



Electronics and wiring manual

TS30

9020-225Y

Rev.:00

APLU5L1

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PAGE REVISION CONTROL TABLE

Vehicle Name : TS-30
Vehicle Code : APLU5L1
Wiring Manual Publish No : 9020-225Y
Wiring Manual Publish Date : 01.March.2013

PAGE REVISION CONTROL TABLE

REVISION PAGE	REVISION DATE	REVISION NO	SERVICE BULLETIN NO	DESCRIPTION

00.1.1 General Information

The Aim of this User's Manual

The Electrical Wiring Manual is prepared to explain how to service your vehicle in the safest and most efficient way.

Safety instructions given in this manual are intended to protect persons and properties.

Therefore, before operating the vehicle or before carrying out any maintenance work, read this manual completely and carefully.

Any injury or damage arisen from noncompliance with the safety instructions given in this manual is the responsibility of that vehicle's owner.

This manual is intended to be used commonly for all variants of TOURMALIN CUMMINS EURO 5. Therefore some properties of your vehicle may not comply with those indicated in this manual.

Use of Genuine Parts and Accessories

For a safer and longer service life of the vehicle, use only TEMSA genuine spare parts, accessories or parts which have been approved and tested by TEMSA.

All genuine parts have been approved by TEMSA by means of testing their reliability, endurance and safety factors.

TEMSA does not take any responsibility for any injury or damage due to use of non-approved third party products.

Any alteration of the vehicle may interfere with safety features built into the vehicle and may lead to an accident resulting in serious injury or death.

Service and Maintenance

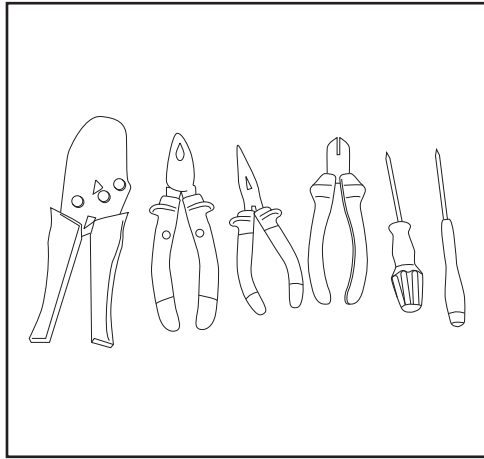
The service and maintenance operations should be carried out by authorized services and be in compliance with TEMSA directives.



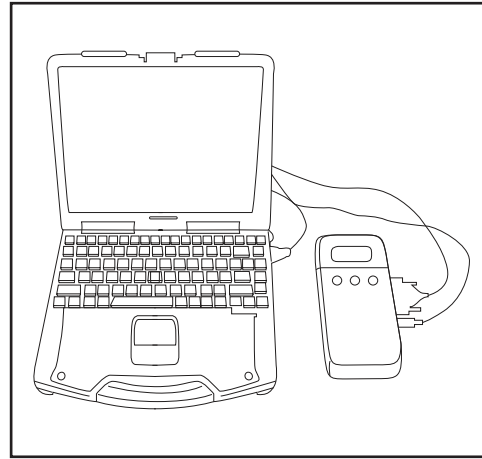
WARNING

Technical information and properties of the vehicles stated within this Electrical Wiring Manual are valid on the date of issue. TEMSA reserves the right to make any necessary changes to the features of its products without giving any advance notice.

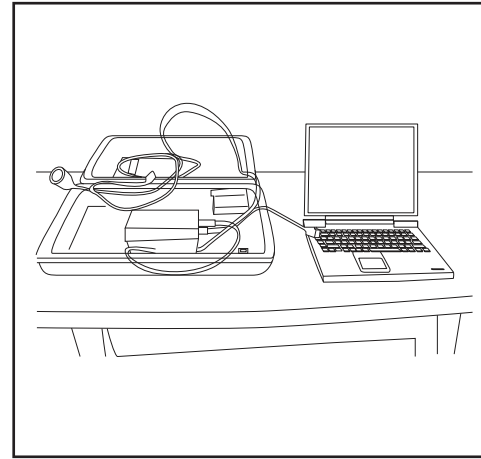
00.1.2 Tools



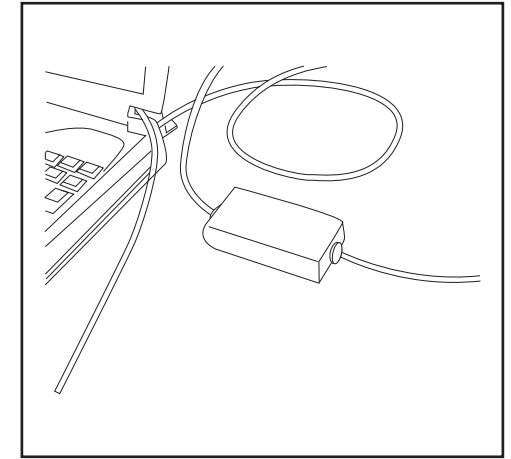
General Tools



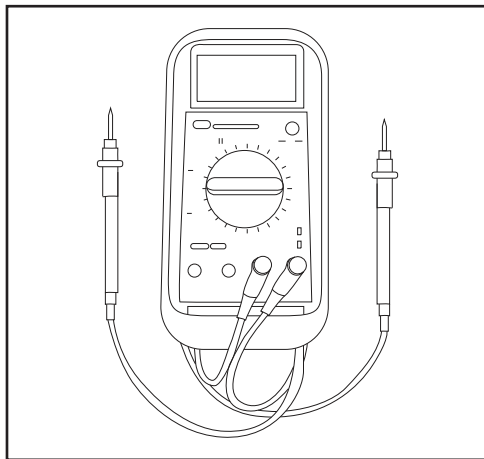
Mitsubishi Diagnostic Tool (MUT III)



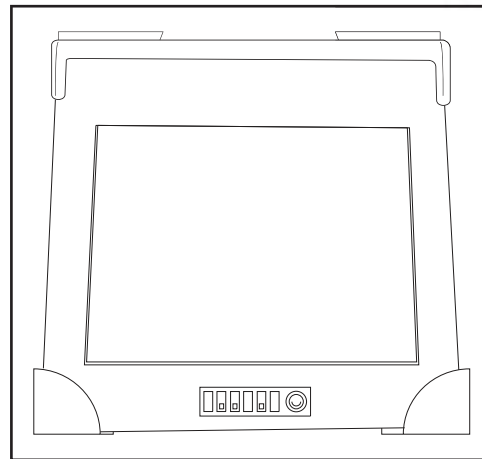
MAN Engine Diagnostic Tool (MANCAT)



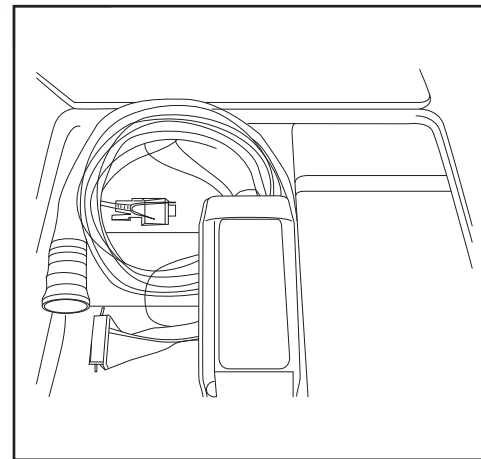
KIBES K-Line Interface Cable



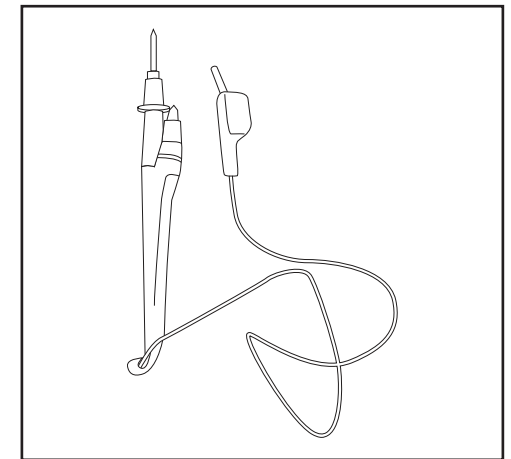
Multimeter



DAF Engine Diagnostic Tool (DAVIE)



CAT Engine Diagnostic Tool (CATET)



Connection Wire

00.1.3 Warnings

Symbol List

Operating Instructions in this manual includes the following symbols, warning words and signs:



CAUTION

This symbol is used in conditions which may cause damage or injury if necessary measures are not taken.



VISUAL INSPECTION

This symbol is used to inform the user that a visual inspection is necessary.



WARNING

This symbol is used in conditions which may cause severe damage or fatal injury if necessary measures are not taken.



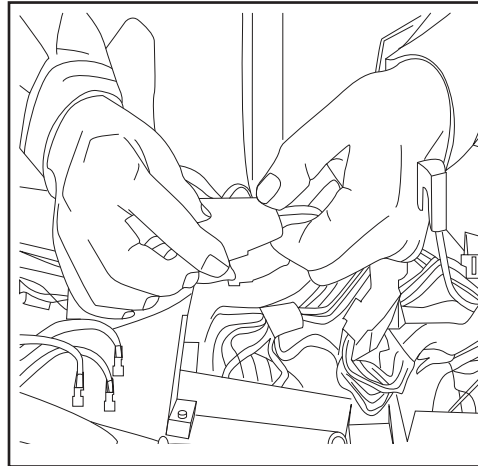
DANGER

This symbol is used to indicate danger.

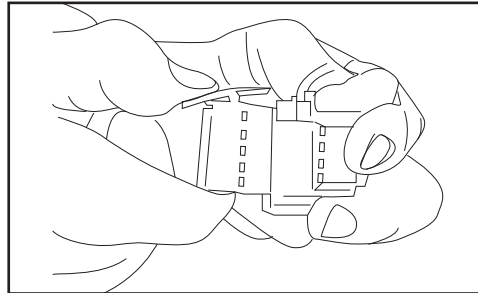
00.1.3 Warnings

Safety Precautions

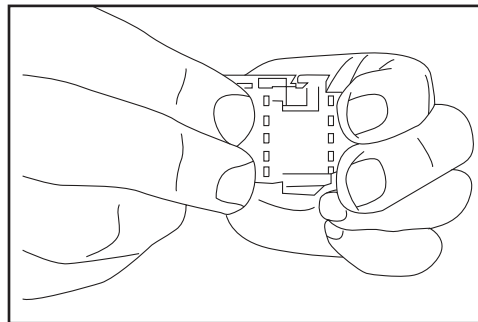
The following safety instructions must be strictly observed.



1. Hold the connector.



2. To disconnect locking type connectors push it in the direction indicated by an arrow.



3. To connect a lock type connector, plug it until a click is heard.

00.1.4 Control Units Handling & Repair Precautions



CAUTION

Observe the following precautions when handling or servicing the control units (Engine EDC, Retarder ECU, etc.).

- a) Make sure that the control units does not contact directly with rain-water, car-washing water etc. If the control units soaks, wipe it immediately.
- b) Avoid unnecessary removal or painting of the cover.
- c) To remove the control unit from the vehicle, follow steps mentioned in the page 0-08.
- d) Apply arc welding for the repair of the vehicle parts steps mentioned in the page 0-09.



CAUTION

Cautions during washing the vehicle:

- a) Before washing the vehicle, make every electrical equipment waterproof (by covering it with vinyl sheet etc.)
- b) Do not wash the electrical harness and waterproof connectors.



CAUTION

During washing the vehicle do not splash pressured water in Fuse Room and to the battery.

00.1.5 Cautions Before Service Work



CAUTIONS

Be sure to use correct tools in the correct place for servicing as mentioned below:

- a) Use Fuse Holder for removing of fuses.
- b) Use Multimeter or a 24V Controllamp to search for short-circuits if vehicle has not multiplex system.
- c) If there is a multiplex system, remember that there is always 12V check voltage in Diagnostic System. Therefore use only Multimeter to check whether the circuit of the system is short or open. Do not use Control lamp or others. Otherwise you could make a mistake to understand the short or open circuit.
- d) Use diagnostic tool to check Engine EDC or UPEC. (Note: A diagnostic tool for Cummins Engine is not existing).
- e) Use Kibes Runtime Software and K-Line interface cable to check Multiplex system control.



CAUTION


Precautions for multiplex System program installation

Following instructions must be strictly observed during installation of program to the system.

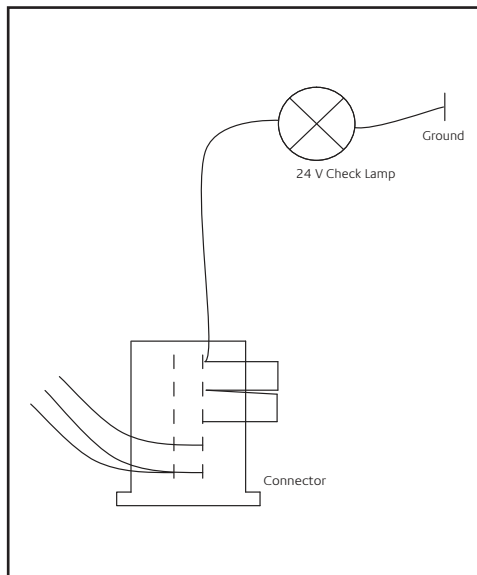
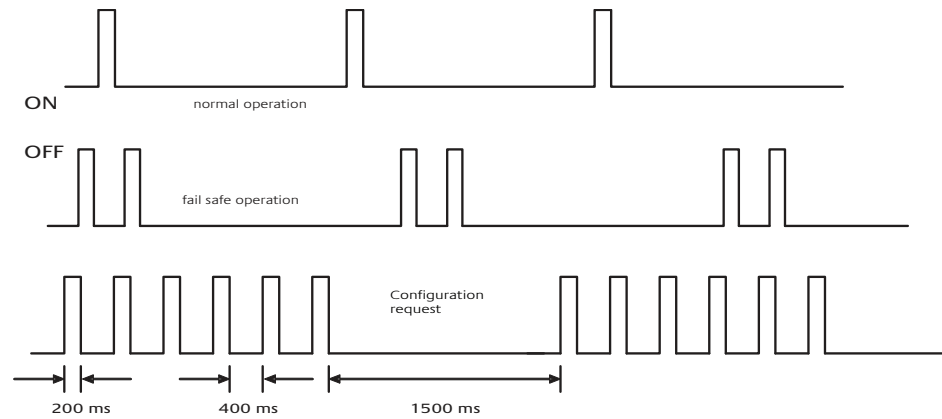
- Do not install program to the system if there is a person under the vehicle.
- If the program installed to the system while the vehicle is in lifting position, lifting valves can release air and vehicle can go down.
- Power supply should not be closed while installing program to the system. Wait until the installation is completed.
- Program should not be installed while engine is in operating conditions. Otherwise engine stops unsuitable conditions.

00.1.6 Cautions Before Service Work

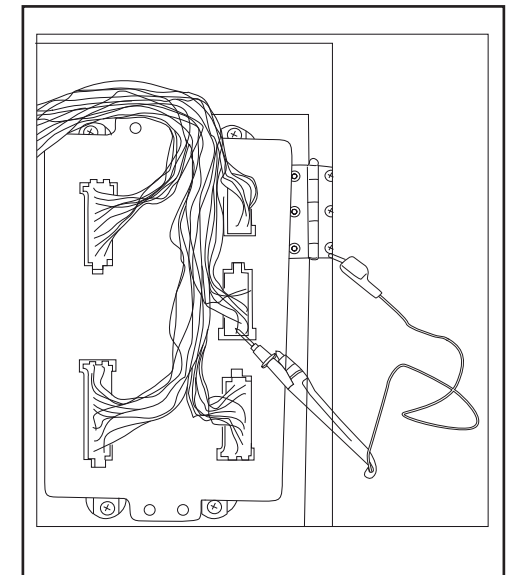
Multiplex System Functional Checks



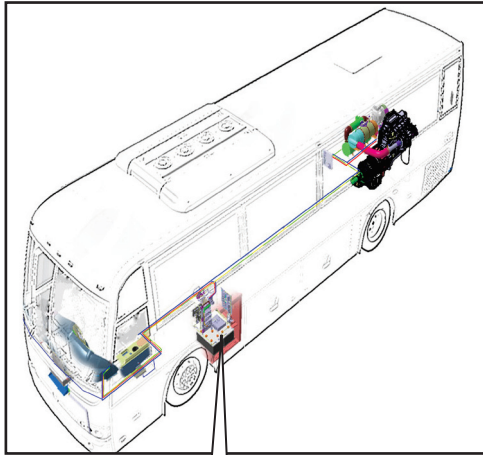
CAUTION
 External node diagnosis:
 To AUS_ID_PLUS, a 2W bulb in connection
 with a 24V power supply can be connected
 for functional checks.



Error Conditions	Cause of Failure
"FAIL SAFE" Operation	CAN-connection failed during operation
Configuration request	Incorrect node ID, incorrect node type or new node (node yet programmed)
OFF	Voltage Supply or CAN already defective or not present when turning on or node defective.
ON	Node defective, Voltage supply OK.



00.1.5 Cautions Before Service Work

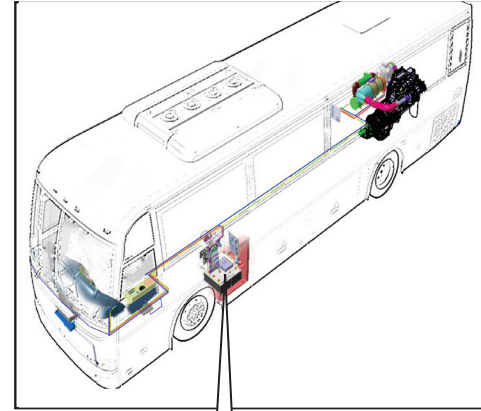


CAUTIONS

Before servicing of electrical systems follow the below mentioned steps:

- Turn the Ignition key to OFF position.
- Turn the Battery Cut Off switch to ON position.
- Check the system failure.

Note: Remember that Battery Cut Off Switch is an OPTION.

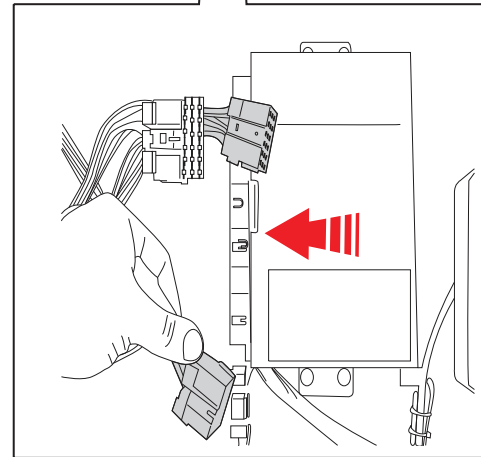
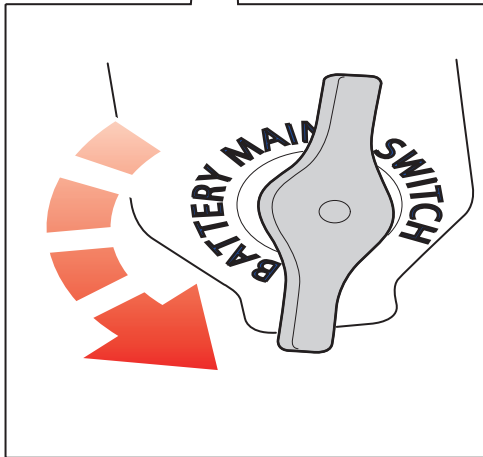


CAUTIONS

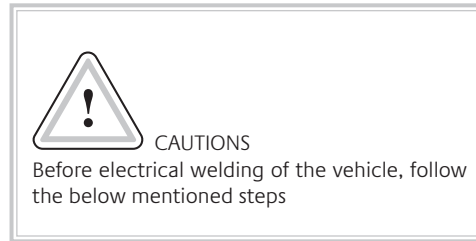
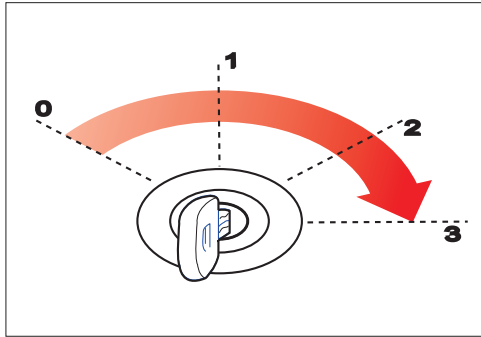
Before servicing of Electronic Control Units(ECU) follow the below mentioned steps:

- Turn the Ignition key to OFF position.
- Turn the Battery Cut Off switch to ON position.
- Disconnect all connectors of Electronic Control Unit
- Check the system failure.

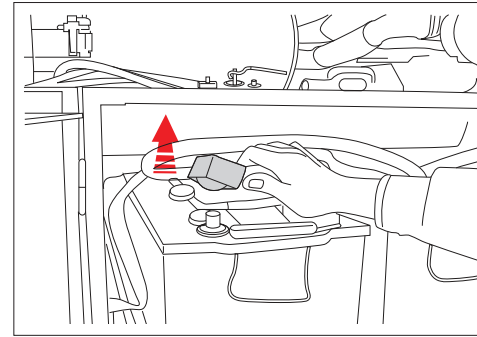
Note: Remember that Battery Cut Off Switch is an OPTION.



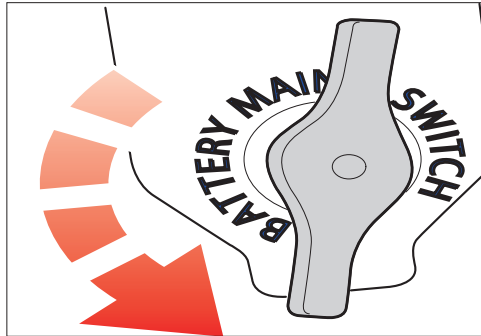
00.1.6 Procedures for Electrical Welding Application



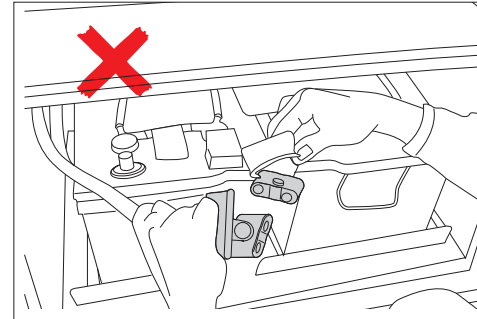
1. Turn the ignition key to OFF position.



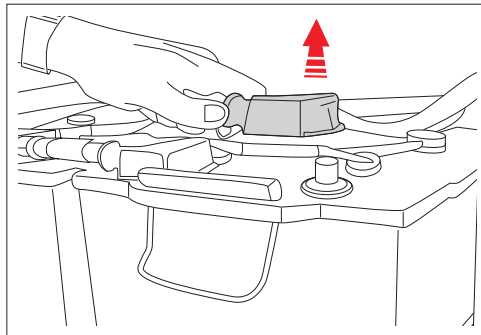
4. Disconnect Battery positive (+) terminal.



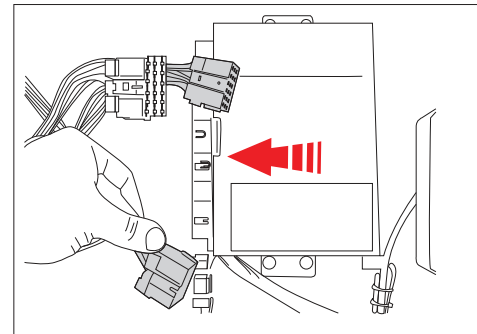
2. Turn the battery cut off switch to ON position.



5. Touch and joint negative and positive cables of vehicle to discharge static electric in the harnesses.



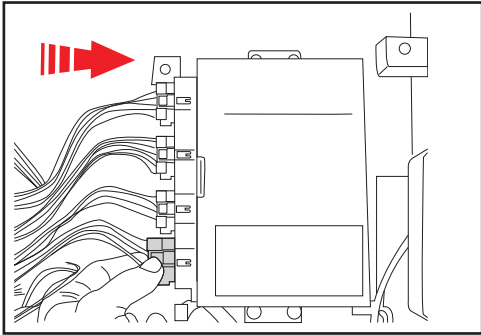
3. Disconnect Battery negative (-) terminal.



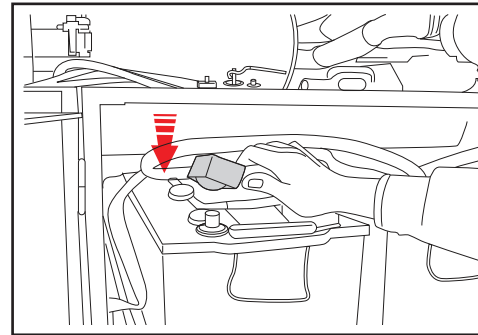
6. Disconnect connectors of all Electronic Control Units.

7. After the above mentioned steps are finished welding processes can be applied safely.

00.1.7 Procedures After Electrical Welding Application

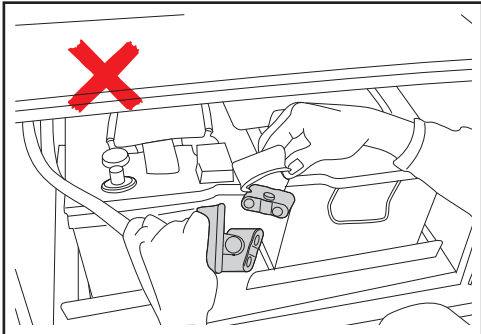


1. Connect all connectors of all Electronic Control Units.

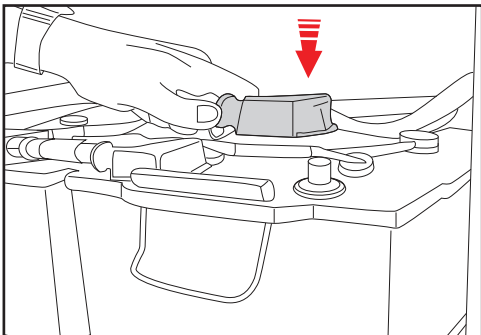


4. Connect Battery positive (+) terminal
5. Turn the ignition key to ON position.
6. Turn the Battery Cut-Off switch to OFF position.

7. Now vehicle is ready to start.



2. Disjoint negative and positive cables of the vehicle.



3. Connect Battery negative (-) terminal.



































00.1.8 Possible failure causes for KIBES 32 products



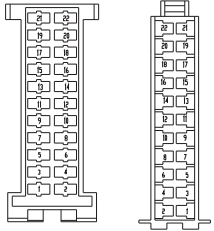
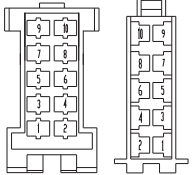
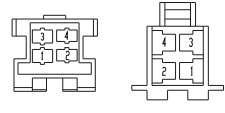
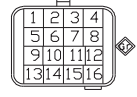
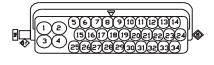
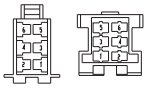
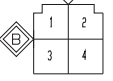

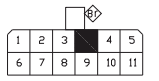
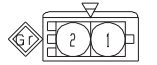


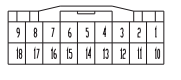
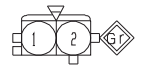
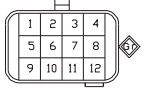

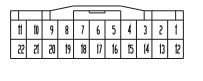
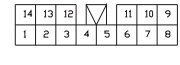
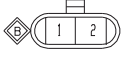

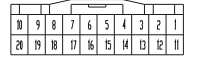
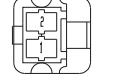
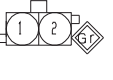
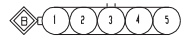
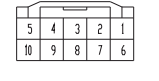
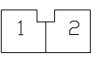

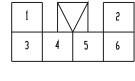



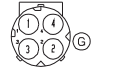
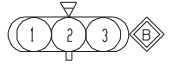



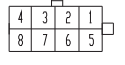
CAUTION

- Welding on the vehicle when KIBES-32 products are connected to the harness of the vehicle
- Vehicle has been struck by lightning
- ESD (electro-static discharge) by touching of connector pins by a person without protection against ESD (e.g. ESD shoes)
- Exchange of KIBES-32 product during connection to power.
(Before exchange, the KIBES-32 product has to be disconnected from power [e.g. switch off battery])
- Overstress of outputs of KIBES-32 products.
Some examples on base of the MUX2-B or MUX2-M are described below.

00.1.9 Symbols of Switch Lens

	Glass Heater Switch		Auxiliary Lamp Switch		Roof Heater Fan Motor Switch
	Mirror Heater Switch		Room Lamp Switch		Reverse Gear Horn Cancel Switch
	Hazard Switch		Reading Lamp Switch		Door Buzzer Cancel Switch
	Destination Plate Lamp		Driver Lamp Switch		School Bus Lamp Switch
	Lifting Switch	WC WC Power Switch	WC Power Switch		Bus Stop Brake Switch
	ASR Switch		Electrical Curtain Switch		Convector Control Switch
	Exhaust Brake Switch	STOP START Engine Start-Stop Switch	Engine Start-Stop Switch		Economy Switch
	ABS Switch	UDS UDS Switch	UDS Switch		Stairs Fan Control Switch
	Retarder Switch		Park & Room Lamp Switch		Wiper Water Switch
	Auto Lubricate		Front Fog Lamp Switch		Front Door Switch
	Horn Signal		Rear Fog Lamp Switch		Rear Door Switch
	Central Lock Switch		Motorfan Floor Switch		Driver Glass Switch
	Preheater Switch				

00.1.10 Socket Configurations

00A-11	TS30	Note:	TEMSA
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00.2.1 How to Use This Manual

This manual consists of following parts.

- 1) General Information
- 2) System Chapters
- 3) Appendix

On General Information

Cautions before service work, warnings, symbols of switch lens, symbols and definitions, configuration of sockets and wiring harness configurations are shown.

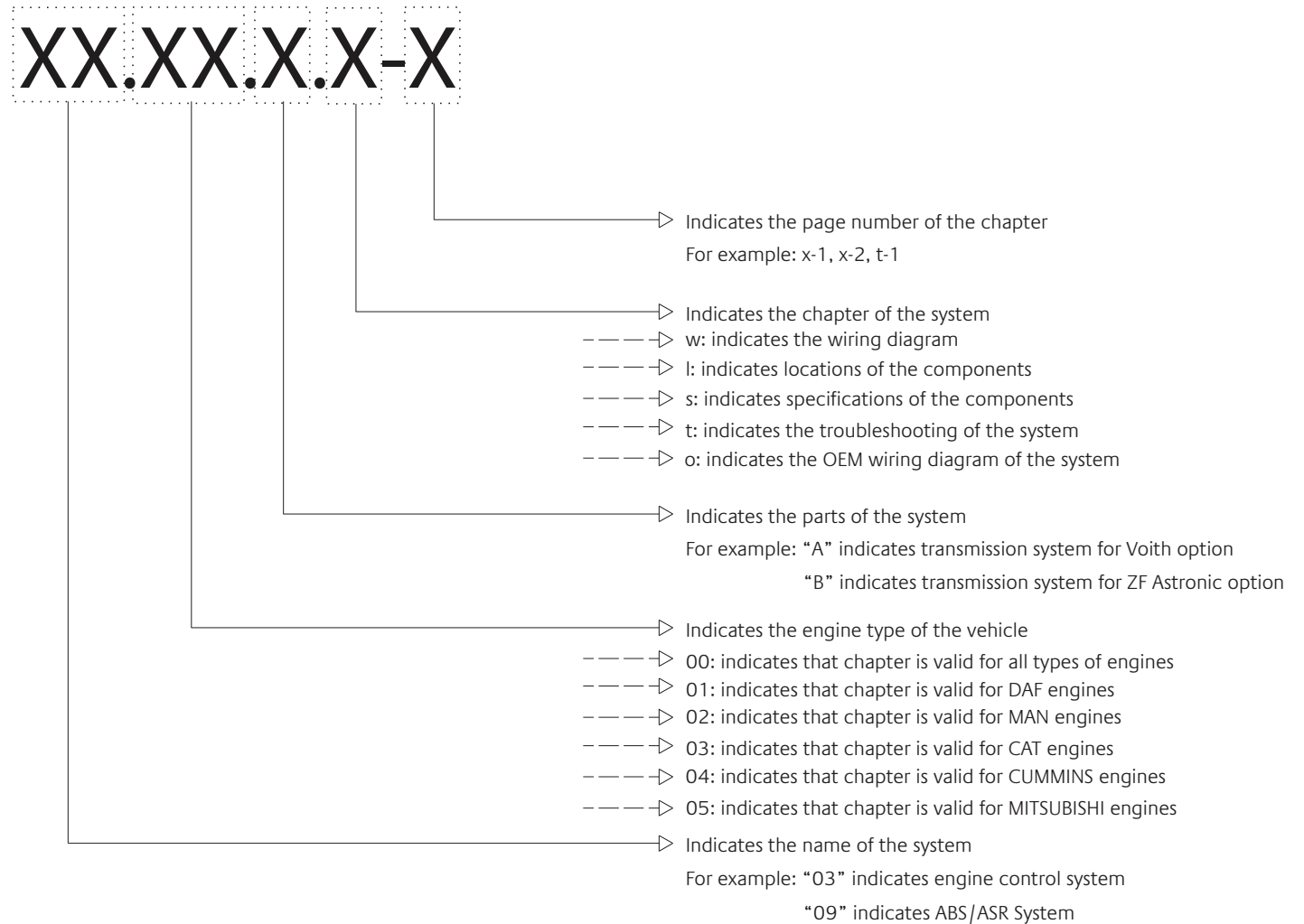
On System Chapters

Wiring diagrams, locations of components, specifications, troubleshooting and OEM wiring diagrams are shown,

On Appendix

Locations of fuses on relay panels are shown,

00.2.2 Coding system of the Manual



08.05.A.w-1: Indicates the brake system mitsubishi engine exhaust brake system wiring diagram page 1.

08.05.B.w-1: Indicates the brake system mitsubishi engine park brake system wiring diagram page 1.

00.2.3 Wiring Diagram Definitions

While looking to the wiring diagram on manual, you will see two pages. On the right hand side you will see electrical wiring diagram. Some symbols and codes exists on the diagram. On the left hand side you will see the explanations of the codes on the table, By looking to the part no, you can easily find the component code and definitions.

Code	Part No	Türkçe	English	Deutsch	Français	Italiano
01G001	2	Akü 1	Battery 1	Batterie 1	Batterie1	Batteria 1
01G002	4-5	Akü 2	Battery 2	Batterie 1	Batterie1	Batteria 2
01G003	8	Alternatör 1	Alternator 1	Generator 1	Alternateur 1	Alternatore 1
01G004	7	Alternatör 2	Alternator 2	Generator 2	Alternateur 2	Alternatore 2
01K006	13-14	Start Aküleri Rölesi	Starter Batteries Relay	Relais Starterbatterien	Relais Batteries De Démarrage	Rele' Batterie Motorino Di Avviamento
01K015	16	Akü Kontrol Rölesi	Battery Control Relay	Relais Batteriesteuerung	Relais De Commande De Batterie	Rele' Controllo Batteria
01M001	10	Maş Motoru	Starter	Starter	Démarreur	Starter
01MF002	8	Alternatör Beslemesi	Alternator Power	Lichtmaschinenstrom	Alimentation De L'Alternateur	Alimentazione Alternatore
01MF003	18	Maş Motoru Beslemesi	Starter Power	Starter Strom	Alimentation Du Demarreur	Alimentazione Starter
01MF006	18	Klima Tavan Ünitesi Beslemesi	Air Conditioner Power	Strom Klimaanlage	Alimentation Du Climatiseur	Alimentazione Condizionatore D'Air
01MF007	20	Röle Paneli K115 Beslemesi	Relay Panel K115 Power	Relaistafel Strom K115	Alimentation Du Panneau Des Relais K115	Alimentazione Pannello Rele' K115
01MF009	19	K130 Beslemesi 1	K130 Power 1	Strom 1 K130	Alimentation 1 Du K130	Alimentazione 1 K130
01MF019	17	Retarder Beslemesi	Retarder Power	Retarder Strom	Puissance Du Ralentisseur	Alimentazione Retarder
01MF022	25	Lift Ünitesi Beslemesi	Lift Unit Power	Strom Hebeeinheit	Puissance Du Mecanisme De Levage	Alimentazione Unita' Sollevamento
01MF023	19	On Röle Paneli K115 Beslemesi	Front Relay Panel K1 15 Power	Strom K1 15 Relaistafel Vorne	Puissance Du Panneau De Relais Avant K1 15	Alimentazione Pannello Rele' Anteriore K1 15
01MF024	9	Alternatör Beslemesi 2	Alternator Power 2	Strom Lichtmaschine 2	Puissance D'Alternateur 2	Alimentazione Alternatore 2
01S001	7	El Kumandali, Ana, Akü Şalteri	Main Manual Battery Switch	Handhauptschalter Batterien	Interrupteur Principal A Main Batteries	Interruttore Manuale Principale Batteria
01X001	3-4	Akü Şarj Soketi	Battery Charge Connector	Batterieladeanschluss	Connecteur Du Chargeur De Batterie	Connettore Carica Batteria
02S009	5	Acil Durum Şalteri	Emergency Stop Switch	Notstoppschalter	Interrupteur Arret D'Urgence	Interruttore Arresto Di Emergenza
03K008	10	Motor Giriş Hava İsticisi Rölesi	Air Intake Heater Relay	Relais Heizung Luftansaugung	Relay Chauffage Admission D'Air	Rele' Aria Di Aspirazione Riscaldatore
05A005	17	Retarder (Teima) Kumanda Modülü	Retarder Control Module (Teima)	Steuermodul Retarder (Teima)	Module De Commande Retardateur (Teima)	Modulo Di Controllo Retarder (Teima)
07P003	6	Takograf (Dico veya Mtcö)	Tachograph (Dico Or Mtcö)	Fahrtsschreiber	Enregistreur De Trajets	Tachigrafo (Dico O Mtcö)
12A007	18	Klima Tavan Ünitesi (Safkar Ruthart)	Hvac Roof Control Module (Safkar Ruthart)	Module De Commande De Toit Hvac (Safkar Ruthart)	Modulo Di Controllo Tetto Hvac (Safkar Ruthart)	Modulo Di Controllo Tetto Hvac (Safkar Ruthart)
32X001w	25	Engelliler Asansörün Tesisi	Handicapped Lift System Harness	Kabelbaum Rollstuhlifft	Securisation Du Mecanisme De Levage Pour Handicapes	Cinghia Sistema Per Ascensore Per Disabili

01.04.B.w-1

Tourmalin

Note:

The table shows the definitions of the codes that are on the diagram in many languages.

TEMSA

KL 31: Chassis Line
KL 58: Park Lamp Power Line
KL 30: Battery Power
KL 15: Ignition Power

TEMSA

Note:

07P003: Indicates the code of the component.
07.04.A.w-7: Indicates the page number.

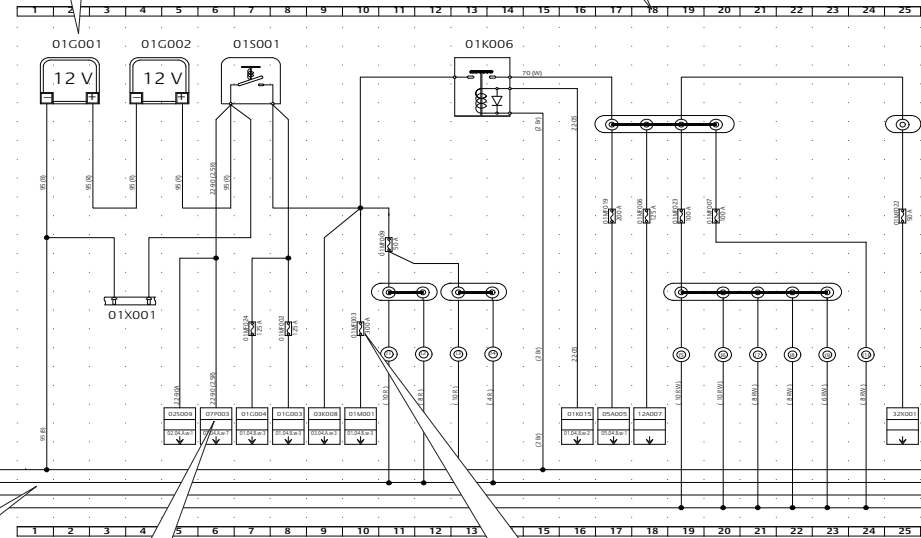
Tourmalin

01.04.B.w-1

01MF003: indicates the fuse name.
300 A: indicates the amper value of fuse. Fuse definition and location are shown in appendix.

01G001: Indicates the code number for the component.

01 to 25: indicates the position of the component on diagram.



00B-2

TS35

Note:

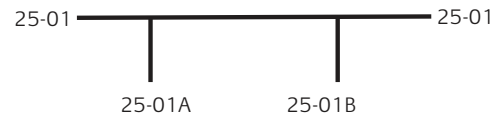
TS30

TEMSA

00.2.4 Wire Code Definitions

Wire characteristic as illustrated in Figure A.

- Background: White
 - 25-01 : Wire Code
 - 2,5 : Wire Size 2,5 mm²
- If there is not any number in parenthesis, wire size is 1mm².



Shield wires are indicated as shown bellow (Figure C) to distinguish them from other wires.

Wire colours are shown with the capital letter of each colour.

When the capital letters of the colours are the same, they will be identified as follows:

R Red
L Blue
Br Brown

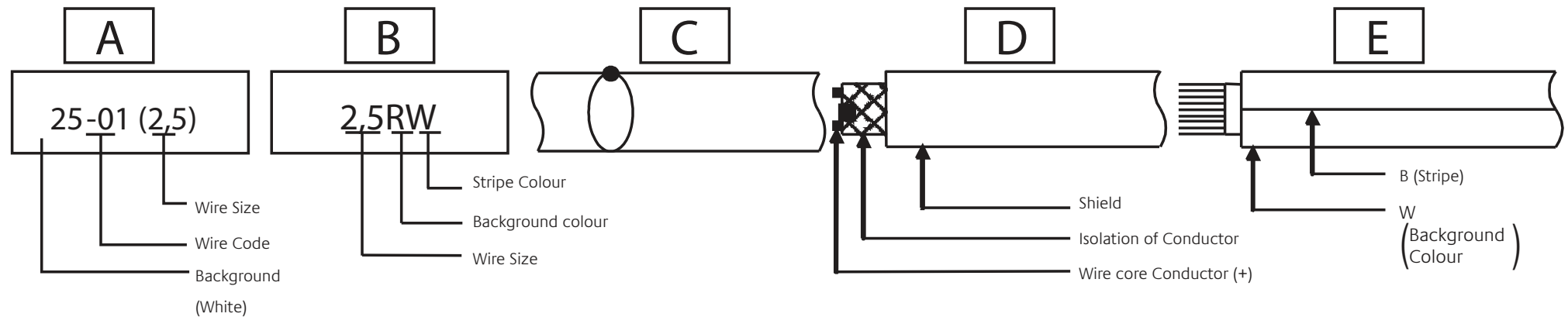
Where a stripe is added to the wire colour, a combination of two capital letters is used.e.g. :
RY (Yellow stripe on red background)
WB (Black stripe on white background)

Wire characteristic as illustrated in Figure B

Wire size is indicated with the cross sectional area of conductor.

2.5RW
2,5: Cross sectional area of conductor is 2,5 mm².
RW: Background colour is RED, Stripe colour is WHITE

No wire size is shown for a shielding wire but is



00.2.5 Wire Definitions

BACKGROUND & STRIPE COLOURS							
B	Black	LgR	Light Green/Red	VY	Violet/Yellow		
BG	Black/Green	LgY	Light Green/Yellow	W	White		
BL	Black/Blue	LgW	Light Green/White	WB	White/Black		
BR	Black/Red	LO	Blue/Orange	WG	White/Green		
Br	Brown	LR	Blue/Red	WL	White/Blue		
BrB	Brown/Black	LW	Blue/White	WR	White/Red		
BrW	Brown/White	LY	Blue/Yellow	Y	Yellow		
BrR	Brown/Red	O	Orange	YB	Yellow/Black		
BW	Black/White	OL	Orange/Blue	YG	Yellow/Green		
BY	Black/Yellow	P	Pink	YL	Yellow/Blue		
BrY	Brown/Yellow	PB	Pink/Black	YR	Yellow/Red		
G	Green	PG	Pink/Green	YW	Yellow/White		
GB	Green/Black	R	Red				
GL	Green/Blue	RB	Red/Black				
GR	Green/Red	RG	Red/Green				
GY	Green/Yellow	RL	Red/Blue				
GW	Green/White	RW	Red/White				
L	Blue	RY	Red/Yellow				
LB	Blue/Black	V	Violet				
LG	Blue/Green	VG	Violet/Green				
Lg	Light Green	VR	Violet/Red				
LgB	Light Green/Black	VW	Violet/White				

00B-4

TS30

Note:

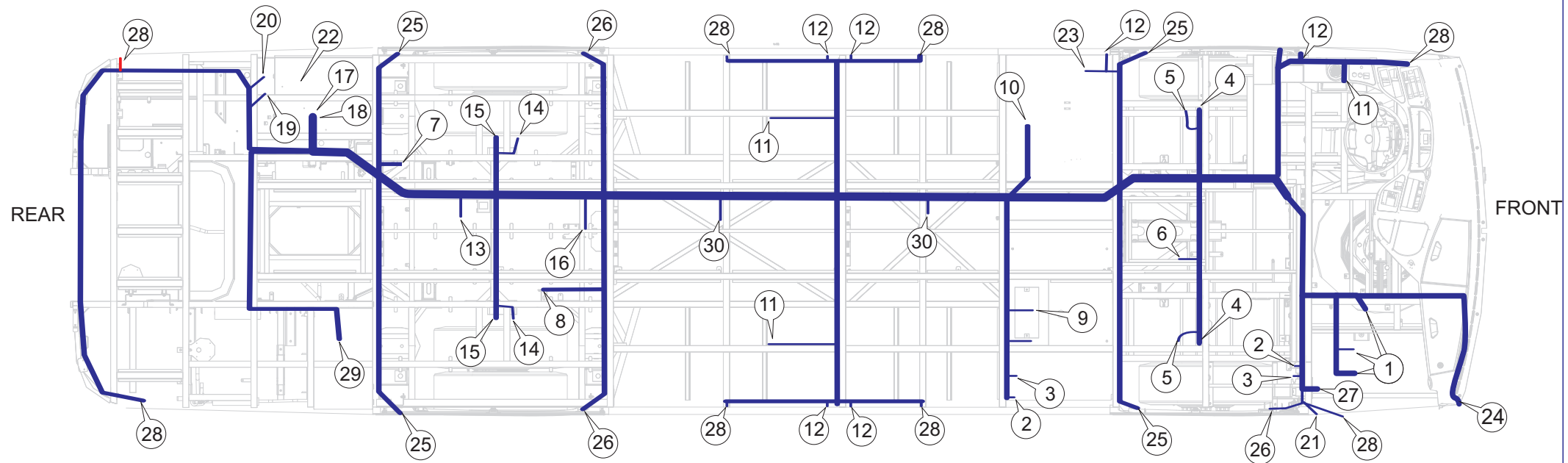
TEMSA

00C. WIRING HARNESS CONFIGURATIONS

CONTENT

Chassis Wiring Harness	00C-2
Roof Wiring Harness	00C-3
Engine Room Wiring Harness	00C-4
Front Body Wiring Harness.....	00C-6
A/C Wiring Harness	00C-7
Dashboard Wiring Harness	00C-8
SwitchBox Wiring Harness.....	00C-10
Socket Connection Places	00C-11
Spare Cable (Chassis Wiring Harness)	00C-12
Spare Cable (Engine Room Wiring Harness)	00C-13

CHASSIS WIRING HARNESS



NO	IDENTIFICATION	NO	IDENTIFICATION	NO	IDENTIFICATION
1	Front Door Step Lamp	11	Luggage Lamp	21	Door Micro Switch
2	Front Door Valve	12	Luggage Lamp Switch	22	Rear Relay & Fuse Room Lamp
3	Front Door Pressure Switch	13	Air Dryer	23	Front Relay & Fuse Room Lamp
4	Brake Lining Sensor (Front)	14	ABS Sensor (Rear)	24	Kneeling Warning Lamp
5	ABS Sensor (Front)	15	Brake Lining Sensor (Rear)	25	Rerverse Gear Lamp
6	ABS Valve (Front)	16	ABS Valve (Rear)	26	Signal Lamp
7	Lifting Valve	17	Rear Relay & Fuse Panel	27	Door Micro Safety Switch
8	Kneeling Valve	18	Diagnose Socket (Preheater)	28	Marker Lamp
9	Fuel Tank Level Sensor	19	Preheater Water Pump	29	Diesel Particle Filter
10	Front Relay & Fuse Panel	20	Roof / Floor Water Valve	30	Fire Warning Sensor

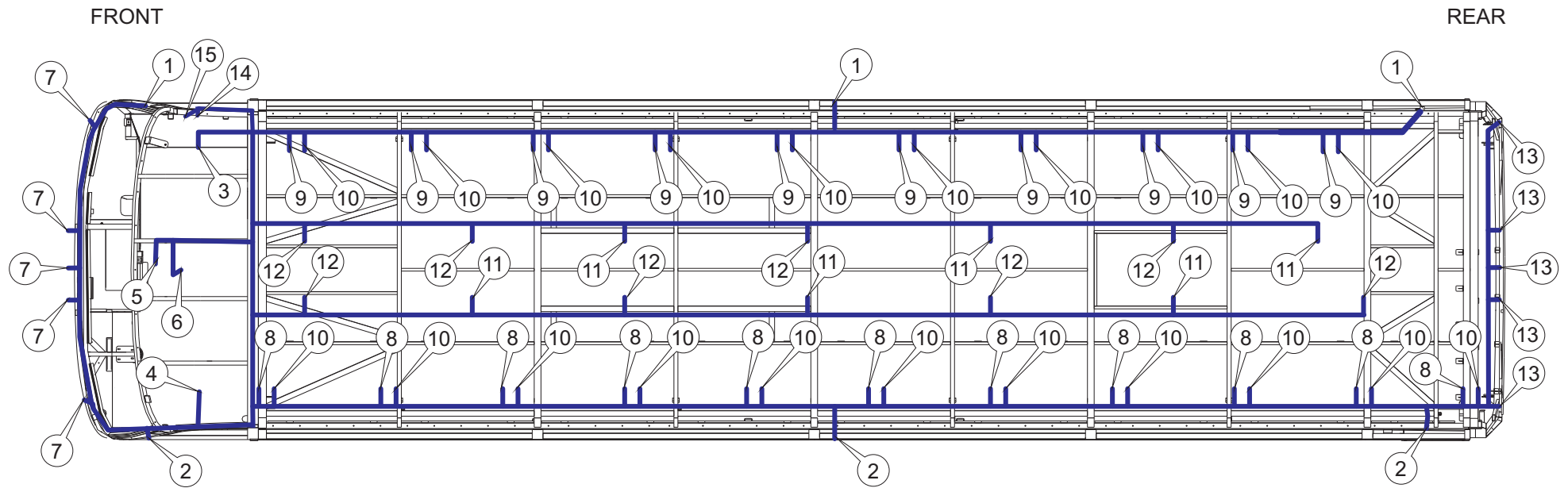
Note :

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00C-2

ROOF WIRING HARNESS



NO	IDENTIFICATION	NO	IDENTIFICATION	NO	IDENTIFICATION
1	Position Lamp (Right Side)(Top)	6	Clock	11	Auxiliary Lamps
2	Position Lamp (Left Side)(Top)	7	Position Lamp (Front) (Top)	12	Interior Lighting Lamps
3	Front Door Upper Lamp	8	Left Speaker	13	Position Lamp (Reart) (Top)
4	Driver Lamp	9	Right Speaker	14	Front Door Valve
5	Monitor Supply	10	Reading Lamp	15	Front Door Pressure Switch

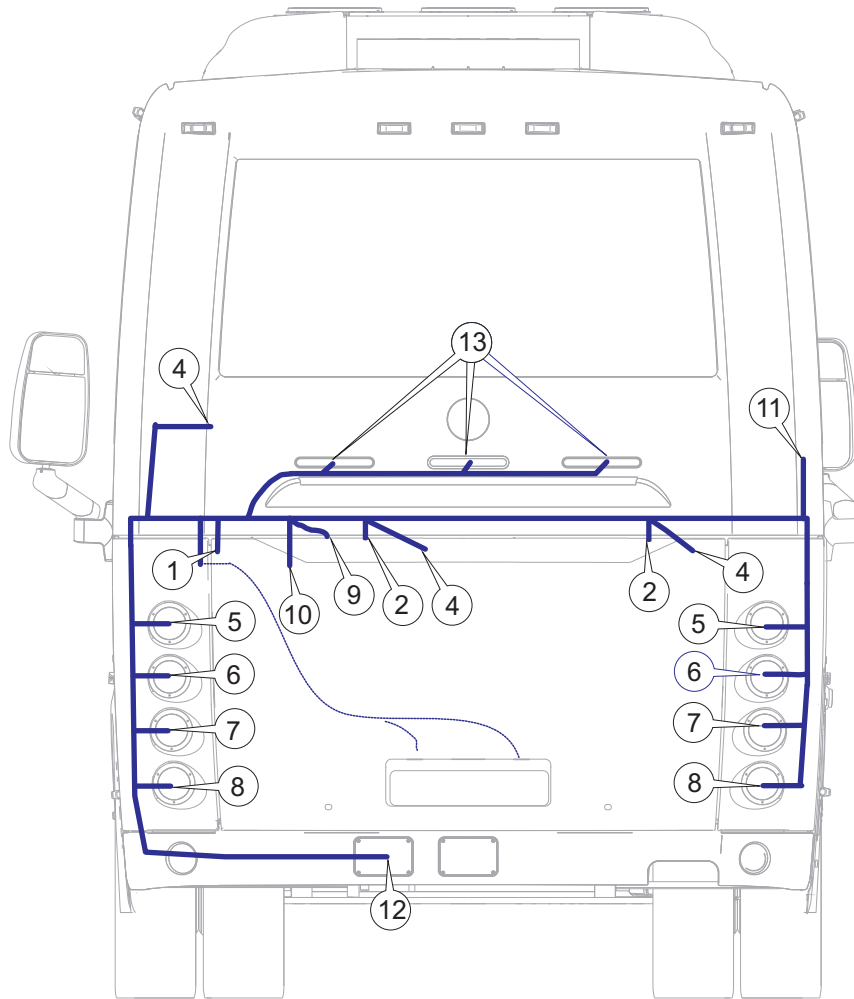
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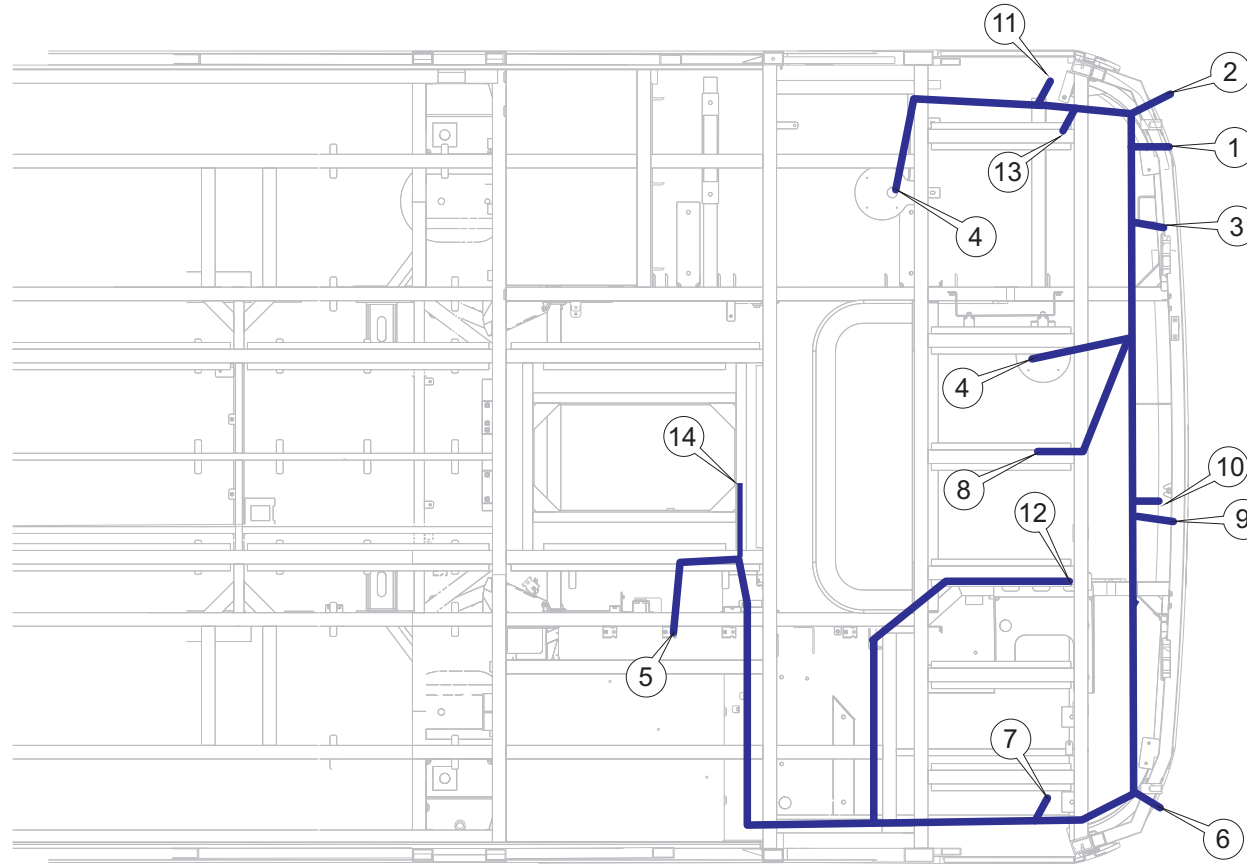
00C-3

ENGINE ROOM WIRING HARNESS



NO	IDENTIFICATION
1	Engine Room Safety Switch
2	Fire Warning Sensor
3	Antifreeze Tank Level Sensor
4	Engine Room Lamps
5	Rear Signal Lamps
6	Stop & Park Lamp
7	Park Lamp
8	Reverse Gear Lamp
9	Reverse Gear Buzzer
10	Start-Stop Switch
11	To Wc Unit
12	Trailer Socket (Option)
13	3rd Stop Lamp
14	MUX 2.1
15	Coolant Level Sensor

ENGINE ROOM WIRING HARNESS



NO	IDENTIFICATION	NO	IDENTIFICATION	NO	IDENTIFICATION
1	Engine Room Safety Switch	6	Head Lamps (Left)(Rear)	11	To Wc Unit
2	Head Lamps (Right)(Rear)	7	Radiator Valve	12	Alternator 1
3	Coolant Level Sensor	8	Fire Warning Sensor	13	Alternator 2
4	Engine Room Lamps	9	Reverse Gear Buzzer	14	Foot Lamp
5	Rear Fuse and Relay Panel	10	Start-Stop Switch	15	

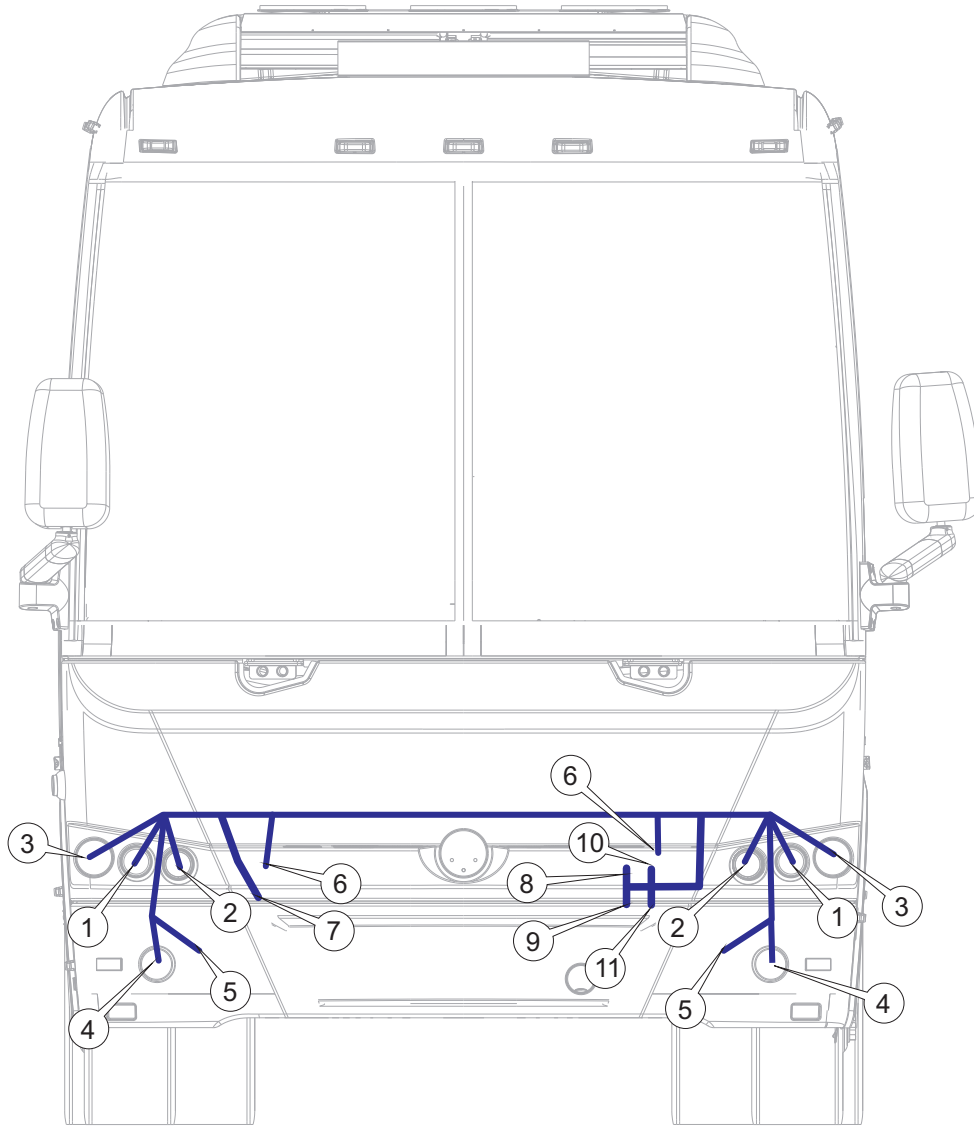
Note :

TEMSA

TS 30

00C-5

FRONT BODY WIRING HARNESS



NO	IDENTIFICATION
1	Head Lamps (Low)
2	Head Lamps (High)
3	Signal Lamp
4	Spot Lamp
5	Fog Lamp (Option)
6	Horn
7	Outside Temperature Sensor
8	Stop Lamp Switch 1 (Brake Pedal)
9	Stop Lamp Switch 2 (Brake Pedal)
10	Air Sensör 1 (Brake Pedal)
11	Air Sensör 2 (Brake Pedal)

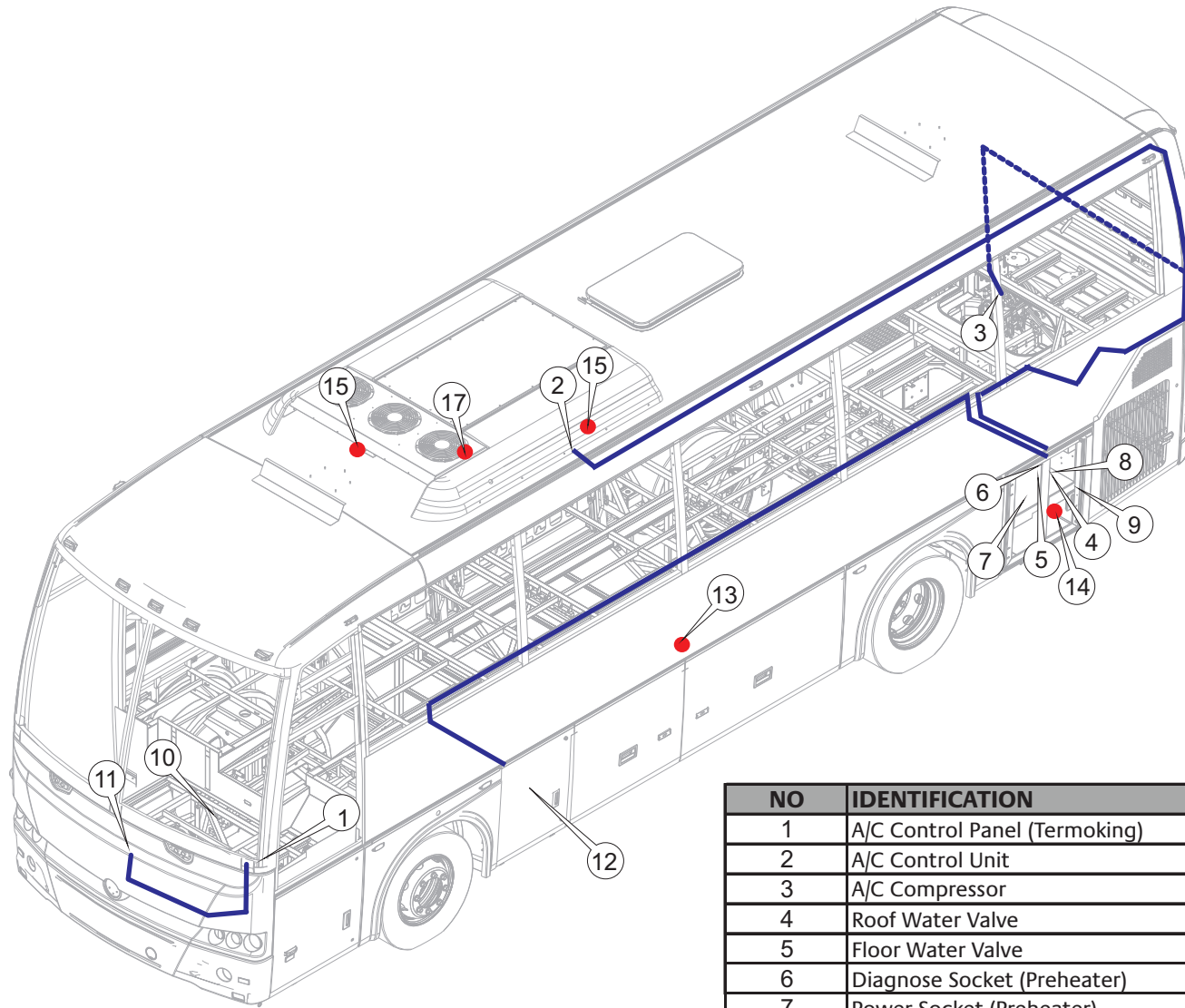
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Note :

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00C-6

A/C WIRING HARNESS



NO	IDENTIFICATION	NO	IDENTIFICATION
1	A/C Control Panel (Termoking)	11	Defroster Unit
2	A/C Control Unit	12	Front Relay Panel
3	A/C Compressor	13	Floor Temperature Sensor
4	Roof Water Valve	14	Hot water Temperature Sensor
5	Floor Water Valve	15	Ambient Temperature Sensor
6	Diagnose Socket (Preheater)	16	Return air Temperature Sensor
7	Power Socket (Preheater)	17	Coil Temperature Sensor
8	Fire Warning Sensor	18	Duct Temperature Sensor
9	Preheater Water Pump		
10	3 Way Valve (Water)		

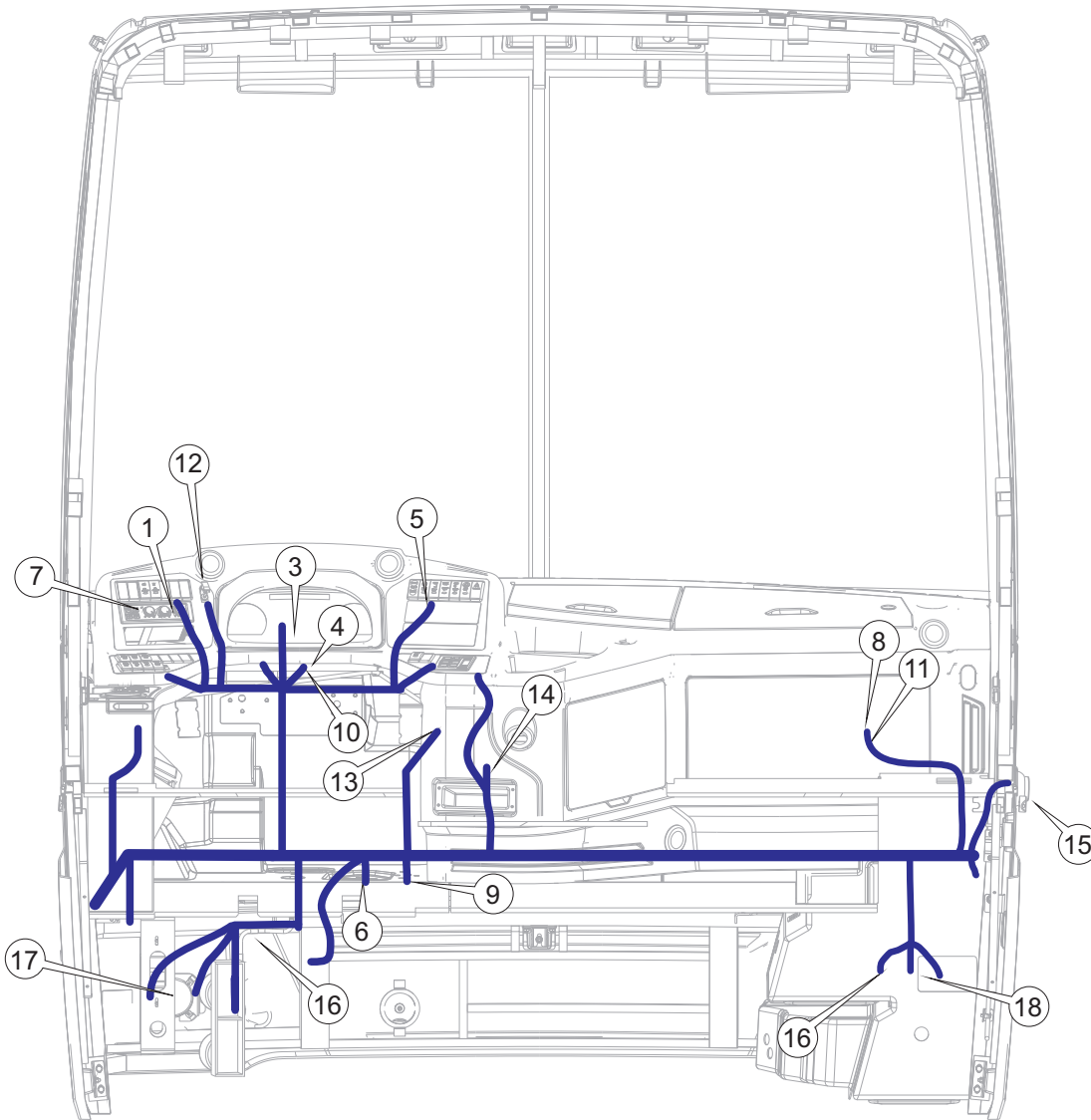
Note :

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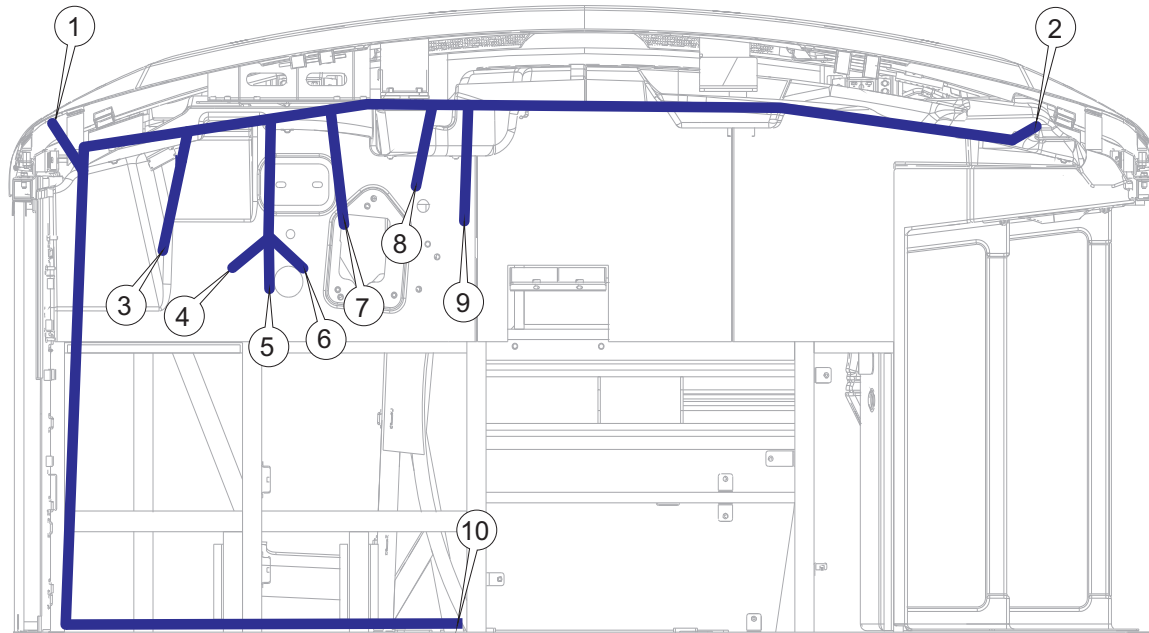
00C-7

DASHBOARD WIRING HARNESS



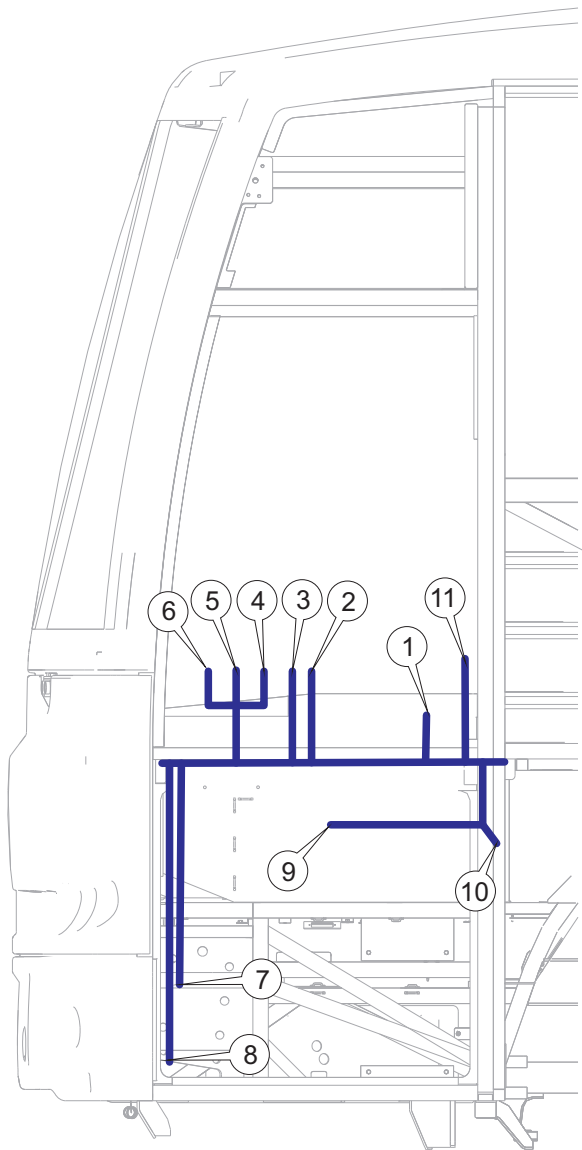
NO	IDENTIFICATION
1	Left Switch Group
2	Left Column Switch
3	MOKI & Warning Lamp s
4	Retarder Column Switch
5	Right Switch Group
6	Brake Pedal
7	A/C Control Unit
8	Mux 1.2 & Mux 1.3
9	Accelerator Pedal
10	Ignition Key
11	Vehicle Diagnosis Socket
12	Emergency Stop Switch
13	Wiper Motor
14	Defroster
15	Kneeling Warning Lamp
16	Horns
17	Head Lamps Group (Left)
18	Head Lamps Group (Right)

DASHBOARD WIRING HARNESS



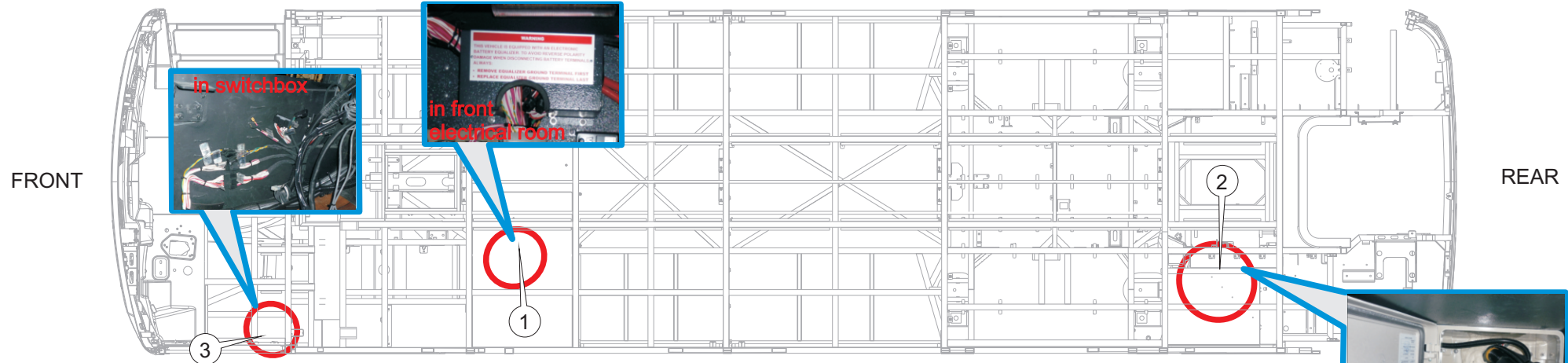
NO	IDENTIFICATION
1	Head Lamp Group (Left)
2	Head Lamp Group (Right)
3	Left Switch Group
4	Left Column Switch
5	Warning Lamps
6	Retarder Column Switch
7	Accelerator Pedal
8	Right Switch Group
9	A/C Control Unit
10	To Relay and Fuse Panel

SWITCHBOX WIRING HARNESS

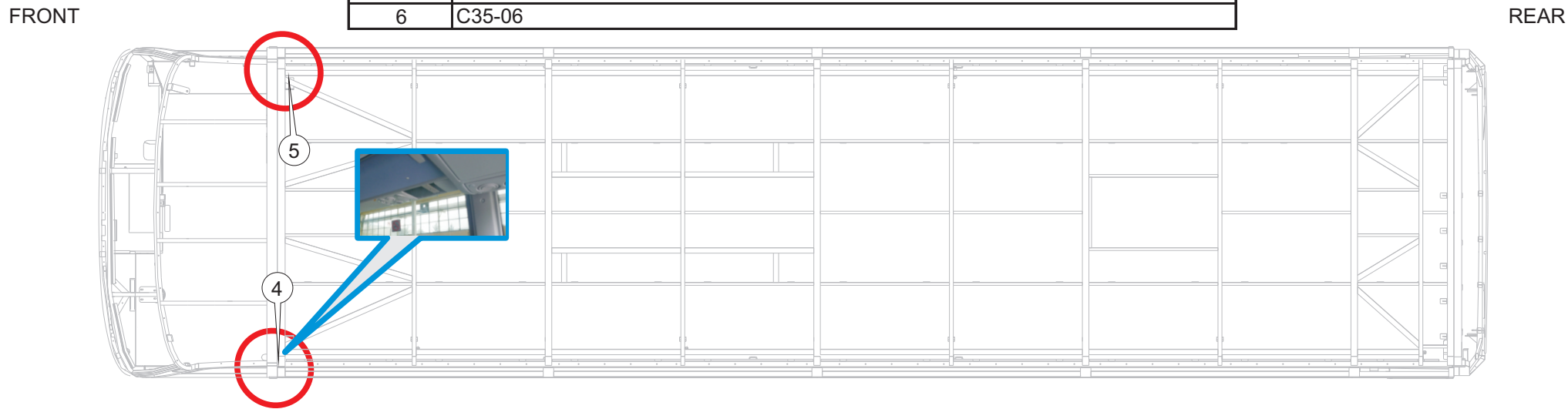


NO	IDENTIFICATION
1	Driver Speaker
2	Mirror Control
3	Parking Brake Switch
4	12V Plug
5	Cigarette Lighter
6	
7	Wiper Water Motor
8	Marker Lamp
9	Luggage Lamp
10	Luggage Lamp Switch
11	K-line Socket

SOCKET CONNECTION PLACES

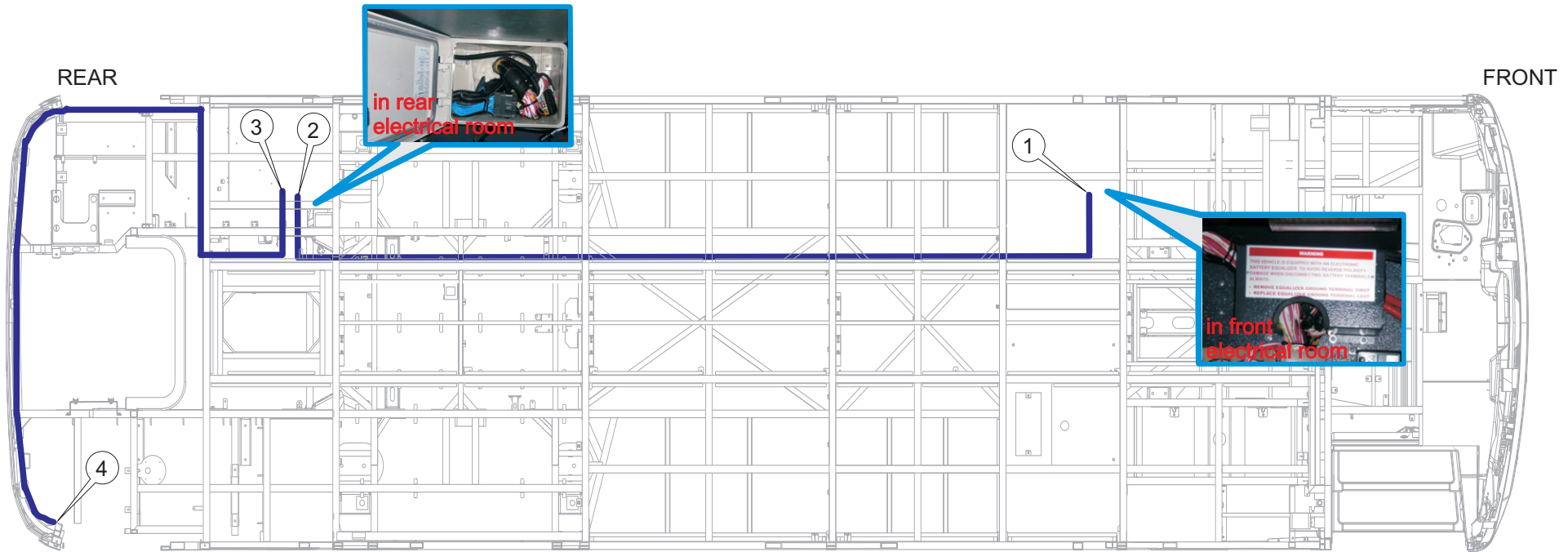


NO	IDENTIFICATION
1	C13-01, C13-02, C13-03, C13-04, C13-05, C13-10, C14-01, C14-02, C14-03, C14-04, C14-08, C14-10, C14-11, FAN, INVERTER
2	C46-01, C46-02, C46-03, CHASIS, C66-01, C66-02
3	C33-01, C33-02, C-33-03, C35-01, C35-02, C-35-03, ALLISON
5	C35-05
6	C35-06



Note:

SPARE CABLE (CHASSIS & ENGINE ROOM WIRING HARNESS)



NO	IDENTIFICATION	SOCKET
1	SP-01, SP-02, SP-03, SP-04, SP-05, SP-06, SP-07, SP-08, SP-09, SP-10, SP-11, SP-12, SP-13, SP-14, SP-15, SP-16,	F.BODY
2	SP-01, SP-02, SP-03, SP-04, SP-05, SP-06, SP-07, SP-08, SP-09, SP-10, SP-11, SP-12, SP-13, SP-14, SP-15, SP-16,	F.BODY
3	SP-01, SP-02, SP-03, SP-04, SP-05, SP-06, SP-07, SP-08, SP-09, SP-10, SP-11, SP-12, SP-13, SP-14, SP-15, SP-16,	E.ROOM
4	SP-01, SP-02, SP-03, SP-04, SP-05, SP-06, SP-07, SP-08, SP-09, SP-10, SP-11, SP-12, SP-13, SP-14, SP-15, SP-16,	E.ROOM

Note :

TEMSA

TS 30

00C-12

