



**GROUP 80**

**HEATING-VENTILATION**

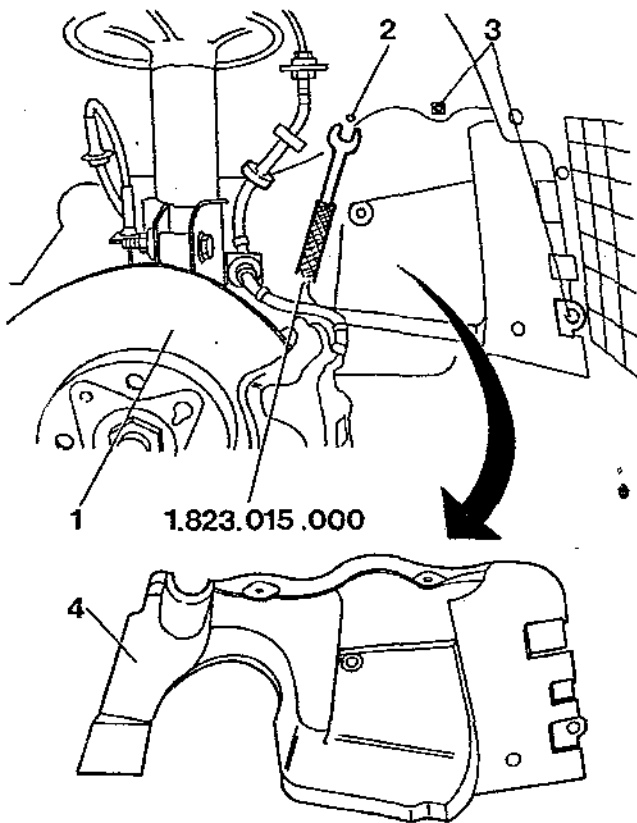
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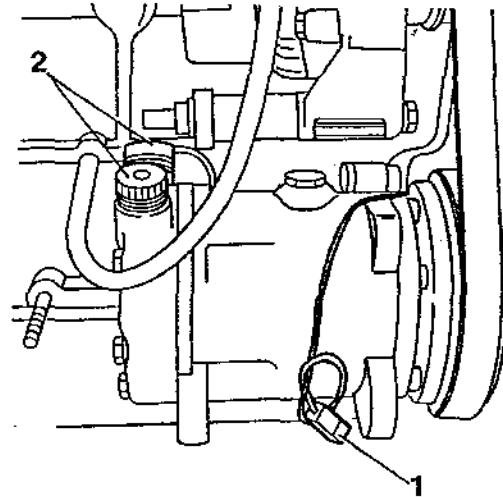
For all parts not given here, refer to the corresponding Group in publication N° PA4655D1000000

**COMPRESSOR****Removal**

1. When vehicle is on a lift, remove the front right-hand wheel.
2. Using tool No. 1.823.015.000 remove the plastic button securing the panel between the engine and wheel compartments.
3. Remove the two screws.
4. Remove the panel.

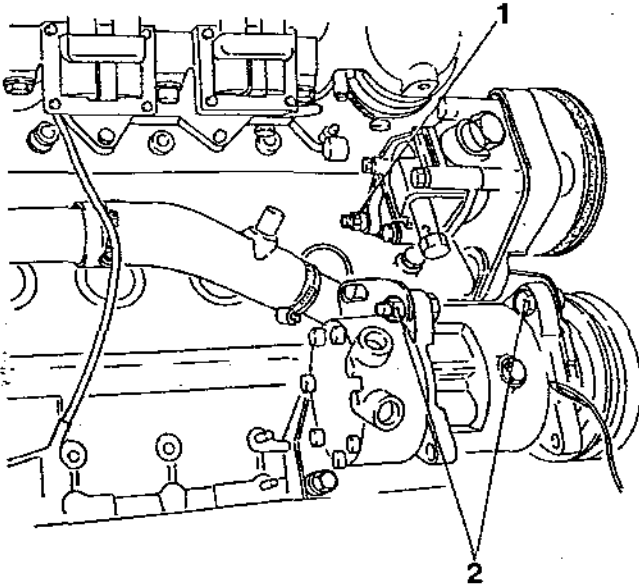


1. Disconnect the cable connecting the solenoid to the compressor.
2. Disconnect the two delivery and return hoses carrying Freon to and from the compressor.

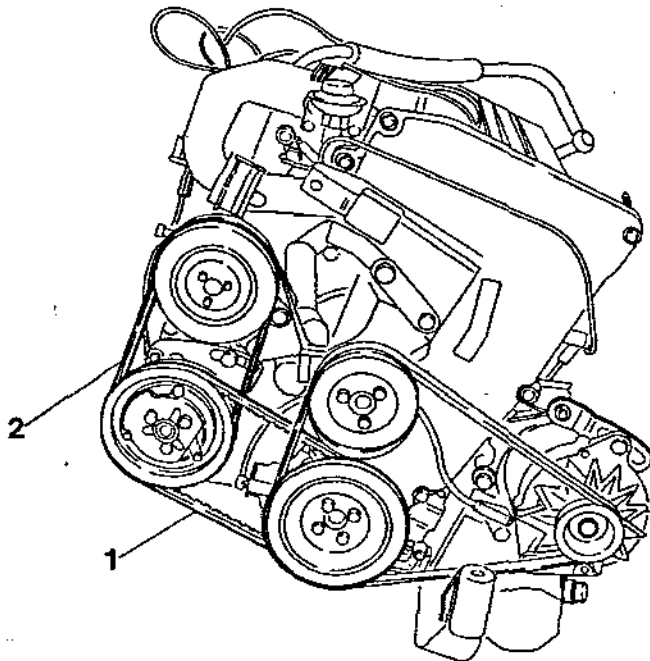


- Remove the front section of the exhaust system (see: PA4736B14x4000 / REPAIR INSTRUCTIONS - ENGINES - GR. 04 - REMOVING AND REFITTING THE EXHAUST PIPE).
- Remove the front crossmember and anti-roll bar (see: PA4655C1000000 / REPAIR INSTRUCTIONS - FRONT SUSPENSION - GR. 21 - REMOVING AND REFITTING FRONT CROSSMEMBER AND ANTI-ROLL BAR).

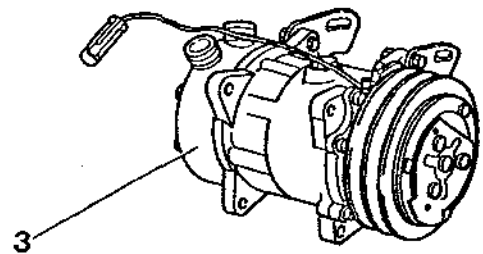
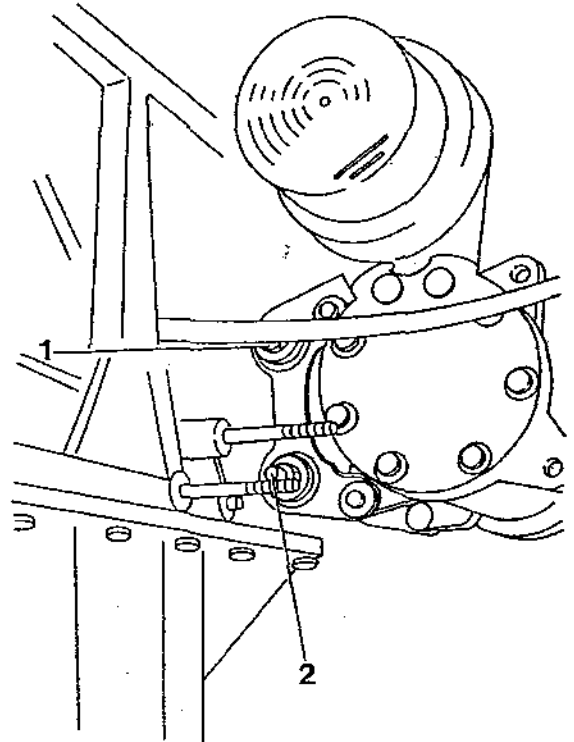
1. Loosen the nut securing the power steering.
2. Loosen the two upper screws securing the compressor.



1. Pull off the crankshaft pulley compressor drive belt.
2. Pull off the power steering-compressor drive belt.



1. Remove the two upper compressor retaining screws.
2. Remove the two lower compressor retaining screws.
3. Remove the complete compressor.



### Refitting



To refit, reverse the procedure followed for removal.

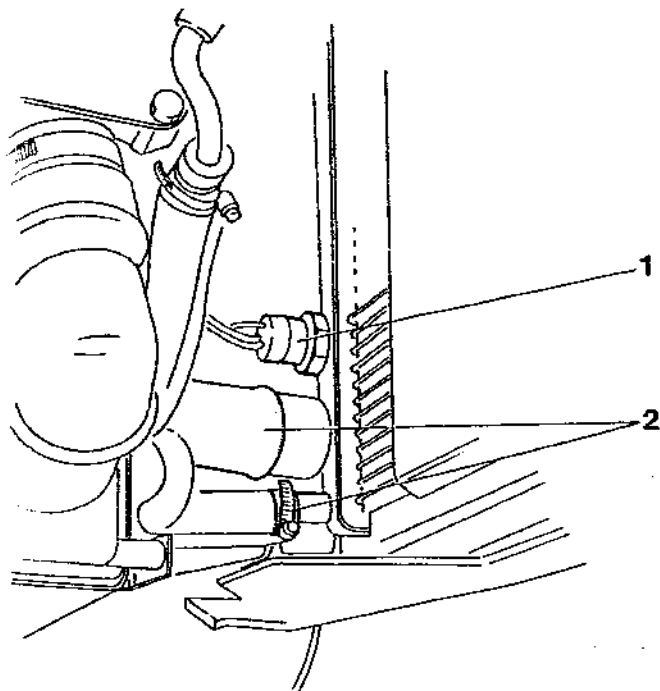
### Supplementary Indications regarding refitting

- Tighten the nuts to the correct torque.

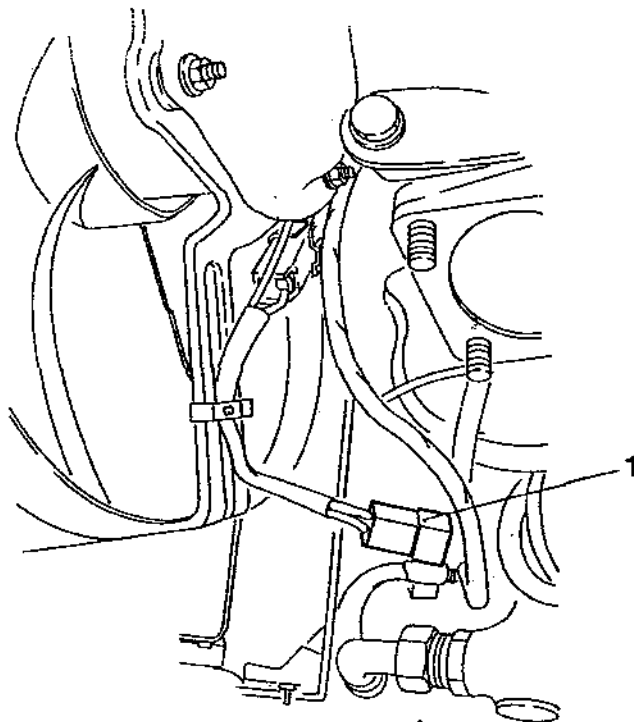
**CONDENSER****Removal**

- Drain off the engine coolant (see: PA4736B14x4000 - REPAIR INSTRUCTIONS - ENGINE COOLING / GR. 07 - DRAINING HYDRAULIC CIRCUIT).
- Detach the front grille and bumper (see: PA4655C1000000 / REPAIR INSTRUCTIONS - HEATING-VENTILATION - GR. 80 - REMOVING CONDENSER).

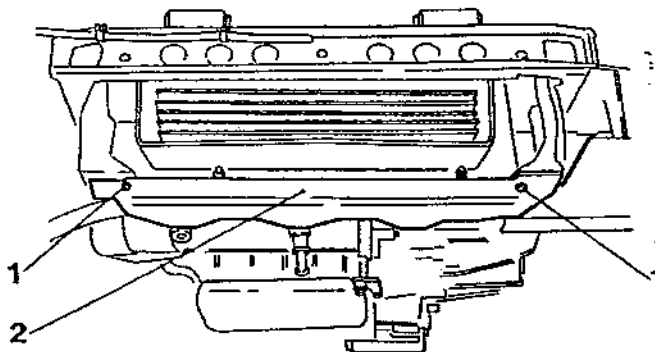
1. Disconnect the electrical connection from the engine coolant temperature sensor on the radiator.
2. Detach the water outlet hose from the radiator and the turbo- blower water hose.



1. Disconnect the electrical connection from the fan.

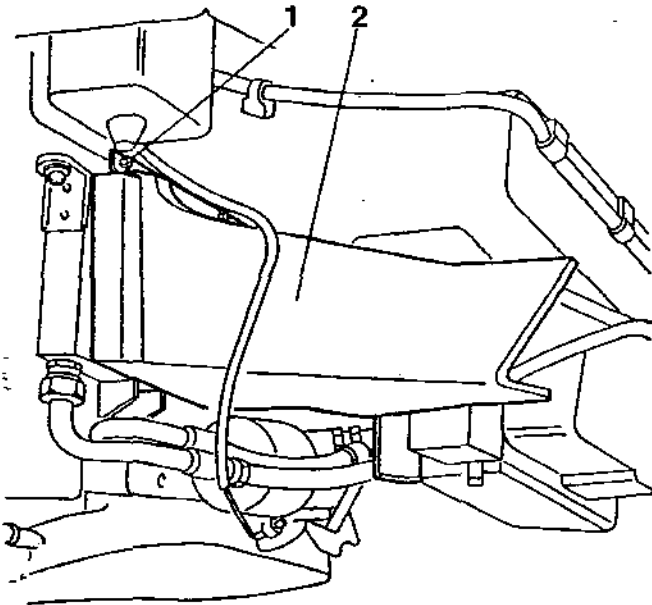


1. Loosen the screws securing the radiator support crossmember.
2. Remove the radiator support crossmember.

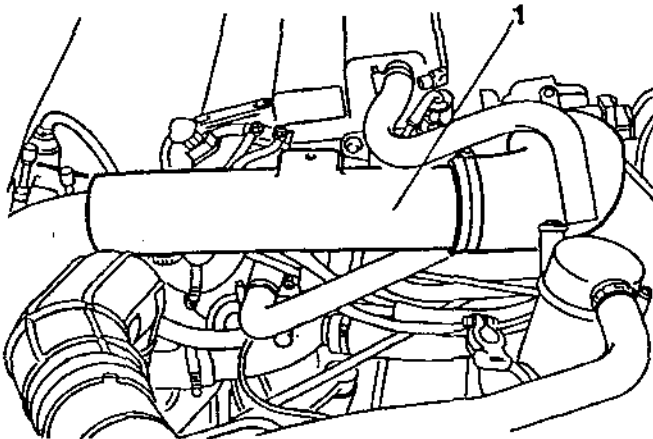




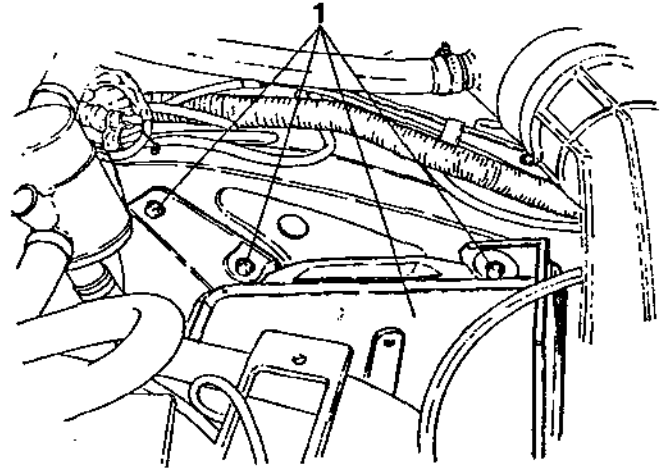
1. Loosen the screws securing the intercooler conveyor.
2. Remove the intercooler conveyor.



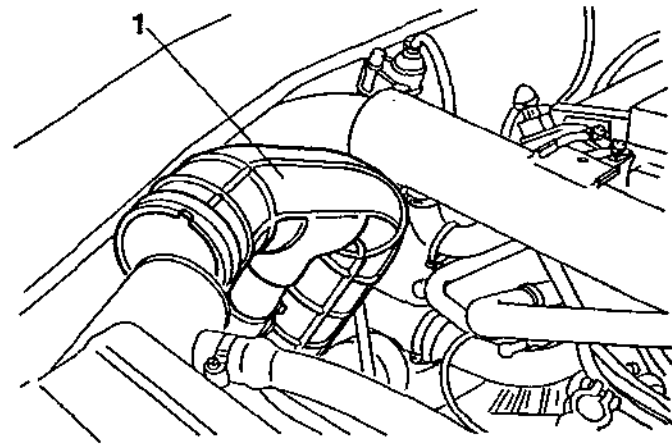
1. Detach the air duct from the engine air intake manifold.



1. Loosen the screws and remove the battery together with its support.



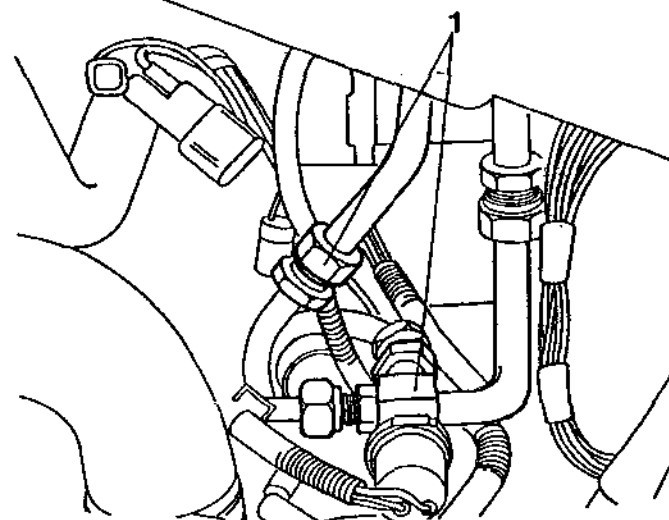
1. Detach the rubber air duct from the air cleaner.



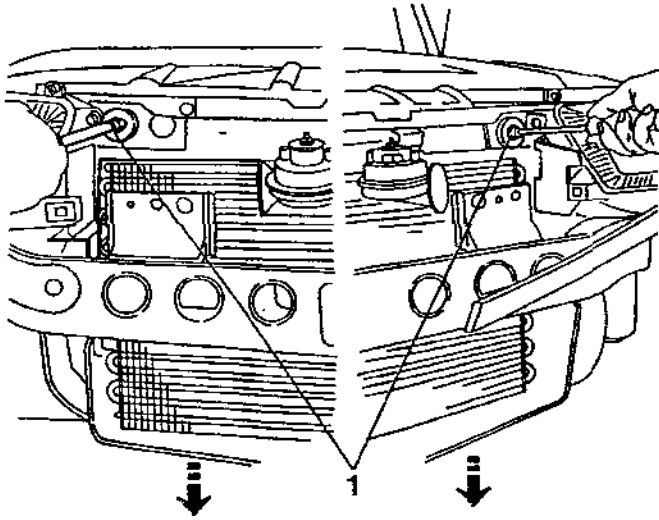
1. Detach the freon hose from the radiator and the engine coolant delivery hose from the radiator.



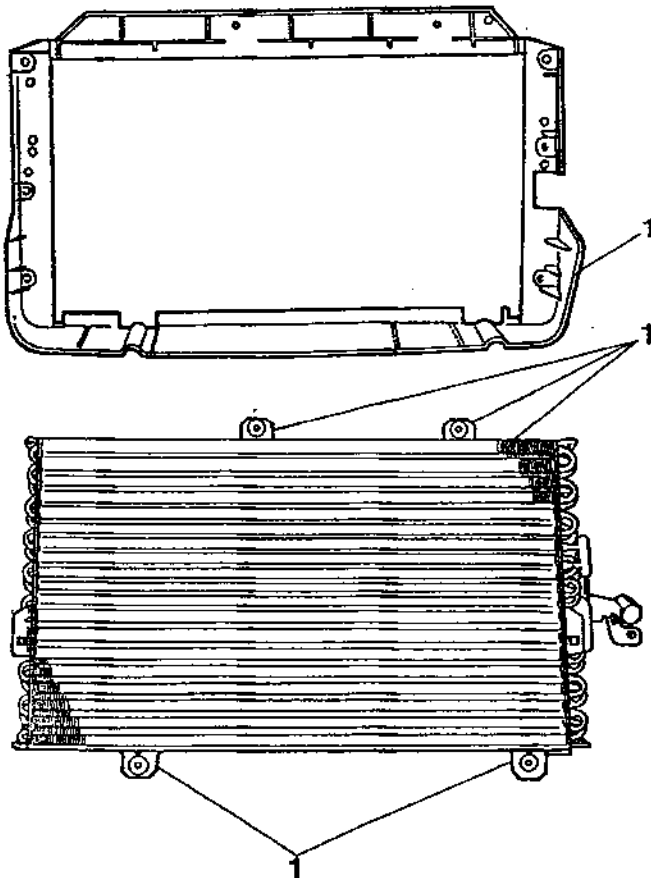
19 + 23 Nm  
(1.9 + 2.3 kgm)



1. With the vehicle positioned on a lift, support the radiator and unscrew the two screws (complete with rubber washers) securing the upper radiator attachment to the chassis and withdraw the radiator from the lower part of the vehicle.



1. Unscrew the four retaining screws and separate the condenser from the conveyor.



### Refitting



To refit, reverse the procedure followed for removal.

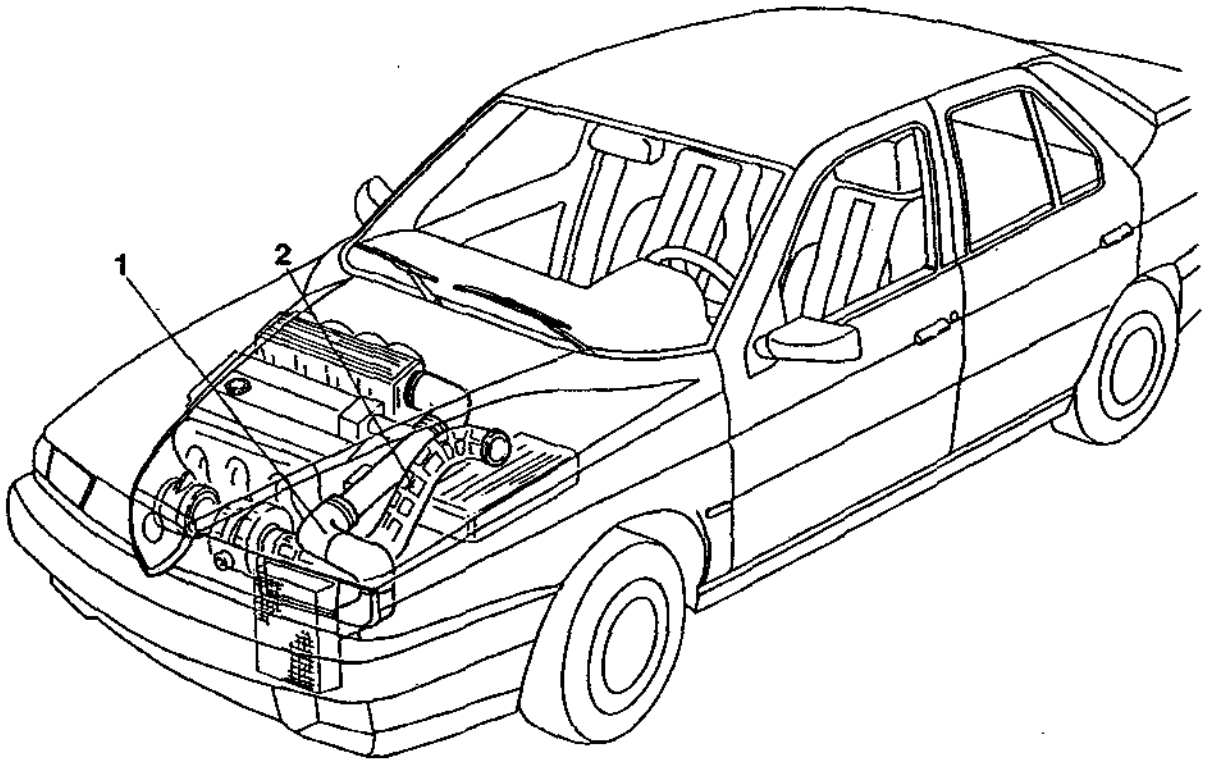
### Supplementary indications regarding refitting

- Tighten the unions to the correct torque.

**HEATING-VENTILATION SYSTEM HOSES****Removal**

- In order to gain access to the freon delivery and return hoses, the following must first be removed.
  
- Disconnect and remove the battery (see: PA4655C1000000 / REPAIR INSTRUCTIONS - ELECTRICAL SYSTEM - REMOVING AND REFITTING BATTERY).

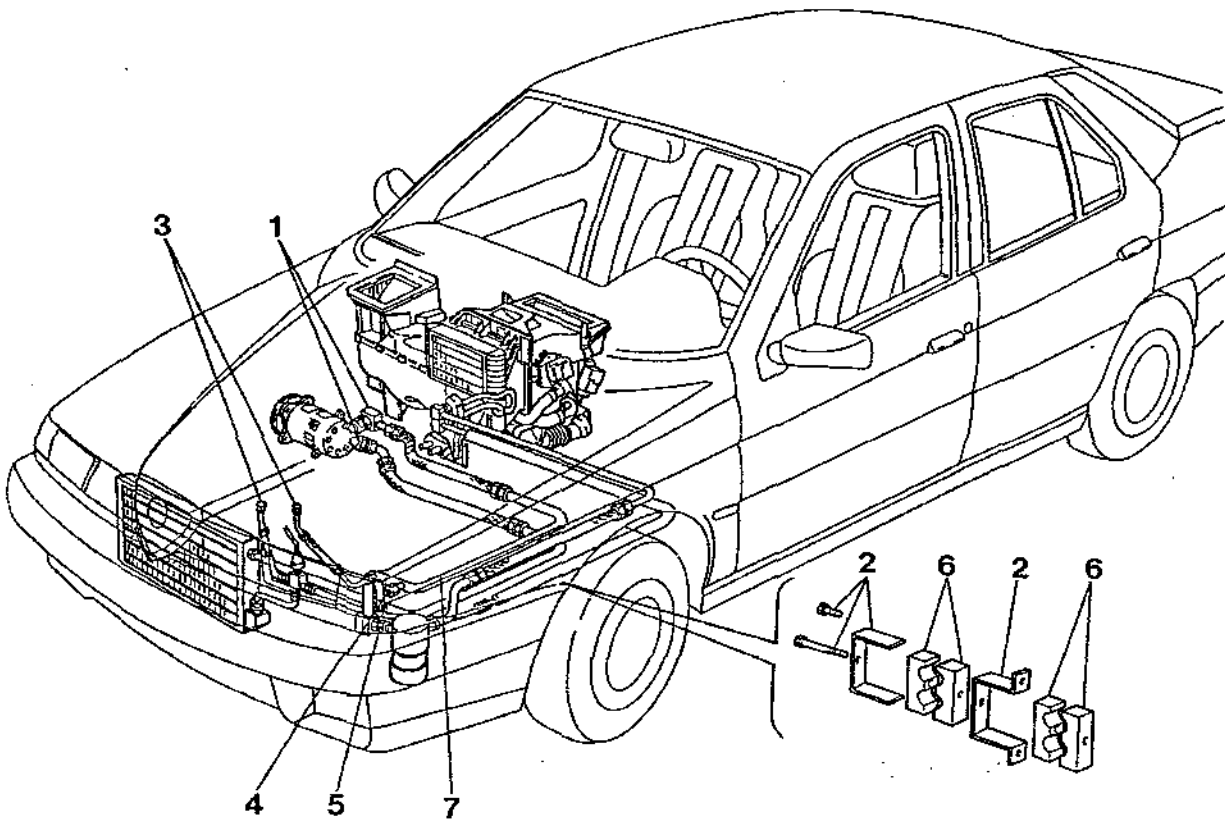
1. Unscrew the strap and detach the intercooler air duct from the throttle body.
  2. Detach the hose connecting the air cleaner to the turboblower.
- Loosen the screws and remove the battery (see: PAR. CONDENSER).





- Raise the vehicle on a lift and remove the front section of the exhaust manifold (see: PA4736B14x4000 / REPAIR INSTRUCTIONS - ENGINES - GR. 04 - REMOVING AND REFITTING EXHAUST PIPE).
1. Disconnect the compressor connections working from underneath the vehicle.

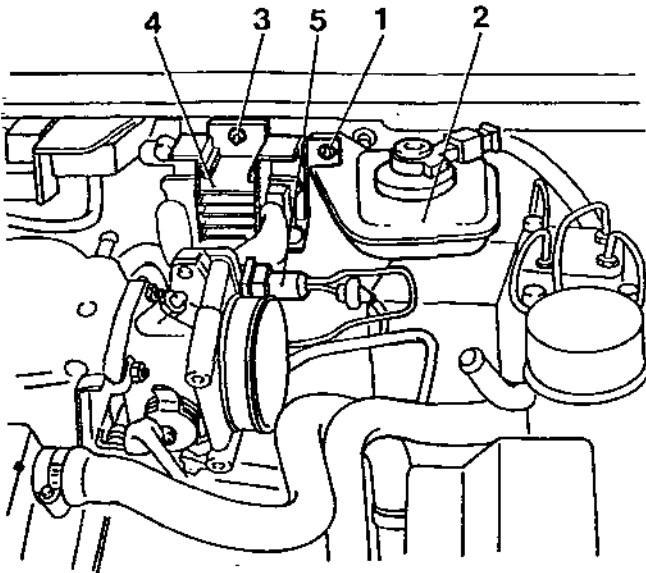
2. Lower the vehicle and loosen the screws to remove the bracket.
3. Free the pressure meter hose.
4. Disconnect the pressure switch.
5. Disconnect the dehydrator connection.
6. Detach the rubber collars from the hoses.
7. Detach the low pressure hose.





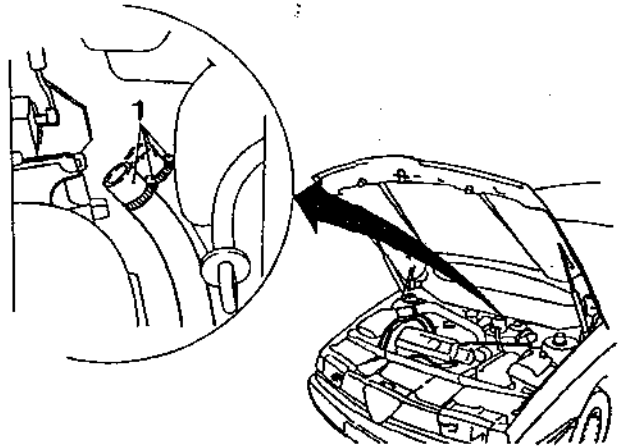


1. Loosen the screws securing the brake and clutch fluid reservoir.
2. Remove the reservoir.
3. Loosen the screws securing the power module and absolute pressure sensor bracket.
4. Remove the bracket.
5. Remove the potentiometer sensor from the throttle unit.

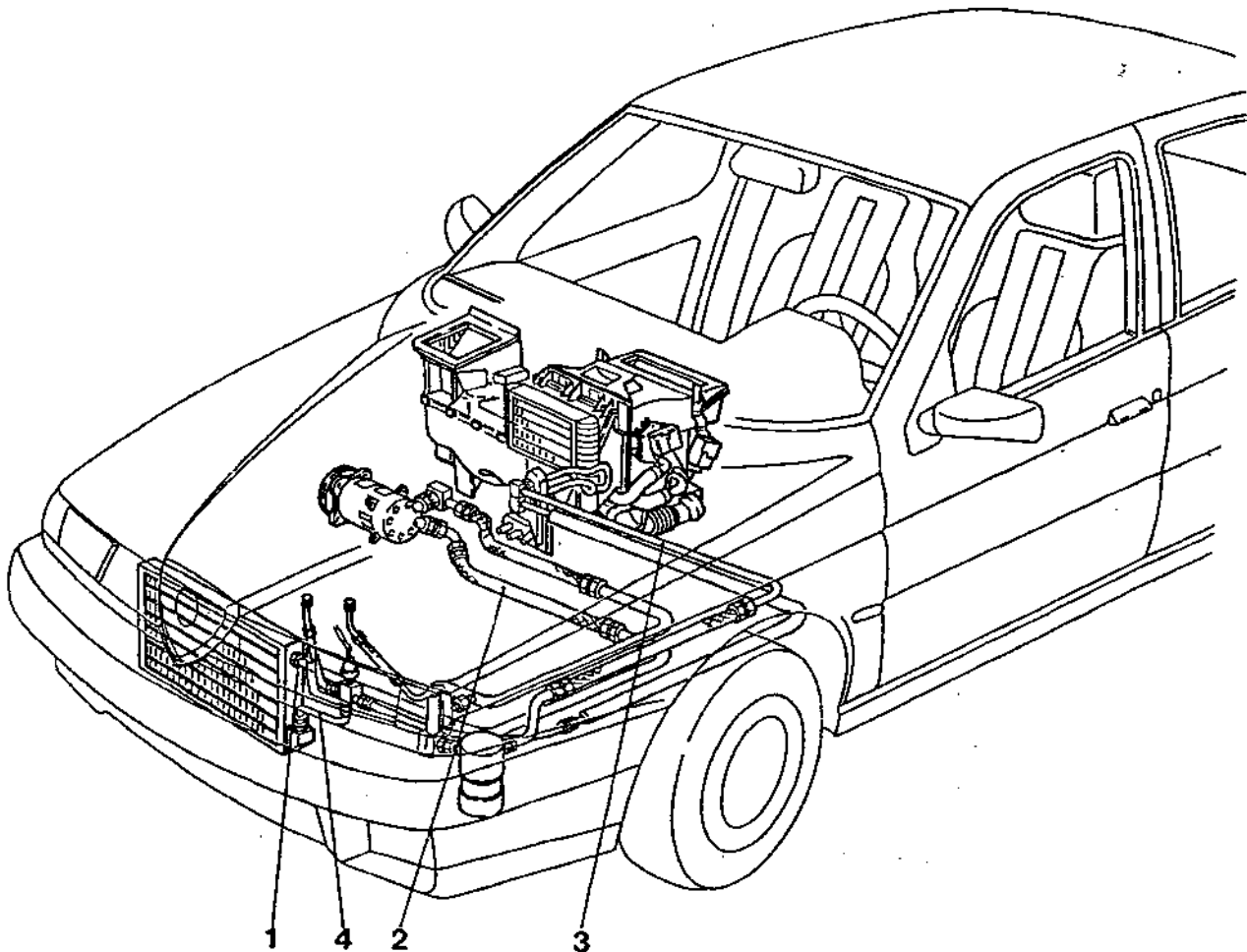


- Detach the vacuum hose from the servo brake (see: PA4655C1000000 / REPAIR INSTRUCTIONS - FRONT AND REAR BRAKES - GR. 22 - REMOVING AND REFITTING THE SERVO BRAKE).

1. Loosen the metal clamps securing the two rubber hoses carrying the engine coolant liquid to and from the heating radiator.



1. Disconnect the connection from the radiator.
2. Pull the high pressure hose out from below when the vehicle is raised on a lift.
3. Disconnect the connections from the evaporator-dehydrator hose connection and remove from below.
4. Disconnect the connections of the radiator- evaporator hose and remove from below.

**Refitting**

To refit, reverse the procedure followed for removal.