

Servicing Motronic injection system

Exploded view of fitting locations

Fitting locations, part 1

Components A to H are not shown in the exploded view. Access to certain components involves removing air cleaner housing

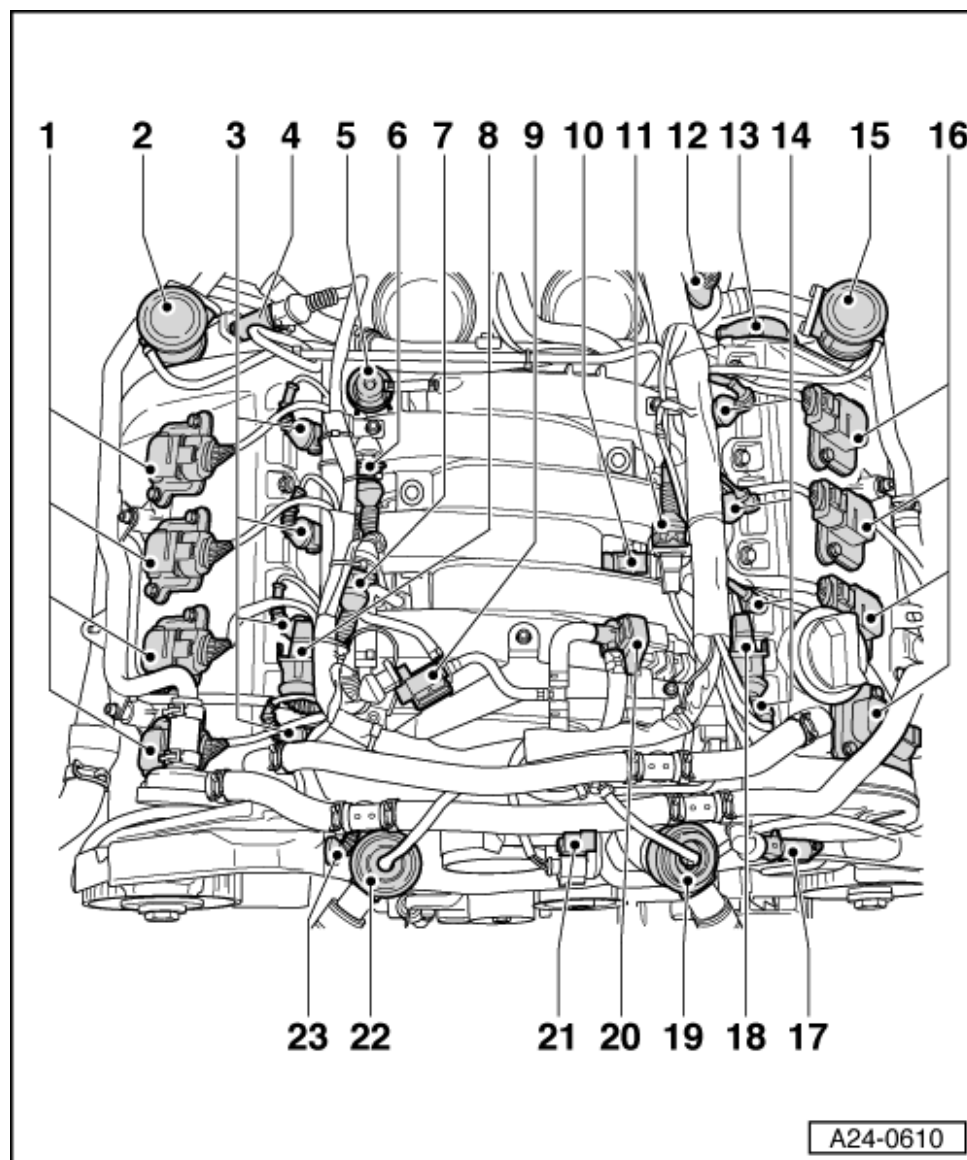
=>Page [24-78](#).

1. **A - Brake light switch (-F) and brake pedal switch (-F47)**
 - In footwell at pedal bracket next to brake pedal
2. **B - Diagnostic connector**
 - In driver's knee restraint
3. **C - Fuel pump relay (-J17)**
 - In micro central electrics behind driver's storage compartment, relay position 4
4. **D - Accelerator pedal position sender (-G79) and accelerator pedal position sender 2 (-G185)**
 - In footwell at accelerator pedal (both senders share same housing)

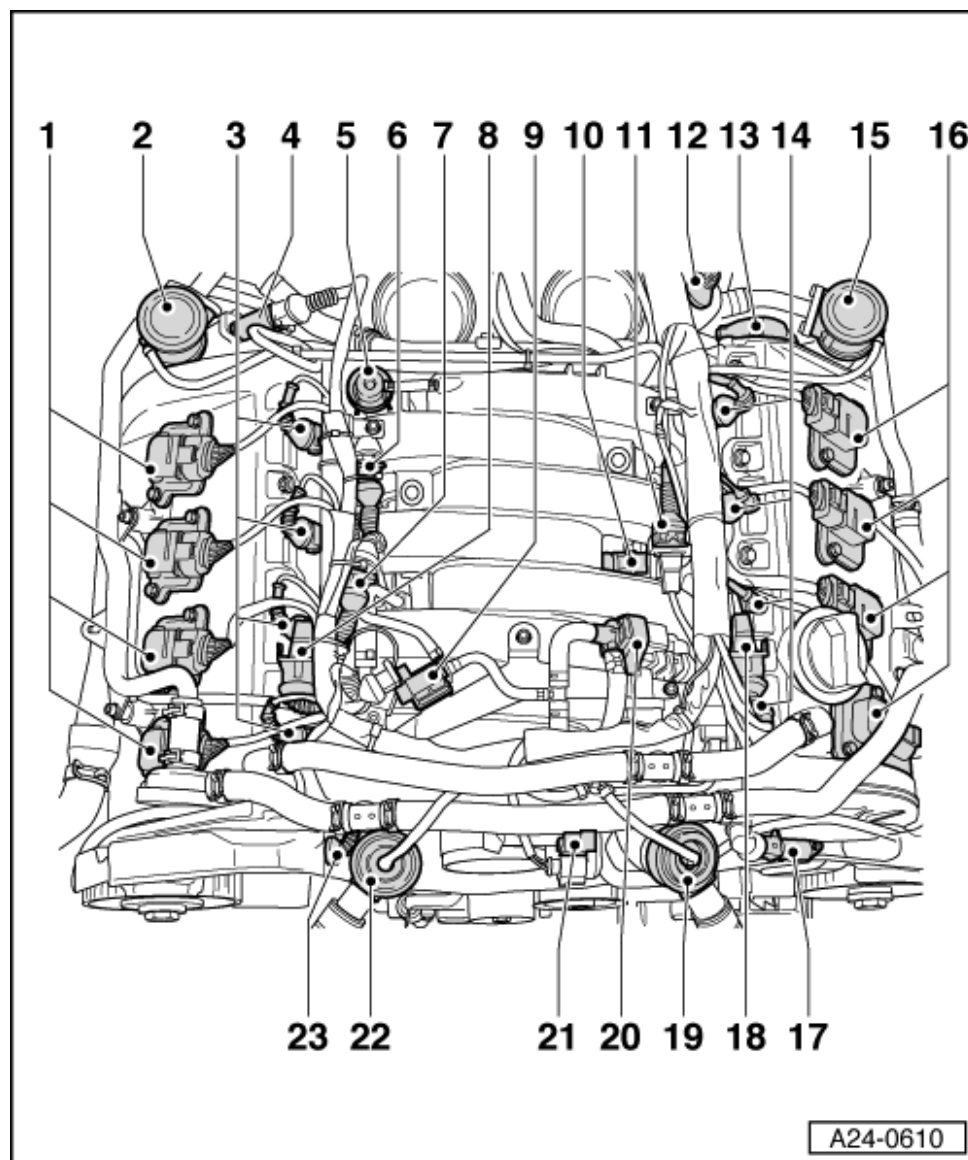
1. **E - "MIL" warning lamp**
 - In dash panel insert
(function of lamp
=>Page [01-3](#))
2. **F - "EPC" warning lamp**
 - In dash panel insert
(function of lamp
=>Page [24-204](#))
3. **G - Fuel pump control unit -J538**
 - Located on passenger's side of vehicle in a cavity on a level with C-pillar beneath cover on right next to rear seat backrest (at rear right seat belt reel)
 - Fitting location
=> Fig.[24-17](#)
4. **H - Air mass meters -G70 and -G246, refer to Page [24-19](#)**

1. **Ignition coils with output stages, cylinder bank 1**
 - Cylinder 1 - N70
 - Cylinder 2 - N127
 - Cylinder 3 - N291
 - Cylinder 4 - N292
2. **Mechanical combination valve for secondary air system**
 - Cylinder bank 1
3. **Injectors, cylinder bank 1**
 - Cylinder 1 - N30
 - Cylinder 2 - N31
 - Cylinder 3 - N32

- Cylinder 4 - N33

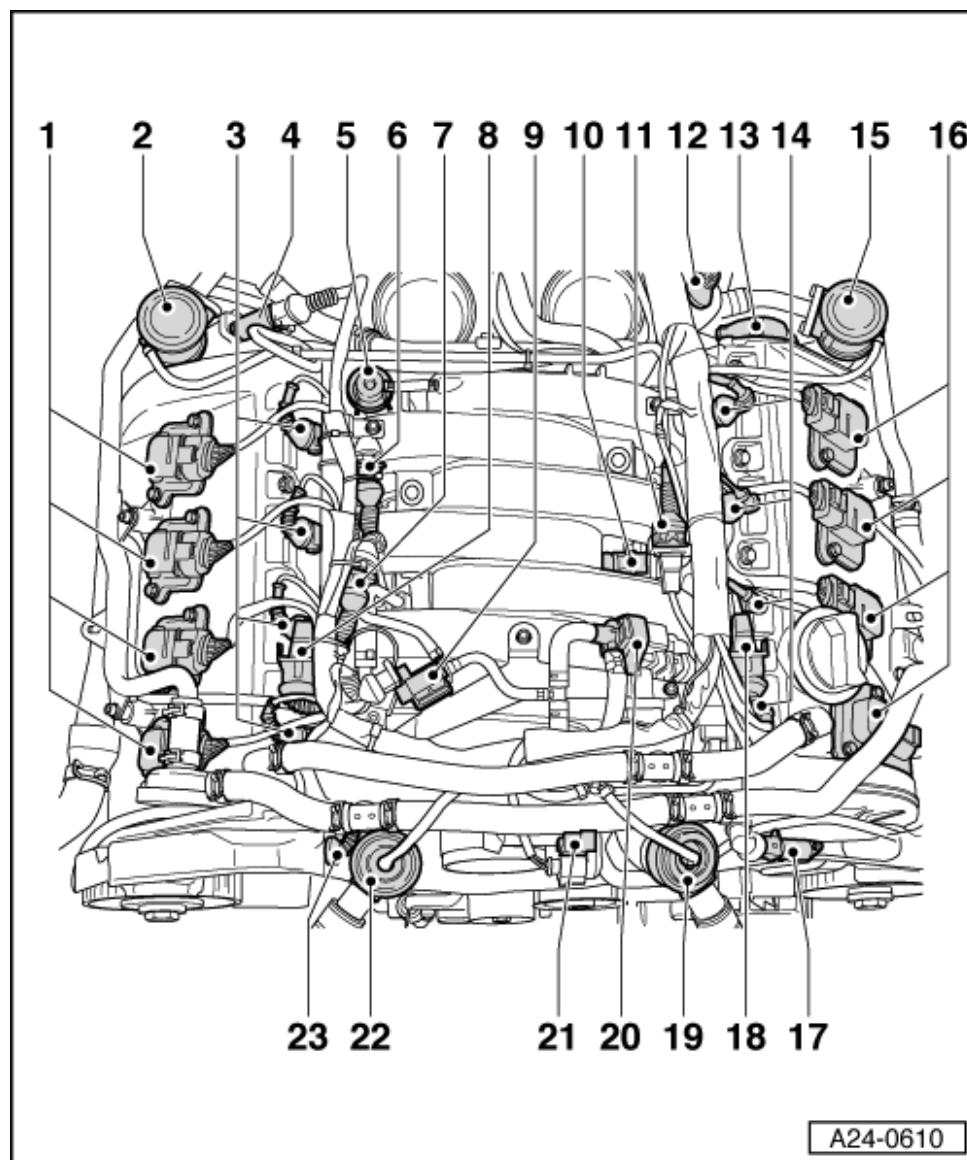


- 4. Inlet camshaft timing adjustment valve 1 (-N205)
- 5. Fuel pressure regulator
- 6. Connector for continued coolant circulation pump -V51
- 7. Connector (extension) for turbocharger divert air valve - N249
- 8. 3-pin connector
 - For knock sensor 1 (-G61)



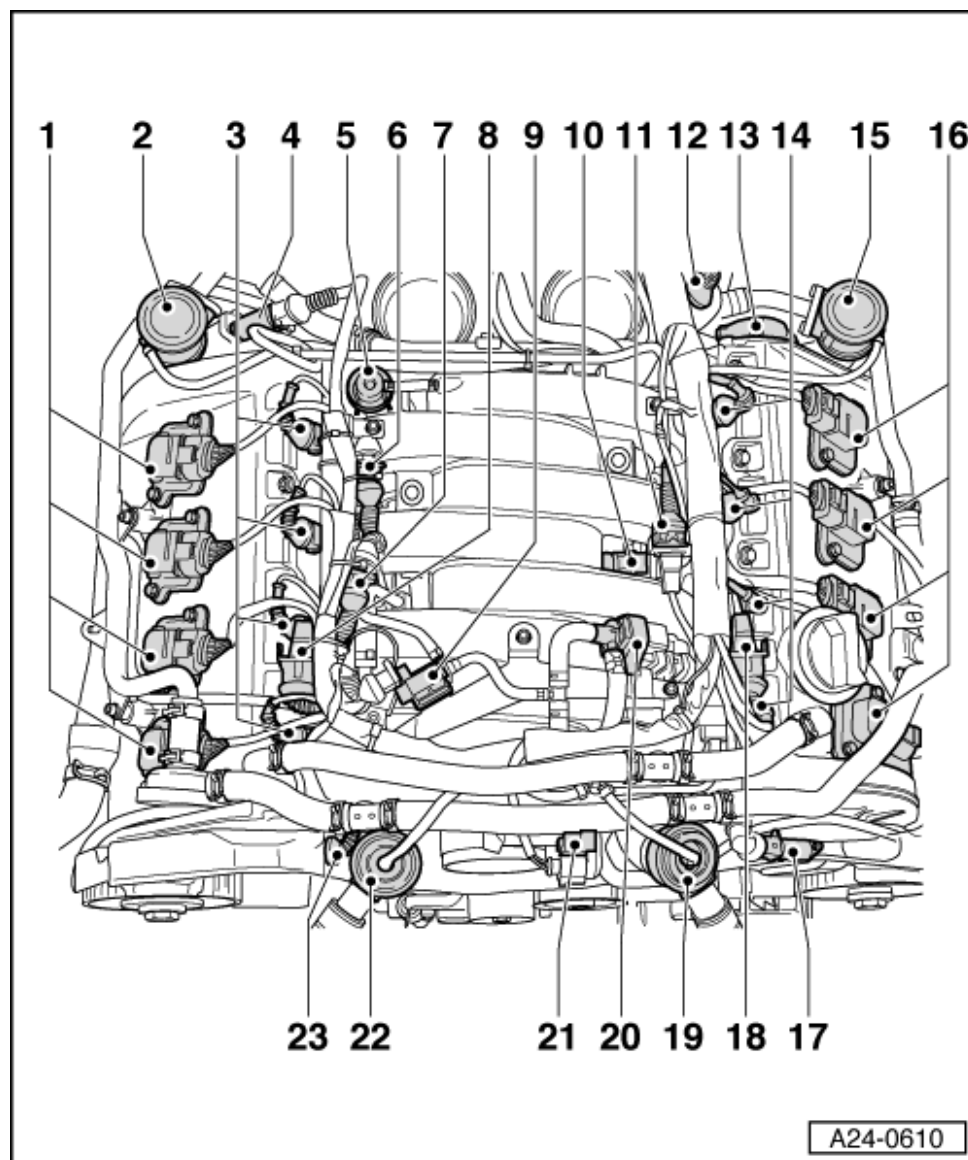
- 9. **Secondary air inlet valve (- N112)**
- 10. **Intake air temperature sender -G42**
- 11. **3-pin connector**
 - For knock sensor 3 (- G198)
- 12. **Coolant temperature sender (-G62)**
- 13. **Hall sender 2 (- G163)**
 - Cylinder bank 2
- 14. **Injectors, cylinder bank 2**
 - Cylinder 5 - N83
 - Cylinder 6 - N84
 - Cylinder 7 - N85

- Cylinder 8 - N86
- 15. Mechanical combination valve for secondary air system**
- Cylinder bank 2



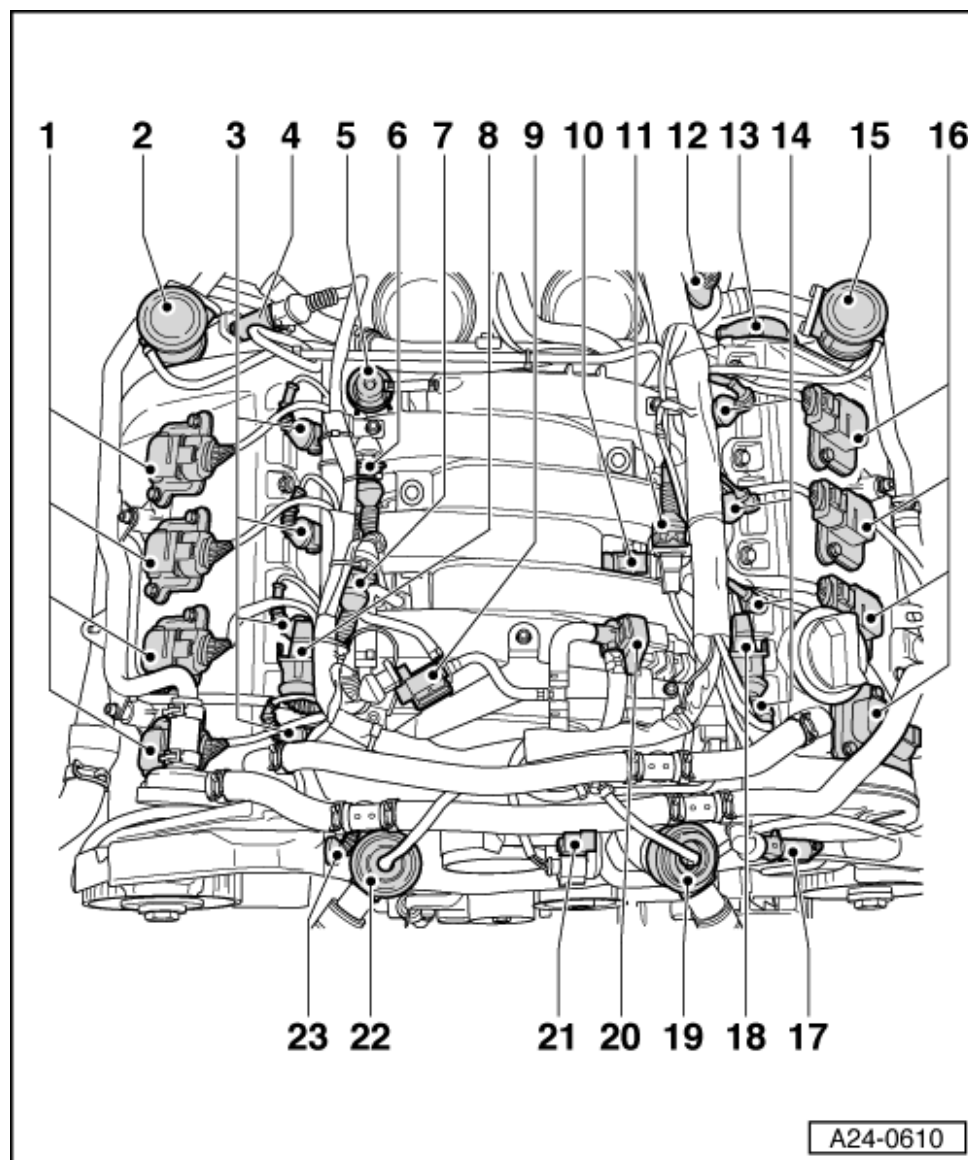
- 16. Ignition coils with output stages, cylinder bank 2**
 - Cylinder 5 - N323
 - Cylinder 6 - N324
 - Cylinder 7 - N325
 - Cylinder 8 - N326
- 17. Inlet camshaft timing adjustment valve 2 (-N208)**
- 18. 3-pin connector**
 - For knock sensor 2 (-G66)
- 19. Mechanical air recirculation valve for turbocharger**
 - Cylinder

- bank 2
20. Turbocharger divert air valve - N249



- 21. Throttle valve control part (- J338)**
- With throttle valve drive (-G186), throttle valve drive angle sender 1 (-G187) and throttle valve drive angle sender 2 (-G188)
- 22. Mechanical air recirculation valve for turbocharger**
- Cylinder bank 1
- 23. Hall sender (- G40)**

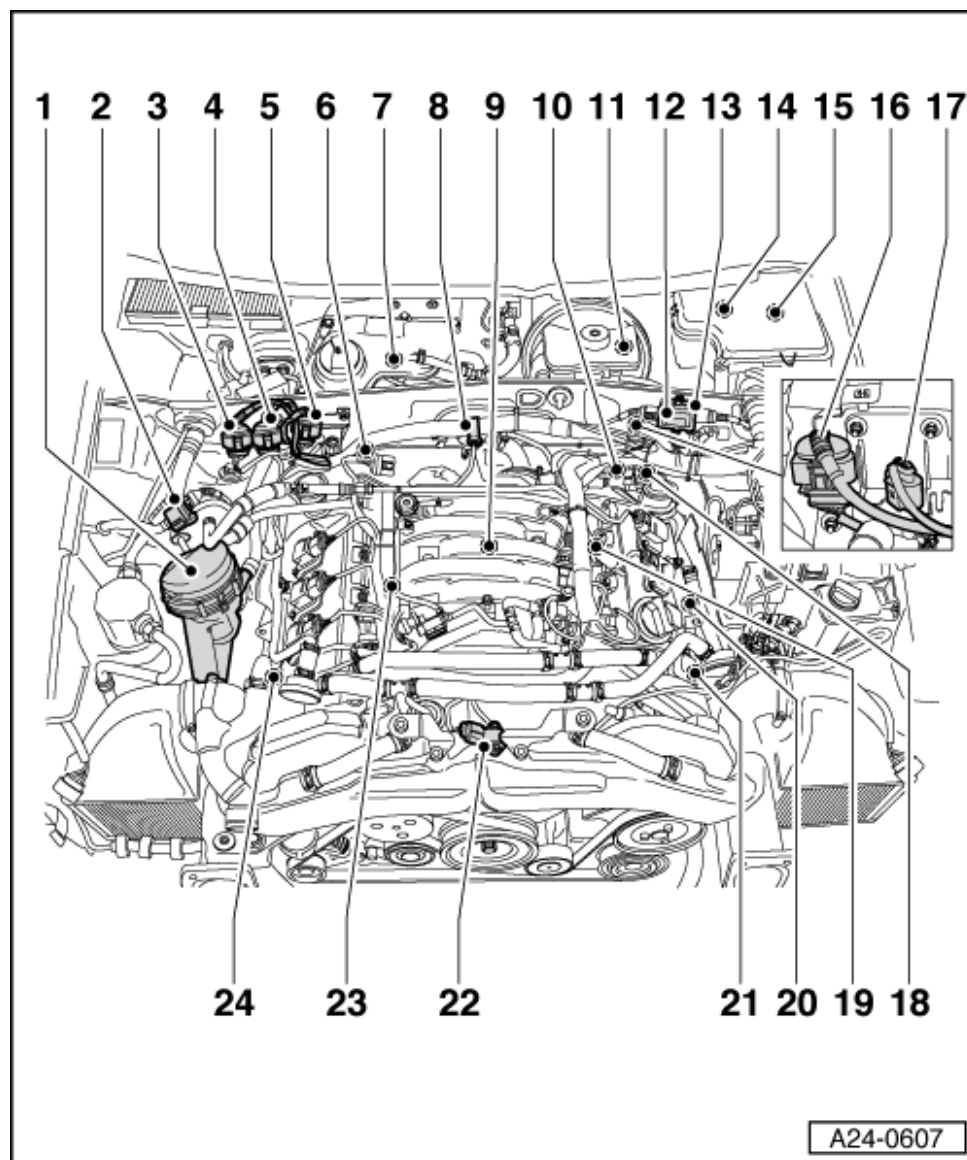
- Cylinder bank 1



Fitting locations, part 2

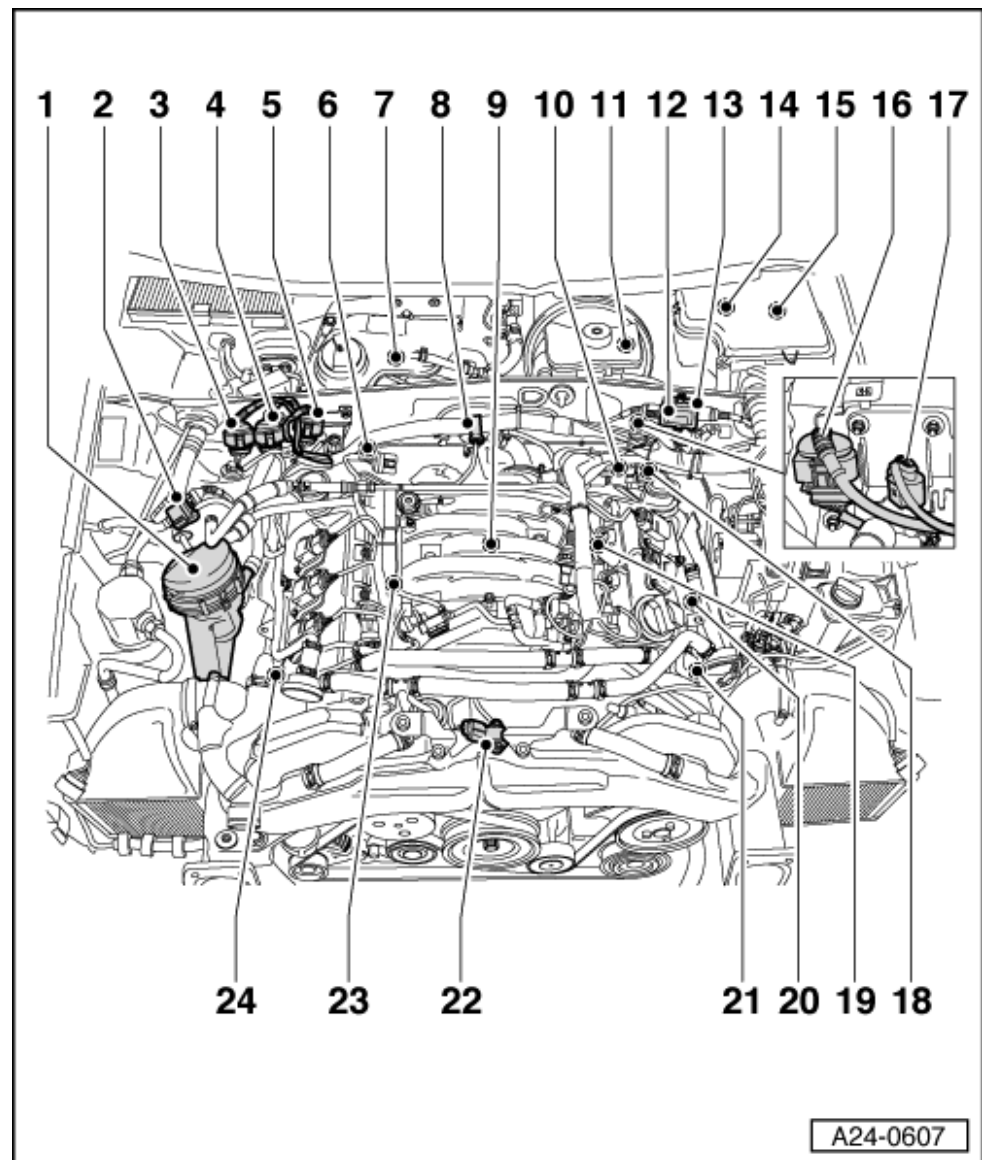
1. **Secondary air pump motor (-V101)**
2. **Activated charcoal filter system solenoid valve 1 (-N80)**
3. **4-pin connector**
 - For lambda probe 2 (-G130) and lambda probe heater (-Z29) downstream of catalytic converter
 - Bank 1 probe 2 (green)
4. **4-pin connector**
 - For lambda

- probe 2 (-G131) and lambda probe heater (-Z30) downstream of catalytic converter
- Bank 2 probe 2 (brown)
- 5. 4-pin connector**
- For lambda probe 1 (-G39) and lambda probe heater (-Z19)
- Bank 1 probe 1 (black)



- 6. Lambda probe 1 (-G39) with lambda probe heater (-Z19)**
 - Bank 1 probe 1 (refer to Page [24-17](#))
- 7. Lambda probe 2 (-G130) with lambda probe heater (-Z29)**
 - Bank 1 probe 2 (refer to Page [24-17](#))
- 8. Charge pressure control solenoid valve (-N75)**
- 9. Continued coolant circulation pump -V51**

- 10. Lambda probe 1 (-G108) with lambda probe heater (-Z28) bank 2 probe 1 (refer to Page [24-18](#))
- 11. Lambda probe 2 (-G131) with lambda probe heater (-Z30) bank 2 probe 2 (refer to Page [24-18](#))
- 12. Exhaust gas temperature sender 1 -G235
 - Brown



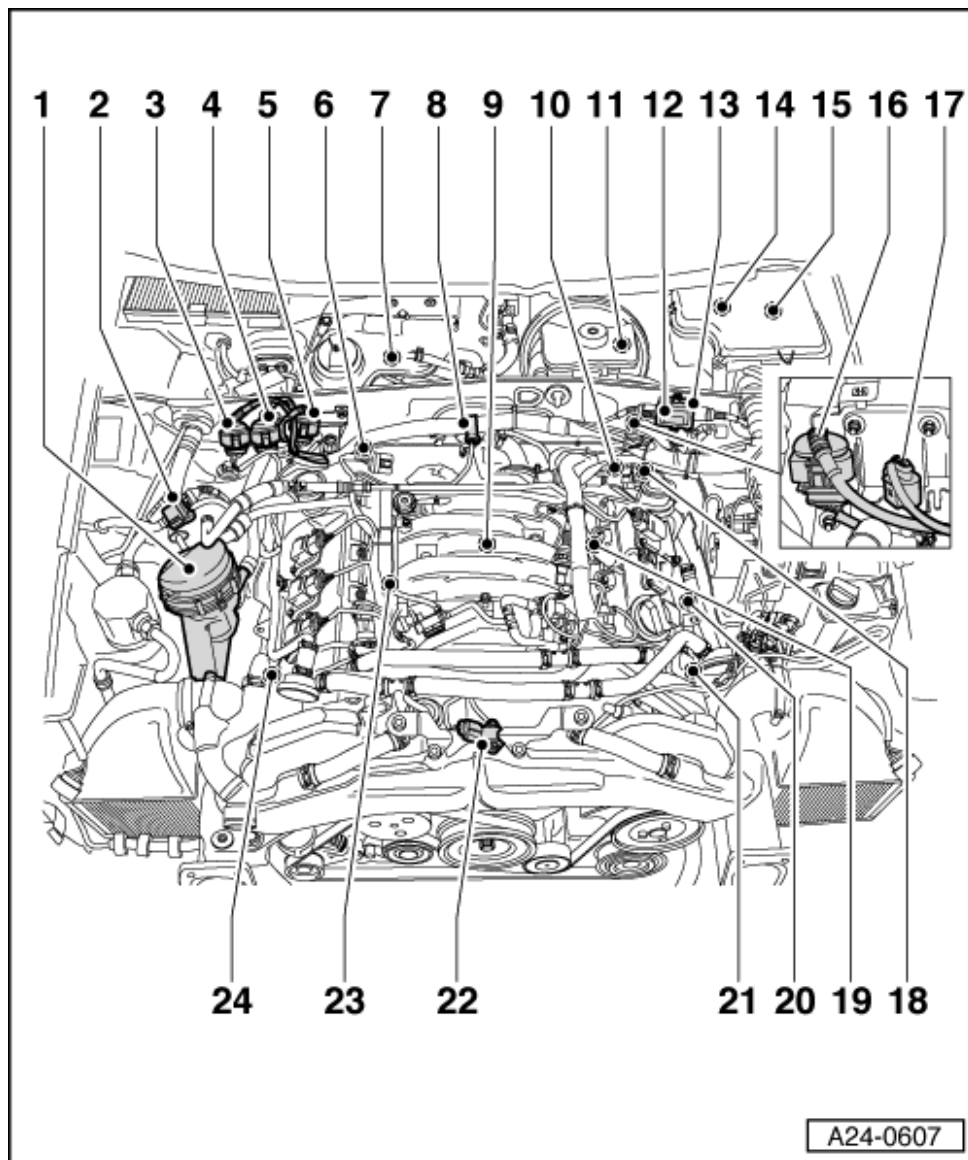
- 13. Exhaust gas temperature sender 2 -G236
 - Black
- 14. Details of fitting locations for the following components are given in current flow diagram
 - Motronic current supply relay -J271
 - Continued coolant circulation relay -J151
 - Secondary air pump relay -J299
- 15. Engine control unit
- 16. 4-pin connector
 - For lambda

probe 1 (-
G108) and
lambda
probe
heater (-
Z28)
upstream
of catalytic
converter

Bank 2
probe 1

17. 3-pin connector

- For engine
speed
sender (-
G28)
- Grey



18. Engine speed sender -G28

- Fitting
location
=> Fig.24-
18

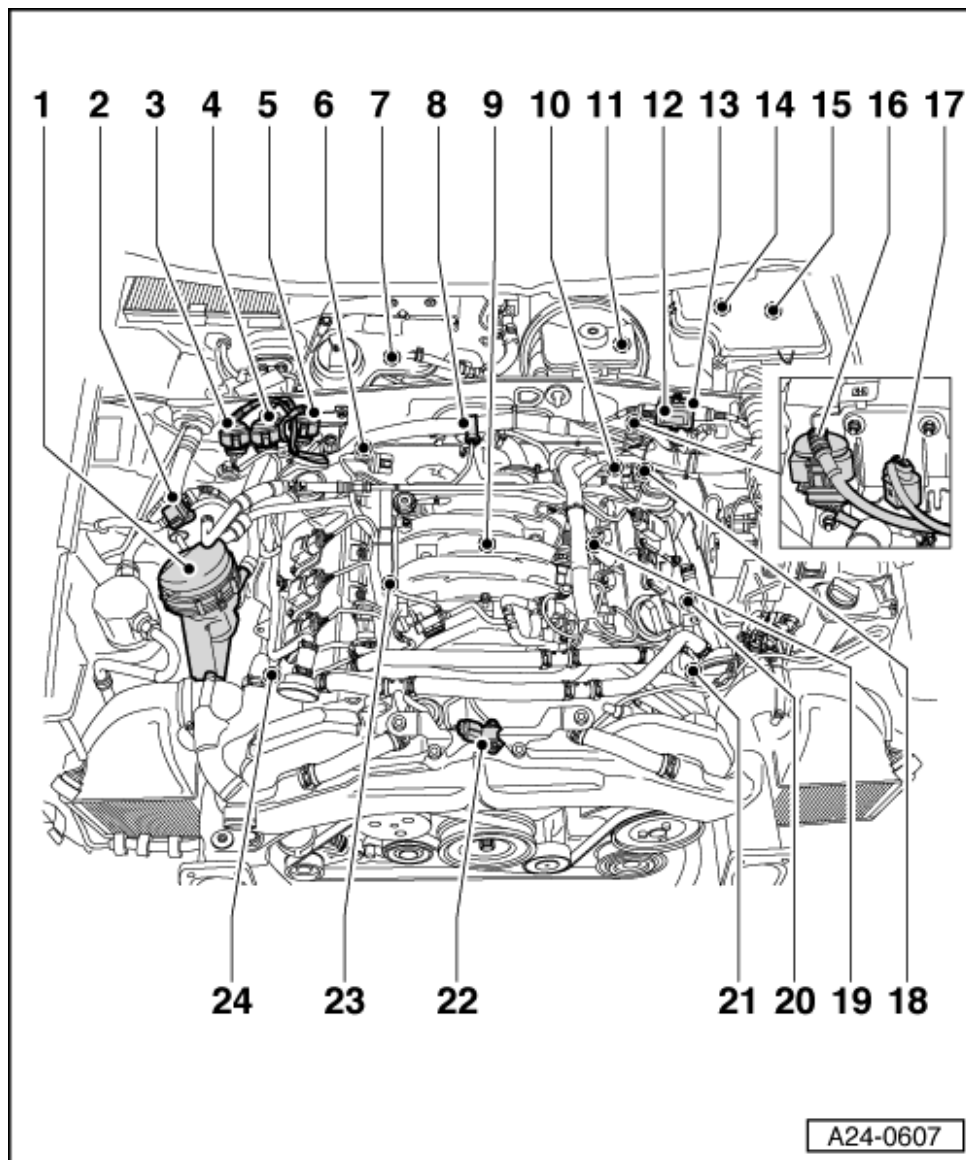
19. Knock sensor 3 - G198

- On left in
direction of
travel
beneath
intake
manifold in
internal V
at cylinder
7 water
jacket

20. Knock sensor 2 - G66

- On left in
direction of
travel
beneath
exhaust

- manifold at
cylinder 6
water
jacket
- 21. Right engine mounting solenoid valve - N145
 - 22. Charge air pressure sender -G31
 - 23. Knock sensor 1 - G61
 - On right in direction of travel beneath intake manifold in internal V between cylinders 2 and 3
 - 24. Left engine mounting solenoid valve - N144



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→ Fig.1 Fitting location of accelerator pedal position sender -G79 and accelerator pedal position sender 2 -G185

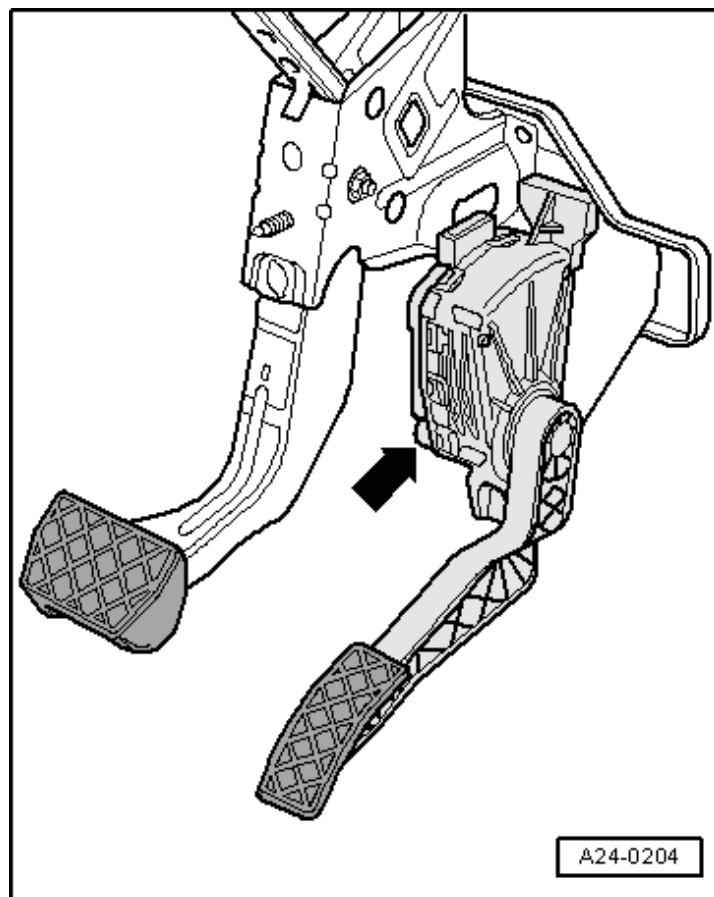
- Integrated into accelerator pedal module -arrow-

Note:

Accelerator pedal position sender -G79 and accelerator pedal position sender 2 -G185 are integrated into accelerator pedal module and cannot be replaced separately.

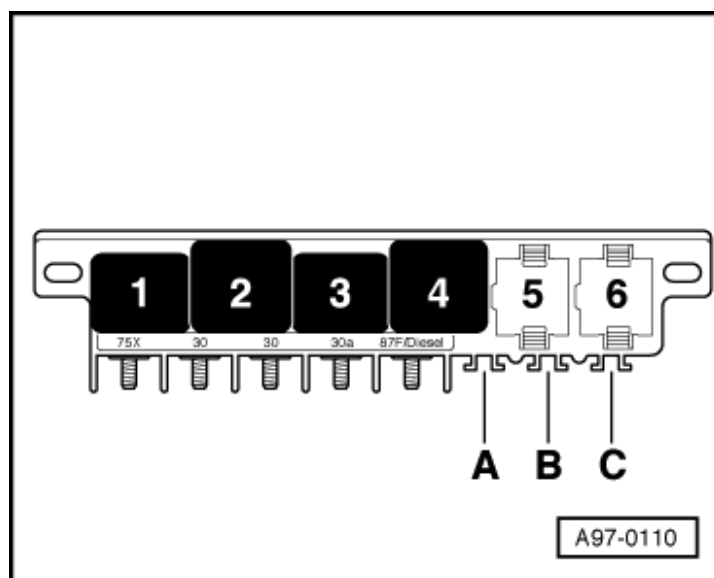
Removing and installing accelerator pedal module

=> [Fuel Supply System - Petrol Engines: Repair Group 20](#)



→ **Fig.2 Fitting location of fuel pump relay J17**

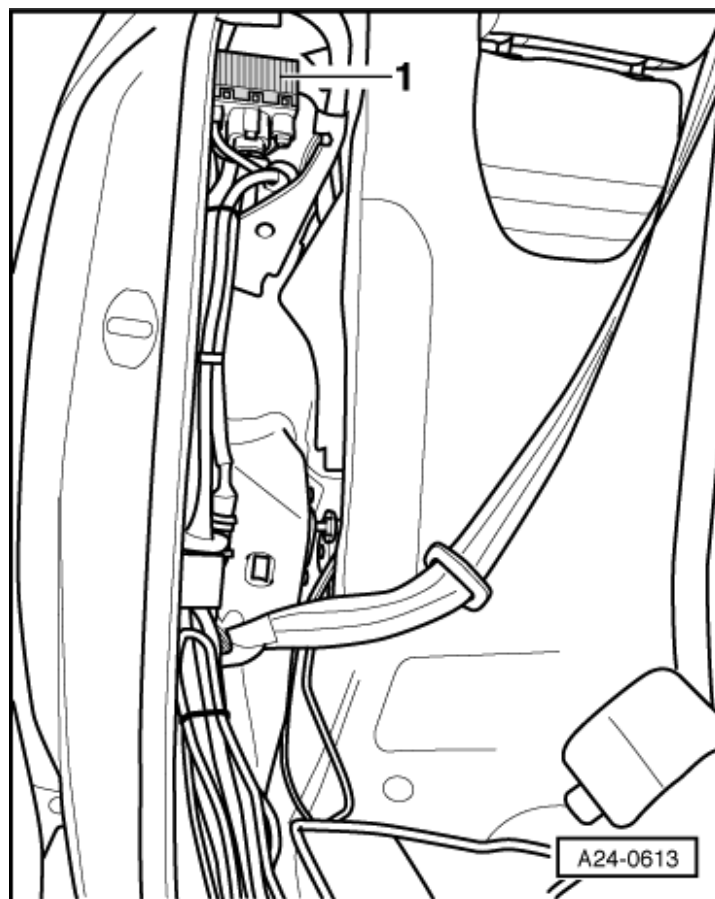
- On central electric on left in driver's footwell, position 4



→ **Fig.3 Fitting location of fuel pump control unit -J534**

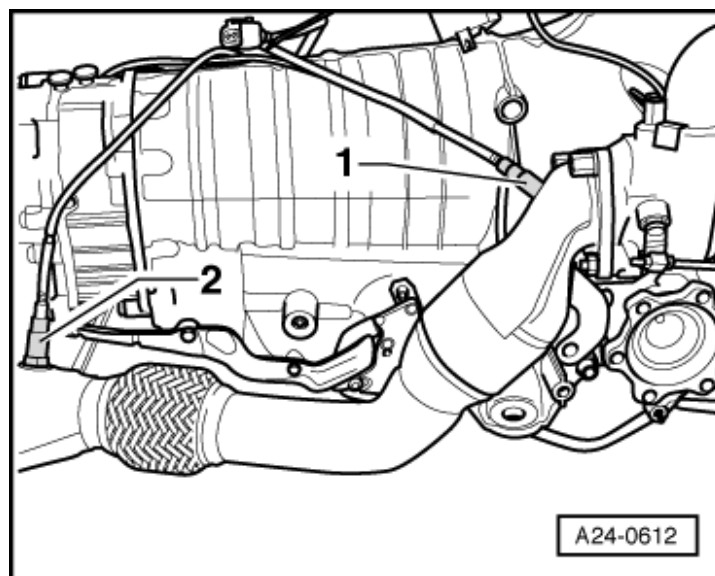
1- Fuel pump control unit -J534

- Located on passenger's side of vehicle in a cavity on a level with C-pillar beneath cover on right next to rear seat backrest (at rear right seat belt reel)



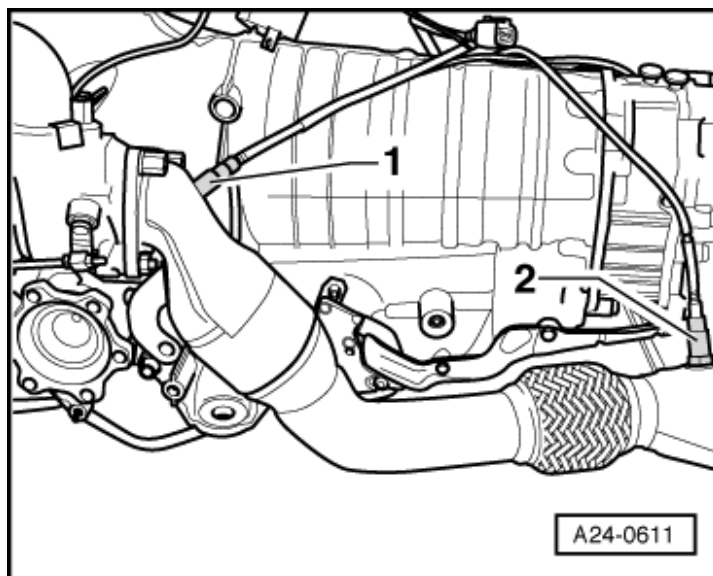
→ Fig.4 Fitting location of lambda probes, cylinder bank 1

- 1- Bank 1 probe 1
- 2 - Bank 1 probe 2



→ Fig.5 Fitting location of lambda probes, cylinder bank 2

- 1- Bank 2 probe 1
- 2 - Bank 2 probe 2



→ Fig.6 Fitting location of engine speed sender -G28, item -1- and vehicle speed sender, item -2-

