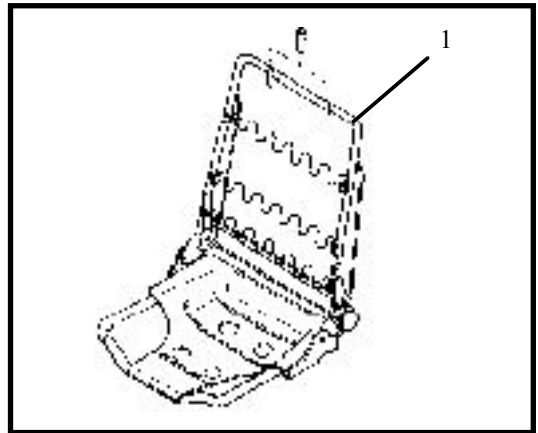
Remove the upholstery.

Detach the quilt from the seat armature.

Release the front seat armature.

REMOUNTING

Perform in the reverse order the dismounting operations.



The rear bench is composed of two separated swinging seats, unequal and two separated, unequal, swinging back rests.

DISMOUNTING

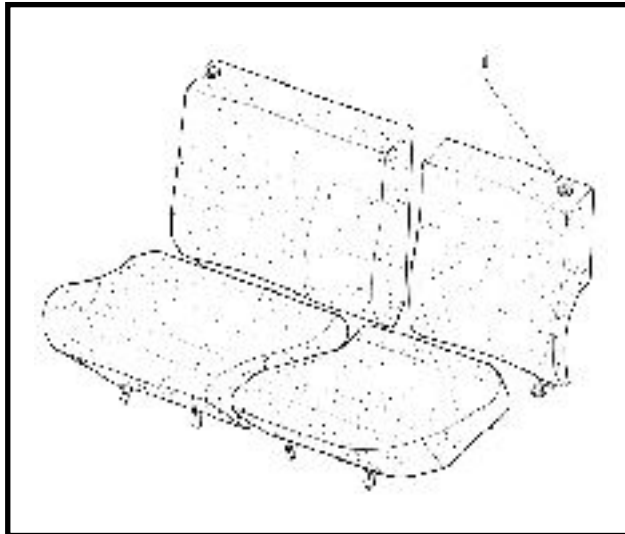
Dismount the seats, by swinging and by removing them from the welded supports on the carriage body.

For the back rests dismounting perform the following operations:

- lift the unlocking buttons (1), and swing out the back rests ahead.
- dismount the four screws for the attachment of hinges on the wheels' passage.
- remove the back rests from the central hinge

REMOUNTING

Perform in the reverse order the dismounting operations.

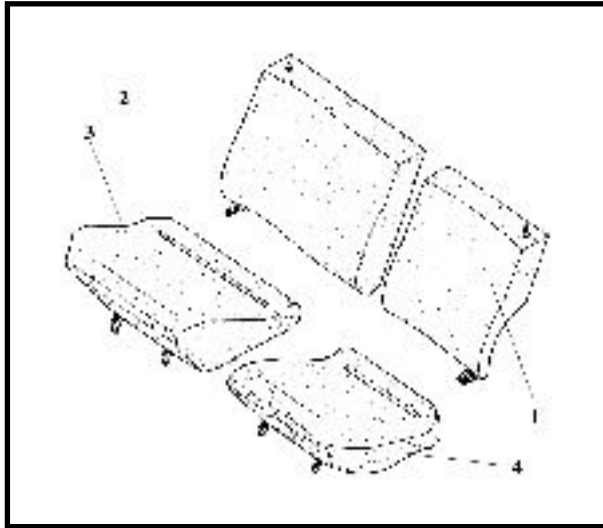


DISMOUNTING

Dismount the bench seats and remove the upholstery from the seats quilts (3) and (4).

Dismount the bench's back rests and remove the upholstery from the back rests quilts (1) and (2).

Release the reinforced quilts of the bench.

**REMOUNTING**

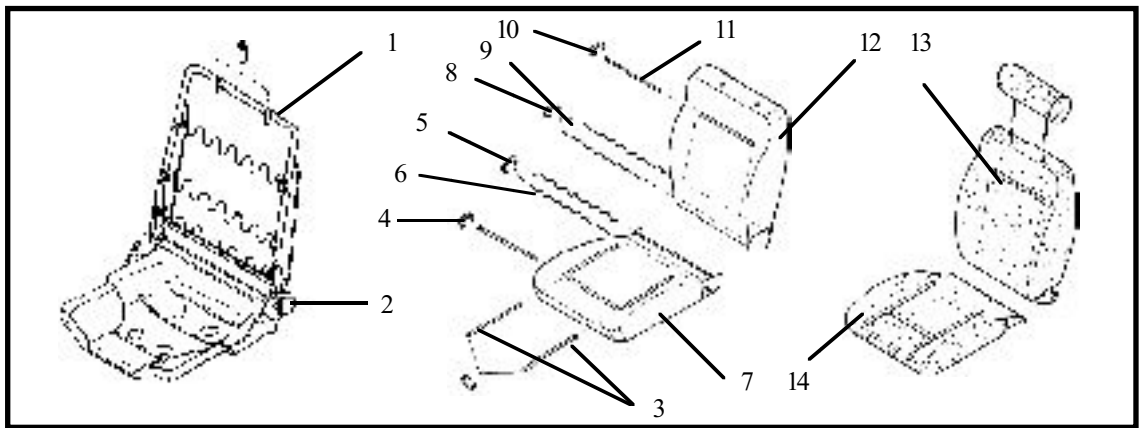
Perform in the reverse order the dismounting operations.

Detach the rods (3) from the attachment clips (4) of the seat upholstery (7) on the quilt (14).
Detach the rods (6) from the attachment clips (5) of the seat upholstery with front seat reinforcement.

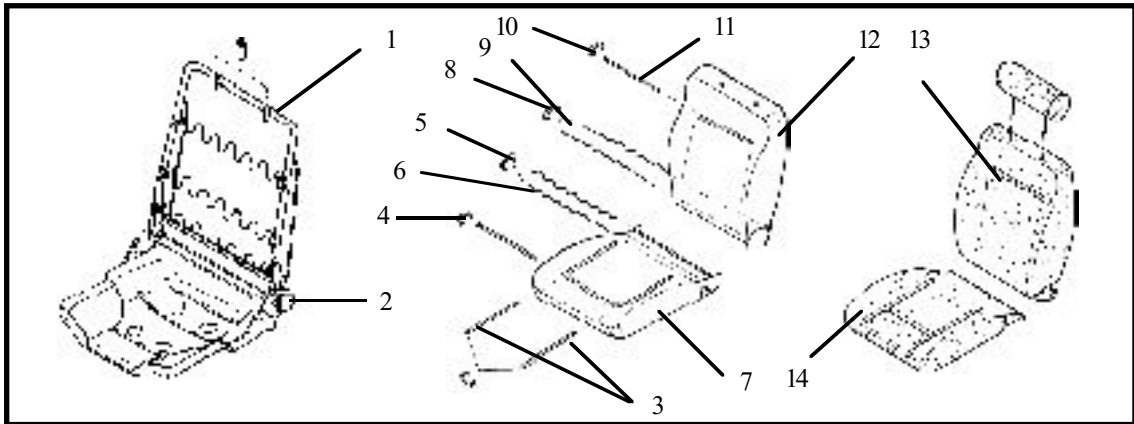
Remove the front seat upholstery from the seat quilt.

REMOUNTING

Perform in the reverse order the dismounting operations.



FRONT SEAT TRIM BACK REST UPHOLSTERY DISMOUNTING



Dismount the button control for backrest swinging **(2)**, releasing the screw, the washer, the plate, and the backing plate.

Remove the sleeves for headrests from the pipes welded on the front seat reinforcement.

Detach the rods **(9)** also from the clips **(8)**.

Detach at the second criss-cross arch level the rod **(11)** from the attachment clips **(10)** of the back rest upholstery **(12)** on the back rest quilt **(13)** and remove the back rest upholstery.

REMOUNTING

Perform in the reverse order the dismounting operations.

SEAT UPHOLSTERY DISMOUNTING

Remove by swinging the seats (1) and (4).

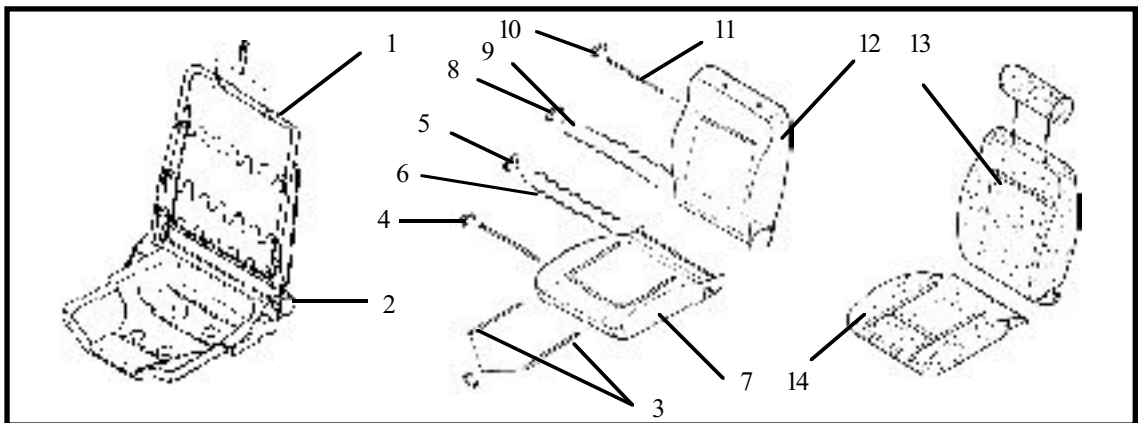
Detach the attachment rods (16) and (11) of the seats upholstery (14) and (13) on the quilts (8) and (7).

Detach the attachment rods (15) and (12) of the seats on the corresponding quilts and remove the upholsters (14) and (13) from the seat quilts.

Remove the front seat upholstery from the seat quilt.

REMOUNTING

Perform in the reverse order the dismounting operations.



BACKREST UPHOLSTERY DISMOUNTING

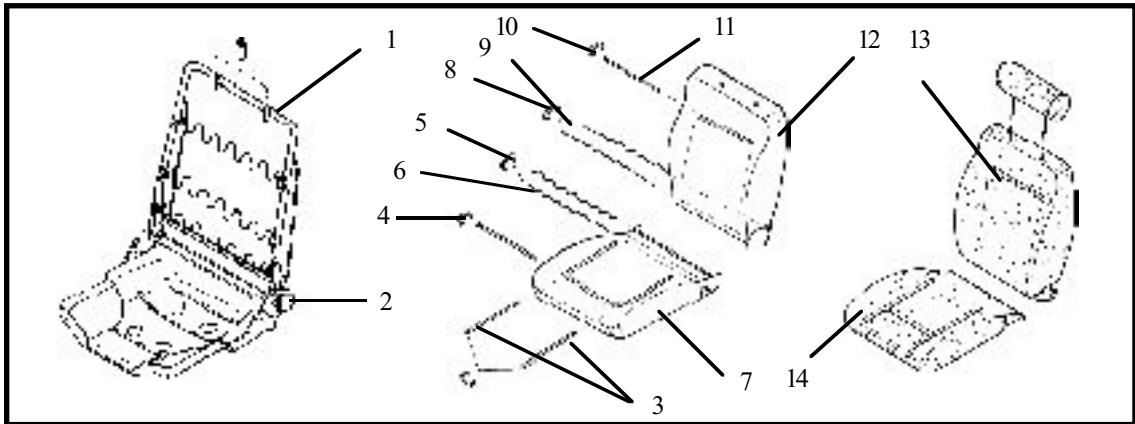
Dismount the backrest seats (2) and (3) from the central and lateral attachment screws.

Detach the rods (19) and (20) of the attachment back rests (2) and (3) of backrest upholstery (8) and (9), the quilts (5), consequently (6).

Detach the rods (17) and (10) of the back rests upholstery on the corresponding quilts and remove the upholstery (8) and (9) from the back rests quilts.

REMOUNTING

Perform in the reverse order the dismounting operations.



Dismount the backrest seats (2) and (3) from the central and lateral attachment screws.

Detach the rods (17) and (20) of the attachment back rests (2) and (3) of backrest upholstery (8) and (9), the quilts (5), consequently (6).

Detach the rods (17) and (10) of the back rests upholstery on the corresponding quilts and remove the upholstery (8) and (9) from the back rests quilts.

REMOUNTING

Perform in the reverse order the dismounting operations.

PARTICULARITIES

CHECKING

It is recommended to check the following:

- cracks or breaches of the battery box (case);
- the battery upper part cleanness;
- the plugs condition

It is required to strictly check the following:

- lack of plugs sulfate composite;
- proceed, is necessary to their cleaning and greasing;
- check the correct wiring plugs tightening at the battery plugs. The existence of an imperfect contact may generate incidents at engine starting or at battery charging, sparks producing risk being possible to occur, which may cause the battery explosion;
- check the electrolyte level.

For the batteries provided with access plugs, which may be dismantled, proceed as follows:

- remove the plugs;
- check the electrolyte level in each element;
- if necessary refill the level, using only distilled water, till maximum 1.5 cm above the plates.

ATTENTION

Never fill up with electrolyte, but only with distilled water.

PRECAUTIONS

It is important to know that:

- the battery contains sulfuric acid which is a dangerous substance;
- during battery charging, oxygen and hydrogen are produced. The mixture of these two gases is forming a detonate gas, which may lead to the explosion risk.

1. DANGER = ACID

The sulfuric acid solution is a very aggressive, toxic and corrosive product. This is attacking the skin, the clothes and may lead to the corrosion of most of the metals.

Also, it is very important that, when you handle a battery to consider the following precautions:

- protect the eyes by using protective glasses;
- wear anti-acid gloves and clothes.

ATTENTION

In case of acid slashes on body, abundantly wash with water all affected parts. If eyes have been touched, urgently call for a doctor.

1. DANGER = EXPLOSION RISK

During battery charging, connected to a charger-rectifier, oxygen and hydrogen emissions are occurring. These gases emission is stronger when the battery has reached the complete charge condition and the produced gas quantity is in direct connection with the charging current.

The oxygen and hydrogen are associating in the free spaces, at the plates surface, forming a detonate mixture, which is very explosive. The littlest spark is sufficient to generate an explosion, followed by the battery case brooking and acid splashing in the proximate environment. The persons, who are around, are in danger to be hurt by the exploded case chips or by the acid, which may come in contact with the eyes, hands, or face.

ATTENTION

Strictly observe the following recommendations:

- before connecting or reconnecting a battery, ensure that all consumers are shouted off;*
- during battery charging in a room, using a charger-rectifier, turn it off before connecting or reconnecting the battery to this one;*
- do not place metallic objects on the battery for not producing a short-circuit between its plugs;*
- never bring closer to a battery, an open flame, a welding lamp or another fire source.*

THE ELECTRIC EQUIPMENT PROTECTION

In case of an intervention on the vehicle, some measures must be taken, for the electric equipment protection against damages or for avoiding a short-circuit that may lead to vehicle firing. The battery is to be all with disconnected by first disconnecting the negative plug and then the positive one. Connection is to be done by performing the disconnecting operations in the reverse order.

Before starter acting, check if the battery is correctly connected (the negative plug connected to the ground), and if the plugs are clean and well tightened. Never disconnect the battery when the engine is running, in order not to damage the voltage regulator, the alternator or some components of the vehicle checking electronic systems. The alternator, voltage regulator disconnecting, and the interventions at their connections, are to be performed only when the engine is stopped (the alternator is not turning) and the contact is taken off.

In case the battery is connected to a charger-rectifier, for charging (without dismantling the battery off the vehicle), it is obligatory to disconnect the wiring from the battery plugs.

BATTERYDISMOUNTING-REMOUNTING**DISMOUNTING**

After identification and elimination of the real cause of the battery discharging, proceed as follows:

Remove the plastic protector from the plus plug of the battery.

Dismount the attachment nut of the ground wiring from the minus plug of the battery.

Dismount the attachment nut of the wiring from the plus plug of the battery.

Dismount the battery attachment clamp screw.

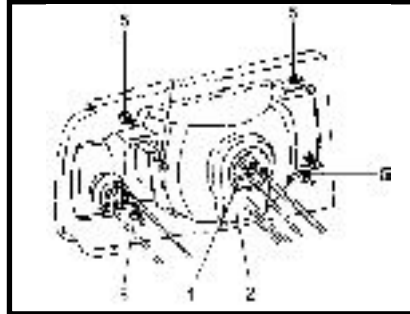
Carefully take off the battery.

REMOUNTING

Perform the dismantling operations in the reverse order. After that, reset the radio by introducing the radio code (if the vehicle is equipped with radio) and adjust the dashboard clock.

NOTE :

After headlamps dismantling, their adjustment must be performed.

**DISMOUNTING**

Disconnect the battery.

Dismount the headlamp adjustment correction control from the headlamp adjustment device, by detaching from clips.

Disconnect the connector (1).

Disconnect the supply wires for the parking bulb and turning light bulb.

Dismount the attachment nuts (5) of the headlamp turning lamp assembly

Push ahead the headlamp assembly.

REMOUNTING

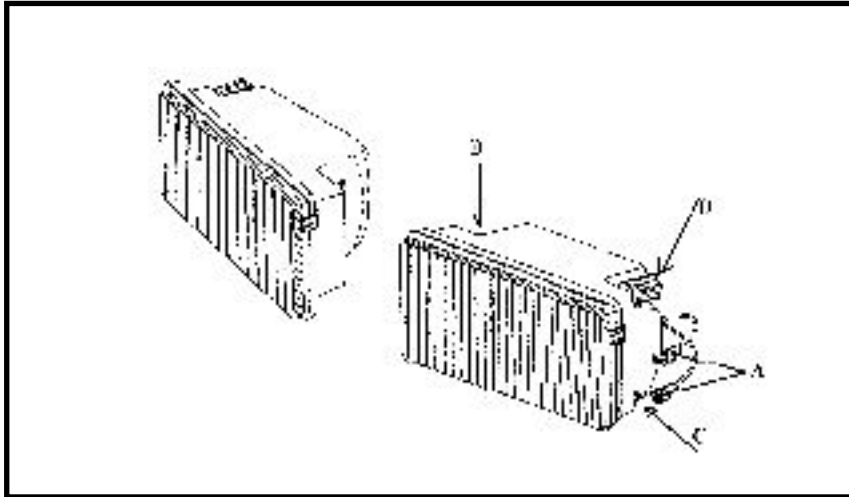
Place the headlamp assembly in its place and tighten the attachment nuts (5).

Mount the headlamp correction cable.

Reconnect the connector (1) and the supply wires to the parking and turning bulbs.

Reconnect the battery.

DISMOUNTING – REMOUNTING

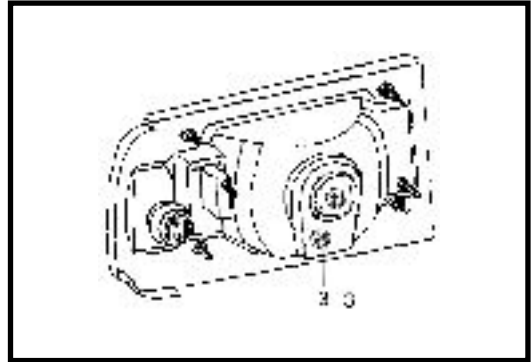
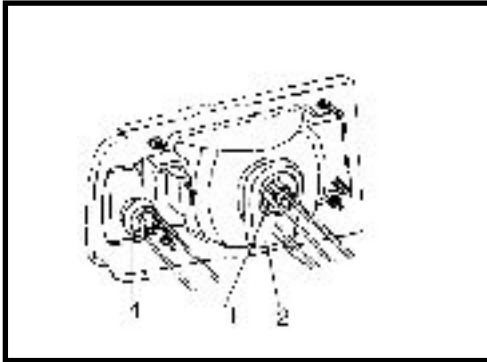


Disconnect the fog lamp (A) connectors from the vehicle wiring.
Dismount the two fog lamp attachment nuts (B and C) on the front bumper.
Remove the fog lamp off the bumper.
Position in the bumper the new fog lamp.
Mount the two fog lamp attachment nuts (B and C).
Connect the fog lamp (A) connectors to the vehicle wiring.
Check the operation of the fog lamps.

NOTE:

After mounting the fog lamps, it is obligatory to perform their adjustment.

HEADLAMP BULB REPLACEMENT



DISMOUNTING

Disconnect the connector (1).

Disconnect the supply wires of the parking bulb and remove the parking bulb.

Remove the rubber protector (2).

Release the attachment clamps (3) and remove the low-main beam bulb.

REMountING

Perform the dismounting operations in the reverse order.

NOTE:

In case the headlamp is equipped with a halogen bulb, do not touch its glass balloon directly by hand.

FRONT TURNING BULB REPLACEMENT

DISMOUNTING

Disconnect the bulb supply wires

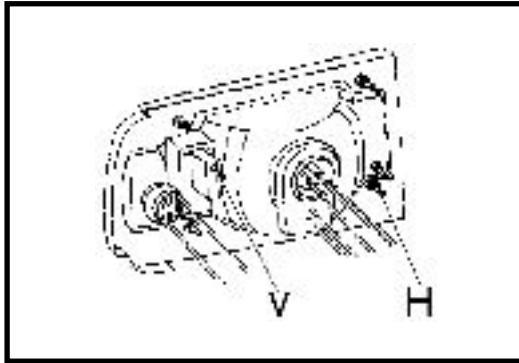
Rotate the holder (4) and remove it.

Remove the burnt bulb from the holder.

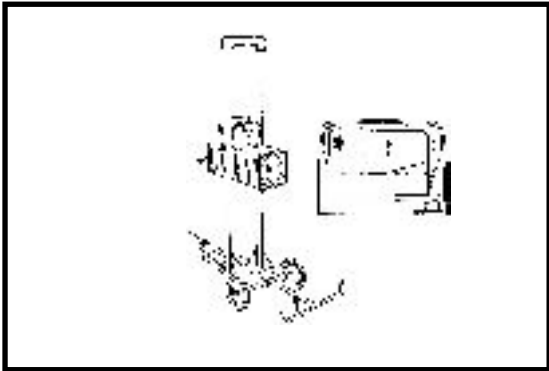
REMountING

Perform the dismounting operations in the reverse order, with the checking of the correct holder (4) positioning to avoid dust and humidity penetration in the headlamp assembly

The turning lamps are using orange color bulb; when replacing the bulb, use the same bulb type.



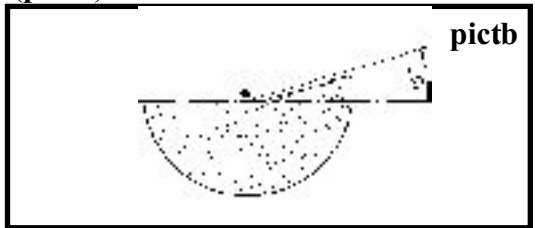
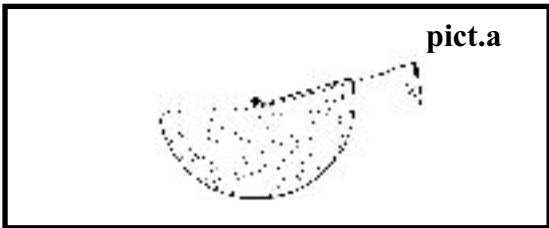
MEETING LIGHTS ADJUSTMENT (LOW BEAM)



This is performed by acting upon the V screw (vertically plane adjustment) or H (horizontally plane adjustment). By screwing, the lighting beam is "lowering" and by unscrewing is "ascending".

Check if the lighted area is centered on the vertical axis and if the optical separation at 15° coincides with the headlamp lighting. An error of 1 cm is admissible.

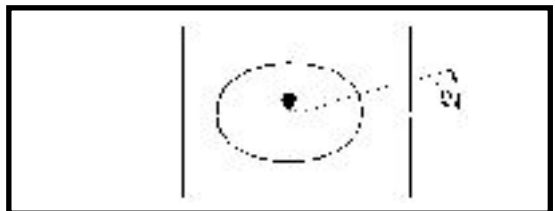
A lighting beam displaced towards left has the aspect shown in (picta) and a lighting beam displaced towards right has the aspect shown in (pictb).



ROAD LIGHTS ADJUSTMENT (LONG BEAM)

Check the position to coincide with the adjustment performed for low beam and with the lighting beam distributed between the two vertical lines on the panel.

When checking the long beam, the lighting center of the ellipse, must be located on the cross marking the screen center.

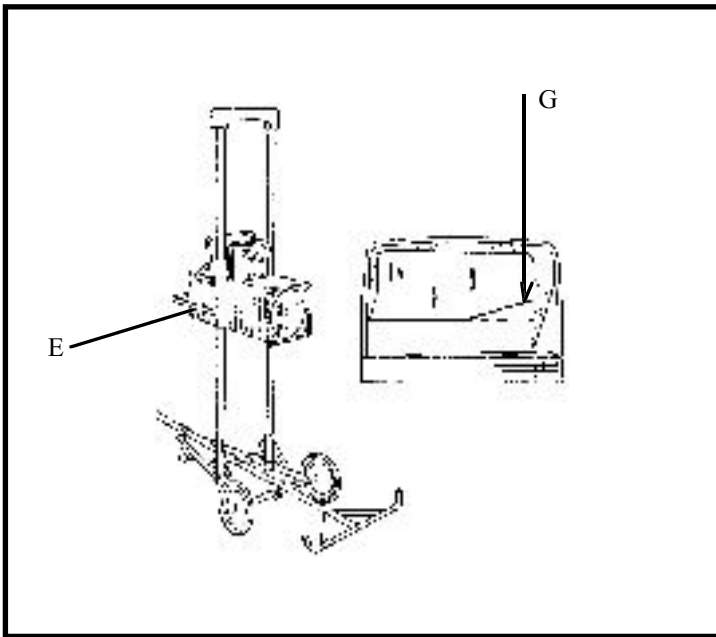


If a major deviation compared with the low beam is noticed, it is recommended the bulb replacement, this one being in most of the cases, responsible for such defect.

FOGLAMPS ADJUSTMENT

The fog lamps adjustment is to be performed in the following conditions:

- the vehicle to be placed on a horizontal surface;
- the vehicle has not passengers inside the cockpit or weights in the trunk;
- the tires are pressurized at the manufacturer prescribed pressure.



Further on, proceed as follows:

Bring the vehicle at the working place.

Position the adjustment device (headlamp adjustment device – E) in front of an optical center of a fog lamp.

Switch on the fog lamps.

Rotate the adjustment screw of the fog lamp (D), so that an adjustment of 2 % is obtained and the separation between the lighted area and the dark one from the adjustment device is located under the marked line (G).

This adjustment is performed in the same way as for the meeting lights adjustment.

Bring the adjustment device in front of the optical center of the second fog lamp.

Perform the fog lamp adjustment.

Switch off the fog lamps.

BULB REPLACEMENT OF THE REAR TURNING, PARKING AND BRAKE STOPLIGHT

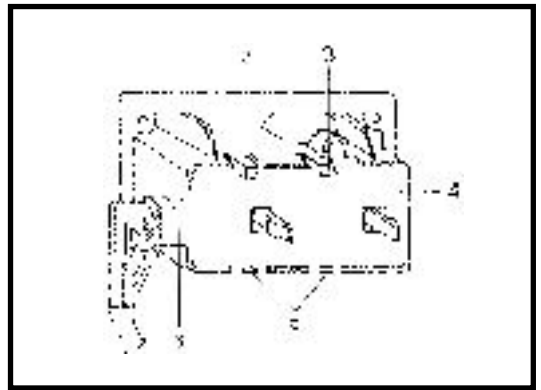
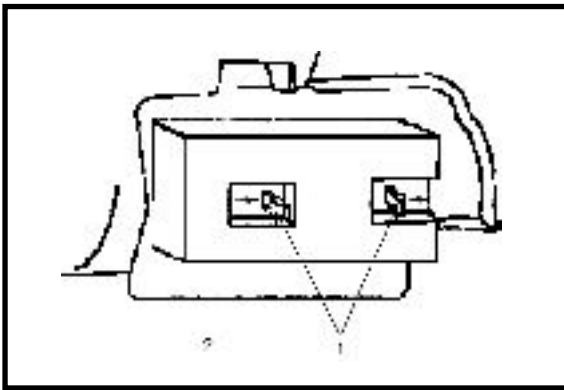
Disconnect the battery.

Push towards interior the two attachment clips (1), then extract the plastic cap (2).

Disconnect the connector (6).

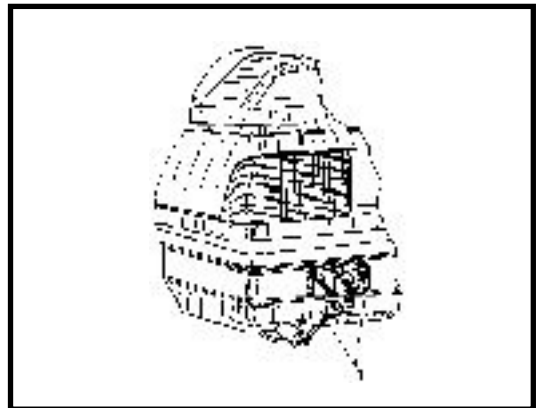
Push upwards the attachment clips (3) of the printed circuit plate (4), swing it and pull out the plate from the attachment shoulders (5).

For remounting perform the dismounting operations in the reverse order.

**FOG LAMP BULB REPLACEMENT**

Dismount the attachment screws (1) of the fog lamp glass and remove the glass;

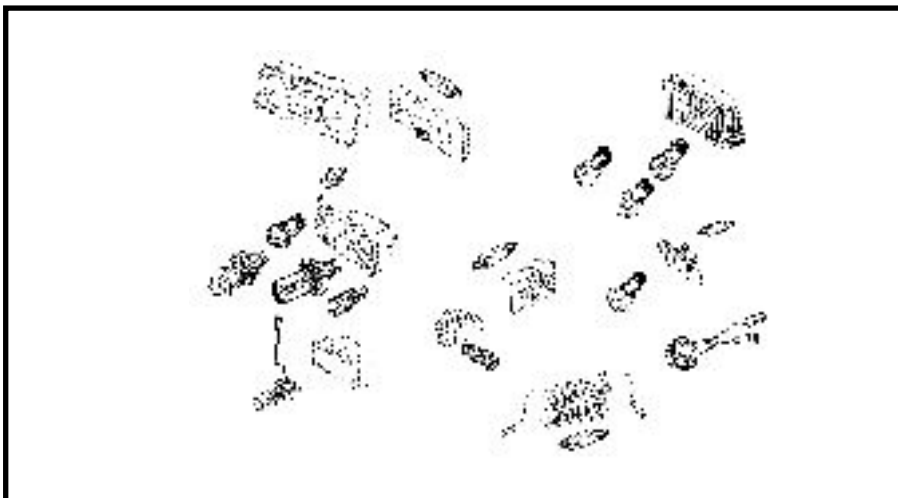
Remove the burnt bulb and replace it.

**REPLACEMENT OF THE LICENSE PLATE LAMP BULB**

Dismount the lamp attachment screws.

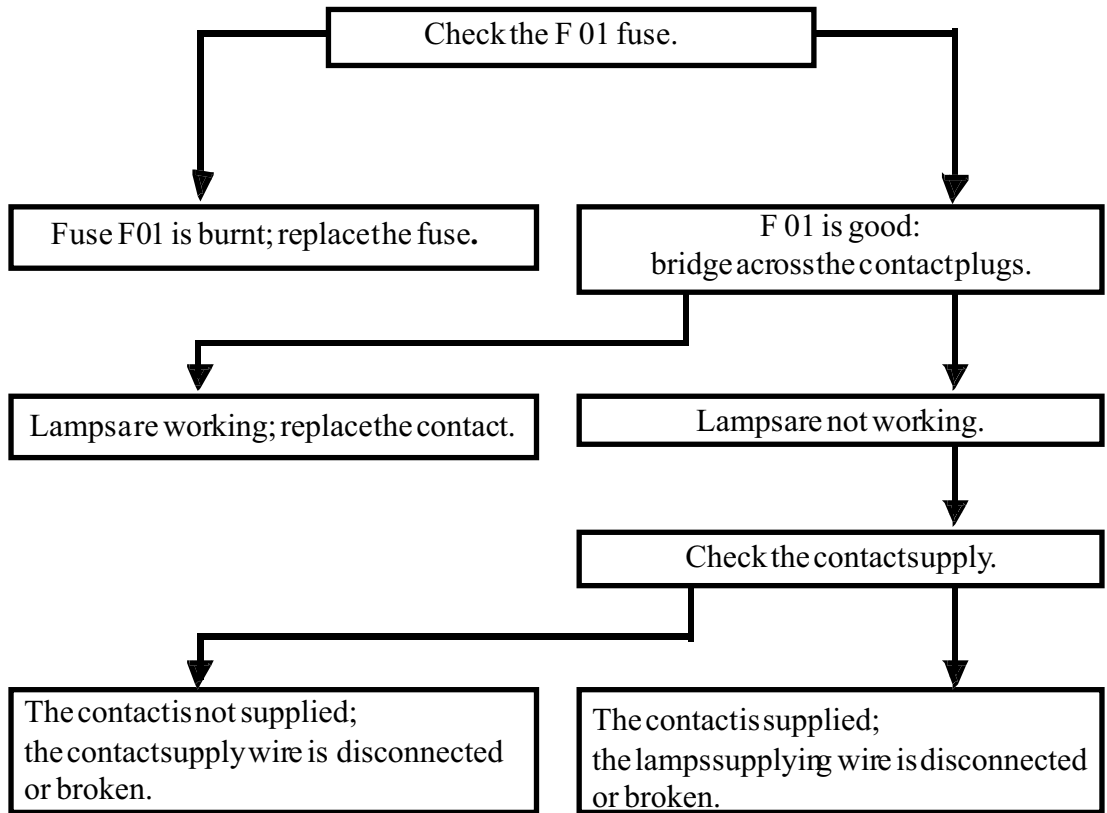
Replace the burnt bulb.

For remounting, perform the dismounting operations in the reverse order.

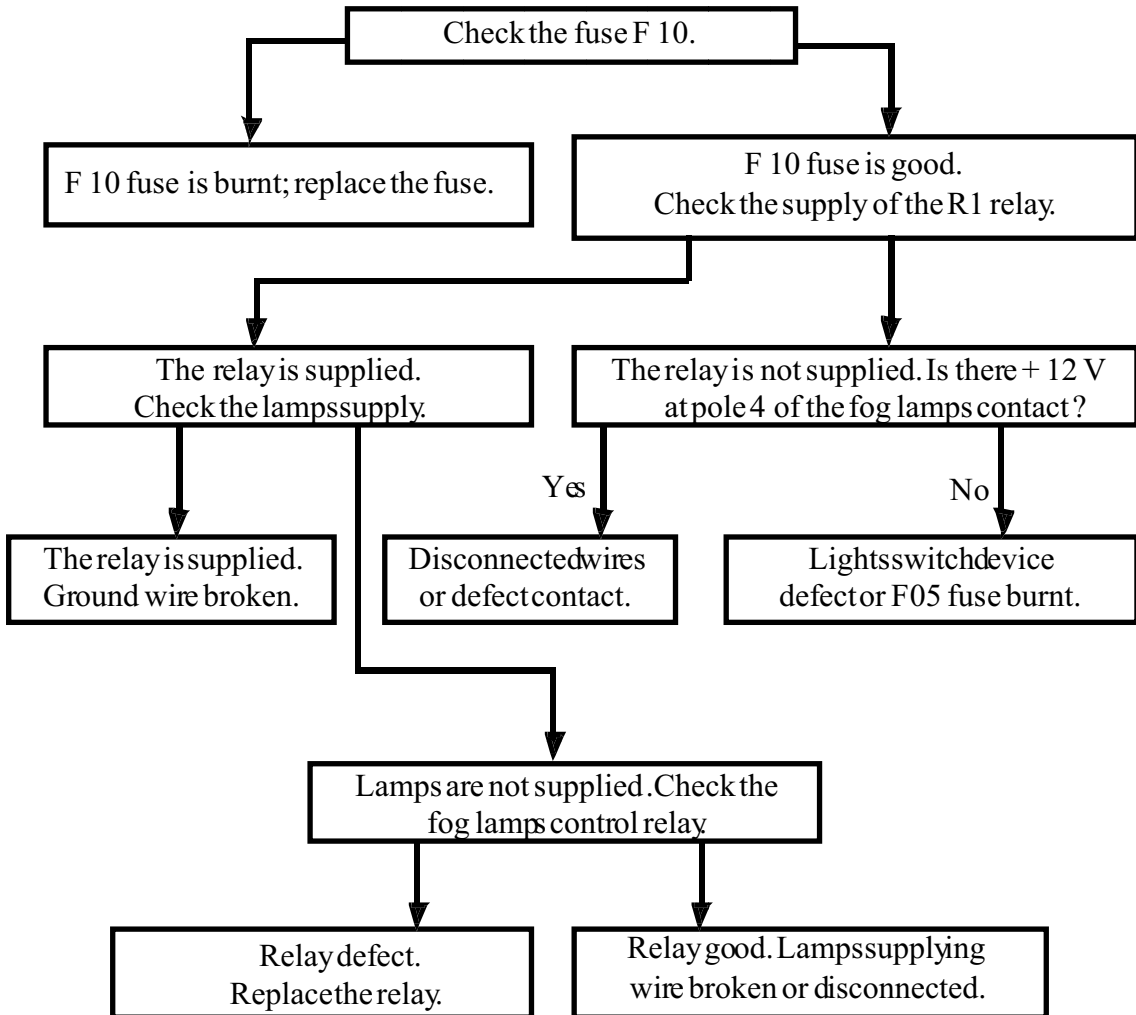


BULBS		
Headlamps	Hugh/lowbeam lights	Two phases bulb R2-12V-40/45 W with flange holder P45t41
	Parking lights	Bulb 12V-4W with holder BA 9s
Front turning lamp		Bulb 12V-21W (colored) with holder BAU 15s
Fog lamps		Halogen bulb H3, 12V-55W with holder Pk22s
Rear lamps	Parking, stop lights	Bulb 12V-21/5W with holder BAY 15d
	Turning and reverse driving	Bulb 12V-21W with holder BA15s
Rear fog lamps		Bulb 12V-21W with holder BA 15s
Lamps: side signaling, trunk lighting		Bulb 12V-5W with holder W2, 1x9,5
License plate, ceiling document compartment lamps		Bulb SOFIT 10 x 35 type AS02; 12V-5W with holder Sv 8,5
Lamp STOP-S3 on the ceiling		Bulb 12V-21W type C21W with holder Sv 8,5
Instrument panel		Bulb 12V-1,2W holder W2 x 4,6d

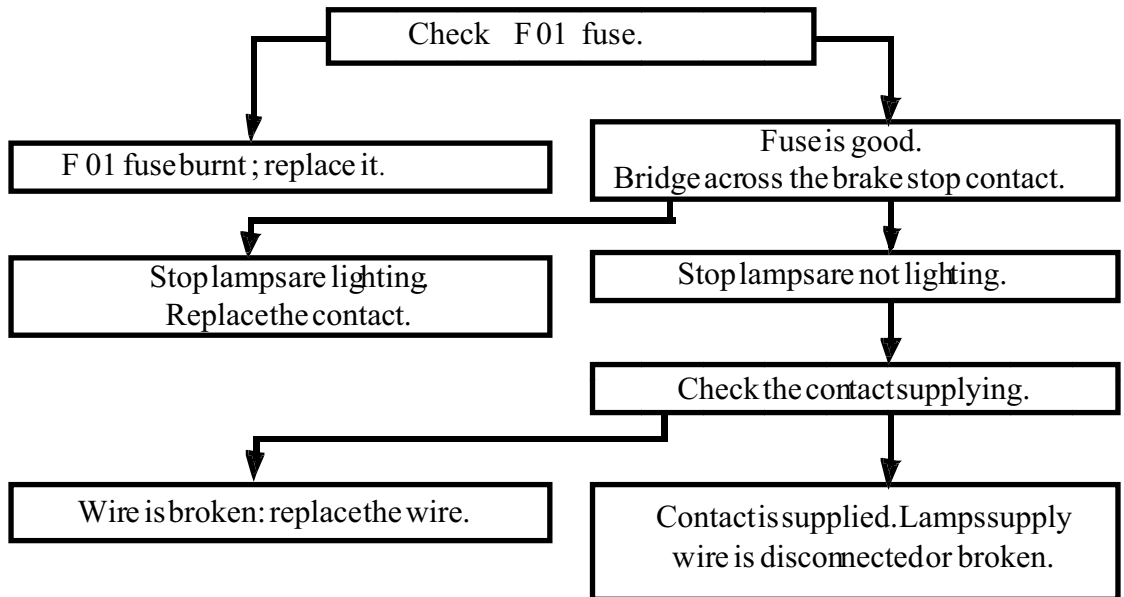
THE REAR DRIVING LAMPS NOT WORKING

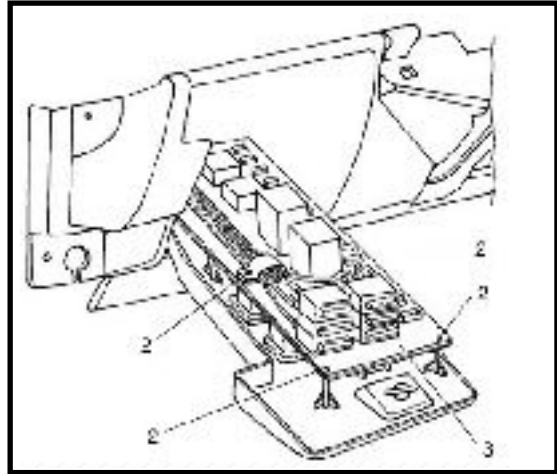
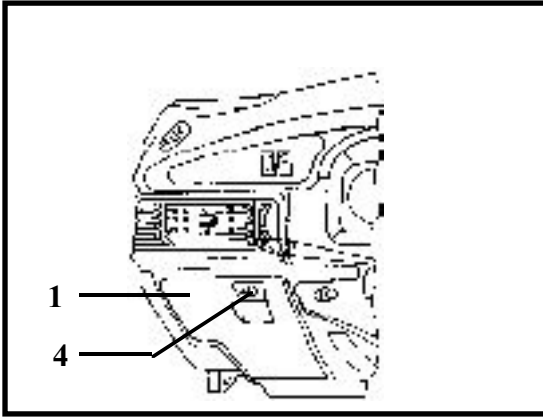


FOGLAMPS NOT WORKING



BRAKE STOPLIGHTS NOT WORKING



DISMOUNTING

Disconnect the (-) plug of the battery.

Turning the button (4) open, then carefully remove the access little door (1) to the fuse box, placed under left side dashboard.

Dismount the attaching screws (2) of the fuse box on back of the little door.

Rotate the fuse box in order to have access at the connectors of its back then carefully disconnect the wiring connectors. If it is necessary the replacement of the module (3) attached on the fuse box, for the fuses F11 – F16, first note the position of the wires connected to these fuses, then perform the wires disconnecting

Remove the fuse box.

REMOUNTING

Connect the wiring connectors to the fuse box printed circuit. Observe the form correspondence of each connector with its drawing, marked on the printed circuit of the fuse box.

Connect the wires corresponding to the fuses F11 – F16, if those have been previously disconnected

Position the wires appointed for the fuses F11- F16 and the module (3) of those fuses, then attach the fuse box on the back of the access little door (1).

Carefully mount the fuse box access little door, then close it.

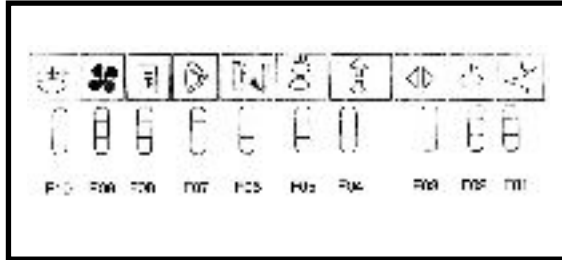
Connect the (-) battery plug.

Perform functional tests, noticing the correct operation of all consumers supplied by means of the cockpit fuse box.

OBSERVATION

For vehicle equipped with radio-tape player, after battery reconnecting, the radio code must be introduced, in order to make it again running.

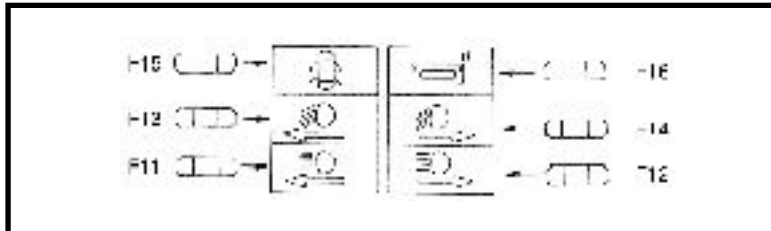
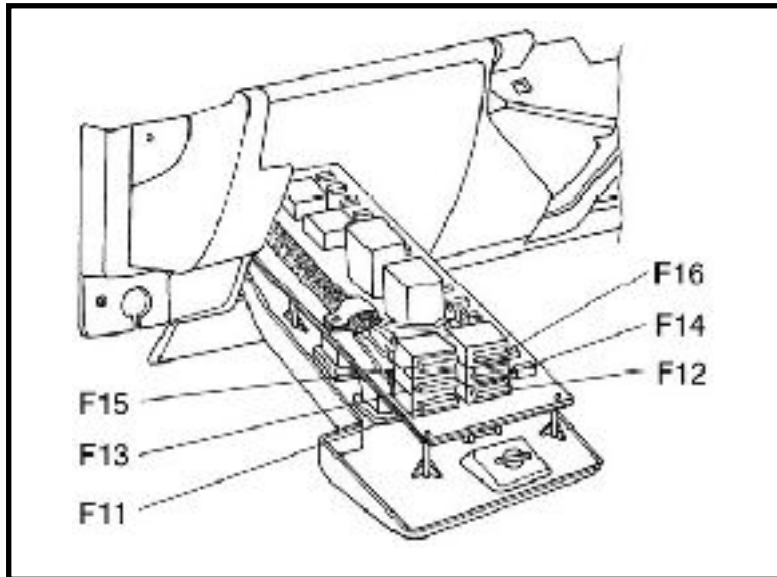
A. FOR VEHICLES MANUFACTURED TILL 01.06.2001



The fuses are protecting the following electric circuits:

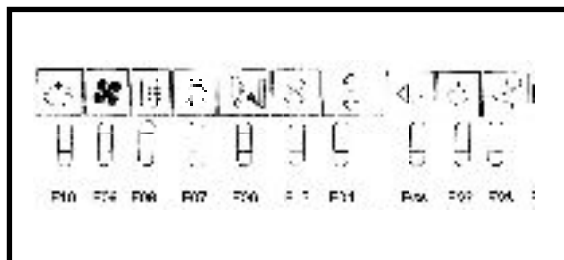
FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, climate blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti intrusion
F04	7,5A	Turning and hazard lights
F05	5A	Front/rear parking lights, lighting: switches, instrument panel, climate control, documents compartment, cigarette lighter, ashtray, radio
F06	15A	Cigarette lighter, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti intrusion, anti intrusion indicator, diagnostic socket
F07	15A	Windscreen wiper-washing switch, windscreen wiper timer
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

On the fusebox, 6 fuses modules are attached, protecting the following consumers:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left high beam
F12	10A	Right high beam, high beam indicator
F13	10A	Left low beam
F14	10A	Right low beam, low beam indicator
F15	15A	UCE decoder, FLASH relay, anti starting bushing
F16	10A	Radio, windscreen wiper motor.

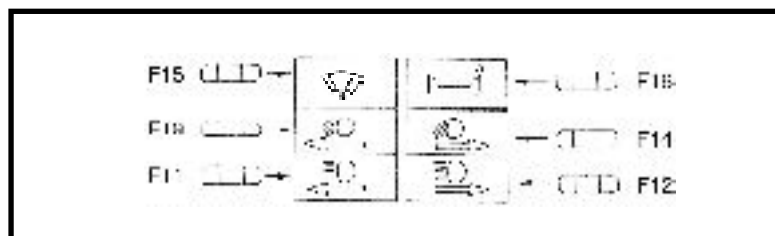
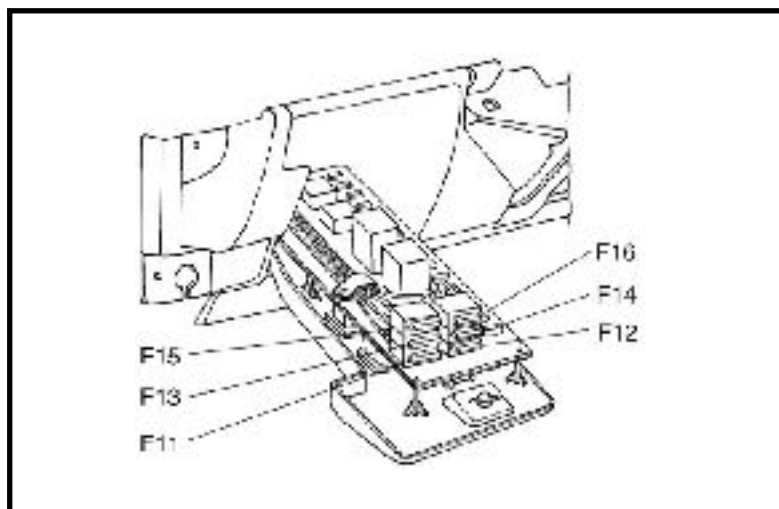
B. FOR VEHICLES MANUFACTURED AFTER 01.06.2001 AND VEHICLES RESPECTING EURO 2000 POLLUTION NORM



The fuses are protecting the following electric circuits:

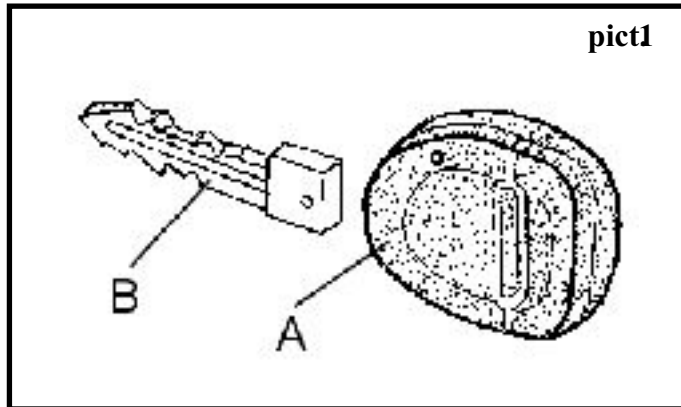
FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, climate blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti intrusion.
F04	7,5A	Turning and hazard lights
F05	5A	Front/rear parking lights, lighting: switches, instrument panel, climate control, documents compartment, cigarette lighter, ashtray, radio.
F06	15A	Cigarette lighter, dock, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti intrusion, anti intrusion indicator, diagnostic socket.
F07	15A	UCE decoder, FLASH relay, anti starting bushing
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

Pe cutia de siguranțe sunt fixate 6 module siguranțe fuzibile ce protejează următorii consumatori:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left high beam
F12	10A	Right high beam, high beam indicator
F13	10A	Left low beam
F14	10A	Right low beam, low beam indicator
F15	15A	Windscreen wiper-washing switch, windscreen wiper timer
F16	10A	Radio, windscreen wiper motor.

This type of anti starting system is based on the key recognition, which has a special construction. It may be separated in two elements which can be identified in the following way (pict.1): the key head (pos.A.) made of plastic, which can be dismantled and the metal insertion (pos.B.), which is fixed and ensured by clipping in the key head.



In the key head, there is a coded independent electronic circuit, which is functioning without battery. When setting the contact, the anti starting bushing, placed around the starting contact, is enquiring and catching the coded signal emitted by the key head, then sends it to the Electronic Control Unit (E.C.U.) decoder. This one is attached on the front left pillar, under the lower casing of the dashboard and has the function of receiving the code sent from the bushing. If the decoder recognises the key code then it will send a coded signal to the injection computer, which compares it with the previous memorised code and will authorise or not the start of the engine.

We mention that the system with radio frequency remote control (RF) of the doors blocking/unlocking, has no influence to the anti starting system. In this case, the key head has a different construction, having an activation button of the remote control and a red LED, which is lighted in the moment of blocking/unlocking the doors, by pushing the key button. Inside the key head there is the coded electronic circuit for the anti starting system and an imprinted electronic circuit, supplied by a battery, for the RF remote control operation of blocking/unlocking the vehicle doors.

The anti starting system is activated after approximate 10 seconds from the breaking of the contact and is visualised by the blinking of the anti starting indicator placed on the instrument panel.



ATTENTION

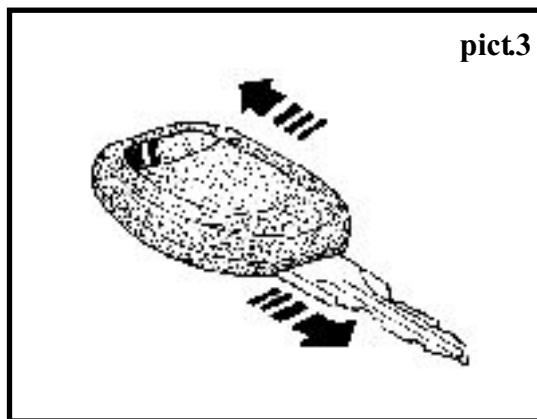
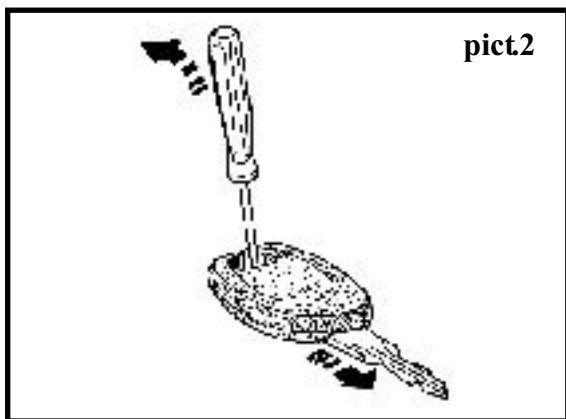
If the battery is low charged, the tension drop on the starter, at starting, may cause the activation of the anti starting system and the start of the engine is impossible.

THE KEY HEADS

The key head has marked inside, a number of identification, formed by 8 alphanumeric characters (letters and figures) and this one is mentioned on the vehicle's invoice.

If the replacement of the battery from the key head is necessary, this can be opened in the following way:

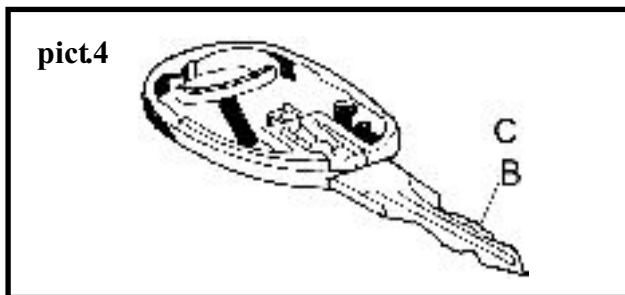
- keep the key in horizontal position, the half with the metal insertion being downwards ;
- with a little screwdriver, positioned as in the picture (picture2), act upon the key head in the direction indicated by the arrow, in order to begin the dismantling.
- move carefully the upper side of the key in the direction indicated by the arrow (picture3) and then the two parts of the key will separate.



If the replacement of the metal insertion (the mechanical part) of the key is needed, proceed as follows:

- open the key head according to the a.m. procedure ;
- unlock carefully the maintaining claw (picture4, pos. C) of the metal insertion (B).
- remove the metal insertion by sliding from the key head.

Introduce by sliding the new metal insertion until a « click » is heard, which confirms its attachment on the key head.



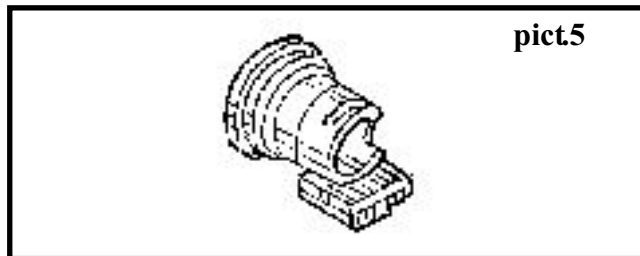
ATTENTION

After dismantling the key head, it is forbidden to touch the electric circuit located inside of it, as this can cause the further non-operation of the anti starting system and impose a replacement of the key head.

NOTE

In case both keys were lost, the code of the key head (8 characters) and the code of the metal insertion (4 characters) can be read from the vehicle invoice. If also the invoice was lost, the two mentioned codes can be found out based on the chassis series number of that vehicle, accessing the database of the DACIA manufacturer, calling the TECH LINE.

ANTISTARTING BUSHING



The anti starting bushing (picture 5) is located around the starting contact and is accessible after the dismounting the steering wheel's scases. It catches the signal from the key head and then sends a coded signal to the E.C.U. decoder.

The vehicles equipped with RF remote control keys for blocking/unlocking the doors are provided with another anti starting bushing which transmits to the E.C.U. decoder also the signal received from the RF remote control.

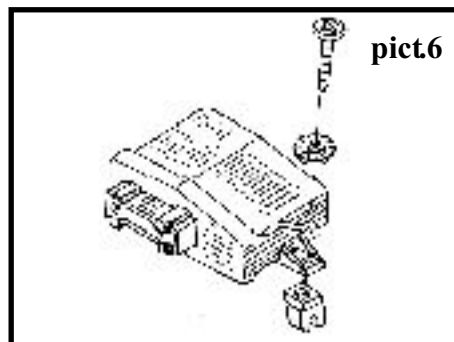
The recognition of the two types of decoding bushings is realised by means of codes labelled on their body, as follows :

- code 042264J - for vehicles without RF remote control
- code 8200044257 - for vehicles with RF remote control

E.C.U. DECODER

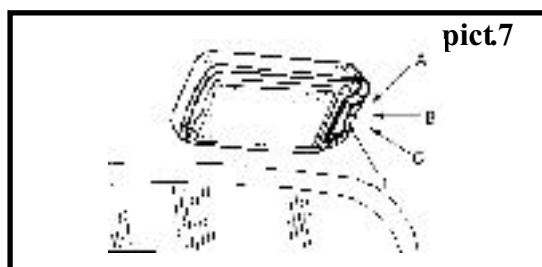
The E.C.U. decoder (picture 6) has the following functions :

- decode the signal received from the anti starting bushing ;
- sends a code to the injection computer in order to authorise the engine starting.
- controls the anti starting indicator of the instrument panel
- receives the coded signal from the anti starting bearings, for the vehicle equipped with RF remote control;
- commands the blocking/unlocking of the doors, if the vehicle is provided with RF remote control keys;
- commands the dome ceiling lighting, for the vehicle equipped with this system.



The dome ceiling lighting is activated subject to the position of the switch (picture 7, position 1):

- position A the ceiling lights permanently
- position B the ceiling turned off
- position C dome ceiling lighting this will light for 5 seconds after a front door closing or after the command of unlocking the doors with the RF remote control. This delay turns out in the moment of setting the contact.



NOTE :

The vehicles equipped with this anti starting system, have a type of decoder, and those provided also with RF remote control for locking/unlocking doors have another type of decoder.

The identification of the two types of E.C.U. decoder is realised by the inscriptions on the labels as follows:

- code P8200032783H and the inscription TRANS-PLAF for the vehicles without RF remote control;

- code P8200032776H and the inscription TRF-TRANS-CAR for the vehicles with RF remote control.

ANTI STARTING INDICATOR

It is located on the instrument panel (picture 8, position A) and has the following functions:

- signal the activation of the anti starting system
- signal the case of non identifying the key head
- signal the entrance in the operation mode “resynchronisation” of the remote controls, RF with E.C.U. decoder, for the vehicles which use the RF remote control.



When the contact is off and the anti starting system is activated, without any existing failure, the anti starting indicator must blink slowly (a blink per second).

After setting the contact on, the anti starting indicator must light for 3 seconds and then turn off.

If after setting the contact on, the anti starting system doesn't work properly, then the anti starting indicator will blink rapidly (2 blinks per second).

After ordering a new key head based on the alphanumeric code mentioned on the invoice, dismount the old key head and remove the metal insertion (mechanical part), then introduce the old metal insertion in the new key head according to the previously mentioned procedure. In case the key head is provided with RF remote control for blocking/unlocking the doors, after its replacement, perform the synchronising procedure of the RF remote control with the decoder, subject to the following cases:

(a)- the vehicle has a key with RF remote control and one without RF remote control; in this case after the replacement of the RF key, perform the “simple synchronised procedure” in order to bring into phase the RF remote control with the decoder.

(b)- the vehicle has two keys with RF remote control; after the replacement of one RF key, perform the “specific synchronised procedure”;

(c)- the vehicle has two keys with RF remote control; if both keys are replaced, perform the “simple synchronised procedure for the first key and the “specific synchronised procedure” for the second one.

If a key was lost, a new key head and a metal insertion will be ordered.

All the new decoders, are not coded. After the mounting on the vehicle it is necessary the memorisation of the key head code by the decoder in order to be operational. If only the decoder is replaced, no intervention is necessary to the injection computer, which will keep the old anti starting code. When the vehicle is provided with RF remote control for blocking/unlocking the doors, the performing of the resynchronisation of the keys with the decoder is imposed, after its mounting.

If further to the diagnostic of the anti starting system, using the CLIP tester, the replacement of the decoder is imposed, proceed as follows:

- disconnect the front wiring connector from the E.C.U. decoder (the contact being off);
- dismount the attachment screws of the E. C. U. decoder on the front left pillar;
- mount the new E.C.U. decoder;
- connect the front wiring to the new decoder.

Proceed then to the insertion of the anti starting code using the contact key, then to its memorising (validation) in the E.C.U. decoder, using the CLIP tester. For this purpose, perform the “E.C.U. decoder replacement procedure and anti starting code memorising”. Check then the correct operation of the anti starting system with both keys.



ATTENTION

Once the decoder has memorised the key codes, this code cannot be erased or replaced with another one.

If it is necessary the replacement of the kit (E.C.U. decoder and two key heads), after that realise the “Kit replacement procedure”.

If further to the diagnostic, it is established the necessity of the replacement of the anti starting bushing, proceed as follows:

- dismount the attachment screws of the steering wheel casing;
- unlock the steering wheel and bring it in low position;
- remove the steering wheel upper casing;
- disconnect the anti starting bushing connector from the front wiring;
- remove the bushing
- mount the new bushing outside the starting contact (anti theft) system;
- connect the bushing connector to the front wiring;
- mount the steering wheel casing;
- check the operation of the indicator and the anti starting system when the contact is off, then with the contact on and the engine started.

HORN - ENGINE IMMOBILISER
RF REMOTE CONTROL FOR BLOCKING/ UNLOCKING
THE DOORS



The RF remote control has no influence on anti starting system. It has only the function of blocking/unlocking the doors. The RF remote control with evolutionary code can use only two keys as the decoder may manage only two different evolutionary codes.

The key heads have an identification number formed by 8 alphanumeric characters (letters and figures) beginning with letter E.

In case of losing one key, a key head and a metal insertion will be ordered, then the resynchronisation procedure of the RF remote control of the key with the decoder from the vehicle must be performed. If the vehicle is provided with RF remote control key and this one has been replaced, then perform the “Simple synchronised procedure”. When the vehicle has both keys with RF remote control, then perform the “Specific synchronised procedure” after the replacement of the second key.

NOTE

- In the case only one key head is replaced, usually there is no need for resynchronisation of the other RF remote control.

- If both RF remote controls are desynchronised, one procedure of resynchronisation will be performed with each remote control: perform the “Simple synchronisation procedure for the first RF remote control” and the “Specific synchronisation procedure” for the second RF remote control.

Check then the operation of blocking/ unlocking of the doors with both RF remote controls.

If further to the diagnostic, it is necessary the replacement of the E.C.U. injection, for its dismounting, proceed as follows:

- disconnect the battery (the contact being off);
- dismount the screw from the battery attachment clip;
- remove the battery;
- disconnect the injection computer from the engine wiring;
- dismount the two attachment nuts of the injection computer.

For mounting perform in the reverse order the dismounting operations.

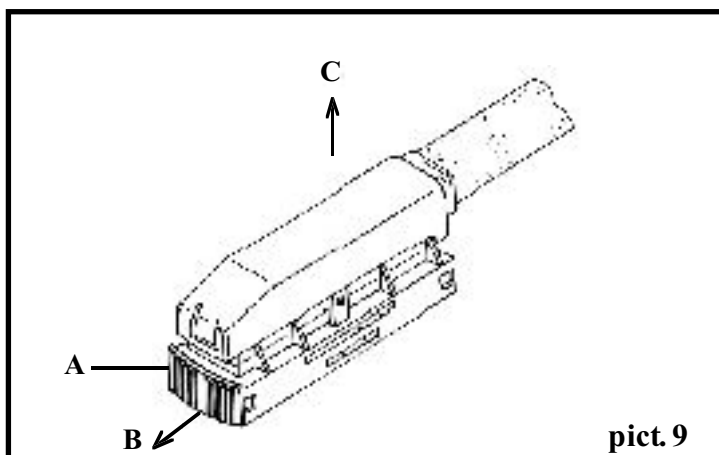
The injection computer is delivered not coded. It is necessary the memorising of an anti starting code in the computer, after this has been mounted was mounted.

Proceed as follows:

1. Set the contact on, without starting the engine, for a few seconds.
2. Take off the contact; after 10 seconds, the anti starting function is activated, and the anti starting indicator will blink rarely (one blink per second).
3. Set the contact on. The anti starting indicator must turn off and the engine can be started.

In order to disconnect the injection computer (E.C.U. injection) act upon the blocking lever (picture 9, position A) of the connector in the direction of the B arrow, then the connector will be lifted in the direction of the C arrow.

In case the vehicle is blocked on the road further to serious damages of the anti starting system, the "Procedure repairing code introduction" may be used, which allows the moving of the vehicle to the nearest DACIA service center for complete repairing. In order to perform this procedure it is necessary the CLIP tester and the specific repairing code of that vehicle.



pict. 9

**A. ECU DECODER REPLACEMENT PROCEDURE AND ANTI STARTING
CODE MEMORISING**

The new E.C.U. decoder is always not coded. After its mounting on the vehicle it is necessary that this one is memorising the anti starting code in order to be operational.

NOTE

If only the E.C.U. decoder is replaced, there is no need of an intervention to the E.C.U. injection (injection computer), which will keep the old anti starting code.

ATTENTION

After the E.C.U. decoder memorised the anti starting code, this code cannot be erased or replaced with another one.

In order to perform this procedure, one of the keys of the vehicle and the CLIP tester are needed. Perform as follows:

1. Connect the CLIP tester to the diagnostic socket and to the battery (or the lighter socket) of the vehicle.
2. Read the configuration of the old E.C.U. decoder in the following way, before dismounting it from the vehicle:
 - select the type "SUPERNOVA" and the "050" equipping level;
 - enter the menu "COMPUTER TEST" then choose "ANTI STARTING"
 - access "COMMAND MODE" then "CONFIGURATIONS READING"
 - note the configurations found: petrol/diesel, programming with 1 or 2 keys, ceiling delay, the type of the doors' blocking switch (CPE), etc.;
3. Get back to the menu "TEST COMPUTERS"
4. Remove the old E.C.U. decoder and replace it with a new one, the contact being off.
5. Enter the menu "ANTI STARTING", then select "STATE LIST". If the E.C.U. decoder is new, you must find the following states:

18G FIRST CYCLE MEMORISING..... ACTIVE
19G NOT PERFORMED KEY PROGRAMMING..... ACTIVE
19D UNLOCKED KEY PROGRAMMING..... ACTIVE

OBSERVATION

If the states 19G and 19D are not "ACTIVE" this means the E.C.U. decoder has been already used, so it isn't new and cannot memorise another anti starting code.

Access the menu "COMMAND MODE" and then "CONFIGURATION", where you will configure the new E.C.U. decoder in the same way as the old one: petrol, 1 key, ceiling delay, impulsion doors blocking switch, etc. selecting one by one these configurations, which you'll validate with "CLICK" on the blue button on right top of the screen.

7. Get back to "TEST COMPUTERS"
8. Set the contact on for 2 seconds in "M" position, without starting the engine. The anti starting indicator will begin to blink rapidly
9. Access the menu "STATE LIST", where the following states must exist:
 - 9D RECEIVED KEY CODE.....ACTIVE
 - 19G NOT PERFORMED KEY PROGRAMMING.....PASSIVE
10. Take the contact off. In the menu "COMMAND MODE" select "ACTUATORS", then validate "FINISHED CALIBRATION" launching the command on the blue rectangle situated on the right top of the screen. The message "COMMAND IN PROGRESS" will appear, followed by "FINISHED COMMAND".
11. The anti starting indicator will blink rarely
12. Get back to the "STATE LIST", which now, must be like that:
 - 18G FIRST CYCLE MEMORISINGACTIVE
 - 19G NOT PERFORMED KEY PROGRAMMING.....PASSIVE
 - 19D UNLOCKED KEY PROGRAMMING..... PASSIVE
13. Set the contact in "M" position for 2-3 seconds in order to send the code to the E.C.U. injection. The anti starting indicator must light for 3 seconds, then turn off.
14. Take off the contact. After 10 seconds, the anti starting indicator will blink rarely.
15. Check the engine starting with both keys, and then take the contact off.
16. Check in the menu "STATE LIST" if the state 10G "ANTI STARTING" is "ACTIVE". Perform the synchronisation of the TRF remote control with the decoder (with 1 or 22 keys).

OBSERVATION

With the CLIP tester, a starting interdiction may be simulated, proceeding as follows:

- take the contact off; wait for 10 seconds, then the anti starting indicator will blink;
- in the menu "COMMAND MODE" access "ACTUATORS" then validate "FORCED PROTECTION MODE" launching the command from the blue button situated on the right topside of the screen. "COMMAND IN PROGRESS" will be displayed and then "FINISHED COMMAND".
- in the menu "STATE LIST" search for the state 10G "ANTI STARTING", which must be "ACTIVE";
- set the contact on "M" position; the anti starting indicator will blink rapidly, and the engine starting is impossible;
- remove the key from the contact and check then the engine starting with both keys, so the procedure is finished.

NOTE

For the RF remote control synchronisation, after the replacement of an E.C.U. decoder, the synchronisation procedure must be performed taking into account the following situations:

- for one RF remote control, perform the “SIMPLE SYNCHRONISED PROCEDURE”;*
- for the second RF remote control perform the “SPECIFIC SYNCHRONISED PROCEDURE”.*

B. KIT REPLACEMENT PROCEDURE

(E.C.U. decoder plus 2 key heads)

In case of one kit replacement perform the following steps:

- memorising the anti starting code by the E.C.U. decoder
- memorising of the new anti starting code by the injection computer; it is necessary the repairing code (found out based on the old key heads code) and the CLIP tester.

Perform the actions in the following sequence:

1. Mount the metal insertions of the old keys to the new key heads.
2. Send to Tech Line the key heads code, written on the vehicle invoice, in order to get the repairing code.
3. Connect the CLIP tester to the diagnostic socket and to the battery (or to the lighter socket) of the vehicle. Read the configuration of the old E.C.U. decoder before dismounting off the vehicle, as follows:
 - select vehicle type “SUPERNOVA” and the “050” equipping level;
 - enter the menu “COMPUTER TEST” then choose “ANTI STARTING”;
 - access “COMMAND MODE” then “READ CONFIGURATIONS”;
 - note the configurations: petrol/diesel, programming with 1 or 2 keys, ceiling delay, the type of the doors’ blocking switch (CPE), etc.;
4. Get back to the menu “ANTI STARTING”;
5. Dismount the old E.C.U. decoder and replace it with a new one, the contact being off.
6. Check the configuration of the new E.C.U. decoder selecting “STATE LIST”; here you must find the following states:

18G FIRST CYCLE MEMORISING PASSIVE.....INACTIVE
19G NOT PERFORMED KEY PROGRAMMINGACTIVE
19D UNLOCKED KEY PROGRAMMING.....ACTIVE

NOTE

If the state 19G and 19D are not “ACTIVE” this means the E.C.U. decoder isn’t a new one and cannot memorise another anti starting code.

7. Set the contact in “M” position with one of the keys (without starting the engine), for about 2 seconds and then check the following states, which must be:

9D RECEIVED KEY CODE..... ACTIVE
 19G NOT PERFORMED KEY PROGRAMMING..... ACTIVE

8. Set the contact with the second key (without starting the engine) for about 2 seconds.

Check then the following states:

- case (a)- the second key belongs to the vehicle;

9D RECEIVED KEY CODE..... ACTIVE
 19G NOT PERFORMED KEY PROGRAMMING..... PASSIVE

- case (b)- the second key does not belong to the vehicle or the first key was used once again;

9D RECEIVED KEY CODE..... PASSIVE
 19G NOT PERFORMED KEY PROGRAMMING..... ACTIVE

9. The anti starting indicator blinks rapidly.

10. Take off the contact. In the menu “COMMAND MODE” select “ACTUATORS” and validate “FINISHED CALIBRATION” launching the command on the blue rectangle situated on the right top of the screen. The message “COMMAND IN PROGRESS” will appear, followed by “FINISHED COMMAND”.

11. The anti starting indicator will blink rarely

12. Get back to the “STATE LIST”, which now must be as follows:

18G FIRST CYCLE MEMORISING..... ACTIVE
 19G NOT PERFORMED KEY PROGRAMMING..... PASSIVE
 19D UNLOCKED KEY PROGRAMMING..... PASSIVE

13. In the menu “COMMAND MODE” choose “ACTUATORS”. Select the command “FORCED PROTECTION MODE” launching the command from the blue button situated on the right top side of the screen. The display will show “COMMAND IN PROGRESS” and then “FINISHED COMMAND”.

Get back to the “STATE LIST” and check the state:

9G FORCED PROTECTION MODE..... ACTIVE

14. Set the contact on “M” position. The anti starting indicator will start to blink rapidly. Check in the “STATE LIST” if the state “ANTI STARTING” is “ACTIVE”.

15. In the menu “COMMAND MODE” access “ACTUATORS”, then select the command “MANUAL INTRODUCTION CODE”. Type the four figures of the repairing code, then validate with the key “ENTER”. On the screen the message “COMMAND IN PROGRESS” will appear and then “FINISHED COMMAND”.

16. Take off and then set again the contact, without starting the engine, in order to send the new anti starting code to the injection computer. The anti starting indicator will light for 3 seconds, and then it will turn off.

17. The procedure is finished. Check the engine starting with both keys.

NOTE

For the RF remote control synchronisation, after the replacement of a kit, take into account the following situations:

- for the first RF remote control, perform the “ simple synchronised procedure”;*
- for the second RF remote control perform the “specific synchronised procedure”.*

C. CODE REPAIRING INTRODUCTION PROCEDURE

The repairing code may be introduced only by the means of the CLIP tester. This is possible only if when setting the contact on, the anti starting indicator blinks rapidly, this being confirmed by the state:

10G ANTI STARTINGACTIVE

After getting from DACIA database the repairing code (based on the code from the vehicle's key head), perform the following operations.

1. Connect the CLIP tester to the diagnostic socket and to the battery (or to the lighter socket) of the vehicle.
2. The anti start up indicator must blink slowly the contact being taken off.
3. Set the contact in “M” position. The indicator must blink rapidly.
4. Select vehicle type “SUPERNOVA” and “050” equipping level.
5. Select the menu “COMPUTER TEST” then choose “ANTI STARTING”.
6. In the menu “STATE LIST” find the state 10G “ANTI STARTING” which must be “ACTIVE”.
7. Access “COMMAND MODE” then select “ACTUATORS”.
8. Select the command “MANUAL INTRODUCTION CODE” where you will write the repairing code (formed of four figures), then validate it with the key “ENTER”. The message “COMMAND IN PROGRESS” will be displayed followed by the message “FINISHED COMMAND”.
9. Now the procedure is finished and you may start the vehicle engine.

ATTENTION

You may perform three essays of introducing the repairing code; if after the third essay the code is not yet valid, wait for 15 minutes, take off the contact and then put it again, other three essays being allowed.

NOTE

This procedure does not decode the injection computer, but allows only the start of the vehicle's engine. After ten minutes have passed from the first introduction of the repairing code or after the disconnection of the battery, the vehicle's engine cannot be started unless a new repairing code is introduced.

D. SIMPLE SYNCHRONISED PROCEDURE

This procedure allows the synchronisation of a RF remote control with E.C.U. decoder and is to be applied in the following situations:

- the RF remote control code is no longer in the range of the E.C.U. decoder reception, because of consecutive pushing over a 1000 times on the RF remote control button.;
- the replacement of the E.C.U. decoder with a new one;
- the replacement of the RF remote control if the E.C.U. decoder is new (E.C.U. decoder replacement plus a RF key.)

The following operations will be performed:

- take off the contact
- push and maintain like that for about 5 seconds, the doors locking switch located on the dashboard; the doors actuators are performing a closing/opening course.
- during the next 10 seconds, confirmed by the permanent lightening of the anti starting system indicator, push twice the RF remote control button; the doors actuators are performing a closing/opening course.
- the procedure of synchronisation is finished; check the blocking/unlocking by pushing the RF remote control.

OBSERVATION

During those 10 seconds you can visualise by means of the CLIP tester the state 17G “THE PROGRAMMING IN PROGRESS OR THE TIR/TRF RESYNCHRONISATION” which must be ACTIVE.

E. SPECIFIC SYNCHRONISED PROCEDURE

This procedure is used for the synchronisation of the second RF key with E.C.U. decoder and will be performed as follows:

- connect the CLIP tester to the diagnostic socket and the battery (or the lighters socket) of the vehicle.
 - select the vehicle type “SUPERNOVA” and the “050” equipping level;
 - select the menu “COMPUTER TEST” then “ANTI STARTING”
 - enter the menu “COMMAND MODE” and select “CONFIGURATION”
 - validate the command “PROGRAMMING THE SECOND TIR / TRF KEY” launching the command from the blue button situated on the right top of the screen; the doors actuators are performing a closing/opening course.
 - during the next 10 seconds, confirmed by the permanent lightening of the anti starting system, push twice the RF remote control button; the doors will block and then unlock and the anti starting indicator will turn off. The second remote control is now synchronised. Check the blocking/unlocking by pushing the RF remote control.
-



FIXING THE INCIDENT “UNRECOGNIZED KEY CODE BY THE E.C.U. DECODER”

For solving the incident “unrecognised anti starting code of the electronic key head by the E.C.U. decoder”, observe the following instructions regarding solving this incident:

I. DIAGNOSTIC METHOD

When setting the contact on, the anti starting LED indicator will start to blink rapidly. Try to start the engine with the second key. If the engine starts, the failure is obvious: the key head of the first key is damaged (or it has another anti starting code) and must be replaced.

If the engine doesn't start, even with the second key, and when setting the contact on, the anti starting indicator blinks rapidly, connect the CLIP tester to the vehicle, select **COMPUTER TEST-ANTI STARTING-STATE LIST**, set the contact on and check:

Case 1: If the following states are as follows:

ANTI STARTING.....	ACTIVE
RECEIVED KEY CODE.....	ACTIVE
ACCEPTED KEY CODE.....	PASSIVE

then the E.C.U. decoder from the vehicle has been coded with other electronic key heads and must be replaced.

Case 2: If the following states are as follows:

ANTI STARTING	ACTIVE
RECEIVED KEY CODE	PASSIVE
ACCEPTED KEY CODE	PASSIVE

repeat checking with another electronic key head (operating on a third party vehicle) mounted in the metal insertion of the original key.

If the states change, like in case 1, the reading system of the anti starting code from the decoding bushing is functioning, so the key heads of the vehicle are damaged and must be replaced.

If the states remain unchanged, check the following:

- electric connections of the decoding bushing
- the electric connections between the E.C.U. decoder and the decoding bushing
- the tension of the battery must have more than 8V when the starter is activated.

If all these are conformable, proceed to the replacement of the decoding bushing, and then check again the a.m. states.

II. SOLVING MODE

When an electric key head (or both) is damaged, order (Info TECH LINE 0248/213766) a new set of two electronic heads, subject to the vehicle type, as follows:

- TRF key head set – item no. 6001 543 684, 1 set, for DSN equipped with anti intrusion (CLIMA or RAPSODIE)
- TR-TRF key head set – item no. 6001 544 452, 1 set, for DSN without anti intrusion (CLIMA or RAPSODIE)
- TR key head set – item no. 6001 543 683, 1 set, for DSN EUROPA

Send to Tech Line (0248 213766), the chassis series no, the anti starting code of the damaged key heads, the anti starting code of the new key heads, and they will send at their turn, to the service center, the repairing code (taking into account that this code has a special regime).

Additionally there are necessary the new key heads, the E.C.U. decoder (obligatory TRF, if the vehicle is equipped with central locking), the repairing code of the computer; proceed then to the replacement of these items performing the following operation:

A) Replacement- checking electronic key heads:

Replace the damaged key heads with the new ones (the metal insertions remain the same), then by means of the CLIP tester, selecting **COMPUTER TEST-ANTISTARTING-STATE LIST**, check following states with both keys:

If the states are in the following configuration, when setting the contact on, consecutively with both keys:

ANTI STARTING.....	ACTIVE
RECEIVED KEY CODE.....	ACTIVE
ACCEPTED KEY CODE.....	PASSIVE

then the new electronic key heads are functioning and pass to the next step. If the states are as follows, with one of the key, then both keys must be again replaced:

ANTI STARTING.....	ACTIVE
RECEIVED KEY CODE.....	PASSIVE
ACCEPTED KEY CODE.....	PASSIVE

B) Replacement – checking of the E.C.U. decoder:

Proceed at the replacement of the vehicle **E.C.U.** decoder with the new one, then check by means of the CLIP tester (with the contact taken off), selecting **COMPUTER TEST- ANTI STARTING- STATE LIST**, the following states:

FIRST CYCLE MEMORISING.....	PASSIVE
NOT PERFORMED KEY PROGRAMMING.....	ACTIVE
UNLOCKED KEY PROGRAMMING.....	ACTIVE

If one of the states **NOT PERFORMED KEY PROGRAMMING** or **UNLOCKED KEY PROGRAMMING** is not **ACTIVE**, then the E.C.U. decoder was used before and must be replaced.

C) E.C.U. decoder coding:

Further on, perform the following operations:

- with the contact taken off, in **COMPUTER TEST- ANTI STARTING- STATE LIST**, launch the command **FINISHED CALIBRATION**.
- set the contact on for a few seconds, the anti starting LED indicator blinks rapidly;
- take the contact off and validate the command **FINISHED CALIBRATION** (by the blue button from the right side of the screen), in this moment the E.C.U. decoder is coded.
- check in the **STATE LIST** the following states which obligatory must be:

FIRST CYCLE MEMORISING.....	ACTIVE
NOT PERFORMED KEY PROGRAMMING.....	PASSIVE
UNLOCKED KEY PROGRAMMING.....	PASSIVE

D) Memorising of the new code of the injection computer

- in **ACTUATORS** launch the command **MANUAL INTRODUCTION CODE**; type the repairing code of the old key kit, then validate it with the key **ENTER**.
- the message **“COMMAND IN PROGRESS”** will be displayed followed by the message **“FINISHED COMMAND”**.
- set the contact on; the anti starting LED indicator will start blinking, then take off the contact;
- set the contact on for 10 seconds ; take off the contact;
- check if the engine starts with the two keys.

If the engine doesn't start, repeat this operation (point D).

E) Key resynchronisation (remote controls)

- if the vehicle is equipped with only one remote control, its resynchronisation will be performed as follows (simple resynchronisation):
 - with the contact taken off, push continuously on the central locking button from the dashboard, up to the moment the anti starting LED indicator remains lighted (the doors actuators are performing a closing/opening course.) From this moment, the operator has 10 seconds to perform the next operation;
 - push twice on the remote control (the doors actuators are performing a closing/opening course.) and the anti starting LED indicator turns off;
 - if the vehicle is equipped with two remote controls, perform the simple resynchronisation procedure for the first key and a specific resynchronisation procedure for the second key, with the CLIP tester as follows:
 - in **COMPUTER TEST** select **ANTISTARTING** with the contact taken off, then **COMMAND MODE, CONFIGURATION**; launch the command **PROGRAMMING OF THE SECOND TIR/TIE KEY** and validate (the doors actuators are performing a closing/opening course.) Then within 10 seconds, push twice on the remote control (the doors actuators are performing a closing/opening course)

DIAGNOSTIC – FAILURES AND STATES INTERPRETATION

1. FAILURE OF COMMUNICATION CLIP TESTER/ E.C.U. DECODER

RECOMMENDATION	Check if the lines K and L are not disturbed by another computer of the vehicle.						
Check the fuse state F15 (vehicles up to 01.06.2001) or F07 (vehicles after 01.06.2001). Replace the fuse if necessary.							
Check if the CLIP tester is not the cause of the failure; check if the tester communicates with another computer of the same vehicle (injection computer).							
Measure the tension of the vehicle's battery ($U > 10,5V$). If necessary, charge the battery. Check if the E.C.U. decoder is well connected to the vehicle's wiring. Check the right supply of the E.C.U. decoder: <ul style="list-style-type: none"> - presence of the ground at pin A8 of the E.C.U. decoder - supply + I.C. at pin A9 of the E.C.U. decoder 							
Be sure that the diagnostic socket is properly supplied, according to the circuit diagram. Check the continuity and the isolation of the electric wiring on the corresponding pins layout. E.C.U. decoder { <table style="display: inline-table; vertical-align: middle;"> <tr> <td>A3</td> <td>→</td> <td>7</td> </tr> <tr> <td>A4</td> <td>→</td> <td>15</td> </tr> </table> } diagnostic socket		A3	→	7	A4	→	15
A3	→	7					
A4	→	15					
If the connection tester CLIP – E.C.U. decoder can't be established, then replace the decoder.							

AFTER REPAIRING	After establishing the communication with the tester, fix the possible failures. Perform a conformity checking
------------------------	---

2. 4D STATE: + 12 V (+DC) SUPPLY, EXISTENT.

RECOMMENDATION	Observation : - 4D state= ACTIVE when the contact is on “M” position - 4D state= PASSIVE when the contact is not on “M” position
----------------	--

Check the F03 fuse state. Replace the fuse if necessary.
Place the contact on “M” position and check the presence of +12V at the pin A7 of the E.C.U. decoder. Is there +12V?

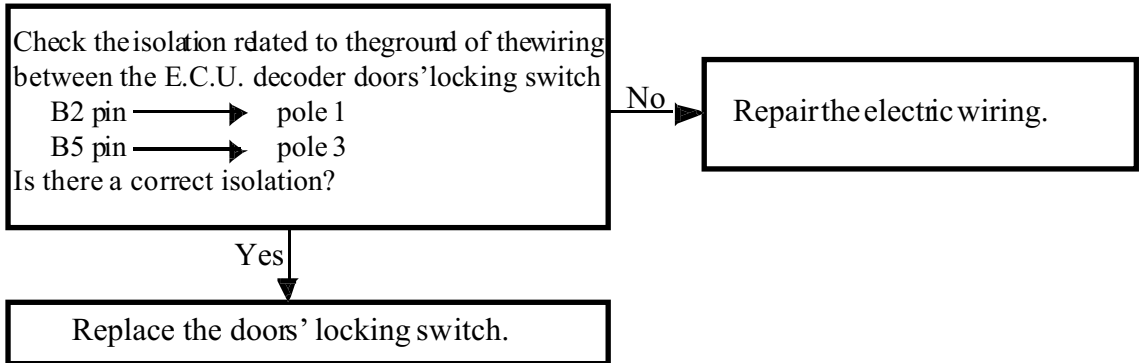
YES	Replace the E.C.U. decoder if it can not be realised its communication with the tester.
-----	---

NO	Repair the electric wiring on the supply layout to the pin A7 of E.C.U. decoder.
----	--

AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system.
-----------------	---

3. FAILURE : DOORS BLOCKING CONTACTOR

RECOMMENDATION	Check if the contactor does not remain permanently pressed due to a mechanical blocking
-----------------------	---



AFTER REPAIRING	Remove the memorised failure by means of the CLIP tester. Perform a conformity checking Check the operation of the anti starting system.
------------------------	--

4. FAILURE: MISSING SIGNAL ON THE CODED LINE E.C.U. DECODER-COMPUTER INJECTION

RECOMMENDATION	
----------------	--

Check the continuity and the isolation related to the ground and + 12 V of the wiring between the E.C.U. decoder Pin A6 → pin 58 injection computer.
Fix it if necessary.

Set the contact on and perform the detection test by the CLIP tester at pin A 6 of the ECU decoder.
Are there any impulses?


YES	Replace the injection computer.
-----	---------------------------------

NO	Replace the E.C.U. decoder.
----	-----------------------------

AFTER REPAIRING	Remove the memorised failure by means of the CLIP tester. Perform a conformity checking Check the operation of the anti starting system.
-----------------	--

5. FAILURE : DEFECTIVE COMMUNICATION ANTI STARTING SYSTEM - E.C.U. DECODER

RECOMMENDATION	-
----------------	---

<p>Check the continuity and the isolation related to the ground and + 12 V voltage of the wiring between the anti starting system pin 4  pin A2 E.C.U. decoder Fix it if necessary.</p>
<p>Check the anti starting bushing supply : + 12V to the pin 3 and the ground to pin 2.</p>
<p>Disconnect the E.C.U. decoder and measure the presence of +12 V to the pin A2 of the decoder, the contact being taken off. If there it isn't +12 V, check the fuse state F15 (vehicles up to 01.06.2001) or F07 fuse (vehicles after 01.06.2001). If the problem persists, replace the anti starting bushing.</p>
<p>Set the contact on and perform the impulse detection test at the pin A2 of the E.C.U. decoder. Is there an impulse ?</p>

YES	Replace the anti starting bushing.
-----	------------------------------------

NO	Replace the E.C.U. decoder.
----	-----------------------------

AFTER REPAIRING	<p>Remove the memorised failure by means of the CLIP tester. Perform a conformity checking Check the operation of the anti starting system.</p>
-----------------	---

6. STATE 11G: ACTIVATE THE RF REMOTE CONTROL/RECEIVED RF SIGNAL INDICATION

RECOMMENDATION	<p>If the 17D state is PASSIVE, do not apply the next diagnostic because the E.C.U. decoder is unused (new).</p> <p>Perform first the remote control synchronisation</p> <p>Do not access the next diagnostic if the state 11G remains PASSIVE when activating the RF remote control at the blocking and unlocking of the doors.</p>
-----------------------	--

Check the blocking and unlocking of the doors using the second RF remote control. If this is one is operating, then the battery of the first RF remote control should be replaced.

Check the presence of +12 V(+DC) at the pin 1 of the anti starting bushing.
Is there +12V ?

YES	<p>Perform using CLIP tester, the impulse detection test at the pin 1 of the anti starting bushing when using the RF remote control.</p> <p>Are any impulses when using the remote control ?</p>
YES	Replace the E.C.U. decoder.
NO	Replace the anti starting bushing.

NO	<p>Check the isolation related to the ground of the electric wiring between:</p> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">E.C.U. decoder</td> <td style="padding-right: 5px;">Pin B1</td> <td style="padding-right: 5px;">→</td> <td style="padding-right: 5px;">pole 1</td> <td style="padding-right: 5px;">anti starting bushing</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"></td> <td style="padding-right: 5px;">Pin B2</td> <td style="padding-right: 5px;">→</td> <td style="padding-right: 5px;">pole</td> <td style="padding-right: 5px;">door locking switch</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"></td> <td style="padding-right: 5px;">Pin B5</td> <td style="padding-right: 5px;">→</td> <td style="padding-right: 5px;">pole 3</td> <td></td> </tr> </table> <p>Is the isolation related to the ground good?</p>	E.C.U. decoder	Pin B1	→	pole 1	anti starting bushing		Pin B2	→	pole	door locking switch		Pin B5	→	pole 3	
E.C.U. decoder	Pin B1	→	pole 1	anti starting bushing												
	Pin B2	→	pole	door locking switch												
	Pin B5	→	pole 3													
YES	Fix the electric wiring.															
NO	Replace the E.C.U. decoder.															

AFTER REPAIRING	<p>Perform a conformity checking</p> <p>Check the operation of the anti starting system.</p>
------------------------	--

7. 11 STATE: OPERATE THE RF REMOTE CONTROL / GOOD RF SIGNAL INDICATION**RECOMMENDATION**

Do not access the following diagnostic unless the state 11D becomes ACTIVE when operating the RF remote control. Check if the keys belong to the vehicle in question.

There is a desynchronising between the code of the RF remote control and the E.C.U. decoder if at the activation of the remote control, the 11D state remains PASSIVE and the state 11G becomes ACTIVE for 3 seconds, then becomes PASSIVE. The blocking / unlocking of the doors is not possible in this case.

Apply the corresponding procedure of resynchronisation (for one or two keys).

AFTER REPAIRING

Perform a conformity checking
Check the operation of the anti starting system.

8. 14G STATE : BLOCKING/UNLOCKING DOORS

RECOMMENDATION	The state 10G (anti starting) must be ACTIVE.
----------------	---

Check the continuity and the isolation related to the +12 V and to the ground of the electric wiring on the line

E.C.U. decoder	Pin B2	→	pole 1		door lockingswitch.
	Pin B5	→	pole 3		

Fix the electric wiring if necessary or replace the switch.

If the incident persists, replace the E.C.U. decoder.

AFTER REPAIRING	Remove the memorised failure by means of the CLIP tester. Perform a conformity checking Check the operation of the anti starting system.
-----------------	--

**FAILURES LOCATING BASED ON CLIENT CLAIM
(algorithm for damage locating)**

ALP1. MISSING COMMUNICATION CLIP TESTER/ E.C.U DECODER

RECOMMENDATION	Check if the lines K and L are not perturbed by another computer of the vehicle.
-----------------------	--

Check the situation of the F15 fuse (up to 01.06.2001) or F7 (after 01.06.2001)
Replace it if necessary.



Be sure the CLIP tester is not the cause of the failure, by trying the communication with another computer of the vehicle.
Check the tension of the battery ($U > 10,5V$). If it is necessary, charge the battery.



Check the correct connection of the E.C.U. decoder to the wiring.
Check the supply of the E.C.U. decoder :
- ground at pin A8
- supply (+IC) at pin A9



Be sure that the diagnostic socket is correctly supplied.
Check the continuity and the isolation of the electric wiring on the pins' line corresponding to:

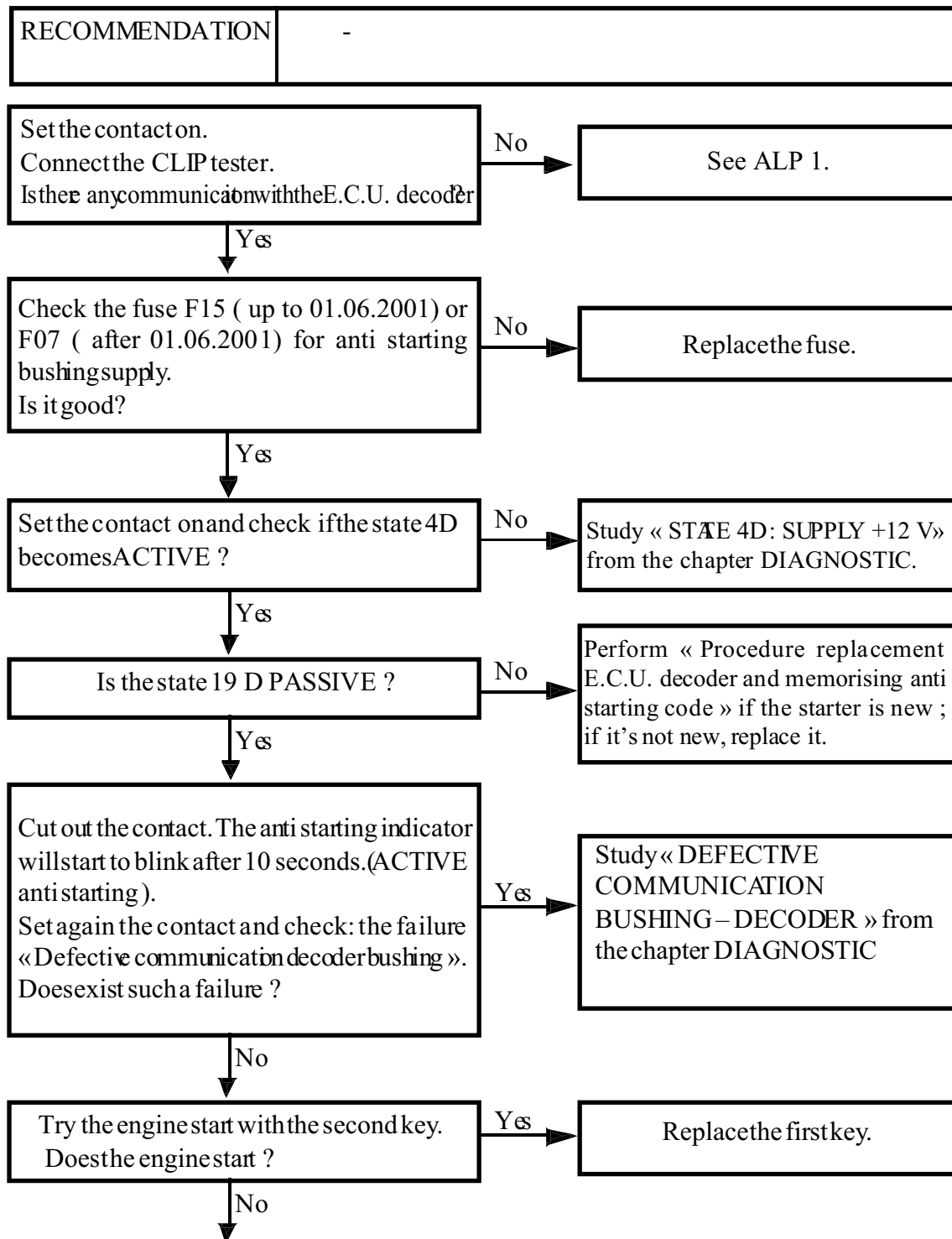
E.C.U. decoder	A3	→	7	diagnostic socket
	A4	→	15	

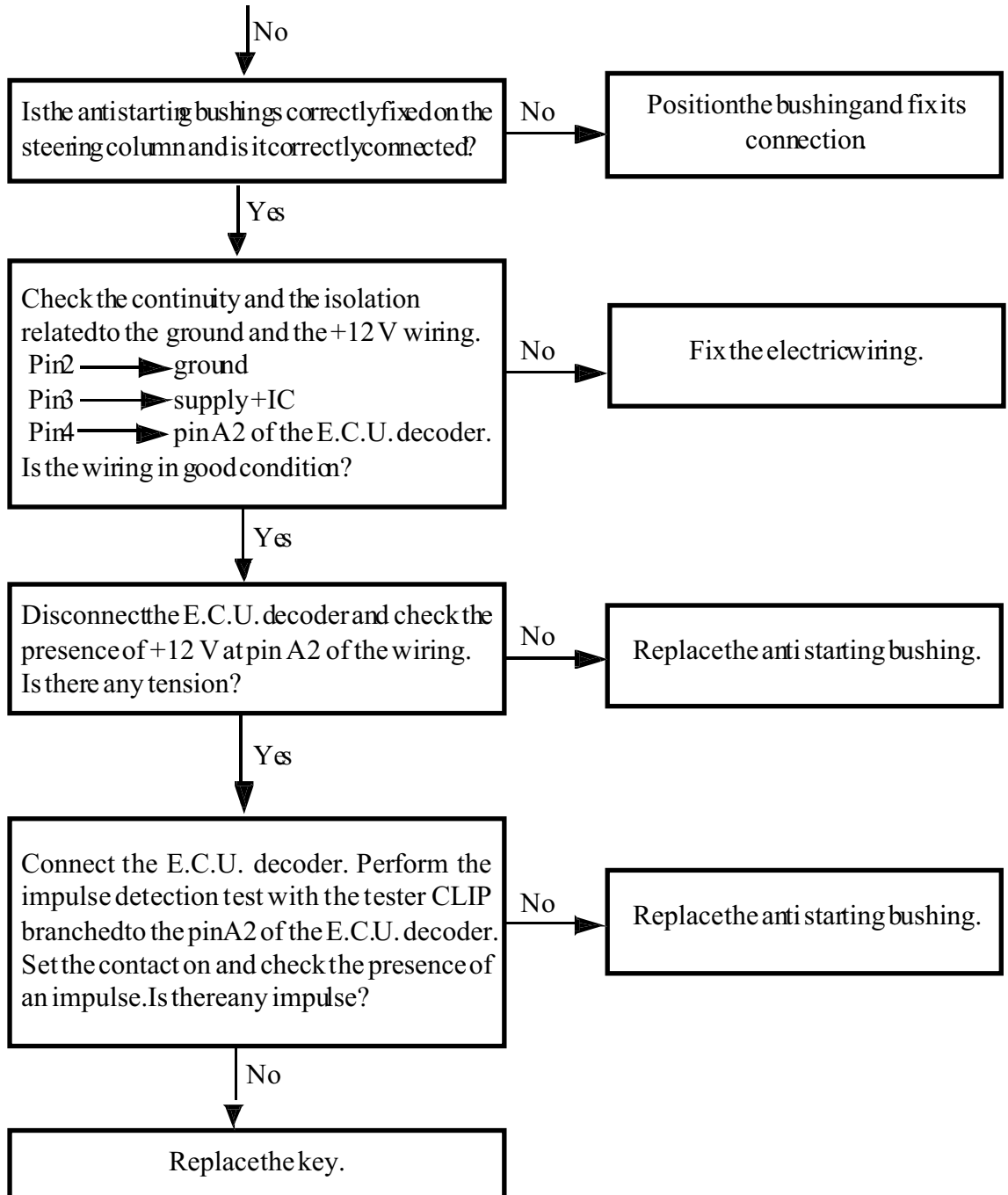


If the dialogue CLIP tester– E.C.U. decoder cannot be established, then replace the decoder.

AFTER REPAIRING	When the communication with the tester is established, solve the failures displayed by CLIP. Perform a conformity checking
------------------------	---

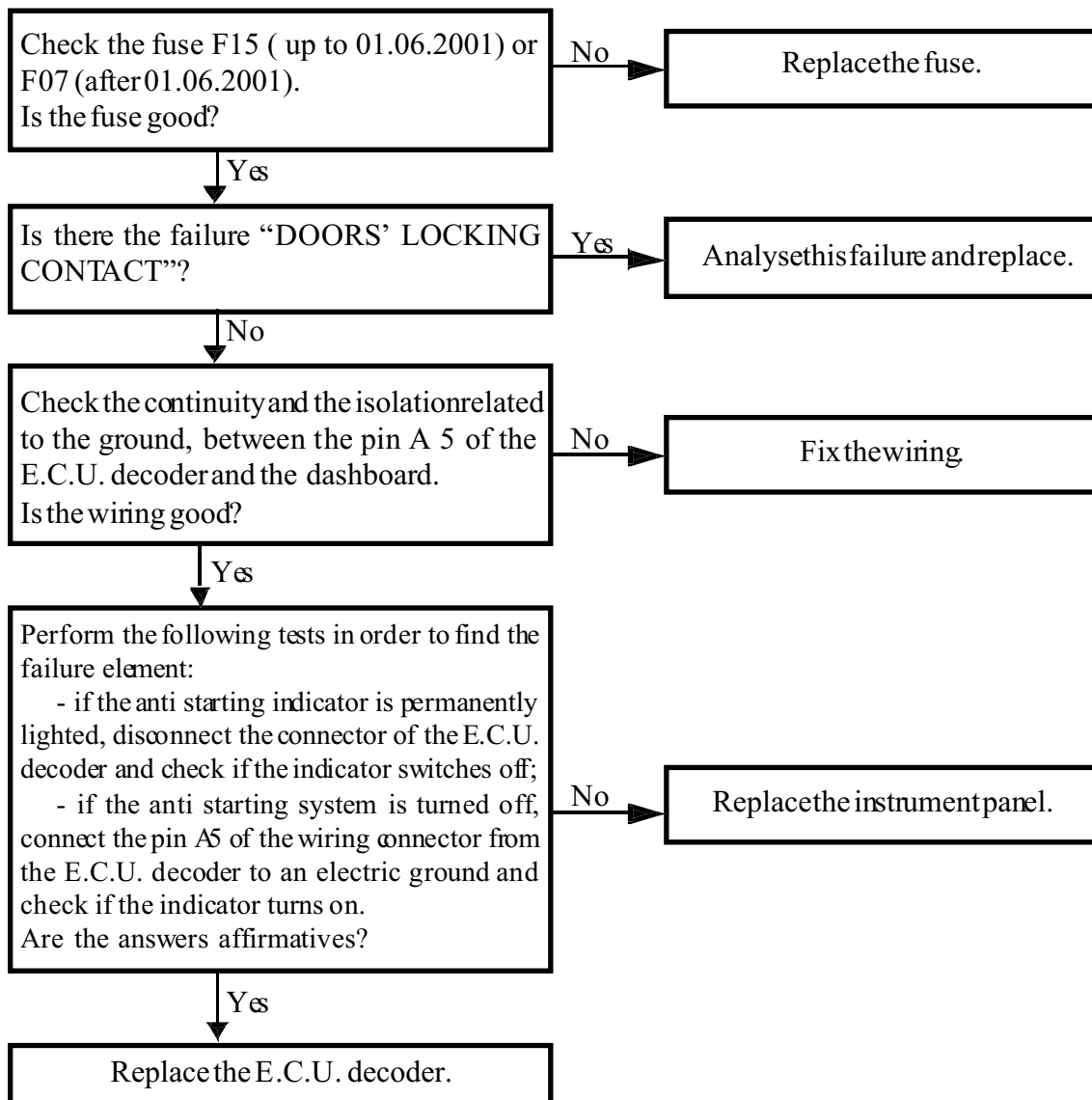
**ALP2. CONTACT SET ON. THE ANTI STARTING INDICATOR BLINKS.
(THE ENGINE DOES NOT STARTS)**





ALP3. THE ANTI STARTING INDICATOR REMAINS PERMANENTLY LIGHTED (even when the contact is taken off) OR IT REMAINS PERMANENTLY SWITCHED OFF.

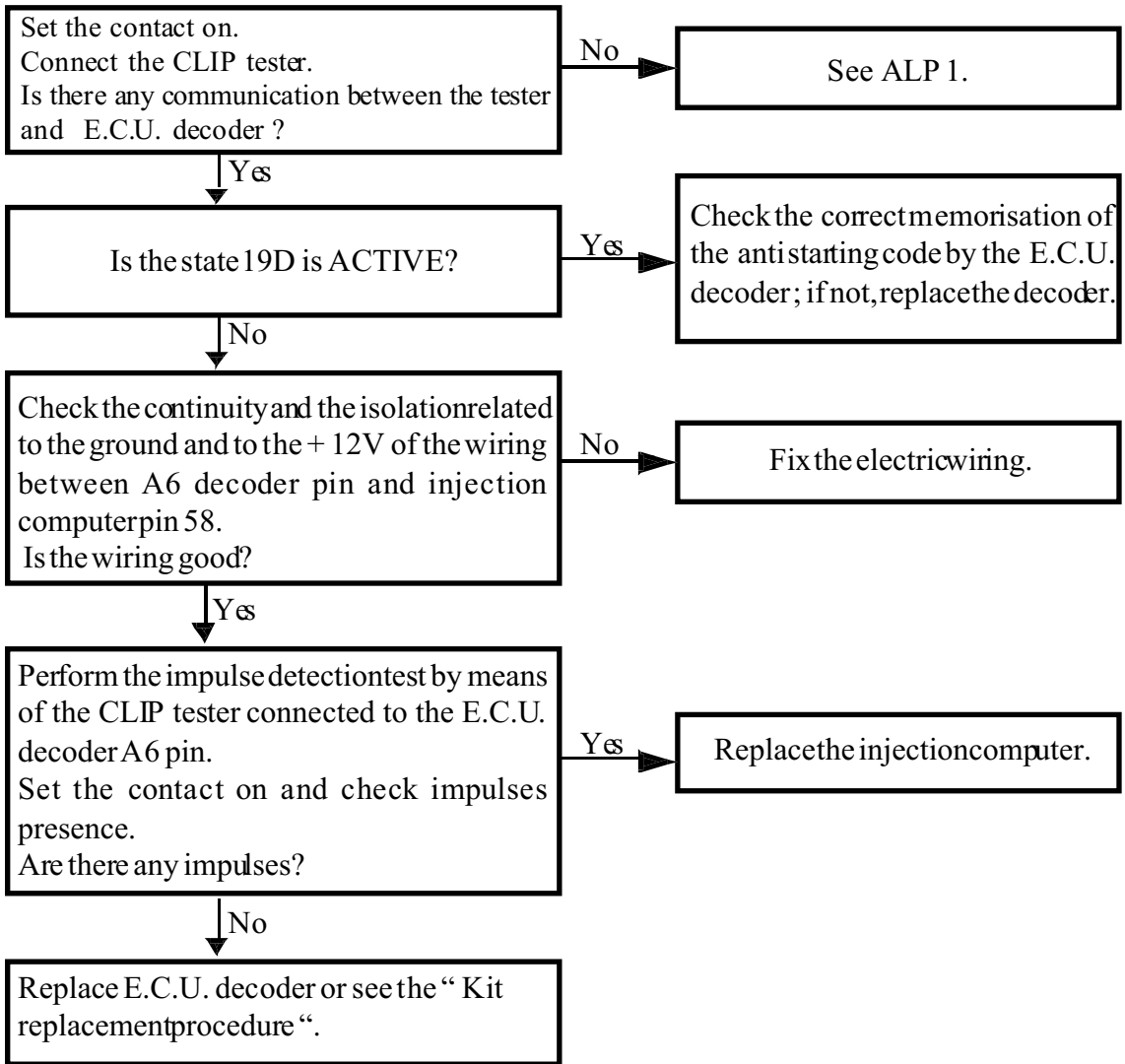
RECOMMENDATION	Check if the "Procedure E.C.U. decoder replacement" was correctly performed.
----------------	--



AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system. Remove by means of the CLIP tester the possible memorised failures.
-----------------	--

ALP4. CONTACT ON. THE ANTI STARTING INDICATOR BLINKS QUICKLY (the engine doesn't start)

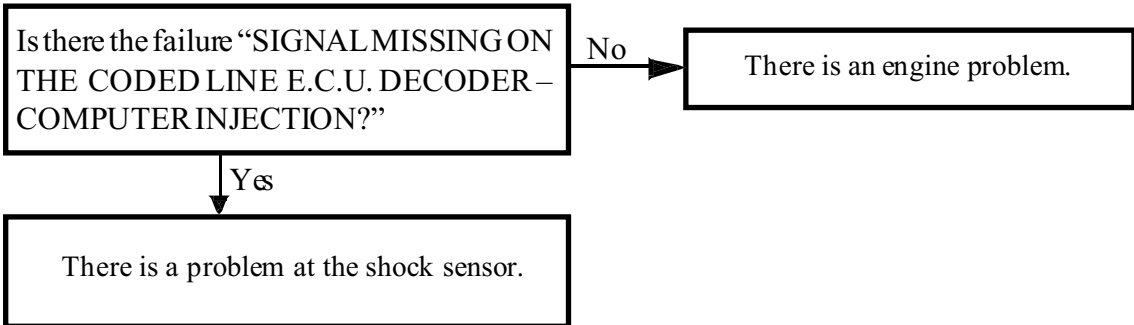
RECOMMENDATION	-
----------------	---



AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system. Remove by means of the CLIP tester the possible memorised failures.
-----------------	--

ALP5. THE VEHICLE DOES NOT START

RECOMMENDATION	-
----------------	---



AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system. Remove by means of the CLIP tester the possible memorised failures.
-----------------	--

ALP6. BLOCKING/UNLOCKING DOORS NOT OPERATING

RECOMMENDATION	Check with the CLIP tester the absence of the failures. If there are memorised failures, these must be removed.
-----------------------	--

Are the doors blocking mechanisms correctly operating?	No → Repair the damaged mechanisms.
--	-------------------------------------

Yes

Check the continuity and the isolation related to the ground of the wiring between : E.C.U. decoder pin B8 → actuators Pin B9 → doors Is the wiring in good condition?	No → Fix the wiring
--	---------------------

Yes

Disconnect the E.C.U. decoder, then supply the wiring connector with +12 V at pin B9 and the ground at the pin B8, then versa (+12 V at pin B8 and the ground at pin B9). Are the actuators blocking/unlocking the doors?	Check the continuity and the isolation related to the ground of the wiring between E.C.U. decoder pin B8 → switch pin B9 → blocking doors Is the wiring in good condition?
--	--

Yes

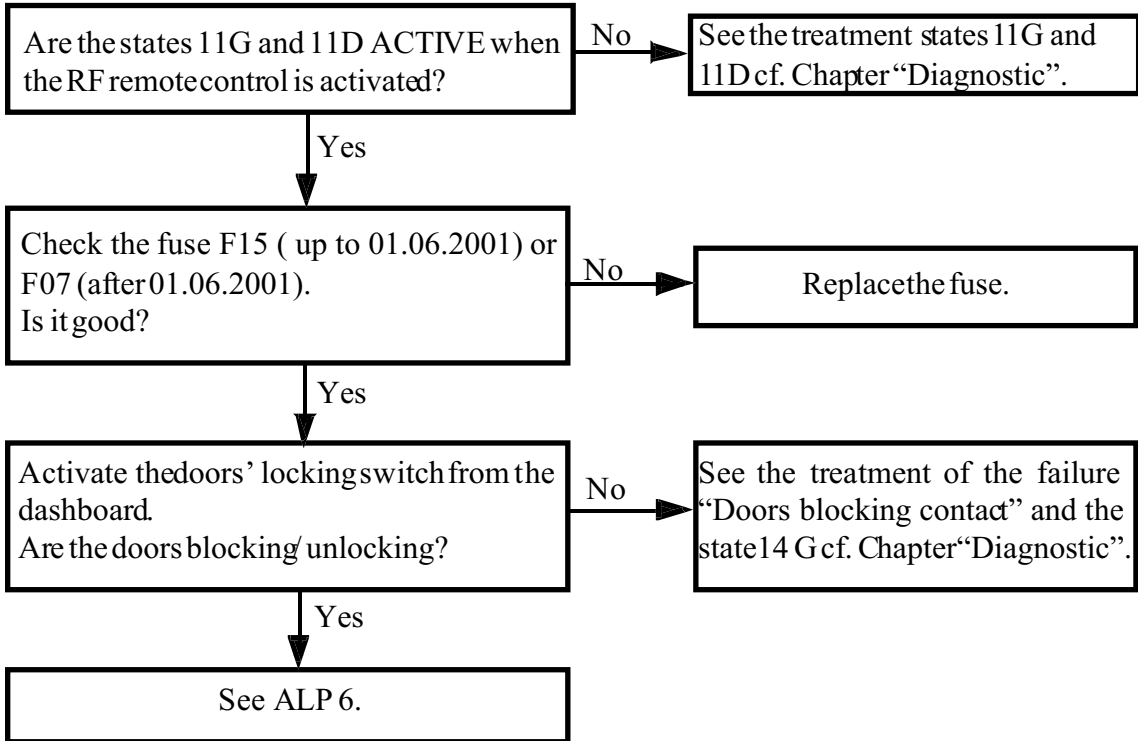
Damaged actuators. Replace them.	No → Repair.
-------------------------------------	--------------

Replace the E.C.U. decoder, then perform the "E.C.U. decoder replacement procedure".
--

AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system.
------------------------	---

ALP7. UNLOCKING DOORS NOT OPERATING BY RF REMOTE CONTROL

RECOMMENDATION	Check the absence of failures with the CLIP tester. If there are memorised failures, these must be repaired.
-----------------------	---

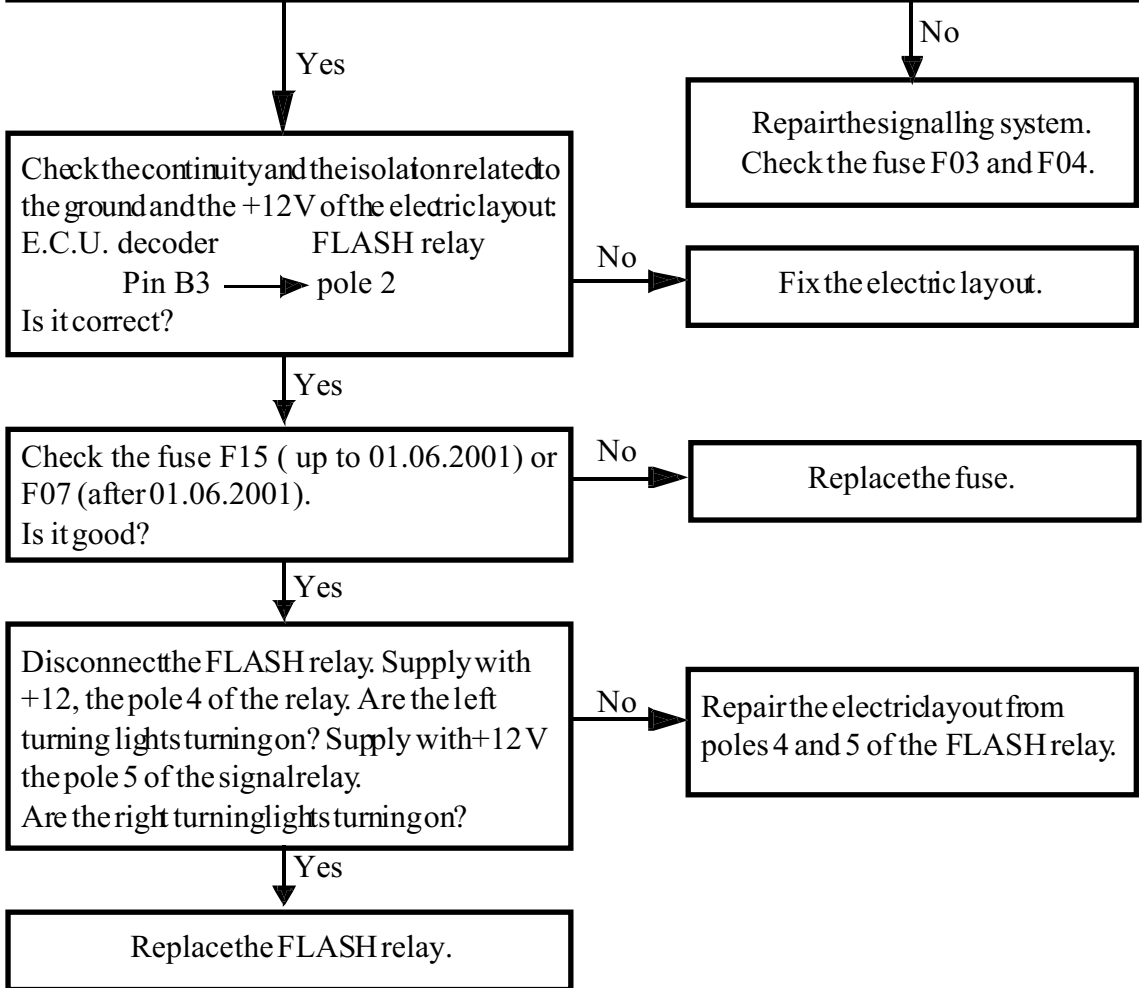


AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system.
------------------------	---

ALP8. TURNING LIGHTS DO NOT SWITCH ON AT THE BLOCKING / UNLOCKING OF THE DOORS

RECOMMENDATION	Check the absence of the failures with the CLIP tester. If there are failures, fix them first.
-----------------------	--

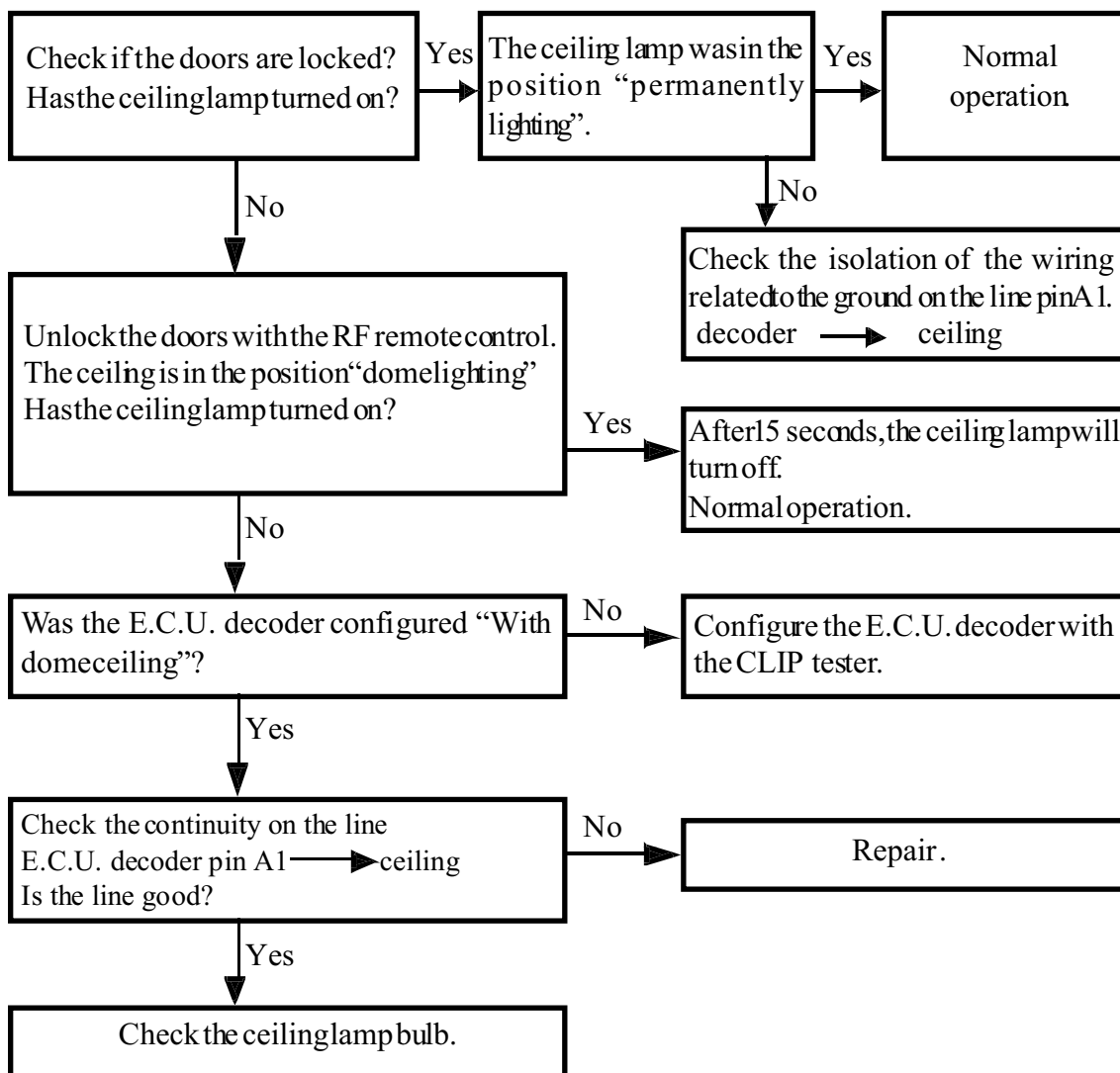
Check if the synchronisation of the RF remote control and the E.C.U. decoder has been performed
Are the turning lights functioning normally at the activation of the signalling switch?



AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system.
------------------------	---

ALP9. THE CEILING LAMP DOES NOT SWITCH ON AT THE BLOCKING / UNLOCKING OF THE DOORS OR IT REMAINS PERMANENTLY TURNED ON.

RECOMMENDATION	Check the absence of failures with the CLIP tester. If there are memorised failures, fix them first.
----------------	---



AFTER REPAIRING	Perform a conformity checking Check the operation of the anti starting system.
-----------------	---

THE CONFORMITY CHECKING

Next, the checking of different states and configurations of the anti starting system is to be performed.

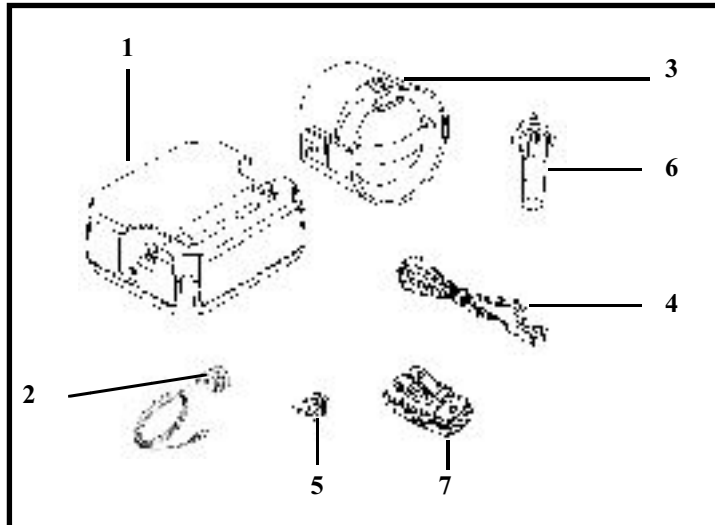
RECOMMENDATION	In case of finding some failures at the diagnostic by means of the CLIP tester, analyse them based on the diagnostic (ALP) corresponding to the respective failure.
-----------------------	---

Nr. crt.	Function	State / configuration	Observations
1.	Conformity E.C.U decoder	Computer identification	Display of the E.C.U. decoder item
2.	Remote control type	2G = remote control configuration	IR = infrared RF = radio frequency
3.	Dome ceiling	Without dome ceiling or with dome ceiling	Validation on the blue button on CLIP screen
4.	Key programming	3G = configuration key programming	With one or 2 keys
5.	Configuration petrol/ diesel	3D = configuration coded diesel electric valve	Without = for petrol engine With = for diesel engine
6.	Forced starting protection	9D = forced protecting mode	ACTIVE = only after validation on the blue button
7.	Anti starting state	10G = anti starting	ACTIVE = with the contact taken off or after 10 seconds from the contact taken off
8.	Key presence	8D = key present	ACTIVE at the setting on the contact if there is a coded key. NOTE: the states 8D, 9D, 10 D must be ACTIVE at a correct operation
9.	Code key receiving	9D = received key code	ACTIVE at the setting on the contact if the key is coded in a good format
10.	Correct key code	10D = right key code	ACTIVE at the setting on the contact if the key is coded in a good format and has the correct code. NOTE: after the analyse of the states 8D, 9D, 10 D the contact will be set o when the LED indicator blinks (ACTIVE anti starting)

11.	Remote control signal reception	11G = activate the RF remote control Received signal indication	ACTIVE for 3 seconds decoder receives the the remote control signal
12.	Remote control signal validation	11D = activate the RF remote control Good signal indication	ACTIVE for three sec. if the signal received at the decoder is good
13.	Communication doors locking switch E.C.U. decoder	14G = blocking/ unlocking	ACTIVE when the E.C.U decoder receives control from the doors' locking switch
14.	Communication E.C.U .decoder - doors actuators	14D =activation of the doors actuators	ACTIVE doors when the E.C.U. decoder sends the command blocking/unlocking to the actuators of the doors.
15.	The state of the doors contact	16G = doors contact	ACTIVE when the front doors are opened. NOTE: the state ACTIVE occurs also if front door or hatchback are opened when the vehicle is equipped with an intrusion system
16.	Remote controls synchronisation in process	17G =programming in progress or resynchronisation TIR/ TRF	ACTIVE when the remote control resynchronisation procedure is in process
17.	RF remote controls synchronisation not performed	17D = not performed TIR programming	ACTIVE when the remote control synchronisation is not performed.
18.	Not performed key code programming	19G = unperformed key programming	ACTIVE when the key programming is not performed
19.	Validated key code programming	19D=unbbckedkey programming	ACTIVE when the validation of the key programming is not performed
20.	The programming of the first key	18G = the memorising of the first key	ACTIVE when the programming of the first key is in process

DESCRIPTION

The anti intrusion system has the purpose of peripheral protection of the vehicle and the volumetric protection of the passengers compartment (cockpit) and has the following components:



The ECU anti intrusion (1) is located under the central console, being attached under the climate control unit and receives information from the volumetric sensors and from the contacts of: front doors, engine hood and tail hatchback.

In case of an intrusion into the vehicle, when the system is activated, ECU will start the siren combined with intermittent lightening of the turning lamps.

The volumetric sensors (2) are fixed on the upholstery of the left and right upper part of the pillars. After the activation of the anti intrusion system with the remote control, the sensors can supply information to the ECU concerning the interior volume of the cockpit, which, in case of its modification will produce the siren starting and the intermittent lightening of the turning lamps.

The siren (3) is fixed on a frame, being located in the climate control unit and it is controlled by the ECU anti intrusion.

The intrusion LED indicator (4) is located on the dashboard, on the left side and it indicates if the system is activated or not and in case of an aggression on the vehicle, the indicator will show the type of aggression.

The contacts of the front and rear doors (5), of the engine hood (6) and of the hatchback (7) are supplying information concerning their opening, to the ECU anti intrusion, when the system is activated.

The anti-intrusion system may be activated or deactivated by pushing the button of the RF remote control of the vehicle key and it is achieving the peripheral protection of the vehicle and the volumetric protection of the cockpit. The activation of the system is indicated on the instrument panel by the LED indicator, which will start to blink, and is confirmed by two blinks of the turning lights. Deactivation is confirmed by a blink of the turning lights and LED indicators switching off.

In case of the vehicles equipped with central locking system, the doors will lock when the system is activated and will unlock when deactivating the anti-intrusion system. After 40 seconds from remote control activation, the opening of a door, of the hood or the hatchback will cause the siren starting and turning lights blinking for 30 seconds; after 30 seconds, the system remains activated.

During those 40 seconds, the volumetric sensors will “read” the volume of the cockpit, this “reading” being reinitialised on every activation of the system, in order to take into account the potential volume modifications. Any modifications of the inner volume of the cockpit (broken window glass, intrusion in the cockpit or movement inside the cockpit) will perturb the ultrasound emission field causing the siren starting.

The system does not normally operate unless all doors, the engine hood, the hatchback and the window glasses are properly closed. If one of the front doors, the engine hood or the hatchback is not well closed, at the doors locking with the RF remote control, the turning lights will not switch on at all. At the deactivation with RF remote control, the traffic indicators will switch on, just once.

**ATTENTION**

In case of one door opening by key, while the anti-intrusion system is activated, the siren will start and it can be stopped by pressing the remote button or by introducing the PIN code which is written on the vehicle invoice.

HORN - ENGINE IMMOBILISER

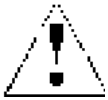
THE PIN CODE



The PIN code is formed of four figures and it can be used only for deactivating the anti intrusion system, if this operation can not be performed by pushing the deactivating button from the RF remote control of the vehicle.

For introducing the PIN code, perform as follows:

- set on the contact key in the M position and take it off it for three times in seven seconds, after which the anti intrusion LED indicator will switch on for three seconds;
- set on the contact again on the M position and maintain it until the number of the LED blinks is equal with the first figure of the PIN code, then take off the contact;
- set on the contact in the M position and maintain it until the number of LED blinks is equal with the second figure of the PIN code, then take off the contact;
- perform the above mentioned method in order to introduce the third and the fourth figure of the PIN code;
- after that, the system is deactivated and the siren stops automatically;
- set on the contact again – the anti LED indicator must switch on, confirming in this way that the correct introduction of the PIN code.



ATTENTION

If it is necessary the checking of the PIN code, this will be performed only after at least 20 seconds have passed, since the anti intrusion ECU has been connected to the vehicle's wiring or since the connecting of the vehicle's battery.

The COBRA anti intrusion system can operate in three different modes (2, 3 or 4).

For the Super Nova vehicles, the system has been programmed to work in the second operation mode. If by mistake the PIN code was introduced in less than 20 seconds since the battery connecting or since connecting the anti intrusion ECU, this can involve the change of the operation way of the system, which will generate errors during the operation. There is, although, the possibility of reprogramming the correct operation way (type 2) and in this purpose, perform the following operations:

- disconnect and then reconnect the anti intrusion ECU; when connecting the anti intrusion ECU the anti intrusion LED indicator will switch on once, confirming the correct connecting;
 - after at least 5 seconds from the previous operation, but no more than 20 seconds from it, perform the following operations:
 - set on the contact key in the M position for three times and then release it;
 - the anti intrusion LED indicator will switch on for three seconds and then will switch off;
 - set on again the contact key in the "M" position and maintain it, counting two blinks of the anti intrusion LED indicator, then take off the contact;
 - the LED indicator will blink for two times in two series, confirming in this way the proper performance of the previous operations;
- press the doors locking button of the dashboard, in order to lock and unlock the doors; the anti intrusion LED indicator must not blink;

- get off the vehicle and press the button of the RF remote control – the doors of the vehicle will lock and the anti intrusion indicator will start blinking, confirming that the anti intrusion system is activated;

- press again the button of the RF remote – the doors will unlock and the anti intrusion LED indicator must switch off.

THE SYSTEM'S MEMORY

If after the deactivating command of the system, the turning lights will blink four times and a sound will be heard also four times, this proves that previous the deactivating, an active cycle of the system has taken place and the reason for it will be shown by the LED indicator as follows:

LED indicator	Cause
1 blink	Engine hood, door or hatchback opening
3 blinks	Volumetric detection
4 blinks	Starting attempt detected
8 blinks	Errant communication with the siren

This cycle indicating the aggression type, stops after setting on the contact.

TEMPORARY CANCELLING OF THE VOLUMETRIC PROTECTION

In case you want to let a window glass partially opened or a passenger remains in the vehicle, it is possible to temporarily cancel the volumetric protection function, but the peripheral protection remains active. Proceed as follows:

- set on the contact key in the M position and then take it off, in no more than seven seconds;

- get off the vehicle and press once the button of the remote control, in no more than 20 seconds.

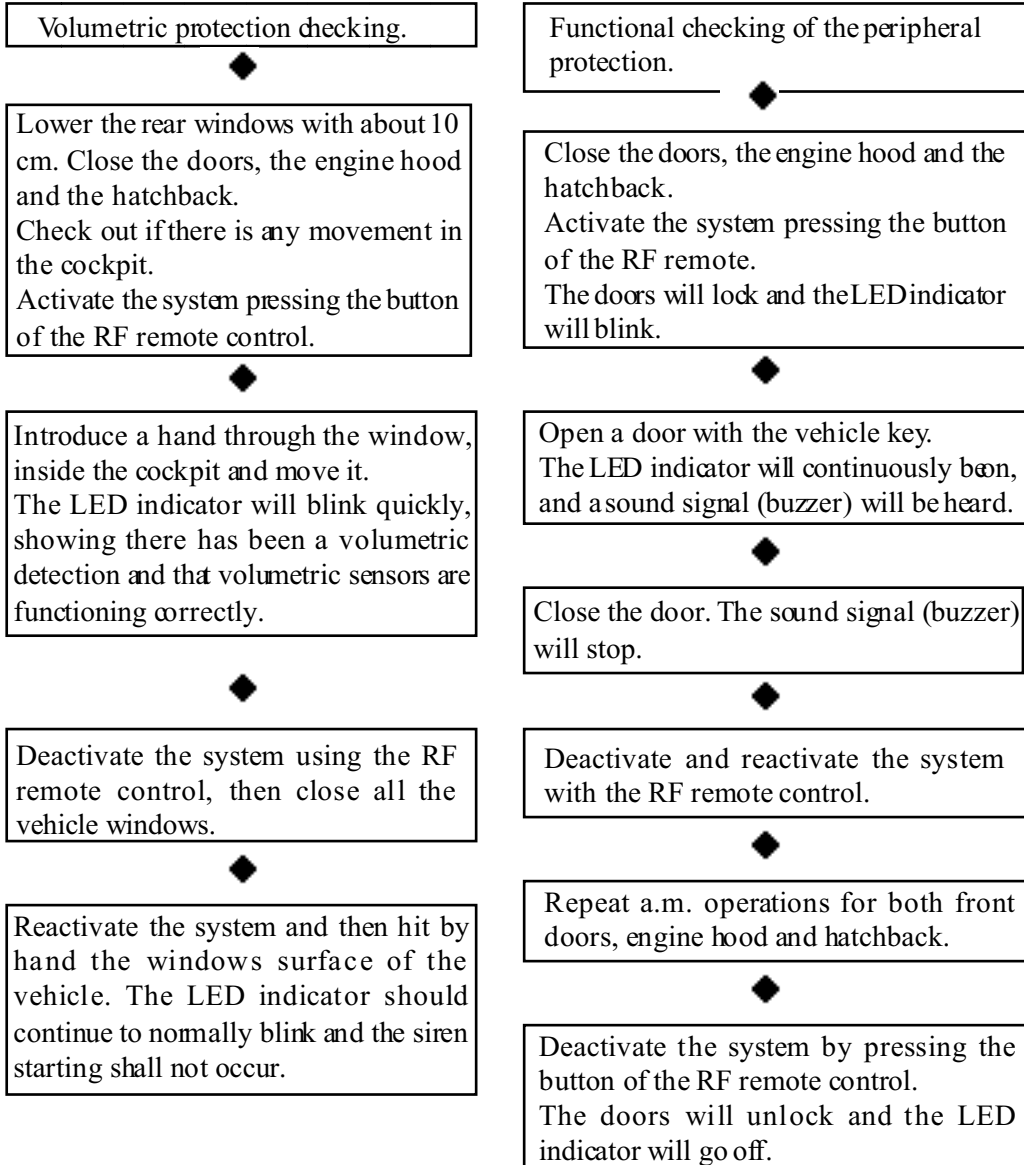
The volumetric protection is again active after the next locking of the doors using the remote control.

HORN - ENGINE IMMOBILISER

FUNCTIONAL CHECKING OF THE SYSTEM

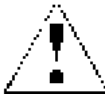


Perform the following checking steps after locking using the RF remote control, the doors, the engine hood and the hatchback. The operations must be performed in no more than 40 seconds since the anti intrusion system has been activated with the RF remote control; if operating after these 40 seconds, the siren will start and the turning lights will blink.



The proper operation of the anti intrusion system on different situations must be according to those shown in Table 01.

For detecting the causes of possible incidents of the anti intrusion system, perform the checking steps presented in Table 02.



ATTENTION

Checking the wiring continuity between the components of the anti intrusion system shall be performed only after disconnecting the anti intrusion ECU and the siren.

CHARACTERISTICS

- nominal supply tension 12 V after contact
- operation tension 9–16 V after contact
- consumption at 12 V after contact:
- on deactivated state < 8mA
- on activated state < 13mA
- operation temperature anti intrusion ECU - 40 +85° C
- operation temperature of siren - 40 +85° C
- acoustic power > 118 dB(A) from a distance
of 1 meter

Pos.	Tested function	Action	Traffic lamps	LED indicator	Siren	Observations
1.		Connect the E.C.U. anti intrusion and the siren Open a rear window 10 - 20 cm. Close the doors, the engine hood and the hatchback.		Switched off		
2.	Anti intrusion system activation	Open the doors using the RF remote control.	2 blinks	Blinking		From this moment, for 40 seconds, the siren does not start but is warning if a door is opening (buzzer signal).
3.	Volumetric protection	Introduce your hand inside the cockpit, through the window.		Repeatedly blinking		
4.		Open a door from interior.		From blinking is passing to stable light	Permanent buzzer	operation will be performed in max. 40 seconds from activation; if the action is performed after 40 seconds from the activation, the siren will start.
5.	Doors	Close the door.		Blinking	The buzzer stops	
6.		Repeat steps 4 and 5 for the passenger's door and for the engine hood.		Identical 4 x 5	Identical 4 x 5	
7.	Volumetric protection	Wait 40 seconds from using the remote, introduce your hand through the open window.	Blinking		The siren starts	The active cycle (siren sound + turning lights blinking) lasts for 30 seconds but can be stopped using the remote control.
8.	System deactivation with siren started.	Unlock the doors with the RF remote control.	4 blinks	Series of 3 blinks	4 buzzer sounds	When deactivating, the turning lights will blink 4 times and 4 sounds signals will be heard; this shows that the system has previously activated

TABLE 1

Pos.	Tested function	Action	Traffic lamps	Anti intrusion indicator	Siren	Observation
9.	Presence test of the 12V after setting the contact on and temporary cancelling of the volumetric protection	Set on the contact		Going off		
		Take off the contact, wait 10 seconds, and set on again the contact, twice in 7 seconds. Block the doors pressing the remote control.			uzzer	
		-----ide the vehicle.		inking		There is no volumetric detection. The volumetric protection will be automatically reactivated on the next doors locking with the RF remote control
10.	PIN code	Set on the contact.		Always lighted	Permanent buzzer	
		Take off the contact.	1 blink	Switched off		
		Block the doors pressing the RF remote control button	2 blinks	Blinking		
		Set on the contact for 3 times in max. 7 sec		Lighted for 3 sec		
		Select the PIN code. If the PIN code is correct, the system will deactivate itself.		Blinking (PIN code)		If the PIN code is wrong introduced for 3 successive times, the system will block for at least two hours. If the siren started, introducing the first correct figure of the PIN code will stop the siren. If the next PIN figures are

NOTE:

If when deactivating the system using a RF remote control, a door is opened before the LED indicator switches off, the siren will start for 30 seconds as self-protection. This is avoided if you wait the anti intruder indicator to go off, before opening a door.

Deficiency	Cause of the deficiency	Position in the connector/ wire colour/function	Parameters to be measured
The system can not be activated	No tension supply	Pin 6/red = + 12 V permanent Pin 24/black = ground cable Pin 12 /yellow = + 12 V after contact on	Permanent connection Permanent ground connection After putting on the contact
The system does not deactivate itself	No commands	Pin 14/ violet-red = blocking doors command Pin 1 /violet = blocking signal Pin 6 /red = + 12 V permanent Pin 24 /black = ground cable Pin 12/ yellow = + 12 V after contact on	Receives the 12 V command for 0,5 seconds on doors blocking 12 V, permanent Reaction Apply 12 V after setting on the contact - receives the 12 V command for 0,5 seconds on doors unlocking
Turning lights do not blink when the anti intruder system started	No commands	Pin 15 /yellow -black = unlocking doors command Pin 1/violet = unlocking signal Pin 5/red = on right turning light	Receives a simple command for 0,2 seconds on doors unlocking - sends + 12 V after the anti intrusion system starting, to the front lights.

BLE

Deficiency	Cause of the deficiency	Position in connectors/ colour of wire / function	Notes to be measured
Lack of detecting open doors	Imperfect connections	Pin 9/blue -yellow = front door switch, hatchback, engine hood	Attention on the opening of a front door,
Lack of volumetric detection	Imperfect connections Volume sensors	Pin 23/ red = left volume sensor	the volume sensors wiring and the wiring ground connection
Lack of PIN code command or temporary cancelling of volumetric protection	Supply connections + 12 V after setting the contact on.	Pin 12/yellow = + 12 V after setting the contact on	-check the sensors to be well connected; replace them one at the time; ATTENTION: do not exchange the Red and Black wire low wire is supplied with 12 V after setting the contact on
Anti intrusion indicator	Supply	Pin 8/black = indicator command; Red wire = supply + 12 V permanently	-check if the serial no. written on the vehicle invoice is the same with the one from the database, as far as PIN code is concerned. wires + 12 V
Unexpected starting of the peripheral protection	Volume sensors orientation	Memory of the system = 3 b links	-check if all windows are properly closed the sensors : they must be parallel oriented with the side windows
Unexpected starting of the peripheral protection	Adjust the contacts of the front doors, hood and hatchback	System memory = 1 blink	adjustment of the hood, doors or hatchback contact.
Lack of siren command	Imperfect connections at the siren	Pin 1 / red = supply 12V permanently Pin 2 / black = ground connection Pin 3 / yellow-blue = command	here is ground connection wires up to 18 PIN anti intrusion ECU.

**HORN - ENGINE IMMOBILISER
DISMOUNTING – REMOUNTING
OF THE ANTI INTRUSION ECU**



If after a complete checking of the anti intrusion system, the replacement of the E.C.U. anti intrusion is required, proceed as follows:

- remove from the central console the tape recorder's frame and the tape recorder pulling backward but without disconnecting the tape recorder from the vehicle's wiring;
- dismount by detaching the aeration grill located on the right side of the central console;
- dismount the two screws attaching the ECU support in the right side of the climate control unit;
- take off the anti intrusion ECU together with its support through the central zone of the central console;
- disconnect the 24 ways connector from the anti intrusion ECU proceeding as follows: remove towards exterior the two blocking clips of the connector and then carefully pull out the connector;
- dismount carefully the two way connector from the anti intrusion ECU;
- dismount the two screws attaching the anti intrusion ECU on its support;
- proceed in the reverse order of the dismounting;
- check the proper operation of the anti intrusion system.

If siren dismounting is required, proceed as follows:

- dismount the two attachment nuts of the siren on its support;
- pull carefully the blocking clip of the wire connector to the siren and then disconnect the siren;
- connect to the siren the connector of the wiring, by pushing, until you hear a “click” confirming the correct connecting, then mount the two attachment screws of the siren on the support;
- check the proper operation of the anti intrusion system.

The engine hood connector is dismounted as follows:

- easily pull the blocking clip of the wiring connector and then disconnect the engine hood contact;
- press the blocking clips of the lateral sides of the contact;
- push upward the contact in order to remove it from its place.

Mount the new contact in its support by downward pushing, until a “click” is heard, confirming the correct connecting.

Connect the wires connector to the contact of the hood.

Check the proper operation of the hood contact and of the anti intrusion system.

**NOTE**

If the dismounting / remounting of the front doors or hatchback contacts, check after that, the correct operation of the anti intrusion system.

LEFT SIDE VOLUME SENSOR REPLACEMENT

If sensor replacement is required, proceed as follows:

- take out carefully the sensor from its support by detaching from clips;
- dismount the attachment screw of the sensor support on the front left pillar upholstery.
- dismount the three attachment screws of the upper upholstery of the front left pillar and carefully remove the upholstery;
- carefully disconnect the sensor connector from the vehicle's wiring;
- mount the new volume sensor and its support performing the above mentioned operations in reverse order, and then checking the proper operation of the anti intrusion system.

**ATTENTION**

*Be sure that the volume sensor mounted on the left side has marked the letter "T" on the red colour collar.
Mount the volume sensor in such way, to be oriented towards the back of the vehicle, parallel with the side windows.*

RIGHT SIDE VOLUME SENSOR REPLACEMENT

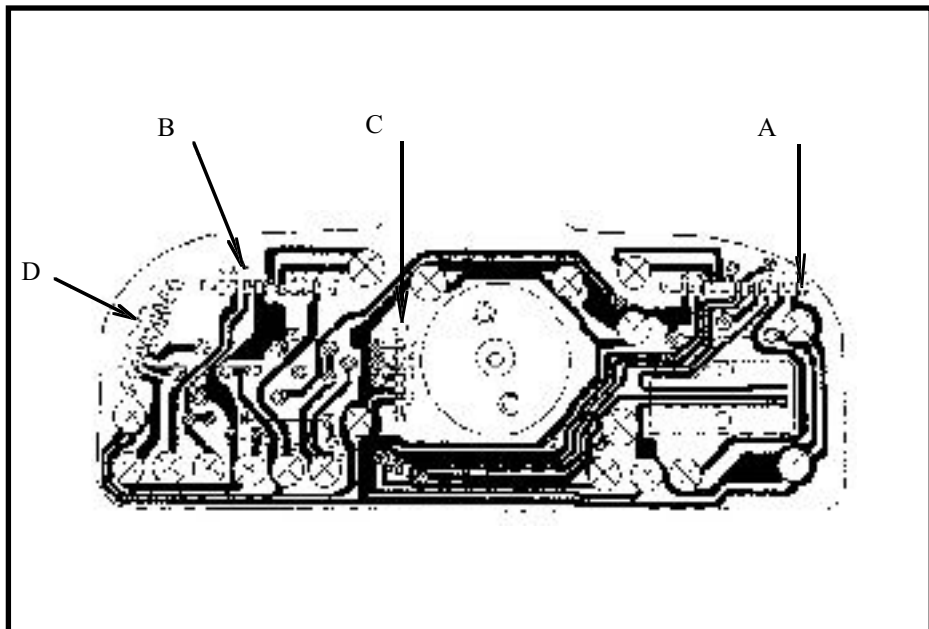
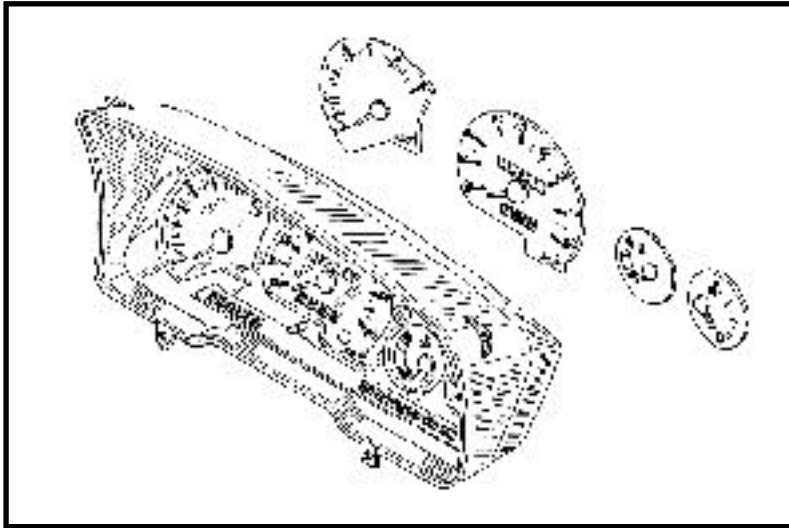
If sensor replacement is required, proceed as follows:

- take out carefully the sensor from its support by detaching from clips;
- dismount the attachment screw of the sensor support on the front right pillar upholstery.
- dismount the three attachment screws of the upper upholstery of the front right pillar and carefully remove the upholstery;
- carefully disconnect the sensor connector from the vehicle's wiring;
- mount the new volume sensor and its support performing the above mentioned operations in reverse order, and then checking the proper operation of the anti intrusion system.

**ATTENTION**

*Be sure that the volume sensor mounted on the right side has marked the letter "R" on the white colour collar.
Mount the volume sensor in such way, to be oriented towards the back of the vehicle, parallel with the side windows.*

A. INSTRUMENT PANEL- CONNECTORS DISPOSAL
(until 01.06.2001)



The correspondence between the positions from A,B,C,D connectors of the instrument panel and the components of the vehicle electric equipment is the following:

CONNECTOR A

1. Free
2. Rear window defrosting indicator
3. RPM
4. Cooling fluid temperature indicator
5. Oil pressure warning
6. Cooling fluid temperature warning
7. Left turning indicator
8. Left turning indicator
9. Hazard lights indicator
10. Instrument panel ground

CONNECTOR B

1. High beam indicator
2. Free
3. Free
4. Right turning indicator
5. Right turning indicator
6. Supply (+DC)- after contact
7. Hand brake, braking system failure warning
8. Brake pads wear indicator
9. Free

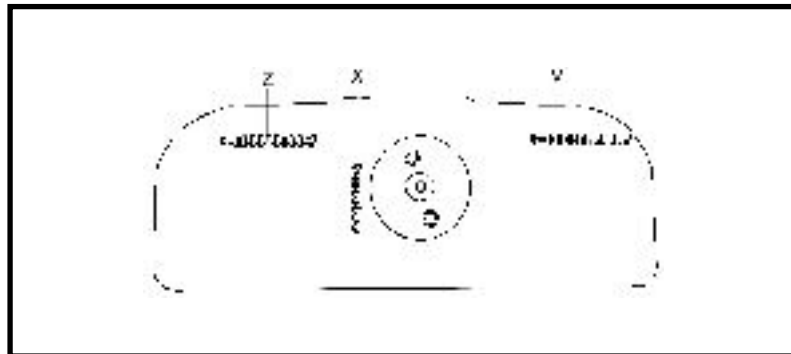
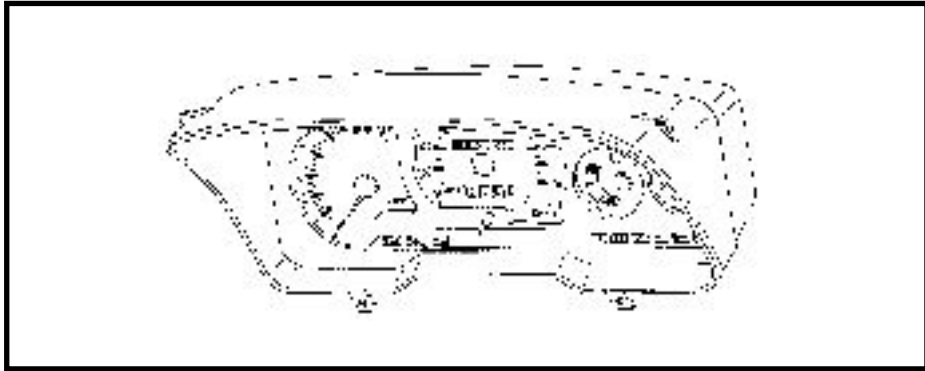
CONNECTOR C

1. Instrument panel lighting
2. Ground
3. Antistarting indicator
4. Supply (+IC)
5. Free
6. Injection failure indicator

CONNECTOR D

1. Battery charging circuit failure indicator
2. Fuel minimum level warning
3. Free
4. Free
5. Free
6. Free
7. Free
8. Free

B. INSTRUMENT PANEL – CONNECTORS DISPOSAL
(after 01.06.200)



The instrument panel is provided with three connectors having the following plugs correspondence:

CONNECTORV

1. Instrument panel lighting
2. Ground
3. Rear window defrosting indicator
4. High beam indicator
5. RPM
6. Supply (+DC) after contact
7. Free
8. Ground
9. Right turning indicator
10. Left turning indicator

CONNECTORZ

1. Hazard indicator
2. Water temperature warning
3. Supply (+DC) after contact
4. Ground
5. ICP and handbrake warning
6. Brake pads wear warning
7. Fuel level indicator
8. Fuel level minimum warning
9. Battery charging indicator

CONNECTORX

1. Low beam indicator
2. Anti starting indicator
3. Supply (+C) anti starting indicator
4. Injection failure indicator
5. Oil pressure warning
6. Water temperature indicator

NOTE

In case of the interventions on the instrument panel, check the existence of the rubber isolating elements on the windscreen lower cross bar, placed behind the instrument panel.

For the vehicles corresponding to the pollution norm EURO 2000, at the X connector, position 4 is “ OBD anti-pollution failure indicator”.

DISMOUNTING

Disconnecting battery

Dismounting flexible shaft (speedometer cable) from the gearbox.

Dismounting control cable from the recycling flap.

Dismounting steering wheel and the steering wheel casing

Dismounting dashboard lower fairing

Dismounting documents compartment.

Disconnecting documents compartment lamp.

Dismounting central console.

Dismounting flaps control cables from the climate control unit.

Disconnecting: cigarette lighter, climate control lighting, ashtray lighting, climate control switch

Dismounting headlamp adjustment control from the dashboard.

Dismounting dashboard from the windscreen lower crossbar.

Disconnecting flexible shaft (speedometer cable) from the instrument panel.

Disconnecting air conducting ducts to aerators.

Disconnecting front wiring from the instrument panel and from the dashboard wiring.

Dismounting instrument panel attachment clamps from the dashboard.

Dismounting clamps from the instrument panel.

Mounting clamp on the new instrument panel.

Mounting instrument panel with clamp on dashboard.

Connecting flexible shaft to the instrument panel.

Connecting front wiring to the instrument panel and to the dashboard wiring.

Positioning and fixing air conducting ducts.

INSTRUMENT PANEL

INSTRUMENT PANEL REPLACEMENT

Positioning and fixing flaps control cable to the climate control unit.
Connecting dashboard wiring to: cigarette lighter, climate control lighting, climate control switch, ashtray lighting.
Connecting documents compartment lamp
Mounting documents compartment.
Mounting central console.
Mounting dashboard lower fairing.
Mounting steering wheel casing and steering wheel.
Mounting flexible shaft to the gearbox.
Mounting control cable to the recycling flap.
Connecting battery.
Functional tests.

REMOUNTING

Perform the dismantling operations in the reverse order.

INSTRUMENT PANEL
DISMOUNTING/REMOUNTING SPEEDOMETER CABLE
(FLEXIBLESHAFT)

83

NOTE

Dismounting / remounting of the speedo cable, may be performed only after dismounting the instrument panel from the dashboard.

DISMOUNTING

Disconnect the battery;

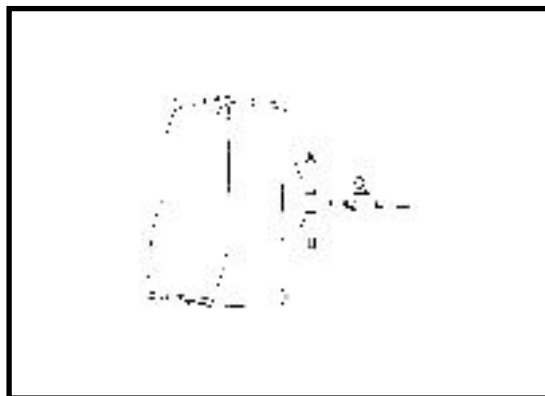
Dismount the dashboard lower fairing;

Disconnect the RPM sensor connector;

Dismount the speedo cable from the gearbox;

Dismount the speedo cable from instrument panel back part, by detaching it from clips, pushing in the direction of the A and B arrows, then extract it acting in the direction of C arrow.

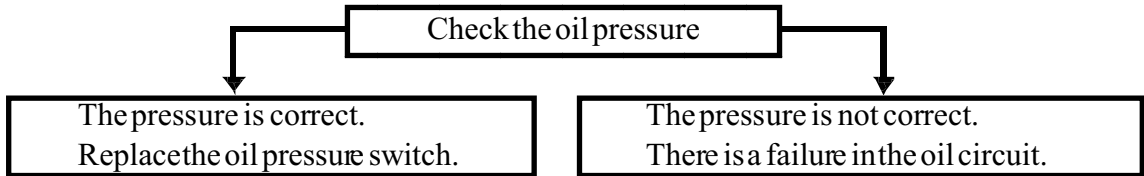
Remove the speedo cable under the dashboard.



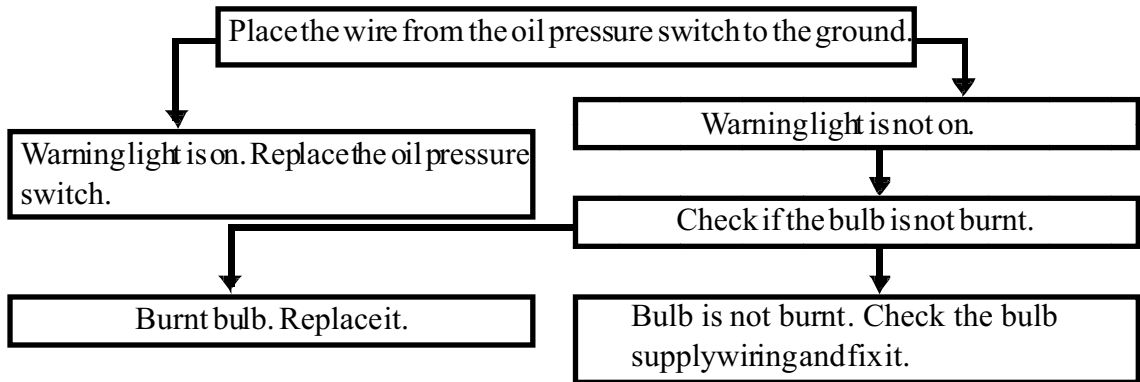
REMOUNTING

Perform the dismounting operations in the reverse order.

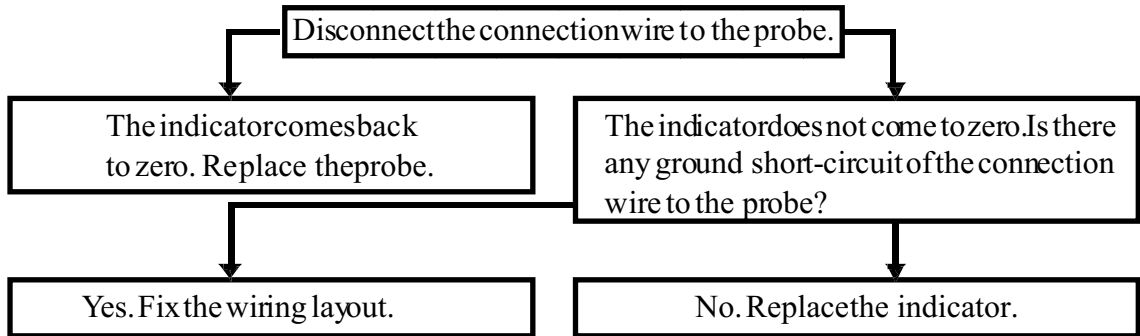
**OIL PRESSURE WARNING LIGHT STILL ON
AFTER ENGINE STARTING**



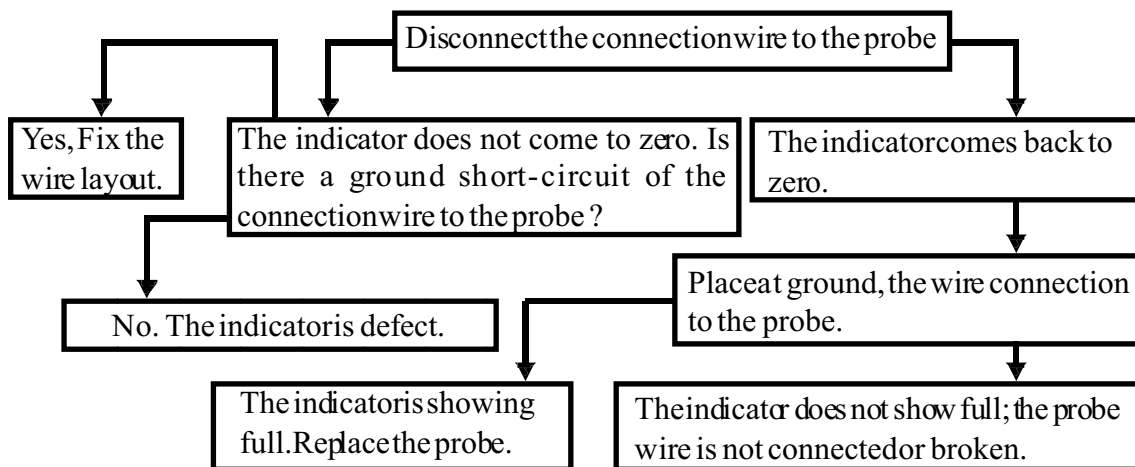
**OIL PRESSURE WARNING LIGHT IS NOT ON
WHEN CONTACT SWITCH ON**



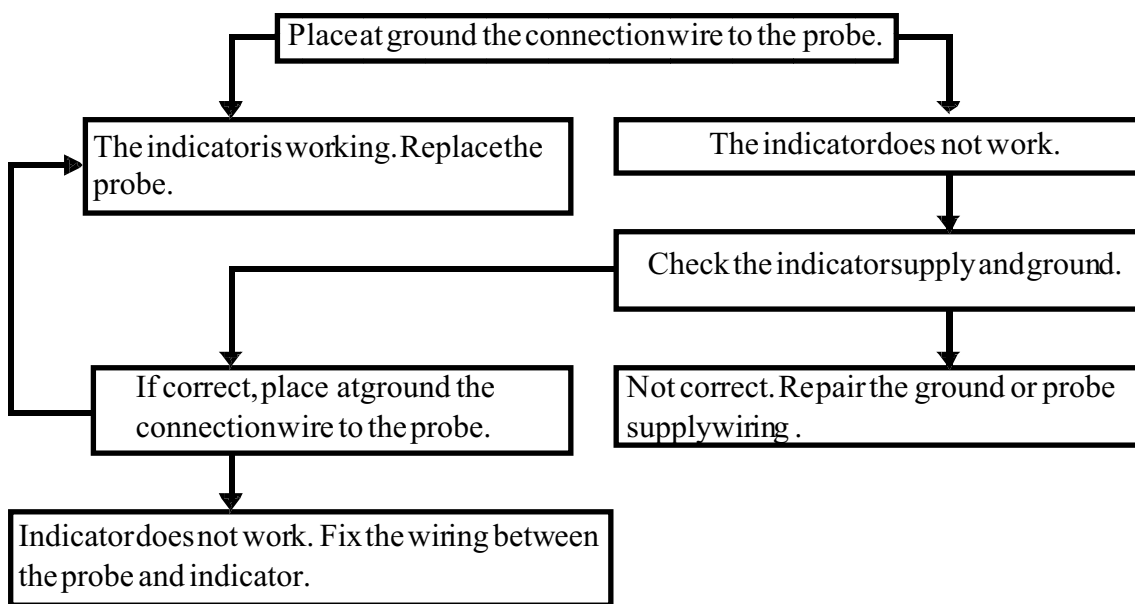
FUEL LEVEL INDICATOR SHOWING ALWAYS FULL



FUEL LEVEL INDICATOR NOT SHOWING CORRECTLY



FUEL LEVEL INDICATOR NOT WORKING



FUEL LEVEL TRANSMITTER REPLACEMENT

DISMOUNTING

Disconnect the battery.

Dismount the fuel tank-visiting cap, by acting upon the attachment screws.

Disconnect the transmitter connector from the rear wiring / fuel tank cap.

Detach the clips of the hoses connected to the fuel tank cap.

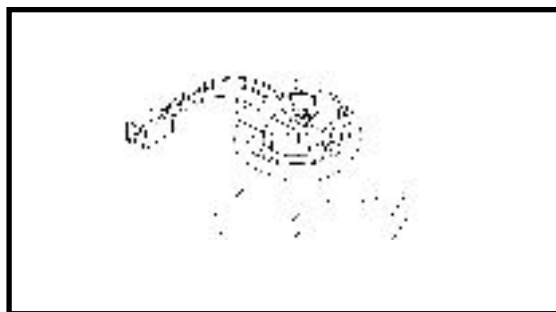
Rotate the probe attachment flange from right to left, by about 1/3 rotation, until it is released from the attachment shoulders.

Pull out the assembly fuel tank cap-fuel pump-level transmitter

Dismount the attachment screws of the fuel level transmitter.

REMountING

Perform in the reverse order the dismounting operations, checking carefully the condition of the tank cap-sealing gasket.



ELECTRIC TESTS – FUEL LEVEL TRANSMITTER

POSITION OF THE FUEL LEVEL INDICATOR ON INSTRUMENT PANEL	R transmitter (W)
4/4	7+/-15 %
3/4	50+/- 5 %
1/2	97+/- 5 %
1/4	162+/- 3 %
0	280+/- 3 %
minimal level warning	-

(STARTING – IGNITION SWITCH)

The anti theft mechanism is placed on the right part of the steering column and has the purpose to starter control when electric system is connected, being provided in the same time also with a steering locking device, with anti theft lock.

NOTE

At the anti theft mechanism there is not any more marked G position (garage) because it does not allow the taking out of the key in this position but helps in pin unblocking for removing the mechanism from the steering column.

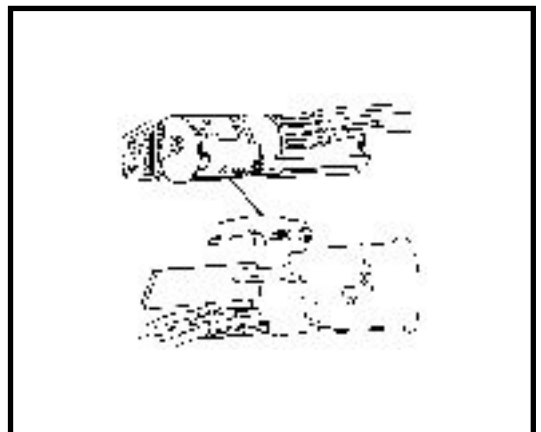
DISMOUNTING

- Disconnect the battery.
- Dismount the steering wheel casings.
- Disconnect the anti-starting bushing.
- Remove the bushing off the steering column.
- Disconnect the switch connection wires.
- Bring the key in the intermediary position (ex G).
- Dismount the attachment screw (1).
- Push the mobile pin (2) and pull backwards the switch.



REMOUNTING

- Mount the switch in its place.
- Tighten the attachment screw (1).
- Connect:
 - the switch
 - the battery.
- Position and mount the anti-starting bushing.
- Connect the anti-starting bushing to the vehicle wiring.
- Check the switch operation.
- Mount the steering wheel casings.

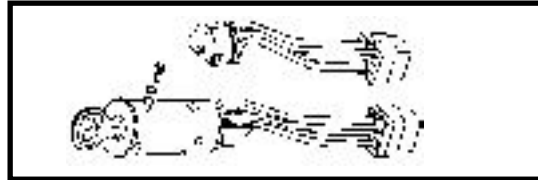


CONNECTING PLUGS REPLACEMENT

The operations are to be performed after dismantling the contact switch from the vehicle.

DISMOUNTING

Dismount the attachment screws of the blocking wedge guiding.
Dismount the connecting plugs.

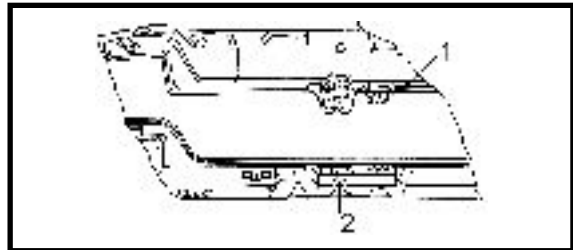
**REMOUNTING**

Position and mount the connecting plugs.
Mount the blocking wedge guiding.
Tighten the attachment screws of the blocking wedge guiding.

**DISMOUNTING-REMOUNTING THE FIX AND MOBILE
HATCHBACK CONTACT (until 01.06.2001)**

FIX CONTACT**DISMOUNTING**

Disconnect the battery.
Disconnect the connections boxes from the rear wiring.
Dismount the attachment screw (2) of the guiding body.



Extract by detaching from clip the fix contact from the guiding body.

REMOUNTING

Perform the dismantling operations in the reverse order.

MOBILE CONTACT**DISMOUNTING**

Dismount the contact attachment screw (1) on the hatchback.
Dismount the attachment screws of the obturator cap on the hatchback.
Disconnect the mobile contact connectors from the consumers (license plate lamps, STOP-S3 lamp, rear window defrosting).
Extract the mobile contact and its wiring.

REMOUNTING

Perform the dismantling operations in the reverse order, previously checking the contacts base pins sliding.

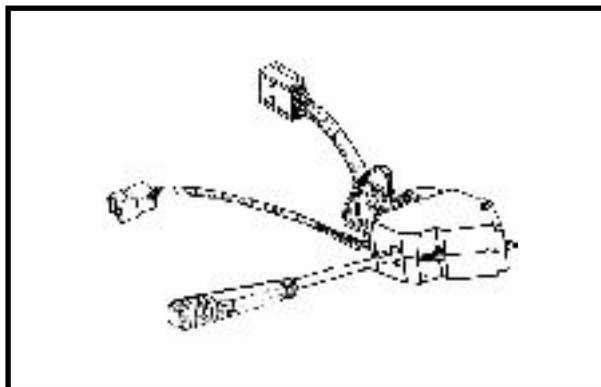
SIGNALIZING AND LIGHTING CONTROL SWITCH

DISMOUNTING-REMOUNTING

The lighting control switch equipping the SuperNova vehicles includes also the tuning-signalizing switch

NOTE

The lighting control switch is not to be repaired.



DISMOUNTING

Disconnect the battery.

Dismount the lower steering wheel casing.

Cut the plastic collar which is attaching the wiring on the steering column.

Disconnect the switch connector from the front wiring

Dismount the switch attachment screw from the steering column

Dismount the switch.

REMOUNTING

Tighten the switch attachment screws.

Connect the switch connector to the front wiring.

Position the plugs and fix with a new plastic collar.

Connect the battery.

Check the switch operation.

Mount the steering wheel lower casing.

**DISMOUNTING-REMOUNTING OF THE WINDSCREEN
WIPER-WASHING SWITCH****DISMOUNTING**

Disconnect the battery.

Dismount the steering wheel casings.

Disconnect the switch connector.

Dismount the windscreen wiper switch attachment screws (2).

Detach the switch.

REMOUNTING

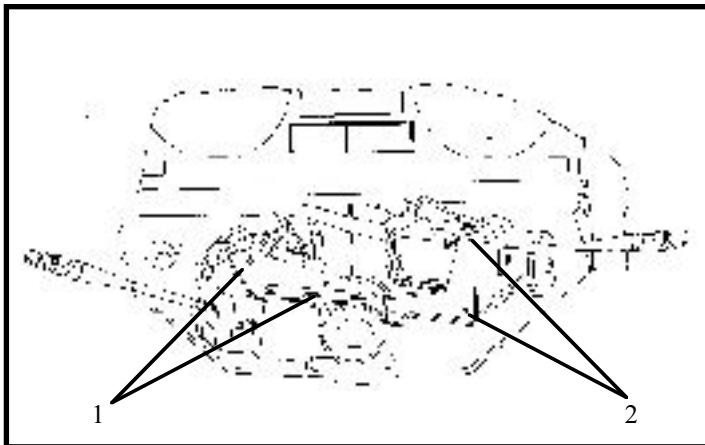
Fix the switch by tightening its attachment screws (2).

Connect the switch connector to the front wiring.

Mount the steering wheel casings.

Connect the battery.

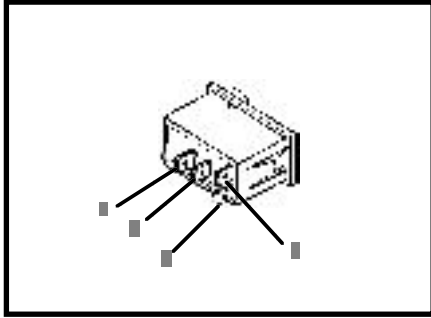
Check the switch operation.



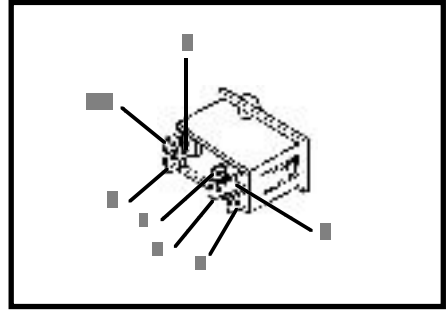
The SuperNova vehicles are equipped with TAKOSAN type switches.

FOGLAMPS SWITCH

FOGPROJECTORSSWITCH



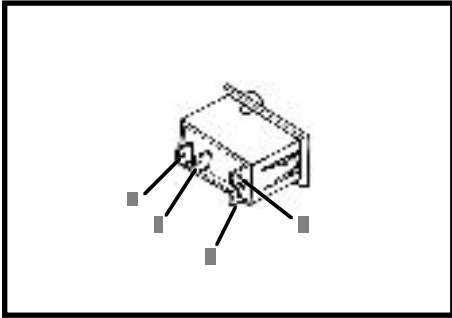
FOGLAMPS SWITCH



Pos	Destination
1	+ Parking lights
2	Fog lamps relay control
3	+ Parking lights
4	Mass

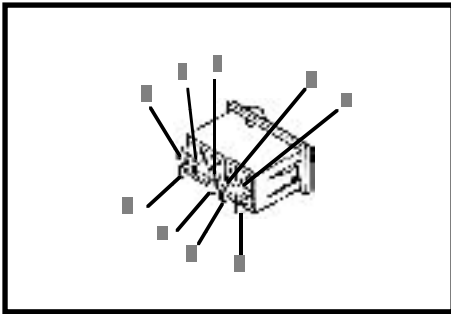
Pos	Destination
2	Fog lamp
4	High beam, low beam
5	+ parking lights
6	Mass
7	Fog lamp
9	Fog lamp relay control

REAR WINDOW DEFROSTING SWITCH (impulsional type)

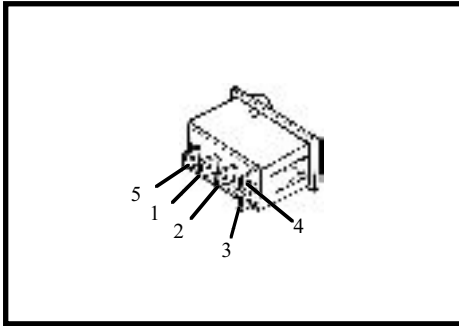


Pos	Destination
1	Relay control
3	+ Parking lights
4	Mass
5	Supply + after contact

HAZARD SWITCH

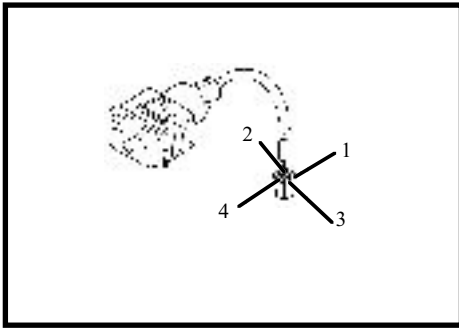


Pos	Destination
1	Supply+ after contact
2	Supply+ permanently
3	Leftturning
4	Right turning
5	+ Parking lights
6	Mass
7	Hazard indicator
8	Turning switch
9	Supply+ turning relay



Pos	Destination
1	Mass
2	Doors electric unlocking control
3	+ Parking lights
4	Mass
5	Doors electric locking control

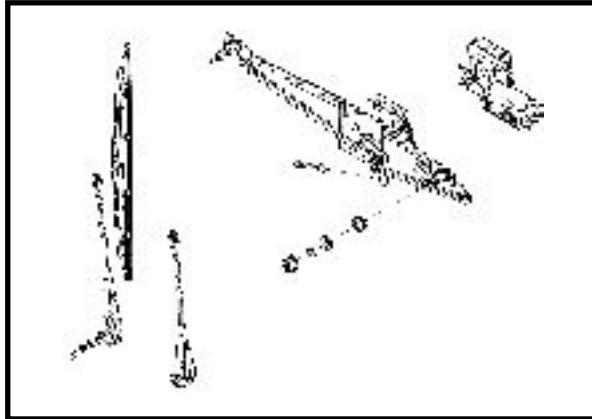
AC STARTINGBUTTON



Pos	Destination
1	Supply+ after contact
2	Mass
3	+Parkinglights
4	AC control

**DISMOUNTING-REMOUNTING OF THE WINDSCREEN
WIPER MECHANISM**

The windscreen wiper mechanism is mounted into the climate control box. This one, and his component too, are in the next detailed drawing.



DISMOUNTING



Disconnect the battery.
Release the protectors (A) from the axles.
Dismount the attachment nut (B) of the windscreen wiper mechanism's arms and blades.

Dismount the attachment nut (C) of the axles from the windscreen's lower frame; recuperate the rubber gaskets and retaining washers.

Disconnect the wiring connectors from the windscreen wiper electric motor.
Dismount the mechanism's attachment screw on the lower traverser windscreen.
Get off the mechanism.

REMOUNTING

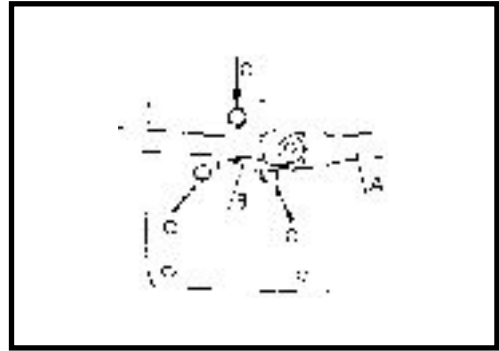
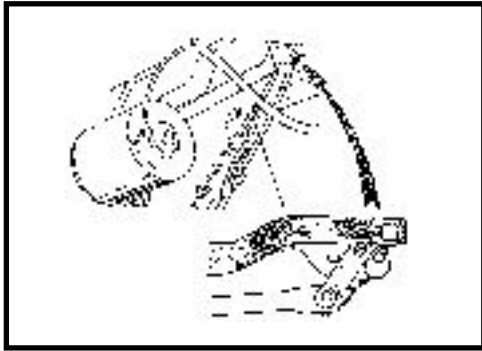
Perform the dismounting operations in the reverse order.

NOTE:

When mounting the windscreen wiper mechanism's arms the windscreen wiper electric motor will be aligned in "stopped at fix point".

THE WINDSCREEN WIPER ELECTRIC MOTOR

The operation is to be performed after dismantling the mechanism off the vehicle.



DISMOUNTING

Dismount the attachment nut of the control connecting rod (B) from the electric motor axle. Dismount the attachment screws of the electric motor on the mechanism support.

REMOUNTING

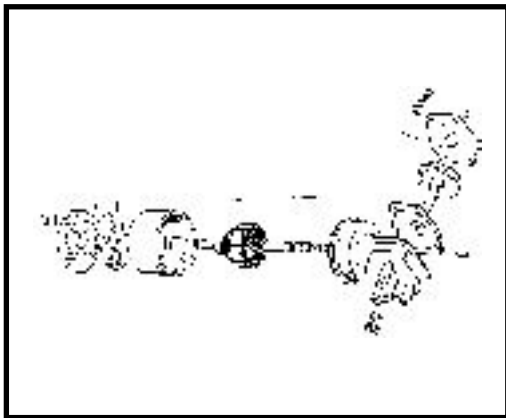
Perform the dismantling operations in the reverse order.

NOTE

When remounting the connecting rods A and B shall be aligned the motor being "stopped at fix point".

REPARATION OF THE WINDSCREEN WIPER ELECTRIC MOTOR

Windscreen wiper electric motor (detailed drawing)



DISMOUNTING

Dismount the electric motor off the mechanism support.

Reductor dismounting :- dismount the cap attachment screws (**B**).

- loosen the adjustment screw of the rotor axial clearance.

Dismount : reductor cap and the gear.

Rotor dismounting : dismount the attachment screws (**A**) of the reductor casing on the electric motor.

Dismount : reductor casing, rotor rear gear and the rotor.

REMOUNTING

Clean the parts.

Check the parts condition (pinions, gears, and collector); replace the damaged or worn parts.

Grease the parts with **LiCaPb** type **II** grease.

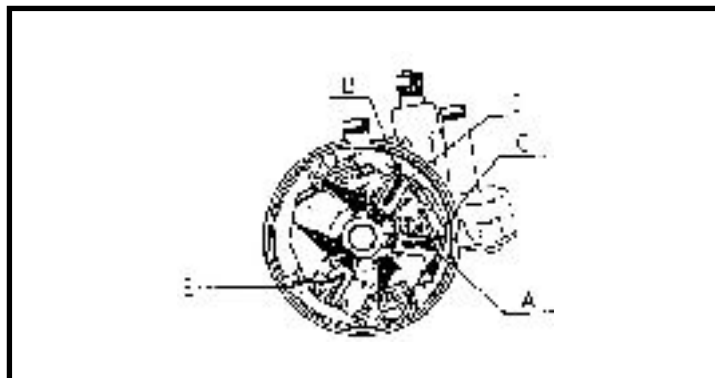
Mount : the rotor, rotor rear gear, reductor casing, pinion and the reductor cap.

Adjust the rotor axial clearance; the screw (**C**) must slightly push on the rotor axle end.

Mount the electric motor on the mechanism support.

REPLACEMENT OF THE WIPER ELECTRIC MOTOR BRUSHES

The operation is to be performed after dismounting the mechanism off the vehicle.



DISMOUNTING

Dismount the electric motor off the windshield wiper mechanism.

Dismount : the reductor and the rotor.

Unstuck the brushes **A**, **B** and **E**.

Remove the brushes.

REMOUNTING

Check the collector condition and its grooves.

Introduce the new brushes and check their free sliding in the supports. Stick then the brushes.

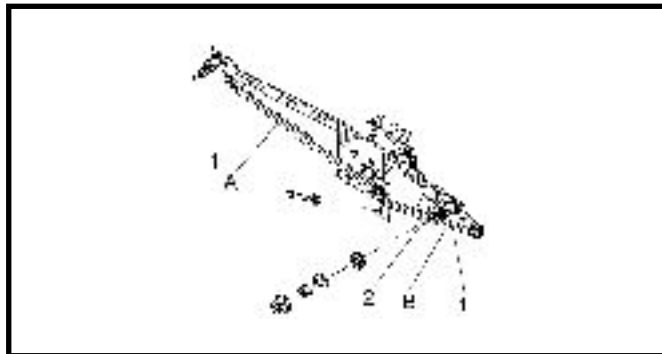
Mount : the rotor and the reductor

Adjust the rotor axial clearance, by means of the adjustment screw.

Mount the electric motor on the mechanism.

REPARATION OF THE WIPER ARM DRIVE AXLE

The operation is to be performed after dismantling the mechanism off the vehicle.



DISMOUNTING

Detach the connecting rods (**A**) and (**B**) from axles.

Dismount the axles (**1**) off the mechanism support (**2**).

Depress the splined bushing

Dismount the axle; recover the bushing and the rubber gasket.

REMOUNTING

Check the rubber gaskets condition.

Clean the parts, to be free of oxides.

Grease the parts with **LiCaPb** type **II** grease.

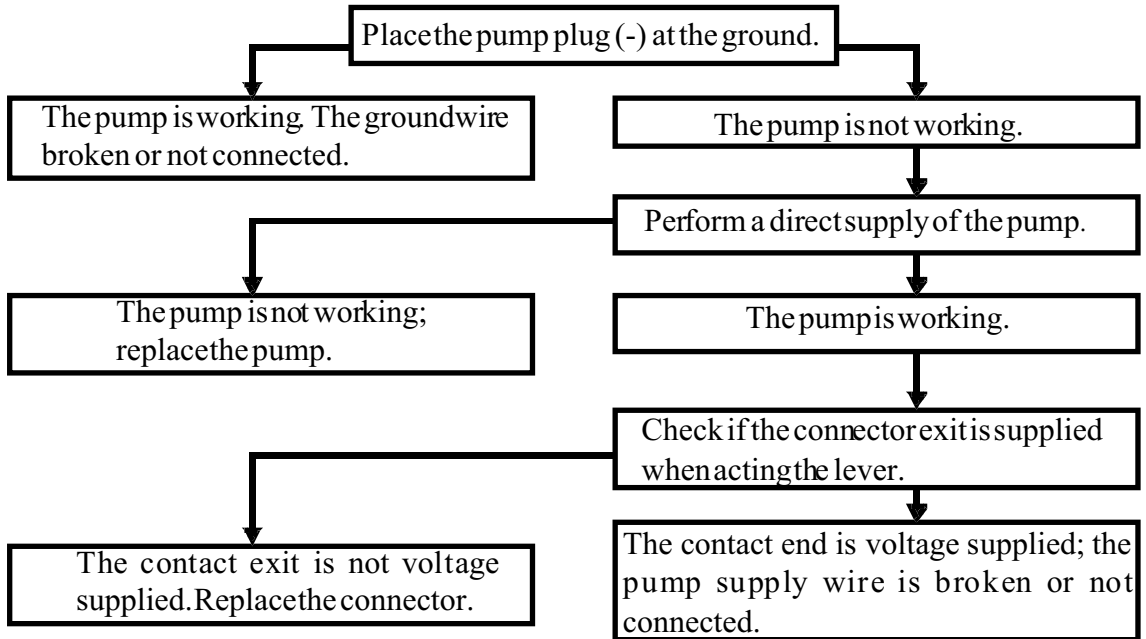
Remount : the rubber gasket on the axle, axle, rubber gasket, and the bushing.

Press the splined bushing.

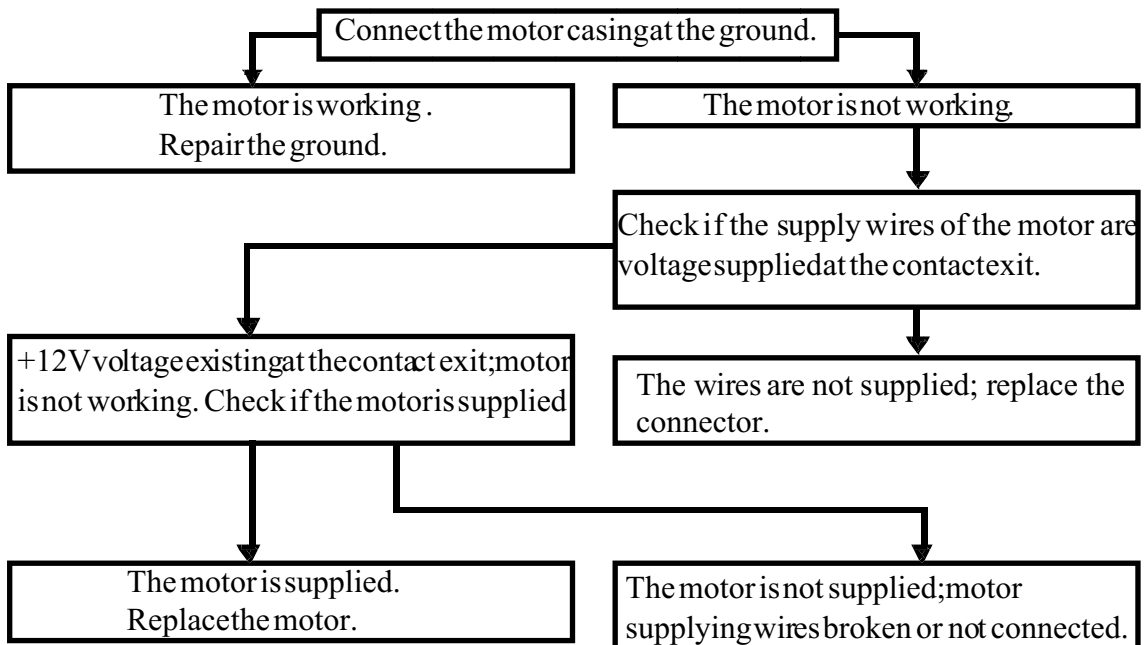
Mount the axle on the mechanism support.

Grease the joints with **LiCaPb** type **II** grease and couple the connecting rods (**A**) and (**B**) on axles.

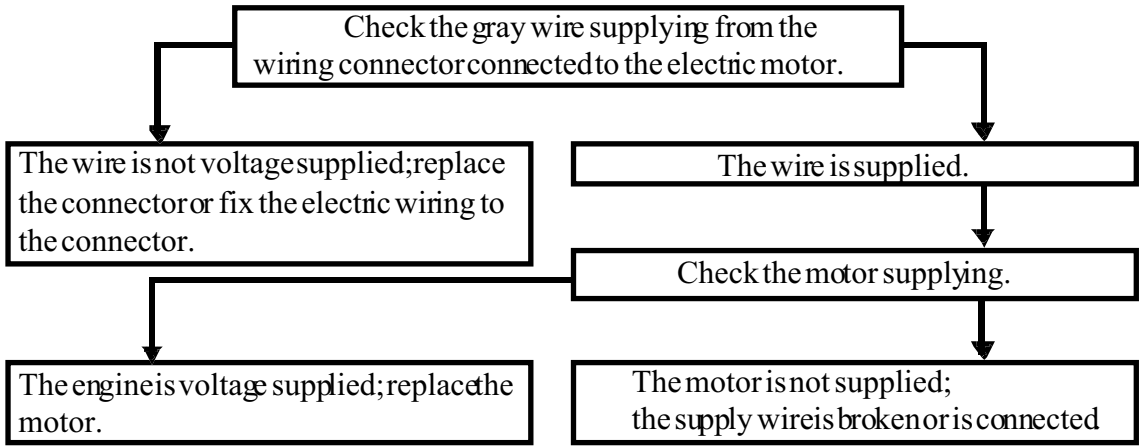
**THE WINDSCREEN WIPER IS WORKING
THE WASHER PUMP IS NOT WORKING**



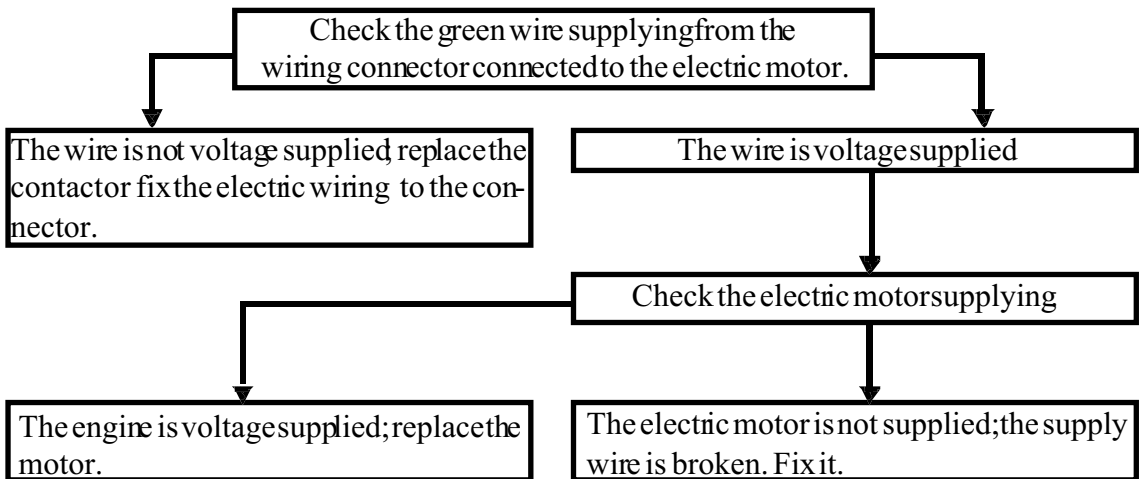
**THE WINDSCREEN WIPER IS NOT WORKING
THE PUMP IS WORKING**



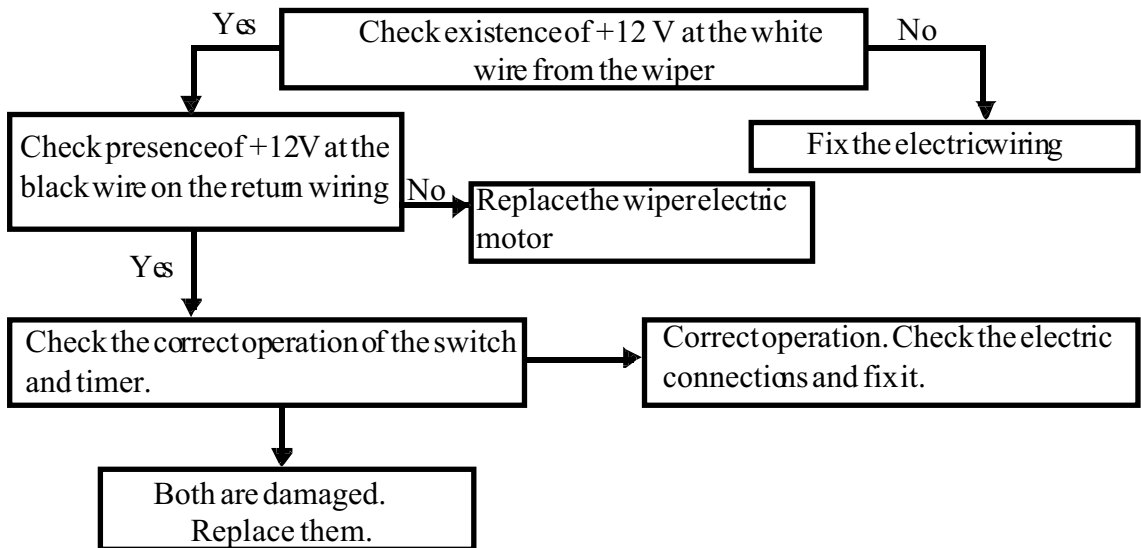
WINDSCREEN WIPER NOT WORKING AT HIGH SPEED; PUMP IS WORKING



WINDSCREEN WIPER NOT WORKING AT LOW SPEED; IT DOES NOT STOP AT FIX POINT; PUMP IS WORKING

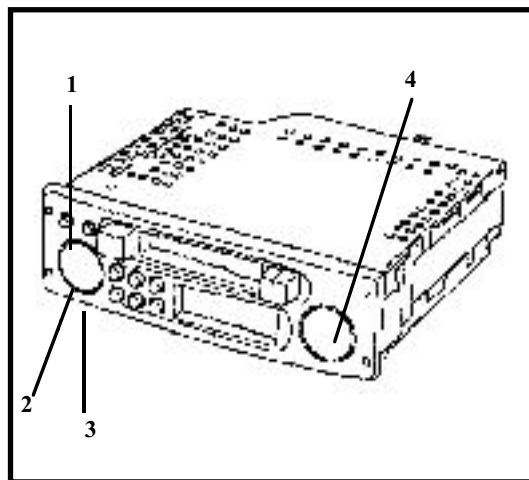


WINDSCREEN WIPER WORKING ON BOTH SPEEDS, BUT IT DOES NOT STOP AT FIX POINT; PUMP IS WORKING



1. ON / OFF
2. Keys < and > allowing configuration changing
3. Keys + and - allowing adjustment changing
4. Key "source".

The auto radio may be fitted in radio-cassettes version with the possibility of a CD controlling.



The autoradio is ensuring the following functions:

- radio listening(on FM four geographical areas may be programmed)
- displaying of the station name in RDS on the best transmitter (AF function).
- receiving of traffic information(TA function)
- receiving of short information and emergency announcements(PTYNEWS).

Radiofunction

- on FM four geographical areas may be programmed

The radioreceiver is using three selection modes that may be seen on the screen and approached on the radio front side:

- manually(MANU)
- by pre-selection(PRESET)
- in alphabetical order(LIST)

Cassettes player

This function is completely automatic, immediately the source has been selected.

NOTE : only Dolby and both direction unwinding, with the blank searching(empty spaces), are approachable by means of specific keys.

OBSERVATION: function MUTE by vocal synthesis or telephone, is stopping the cassette playing.

Thermal protection

If the radio temperature is too high for an optimal operation, the volume is automatically reduced (without modification of the volume on the display).

Codeprotection

The radio is protected by means of a four digit code. This code is introduced by the radio keys at each battery disconnection.

Code introduction by means of the radio keys: in order to valid one digit introduction, push the next key (see the operation technical book).

In case of a wrong code, the instrument is getting blocked (one minute for the first error, two minutes for the second error, four minutes for the third...)

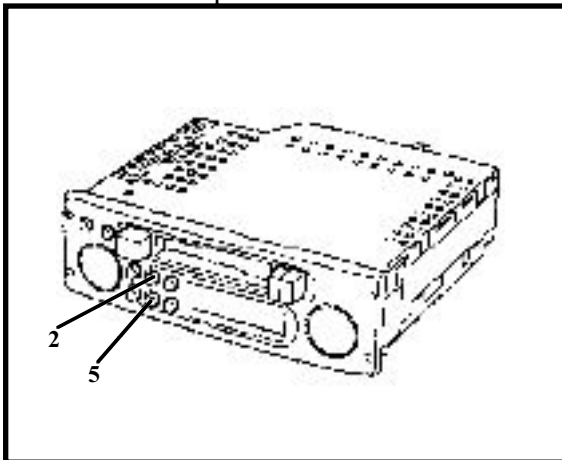
After first code introduction, some configurations must be programmed (see chapter "configuration") These are remaining programmed till battery disconnection.

NOTE : the return to the "wave jammer" mode is possible by simultaneously pushing of the keys 2 and 5, putting the radio under tension. Wait then for two minutes.

Programming

OBSERVATION : in order to select the radio operation area, push simultaneously keys 2 and 5, putting the radio under tension. Wait then for about two minutes. Introduce the four digits code, then:

- select the adequate area



- America
- Japab
- Asia
- Arabia
- Others (Europa, Africa, others...)
- Select the sound tonality curves:
 - 0 : inactive adjustment
 - 1 : Twingo
 - 2 : Clio
 - 3 : Mégane
 - 4 : Laguna
 - 5 : Top range
- speakers number configuration – with or without rear speakers (**REAR ON / OFF**)

NOTE : it is not necessary to perform the configuration after radio code introduction, further to a supply failure.

“Expert“ operation mode.

In order to pass in configuration (**Expert** mode), perform a long pushing (4 sec) on “**source**” key until a beep is heard. This is allowing the following functions adjustment:

- **AF** mode activation (automatic resetting)
- Volume modification subject to the vehicle speed (**5** for maximal modification, **0** for modification canceling)
- **Loudness** mode activation
- **Assisted radio receiver** mode activation
- Number of **speakers** activation (2 or 4)
- Manual or dynamic list selection

NOTE: during configuration, one impulse on “source” key, is canceling the modifications.

Volume

The volume may be settled subject to vehicle speed. For the activation of this function, select the desired volume modification curve, by means of the “**Expert**“ mode (push longer on the “**source**” button, until a beep is heard): **5** for maximal modification, **0** for modification canceling

OBSERVATION : the auto radio is provided with a sound tonality modifications subject to vehicle type. To modify that, see chapter “ configuration”.

Self-diagnostic

This mode is allowing some main functions controlling

- **speakers testing**

by simultaneously pushing of 2 and 4 keys, the speakers are supplied one by one. The display is enabling their location.

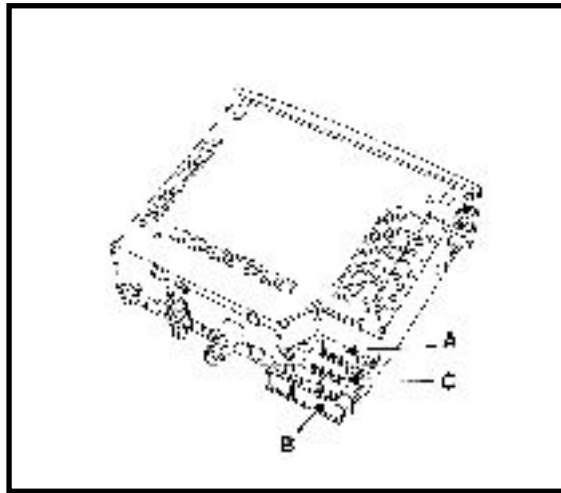
- **reception level testing (after frequency displaying)**

by simultaneously pushing of 1 and 6 keys, the display is showing the radio reception criteria:

- 9 or letter = good reception
- 3 = defective signal
- 2 = stereo sound losing

Keys testing

The introduction of this mode is performed by simultaneously pushing of **3** and **ON/OFF** keys. Each key pushing may be seen on display. The exit from this checking mode is automatic, after all keys have been pushed.



Connectors

Black connector (A)

Brown connector (C)

Way	Denomination
4	Battery supply
6	Lighting supply
7	Operation supply
8	Mass

Way	Denomination
1	+ Right rear speaker
2	- Right rear speaker
3	+ Right front speaker
4	- Right front speaker
5	+ Left front speaker
6	- Left front speaker
7	+ Left rear speaker
8	- Left rear speaker

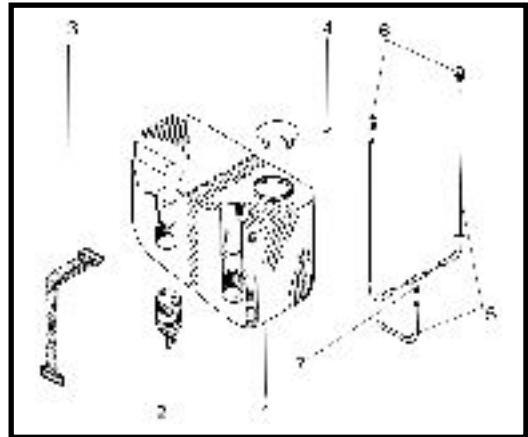
OBSERVATION: the speakers are connected in parallel on each exit.

WINDSCREEN WASHING ASSEMBLY

It is located in the left part of the climate control box, being attached with an attachment strap (3) and the windscreen washing electric pump (2) is attached on the reservoir (1) by means of clips.

In the drawing the following elements may be identified:

1. Windscreen washing reservoir.
2. Electric pump
3. Attachment strap
4. Sustaining clip
5. Piping
6. Nozzles
7. T connector

**DISMOUNTING**

- Disconnect the battery;
- Disconnect the electric connectors from the electric pump.
- Disconnect the pipe connected to the electric pump.
- Dismount the washing reservoir, releasing the attachment strap.

REMOVING

- Perform the dismantling operations in reverse order.
- Check the nozzle adjustment, in order to obtain correct windscreen washing.

GENERALPRESENTATION

From the electric point of view, the electric diagrams of the vehicle have been structured as Applied Principle Schemes (APS), which are presented according to the function each system of the vehicle is having, from electric point of view. These APS diagrams also contain detail concerning the internal function of some simple electric components (contacts, relays), thus contributing to a better understanding of the system functioning and of the incident correct diagnosis.

● The list of the functional diagrams is presented in chapter 3, where the vehicle Applied Principle Schemes may be found. These are divided in: electric supply diagrams, mass connection diagrams and system functional diagrams.

● The electric functional diagrams (APS), are presented in chapter 8 and on these, the following may be identified:

- electric components, marked by a 3-4 figures; their identification on the electric diagrams can be achieved by means of “index of components” – Chapter 4;

- couplings between the electric wires, marked by the letter R followed by figures; they are indicated in the Chapter 5 list;

- mass connections, marked by the letter M followed by a figure or a letter, are indicated in Chapter 5.

● Each wire of the electric diagrams is marked by an alphanumeric code, representing the wire function, followed by figures representing the wire sectioning

● The connectors and couplings between the wires are presented in chapter 12, where they are drawn from the wires inlet to the connector/coupling. The wires entering each connector socket are identified by means of the above-mentioned drawings. The Chapter 11 also includes tables with details about each wire entering the connector: wire location in the connector socket, wire sectioning, wire function code and its destination.

● Abbreviation index- in chapter 2, the abbreviations used in the tables of chapter 12, are detailed explained.

Chapter 11 includes the index of wire functions in connectors and couplings, representing the list of all the connectors and couplings and helping to their easy identification in Chapter 12.

● The mass and coupling position on the vehicle is presented in chapter 6 and helps to identify the electric mass fixing points on it and the location of the couplings between its wires.

● The electric components position on the vehicle is presented in chapter 7. The position of the various components with electric functions on the vehicle can be identified by means of the components list.

● The cockpit fusebox is presented in chapter 9 and contains information about its positioning the functional purpose of the fuse and their relays and the description of the wiring connectors connected to this one.

- The fusebox from the engine compartment is presented in chapter 10, that contains information about its positioning on the vehicle and the functional purpose of the relays and fuse placed on it.
- The functional codes of the wires are detailed explained in chapter 13.

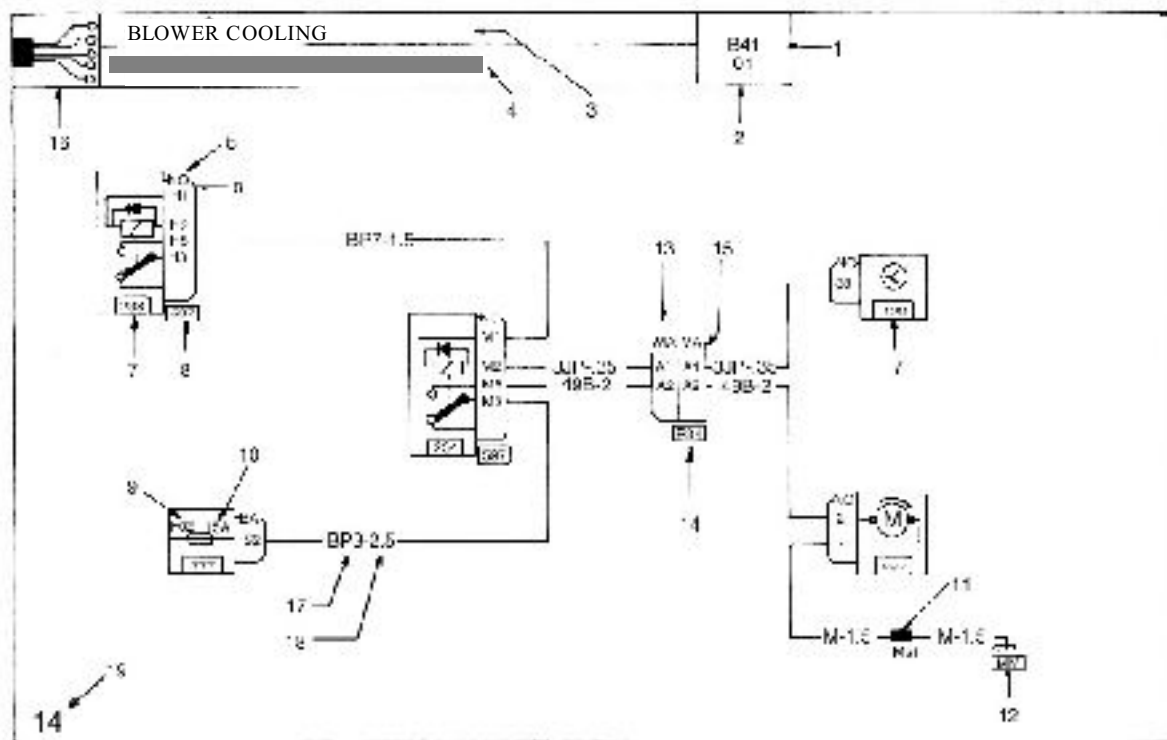
FUNCTIONAL DIAGRAMS INTERPRETATIONS

The functional diagrams information included in Chapter 8 are to be interpreted taking into consideration the explanation referring to the following example:

- 1 = vehicle class
- 2 = manufacturing year
- 3 = electric functional diagram denomination
- 4 = criteria of equipment differentiation for identifying the functional diagram
- 5 = electric connector colour*
- 6 = connector graphical representation
- 7 = electric component index number
- 8 = fuses box number where the relay or the safety fuse are mounted.
- 9 = identification of the safety fuse on the fuses box
- 10 = safety fuse value
- 11 = identification of wiring joints
- 12 = electric mass identification
- 13 = electric connection colour between wires*
- 14 = electric connection identification
- 15 = electric connection graphical representation
- 16 = symbol (sign) pages containing functional diagrams
- 17 = wire function code
- 18 = wire sectioning
- 19 = functional diagram number

The electric connectors (5) and the couplings (13) are symbolised by the following colours:

BA = white	GR = grey	RG = red
NO = black	MA = brown	CY = white
BE = blue	VE = green	



INTERPRETATION OF CONNECTORS WIRES FUNCTION INDEX

The information concerning the function of the wires in connectors and couplings included in Chapter 12, are to be interpreted taking into account the explanations based upon the following example:

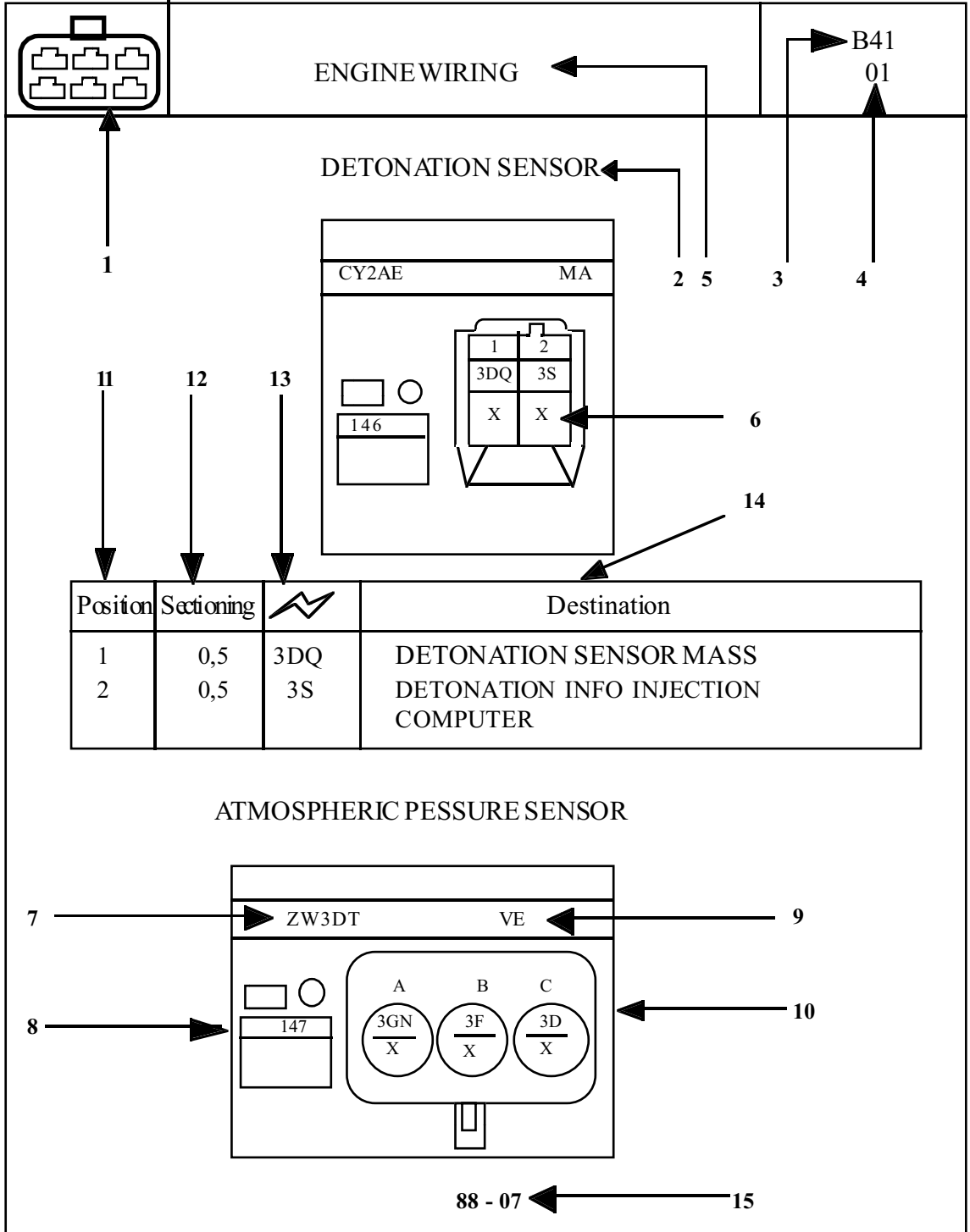
- 1 = symbol (sign) of the pages containing connectors and couplings
- 2 = connector destination
- 3 = vehicle class
- 4 = manufacturing year
- 5 = name of the wiring on which the respective connector is placed
- 6 = wire colour
- 7 = connector code
- 8 = component to whom the described connector is to be connected
- 9 = connector colour
- 10 = connector symbol
- 11 = indication of the connector socket
- 12 = wire sectioning (mm²)
- 13 = wire functional code
- 14 = wire destination
- 15 = chapter number and connector drawing number

NOTE

Concerning position 6, please note that one X is marked, for one wire and two Xs for two wires. The colour of the wire is to be symbolised only in case the electric track of the wire represents one of the fundamental statuses: + permanent (+IC), + after contact (+DC), mass (-) or controls.

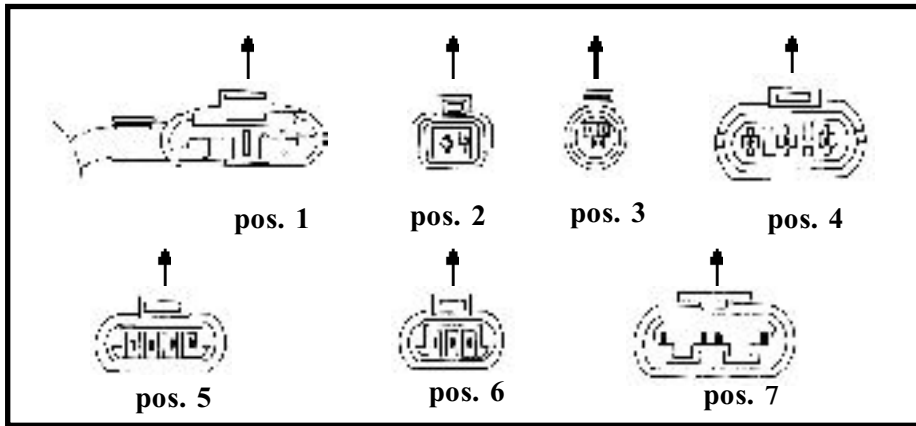
The symbols used for the wire colours are as follows:

A = white	AS = blue	GR = grey
N = black	G = yellow	V = green
M = brown	VI = violet	R = red

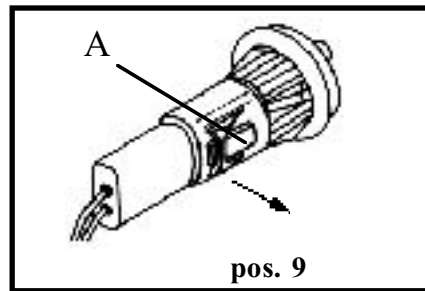
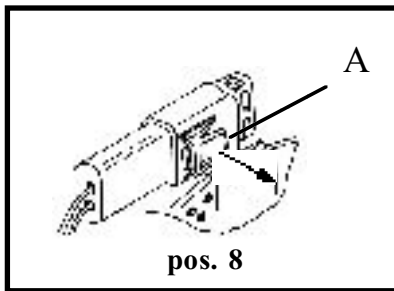


**PARTICULARITIES REGARDING THE CONNECTORS
DISCONNECTING METHOD**

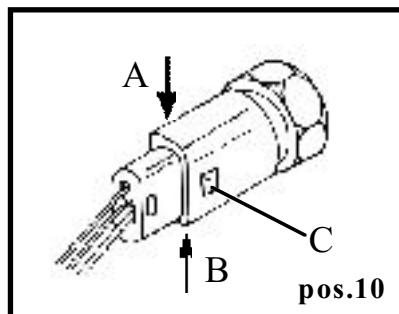
Because this vehicle is equipped with electronics systems controlling and checking different functions, it is necessary the execution of the electric connection by means of some connectors provided with securing devices after coupling performing. Due to this reason, in case their disconnecting is necessary, proceed observing the following observations:



- connectors for: ignition coil (pos.1), canister purging valve (pos.2), AC pressure sensor (pos.3), atmospheric pressure sensor (pos.4), siren (pos.4), step-by-step engine (pos.5), valve potentiometer (pos.6), cooling blower (pos.7) are to be disconnected after easy pulling the locking clamp in the direction shown by the arrow.

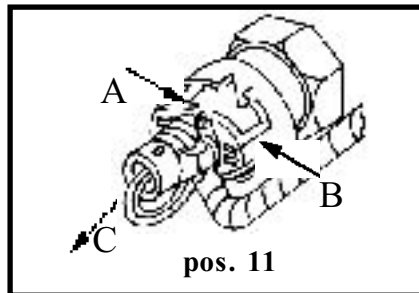


- the connectors for: RPM sensor (pos.8), front hood contact (pos.9) are to be disconnected after easy pulling the locking clamp (A) in the arrow direction, for unlocking.

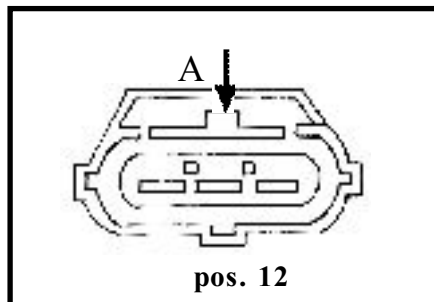


GENERALITES

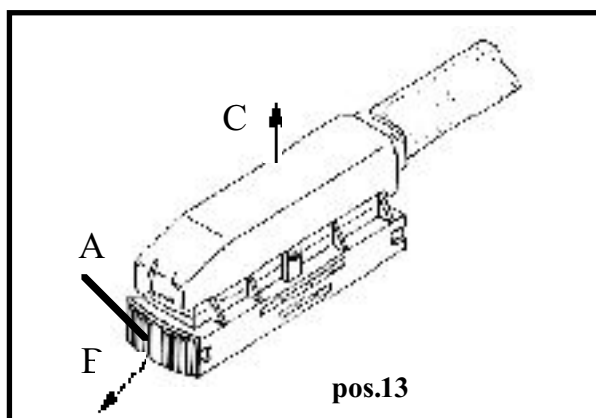
- the connector of the watertemperature sensor(pos. 10) shall be disconnected as follows: push the sensor connector in antipodes points, in the direction of the A and B arrows, achieving in this way the unlocking of the (C) spur, then perform the disconnecting.



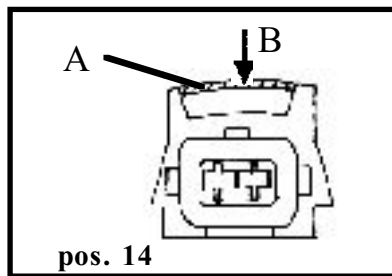
- the connectors of oil pressure contact (pos.11) and of the reverse driving contact shall be disconnected as follows: push in antipodes points in the direction of the (A) and (B) arrows, achieving in this way the unlocking of the connector claw, then the connector may be disconnected by pulling in the (C) arrow direction.



- the connector of the choke sensor (pos. 12) shall be unlocked by pushing the clamp in the (A) arrow direction, then the connector disconnecting may be achieved.



- the injection computer (pos. 13) – the unlocking is performed by acting upon the locking clamp (A) in the (B) arrow direction, then lift the connector in the (C) arrow direction, achieving in this way the computer disconnecting. For reconnecting, perform the disconnecting operations in the reverse order.

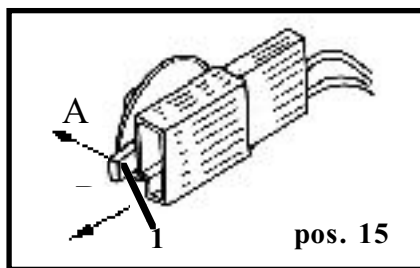


- the connector of the air temperature sensor (pos.14) and of the injectors (pos.14) – push the locker (A) in the (B) arrow direction then the connector disconnecting may be achieved.

The reconnecting of the a.m. connectors shall be performed after their correct positioning, followed by their pushing till a “click” is heard, that will confirm the firm and correct performing of the connecting.

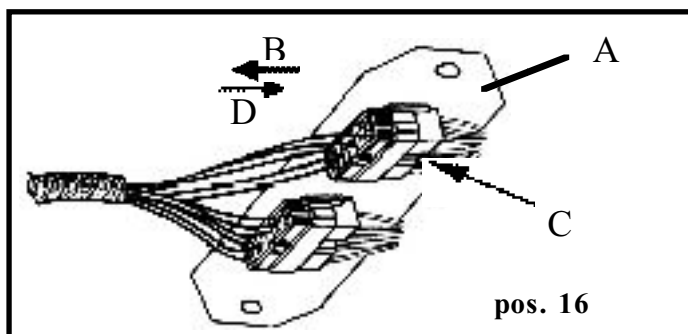
The connector of the oxygen sensor, the coupling connections of the rear wiring to the vehicle doors wiring, the connections between the doors actuators and the doors wiring are attached to the carriage body by means of clamps (pos.15). To unlock the clamps maintaining these connectors on the carriage body, disconnect these connectors, easy push the clamp terminal (I) in the (A) arrow direction and move the connector in the (B) arrow direction, parallel to the attachment surface on the clamp.

The attachment of the connector on the clamp is achieved, proceeding in the reverse order, then the disconnecting may be performed.



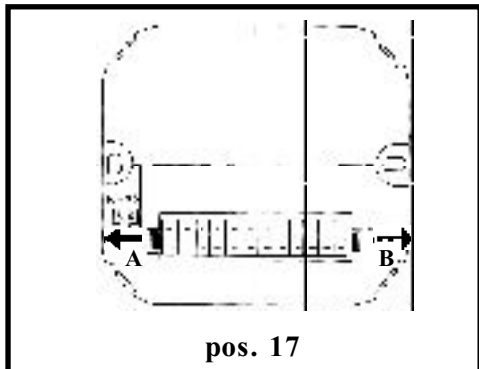
The connections between front wiring, dashboard, rear and engine are attached by sliding in the supports. Next, the disconnecting/reconnecting procedure of the front wiring-dashboard (pos.16) is presented, which are attached on a support placed under the dashboard, left side:

- remove the connection from the support (A), by pulling it in the (B) arrow direction.
- push the (C)-locking spur, then the connections disconnecting may be achieved.
- at reconnecting, push the two connectors till the correct connecting.
- position the connection in the (A) support guides, then push in the (D) arrow directions.



In the sameway, shall be proceed also foe the disconnecting/reconnecting the other previously mentioned connections.

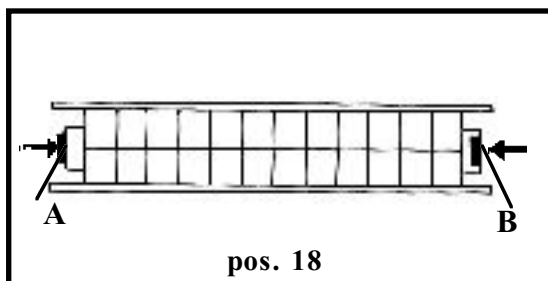
The disconnecting of the UCE anti-intrusion (pos. 17) shall be performed as follows:



- push in the direction of the A and B arrows, the two maintaining clamps of the wiring connector;
- easy pull the 24-ways connector, achieving in this way the disconnecting;
- disconnect then, carefully, the two-ways connector.

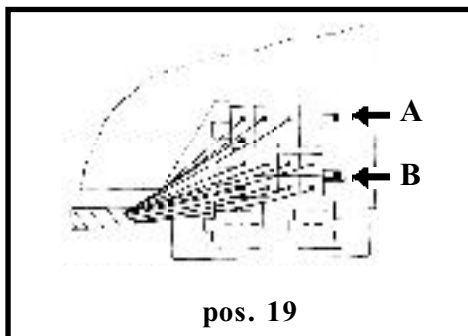
At reconnecting insert the connector until a "click" is heard, confirming the correct connecting.

The disconnecting/reconnecting of the UCE decoder (pos. 18) shall be performed as follows:



- push the two clamps (A) and (B) in the direction shown by the arrows;
- disconnect then the connector;
- at reconnecting push the connector until a "click" is heard, confirming the correct coupling.

The disconnecting of the two connectors of the radio unit (pos. 19) shall be performed as follows:



- push the connectors locking spur in the direction of the (A) and (B) arrows.
- disconnect the connector;
- at reconnecting position the connectors, then push them until a "click" is heard, confirming the correct performing of the connection.

(until 01.06.2001)

NR.	ELECTRIC DIAGRAMS DENOMINATION	AE1	AE2	AE3
1	ANTI-INTRUSION AE2(O), AE3		O	S
2	DOORS CENTRAL LOCKING	S	S	S
3	ANTI-STARTING	S	S	S
4	ELECTRIC LIGHTER	S	S	S
5	CLIMATE CONTROL AE1, AE2	S	S	
6	CLIMATE CONTROL AND AIR CONDITIONING AE1(O), AE2(O), AE3	O	O	S
7	TRUNK LIGHTING	S	S	
8	CEILING LIGHTING	S	S	S
9	ASHTRAY AND DOCUMENT COMPL. LIGHTING	S	S	S
10	CLOCK	S	S	S
11	PRE-EQUIPPING RADIO AE1, AE2	S	S	
12	PRE-EQUIPPING RADIO AE3			S
13	STARTING CIRCUIT	S	S	S
14	ENGINE COOLING CIRCUIT AE1(series), AE2(series)	S	S	
15	ENGINE COOLING CIRCUIT AE2(O), AE3		O	S
16	ELECTRONIC INJECTION AE1(series), AE2(series)	S	S	
17	ELECTRONIC INJECTION AE3			S
18	ALTERNATOR CIRCUIT	S	S	S
19	MASS	S	S	S
20	MASS AE1	S		
21	MASS AE2		S	
22	MASS AE2(anti-intrusion), AE3	O	S	
23	MASS AE1	S		
24	MASS AE1(CA)	O		
25	MASS AE2		S	
26	MASS AE2(CA), AE3		O	S
27	MASS AE1, AE2	S	S	
28	MASS AE2(anti-intrusion) AE3		O	S
29	MASS AE1, AE2	S	S	
30	MASS AE1(AC), AE2(CA), AE3	O	O	S
31	FUSE BOX AND COCKPIT RELAYS AE1	S		
32	FUSE BOX AND COCKPIT RELAYS AE1(CA)	O		
33	FUSE BOX AND COCKPIT RELAYS AE2		S	
34	FUSE BOX AND COCKPIT RELAYS AE2(CA), AE3		O	S
35	FUSE BOX AND ENGINE RELAYS AE1	S		
36	FUSE BOX AND ENGINE RELAYS AE1(CA)	O		
37	FUSE BOX AND ENGINE RELAYS AE2		S	
38	FUSE BOX AND ENGINE RELAYS AE2(CA), AE3		O	S

39	HANDBRAKE INDICATOR AND BRAKING SYSTEM FAILURE	S	S	S
40	FUEL LEVEL INDICATOR CIRCUIT	S	S	S
41	OIL PRESSURE INDICATOR CIRCUIT	S	S	S
42	DIAGNOSTIC SOCKET	S	S	S
43	INSTRUMENT PANEL AE1	S		
44	INSTRUMENT PANEL AE2, AE3		S	S
45	WATER TEMPERATURE INDICATOR CIRCUIT	S	S	S
46	BRAKE PADS WEAR INDICATOR CIRCUIT	S	S	S
47	VEHICLE SPEED	S	S	S
48	SOUND WARNING	S	S	S
49	REAR WINDOW DEFROSTING	S	S	S
50	WINDSCREEN WIPER-WASHING	S	S	S
51	REAR FOG LAMP	S	S	S
52	FOG HEADLIGHTS AE2, AE3		S	S
53	MEETING LIGHTS	S	S	S
54	REVERSE DRIVING LIGHTS	S	S	S
55	PARKING LIGHTS	S	S	S
56	ROAD LIGHTS	S	S	S
57	STOP LIGHTS AE1, AE2		S	S
58	STOP LIGHTS AE2(aileron)			O
59	STOP LIGHTS AE2(CA), AE3	O	S	
60	TURNING AND HAZARD LIGHTS AE1		S	
61	TURNING AND HAZARD LIGHTS AE2, AE3		S	S

Note : these electric diagrams are valid for vehicle manufactured **until 01.06.2001**; **AE1 (Confort), AE2 (Rapsodie), AE3 (Clima)** represent equipping level of the vehicle.

(until 01.06.2001)

CODE	COMPONENT DENOMINATION	CODE	COMPONENT DENOMINATION
21	Right signalling anti-return diode	216	Right front brake pad
101	Electric lighter	217	Left front brake pad
102	Ashtray	221	Windscreen washing pump
103	Alternator	222	Valve potentiometer
104	Anti-theft system	225	Diagnostic socket
105	Acoustic alarm	226	Right headlamp
107	Battery	227	Left headlamp
113	Windscreen wiper timer	230	Fog lamps relay
120	Injection computer (UCE)	231	Fog headlights control relay
121	Fog lights switch	234	Cooling motor fan control relay
122	Fog headlights switch	236	Fuel pump control relay
123	Door closing switch	238	Actuators relay
124	Climate blower switch	244	Injection water temperature sensor
125	Hazard switch	247	Instrument panel
128	Rear window defrosting switch	250	Vehicle speed transducer
137	Turning signalling relay	255	Right front turning lamp
138	Right rear door actuator	256	Left front turning lamp
139	Left rear door actuator	260	Cockpit fuse and relays box
140	Left front door actuator	261	Radio
141	Right front door actuator	262	Cooling motor fan and AC
145	Windscreen wiper-washer switch	267	Right side signalling lamp
146	Detonation sensor	268	Left side signalling lamp
147	Atmospheric pressure sensor	272	Injection air temperature sensor
149	RPM sensor	294	Rear window defrosting timer
155	Reverse driving contact	298	Climate control lighting
156	Handbrake contact	319	AC starting button
160	Stop contact	321	Motor fan resistance (for AC)
163	Starter	328	Left front ceiling lamp
165	Trunk lighting lamp	329	Right front ceiling lamp
168	Documents compartment lighting lamp	371	Canister purging valve
171	AC compressor clutch	427	UCE anti-intrusion
172	Right rear lamp	438	Engine hood contact
173	Left rear lamp	442	Siren
175	Left fog lamp	454	Volumetric sensor
176	Right fog headlight	474	AC relay (on board)
177	Left fog headlight	503	UCE decoder
180	Left front door contact	560	Hatchback contact
181	Right front door contact	584	AC compressor clutch control relay
184	Right front parking lamp	597	Engine compartment fuse and relays box
185	Left front parking lamp	600	Climate control blower
188	Cooling motor fan	639	STOP-S3 lamp
189	Right rear loud speaker	649	Step-by-step engine
190	Left rear loud speaker	654	Anti-starting bushing

191	Right front door loud speaker	700	Cooling blower low speed control relay
192	Left front door loud speaker	778	Ignition coil
193	Injector 1	857	FLASH relay
194	Injector 2	871	Hatchback contact separation diode
195	Injector 3	887	Upstream oxygen sensor
196	Injector 4	927	Chock sensor
199	Fuel level transmitter and electric pump	993	Anti-intrusion indicator LED
205	Oil pressure contact	1091	Braking system ICP
209	Lights, turning lights and horn switch	1202	AC pressure sensor (pressure controller)
210	Electronic clock	1335	Front ashtray lighting
212	Windscreen wiper motor	1428	Climate control blower control relay

(until01.06.2001)

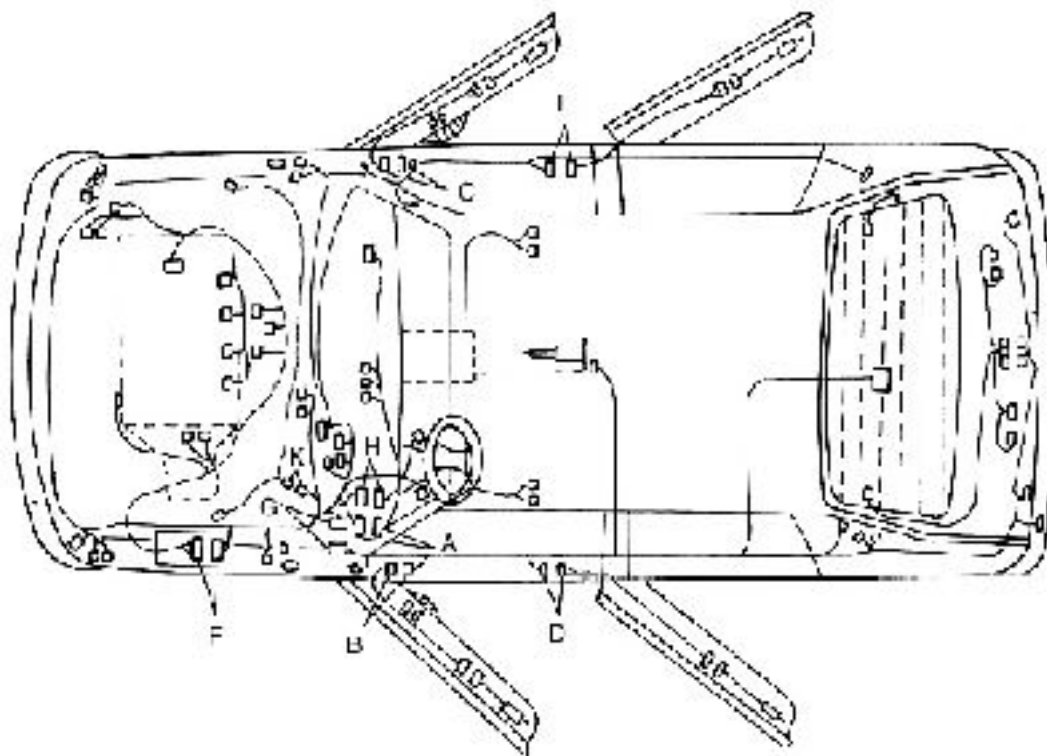
COUPLINGLIST

R53 =BATTERYMASS WIRING/MASS STRIPE (J) COUPLING
R89 = FRONT WIRING/BRAKE PADS WEAR (K) COUPLING
R107 = FRONT WIRING/DASHBOARD (A) COUPLING
R153 = REAR WIRING/LEFT FRONT DOOR (B) COUPLING
R154 = REAR WIRING/RIGHT FRONT DOOR (C) COUPLING
R155 = REAR WIRING/LEFT REAR DOOR (D) COUPLING
R156 = REAR WIRING/RIGHT REAR DOOR (E) COUPLING]
R212 = FRONT WIRING/ENGINE (F) COUPLING
R265 = FRONT WIRING/REAR (G) COUPLING
R318 = FRONT WIRING/DASHBOARD (H) COUPLING

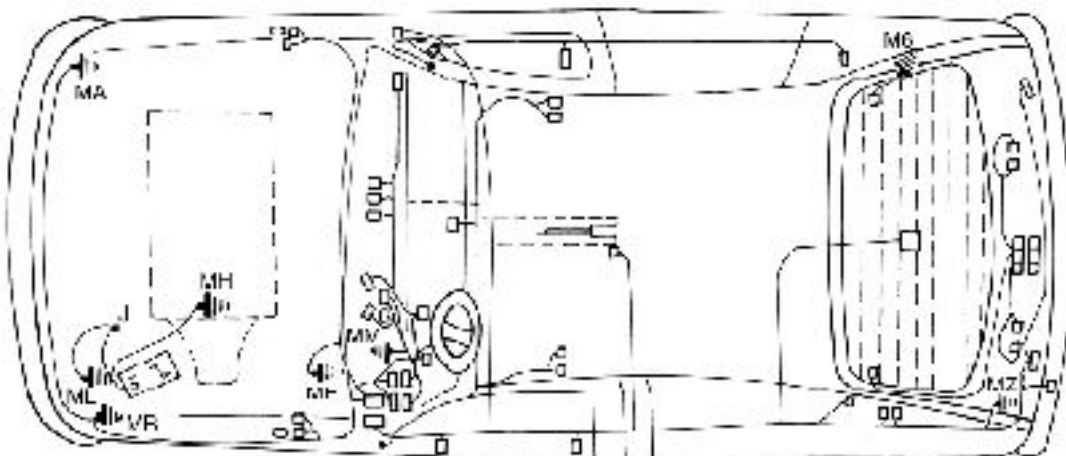
MASS LIST

M6 = REAR WINDOW DEFROSTING MASS
MA = RIGHT FRONT BODY MASS
MB = LEFT FRONT BODY MASS
ME = ELECTRIC MASS AT WINDSCREEN WIPER ATTACHMENT
MH = ENGINE ELECTRIC MASS
ML = LEFT FRONT LONGITUDINAL GIRDER ELECTRIC MASS
MM = ELECTRIC MASS AT THE STEERING COLUMN
MZ = LEFT REAR BODY MASS

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE
MASS ATTACHMENTS ON THE VEHICLE



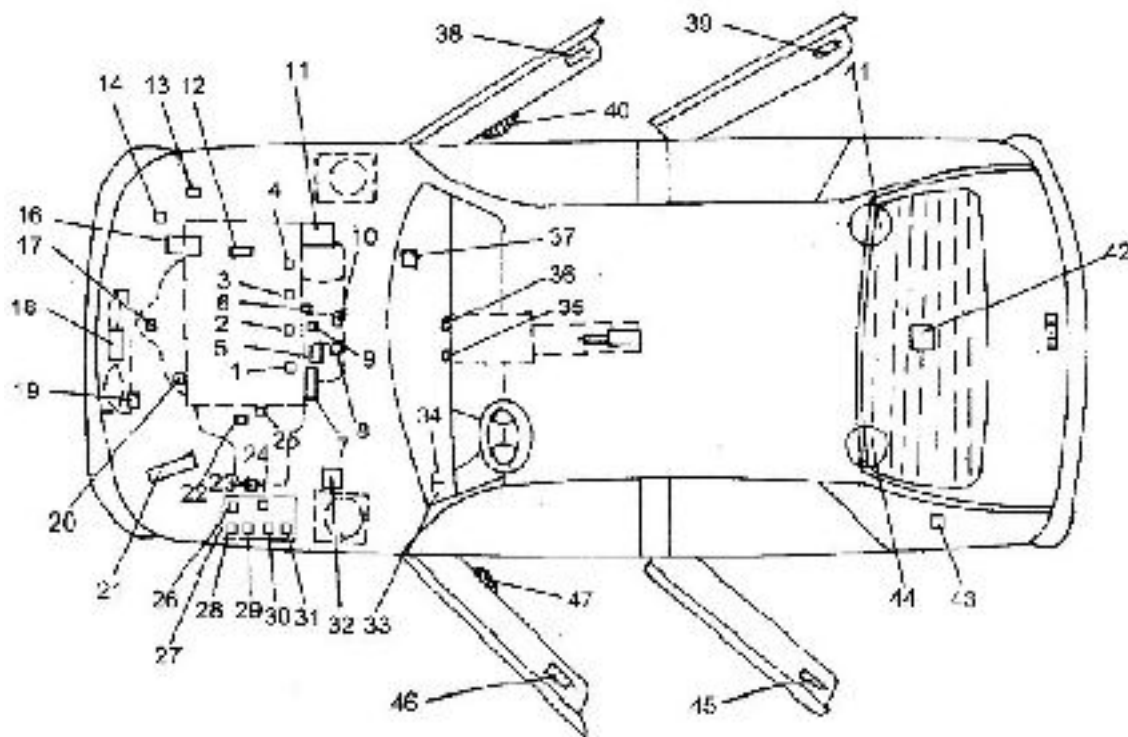
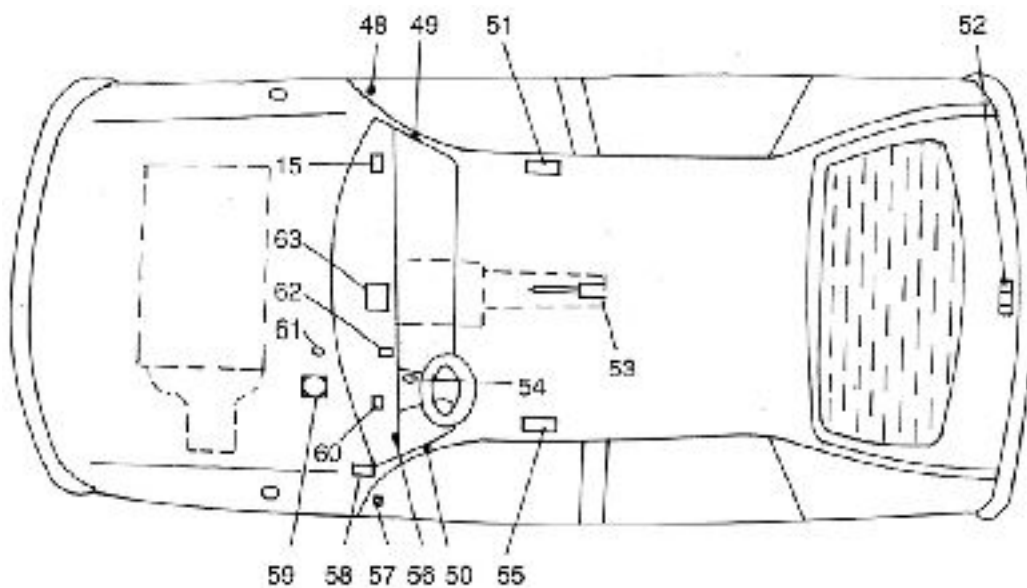
MASS ATTACHMENTS ON THE VEHICLE



(until 01.06.2001)

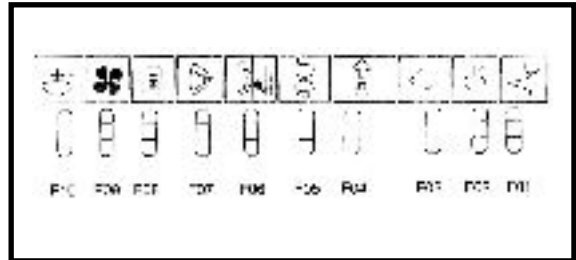
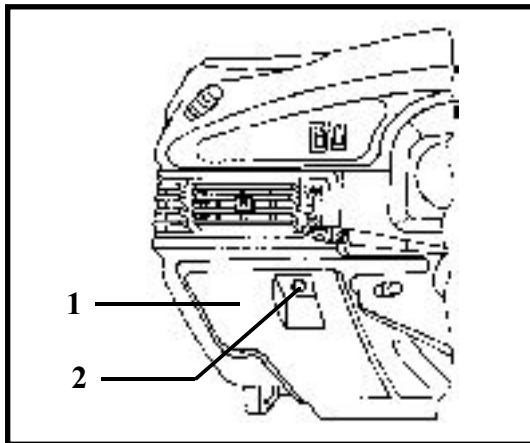
1	Injector 1	33	Windscreen wiper timer
2	Injector 2	34	FLASH relay
3	Injector 3	35	Climate control lighting
4	Injector 4	36	AC starting button
5	Atmospheric pressure sensor	37	AC relay (on board)
6	Detonation sensor	38	Right front door actuator
7	Starter	39	Right rear door actuator
8	Injection air temperature sensor	40	Right front door loud speaker
9	Valve potentiometer	41	Right rear loudspeaker
10	Step-by step engine	42	Fuel level transmitter and electric pump
11	Alternator	43	Trunk lighting lamp
12	Ignition coil	44	Left rear loud speaker
13	Canister purging valve	45	Left rear door actuator
14	AC pressure sensor (pressure controller)	46	Left front door actuator
15	Diagnostic socket	47	Left front door loud speaker
16	AC compressor clutch	48	Right front door contact
17	Upstream oxygen sensor	49	Right volumetric sensor
18	Cooling blower and AC	50	Left volumetric sensor
19	Blower resistance for AC	51	Right front ceiling lamp
20	Oil pressure contact	52	Hatchback contacts
21	Injection computer	53	Handbrake contact
22	RPM sensor	54	Anti-starting bushing
23	Reverse driving contact	55	Left front ceiling lamp
24	AC compressor clutch control relay (E)	56	Anti-intrusion indicator LED
25	Water temperature sensor	57	Left front door contact
26	Blower lower speed control relay (B)	58	UCE decoder
27	Engine compartment fuse and relays box	59	Siren
28	Motor fan control relay (C)	60	Vehicle speed transducer
29	Fog headlamps control relay (A)	61	Engine hood contact
30	Fuel pump control relay (H)	62	Doors closing switch
31	Actuators relay (D)	63	UCE anti-intrusion
32	Chock sensor		

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE



(until 01.06.2001)

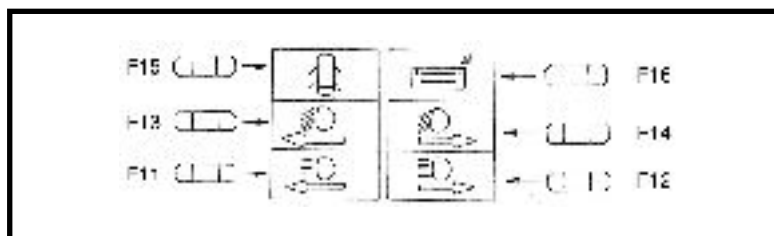
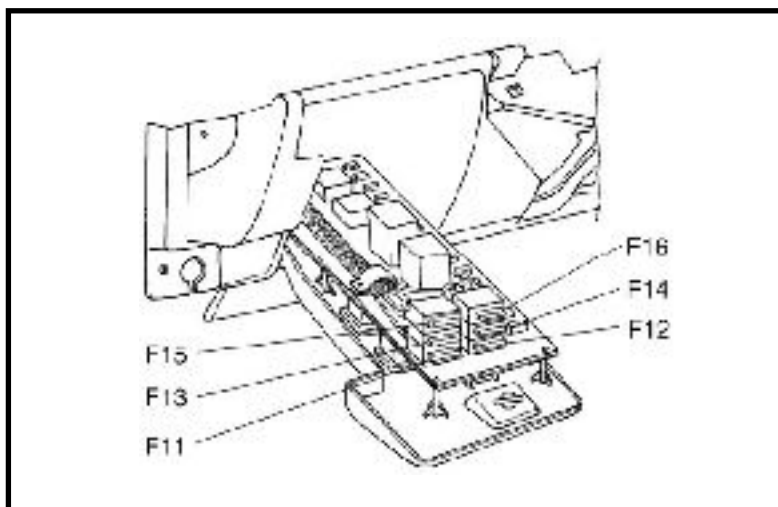
The cockpit fuse box is placed left side under dashboard, being attached on the interior side of the door (1). To access the fuses, turn the knob (2), then open up the door towards exterior.



The fuses are protecting the following electric circuits:

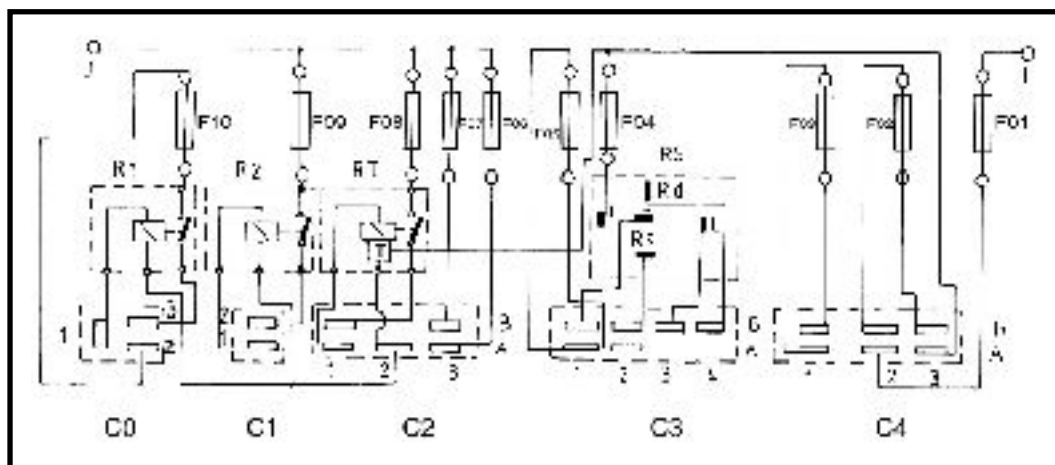
FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, climate blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti-intrusion
F04	7,5A	Hazard and turning signaling lights
F05	5A	Front/rear parking lights, lighting switches, instrument panel, climate control, documents compartment, lighter, ashtray, radio.
F06	15A	Lighter, clock, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti-intrusion, anti-intrusion indicator, diagnostic socket.
F07	15A	Windscreen wiper-washing switch, windscreen wiper timer
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

On the fuse box, 6 fusible fuse modules are attached, protecting the following consumers:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left road lights
F12	10A	Right road lights, road lights indicator
F13	10A	Left meeting lights
F14	10A	Right meeting lights, meeting lights indicator
F15	15A	UCE decoder, FLASH relay, anti-starting bushing
F16	10A	Radio, windscreen wiper motor

FUSE BOX ELECTRIC DIAGRAM

**Connector C0**

1. Fog lamp switch ♦ fog lamp relay control
2. Parking lights ♦ inlet fuse F 1
3. Outlet fuse F10 ♦ left fog lamp

Connector C1

1. Outlet fuse F01 ♦ climate blower relay control
2. Outlet F09 ♦ climate blower

Connector C2

- A1. Rear window defrosting switch ♦ rear window defrosting timer control
- A2. Mass
- A3. Outlet fuse F06
- B1. Outlet fuse F09 ♦ rear window defrosting
- B2. Free
- B3. Outlet fuse 07 ♦ windscreen wiper-washing, siren

Connector C3

- A1. Lights switch (+ parking) ♦ inlet fuse F05
- A2. Outlet fuse F05 ♦ + parking
- A3. Free
- A4. Free
- B1. Mass
- B2. Mass
- B3. Turning lights switch (signaling relay control)
- B4. Free

Connector C4

- A1. Anti-theft mechanism (positionM) ♦ inlet fuse F03)
- A2. Outlet fuse F01
- A3. Hazard switch ♦ inlet fuse F04, supply of the rear window defrosting timer
- B1. Outlet fuse F03
- B2. Anti-theft mechanism (positionM) ♦ inlet fuse F02
- B3. Outlet fuse F02 ♦ reverse driving contact

I = DC (after contact)

J = IC (before contact)

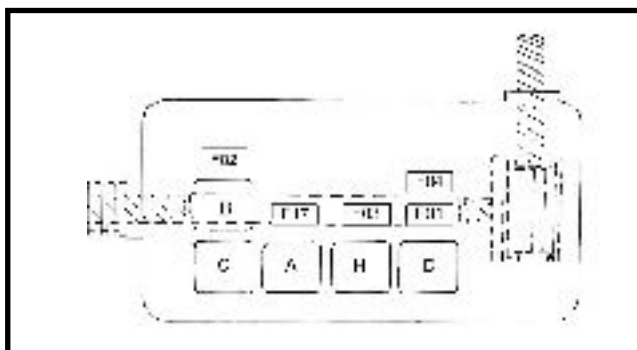
R1 = fog lamp control relay

R2 = climate blower control relay

RT = rear window defrosting timer

RS = turning signaling relay

A. for equipping E1, E2
 (until 01.06.2001)



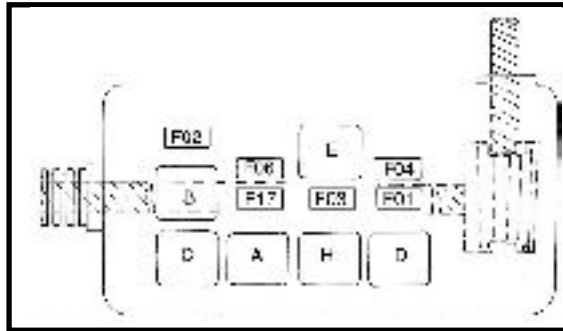
The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump ignition coil.
F02	25A	Cooling blower (vehicles without AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer(+IC)
F17	15A	Fog headlights

RELAY	A	C	D	H
RELAY TYPE	15A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower (vehicle without AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	Fuel pump Ignition coil

FUSE BOX FROM ENGINE COMPARTMENT

B. For equipping E2(0), E3
(until 01.06.2001)



The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump, ignition coil.
F02	40A	Cooling blower (vehicles with AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights
F06	7,5A	AC compressor

RELAY	A	B	C	D	E	H
RELAY TYPE	15A	40A	30A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower- 1st speed (vehicles with AC)	Cooling blower- 2/nd speed (vehicle with AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	AC compressor	Fuel pump Ignition coil

(until 01.06.2001)

Connect.	Denomination
101	ELECTRIC LIGHTER
103 HA	ALTERNATOR
103 HB	ALTERNATOR EXCITATION
104	ANTI-THEFT MECHANISM
105	ACOUSTIC WARNING
113	WINDSCREEN WIPER TIMER
120	UCE INJECTION(for vehicles without AC)
120	UCE INJECTION(for vehicles with AC)
121	FOG LAMPS SWITCH
122	FOG HEADLAMPS SWITCH
123	LOCKING DOORS SWITCH
124	BLOWER SWITCH
125	HAZARD SWITCH
128	REAR WINDOW DEFROSTING SWITCH
138	RIGHT REAR DOOR ACTUATOR
139	LEFT REAR DOOR ACTUATOR
140	LEFT FRONT DOOR ACTUATOR
141	RIGHT FRONT DOOR ACTUATOR
145	WINDSCREEN WIPER-WASHING SWITCH
146	DETONATION SENSOR
147	ATMOSPHERIC PRESSURE SENSOR
149	RPM SENSOR
155	REVERSE DRIVING CONTACT
156	HANDBRAKE CONTACT
160	STOP CONTACT
163 GA	STARTER
163 AB	STARTER EXCITATION
166	RIGHT LICENSE PLATE LAMP
167	RIGHT LICENSE PLATE LAMP
168	DOCUMENTS COMPARTMENT LIGHTING LAMP
171	AC COMPRESSOR CLUTCH
172	RIGHT REAR LAMP
173	LEFT REAR LAMP
175	LEFT FOG LAMP
176	RIGHT FOG HEADLIGHT
177	LEFT FOG HEADLIGHT
180	LEFT FRONT DOOR CONTACT
181	RIGHT FRONT DOOR CONTACT
184	RIGHT FRONT PARKING LAMP
185	LEFT FRONT PARKING LAMP
188	COOLING FAN MOTOR (for vehicles without AC)
189	RIGHT REAR LOUD SPEAKER
190	LEFT REAR LOUD SPEAKER
191	RIGHT FRONT DOOR LOUD SPEAKER
192	LEFT FRONT DOOR LOUD SPEAKER
193	INJECTOR 1
194	INJECTOR 2
195	INJECTOR 3

196	INJECTOR 4
199	FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP
200	REAR WINDOW DEFROSTING
205	OIL PRESSURE CONTACT
209	CLIGHTS, TURNING LIGHTS, HORN SWITCH
210	ELECTRONIC CLOCK
212	WINDSCREEN WIPER MOTOR
216	RIGHT FRONT BRAKE PAD
217	LEFT FRONT BRAKE PAD
221	WINDSCREEN WASHING PUMP
222	VALVE POTENTIOMETER
225	DIAGNOSTIC SOCKET
226	RIGHT HEADLAMP
227	LEFT HEADLAMP
244	WATER TEMPERATURE SENSOR
247	INSTRUMENT PANEL
250	SPEED TRANSDUCER
255	RIGHT FRONT TURNING LAMP
256	LEFT FRONT TURNING LAMP
260	COCKPIT FUSE AND RELAYS BOX
261	RADIO
262	COOLING MOTOR FAN (for vehicles with AC)
267	RIGHT SIDE SIGNALING LAMP
268	LEFT SIDE SIGNALING LAMP
272	INJECTION AIR TEMPERATURE SENSOR
298	CLIMATE CONTROL LIGHTING
319	AC STARTING BUTTON
321	MOTOR FAN RESISTANCE (for vehicles with AC)
328	LEFT FRONT CEILING LAMP
329	RIGHT FRONT CEILING LAMP
371	CANISTER PURGING VALVE
427	UCE ANTI-INTRUSION
438	ENGINE HOOD CONTACT
442	SIREN
454	RIGHT VOLUMETRIC SENSOR(Rx)
454	LEFT VOLUMETRIC SENSOR (Tx)
474	AC RELAY(on board)
503	UCE DECODER
560	HATCHBACK CONTACT
597	ENGINE RELAYS AND FUSE BOX (for vehicles without AC)
597	ENGINE RELAYS AND FUSE BOX (for vehicles with AC)
600	CLIMATE CONTROL BLOWER
639	STOP-S3 LAMP (on roof)
639	STOP[-S3 LAMP (in aileron)
649	STEP-BY-STEP ENGINE
654	ANTI-STARTING BUSHING
778	IGNITION COIL
857	FLASH RELAY
887	SUPSTREAM OXYGEN SENSOR
927	CHOCK SENSOR
993	ANTI-INTRUSION INDICATOR LED

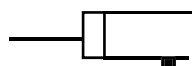
1033CA 1091 1202 1335 MH 121	BATTERY PLUS PLUG ICP BRAKING SYSTEM AC PRESSURE SENSOR FRONT ASHTRAY LIGHTING ENGINE ELECTRIC MASS MOTOR FAN MASS	
R 89 R 107 R 153 R 154 R 155 R 156 R 212 R 265 R 318	FRONT WIRING/ BRAKE PADS WEAR COUPLING FRONT WIRING/ DASHBOARD COUPLING REAR WIRING/LEFT FRONT DOOR COUPLING REAR WIRING/ RIGHT FRONT DOOR COUPLING REAR WIRING/ LEFT REAR DOOR COUPLING REAR WIRING/ RIGHT REAR DOOR COUPLING FRONT WIRING/ ENGINE COUPLING FRONT WIRING/ REAR COUPLING FRONT WIRING/ DASHBOARD COUPLING	

OBSERVATIONS:

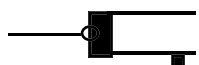
- Connectors and couplings are represented backwards (from wires forward)
- Some electric components are not connected to the vehicle wiring by means of multiple-way connectors, but by means of protected individual plugs. For illustrating the type of the respective plug, the following symbols are to be used:



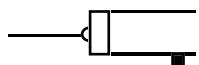
Plug mother 6 mm



Plug father 6 mm



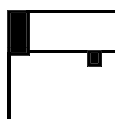
Plug mother broach Φ 3mm



Plug father broach Φ 3mm

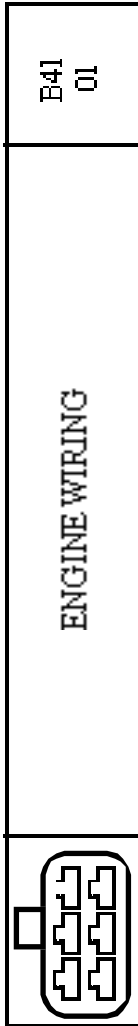


Plug mother 8mm

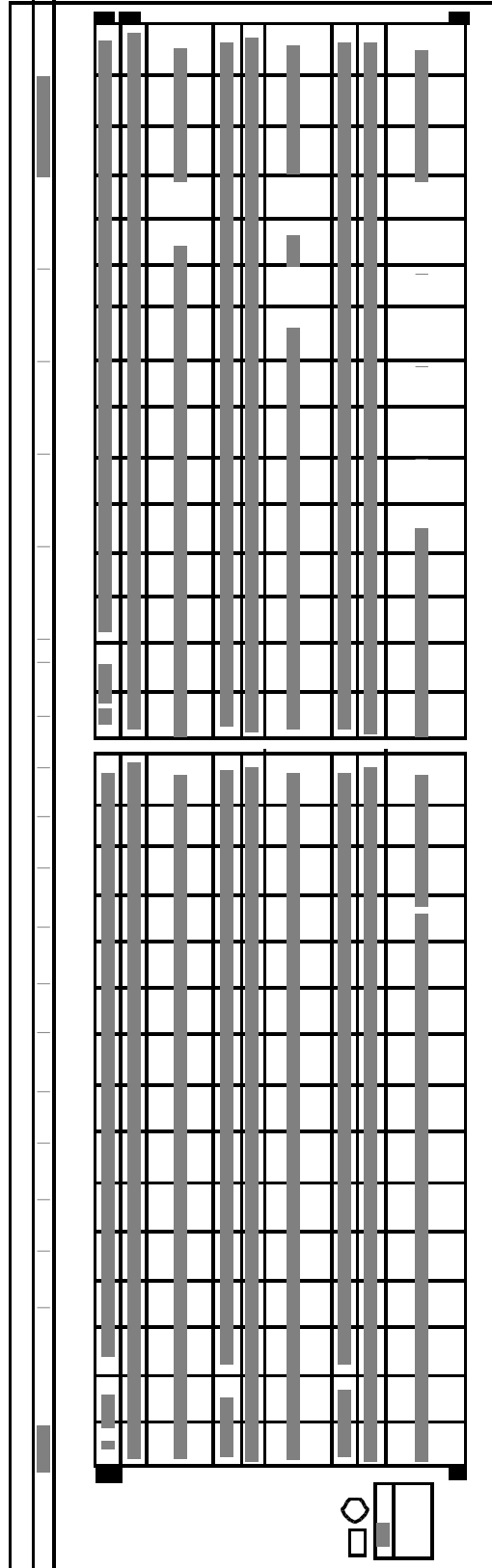


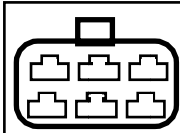
Plug mother flag 6,3mm

(before June 1st 2001)



U.C.E. INJECTION
(For vehicles without air conditioning system)

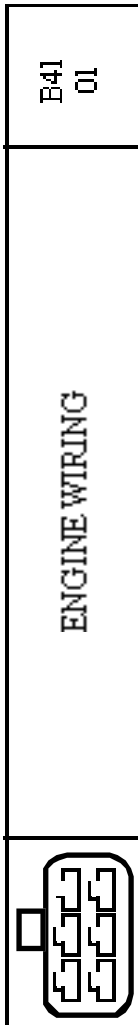




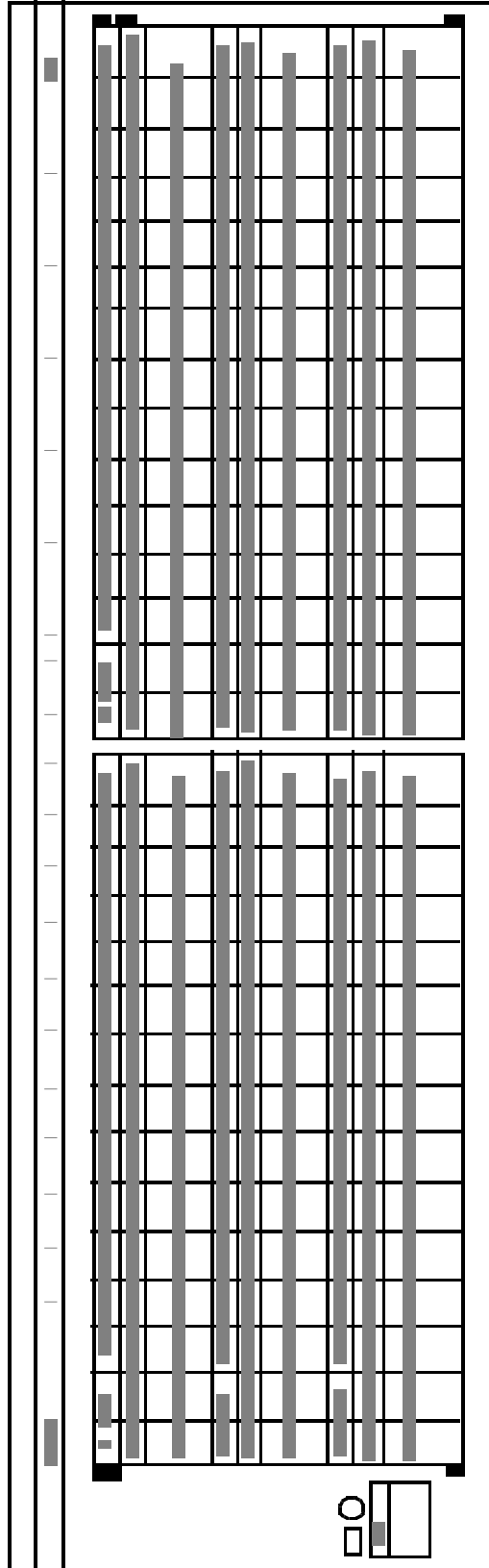
ENGINE WIRING

B41
01


Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL-CYLINDERS2-3IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTERPURGINGVALVE CONTROL
8	0,6	3JN	CONTROL-BLOWER RELAY
9	0,35	31A	CONTROL -WATER TEMPERATURE INDICATOR
12	0,6	3BU	IDLERUNNNGREGULATOR CONTROL1
13	0,6	3C	SIGNAL +WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
19	0,5	TB1	DETONATION SENSOR SCREENING
20	0,5	3S	SIGNAL+ DETONATION SENSOR
24	0,6	3BL	SIGNAL -ENGINE RPM>RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL -LINE L
28	2,0	M	MASS
29	0,35	AP29	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL-CYLINDERS1-4IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL -INJECTION FAILURE INDICATOR
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLERUNNNGREGULATOR CONTROL2
42	0,6	3BA	IDLERUNNNGREGULATOR CONTROL3
43	0,6	3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
49	0,6	3B	SIGNAL+ AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL -ENGINE RPM>RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL LINE K
58	0,35	HI7	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL -INJECTOR 1
60	1,0	3CT	CONTROL -INJECTOR 3
63	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL- FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLERUNNNGREGULATOR CONTROL4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL+ VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
77	0,6	3JQ	- AIR TEMPERATURE SENSOR
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR SUPPLY +
79	0,5	3DQ	- DETONATION SENSOR
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS
89	1,0	3CU	CONTROL-INJECTOR 4
90	1,0	3CS	CONTROL -INJECTOR 2




U.C.E. INJECTION
(For air conditioning system equipped vehicles)

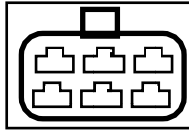


	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL - CYLINDERS 2-3 IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTER PURGING VALVE CONTROL
8	0,6	3JN	CONTROL - BLOWER RELAY
9	0,35	31A	CONTROL - WATER TEMPERATURE INDICATOR
10	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
12	0,6	3BU	IDLE RUNNING REGULATOR CONTROL 1
13	0,6	3C	SIGNAL + WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
18	0,6	38X	FREON PRESSURE SENSOR SIGNAL
19	0,5	TB1	DETONATION SENSOR SCREENING
20	0,5	3S	SIGNAL + DETONATION SENSOR
24	0,6	3BL	SIGNAL - ENGINE RPM > RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL - LINE L
28	2,0	M	MASS
29	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL - CYLINDERS 1-4 IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL - INJECTION FAILURE INDICATOR
38	0,6	3JP	CONTROL - BLOWER RELAY TR.2
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLE RUNNING REGULATOR CONTROL 2
42	0,6	3BW	IDLE RUNNING REGULATOR CONTROL 3
43	0,6	3AJ	SIGNAL + VALVE POSITION POTENTIOMETER
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
46	0,5	38AS	AIR CONDITIONING COMPRESSOR CONNECTION SIGNAL
49	0,6	3B	SIGNAL + AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL - ENGINE RPM > RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL - LINE K
58	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL - INJECTOR 1
60	1,0	3CT	CONTROL - INJECTOR 3
63	1,0	3GF	CONTROL - UPSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL - FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLE RUNNING REGULATOR CONTROL 4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL + VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
77	0,6	3JQ	- AIR TEMPERATURE SENSOR
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR > SUPPLY +

	ENGINE WIRING	B41 01
---	---------------	-----------

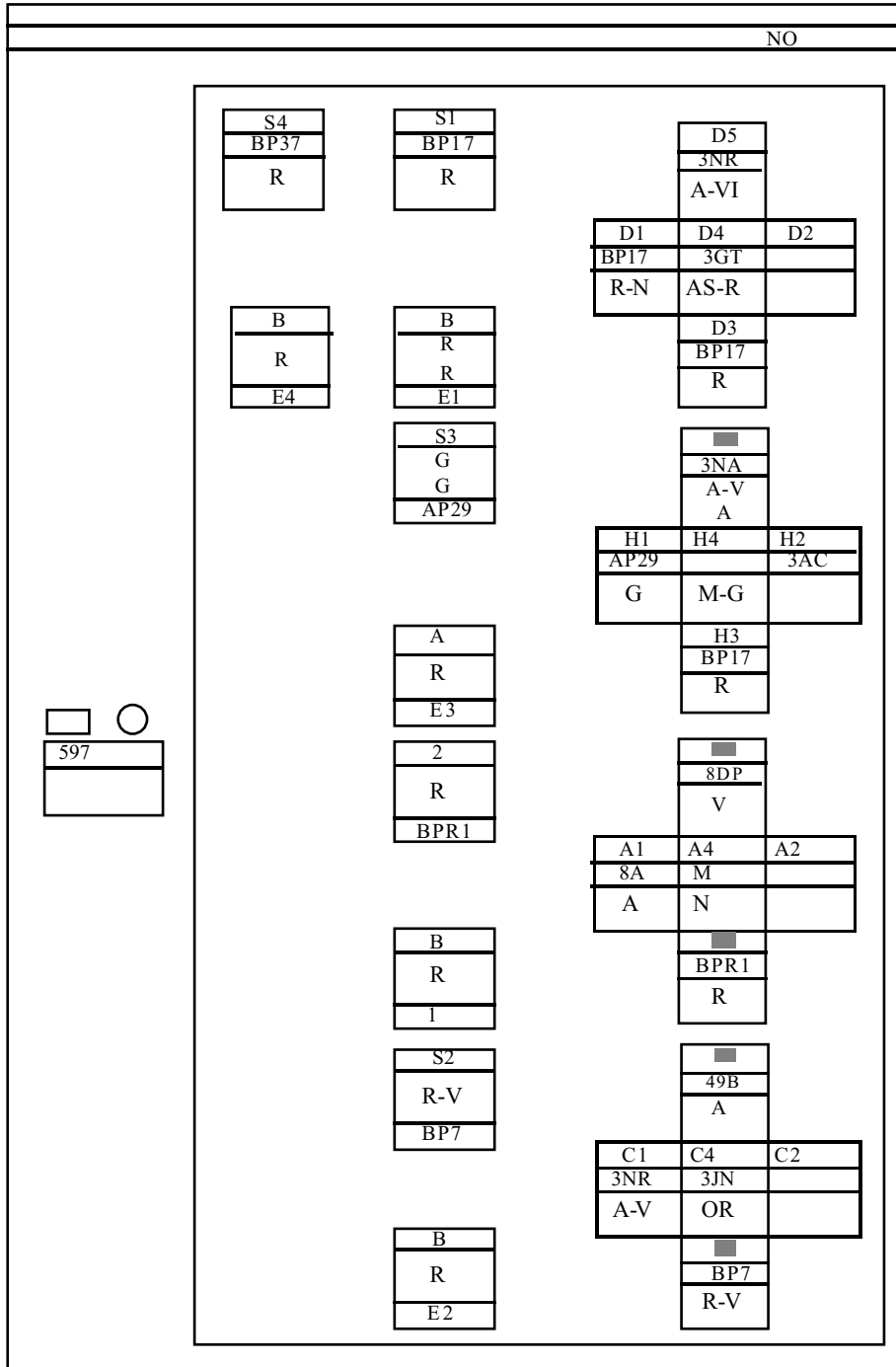
Pos.	Sectioning		Destination
79	0,5	3DQ	- DETONATION SENSOR
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS
82	0,6	38U	- FREON PRESSURE SENSOR
83	0,6	38Y	+ FREON PRESSURE SENSOR
89	1,0	3CU	CONTROL - INJECTOR 4
90	1,0	3CS	CONTROL - INJECTOR 2

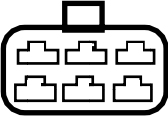



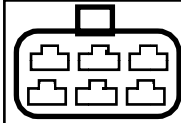
ENGINE WIRING

B41
01

ENGINE RELAYS AND FUSE BOX (FOR VEHICLES WITHOUT AIR CONDITIONING SYSTEM)



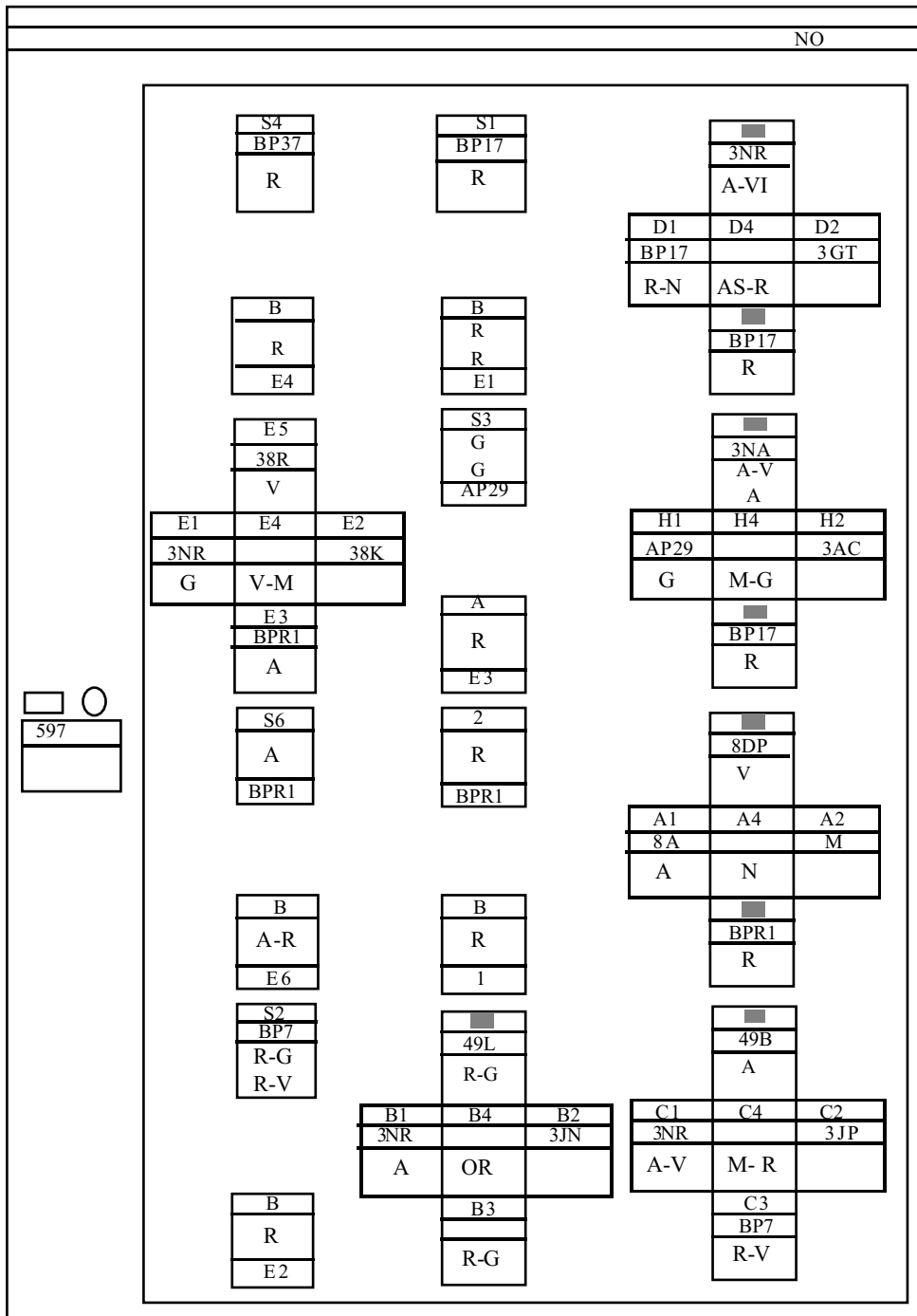
			ENGINE WIRING	B41 01
				
Pos.	Sectioning		Destination	
A1	0,5	8A	+ FOG LAMPS RELAY	
A2	0,5	M	MASS	
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY	
A5	1,0	8DP	+ PROTECTED FUSE > FOG AMPS	
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET	
C2	0,6	3JN	CONTROL-BLOWER RELAY, TR.1	
C3	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02	
C5	1,5	49B	CONTROL+BLOWER COOLING	
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
D2	0,6	3GT	INJECTION COMPUTER > ACTUATORS RELAY CONTROL	
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET	
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03	
H2	0,6	3AC	CONTROL- FUEL PUMP RELAY	
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
H5	2,0	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY	
H5	1,4	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY	
E1	5,0	B	+ BATTERY	
E1	0,6	B	+ BATTERY > FUSE INLET F04	
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
E2	5,0	B	+ BATTERY > STARTER	
S2	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING	
E3	1,0	A	SUPPLY+ AFTER CONTACT	
S3	0,6	AP29	+ PROTECTED D.C. > ENGINE SAFETY RUNNING RELAY	
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03	
E4	0,6	B	+ BATTERY > FUSE INLET F01	
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04	
1	1,0	B	+ BATTERY	
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY	




ENGINE WIRING

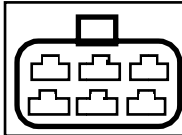
B41
01

ENGINE RELAYS AND FUSE BOX (FOR AIR CONDITIONING SYSTEM EQUIPPED VEHICLES)



	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OULETF17> RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOGAMPS
B1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B2	0,6	3JN	-BLOWERRELAY,TR.1
B3	2,0	BP7	+ PROTECTED BATTERY > FUSE @TLETFF02
B5	2,0	49L	BLOWERCOOLINGRESISTANCECONTROL
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JP	CONTROL-BLOWER RELAY,TR.2
C3	4,0	BP7	+ PROTECTED BATTERY > FUSE @TLETFF02
C5	5,0	49B	CONTROL+BLOWERCOOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE @TLETFF01
D2	0,6	3GT	ACTUATORS RELAY CONTROL, INJECTIONCOMPUTER
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE @TLETFF01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E1	0,5	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E2	0,5	38K	AIR CONDITIONING SYSTEMSTOPPING CONTROL > INJECTIONCOMPUTER
E3	1,0	BPR1	+ BATTERY > FUSE OULETF06> RELAY
E5	1,0	38R	CONTROL+AIR CONDITIONINGCOMPRESSOR CLUTCH
H1	0,6	AP29	+ AFTER PROTECTED CONTACT> FUSE OUTET F03
H2	0,6	3AC	CONTROL- FUEL PUMPRELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE @TLETFF01
H5	2,0	3NA	+IGNITIONCOIL, CHOKESENSOR > FUEIPUMPRELAY
H5	1,4	3NA	+IGNITIONCOIL, CHOKESENSOR > FUEIPUMPRELAY
E1	5,0	B	+BATTERY
E1	0,6	B	+ BATTERY > FUSE INLE F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE @TLETFF01
E2	5,0	B	+ BATTERY>+ STARTER
S2	2,0	BP7	+ PROTECTED BATTERY > FUSE @TLETFF02,BLOWER COOLING
S2	4,0	BP7	+ PROTECTED BATTERY > FUSE @TLETFF02
E3	1,0	A	SUPPLY+AFTER CONTACT
S3	0,6	AP29	+PROTECTEDD.C> ENGINERUNNINGSAFETYRELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT> FUSE OUTET F03
E4	0,6	B	+ BATTERY > FUSE INLE F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE @TLETFF04
1	1,0	B	+BATTERY
2	1,0	BPR1	+ BATTERY > FUSE @TLETFF17>RELAY
E6	1,0	B	+BATTERY
S6	1,0	BPR1	+ BATTERY > FUSE OULETF06> RELAY

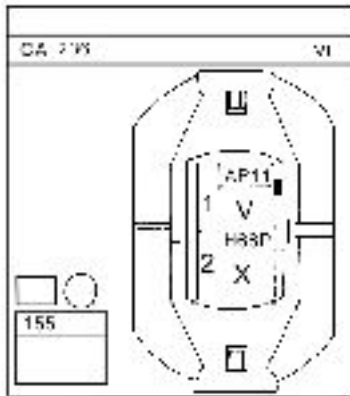


ENGINE WIRING


B41
01

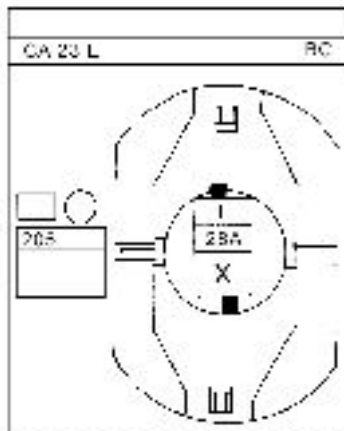
REVERSE DRIVING CONTACT

Pos.	Sectioning		Destination
1	0,60	AP11	+ AFTER PROTECTED CONTACT, REVERSE DRIVING LIGHTS
2	0,60	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02




OIL TRANSMITTER CONTACT

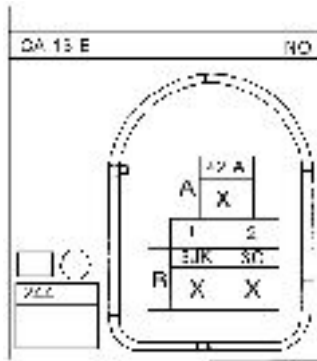
Pos.	Sectioning		Destination
1	0,35	28A	OIL PRESSURE INDICATOR - CONTROL




	ENGINE WIRING	B41 01
---	---------------	-----------

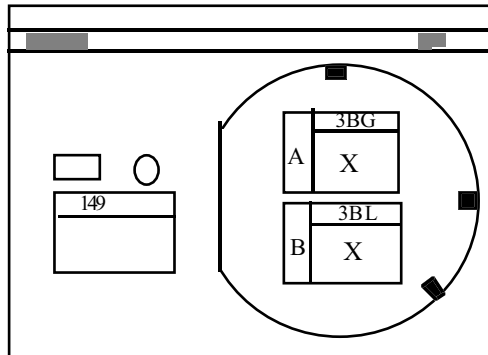
WATER TEMPERATURE SENSOR

Pos.	Sectioning		Destination
A	0,35	42A	SIGNAL +WATER TEMPERATURE
B1	0,60	3JK	- WATER TEMPERATURE
B2	0,60	3C	SIGNAL +WATER TEMPERATURE SENSOR




RPM SENSOR

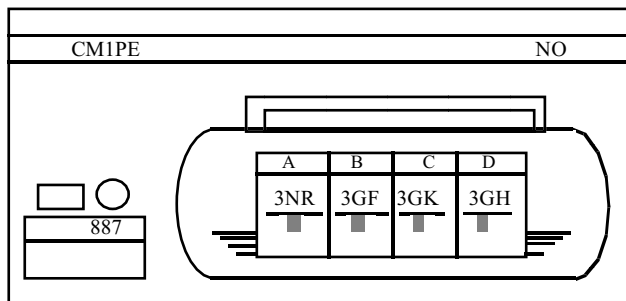
Pos.	Sectioning		Destination
A	0,60	3BG	ENGINE RPM SIGNAL >RPM SENSOR
B	0,60	3BL	ENGINE RPM -SIGNAL >RPM SENSOR




	ENGINE WIRING	B41 01
---	---------------	-----------

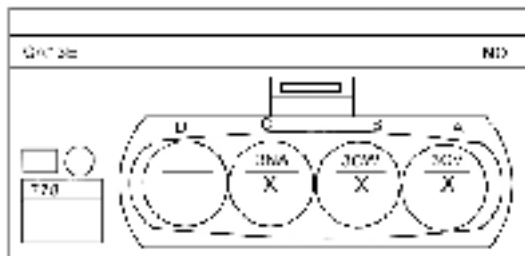
UPSTREAM OXYGEN SENSOR

Pos.	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
C	0,60	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GH	UPSTREAM OXYGEN SENSOR MASS




IGNITION COIL

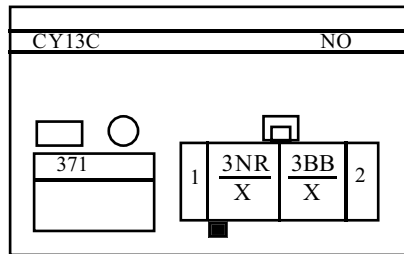
Pos.	Sectioning		Destination
A	2,0	3CV	CONTROL-CYLINDERS 1-4 IGNITION COIL
B	2,0	3CW	CONTROL-CYLINDERS 2-3 IGNITION COIL
C	2,0	3NA	+ IGNITION COIL, CHOKE 3 SENSOR > FUEL PUMP RELAY




	ENGINE WIRING	B41 01
---	---------------	-----------

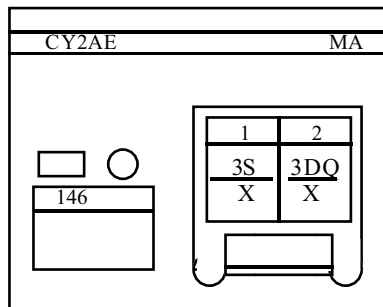
CANISTER PURGING VALVE

Pos.	Sectioning		Destination
1	0,60	3NR	+ INJECTORS >ACTUATORS RELAY OUTLET CANISTERPURGINGVALVE CONTROL
2	0,60	3BB	




DETONATION SENSOR

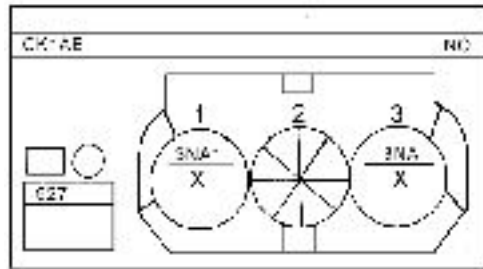
Pos.	Sectioning		Destination
1	0,50	3S	SIGNAL+ DETONATION SENSOR DETONATION SENSOR MASS DETONATIONSENSORSCREENING
2	0,50	3DQ	
4	0,50	TB1	




	ENGINE WIRING	B41 01
---	---------------	-----------

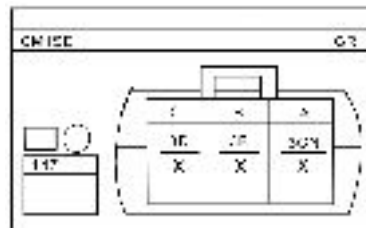
CHOKE SENSOR

Pos.	Sectioning		Destination
1	1,40	3NA1	+ FUEL PUMP > CHOKE SENSOR
3	1,40	3NA	+ IGNITION COIL, CHOKE SENSOR & FUEL PUMP RELAY



ATMOSPHERIC PRESSURE SENSOR

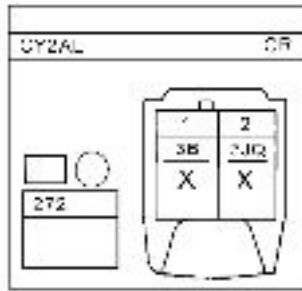
Pos.	Sectioning		Destination
A	0,35	3GN	Atmospheric pressure sensor mass
B	0,35	3F	Atmospheric pressure sensor signal
C	0,35	3D	Atmospheric pressure sensor > Supply +




	ENGINE WIRING	B41 01
---	---------------	-----------

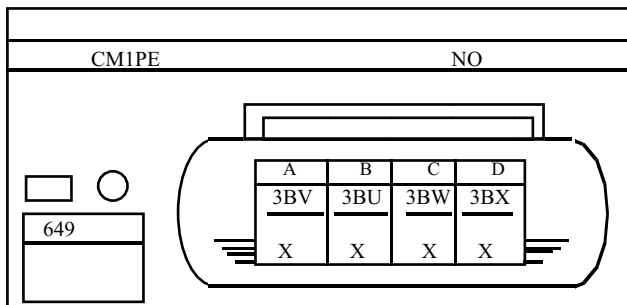
AIR TEMPERATURE SENSOR

Pos.	Sectioning		Destination
1	0,60	3B	SIGNAL +AIRTEMPERATURE SENSOR
2	0,60	3JQ	AIR TEMPERATURE SENSOR MASS




STEP-BY-STEP ENGINE

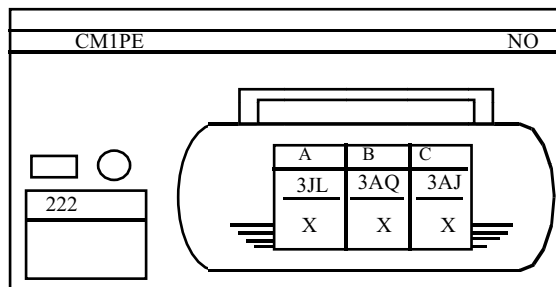
Pos.	Sectioning		Destination
A	0,60	3BV	IDLERUNNNGREGULATORCONTROL2
B	0,60	3BU	IDLERUNNNGREGULATORCONTROL1
C	0,60	3BW	IDLERUNNNGREGULATORCONTROL3
D	0,60	3BX	IDLERUNNNGREGULATORCONTROL4




	ENGINE WIRING	B41 01
---	---------------	-----------

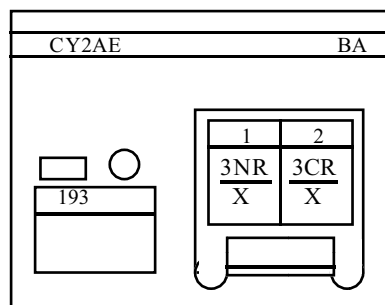
VALVE POTENTIOMETER

Pos.	Sectioning		Destination
A	0,60	3JL	VALVE POTENTIOMETER MASS
B	0,60	3AQ	SIGNAL+ VALVE POTENTIOMETER
C	0,60	3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER




INJECTOR 1

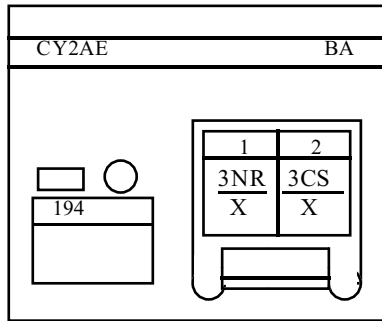
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CR	CONTROL -INJECTOR 1



	ENGINE WIRING	B41 01
---	---------------	-----------

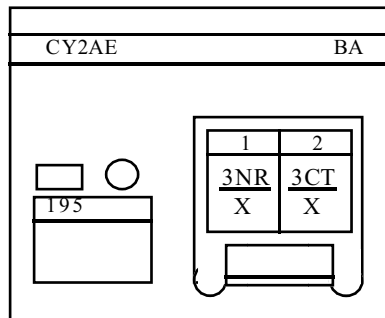
INJECTOR 2

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET CONTROL -INJECTOR 2
2	1,0	3CS	




INJECTOR 3

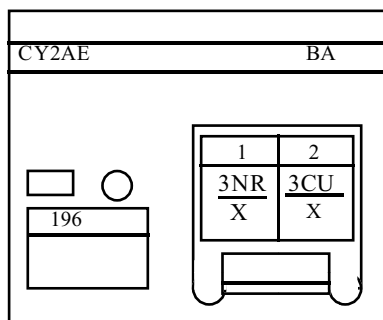
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET CONTROL -INJECTOR 3
2	1,0	3CT	




	ENGINE WIRING	B41 01
---	---------------	-----------

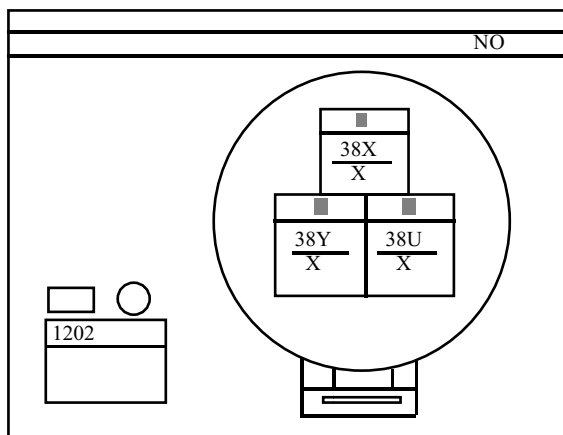
INJECTOR 4

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CU	CONTROL -INJECTOR 4



AIR CONDITIONING SYSTEM PRESSURE SENSOR

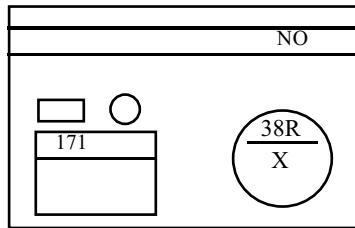
Pos.	Sectioning		Destination
A	0,60	38U	FREON PRESSURE SENSOR MASS
B	0,60	38Y	+FREON PRESSURE SENSOR
C	0,60	38X	FREON PRESSURE SENSOR SIGNAL




	ENGINE WIRING	B41 01
---	---------------	-----------

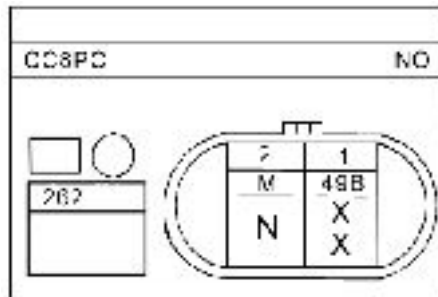
AIR CONDITIONING COMPRESSOR CLUTCH

Pos.	Sectioning		Destination
1	1,0	38R	CONTROL+AIRCONDITIONINGCOMPRESSORCLUTCH




AIR CONDITIONING AND BLOWER COOLING
(FOR AIR CONDITIONING EQUIPPED VEHICLES)

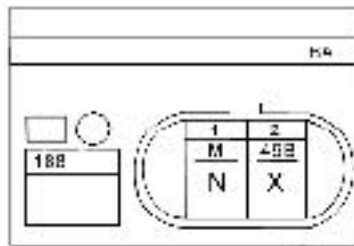
Pos.	Sectioning		Destination
1	2,0	49B	CONTROL+BLOWERCOOLING->BLOWERRESISTANCE
1	5,0	49B	CONTROL+BLOWERCOOLING
2	5,0	M	MASS



	ENGINE WIRING	B41 01
---	---------------	-----------

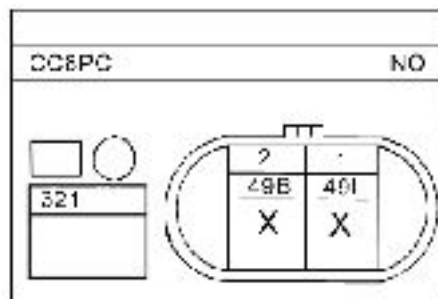
BLOWER COOLING (FOR VEHICLES WITHOUT AIRCONDITIONING SYSTEM)

Pos.	Sectioning		Destination
1	1,5	M	MASS
2	1,5	49B	CONTROL+BLOWER COOLING




BLOWER RESISTANCE (FOR AIRCONDITIONING EQUIPPED VEHICLES)

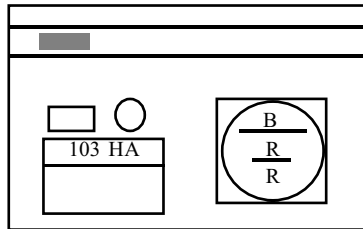
Pos.	Sectioning		Destination
1	2	49L	CONTROL+ BLOWER COOLING RESISTANCE
2	2	49B	CONTROL+BLOWER COOLING



	ENGINE WIRING	B41 01
---	---------------	-----------

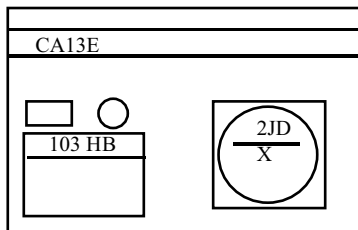
ALTERNATOR

Pos.	Sectioning		Destination
1	5,0	B	+ BATTERY > FUSE INLE F02
1	16,0	B	+ BATTERY > + STARTER




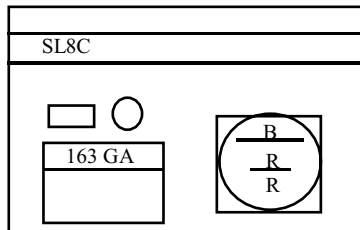
ALTERNATOR EXCITATION

Pos.	Sectioning		Destination
1	0,6	2JD	+ ALTERNATOR EXCITATION > INSTRUMENT PANEL




STARTER

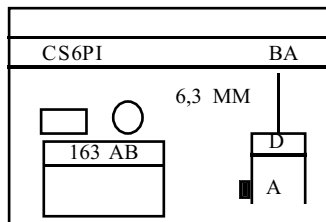
Pos.	Sectioning		Destination
1	160	B	+ BATTERY
1	160	B	+ BATTERY > + ALTERNATOR




	ENGINE WIRING	B41 01
---	---------------	-----------

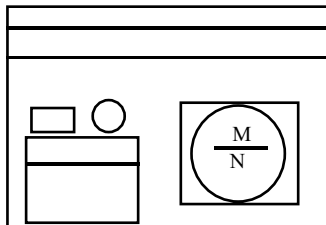
STARTER EXCITATION

Pos.	Sectioning		Destination
1	3,0	D	+ STARTER CONTROL




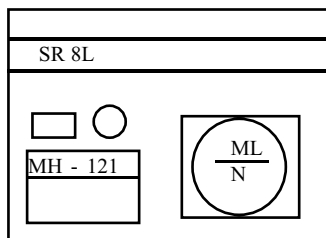
BLOWER MASS

Pos.	Sectioning		Destination
1	5,0	M	MASS




ENGINE ELECTRIC MASS

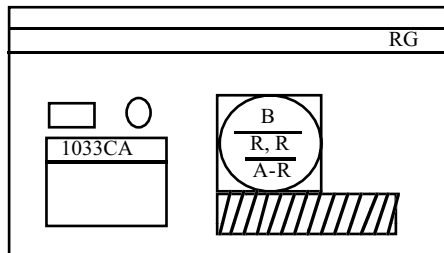
Pos.	Sectioning		Destination
1	4,0	ML	INJECTION COMPUTER MASS (PINS 3, 2&ND 3)



	<p>ENGINE WIRING</p>	<p>B41 01</p>
---	----------------------	-------------------


BATTERY TERMINAL+ (PLUS)

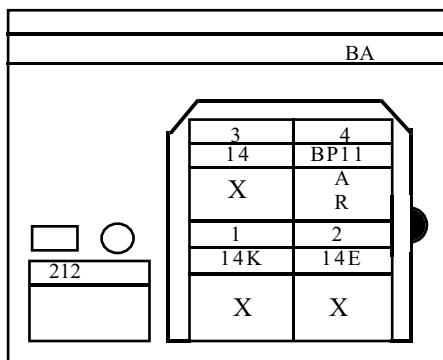
Pos	Sectioning		Destination
1	16,0	B	+ BATTERY > + STARTER
1	5,0	B	+ BATTERY > FUSES INLE F01, F04
1	1,0	B	+ BATTERY > FUSE INLE F06



	FRONT WIRING	B41 01
---	--------------	-----------


WINDSCREEN WIPER MOTOR

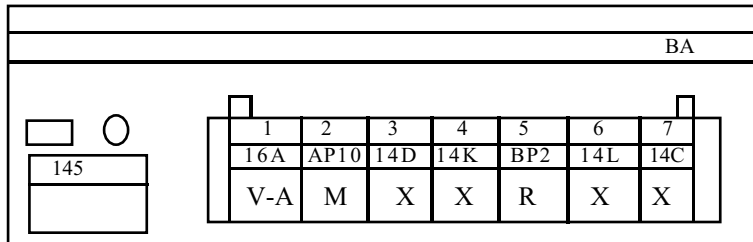
Pos	Sectioning		Destination
1	1,0	14K	CONTROL +WINDSCREEN WIPER LOW SPEED
2	0,75	14E	CONTROL +WINDSCREEN WIPER TIMER
3	0,75	14L	CONTROL +WINDSCREEN WIPER HIGH SPEED
4	0,75	BP11	+ BATTERY PROTECTED WINDSCREEN WIPER STOPPING ON PRESET POSITION
4	0,5	BP11	+ BATTERY PROTECTED STOPPING ON PRESET POSITION> SIREN




	FRONT WIRING	B41 01
---	--------------	-----------

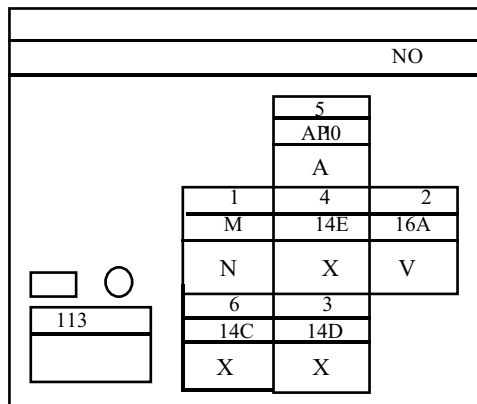
WINDSCREEN WIPER – WASHING SWITCH

Position	Sectioning		Destination
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
2	0,75	AP10	+ AFTER PROTECTED CONTACT, OUTLET FUSE F01
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	1,0	14K	CONTROL + WINDSCREEN WIPER LOW SPEED
5	1,0	BP2	+ AFTER PROTECTED CONTACT, WINDSCREEN WIPER STOPPING ON PRESET POSITION.
6	0,75	14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
7	0,5	14C	CONTROL + WINDSCREEN WIPER STOPPING ON PRESET POSITION



WINDSCREEN WIPER TIMER

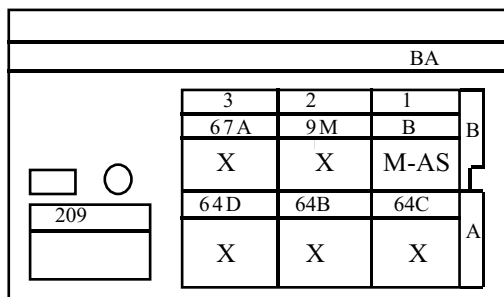
Position	Sectioning		Destination
1	0,5	M	MASS
2	0,5	16A	CONTROL + WINDSCREEN WASHING PUMP
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
5	0,75	AP10	+ AFTER PROTECTED CONTACT, OUTLET FUSE F01
6	0,5	14C	CONTROL + WINDSCREEN WIPER STOPPING ON PRESET POSITION




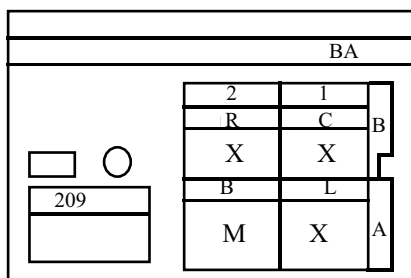
	FRONT WIRING	B41 01
---	--------------	-----------

HORN, TURNING AND LIGHTS SWITCH

Position	Sectioning		Destination
A1	1,0	64C	LEFT TURNING LIGHTS CONTROL
A2	1,0	64B	CONTROL + TURNING RELAY
A3	1,0	64D	RIGHT TURNING LIGHTS CONTROL
B1	1,0	B	+ BATTERY
B2	0,5	9M	SHUNT > FO LIGHTS SWITCH
B3	1,0	67A	CONTROL - ACOUSTIC WARNING




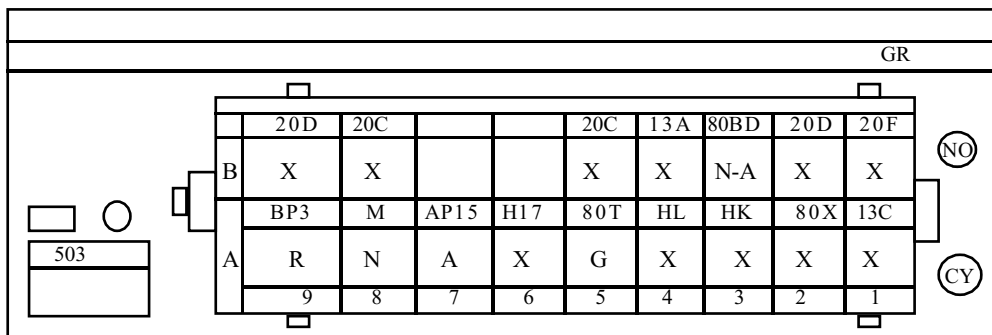
Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > FUSHNLET F05
A2	3,0	B	+ BATTERY
B1	0,75	C	+ LOW BEAM LIGHTS
B2	0,75	R	+ HIGH BEAM LIGHTS



	FRONT WIRING	B41 01
---	--------------	-----------


U.C.E. DECODER

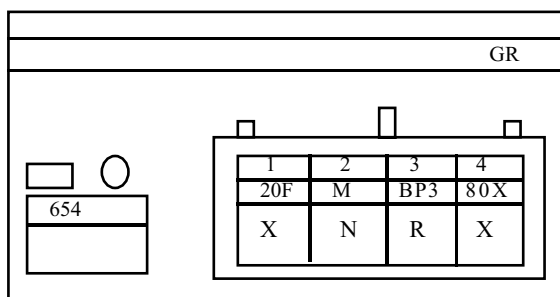
Position	Sectioning		Destination
A1	0,5	13C	CEILING LAMP CONTROL
A2	0,35	80X	ANTI-STARTER RECEPTOR SIGNATRACK (TR)
A3	0,35	HK	DIAGNOSIS SIGNAL LINE K
A4	0,35	HL	DIAGNOSIS SIGNAL -LINE L
A5	0,35	80T	ANTI-STARTING CONTROL-INDICATOR
A6	0,35	H17	INJECTION CODE SIGNAL > ANTI-STARTING
A7	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
A8	0,35	M	MASS
A9	1,0	BP3	+ PROTECTED CONTACT > FUSE OUTLET F15
B1	0,35	20F	RADIO FREQUENCY RECEPTION SIGNAL
B2	0,35	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
B3	0,35	80BD	FLASH RELAY CONTROL
B4	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
B5	0,35	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
B6			
B7			
B8	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > ACTUATORS
B9	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS




	FRONTWIRING	B41 01
---	-------------	-----------

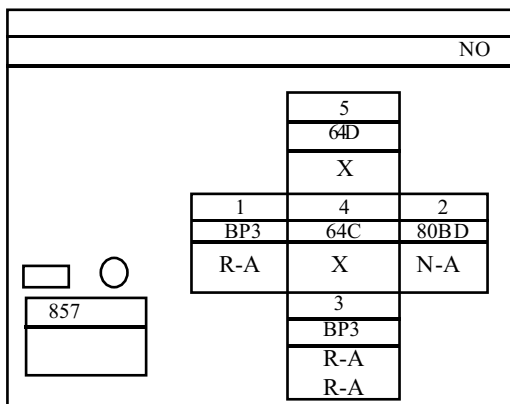
ANTI-STARTING BUSHING

Position	Sectioning		Destination
1	0,35	20F	RADIOFREQUENCY RECEPTION SIGNAL
2	0,35	M	MASS
3	0,35	BP3	PROTECTED BATTERY > FUSE OUTLET F15
4	0,35	80X	ANTI-STARTING RECEIVER SIGNAL TRACK (TR)




FLASH RELAY

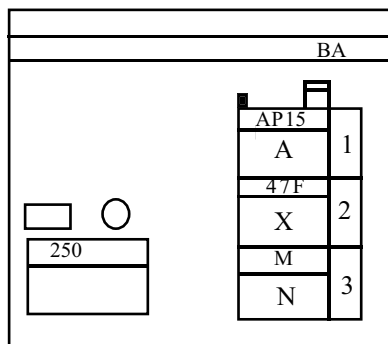
Position	Sectioning		Destination
1	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F15
2	0,35	80BD	FLASH RELAY CONTROL
3	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F15
3	0,5	BP3	+ SHUNT > FUSE OUTLET F15
4	0,5	64C	LEFT TURNING LIGHTS CONTROL
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
* For anti-intrusion system equipped vehicles			
5	0,5	64D	RIGHT TURNING LIGHTS > U.C.E. ANTI-INTRUSION SYSTEM > DOORS ELECTRIC LOCKING UNLOCKING INFO




	FRONT WIRING	B41 01
---	--------------	-----------

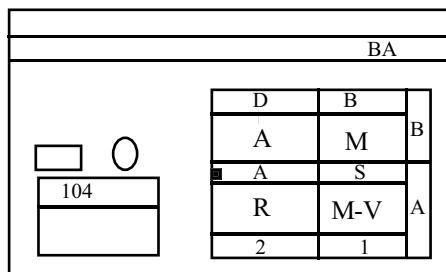
VEHICLE SPEED TRANSDUCER

Position	Sectioning		Destination
1	0,35	AP15	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,35	47F	VEHICLE SPEED SIGNAL
3	0,35	M	MASS




INTRUSION SYSTEM

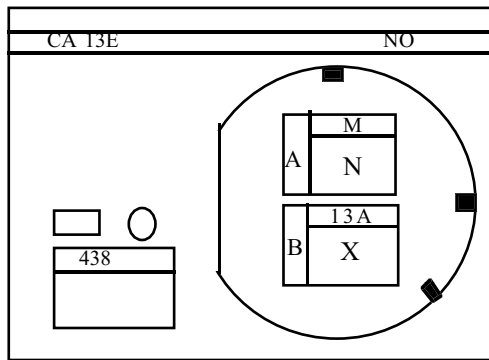
Position	Sectioning		Destination
A1	1,5	S	+ACCESSORIES > COCKPIT FUSES INLET F01
A2	4,0	A	SUPPLY+AFTER CONTACT > COCKPIT FUSES INLET F02, F03 AND ENGINE FUSE INLET F03
B1	4,0	B	+BATTERY
B2	3,0	D	+ STARTER CONTROL




	FRONT WIRING	B41 01
---	--------------	-----------

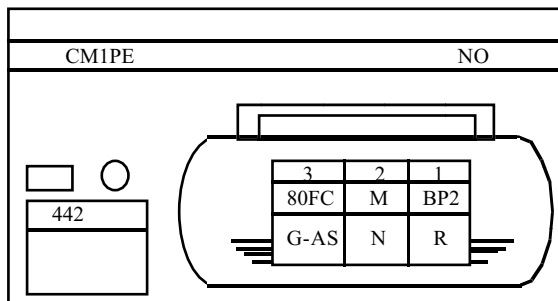
ENGINE HOOD CONTACT

Position	Sectioning		Destination
A	0,35	M	MASS
B	0,35	13A	CONTROL-CEILING LAMPS LIGHTING>ENGINE HOOD CONTACT




SIREN

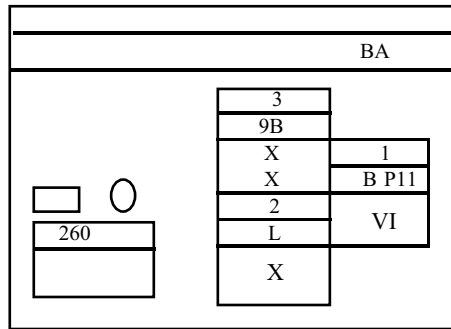
Position	Sectioning		Destination
1	0,5	BP2	+ PROTECTED BATTERY WIPER STOPPING OR RESET POSITION > SIREN
2	0,5	M	MASS
3	0,35	80FC	SIREN CONTROL SUPPLY




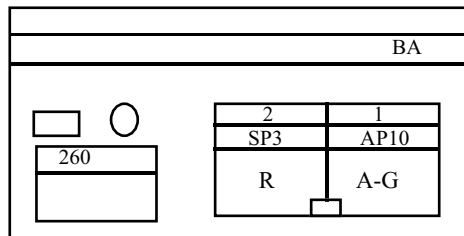
	FRONT WIRING	B41 01
---	--------------	-----------

COCKPIT RELAYS AND FUSE BOX


Position	Sectioning		Destination
1	0,5	9B	CONTROL + REAR FOG LAMP
2	0,5	L	+ PARKING LIGHTS > LIGHTS SWITCH
3	0,5	9DP	+ PROTECTED REAR FOGLIGHTS
3	0,5	9DP	+ PROTECTED REAR FOGLIGHTS > FOGLAMP SWITCH



Position	Sectioning		Destination
1	0,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
2	1,5	SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER

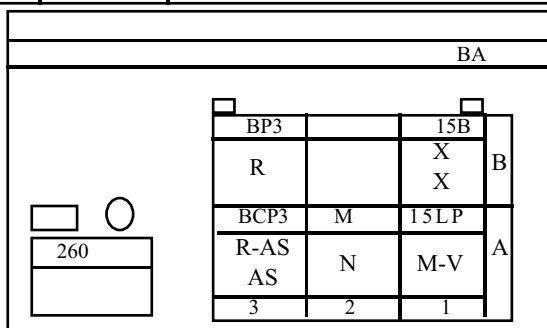



	FRONT WIRING	B41 01
---	--------------	-----------

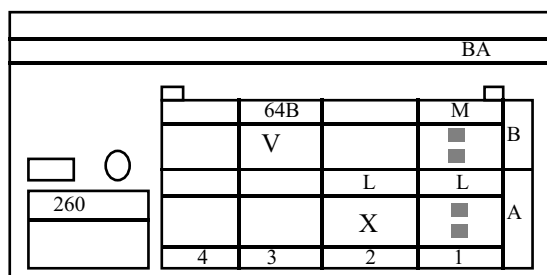
Position	Sectioning		Destination
A1	0,35	15LP	CONTROL+PROTECTED REAR WINDOW DEFROSTING
A2	0,5	M	MASS
A3	0,5	BCP3	+ CEILING PROTECTED BATTERY
A3	1,5	BCP3	+ CEILING PROTECTED BATTERY > FUSE OUTLET F06
B1	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B1	0,35	15A	REAR WINDOW DEFROSTING INDICATOR - CONTROL
B2			
B3	1,0	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07

* For Anti-intrusion equipped vehicles


B3	1,0	BP3	+ WINDSCREEN WIPER STOPPING PRESET POSITION PROTECTED BATTERY > SIREN
----	-----	-----	---

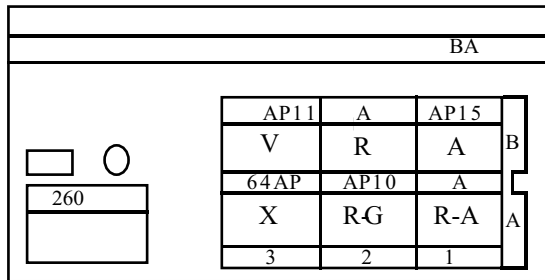


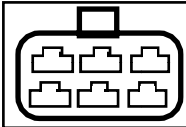
Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > LIGHTS SWITCH
A1	0,50	L	+ PARKING LIGHTS > FOG LAMPS RELAY
A2	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
A3			
A4			
B1	0,5	M	MASS
B1	0,5	M	MASS > FOG LAMPS RELAY, CLIMATE CONTROL BLOWER RELAY, REAR WINDOW DEFROSTING TIMER
B2			
B3	1,0	64B	CONTROL + TURNING RELAY





Position	Sectioning		Destination
A1	1,5	A	SUPPLY+ D.C. > FUSE INTLEF03
A2	1,5	AP10	+ AFTER PROTECTED CONTACT> FUSE OUTET F01
A3	1,0	64AP	+PROTECTEDTURNINGLIGHTS,FUSEINLETF04
B1	1,5	AP15	+AFTER PROTECTED CONTACT > FUSE OUTLE F03
B2	0,5	A	SUPPLY + D.C. > COCKPIT FUSE INTLEF02
B3	0,5	AP11	+REVERSEDRIVINGLIGHTS AFTERPROTECTED CONTACT

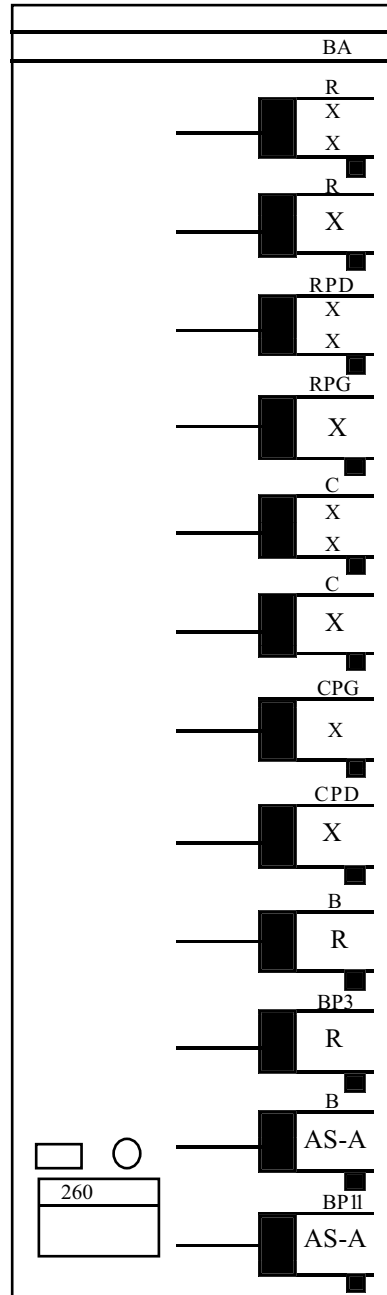





FRONT WIRING

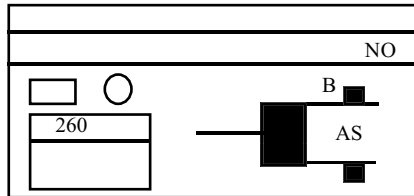
B41
01

Position	Sectioning		Destination
F11	0,75	R	+ HIGH BEAM LIGHTS > FUSE INLET F11
	0,75	R	HIGH BEAM LGHTS > FUSE NLET F12
F12	0,75	R	HIGH BEAM LIGHTS > FUSE INLET F12
F12	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12
	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F11	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11
F13	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F13
	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F14	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F13	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13
F14	0,75	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14
F15	1,5	B	+ BATTERY
F15	1,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F15
F16	0,75	B	+ BATTERY
F16	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16

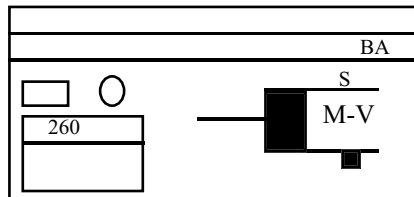





Position	Sectioning		Destination
	3,0	B	+ BATTERY > FUSES INLET F06, F07 F08, F09

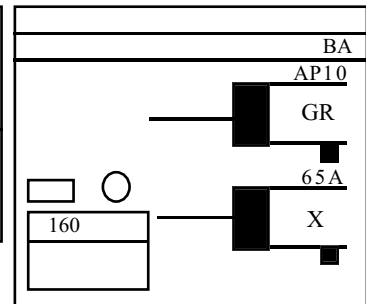


Position	Sectioning		Destination
	1,5	S	+ ACCESSORIES > FUSE INLET F01 COCKPIT




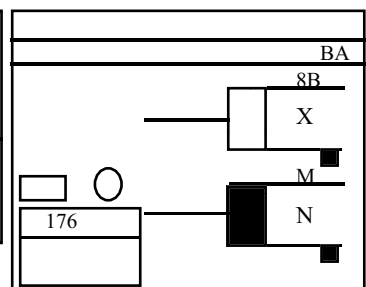
STOP CONTACT

Position	Sectioning		Destination
1	1,0	AB0	+ PROTECT D.C > FUSE OUTLET F01
2	1,0	65A	CONTROL + STOP LIGHTS




RIGHT FOG LAMP

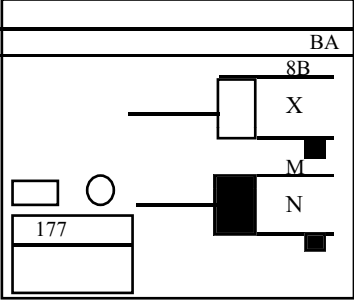
Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELAY
2	0,75	M	MASS




	FRONT WIRING	B41 01
---	--------------	-----------

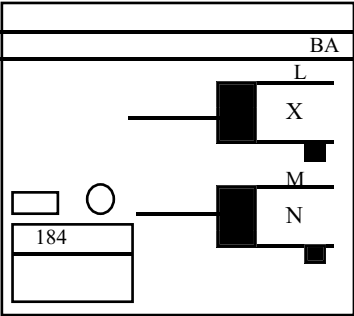
LEFT FRONT FOGLAMP

Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELXA
2	0,75	M	MASS




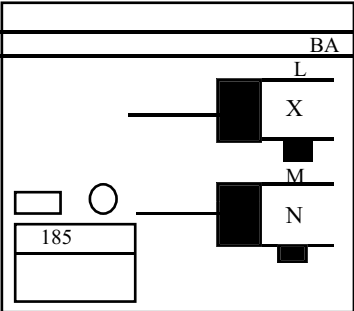
RIGHT FRONT PARKING LAMP

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




LEFT FRONT PARKING LIGHT

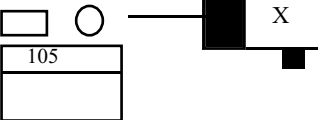
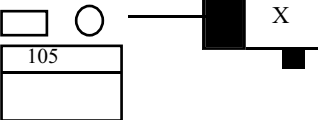
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




	FRONT WIRING	B41 01
---	--------------	-----------

ACOUSTIC WARNING

Position	Sectioning		Destination
1	1,0	67A	CONTROL +ACOUSTIC WARNING


BA	
67A	
	
105	

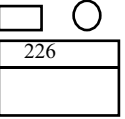
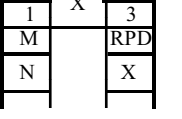
WINDSCREEN WIPER PUMP

Position	Sectioning		Destination
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
2	0,35	M	MASS


BA	
M	
N	
16A	
X	
221	

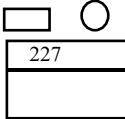
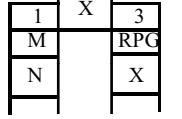
RIGHT HEADLIGHT

Position	Sectioning		Destination
1	1,0	M	MASS
2	0,75	CPD	+ PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14
3	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12

CD8F	
BA	
2	
CPD	
X	
3	
RPD	
X	
226	
	


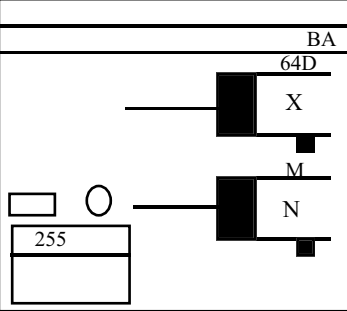
LEFT HEADLIGHT

Position	Sectioning		Destination
1	1,0	M	MASS
2	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13
3	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11


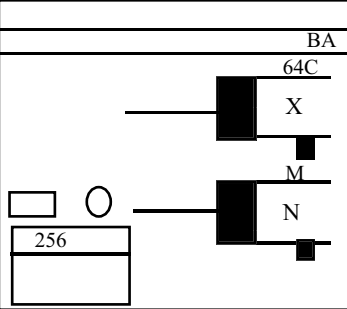
CD8F	
BA	
2	
CPG	
X	
3	
RPG	
X	
227	
	

	FRONT WIRING	B41 01
---	--------------	-----------


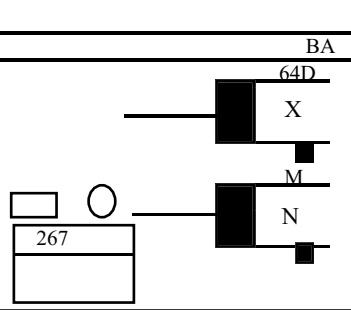
RIGHT FRONT TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64D	RIGHTTURNGLIGHTSCONTROL	
2	0,5	M	MASS	

LEFT FRONT TURNING LIGHT


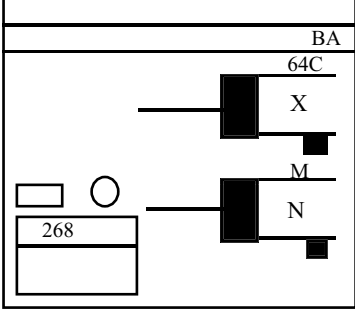
Position	Sectioning		Destination	
1	0,5	64C	LEFTTURNINGLIGHTSCONTROL	
2	0,5	M	MASS	

RIGHT FRONT SIDE TURNING LIGHT


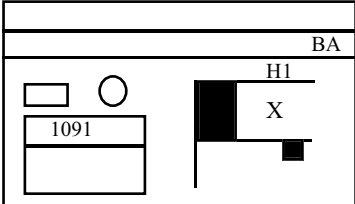
Position	Sectioning		Destination	
1	0,5	64D	RIGHTTURNGLIGHTSCONTROL	
2	0,5	M	MASS	

	FRONT WIRING	B41 01
---	--------------	-----------


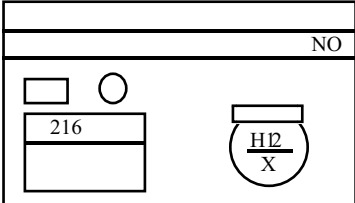
LEFT FRONT SIDE TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	


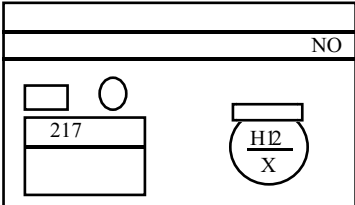
I.C.P. BRAKING SYSTEM

Position	Sectioning		Destination	
1	0,35	H1	CONTROL - ICP, HAND BRAKE INDICATOR	

RIGHT FRONT BRAKE PADS


Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	

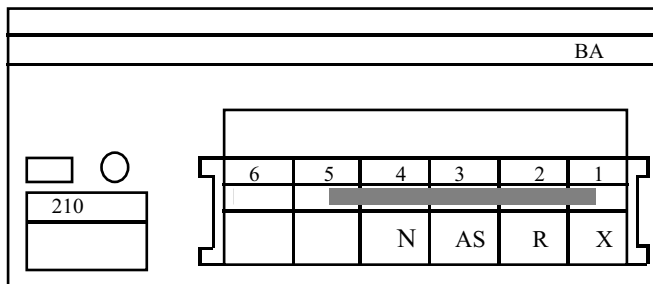
LEFT FRONT BRAKE PADS

Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	


	DASHBOARD WIRING	B41 01
---	------------------	-----------

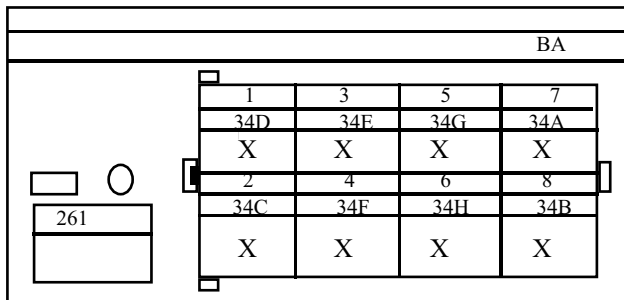
ELECTRONIC CLOCK

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,35	AP10	+ AFTER PROTECTED CONTACT . FUSE OUTLET F01
3	0,35	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	M	MASS
5			
6			




RADIO

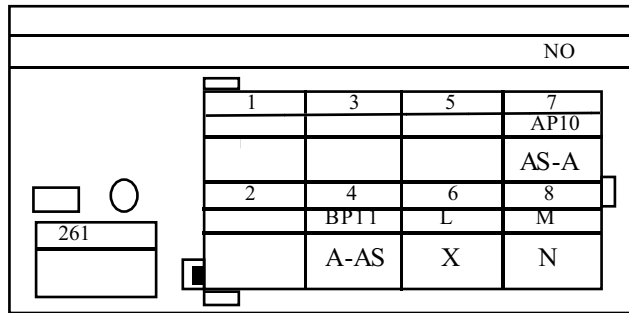
Position	Sectioning		Destination
1	0,35	34D	SIGNAL+ RIGHT REAR SPEAKER
2	0,35	34C	SIGNAL- RIGHT REAR SPEAKER
3	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
4	0,35	34F	SIGNAL- RIGHT FRONT SPEAKER
5	0,35	34G	SIGNAL+ LEFT FRONT SPEAKER
6	0,35	34H	SIGNAL- LEFT FRONT SPEAKER
7	0,35	34A	SIGNAL+ LEFT REAR SPEAKER
8	0,35	34B	SIGNAL- LEFT REAR SPEAKER




	DASHBOARD WIRING	B41 01
---	------------------	-----------

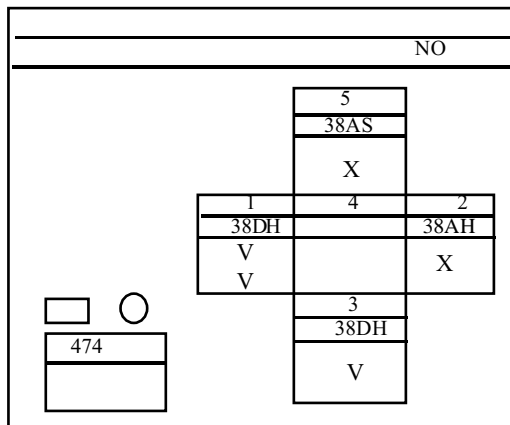
RADIO

Position	Sectioning		Destination
4	0,75	BP11	+PROTECTED BATTERY > COCKPIT FUSE BOX
6	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
7	0,75	AP10	+AFTER PROTECTED CONTACT > FUSE OUTLET F01
8	0,5	M	MASS




AIR CONDITIONING RELAY(ON BOARD)

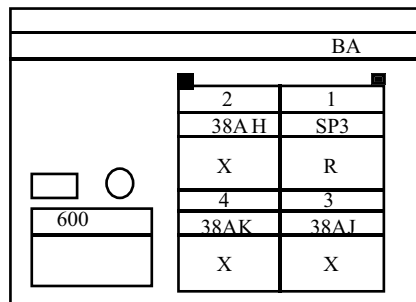
Position	Sectioning		Destination
1	0,5	38DH	CONTROL+AIRCONDITIONING
1	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
2	0,5	38AH	CONTROL+ CLIMATE CONTROL BLOWER, SPEED
3	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
5	0,35	38AS	AIRCONDITIONING COMPRESSOR CONNECTION SIGNAL




	DASHBOARD WIRING	B41 01
---	------------------	-----------

CLIMATE CONTROL BLOWER

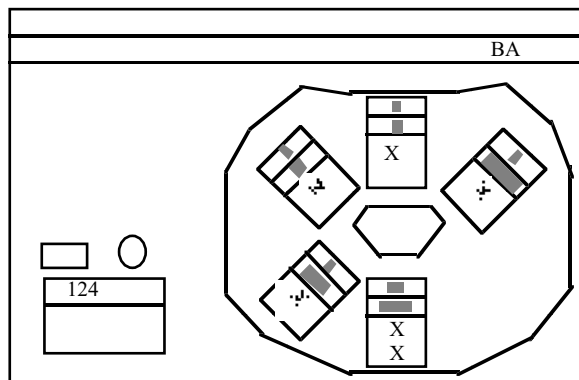
Position	Sectioning		Destination
1	1,5	SP3	ACCESSORIES PROTECTED CLIMATE CONTROL BLOWER
2	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED 1
3	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED 2
4	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED 3



BLOWER SWITCH


Position	Sectioning		Destination
1	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED 1
1*	0,5	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED 1 + AIR CONDITIONING SYSTEM RELAY COIL (ONBOARD)
2	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER, SPEED 2
3	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER, SPEED 3
4	0,35	L	+ PARKING LIGHTS > FUSE IN LET F05
5	1,5	M	MASS

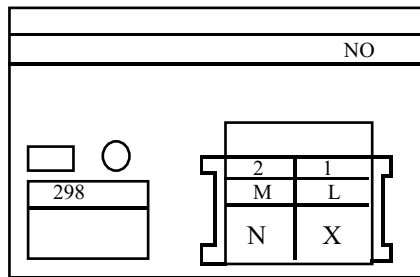
1* - for air conditioning system equipped vehicles




	DASHBOARD WIRING	B41 01
---	------------------	-----------

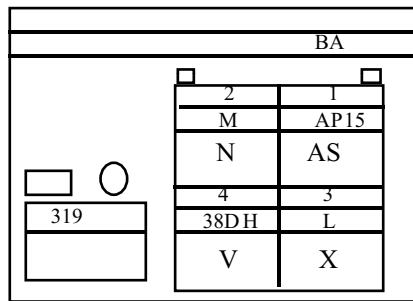
CLIMATE CONTROL LIGHTING

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




AIR CONDITIONING STARTING BUTTON

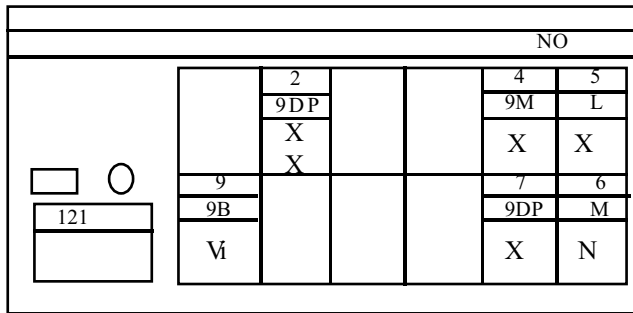
Position	Sectioning		Destination
1	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,5	M	MASS
3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,5	38DH	CONTROL+AIR CONDITIONING




	<h3>DASHBOARD WIRING</h3>	B41 01
---	---------------------------	-----------

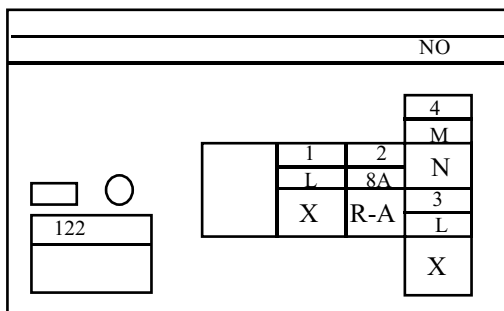
FOGLIGHT SWITCH

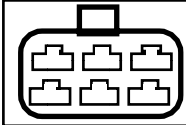
Position	Sectioning		Destination
2	0,5	9DP	+PROTECTED REAR FOGLIGHTS
	0,5	9DP	+PROTECTED REAR FOGLIGHTS > FOGLIGHT SWITCH
4	0,5	9M	SHUNT > LIGHTS SWITCH
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,5	9DP	SHUNT > + PROTECTED REAR FOGLIGHTS
9	0,5	9B	CONTROL + REAR FOGLIGHT



FOGLAMP SWITCH

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	8A	CONTROL + FOGLAMPS RELAY
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS



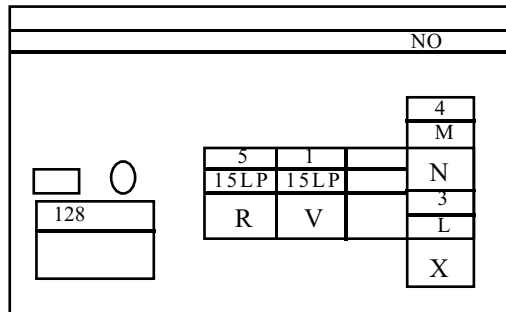


DASHBOARD WIRING

B41
01


REAR WINDOW DEFROSTING SWITCH (Pulse type)

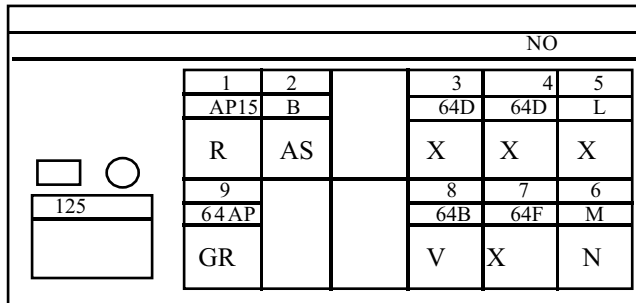
Position	Sectioning		Destination
1	0,5	15LP	CONTROL+PROTECT REAR WINDOW DEFROSTING
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS
5	0,5	15LP	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03




	DASHBOARD WIRING	B41 01
---	------------------	-----------

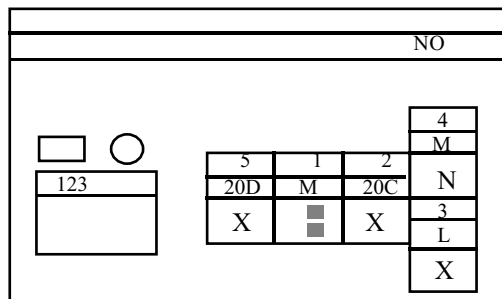
HAZARD SWITCH

Position	Sectioning		Destination
1	1,0	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	1,0	B	+ BATTERY
3	0,5	64C	LEFT TURNING LIGHTS CONTROL
4	0,5	64D	RIGHT TURNING LIGHTS CONTROL
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,35	64F	CONTROL + HAZARD INDICATOR
8	1,0	64B	CONTROL + TURNING RELAY
9	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE OUTLET F04




DOORS LOCKING SWITCH

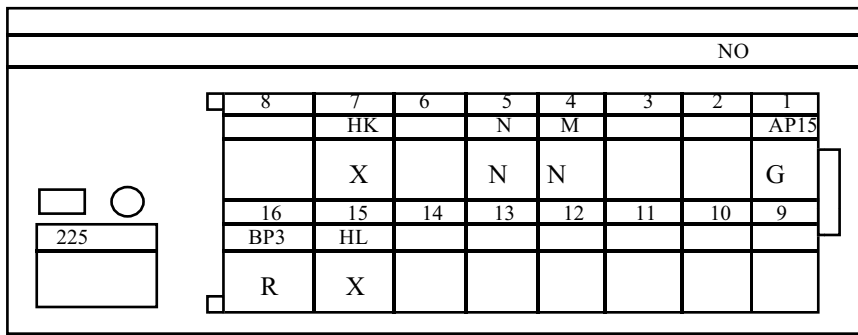
Position	Sectioning		Destination
5	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
1	0,5	M	MASS
1	0,35	M	SHUNT > MASS
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
3	0,5	L	PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	SHUNT > MASS




	DASHBOARD WIRING	B41 01
---	------------------	-----------

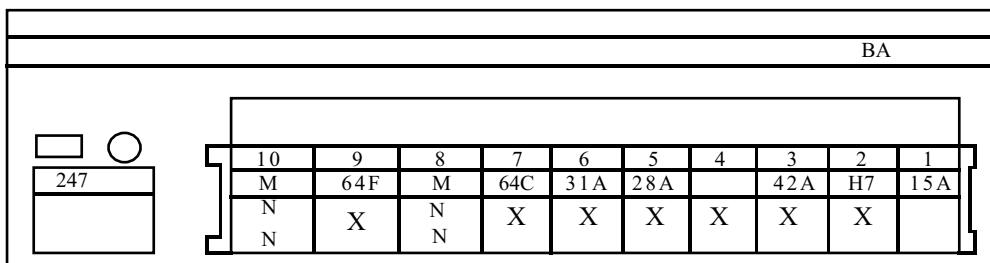
DIAGNOSIS SOCKET

Position	Sectioning		Destination
1	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
4	0,35	M	MASS
5	0,35	N	ELECTRON MASS
7	0,35	HK	DIAGNOSIS SIGNAL- LINE K
15	0,35	HL	DIAGNOSIS SIGNAL- LINE L
16	0,35	BP3	+ PROTECTED BATTERY > FUSE OUTLET F15




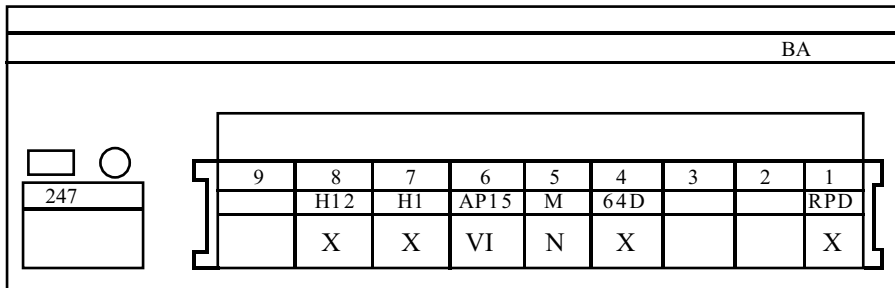
INSTRUMENT PANEL


Position	Sectioning		Destination
1			
2	0,35	15A	REAR WINDOW DEFROSTING INDICATOR- CONTROL
3	0,35	H7	RPM- METER SIGNAL > INJECTION COMPUTER
4	0,35	42A	SIGNAL + WATER TEMPERATURE
5	0,35	28A	CONTROL- OIL PRESSURE INDICATOR
6	0,35	31A	CONTROL - WATER PRESSURE INDICATOR
7	0,35	64C	LEFT TURNING LIGHTS CONTROL
8	0,35	M	MASS
8	0,35	M	SHUNT > MASS
9	0,35	64F	CONTROL + HAZARD INDICATOR
10	0,5	M	SHUNT > MASS
10	0,5	M	SHUNT > MASS

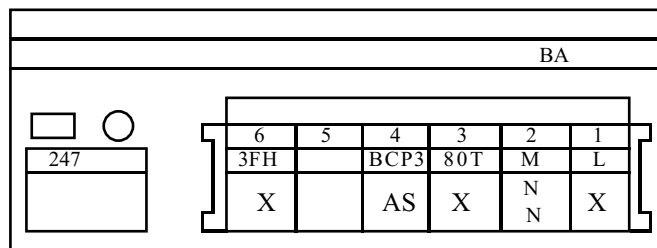


	DASHBOARD WIRING	B41 01
---	------------------	-----------


Position	Sectioning		Destination
1	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
2			
3			
4	0,35	64D	RIGHT TURN LIGHTS CONTROL
5	0,35	M	SHUNT > MASS
6	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
7	0,35	HI	ICP HANDBRAKE INDICATOR - CONTROL
8	0,35	HI2	BRAKE PADS WEAR INDICATOR - CONTROL
9			

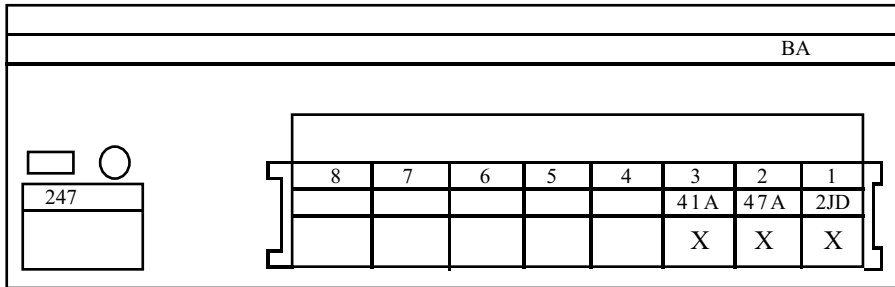


Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,35	M	SHUNT > MASS
2	0,5	M	SHUNT > MASS
3	0,35	80T	ANTI-STARTING INDICATOR - CONTROL
4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
5			
6	0,35	3FH	INJECTION FAILURE INDICATOR - CONTROL




	DASHBOARD WIRING	B41 01
---	------------------	-----------

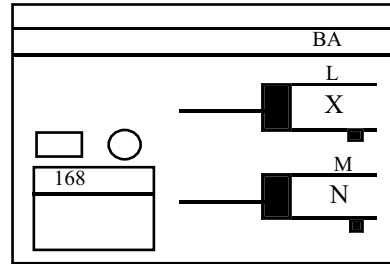
Position	Sectioning		Destination
1	0.6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL
2	0.35	47A	-FUELLEVEL WARNING SIGNAL
3	0,35	41A	SIGNAL+FUELLEVEL TRANSMITTER
4			
5			
6			
7			
8			






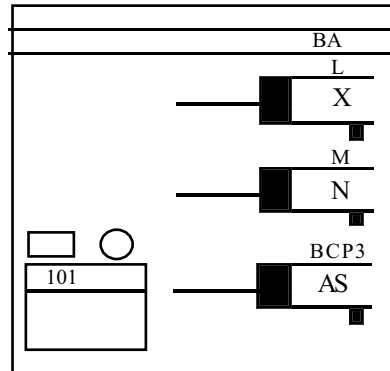
DOCUMENTS COMPARTMENT LIGHTING LAMP

Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS > FUSE OUTLET F05
2	0,5	M	MASS




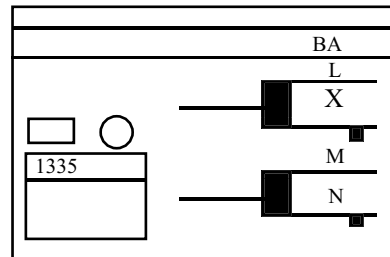
ELECTRIC LIGHTER

Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS > FUSE OUTLET F05
2	0,5	M	MASS
3	0,75	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06



FRONT ASHTRAY LIGHTING

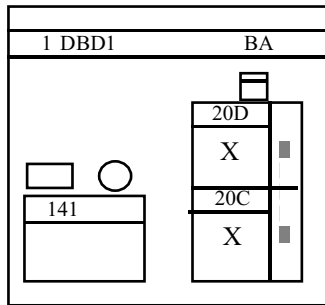
Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS > FUSE OUTLET F05
2	0,5	M	MASS



	DOORS WIRING	B41 01
---	--------------	-----------

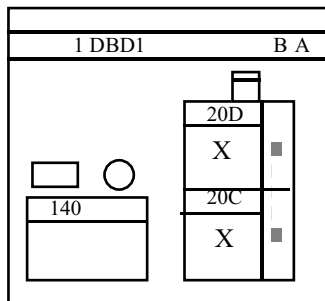
RIGHT FRONT DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS



LEFT FRONT DOOR ACTUATOR

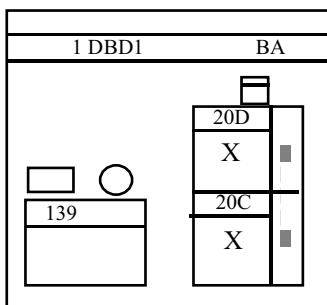
Position	Sectioning		Destination
1	0.	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS





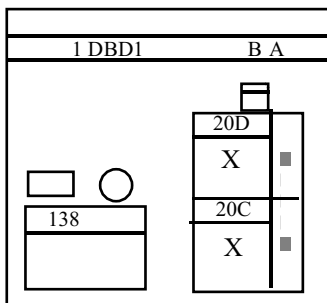
LEFT REAR DOORACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




RIGHT REAR DOORACTUATOR

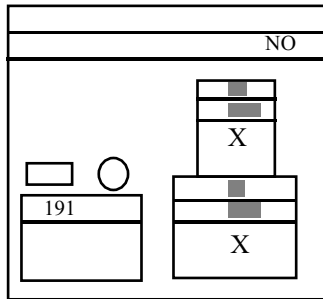
Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




	DOORS WIRING	B41 01
---	--------------	-----------

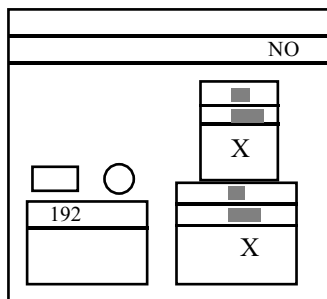
RIGHT FRONT DOOR SPEAKER

Position	Sectioning		Destination
1	0.35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
2	0.35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)




LEFT FRONT DOOR SPEAKER

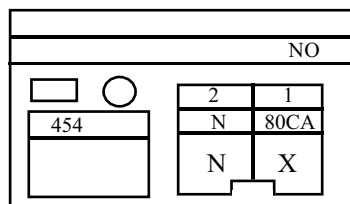
Position	Sectioning		Destination
1	0.35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
2	0.35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)




	REAR WIRING	B41 01
---	--------------------	-------------------

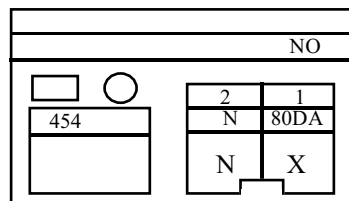
RIGHT VOLUME SENSOR (RX)

Position	Sectioning		Destination
1	0.35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0.35	N	ELECTRONCMASS




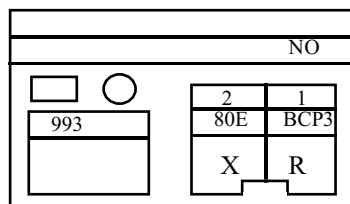
LEFT VOLUME SENSOR (TX)

Position	Sectioning		Destination
1	0.35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
2	0.35	N	ELECTRONCMASS



ANTI INTRUSION INDICATOR LED

Position	Sectioning		Destination
1	0.35	BCP3	+ CEILING LAMPS PROTECTED BATTERY OUTLET FUSE F06
2	0.35	80E	ANTI-INTRUSION INDICATOR CONTROL




ELECTRICAL DIAGRAMS



CONNECTORS AND CONNECTIONS WIRES FUNCTION

89A

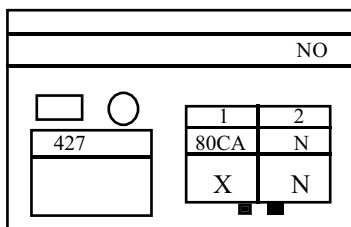
	<h3 style="margin: 0;">REAR WIRING</h3>	B41 01
---	---	-----------

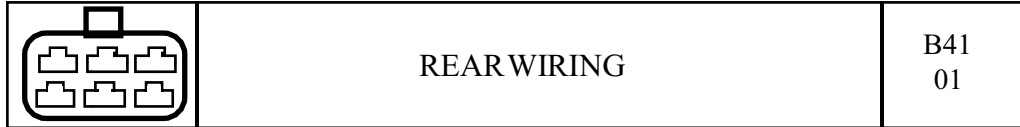
U.C.E. ANTI-INTRUSION

Position	Sectioning		Destination
1	0,5	64D	RIGHT TURNING LIGHTS > UCE ANTI-INTRUSION > DOORS LOCKING/UNLOCKING INFO
2	0,35	M	MASS
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
6	0,5	BCP3	+ CEILING LAMP PROTECTED BATTERY > FUSE OUTLET F06
6	0,35	BCP3	+ CEILING LAMP PROTECTED BATTERY
7	0,5	64C	LEFT TURNING LIGHTS CONTROL
8	0,35	80E	ANTI-INTRUSION INDICATOR CONTROL
9	0,35	13A	CEILING LAMP LIGHTING - CONTROL > CONTACTS
12	0,35	AP15	+ PLUS AFTER PROTECTED CONTACT > FUSE OUTLET F03
14	0,35	20D	CONTROL + DOORS LOCKING ACTUATORS
15	0,35	20C	CONTROL + DOORS UNLOCKING ACTUATORS
18	0,35	80FC	SIREN CONTROL SUPPLY
23	0,35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
24	0,35	N	ELECTRON MASS
24	0,35	N	MASS


BA											
  427											
24	23	22	21	20	19	18	17	16	15	14	13
N	80DA					80EC			20C	20D	
N	X					GR-VI			X	X	
N											
12	11	10	9	8	7	6	5	4	3	2	1
AP15			13A	M	64C	BCP3	64D			M	64D
G			X	X	X	R R	R			V-A	X

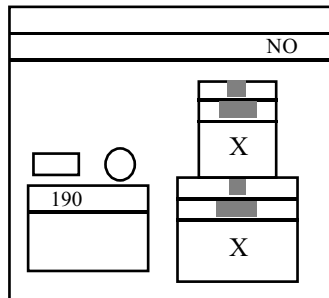
Position	Sectioning		Destination
1	0,35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0,35	N	ELECTRON MASS






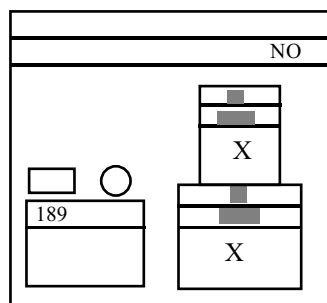
LEFT REAR SPEAKER

Position	Sectioning		Destination
1	0.35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
2	0.35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)




RIGHT REAR SPEAKER

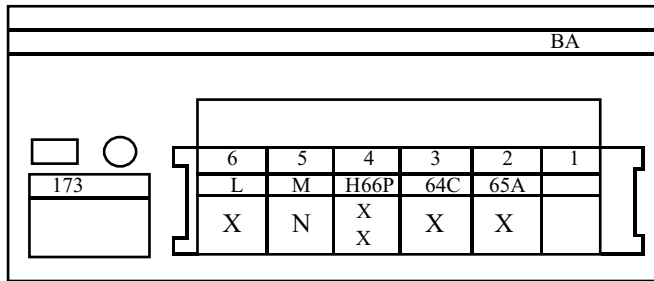
Position	Sectioning		Destination
1	0.35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
2	0.35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)




	REAR WIRING	B41 01
---	-------------	-----------

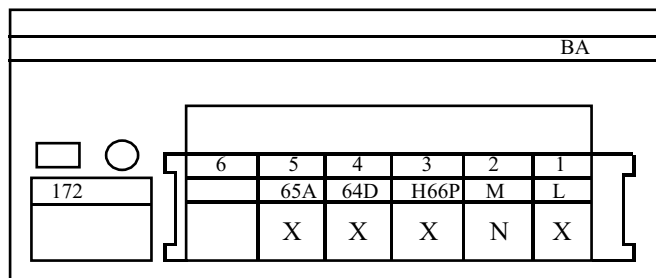
LEFTREARLAMP

Position	Sectioning		Destination
1			
2	0,5	65A	CONTROL +STOP LIGHTS
3	0,5	64C	LEFTTURNINGLIGHTSCONTROL
4	0,5	H66P	CONTROL+REVERSEDIVINGLIGHTS>FUSEOUTLET F02
4	0,5	H66P	CONTROL+ REVERSEDIVING LIGHTS>RIGHTREARLAMP
5	0,5	M	MASS
6	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05




RIGHTREARLAMP

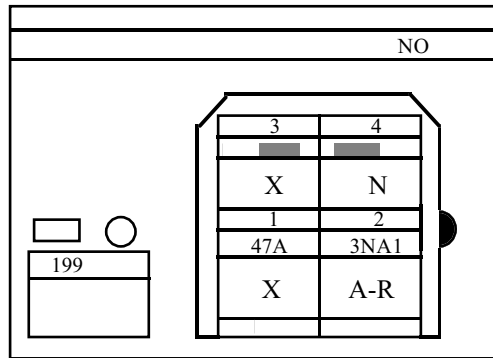
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05
2	0,5	M	MASS
3	0,5	H66P	CONTROL+ REVERSE DRIVINGLIGHTS> FUSE OUTLET F02
4	0,5	64D	CONTROL +REVERSE DRIVING LIGHTS>RIGHT TURNING LAMP
5	0,5	65A	CONTROL +STOP LIGHTS
6			




	REAR WIRING	B41 01
---	--------------------	-------------------

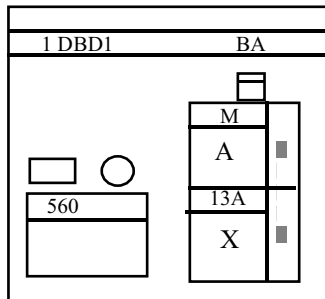
FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP

Position	Sectioning		Destination
1	0,35	47A	- FUEL MINIMAL LEVEL WARNING
2	1,5	3NA1	+ FUEL PUMP > CHOK SENSOR
3	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
4	1,5	M	MASS



HATCHBACK CONTACT

Position	Sectioning		Destination
1	0,35	13A	CEILING LIGHTING CONTROL > HATCHBACK CONTACT
2	0,35	M	MASS




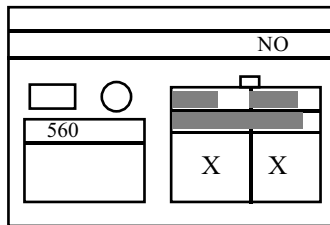
ELECTRICAL DIAGRAMS

CONNECTORS AND CONNECTIONS WIRES FUNCTION

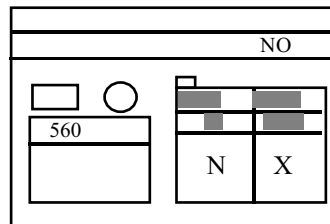
89A

	<p>REAR WIRING</p>	<p>B41 01</p>
---	--------------------	-------------------

Position	Sectioning		Destination
3	0,5	L	+ PARKING LIGHTS> OUTLET FUSE F6 CONTROL+REAR WINDSCREEN DEFROSTING
4	2,0	15B	

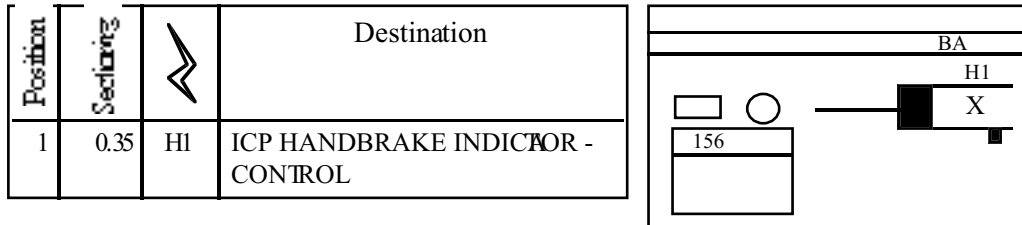


Position	Sectioning		Destination
5	0,5	65A	CONTROL+ STOP LIGHTS MASS
6	0,5	M	

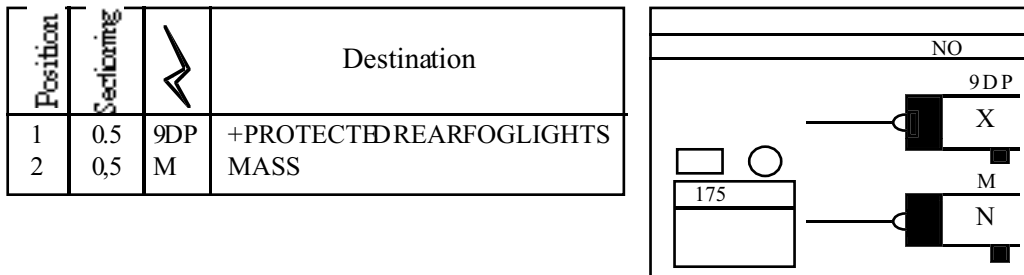




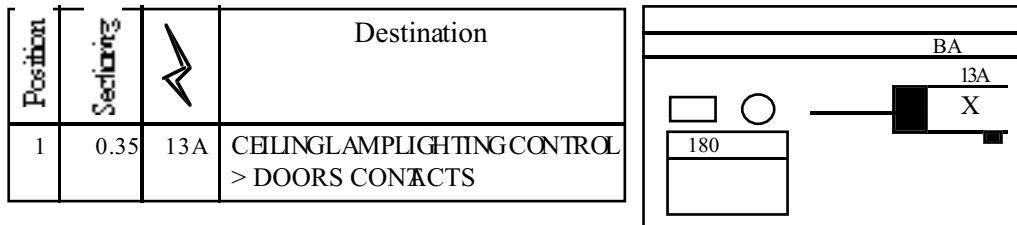
HANDBRAKE CONTACT



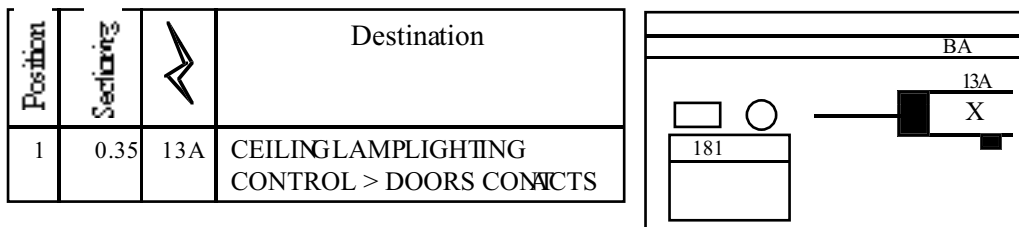
LEFTFOG LIGHT



LEFT FRONT DOOR CONTACT




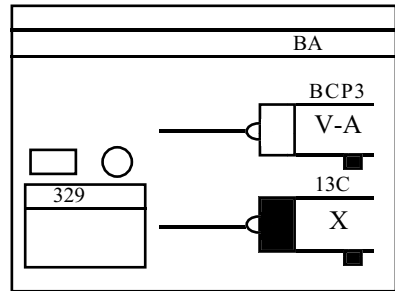
RIGHT FRONT DOOR CONTACT




	<h3 style="margin: 0;">HATCHBACK WIRING</h3>	B41 01
---	--	-----------

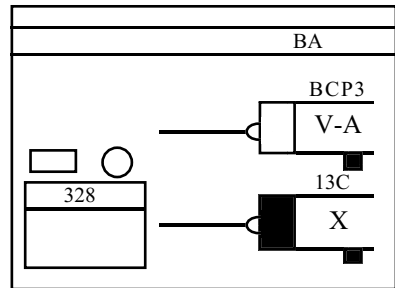
RIGHT FRONT CEILING LAMP

Position	Sectioning		Destination
1	0,35	BCP3	+ BATTERY PROTECTED CEILING LAMPS
2	0,5	13C	CONTROL – CEILING LAMPS




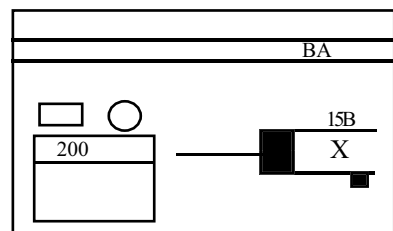
LEFT FRONT CEILING LAMP

Position	Sectioning		Destination
1	0,35	BCP3	+ BATTERY PROTECTED CEILING LAMPS
2	0,5	13C	CONTROL – CEILING LAMPS



REAR WINDOW DEFROSTING

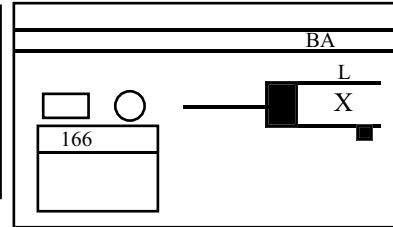
Position	Sectioning		Destination
1	2,0	15B	CONTROL + HATCHBACK REAR WINDOW DEFROSTING




	HATCHBACK WIRING	B41 01
---	------------------	-----------

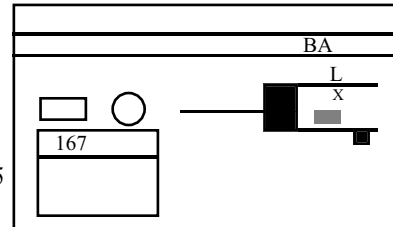
RIGHT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	PARKING LIGHTS > FUSE OUTLET F05




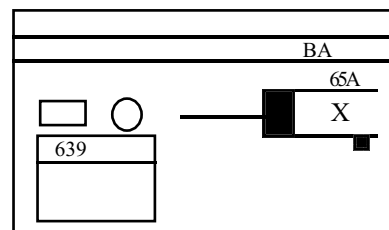
LEFT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	+ PARKING LIGHTS > FUSE OUTLET F05
1	0,35	L	+ PARKING LIGHTS FUSE OUTLET F05




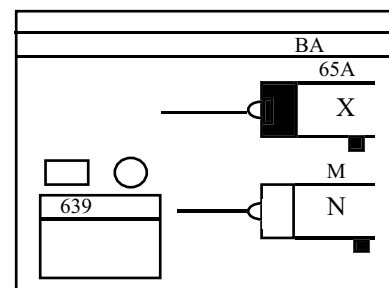
STOP LAMP S3 (ON ROOF)

Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS



STOP LAMP S3 (INAILERON)


Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS
2	0,5	M	MASS



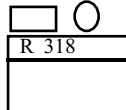
	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

DASHBOARD/FRONT WIRING CONNECTION

FRONT WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
A2	1,5	BCP3	FUSE BOX > FUSE OUTLET F06(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A4			
A5	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE OUTLET F04
A6	1,0	64B	CONTROL + TURNING RELAY
A7	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
B1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B2	0,5	64C	LEFT TURNING LIGHTS CONTROL
B3	0,5	64D	RIGHT TURNING LIGHTS CONTROL
B4	0,5	9M	SHUNT > LIGHTS SWITCH
B5	0,5	L	+ PARKING LIGHTS - FUSE OUTLET F05
B6	1,5	SP3	+ PROTECTED ACCESSORIES
B7	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
C1	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
C2	0,75	BP11	PROTECTED BATTERY > FUSE OUTLET F16
C3	0,35	15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
C4	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY
C7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
D1	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D2	0,35	BP3	+ PROTECTED BATTERY > FUSE OUTLET F15
D3	0,35	20C	CONTROL + DOOR SELECTRIC UNLOCKING > UCE DECODER
D4	0,35	20D	CONTROL + DOOR SELECTRIC LOCKING > UCE DECODER
D5	0,5	9B	CONTROL + REAR FOG AMP
D6	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)

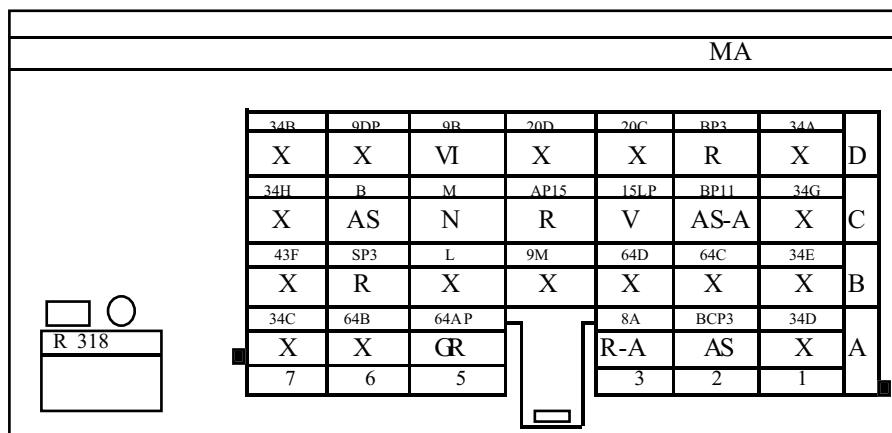
MA							
D	34A	CPD	20C	20D	9B	9DP	34B
C	34G	BP11	15LP	AP15	M	B	34H
B	34E	64C	64D	9M	L	SP3	34F
A	34D	BCP3	8A		64AP	64B	34C
	X	AS	A		GR	X	X
	1	2	3		5	6	7



	CONNECTIONS	B41 01
---	-------------	-----------

DASHBOARD WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL+ RIGHTREAR SPEAKER
A2	1,0	BCP3	SUPPLY(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A5	1,0	64AP	+PROTECTEDTURNINGLIGHTS
A6	1,0	64B	CONTROL+ TURNINGRELAY
A7	0,35	34C	SIGNAL- RIGHTREAR SPEAKER
B1	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
B2	0,5	64C	LEFTTURNINGLIGHTSCONTROL
B3	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
B4	0,5	9M	SHUNT > FOG LAMP SWITCH
B5	0,5	L	+PARKINGLIGHTS
B6	1,5	SP3	+ PROTECTED ACCESORES> CLIMATE CONTROIBLOWER
B7	0,35	34F	SIGNAL -RIGHTFRONT SPEAKER
C1	0,35	34G	SIGNAL +LEFTFRONT SPEAKER
C2	0,75	BP11	+ PROTECTED BATTERY> RADIO
C3	0,5	15LP	CONTROL+PROTECTED REARWINDOWDEFROSTING
C4	1,5	AP15	+AFTER PROTECTED CONTACT
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY > HAZARD SWITCH
C7	0,35	34H	SIGNAL -LEFTFRONT SPEAKER
D1	0,35	34A	SIGNAL +LEFTREAR SPEAKER
D2	0,35	BP3	+ PROTECTEDBATTERY>DIAGNOSTIC SOCKET
D3	0,5	20C	CONTROL+DOORS ELECTRICUNLOCKING> SWITCH
D4	0,5	20D	CONTROL+DOORS ELECTRICLOCKING>SWITCH
D5	0,5	9B	CONTROL + REAR FOGAMP
D6	0,5	9DP	+PROTECTEDREARFOGLIGHTS
D7	0,35	34B	SIGNAL -LEFTREAR SPEAKER








	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

DASHBOARD/FRONT WIRING CONNECTION

FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	0,5	64D	RIGHTTURNGLIGHTSCONTROL
A2	0,35	31A	WATER TEMPERATURE WARNING
A3	0,35	28A	OIL PRESSURE WARNING
A4			
A5	0,35	42A	WATER TEMPERATURE SIGNAL
A6	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
A7	0,35	15A	REAR WINDOW DEFROSTING INDICATOR-CONTROL
B1	0,75	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
B2	0,35	RPD	PROTECTED RIGHT HIGH BEAM
B3	0,35	64D	RIGHT TURN LIGHTS CONTROL
B4	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
B5	0,35	H1	HANDBRAKE INDICATOR-CONTROL
B5	0,35	H1	ICP INDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ ALTERNATOR EXCITATION
C1	0,35	47A	- FUEL MINIMAL LEVEL WARNING
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > INJECTION COMPUTER
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > UCE DECODER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > INJECTION COMPUTER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > UCE DECODER
C7	0,35	M	MASS


MA							
	47A	41A	3FH	80T	HK	HL	M
C	X	X	X	X			NG
B	AP10	RPD	64D	38AS		X	X
A	64D	31A	28A			H7	15A
	X	X	X		X	X	X
	1	2	3		5	6	7

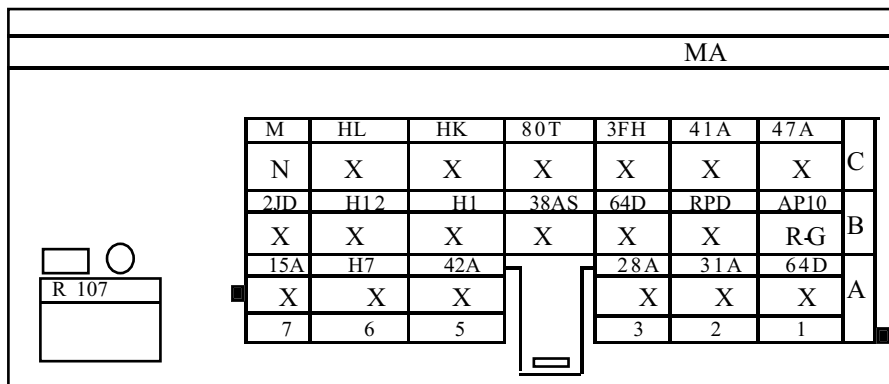


R 107

	CONNECTIONS	B41 01
---	-------------	-----------


DASHBOARD WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	64D	RIGHTTURNINGLIGHTSCONTROL> INDICATOR
A2	0,35	31A	INSRUMENTPANEL>WATERTEMPERATUREWARNING
A3	0,35	28A	INSTRUMENTPANEL> OILPRESSURE WARNING
A4			
A5	0,35	42A	SIGNAL +WATER TEMPERATURE
A6	0,35	H7	RPM-METERSIGNAL
A7	0,35	15A	REAR WINDOWDEFROSTINGINDICATOR-CONTROL
B1	0,75	AP10	+AFTER PROTECTED CONACT
B2	0,35	RPD	PROTECTED RIGHHIGHBEAM> INDICATOR
B3	0,35	64D	RIGHTTURNINGLIGHTSCONTROL> INDICATOR
B4	0,35	38AS	AIR-CONDITIONINGCOMPRESSORCONNECTIONSIGNA> RELAX
B5	0,35	H1	ICP HANDBRAKEINDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL
C1	0,35	47A	- FUELMINIMALLEVEL WARNING
C2	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
C3	0,35	3FH	INJECTDNFAILUREINDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSISSIGNALLINEK
C6	0,35	HL	DIAGNOSISSIGNALLINEL
C7	0,35	M	MASS

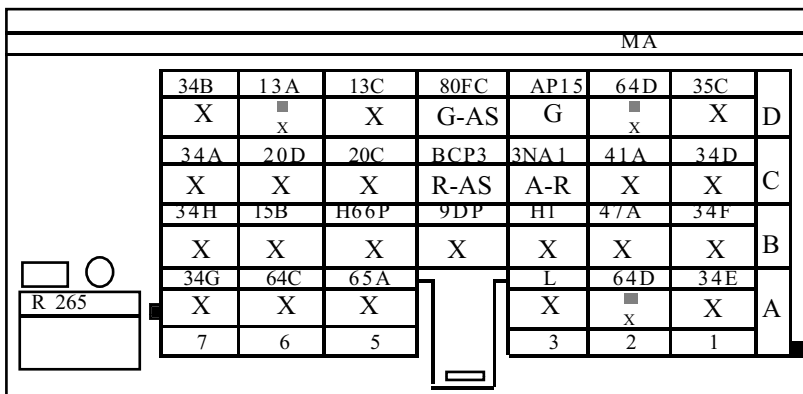




REAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL > TURNING SWITCH
A2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
B2	0,35	47A	- FUEL MINIMAL LEVEL WARNING
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
C1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP > CHOKE SENSOR
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
C5	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > UCE DECODER
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
D2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
D2	0,5	64D	FLASH RELAY DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	CEILING LAMPS CONTROL
D6	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
D6*	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > HOOD CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)

A2*, D2* - for vehicles without Anti-intrusion System
D4, D6* - for Anti-intrusion System provided vehicles




	CONNECTIONS	B41 01
---	-------------	-----------

REAR WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT REAR SPEAKER
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL
A2*	0,5	64D	RIGHT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A6*	0,5	64C	LEFT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER
B2	0,35	47A	- FUEL MINIMAL LEVEL WARNING
B3	0,35	H1	HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER
C1	0,35	34D	SIGNAL + RIGHT FRONT SPEAKER
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY
C5	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER
D2	0,5	64D	DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL > UCE ANTI-INTRUSION
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > UCE ANTI-INTRUSION
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	RIGHT CEILING LAMP CONTROL
D6	0,35	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK DOORS CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER

D2, D3, D4, A2*, A6* - for anti-intrusion system provided vehicles


MA							
	34C	64D	AP15	80FC	13C	13A	34B
D	X	X	X	GR-VI	X	X	X
C	34D	41A	3NA1	BCP3	20C	20D	34A
B	34F	47A	H1	9DP	H66P	15B	34H
A	34E	64D	L		65A	64C	34G
	X	■	X		X	■	X
	1	2	3		5	6	7

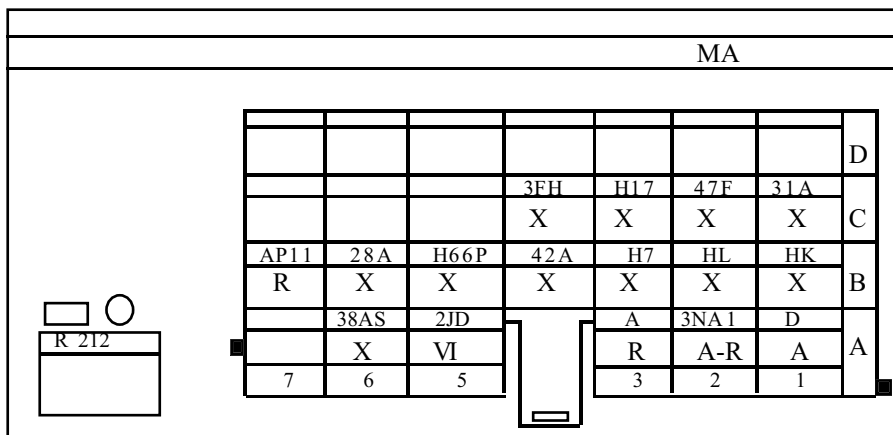


R 265

	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------


ENGINE / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL

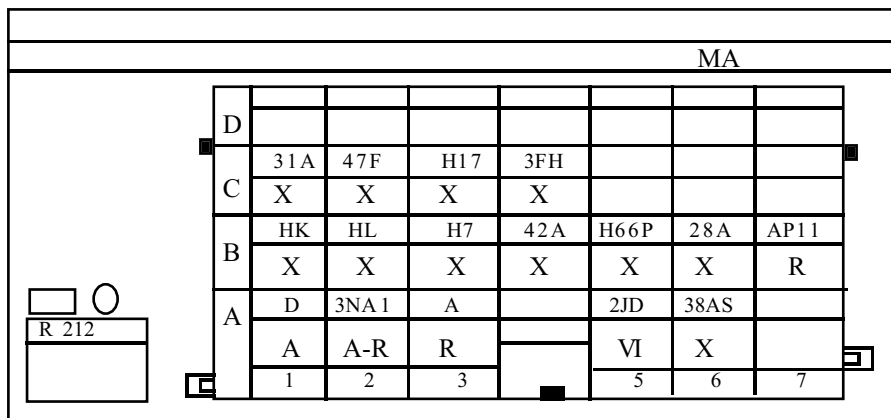




ENGINE WIRING CONNECTION


Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP > SHOCK SENSOR
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION > INSTRUMENT PANEL
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT > CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL

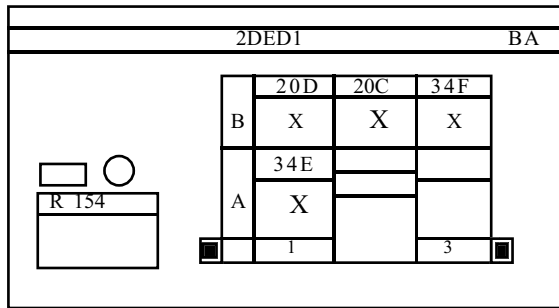
A6 - For air-conditioning system provided vehicles




	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

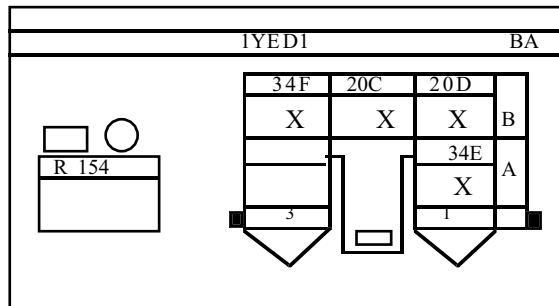
RIGHT FRONT DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B1	0,5	20D	CONTROL + DOORSELECTRIC LOCKING > UCE DECODER
B2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)




RIGHT FRONT DOOR WIRING CONNECTION

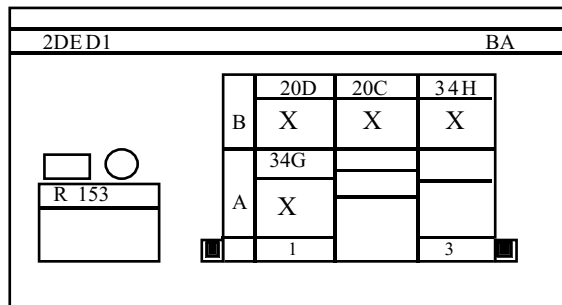
Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL + DOORSELECTRIC UNLOCKING > ACTUATORS
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER




	CONNECTIONS	B41 01
---	-------------	-----------

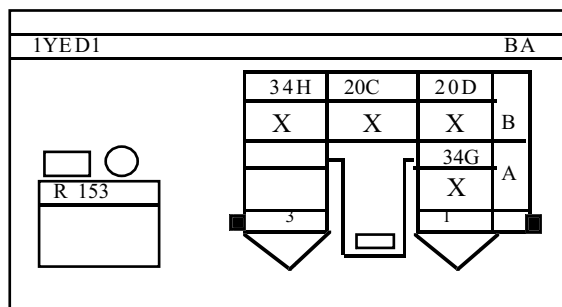
LEFT FRONT DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,5	20D	CONTROL+ DOORSELECTRIC LOCKING > UCE DECODER
B2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
B3	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




LEFT FRONT DOOR WIRING CONNECTION

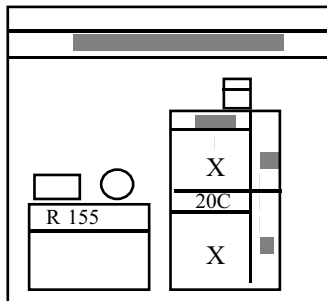
Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG >ACTUATORS
B3	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

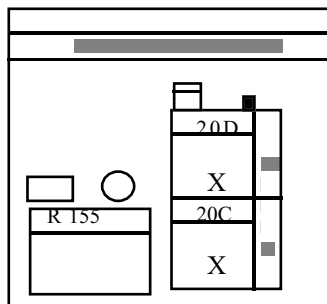
LEFT FRONT DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER




LEFT REAR DOOR WIRING CONNECTION

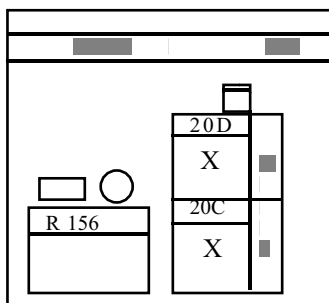
Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL + DOORSELECTRIC UNLOCKING > ACTUATORS




	CONNECTIONS	B41 01
---	--------------------	-------------------

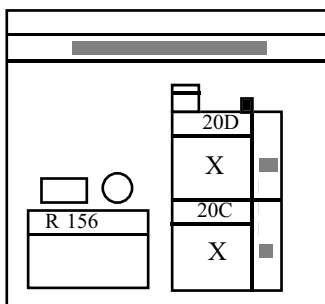
RIGHT REAR DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER




RIGHT REAR DOOR WIRING CONNECTION

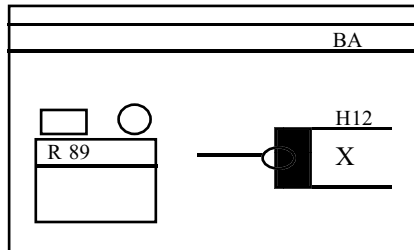
Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

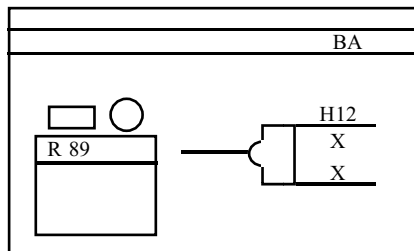
BRAKE PADS WEAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
1	0,35	H12	BRAKE PADS WEAR INDICATOR - CONTROL



BRAKE PADS WEAR WIRING CONNECTION

Position	Sectioning		Destination
	0,35 0,35	H12 H12	BRAKE PADS WEAR INDICATOR – CONTROL > RIGHT PAD BRAKE PADS WEAR INDICATOR – CONTROL > LEFT PAD



(until 01.06.2001)

LINK CODES	WIRE FUNCTIONS
A	SUPPLY + AFTER CONTACT
AP10	+ AFTER PROTECTED CONTACT>OUTLET FUSE F01
AP11	+ AFTER PROTECTED CONTACT REVERSE DRIVING LIGHTS
AP15	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03
AP29	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03 ENGINE RUNNING
B	+ BATTERY
BCP3	+ PROTECTED BATTERY, CEILING LAMPS
BP11	+ PROTECTED BATTERY > COCKPIT 1
BP17	+ PROTECTED BATTERY> OUTLET FUSE F01
BP2	+ PROTECTED BATTERY> WINDSCREEN WIPER STOPPING IN A FIXED POSITION
BP3	+ PROTECTED BATTERY> OUTLET FUSE F15
BP37	+ PROTECTED BATTERY> OUTLET FUSE F04
BP7	+ PROTECTED BATTERY FUSE 1 MOTOR FAN
BP76	+ PROTECTED BATTERY > LIGHTING CONTROL
BPR1	+ PROTECTED BATTERY > OUTLET FUSE F17> RELAY
C	+ MEETING LIGHTS (LOW BEAM)
CPD	+ MEETING LIGHTS RIGHT PROTECTED
CPG	+ MEETING LIGHTS LEFT PROTECTED
D	+ STARTER CONTROL
H1	CONTROL- HANDBRAKE INDICATOR, BRAKING CIRCUIT ICP
H12	CONTROL-BRAKE PADS WEAR INDICATOR
H17	INJECTION CODED SIGNAL>ANTI-STARTING
H66P	CONTROL+ REVERSE DRIVING LIGHTS
H7	RPM METER SIGNAL
HK	DIAGNOSTIC SIGNAL LINE K
HL	DIAGNOSTIC SIGNAL LINE L
L	+ PARKING LIGHTS
LPD	+ PARKING LIGHTS RIGHT PROTECTED
LPG	+ PARKING LIGHTS LEFT PROTECTED
M	ELECTRIC MASS
ML	BATTERY ELECTRIC MASS
N	ELECTRONIC MASS
NF	MASS: WATER TEMPERATURE SENSOR, AIR, POTENTIOMETER
R	+ ROAD LIGHTS (HIGH BEAM)
RPD	+ ROAD LIGHTS RIGHT PROTECTED
RPG	+ ROAD LIGHTS LEFT PROTECTED
S	+ ACCESSORIES
SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER
TB1	DETONATION SENSOR SCREENING
2JD	+ ALTERNATOR EXCITATION
3AC	CONTROL- FUEL PUMP RELAY
3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
3AQ	SIGNAL+ VALVE POTENTIOMETER
3B	SIGNAL+ AIR TEMPERATURE SENSOR
3BB	CANISTER PURGING VALVE CONTROL
3BG	ENGINE RPM SIGNAL > RPM SENSOR
3BL	SIGNAL - RPM ENGINE > RPM SENSOR
3BU	CONTROL 1 IDLING REGULATOR
3BV	CONTROL 2 IDLING REGULATOR
3BW	CONTROL 3 IDLING REGULATOR
3BX	CONTROL 4 IDLING REGULATOR
3C	SIGNAL + WATER TEMPERATURE SENSOR

ELECTRICAL DIAGRAMS

WIREFUNCTIONS EXPLANATION

89A

3CR	CONTROL- INJECTOR 1
3CS	CONTROL- INJECTOR 2
3CT	CONTROL- INJECTOR 3
3CU	CONTROL- INJECTOR 4
3CV	CONTROL- IGNITION COIL CYLINDERS 1-4
3CW	CONTROL- IGNITION COIL CYLINDERS 2-3
3D	ATMOSPHERIC PRESSURE SENSOR> SUPPLY +
3DQ	- DETONATION SENSOR
3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
3FH	CONTROL-INJECTION FAILURE INDICATOR
3FN	RPM SENSOR SIGNAL
3GF	CONTROL- UPSTREAM OXYGEN SENSOR HEATING
3GH	MASS UPSTREAM OXYGEN SENSOR
3GK	SIGNAL UPSTREAM OXYGEN SENSOR
3GN	ATMOSPHERIC PRESSURE SENSOR MASS
3GT	ACTUATORS RELAY MASS
3JK	- WATER TEMPERATURE
3JL	- VALVE POTENTIOMETER
3JN	CONTROL - STEP 1 MOTOR FAN RELAY
3JP	CONTROL- STEP 2 MOTOR FAN RELAY
3JQ	- AIR TEMPERATURE SENSOR
3NA	+ IGNITION COIL, CHOCK SENSOR> PETROL PUMP RELAY
3NA1	+ PETROL PUMP
3NR	+ INJECTORS> ACTUATORS RELAY OUTPUT
3S	SIGNAL + DETONATION SENSOR
8A	+ FOG HEADLAMPS RELAY
8B	+ FOG HEADLAMPS > RELAY
8DP	+ PROTECTED FOG HEADLAMPS
9A	+ REAR FOG LAMPS RELAY CONTROL
9B	CONTROL + REAR FOG LAMPS
9C	CONTROL + REAR FOG LAMPS INDICATOR
9DP	+ PROTECTED REAR FOG LAMPS
9M	SHUNT> FOG LAMPS SWITCH
11A	CONTROL + ROAD LIGHTS
13A	CONTROL - CEILING LAMPS> DOORS CONTACTS
13C	CONTROL> CEILING LAMPS
14A	CONTROL + LOW SPEED WINDSCREEN WIPER
14B	CONTROL + HIGH SPEED WINDSCREEN WIPER
14C	CONTROL + WINDSCREEN WIPER FIX POINT STOPPING
14D	CONTROL LOW SPEED WINDSCREEN WIPER TIMER
14E	CONTROL + WINDSCREEN WIPER TIMER
14K	CONTROL + WINDSCREEN WIPER LOW SPEED
14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
15A	REAR WINDOW DEFROSTING INDICATOR CONTROL
15B	CONTROL + REAR WINDOW DEFROSTING
15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
16A	CONTROL + WINDSCREEN WASHING PUMP
20C	CONTROL + DOORS ELECTRIC UNLOCKING
20D	CONTROL + DOORS ELECTRIC LOCKING
20F	RADIO-FREQUENCY RECEPTION SIGNAL
28A	CONTROL - OIL PRESSURE INDICATOR

31A	CONTROL – WATER TEMPERATURE INDICATOR
34A	SIGNAL – LEFT REAR LOUDSPEAKER
34B	SIGNAL – LEFT REAR LOUDSPEAKER
34C	SIGNAL – RIGHT REAR LOUDSPEAKER
34D	SIGNAL + RIGHT REAR LOUDSPEAKER
34E	SIGNAL + RIGHT FRONT LOUDSPEAKER
34F	SIGNAL – RIGHT FRONT LOUDSPEAKER
34G	SIGNAL + LEFT FRONT LOUDSPEAKER
34H	SIGNAL – LEFT FRONT LOUDSPEAKER
38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED 1
38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED 2
38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED 3
38AL	CONTROL + CLIMATE CONTROL BLOWER SPEED 4
38AS	AC CONTROL
38DH	CONTROL + AIR CONDITIONING
38K	AC CONTROL RELAY > UCE INJECTION
38N	CONTROL + AC CLUTCH RELAY > AC PRESSURE SENSOR
38R	CONTROL + AC COMPRESSOR CLUTCH
38U	- FREON PRESSURE SENSOR
38X	FREON PRESSURE SENSOR SIGNAL
38Y	+ FREON PRESSURE SENSOR
41A	SIGNAL + FUEL LEVEL TRANSMITTER
42A	SIGNAL + WATER TEMPERATURE
47A	- MINIMUM LEVEL FUEL WARNING
47F	VEHICLE SPEED SIGNAL
49B	CONTROL + COOLING BLOWER
49C	CONTROL + COOLING BLOWER RELAY
49F	CONTROL + AIR CONDITIONING
49L	CONTROL + COOLING BLOWER LOW SPEED RESISTANCE
64A	SUPPLY + TURNING
64AP	+ PROTECTED TURNING LIGHTS
64B	CONTROL + TURNING RELAY
64C	LEFT TURNING LIGHTS CONTROL
64D	RIGHT TURNING LIGHTS CONTROL
64E	CONTROL + TURNING INDICATOR
64F	CONTROL + HAZARD INDICATOR
64P	+ PROTECTED SIGNALING
65A	CONTROL + STOP LIGHTS
67A	CONTROL + ACOUSTIC WARNING
67C	CONTROL + ACOUSTIC WARNING FUSE
80BC	+ INERTIA CONTACT
80BD	FLASH RELAY CONTROL
80CA	RIGHT FRONT ULTRASONIC EMISSION
80DA	LEFT FRONT ULTRASONIC DETECTION INFORMATION
80E	ANTI-INTRUSION INDICATOR CONTROL
80FC	SIREN CONTROL SUPPLY
80T	CONTROL – ANTI-STARTING INDICATOR
80X	ANTI-STARTING RECEIVER SIGNAL ROUTE

ELECTRIC DIAGRAMS
FUNCTIONAL DIAGRAMS LIST

89B

(After 01.06.2001)

NR	ELECTRIC DIAGRAMS DENOMINATION	E0	E1	E2	E3
1	ANTI-INTRUSION E2(O), E3			O	S
2	DOORS CENTRAL LOCKING E1, E2, E3		S	S	S
3	ANTI-STARTING	S	S	S	S
4	ELECTRIC LIGHTER E1, E2, E3		S	S	S
5	CLIMATE CONTROL E0, E1(series), E2(series)	S	S	S	
6	CLIMATE CONTROL AND AIR CONDITIONING E1(O), E2(O), E3		O	O	S
7	CEILING LIGHTING	S	S	S	S
8	ASHTRAY LIGHTING E0	S			
9	ASHTRAY AND DOCUMENT COMP.LIGHTING E1, E2, E3		S	S	S
10	CLOCK		S	S	S
11	PRE-EQUIPPING RADIO E0	S			
12	PRE-EQUIPPING RADIO E1, E2		S	S	
13	PRE-EQUIPPING RADIO E3				S
14	STARTING CIRCUIT	S	S	S	S
15	ENGINE COOLING CIRCUIT E0, E1(series), E2(series)	S	S	S	
16	ENGINE COOLING CIRCUIT E2(AC), E3			O	S
17	ELECTRONIC INJECTION E0	S			
18	ELECTRONIC INJECTION E1(series), E2(series)		S	S	
19	ELECTRONIC INJECTION E1(CA), E2 (CA), E3		O	O	S
20	ALTERNATOR CIRCUIT	S	S	S	S
21	MASS	S	S	S	S
22	MASS 2 E0	S			
23	MASS 2 E1(series)		S		
24	MASS 2 E1(CA)		O		
25	MASS 2 E2 (serie)			S	
26	MASS 2 E2(CA), E3			O	S
27	MASS 3 E0, E1, E2 (series)	S	S	S	
28	MASS 3 E2(anti-intrusion), E3			O	S
29	MASS 4 E0, E1, E2 (serie)	S	S	S	
30	MASS 4 E2(anti-intrusion), E3			O	S
31	MASS 5 E0, E1(series), E2(series)	S	S	S	
32	MASS 5 E1(AC), E2(CA), E3		O	O	S
33	FUSE BOX AND COCKPIT RELAYS E0	S			
34	FUSE BOX AND COCKPIT RELAYS E1(series)		S		
35	FUSE BOX AND COCKPIT RELAYS E1(CA)		O		
36	FUSE BOX AND COCKPIT RELAYS E2 (series)			S	
37	FUSE BOX AND ENGINE RELAYS E2(CA), E3			O	S
38	FUSE BOX AND ENGINE RELAYS E0, E1(serie)	S	S		
39	FUSE BOX AND ENGINE RELAYS E1(CA)		O		
40	FUSE BOX AND ENGINE RELAYS E2(serie)			S	
41	FUSE BOX AND ENGINE RELAYS E2(CA), E3			O	S
42	HANDBRAKE INDICATOR AND BRAKING SYSTEM FAILURE	S	S	S	S

43	FUEL LEVEL INDICATOR CIRCUIT	S	S	S	S
44	OIL PRESSURE INDICATOR CIRCUIT	S	S	S	S
45	DIAGNOSTIC SOCKET	S	S	S	S
46	INSTRUMENT PANEL E0	S			
47	INSTRUMENT PANEL E1, E2, E3		S	S	S
48	WATER TEMPERATURE INDICATOR CIRCUIT E0	S			
49	WATER TEMPERATURE INDICATOR CIRCUIT E1, E2, E3		S	S	S
50	BRAKE PADS WEAR INDICATOR CIRCUIT	S	S	S	S
51	VEHICLE SPEED	S	S	S	S
52	SOUND WARNING	S	S	S	S
53	REAR WINDOW DEFROSTING	S	S	S	S
54	WINDSCREEN WIPER-WASHING	S	S	S	S
55	REAR FOG LAMP	S	S	S	S
56	FOG HEADLIGHTS			S	S
57	MEETING LIGHTS	S	S	S	S
58	REVERSE DRIVING LIGHTS	S	S	S	S
59	PARKING LIGHTS	S	S	S	S
60	ROAD LIGHTS	S	S	S	S
61	STOP LIGHTS E0, E1, E2(series)	S	S	S	
62	STOP LIGHTS E2 (aileron)			O	
63	STOP LIGHTS E2 (anti-intrusion), E3			O	S
64	TURNING AND HAZARD LIGHTS E0, E1, E2(series)	S	S	S	
65	TURNING AND HAZARD LIGHTS E2(anti-intrusion), E3			O	S

Note : these electric diagrams are valid for vehicle manufactured **after 01.06.2001**; **E0 (Europa)**, **E1 (Confort)**, **E2 (Rapsodie)**, **E3 (Clima)** represente quipping level of the vehicle.

ELECTRIC COMPONENTS INDEX

(After 01.06.2001)

CODE	COMPONENT DENOMINATION	CODE	COMPONENT DENOMINATION
21	Right signalling anti-return diode	216	Right front brake pad
101	Electric lighter	217	Left front brake pad
102	Ashtray	221	Windscreen washing pump
103	Alternator	222	Valve potentiometer
104	Anti-theft system	225	Diagnostic socket
105	Acoustic alarm	226	Right headlamp
107	Battery	227	Left headlamp
113	Windscreen wiper timer	230	Fog lamps relay
120	Injection computer (UCE)	231	Fog headlights control relay
121	Fog lights switch	234	Cooling motor fan control relay
122	Fog headlights switch	236	Fuel pump control relay
123	Door closing switch	238	Actuators relay
124	Climate blower switch	244	Injection water temperature sensor
125	Hazard switch	247	Instrument panel
128	Rear window defrosting switch	250	Vehicle speed transducer
137	Turning signalling relay	255	Right front turning lamp
138	Right rear door actuator	256	Left front turning lamp
139	Left rear door actuator	260	Cockpit fuse and relays box
140	Left front door actuator	261	Radio
141	Right front door actuator	262	Cooling motor fan and AC
145	Windscreen wiper-washer switch	267	Right side signalling lamp
146	Detonation sensor	268	Left side signalling lamp
147	Atmospheric pressure sensor	272	Injection air temperature sensor
149	RPM sensor	294	Rear window defrosting timer
155	Reverse driving contact	298	Climate control lighting
156	Handbrake contact	319	AC starting button
160	Stop contact	321	Motor fan resistance (for AC)
163	Starter	329	Right front ceiling lamp
168	Documents compartment lighting lamp	371	Canister purging valve
171	AC compressor clutch	427	UCE anti-intrusion
172	Right rear lamp	438	Engine hood contact
173	Left rear lamp	442	Siren
175	Left fog lamp	454	Volumetric sensor
176	Right fog headlight	474	AC relay (on board)
177	Left fog headlight	503	UCE decoder
180	Left front door contact	584	AC compressor clutch control relay
181	Right front door contact	597	Engine compartment fuse and relays box
184	Right front parking lamp	600	Climate control blower
185	Left front parking lamp	639	STOP-S3 amp
188	Cooling motor fan	649	Step-by-step engine
189	Right rear loud speaker	654	Anti-starting bushing
190	Left rear loud speaker	700	Cooling blower low speed control relay
191	Right front door loud speaker	778	Ignition coil
192	Left front door loud speaker	857	FLASH relay
193	Injector 1	887	Upstream oxygen sensor
194	Injector 2	927	Chock sensor
195	Injector 3	993	Anti-intrusion indicator LED
196	Injector 4	1091	Braking system ICP
199	Fuel level transmitter and electric pump	1202	AC pressure sensor (pressure controller)
205	Oil pressure contact	1335	Front ashtray lighting
209	Lights, turning lights and horn switch	1428	Climate control blower control relay
210	Electronic clock		
212	Windscreen wiper motor		

(after 01.06.2001)

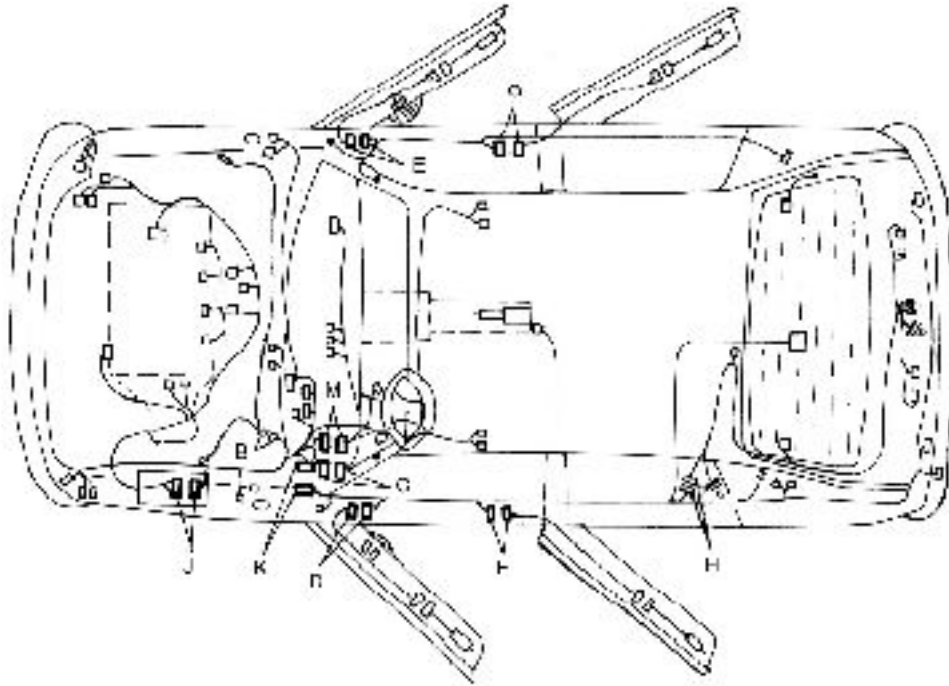
COUPLINGLIST

R53 =BATTERYMASS WIRING/MASS STRIPE (A) COUPLING
R89 = FRONT WIRING/BRAKE PADS WEAR (B) COUPLING
R107 = FRONT WIRING/DASHBOARD (C) COUPLING
R153 = REAR WIRING/LEFT FRONT DOOR (D) COUPLING
R154 = REAR WIRING/RIGHT FRONT DOOR (E) COUPLING
R155 = REAR WIRING/LEFT REAR DOOR(F) COUPLING
R156 = REAR WIRING/RIGHT REAR DOOR(G) COUPLING
R157 = REAR WIRING/HATCHBACK(H) COUPLING
R212 = FRONT WIRING/ENGINE (J) COUPLING
R265 = FRONT WIRING/REAR (K) COUPLING
R318 = FRONT WIRING/DASHBOARD(M) COUPLING

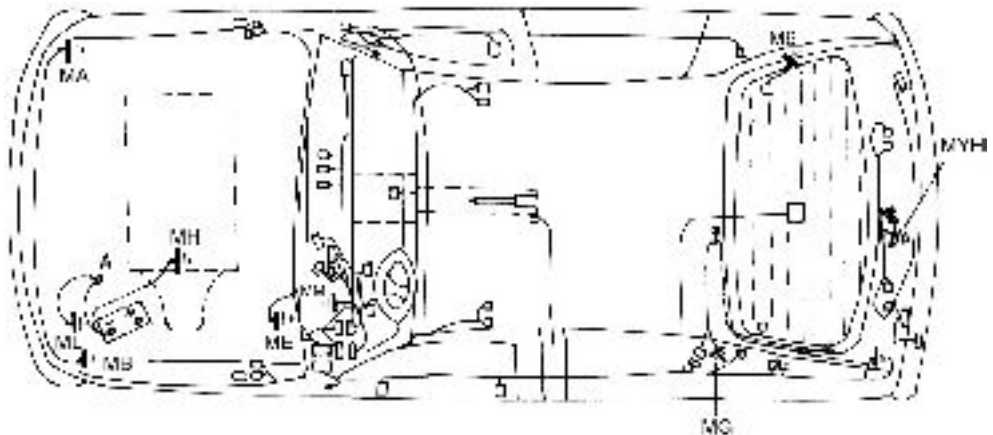
MASS LIST

M6 = REAR WINDOW DEFROSTING MASS
MA = RIGHT FRONT BODY MASS
MB = LEFT FRONT BODY MASS
ME = ELECTRIC MASS AT WINDSCREEN WIPER ATTACHMENT
MH = ENGINE ELECTRIC MASS
ML = LEFT FRONT LONGITUDINAL GIRDER ELECTRIC MASS
MM = ELECTRIC MASS AT THE STEERING COLUMN
MZ = LEFT REAR BODY MASS
MYH= LEFT HATCHBACK MASS

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE



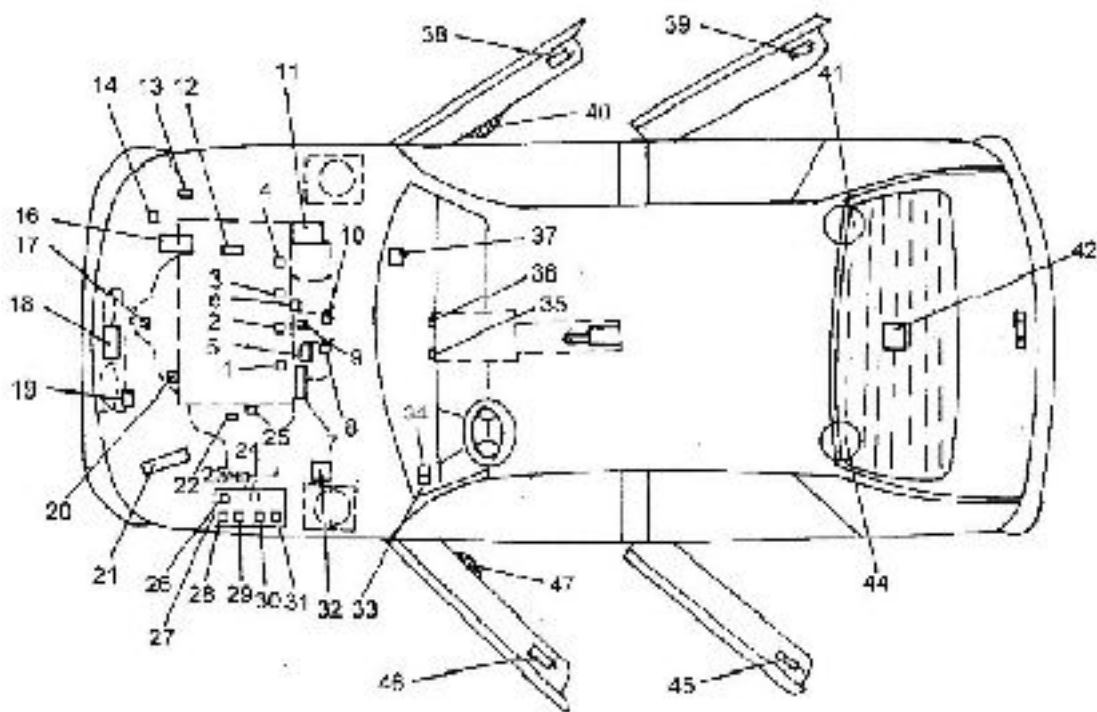
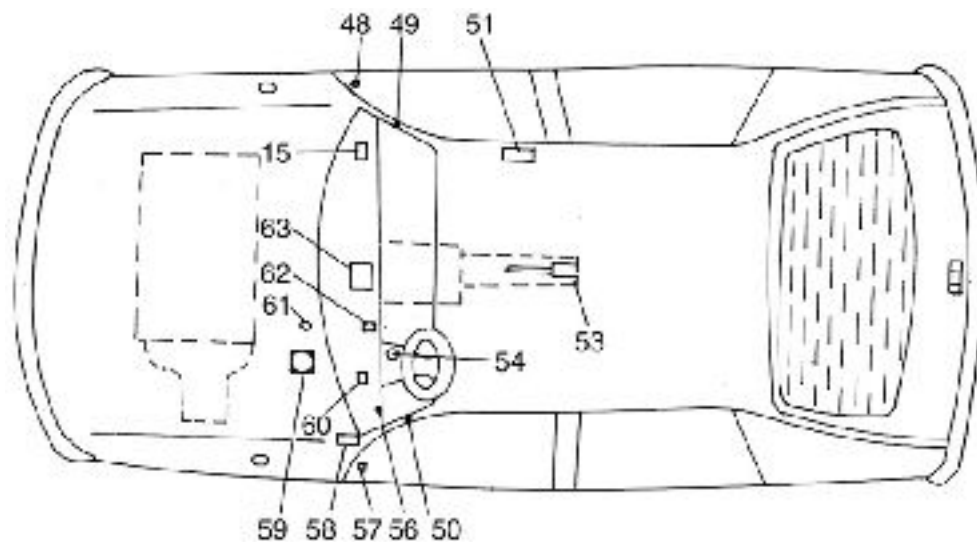
MASS ATTACHMENTS ON THE VEHICLE



(after 01.06.2001)

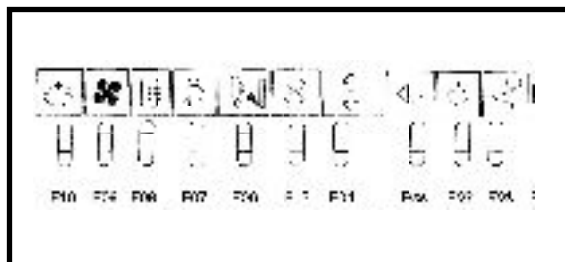
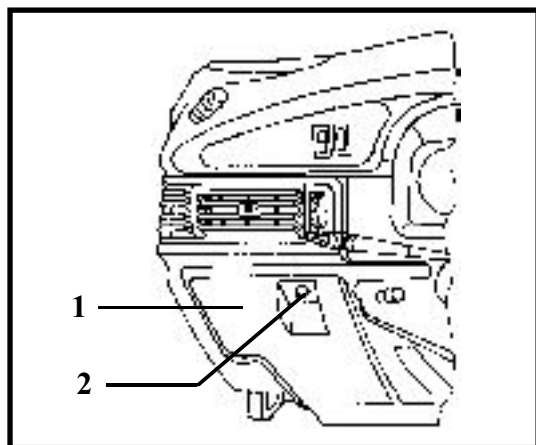
1	Injector 1	33	Windscreen wiper timer
2	Injector 2	34	FLASH relay
3	Injector 3	35	Climate control lighting
4	Injector 4	36	AC starting button
5	Atmospheric pressure sensor	37	AC relay (on board)
6	Detonation sensor	38	Right front door actuator
7	Starter	39	Right rear door actuator
8	Injection air temperature sensor	40	Right front door loud speaker
9	Valve potentiometer	41	Right rear loudspeaker
10	Step-by step engine	42	Fuel level transmitter and electric pump
11	Alternator	44	Trunk lighting lamp
12	Ignition coil	45	Left rear loud speaker
13	Canister purging valve	46	Left rear door actuator
14	AC pressure sensor (pressure controller)	47	Left front door actuator
15	Diagnostic socket	48	Left front door loud speaker
16	AC compressor clutch	49	Right front door contact
17	Upstream oxygen sensor	50	Right volumetric sensor
18	Cooling blower and AC	51	Left volumetric sensor
19	Blower resistance for AC	53	Right front ceiling lamp
20	Oil pressure contact	54	Handbrake contact
21	Injection computer	55	Anti-starting bushing
22	RPM sensor	56	Anti-intrusion indicator LED
23	Reverse driving contact	57	Left front door contact
24	AC compressor clutch control relay (E)	58	UCE decoder
25	Water temperature sensor	59	Siren
26	Blower lower speed control relay (B)	60	Vehicle speed transducer
27	Engine compartment fuse and relays box	61	Engine hood contact
28	Motor fan control relay (C)	62	Doors closing switch
29	Fog headlamps control relay(A)	63	UCE anti-intrusion
30	Fuel pump control relay (H)		
31	Actuators relay(D)		
32	Chock sensor		

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE



(after 01.06.2001)

The cockpit fuse box is placed left side under dashboard, being attached on the interior side of the door (1). To access the fuses, turn the knob (2), then open up the door towards exterior.

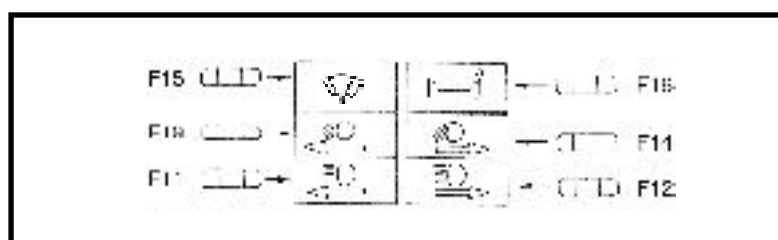
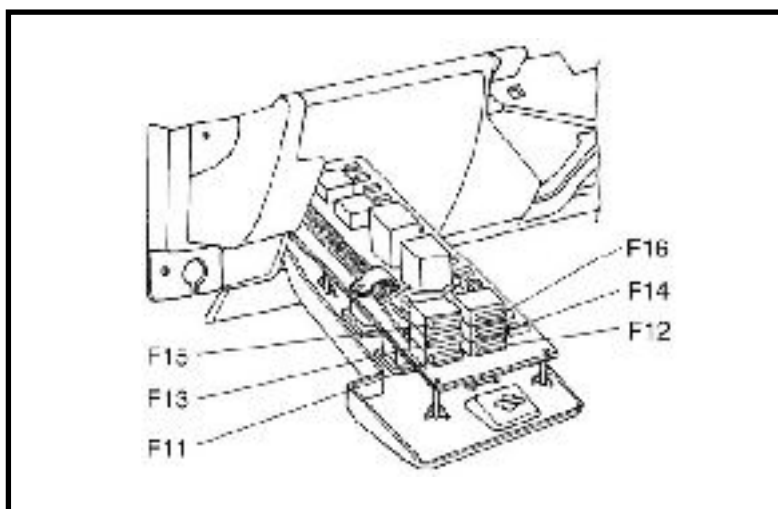


The fuses are protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, climate blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti-intrusion
F04	7,5A	Hazard and turning signaling lights
F05	5A	Front/rear parking lights, lighting: switches, instrument panel, climate control, documents compartment, lighter, ashtray, radio.
F06	15A	Lighter, clock, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti-intrusion, anti-intrusion indicator, diagnostic socket.
F07	15A	UCE decoder, FLASH relay, anti-starting bushing
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

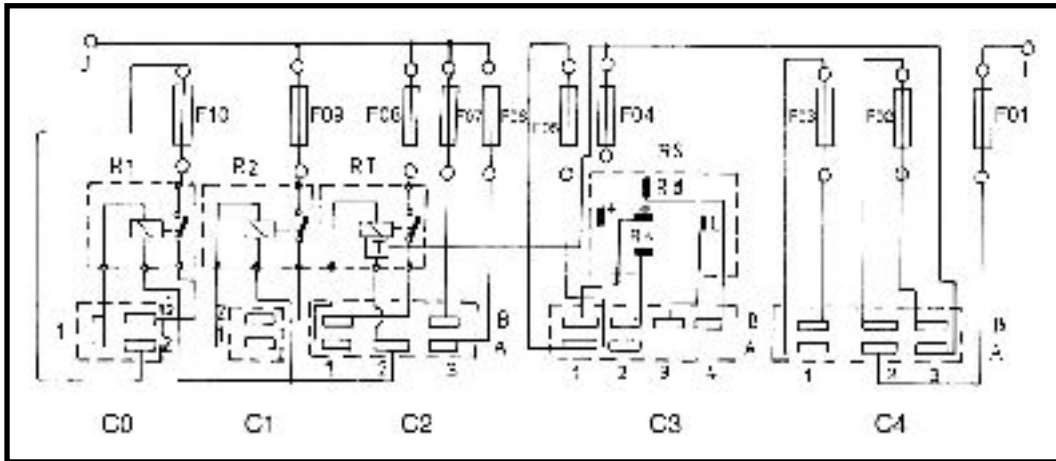
COCKPIT FUSE BOX

On the fusebox, 6 fusible fuse modules are attached, protecting the following consumers:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left road lights
F12	10A	Right road lights, road lights indicator
F13	10A	Left meeting lights
F14	10A	Right meeting lights, meeting lights indicator
F15	15A	Windscreen wiper-washing switch, windscreen wiper timer
F16	10A	Radio, windscreen wiper motor

FUSE BOX ELECTRIC DIAGRAM

**Connector C0**

1. Fog lamp switch ♦ fog lamp relay control
2. Parking lights ♦ inlet fuse F 1
3. Outlet fuse F10 ♦ left fog lamp

Connector C1

1. Outlet fuse F01 ♦ climate blower relay control
2. Outlet F09 ♦ climate blower

Connector C2

- A1. Rear window defrosting switch ♦ rear window defrosting timer control
- A2. Mass
- A3. Outlet fuse F06
- B1. Outlet fuse F09 ♦ rear window defrosting
- B2. Free
- B3. Outlet fuse 07 ♦ UCE decoder, anti-starting bushing, FLASH relay

Connector C3

- A1. Lights switch (+ parking) ♦ inlet fuse F05
- A2. Outlet fuse F05 ♦ + parking
- A3. Free
- A4. Free
- B1. Mass
- B2. Mass
- B3. Turning lights switch (signaling relay control)
- B4. Free

Connector C4

- A1. Anti-theft mechanism (position M) ♦ inlet fuse F03
- A2. Outlet fuse F01
- A3. Hazard switch ♦ inlet fuse F04, supply of the rear window defrosting timer
- B1. Outlet fuse F03
- B2. Anti-theft mechanism (position M) ♦ inlet fuse F02
- B3. Outlet fuse F02 ♦ reverse driving contact

I = DC (after contact)

J = IC (before contact)

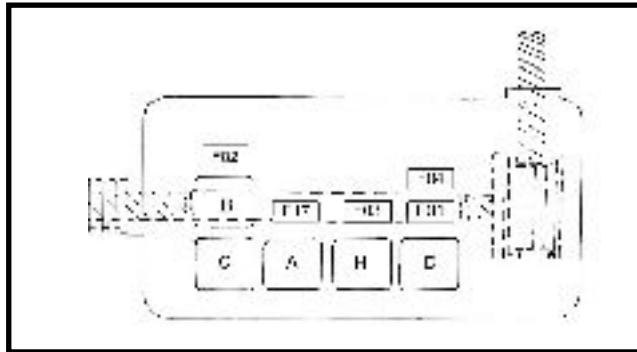
R1 = fog lamp control relay

R2 = climate blower control relay

RT = rear window defrosting timer

RS = turning signaling relay

A. for equipping E0, E1, E2
 (after 01.06.2001)

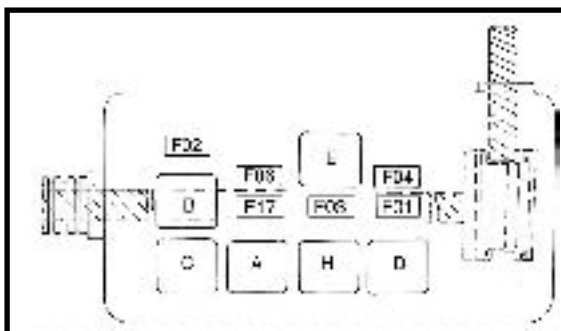


The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump ignition coil.
F02	25A	Cooling blower (vehicles without AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights

RELAY	A	C	D	H
RELAY TYPE	15A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower (vehicle without AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	Fuel pump Ignition coil

B. For equipping E2(0), E3
(after 01.06.2001)



The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump, ignition coil.
F02	40A	Cooling blower (vehicles with AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights
F06	7,5A	AC compressor

RELAY	A	B	C	D	E	H
RELAY TYPE	15A	40A	30A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower- 1st speed (vehicles with AC)	Cooling blower- 2nd speed (vehicle with AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	AC compressor	Fuel pump Ignition coil

(after 01.06.2001)

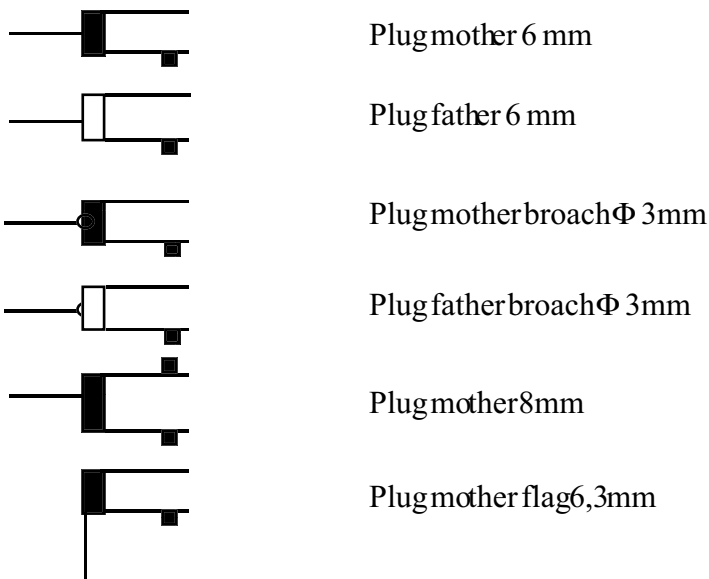
Connec.	Denomination
101	ELECTRIC LIGHTER
103 HA	ALTERNATOR
103 HB	ALTERNATOR EXCITATION
104	ANTI-THEFT MECHANISM
105	ACOUSTIC WARNING
113	WINDSCREEN WIPER TIMER
120	UCE INJECTION(for vehicles without AC)
120	UCE INJECTION(for vehicles with AC)
121	FOG LAMPS SWITCH
122	FOG HEADLAMPS SWITCH
123	LOCKING DOORS SWITCH
124	BLOWER SWITCH
125	HAZARD SWITCH
128	REAR WINDOW DEFROSTING SWITCH
138	RIGHT REAR DOOR ACTUATOR
139	LEFT REAR DOOR ACTUATOR
140	LEFT FRONT DOOR ACTUATOR
141	RIGHT FRONT DOOR ACTUATOR
145	WINDSCREEN WIPER-WASHING SWITCH
146	DETONATION SENSOR
147	ATMOSPHERIC PRESSURE SENSOR
149	RPM SENSOR
155	REVERSE DRIVING CONTACT
156	HANDBRAKE CONTACT
160	STOP CONTACT
163 GA	STARTER
163 AB	STARTER EXCITATION
166	RIGHT LICENSE PLATE LAMP
167	RIGHT LICENSE PLATE LAMP
168	DOCUMENTS COMPARTMENT LIGHTING LAMP
171	AC COMPRESSOR CLUTCH
172	RIGHT REAR LAMP
173	LEFT REAR LAMP
175	LEFT FOG LAMP
176	RIGHT FOG HEADLIGHT
177	LEFT FOG HEADLIGHT
180	LEFT FRONT DOOR CONTACT
181	RIGHT FRONT DOOR CONTACT
184	RIGHT FRONT PARKING LAMP
185	LEFT FRONT PARKING LAMP
188	COOLING FAN MOTOR (for vehicles without AC)
189	RIGHT REAR LOUD SPEAKER
190	LEFT REAR LOUD SPEAKER
191	RIGHT FRONT DOOR LOUD SPEAKER
192	LEFT FRONT DOOR LOUD SPEAKER
193	INJECTOR 1
194	INJECTOR 2
195	INJECTOR 3

196	INJECTOR 4
199	FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP
200	REAR WINDOW DEFROSTING
205	OIL PRESSURE CONTACT
209	CLIGHTS, TURNING LIGHTS, HORN SWITCH
210	ELECTRONIC CLOCK
212	WINDSCREEN WIPER MOTOR
216	RIGHT FRONT BRAKE PAD
217	LEFT FRONT BRAKE PAD
221	WINDSCREEN WASHING PUMP
222	VALVE POTENTIOMETER
225	DIAGNOSTIC SOCKET
226	RIGHT HEADLAMP
227	LEFT HEADLAMP
244	WATER TEMPERATURE SENSOR
247	INSTRUMENT PANEL
250	SPEED TRANSDUCER
255	RIGHT FRONT TURNING LAMP
256	LEFT FRONT TURNING LAMP
260	COCKPIT FUSE AND RELAYS BOX
261	RADIO
262	COOLING MOTOR FAN (for vehicles with AC)
267	RIGHT SIDE SIGNALING LAMP
268	LEFT SIDE SIGNALING LAMP
272	INJECTION AIR TEMPERATURE SENSOR
298	CLIMATE CONTROL LIGHTING
319	AC STARTING BUTTON
321	MOTOR FAN RESISTANCE (for vehicles with AC)
329	RIGHT FRONT CEILING LAMP
371	CANISTER PURGING VALVE
427	UCE ANTI-INTRUSION
438	ENGINE HOOD CONTACT
442	SIREN
454	RIGHT VOLUMETRIC SENSOR(Rx)
454	LEFT VOLUMETRIC SENSOR (Tx)
474	AC RELAY (on board)
503	UCE DECODER
560	HATCHBACK CONTACT
597	ENGINE RELAYS AND FUSE BOX (for vehicles without AC)
597	ENGINE RELAYS AND FUSE BOX (for vehicles with AC)
600	CLIMATE CONTROL BLOWER
639	STOP-S3 LAMP (on roof)
639	STOP[-S3 LAMP (in aileron)
649	STEP-BY-STEP ENGINE
654	ANTI-STARTING BUSHING
778	IGNITION COIL
857	FLASH RELAY
887	SUPSTREAM OXYGEN SENSOR
927	CHOCK SENSOR
993	ANTI-INTRUSION INDICATOR LED

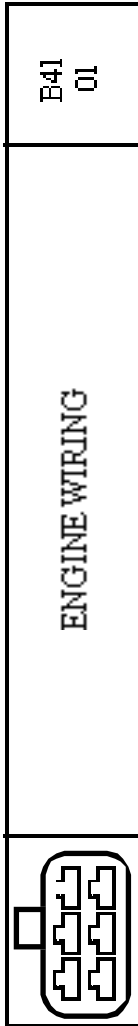
1033CA	BATTERY PLUS PLUG
1091	ICP BRAKING SYSTEM
1202	AC PRESSURE SENSOR
1335	FRONT ASHTRAY LIGHTING
MH 121	ENGINE ELECTRIC MASS MOTOR FAN MASS
R 89	FRONT WIRING/ BRAKE PADS WEAR COUPLING
R 107	FRONT WIRING/ DASHBOARD COUPLING
R 153	REAR WIRING/LEFT FRONT DOOR COUPLING
R 154	REAR WIRING/ RIGHT FRONT DOOR COUPLING
R 155	REAR WIRING/ LEFT REAR DOOR COUPLING
R 156	REAR WIRING/ RIGHT REAR DOOR COUPLING
R 157	REAR WIRING/ HATCHBACK COUPLING
R 212	FRONT WIRING/ ENGINE COUPLING
R 265	FRONT WIRING/ REAR COUPLING
R 318	FRONT WIRING/ DASHBOARD COUPLING

OBSERVATIONS:

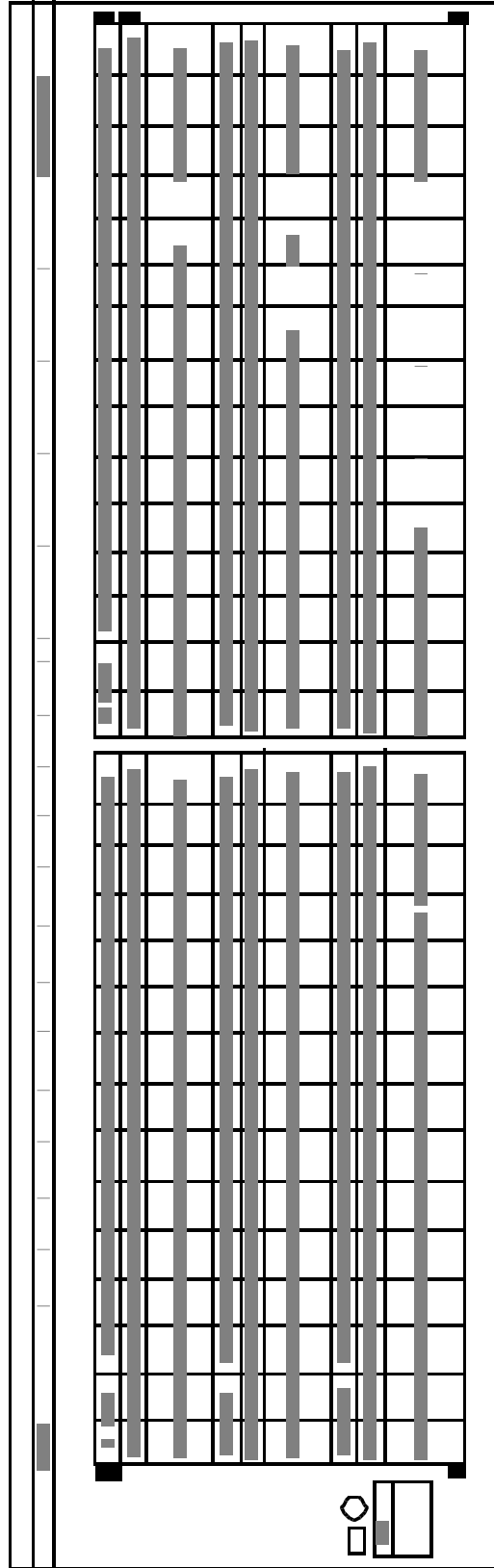
- Connectors and couplings are represented backwards (from wires forward).
- Some electric components are not connected to the vehicle wiring by means of multiple-way connectors, but by means of protected individual plugs. For illustrating the type of the respective plug, the following symbols are to be used:

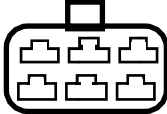



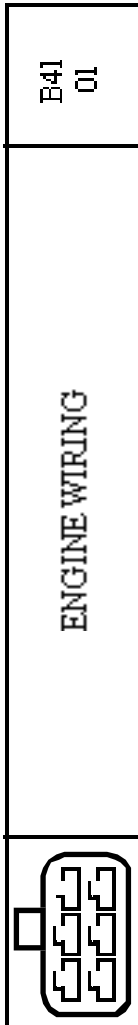
(After June 1st 2001)



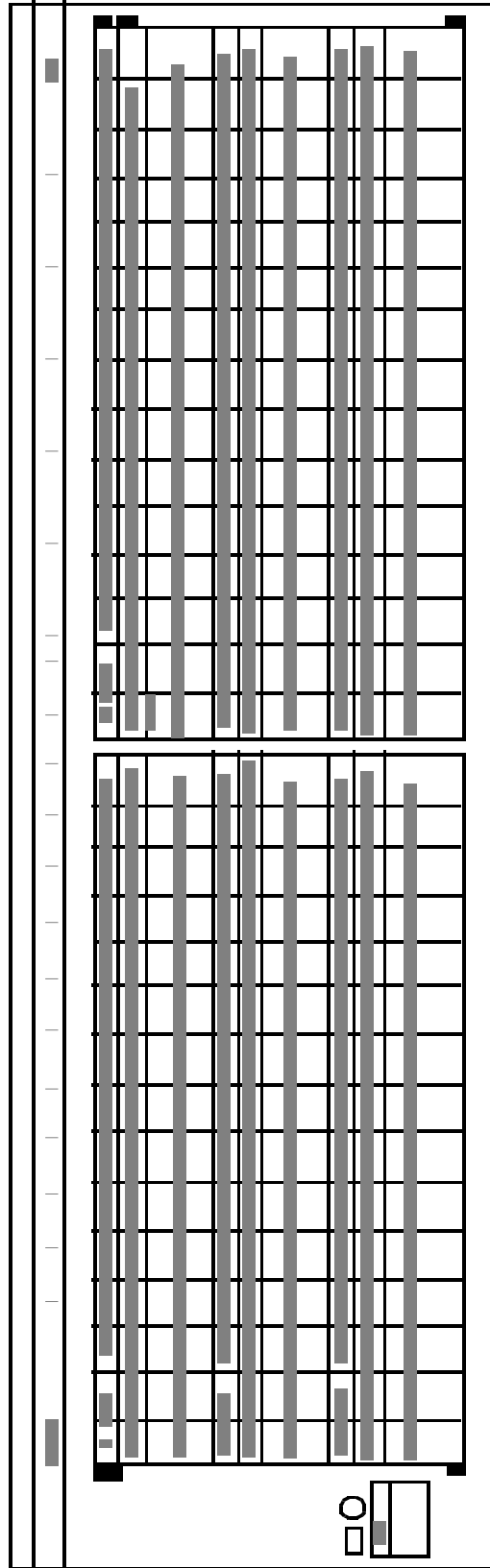
U.C.E. INJECTION
(For vehicles without air conditioning system)


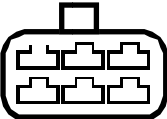


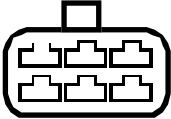

		ENGINE WIRING		B41 01
Pos.	Sectioning		Destination	
1	2,0	3CW	CONTROL-CYLINDERS2-3IGNITION COIL	
3	2,0	M	MASS	
4	0,6	3BB	CANISTER PURGING VALVE CONTROL	
8	0,6	3JN	CONTROL-BLOWER RELAY	
9	0,35	31A	CONTROL -WATER TEMPERATURE INDICATOR	
12	0,6	3BU	IDLERUNNINGREGULATORCONTROL1	
13	0,6	3C	SIGNAL +WATER TEMPERATURE SENSOR	
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS	
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL	
19	0,5	TB1	DETONATION SENSOR SCREENING	
20	0,5	3S	SIGNAL+ DETONATION SENSOR	
24	0,6	3BL	SIGNAL -ENGINE RPM>RPM SENSOR	
26	0,35	HL	DIAGNOSIS SIGNAL -LINE L	
28	2,0	M	MASS	
29	0,35	AP29	+AFTER PROTECTED CONTACT > FUSE OUTLET F03	
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04	
32	2,0	3CV	CONTROL-CYLINDERS1-4IGNITION COIL	
33	2,0	M	MASS	
34	0,35	3FH	CONTROL -INJECTION FAILURE INDICATOR	
39	0,6	3GT	ACTUATORS RELAY CONTROL	
41	0,6	3BV	IDLERUNNINGREGULATORCONTROL2	
42	0,6	3BW	IDLERUNNINGREGULATORCONTROL3	
43	0,6	3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER	
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL	
49	0,6	3B	SIGNAL+ AIR TEMPERATURE SENSOR	
53	0,35	47F	VEHICLE SPEED SIGNAL	
54	0,6	3BG	SIGNAL -ENGINE RPM>RPM SENSOR	
56	0,35	HK	DIAGNOSIS SIGNAL LINE K	
58	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTER	
59	1,0	3CR	CONTROL -INJECTOR 1	
60	1,0	3CT	CONTROL -INJECTOR 3	
63	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING	
66	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET	
68	0,6	3AC	CONTROL- FUEL PUMP RELAY	
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER	
72	0,6	3BX	IDLERUNNINGREGULATORCONTROL4	
73	0,6	3JK	- WATER TEMPERATURE	
74	0,6	3AQ	SIGNAL+ VALVE POTENTIOMETER	
75	0,6	3JL	- VALVE POTENTIOMETER	
77	0,6	3JQ	-AIR TEMPERATURE SENSOR	
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR SUPPLY +	
79	0,5	3DQ	- DETONATION SENSOR	
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS	
89	1,0	3CU	CONTROL-INJECTOR 4	
90	1,0	3CS	CONTROL -INJECTOR 2	



U.C.E. INJECTION
(For air conditioning system equipped vehicles)

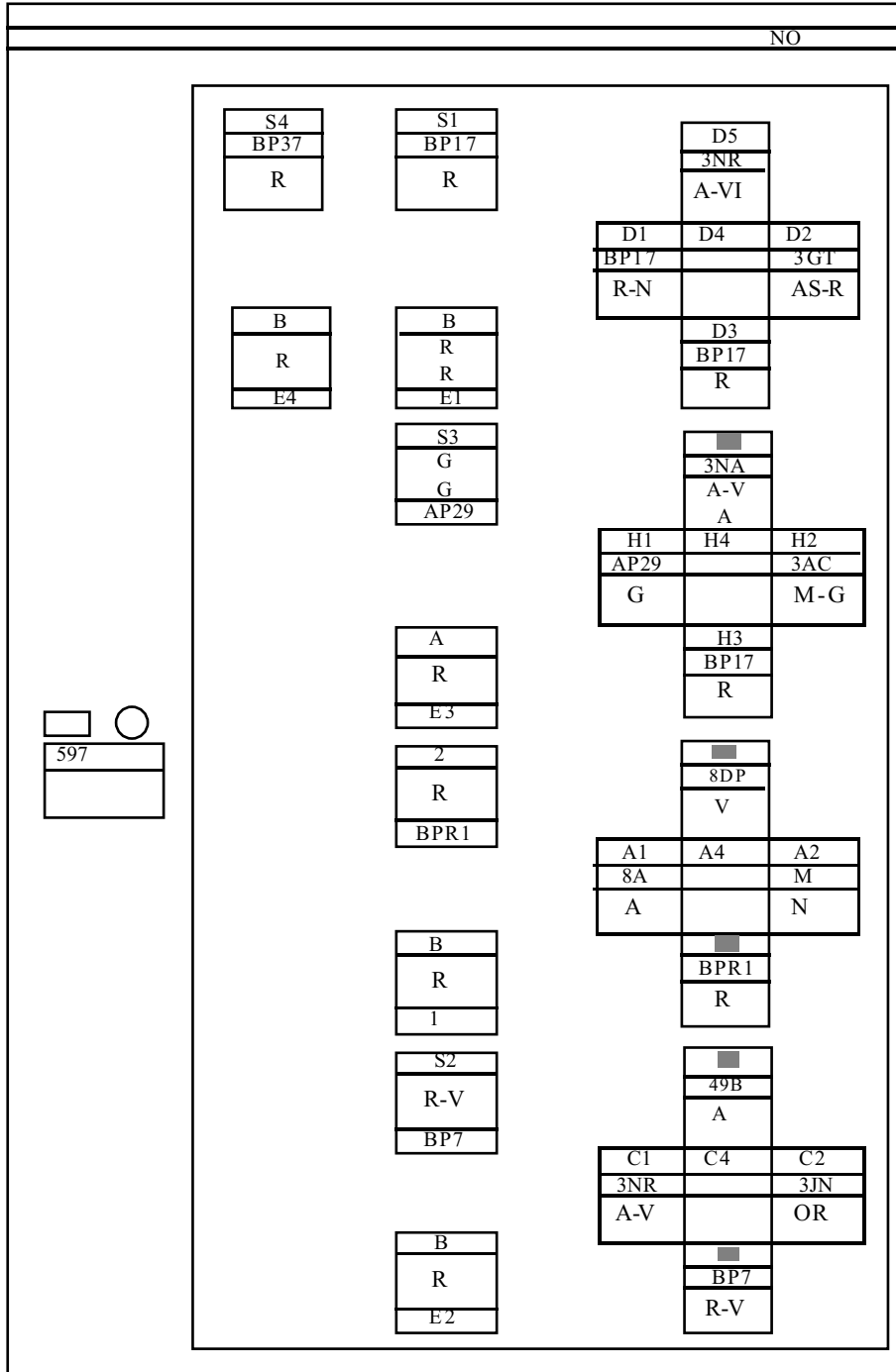


Pos.	Sectioning		Destination
			
			ENGINE WIRING
			B41 01
1	2,0	3CW	CONTROL - CYLINDERS 2-3 IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTER PURGING VALVE CONTROL
8	0,6	3JN	CONTROL - BLOWER RELAY
9	0,35	31A	CONTROL - WATER TEMPERATURE INDICATOR
10	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
12	0,6	3BU	IDLE RUNNING REGULATOR CONTROL 1
13	0,6	3C	SIGNAL + WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
18	0,6	38X	FREON PRESSURE SENSOR SIGNAL
19	0,5	TB1	DETONATION SENSOR SCREENING
20	0,5	3S	SIGNAL + DETONATION SENSOR
24	0,6	3BL	SIGNAL - ENGINE RPM > RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL - LINE L
28	2,0	M	MASS
29	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL - CYLINDERS 1-4 IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL - INJECTION FAILURE INDICATOR
38	0,6	3JP	CONTROL - BLOWER RELAY TR.2
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLE RUNNING REGULATOR CONTROL 2
42	0,6	3BW	IDLE RUNNING REGULATOR CONTROL 3
43	0,6	3AJ	SIGNAL + VALVE POSITION POTENTIOMETER
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
46	0,5	38AS	AIR CONDITIONING COMPRESSOR CONNECTION SIGNAL
49	0,6	3B	SIGNAL + AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL - ENGINE RPM > RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL - LINE K
58	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL - INJECTOR 1
60	1,0	3CT	CONTROL - INJECTOR 3
63	1,0	3GF	CONTROL - UPSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL - FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLE RUNNING REGULATOR CONTROL 4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL + VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
77	0,6	3JQ	- AIR TEMPERATURE SENSOR
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR > SUPPLY +


		ENGINE WIRING		B41 01
Pos.	Sectioning		Destination	
79	0,5	3DQ	- DETONATION SENSOR	
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS	
82	0,6	38U	- FREON PRESSURE SENSOR	
83	0,6	38Y	+ FREON PRESSURE SENSOR	
89	1,0	3CU	CONTROL - INJECTOR 4	
90	1,0	3CS	CONTROL - INJECTOR 2	

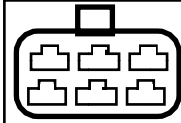
	ENGINE WIRING	B41 01
---	---------------	-----------

ENGINE RELAYS AND FUSE BOX (FOR VEHICLES WITHOUT AIR CONDITIONING SYSTEM)



	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOG AMPS
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JN	CONTROL-BLOWER RELAY, TR.1
C3	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
C5	1,5	49B	CONTROL+BLOWER COOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D2	0,6	3GT	INJECTION COMPUTER > ACTUATORS RELAY CONTROL
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
H2	0,6	3AC	CONTROL- FUEL PUMP RELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
H5	2,0	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY
H5	1,4	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY
E1	5,0	B	+ BATTERY
E1	0,6	B	+ BATTERY > FUSE INLET F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
E2	5,0	B	+ BATTERY > STARTER
S2	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING
E3	1,0	A	SUPPLY+ AFTER CONTACT
S3	0,6	AP29	+ PROTECTED D.C > ENGINE SAFETY RUNNING RELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
E4	0,6	B	+ BATTERY > FUSE INLET F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
1	1,0	B	+ BATTERY
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY

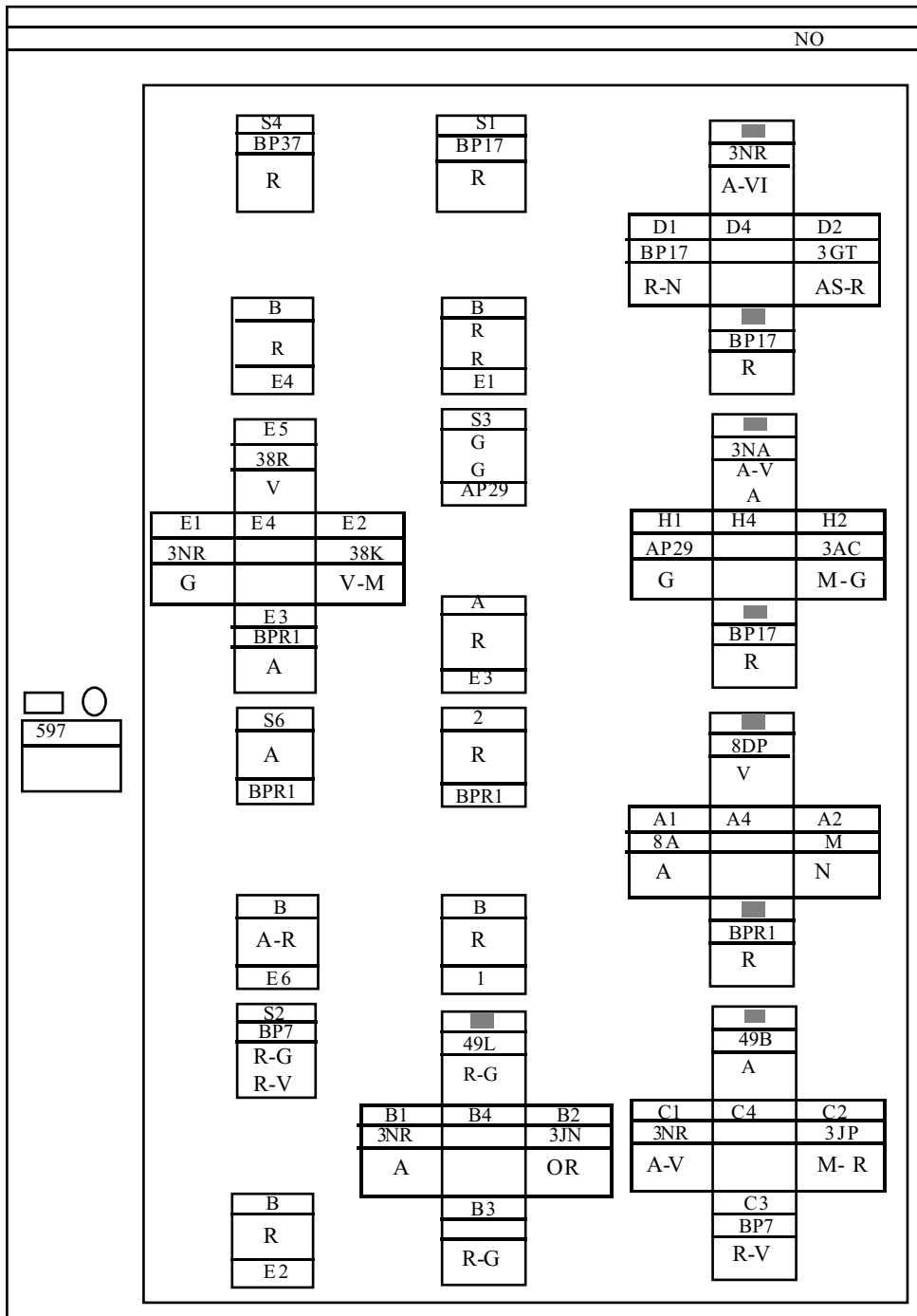


ENGINE WIRING


B41
01

ENGINE RELAYS AND FUSE BOX

(FOR AIR CONDITIONING SYSTEM EQUIPPED VEHICLES)



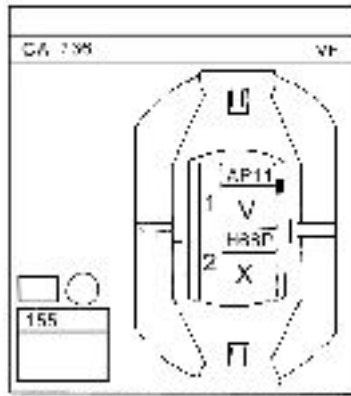
	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOG AMPS
B1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B2	0,6	3JN	- BLOWER RELAY, TR. 1
B3	2,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
B5	2,0	49L	BLOWER COOLING RESISTANCE CONTROL
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JP	CONTROL - BLOWER RELAY, TR. 2
C3	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
C5	5,0	49B	CONTROL + BLOWER COOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D2	0,6	3GT	ACTUATORS RELAY CONTROL, INJECTION COMPUTER
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E1	0,5	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E2	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
E3	1,0	BPR1	+ BATTERY > FUSE OUTLET F06 > RELAY
E5	1,0	38R	CONTROL + AIR CONDITIONING COMPRESSOR CLUTCH
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
H2	0,6	3AC	CONTROL - FUEL PUMP RELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
H5	2,0	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
H5	1,4	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
E1	5,0	B	+ BATTERY
E1	0,6	B	+ BATTERY > FUSE INLET F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
E2	5,0	B	+ BATTERY > + STARTER
S2	2,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING
S2	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
E3	1,0	A	SUPPLY + AFTER CONTACT
S3	0,6	AP29	+ PROTECTED D.C. > ENGINE RUNNING SAFETY RELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
E4	0,6	B	+ BATTERY > FUSE INLET F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
1	1,0	B	+ BATTERY
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
E6	1,0	B	+ BATTERY
S6	1,0	BPR1	+ BATTERY > FUSE OUTLET F06 > RELAY


	ENGINE WIRING	B41 01
---	---------------	-----------

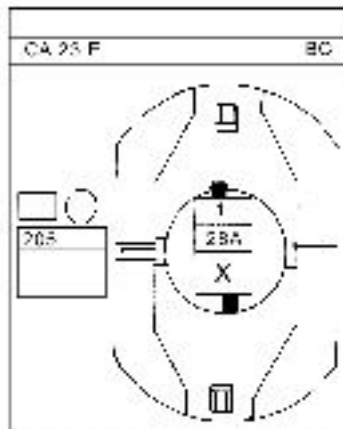
REVERSE DRIVING CONTACT

Pos.	Sectioning		Destination
1	0,60	AP11	+ AFTER PROTECTED CONTACT, REVERSE DRIVING LIGHTS
2	0,60	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02




OIL TRANSMITTER CONTACT

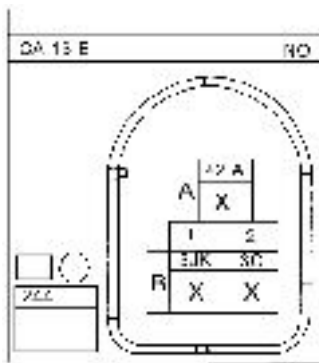
Pos.	Sectioning		Destination
1	0,35	28A	OIL PRESSURE INDICATOR - CONTROL




	ENGINE WIRING	B41 01
---	---------------	-----------

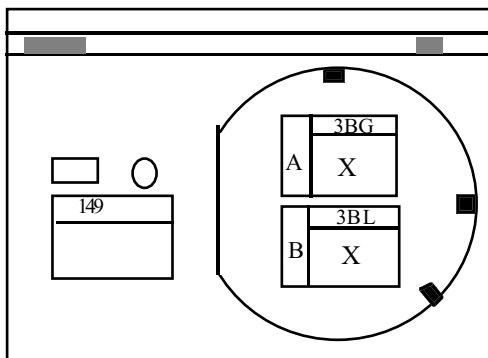
WATER TEMPERATURE SENSOR

Pos.	Sectioning		Destination
A	0,35	42A	SIGNAL +WATER TEMPERATURE
B1	0,60	3JK	- WATER TEMPERATURE
B2	0,60	3C	SIGNAL +WATER TEMPERATURE SENSOR




RPM SENSOR

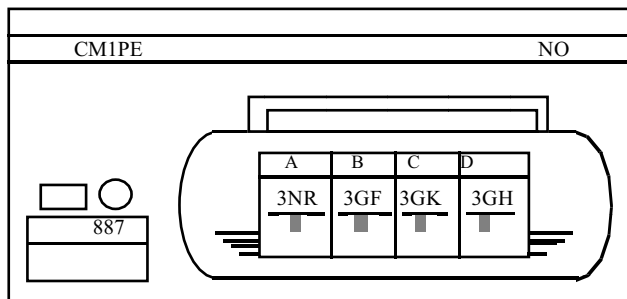
Pos.	Sectioning		Destination
A	0,60	3BG	ENGINE RPM SIGNAL >RPM SENSOR
B	0,60	3BL	ENGINE RPM - SIGNAL >RPM SENSOR




	ENGINE WIRING	B41 01
---	---------------	-----------

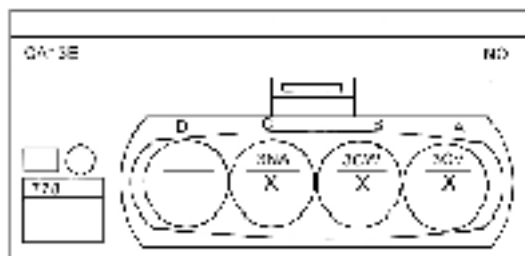
UPSTREAM OXYGEN SENSOR

Pos.	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
C	0,60	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GH	UPSTREAM OXYGEN SENSOR MASS




IGNITION COIL

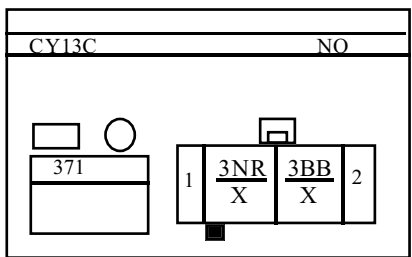
Pos.	Sectioning		Destination
A	2,0	3CV	CONTROL-CYLINDERS 1-4 IGNITION COIL
B	2,0	3CW	CONTROL-CYLINDERS 2-3 IGNITION COIL
C	2,0	3NA	+ IGNITION COIL, CHOKE 3 SENSOR > FUEL PUMP RELAY




	<p>ENGINE WIRING</p>	<p>B41 01</p>
---	----------------------	-------------------

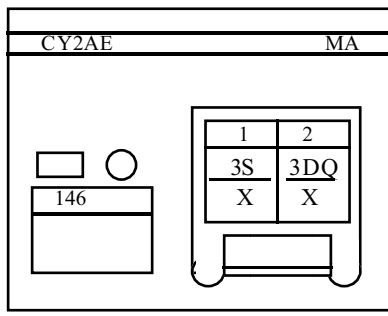
CANISTER PURGING VALVE

Pos.	Sectioning		Destination
1	0,60	3NR	+ INJECTORS >ACTUATORS RELAY OUTLET
2	0,60	3BB	CANISTRPURGINGVALVECONTROL




DETONATION SENSOR

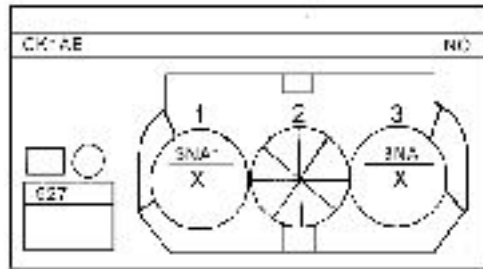
Pos.	Sectioning		Destination
1	0,50	3S	SIGNAL+ DETONATION SENSOR
2	0,50	3DQ	DETONATION SENSOR MASS
4	0,50	TB1	DETONATIONSENSORSCREENING




	ENGINE WIRING	B41 01
---	---------------	-----------

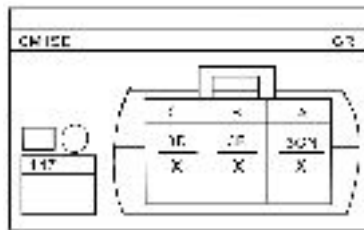
CHOKE SENSOR

Pos.	Sectioning		Destination
1	1,40	3NA1	+ FUEL PUMP > CHOKE SENSOR
3	1,40	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY



ATMOSPHERIC PRESSURE SENSOR

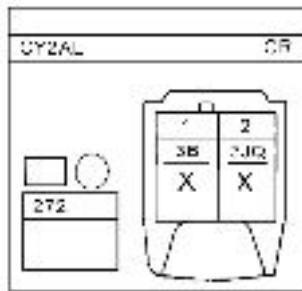
Pos.	Sectioning		Destination
A	0,35	3GN	Atmospheric pressure sensor mass
B	0,35	3F	Atmospheric pressure sensor signal
C	0,35	3D	Atmospheric pressure sensor > Supply +




	ENGINE WIRING	B41 01
---	---------------	-----------

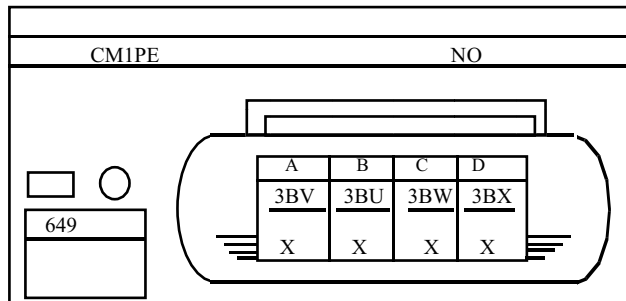
AIR TEMPERATURE SENSOR

Pos.	Sectioning		Destination
1	0,60	3B	SIGNAL +AIRTEMPERATURE SENSOR
2	0,60	3JQ	AIR TEMPERATURE SENSOR MASS




STEP-BY-STEP ENGINE

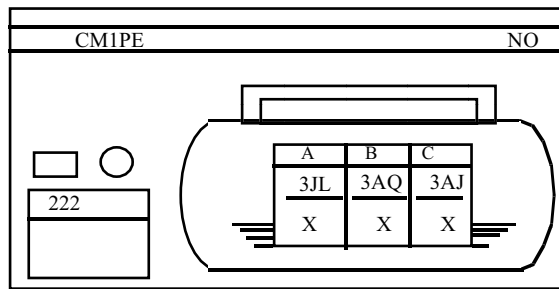
Pos.	Sectioning		Destination
A	0,60	3BV	IDLERUNNNGREGULATORCONTROL2
B	0,60	3BU	IDLERUNNNGREGULATORCONTROL1
C	0,60	3BW	IDLERUNNNGREGULATORCONTROL3
D	0,60	3BX	IDLERUNNNGREGULATORCONTROL4



	ENGINE WIRING	B41 01
---	---------------	-----------

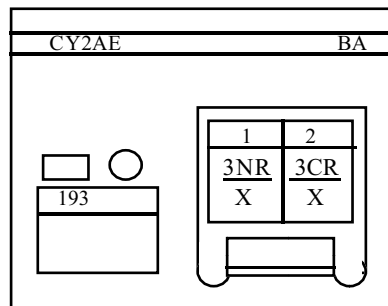
VALVEPOTENTIOMETER

Pos.	Sectioning		Destination
A	0,60	3JL	VALVEPOTENTIOMETERMASS
B	0,60	3AQ	SIGNAL+ VALVEPOTENTIOMETER
C	0,60	3AJ	SIGNAL+VALVE POSITON POTENTIOMETER




INJECTOR 1

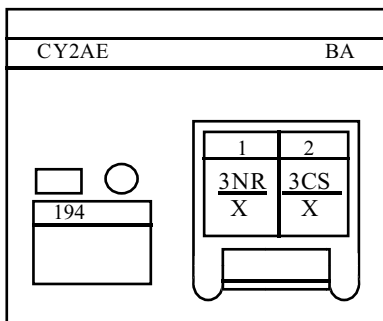
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CR	CONTROL -INJECTOR 1



	ENGINE WIRING	B41 01
---	---------------	-----------

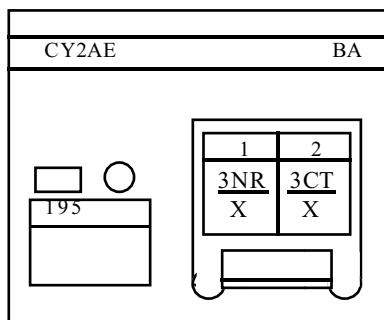
INJECTOR 2

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CS	CONTROL -INJECTOR 2




INJECTOR 3

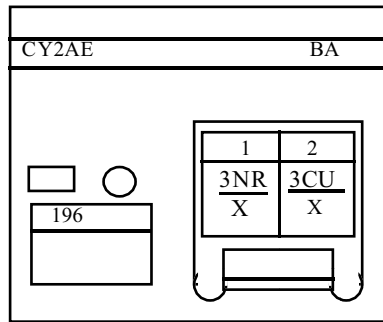
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CT	CONTROL -INJECTOR 3




	ENGINE WIRING	B41 01
---	---------------	-----------

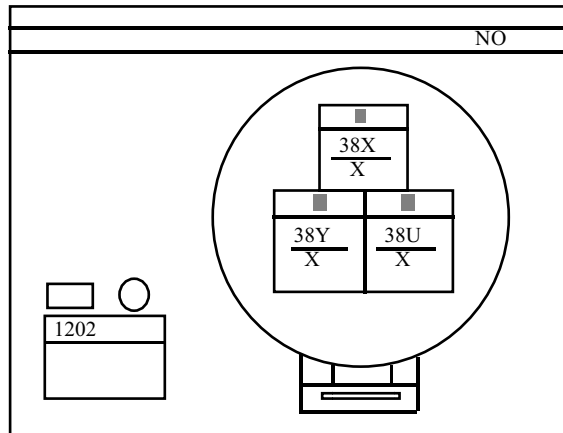
INJECTOR 4

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CU	CONTROL -INJECTOR 4




AIR CONDITIONING SYSTEM PRESSURE SENSOR

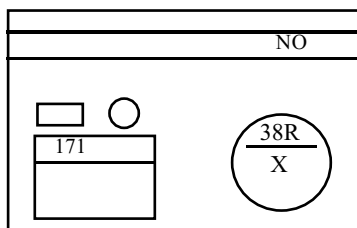
Pos.	Sectioning		Destination
A	0,60	38U	FREON PRESSURE SENSOR MASS
B	0,60	38Y	+FREON PRESSURE SENSOR
C	0,60	38X	FREON PRESSURE SENSOR SIGNAL




	ENGINE WIRING	B41 01
---	---------------	-----------

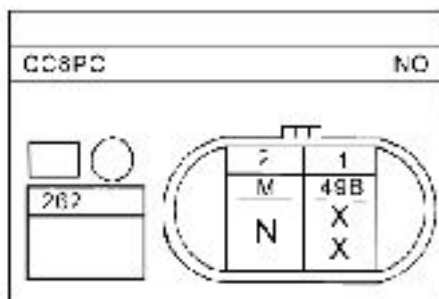
AIR CONDITIONING COMPRESSOR CLUTCH

Pos.	Sectioning		Destination
1	1,0	38R	CONTROL+AIRCONDITIONINGCOMPRESSORCLUTCH




AIR CONDITIONING AND BLOWER COOLING
(FOR AIRCONDITIONING EQUIPPED VEHICLES)

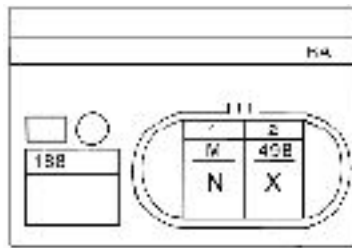
Pos.	Sectioning		Destination
1	2,0	49B	CONTROL+BLOWERCOOLING->BLOWERRESISTANCE
1	5,0	49B	CONTROL+BLOWERCOOLING
2	5,0	M	MASS



	ENGINE WIRING	B41 01
---	---------------	-----------

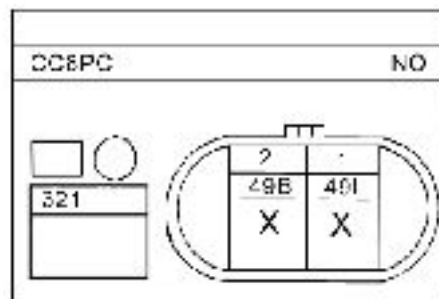
BLOWER COOLING
(FOR VEHICLES WITHOUT AIRCONDITIONING SYSTEM)

Pos.	Sectioning		Destination
1	1,5	M	MASS
2	1,5	49B	CONTROL+BLOWER COOLING




BLOWER RESISTANCE
(FOR AIRCONDITIONING EQUIPPED VEHICLES)

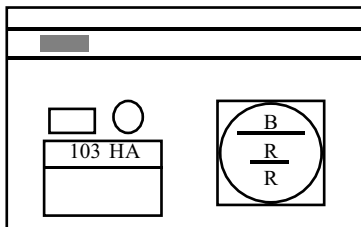
Pos.	Sectioning		Destination
1	2	49L	CONTROL+ BLOWER COOLING RESISTANCE
2	2	49B	CONTROL+BLOWER COOLING



	ENGINE WIRING	B41 01
---	---------------	-----------

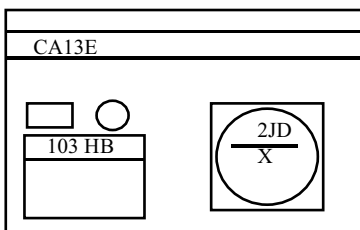
ALTERNATOR

Pos.	Sectioning		Destination
1	5,0	B	+ BATTERY > FUSE INLE F02
1	16,0	B	+ BATTERY > + STARTER




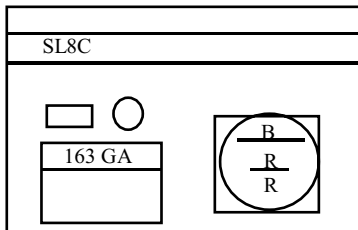
ALTERNATOREXCITATION

Pos.	Sectioning		Destination
1	0,6	2JD	+ALTERNATOR EXCITATION >INSTRUMENT PANEL



STARTER

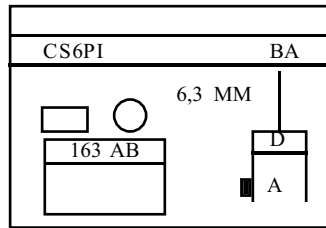
Pos.	Sectioning		Destination
1	160	B	+BATTERY
1	160	B	+ BATTERY >+ ALTERNATOR




	ENGINE WIRING	B41 01
---	---------------	-----------

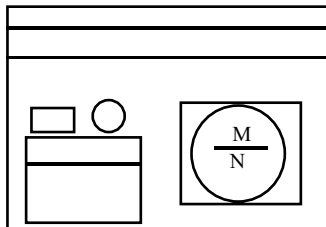
STARTER EXCITATION

Pos.	Sectioning		Destination
1	3,0	D	+ STARTER CONTROL




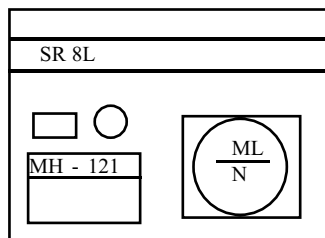
BLOWER MASS

Pos.	Sectioning		Destination
1	5,0	M	MASS




ENGINE ELECTRIC MASS

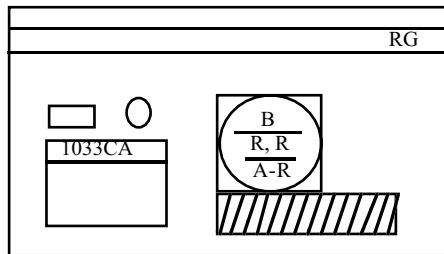
Pos.	Sectioning		Destination
1	4,0	ML	INJECTION COMPUTER MASS (PINS 3, 2&ND 3)



	<p>ENGINE WIRING</p>	<p>B41 01</p>
---	----------------------	-------------------


BATTERY TERMINAL+ (PLUS)

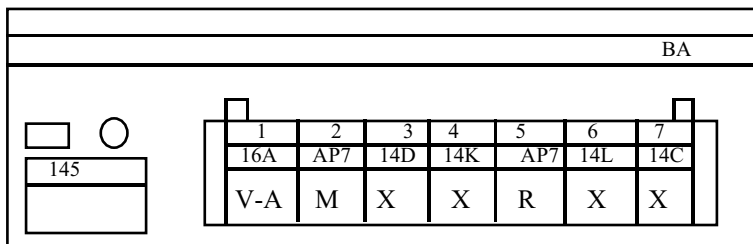
Pos	Sectioning		Destination
1	16,0	B	+ BATTERY > + STARTER
1	5,0	B	+ BATTERY > FUSES INLE F01, F04
1	1,0	B	+ BATTERY > FUSE INLE F06




	FRONT WIRING	B41 01
---	--------------	-----------

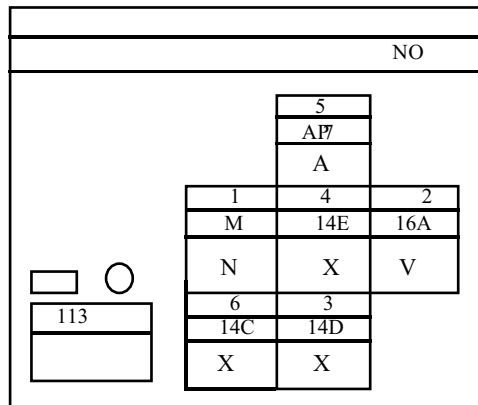
WINDSCREEN WIPER – WASHING SWITCH

Position	Sectioning		Destination
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
2	0,75	AP7	+AFTER PROTECTED CONTACT, WINDSCREEN WIPER
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	1,0	14K	CONTROL +WINDSCREEN WIPER LOW SPEED
5	1,0	AP7	+AFTER PROTECTED CONTACT, WINDSCREEN WIPER
6	0,75	14L	CONTROL +WINDSCREEN WIPER HIGH SPEED
7	0,5	14C	CONTROL +WINDSCREEN WIPER STOPPING IN PRESET POSITION




WINDSCREEN WIPER TIMER

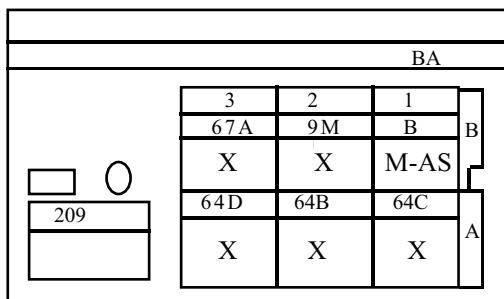
Position	Sectioning		Destination
1	0,5	M	MASS
2	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
5	0,75	AP7	+AFTER PROTECTED CONTACT, WINDSCREEN WIPER
6	0,5	14C	CONTROL +WINDSCREEN WIPER STOPPING IN PRESET POSITION




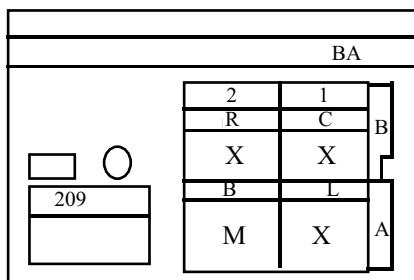
	FRONT WIRING	B41 01
---	--------------	-----------

HORN, TURNING AND LIGHTS SWITCH

Position	Sectioning		Destination
A1	1,0	64C	LEFT TURNING LIGHTS CONTROL
A2	1,0	64B	CONTROL + TURNING RELAY
A3	1,0	64D	RIGHT TURNING LIGHTS CONTROL
B1	1,0	B	+ BATTERY
B2	0,5	9M	SHUNT > FO LIGHTS SWITCH
B3	1,0	67A	CONTROL + ACOUSTIC WARNING




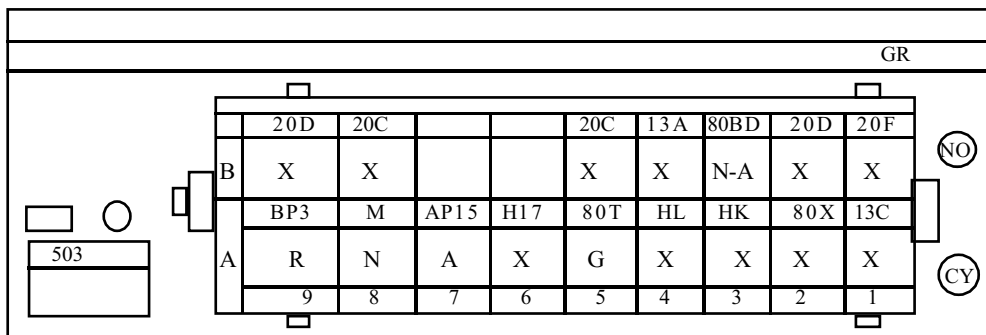
Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > FUSHNLET F05
A2	3,0	B	+ BATTERY
B1	0,75	C	+ LOW BEAM LIGHTS
B2	0,75	R	+ HIGH BEAM LIGHTS



	FRONTWIRING	B41 01
---	-------------	-----------


U.C.E. DECODER

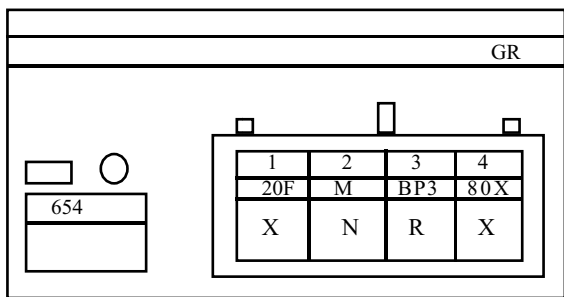
Position	Sectioning		Destination
A1	0,5	13C	CEILING LAMP CONTROL
A2	0,35	80X	ANTI-STARTER RECEPTOR SIGNAL TRACK (TR)
A3	0,35	HK	DIAGNOSIS SIGNAL LINE K
A4	0,35	HL	DIAGNOSIS SIGNAL - LINE L
A5	0,35	80T	ANTI-STARTING CONTROL-INDICATOR
A6	0,35	H17	INJECTION CODE SIGNAL > ANTI-STARTING
A7	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
A8	0,35	M	MASS
A9	1,0	BP3	+ PROTECTED CONTACT > FUSE OUTLET F07
B1	0,35	20F	RADIO FREQUENCY RECEPTION SIGNAL
B2	0,35	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
B3	0,35	80BD	FLASH RELAY CONTROL
B4	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
B5	0,35	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
B6			
B7			
B8	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > ACTUATORS
B9	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS




	FRONT WIRING	B41 01
---	--------------	-----------

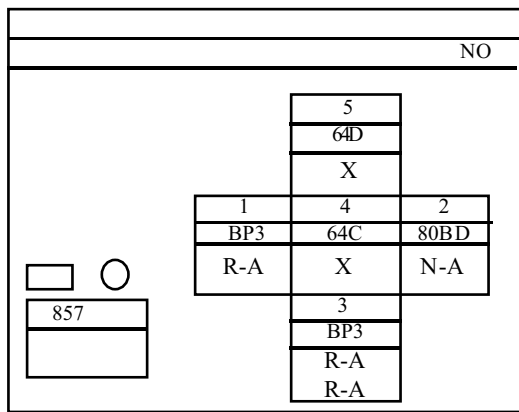
ANTI-STARTING BUSHING

Position	Sectioning		Destination
1	0,35	20F	RADIOFREQUENCY RECEPTION SIGNAL
2	0,35	M	MASS
3	0,35	BP3	PROTECTED BATTERY > FUSE OUTLET F07
4	0,35	80X	ANTI-STARTING RECEPTOR SIGNAL TRACK (TR)




FLASH RELAY

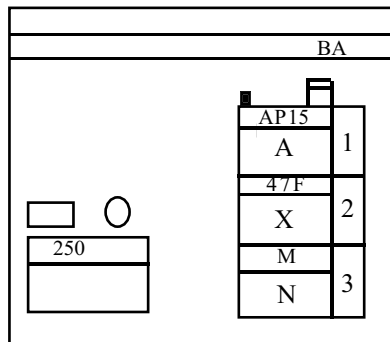
Position	Sectioning		Destination
1	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
2	0,35	80BD	FLASH RELAY CONTROL
3	0,5	BP3	+ PROTECTED BATTERY > FLASH RELAY
3	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
4	0,5	64C	LEFT TURNING LIGHTS CONTROL
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
* For Anti-intrusion System equipped vehicles			
5	0,5	64D	RIGHT TURNING LIGHTS > U.C.E. ANTI-INTRUSION SYSTEM > DOORS ELECTRIC LOCKING/ UNLOCKING INFO




	FRONTWIRING	B41 01
---	-------------	-----------

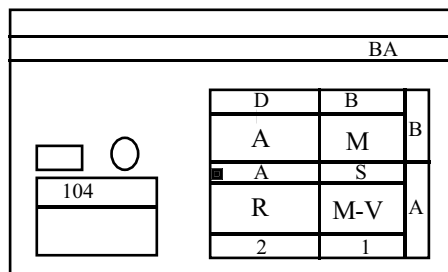
VEHICLE SPEED TRANSDUCER

Position	Sectioning		Destination
1	0,35	AP15	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,35	47F	VEHICLE SPEED SIGNAL
3	0,35	M	MASS




INTRUSION SYSTEM

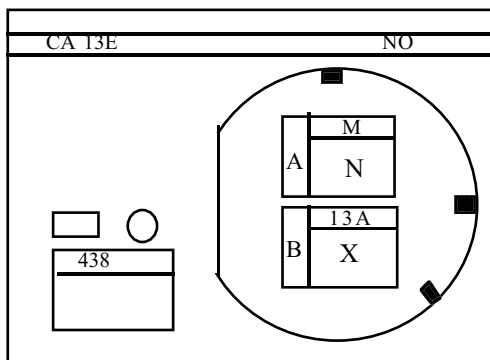
Position	Sectioning		Destination
A1	1,5	S	+ACCESSORIES > COCKPIT FUSES INLET F01, F15
A2	4,0	A	SUPPLY + AFTER CONTACT > COCKPIT FUSES INLET F02, F03 AND ENGINE FUSE INLET F03
B1	4,0	B	+ BATTERY
B2	3,0	D	+ STARTER CONTROL




	FRONT WIRING	B41 01
---	--------------	-----------

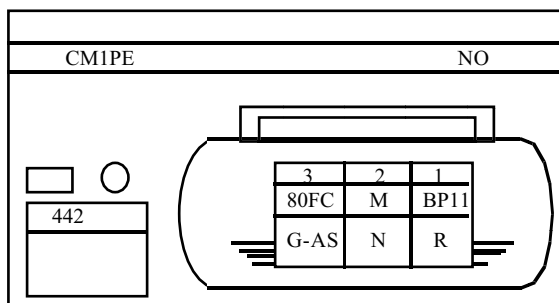
ENGINE HOOD CONTACT

Position	Sectioning		Destination
A	0,35	M	MASS
B	0,35	13A	CONTROL-CEILING LAMPS LIGHTING>ENGINE HOOD CONTACT




SIREN

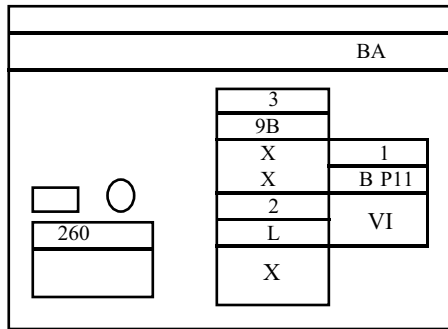
Position	Sectioning		Destination
1	0,5	BP11	+ PROTECTED BATTERY > SIREN
2	0,5	M	MASS
3	0,35	80FC	SIREN CONTROL SUPPLY




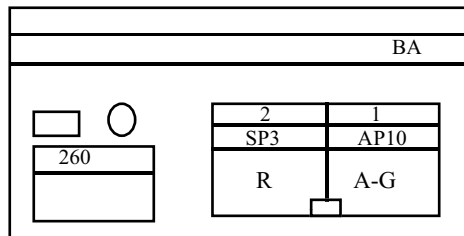
	FRONT WIRING	B41 01
---	--------------	-----------

COCKPIT RELAYS AND FUSE BOX

Position	Sectioning		Destination
1	0,5	9B	CONTROL + REAR FOG AMP
2	0,5	L	+ PARKING LIGHTS > LIGHTS SWITCH
3	0,5	9DP	+ PROTECTED REAR FOGLIGHTS
3	0,5	9DP	+ PROTECTED REAR FOGLIGHTS > FOGLAMP SWITCH




Position	Sectioning		Destination
1	0,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
2	1,5	SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER



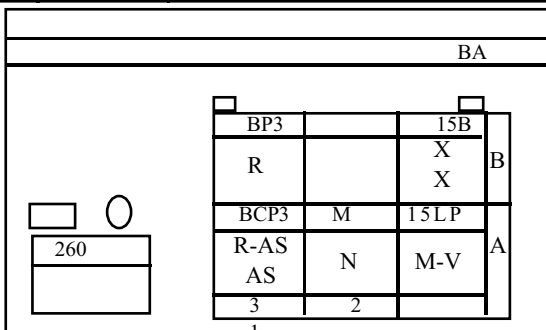
CONNECTORS AND CONNECTIONS WIRES FUNCTION


	FRONT WIRING	B41 01
---	--------------	-----------

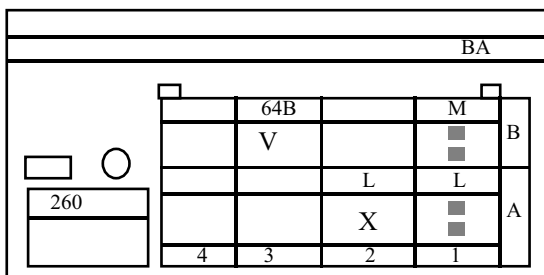
Position	Sectioning		Destination
A1	0,35	15LP	CONTROL+PROTECTED REAR WINDOW DEFROSTING
A2	0,5	M	MASS
A3	0,5	BCP3	+CEILING PROTECTED BATTERY
A3	1,5	BCP3	+CEILING PROTECTED BATTERY > FUSE OUTLET F06
B1	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B1	0,35	15A	REAR WINDOW DEFROSTING INDICATOR - CONTROL
B2			
B3	1,0	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07

* For Anti-intrusion equipped vehicles


B3	1,0	BP3	+ WINDSCREEN WIPER STOPPING PRESET POSITION PROTECTED BATTERY > SIREN
----	-----	-----	---

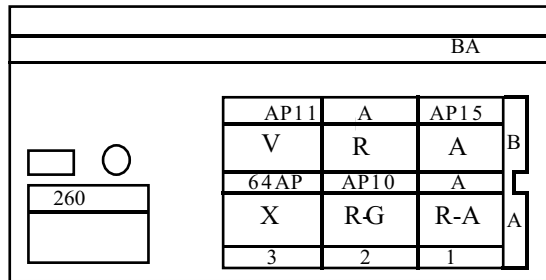



Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > LIGHTS SWITCH
A1	0,50	L	+ PARKING LIGHTS > FOG LAMPS RELAY
A2	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
A3			
A4			
B1	0,5	M	MASS
B1	0,5	M	MASS > FOG LAMPS RELAY, CLIMATE CONTROL BLOWER RELAY, REAR WINDOW DEFROSTING TIMER
B2			
B3	1,0	64B	CONTROL + TURNING RELAY

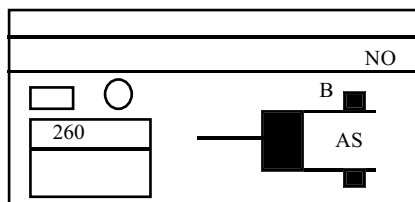




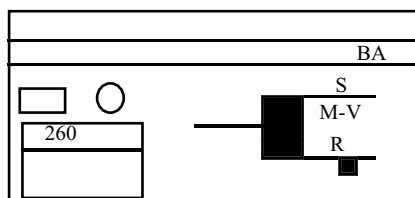
Position	Sectioning		Destination
A1	1,5	A	SUPPLY + D.C.
A2	1,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
A3	1,0	64AP	+ PROTECTED TURNING LIGHTS, FUSE INLET F04
B1	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
B2	0,5	A	SUPPLY + D.C. > COCKPIT FUSE INLET F02
B3	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT



Position	Sectioning		Destination
	3,0	B	+ BATTERY > FUSES INLET F06, F07 F08, F09

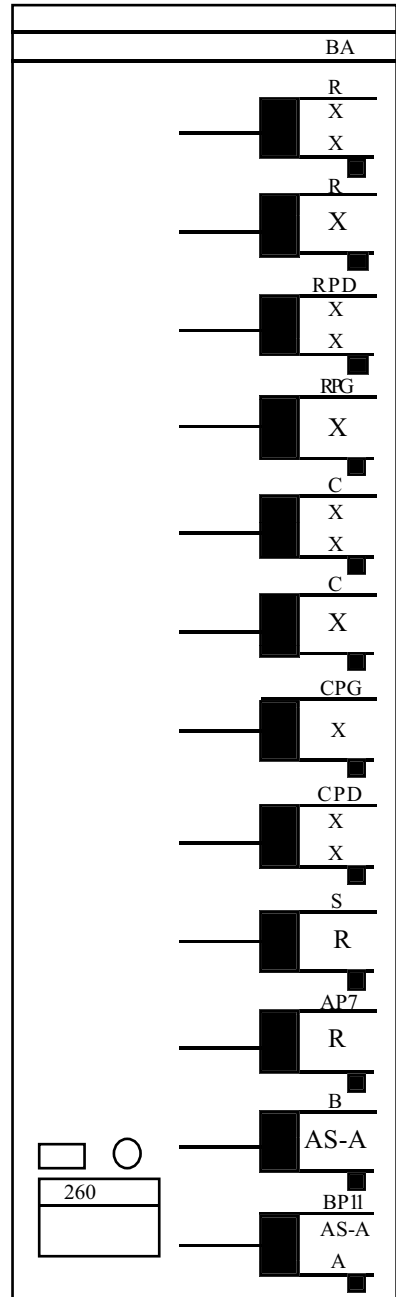


Position	Sectioning		Destination
	1,5	S	+ ACCESSORIES > FUSE INLET F01 COCKPIT
	1,5	S	+ ACCESSORIES > FUSE INLET F05 COCKPIT






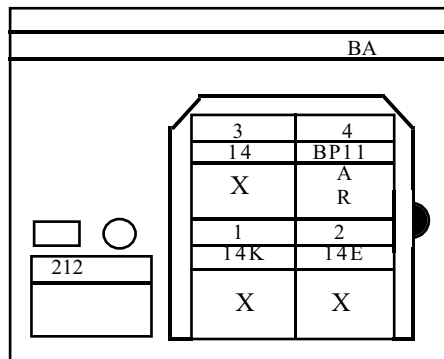
Position	Sectioning		Destination
F11	0,75	R	+ HIGH BEAM LIGHTS > FUSE INLET F11
	0,75	R	HIGH BEAM LGHTS > FUSE NLET F12
F12	0,75	R	HIGH BEAM LIGHTS > FUSE INLET F12
F12	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12
	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F11	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11
F13	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F13
	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F14	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F13	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13
F14	0,75	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14
	0,35	CPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F15	1,5	S	+ ACCESSORIES > FUSE INLET F01
F15	1,0	AP7	+ WINDSCREEN WPER PROTECTED D.C.
F16	0,75	B	+ BATTERY
F16	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
	0,75	BP11	+ PROTECTED BATTERY > HORNS






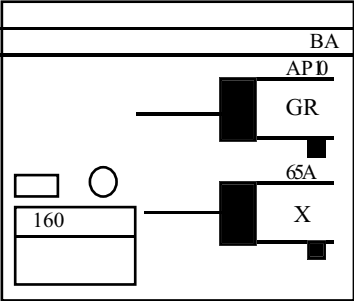
WINDSCREEN WIPER MOTOR

Pos	Sectioning		Destination
1	1,0	14K	CONTROL + WINDSCREEN WIPER LOW SPEED
2	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
3	0,75	14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
4	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
4	0,5	BP11	+ PROTECTED BATTERY > HORNS




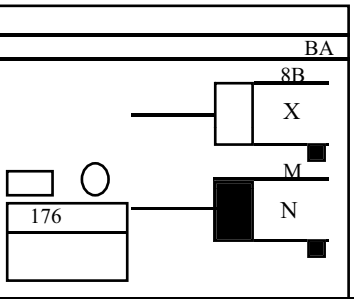
STOP CONTACT

Position	Sectioning		Destination
1	1,0	AH0	+PROTECTØDD.C>FUSEOUTLET F01
2	1,0	65A	CONTROL + STOP LIGHTS




RIGHTFOGLAMP

Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELX
2	0,75	M	MASS

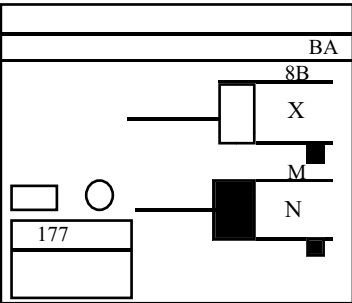


	FRONT WIRING	B41 01
---	--------------	-----------


LEFT FRONT FOG LAMP

Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELX
2	0,75	M	MASS

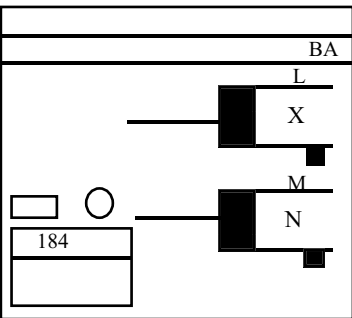
177




RIGHT FRONT PARKING LAMP

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS

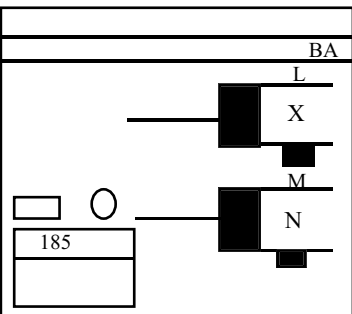
184



LEFT FRONT PARKING LIGHT


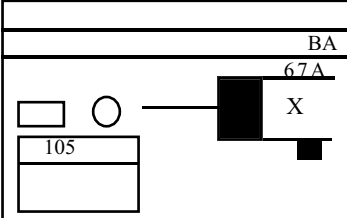
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS

185


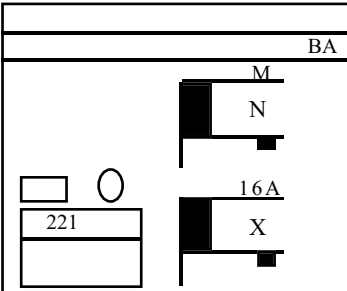


	FRONT WIRING	B41 01
---	--------------	-----------


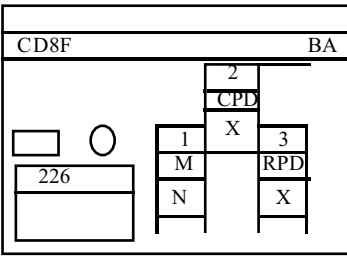
ACOUSTIC WARNING

Position	Sectioning		Destination	
1	1,0	67A	CONTROL +ACOUSTIC WARNING	


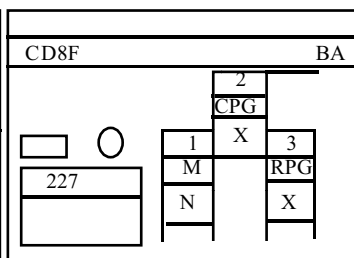
WINDSCREEN WIPER PUMP

Position	Sectioning		Destination	
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP	
2	0,35	M	MASS	

RIGHT HEADLIGHT


Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPD	+ PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14	
3	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12	

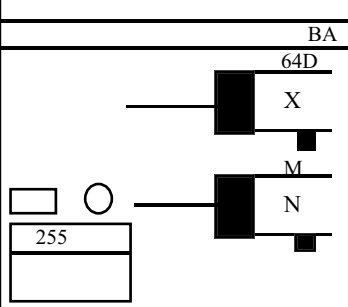
LEFT HEADLIGHT

Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13	
3	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11	


	FRONT WIRING	B41 01
---	--------------	-----------

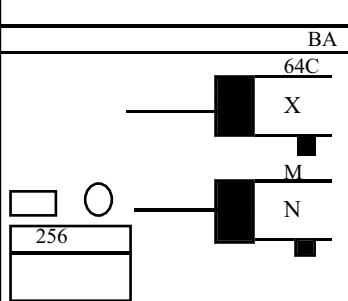
RIGHT FRONT TURNING LIGHT

Position	Sectioning		Destination
1	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
2	0,5	M	MASS




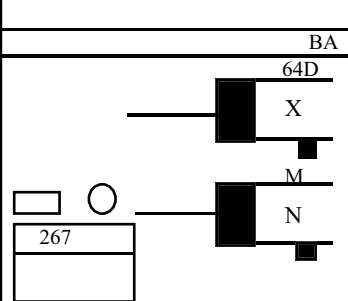
LEFT FRONT TURNING LIGHT

Position	Sectioning		Destination
1	0,5	64C	LEFTTURNINGLIGHTSCONTROL
2	0,5	M	MASS




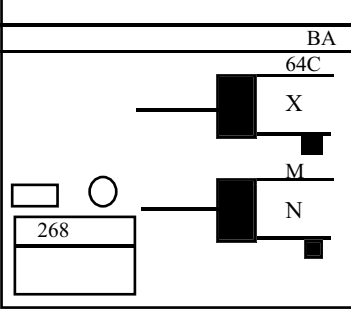
RIGHT FRONT SIDE TURNING LIGHT

Position	Sectioning		Destination
1	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
2	0,5	M	MASS


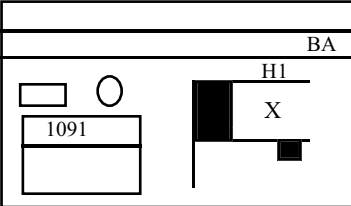


	FRONT WIRING	B41 01
---	--------------	-----------


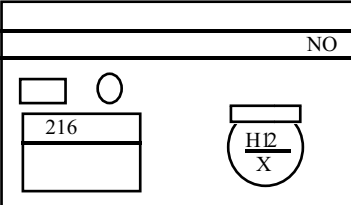
LEFT FRONT SIDE TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	


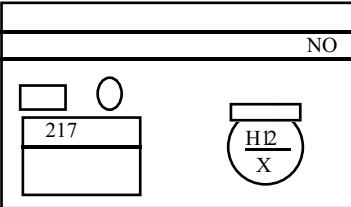
I.C.P. BRAKING SYSTEM

Position	Sectioning		Destination	
1	0,35	H1	CONTROL - ICP, HAND BRAKE INDICATOR	

RIGHT FRONT BRAKE PADS


Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	

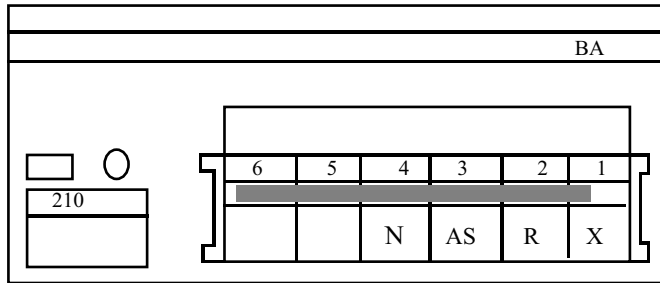
LEFT FRONT BRAKE PADS

Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	


	DASHBOARD WIRING	B41 01
---	------------------	-----------

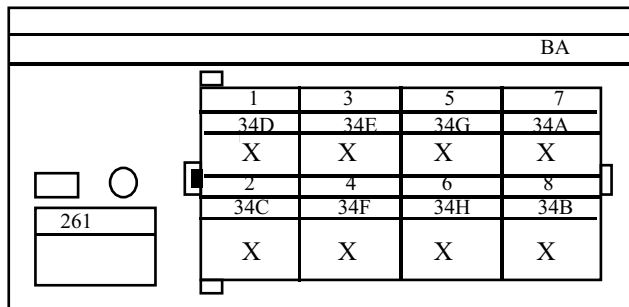
ELECTRONIC CLOCK

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,35	AP10	+ AFTER PROTECTED CONTACT . FUSE OUTLET F01
3	0,35	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	M	MASS
5			
6			




RADIO

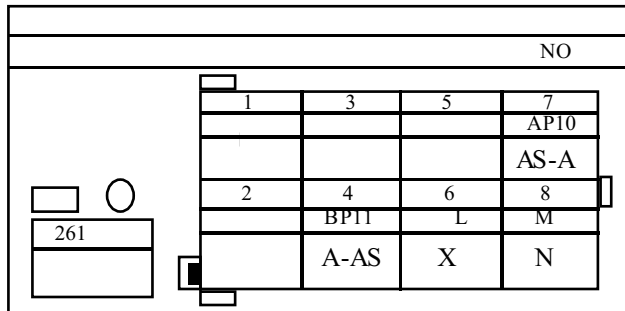
Position	Sectioning		Destination
1	0,35	34D	SIGNAL+ RIGHT REAR SPEAKER
2	0,35	34C	SIGNAL- RIGHT REAR SPEAKER
3	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
4	0,35	34F	SIGNAL -RIGHT FRONT SPEAKER
5	0,35	34G	SIGNAL +LEFT FRONT SPEAKER
6	0,35	34H	SIGNAL -LEFT FRONT SPEAKER
7	0,35	34A	SIGNAL +LEFT REAR SPEAKER
8	0,35	34B	SIGNAL -LEFT REAR SPEAKER




	DASHBOARD WIRING	B41 01
---	------------------	-----------

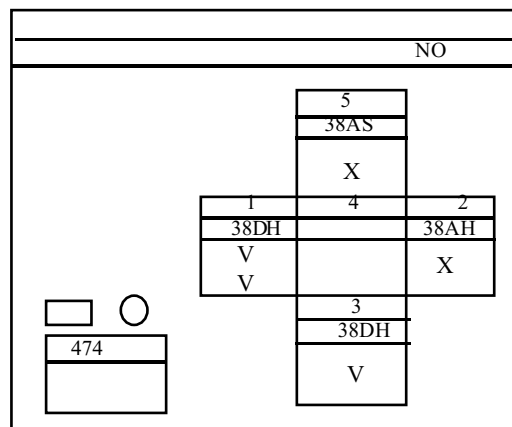
RADIO

Position	Sectioning		Destination
4	0,75	BP11	+PROTECTED BATTERY > COCKPIT FUSE BOX
6	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
7	0,75	AP10	+AFTER PROTECTED CONTACT > FUSE OUTLET F01
8	0,5	M	MASS




AIR CONDITIONING RELAY(ON BOARD)

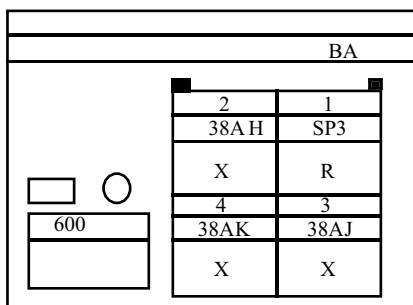
Position	Sectioning		Destination
1	0,5	38DH	CONTROL+AIRCONDITIONING
1	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
2	0,5	38AH	CONTROL+ CLIMATE CONTROL BLOWER, SPEED
3	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
5	0,35	38AS	AIRCONDITIONING COMPRESSOR CONNECTION SIGNAL




	DASHBOARD WIRING	B41 01
---	------------------	-----------

CLIMATE CONTROL BLOWER

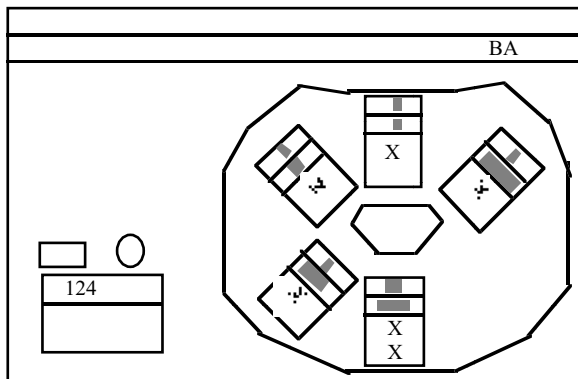
Position	Sectioning		Destination
1	1,5	SP3	ACCESSORIES PROTECTED CLIMATE CONTROL BLOWER
2	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED
3	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED
4	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED



BLOWERSWITCH

Position	Sectioning		Destination
1	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED
1*	0,5	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED + AIR CONDITIONING SYSTEM RELAY COIL (ONBOARD)
2	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER, SPEED
3	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER, SPEED
4	0,35	L	+ PARKING LIGHTS > FUSHNLETF05
5	1,5	M	MASS

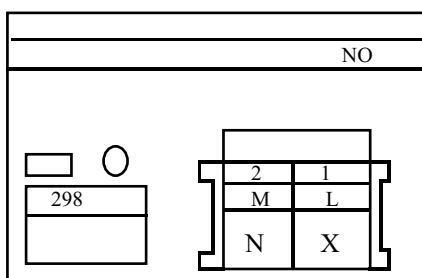
1* - for air conditioning system equipped vehicles



	DASHBOARD WIRING	B41 01
---	------------------	-----------

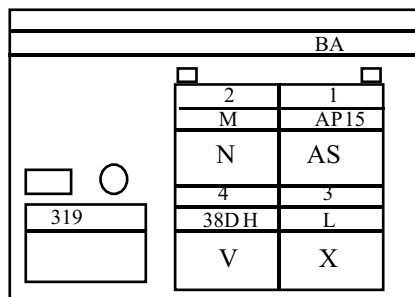
CLIMATE CONTROL LIGHTING

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




AIR CONDITIONING STARTING BUTTON

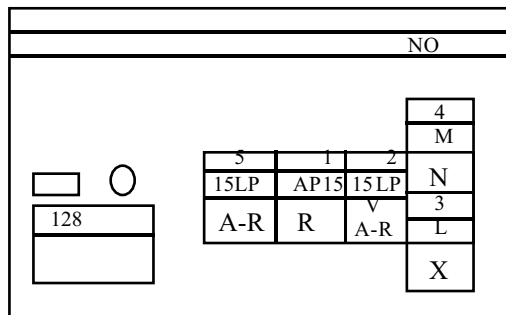
Position	Sectioning		Destination
1	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,5	M	MASS
3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,5	38DH	CONTROL+AIR CONDITIONING



	DASHBOARD WIRING	B41 01
---	------------------	-----------

REAR WINDOW DEFROSTING SWITCH (Pulse type)


Position	Sectioning		Destination
1	0,5	AP15	+ PROTECTED D.C. > FUSE OUTLET F03
2	0,5	15LP	SHUNT > PROTECTED REAR WINDOW DEFROSTING
2	0,5	15LP	+ PROTECTED REAR WINDOW DEFROSTING
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS
5	0,5	15LP	SHUNT > PROTECTED REAR WINDOW DEFROSTING

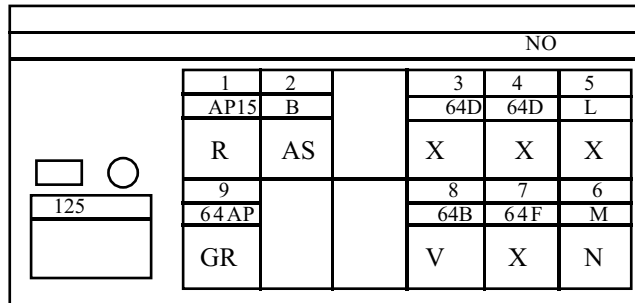


CONNECTORS AND CONNECTIONS WIRES FUNCTION


	DASHBOARD WIRING	B41 01
---	------------------	-----------

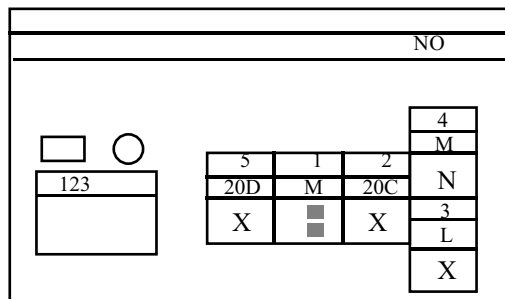
HAZARD SWITCH

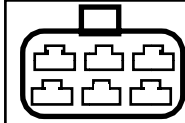
Position	Sectioning		Destination
1	1,0	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	1,0	B	+ BATTERY
3	0,5	64C	LEFT TURNING LIGHTS CONTROL
4	0,5	64D	RIGHT TURNING LIGHTS CONTROL
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,35	64F	CONTROL + HAZARD INDICATOR
8	1,0	64B	CONTROL + TURNING RELAY
9	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE INLET F04



DOORS LOCKING SWITCH

Position	Sectioning		Destination
5	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
1	0,5	M	MASS
1	0,35	M	SHUNT > MASS
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
3	0,5	L	PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	SHUNT > MASS



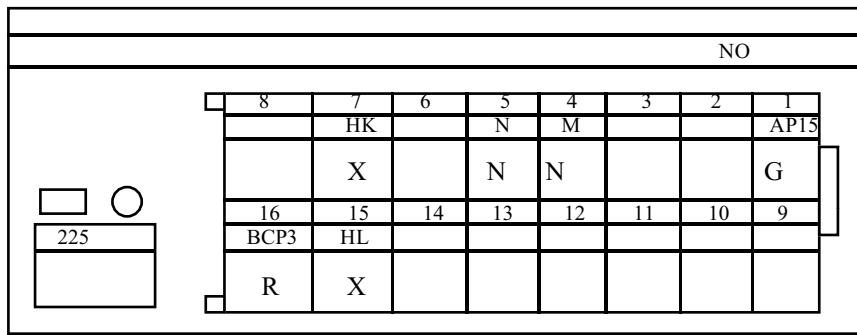


DASHBOARD WIRING

B41
01

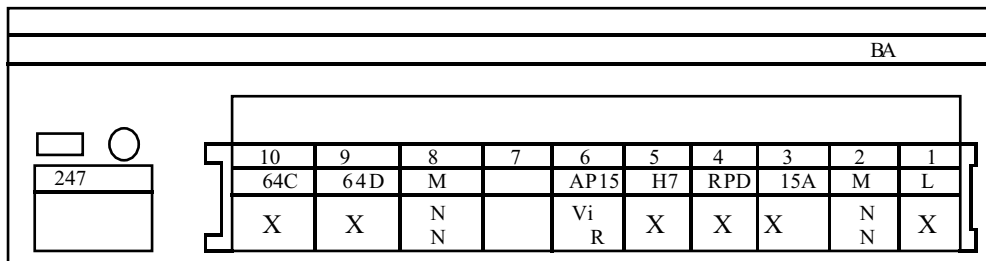
DIAGNOSIS SOCKET

Position	Sectioning		Destination
1	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
4	0,35	M	MASS
5	0,35	N	ELECTRON MASS
7	0,35	HK	DIAGNOSIS SIGNAL- LINE K
15	0,35	HL	DIAGNOSIS SIGNAL- LINE L
16	0,35	BCP3	+ PROTECTED BATTERY > FUSE OUTLET F06



INSTRUMENT PANEL

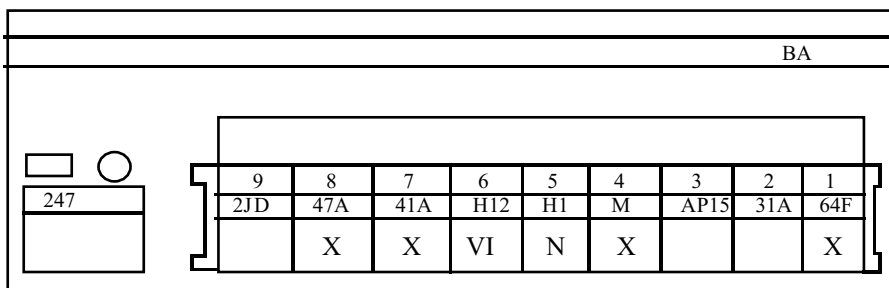
Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,75	M	MASS
2	0,5	M	SHUNT > MASS
3	0,35	15A	REAR WINDOW DEFROSTING INDICATOR-CONTROL
4	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
5	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
6	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
6	0,5	AP15	SHUNT > + AFTER PROTECTED CONTACT
7			
8	0,5	M	SHUNT > MASS
8	0,5	M	SHUNT > MASS
9	0,5	64D	RIGHT TURNING LIGHTS CONTROL
10	0,35	64C	LEFT TURNING LIGHTS CONTROL



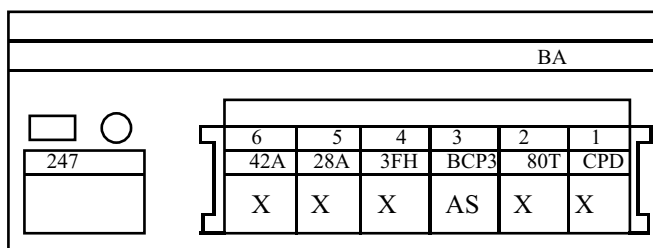
CONNECTORS AND CONNECTIONS WIRES FUNCTION

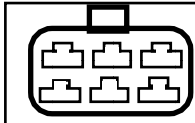
	DASHBOARD WIRING	B41 01
---	------------------	-----------

Position	Sectioning	⚡	Destination
1	0,35	64F	CONTROL + HAZARD INDICATOR
2	0,35	31A	WATER TEMPERATURE INDICATOR – CONTROL
3	0,5	AP15	SHUNT > +AFTER PROTECTED CONTACT
4	0,5	M	SHUNT > MASS
5	0,35	H1	ICP HANDBRAKE INDICATOR – CONTROL
6	0,35	H12	BRAKE PADSWEAR INDICATOR – CONTROL
7	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
8	0,35	47A	-FUELLEVEL WARNING SIGNAL
9	0.6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL



Position	Sectioning	⚡	Destination
1	0,35	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > INDICATOR
2	0,35	80T	ANTI-STARTING INDICATOR - CONTROL
3	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	3FH	INJECTION FAILURE INDICATOR – CONTROL
5	0,35	28A	OIL PRESSURE INDICATOR – CONTROL
6	0,35	42A	SIGNAL + WATER TEMPERATURE



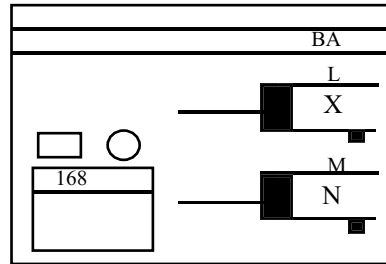


DASHBOARD WIRING

B41
01

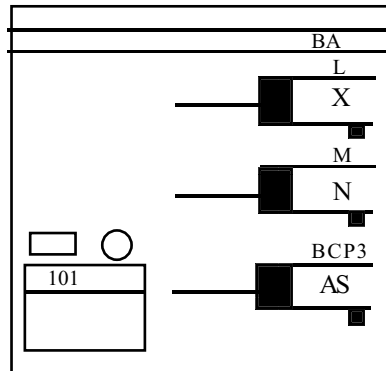
DOCUMENTS COMPARTMENT LIGHTING LAMP

Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS



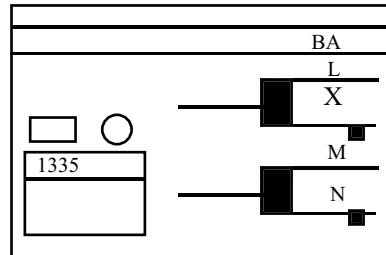
ELECTRIC LIGHTER

Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS
3	0,75	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06



FRONT ASHTRAY LIGHTING

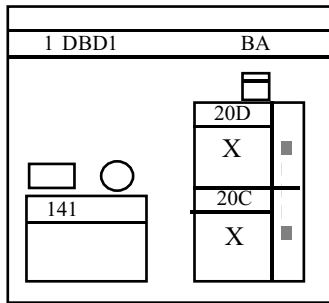
Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS



	DOORS WIRING	B41 01
---	--------------	-----------

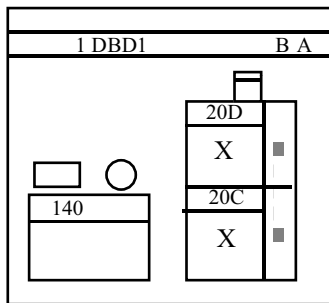
RIGHT FRONT DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS



LEFT FRONT DOOR ACTUATOR

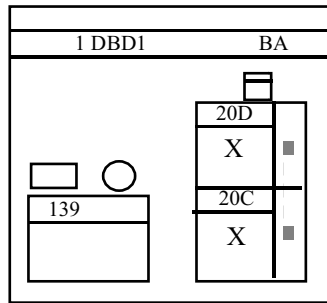
Position	Sectioning		Destination
1	0.	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS





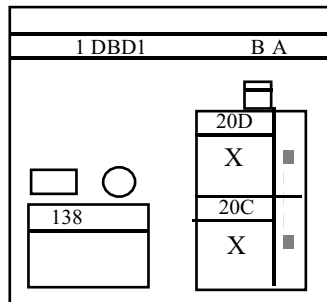
LEFT REAR DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




RIGHT REAR DOOR ACTUATOR

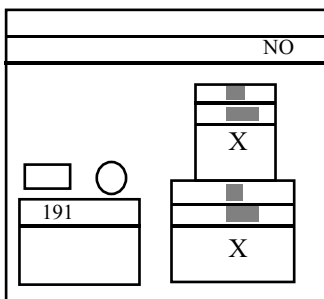
Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




	<p>DOORS WIRING</p>	<p>B41 01</p>
---	---------------------	-------------------

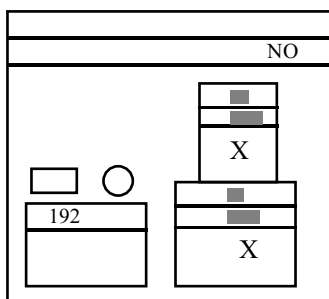
RIGHT FRONT DOOR SPEAKER

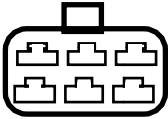
Position	Sectioning		Destination
1	0.35	34E	SIGNAL +RIGHT FRONT SPEAKER(RADIO)
2	0.35	34F	SIGNAL -RIGHT FRONT SPEAKER (RADIO)




LEFT FRONT DOOR SPEAKER

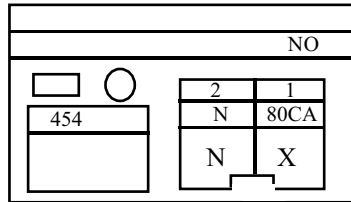
Position	Sectioning		Destination
1	0.35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
2	0.35	34H	SIGNAL -LEFTFRONT SPEAKER (RADIO)




	REAR WIRING	B41 01
---	--------------------	-------------------

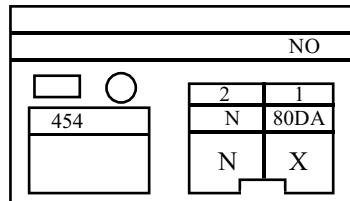
RIGHT VOLUME SENSOR (RX)

Position	Sectioning		Destination
1	0.35	80CA	RIGHT FRONT ULTRASONIC EMISSION ELECTRON MASS
2	0.35	N	




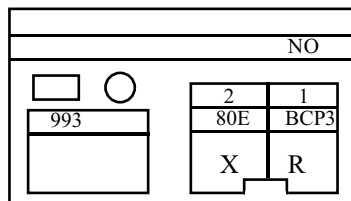
LEFT VOLUME SENSOR (TX)

Position	Sectioning		Destination
1	0.35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO ELECTRON MASS
2	0.35	N	




ANTI INTRUSION INDICATOR LED

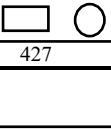
Position	Sectioning		Destination
1	0.35	BCP3	+ CEILING LAMPS PROTECTED BATTERY OUTLET FUSE F06 ANTI-INTRUSION INDICATOR CONTROL
2	0.35	80E	



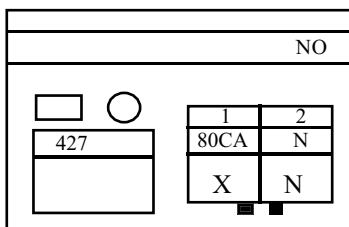
	REAR WIRING	B41 01
---	-------------	-----------

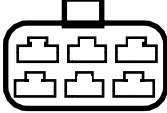
U.C.E. ANTI-INTRUSION

Position	Sectioning		Destination
1	0,5	64D	RIGHT TURNING LIGHTS > ICE ANTI-INTRUSION > DOORSLOCKING/UNLOCKINGINFO
2	0,35	M	MASS
5	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
6	0,5	BCP3	+ CEILINGLAMP PROTECTED BATTERY > FUSE OUTLET F06
6	0,35	BCP3	+ CEILINGLAMP PROTECTED BATTERY
7	0,5	64C	LEFTTURNINGLIGHTSCONTROL
8	0,35	80E	ANTI-INTRUSION INDICATOR CONTROL
9	0,35	13A	CEILING LAMP LIGHTING -CONTROL> CONTACTS
12	0,35	AP15	+ PLUSAFTER PROTECTED CONTACT> FUSE OUTLET F03
14	0,35	20D	CONTROL + DOORS LOCKING & ACTUATORS
15	0,35	20C	CONTROL + DOORS UNLOCKING > ACTUATORS
18	0,35	80FC	SIREN CONTROL SUPPLY
23	0,35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
24	0,35	N	ELECTRONCMASS
24	0,35	N	MASS


BA												
 427	24	23	22	21	20	19	18	17	16	15	14	13
	N	80DA					80FC			20C	20D	
	N	X					GR-VI			X	X	
	N											
	12	11	10	9	8	7	6	5	4	3	2	1
	AP15			13A	M	64C	BCP3	64D			M	64D
	G			X	X	X	R R	R			V-A	X

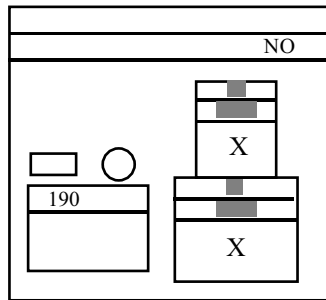
Position	Sectioning		Destination
1	0,35	80CA	RIGHT FRONT ULTRASONIC EMSSION
2	0,35	N	ELECTRONCMASS




	REAR WIRING	B41 01
---	--------------------	-------------------

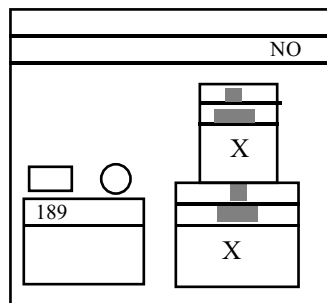
LEFTREAR SPEAKER

Position	Sectioning		Destination
1	0.35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
2	0.35	34B	SIGNAL - LEFTREAR SPEAKER (RADIO)




RIGHTREAR SPEAKER

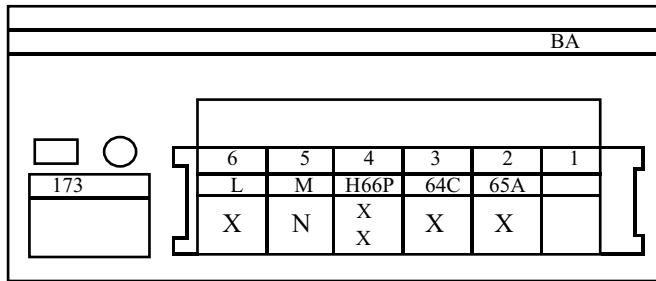
Position	Sectioning		Destination
1	0.35	34D	SIGNAL +RIGHT REAR SPEAKER (RADIO)
2	0.35	34C	SIGNAL -RIGHT REARSPEAKER (RADIO)




	REAR WIRING	B41 01
---	-------------	-----------

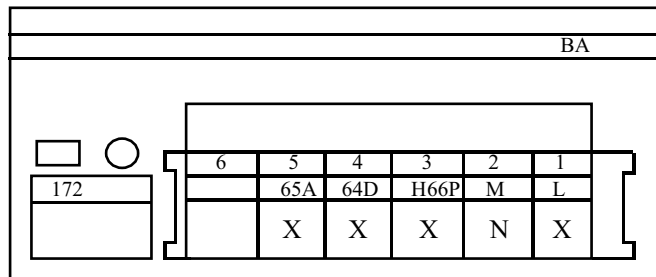
LEFTREARLAMP

Position	Sectioning		Destination
1			
2	0,5	65A	CONTROL +STOP LIGHTS
3	0,5	64C	LEFTTURNINGLIGHTSCONTROL
4	0,5	H66P	CONTROL+REVERSEDIVINGLIGHTS>FUSEOUTLET F02
4	0,5	H66P	CONTROL+ REVERSEDIVING LIGHTS>RIGHTREARLAMP
5	0,5	M	MASS
6	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05




RIGHTREARLAMP

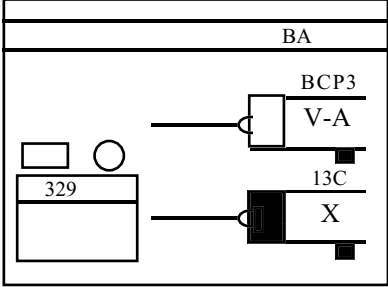
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05
2	0,5	M	MASS
3	0,5	H66P	CONTROL+ REVERSE DRIVINGLIGHTS> FUSE OUTLET F02
4	0,5	64D	CONTROL +REVERSE DRIVING LIGHTS>RIGHT TURNING LAMP
5	0,5	65A	CONTROL +STOP LIGHTS
6			




	<p>REAR WIRING</p>	<p>B41 01</p>
---	--------------------	-------------------

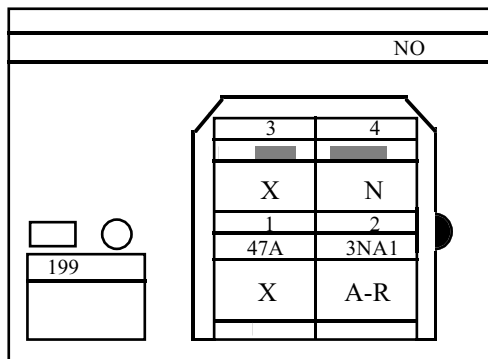
RIGHT FRONT CEILING LAMP

Position	Sectioning		Destination
1	0,35	BCP3	+ CEILING LAMP PROTECTED BATTERY
2	0,5	13C	CEILING LAMP CONTROL




FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP

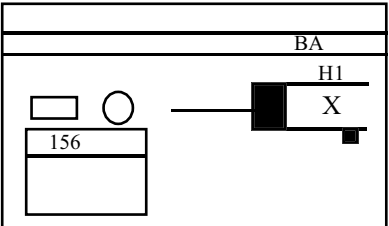
Position	Sectioning		Destination
1	0,35	47A	- FUEL MINIMAL LEVEL WARNING
2	1,5	3NA1	+ FUEL PUMP > CHOKES SENSOR
3	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
4	1,5	M	MASS




	REAR WIRING	B41 01
---	-------------	-----------

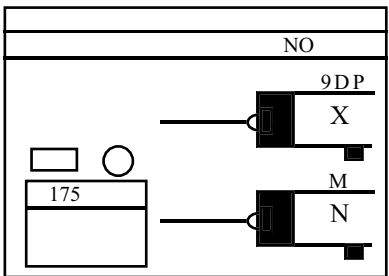
HANDBRAKE CONTACT

Position	Sectioning		Destination
1	0.35	HI	ICP HANDBRAKE INDICATOR - CONTROL




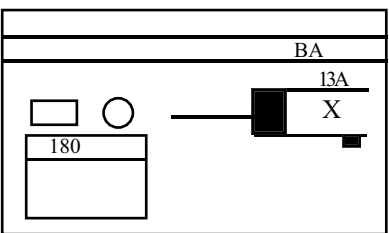
LEFTFOG LIGHT

Position	Sectioning		Destination
1	0.5	9DP	+PROTECTED REARFOGLIGHTS
2	0,5	M	MASS




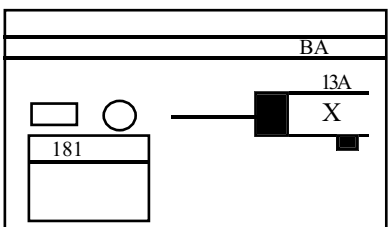
LEFT FRONT DOOR CONTACT

Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS




RIGHT FRONT DOOR CONTACT

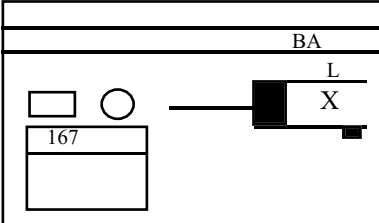
Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS




	HATCHBACK WIRING	B41 01
---	------------------	-----------

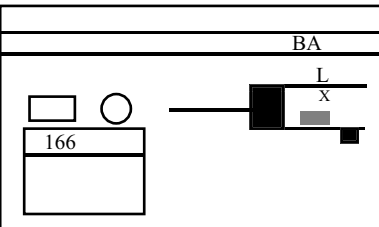
LEFT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	PARKING LIGHTS > FUSE OUTLET F05




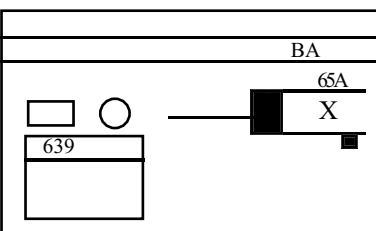
RIGHT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	+PARKING LIGHTS > FUSE OUTLET F05
1	0,35	L	+PARKING LIGHTS > LEFT LICENSE PLATE LAMP




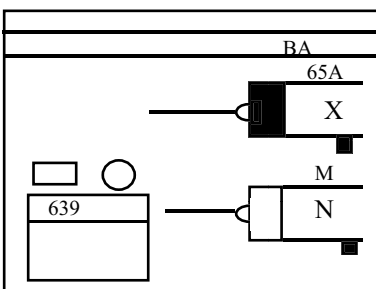
STOP LAMP S3 (ON ROOF)

Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS




STOP LAMP S3 (INAILERON)

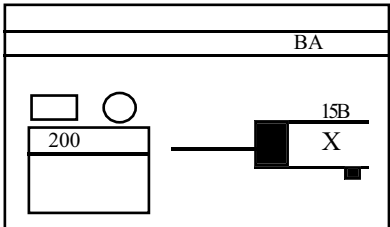
Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS
2	0,5	M	MASS




	<p>HATCHBACK WIRING</p>	<p>B41 01</p>
---	-------------------------	-------------------

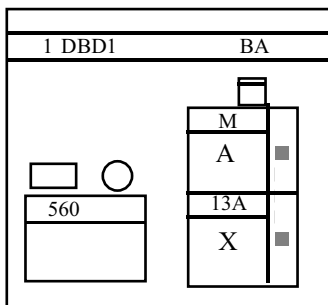
REAR WINDOW DEFROSTING

Position	Sectioning		Destination
1	2,0	15B	CONTROL + HATCHBACK REAR WINDOW DEFROSTING



HATCHBACK CONTACT

Position	Sectioning		Destination
1	0,35	M	MASS
2	0,35	13A	CEILING LIGHTING CONTROL > HATCHBACK CONTACT ANTI-INTRUSION UCE > HATCHBACK CONTACT



	CONNECTIONS	B41 01
--	-------------	-----------

DASHBOARD/FRONT WIRING CONNECTION

FRONT WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
A2	1,5	BCP3	FUSE BOX > FUSE OUTLET F06(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A4			
A5	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE OUTLET F04
A6	1,0	64B	CONTROL + TURNING RELAY
A7	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
B1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B2	0,5	64C	LEFT TURNING LIGHTS CONTROL
B3	0,5	64D	RIGHT TURNING LIGHTS CONTROL
B4	0,5	9M	SHUNT > LIGHTS SWITCH
B5	0,5	L	+ PARKING LIGHTS - FUSE OUTLET F05
B6	1,5	SP3	+ PROTECTED ACCESSORIES
B7	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
C1	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
C2	0,75	BP11	PROTECTED BATTERY > FUSE OUTLET F16
C3	0,35	15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
C4	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY
C7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
D1	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D2	0,35	CPD	RIGHT PROTECTED MEETING LIGHTS > FUSE OUTLET F14
D3	0,35	20C	CONTROL + DOOR ELECTRIC UNLOCKING > UCE DECODER
D4	0,35	20D	CONTROL + DOOR ELECTRIC LOCKING > UCE DECODER
D5	0,5	9B	CONTROL REAR FOG LAMP
D6	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)

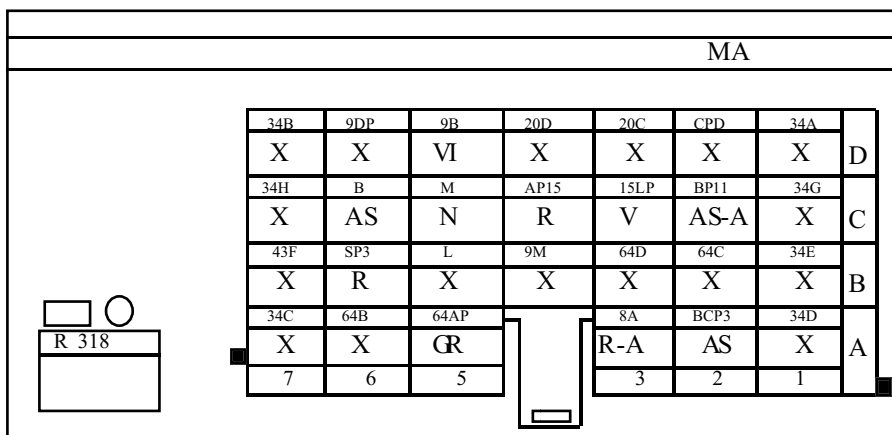
MA							
D	34A	CPD	20C	20D	9B	9DP	34B
	X	X	X	X	VI	X	X
C	34G	BP11	15LP	AP15	M	B	34H
	X	AS-A	M-V	R	N	AS	X
B	34E	64C	64D	9M	L	SP3	34F
	X	X	X	X	X	R	X
A	34D	BCP3	8A		64AP	64B	34C
	X	AS	A		GR	X	X
	1	2	3		5	6	7

R 318

	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

DASHBOARD WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL+ RIGHTREAR SPEAKER
A2	1,0	BCP3	SUPPLY(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A5	1,0	64AP	+PROTECTED TURNINGLIGHTS
A6	1,0	64B	CONTROL+ TURNINGRELAY
A7	0,35	34C	SIGNAL- RIGHTREAR SPEAKER
B1	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
B2	0,5	64C	LEFTTURNINGLIGHTSCONTROL
B3	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
B4	0,5	9M	SHUNT > FOG LAMP SWITCH
B5	0,5	L	+PARKINGLIGHTS
B6	1,5	SP3	+ PROTECTED ACCESORES> CLIMATE CONTROLBLOWER
B7	0,35	34F	SIGNAL -RIGHTFRONT SPEAKER
C1	0,35	34G	SIGNAL +LEFTFRONT SPEAKER
C2	0,75	BP11	+ PROTECTED BATTERY> RADIO
C3	0,5	15LP	CONTROL+PROTECTEDREARWINDOWDEFROSTING
C4	1,5	AP15	+AFTER PROTECTED CONTACT
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY > HAZARD SWITCH
C7	0,35	34H	SIGNAL -LEFTFRONT SPEAKER
D1	0,35	34A	SIGNAL +LEFTREAR SPEAKER
D2	0,35	CPD	RIGHTPROTECTEDMEETINGLIGHTS>INDICATOR
D3	0,5	20C	CONTROL+DOORS ELECTRICUNLOCKING> SWITCH
D4	0,5	20D	CONTROL+DOORS ELECTRICLOCKING>SWITCH
D5	0,5	9B	CONTROL + REAR FOGAMP
D6	0,5	9DP	+PROTECTEDREARFOGLIGHTS
D7	0,35	34B	SIGNAL -LEFTREAR SPEAKER







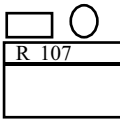
	CONNECTIONS	B41 01
---	-------------	-----------

DASHBOARD/FRONT WIRING CONNECTION

FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
A2	0,35	31A	WATER TEMPERATURE WARNING
A3	0,35	28A	OIL PRESSURE WARNING
A4			
A5	0,35	42A	WATER TEMPERATURE SIGNAL
A6	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
A7	0,35	15A	REAR WINDOW DEFROSTING INDICATOR-CONTROL
B1	0,75	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
B2	0,35	RPD	PROTECTED RIGHT HIGH BEAM
B3	0,35	64C	LEFT TURNING LIGHTS CONTROL
B4	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
B5	0,35	H1	HAND BRAKE INDICATOR-CONTROL
B5	0,35	H1	ICP INDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ ALTERNATOR EXCITATION
C1	0,35	47A	- FUEL MINIMAL LEVEL WARNING
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > INJECTION COMPUTER
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > UCE DECODER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > INJECTION COMPUTER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > UCE DECODER
C7	0,35	M	MASS


MA							
	47A	41A	3FH	80T	HK	HL	M
C	X	X	X	X			NG
B	AP10	RPD	64C	38AS	H1	H12	2JD
	R-G	X	X	X		X	X
A	64D	31A	28A			H7	15A
	X	X	X		X	X	X
	1	2	3		5	6	7

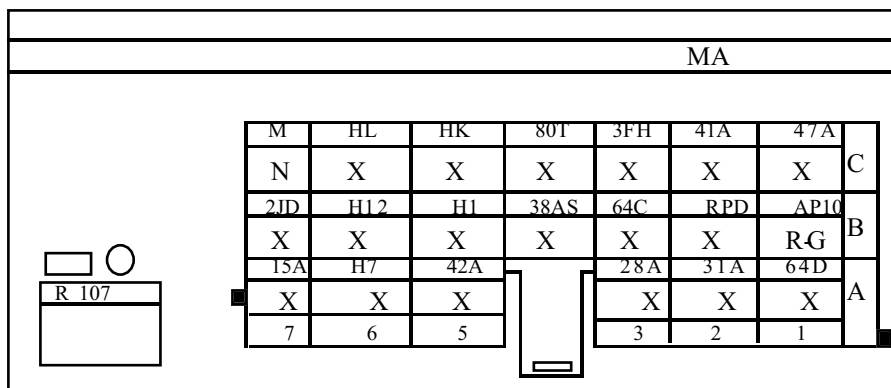


R 107

	CONNECTIONS	B41 01
---	-------------	-----------


DASHBOARD WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	64D	RIGHTTURNINGLIGHTSCONTROL> INDICATOR
A2	0,35	31A	INSRUMENTPANEL>WATER TEMPERATUREWARNING
A3	0,35	28A	INSTRUMENT PANEL> OILPRESSURE WARNING
A4			
A5	0,35	42A	SIGNAL +WATER TEMPERATURE
A6	0,35	H7	RPM-METERSIGNAL
A7	0,35	15A	REAR WINDOWDEFROSTINGINDICATOR-CONTROL
B1	0,75	AP10	+AFTER PROTECTED CONTACT
B2	0,35	RPD	PROTECTED RIGHTHIGHBEAM> INDICATOR
B3	0,35	64C	LEFTTURNING LIGHTS CONTROL> INDICATOR
B4	0,35	38AS	AIR-CONDITIONINGCOMPRESSORCONNECTIONSIGNAL> RELAY
B5	0,35	H1	ICP HANDBRAKEINDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL
C1	0,35	47A	- FUELMINIMALLEVEL WARNING
C2	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
C3	0,35	3FH	INJECTIONFAILUREINDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSISSIGNALLINEK
C6	0,35	HL	DIAGNOSISSIGNALLINEL
C7	0,35	M	MASS



	CONNECTIONS	B41 01
---	-------------	-----------

REAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL > TURNING SWITCH
A2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
B2	0,35	47A	- FUEL MINIMAL LEVEL WARNING
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
C1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP > CHOKE SENSOR
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
C5	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > UCE DECODER
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
D2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
D2	0,5	64D	FLASH RELAY DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	CEILING LAMPS CONTROL
D6	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
D6*	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > HOOD CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)

A2*, D2* - for vehicles without Anti-intrusion System
D4, D6*- for Anti-intrusion System provided vehicles

MA							
34B	13A	13C	80FC	AP15	64D	35C	D
X	x	X	G-AS	G	x	X	
34A	20D	20C	BCP3	3NA1	41A	34D	C
X	X	X	R-AS	A-R	X	X	
34H	15B	H66P	9DP	H1	47A	34F	B
X	X	X	X	X	X	X	
34G	64C	65A		L	64D	34E	A
X	X	X		X	x	X	
	7	6	5		3	2	1


	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

REAR WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT REAR SPEAKER
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL
A2*	0,5	64D	RIGHT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A6*	0,5	64C	LEFT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER
B2	0,35	47A	- FUEL MINIMAL LEVEL WARNING
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER
C1	0,35	34D	SIGNAL + RIGHT FRONT SPEAKER
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY
C5	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER
D2	0,5	64D	DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL > UCE ANTI-INTRUSION
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > UCE ANTI-INTRUSION
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	RIGHT CEILING LAMP CONTROL
D6	0,35	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK DOORS CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER

D2, D3, D4, A2*, A6* - for anti-intrusion system provided vehicles


MA							
D	34C	64D	AP15	80FC	13C	13A	34B
C	34D	41A	3NA1	BCP3	20C	20D	34A
B	34F	47A	H1	9DP	H66P	15B	34H
A	34E	64D	L		65A	64C	34G
	1	2	3		5	6	7

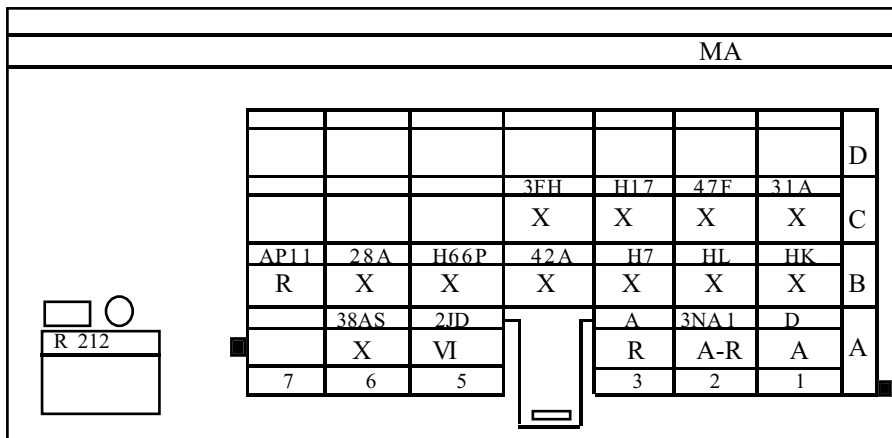


R 265




ENGINE / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL

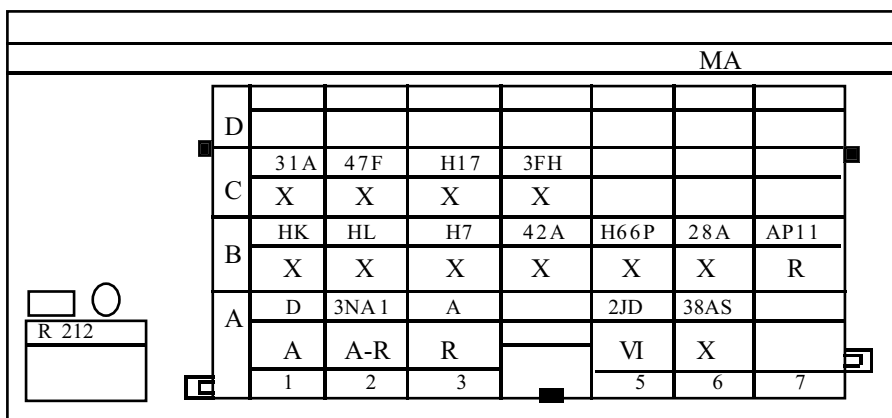


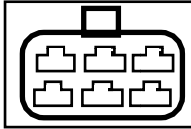
	CONNECTIONS	B41 01
---	-------------	-----------

ENGINE WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION > INSTRUMENT PANEL
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT > CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	INJECTION FAILURE INDICATOR-CONTROL

A6 - For air-conditioning system provided vehicles



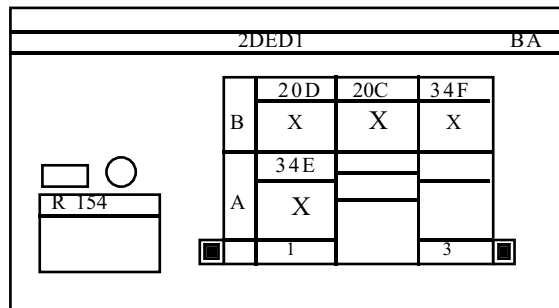


CONNECTIONS

B41
01

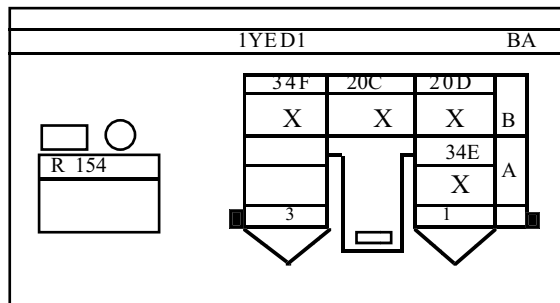
RIGHT FRONT DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B1	0,5	20D	CONTROL+ DOORSELECTRIC LOCKING > UCE DECODER
B2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)




RIGHT FRONT DOOR WIRING CONNECTION

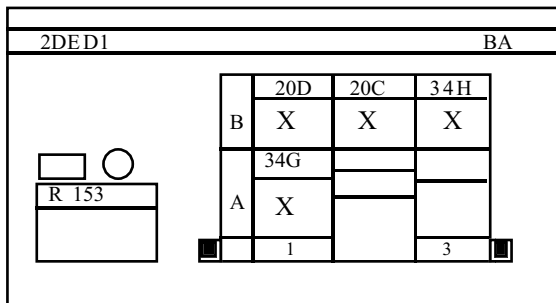
Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG > ACTUATORS
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER




	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

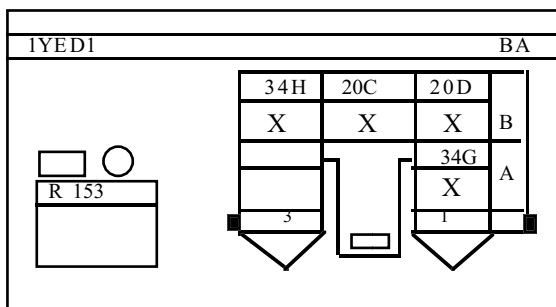
LEFT FRONT DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,5	20D	CONTROL+ DOORSELECTRIC LOCKING > UCE DECODER
B2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
B3	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




LEFT FRONT DOOR WIRING CONNECTION

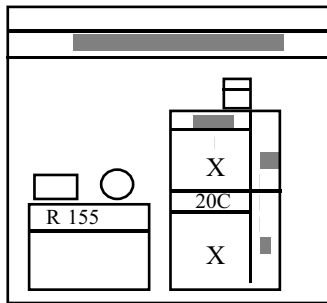
Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG >ACTUATORS
B3	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

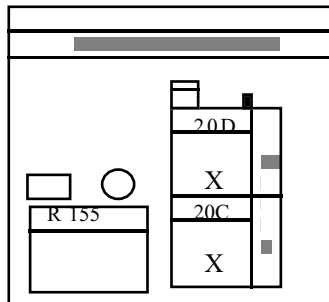
LEFT FRONT DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER



LEFT REAR DOOR WIRING CONNECTION


Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS

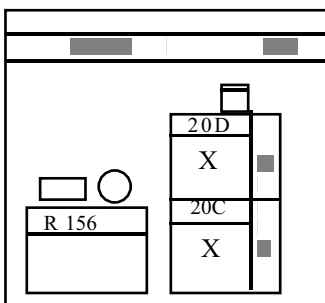


CONNECTORS AND CONNECTIONS WIRES FUNCTION


	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

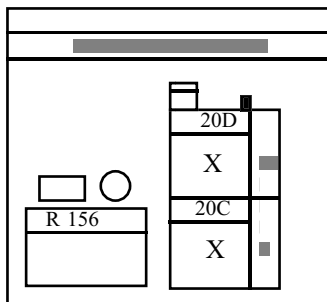
RIGHT REAR DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORSELECTRICLOCKING > UCEDECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER




RIGHT REAR DOOR WIRING CONNECTION

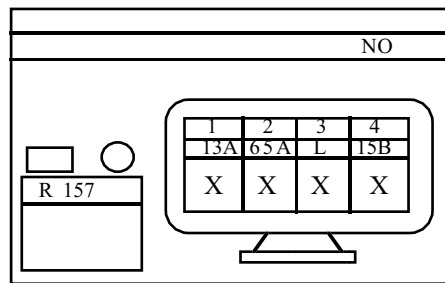
Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG > ACTUATORS




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

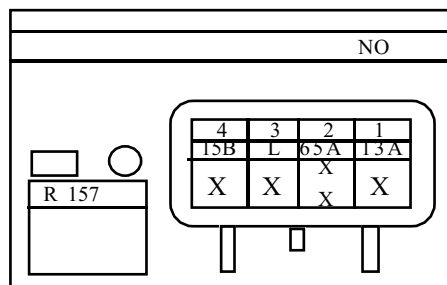
HATCHBACK/REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK CONTACT UCE ANTI-INTRUSION CONTROL > HATCHBACK CONTACT
2	0,5	65A	CONTROL + STOP LIGHTS
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




HATCHBACK WIRING CONNECTION

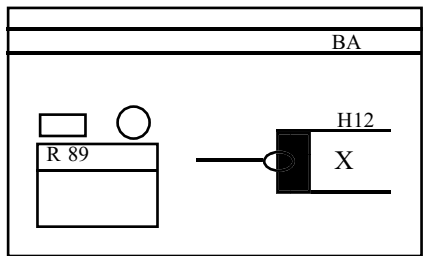
Position	Sectioning		Destination
1	0,35	13A	CONTROL + CEILING LAMPS LIGHTING > HATCHBACK CONTACT
2	0,35	65A	CONTROL + STOP LIGHTS (ON HOOD)
2	0,35	65A	CONTROL + STOP LIGHTS (ON AILERON)
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

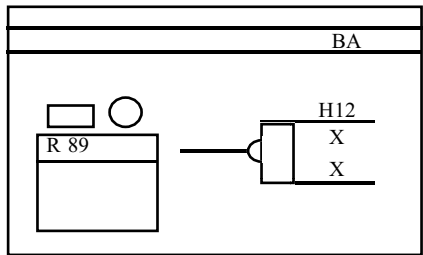
BRAKE PADS WEAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
1	0,35	H12	BRAKE PADS WEAR INDICATOR - CONTROL



BRAKE PADS WEAR WIRING CONNECTION

Position	Sectioning		Destination
	0,35 0,35	H12 H12	BRAKE PADS WEARINDICATOR – CONTROL > RIGHT PAD BRAKE PADS WEAR INDICATOR – CONTROL > LEFT PAD



ELECTRIC DIAGRAMS WIREFUNCTIONS EXPLANATION

(after 01.06.2001)

LINK CODES	WIRE FUNCTIONS
A	SUPPLY + AFTER CONTACT
AP10	+ AFTER PROTECTED CONTACT>OUTLET FUSE F01
AP11	+ AFTER PROTECTED CONTACT REVERSE DRIVING LIGHTS
AP15	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03
AP29	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03 ENGINE RUNNING
B	+ BATTERY
BCP3	+ PROTECTED BATTERY, CEILING LAMPS
BP11	+ PROTECTED BATTERY > COCKPIT 1
BP17	+ PROTECTED BATTERY> OUTLET FUSE F01
BP2	+ PROTECTED BATTERY> WINDSCREEN WIPER STOPPING IN A FIXED POSITION
BP3	+ PROTECTED BATTERY> OUTLET FUSE F15
BP37	+ PROTECTED BATTERY> OUTLET FUSE F04
BP7	+ PROTECTED BATTERY FUSE 1 MOTOR FAN
BP76	+ PROTECTED BATTERY > LIGHTING CONTROL
BPR1	+ PROTECTED BATTERY > OUTLET FUSE F17> RELAY
C	+ MEETING LIGHTS (LOW BEAM)
CPD	+ MEETING LIGHTS RIGHT PROTECTED
CPG	+ MEETING LIGHTS LEFT PROTECTED
D	+ STARTER CONTROL
H1	CONTROL- HANDBRAKE INDICATOR, BRAKING CIRCUIT ICP
H12	CONTROL-BRAKE PADS WEAR INDICATOR
H17	INJECTION CODED SIGNAL>ANTI-STARTING
H66P	CONTROL+ REVERSE DRIVING LIGHTS
H7	RPM METER SIGNAL
HK	DIAGNOSTIC SIGNAL LINE K
HL	DIAGNOSTIC SIGNAL LINE L
L	+ PARKING LIGHTS
LPD	+ PARKING LIGHTS RIGHT PROTECTED
LPG	+ PARKING LIGHTS LEFT PROTECTED
M	ELECTRIC MASS
ML	BATTERY ELECTRIC MASS
N	ELECTRONIC MASS
NF	MASS: WATER TEMPERATURE SENSOR, AIR, POTENTIOMETER
R	+ ROAD LIGHTS (HIGH BEAM)
RPD	+ ROAD LIGHTS RIGHT PROTECTED
RPG	+ ROAD LIGHTS LEFT PROTECTED
S	+ ACCESORIES
SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER
TB1	DETONATION SENSOR SCREENING
2JD	+ ALTERNATOR EXCITATION
3AC	CONTROL- FUEL PUMP RELAY
3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
3AQ	SIGNAL+ VALVE POTENTIOMETER
3B	SIGNAL+ AIR TEMPERATURE SENSOR
3BB	CANISTER PURGING VALVE CONTROL
3BG	ENGINE RPM SIGNAL > RPM SENSOR
3BL	SIGNAL - RPM ENGINE > RPM SENSOR
3BU	CONTROL 1 IDLING REGULATOR
3BV	CONTROL 2 IDLING REGULATOR
3BW	CONTROL 3 IDLING REGULATOR
3BX	CONTROL 4 IDLING REGULATOR
3C	SIGNAL + WATER TEMPERATURE SENSOR

WIREFUNCTIONS EXPLANATION

3CR	CONTROL- INJECTOR 1
3CS	CONTROL- INJECTOR 2
3CT	CONTROL- INJECTOR 3
3CU	CONTROL- INJECTOR 4
3CV	CONTROL- IGNITION COIL CYLINDERS 1-4
3CW	CONTROL- IGNITION COIL CYLINDERS 2-3
3D	ATMOSPHERIC PRESSURE SENSOR> SUPPLY +
3DQ	- DETONATION SENSOR
3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
3FH	CONTROL-INJECTION FAILURE INDICATOR
3FN	RPM SENSOR SIGNAL
3GF	CONTROL- UPSTREAM OXYGEN SENSOR HEATING
3GH	MASS UPSTREAM OXYGEN SENSOR
3GK	SIGNAL UPSTREAM OXYGEN SENSOR
3GN	ATMOSPHERIC PRESSURE SENSOR MASS
3GT	ACTUATORS RELAY MASS
3JK	- WATER TEMPERATURE
3JL	- VALVE POTENTIOMETER
3JN	CONTROL - STEP 1 MOTOR FAN RELAY
3JP	CONTROL- STEP 2 MOTOR FAN RELAY
3JQ	- AIR TEMPERATURE SENSOR
3NA	+ IGNITION COIL, CHOCK SENSOR> PETROL PUMP RELAY
3NA1	+ PETROL PUMP
3NR	+ INJECTORS> ACTUATORS RELAY OUTPUT
3S	SIGNAL + DETONATION SENSOR
8A	+ FOG HEADLAMPS RELAY
8B	+ FOG HEADLAMPS > RELAY
8DP	+ PROTECTED FOG HEADLAMPS
9A	+ REAR FOG LAMPS RELAY CONTROL
9B	CONTROL + REAR FOG LAMPS
9C	CONTROL + REAR FOG LAMPS INDICATOR
9DP	+ PROTECTED REAR FOG LAMPS
9M	SHUNT> FOG LAMPS SWITCH
11A	CONTROL + ROAD LIGHTS
13A	CONTROL - CEILING LAMPS> DOORS CONTACTS
13C	CONTROL> CEILING LAMPS
14A	CONTROL + LOW SPEED WINDSCREEN WIPER
14B	CONTROL + HIGH SPEED WINDSCREEN WIPER
14C	CONTROL + WINDSCREEN WIPER FIX POINT STOPPING
14D	CONTROL LOW SPEED WINDSCREEN WIPER TIMER
14E	CONTROL + WINDSCREEN WIPER TIMER
14K	CONTROL + WINDSCREEN WIPER LOW SPEED
14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
15A	REAR WINDOW DEFROSTING INDICATOR CONTROL
15B	CONTROL + REAR WINDOW DEFROSTING
15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
16A	CONTROL + WINDSCREEN WASHING PUMP
20C	CONTROL + DOORS ELECTRIC UNLOCKING
20D	CONTROL + DOORS ELECTRIC LOCKING
20F	RADIO-FREQUENCY RECEPTION SIGNAL
28A	CONTROL - OIL PRESSURE INDICATOR

ELECTRIC DIAGRAMS

WIREFUNCTIONS EXPLANATION

31A	CONTROL – WATER TEMPERATURE INDICATOR
34A	SIGNAL – LEFT REAR LOUDSPEAKER
34B	SIGNAL – LEFT REAR LOUDSPEAKER
34C	SIGNAL – RIGHT REAR LOUDSPEAKER
34D	SIGNAL + RIGHT REAR LOUDSPEAKER
34E	SIGNAL + RIGHT FRONT LOUDSPEAKER
34F	SIGNAL – RIGHT FRONT LOUDSPEAKER
34G	SIGNAL + LEFT FRONT LOUDSPEAKER
34H	SIGNAL – LEFT FRONT LOUDSPEAKER
38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED 1
38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED 2
38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED 3
38AL	CONTROL + CLIMATE CONTROL BLOWER SPEED 4
38AS	AC CONTROL
38DH	CONTROL + AIR CONDITIONING
38K	AC CONTROL RELAY > UCE INJECTION
38N	CONTROL + AC CLUTCH RELAY > AC PRESSURE SENSOR
38R	CONTROL + AC COMPRESSOR CLUTCH
38U	- FREON PRESSURE SENSOR
38X	FREON PRESSURE SENSOR SIGNAL
38Y	+ FREON PRESSURE SENSOR
41A	SIGNAL + FUEL LEVEL TRANSMITTER
42A	SIGNAL + WATER TEMPERATURE
47A	- MINIMUM LEVEL FUEL WARNING
47F	VEHICLE SPEED SIGNAL
49B	CONTROL + COOLING BLOWER
49C	CONTROL + COOLING BLOWER RELAY
49F	CONTROL + AIR CONDITIONING
49L	CONTROL + COOLING BLOWER LOW SPEED RESISTANCE
64A	SUPPLY + TURNING
64AP	+ PROTECTED TURNING LIGHTS
64B	CONTROL + TURNING RELAY
64C	LEFT TURNING LIGHTS CONTROL
64D	RIGHT TURNING LIGHTS CONTROL
64E	CONTROL + TURNING INDICATOR
64F	CONTROL + HAZARD INDICATOR
64P	+ PROTECTED SIGNALING
65A	CONTROL + STOP LIGHTS
67A	CONTROL + ACOUSTIC WARNING
67C	CONTROL + ACOUSTIC WARNING FUSE
80BC	+ INERTIA CONTACT
80BD	FLASH RELAY CONTROL
80CA	RIGHT FRONT ULTRASONIC EMISSION
80DA	LEFT FRONT ULTRASONIC DETECTION INFORMATION
80E	ANTI-INTRUSION INDICATOR CONTROL
80FC	SIREN CONTROL SUPPLY
80T	CONTROL – ANTI-STARTING INDICATOR
80X	ANTI-STARTING RECEIVER SIGNAL ROUTE

ELECTRIC DIAGRAMS
FUNCTIONAL DIAGRAMS LIST

89C

(EURO 2000)

NR	ELECTRIC DIAGRAMS DENOMINATION	E0	E1	E2	E3
1	ANTI-INTRUSION E2(O), E3			O	S
2	DOORS CENTRAL LOCKING E1, E2, E3		S	S	S
3	ANTI-STARTING	S	S	S	S
4	ELECTRIC LIGHTER E1, E2, E3		S	S	S
5	CLIMATE CONTROL E0, E1, E2(series)	S	S	S	
6	CLIMATE CONTROL AND AIR CONDITIONING E1(O), E2(O), E3		O	O	S
7	CEILING LIGHTING	S	S	S	S
8	ASHTRAY LIGHTING E0	S			
9	ASHTRAY AND DOCUMENT COMP.LIGHTING E1, E2, E3		S	S	S
10	CLOCK		S	S	S
11	PRE-EQUIPPING RADIO E0	S			
12	PRE-EQUIPPING RADIO E1, E2		S	S	
13	PRE-EQUIPPING RADIO E3				S
14	STARTING CIRCUIT	S	S	S	S
15	ENGINE COOLING CIRCUIT E0, E1(series), E2(series)	S	S	S	
16	ENGINE COOLING CIRCUIT E2(CA), E3		O	O	S
17	ELECTRONIC INJECTION E0	S			
18	ELECTRONIC INJECTION E1(series), E2(series)		S	S	
19	ELECTRONIC INJECTION E1(CA), E2 (CA), E3		O	O	S
20	ALTERNATOR CIRCUIT	S	S	S	S
21	MASS	S	S	S	S
22	MASS 2 E0	S			
23	MASS 2 E1(series)		S		
24	MASS 2 E1(CA)		O		
25	MASS 2 E2 (serie)			S	
26	MASS 2 E2(CA), E3			O	S
27	MASS 3 E0, E1, E2 (series)	S	S	S	
28	MASS 3 E2(anti-intrusion), E3			O	S
29	MASS 4 E0, E1, E2 (serie)	S	S	S	
30	MASS 4 E2(anti-intrusion), E3			O	S
31	MASS 5 E0, E1(series), E2(series)	S	S	S	
32	MASS 5 E1(CA), E2(CA), E3		O	O	S
33	FUSE BOX AND COCKPIT RELAYS E0	S			
34	FUSE BOX AND COCKPIT RELAYS E1(series)		S		
35	FUSE BOX AND COCKPIT RELAYS E1(CA)		O		
36	FUSE BOX AND COCKPIT RELAYS E2 (series)			S	
37	FUSE BOX AND ENGINE RELAYS E2(CA), E3			O	S
38	FUSE BOX AND ENGINE RELAYS E0, E1(serie)	S	S		
39	FUSE BOX AND ENGINE RELAYS E1(CA)		O		
40	FUSE BOX AND ENGINE RELAYS E2(serie)			S	
41	FUSE BOX AND ENGINE RELAYS E2(CA), E3			O	S
42	HANDBRAKE INDICATOR AND BRAKING SYSTEM FAILURE	S	S	S	S

43	FUEL LEVEL INDICATOR CIRCUIT	S	S	S	S
44	OIL PRESSURE INDICATOR CIRCUIT	S	S	S	S
45	DIAGNOSTIC SOCKET	S	S	S	S
46	INSTRUMENT PANEL E0	S			
47	INSTRUMENT PANEL E1, E2, E3		S	S	S
48	WATER TEMPERATURE INDICATOR CIRCUIT E0	S			
49	WATER TEMPERATURE INDICATOR CIRCUIT E1, E2, E3		S	S	S
50	BRAKE PADS WEAR INDICATOR CIRCUIT	S	S	S	S
51	VEHICLE SPEED	S	S	S	S
52	SOUND WARNING	S	S	S	S
53	REAR WINDOW DEFROSTING	S	S	S	S
54	WINDSCREEN WIPER-WASHING	S	S	S	S
55	REAR FOG LAMP	S	S	S	S
56	FOG HEADLIGHTS			S	S
57	MEETING LIGHTS	S	S	S	S
58	REVERSE DRIVING LIGHTS	S	S	S	S
59	PARKING LIGHTS	S	S	S	S
60	ROAD LIGHTS	S	S	S	S
61	STOP LIGHTS E0, E1, E2(series)	S	S	S	
62	STOP LIGHTS E2 (aileron)			O	
63	STOP LIGHTS E2 (anti-intrusion), E3			O	S
64	TURNING AND HAZARD LIGHTS E0, E1, E2(series)	S	S	S	
65	TURNING AND HAZARD LIGHTS E2(anti-intrusion), E3			O	S

Note : these electric diagrams are valid for vehicles who respect depollution norms **EURO 2000; E0 (Europa), E1 (Confort), E2 (Rapsodie), E3 (Clima)** represente quipping levels of the vehicle.

(EURO 2000)

CODE	COMPONENT DENOMINATION	CODE	COMPONENT DENOMINATION
21	Right signalling anti-return diode	216	Right front brake pad
101	Electric lighter	217	Left front brake pad
102	Ashtray	221	Windscreen washing pump
103	Alternator	222	Valve potentiometer
104	Anti-theft system	225	Diagnostic socket
105	Acoustic alarm	226	Right headlamp
107	Battery	227	Left headlamp
113	Windscreen wiper timer	230	Fog lamps relay
120	Injection computer (UCE)	231	Fog headlights control relay
121	Fog lights switch	234	Cooling motor fan control relay
122	Fog headlights switch	236	Fuel pump control relay
123	Door closing switch	238	Actuators relay
124	Climate blower switch	242	Downstream oxygen sensor
125	Hazard switch	244	Injection water temperature sensor
128	Rear window defrosting switch	247	Instrument panel
137	Turning signalling relay	250	Vehicle speed transducer
138	Right rear door actuator	255	Right front turning lamp
139	Left rear door actuator	256	Left front turning lamp
140	Left front door actuator	260	Cockpit fuse and relays box
141	Right front door actuator	261	Radio
145	Windscreen wiper-washer switch	262	Cooling motor fan and AC
146	Detonation sensor	267	Right side signalling lamp
147	Atmospheric pressure sensor	268	Left side signalling lamp
149	RPM sensor	272	Injection air temperature sensor
155	Reverse driving contact	294	Rear window defrosting timer
156	Handbrake contact	298	Climate control lighting
160	Stop contact	319	AC starting button
163	Starter	321	Motor fan resistance (for AC)
168	Documents compartment lighting lamp	329	Right front ceiling lamp
171	AC compressor clutch	371	Canister purging valve
172	Right rear lamp	427	UCE anti-intrusion
173	Left rear lamp	438	Engine hood contact
175	Left fog lamp	442	Siren
176	Right fog headlight	454	Volumetric sensor
177	Left fog headlight	474	AC relay (on board)
180	Left front door contact	503	UCE decoder
181	Right front door contact	584	AC compressor clutch control relay
184	Right front parking lamp	597	Engine compartment fuse and relays box
185	Left front parking lamp	600	Climate control blower
188	Cooling motor fan	639	STOP-S3 lamp
189	Right rear loud speaker	649	Step-by-step engine
190	Left rear loud speaker	654	Anti-starting bushing
191	Right front door loud speaker	700	Cooling blower low speed control relay
192	Left front door loud speaker	778	Ignition coil
193	Injector 1	857	FLASH relay
194	Injector 2	887	Upstream oxygen sensor
195	Injector 3	927	Chock sensor
196	Injector 4	993	Anti-intrusion indicator LED
199	Fuel level transmitter and electric pump	1091	Braking system ICP
205	Oil pressure contact	1202	AC pressure sensor (pressure controller)
209	Lights, turning lights and horn switch	1335	Front ashtray lighting
210	Electronic clock	1428	Climate control blower control relay
212	Windscreen wiper motor		

(EURO 2000)

COUPLINGLIST

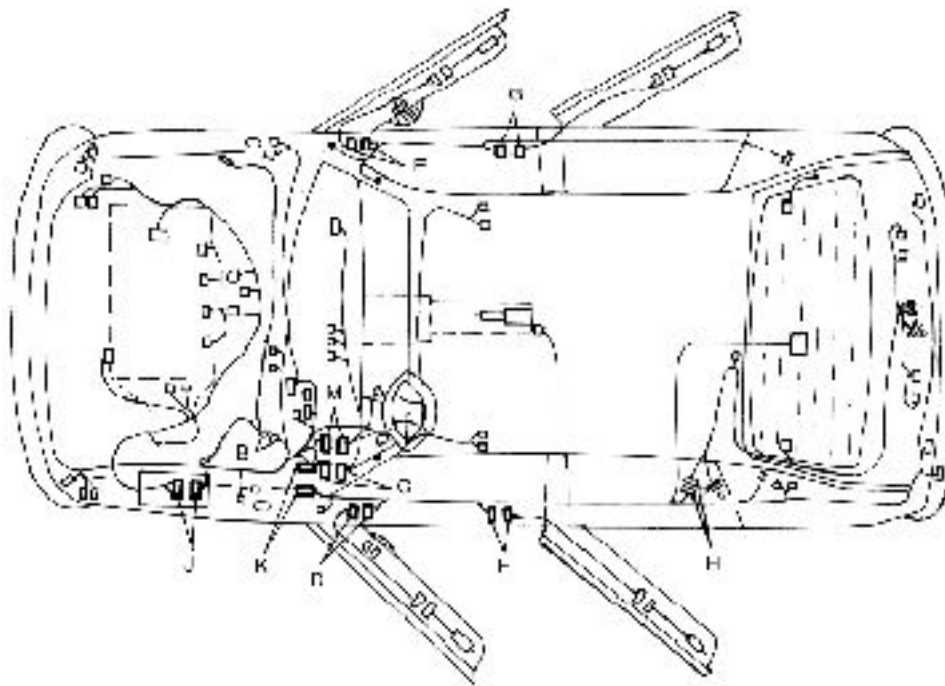
- R53 =BATTERYMASS WIRING/MASS STRIPE (A) COUPLING**
- R89 = FRONT WIRING/BRAKE PADS WEAR (B) COUPLING**
- R107 = FRONT WIRING/DASHBOARD (C) COUPLING**
- R153 = REAR WIRING/LEFT FRONT DOOR (D) COUPLING**
- R154 = REAR WIRING/RIGHT FRONT DOOR (E) COUPLING**
- R155 = REAR WIRING/LEFT REAR DOOR(F) COUPLING**
- R156 = REAR WIRING/RIGHT REAR DOOR(G) COUPLING**
- R157 = REAR WIRING/HATCHBACK(H) COUPLING**
- R212 = FRONT WIRING/ENGINE (J) COUPLING**
- R265 = FRONT WIRING/REAR (K) COUPLING**
- R318 = FRONT WIRING/DASHBOARD(M) COUPLING**

MASS LIST

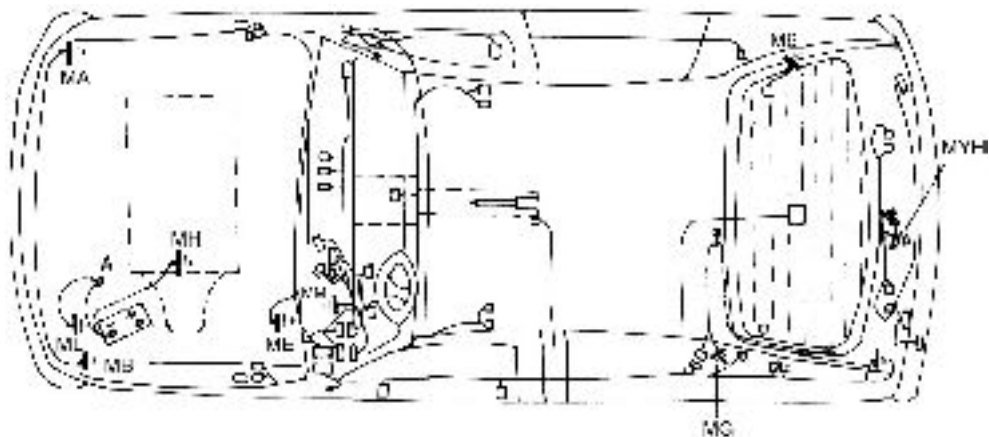
- M6 = REAR WINDOW DEFROSTING MASS**
- MA = RIGHT FRONT BODY MASS**
- MB = LEFT FRONT BODY MASS**
- ME = ELECTRIC MASS AT WINDSCREEN WIPER ATTACHMENT**
- MH = ENGINE ELECTRIC MASS**
- ML = LEFT FRONT LONGITUDINAL GIRDER ELECTRIC MASS**
- MM = ELECTRIC MASS AT THE STEERING COLUMN**
- MZ = LEFT REAR BODY MASS**
- MYH= LEFT HATCHBACK MASS**

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE
MASS ATTACHMENTS ON THE VEHICLE

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE

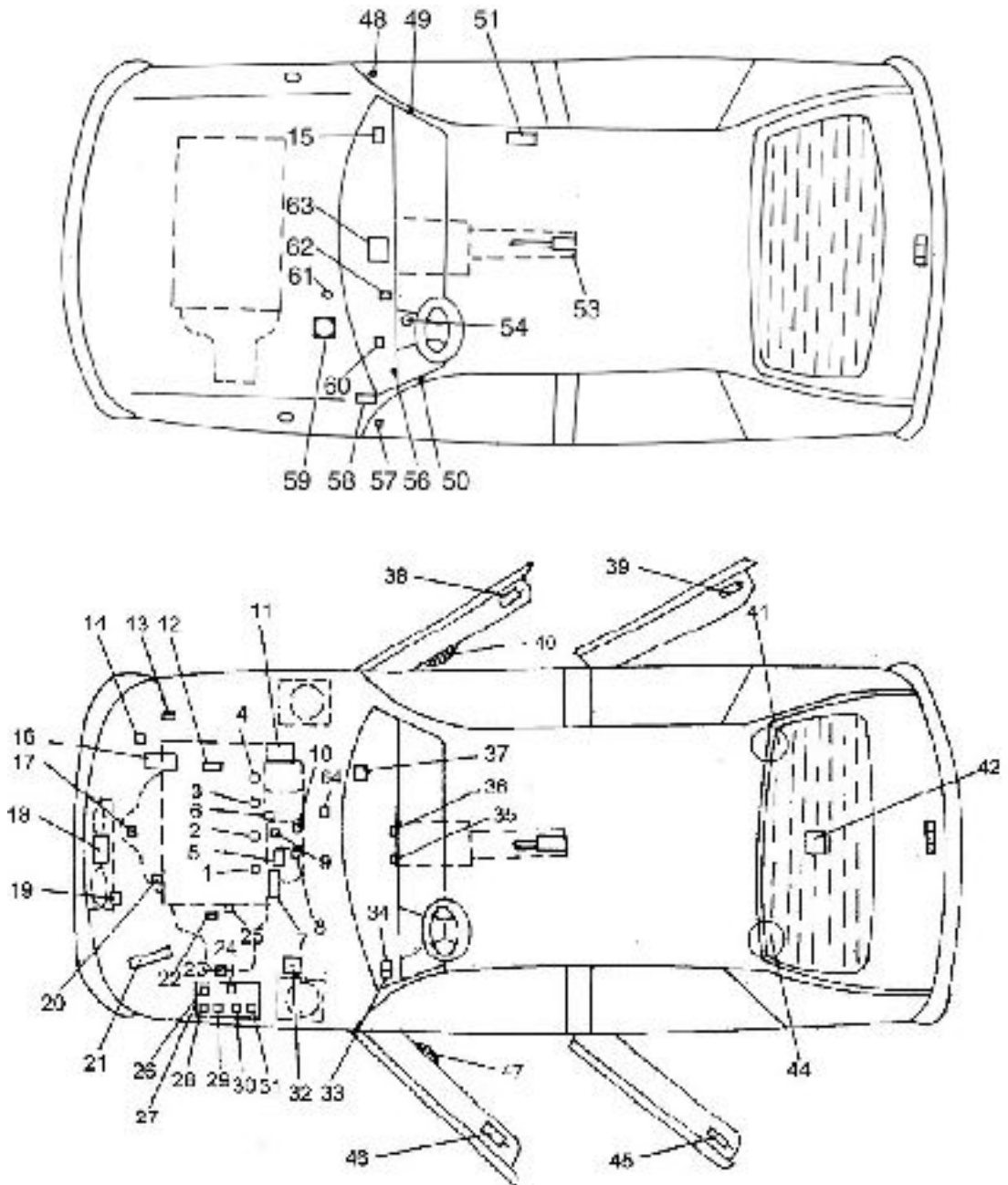


MASS ATTACHMENTS ON THE VEHICLE



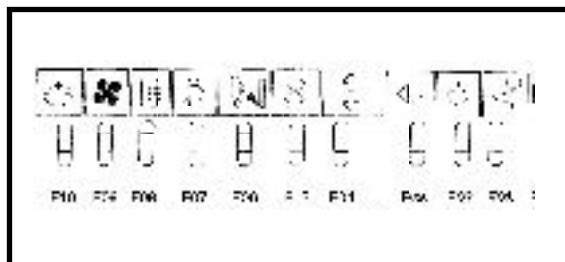
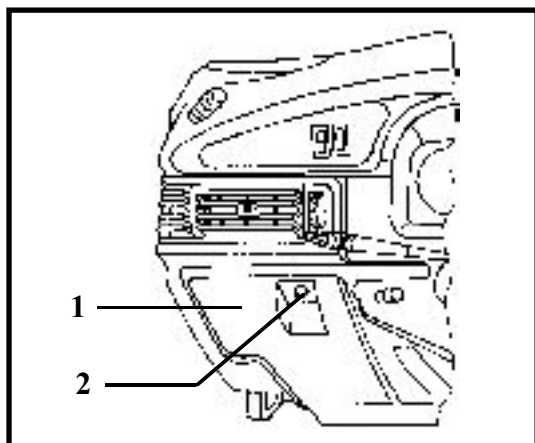
(EURO 2000)

1	Injector 1	33	Windscreen wiper timer
2	Injector 2	34	FLASH relay
3	Injector 3	35	Climate control lighting
4	Injector 4	36	AC starting button
5	Atmospheric pressure sensor	37	AC relay (on board)
6	Detonation sensor	38	Right front door actuator
7	Starter	39	Right rear door actuator
8	Injection air temperature sensor	40	Right front door loud speaker
9	Valve potentiometer	41	Right rear loudspeaker
10	Step-by step engine	42	Fuel level transmitter and electric pump
11	Alternator	44	Trunk lighting lamp
12	Ignition coil	45	Left rear loud speaker
13	Canister purging valve	46	Left rear door actuator
14	AC pressure sensor (pressure controller)	47	Left front door actuator
15	Diagnostic socket	48	Left front door loud speaker
16	AC compressor clutch	49	Right front door contact
17	Upstream oxygen sensor	50	Right volumetric sensor
18	Cooling blower and AC	51	Left volumetric sensor
19	Blower resistance for AC	53	Right front ceiling lamp
20	Oil pressure contact	54	Handbrake contact
21	Injection computer	55	Anti-starting bushing
22	RPM sensor	56	Anti-intrusion indicator LED
23	Reverse driving contact	57	Left front door contact
24	AC compressor clutch control relay (E)	58	UCE decoder
25	Water temperature sensor	59	Siren
26	Blower lower speed control relay (B)	60	Vehicle speed transducer
27	Engine compartment fuse and relays box	61	Engine hood contact
28	Motor fan control relay (C)	62	Doors closing switch
29	Fog headlamps control relay(A)	63	UCE anti-intrusion
30	Fuel pump control relay (H)	64	Downstream oxygen sensor
31	Actuators relay(D)		
32	Chock sensor		



(EURO 2000)

The cockpit fuse box is placed left side under dashboard, being attached on the interior side of the door (1). To access the fuses, turn the knob (2), then open up the door towards exterior.

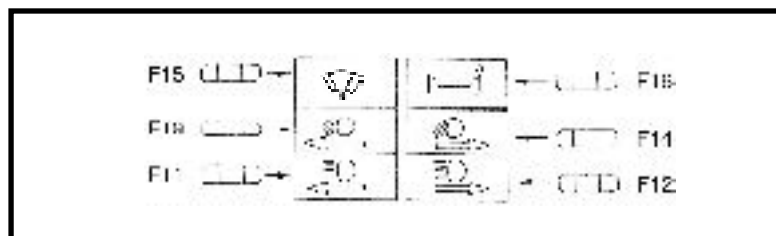
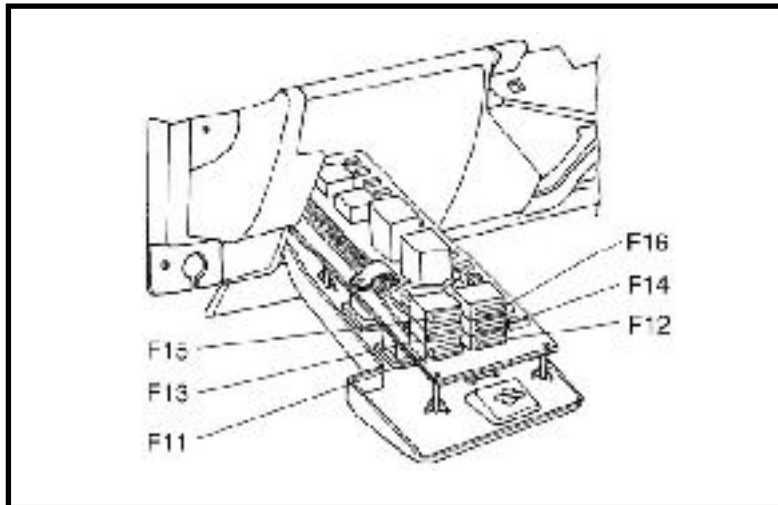


The fuses are protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, climate blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti-intrusion
F04	7,5A	Hazard and turning signaling lights
F05	5A	Front/rear parking lights, lighting: switches, instrument panel, climate control, documents compartment, lighters, ashtray, radio.
F06	15A	Lighter, clock, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti-intrusion, anti-intrusion indicator, diagnostic socket.
F07	15A	UCE decoder, FLASH relay, anti-starting bushing
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

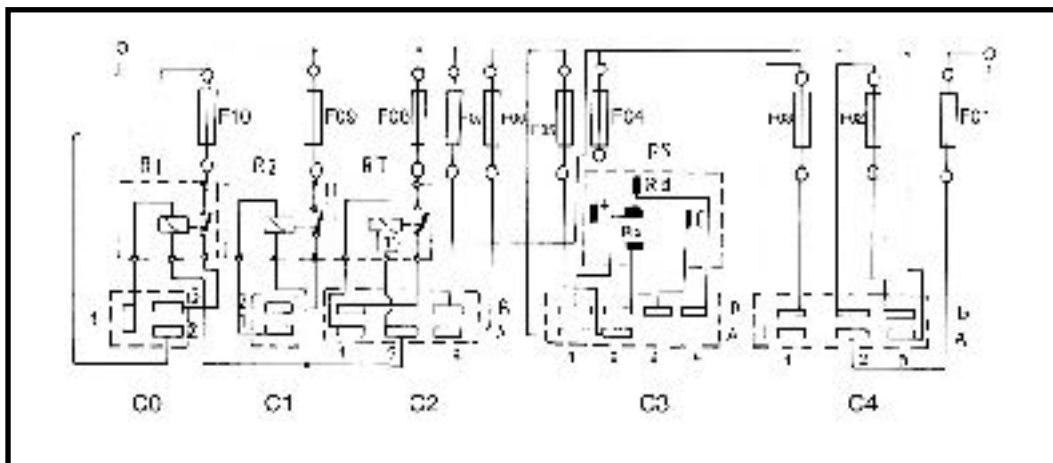
COCKPIT FUSE BOX

On the fuse box, 6 fusible fuse modules are attached, protecting the following consumers:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left road lights
F12	10A	Right road lights, road lights indicator
F13	10A	Left meeting lights
F14	10A	Right meeting lights, meeting lights indicator
F15	15A	Windscreen wiper-washing switch, windscreen wiper timer
F16	10A	Radio, windscreen wiper motor

FUSE BOX ELECTRIC DIAGRAM

**Connector C0**

1. Fog lamp switch ♦ fog lamp relay control
2. Parking lights ♦ inlet fuse F 1
3. Outlet fuse F 10 ♦ left fog lamp

Connector C1

1. Outlet fuse F01 ♦ climate blower relay control
2. Outlet F09 ♦ climate blower

Connector C2

- A1. Rear window defrosting switch ♦ rear window defrosting timer control
- A2. Mass
- A3. Outlet fuse F06
- B1. Outlet fuse F09 ♦ rear window defrosting
- B2. Free
- B3. Outlet fuse 07 ♦ UCE decoder, anti-starting bushing, FLASH relay

Connector C3

- A1. Lights switch (+ parking) ♦ inlet fuse F05
- A2. Outlet fuse F05 ♦ + parking
- A3. Free
- A4. Free
- B1. Mass
- B2. Mass
- B3. Turning lights switch (signaling relay control)
- B4. Free

Connector C4

- A1. Anti-theft mechanism (position M) ♦ inlet fuse F03)
- A2. Outlet fuse F01
- A3. Hazard switch ♦ inlet fuse F04, supply of the rear window defrosting timer
- B1. Outlet fuse F03
- B2. Anti-theft mechanism (position M) ♦ inlet fuse F02
- B3. Outlet fuse F02 ♦ reverse driving contact

I = DC (after contact)

J = IC (before contact)

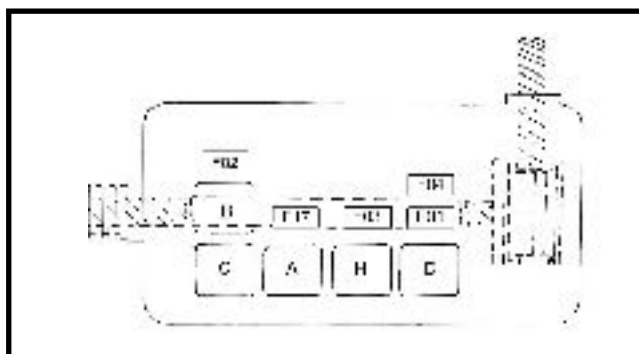
R1 = fog lamp control relay

R2 = climate blower control relay

RT = rear window defrosting timer

RS = turning signaling relay

A. for equipping E0, E1, E2
(EURO 2000)



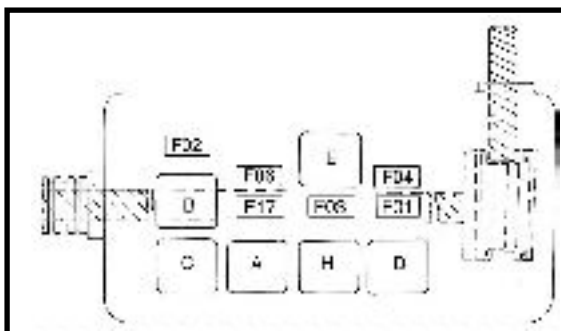
The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump ignition coil.
F02	25A	Cooling blower (vehicles without AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights

RELAY	A	C	D	H
RELAY TYPE	15A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower (vehicle without AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	Fuel pump Ignition coil

COCKPIT FUSE BOX

**B. For equipping E2(0), E3
(EURO 2000)**



The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump, ignition coil.
F02		
	40A	Cooling blower (vehicles with AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights
F06	7,5A	AC compressor

RELAY	A	B	C	D	E	H
RELAY TYPE	15A	40A	30A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower- 1st speed (vehicles with AC)	Cooling blower- 2nd speed (vehicle with AC)	Injectors, canister purging valve, oxygen sensor heating resistance, injection computer.	AC compressor	Fuel pump Ignition coil

(EURO 2000)

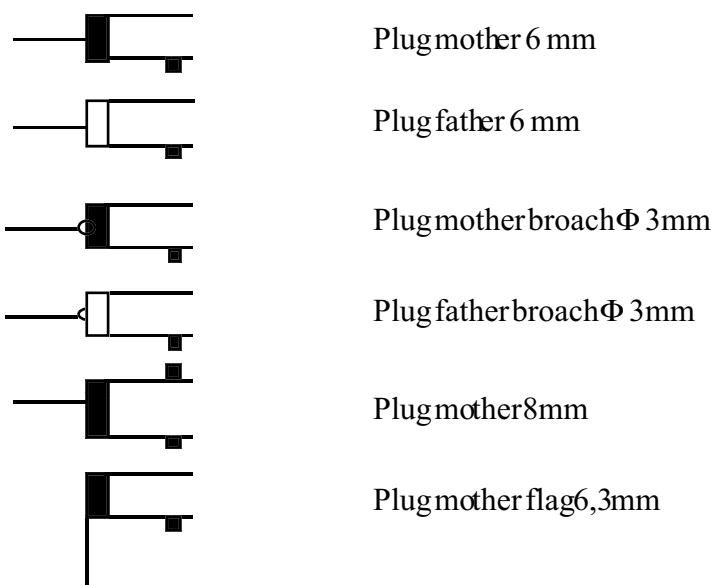
Connect.	Denomination
101	ELECTRIC LIGHTER
103 HA	ALTERNATOR
103 HB	ALTERNATOR EXCITATION
104	ANTI-THEFT MECHANISM
105	ACOUSTIC WARNING
113	WINDSCREEN WIPER TIMER
120	UCE INJECTION(for vehicles without AC)
120	UCE INJECTION(for vehicles with AC)
121	FOG LAMPS SWITCH
122	FOG HEADLAMPS SWITCH
123	LOCKING DOORS SWITCH
124	BLOWER SWITCH
125	HAZARD SWITCH
128	REAR WINDOW DEFROSTING SWITCH
138	RIGHT REAR DOOR ACTUATOR
139	LEFT REAR DOOR ACTUATOR
140	LEFT FRONT DOOR ACTUATOR
141	RIGHT FRONT DOOR ACTUATOR
145	WINDSCREEN WIPER-WASHING SWITCH
146	DETONATION SENSOR
147	ATMOSPHERIC PRESSURE SENSOR
149	RPM SENSOR
155	REVERSE DRIVING CONTACT
156	HANDBRAKE CONTACT
160	STOP CONTACT
163 GA	STARTER
163 AB	STARTER EXCITATION
166	RIGHT LICENSE PLATE LAMP
167	RIGHT LICENSE PLATE LAMP
168	DOCUMENTS COMPARTMENT LIGHTING LAMP
171	AC COMPRESSOR CLUTCH
172	RIGHT REAR LAMP
173	LEFT REAR LAMP
175	LEFT FOG LAMP
176	RIGHT FOG HEADLIGHT
177	LEFT FOG HEADLIGHT
180	LEFT FRONT DOOR CONTACT
181	RIGHT FRONT DOOR CONTACT
184	RIGHT FRONT PARKING LAMP
185	LEFT FRONT PARKING LAMP
188	COOLING FAN MOTOR (for vehicles without AC)
189	RIGHT REAR LOUD SPEAKER
190	LEFT REAR LOUD SPEAKER
191	RIGHT FRONT DOOR LOUD SPEAKER
192	LEFT FRONT DOOR LOUD SPEAKER
193	INJECTOR 1
194	INJECTOR 2
195	INJECTOR 3

196	INJECTOR 4
199	FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP
200	REAR WINDOW DEFROSTING
205	OIL PRESSURE CONTACT
209	CLIGHTS, TURNING LIGHTS, HORN SWITCH
210	ELECTRONIC CLOCK
212	WINDSCREEN WIPER MOTOR
216	RIGHT FRONT BRAKE PAD
217	LEFT FRONT BRAKE PAD
221	WINDSCREEN WASHING PUMP
222	VALVE POTENTIOMETER
225	DIAGNOSTIC SOCKET
226	RIGHT HEADLAMP
227	LEFT HEADLAMP
242	DOWNSTREAM OXYGEN SENSOR
244	WATER TEMPERATURE SENSOR
247	INSTRUMENT PANEL
250	SPEED TRANSDUCER
255	RIGHT FRONT TURNING LAMP
256	LEFT FRONT TURNING LAMP
260	COCKPIT FUSE AND RELAYS BOX
261	RADIO
262	COOLING MOTOR FAN (for vehicles with AC)
267	RIGHT SIDE SIGNALING LAMP
268	LEFT SIDE SIGNALING LAMP
272	INJECTION AIR TEMPERATURE SENSOR
298	CLIMATE CONTROL LIGHTING
319	AC STARTING BUTTON
321	MOTOR FAN RESISTANCE (for vehicles with AC)
329	RIGHT FRONT CEILING LAMP
371	CANISTER PURGING VALVE
427	UCE ANTI-INTRUSION
438	ENGINE HOOD CONTACT
442	SIREN
454	RIGHT VOLUMETRIC SENSOR (Rx)
454	LEFT VOLUMETRIC SENSOR (Tx)
474	AC RELAY (on board)
503	UCE DECODER
560	HATCHBACK CONTACT
597	ENGINE RELAYS AND FUSE BOX (for vehicles without AC)
597	ENGINE RELAYS AND FUSE BOX (for vehicles with AC)
600	CLIMATE CONTROL BLOWER
639	STOP-S3 LAMP (on roof)
639	STOP[-S3 LAMP (in aileron)
649	STEP-BY-STEP ENGINE
654	ANTI-STARTING BUSHING
778	IGNITION COIL
857	FLASH RELAY
887	SUPSTREAM OXYGEN SENSOR
927	CHOCK SENSOR
993	ANTI-INTRUSION INDICATOR LED

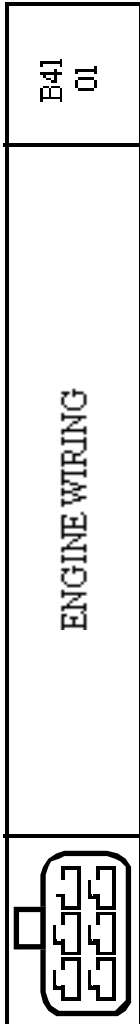
1033CA	BATTERY PLUS PLUG
1091	ICP BRAKING SYSTEM
1202	AC PRESSURE SENSOR
1335	FRONT ASHTRAY LIGHTING
MH 121	ENGINE ELECTRIC MASS MOTOR FAN MASS
R 89	FRONT WIRING/ BRAKE PADS WEAR COUPLING
R 107	FRONT WIRING/ DASHBOARD COUPLING
R 153	REAR WIRING/ LEFT FRONT DOOR COUPLING
R 154	REAR WIRING/ RIGHT FRONT DOOR COUPLING
R 155	REAR WIRING/ LEFT REAR DOOR COUPLING
R 156	REAR WIRING/ RIGHT REAR DOOR COUPLING
R 157	REAR WIRING/ HATCHBACK COUPLING
R 212	FRONT WIRING/ ENGINE COUPLING
R 265	FRONT WIRING/ REAR COUPLING
R 318	FRONT WIRING/ DASHBOARD COUPLING

OBSERVATIONS:

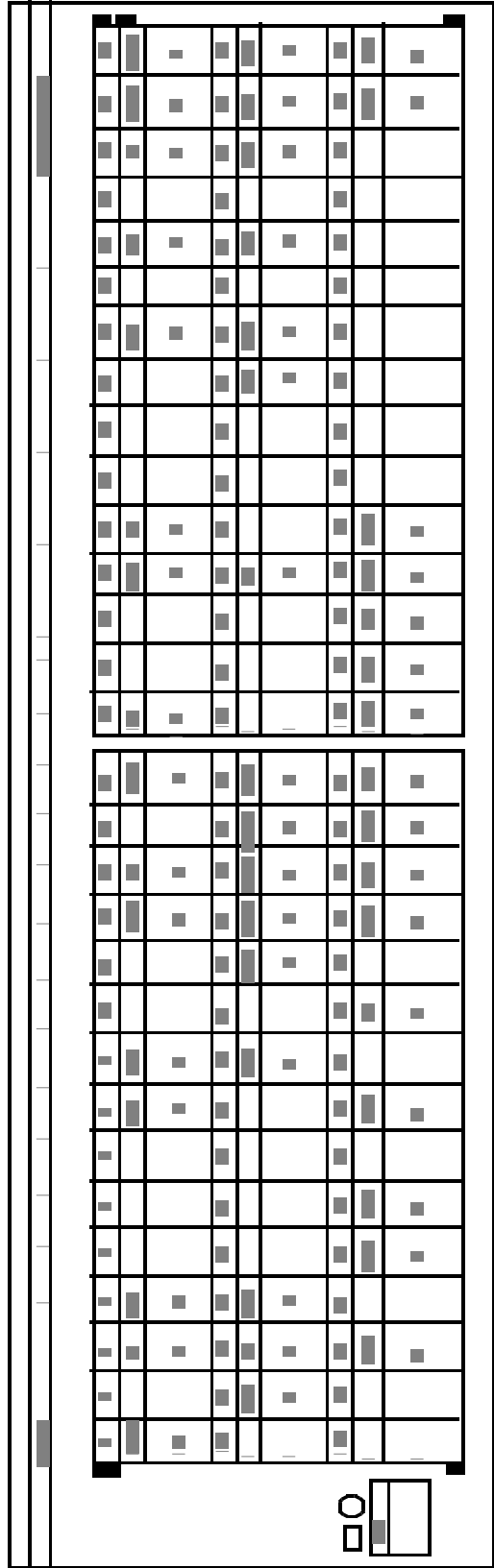
- Connectors and couplings are represented backwards (from wires forward).
- Some electric components are not connected to the vehicle wiring by means of multiple-way connectors, but by means of protected individual plugs. For illustrating the type of the respective plug, the following symbols are to be used:




(EURO 2000)




U.C.E. INJECTION
 (For vehicles without air conditioning system)

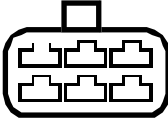



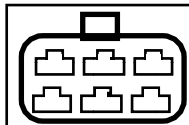
	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL-CYLINDERS2-3IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTERPURGINGVALVE CONTROL
8	0,6	3JN	CONTROL-BLOWERRELAY
9	0,35	31A	CONTROL -WATER TEMPERATURE INDICATOR
12	0,6	3BU	IDLERUNNNGREGULATORCONTROL1
13	0,6	3C	SIGNAL +WATERTEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERICPRESSURESENSORSIGNAL
19	0,5	TB1	DETONATIONSENSORS SCREENING
20	0,5	3S	SIGNAL+ DETONATION SENSOR
24	0,6	3BL	SIGNAL -ENGINE RPM>RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL -LINE L
28	2,0	M	MASS
29	0,35	AP29	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL-CYLINDERS1-4IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL -ANTI-POLLUTION INDICATOR
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLERUNNNGREGULATORCONTROL2
42	0,6	3BW	IDLERUNNNGREGULATORCONTROL3
43	0,6	3AJ	SIGNAL+VALVE POSITIONPOTENTIOMETER
44	0,6	3GL	DOWNSTREAM OXYGEN SENSORSIGNAL
45	0,6	3GK	UPSTREAM OXYGEN SENSORSIGNAL
49	0,6	3B	SIGNAL+AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEEDSIGNAL
54	0,6	3BG	SIGNAL -ENGINE RPM>RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL LINE K
58	0,35	HI7	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL -INJECTOR 1
60	1,0	3CT	CONTROL -INJECTOR 3
63	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
65	1,0	3GG	CONTROL-DOWNSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL- FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLERUNNNGREGULATORCONTROL4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL+ VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
76	0,6	3GJ	DOWNSTREAM OXYGEN SENSOR MASS
77	0,6	3JQ	- AIR TEMPERATURE SENSOR
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR SUPPLY +
79	0,5	3DQ	- DETONATION SENSOR
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS
89	1,0	3CU	CONTROL-INJECTOR4
90	1,0	3CS	CONTROL -INJECTOR 2

	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL - CYLINDERS 2-3 IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTER PURGING VALVE CONTROL
8	0,6	3JN	CONTROL - BLOWER RELAY
9	0,35	31A	CONTROL - WATER TEMPERATURE INDICATOR
10	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
12	0,6	3BU	IDLE RUNNING REGULATOR CONTROL 1
13	0,6	3C	SIGNAL + WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
18	0,6	38X	FREON PRESSURE SENSOR SIGNAL
19	0,5	TB1	DETONATION SENSOR SCREENING
20	0,5	3S	SIGNAL + DETONATION SENSOR
24	0,6	3BL	SIGNAL - ENGINE RPM > RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL - LINE L
28	2,0	M	MASS
29	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL - CYLINDERS 1-4 IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL - ANTI-POLLUTION INDICATOR
38	0,6	3JP	CONTROL - BLOWER RELAY TR.2
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLE RUNNING REGULATOR CONTROL 2
42	0,6	3BW	IDLE RUNNING REGULATOR CONTROL 3
43	0,6	3AJ	SIGNAL +VALVE POSITION POTENTIOMETER
44	0,6	3GL	DOWNSTREAM OXYGEN SENSOR SIGNAL
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
46	0,5	38AS	AIR CONDITIONING COMPRESSOR CONNECTION SIGNAL
49	0,6	3B	SIGNAL +AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL - ENGINE RPM > RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL - LINE K
58	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL - INJECTOR 1
60	1,0	3CT	CONTROL - INJECTOR 3
63	1,0	3GF	CONTROL - UPSTREAM OXYGEN SENSOR HEATING
65	1,0	3GG	CONTROL - DOWNSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+INJECTORS > ACTUATORSRELAY OUTLET
68	0,6	3AC	CONTROL - FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLE RUNNING REGULATOR CONTROL 4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL + VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
76	0,6	3GJ	DOWNSTREAM OXYGEN SENSOR MASS

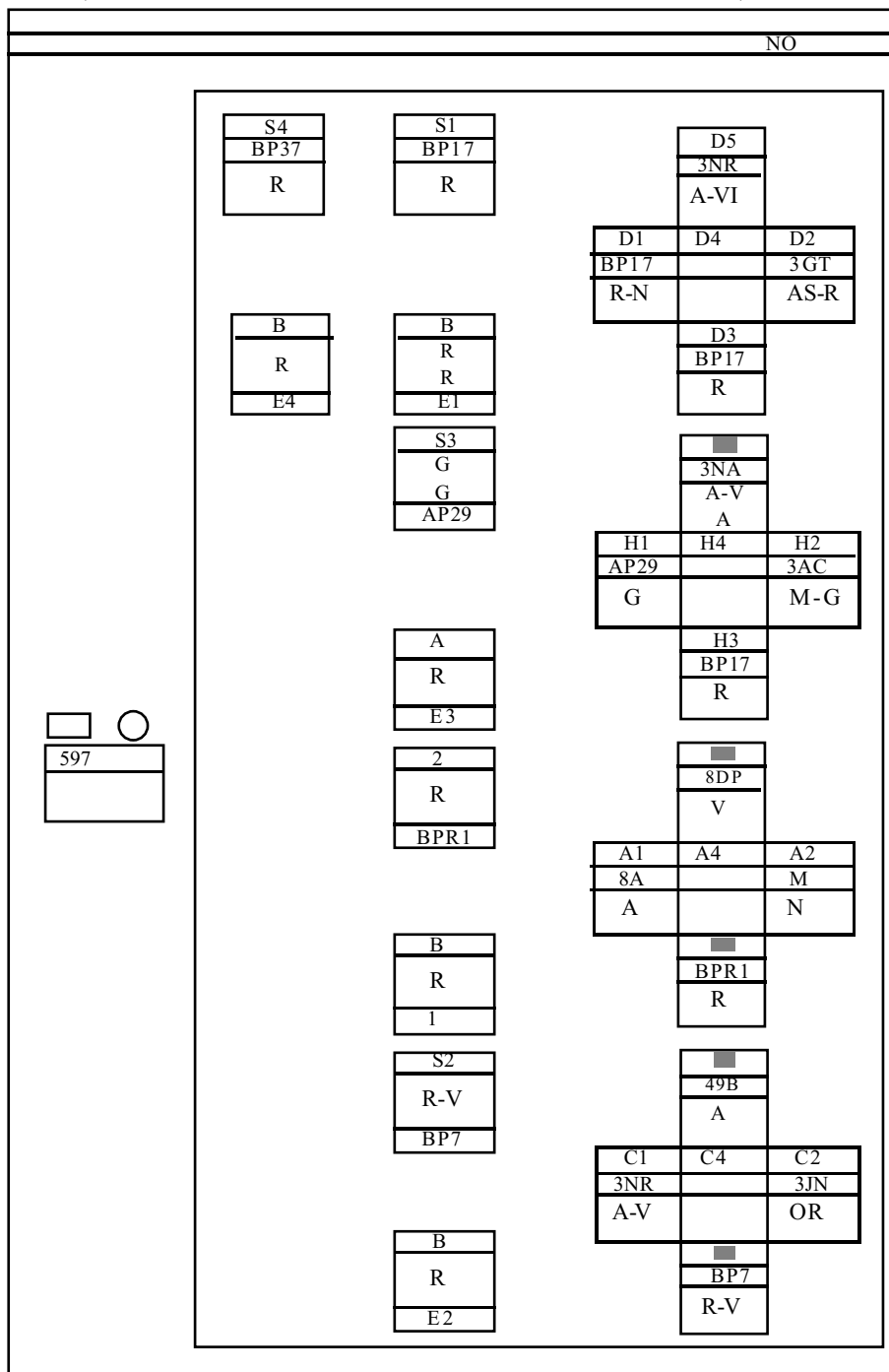
		ENGINE WIRING		B41 01
Pos.	Sectioning		Destination	
77	0,6	3JQ	- AIR TEMPERATURE SENSOR	
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR > SUPPLY +	
79	0,5	3DQ	- DETONATION SENSOR	
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS	
82	0,6	38U	- FREON PRESSURE SENSOR	
83	0,6	38Y	+ FREON PRESSURE SENSOR	
89	1,0	3CU	CONTROL - INJECTOR 4	
90	1,0	3CS	CONTROL - INJECTOR 2	




ENGINE WIRING

B41
01


ENGINE RELAYS AND FUSE BOX (FOR VEHICLES WITHOUT AIR CONDITIONING SYSTEM)



	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOG AMPS
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JN	CONTROL-BLOWER RELAY, TR.1
C3	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
C5	1,5	49B	CONTROL+BLOWER COOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D2	0,6	3GT	INJECTION COMPUTER > ACTUATORS RELAY CONTROL
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
H2	0,6	3AC	CONTROL- FUEL PUMP RELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
H5	2,0	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
H5	1,4	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
E1	5,0	B	+ BATTERY
E1	0,6	B	+ BATTERY > FUSE INLET F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
E2	5,0	B	+ BATTERY > STARTER
S2	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING
E3	1,0	A	SUPPLY+ AFTER CONTACT
S3	0,6	AP29	+ PROTECTED D.C > ENGINE SAFETY RUNNING RELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
E4	0,6	B	+ BATTERY > FUSE INLET F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
1	1,0	B	+ BATTERY
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY

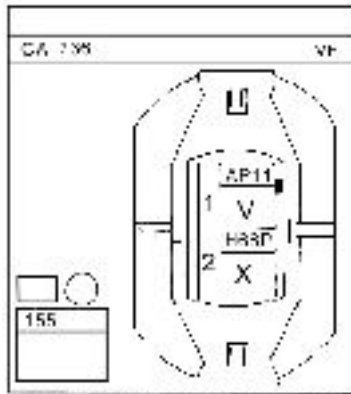
	ENGINE WIRING	B41 01
---	---------------	-----------

Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOG AMPS
B1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B2	0,6	3JN	- BLOWER RELAY, TR. 1
B3	2,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
B5	2,0	49L	BLOWER COOLING RESISTANCE CONTROL
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JP	CONTROL - BLOWER RELAY, TR. 2
C3	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
C5	5,0	49B	CONTROL + BLOWER COOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D2	0,6	3GT	ACTUATORS RELAY CONTROL, INJECTION COMPUTER
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E1	0,5	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E2	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
E3	1,0	BPR1	+ BATTERY > FUSE OUTLET F06 > RELAY
E5	1,0	38R	CONTROL + AIR CONDITIONING COMPRESSOR CLUTCH
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
H2	0,6	3AC	CONTROL - FUEL PUMP RELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
H5	2,0	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
H5	1,4	3NA	+ IGNITION COIL, CHOKI SENSOR > FUEL PUMP RELAY
E1	5,0	B	+ BATTERY
E1	0,6	B	+ BATTERY > FUSE INLET F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
E2	5,0	B	+ BATTERY > + STARTER
S2	2,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING
S2	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
E3	1,0	A	SUPPLY + AFTER CONTACT
S3	0,6	AP29	+ PROTECTED D.C. > ENGINE RUNNING SAFETY RELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
E4	0,6	B	+ BATTERY > FUSE INLET F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
1	1,0	B	+ BATTERY
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY
E6	1,0	B	+ BATTERY
S6	1,0	BPR1	+ BATTERY > FUSE OUTLET F06 > RELAY


	ENGINE WIRING	B41 01
---	---------------	-----------

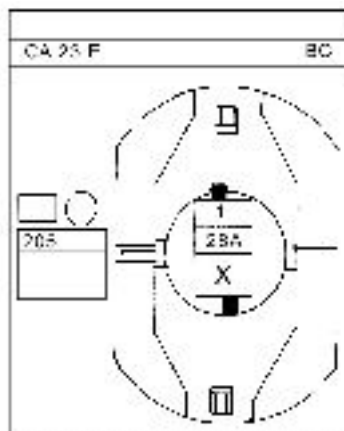
REVERSE DRIVING CONTACT

Pos.	Sectioning		Destination
1	0,60	AP11	+ AFTER PROTECTED CONTACT, REVERSE DRIVING LIGHTS
2	0,60	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02




OIL TRANSMITTER CONTACT

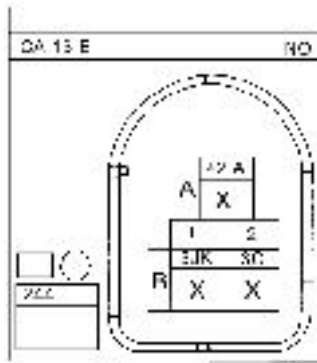
Pos.	Sectioning		Destination
1	0,35	28A	OIL PRESSURE INDICATOR - CONTROL




	ENGINE WIRING	B41 01
---	---------------	-----------

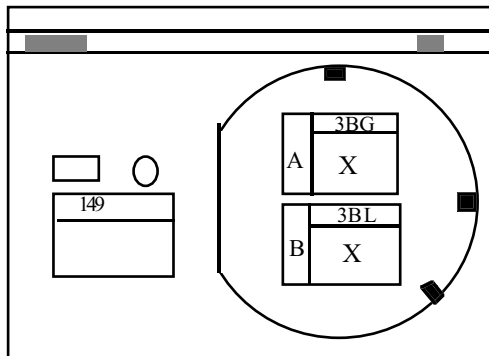
WATER TEMPERATURE SENSOR

Pos.	Sectioning		Destination
A	0,35	42A	SIGNAL +WATER TEMPERATURE
B1	0,60	3JK	- WATER TEMPERATURE
B2	0,60	3C	SIGNAL +WATER TEMPERATURE SENSOR




RPM SENSOR

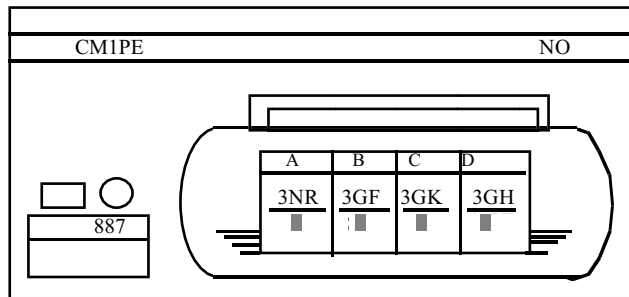
Pos.	Sectioning		Destination
A	0,60	3BG	ENGINE RPM SIGNAL >RPM SENSOR
B	0,60	3BL	ENGINE RPM - SIGNAL >RPM SENSOR




	ENGINE WIRING	B41 01
---	---------------	-----------

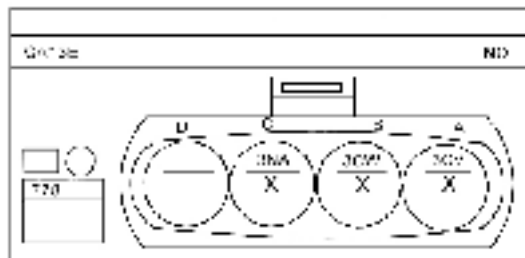
UPSTREAM OXYGEN SENSOR

Pos.	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
C	0,60	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GH	UPSTREAM OXYGEN SENSOR MASS




IGNITION COIL

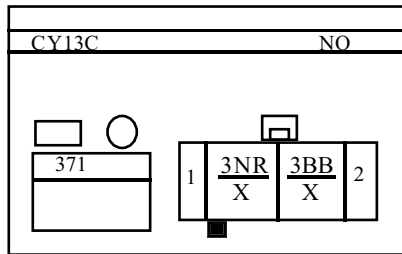
Pos.	Sectioning		Destination
A	2,0	3CV	CONTROL-CYLINDERS 1-4 IGNITION COIL
B	2,0	3CW	CONTROL-CYLINDERS 2-3 IGNITION COIL
C	2,0	3NA	+ IGNITION COIL, CHOKE 3 SENSOR > FUEL PUMP RELAY




	ENGINE WIRING	B41 01
---	---------------	-----------

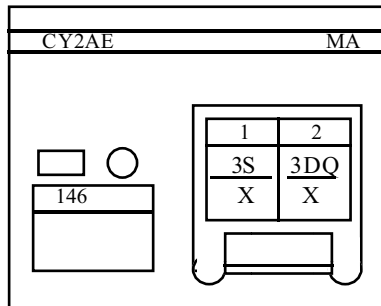
CANISTER PURGING VALVE

Pos.	Sectioning		Destination
1	0,60	3NR	+ INJECTORS >ACTUATORS RELAY OUTLET
2	0,60	3BB	CANISTRPURGINGVALVECONTROL




DETONATION SENSOR

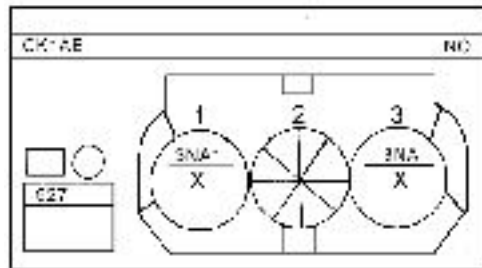
Pos.	Sectioning		Destination
1	0,50	3S	SIGNAL+ DETONATION SENSOR
2	0,50	3DQ	DETONATION SENSOR MASS
4	0,50	TB1	DETONATIONSENSORSCREENING




	ENGINE WIRING	B41 01
---	---------------	-----------

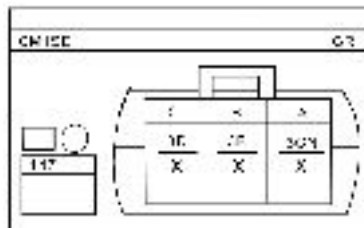
CHOKE SENSOR

Pos.	Sectioning		Destination
1	1,40	3NA1	+ FUEL PUMP > CHOKE SENSOR
3	1,40	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY




ATMOSPHERIC PRESSURE SENSOR

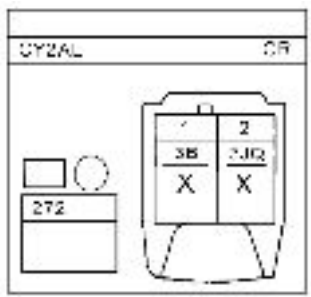
Pos.	Sectioning		Destination
A	0,35	3GN	Atmospheric pressure sensor mass
B	0,35	3F	Atmospheric pressure sensor signal
C	0,35	3D	Atmospheric pressure sensor > Supply +




	ENGINE WIRING	B41 01
---	---------------	-----------

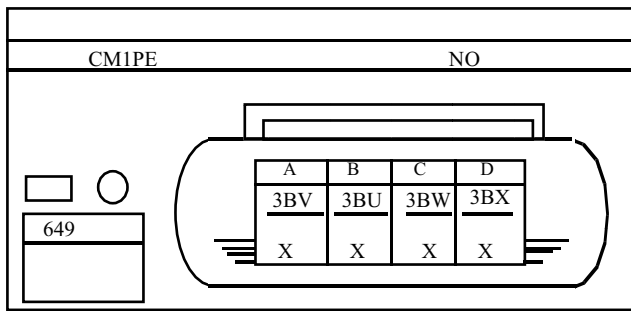
AIR TEMPERATURE SENSOR

Pos.	Sectioning		Destination
1	0,60	3B	SIGNAL +AIRTEMPERATURE SENSOR
2	0,60	3JQ	AIR TEMPERATURE SENSOR MASS




STEP-BY-STEP ENGINE

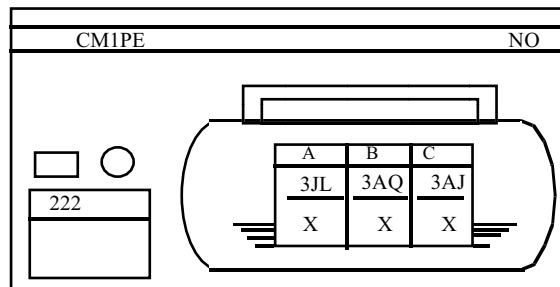
Pos.	Sectioning		Destination
A	0,60	3BV	IDLERUNNNGREGULATORCONTROL2
B	0,60	3BU	IDLERUNNNGREGULATORCONTROL1
C	0,60	3BW	IDLERUNNNGREGULATORCONTROL3
D	0,60	3BX	IDLERUNNNGREGULATORCONTROL4



	ENGINE WIRING	B41 01
---	---------------	-----------

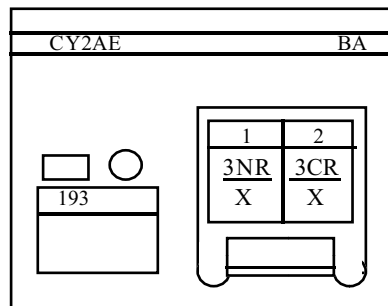
VALVEPOTENTIOMETER

Pos.	Sectioning		Destination
A	0,60	3JL	VALVEPOTENTIOMETERMASS
B	0,60	3AQ	SIGNAL+ VALVEPOTENTIOMETER
C	0,60	3AJ	SIGNAL+VALVE POSITON POTENTIOMETER




INJECTOR 1

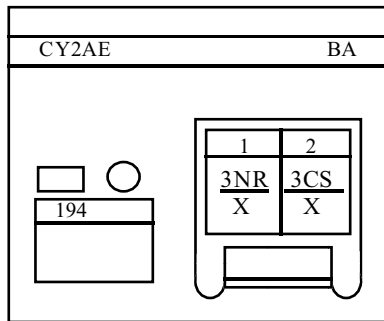
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CR	CONTROL -INJECTOR 1




	ENGINE WIRING	B41 01
---	---------------	-----------

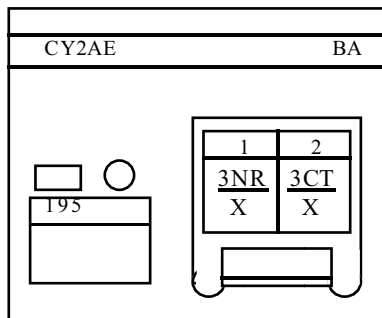
INJECTOR 2

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CS	CONTROL -INJECTOR 2




INJECTOR 3

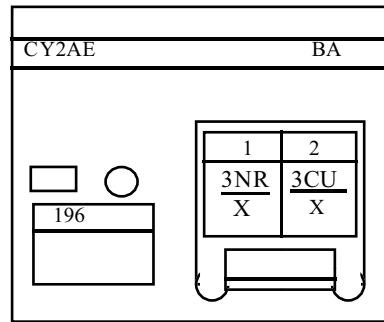
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CT	CONTROL -INJECTOR 3




	ENGINE WIRING	B41 01
---	---------------	-----------

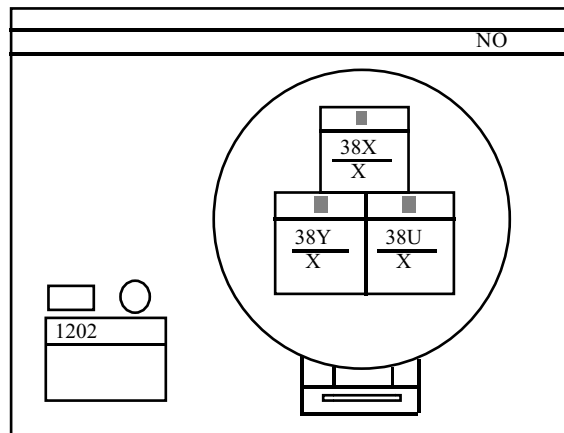
INJECTOR 4

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CU	CONTROL -INJECTOR 4



AIR CONDITIONING SYSTEM PRESSURE SENSOR

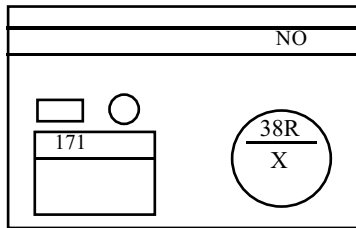
Pos.	Sectioning		Destination
A	0,60	38U	FREON PRESSURE SENSOR MASS
B	0,60	38Y	+FREON PRESSURE SENSOR
C	0,60	38X	FREON PRESSURE SENSOR SIGNAL




	ENGINE WIRING	B41 01
---	---------------	-----------

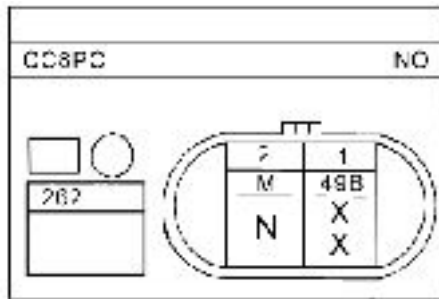
AIR CONDITIONING COMPRESSOR CLUTCH

Pos.	Sectioning		Destination
1	1,0	38R	CONTROL+AIRCONDITIONINGCOMPRESSORCLUTCH




AIR CONDITIONING AND BLOWER COOLING
(FOR AIRCONDITIONING EQUIPPED VEHICLES)

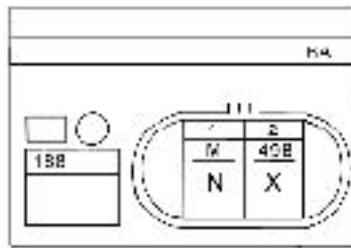
Pos.	Sectioning		Destination
1	2,0	49B	CONTROL+BLOWERCOOLING->BLOWERRESISTANCE
1	5,0	49B	CONTROL+BLOWERCOOLING
2	5,0	M	MASS



	ENGINE WIRING	B41 01
---	---------------	-----------

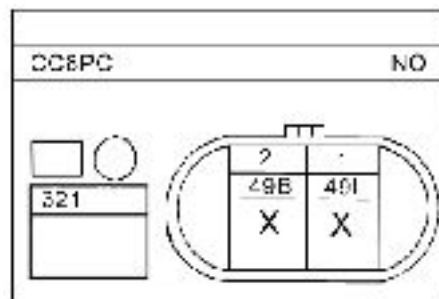
BLOWER COOLING
(FOR VEHICLES WITHOUT AIRCONDITIONING SYSTEM)

Pos.	Sectioning		Destination
1	1,5	M	MASS
2	1,5	49B	CONTROL+BLOWER COOLING




BLOWER RESISTANCE
(FOR AIRCONDITIONING EQUIPPED VEHICLES)

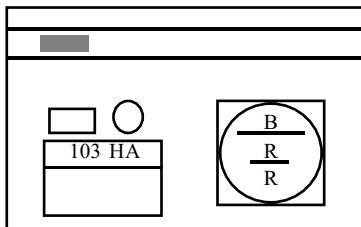
Pos.	Sectioning		Destination
1	2	49L	CONTROL+ BLOWER COOLING RESISTANCE
2	2	49B	CONTROL+BLOWER COOLING



	ENGINE WIRING	B41 01
---	---------------	-----------

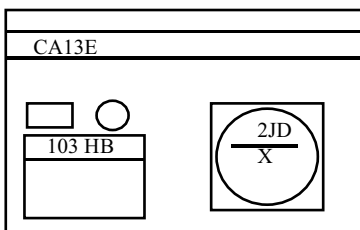
ALTERNATOR

Pos.	Sectioning		Destination
1	5,0	B	+ BATTERY > FUSE INLE F02
1	16,0	B	+ BATTERY > + STARTER




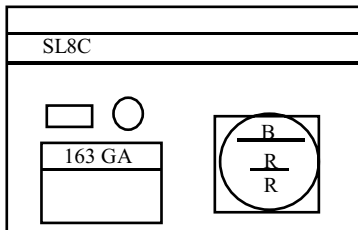
ALTERNATOREXCITATION

Pos.	Sectioning		Destination
1	0,6	2JD	+ALTERNATOR EXCITATION >INSTRUMENT PANEL




STARTER

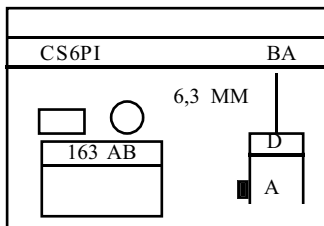
Pos.	Sectioning		Destination
1	160	B	+BATTERY
1	160	B	+ BATTERY >+ ALTERNATOR




	ENGINE WIRING	B41 01
---	---------------	-----------

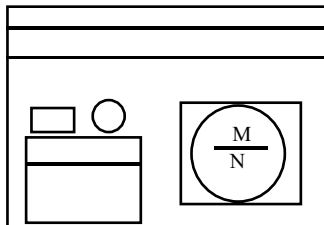
STARTER EXCITATION

Pos.	Sectioning		Destination
1	3,0	D	+ STARTER CONTROL




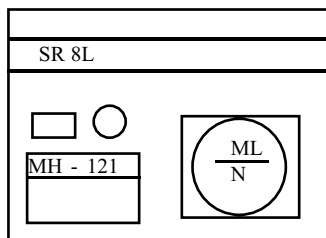
BLOWER MASS

Pos.	Sectioning		Destination
1	5,0	M	MASS




ENGINE ELECTRIC MASS

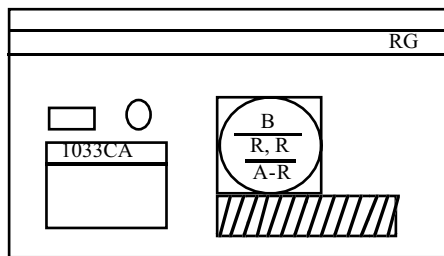
Pos.	Sectioning		Destination
1	4,0	ML	INJECTION COMPUTER MASS (PINS 3, 2&ND 3)




	ENGINE WIRING	B41 01
---	---------------	-----------

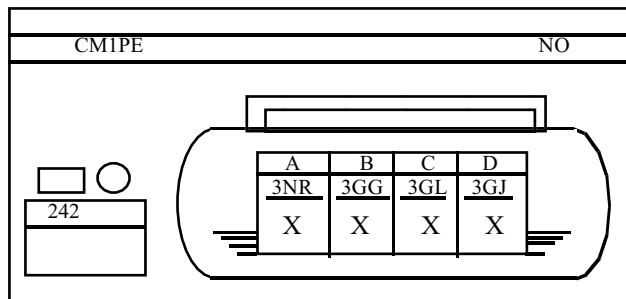
BATTERY TERMINAL + (PLUS)

Pos	Sectioning		Destination
1	16,0	B	+ BATTERY > + STARTER
1	5,0	B	+ BATTERY > FUSES INLET F01, F04
1	1,0	B	+ BATTERY > FUSE INLET F06




DOWNSTREAM OXYGEN SENSOR

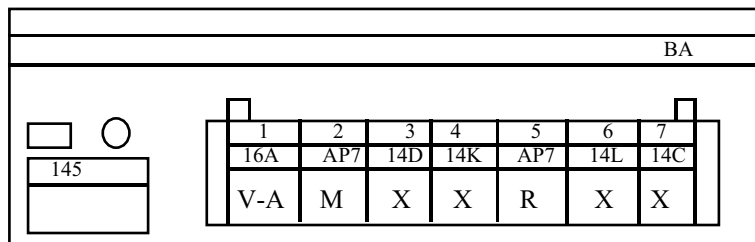
Position	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GG	CONTROL - DOWNSTREAM OXYGEN SENSOR HEATING
C	0,60	3GL	DOWNSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GJ	DOWNSTREAM OXYGEN SENSOR MASS




	FRONT WIRING	B41 01
---	--------------	-----------

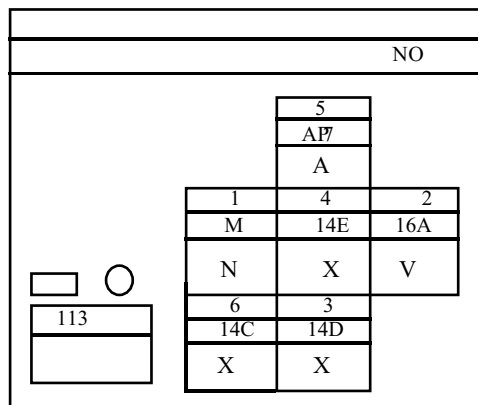
WINDSCREEN WIPER – WASHING SWITCH

Position	Sectioning		Destination
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
2	0,75	AP7	+AFTERPROTECTEDCONTACT, WINDSCREEN WIPER
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	1,0	14K	CONTROL +WINDSCREEN WIPER LOW SPEED
5	1,0	AP7	+AFTERPROTECTEDCONTACT, WINDSCREEN WIPER
6	0,75	14L	CONTROL +WINDSCREEN WIPER HIGH SPEED
7	0,5	14C	CONTROL +WINDSCREEN WIPER STOPPING IN PRESET POSITION



WINDSCREEN WIPER TIMER

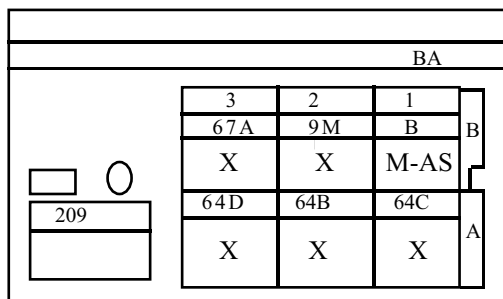
Position	Sectioning		Destination
1	0,5	M	MASS
2	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
5	0,75	AP7	+AFTERPROTECTEDCONTACT, WINDSCREEN WIPER
6	0,5	14C	CONTROL +WINDSCREEN WIPER STOPPING IN PRESET POSITION




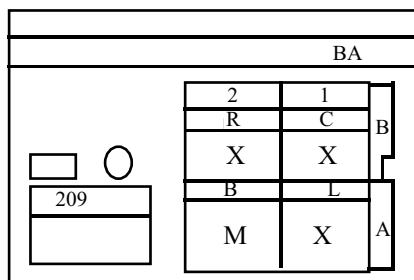
	FRONT WIRING	B41 01
---	--------------	-----------

HORN, TURNING AND LIGHTS SWITCH

Position	Sectioning		Destination
A1	1,0	64C	LEFT TURNING LIGHTS CONTROL
A2	1,0	64B	CONTROL + TURNING RELAY
A3	1,0	64D	RIGHT TURNING LIGHTS CONTROL
B1	1,0	B	+ BATTERY
B2	0,5	9M	SHUNT > FO LIGHTS SWITCH
B3	1,0	67A	CONTROL + ACOUSTIC WARNING




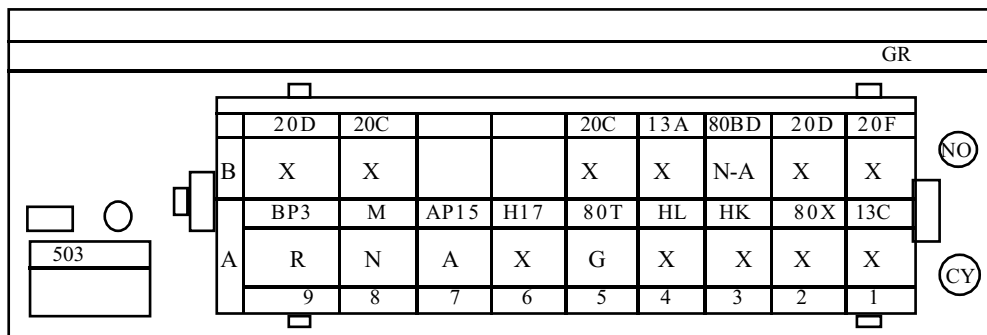
Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > FUSHNLET F05
A2	3,0	B	+ BATTERY
B1	0,75	C	+ LOW BEAM LIGHTS
B2	0,75	R	+ HIGH BEAM LIGHTS



	FRONTWIRING	B41 01
---	-------------	-----------


U.C.E. DECODER

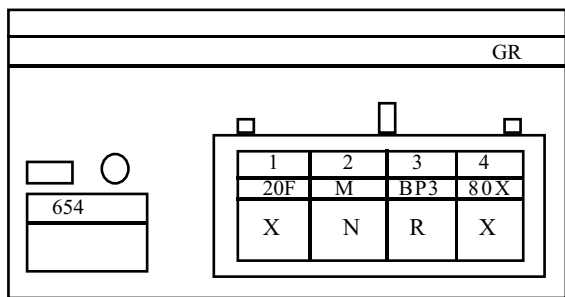
Position	Sectioning		Destination
A1	0,5	13C	CEILINGLAMPCONTROL
A2	0,35	80X	ANTI-STARTER RECEPTOR SIGNATRACK (TR)
A3	0,35	HK	DIAGNOSIS SIGNALLINEK
A4	0,35	HL	DIAGNOSIS SIGNAL -LINEL
A5	0,35	80T	ANTI-STARTING CONTROL-INDICATOR
A6	0,35	H17	INJECTION CODESIGNAL>ANTI-STARTING
A7	0,5	AP15	+ AFTER PROTECTED CONTACT> FUSE OUTET F03
A8	0,35	M	MASS
A9	1,0	BP3	+ PROTECTED CONTACT > FUSE OUIET F07
B1	0,35	20F	RADIOFREQUENCYRECEPTIONSIGNAL
B2	0,35	20D	CONTROL+DOORS ELECTRICLOCKING>SWITCH
B3	0,35	80BD	FLASHRELAYCONTROL
B4	0,35	13A	CONTROL-CEILINGLAMPSLIGHTING< DOORS CONTACTS
B5	0,35	20C	CONTROL+DOORS ELECTRICUNLOCKING< SWITCH
B6			
B7			
B8	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > ACTUATORS
B9	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS




	FRONTWIRING	B41 01
---	-------------	-----------

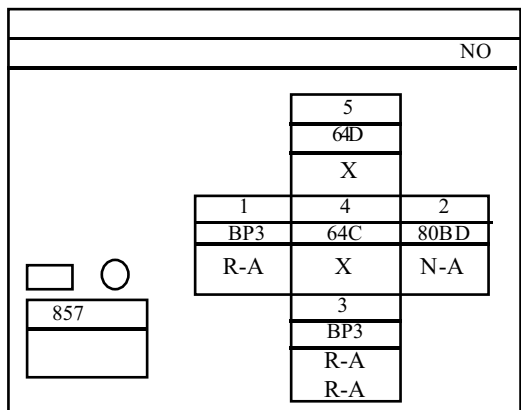
ANTI-STARTING BUSHING

Position	Sectioning		Destination
1	0,35	20F	RADIOFREQUENCYRECEPTIONSIGNAL
2	0,35	M	MASS
3	0,35	BP3	PROTECTED BATTERY > FUSEOUTLET F07
4	0,35	80X	ANTI-STARTING RECEPTOR SIGNALTRACK (TR)




FLASHRELAY

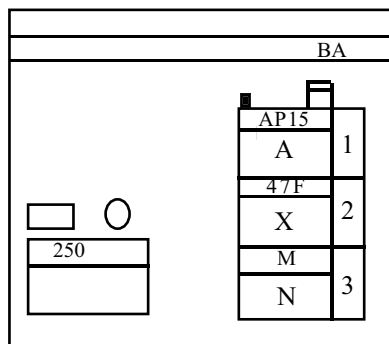
Position	Sectioning		Destination
1	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
2	0,35	80BD	FLASHRELAYCONTROL
3	0,5	BP3	+ PROTECTED BATTERY > FLASHRELAY
3	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
4	0,5	64C	LEFTTURNINGLIGHTSCONTROL
5	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
* For Anti-intrusion System equipped vehicles			
5	0,5	64D	RIGHT TURNING LIGHTS > U.C.E. ANTI-INTRUSION SYSTEM > DOORS ELECTRIC LOCKING/ UNLOCKING INFO




	FRONTWIRING	B41 01
---	-------------	-----------

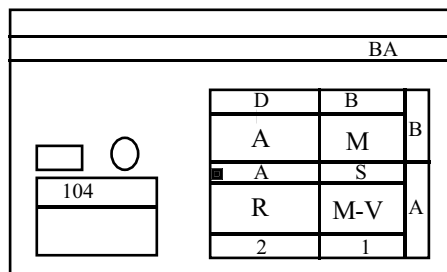
VEHICLE SPEED TRANSDUCER

Position	Sectioning		Destination
1	0,35	AP15	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,35	47F	VEHICLE SPEED SIGNAL
3	0,35	M	MASS




INTRUSION SYSTEM

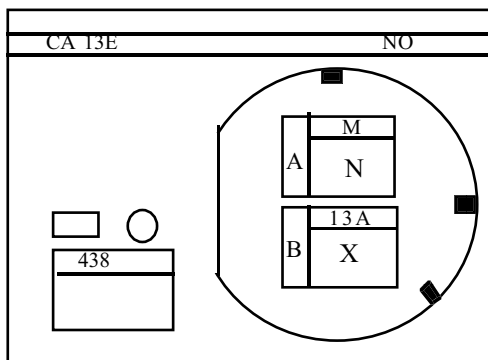
Position	Sectioning		Destination
A1	1,5	S	+ACCESSORIES > COCKPIT FUSES INLET F01, F15
A2	4,0	A	SUPPLY + AFTER CONTACT > COCKPIT FUSES INLET F02, F03 AND ENGINE FUSE INLET F03
B1	4,0	B	+ BATTERY
B2	3,0	D	+ STARTER CONTROL




	FRONT WIRING	B41 01
---	--------------	-----------

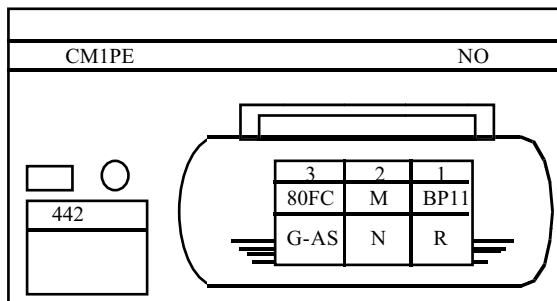
ENGINE HOOD CONTACT

Position	Sectioning		Destination
A	0,35	M	MASS
B	0,35	13A	CONTROL-CEILING LAMPS LIGHTING>ENGINE HOOD CONTACT




SIREN

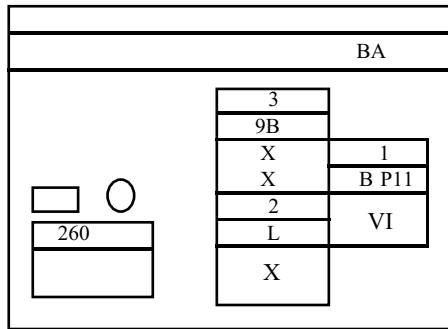
Position	Sectioning		Destination
1	0,5	BP11	+ PROTECTED BATTERY > SIREN
2	0,5	M	MASS
3	0,35	80FC	SIREN CONTROL SUPPLY




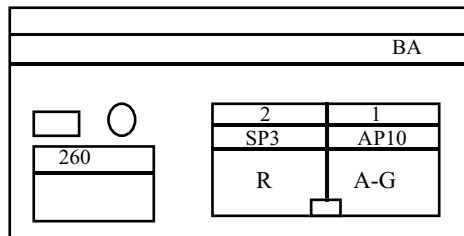
	FRONT WIRING	B41 01
---	--------------	-----------

COCKPIT RELAYS AND FUSE BOX

Position	Sectioning		Destination
1	0,5	9B	CONTROL + REAR FOGAMP
2	0,5	L	+ PARKING LIGHTS > LIGHTS SWITCH
3	0,5	9DP	+ PROTECTED REARFOGLIGHTS
3	0,5	9DP	+ PROTECTED REARFOGLIGHTS > FOGLAMP SWITCH



Position	Sectioning		Destination
1	0,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
2	1,5	SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER



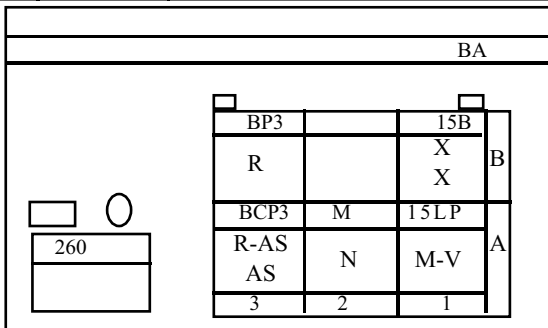
CONNECTORS AND CONNECTIONS WIRES FUNCTION



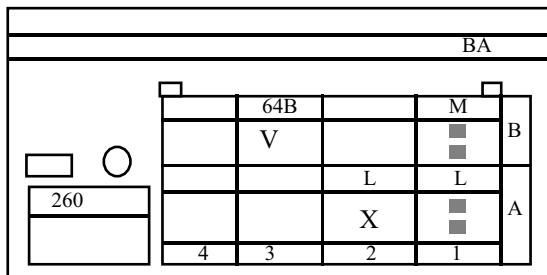
FRONT WIRING

B41
01


Position	Sectioning		Destination
A1	0,35	15LP	CONTROL+PROTECTED REAR WINDOW DEFROSTING
A2	0,5	M	MASS
A3	0,5	BCP3	+CEILING PROTECTED BATTERY
A3	1,5	BCP3	+CEILING PROTECTED BATTERY > FUSE OUTLET F06
B1	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B1	0,35	15A	REAR WINDOW DEFROSTING INDICATOR - CONTROL
B2			
B3	1,0	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
* For Anti-intrusion equipped vehicles			
B3	1,0	BP3	+ WINDSCREEN WIPER STOPPING PRESET POSITION PROTECTED BATTERY > SIREN

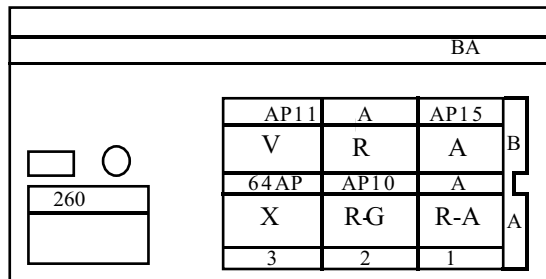



Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > LIGHTS SWITCH
A1	0,50	L	+ PARKING LIGHTS > FOG LAMPS RELAY
A2	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
A3			
A4			
B1	0,5	M	MASS
B1	0,5	M	MASS > FOG LAMPS RELAY, CLIMATE CONTROL BLOWER RELAY, REAR WINDOW DEFROSTING TIMER
B2			
B3	1,0	64B	CONTROL + TURNING RELAY

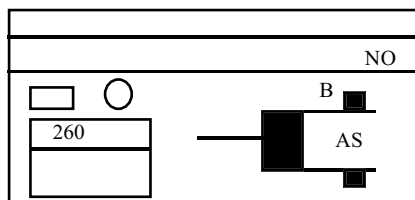


	FRONTWIRING	B41 01
---	-------------	-----------

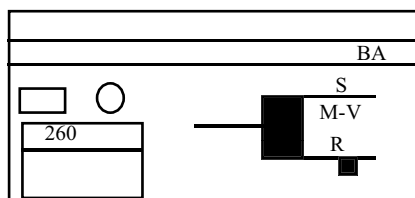
Position	Sectioning		Destination
A1	1,5	A	SUPPLY + D.C.
A2	1,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
A3	1,0	64AP	+ PROTECTED TURNING LIGHTS, FUSE INLET F04
B1	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
B2	0,5	A	SUPPLY + D.C. > COCKPIT FUSE INLET F02
B3	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT



Position	Sectioning		Destination
	3,0	B	+ BATTERY > FUSES INLET F06, F07 F08, F09

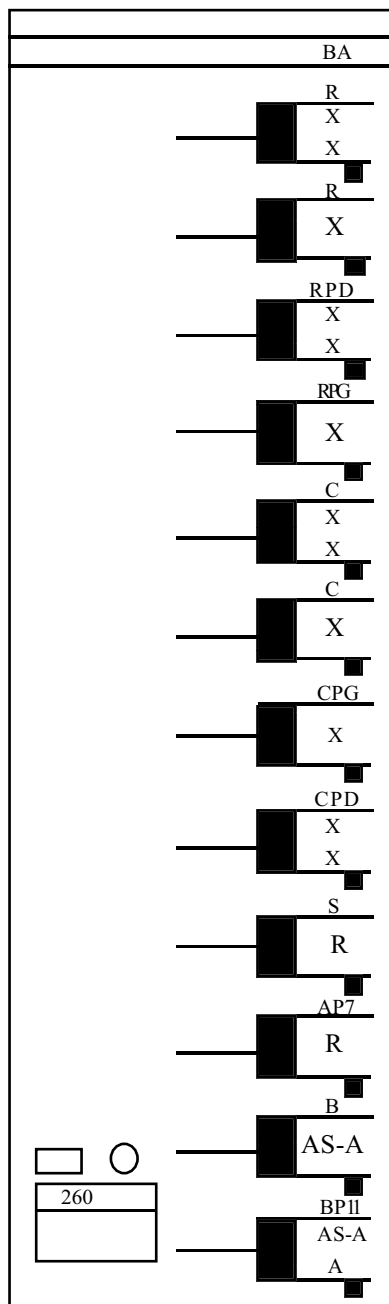


Position	Sectioning		Destination
	1,5	S	+ ACCESSORIES > FUSE INLET F01 COCKPIT
	1,5	S	+ ACCESSORIES > FUSE INLET F15 COCKPIT






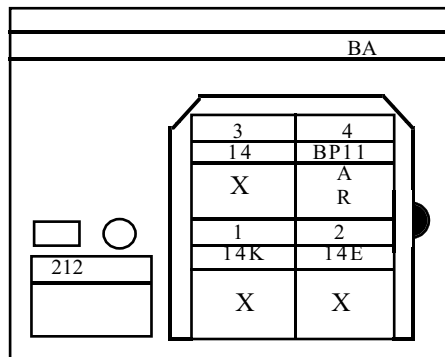
Position	Setting		Destination
F11	0,75	R	+ HIGH BEAM LIGHTS > FUSE INLET F11
	0,75	R	HIGH BEAM LGHTS > FUSE NLET F12
F12	0,75	R	HIGH BEAM LIGHTS > FUSE INLET F12
F12	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12
	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F11	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11
F13	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F13
	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F14	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F13	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13
F14	0,75	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14
	0,35	CPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F15	1,5	S	+ ACCESSORIES > FUSE INLET F01
F15	1,0	AP7	+ WINDSCREEN WPER PROTECTED D.C.
F16	0,75	B	+ BATTERY
F16	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
	0,75	BP11	+ PROTECTED BATTERY > HORNS




	FRONT WIRING	B41 01
---	--------------	-----------

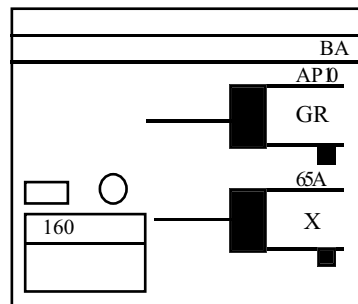
WINDSCREEN WIPER MOTOR

Pos	Sectioning		Destination
1	1,0	14K	CONTROL + WINDSCREEN WIPER LOW SPEED
2	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
3	0,75	14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
4	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
4	0,5	BP11	+ PROTECTED BATTERY > HORNS




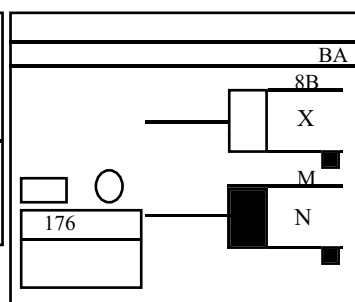
STOP CONTACT

Position	Sectioning		Destination
1	1,0	AH0	+PROTECTØDD.C>FUSEOUTLET F01
2	1,0	65A	CONTROL + STOP LIGHTS




RIGHTFOGLAMP

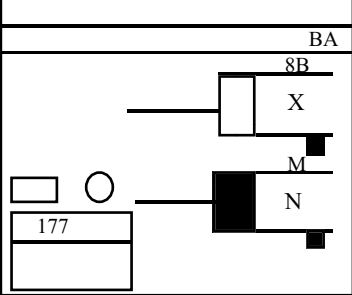
Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELX
2	0,75	M	MASS




	FRONT WIRING	B41 01
---	--------------	-----------

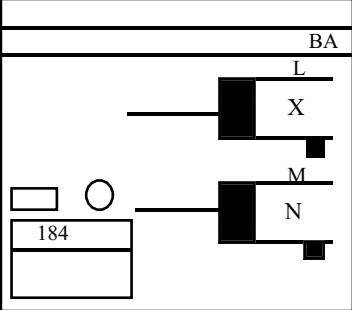
LEFT FRONT FOG LAMP

Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELAY
2	0,75	M	MASS




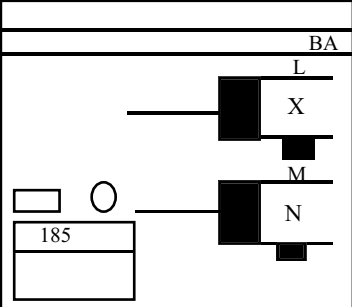
RIGHT FRONT PARKING LAMP

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




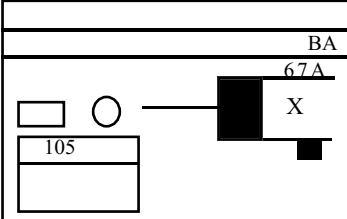
LEFT FRONT PARKING LIGHT

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS


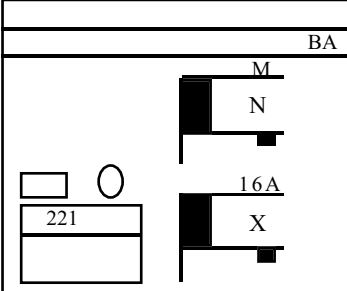


	FRONT WIRING	B41 01
---	--------------	-----------


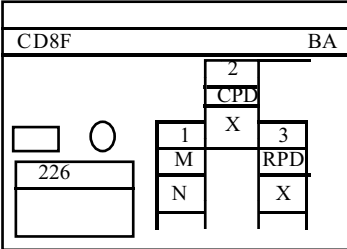
ACOUSTIC WARNING

Position	Sectioning		Destination	
1	1,0	67A	CONTROL +ACOUSTIC WARNING	


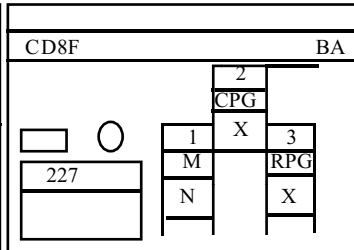
WINDSCREEN WIPER PUMP

Position	Sectioning		Destination	
1	0,5	16A	CONTROL +WINDSCREEN WASHING PUMP	
2	0,35	M	MASS	

RIGHT HEADLIGHT


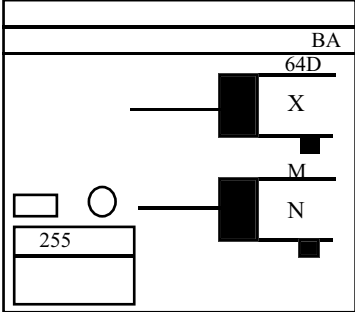
Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPD	+ PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14	
3	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12	

LEFT HEADLIGHT


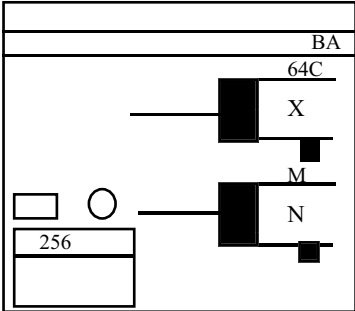
Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13	
3	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11	

	FRONT WIRING	B41 01
---	--------------	-----------


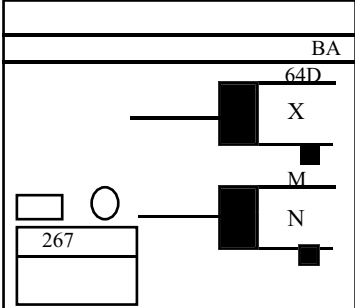
RIGHT FRONT TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64D	RIGHT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

LEFT FRONT TURNING LIGHT


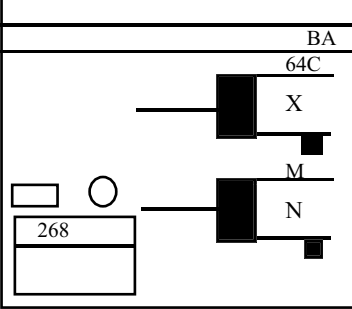
Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

RIGHT FRONT SIDE TURNING LIGHT


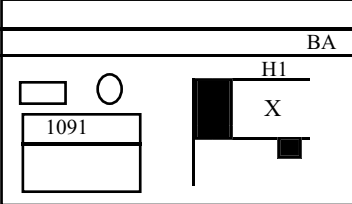
Position	Sectioning		Destination	
1	0,5	64D	RIGHT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

	FRONT WIRING	B41 01
---	--------------	-----------


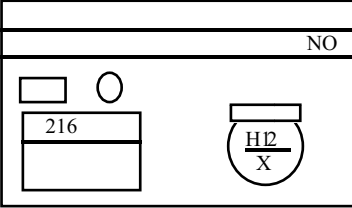
LEFT FRONT SIDE TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	


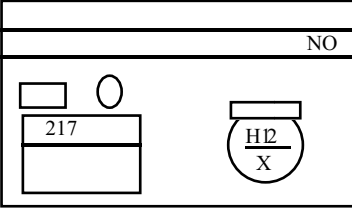
I.C.P. BRAKING SYSTEM

Position	Sectioning		Destination	
1	0,35	H1	CONTROL -ICP, HAND BRAKE INDICATOR	

RIGHT FRONT BRAKE PADS


Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	

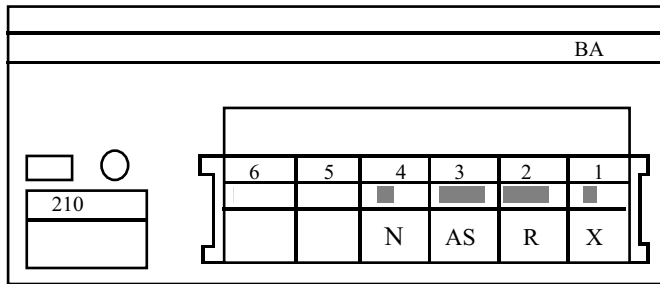
LEFT FRONT BRAKE PADS

Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	


	DASHBOARD WIRING	B41 01
---	------------------	-----------

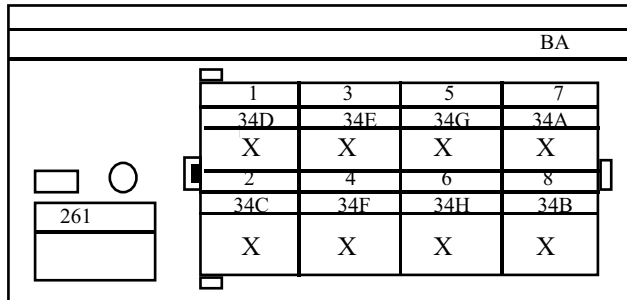
ELECTRONIC CLOCK

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,35	AP10	+ AFTER PROTECTED CONTACT . FUSE OUTLET F01
3	0,35	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	M	MASS
5			
6			




RADIO

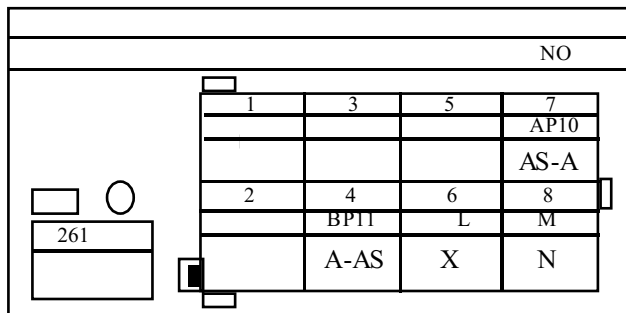
Position	Sectioning		Destination
1	0,35	34D	SIGNAL+ RIGHT REAR SPEAKER
2	0,35	34C	SIGNAL- RIGHT REAR SPEAKER
3	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
4	0,35	34F	SIGNAL -RIGHTFRONT SPEAKER
5	0,35	34G	SIGNAL +LEFTFRONT SPEAKER
6	0,35	34H	SIGNAL -LEFTFRONT SPEAKER
7	0,35	34A	SIGNAL +LEFTREAR SPEAKER
8	0,35	34B	SIGNAL -LEFTREAR SPEAKER




	DASHBOARD WIRING	B41 01
---	------------------	-----------

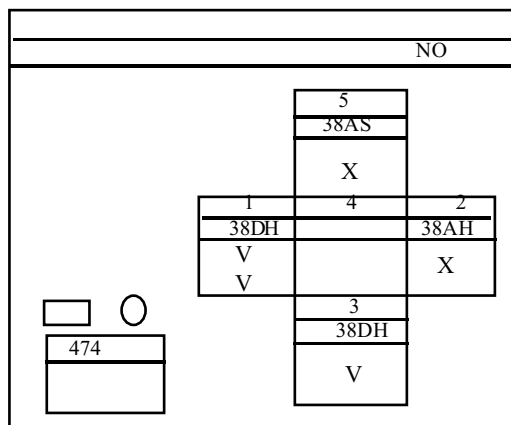
RADIO

Position	Sectioning		Destination
4	0,75	BP11	+PROTECTED BATTERY > COCKPIT FUSE BOX
6	0,75	L	+ PARKING LIGHTS > FUSE OUTLET F05
7	0,75	AP10	+AFTER PROTECTED CONTACT > FUSE OUTLET F01
8	0,5	M	MASS




AIR CONDITIONING RELAY (ON BOARD)

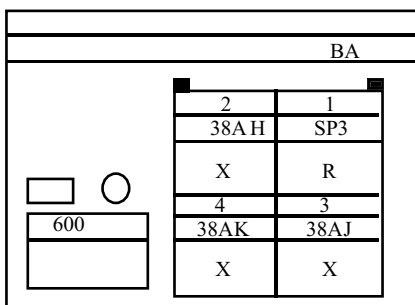
Position	Sectioning		Destination
1	0,5	38DH	CONTROL + AIR CONDITIONING
1	0,5	38DH	SHUNT > CONTROL + AIR CONDITIONING
2	0,5	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED
3	0,5	38DH	SHUNT > CONTROL + AIR CONDITIONING
5	0,35	38AS	AIR CONDITIONING COMPRESSOR CONNECTION SIGNAL




	DASHBOARD WIRING	B41 01
---	------------------	-----------

CLIMATE CONTROL BLOWER

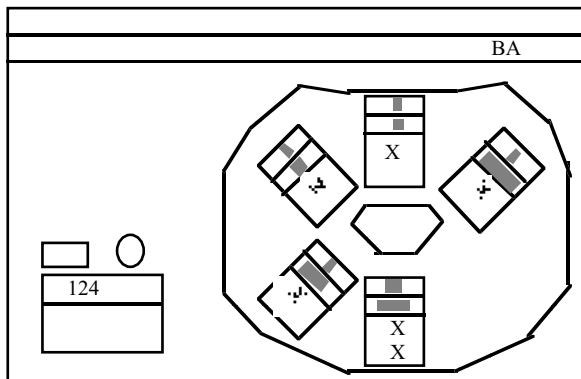
Position	Sectioning		Destination
1	1,5	SP3	ACCESSORIES PROTECTED CLIMATE CONTROL BLOWER
2	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED
3	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED
4	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED



BLOWER SWITCH


Position	Sectioning		Destination
1	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED
1*	0,5	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED + AIR CONDITIONING SYSTEM RELAY COIL (ONBOARD)
2	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER, SPEED
3	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER, SPEED
4	0,35	L	+ PARKING LIGHTS > FUSHNLET F05
5	1,5	M	MASS

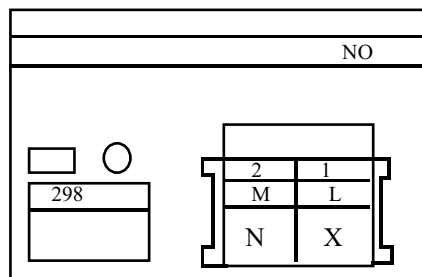
1* - for air conditioning system equipped vehicles




	DASHBOARD WIRING	B41 01
---	------------------	-----------

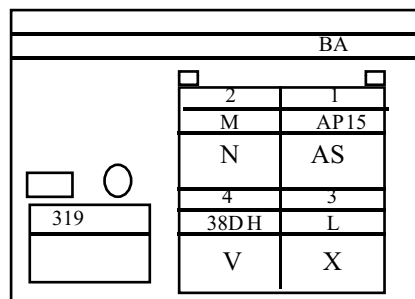
CLIMATE CONTROL LIGHTING

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




AIR CONDITIONING STARTING BUTTON

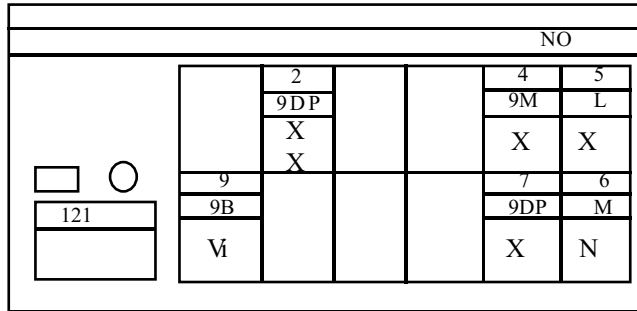
Position	Sectioning		Destination
1	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	0,5	M	MASS
3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,5	38DH	CONTROL+AIR CONDITIONING




	DASHBOARD WIRING	B41 01
---	------------------	-----------

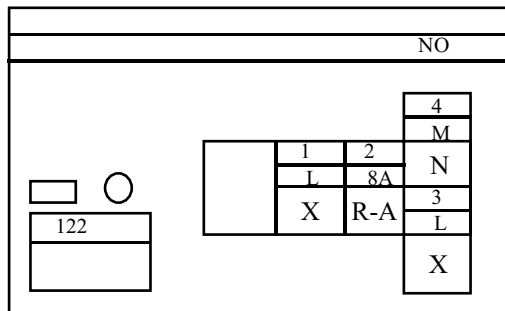
FOGLIGHT SWITCH

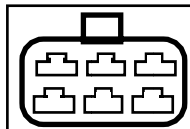
Position	Sectioning		Destination
2	0,5	9DP	+PROTECTED REAR FOGLIGHTS
	0,5	9DP	+PROTECTED REAR FOGLIGHTS > FOGLIGHT SWITCH
4	0,5	9M	SHUNT > LIGHTS SWITCH
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,5	9DP	SHUNT > + PROTECTED REAR FOG LIGHTS
9	0,5	9B	CONTROL + REAR FOGLIGHT



FOGLAMP SWITCH

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	8A	CONTROL + FOGLAMPS RELAY
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS




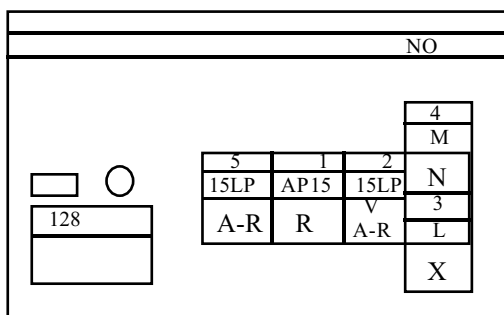


DASHBOARD WIRING

B41
01


REAR WINDOW DEFROSTING SWITCH (Pulsetype)

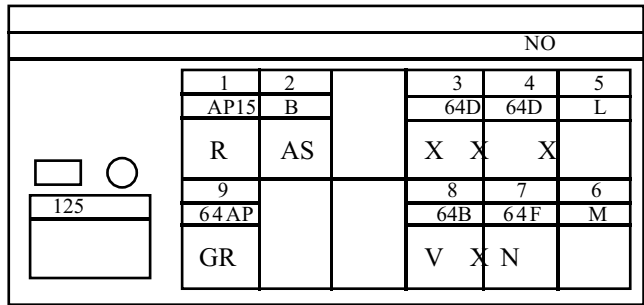
Position	Sectioning		Destination
1	0,5	AP15	+ PROTECTED D.C. > FUSE OUTLET F03
2	0,5	15LP	SHUNT > PROTECT REAR WINDOW DEFROSTING
2	0,5	15LP	+ PROTECTED REAR WINDOW DEFROSTING
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS
5	0,5	15LP	SHUNT > PROTECT REAR WINDOW DEFROSTING




	DASHBOARD WIRING	B41 01
---	------------------	-----------

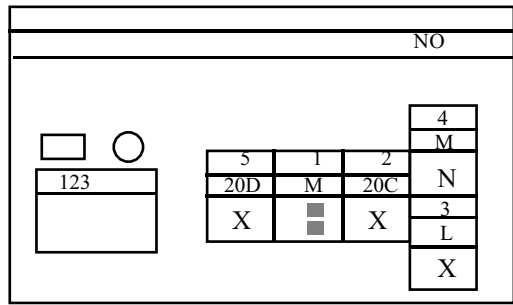
HAZARD SWITCH

Position	Sectioning		Destination
1	1,0	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	1,0	B	+ BATTERY
3	0,5	64C	LEFT TURNING LIGHTS CONTROL
4	0,5	64D	RIGHT TURNING LIGHTS CONTROL
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,35	64F	CONTROL + HAZARD INDICATOR
8	1,0	64B	CONTROL + TURNING RELAY
9	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE INLET F04



DOORS LOCKING SWITCH

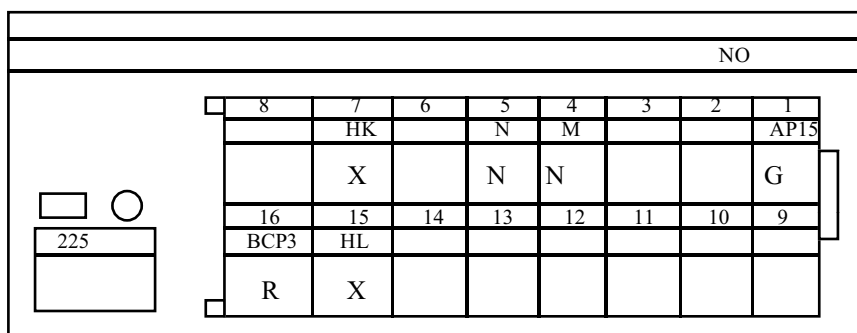
Position	Sectioning		Destination
5	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
1	0,5	M	MASS
1	0,35	M	SHUNT > MASS
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
3	0,5	L	PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	SHUNT > MASS



	DASHBOARD WIRING	B41 01
--	------------------	-----------

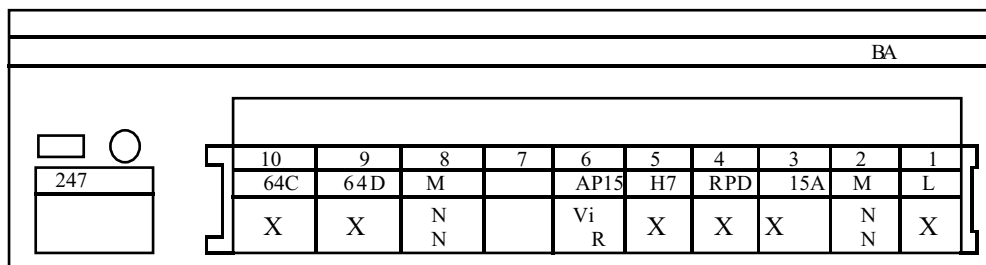
DIAGNOSIS SOCKET

Position	Sectioning		Destination
1	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
4	0,35	M	MASS
5	0,35	N	ELECTRON MASS
7	0,35	HK	DIAGNOSIS SIGNAL- LINE K
15	0,35	HL	DIAGNOSIS SIGNAL- LINE L
16	0,35	BCP3	+ PROTECTED BATTERY > FUSE OUTLET F06




INSTRUMENT PANEL

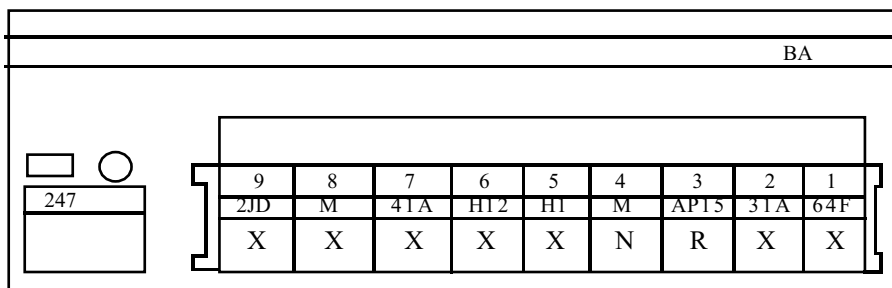
Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,75	M	MASS
2	0,5	M	SHUNT > MASS
3	0,35	15A	REAR WINDOW DEFROSTING INDICATOR-CONTROL
4	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
5	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
6	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
6	0,5	AP15	SHUNT > + AFTER PROTECTED CONTACT
7			
8	0,5	M	SHUNT > MASS
8	0,5	M	SHUNT > MASS
9	0,5	64D	RIGHT TURNING LIGHTS CONTROL
10	0,35	64C	LEFT TURNING LIGHTS CONTROL




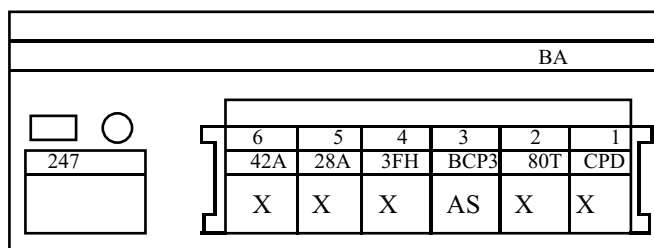
CONNECTORS AND CONNECTIONS WIRES FUNCTION



Position	Sectioning		Destination
1	0,35	64F	CONTROL + HAZARD INDICATOR
2	0,35	31A	WATER TEMPERATURE INDICATOR – CONTROL
3	0,5	AP15	SHUNT > +AFTER PROTECTED CONTACT
4	0,5	M	SHUNT > MASS
5	0,35	H1	ICP HANDBRAKE INDICATOR – CONTROL
6	0,35	H12	BRAKE PADSWEAR INDICATOR – CONTROL
7	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
8	0,35	M	FUELLEVELWARNING SIGNAL
9	0.6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL




Position	Sectioning		Destination
1	0.35	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > INDICATOR
2	0.35	80T	ANTI-STARTING INDICATOR - CONTROL
3	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	3FH	ANTI-POLLUTION FAILURE INDICATOR – CONTROL
5	0,35	28A	OIL PRESSURE INDICATOR – CONTROL
6	0,35	42A	SIGNAL + WATER TEMPERATURE

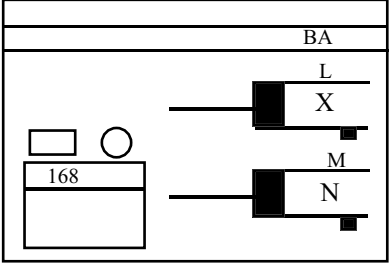


	DASHBOARD WIRING	B41 01
---	------------------	-----------


DOCUMENTS COMPARTMENT LIGHTING LAMP

Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS

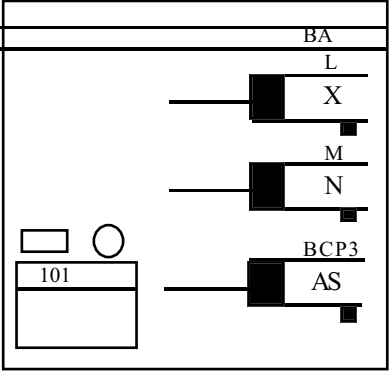
168




ELECTRIC LIGHTER

Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS
3	0,75	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06

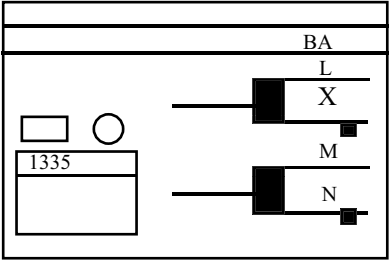
101



FRONT ASHTRAY LIGHTING

Position	Sectioning		Destination
1	0,35	L	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS

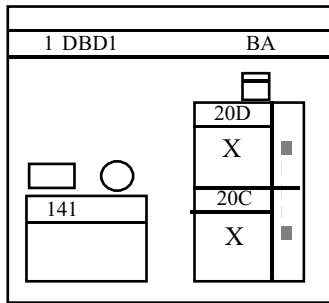
1335




	DOORS WIRING	B41 01
---	--------------	-----------

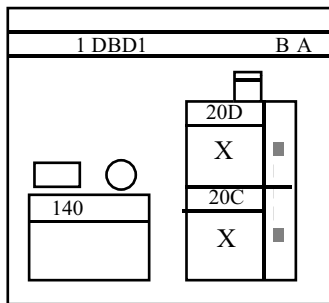
RIGHT FRONT DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS



LEFT FRONT DOOR ACTUATOR

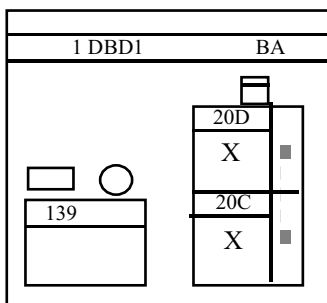
Position	Sectioning		Destination
1	0.	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS



	DOORS WIRING	B41 01
---	--------------	-----------

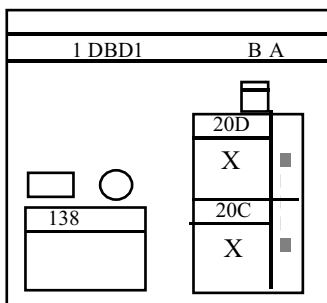
LEFT REAR DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKINGACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




RIGHT REAR DOOR ACTUATOR

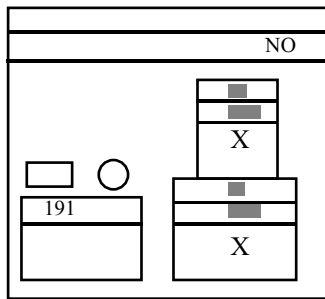
Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKINGACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS




	DOORS WIRING	B41 01
---	--------------	-----------

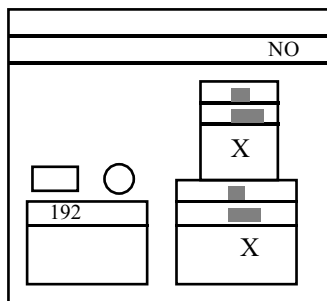
RIGHTFRONT DOOR SPEAKER

Position	Sectioning		Destination
1	0.35	34E	SIGNAL +RIGHT FRONTSPEAKER(RADIO)
2	0.35	34F	SIGNAL -RIGHT FRONTSPEAKER (RADIO)




LEFTFRONT DOOR SPEAKER

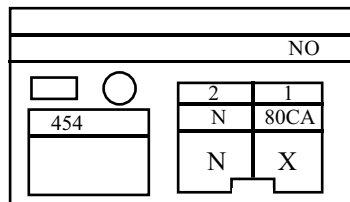
Position	Sectioning		Destination
1	0.35	34G	SIGNAL + LEFT FRONTSPEAKER (RADIO)
2	0.35	34H	SIGNAL -LEFTFRONT SPEAKER (RADIO)




	REAR WIRING	B41 01
---	-------------	-----------

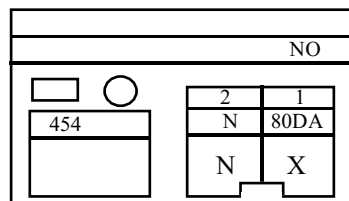
RIGHT VOLUME SENSOR (RX)

Position	Sectioning		Destination
1	0.35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0.35	N	ELECTRONCMASS




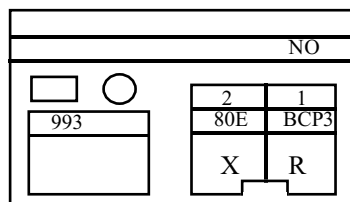
LEFT VOLUME SENSOR (TX)

Position	Sectioning		Destination
1	0.35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
2	0.35	N	ELECTRONCMASS




ANTI INTRUSION INDICATOR LED

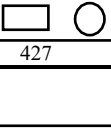
Position	Sectioning		Destination
1	0.35	BCP3	+ CEILING LAMPS PROTECTED BATTERY OUTLET FUSE F06
2	0.35	80E	ANTI-INTRUSION INDICATOR CONTROL



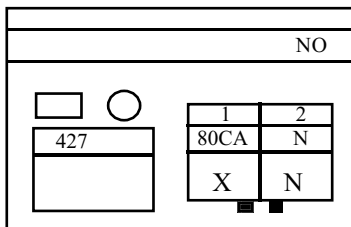
	REAR WIRING	B41 01
---	-------------	-----------

U.C.E. ANTI-INTRUSION

Position	Sectioning		Destination
1	0,5	64D	RIGHT TURNING LIGHTS > ICE ANTI-INTRUSION > DOORS LOCKING/UNLOCKING INFO
2	0,35	M	MASS
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
6	0,5	BCP3	+ CEILING LAMP PROTECTED BATTERY > FUSE OUTLET F06
6	0,35	BCP3	+ CEILING LAMP PROTECTED BATTERY
7	0,5	64C	LEFT TURNING LIGHTS CONTROL
8	0,35	80E	ANTI-INTRUSION INDICATOR CONTROL
9	0,35	13A	CEILING LAMP LIGHTING - CONTROL > CONTACTS
12	0,35	AP15	+ PLUS AFTER PROTECTED CONTACT > FUSE OUTLET F03
14	0,35	20D	CONTROL + DOORS LOCKING ACTUATORS
15	0,35	20C	CONTROL + DOORS UNLOCKING > ACTUATORS
18	0,35	80FC	SIREN CONTROL SUPPLY
23	0,35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
24	0,35	N	ELECTRON MASS
24	0,35	N	MASS


BA												
 427	24	23	22	21	20	19	18	17	16	15	14	13
	N	80DA					80FC			20C	20D	
	N	X					GR-VI			X	X	
	N											
	12	11	10	9	8	7	6	5	4	3	2	1
AP15			13A	M	64C	BCP3	64D			M	64D	
G			X	X	X	R	R			V-A	X	

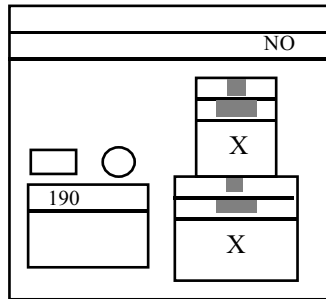
Position	Sectioning		Destination
1	0,35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0,35	N	ELECTRON MASS




	REAR WIRING	B41 01
---	--------------------	-------------------

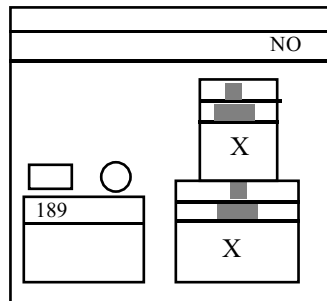
LEFTREAR SPEAKER

Position	Sectioning		Destination
1	0.35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
2	0.35	34B	SIGNAL - LEFTREAR SPEAKER (RADIO)




RIGHTREAR SPEAKER

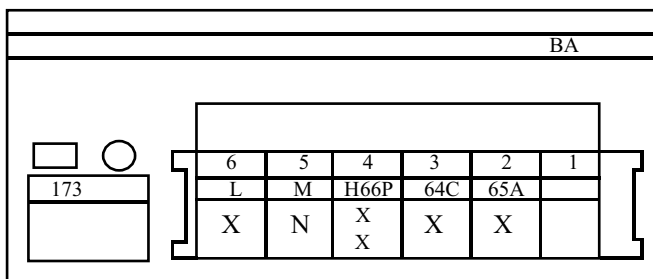
Position	Sectioning		Destination
1	0.35	34D	SIGNAL +RIGHT REAR SPEAKER (RADIO)
2	0.35	34C	SIGNAL -RIGHT REARSPEAKER (RADIO)




	REAR WIRING	B41 01
---	-------------	-----------

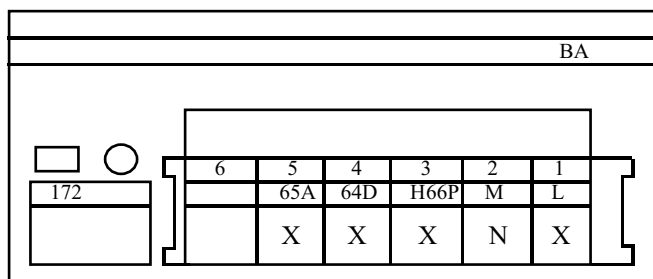
LEFTREARLAMP

Position	Sectioning		Destination
1			
2	0,5	65A	CONTROL +STOP LIGHTS
3	0,5	64C	LEFTTURNINGLIGHTSCONTROL
4	0,5	H66P	CONTROL+REVERSEDIVINGLIGHTS>FUSEOUTLET F02
4	0,5	H66P	CONTROL+ REVERSEDIVINGLIGHTS>RIGHTREARLAMP
5	0,5	M	MASS
6	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05




RIGHTREARLAMP

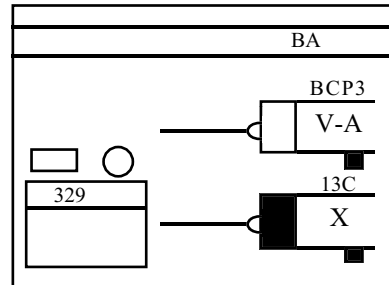
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSEOUTLET F05
2	0,5	M	MASS
3	0,5	H66P	CONTROL+ REVERSE DRIVINGLIGHTS>FUSE OUTLET F02
4	0,5	64D	CONTROL +REVERSE DRIVING LIGHTS>RIGHT TURNING LAMP
5	0,5	65A	CONTROL +STOP LIGHTS
6			




	REAR WIRING	B41 01
---	-------------	-----------

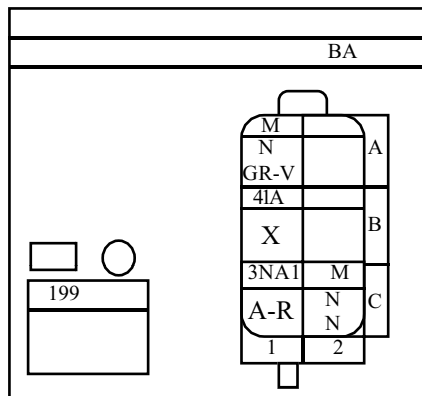
RIGHTFRONTCEILING LAMP

Position	Sectioning		Destination
1	0,35	BCP3	+ CEILINGLAMP PROTECTED BATTERY
2	0,5	13C	CEILINGLAMP CONTROL



FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP

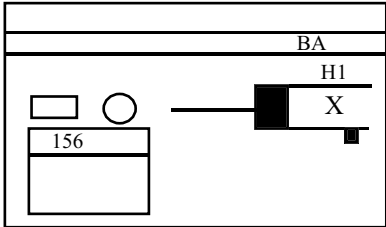
Position	Sectioning		Destination
A1	0,35	M	MASS > SHUNT
A1	0,35	M	MASS > INSTRUMENT PANEL
B1	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C1	1,5	3NA1	+ FUEL PUMP
C2	1,5	M	MASS
C2	0,35	M	MASS > SHUNT



	<h3 style="margin: 0;">REAR WIRING</h3>	B41 01
---	---	-----------

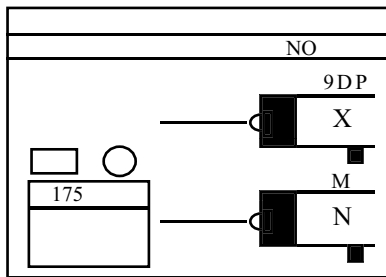
HANDBRAKE CONTACT

Position	Sectioning		Destination
1	0.35	HI	ICP HANDBRAKE INDICATOR - CONTROL



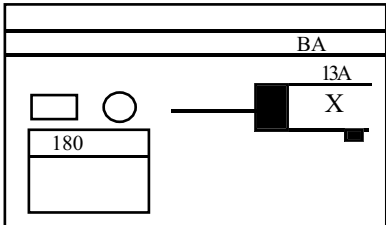
LEFTFOGLIGHT

Position	Sectioning		Destination
1	0.5	9DP	+PROTECTED REARFOGLIGHTS MASS
2	0,5	M	



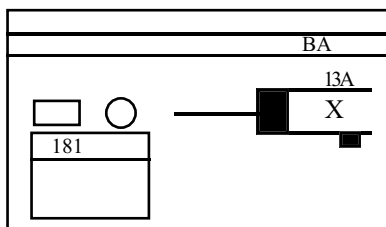
LEFT FRONT DOOR CONTACT

Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS




RIGHT FRONT DOOR CONTACT

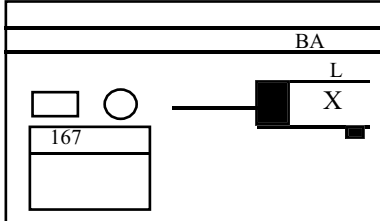
Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS




	HATCHBACK WIRING	B41 01
---	------------------	-----------

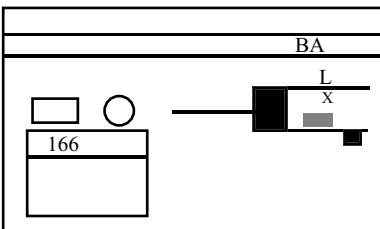
LEFT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	PARKING LIGHTS > FUSE OUTLET F05




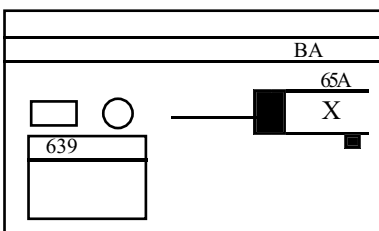
RIGHT LICENSE PLATE LAMP

Position	Sectioning		Destination
1	0.35	L	+ PARKING LIGHTS > FUSE OUTLET F05
1	0,35	L	+ PARKING LIGHTS > LEFT LICENSE PLATE LAMP




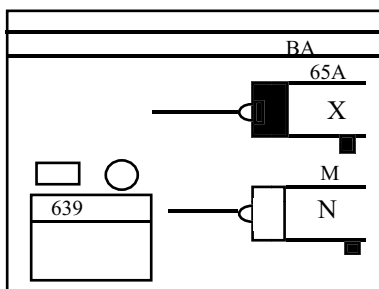
STOP LAMP S3 (ON ROOF)

Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS




STOP LAMP S3 (INAILERON)

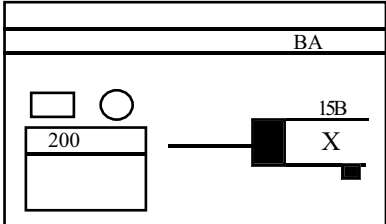
Position	Sectioning		Destination
1	0.5	65A	CONTROL + STOP LIGHTS
2	0,5	M	MASS




	<p>HATCHBACK WIRING</p>	<p>B41 01</p>
---	-------------------------	-------------------

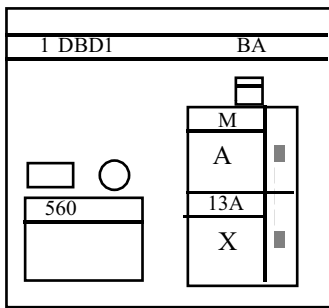
REAR WINDOW DEFROSTING

Position	Sectioning		Destination
1	2,0	15B	CONTROL + HATCHBACK REAR WINDOW DEFROSTING



HATCHBACK CONTACT


Position	Sectioning		Destination
1	0,35	M	MASS
2	0,35	13A	CEILING LIGHTING CONTROL > HATCHBACK CONTACT ANTI-INTRUSION UCE > HATCHBACK CONTACT




	CONNECTIONS	B41 01
---	-------------	-----------

DASHBOARD/FRONT WIRING CONNECTION

FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
A2	1,5	BCP3	FUSE BOX > FUSE OUTLET F06(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A4			
A5	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE OUTLET F04
A6	1,0	64B	CONTROL + TURNING RELAY
A7	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
B1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B2	0,5	64C	LEFT TURNING LIGHTS CONTROL
B3	0,5	64D	RIGHT TURNING LIGHTS CONTROL
B4	0,5	9M	SHUNT > LIGHTS SWITCH
B5	0,5	L	+ PARKING LIGHTS - FUSE OUTLET F05
B6	1,5	SP3	+ PROTECTED ACCESSORIES
B7	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
C1	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
C2	0,75	BP11	PROTECTED BATTERY > FUSE OUTLET F16
C3	0,35	15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
C4	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY
C7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
D1	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D2	0,35	CPD	RIGHT PROTECTED MEETING LIGHTS > FUSE OUTLET F14
D3	0,35	20C	CONTROL + DOOR ELECTRIC UNLOCKING > UCE DECODER
D4	0,35	20D	CONTROL + DOOR ELECTRIC LOCKING > UCE DECODER
D5	0,5	9B	CONTROL REAR FOG LAMP
D6	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)


MA							
	34A	CPD	20C	20D	9B	9DP	34B
D	X	X	X	X	VI	X	X
C	34G	BP11	15LP	AP15	M	B	34H
	X	AS-A	M-V	R	N	AS	X
B	34E	64C	64D	9M	L	SP3	34F
	X	X	X	X	X	R	X
A	34D	BCP3	8A		64AP	64B	34C
	X	AS	A		GR	X	X
	1	2	3		5	6	7

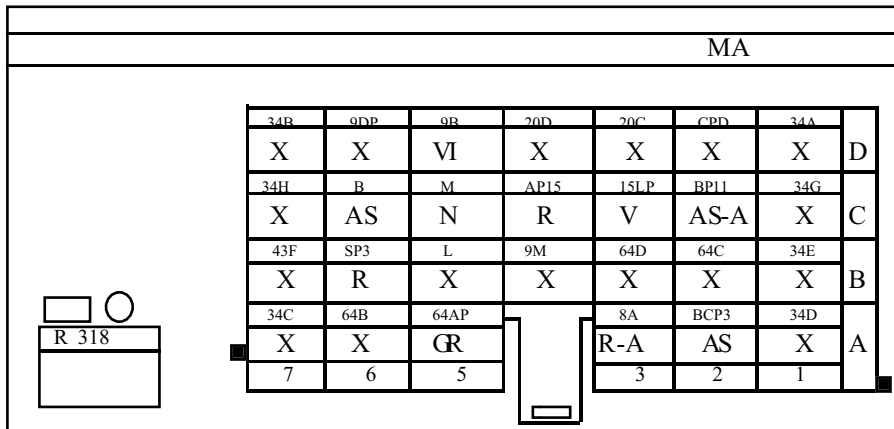


R 318

	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

DASHBOARD WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL+ RIGHTREAR SPEAKER
A2	1,0	BCP3	SUPPLY(+IC)
A3	0,50	8A	+ FOG LAMP RELAY
A5	1,0	64AP	+PROTECTED TURNINGLIGHTS
A6	1,0	64B	CONTROL+ TURNINGRELAY
A7	0,35	34C	SIGNAL- RIGHTREAR SPEAKER
B1	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
B2	0,5	64C	LEFTTURNINGLIGHTS CONTROL
B3	0,5	64D	RIGHTTURNINGLIGHTS CONTROL
B4	0,5	9M	SHUNT > FOG LAMP SWITCH
B5	0,5	L	+PARKINGLIGHTS
B6	1,5	SP3	+ PROTECTED ACCESORES> CLIMATE CONTROL BLOWER
B7	0,35	34F	SIGNAL -RIGHTFRONT SPEAKER
C1	0,35	34G	SIGNAL -LEFTFRONT SPEAKER
C2	0,75	BP11	+ PROTECTED BATTERY> RADIO
C3	0,5	15LP	CONTROL+PROTECTED REAR WINDOW DEFROSTING
C4	1,5	AP15	+AFTER PROTECTED CONTACT
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY > HAZARD SWITCH
C7	0,35	34H	SIGNAL -LEFTFRONT SPEAKER
D1	0,35	34A	SIGNAL -LEFTREAR SPEAKER
D2	0,35	CPD	RIGHTPROTECTED MEETING LIGHTS> INDICATOR
D3	0,5	20C	CONTROL+DOORS ELECTRIC UNLOCKING> SWITCH
D4	0,5	20D	CONTROL+DOORS ELECTRIC LOCKING> SWITCH
D5	0,5	9B	CONTROL + REAR FOG LAMP
D6	0,5	9DP	+PROTECTED REARFOGLIGHTS
D7	0,35	34B	SIGNAL -LEFTREAR SPEAKER

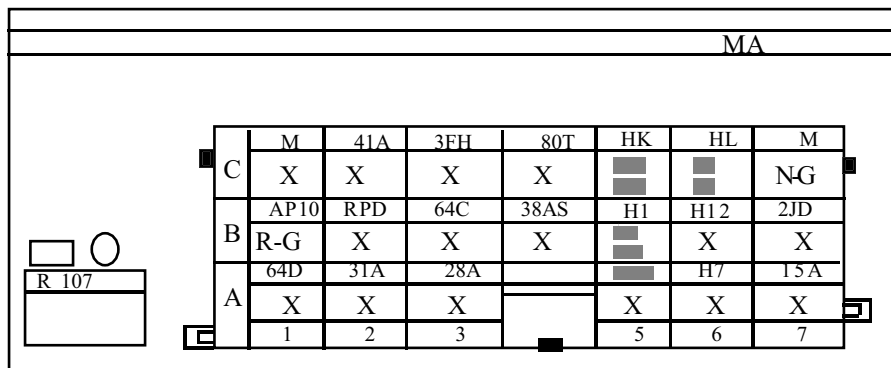


	CONNECTIONS	B41 01
---	-------------	-----------

DASHBOARD/FRONT WIRING CONNECTION


FRONT WIRING CONNECTION

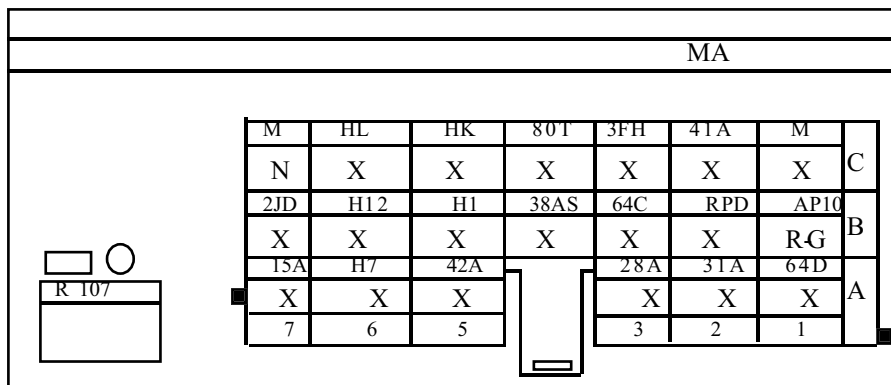
Position	Sectioning		Destination
A1	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
A2	0,35	31A	WATER TEMPERATURE WARNING
A3	0,35	28A	OILPRESSURE WARNING
A4			
A5	0,35	42A	WATERTEMPERATURE SIGNAL
A6	0,35	H7	RPM-METER SIGNAL> INJECTION COMPUTER
A7	0,35	15A	REAR WINDOWDEFROSTINGINDICATOR-CONTROL
B1	0,75	AP10	+AFTER PROTECTED CONTACT > FUSE OUTLET F01
B2	0,35	RPD	PROTECTEDRIGHTHIGHBEAM
B3	0,35	64C	LEFTTURNINGLIGHTSCONTROL
B4	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
B5	0,35	H1	HANDBRAKENDICATOR-CONTROL
B5	0,35	H1	ICP INDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ALTERNATOR EXCITATION
C1	0,35	47A	- FUELMINIMALLEVELWARNING SIGNAL
C2	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
C3	0,35	3FH	ANTI-POLLUTIONINDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSIS SIGNALINE K> INJECTIONCOMPUTER
C5	0,35	HK	DIAGNOSISSIGNALLINEK> UCEDECODER
C6	0,35	HL	DIAGNOSIS SIGNALINE L> INJECTIONCOMPUTER
C6	0,35	HL	DIAGNOSISSIGNALLINEL>UCEDECODER
C7	0,35	M	MASS



	CONNECTIONS	B41 01
---	-------------	-----------


DASHBOARD WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	64D	RIGHTTURNINGLIGHTSCONTROL> INDICATOR
A2	0,35	31A	INSRUMENTPANEL> WATER TEMPERATUREWARNING
A3	0,35	28A	INSTRUMENT PANEL > OILPRESSURE WARNING
A4			
A5	0,35	42A	SIGNAL +WATER TEMPERATURE
A6	0,35	H7	RPM-METERSIGNAL
A7	0,35	15A	REAR WINDOWDEFROSTINGINDICATOR-CONTROL
B1	0,75	AP10	+AFTER PROTECTED CONTACT
B2	0,35	RPD	PROTECTED RIGHTHIGHBEAM> INDICATOR
B3	0,35	64C	LEFTTURNING LIGHTS CONTROL> INDICATOR
B4	0,35	38AS	AIR-CONDITIONINGCOMPRESSORCONNECTIONSIGNAL > RELAY
B5	0,35	H1	ICP HANDBRAKEINDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL
C1	0,35	M	- FUELMINIMALLEVELWARNING SIGNAL
C2	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
C3	0,35	3FH	ANTI-POLLUTIONINDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSISSIGNALLINEK
C6	0,35	HL	DIAGNOSISSIGNALLINEL
C7	0,35	M	MASS



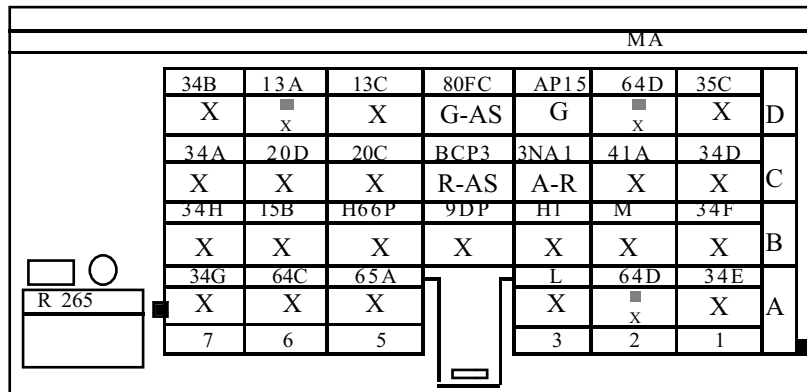


REAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL > TURNING SWITCH
A2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
B2	0,35	M	- FUEL MINIMAL LEVEL WARNING SIGNAL
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL -REVERSE DRIVING LIGHTS> FUSE OUTLET F02
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
C1	0,35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP > CHOKE SENSOR
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
C5	0,5	20C	CONTROL + DOOR SELECTRIC UNLOCKING > UCE DECODER
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
D2*	0,5	64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
D2	0,5	64D	FLASH RELAY DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	CEILING LAMPS CONTROL
D6	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
D6*	0,35	13A	CONTROL - CEILING LAMPS LIGHTING > HOOD CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)


A2*, D2* - for vehicles without Anti-intrusion System

D4, D6*- for Anti-intrusion System provided vehicles




	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

REAR WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT REAR SPEAKER
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL
A2*	0,5	64D	RIGHT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A6*	0,5	64C	LEFT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER
B2	0,35	M	- FUEL MINIMAL LEVEL WARNING SIGNAL
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER
C1	0,35	34D	SIGNAL + RIGHT FRONT SPEAKER
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY
C5	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > ACTUATORS
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER
D2	0,5	64D	DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL > UCE ANTI-INTRUSION
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > UCE ANTI-INTRUSION
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	RIGHT CEILING LAMP CONTROL
D6	0,35	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK DOORS CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER

D2, D3, D4, A2*, A6* - for anti-intrusion system provided vehicles


MA								
	D	34C	64D	AP15	80FC	13C	13A	34B
	C	34D	41A	3NA1	BCP3	20C	20D	34A
	B	34F	M	H1	9DP	H66P	15B	34H
	A	34E	64D	L		65A	64C	34G
	1	1	2	3		5	6	7

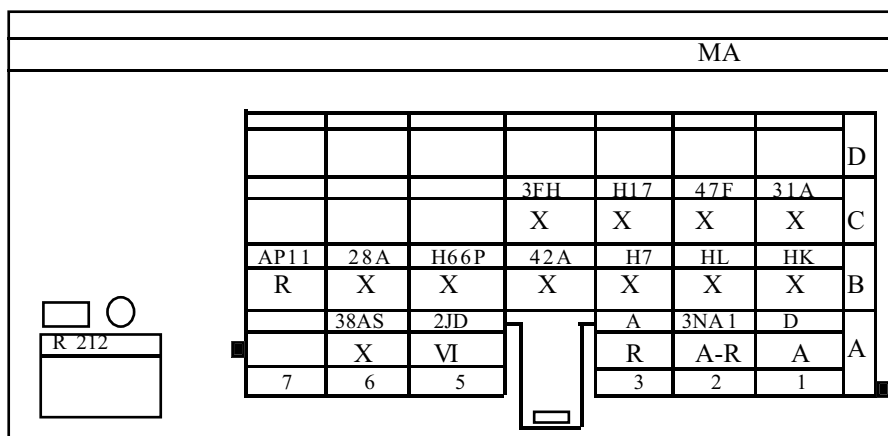


R 265

	CONNECTIONS	B41 01
---	-------------	-----------


ENGINE / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY+ AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	ANTI-POLLUTION INDICATOR-CONTROL



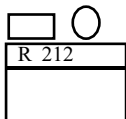
	CONNECTIONS	B41 01
---	-------------	-----------

ENGINE WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION > INSTRUMENT PANEL
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT > CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	ANTI-POLLUTION INDICATOR-CONTROL

A6 - For air-conditioning system provided vehicles

MA							
D							
C	31A	47F	H17	3FH			
B	HK	HL	H7	42A	H66P	28A	AP11
A	D	3NA1	A		2JD	38AS	
	A	A-R	R		VI	X	
	1	2	3		5	6	7

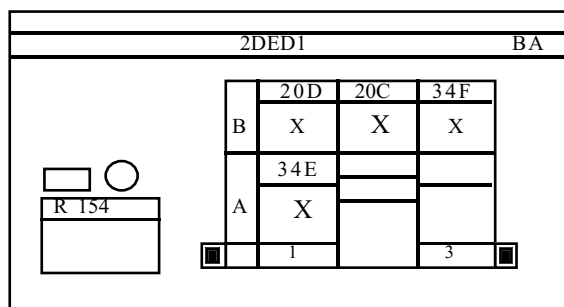


R 212

	CONNECTIONS	B41 01
--	-------------	-----------

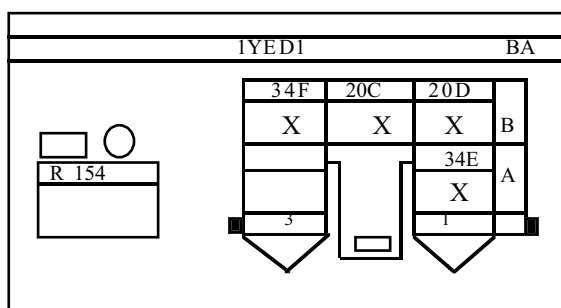
RIGHT FRONT DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
B1	0,5	20D	CONTROL+ DOORSELECTRIC LOCKING > UCE DECODER
B2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)




RIGHT FRONT DOOR WIRING CONNECTION

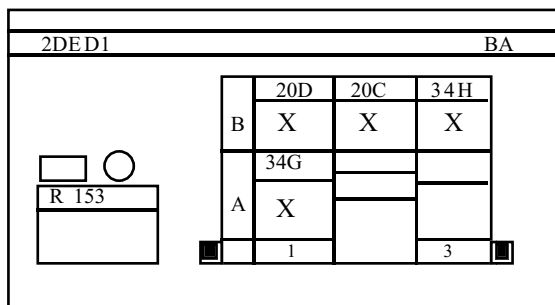
Position	Sectioning		Destination
A1 A2 A3	0,35	34E	SIGNAL + RIGHT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG > ACTUATORS
B3	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER




	<h3 style="margin: 0;">CONNECTIONS</h3>	B41 01
---	---	-----------

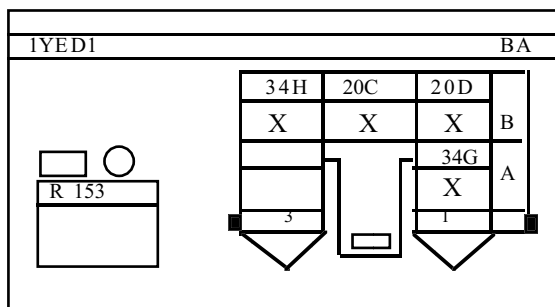
LEFT FRONT DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1 B2 B3	0,5	20D	CONTROL+ DOORSELECTRIC LOCKING > UCE DECODER
	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER
	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




LEFT FRONT DOOR WIRING CONNECTION

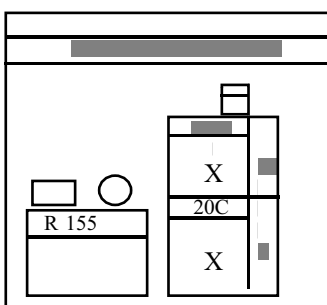
Position	Sectioning		Destination
A1 A2 A3	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
B2	0,5	20C	CONTROL+ DOORSELECTRIC UNLOCKNG >ACTUATORS
B3	0,35	34H	SIGNAL - LEFT FRONT SPEAKER




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

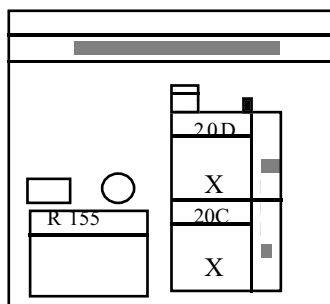
LEFT FRONT DOOR / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER




LEFT REAR DOOR WIRING CONNECTION

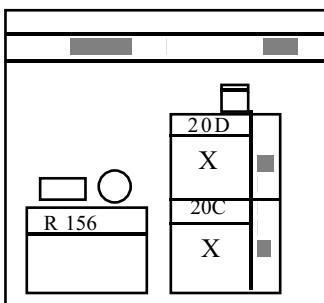
Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS




	CONNECTIONS	B41 01
---	-------------	-----------

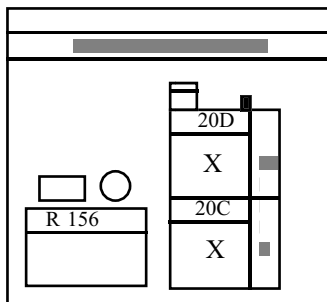
RIGHT REAR DOOR / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > UCE DECODER




RIGHT REAR DOOR WIRING CONNECTION

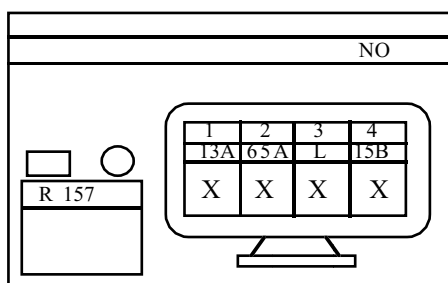
Position	Sectioning		Destination
1	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
2	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS




	<p>CONNECTIONS</p>	<p>B41 01</p>
---	--------------------	-------------------

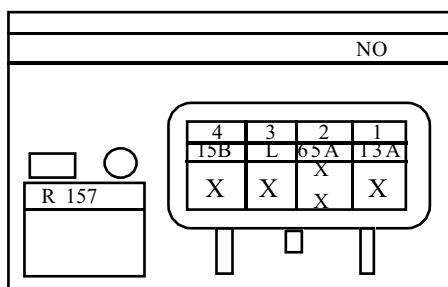
HATCHBACK / REAR WIRING CONNECTION REAR WIRING CONNECTION

Position	Sectioning		Destination
1	0,5	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK CONTACT UCE ANTI-INTRUSION CONTROL > HATCHBACK CONTACT
2	0,5	65A	CONTROL + STOP LIGHTS
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




HATCHBACK WIRING CONNECTION

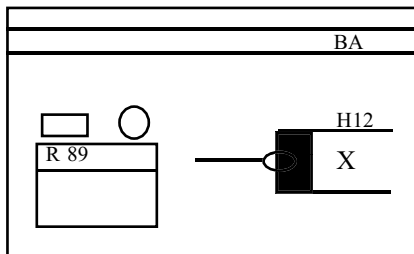
Position	Sectioning		Destination
1	0,35	13A	CONTROL + CEILING LAMPS LIGHTING > HATCHBACK CONTACT
2	0,35	65A	CONTROL + STOP LIGHTS (ON HOOD)
2	0,35	65A	CONTROL + STOP LIGHTS (ON AILERON)
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




	CONNECTIONS	B41 01
---	-------------	-----------

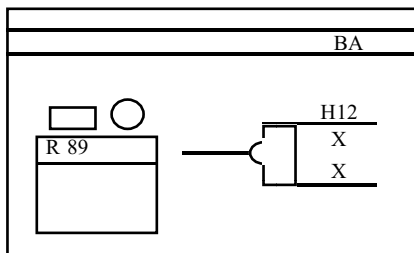
BRAKE PADS WEAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
1	0,35	H12	BRAKE PADS WEAR INDICATOR - CONTROL



BRAKE PADS WEAR WIRING CONNECTION

Position	Sectioning		Destination
	0,35 0,35	H12 H12	BRAKE PADS WEAR INDICATOR – CONTROL > RIGHT PAD BRAKE PADS WEAR INDICATOR – CONTROL > LEFT PAD



(EURO 2000)

LINK CODES	WIRE FUNCTIONS
A	SUPPLY + AFTER CONTACT
AP10	+ AFTER PROTECTED CONTACT>OUTLET FUSE F01
AP11	+ AFTER PROTECTED CONTACT REVERSE DRIVING LIGHTS
AP15	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03
AP29	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03 ENGINE RUNNING
B	+ BATTERY
BCP3	+ PROTECTED BATTERY, CEILING LAMPS
BP11	+ PROTECTED BATTERY > COCKPIT 1
BP17	+ PROTECTED BATTERY> OUTLET FUSE F01
BP2	+ PROTECTED BATTERY> WINDSCREEN WIPER STOPPING IN A FIXED POSITION
BP3	+ PROTECTED BATTERY> OUTLET FUSE F15
BP37	+ PROTECTED BATTERY> OUTLET FUSE F04
BP7	+ PROTECTED BATTERY FUSE 1 MOTOR FAN
BP76	+ PROTECTED BATTERY > LIGHTING CONTROL
BPR1	+ PROTECTED BATTERY > OUTLET FUSE F17> RELAY
C	+ MEETING LIGHTS (LOW BEAM)
CPD	+ MEETING LIGHTS RIGHT PROTECTED
CPG	+ MEETING LIGHTS LEFT PROTECTED
D	+ STARTER CONTROL
H1	CONTROL- HANDBRAKE INDICATOR, BRAKING CIRCUIT ICP
H12	CONTROL-BRAKE PADS WEAR INDICATOR
H17	INJECTION CODED SIGNAL>ANTI-STARTING
H66P	CONTROL+ REVERSE DRIVING LIGHTS
H7	RPM METER SIGNAL
HK	DIAGNOSTIC SIGNAL LINE K
HL	DIAGNOSTIC SIGNAL LINE L
L	+ PARKING LIGHTS
LPD	+ PARKING LIGHTS RIGHT PROTECTED
LPG	+ PARKING LIGHTS LEFT PROTECTED
M	ELECTRIC MASS
ML	BATTERY ELECTRIC MASS
N	ELECTRONIC MASS
NF	MASS: WATER TEMPERATURE SENSOR, AIR, POTENTIOMETER
R	+ ROAD LIGHTS (HIGH BEAM)
RPD	+ ROAD LIGHTS RIGHT PROTECTED
RPG	+ ROAD LIGHTS LEFT PROTECTED
S	+ ACCESSORIES
SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER
TB1	DETONATION SENSOR SCREENING
2JD	+ ALTERNATOR EXCITATION
3AC	CONTROL- FUEL PUMP RELAY
3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
3AQ	SIGNAL+ VALVE POTENTIOMETER
3B	SIGNAL+ AIR TEMPERATURE SENSOR
3BB	CANISTER PURGING VALVE CONTROL
3BG	ENGINE RPM SIGNAL > RPM SENSOR
3BL	SIGNAL - RPM ENGINE > RPM SENSOR
3BU	CONTROL 1 IDLING REGULATOR
3BV	CONTROL 2 IDLING REGULATOR
3BW	CONTROL 3 IDLING REGULATOR
3BX	CONTROL 4 IDLING REGULATOR
3C	SIGNAL + WATER TEMPERATURE SENSOR

WIREFUNCTIONS EXPLANATION

3CR	CONTROL- INJECTOR 1
3CS	CONTROL- INJECTOR 2
3CT	CONTROL- INJECTOR 3
3CU	CONTROL- INJECTOR 4
3CV	CONTROL- IGNITION COIL CYLINDERS 1-4
3CW	CONTROL- IGNITION COIL CYLINDERS 2-3
3D	ATMOSPHERIC PRESSURE SENSOR> SUPPLY +
3DQ	- DETONATION SENSOR
3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
3FH	CONTROL-INJECTION FAILURE INDICATOR
3FN	RPM SENSOR SIGNAL
3GF	CONTROL- UPSTREAM OXYGEN SENSOR HEATING
3GG	CONTROL- DOWNSTREAM OXYGEN SENSOR HEATING
3GH	MASS UPSTREAM OXYGEN SENSOR
3GJ	MASS DOWNSTREAM OXYGEN SENSOR
3GK	SIGNAL UPSTREAM OXYGEN SENSOR
3GL	SIGNAL DOWNSTREAM OXYGEN SENSOR
3GN	ATMOSPHERIC PRESSURE SENSOR MASS
3GT	ACTUATORS RELAY MASS
3JK	- WATER TEMPERATURE
3JL	- VALVE POTENTIOMETER
3JN	CONTROL - STEP 1 MOTOR FAN RELAY
3JP	CONTROL- STEP 2 MOTOR FAN RELAY
3JQ	- AIR TEMPERATURE SENSOR
3NA	+ IGNITION COIL, CHOCK SENSOR> PETROL PUMP RELAY
3NA1	+ PETROL PUMP
3NR	+ INJECTORS> ACTUATORS RELAY OUTPUT
3S	SIGNAL + DETONATION SENSOR
8A	+ FOG HEADLAMPS RELAY
8B	+ FOG HEADLAMPS > RELAY
8DP	+ PROTECTED FOG HEADLAMPS
9A	+ REAR FOG LAMPS RELAY CONTROL
9B	CONTROL + REAR FOG LAMPS
9C	CONTROL + REAR FOG LAMPS INDICATOR
9DP	+ PROTECTED REAR FOG LAMPS
9M	SHUNT> FOG LAMPS SWITCH
11A	CONTROL + ROAD LIGHTS
13A	CONTROL - CEILING LAMPS> DOORS CONTACTS
13C	CONTROL> CEILING LAMPS
14A	CONTROL + LOW SPEED WINDSCREEN WIPER
14B	CONTROL + HIGH SPEED WINDSCREEN WIPER
14C	CONTROL + WINDSCREEN WIPER FIX POINT STOPPING
14D	CONTROL LOW SPEED WINDSCREEN WIPER TIMER
14E	CONTROL + WINDSCREEN WIPER TIMER
14K	CONTROL + WINDSCREEN WIPER LOW SPEED
14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
15A	REAR WINDOW DEFROSTING INDICATOR CONTROL
15B	CONTROL + REAR WINDOW DEFROSTING
15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
16A	CONTROL + WINDSCREEN WASHING PUMP
20C	CONTROL + DOORS ELECTRIC UNLOCKING

20D	CONTROL + DOORS ELECTRIC LOCKING
20F	RADIO-FREQUENCY RECEPTION SIGNAL
28A	CONTROL - OIL PRESSURE INDICATOR
31A	CONTROL - WATER TEMPERATURE INDICATOR
34A	SIGNAL - LEFT REAR LOUDSPEAKER
34B	SIGNAL - LEFT REAR LOUDSPEAKER
34C	SIGNAL - RIGHT REAR LOUDSPEAKER
34D	SIGNAL + RIGHT REAR LOUDSPEAKER
34E	SIGNAL + RIGHT FRONT LOUDSPEAKER
34F	SIGNAL - RIGHT FRONT LOUDSPEAKER
34G	SIGNAL + LEFT FRONT LOUDSPEAKER
34H	SIGNAL - LEFT FRONT LOUDSPEAKER
38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED 1
38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED 2
38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED 3
38AL	CONTROL + CLIMATE CONTROL BLOWER SPEED 4
38AS	AC CONTROL
38DH	CONTROL + AIR CONDITIONING
38K	AC CONTROL RELAY > UCE INJECTION
38N	CONTROL + AC CLUTCH RELAY> AC PRESSURE SENSOR
38R	CONTROL + AC COMPRESSOR CLUTCH
38U	- FREON PRESSURE SENSOR
38X	FREON PRESSURE SENSOR SIGNAL
38Y	+ FREON PRESSURE SENSOR
41A	SIGNAL + FUEL LEVEL TRANSMITTER
42A	SIGNAL + WATER TEMPERATURE
47A	- MINIMUM LEVEL FUEL WARNING
47F	VEHICLE SPEED SIGNAL
49B	CONTROL + COOLING BLOWER
49C	CONTROL + COOLING BLOWER RELAY
49F	CONTROL + AIR CONDITIONING
49L	CONTROL + COOLING BLOWER LOW SPEED RESISTANCE
64A	SUPPLY + TURNING
64AP	+ PROTECTED TURNING LIGHTS
64B	CONTROL + TURNING RELAY
64C	LEFT TURNING LIGHTS CONTROL
64D	RIGHT TURNING LIGHTS CONTROL
64E	CONTROL + TURNING INDICATOR
64F	CONTROL + HAZARD INDICATOR
64P	+ PROTECTED SIGNALING
65A	CONTROL + STOP LIGHTS
67A	CONTROL + ACOUSTIC WARNING
67C	CONTROL + ACOUSTIC WARNING FUSE
80BC	+ INERTIA CONTACT
80BD	FLASH RELAY CONTROL
80CA	RIGHT FRONT ULTRASONIC EMISSION
80DA	LEFT FRONT ULTRASONIC DETECTION INFORMATION
80E	ANTI-INTRUSION INDICATOR CONTROL
80FC	SIREN CONTROL SUPPLY
80T	CONTROL - ANTI-STARTING INDICATOR
80X	ANTI-STARTING RECEIVER SIGNAL ROUTE

GENERALPRESENTATION

From the electric point of view, the electric diagrams of the vehicle have been structured as Applied Principle Schemes (APS), which are presented according to the function each system of the vehicle is having from electric point of view. These APS diagrams also contain detail concerning the internal function of some simple electric components (contacts, relays), thus contributing to a better understanding of the system functioning and of the incident correct diagnosis.

● The list of the functional diagrams is presented in Chapter 2, where the vehicle Applied Principle Schemes may be found. These are divided in: electric supply diagrams, mass connection diagrams and system functional diagrams.

● The electric functional diagrams (APS), are presented in Chapter 7 and on these, the following may be identified:

- electric components, marked by a 3-4 figures; their identification on the electric diagrams can be achieved by means of “index of components” – Chapter 3;

- couplings between the electric wires, marked by the letter R followed by figures, they are indicated in the Chapter 4 list;

- mass connections, marked by the letter M followed by a figure or a letter, are indicated in Chapter 4.

● Each wire of the electric diagrams is marked by an alphanumeric code, representing the wire function, followed by figures representing the wire sectioning

● The connectors and couplings between the wires are presented in Chapter 11, where they are drawn from the wires inlet to the connector/coupling. The wires entering each connector socket are identified by means of the above-mentioned drawings. The Chapter 11 also includes tables with details about each wire entering the connector: wire location in the connector socket, wire sectioning, wire function code and its destination.

● Chapter 10 includes the index of wire functions in connectors and couplings, representing the list of all the connectors and couplings and helping to their easy identification in Chapter 12.

● The mass and coupling position on the vehicle is presented in Chapter 5 and helps to identify the electric mass fixing points on it and the location of the couplings between its wires.

● The electric components position on the vehicle is presented in Chapter 6. The position of the various components with electric functions on the vehicle can be identified by means of the components list.

● The cockpit fuse box is presented in Chapter 8 and contains information about its positioning, the functional purpose of the fuse and their relays and the description of the wiring connectors connected to this one.

- The fuse box from the engine compartment is presented in Chapter 9, that contains information about its positioning on the vehicle and the functional purpose of the relays and fuse placed on it.
- The functional codes of the wires are detailed explained in Chapter 12.

FUNCTIONAL DIAGRAMS INTERPRETATIONS

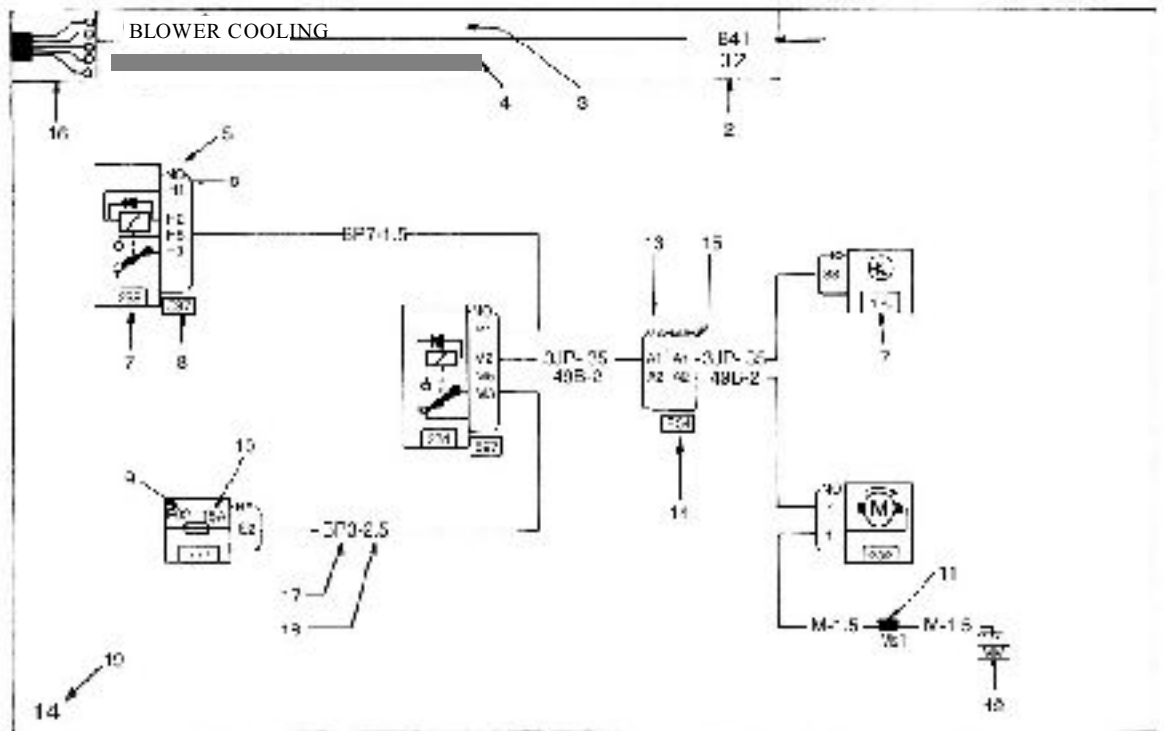
The functional diagrams information included in Chapter 7 are to be interpreted taking into consideration the explanation referring to the following example:

- 1 = vehicle class
- 2 = manufacturing year
- 3 = electric functional diagram denomination
- 4 = criteria of equipment differentiation for identifying the functional diagram
- 5 = electric connector colour*
- 6 = connector graphical representation
- 7 = electric component index number
- 8 = fuses box number where the relay or the safety fuse are mounted.
- 9 = identification of the safety fuse on the fuses box
- 10 = safety fuse value
- 11 = identification of wiring joints
- 12 = electric mass identification
- 13 = electric connection colour between wires*
- 14 = electric connection identification
- 15 = electric connection graphical representation
- 16 = symbol (sign) pages containing functional diagrams
- 17 = wire function code
- 18 = wire sectioning
- 19 = functional diagram number

1.

The electric connectors (5) and the couplings (13) are symbolised by the following colours:

BA = white	GR = grey	RG = red
NO = black	MA = brown	CY = white
BE = blue	VE = green	



INTERPRETATION OF CONNECTORS WIRES FUNCTION INDEX

The information concerning the function of the wires in connectors and couplings included in Chapter 11, are to be interpreted taking into account the explanations based upon the following example:

- 1 = symbol (sign) of the pages containing connectors and couplings
- 2 = connector destination
- 3 = vehicle class
- 4 = manufacturing year
- 5 = name of the wiring on which the respective connector is placed
- 6 = wire colour
- 7 = connector code
- 8 = component to whom the described connector is to be connected
- 9 = connector colour
- 10 = connector symbol
- 11 = indication of the connector socket
- 12 = wire sectioning (mm²)
- 13 = wire functional code
- 14 = wire destination
- 15 = chapter number and connector drawing number

NOTE

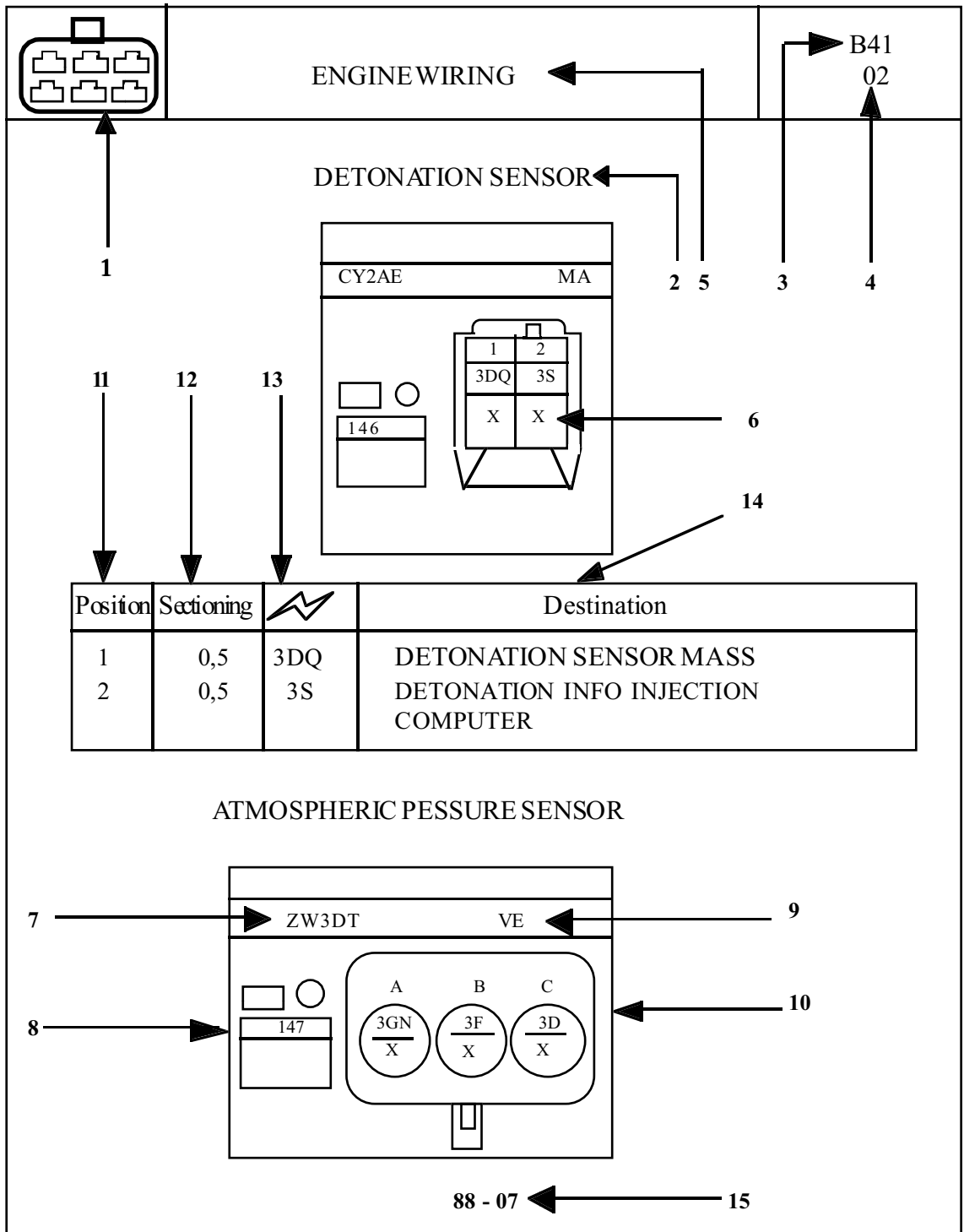
Concerning position 6, please note that one X is marked, for one wire and two Xs for two wires. The colour of the wire is to be symbolised only in case the electric track of the wire represents one of the fundamental statuses: + permanent (+IC), + after contact (+DC), mass (-) or controls.

The symbols used for the wire colours are as follows:

A = white
N = black
M = brown

AS = blue
G = yellow
VI = violet

GR = grey
V = green
R = red



(after 15.02.2002)

NR.	ELECTRIC DIAGRAMS DENOMINATION	E0	E1	E2	E3	EURO 96	EU 00
1	ANTI-INTRUSION E2(O), E3			O	S	X	X
2	DOORS CENTRAL LOCKING E1, E2, E3		S	S	S	X	X
3	ANTI-STARTING	S	S	S	S	X	X
4	ELECTRIC LIGHTER E1, E2, E3	S	S	S	X	X	
5	CLIMATE CONTROL E0, E1, E2(serie)	S	S	S		X	X
6	CLIMATECONTROL AND AIR CONDITIONING E1(O), E2(O), E3		O	O	S	X	X
7	CEILING LIGHTING	S	S	S	S	X	X
8	ASHTRAY LIGHTING E0	S				X	X
9	ASHTRAY AND DOCUMENT COMPL.LIGHTING E1, E2, E3		S	S	S	X	X
10	CLOCK		S	S	S	X	X
11	PRE-EQUIPPING E0	S				X	X
12	PRE-EQUIPPING E1, E2		S	S		X	X
13	PRE-EQUIPPING E3				S	X	X
14	STARTING CIRCUIT	S	S	S	S	X	X
15	ENGINE COOLING CIRCUIT E0, E1(series), E2(series)	S	S	S		X	X
16	ENGINE COOLING CIRCUIT E1(AC), E2(AC), E3		O	O	S	X	X
17	ELECTRONIC INJECTION E0	S				X	
18	ELECTRONIC INJECTION E0	S					X
19	ELECTRONIC INJECTION E1(series), E2(series)		S	S		X	
20	ELECTRONIC INJECTION E1(series), E2(series)		S	S			X
21	ELECTRONIC INJECTION E1(AC), E2 (AC), E3		O	O	S	X	
22	ELECTRONIC INJECTION E1(AC), E2 (AC), E3		O	O	S		X
23	ALTERNATOR CIRCUIT	S	S	S	S	X	X
24	MASS	S	S	S	S	X	X
25	MASS 2 E0	S				X	X
26	MASS 2 E1(series)		S			X	X
27	MASS 2 E1(AC)		O			X	X
28	MASS 2 E2 (series)			S		X	X
29	MASS 2 E2(AC), E3			O	S	X	X
30	MASS 3 E0, E1, E2 (series)	S	S	S		X	
31	MASS 3 E0, E1, E2 (series)	S	S	S			X
32	MASS 3 E2(anti-intrusion), E3			O	S	X	
33	MASS 3 E2(anti-intrusion), E3			O	S		X
34	MASS 4 E0, E1, E2 (series)	S	S	S		X	X
35	MASS 4 E2(anti-intrusion), E3			O	S	X	X
36	MASS 5 E0, E1(series), E2(series)	S	S	S		X	X
37	MASS 5 E1(AC), E2(AC), E3		O	O	S	X	X
38	FUSE BOX AND COCKPIT RELAYS E0	S				X	X
39	FUSE BOX AND COCKPIT RELAYS E1(series)		S			X	X

FUNCTIONAL DIAGRAMS LIST

40	FUSE BOX AND COCKPIT RELAYS E1(AC)	O					X	X
41	FUSE BOX AND COCKPIT RELAYS E2 (series)			S			X	X
42	FUSE BOX AND COCKPIT RELAYS E2(AC), E3			O	S		X	X
43	FUSE BOX AND ENGINE RELAYS E0, E1(series)	S	S				X	
44	FUSE BOX AND ENGINE RELAYS E0, E1(series)	S	S					X
45	FUSE BOX AND ENGINE RELAYS E1(AC)			O			X	
46	FUSE BOX AND ENGINE RELAYS E1(AC)			O				X
47	FUSE BOX AND ENGINE RELAYS E2(series)				S		X	
48	FUSE BOX AND ENGINE RELAYS E2(series)				S			X
49	FUSE BOX AND ENGINE RELAYS E2(AC), E3				O	S	X	
50	FUSE BOX AND ENGINE RELAYS E2(AC), E3				O	S		X
51	HANDBRAKE INDICATOR AND BRAKING SYSTEM FAILURE	S	S	S	S	S	X	X
52	FUEL LEVEL INDICATOR CIRCUIT	S	S	S	S	S	X	
53	FUEL LEVEL INDICATOR CIRCUIT	S	S	S	S	S		X
54	OIL PRESSURE INDICATOR CIRCUIT	S	S	S	S	S	X	X
55	DIAGNOSTIC SOCKET	S	S	S	S	S	X	X
56	INSTRUMENT PANEL E0	S					X	X
57	INSTRUMENT PANEL E1, E2, E3			S	S	S	X	X
58	WATER TEMPERATURE INDICATOR CIRCUIT E0			S			X	X
59	WATER TEMPERATURE INDICATOR CIRCUIT E1, E2, E3			S	S	S	X	X
60	BRAKE PADS WEAR INDICATOR CIRCUIT	S	S	S	S	S	X	X
61	VEHICLE SPEED	S	S	S	S	S	X	X
62	SOUND WARNING	S	S	S	S	S	X	X
63	REAR WINDOW DEFROSTING	S	S	S	S	S	X	X
64	WINDSCREEN WIPER-WASHING	S	S	S	S	S	X	X
65	REAR FOG LAMP	S	S	S	S	S	X	X
66	FOG HEADLIGHTS				S	S	X	X
67	MEETING LIGHTS	S	S	S	S	S	X	X
68	REVERSE DRIVING LIGHTS	S	S	S	S	S	X	X
69	PARKING LIGHTS	S	S	S	S	S	X	X
70	ROAD LIGHTS	S	S	S	S	S	X	X
71	STOP LIGHTS E0, E1, E2(series)	S	S	S			X	X
72	STOP LIGHTS E2 (aileron)				O		X	X
73	STOP LIGHTS E2 (anti-intrusion), E3				O	S	X	X
74	TURNING AND HAZARD LIGHTS E0, E1, E2(series)	S	S	S			X	X

Note : these electric diagrams are valid for vehicles who respect depollution norms **EURO96** and **EURO2000** manufactured **after 15.02.2002**; **E0 (Europa)**, **E1 (Confort)**, **E2 (Rapsodie)**, **E3 (Clima)** represent equipping levels of the vehicle.

ELECTRIC DIAGRAMS

ELECTRIC COMPONENTS INDEX

(after 15.02.2002)

CODE	COMPONENT DENOMINATION	CODE	COMPONENT DENOMINATION
21	Right signalling anti-return diode	216	Right front brake pad
101	Electric lighter	217	Left front brake pad
102	Ashtray	221	Windscreen washing pump
103	Alternator	222	Valve potentiometer
104	Anti-theft system	225	Diagnostic socket
105	Acoustic alarm	226	Right headlamp
107	Battery	227	Left headlamp
113	Windscreen wiper timer	230	Fog lamps relay
120	Injection computer (UCE)	231	Fog headlights control relay
121	Fog lights switch	234	Cooling motor fan control relay
122	Fog headlights switch	236	Fuel pump control relay
123	Door closing switch	238	Actuators relay
124	Climate blower switch	242	Downstream oxygen sensor
125	Hazard switch	244	Injection water temperature sensor
128	Rear window defrosting switch	247	Instrument panel
137	Turning signalling relay	250	Vehicle speed transducer
138	Right rear door actuator	255	Right front turning lamp
139	Left rear door actuator	256	Left front turning lamp
140	Left front door actuator	260	Cockpit fuse and relays box
141	Right front door actuator	261	Radio
145	Windscreen wiper-washer switch	262	Cooling motor fan and AC
146	Detonation sensor	267	Right side signalling lamp
147	Atmospheric pressure sensor	268	Left side signalling lamp
149	RPM sensor	272	Injection air temperature sensor
155	Reverse driving contact	294	Rear window defrosting timer
156	Handbrake contact	298	Climate control lighting
160	Stop contact	319	AC starting button
163	Starter	321	Motor fan resistance (for AC)
168	Documents compartment lighting lamp	329	Right front ceiling lamp
171	AC compressor clutch	371	Canister purging valve
172	Right rear lamp	427	UCE anti-intrusion
173	Left rear lamp	438	Engine hood contact
175	Left fog lamp	442	Siren
176	Right fog headlight	454	Volumetric sensor
177	Left fog headlight	474	AC relay (on board)
180	Left front door contact	503	UCE decoder
181	Right front door contact	584	AC compressor clutch control relay
184	Right front parking lamp	597	Engine compartment fuse and relays box
185	Left front parking lamp	600	Climate control blower
188	Cooling motor fan	639	STOP-S3 lamp
189	Right rear loud speaker	649	Step-by-step engine
190	Left rear loud speaker	654	Anti-starting bushing
a191	Right front door loud speaker	700	Cooling blower low speed control relay
192	Left front door loud speaker	778	Ignition coil
193	Injector 1	857	FLASH relay
194	Injector 2	887	Upstream oxygen sensor
195	Injector 3	927	Chock sensor
196	Injector 4	993	Anti-intrusion indicator LED
199	Fuel level transmitter and electric pump	1091	Braking system ICP
205	Oil pressure contact	1202	AC pressure sensor (pressure controller)
209	Lights, turning lights and horn switch	1335	Front ashtray lighting
210	Electronic clock	1428	Climate control blower control relay
212	Windscreen wiper motor		

(after 15.02.2002)

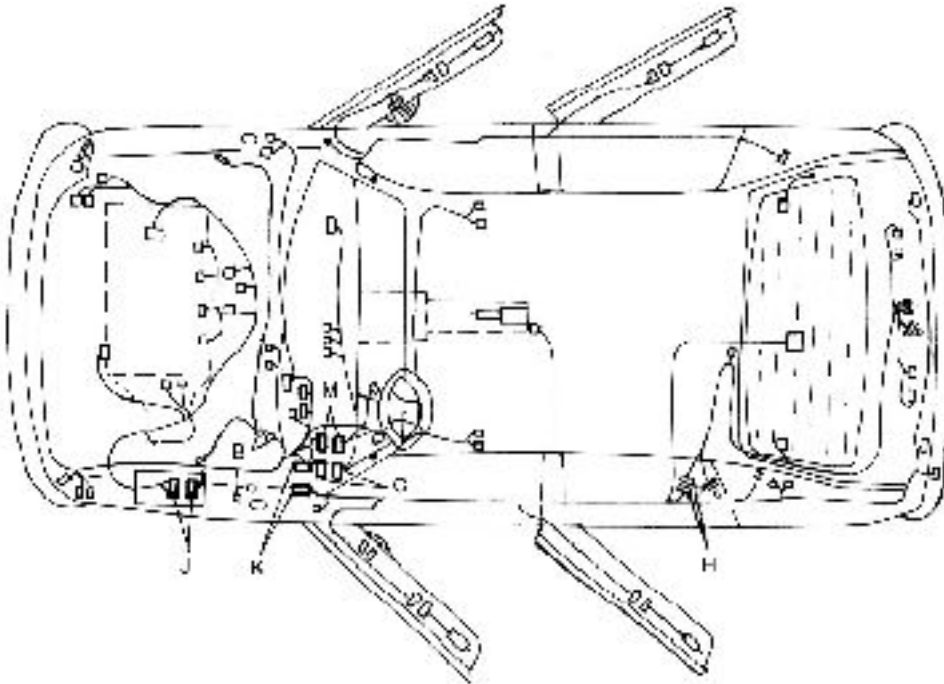
COUPLINGLIST

R53 =BATTERYMASS WIRING/MASS STRIPE (A) COUPLING
R89 = FRONT WIRING/BRAKE PADS WEAR (B) COUPLING
R107 = FRONT WIRING/DASHBOARD (C) COUPLING
R157 = REAR WIRING/HATCHBACK(H) COUPLING
R212 = FRONT WIRING/ENGINE (J) COUPLING
R265 = FRONT WIRING/REAR (K) COUPLING
R318 = FRONT WIRING/DASHBOARD(M) COUPLING

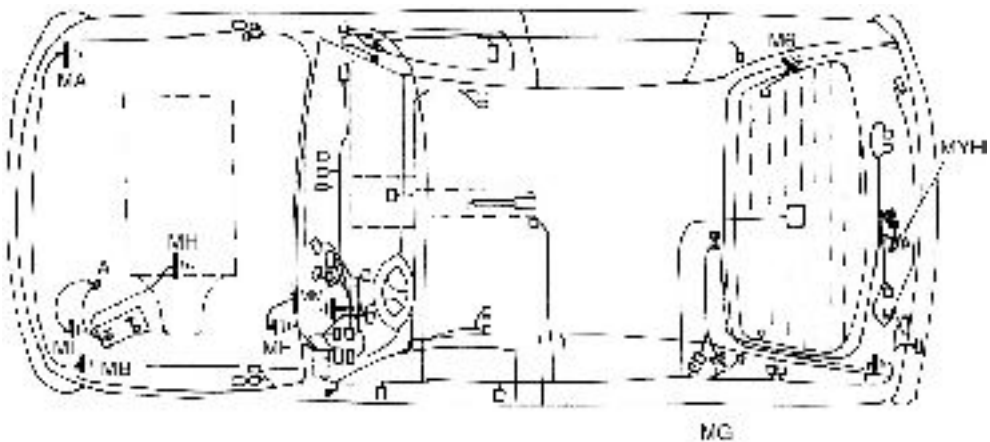
MASS LIST

M6 = REAR WINDOW DEFROSTING MASS
MA = RIGHT FRONT BODY MASS
MB = LEFT FRONT BODY MASS
ME = ELECTRIC MASS AT WINDSCREEN WIPER ATTACHMENT
MH = ENGINE ELECTRIC MASS
ML = LEFT FRONT LONGITUDINAL GIRDER ELECTRIC MASS
MM = ELECTRIC MASS AT THE STEERING COLUMN
MZ = LEFT REAR BODY MASS
MYH= LEFT HATCHBACK MASS

LOCATION OF ELECTRIC COUPLING ON THE VEHICLE



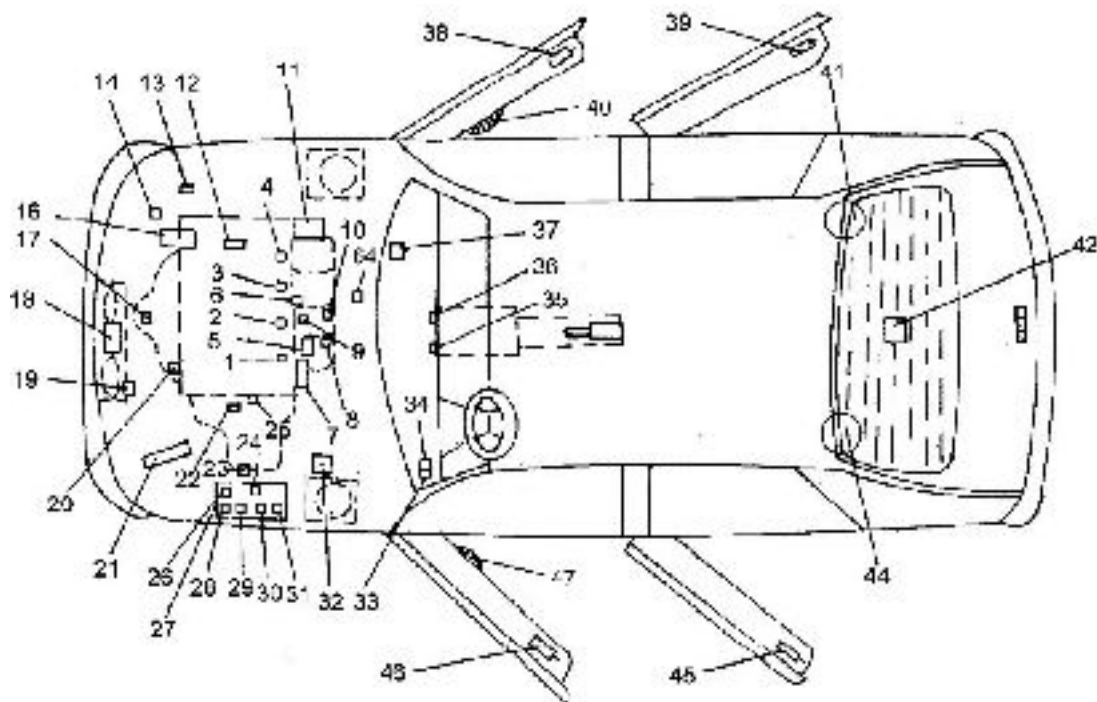
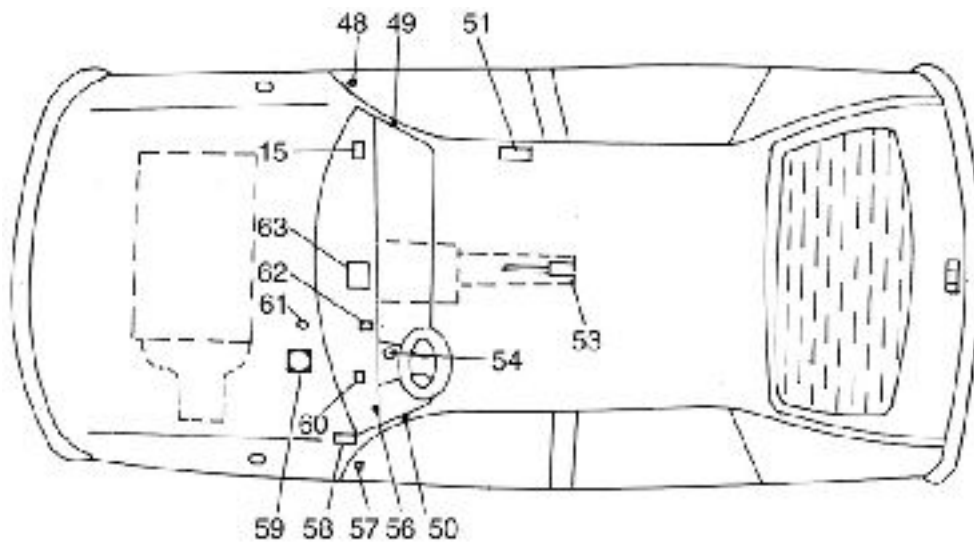
MASS ATTACHMENTS ON THE VEHICLE



LOCATION OF ELECTRIC COUPLING ON THE VEHICLE

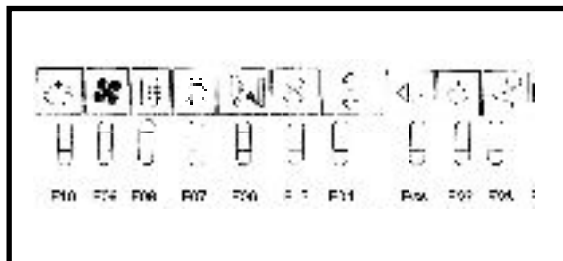
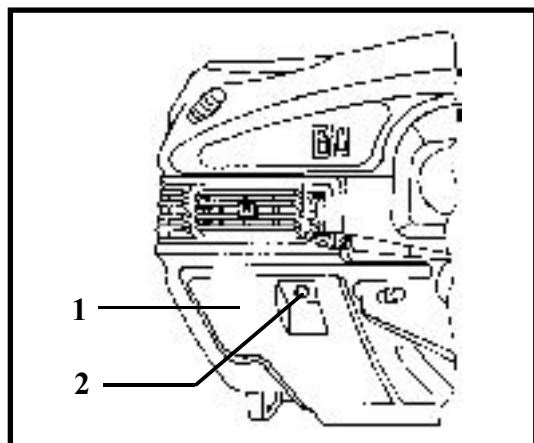
(after 15.02.2002)

1	Injector 1	33	Windscreen wiper timer
2	Injector 2	34	FLASH relay
3	Injector 3	35	Climate control lighting
4	Injector 4	36	AC starting button
5	Atmospheric pressure sensor	37	AC relay (on board)
6	Detonation sensor	38	Right front door actuator
7	Starter	39	Right rear door actuator
8	Injection air temperature sensor	40	Right front door loud speaker
9	Valve potentiometer	41	Right rear loudspeaker
10	Step-by step engine	42	Fuel level transmitter and electric pump
11	Alternator	44	Trunk lighting lamp
12	Ignition coil	45	Left rear loud speaker
13	Canister purging valve	46	Left rear door actuator
14	AC pressure sensor (pressure controller)	47	Left front door actuator
15	Diagnostic socket	48	Left front door loud speaker
16	AC compressor clutch	49	Right front door contact
17	Upstream oxygen sensor	50	Right volumetric sensor
18	Cooling blower and AC	51	Left volumetric sensor
19	Blower resistance for AC	53	Right front ceiling lamp
20	Oil pressure contact	54	Handbrake contact
21	Injection computer	55	Anti-starting bushing
22	RPM sensor	56	Anti-intrusion indicator LED
23	Reverse driving contact	57	Left front door contact
24	AC compressor clutch control relay (E)	58	UCE decoder
25	Water temperature sensor	59	Siren
26	Blower lower speed control relay (B)	60	Vehicle speed transducer
27	Engine compartment fuse and relays box	61	Engine hood contact
28	Motor fan control relay (C)	62	Doors closing switch
29	Fog headlamps control relay(A)	63	UCE anti-intrusion
30	Fuel pump control relay (H)	64	Downstream oxygen sensor
31	Actuators relay(D)		
32	Chock sensor		



(EURO 2000)

The cockpit fuse box is placed left side under dashboard, being attached on the interior side of the door (1). To access the fuses, turn the knob (2), then open up the door towards exterior.

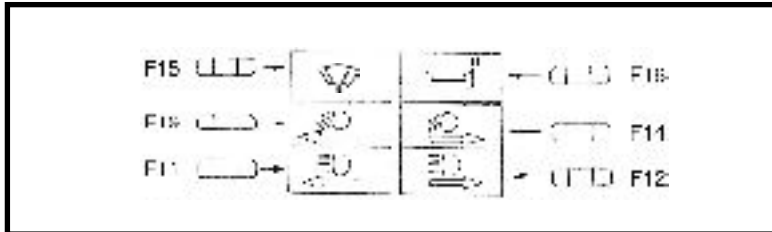
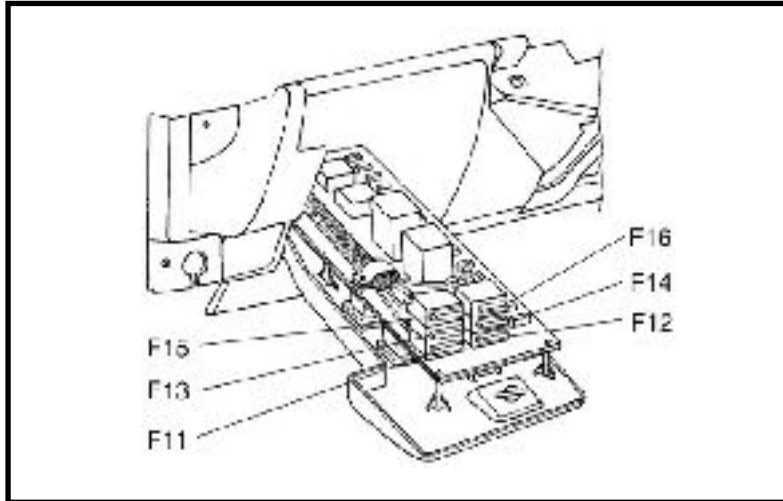


The fuses are protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	15A	Clock, radio, STOP contact, dimmer blower relay control
F02	5A	Reverse driving contact
F03	15A	UCE decoder, speed transducer, instrument panel supply, diagnostic socket, AC starting button, UCE anti-intrusion
F04	7,5A	Hazard and turning signaling lights
F05	5A	Front/rear parking lights, lighting: switches, instrument panel, dimmer control, documents compartment, lighter, ashtray, radio.
F06	15A	Lighter, clock, instrument panel (anti-starting indicator), front right ceiling lamp, UCE anti-intrusion, anti-intrusion indicator, diagnostic socket.
F07	15A	UCE decoder, FLASH relay, anti-starting bushing
F08	20A	Rear window defrosting
F09	15A	Climate blower
F10	5A	Left fog lamp

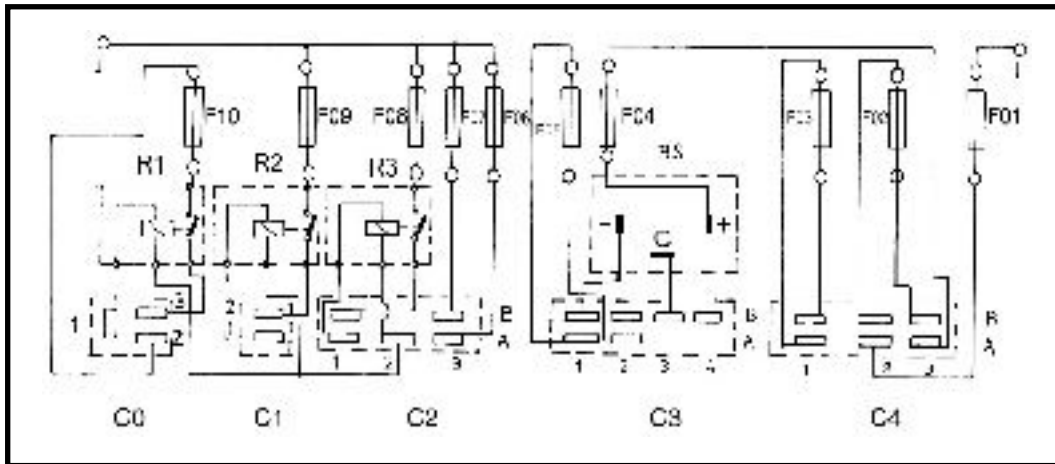
ELECTRIC DIAGRAMS
COCKPIT FUSE BOX

On the fuse box, 6 fusible fuse modules are attached, protecting the following consumers:



FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F11	10A	Left road lights
F12	10A	Right road lights, road lights indicator
F13	10A	Left meeting lights
F14	10A	Right meeting lights, meeting lights indicator
F15	15A	Windscreen wiper-washing switch, windscreen wiper timer
F16	10A	Radio, windscreen wiper motor

FUSE BOX ELECTRIC DIAGRAM

**Connector C0**

1. Fog lamp switch ♦ fog lamp relay control
2. Parking lights ♦ inlet fuse F 1
3. Outlet fuse F10 ♦ left fog lamp

Connector C1

1. Outlet fuse F01 ♦ climate blower relay control
2. Outlet F09 ♦ climate blower

Connector C2

- A1. Rear window defrosting switch ♦ rear window defrosting timer control
- A2. Mass
- A3. Outlet fuse F06
- B1. Outlet fuse F09 ♦ rear window defrosting
- B2. Free
- B3. Outlet fuse 07 ♦ UCE decoder, anti-starting bushing, FLASH relay

Connector C3

- A1. Lights switch (+ parking) ♦ inlet fuse F05
- A2. Outlet fuse F05 ♦ + parking
- A3. Free
- A4. Free
- B1. Mass
- B2. Mass
- B3. Turning lights switch (signaling relay control)
- B4. Free

Connector C4

- A1. Anti-theft mechanism (position M) ♦ inlet fuse F03
- A2. Outlet fuse F01
- A3. Hazard switch ♦ inlet fuse F04
- B1. Outlet fuse F03
- B2. Anti-theft mechanism (position M) ♦ inlet fuse F02
- B3. Outlet fuse F02 ♦ reverse driving contact

I = DC (after contact)

J = IC (before contact)

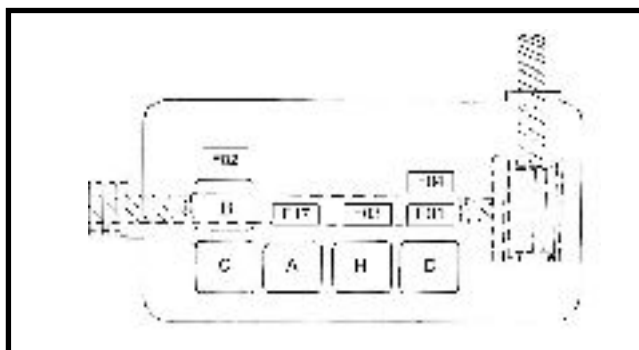
R1 = fog lamp control relay

R2 = climate blower control relay

RT = rear window defrosting timer

RS = turning signaling relay

A. for equipping E0, E1, E2
(after 15.02.2002)

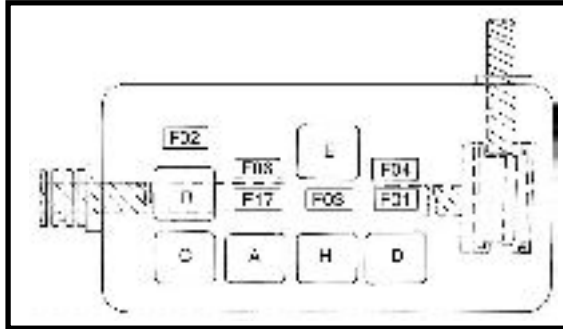


The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump, ignition coil.
F02	25A	Cooling blower (vehicles without AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer(+IC)
F17	15A	Fog headlights

RELAY	A	C	D	H
RELAY TYPE	15A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower (vehicle without AC)	Injectors, canister purging valve, oxygen sensor resistance heating, injection computer.	Fuel pump Ignition coil

B. For equipping E2(0), E3
 (after 15.02.2002)



The fuse box placed in the engine compartment is attached in front of the left shock absorber column and contains relays and fuses protecting the following electric circuits:

FUSE NUMBER	FUSE TYPE	PROTECTED CIRCUIT
F01	30A	Injectors, oxygen sensor resistance heating, canister purging valve, injection computer, fuel pump, ignition coil.
F02	40A	Cooling blower (vehicles with AC)
F03	7,5A	Injection computer (+ DC)
F04	5A	Injection computer((+IC)
F17	15A	Fog headlights
F06	7,5A	AC compressor

RELAY	A	B	C	D	E	H
RELAY TYPE	15A	40A	30A	30A	30A	30A
CONTROLLED CIRCUIT	Fog headlamps	Cooling blower- 1st speed (vehicles with AC)	Cooling blower- 2nd speed (vehicle with AC)	Injectors, canister purging valve, oxygen sensor resistance heating, injection computer.	AC compressor	Fuel pump Ignition coil

(after 15.02.2002)

Connect.	Denomination
101	ELECTRIC LIGHTER
103 HA	ALTERNATOR
103 HB	ALTERNATOR EXCITATION
104	ANTI-THEFT MECHANISM
105	ACOUSTIC WARNING
113	WINDSCREEN WIPER TIMER
120	UCE INJECTION(for vehicles without AC)
120	UCE INJECTION(for vehicles with AC)
121	FOG LAMPS SWITCH
122	FOG HEADLAMPS SWITCH
123	LOCKING DOORS SWITCH
124	BLOWER SWITCH
125	HAZARD SWITCH
128	REAR WINDOW DEFROSTING SWITCH
138	RIGHT REAR DOOR ACTUATOR
139	LEFT REAR DOOR ACTUATOR
140	LEFT FRONT DOOR ACTUATOR
141	RIGHT FRONT DOOR ACTUATOR
145	WINDSCREEN WIPER-WASHING SWITCH
146	DETONATION SENSOR
147	ATMOSPHERIC PRESSURE SENSOR
149	RPM SENSOR
155	REVERSE DRIVING CONTACT
156	HANDBRAKE CONTACT
160	STOP CONTACT
163 GA	STARTER
163 AB	STARTER EXCITATION
166	RIGHT LICENSE PLATE LAMP
167	RIGHT LICENSE PLATE LAMP
168	DOCUMENTS COMPARTMENT LIGHTING LAMP
171	AC COMPRESSOR CLUTCH
172	RIGHT REAR LAMP
173	LEFT REAR LAMP
175	LEFT FOG LAMP
176	RIGHT FOG HEADLIGHT
177	LEFT FOG HEADLIGHT
180	LEFT FRONT DOOR CONTACT
181	RIGHT FRONT DOOR CONTACT
184	RIGHT FRONT PARKING LAMP
185	LEFT FRONT PARKING LAMP
188	COOLING FAN MOTOR (for vehicles without AC)
189	RIGHT REAR LOUD SPEAKER
190	LEFT REAR LOUD SPEAKER
191	RIGHT FRONT DOOR LOUD SPEAKER
192	LEFT FRONT DOOR LOUD SPEAKER
193	INJECTOR 1
194	INJECTOR 2
195	INJECTOR 3

196	INJECTOR 4
199	FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP
200	REAR WINDOW DEFROSTING
205	OIL PRESSURE CONTACT
209	CLIGHTS, TURNING LIGHTS, HORN SWITCH
210	ELECTRONIC CLOCK
212	WINDSCREEN WIPER MOTOR
216	RIGHT FRONT BRAKE PAD
217	LEFT FRONT BRAKE PAD
221	WINDSCREEN WASHING PUMP
222	VALVE POTENTIOMETER
225	DIAGNOSTIC SOCKET
226	RIGHT HEADLAMP
227	LEFT HEADLAMP
242	DOWNSTREAM OXYGEN SENSOR
244	WATER TEMPERATURE SENSOR
247	INSTRUMENT PANEL
250	SPEED TRANSDUCER
255	RIGHT FRONT TURNING LAMP
256	LEFT FRONT TURNING LAMP
260	COCKPIT FUSE AND RELAYS BOX
261	RADIO
262	COOLING MOTOR FAN (for vehicles with AC)
267	RIGHT SIDE SIGNALING LAMP
268	LEFT SIDE SIGNALING LAMP
272	INJECTION AIR TEMPERATURE SENSOR
298	CLIMATE CONTROL LIGHTING
319	AC STARTING BUTTON
321	MOTOR FAN RESISTANCE (for vehicles with AC)
329	RIGHT FRONT CEILING LAMP
371	CANISTER PURGING VALVE
427	UCE ANTI-INTRUSION
438	ENGINE HOOD CONTACT
442	SIREN
454	RIGHT VOLUMETRIC SENSOR(Rx)
454	LEFT VOLUMETRIC SENSOR (Tx)
474	AC RELAY(on board)
503	UCE DECODER
560	HATCHBACK CONTACT
597	ENGINE RELAYS AND FUSE BOX (for vehicles without AC)
597	ENGINE RELAYS AND FUSE BOX (for vehicles with AC)
600	CLIMATE CONTROL BLOWER
639	STOP-S3 LAMP (on roof)
639	STOP[-S3 LAMP (in aileron)
649	STEP-BY-STEP ENGINE
654	ANTI-STARTING BUSHING
778	IGNITION COIL
857	FLASH RELAY
887	SUPSTREAM OXYGEN SENSOR
927	CHOCK SENSOR
993	ANTI-INTRUSION INDICATOR LED

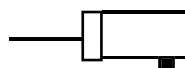
1033CA	BATTERY PLUS PLUG
1091	ICP BRAKING SYSTEM
1202	AC PRESSURE SENSOR
1335	FRONT ASHTRAY LIGHTING
MH 121	ENGINE ELECTRIC MASS MOTOR FAN MASS
R 89	FRONT WIRING/ BRAKE PADS WEAR COUPLING
R 107	FRONT WIRING/ DASHBOARD COUPLING
R 157	REAR WIRING/ HATCHBACK COUPLING
R 212	FRONT WIRING/ ENGINE COUPLING
R 265	FRONT WIRING/ REAR COUPLING
R 318	FRONT WIRING/ DASHBOARD COUPLING

OBSERVATIONS:

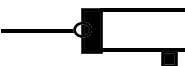
- Connectors and couplings are represented backwards (from wires forward).
- Some electric components are not connected to the vehicle wiring by means of multiple-way connectors, but by means of protected individual plugs. For illustrating the type of the respective plug, the following symbols are to be used:



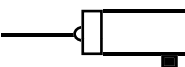
Plug mother 6 mm



Plug father 6 mm



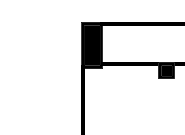
Plug mother broach Φ 3mm



Plug father broach Φ 3mm

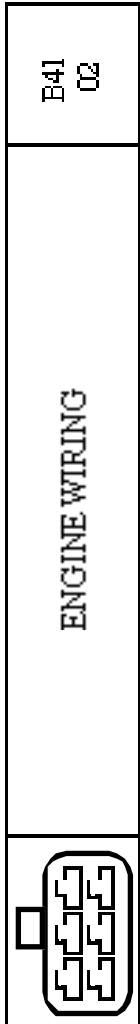


Plug mother 8mm

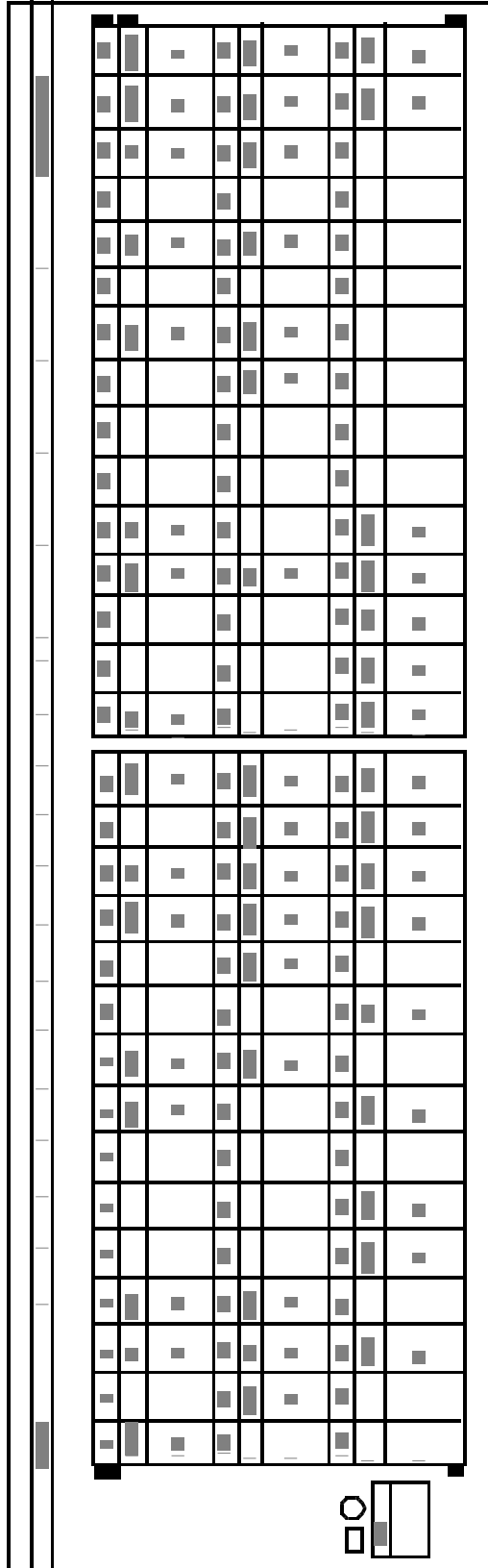


Plug mother flag 6,3mm


(After February 15th 2002)




U.C.E. INJECTION
 (For vehicles without air conditioning system)

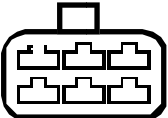



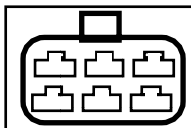
	ENGINE WIRING	B41 02
---	---------------	-----------

Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL-CYLINDERS2-3IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTER PURGING VALVE CONTROL
8	0,6	3JN	CONTROL-BLOWER RELAY
9	0,35	31A	CONTROL -WATER TEMPERATURE INDICATOR
12	0,6	3BU	IDLERUNNINGREGULATORCONTROL1
13	0,6	3C	SIGNAL -WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSORSIGNAL
19	0,5	TB1	DETONATION SENSORS SCREENING
20	0,5	3S	SIGNAL+ DETONATION SENSOR
24	0,6	3BL	SIGNAL -ENGINE RPM>RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL -LINE L
28	2,0	M	MASS
29	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL-CYLINDERS1-4IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL -ANTI-POLLUTION INDICATOR
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLERUNNINGREGULATORCONTROL2
42	0,6	3BW	IDLERUNNINGREGULATORCONTROL3
43	0,6	3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
44	0,6	3GL	DOWNSTREAM OXYGEN SENSORSIGNAL
45	0,6	3GK	UPSTREAM OXYGEN SENSORSIGNAL
49	0,6	3B	SIGNAL+ AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL -ENGINE RPM>RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL LINE K
58	0,35	HI7	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL -INJECTOR 1
60	1,0	3CT	CONTROL -INJECTOR 3
63	1,0	3GF	CONTROL-UPSTREAM OXYGEN SENSOR HEATING
65	1,0	3GG	CONTROL-DOWNSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL- FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLERUNNINGREGULATORCONTROL4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL+ VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
76	0,6	3GJ	DOWNSTREAM OXYGEN SENSOR MASS
77	0,6	3JQ	- AIR TEMPERATURE SENSOR
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR SUPPLY +
79	0,5	3DQ	- DETONATION SENSOR
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS
89	1,0	3CU	CONTROL-INJECTOR 4
90	1,0	3CS	CONTROL -INJECTOR 2

	ENGINE WIRING	B41 02
---	---------------	-----------

Pos.	Sectioning		Destination
1	2,0	3CW	CONTROL - CYLINDERS 2-3 IGNITION COIL
3	2,0	M	MASS
4	0,6	3BB	CANISTER PURGING VALVE CONTROL
8	0,6	3JN	CONTROL - BLOWER RELAY
9	0,35	31A	CONTROL - WATER TEMPERATURE INDICATOR
10	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTION COMPUTER
12	0,6	3BU	IDLE RUNNING REGULATOR CONTROL 1
13	0,6	3C	SIGNAL + WATER TEMPERATURE SENSOR
15	0,35	3GN	ATMOSPHERIC PRESSURE SENSOR MASS
16	0,35	3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
18	0,6	38X	FREON PRESSURE SENSOR SIGNAL
19	0,5	TB1	DETONATION SENSOR SCREENING
20	0,5	3S	SIGNAL + DETONATION SENSOR
24	0,6	3BL	SIGNAL - ENGINE RPM > RPM SENSOR
26	0,35	HL	DIAGNOSIS SIGNAL - LINE L
28	2,0	M	MASS
29	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
30	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
32	2,0	3CV	CONTROL - CYLINDERS 1-4 IGNITION COIL
33	2,0	M	MASS
34	0,35	3FH	CONTROL - ANTI-POLLUTION INDICATOR
38	0,6	3JP	CONTROL - BLOWER RELAY TR.2
39	0,6	3GT	ACTUATORS RELAY CONTROL
41	0,6	3BV	IDLE RUNNING REGULATOR CONTROL 2
42	0,6	3BW	IDLE RUNNING REGULATOR CONTROL 3
43	0,6	3AJ	SIGNAL +VALVE POSITION POTENTIOMETER
44	0,6	3GL	DOWNSTREAM OXYGEN SENSOR SIGNAL
45	0,6	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
46	0,5	38AS	AIR CONDITIONING COMPRESSOR CONNECTION SIGNAL
49	0,6	3B	SIGNAL +AIR TEMPERATURE SENSOR
53	0,35	47F	VEHICLE SPEED SIGNAL
54	0,6	3BG	SIGNAL - ENGINE RPM > RPM SENSOR
56	0,35	HK	DIAGNOSIS SIGNAL - LINE K
58	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTER
59	1,0	3CR	CONTROL - INJECTOR 1
60	1,0	3CT	CONTROL - INJECTOR 3
63	1,0	3GF	CONTROL - UPSTREAM OXYGEN SENSOR HEATING
65	1,0	3GG	CONTROL - DOWNSTREAM OXYGEN SENSOR HEATING
66	1,0	3NR	+INJECTORS > ACTUATORS RELAY OUTLET
68	0,6	3AC	CONTROL - FUEL PUMP RELAY
70	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
72	0,6	3BX	IDLE RUNNING REGULATOR CONTROL 4
73	0,6	3JK	- WATER TEMPERATURE
74	0,6	3AQ	SIGNAL + VALVE POTENTIOMETER
75	0,6	3JL	- VALVE POTENTIOMETER
76	0,6	3GJ	DOWNSTREAM OXYGEN SENSOR MASS

		ENGINE WIRING		B41 02
Pos.	Sectioning		Destination	
77	0,6	3JQ	- AIR TEMPERATURE SENSOR	
78	0,35	3D	ATMOSPHERIC PRESSURE SENSOR > SUPPLY +	
79	0,5	3DQ	- DETONATION SENSOR	
80	0,6	3GH	UPSTREAM OXYGEN SENSOR MASS	
82	0,6	38U	- FREON PRESSURE SENSOR	
83	0,6	38Y	+ FREON PRESSURE SENSOR	
89	1,0	3CU	CONTROL - INJECTOR 4	
90	1,0	3CS	CONTROL - INJECTOR 2	

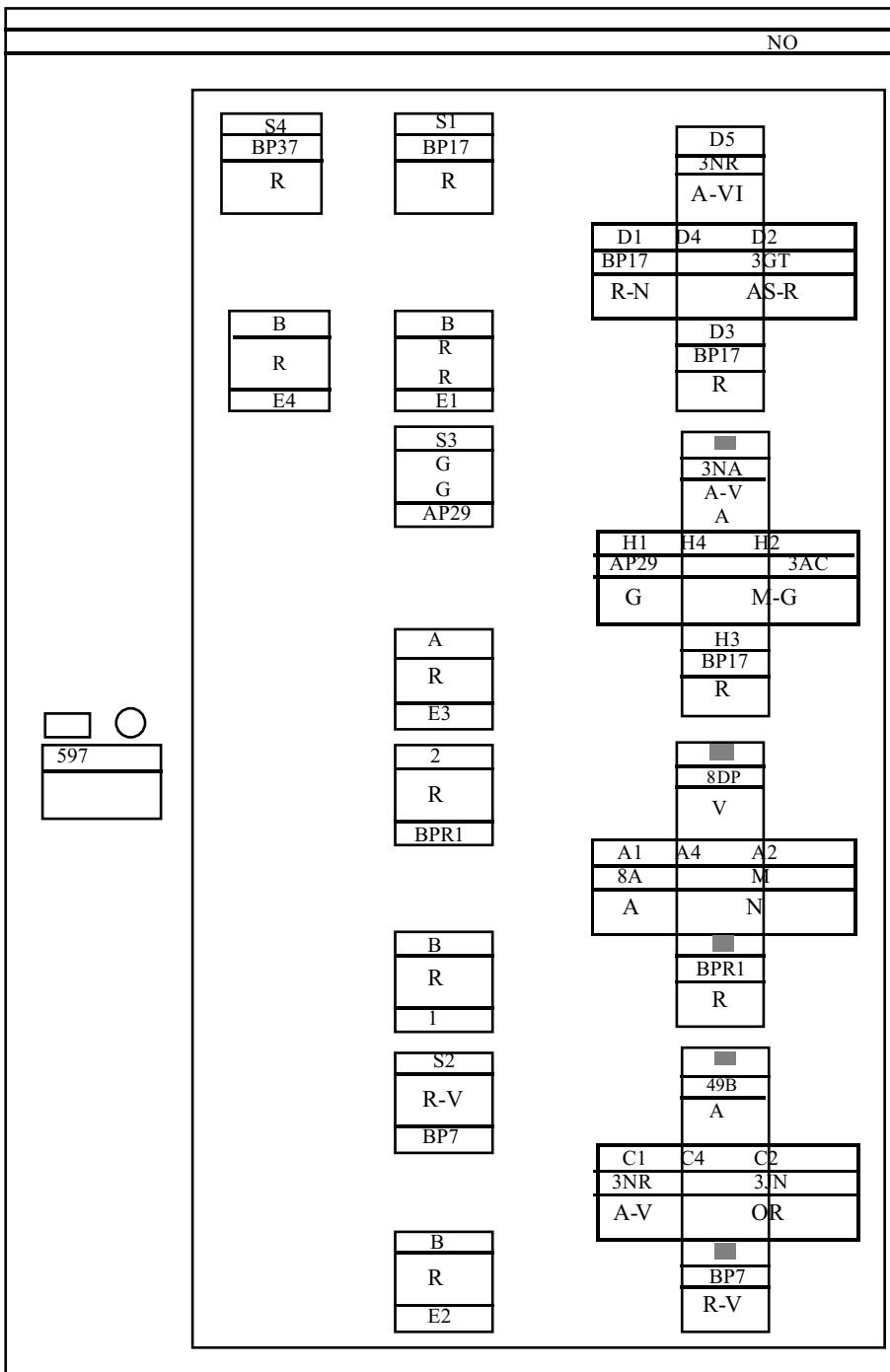


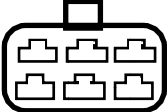

ENGINE WIRING

B41
02

ENGINE RELAYS AND FUSE BOX

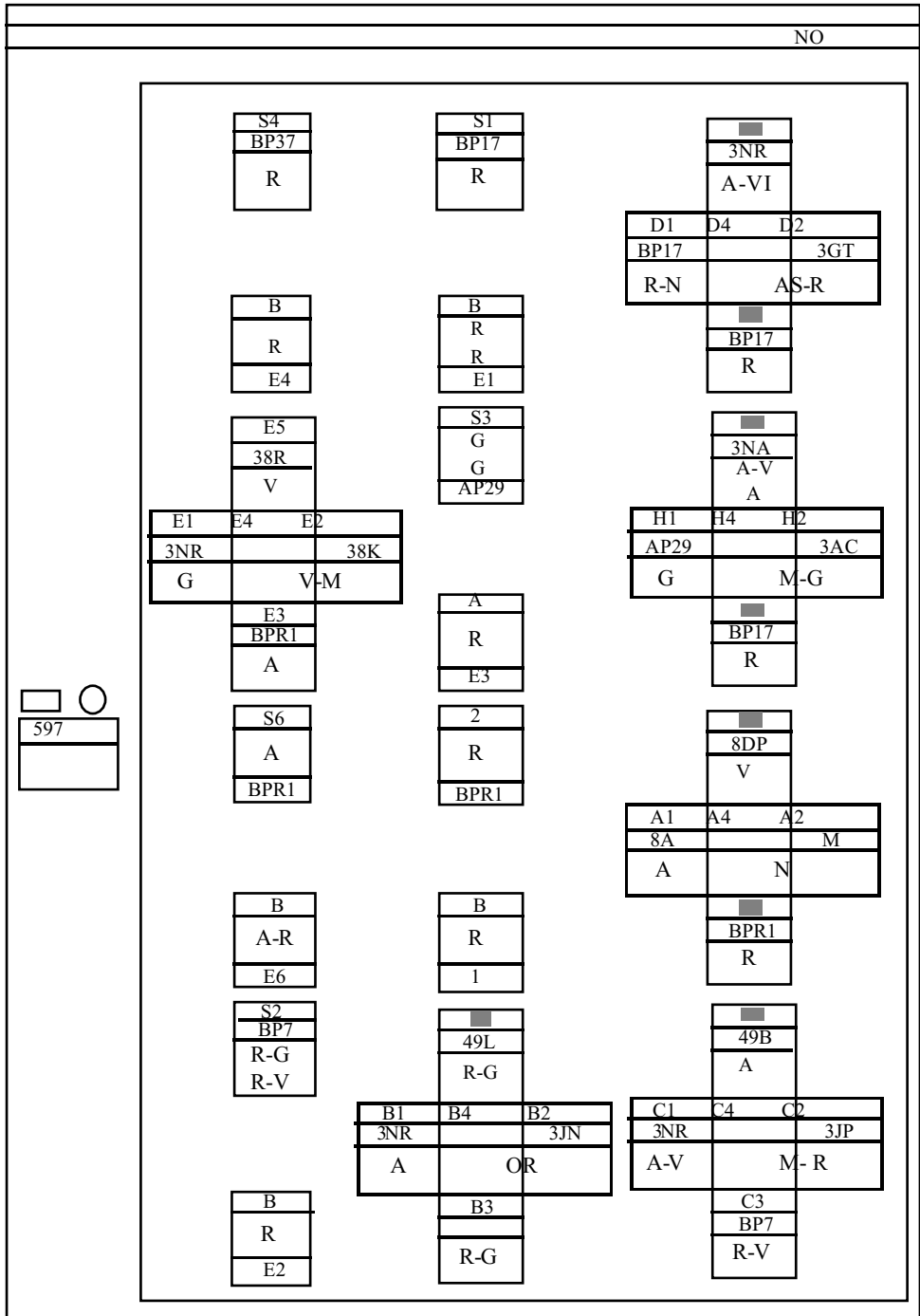
(FOR VEHICLES WITHOUT AIR CONDITIONING SYSTEM)

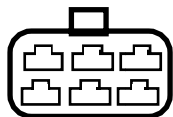


		ENGINE WIRING		B41 02
Pos.	Sectioning		Destination	
A1	0,5	8A	+ FOG LAMPS RELAY	
A2	0,5	M	MASS	
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY	
A5	1,0	8DP	+ PROTECTED FUSE > FOGAMPS	
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET	
C2	0,6	3JN	CONTROL-BLOWER RELAY, TR.1	
C3	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02	
C5	1,5	49B	CONTROL+BLOWER COOLING	
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
D2	0,6	3GT	INJECTION COMPUTER > ACTUATORS RELAY CONTROL	
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET	
H1	0,6	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03	
H2	0,6	3AC	CONTROL- FUEL PUMP RELAY	
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
H5	2,0	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY	
H5	1,4	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY	
E1	5,0	B	+ BATTERY	
E1	0,6	B	+ BATTERY > FUSE INLET F04	
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01	
E2	5,0	B	+ BATTERY > STARTER	
S2	1,5	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02, BLOWER COOLING	
E3	1,0	A	SUPPLY+ AFTER CONTACT	
S3	0,6	AP29	+ PROTECTED D.C. > ENGINE SAFETY RUNNING RELAY	
S3	0,35	AP29	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03	
E4	0,6	B	+ BATTERY > FUSE INLET F01	
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04	
1	1,0	B	+ BATTERY	
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17 > RELAY	

	ENGINE WIRING	B41 02
---	---------------	-----------

ENGINE RELAYS AND FUSE BOX (FOR AIR CONDITIONING SYSTEM EQUIPPED VEHICLES)






ENGINE WIRING

B41
02

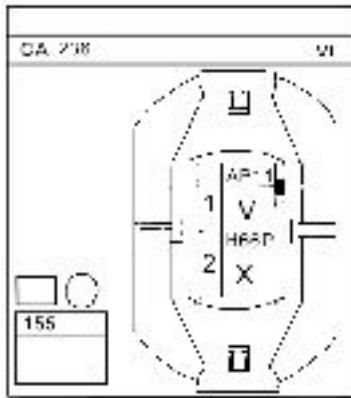
Pos.	Sectioning		Destination
A1	0,5	8A	+ FOG LAMPS RELAY
A2	0,5	M	MASS
A3	1,0	BPR1	+ BATTERY > FUSE OUTLET F17> RELAY
A5	1,0	8DP	+ PROTECTED FUSE > FOGAMPS
B1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B2	0,6	3JN	-BLOWERRELAY,TR.1
B3	2,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
B5	2,0	49L	BLOWERCOOLINGRESISTANCECONTROL
C1	0,6	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
C2	0,6	3JP	CONTROL-BLOWER RELAY,TR.2
C3	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
C5	5,0	49B	CONTROL+BLOWERCOOLING
D1	0,6	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D2	0,6	3GT	ACTUATORS RELAY CONTROL, INJECTIONCOMPUTER
D3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
D5	5,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E1	0,5	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
E2	0,5	38K	AIR CONDITIONING SYSTEM STOPPING CONTROL > INJECTIONCOMPUTER
E3	1,0	BPR1	+ BATTERY > FUSE OUTLET F06> RELAY
E5	1,0	38R	CONTROL+AIR CONDITIONINGCOMPRESSOR CLUTCH
H1	0,6	AP29	+ AFTER PROTECTED CONTACT> FUSE OUTLET F03
H2	0,6	3AC	CONTROL- FUEL PUMPRELAY
H3	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
H5	2,0	3NA	+IGNITIONCOIL, CHOKESENSOR > FUEIPUMPRELAY
H5	1,4	3NA	+IGNITIONCOIL, CHOKESENSOR > FUEIPUMPRELAY
E1	5,0	B	+BATTERY
E1	0,6	B	+ BATTERY > FUSE INLET F04
S1	5,0	BP17	+ PROTECTED BATTERY > FUSE OUTLET F01
E2	5,0	B	+ BATTERY> + STARTER
S2	2,0	BP7	+PROTECTED BATTERY > FUSE OUTLET F02,BLOWER COOLING
S2	4,0	BP7	+ PROTECTED BATTERY > FUSE OUTLET F02
E3	1,0	A	SUPPLY+AFTER CONTACT
S3	0,6	AP29	+PROTECTEDD.C> ENGINERUNNINGSAFETYRELAY
S3	0,35	AP29	+ AFTER PROTECTED CONTACT> FUSE OUTLET F03
E4	0,6	B	+ BATTERY > FUSE INLET F01
S4	0,6	BP37	+ PROTECTED BATTERY > FUSE OUTLET F04
1	1,0	B	+BATTERY
2	1,0	BPR1	+ BATTERY > FUSE OUTLET F17>RELAY
E6	1,0	B	+BATTERY
S6	1,0	BPR1	+ BATTERY > FUSE OUTLET F06> RELAY

	<p>ENGINE WIRING</p>	<p>B41 02</p>
---	----------------------	-------------------


REVERSE DRIVING CONTACT

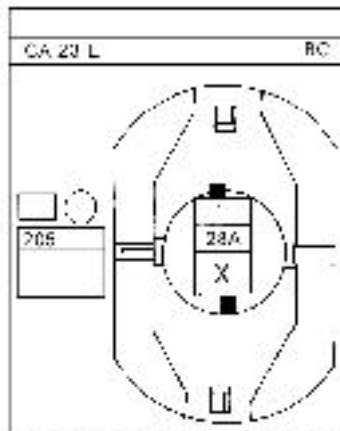
Pos.	Sectioning		Destination
1	0,60	AP11	+ AFTER PROTECTED CONTACT, REVERSE LIGHTS
2	0,60	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE

OUTLET F02




OIL TRANSMITTER CONTACT

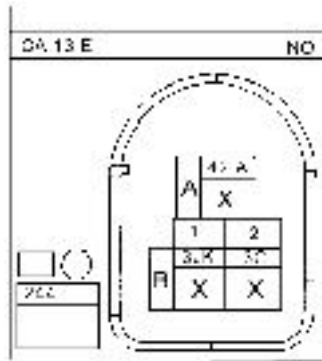
Pos.	Sectioning		Destination
1	0,35	28A	OIL PRESSURE INDICATOR – CONTROL




	ENGINE WIRING	B41 02
---	---------------	-----------

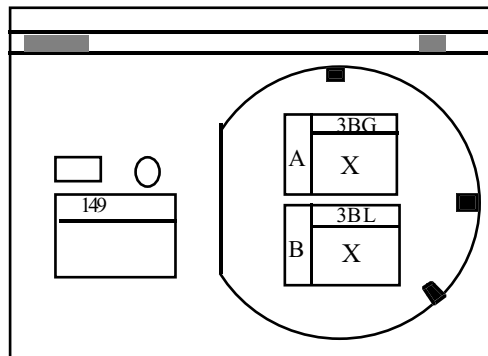
WATER TEMPERATURE SENSOR

Pos.	Sectioning		Destination
A	0,35	42A	SIGNAL +WATER TEMPERATURE
B1	0,60	3JK	- WATER TEMPERATURE
B2	0,60	3C	SIGNAL +WATER TEMPERATURE SENSOR




RPM SENSOR

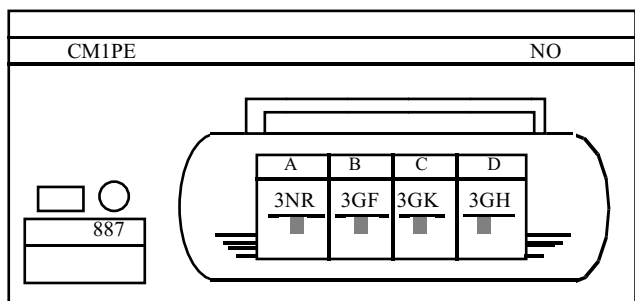
Pos.	Sectioning		Destination
A	0,60	3BG	ENGINE RPM SIGNAL >RPM SENSOR
B	0,60	3BL	ENGINE RPM - SIGNAL >RPM SENSOR




	ENGINE WIRING	B41 02
---	---------------	-----------

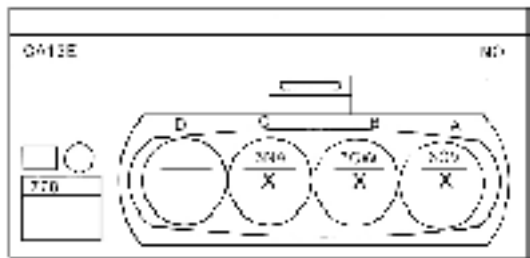
UPSTREAM OXYGEN SENSOR

Pos.	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GF	CONTROL-UPSTREAMOXYGENSENSORHEATING
C	0,60	3GK	UPSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GH	UPSTREAMOXYGENSENSOR MASS



IGNITION COIL

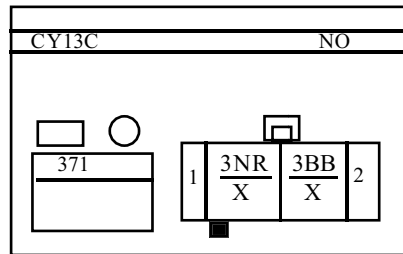
Pos.	Sectioning		Destination
A	2,0	3CV	CONTROL – CYLINDERS 1-4 IGNITION COIL
B	2,0	3CW	CONTROL–CYLINDERS2-3IGNITIONCOIL
C	2,0	3NA	+ IGNITIONCOIL, CHOÆ3 SENSOR > FUEIPUMP RELAY




	ENGINE WIRING	B41 02
---	---------------	-----------

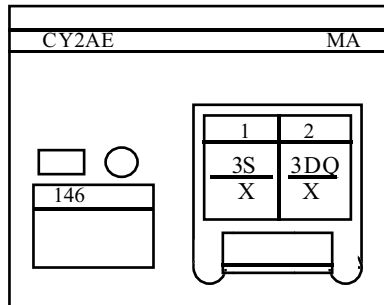
CANISTER PURGING VALVE

Pos.	Sectioning		Destination
1	0,60	3NR	+ INJECTORS >ACTUATORS RELAY OUTLET
2	0,60	3BB	CANISTRPURGINGVALVECONTROL




DETONATION SENSOR

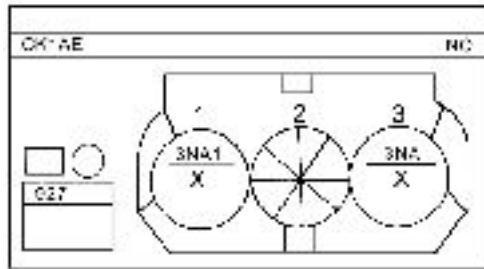
Pos.	Sectioning		Destination
1	0,50	3S	SIGNAL+ DETONATION SENSOR
2	0,50	3DQ	DETONATION SENSOR MASS
4	0,50	TB1	DETONATIONSENSORSCREENING




	<p>ENGINE WIRING</p>	<p>B41 02</p>
---	----------------------	-------------------

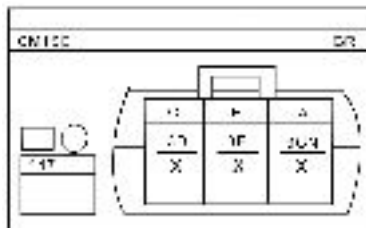
CHOKE SENSOR

Pos.	Sectioning		Destination
1	1,40	3NA1	+ FUEL PUMP > CHOKE SENSOR
3	1,40	3NA	+ IGNITION COIL, CHOKE SENSOR > FUEL PUMP RELAY




ATMOSPHERIC PRESSURE SENSOR

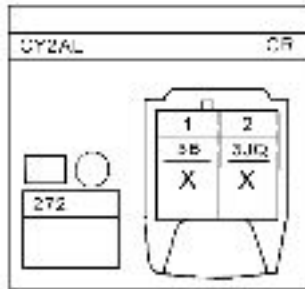
Pos.	Sectioning		Destination
A	0,35	3GN	Atmospheric pressure sensor mass
B	0,35	3F	Atmospheric pressure sensor signal
C	0,35	3D	Atmospheric pressure sensor > Supply +




	ENGINE WIRING	B41 02
---	---------------	-----------

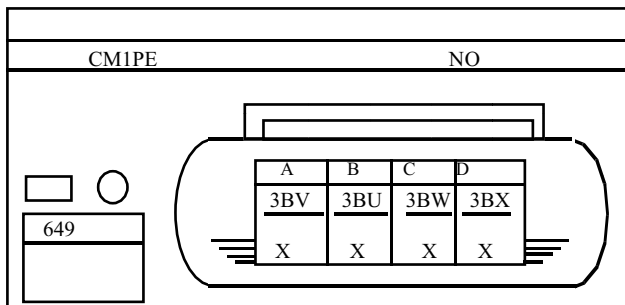
AIR TEMPERATURE SENSOR

Pos.	Sectioning		Destination
1	0,60	3B	SIGNAL +AIRTEMPERATURE SENSOR
2	0,60	3JQ	AIR TEMPERATURE SENSOR MASS




STEP-BY-STEP ENGINE

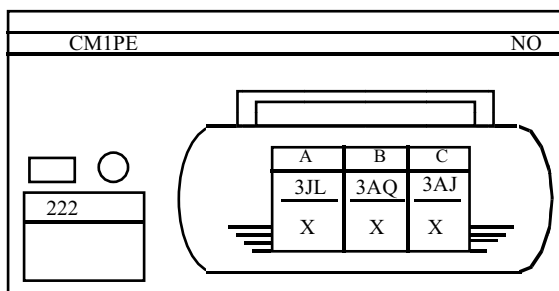
Pos.	Sectioning		Destination
A	0,60	3BV	IDLERUNNNGREGULATORCONTROL2
B	0,60	3BU	IDLERUNNNGREGULATORCONTROL1
C	0,60	3BW	IDLERUNNNGREGULATORCONTROL3
D	0,60	3BX	IDLERUNNNGREGULATORCONTROL4



	ENGINE WIRING	B41 02
---	---------------	-----------

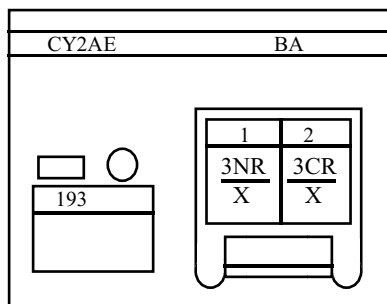
VALVE POTENTIOMETER

Pos.	Sectioning		Destination
A	0,60	3JL	VALVE POTENTIOMETER MASS
B	0,60	3AQ	SIGNAL+ VALVEPOTENTIOMETER
C	0,60	3AJ	SIGNAL+VALVE POSITON POTENTIOMETR




INJECTOR 1

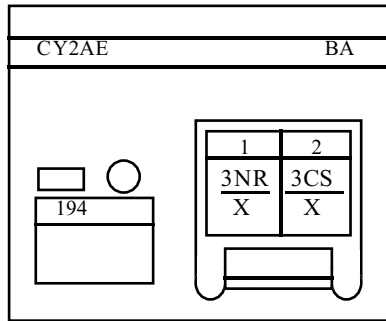
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CR	CONTROL -INJECTOR 1



	ENGINE WIRING	B41 02
---	---------------	-----------

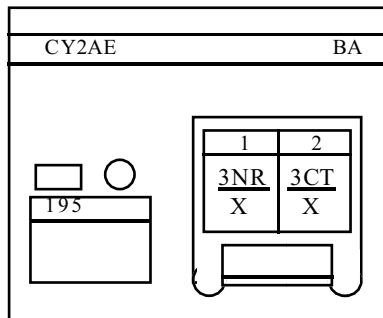
INJECTOR 2

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CS	CONTROL -INJECTOR 2



INJECTOR 3

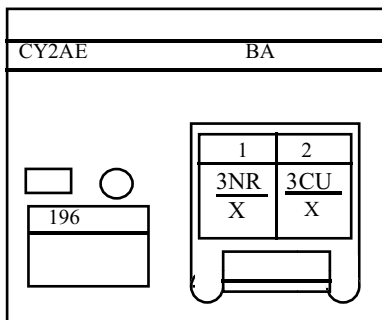
Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CT	CONTROL -INJECTOR 3




	ENGINE WIRING	B41 02
---	---------------	-----------

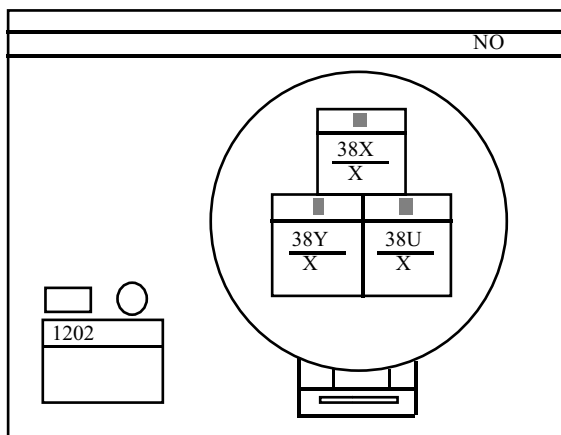
INJECTOR 4

Pos.	Sectioning		Destination
1	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
2	1,0	3CU	CONTROL -INJECTOR 4



AIR CONDITIONING SYSTEM PRESSURE SENSOR

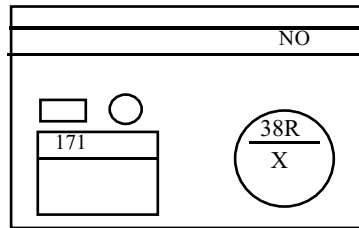
Pos.	Sectioning		Destination
A	0,60	38U	FREON PRESSURE SENSOR MASS
B	0,60	38Y	+FREONPRESSURESENSOR
C	0,60	38X	FREONPRESSURESENSORSIGNAL



	ENGINE WIRING	B41 02
---	---------------	-----------

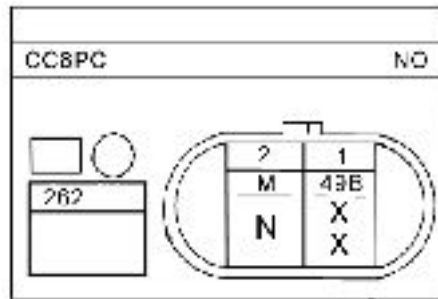
AIR CONDITIONING COMPRESSOR CLUTCH

Pos.	Sectioning		Destination
1	1,0	38R	CONTROL+AIRCONDITIONINGCOMPRESSORCLUTCH




AIR CONDITIONING AND BLOWER COOLING (FOR AIRCONDITIONING EQUIPPED VEHICLES)

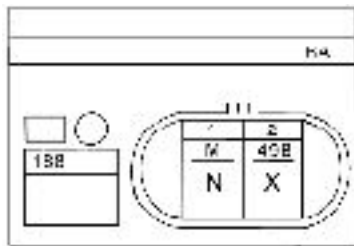
Pos.	Sectioning		Destination
1	2,0	49B	CONTROL+BLOWERCOOLING>BLOWERRESISTANCE
1	5,0	49B	CONTROL+BLOWERCOOLING
2	5,0	M	MASS




	<p>ENGINE WIRING</p>	<p>B41 02</p>
---	----------------------	-------------------

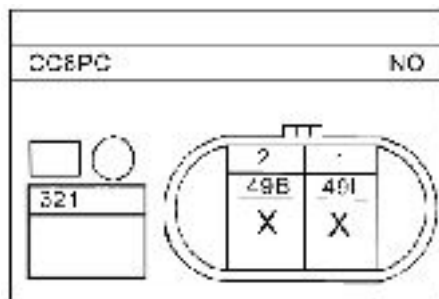
BLOWER COOLING
(FOR VEHICLES WITHOUT AIR CONDITIONING SYSTEM)

Pos.	Sectioning		Destination
1	1,5	M	MASS
2	1,5	49B	CONTROL+BLOWERCOOLING




BLOWER RESISTANCE
(FOR AIR CONDITIONING EQUIPPED VEHICLES)

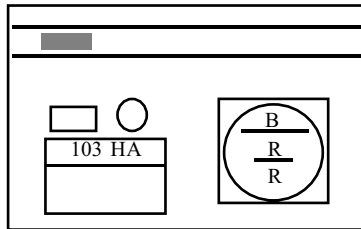
Pos.	Sectioning		Destination
1	2	49L	CONTROL + BLOWER COOLING RESISTANCE
2	2	49B	CONTROL+BLOWERCOOLING



	ENGINE WIRING	B41 02
---	---------------	-----------

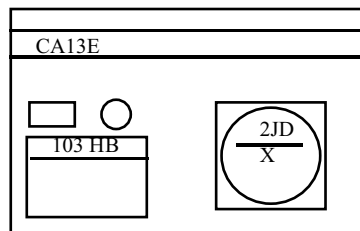
ALTERNATOR

Pos.	Sectioning		Destination
1	5,0	B	+ BATTERY > FUSE INLE F02
1	16,0	B	+ BATTERY > + STARTER




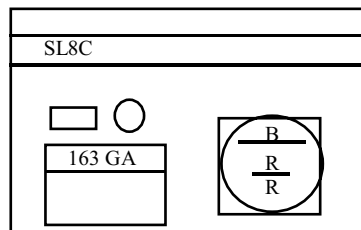
ALTERNATOREXCITATION

Pos.	Sectioning		Destination
1	0,6	2JD	+ALTERNATOR EXCITATION >INSTRUMENT PANEL



STARTER

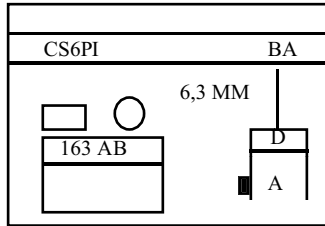
Pos.	Sectioning		Destination
1	160	B	+BATTERY
1	160	B	+ BATTERY >+ ALTERNATOR






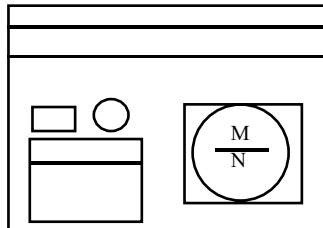
STARTER EXCITATION

Pos.	Sectioning		Destination
1	3,0	D	+ STARTER CONTROL



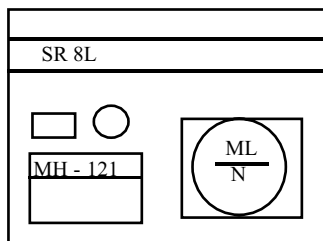
BLOWER MASS

Pos.	Sectioning		Destination
1	5,0	M	MASS




ENGINE ELECTRIC MASS

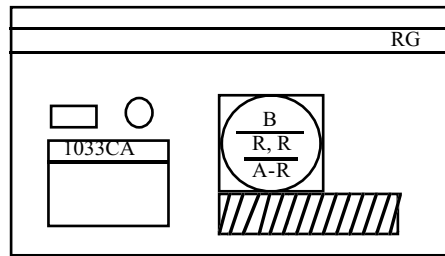
Pos.	Sectioning		Destination
1	4,0	ML	INJECTION COMPUTER MASS (PINS 3, 28 AND 33)




	ENGINE WIRING	B41 02
---	---------------	-----------

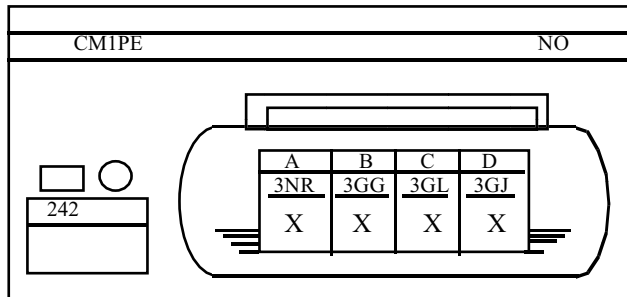
BATTERY TERMINAL+ (PLUS)

Pos	Sectioning		Destination
1	16,0	B	+ BATTERY > + STARTER
1	5,0	B	+ BATTERY > FUSES INLET F01, F04
1	1,0	B	+ BATTERY > FUSE INLET F06




DOWNSTREAM OXYGEN SENSOR

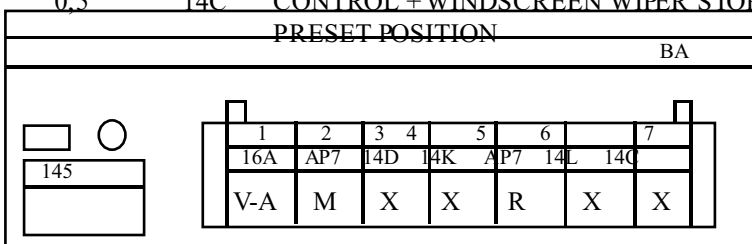
Position	Sectioning		Destination
A	1,0	3NR	+ INJECTORS > ACTUATORS RELAY OUTLET
B	1,0	3GG	CONTROL - DOWNSTREAM OXYGEN SENSOR HEATING
C	0,60	3GL	DOWNSTREAM OXYGEN SENSOR SIGNAL
D	0,60	3GJ	DOWNSTREAM OXYGEN SENSOR MASS




	FRONT WIRING	B41 02
---	--------------	-----------

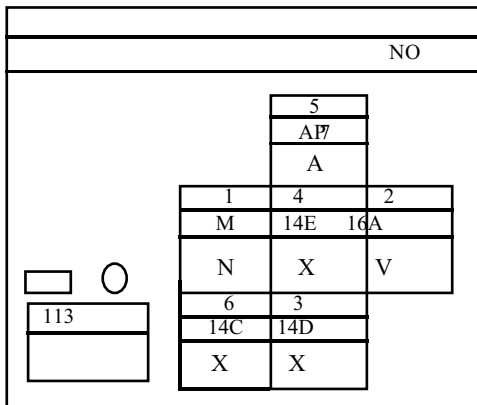
WINDSCREEN WIPER – WASHING SWITCH

Position	Sectioning		Destination
1	0,5	16A	CONTROL + WINDSCREEN WASHING PUMP + AFTER PROTECTED CONTACT, WINDSCREEN
2	0,75	AP7	
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED
4	1,0	14K	CONTROL + WINDSCREEN WIPER LOW SPEED + AFTER PROTECTED CONTACT, WINDSCREEN
5	1,0	AP7	
6	0,75	14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
7	0,5	14C	CONTROL + WINDSCREEN WIPER STOPPING ON PRESET POSITION




WINDSCREEN WIPER TIMER

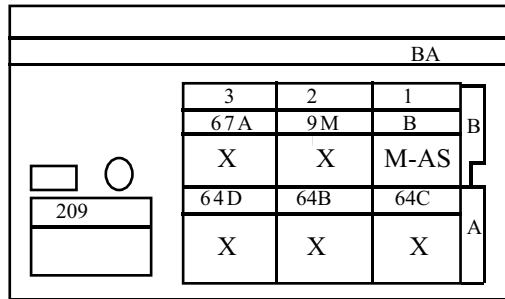
Position	Sectioning		Destination
1	0,5	M	MASS
2	0,5	16A	CONTROL + WINDSCREEN WASHING PUMP
3	0,75	14D	WINDSCREEN WIPER TIMER LOW SPEED CONTROL
4	0,75	14E	CONTROL + WINDSCREEN WIPER TIMER
5	0,75	AP7	+ AFTER PROTECTED CONTACT, WINDSCREEN WIPER
6	0,5	14C	CONTROL + WINDSCREEN WIPER STOPPING ON PRESET POSITION




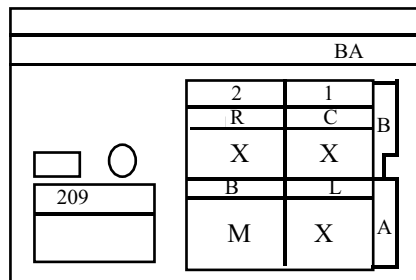
	FRONT WIRING	B41 02
---	--------------	-----------

HORN, TURNING AND LIGHTS SWITCH

Position	Sectioning		Destination
A1	1,0	64C	LEFT TURNING LIGHTS CONTROL
A2	1,0	64B	CONTROL + TURNING RELAY
A3	1,0	64D	RIGHT TURNING LIGHTS CONTROL
B1	1,0	B	+ BATTERY
B2	0,5	9M	SHUNT > FO LIGHTS SWITCH
B3	1,0	67A	CONTROL + ACOUSTIC WARNING




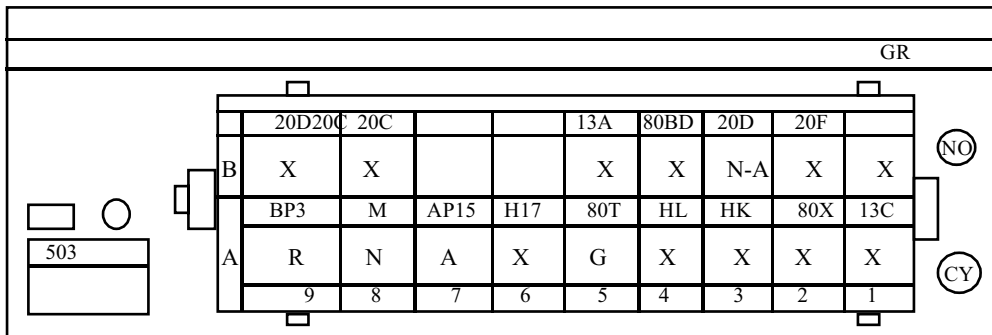
Position	Sectioning		Destination
A1	0,75	L	+ PARKING LIGHTS > FUSHNLET F05
A2	3,0	B	+ BATTERY
B1	0,75	C	+ LOW BEAM LIGHTS
B2	0,75	R	+ HIGH BEAM LIGHTS



	FRONT WIRING	B41 02
---	--------------	-----------


U.C.E. DECODER

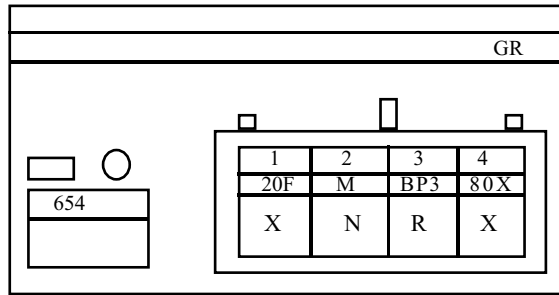
Position	Sectioning		Destination
A1	0,5	13C	CEILING LAMP CONTROL
A2	0,35	80X	ANTI-STARTER RECEPTOR SIGNAL TRACK (TR)
A3	0,35	HK	DIAGNOSIS SIGNAL - LINE K
A4	0,35	HL	DIAGNOSIS SIGNAL - LINE L
A5	0,35	80T	ANTI-STARTING CONTROL-INDICATOR
A6	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
A7	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET
F03			
A8	0,35	M MASS	
A9	1,0	BP3	+ PROTECTED CONTACT > FUSE OUTLET F07
B1	0,35	20F	RADIO FREQUENCY RECEPTION SIGNAL
B2	0,35	20D	CONTROL + DOORS ELECTRIC LOCKING >
SWITCH			
B3	0,35	80BD	FLASH RELAY CONTROL
B4	0,35	13A	CONTROL-CEILING LAMPS LIGHTING > DOORS CONTACTS
B5	0,35	20C	CONTROL + DOORS ELECTRIC UNLOCKING >
SWITCH			
B6			
B7			
B8	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > ACTUATORS
B9	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS




	FRONT WIRING	B41 02
---	--------------	-----------

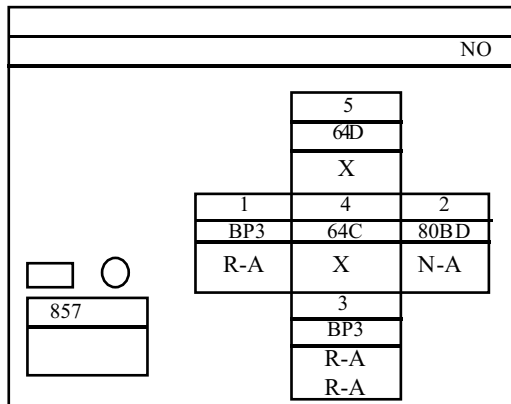
ANTI-STARTING BUSHING

Position	Sectioning		Destination
1	0,35	20F	RADIOFREQUENCY RECEPTION SIGNAL
2	0,35	M	MASS
3	0,35	BP3	PROTECTED BATTERY > FUSE OUTLET F07
4	0,35	80X	ANTI-STARTING RECEIVER SIGNAL TRACK (TR)




FLASH RELAY

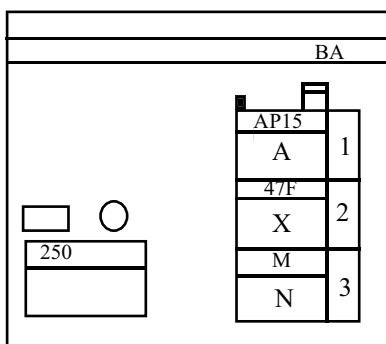
Position	Sectioning		Destination
1	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
2	0,35	80BD	FLASH RELAY CONTROL
3	0,5	BP3	+ PROTECTED BATTERY > FLASH RELAY
3	0,5	BP3	+ PROTECTED BATTERY > FUSE OUTLET F07
4	0,5	64C	LEFT TURNING LIGHTS CONTROL
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
* For Anti-intrusion System equipped vehicles			
5	0,5	64D	RIGHT TURNING LIGHTS > U.C.E. ANTI-INTRUSION SYSTEM > DOORS ELECTRIC LOCKING/ UNLOCKING INFO




	FRONT WIRING	B41 02
---	--------------	-----------

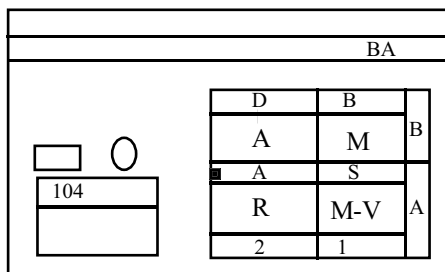
VEHICLE SPEED TRANSDUCER

Position	Sectioning		Destination
1 F03	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET
2	0,35	47F	VEHICLE SPEED SIGNAL
3	0,35	M	MASS




INTRUSION SYSTEM

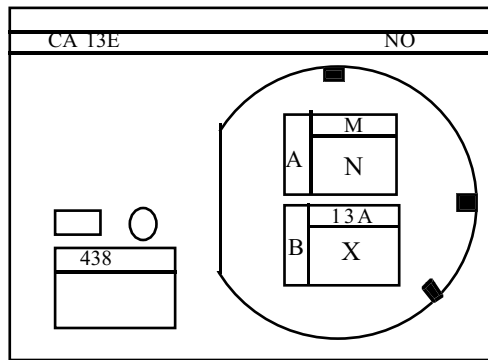
Position	Sectioning		Destination
A1	1,5	S	+ ACCESSORIES > COCKPIT FUSES INLET F01, F15
A2	4,0	A	SUPPLY+AFTER CONTACT > COCKPIT FUSES INLET F02, F03 AND ENGINE FUSE INLET F03
B1	4,0	B	+ BATTERY
B2	3,0	D	+ STARTER CONTROL




	FRONT WIRING	B41 02
---	--------------	-----------

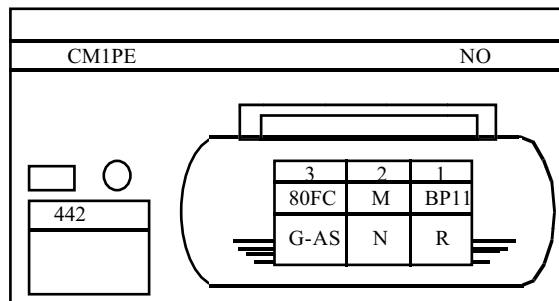
ENGINE HOOD CONTACT

Position	Sectioning		Destination
A	0,35	M	MASS
B	0,35	13A	CONTROL-CEILING LAMPS LIGHTING>ENGINE HOOD CONTACT




SIREN

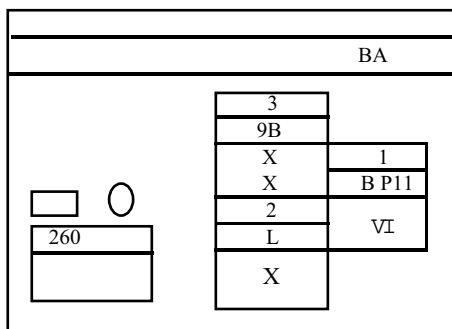
Position	Sectioning		Destination
1	0,5	BP11	+ PROTECTED BATTERY > SIREN
2	0,5	M	MASS
3	0,35	80FC	SIREN CONTROL SUPPLY




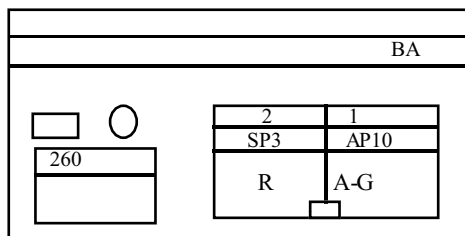
	FRONT WIRING	B41 02
---	--------------	-----------

COCKPIT RELAYS AND FUSE BOX


Position	Sectioning		Destination
1	0,5	9B	CONTROL + REAR FOG LAMP
2	0,5	L	+ PARKING LIGHTS > LIGHTS SWITCH
3	0,5	9DP	+PROTECTED REARFOGLIGHTS
3	0,5	9DP	+PROTECTED REARFOGLIGHTS>FOGLAMP SWITCH

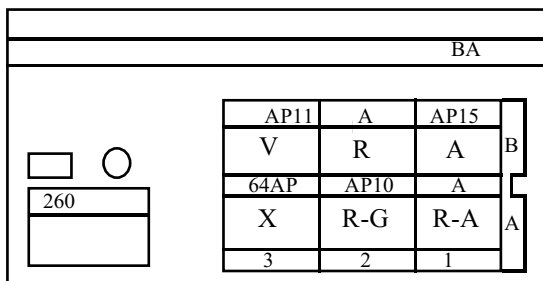



Position	Sectioning		Destination
1 F01	0,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET
2	1,5	SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER

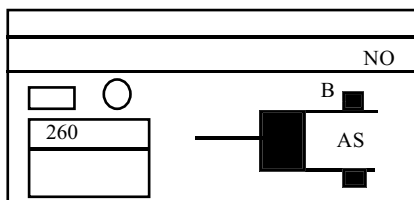




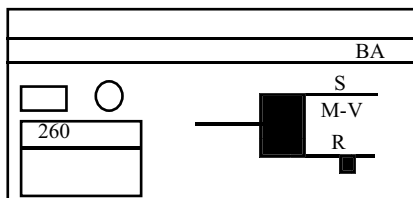
Position	Sectioning		Destination
A1	1,5	A	SUPPLY + D.C.
A2	1,5	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
A3	1,0	64AP	+ PROTECTED TURNING LIGHTS, FUSE INLET F04
B1	1,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
B2	0,5	A	SUPPLY + D.C. > COCKPIT FUSE INLET F02
B3	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT



Position	Sectioning		Destination
	3,0		B + BATTERY > FUSES INLET F06, F07, F08, F09

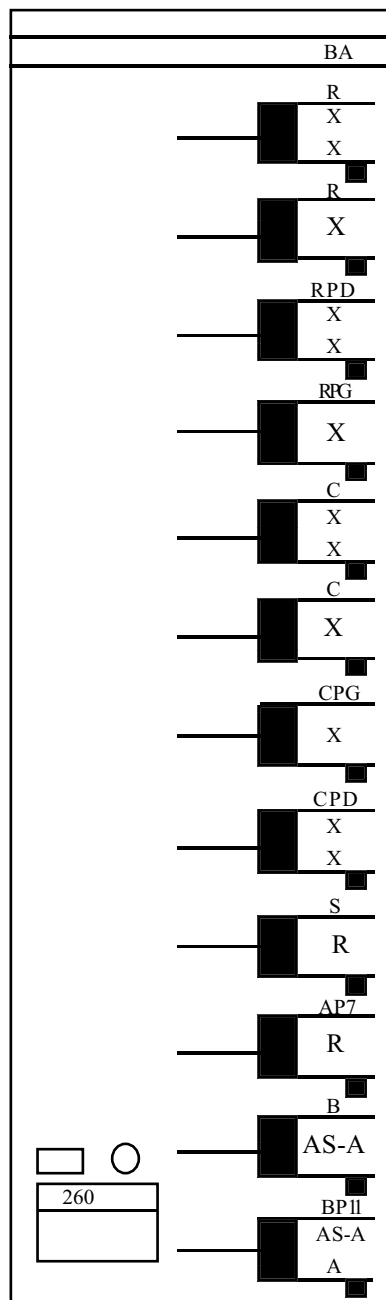


Position	Sectioning		Destination
	1,5	S	+ ACCESSORIES > FUSE INLET F01 COCKPIT
	1,5	S	+ ACCESSORIES > FUSE INLET F05 COCKPIT






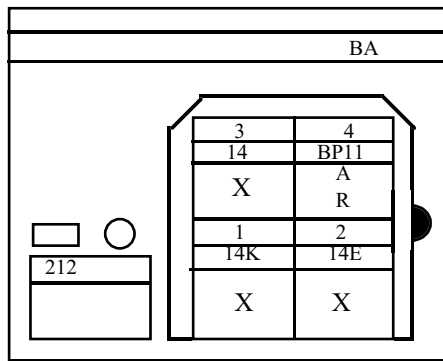
Position	Sectioning	↗	Destination
F11	0,75	R	+ HIGH BEAM LIGHTS > FUSE INLET F11
	0,75	R	HIGH BEAM LIGHTS > FUSE INLET F12
F12	0,75	R	HIGH BEAM LIGHTS > FUSE INLET F12
F12	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12
	0,35	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F11	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11
F13	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F13
	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F14	0,75	C	LOW BEAM LIGHTS > FUSE OUTLET F14
F13	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13
F14	0,75	CPD	PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14
	0,35	CPD	PROTECTED RIGHT HIGH BEAM LIGHTS > INDICATOR
F15	1,5	S	+ ACCESSORIES > FUSE INLET F01
F15	1,0	AP7	+ WINDSCREEN WIPER PROTECTED D.C.
F16	0,75	B	+ BATTERY
F16	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
	0,75	BP11	+ PROTECTED BATTERY > HORNS




	FRONT WIRING	B41 02
---	--------------	-----------

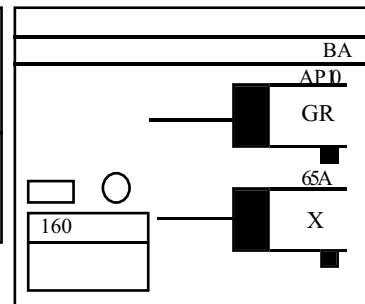
WINDSCREEN WIPER MOTOR

Pos	Sectioning		Destination
1	1,0	14K	CONTROL +WINDSCREEN WIPER LOW SPEED
2	0,75	14E	CONTROL +WINDSCREEN WIPER TIMER
3	0,75	14L	CONTROL +WINDSCREEN WIPER HIGH SPEED
4	0,75	BP11	+ PROTECTED BATTERY > FUSE OUTLET F16
4	0,5	BP11	+ PROTECTED BATTERY > HORNS




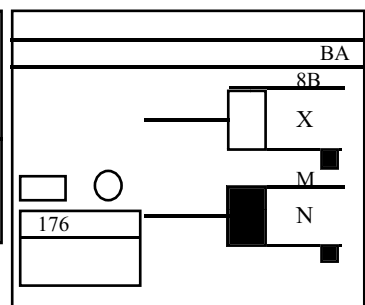
STOP CONTACT

Position	Sectioning		Destination
1	1,0	AP10	+ PROTECTED D.C. > FUSE OUTLET F01
2	1,0	65A	CONTROL + STOP LIGHTS




RIGHT FOG LAMP

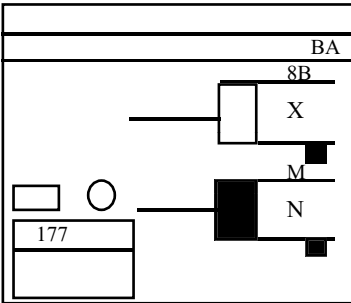
Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELAY
2	0,75	M	MASS




	FRONT WIRING	B41 02
---	--------------	-----------

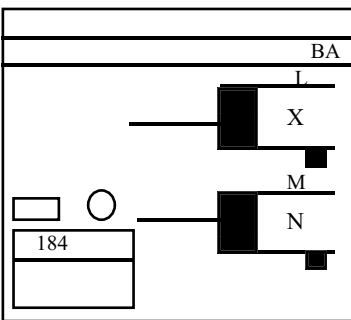
LEFT FRONT FOGLAMP

Position	Sectioning		Destination
1	0,75	8B	+ FOG LAMPS > RELXA
2	0,75	M	MASS




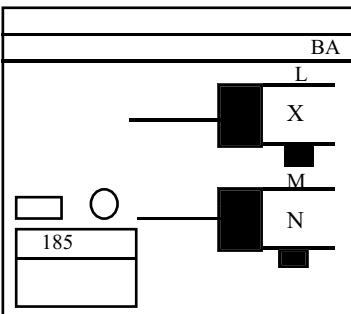
RIGHT FRONT PARKING LAMP

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




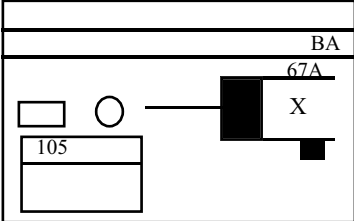
LEFT FRONT PARKING LIGHT

Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS


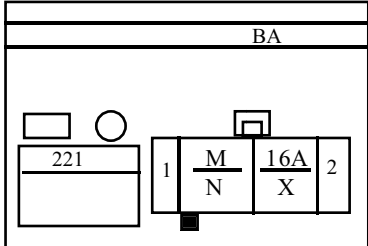


	FRONT WIRING	B41 02
---	--------------	-----------


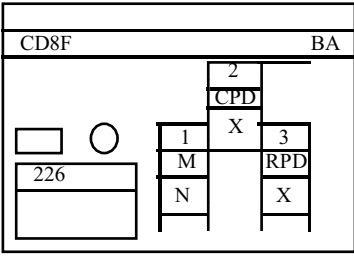
ACOUSTIC WARNING

Position	Sectioning		Destination	
1	1,0	67A	CONTROL + ACOUSTIC WARNING	


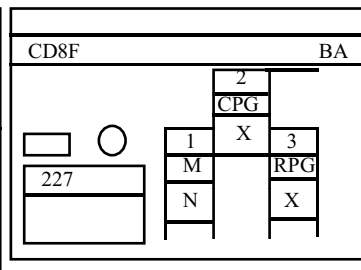
WINDSCREEN WIPER PUMP

Position	Sectioning		Destination	
1	0,35	M	MASS	
2	0,5	16A	CONTROL + WINDSCREEN PUMP	

RIGHT HEADLIGHT


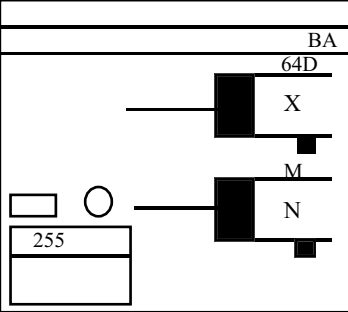
Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPD	+ PROTECTED RIGHT LOW BEAM LIGHTS > FUSE OUTLET F14	
3	0,75	RPD	PROTECTED RIGHT HIGH BEAM LIGHTS > FUSE OUTLET F12	

LEFT HEADLIGHT

Position	Sectioning		Destination	
1	1,0	M	MASS	
2	0,75	CPG	PROTECTED LEFT LOW BEAM LIGHTS > FUSE OUTLET F13	
3	0,75	RPG	PROTECTED LEFT HIGH BEAM LIGHTS > FUSE OUTLET F11	

	FRONT WIRING	B41 02
---	--------------	-----------


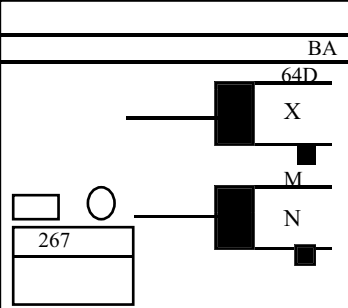
RIGHT FRONT TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64D	RIGHT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

LEFT FRONT TURNING LIGHT


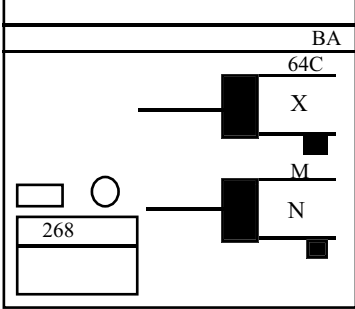
Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

RIGHT FRONT SIDE TURNING LIGHT


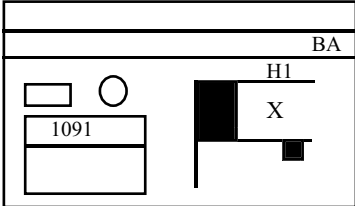
Position	Sectioning		Destination	
1	0,5	64D	RIGHT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	

	FRONT WIRING	B41 02
---	--------------	-----------


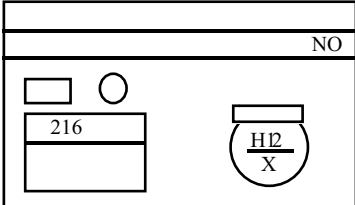
LEFT FRONT SIDE TURNING LIGHT

Position	Sectioning		Destination	
1	0,5	64C	LEFT TURNING LIGHTS CONTROL	
2	0,5	M	MASS	


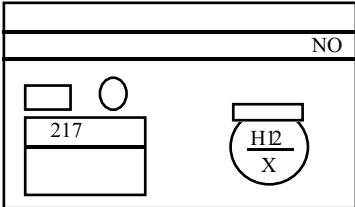
I.C.P. BRAKING SYSTEM

Position	Sectioning		Destination	
1	0,35	H1	CONTROL -ICP, HAND BRAKE INDICATOR	

RIGHT FRONT BRAKE PADS


Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	

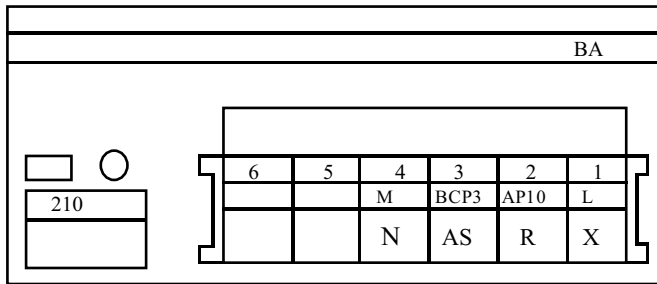
LEFT FRONT BRAKE PADS

Position	Sectioning		Destination	
1	0,35	H12	CONTROL - BRAKE PADS WEAR INDICATOR	


	DASHBOARD WIRING	B41 02
---	------------------	-----------

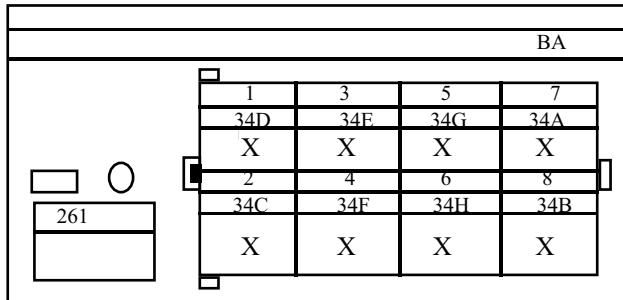
ELECTRONIC CLOCK

Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,35	AP10	+ AFTER PROTECTED CONTACT . FUSE OUTLET F01
3	0,35	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
4	0,35	M	MASS
5			
6			



RADIO

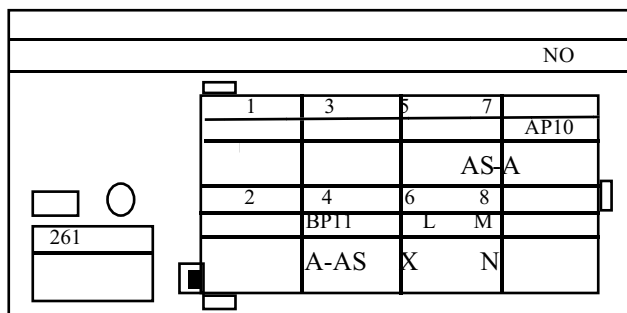
Position	Sectioning		Destination
1	0,35	34D	SIGNAL+ RIGHT REAR SPEAKER
2	0,35	34C	SIGNAL- RIGHT REAR SPEAKER
3	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
4	0,35	34F	SIGNAL -RIGHT FRONT SPEAKER
5	0,35	34G	SIGNAL +LEFT FRONT SPEAKER
6	0,35	34H	SIGNAL -LEFT FRONT SPEAKER
7	0,35	34A	SIGNAL +LEFT REAR SPEAKER
8	0,35	34B	SIGNAL -LEFT REAR SPEAKER




	DASHBOARD WIRING	B41 02
---	------------------	-----------

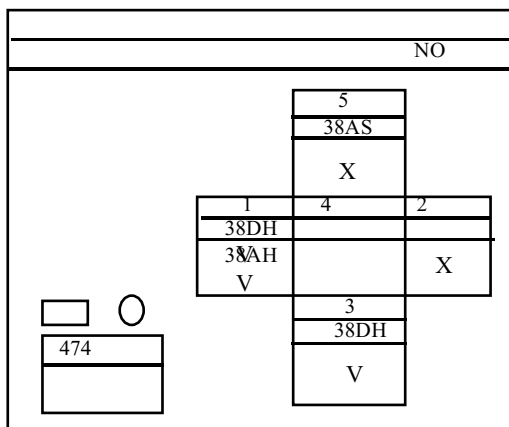
RADIO

Position	Sectioning		Destination
4	0,75	BP11	+ PROTECTED BATTERY > COCKPIT FUSE BOX
6	0,75	L	+ PARKING LIGHTS > FUSEOUTLET F05
7	0,75	AP10	+AFTER PROTECTED CONTACT > FUSE OUTLET F01
8	0,5	M	MASS




AIR CONDITIONING RELAY (ON BOARD)

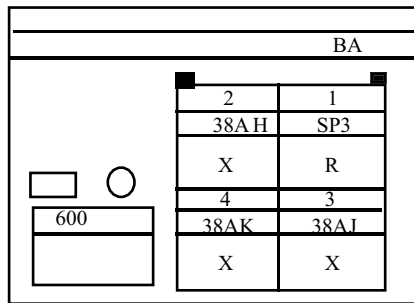
Position	Sectioning		Destination
1	0,5	38DH	CONTROL +AIR CONDITIONING
1	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
2	0,5	38AH	CONTROL+ CLIMATE CONTROL BLOWER, SPEED
3	0,5	38DH	SHUNT >CONTROL +AIR CONDITIONING
5	0,35	38AS	AIRCONDITIONINGCOMPRESSORCONNECTIONSIGNAL




	DASHBOARD WIRING	B41 02
---	------------------	-----------

CLIMATE CONTROL BLOWER

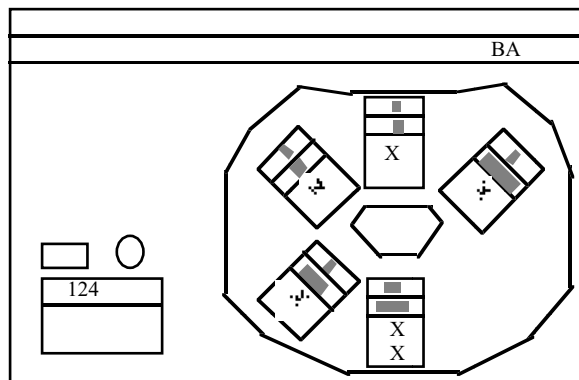
Position	Sectioning		Destination
1	1,5	SP3	ACCESSORIES PROTECTED CLIMATE CONTROL BLOWER
2	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED
3	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED
4	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED



BLOWERSWITCH

Position	Sectioning		Destination
1	1,0	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED
1*	0,5	38AH	CONTROL + CLIMATE CONTROL BLOWER, SPEED + AIR CONDITIONING SYSTEM RELAY COIL (ONBOARD)
2	1,5	38AJ	CONTROL + CLIMATE CONTROL BLOWER, SPEED
3	1,5	38AK	CONTROL + CLIMATE CONTROL BLOWER, SPEED
4	0,35	L	+ PARKING LIGHTS > FUSHNLETF05
5	1,5	M	MASS

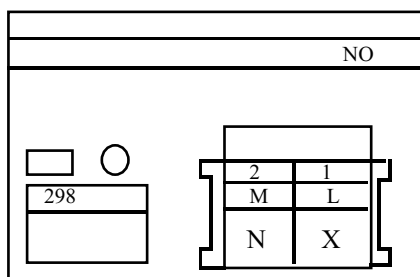
1* - for air conditioning system equipped vehicles




	DASHBOARD WIRING	B41 02
---	------------------	-----------

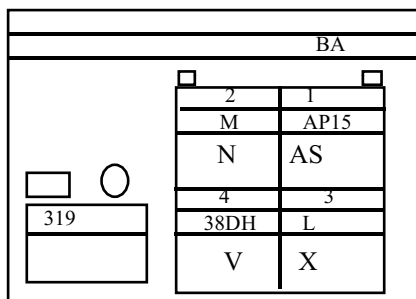
CLIMATE CONTROL LIGHTING

Position	Sectioning		Destination
1	0,35	L+	PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS




AIR CONDITIONING STARTING BUTTON

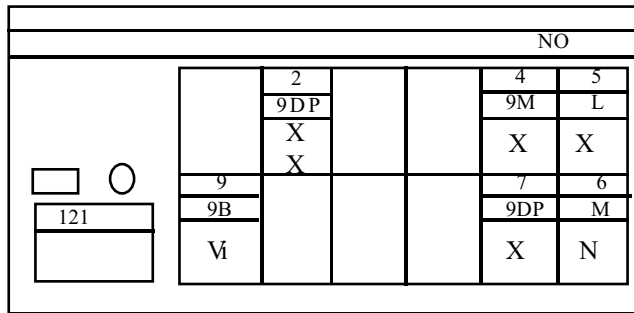
Position	Sectioning		Destination
1	0,5	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET
F03			
2	0,5	M	MASS
3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,5	38DH	CONTROL AIR CONDITIONING




	DASHBOARD WIRING	B41 02
---	------------------	-----------

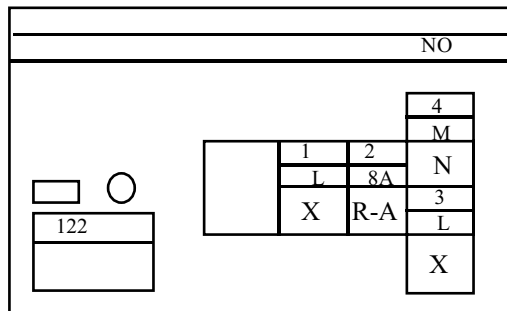
FOGLIGHT SWITCH

Position	Sectioning		Destination
2	0,5	9DP	+PROTECTED REAR FOGLIGHTS
	0,5	9DP	+PROTECTED REAR FOGLIGHTS > FOGLIGHT SWITCH
4	0,5	9M	SHUNT > LIGHTS SWITCH
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,5	9DP	SHUNT > + PROTECTED REAR FOGLIGHTS
9	0,5	9B	CONTROL + REAR FOGLIGHT




FOGLAMP SWITCH

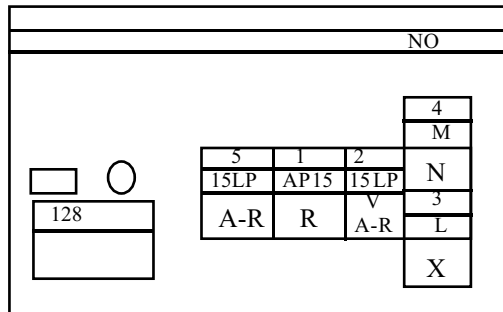
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	8A	CONTROL + FOGLAMPS RELAY
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS



	DASHBOARD WIRING	B41 02
---	------------------	-----------


REAR WINDOW DEFROSTING SWITCH
(Pulse type)

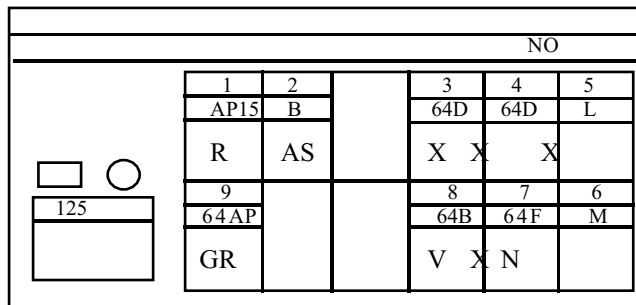
Position	Sectioning		Destination
1	0,5	AP15	+ PROTECTED D.C. > FUSE OUTLET F03
2	0,5	15LP	SHUNT > PROTECTED REAR WINDOW DEFROSTING
2	0,5	15LP	+ PROTECTED REAR WINDOW DEFROSTING
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	MASS
5	0,5	15LP	SHUNT > PROTECTED REAR WINDOW DEFROSTING




	DASHBOARD WIRING	B41 02
---	------------------	-----------

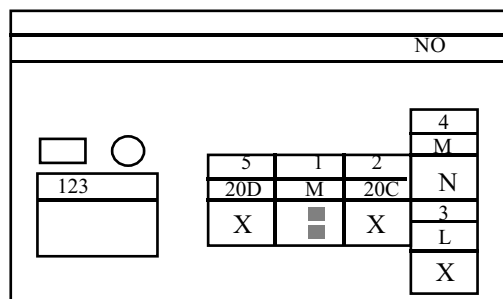
HAZARD SWITCH

Position	Sectioning		Destination
1	1,0	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
2	1,0	B	+ BATTERY
3	0,5	64C	LEFT TURNING LIGHTS CONTROL
4	0,5	64D	RIGHT TURNING LIGHTS CONTROL
5	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
6	0,35	M	MASS
7	0,35	64F	CONTROL + HAZARD INDICATOR
8	1,0	64B	CONTROL + TURNING RELAY
9	1,0	64AP	+ PROTECTED TURNING LIGHTS > FUSE OUTLET F04




DOORS LOCKING SWITCH

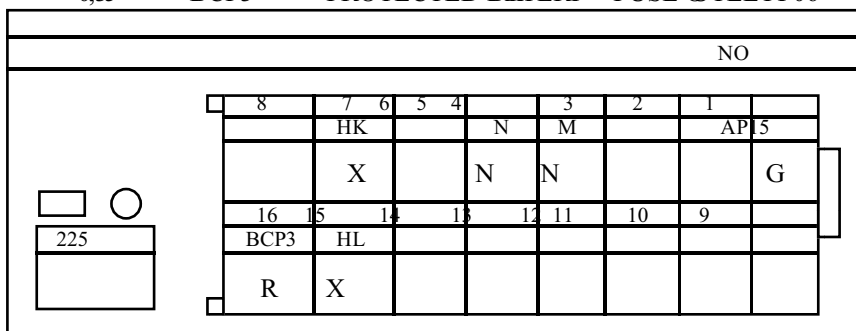
Position	Sectioning		Destination
5	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > SWITCH
1	0,5	M	MASS
1	0,35	M	SHUNT > MASS
2	0,5	20C	CONTROL + DOORS ELECTRIC UNLOCKING > SWITCH
3	0,5	L	PARKING LIGHTS > FUSE OUTLET F05
4	0,35	M	SHUNT > MASS




	<p>DASHBOARD WIRING</p>	<p>B41 02</p>
---	-------------------------	-------------------

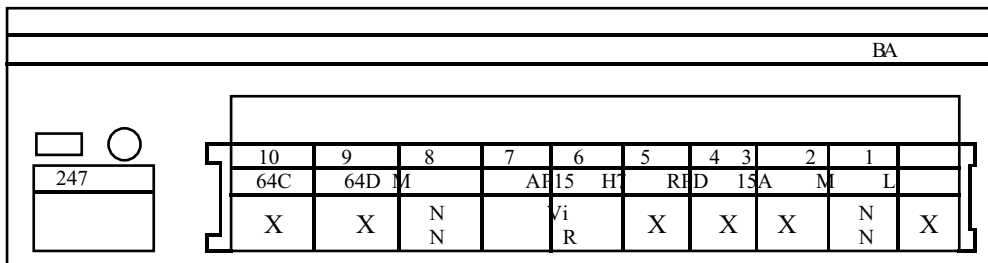
DIAGNOSIS SOCKET

Position	Sectioning		Destination
1	0,35	AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET
F03			
4	0,35	M	MASS
5	0,35	N	ELECTRONCMASS
7	0,35	HK	DIAGNOSIS SIGNAL- LINE K
15	0,35	HL	DIAGNOSIS SIGNAL-LINEL
16	0,35	BCP3	+ PROTECTED BATTERY > FUSE @TLETF06




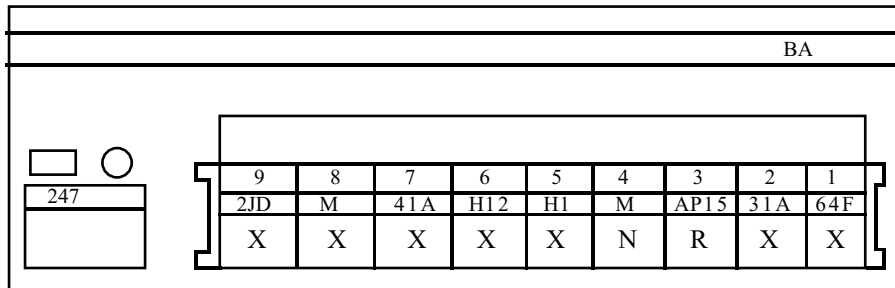
INSTRUMENT PANEL


Position	Sectioning		Destination
1	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,75	M	MASS
2	0,5	M	SHUNT > MASS
3	0,35	15A	REARWINDOWDEFROSTINGINDICATOR-CONTROL
4	0,35	RPD	PROTECTEDRIGHTHIGHBEAMLIGHTS>INDICATOR
5	0,35	H7	RPM-METER SIGNAL> INJECTION COMPUTER
6	0,5	AP15	+AFTER PROTECTED CONTACT > FUSE OUTLET F03
6	0,5	AP15	SHUNT > +AFTER PROTECTED CONTACT
7			
8	0,5	M	SHUNT > MASS
8	0,5	M	SHUNT > MASS
9	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
10	0,35	64C	LEFTTURNINGLIGHTSCONTROL

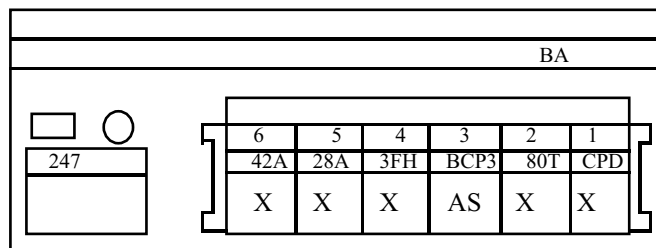


	DASHBOARD WIRING	B41 02
---	------------------	-----------

Position	Sectioning		Destination
1	0,35	64F	CONTROL + HAZARD INDICATOR
2	0,35	31A	WATER TEMPERATURE INDICATOR – CONTROL
3	0,5	AP15	SHUNT > +AFTER PROTECTED CONTACT
4	0,5	M	SHUNT > MASS
5	0,35	H1	ICP HANDBRAKE INDICATOR – CONTROL
6	0,35	H12	BRAKE PADSWEAR INDICATOR – CONTROL
7	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
8	0,35	M	FUELLEVELWARNING SIGNAL
9	0,6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL




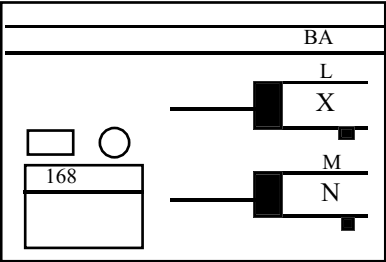
Position	Sectioning		Destination
1	0,35	CPD	PROTECTED RIGHTLOWBEAMLIGHTS> INDICATOR
2	0,35	80T	ANTI-STARTING INDICATOR - CONTROL
3	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY> FUSE OUTLET F06
4	0,35	3FH	ANTI-POLLUTION FAILURE INDICATOR – CONTROL
5	0,35	28A	OIL PRESSURE INDICATOR – CONTROL
6	0,35	42A	SIGNAL +WATER TEMPERATURE






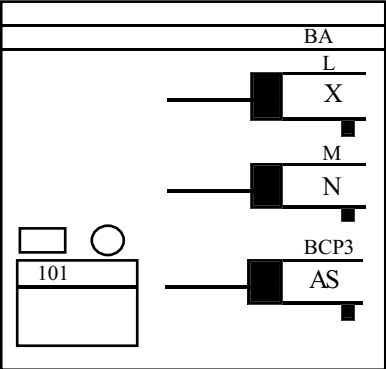
DOCUMENTS COMPARTMENT LIGHTING LAMP

Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS> FUSE OUTLET 05
2	0,5	M	MASS




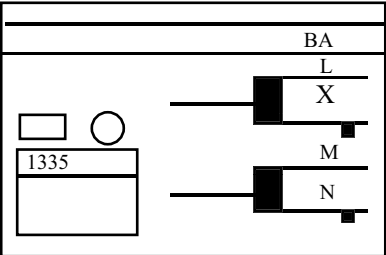
ELECTRIC LIGHTER

Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS> FUSE OUTLET 05
2,5	M	M	MASS
3	0,75	BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06



FRONT ASHTRAY LIGHTING

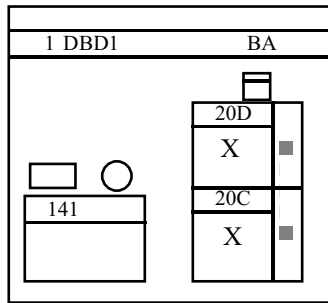
Position	Sectioning		Destination
1	0,35	L	PARKING LGHTS> FUSE OUTLET 05
2	0,5	M	MASS



	DOORS WIRING	B41 02
---	--------------	-----------

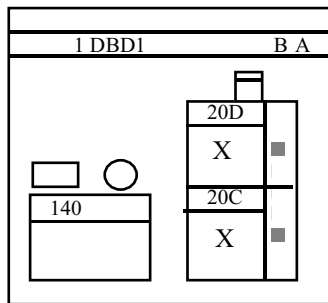
RIGHT FRONT DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS



LEFT FRONT DOOR ACTUATOR

Position	Sectioning		Destination
1	0.	20D	CONTROL+ DOORSELECTRIC LOCKING<ACTUATORS
2	0.5	20C	CONTROL+DOORSELECTRICUNLOCKING>ACTUATORS

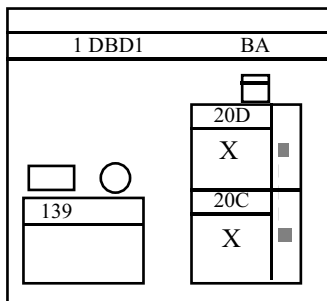


	DOORS WIRING	B41 02
---	--------------	-----------

LEFT REAR DOOR ACTUATOR

Position	Sectioning		Destination
1	0.5	20D	CONTROL + DOORS ELECTRIC LOCKING
>ACTUATORS			
2	0.5	20C	CONTROL + DOORS ELECTRIC UNLOCKING >

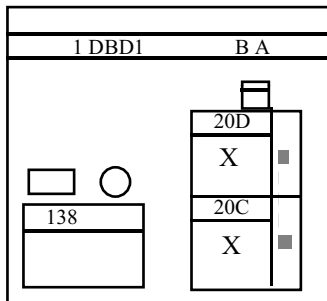
ACTUATORS



RIGHT REAR DOOR ACTUATOR


Position	Sectioning		Destination
1	0.5	20D	CONTROL + DOORS ELECTRIC LOCKING
>ACTUATORS			
2	0.5	20C	CONTROL + DOORS ELECTRIC UNLOCKING >

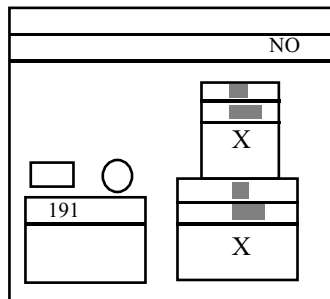
ACTUATORS




	DOORS WIRING	B41 02
---	--------------	-----------

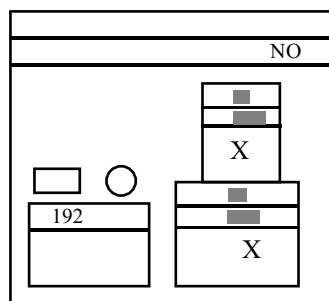
RIGHT FRONT DOOR SPEAKER

Position	Sectioning		Destination
1	0.35	34E	SIGNAL +RIGHT FRONTSPEAKER(RADIO)
2	0.35	34F	SIGNAL -RIGHT FRONTSPEAKER (RADIO)




LEFT FRONT DOOR SPEAKER

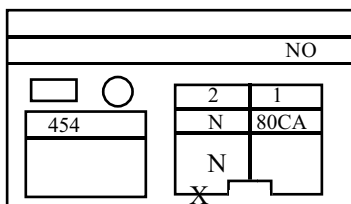
Position	Sectioning		Destination
1	0.35	34G	SIGNAL + LEFT FRONTSPEAKER (RADIO)
2	0.35	34H	SIGNAL -LEFTFRONT SPEAKER (RADIO)




	REAR WIRING	B41 02
---	-------------	-----------

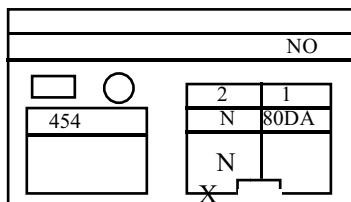
RIGHT VOLUME SENSOR (RX)

Position	Sectioning		Destination
1	0.35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0.35	N	ELECTRONIC MASS




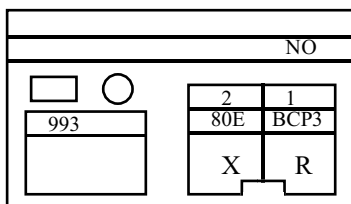
LEFT VOLUME SENSOR (TX)

Position	Sectioning		Destination
1	0.35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
2	0.35	N	ELECTRONIC MASS




ANTI INTRUSION INDICATOR LED

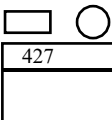
Position	Sectioning		Destination
1	0.35	BCP3	+ CEILING LAMPS PROTECTED BATTERY OUTLET FUSE F06
2	0.35	80E	ANTI-INTRUSION INDICATOR CONTROL



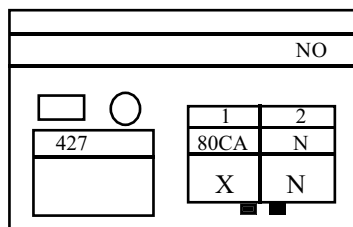
	REAR WIRING	B41 02
---	-------------	-----------

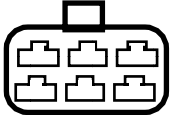
U.C.E. ANTI-INTRUSION

Position	Sectioning		Destination
1	0,5	64D	RIGHT TURNING LIGHTS > UCE ANTI-INTRUSION > DOORS LOCKING/UNLOCKING INFO
2	0,35	M	MASS
5	0,5	64D	RIGHT TURNING LIGHTS CONTROL
6	0,5	BCP3	+ CEILING LAMP PROTECTED BATTERY > FUSE OUTLET F06
6	0,35	BCP3	+ CEILING LAMP PROTECTED BATTERY
7	0,5	64C	LEFT TURNING LIGHTS CONTROL
8	0,35	80E	ANTI-INTRUSION INDICATOR CONTROL
9	0,35	13A	CEILING LAMP LIGHTING - CONTROL > CONTACTS
12	0,35	AP15	+ PLUS AFTER PROTECTED CONTACT > FUSE OUTLET F08
14	0,35	20D	CONTROL + DOORS LOCKING & ACTUATORS
15	0,35	20C	CONTROL + DOORS UNLOCKING > ACTUATORS
18	0,35	80FC	SIREN CONTROL SUPPLY
23	0,35	80DA	LEFT FRONT ULTRASONIC DETECTION INFO
24	0,35	N	ELECTRON MASS
24	0,35	N	MASS


BA												
 427	24	23	22	21	20	19	18	17	16	15	14	13
	N	80DA					80FC			20C	20D	
	N	X					GR-VI			X	X	
	N											
	12	11	10	9	8	7	6	5	4	3	2	1
AP15			13A	M	64C	BCP3	64D			M	64D	
G			X	X	X	R	R			V-A	X	

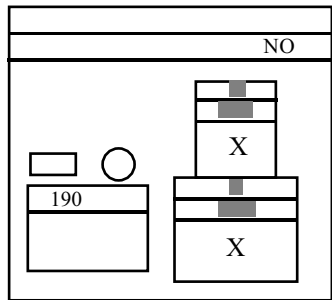
Position	Sectioning		Destination
1	0,35	80CA	RIGHT FRONT ULTRASONIC EMISSION
2	0,35	N	ELECTRON MASS




	<p>REAR WIRING</p>	<p>B41 02</p>
---	--------------------	-------------------

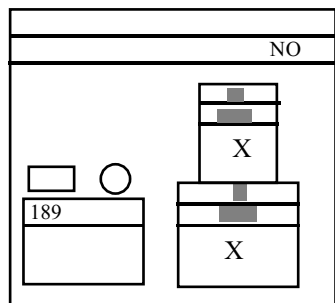
LEFT REAR SPEAKER

Position	Sectioning		Destination
1	0.35	34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
2	0.35	34B	SIGNAL - LEFT REAR SPEAKER (RADIO)




RIGHT REAR SPEAKER

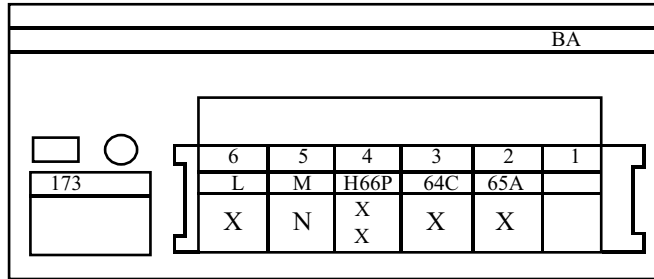
Position	Sectioning		Destination
1	0.35	34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
2	0.35	34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)




	REAR WIRING	B41 02
---	-------------	-----------

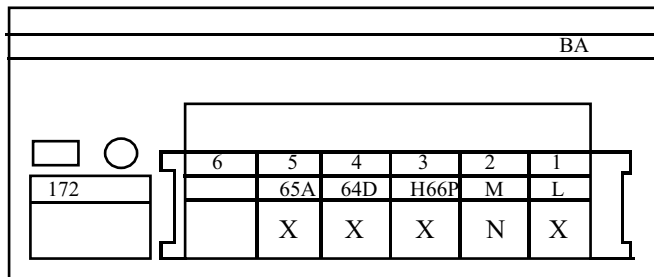
LEFT REAR LAMP

Position	Sectioning		Destination
1			
2	0,5	65A	CONTROL + STOP LIGHTS
3	0,5	64C	LEFT TURNING LIGHTS CONTROL
4	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
4	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > RIGHT REAR LAMP
5	0,5	M	MASS
6	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05




RIGHT REAR LAMP

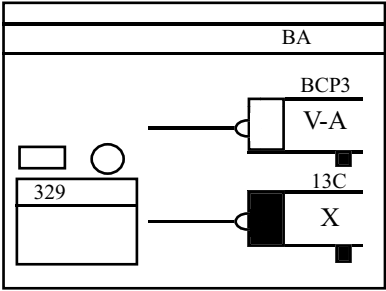
Position	Sectioning		Destination
1	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
2	0,5	M	MASS
3	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
4	0,5	64D	CONTROL + REVERSE DRIVING LIGHTS & RIGHT TURNING LAMP
5	0,5	65A	CONTROL + STOP LIGHTS
6			




	REAR WIRING	B41 02
---	-------------	-----------

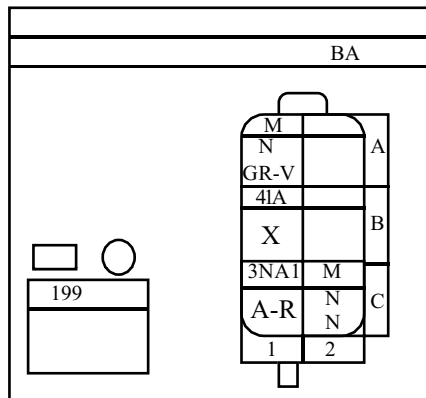
RIGHT FRONT CEILING LAMP

Position	Sectioning		Destination
1	0,35	BCP3	+ CEILING LAMP PROTECTED BATTERY
2	0,5	13C	CEILING LAMP CONTROL




FUEL LEVEL TRANSMITTER AND ELECTRIC PUMP

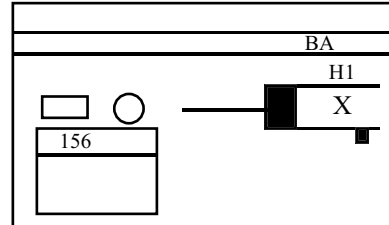
Position	Sectioning		Destination
A1	0,35	M	MASS > SHUNT
A1	0,35	M	MASS > INSTRUMENT PANEL
B1	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C1	1,5	3NA1	+ FUEL PUMP
C2	1,5	M	MASS
C2	0,35	M	MASS > SHUNT






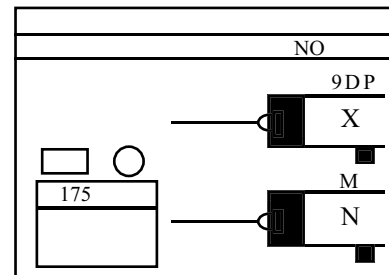
HANDBRAKE CONTACT

Position	Sectioning		Destination
1	0.35	HI	ICP HANDBRAKE INDICATOR - CONTROL




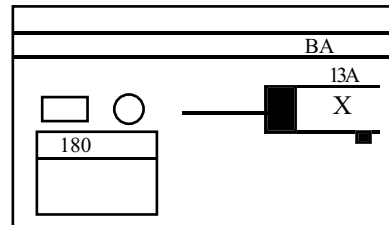
LEFTFOG LIGHT

Position	Sectioning		Destination
1	0.5	9DP	+PROTECTED REARFOGLIGHTS
2	0,5	M	MASS




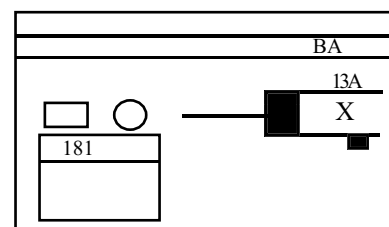
LEFT FRONT DOOR CONTACT

Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS



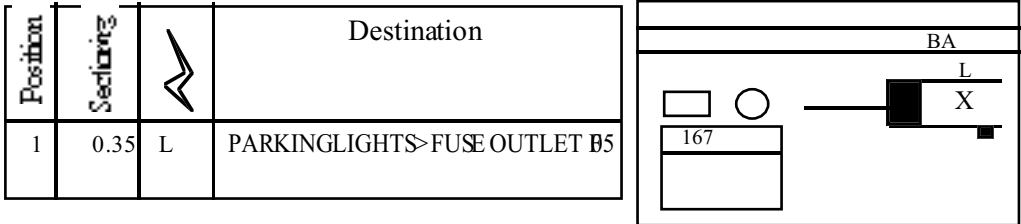
RIGHT FRONT DOOR CONTACT

Position	Sectioning		Destination
1	0.35	13A	CEILING LAMP LIGHTING CONTROL > DOORS CONTACTS





LEFT LICENSE PLATE LAMP



RIGHT LICENSE PLATE LAMP

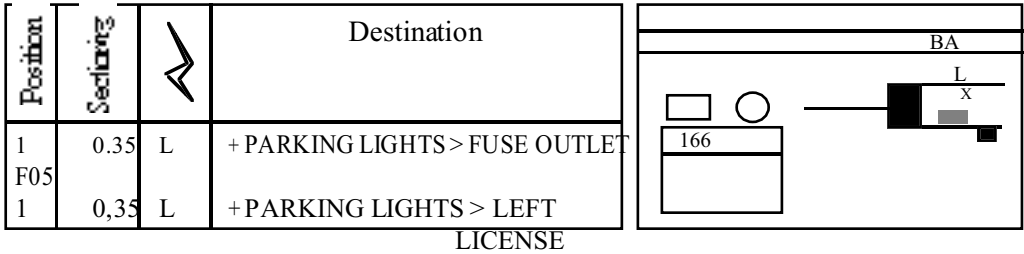
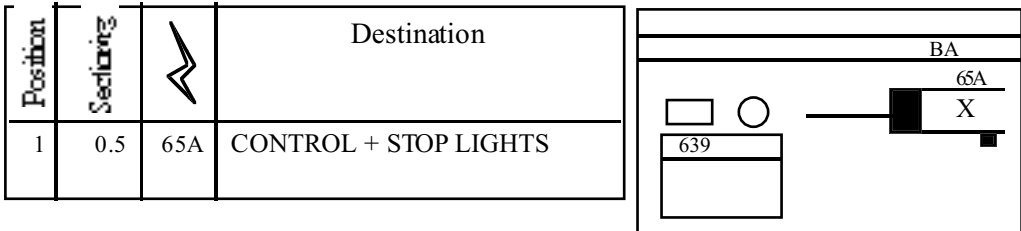
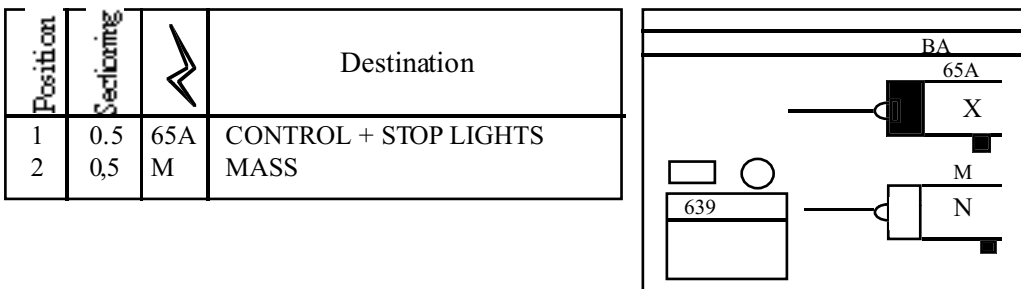


PLATE LAMP

STOP LAMP S3 (ON ROOF)




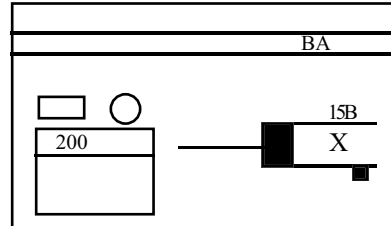
STOP LAMP S3 (INAILERON)




	HATCHBACK WIRING	B41 01
---	------------------	-----------

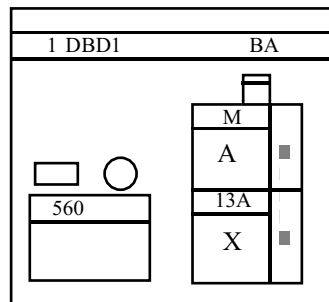
REAR WINDOW DEFROSTING

Position	Sectioning		Destination
1	2,0	15B	CONTROL + HATCHBACK REAR WINDOW DEFROSTING




HATCHBACK CONTACT

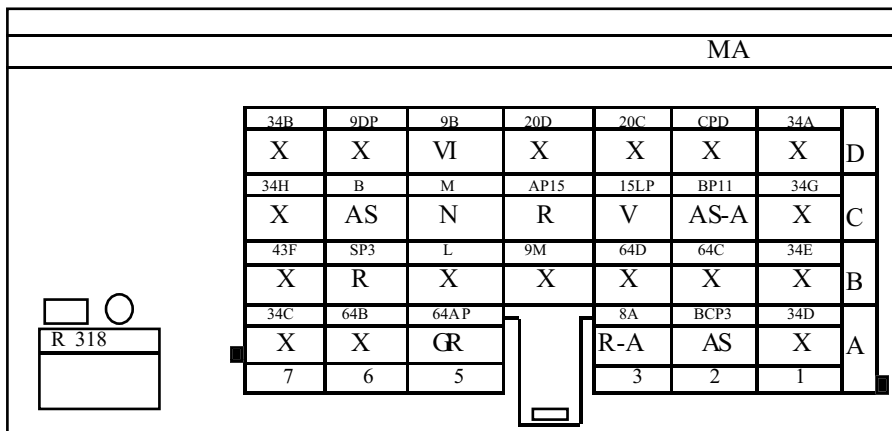
Position	Sectioning		Destination
1	0,35	M	MASS
2	0,35	13A	CEILING LIGHTING CONTROL > HATCHBACK CONTACT ANTI-INTRUSION UCE > HATCHBACK CONTACT



	CONNECTIONS	B41 02
---	-------------	-----------

DASHBOARD WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	34D	SIGNAL+ RIGHTREAR SPEAKER
A2	1,0	BCP3	SUPPLY(+IC)
A3	0,50	8A	+ FOG LAMPS RELAY
A5	1,0	64AP	+PROTECTEDTURNINGLIGHTS
A6	1,0	64B	CONTROL+ TURNINGRELAY
A7	0,35	34C	SIGNAL- RIGHTREAR SPEAKR
B1	0,35	34E	SIGNAL+ RIGHT FRONT SPEAKER
B2	0,5	64C	LEFTTURNINGLIGHTSCONTROL
B3	0,5	64D	RIGHTTURNINGLIGHTSCONTROL
B4	0,5	9M	SHUNT > FOG LAMP SWITCH
B5	0,5	L	+PARKINGLIGHTS
B6	1,5	SP3	+ PROTECTED ACCESORES> CLIMATE CONTROLBLOWER
B7	0,35	34F	SIGNAL -RIGHTFRONT SPEAKR
C1	0,35	34G	SIGNAL +LEFTFRONT SPEAKER
C2	0,75	BP11	+ PROTECTED BATTERY> RADIO
C3	0,5	15LP	CONTROL+PROTECTEDREARWINDOWDEFROSTING
C4	1,5	AP15	+AFTER PROTECTED CONTACT
C5	2,0	M	MASS
C6	1,0	B	+ BATTERY > HAZARD SWITCH
C7	0,35	34H	SIGNAL -LEFTFRONT SPEAKR
D1	0,35	34A	SIGNAL +LEFTREAR SPEAKER
D2	0,35	CPD	RIGHTPROTECTEDMEETINGLIGHTS>INDICATOR
D3	0,5	20C	CONTROL+DOORS ELECTRICUNLOCKING> SWITCH
D4	0,5	20D	CONTROL+DOORS ELECTRICLOCKING>SWITCH
D5	0,5	9B	CONTROL + REAR FOGAMP
D6	0,5	9DP	+PROTECTEDREARFOGLIGHTS
D7	0,35	34B	SIGNAL -LEFTREAR SPEAKR








	CONNECTIONS	B41 02
---	-------------	-----------


DASHBOARD/FRONT WIRING CONNECTION


FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	0,5	64D	RIGHT TURNING LIGHTS CONTROL
A2	0,35	31A	WATER TEMPERATURE WARNING
A3	0,35	28A	OIL PRESSURE WARNING
A4			
A5	0,35	42A	WATER TEMPERATURE SIGNAL
A6	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
A7	0,35	15A	REAR WINDOW DEFROSTING INDICATOR-CONTROL
B1	0,75	AP10	+ AFTER PROTECTED CONTACT > FUSE OUTLET F01
B2	0,35	RPD	PROTECTED RIGHT HIGH BEAM
B3	0,35	64C	LEFT TURNING LIGHTS CONTROL
B4	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
B5	0,35	H1	HANDBRAKE INDICATOR-CONTROL
B5	0,35	H1	ICP INDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ ALTERNATOR EXCITATION
C1	0,35	47A	- FUEL MINIMAL LEVEL WARNING SIGNAL
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	0,35	3FH	ANTI-POLLUTION INDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > INJECTION COMPUTER
C5	0,35	HK	DIAGNOSIS SIGNAL LINE K > UCE DECODER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > INJECTION COMPUTER
C6	0,35	HL	DIAGNOSIS SIGNAL LINE L > UCE DECODER
C7	0,35	M	MASS

MA							
	M	41A	3FH	80T	HK	HL	M
C	X	X	X	X			N-G
B	AP10	RPD	64C	38AS	H1	H12	2JD
A	R-G	X	X	X		X	X
	64D	31A	28A			H7	15A
	X	X	X		X	X	X
	1	2	3		5	6	7




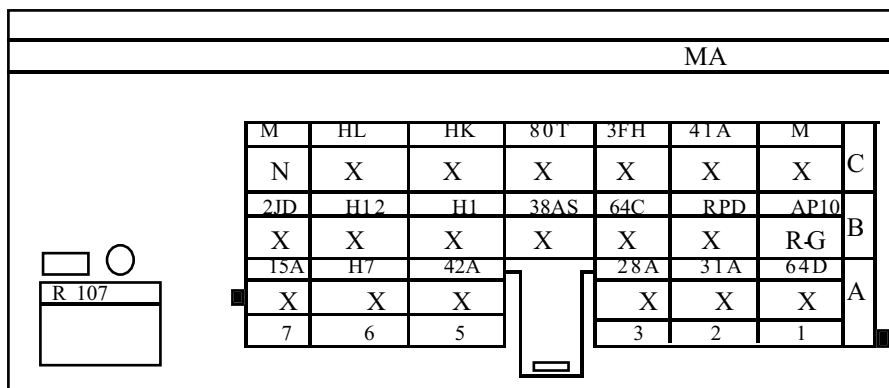




	CONNECTIONS	B41 02
---	-------------	-----------

DASHBOARD WIRING CONNECTION


Position	Sectioning		Destination
A1	0,35	64D	RIGHTTURNINGLIGHTSCONTROL> INDICATOR
A2	0,35	31A	INSRUMENTPANEL>WATERTEMPERATUREWARNING
A3	0,35	28A	INSTRUMENTPANEL> OILPRESSURE WARNING
A4			
A5	0,35	42A	SIGNAL +WATER TEMPERATURE
A6	0,35	H7	RPM-METERSIGNAL
A7	0,35	15A	REAR WINDOWDEFROSTINGINDICATOR-CONTROL
B1	0,75	AP10	+AFTER PROTECTED CONACT
B2	0,35	RPD	PROTECTED RIGHHIGHBEAM> INDICATOR
B3	0,35	64C	LEFTTURNING IIGHTS CONTROL> INDICATOR
B4	0,35	38AS	AIR-CONDITIONINGCOMPRESSORCONNECTIONSIGNAL> RELAY
B5	0,35	H1	ICP HANDBRAKEINDICATOR-CONTROL
B6	0,35	H12	BRAKE PADS WEAR INDICATOR-CONTROL
B7	0,6	2JD	+ALTERNATOR EXCITATION > INSTRUMENT PANEL
C1	0,35	M	- FUELMINIMALLEVELWARNING SIGNAL
C2	0,35	41A	SIGNAL+FUELLEVELTRANSMITTER
C3	0,35	3FH	ANTI-POLIUTIONINDICATOR-CONTROL
C4	0,35	80T	ANTI-STARTING INDICATOR-CONTROL
C5	0,35	HK	DIAGNOSISSIGNALLINEK
C6	0,35	HL	DIAGNOSISSIGNALLINEL
C7	0,35	M	MASS



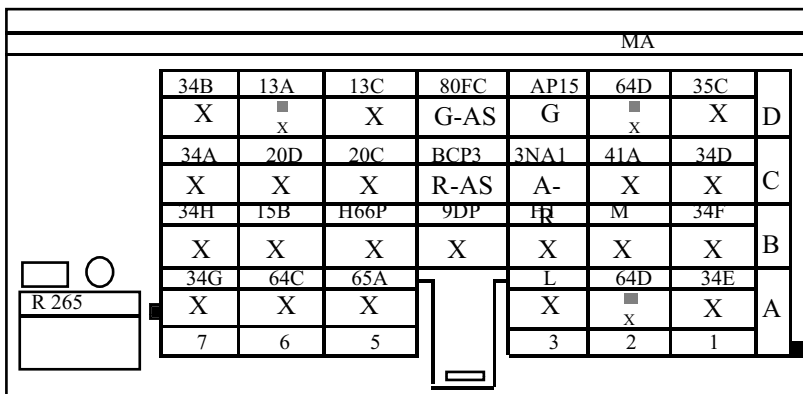
CONNECTORS AND CONNECTIONS WIRES FUNCTION



REAR / FRONT WIRING CONNECTION FRONT WIRING CONNECTION


Position	Sectioning			Destination
A1	0,35		34E	SIGNAL + RIGHT FRONT SPEAKER (RADIO)
A2	0,5		64D	RIGHT TURNING LIGHTS CONTROL > TURNING SWITCH
A2*	0,5		64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
A3	0,5		L	+ PARKING LIGHTS > FUSE OUTLET F05
A4				
A5	1,0		65A	CONTROL + STOP LIGHTS
A6	0,5		64C	LEFT TURNING LIGHTS CONTROL
A7	0,35		34G	SIGNAL + LEFT FRONT SPEAKER (RADIO)
B1	0,35		34F	SIGNAL - RIGHT FRONT SPEAKER (RADIO)
B2	0,35		M	- FUEL MINIMAL LEVEL WARNING SIGNAL
B3	0,35		H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5		9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5		H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	2,0		15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35		34H	SIGNAL - LEFT FRONT SPEAKER (RADIO)
C1	0,35		34D	SIGNAL + RIGHT REAR SPEAKER (RADIO)
C2	0,35		41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5		3NA1	+ FUEL PUMP > CHOKE SENSOR
C4	0,5		BCP3	+ CEILING LAMPS PROTECTED BATTERY > FUSE OUTLET F06
C5	0,5		20C	CONTROL + DOOR ELECTRIC UNLOCKING > UCE DECODER
C6	0,5		20D	CONTROL + DOORS ELECTRIC LOCKING > UCE DECODER
C7	0,35		34A	SIGNAL + LEFT REAR SPEAKER (RADIO)
D1	0,35		34C	SIGNAL - RIGHT REAR SPEAKER (RADIO)
D2*	0,5		64D	SHUNT > RIGHT TURNING LIGHTS CONTROL
D2	0,5		64D	FLASH RELAY DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL
D3	0,35		AP15	+ AFTER PROTECTED CONTACT > FUSE OUTLET F03
D4	0,35		80FC	SIREN CONTROL SUPPLY
D5	0,5		13C	CEILING LAMPS CONTROL
D6	0,35		13A	CONTROL - CEILING LAMPS LIGHTING > DOORS CONTACTS
D6*	0,35		13A	CONTROL - CEILING LAMPS LIGHTING > HOOD CONTACTS
D7	0,35		34B	SIGNAL - LEFT REAR SPEAKER (RADIO)

A2*, D2* - for vehicles without Anti-intrusion System
 D4, D6* - for Anti-intrusion System provided vehicles




	CONNECTIONS	B41 02
---	-------------	-----------

REAR WIRING CONNECTION

Position	Sectioning		Destination
A1	0,35	34E	SIGNAL + RIGHT REAR SPEAKER
A2	0,5	64D	RIGHT TURNING LIGHTS CONTROL
A2*	0,5	64D	RIGHT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A3	0,5	L	+ PARKING LIGHTS > FUSE OUTLET F05
A4			
A5	1,0	65A	CONTROL + STOP LIGHTS
A6	0,5	64C	LEFT TURNING LIGHTS CONTROL
A6*	0,5	64C	LEFT TURNING LIGHTS CONTROL > UCE ANTI-INTRUSION
A7	0,35	34G	SIGNAL + LEFT FRONT SPEAKER
B1	0,35	34F	SIGNAL - RIGHT FRONT SPEAKER
B2	0,35	M	- FUEL MINIMAL LEVEL WARNING SIGNAL
B3	0,35	H1	ICP HANDBRAKE INDICATOR-CONTROL
B4	0,5	9DP	+ PROTECTED REAR FOG LIGHTS
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	2,0	15B	CONTROL + REAR WINDOW DEFROSTING
B7	0,35	34H	SIGNAL - LEFT FRONT SPEAKER
C1	0,35	34D	SIGNAL + RIGHT FRONT SPEAKER
C2	0,35	41A	SIGNAL + FUEL LEVEL TRANSMITTER
C3	1,5	3NA1	+ FUEL PUMP
C4	0,5	BCP3	+ CEILING LAMPS PROTECTED BATTERY
C5	0,5	20C	CONTROL + DOOR ELECTRIC UNLOCKING > ACTUATORS
C6	0,5	20D	CONTROL + DOORS ELECTRIC LOCKING > ACTUATORS
C7	0,35	34A	SIGNAL + LEFT REAR SPEAKER
D1	0,35	34C	SIGNAL - RIGHT REAR SPEAKER
D2	0,5	64D	DOORS ELECTRIC LOCKING/UNLOCKING SIGNAL > UCE ANTI-INTRUSION
D3	0,35	AP15	+ AFTER PROTECTED CONTACT > UCE ANTI-INTRUSION
D4	0,35	80FC	SIREN CONTROL SUPPLY
D5	0,5	13C	RIGHT CEILING LAMP CONTROL
D6	0,35	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK DOORS CONTACTS
D7	0,35	34B	SIGNAL - LEFT REAR SPEAKER

D2, D3, D4, A2*, A6* - for anti-intrusion system provided vehicles

MA							
	34C	64D	AP15	80FC	13C	13A	34B
D	X	X	X	GR-VI	X	X	X
C	34D	41A	3NA1	BCP3	20C	20D	34A
B	34F	M	H1	9DP	H66P	15B	34H
A	34E	64D	L		65A	64C	34G
	X	■	X		X	■	X
	1	2	3		5	6	7

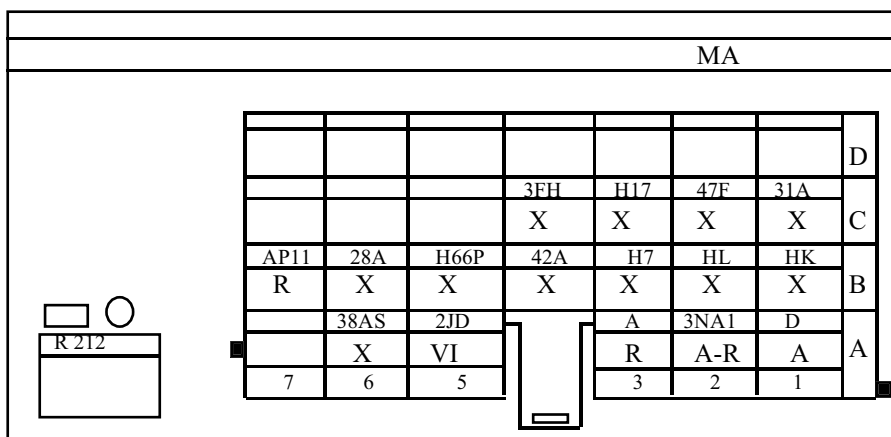


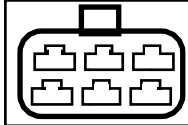
R 265



ENGINE / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
A1	3,0	D	+ STARTERCONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTDN SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	ANTI-POLLUTION INDICATOR-CONTROL





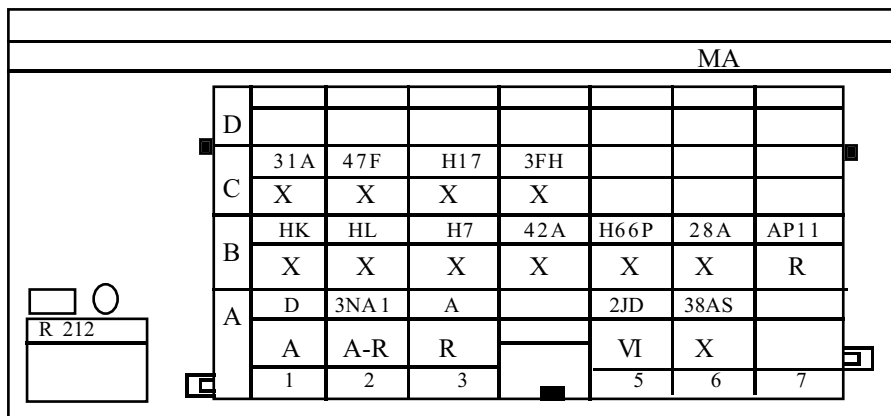
CONNECTIONS

B41
02

ENGINE WIRING CONNECTION


Position	Sectioning		Destination
A1	3,0	D	+ STARTER CONTROL
A2	1,5	3NA1	+ FUEL PUMP
A3	1.0	A	SUPPLY + AFTER PROTECTED CONTACT
A4			
A5	0,6	2JD	+ ALTERNATOR EXCITATION > INSTRUMENT PANEL
A6	0,35	38AS	AIR-CONDITIONING COMPRESSOR CONNECTION SIGNAL
A7			
B1	0,35	HK	DIAGNOSIS SIGNAL LINE K
B2	0,35	HL	DIAGNOSIS SIGNAL LINE L
B3	0,35	H7	RPM-METER SIGNAL > INJECTION COMPUTER
B4	0,35	42A	SIGNAL + WATER TEMPERATURE
B5	0,5	H66P	CONTROL + REVERSE DRIVING LIGHTS > FUSE OUTLET F02
B6	0,35	28A	OIL PRESSURE INDICATOR-CONTROL
B7	0,5	AP11	+ REVERSE DRIVING LIGHTS AFTER PROTECTED CONTACT > CONTACT
C1	0,35	31A	WATER TEMPERATURE INDICATOR-CONTROL
C2	0,35	47F	VEHICLE SPEED SIGNAL
C3	0,35	H17	INJECTION CODED SIGNAL > ANTI-STARTING
C4	0,35	3FH	ANTI-POLLUTION INDICATOR-CONTROL

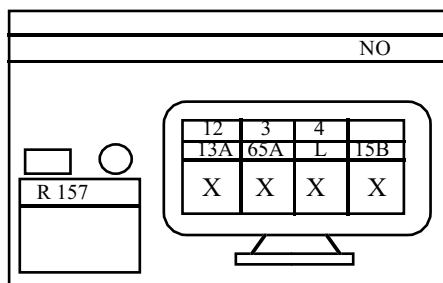
A6 - For air-conditioning system provided vehicles




	<p>CONNECTIONS</p>	<p>B41 02</p>
---	--------------------	-------------------

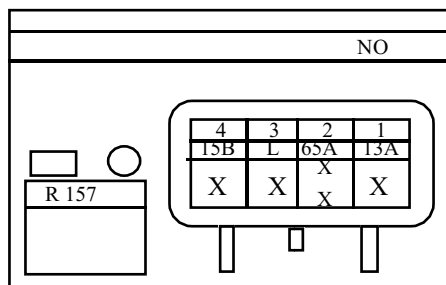
HATCHBACK / REAR WIRING CONNECTION
REAR WIRING CONNECTION

Position	Sectioning		Destination
1 CONTACT	0,5	13A	CEILING LAMPS LIGHTING CONTROL > HATCHBACK UCE ANTI-INTRUSION CONTROL > HATCHBACK
2 CONTACT	0,5	65A	CONTROL + STOP LIGHTS
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




HATCHBACK WIRING CONNECTION

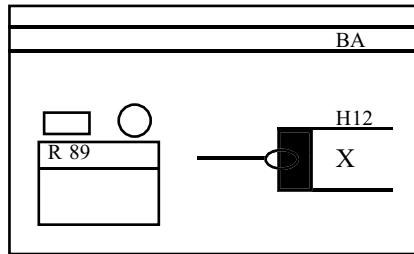
Position	Sectioning		Destination
1 CONTACT	0,35	13A	CONTROL + CEILING LAMPS LIGHTING > HATCHBACK
2	0,35	65A	CONTROL + STOP LIGHTS (ON HOOD)
2	0,35	65A	CONTROL + STOP LIGHTS (ON AILERON)
3	0,35	L	+ PARKING LIGHTS > FUSE OUTLET F05
4	2,0	15B	CONTROL + REAR WINDOW DEFROSTING




	<p>CONNECTIONS</p>	<p>B41 02</p>
---	--------------------	-------------------

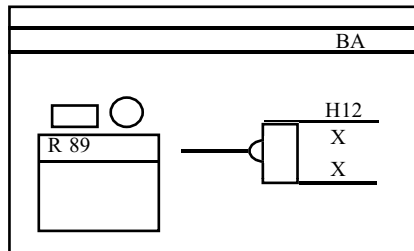
BRAKE PADS WEAR / FRONT WIRING CONNECTION
FRONT WIRING CONNECTION

Position	Sectioning		Destination
1	0,35	H12	BRAKE PADS WEAR INDICATOR - CONTROL



BRAKE PADS WEAR WIRING CONNECTION

Position	Sectioning		Destination
	0,35	H12	BRAKE PADS WEAR INDICATOR – CONTROL > RIGHT PAD
	0,35	H12	BRAKE PADS WEAR INDICATOR – CONTROL > LEFT PAD



WIREFUNCTIONS EXPLANATION

(after 15.02.2002)

LINK CODES	WIRE FUNCTIONS
A	SUPPLY + AFTER CONTACT
AP10	+ AFTER PROTECTED CONTACT>OUTLET FUSE F01
AP11	+ AFTER PROTECTED CONTACT REVERSE DRIVING LIGHTS
AP15	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03
AP29	+ AFTER PROTECTED CONTACT > OUTLET FUSE F03 ENGINE RUNNING
B	+ BATTERY
BCP3	+ PROTECTED BATTERY, CEILING LAMPS
BP11	+ PROTECTED BATTERY > COCKPIT 1
BP17	+ PROTECTED BATTERY> OUTLET FUSE F01
BP2	+ PROTECTED BATTERY> WINDSCREEN WIPER STOPPING IN A FIXED POSITION
BP3	+ PROTECTED BATTERY> OUTLET FUSE F15
BP37	+ PROTECTED BATTERY> OUTLET FUSE F04
BP7	+ PROTECTED BATTERY FUSE 1 MOTOR FAN
BP76	+ PROTECTED BATTERY > LIGHTING CONTROL
BPR1	+ PROTECTED BATTERY > OUTLET FUSE F17> RELAY
C	+ MEETING LIGHTS (LOW BEAM)
CPD	+ MEETING LIGHTS RIGHT PROTECTED
CPG	+ MEETING LIGHTS LEFT PROTECTED
D	+ STARTER CONTROL
H1	CONTROL- HANDBRAKE INDICATOR, BRAKING CIRCUIT ICP
H12	CONTROL-BRAKE PADS WEAR INDICATOR
H17	INJECTION CODED SIGNAL>ANTI-STARTING
H66P	CONTROL+ REVERSE DRIVING LIGHTS
H7	RPM METER SIGNAL
HK	DIAGNOSTIC SIGNAL LINE K
HL	DIAGNOSTIC SIGNAL LINE L
L	+ PARKING LIGHTS
LPD	+ PARKING LIGHTS RIGHT PROTECTED
LPG	+ PARKING LIGHTS LEFT PROTECTED
M	ELECTRIC MASS
ML	BATTERY ELECTRIC MASS
N	ELECTRONIC MASS
NF	MASS: WATER TEMPERATURE SENSOR, AIR, POTENTIOMETER
R	+ ROAD LIGHTS (HIGH BEAM)
RPD	+ ROAD LIGHTS RIGHT PROTECTED
RPG	+ ROAD LIGHTS LEFT PROTECTED
S	+ ACCESSORIES
SP3	+ PROTECTED ACCESSORIES > CLIMATE CONTROL BLOWER
TB1	DETONATION SENSOR SCREENING
2JD	+ ALTERNATOR EXCITATION
3AC	CONTROL- FUEL PUMP RELAY
3AJ	SIGNAL+ VALVE POSITION POTENTIOMETER
3AQ	SIGNAL+ VALVE POTENTIOMETER
3B	SIGNAL+ AIR TEMPERATURE SENSOR
3BB	CANISTER PURGING VALVE CONTROL
3BG	ENGINE RPM SIGNAL > RPM SENSOR
3BL	SIGNAL - RPM ENGINE > RPM SENSOR
3BU	CONTROL 1 IDLING REGULATOR
3BV	CONTROL 2 IDLING REGULATOR
3BW	CONTROL 3 IDLING REGULATOR
3BX	CONTROL 4 IDLING REGULATOR
3C	SIGNAL + WATER TEMPERATURE SENSOR

3CR	CONTROL- INJECTOR 1
3CS	CONTROL- INJECTOR 2
3CT	CONTROL- INJECTOR 3
3CU	CONTROL- INJECTOR 4
3CV	CONTROL- IGNITION COIL CYLINDERS 1-4
3CW	CONTROL- IGNITION COIL CYLINDERS 2-3
3D	ATMOSPHERIC PRESSURE SENSOR> SUPPLY +
3DQ	- DETONATION SENSOR
3F	ATMOSPHERIC PRESSURE SENSOR SIGNAL
3FH	CONTROL-INJECTION FAILURE INDICATOR
3FN	RPM SENSOR SIGNAL
3GF	CONTROL- UPSTREAM OXYGEN SENSOR HEATING
3GG	CONTROL- DOWNSTREAM OXYGEN SENSOR HEATING
3GH	MASS UPSTREAM OXYGEN SENSOR
3GJ	MASS DOWNSTREAM OXYGEN SENSOR
3GK	SIGNAL UPSTREAM OXYGEN SENSOR
3GL	SIGNAL DOWNSTREAM OXYGEN SENSOR
3GN	ATMOSPHERIC PRESSURE SENSOR MASS
3GT	ACTUATORS RELAY MASS
3JK	- WATER TEMPERATURE
3JL	- VALVE POTENTIOMETER
3JN	CONTROL - STEP 1 MOTOR FAN RELAY
3JP	CONTROL- STEP 2 MOTOR FAN RELAY
3JQ	- AIR TEMPERATURE SENSOR
3NA	+ IGNITION COIL, CHOCK SENSOR> PETROL PUMP RELAY
3NA1	+ PETROL PUMP
3NR	+ INJECTORS> ACTUATORS RELAY OUTPUT
3S	SIGNAL + DETONATION SENSOR
8A	+ FOG HEADLAMPS RELAY
8B	+ FOG HEADLAMPS > RELAY
8DP	+ PROTECTED FOG HEADLAMPS
9A	+ REAR FOG LAMPS RELAY CONTROL
9B	CONTROL + REAR FOG LAMPS
9C	CONTROL + REAR FOG LAMPS INDICATOR
9DP	+ PROTECTED REAR FOG LAMPS
9M	SHUNT> FOG LAMPS SWITCH
11A	CONTROL + ROAD LIGHTS
13A	CONTROL - CEILING LAMPS> DOORS CONTACTS
13C	CONTROL> CEILING LAMPS
14A	CONTROL + LOW SPEED WINDSCREEN WIPER
14B	CONTROL + HIGH SPEED WINDSCREEN WIPER
14C	CONTROL + WINDSCREEN WIPER FIX POINT STOPPING
14D	CONTROL LOW SPEED WINDSCREEN WIPER TIMER
14E	CONTROL + WINDSCREEN WIPER TIMER
14K	CONTROL + WINDSCREEN WIPER LOW SPEED
14L	CONTROL + WINDSCREEN WIPER HIGH SPEED
15A	REAR WINDOW DEFROSTING INDICATOR CONTROL
15B	CONTROL + REAR WINDOW DEFROSTING
15LP	CONTROL + PROTECTED REAR WINDOW DEFROSTING
16A	CONTROL + WINDSCREEN WASHING PUMP
20C	CONTROL + DOORS ELECTRIC UNLOCKING

WIREFUNCTIONS EXPLANATION

20D	CONTROL + DOORS ELECTRIC LOCKING
20F	RADIO-FREQUENCY RECEPTION SIGNAL
28A	CONTROL - OIL PRESSURE INDICATOR
31A	CONTROL - WATER TEMPERATURE INDICATOR
34A	SIGNAL - LEFT REAR LOUDSPEAKER
34B	SIGNAL - LEFT REAR LOUDSPEAKER
34C	SIGNAL - RIGHT REAR LOUDSPEAKER
34D	SIGNAL + RIGHT REAR LOUDSPEAKER
34E	SIGNAL + RIGHT FRONT LOUDSPEAKER
34F	SIGNAL - RIGHT FRONT LOUDSPEAKER
34G	SIGNAL + LEFT FRONT LOUDSPEAKER
34H	SIGNAL - LEFT FRONT LOUDSPEAKER
38AH	CONTROL + CLIMATE CONTROL BLOWER SPEED 1
38AJ	CONTROL + CLIMATE CONTROL BLOWER SPEED 2
38AK	CONTROL + CLIMATE CONTROL BLOWER SPEED 3
38AL	CONTROL + CLIMATE CONTROL BLOWER SPEED 4
38AS	AC CONTROL
38DH	CONTROL + AIR CONDITIONING
38K	AC CONTROL RELAY > UCE INJECTION
38N	CONTROL + AC CLUTCH RELAY > AC PRESSURE SENSOR
38R	CONTROL + AC COMPRESSOR CLUTCH
38U	- FREON PRESSURE SENSOR
38X	FREON PRESSURE SENSOR SIGNAL
38Y	+ FREON PRESSURE SENSOR
41A	SIGNAL + FUEL LEVEL TRANSMITTER
42A	SIGNAL + WATER TEMPERATURE
47A	- MINIMUM LEVEL FUEL WARNING
47F	VEHICLE SPEED SIGNAL
49B	CONTROL + COOLING BLOWER
49C	CONTROL + COOLING BLOWER RELAY
49F	CONTROL + AIR CONDITIONING
49L	CONTROL + COOLING BLOWER LOW SPEED RESISTANCE
64A	SUPPLY + TURNING
64AP	+ PROTECTED TURNING LIGHTS
64B	CONTROL + TURNING RELAY
64C	LEFT TURNING LIGHTS CONTROL
64D	RIGHT TURNING LIGHTS CONTROL
64E	CONTROL + TURNING INDICATOR
64F	CONTROL + HAZARD INDICATOR
64P	+ PROTECTED SIGNALING
65A	CONTROL + STOP LIGHTS
67A	CONTROL + ACOUSTIC WARNING
67C	CONTROL + ACOUSTIC WARNING FUSE
80BC	+ INERTIA CONTACT
80BD	FLASH RELAY CONTROL
80CA	RIGHT FRONT ULTRASONIC EMISSION
80DA	LEFT FRONT ULTRASONIC DETECTION INFORMATION
80E	ANTI-INTRUSION INDICATOR CONTROL
80FC	SIREN CONTROL SUPPLY
80T	CONTROL - ANTI-STARTING INDICATOR
80X	ANTI-STARTING RECEIVER SIGNAL ROUTE