



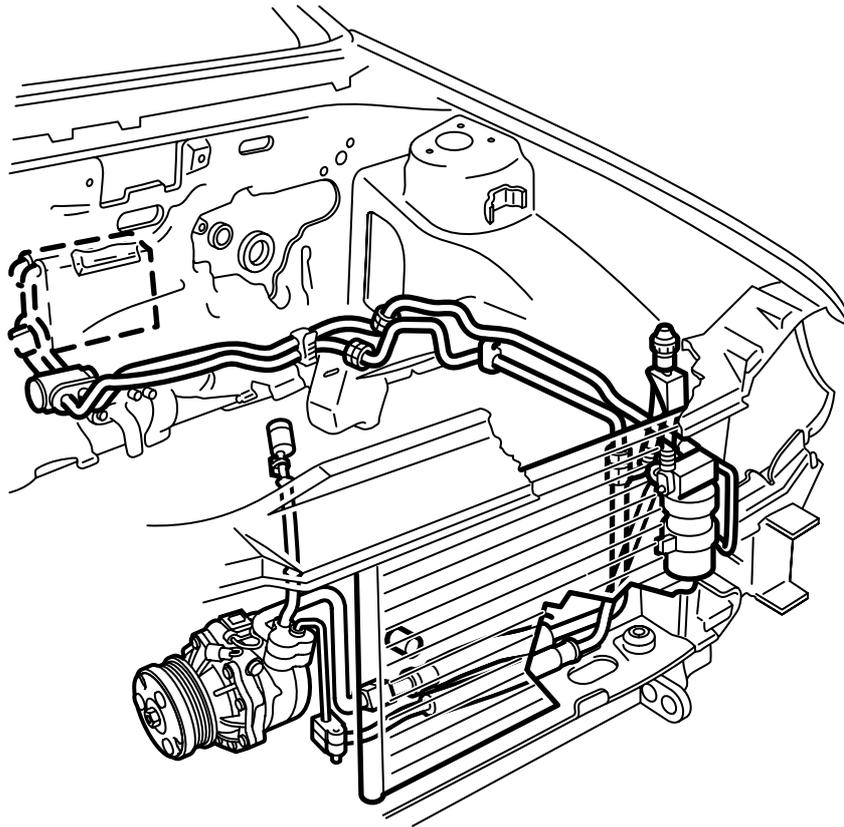
SAAB

**MONTERINGSANVISNING · INSTALLATION INSTRUCTIONS
MONTAGEANLEITUNG · INSTALLATIONS DE MONTAGE**

Saab 9-3 M00-

Air Conditioning (A/C), basic kit

Accessories Part No.	Group	Date	Instruction Part No.	Replaces
400 126 686				
400 126 694				
400 126 702				
400 110 649				
400 110 870				
400 110 888				
400 101 531	8:70-38	Jun 99	50 46 800	



D980A266

Introduction

The basic A/C kit must be installed by an authorized Saab workshop with approved equipment for handling refrigerant.

Important

R134a refrigerant is used in all Saab 9-3 cars.

Note the following:

- The A/C system is extremely sensitive for impurities. Make sure dirt does not enter the system.
- Both the receiver and the compressor absorb moisture from the air that cannot be removed later. All openings must therefore be plugged until they are connected.
- All new O-rings must be lubricated with synthetic vaseline, part no. (45) 30 14 286, before being fitted.

The removal of components in connection with gaining access to the system, charging the system with refrigerant, fault diagnosis and checking the performance of the system is described in Service Manual 8:3 Climate. Read through the installation instructions thoroughly before commencing work.

Supplementing the basic kit.

Basic kit 400 110 623 must always be complemented with additional kits for the variant of car concerned:

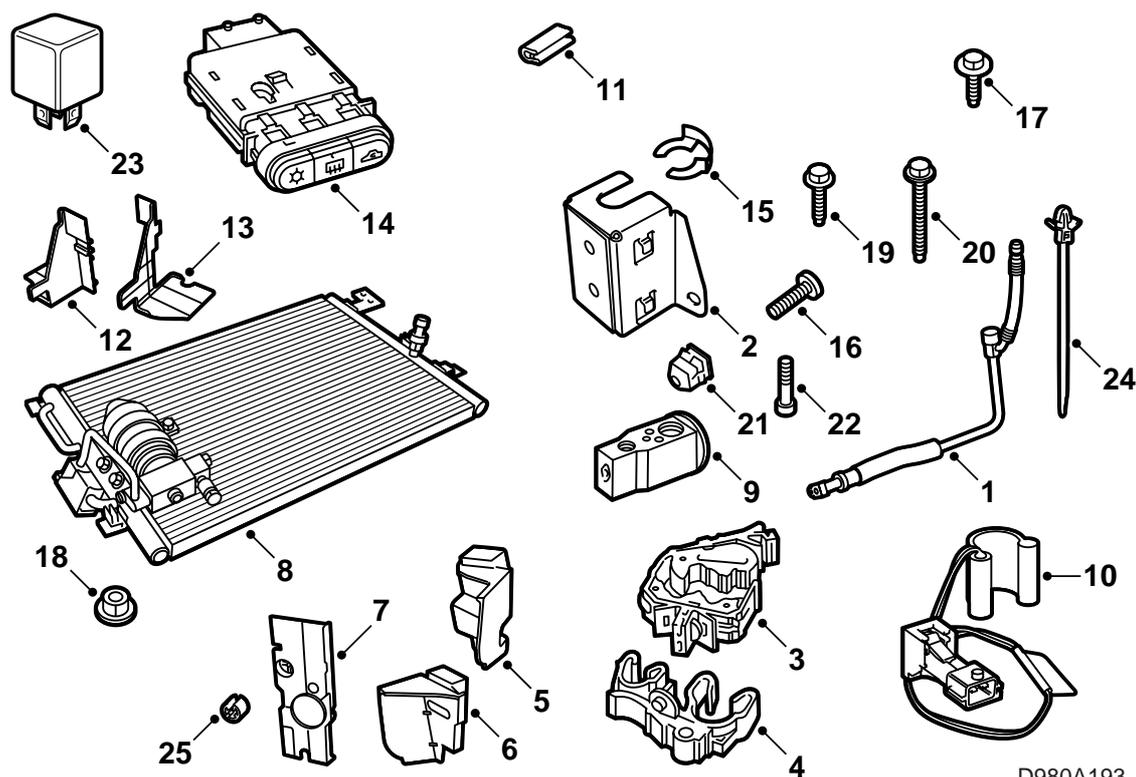
Additional kit	Cars affected
400 126 686 Basic kit	All cars
400 126 694 Fitting kit	Petrol (cold markets)
400 126 702 Fitting kit	Petrol (warm market)
400 110 649 Fitting kit	Diesel engines
400 110 870 Evaporator kit	LHD
400 110 888 Evaporator kit	RHD
400 101 531 Cooling system kit	Petrol (cold market)

Procedure

There are two descriptions for installing the A/C kit:

- Brief installation instructions, page 30.
- Installation instructions, page 43.

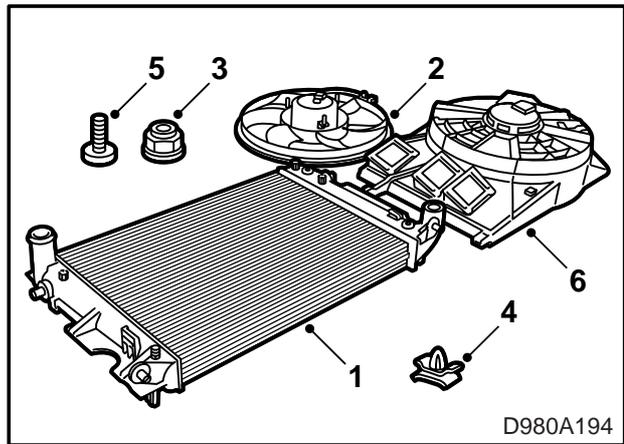
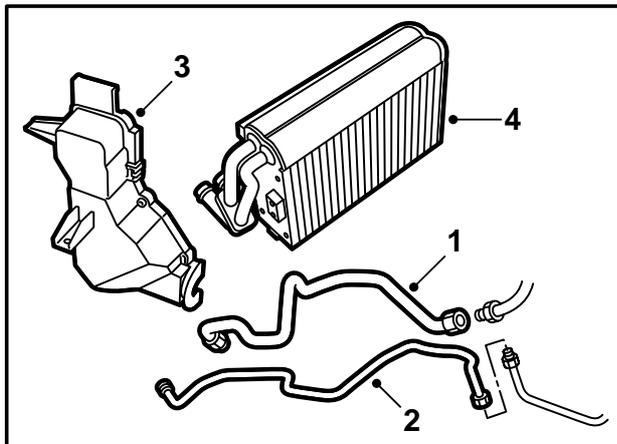
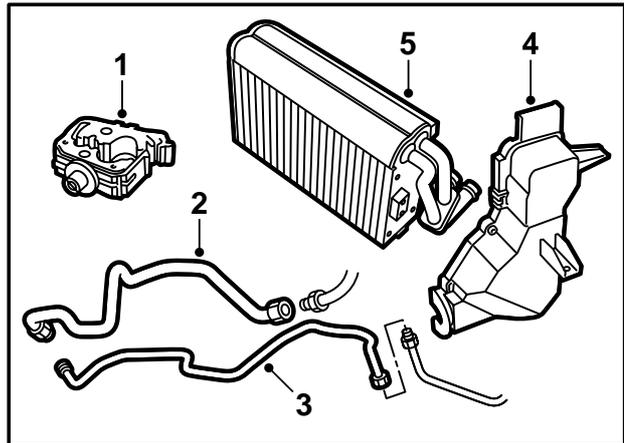
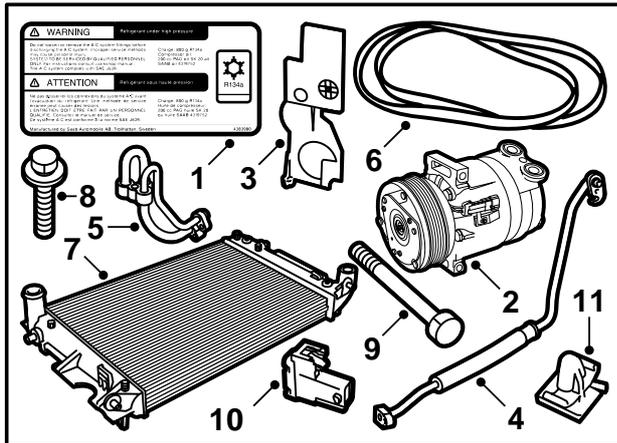
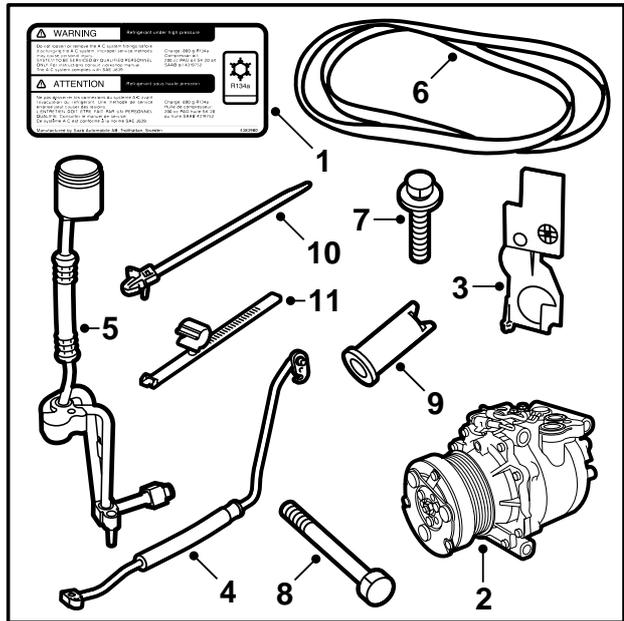
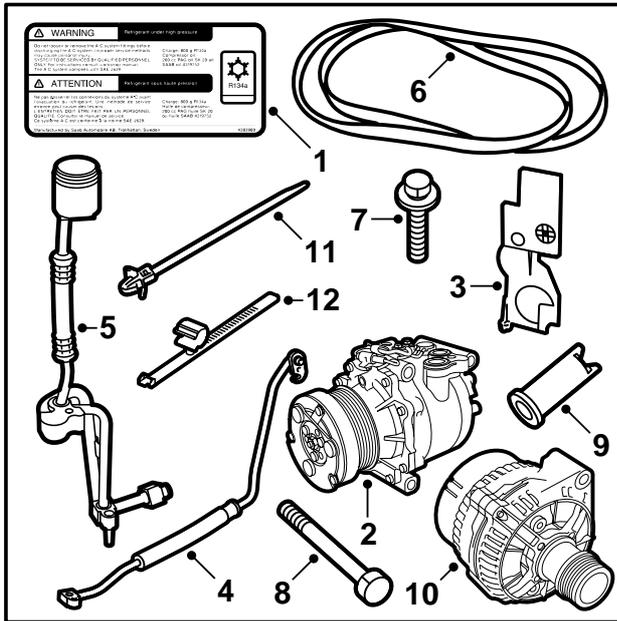
The brief description is intended for mechanics with previous experience of A/C installation. If no previous experience of fitting A/C units in cars of the type concerned has been acquired, the detailed installation instructions should be followed.



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Contents of basic kit 400 126 686:

- 1 Filler hose
- 2 Bracket, service connection
- 3 Clip for keyhole
- 4 Holder, A/C hoses
- 5 Air shield, LH outer
- 6 Air shield, RH outer
- 7 Air shield, RH vertical
- 8 Condenser
- 9 Expansion valve
- 10 Anti-frost thermostat
- 11 Edge protection moulding
- 12 Air shield, RH condenser
- 13 Air shield, LH condenser
- 14 Switch kit, A/C
- 15 Lock ring
- 16 Pressed thread screw 4.8x19
- 17 Self-tapping screw with washer 4.8x19, (2pcs.)
- 18 Nut and washer M6, (2 pcs)
- 19 Screw and washer M6x20
- 20 Screw and washer M6x50
- 21 Press nut, unthreaded
- 22 Screw M5x40, socket head (2 pcs.)
- 23 Relay
- 24 Cable tie and holder
- 25 Pipe clamp



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Supplementary kits

Fitting kit petrol (cold markets) 400 126 694:

- 1 Label
- 2 Compressor
- 3 Air shield, LH vertical (engines with fuel injection)
- 4 Hose, condenser
- 5 Compressor pipe, high/low pressure side
- 6 Multigroove belt
- 7 Screw and washer M8x40
- 8 Screw and washer M10x110, (3 pcs.)
- 9 1-pin connector
- 10 Generator 130A
- 11 Cable tie and holder
- 12 Clips

Fitting kit petrol (warm markets) 400 126 702:

- 1 Label
- 2 Compressor
- 3 Air shield LH vertical (injection engines)
- 4 Hose condenser
- 5 Pipe compressor high/low pressure side
- 6 Multigroove belt
- 7 Bolt with washer M8x40
- 8 Bolt with washer M10x110 (3 pcs.)
- 9 1-pin connector
- 10 Cable tie with holder

Fitting kit diesel 400 110 649:

- 1 Label
- 2 Compressor
- 3 Air shield, LH vertical
- 4 Hose, condenser
- 5 Compressor pipe, high/low side
- 6 Multigroove belt
- 7 Cooler
- 8 Screw with washer M10x40
- 9 Screw with washer M8x90 (3 pcs.)
- 10 Component retainer for diode
- 11 Clip for connector

Evaporator kit LHD 400 110 870:

- 1 Clip for weld bolt
- 2 Low-pressure pipe
- 3 High-pressure pipe
- 4 Evaporator cover
- 5 Evaporator

Evaporator kit RHD 400 110 888:

- 1 Low-pressure pipe
- 2 High-pressure pipe
- 3 Evaporator cover
- 4 Evaporator

Cooling system kit injector engines (cold markets)
400 101 531:

- 1 Cooler
- 2 Fan
- 3 Lock nut (3 pcs.)
- 4 Clip for connector
- 5 Pressed thread screw 4.8x19, socket head (2 pcs)
- 6 Fan cowl

Brief installation instructions

Start by unpacking the A/C kit and carefully reading the installation instructions.

Work to be carried out in the cabin

- 1 Disconnect the negative cable on the battery and remove the glove box, the panel on the passenger side of the centre console, the floor air duct, the air duct to the side vent in the dashboard and the stay for the knee member.
- 2 Remove the protective cover, the glove box mounting and the side cover on the heating and ventilation unit.
Cars with automatic transmission:
Remove the automatic transmission control module and its bracket.
- 3 Press in the pre-punched holes in the bulkhead seal.
- 4 Put the pipes between the evaporator housing and the expansion valve through the bulkhead.
- 5 Position the evaporator in the heating and ventilation unit and connect the pipes to the evaporator.
Tightening torque 5 Nm (3.7 lbf ft)
- 6 Put the anti-frost thermostat in place and connect the sensor to the low-pressure pipe with the clip.
- 7 Fit the side cover on the heating and ventilation unit, the glove box bracket and the protective cover.
Cars with automatic transmission:
Screw on the bracket for the automatic transmission control module and mount the control module.
- 8 Fit the knee member stay and the air ducts.
- 9 Remove the knobs on the control panel, the front plate and the switch panel.
- 10 Change the switch panel and refit the front plate and the knobs on the control panel.

Work to be carried out in the engine bay

- 1 Remove the grille, the horn, the LH and RH indicator lamps, the LH and RH headlamps, the engine cover, the battery, the fastener for the steering servo pipe, the battery tray and unplug the outdoor temperature sensor.
- 2 Cars with injection engines:
Remove the air filter container and the hose between it and the throttle body.

- 3 Cars with turbo (petrol and diesel):
Remove the hose between the charge air cooler and the pipe to the throttle body, the screw for the expansion valve, the by-pass valve and the screws for the control valve, and put the valve to one side.
- 4 Cars with automatic transmission:
Remove the nut securing the gear selector arm, the screws for the bracket on the gearbox and, where appropriate, disconnect the electrical connection on the gearbox and remove the cable tie.
- 5 Put the compressor in place and tighten the bolts.
Tightening torque, petrol 47 Nm (35 lbf ft)
Tightening torque, diesel 24 Nm (18 lbf ft)
- 6 Screw the high and low-pressure hose PAD connections to the compressor.
Tightening torque, petrol 20 Nm (14.5 lbf ft)
Tightening torque, diesel 39 Nm (29 lbf ft)
- 7 Relieve the belt tensioner and remove the multigroove belt.
- 8 Cars with petrol engines (not warm markets):
Undo the exhaust pipe at the manifold and the exhaust pipe suspension. Carefully push the catalytic converter to the left and remove the generator.
Fit the new generator and fasten the exhaust pipe and suspension.
- 9 Fit the new multigroove belt.
- 10 Remove the power steering fluid reservoir, undo the steering servo pipe at the radiator member.
Cars with petrol engines (not warm markets):
Remove the radiator hoses, purge hose, radiator fan connection and fan cowl.
Remove the fan from the fan cowl.
Cars with turbo (petrol and diesel):
Remove the charge air cooler hose.
- 11 Cars with petrol engines (not warm markets):
Transfer the bushes from the old radiator to the new one. Fit the new radiator and the lower radiator hose.
- 12 Cars with petrol engines (not warm markets):
Fit the new fan into the fan cowl and mount the new fan assembly. Fit the remaining radiator hoses, purge hose and steering servo pipe.
- 13 Remove the bumper.
Cars with turbo (petrol and diesel):
Detach the hose between the charge air cooler and the turbo unit and remove the charge air cooler.

- 14 Put the condenser in place and tighten the screws. Plug in the pressure monitor connector. Fit the bumper.

Cars with turbo (petrol and diesel):

Fit the charge air cooler hose and the hose between the charge air cooler and the turbo unit.

- 15 Fit the pipe holder on the structure and the subframe. Place the A/C pipes in the engine bay without securing them.
- 16 Fit the expansion valve to the pipes from the evaporator.

Tightening torque 5 Nm (3.7 lbf ft)

- 17 Connect the pipes along the bulkhead to the expansion valve.

Tightening torque 9 Nm (6.6 lbf ft)

- 18 Connect the high-pressure pipe by the left-hand wheel housing.

Tightening torque 16 Nm (11.8 lbf ft)

- 19 Connect the low-pressure pipe by the left-hand wheel housing.

Tightening torque 34 Nm (25.1 lbf ft)

- 20 Connect the low-pressure pipe with the service connection by the left-hand wheel housing and the PAD connection below the compressor.

Tightening torque, service connection 34 Nm (25.1 lbf ft)

Tightening torque, PAD connection 9 Nm (6.6 lbf ft)

- 21 Connect the high-pressure pipe PAD connection at the condenser.

Tightening torque 9 Nm (6.6 lbf ft)

- 22 Connect the high-pressure pipe below the compressor.

Tightening torque 34 Nm (25.1 lbf ft)

- 23 Fit the outer air shields and the shields at the condenser and radiator.

- 24 Connect the compressor wiring harness.

Cars with diesel engines:

Fit the component holder for the diode to the connector on the right-hand side of the radiator member.

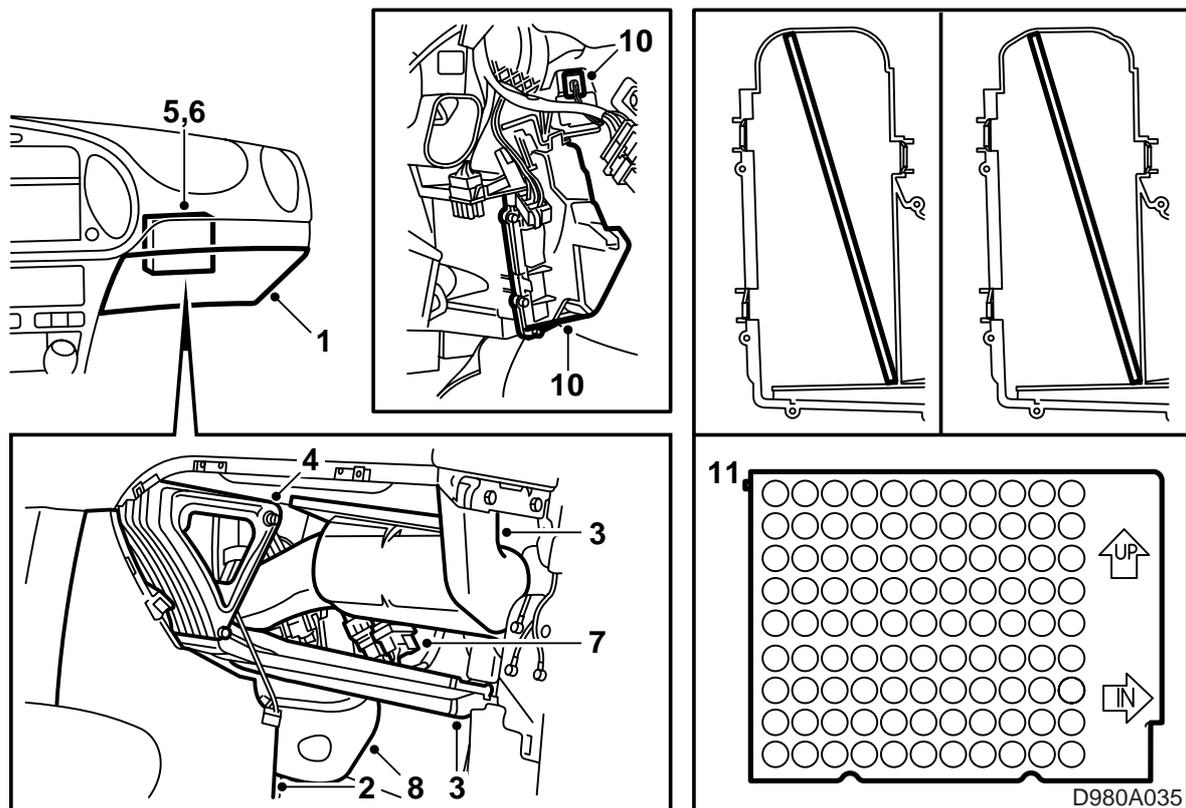
- 25 Fit the remaining details in the engine bay that have been removed.

- 26 Fit the relay in the main fuse box in the engine bay, position J.

- 27 Fit the fuses in the main fuse box in the dashboard, 10A in position 21 and 15A in position 5 in the main fuse box in the engine bay, and affix the warning label.

Concluding work

- 1 Vacuum the A/C system and charge it with R134a refrigerant. Fill with coolant.
- 2 Program DICE and MIU for A/C and the new fan, 330W (applies to petrol engines).
- 3 Allow the compressor to run-in:
 - Turn on the A/C and let it run for at least 2 minutes at <1500 rpm.
- 4 Perform a function test on the A/C system.
- 5 Make sure the cooling system is tight and top up if necessary.
- 6 Refit the remaining details in the cabin.
- 7 Set the clock, radio code, etc.



Preparatory work

- Position the car on a lift.
- If the car is fitted with anything other than a Saab original radio, make sure that the customer has the radio code before commencing work.
- Place protective coverings over the carpets and paintwork.
- Disconnect the negative battery cable.

Work to be carried out in the cabin

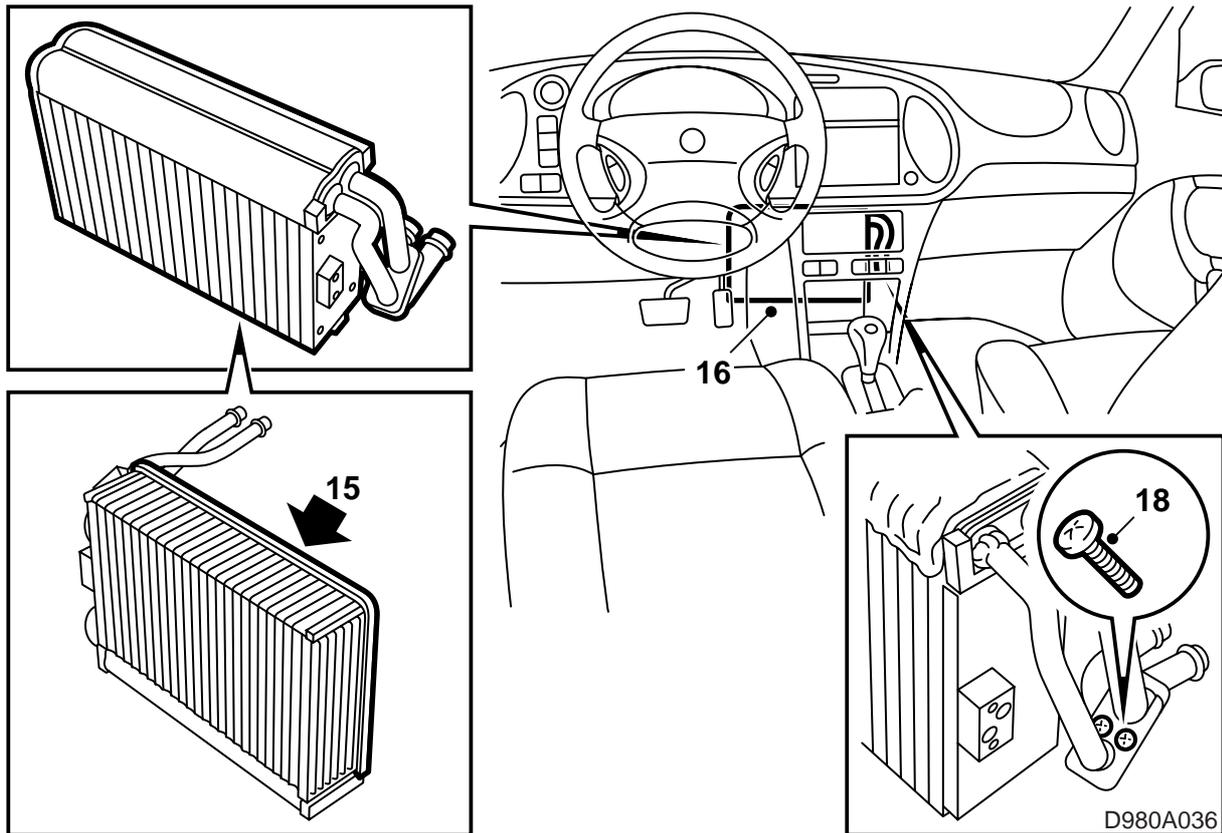
Fitting the evaporator

- 1 Remove the glove box.
- 2 Remove the panel on the passenger side of the centre console.
- 3 Remove the floor air ducts and the duct to the side vent in the dashboard.
- 4 Remove the stay for the knee member, if appropriate.
- 5 If appropriate, detach the automatic transmission control module from its mounting on the bulkhead and let it hang on its cables.
- 6 Remove the control module mounting.
- 7 LHD:
Unplug the dashboard wiring harness.
- 8 Fold down the floor mat and remove the protective cover.

9 Remove the glove box mounting on the bulkhead by pressing in the lock tabs with a screwdriver.

10 Fold down the seal. Remove the recirculation motor bracket and remove the side cover on the heating and ventilation unit.

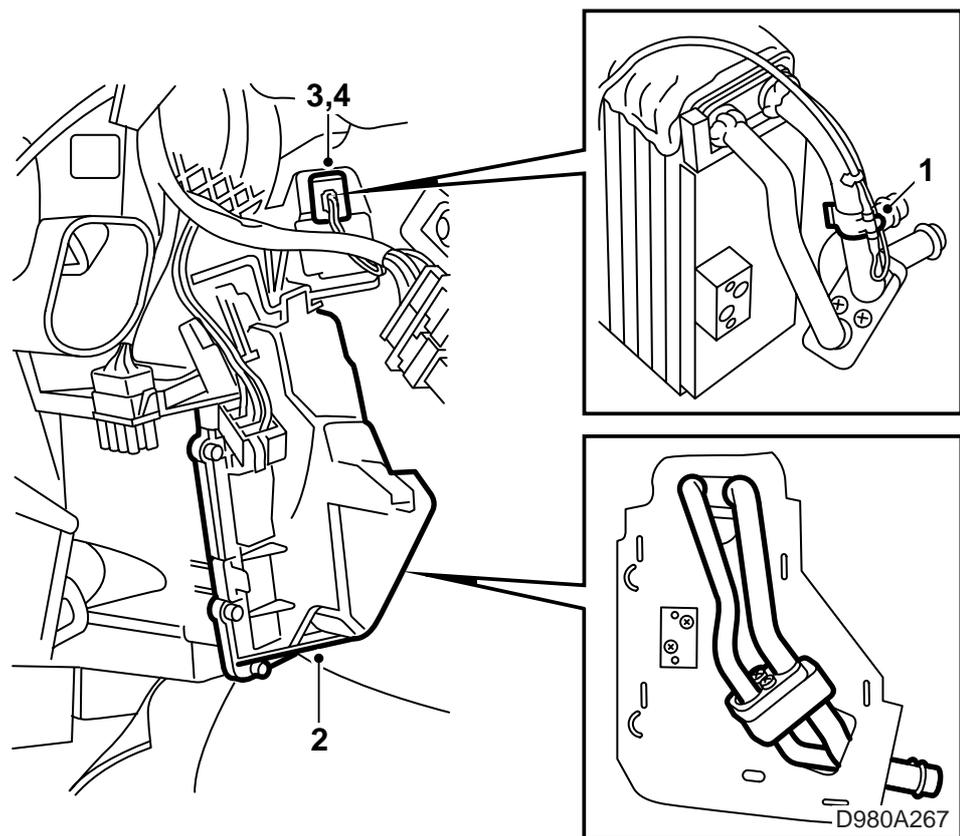
11 Remove the air distribution shield from the heating and ventilation unit.



Fitting the evaporator (cont.)

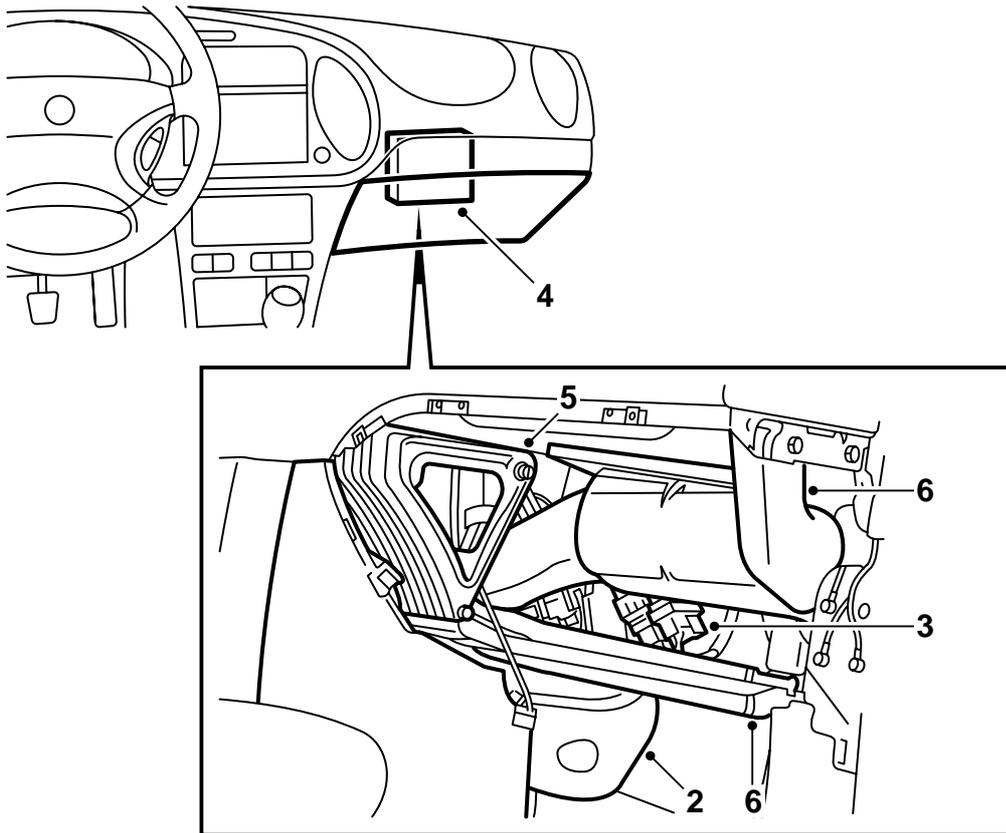
- 12 Press in the pre-punched holes in the seal in the bulkhead.
- 13 Plug the expansion valve pipe.
- 14 Insert the pipe through the hole in the bulkhead.
- 15 Fit the seal on the evaporator as illustrated and apply vaseline to the top of the evaporator.
- 16 Place the evaporator in the heating and ventilation unit.
- 17 Lubricate the O-rings with synthetic vaseline.
- 18 Connect the pipes to the evaporator and tighten the screws.

**Tightening torque, expansion valve 5 Nm
(3.7 lbf ft)**



Fitting the anti-frost thermostat

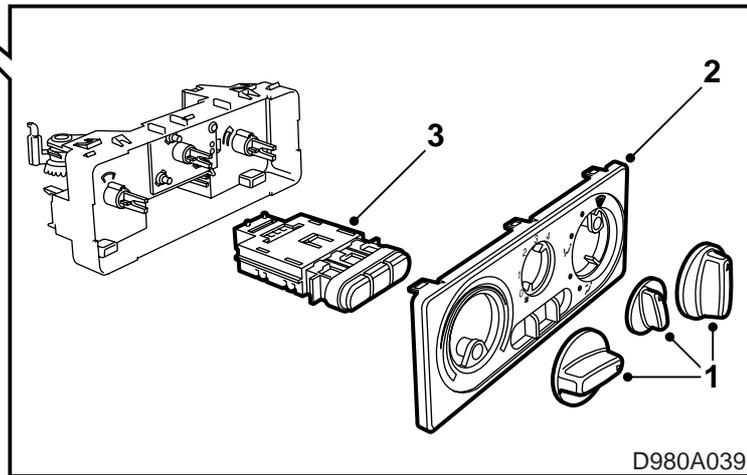
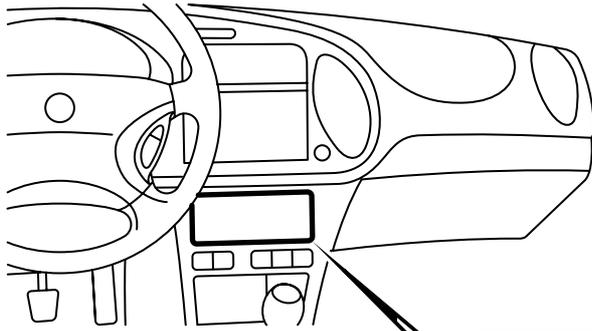
- 1 Connect the sensor element to the low-pressure pipe.
- 2 The clips can be cut to facilitate. Fit the side cover with seal on the heating and ventilation unit and tighten the screws.
- 3 Fit the anti-frost thermostat connector to the recirculation motor bracket. Fit the bracket to the side cover.
- 4 Connect the car's wiring harness for the anti-frost thermostat to the connector on the recirculation motor bracket.



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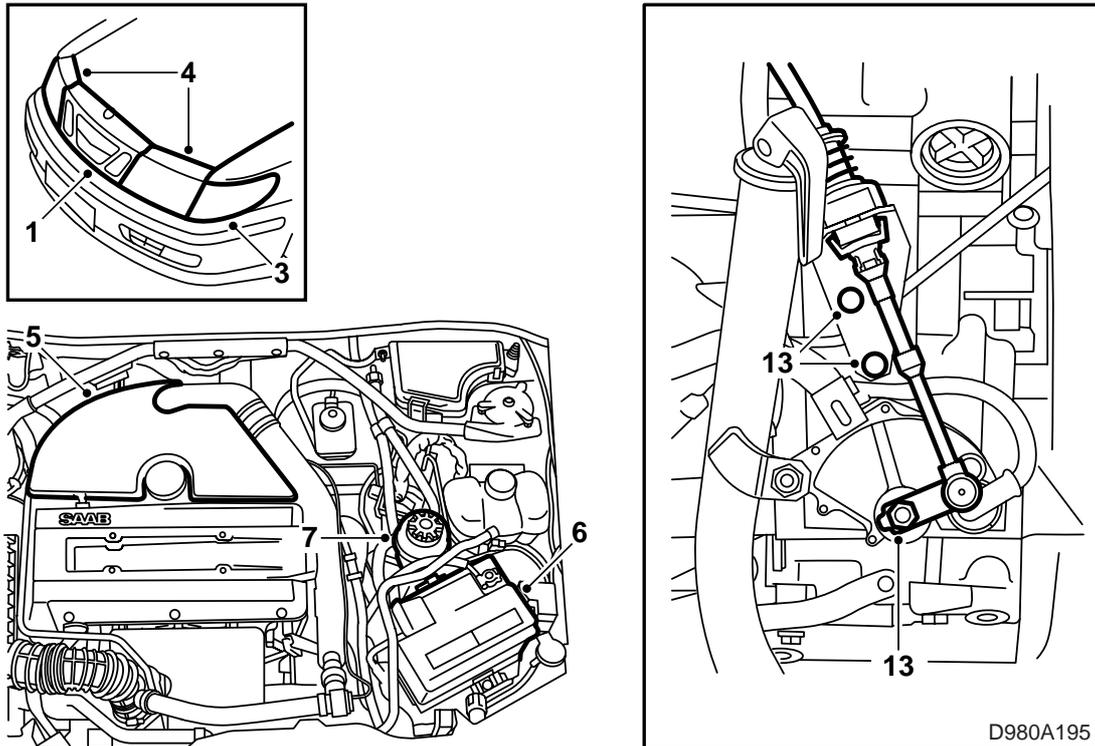
Fitting the details removed from the cabin

- 1 Put back the glove box mounting on the bulkhead.
- 2 Refit the seal and the protective cover. Replace the floor mat.
- 3 Connect cables to the dashboard and secure them with cable ties.
- 4 If appropriate, screw the mounting for the automatic transmission control module onto the bulkhead and fit the control module.
- 5 Fit the stay for the knee member.
- 6 Fit the air ducts.



Changing the control panel

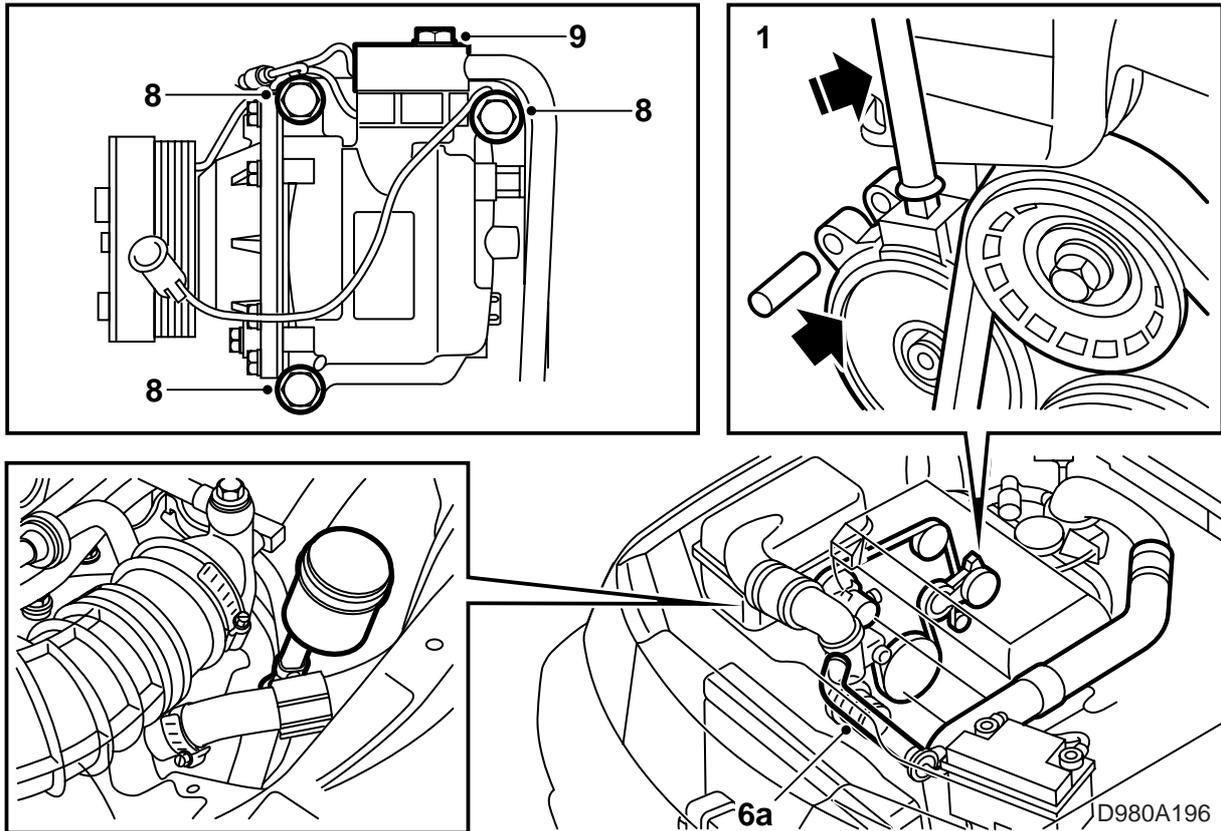
- 1 Apply tape to the knobs to protect them and pull them off with a pair of pliers.
- 2 Remove the front plate.
- 3 Unplug the switch panel and remove it
- 4 Fit the new switch panel in place.
- 5 Put back the front plate.
- 6 Press on the knobs.



Work to be carried out in the engine bay

Exposing the A/C pipe

- 1 Remove the grille.
- 2 Remove the horn.
- 3 Remove the right and left-hand direction indicator lamps.
- 4 Remove the right and left-hand headlamps.
- 5 Remove the engine cover.
- 6 Remove the battery from the battery tray.
- 7 Remove the fastener securing the steering servo pipe to the battery tray.
- 8 Remove the battery tray.
- 9 Remove the power steering fluid reservoir from its mounting and move it away.
- 10 Undo the screw securing the steering servo pipe to the radiator member.
- 11 Unplug the connection to the outside temperature sensor.
- 12 Cars with turbo (petrol and diesel):
Remove the hose between the charge air cooler and the pipe leading to the throttle body.
- 13 Cars with automatic transmission:
 - a Remove the nut securing the gear selector arm to the gearbox
 - b Remove both bolts securing the gear selector arm bracket to the gearcasing.



Fitting the compressor

- 1 Relieve the tension on the belt tensioner and remove the multigroove belt.
- 2 Raise the car.
- 3 Remove the belt cover
- 4 Remove the air shields under the car.
- 5 Cars with injection engines:
Remove the air filter housing and the suction hose between the air filter housing and the throttle body.
- 6 Cars with turbo engines (petrol and diesel):
 - a Remove the air filter housing and bypass valve and plug the turbo pipe.
 - b Undo the solenoid valve screws and put the solenoid valve to one side.
- 7 Remove the plug in the PAD connection and lubricate the connection with synthetic petroleum jelly.
- 8 Put the compressor in place and tighten the screws.

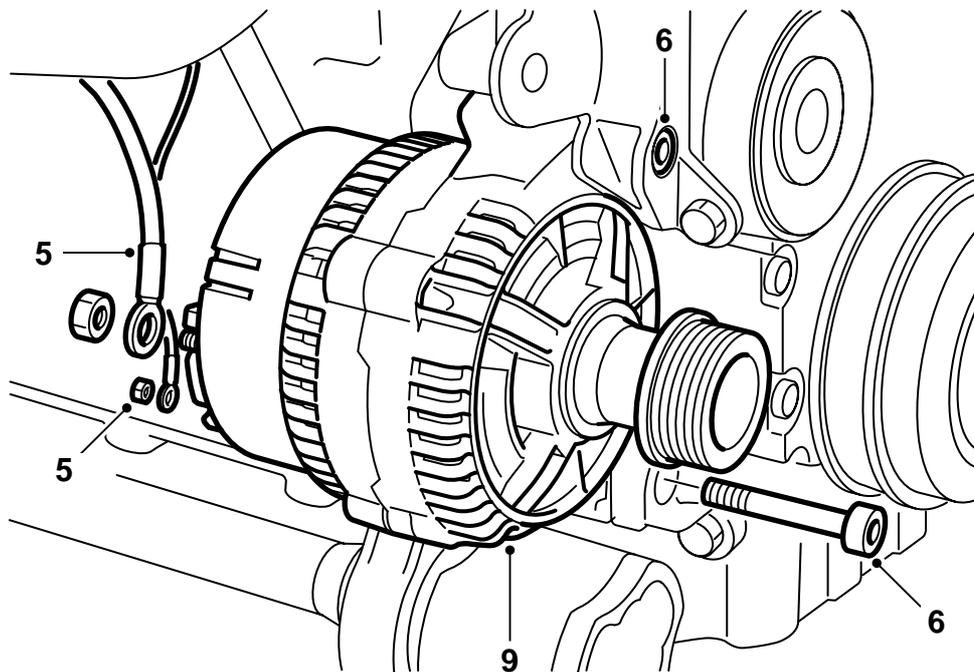
Tightening torque, petrol 47 Nm (35 lbf ft)

Tightening torque, diesel 24 Nm (18 lbf ft)

- 9 Screw the high and low pressure hose PAD connection to the compressor.

Tightening torque, petrol 20 Nm (14.5 lbf ft)

Tightening torque, diesel 39 Nm (29 lbf ft)

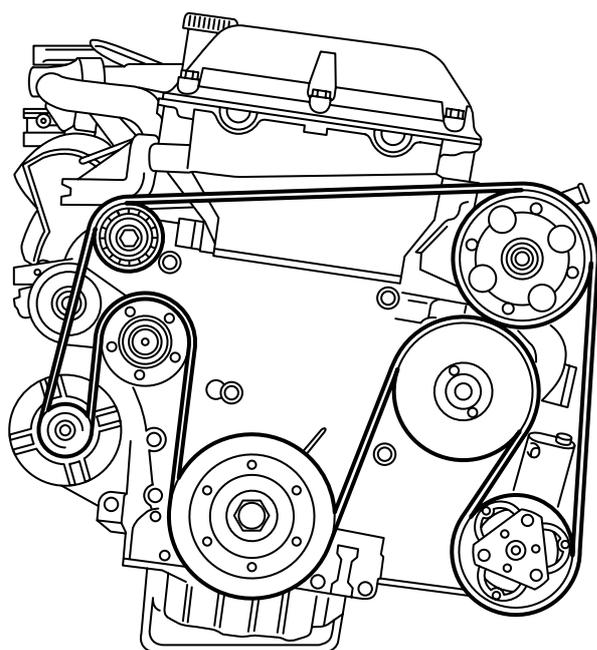


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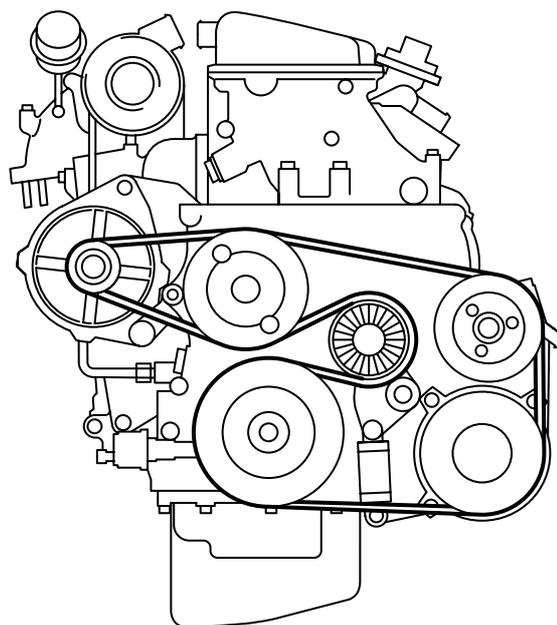
Replacing the generator, petrol engines (not warm markets)

- 5 Detach the cables on the generator.
- 6 Undo both generator retaining bolts.
- 7 Detach the exhaust pipe from the manifold.
- 8 Undo the front exhaust pipe mounting.
- 9 Carefully push the catalytic converter to the left and remove the generator.
- 10 Clean the generator mounting points and apply vaseline to prevent corrosion.
- 11 Carefully push the catalytic converter to the left and fit the new generator.
- 12 Tighten both generator retaining bolts.
- 13 Connect the cables to the generator.
- 14 Refit the exhaust pipe to the manifold.
- 15 Refit the rubber mounting on the front exhaust pipe.

4 CYL



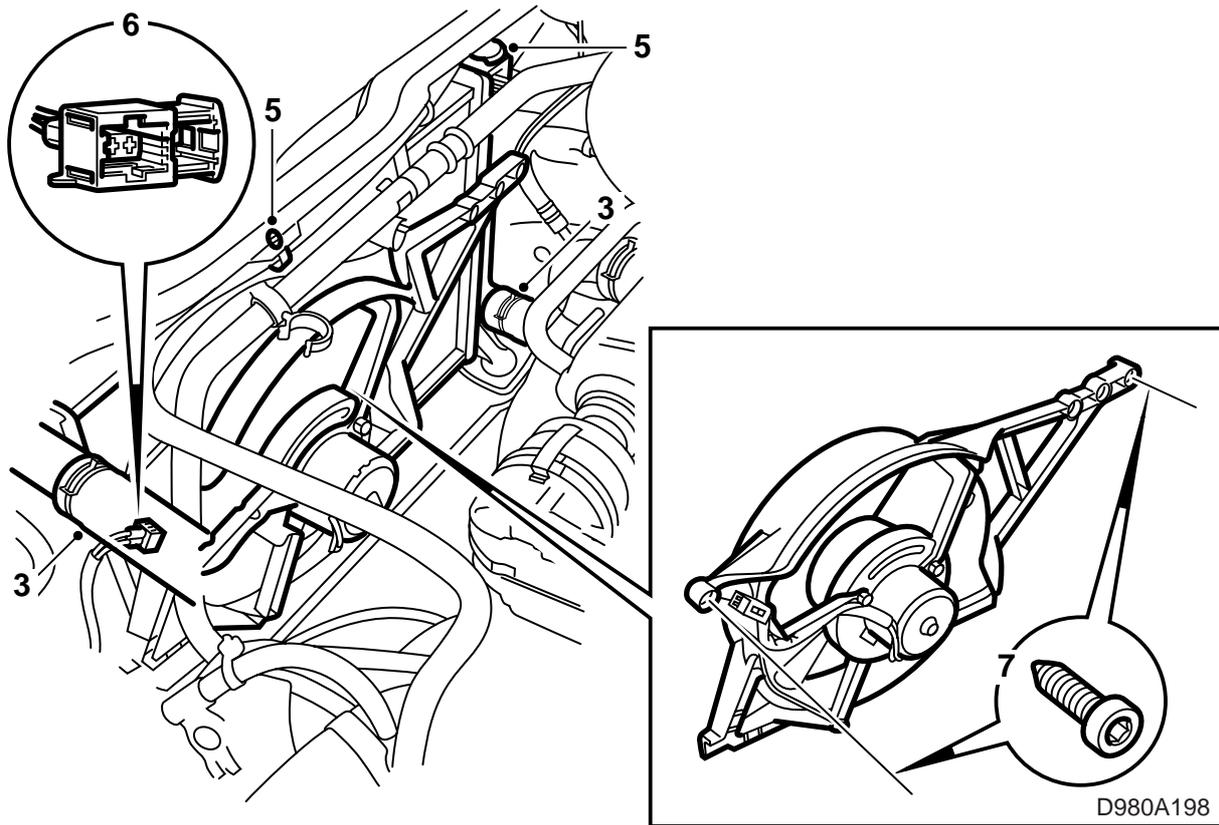
DIESEL



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Fitting the multigroove belt

- 1 Fit the new multigroove belt and check its position on all pulleys.
- 2 Refit the belt cover
- 3 Refit the front right wheel and lower the car.

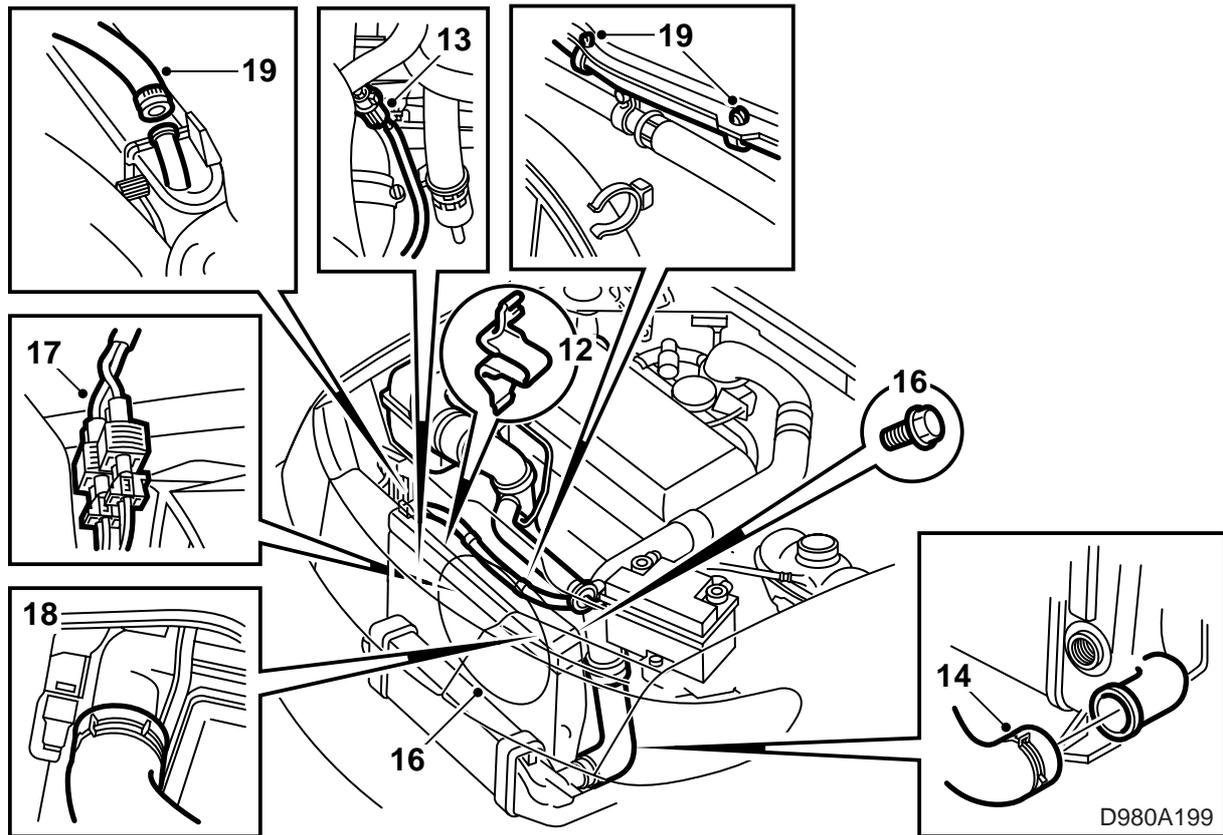


Replacing the radiator and fan, manual (not warm markets)

WARNING

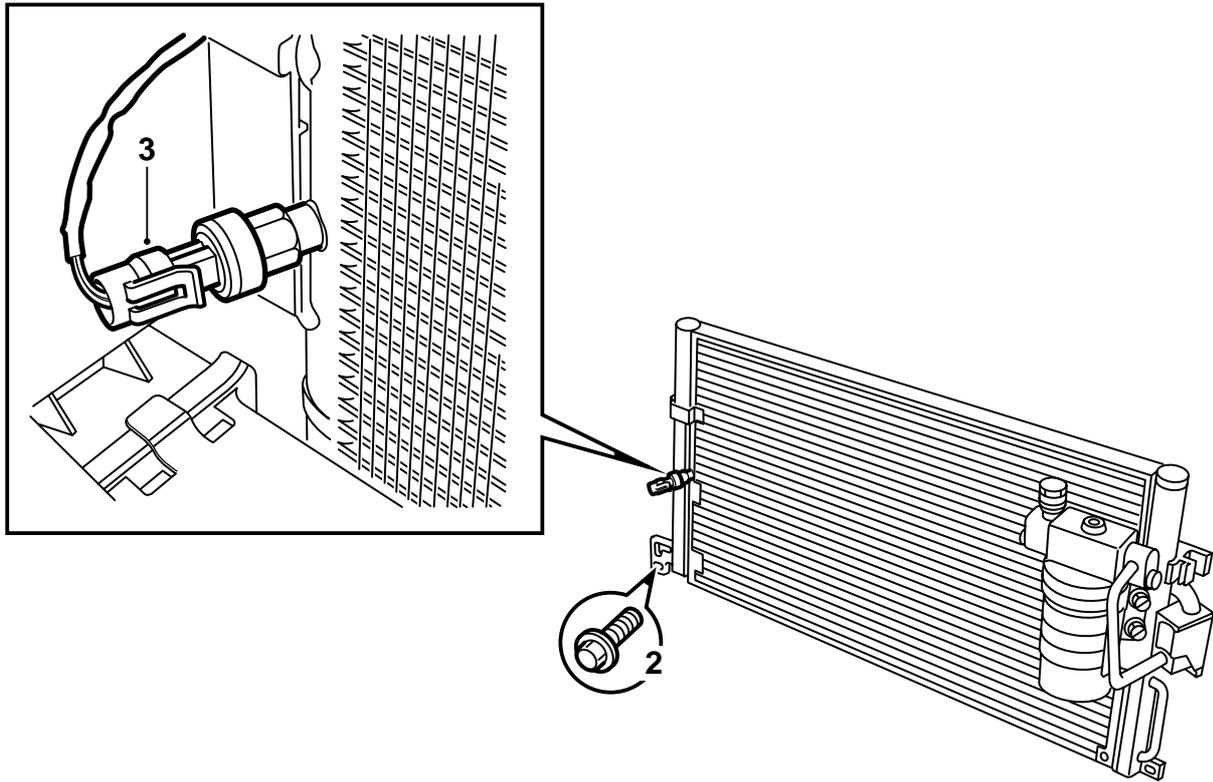
The engine coolant is extremely hot and is under high pressure. There is a risk for burn injuries when opening the pressure cap. Exercise extreme care.

- 1 open the cap on the expansion valve
- 2 Place a receptacle under the radiator and drain the coolant.
- 3 Detach the radiator hoses from the radiator.
- 4 Cars with turbo (petrol and diesel):
Remove the charge air cooler hose.
- 5 Detach the vent hose from the radiator and the clip securing the hose to the radiator member. Bend the hose to one side.
- 6 Unplug the radiator fan connection.
- 7 Remove the screws securing the fan cowl and lift off the cowl.
- 8 Remove the clips securing the radiator and lift up the radiator.



Replacing the radiator and fan, manual (not warm markets) (cont.)

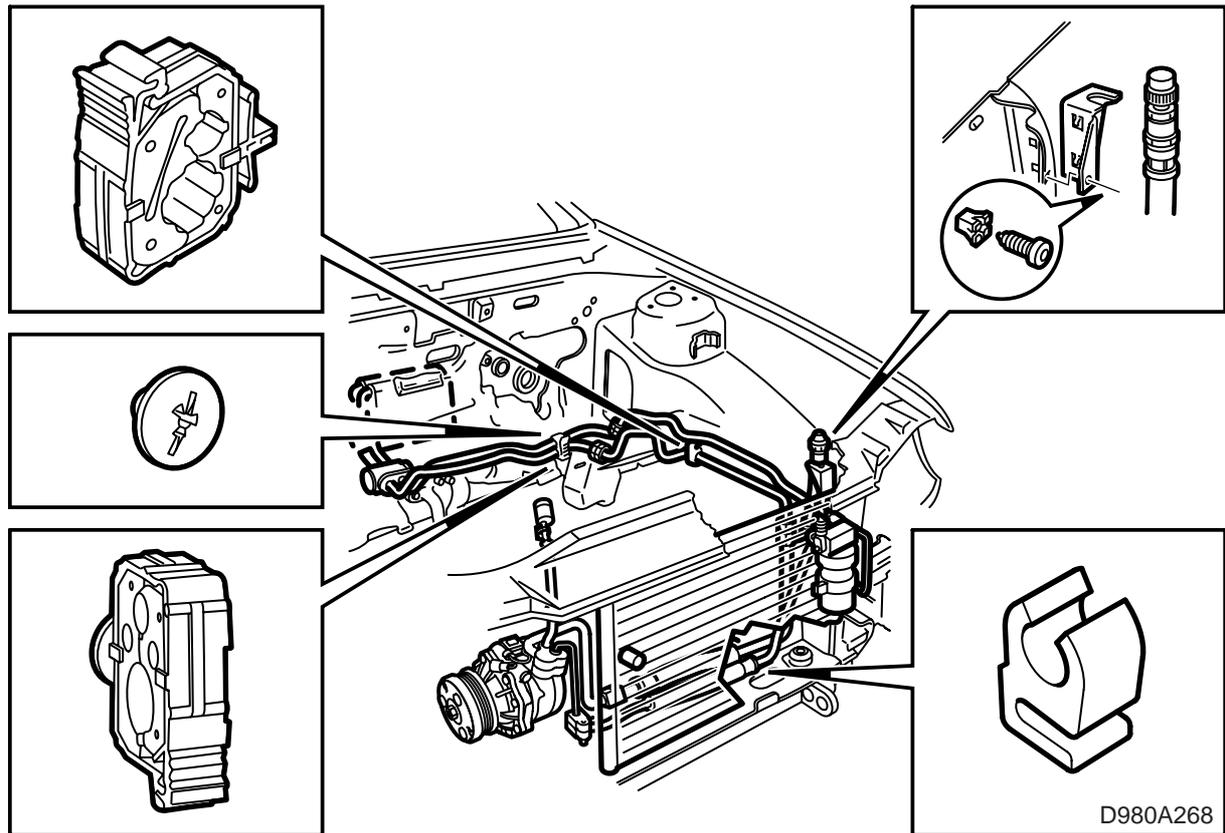
- 11 Apply acid-free petroleum jelly to the rubber bushes from the old radiator. Fit the rubber bushes to the new radiator.
- 12 Fit the new radiator and press on the clips.
- 13 Secure the compressor wiring to the right-hand side of the radiator.
- 14 Put in place the lower radiator hose and tighten the hose clip.
- 15 Cars with injection engines:
Fit the new fan into the fan cowl.
- 16 Put the fan cowl with fan in place and tighten the bolts.
- 17 Plug the wiring to the fan.
- 18 Put the remaining radiator hoses in place and tighten the hose clips.
- 19 Refit the vent hose and secure it to the radiator member with clips.



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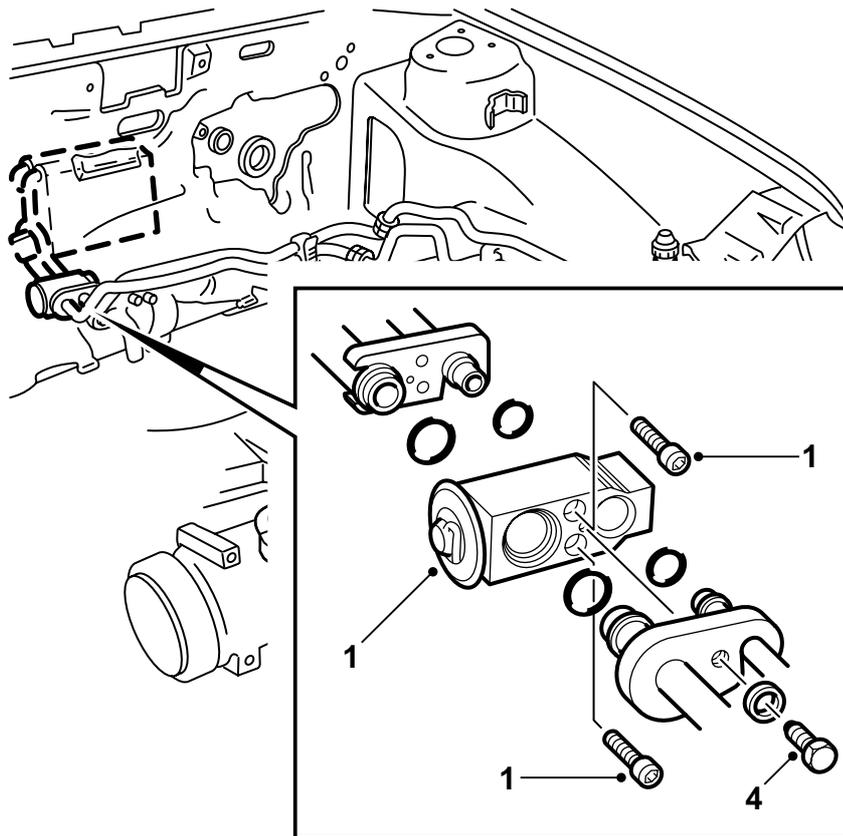
Fitting the condenser

- 1 Cars with turbo (petrol and diesel):
 - a Remove the bumper.
 - b Remove the hose between the charge air cooler and the turbocharger.
 - c Remove the charge air cooler.
- 2 Put the condenser in place and tighten the screws.
- 3 Plug in the pressure monitor connector.



Fitting the pipe holder and mounting

- 1 open the holder that secures the steering servo pipe to the left-hand wheel housing.
- 2 LHD:
Remove the clip on the bulkhead.
- 3 Fit the pipe brackets and A/C pipe mounting in place together with the hoses as illustrated.



D980A049

Fitting the expansion valve and A/C pipe

- 1 Put the expansion valve in place.

**Tightening torque, expansion valve 5 Nm
(3.7 lbf ft)**

- 2 RHD:

Fit the short high and low-pressure pipes onto the expansion valve.

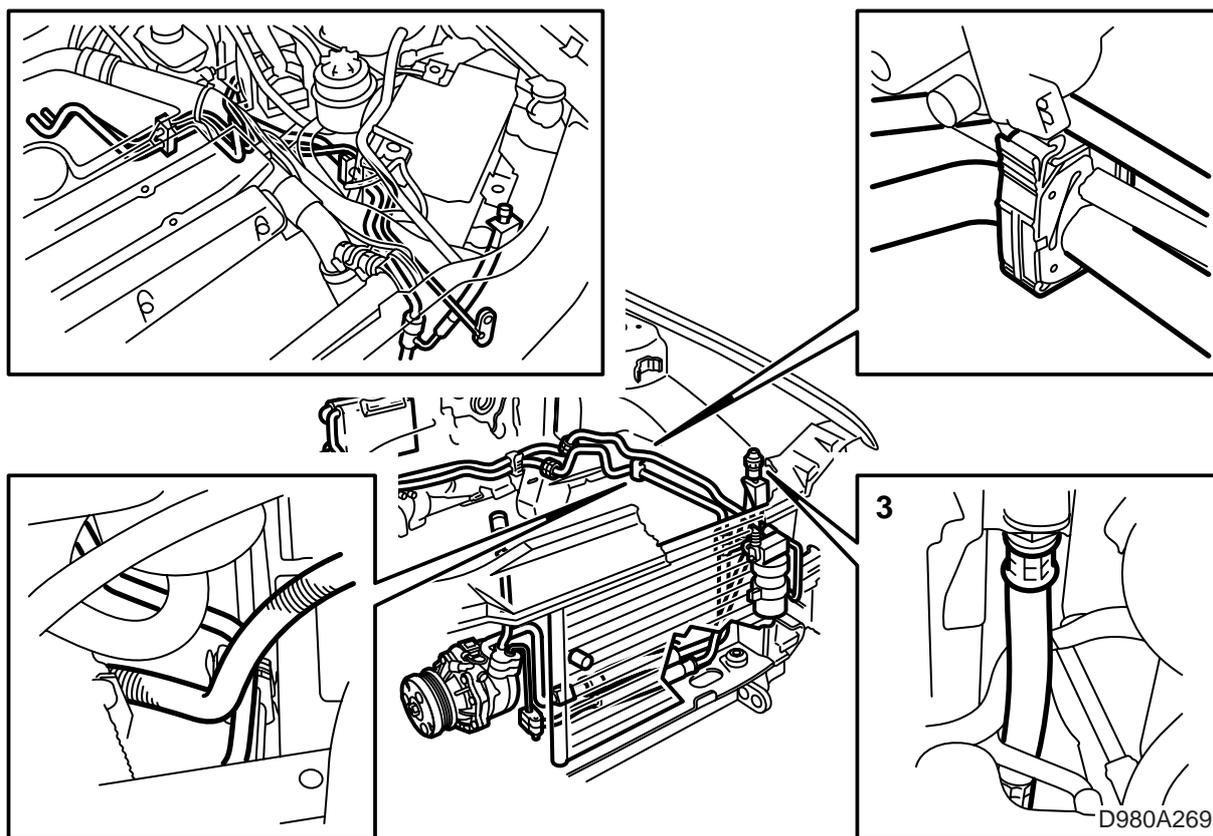
**Tightening torque, expansion valve 9 Nm
(6.6 lbf ft)**

- 3 LHD:

Put the high and low-pressure pipes on the bulkhead in place. Lift it up from below between the silencer and the gearbox. Place the pipe on top of the water hoses to the heat exchanger.

- 4 Put the pipes with the PAD connection in place on the expansion valve.

Tightening torque 9 Nm (6.6 lbf ft)



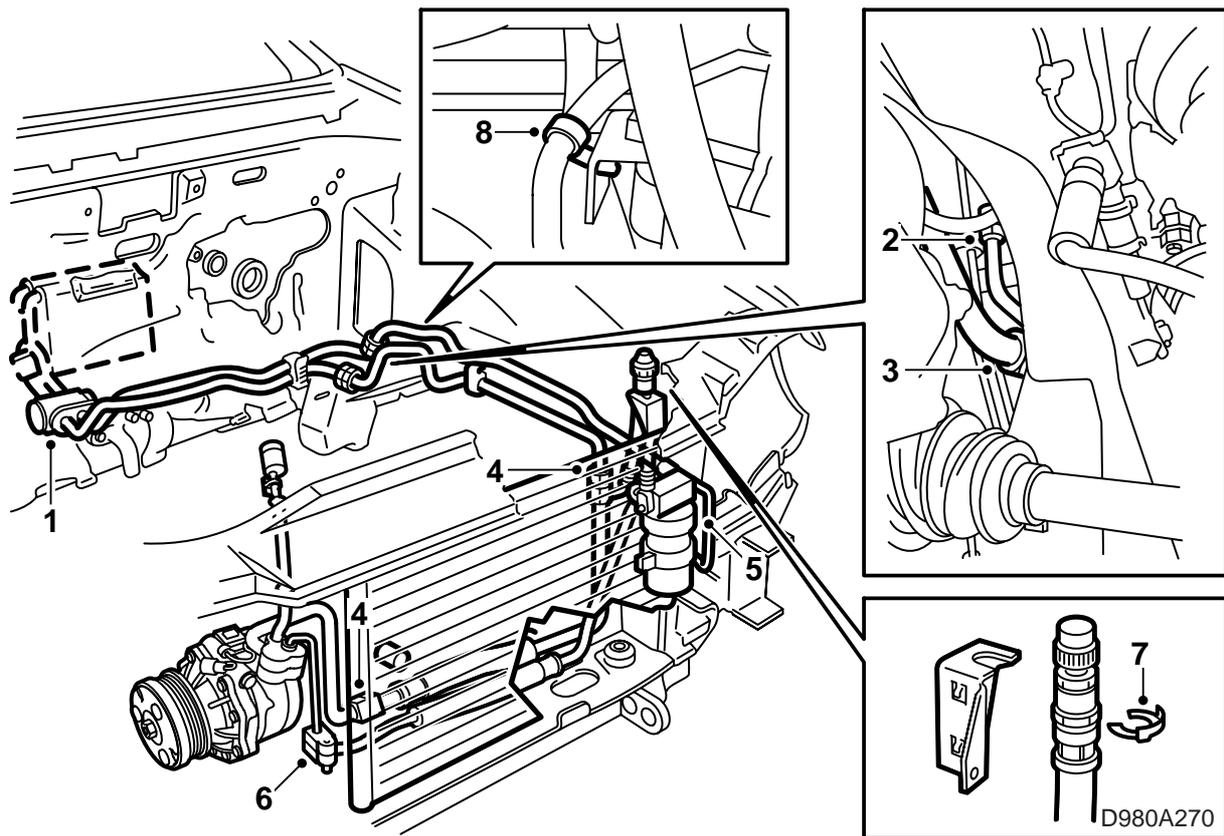
Fitting the A/C pipe (cont.)

- 1 Put the low and high-pressure pipes in place by the left-hand wheel housing. Insert the pipe under all the cables and hoses from the front and all the way back to the bulkhead, then back under the radiator member towards the condenser and on towards the compressor (high-pressure pipe), see illustration.

Note

The hydraulic hose to the clutch must be under the AC pipes.

- 2 Insert the low and high-pressure pipes by the left-hand wheel housing together with the pipes coming from the expansion valve.
- 3 Lay the low-pressure pipe with the service connection in place and insert it by the left-hand wheel housing and together with the low-pressure A/C compressor pipe under the compressor.
- 4 Insert the high-pressure pipe PAD connection by the condenser and the connection below the A/C compressor.



Tightening all the A/C pipe connections

- 1 Tighten the PAD connection on the expansion valve.

Tightening torque 9 Nm (6.6 lbf ft)

- 2 Tighten the high-pressure pipe connection by the left-hand wheel housing.

Tightening torque 16 Nm (11.8 lbf ft)

- 3 Tighten the low-pressure pipe connection by the left-hand wheel housing.

Tightening torque 34 Nm (25.1 lbf ft)

- 4 Tighten the low-pressure connection at the service connection and the connection below the compressor.

Tightening torque 34 Nm (25.1 lbf ft)

- 5 Tighten the high-pressure PAD connection at the condenser.

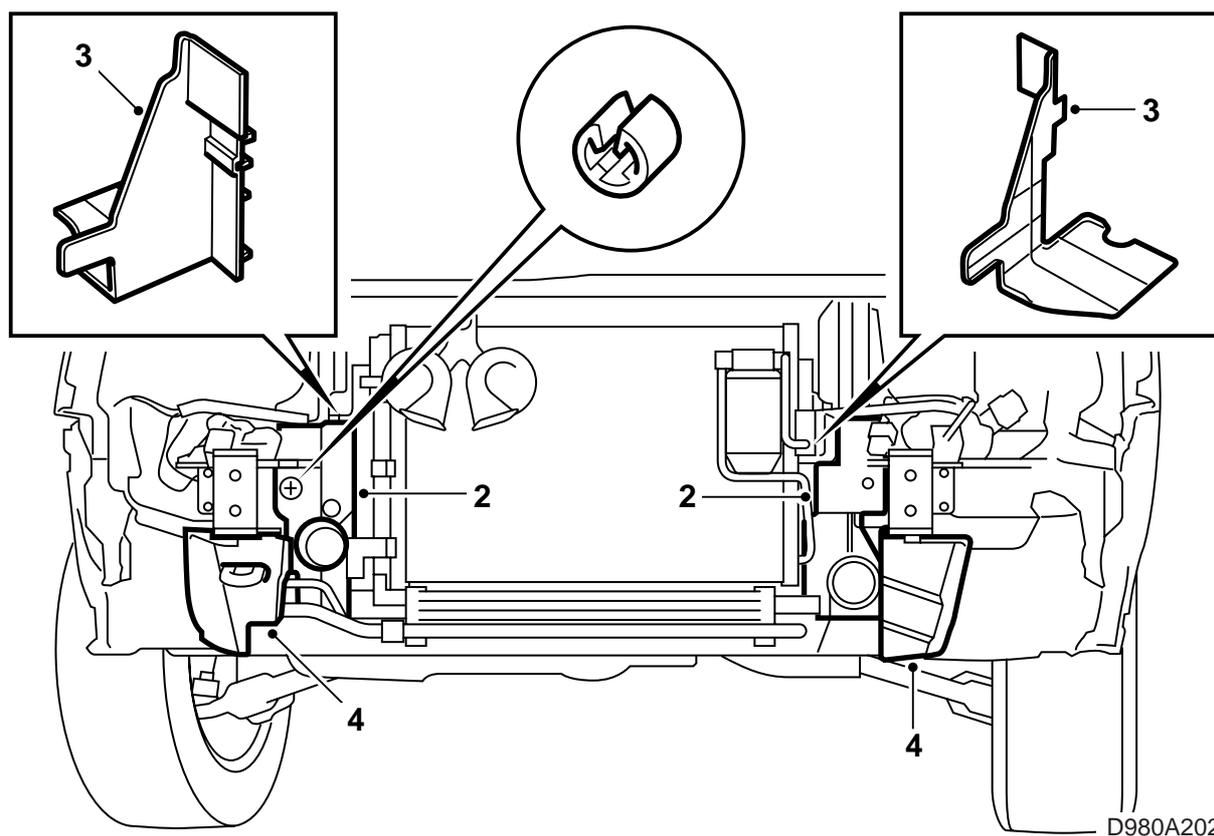
Tightening torque 9 Nm (6.6 lbf ft)

- 6 Tighten the high-pressure pipe connection below the compressor.

Tightening torque 34 Nm (25.1 lbf ft)

- 7 Make sure the pipe holders and the pipes are secure and fit the service connector clip.

- 8 Fit a cable tie on the ABS bracket for the high-pressure pipe.



Fitting the air shields

1 Cars with turbo (petrol and diesel):

Remove the prepunched parts on the right-hand vertical air shield if the charge air cooler has a pipe on its right-hand side.

Cars with automatic transmission:

Remove also the prepunched part on the right-hand vertical air shield for the automatic transmission fluid cooler.

2 Fit the vertical air shields on each side of the radiator. Fit the small white pipe clamp at the rear between the shoulders on the air shield to secure the fastening.

3 Fit the condenser air shields on each side of the condenser.

Cars with turbo (petrol and diesel):

Refit the charge air cooler.

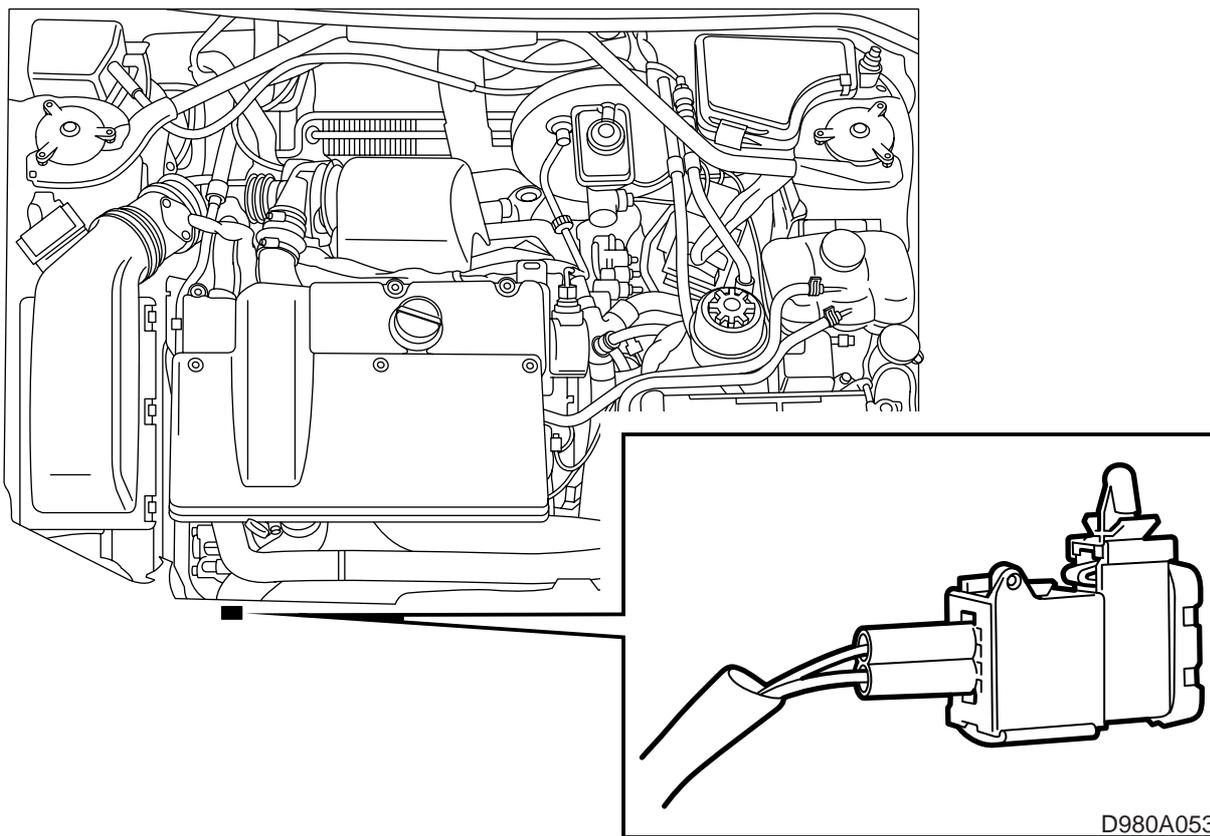
Refit the hose between the charge air cooler and the turbocharger.

4 Fit the outer air shields.

5 Connect the compressor wiring.

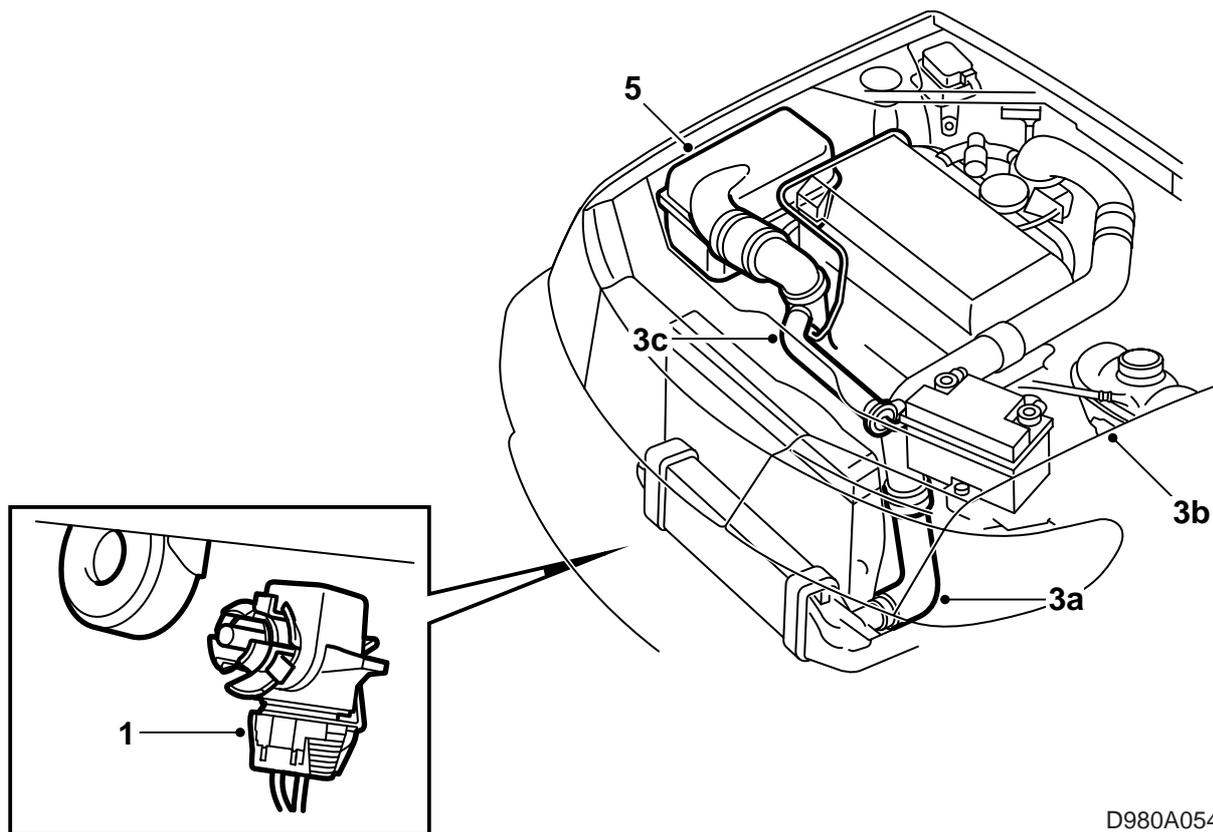
6 Fit the bumper and adjust it.

Tightening torque 39 Nm (28.8 lbf ft)



Fitting the diode component holder, diesel engines

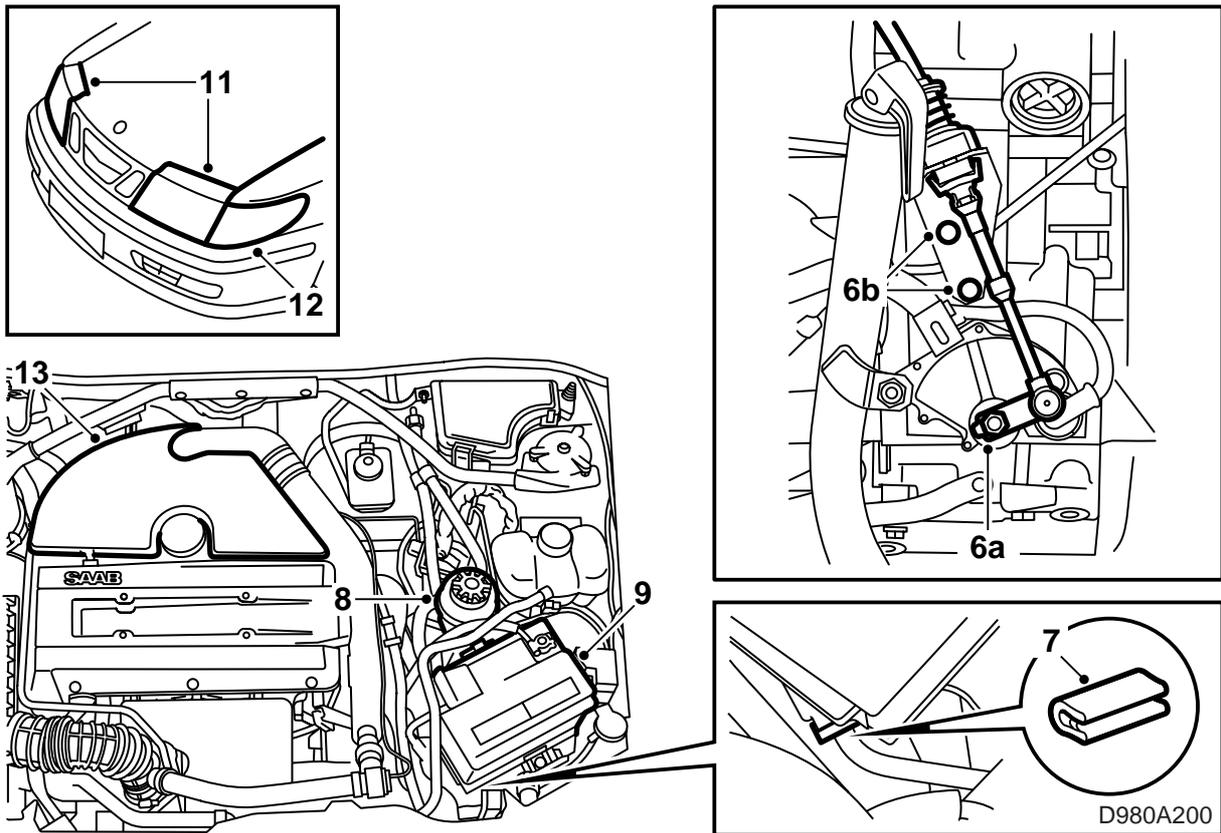
- 1 Remove the cable and holder located on the right of the radiator member.
- 2 Unplug the connector and attach the component holder with diode.
- 3 Mount the component holder with diode to the radiator member with a clip.



D980A054

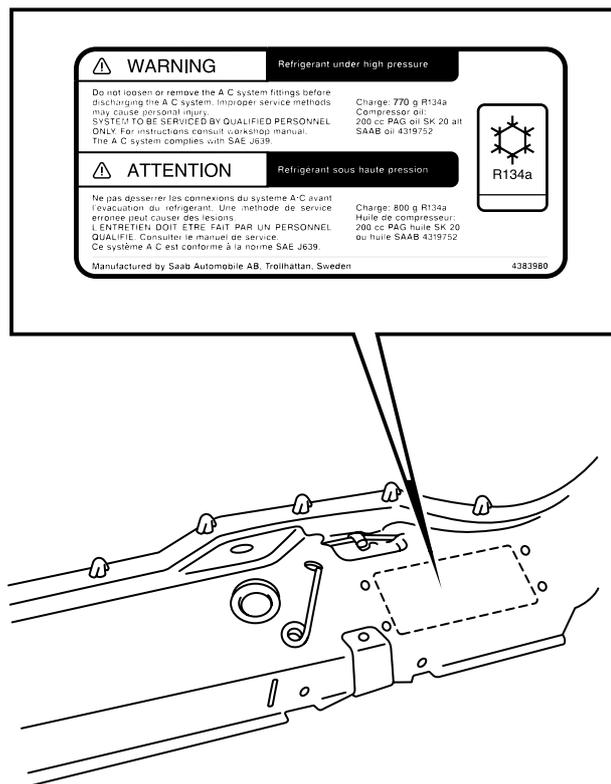
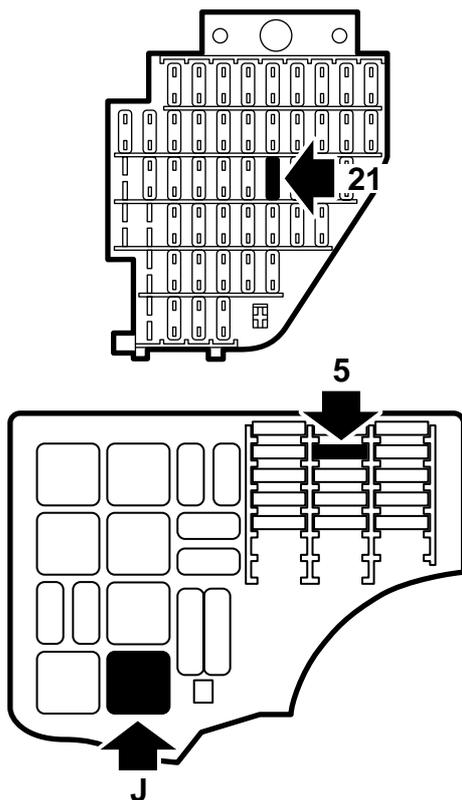
Fitting dismantled components, engine bay

- 1 Connect the outside temperature sensor wiring.
- 2 Refit the suction hose between the air filter housing and the throttle body.
- 3 Cars with turbo (petrol and diesel):
 - a Refit the hose between the charge air cooler and the pipe leading to the throttle body.
 - b Refit the screw securing the power steering fluid reservoir.
 - c Refit the solenoid and bypass valves.
- 4 Tighten the screw securing the steering servo pipe to the radiator member.
- 5 Refit the air filter housing.
- 6 Fit the lower air shields under the car.



Fitting dismantled details, engine bay (cont.)

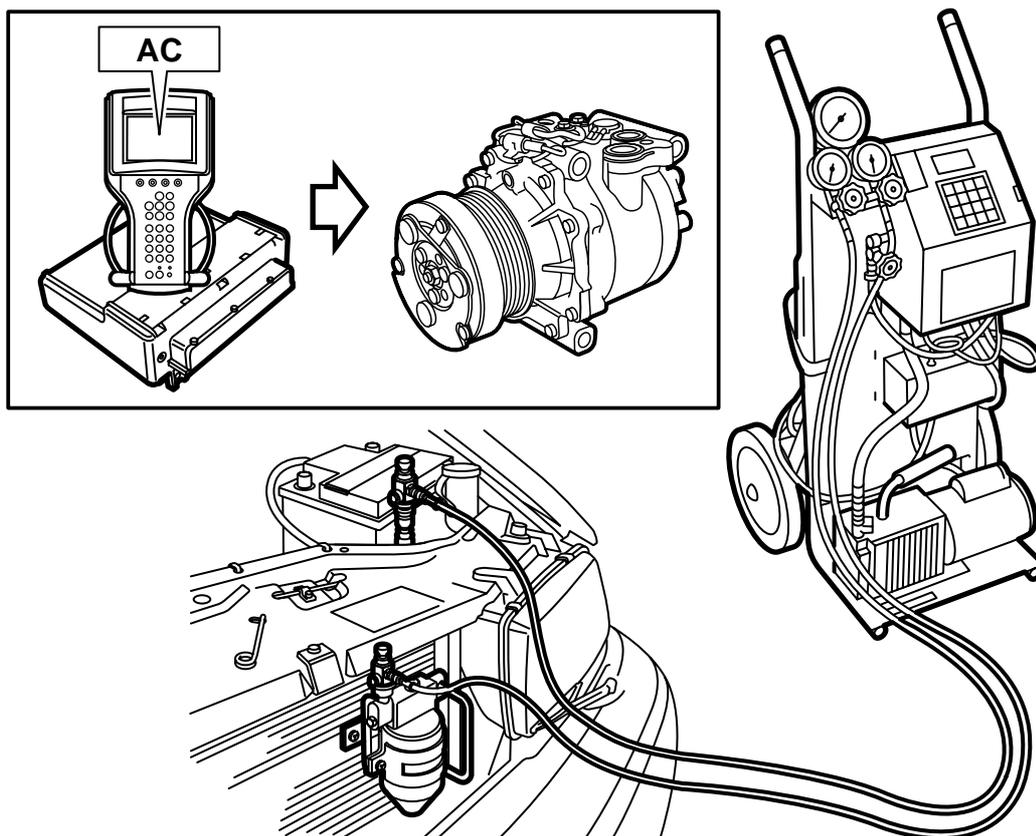
- 6 Cars with automatic transmission:
 - a Refit the nut securing gear selector arm to the gearbox.
 - b Fit both screws securing the gear selector arm bracket to the gearcasing.
- 7 Fit the edge protection moulding to the battery tray (protection for high pressure pipe) and fit the battery tray.
- 8 Fit the fastener securing the steering servo pipe to the battery tray.
- 9 Put the battery in place.
- 10 Clean and grease the positive and negative battery terminals and then connect the battery cables.
- 11 Refit the right and left-hand headlamps.
- 12 Refit the right and left-hand direction indicator lamps.
- 13 Put in place the cover over the engine.
- 14 Make sure all hoses and cables in the engine bay are secure.
- 15 Refit the horn.



D980A201

Fitting the A/C relay

- 1 Press the relay into position J in the relay holder in the engine bay.
- 2 Make sure there is a 10A fuse in position 21 on the fuse board in the dashboard.
- 3 Make sure there is a 15A fuse in position 5 on the fuse board in the engine bay.
- 4 Affix the label.



D980A057

Filling refrigerant

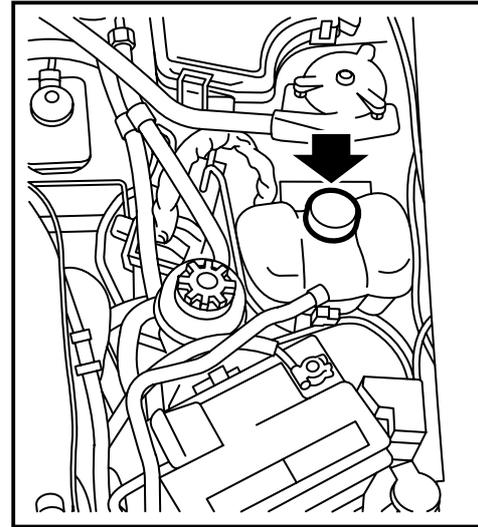
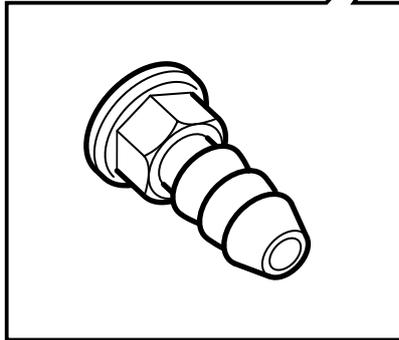
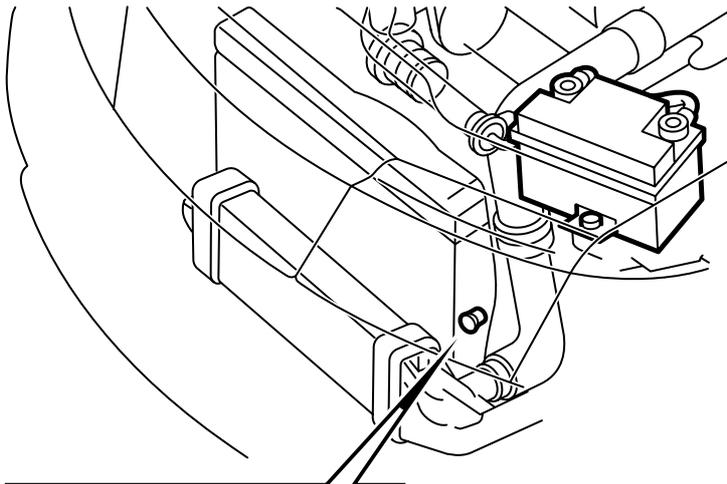
Vacuum the A/C system and fill it with refrigerant as directed in WIS 8 Body "Heating and ventilation, A/C".

Important

Do not start the engine before filling with coolant.

Programming DICE and MIU

- 1 DICE and MIU control modules must be programmed before the A/C system will work. For more information, see WIS 3 Electrical system, Central electronics, DICE" and WIS 3 Electrical system, Instruments, Main instrument unit".
- 2 Cars with petrol engines (not warm markets):
The DICE control module must be programmed for the new radiator fan. For more information, see WIS 3 Electrical system, Central electronics, DICE".



D980A058

Filling with coolant, petrol engines (not warm markets)

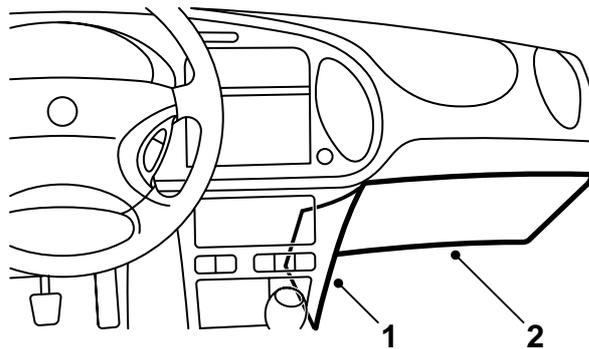
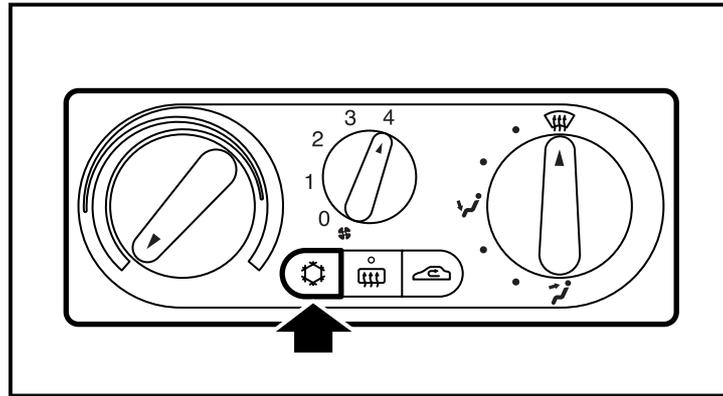
- 1 Fill with coolant

Filling with coolant, diesel engines (not warm markets)

Important

It is very important that the cooling system is bled as described in this section. Also, make sure there are no leaks.

- 1 Mix equal amounts of water and coolant in a vessel.
Pour the coolant into the expansion tank and check the integrity of the system. Bleed the system as follows.
 - a Connect the exhaust hoses to both the engine exhaust system and the auxiliary heater exhaust system and start the engine.
 - b Start the parking heater with the diagnostic tool (Body, SID, Activate, Heater). The parking heater goes off when the engine temperature reaches 80° or on exiting the parking heater menu.
 - c Make sure that there is a continuous flow of coolant in the hose from the thermostat housing to the expansion tank.
 - d Run the engine until the thermostat opens.



D980A059

Function check

- 1 Start the engine and run it warm.
- 2 Activate the A/C switch.
- 3 Check all functions.
- 4 Make sure there is no condensation leaking from the side of the evaporator housing.
- 5 Cars with petrol engines (not warm markets)
Make sure the cooling system is tight and top-up as necessary.
- 6 Check the integrity of the A/C system as described in Service Manual 8:3 Climate "Heating and ventilation, A/C"

Fitting dismantled details (cont.)

- 1 Replace the panel on the passenger side of the centre console.
- 2 Fit the glove box.
- 3 Set the correct time on the clock.
- 4 Code the radio if appropriate.
- 5 Refit the grille.