



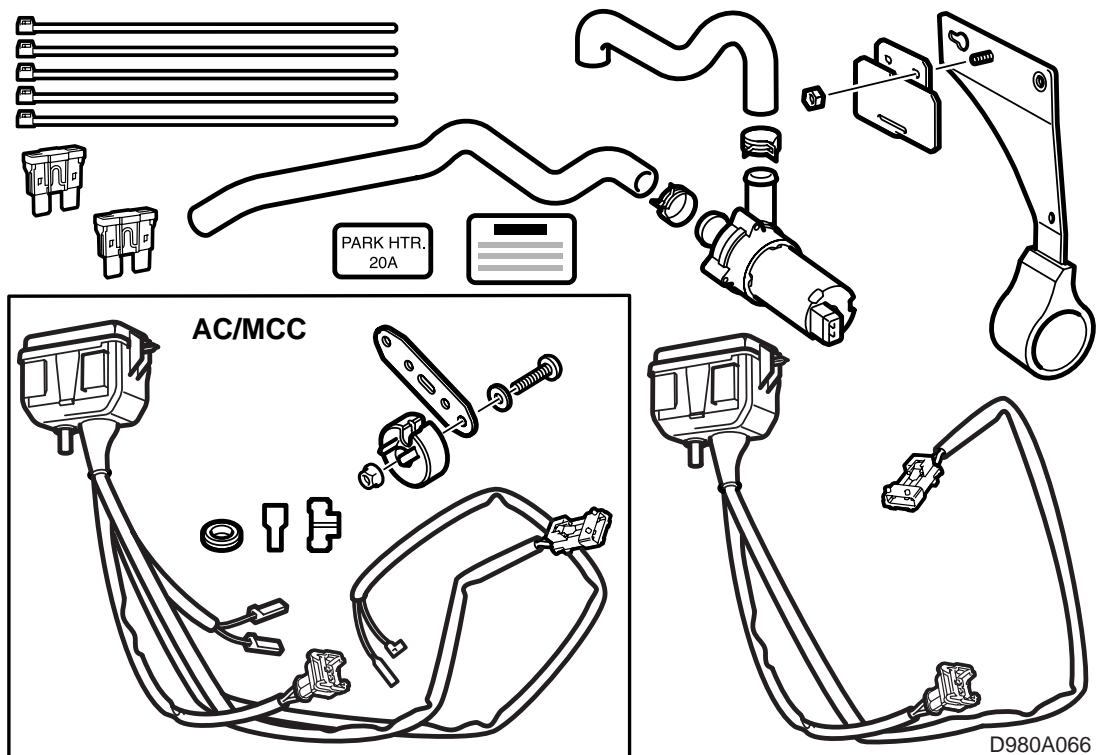
SAAB

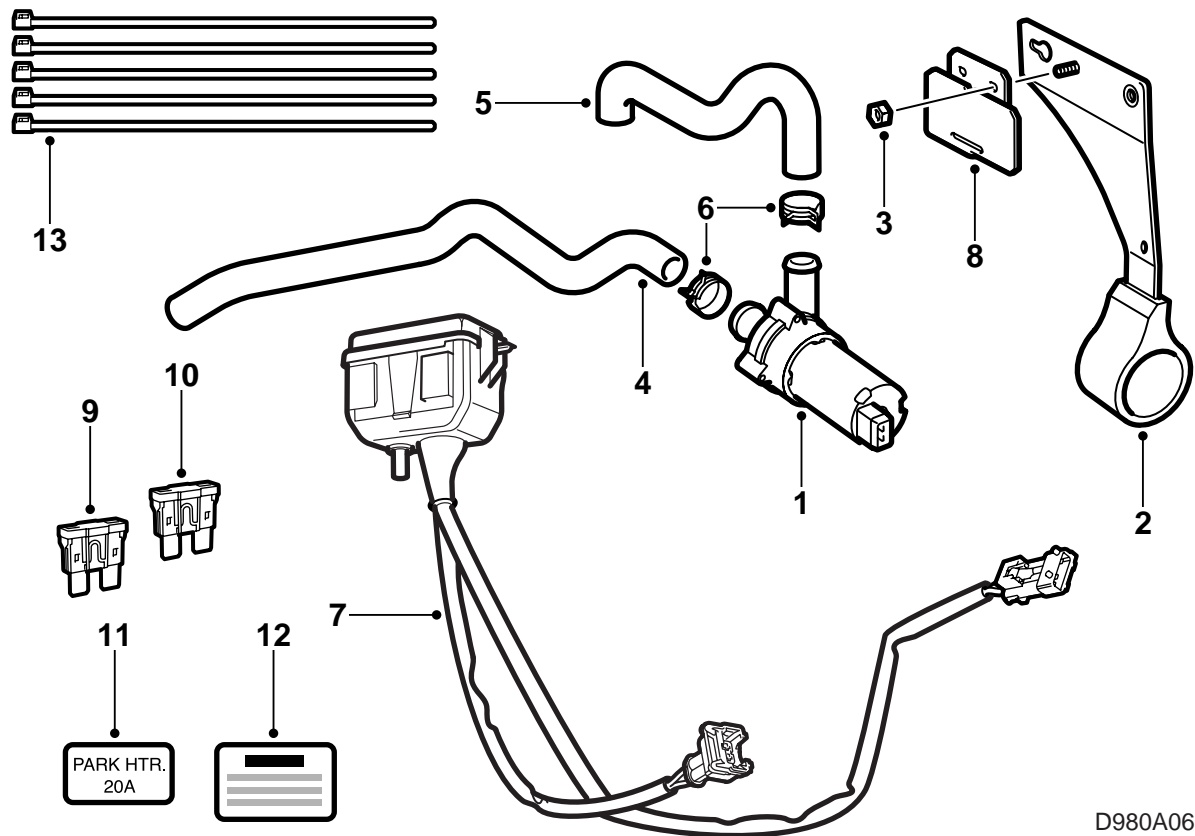
**MONTERINGSANVISNING · INSTALLATION INSTRUCTIONS
MONTAGEANLEITUNG · INSTALLATIONS DE MONTAGE**

Saab 9-3 D223

Parking Heater Accessory

Accessories Part No.	Group	Date	Instruction Part No.	Replaces
400 110 482 400 110 839 400 110 821 400 110 847	9:87-13	Aug 98	49 62 791	-

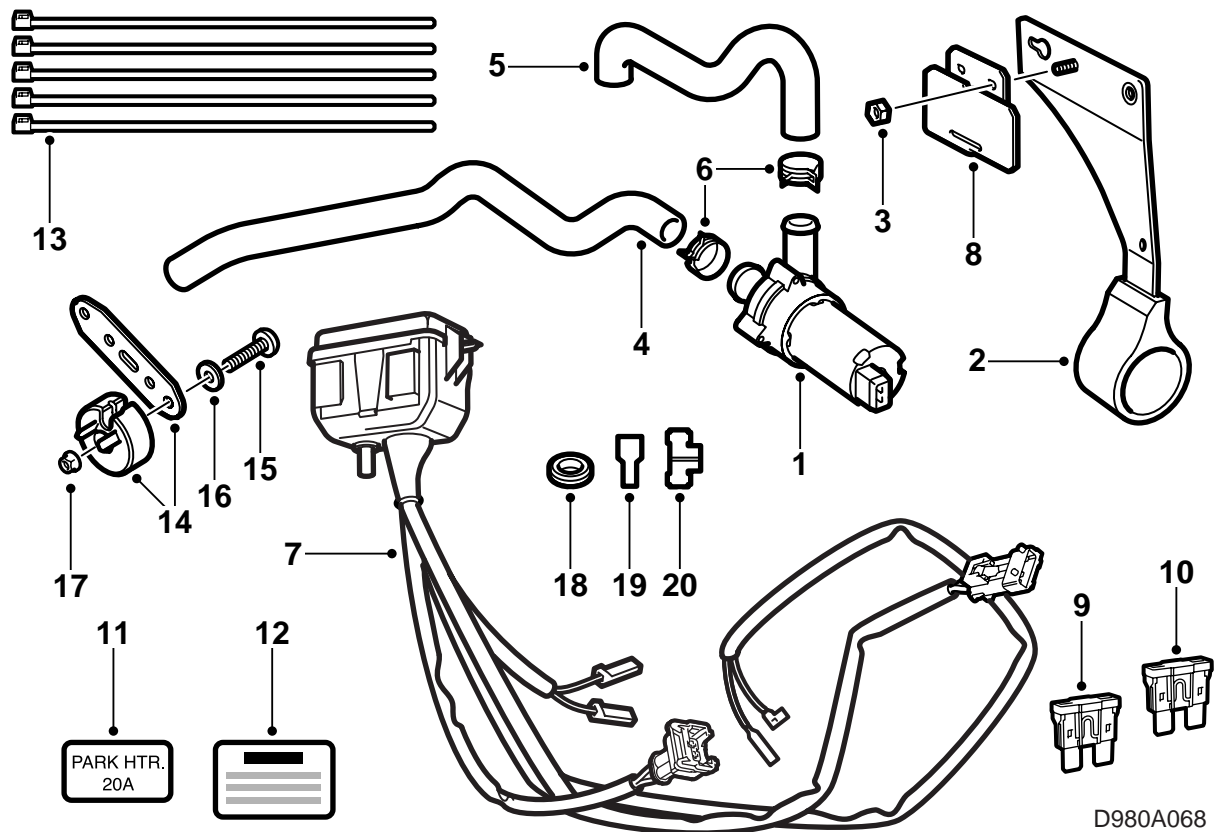




D980A067

ACC

- 1 Engine coolant pump
- 2 Bracket, coolant pump
- 3 Nut M6
- 4 Engine coolant hose (suction hose)
- 5 Engine coolant hose (delivery hose)
- 6 Hose clips (2 pcs)
- 7 Main fuse box with wiring harness
- 8 Mounting, main fuse box
- 9 Fuse 10 A
- 10 Fuse 20 A
- 11 Label, fuse
- 12 Label, tank hatch
- 13 Cable ties (5 off)



D980A068

MCC

- 1 Engine coolant pump
- 2 Bracket, coolant pump
- 3 Nut M6
- 4 Engine coolant hose (suction hose)
- 5 Engine coolant hose (delivery hose)
- 6 Hose clips (2 off)
- 7 Main fuse box with wiring harness
- 8 Mounting, main fuse box
- 9 Fuse 10 A
- 10 Fuse 20 A
- 11 Label, fuse
- 12 Label, tank hatch
- 13 Cable ties (5 pcs.)
- 14 Resistor with mounting
- 15 Screw M5
- 16 Washer
- 17 Nut M5
- 18 Rubber grommet
- 19 Connector, straight
- 20 Connector, angled

Introduction

The parking heater accessory is available in different versions for left-hand drive (LHD) cars and right-hand drive (RHD) cars as well as for cars with ACC (automatic climate control) or MCC (manual climate control with or without A/C).

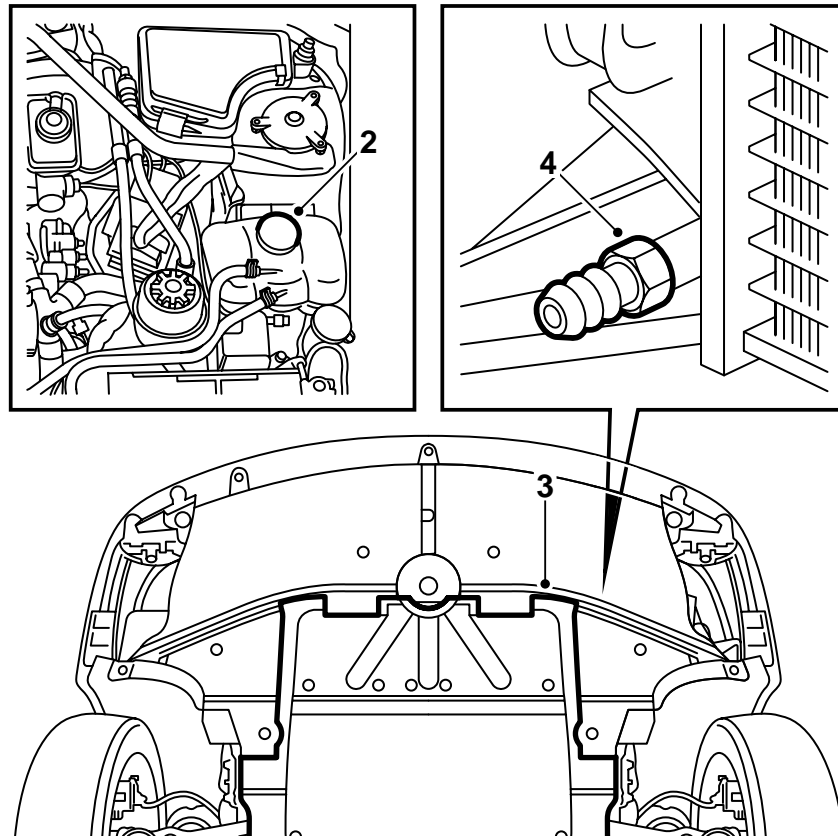
The installation instructions are separate for left and right-hand drive cars.

See the heading **LHD** on page 8 for left-hand drive cars.

See the heading **RHD** on page 28 for right-hand drive cars.

Safety regulations

- The heater must not be used in confined spaces such as garages or workshops unless apparatus for exhaust extraction is used.
- Always turn off the heater in service stations and similar premises.



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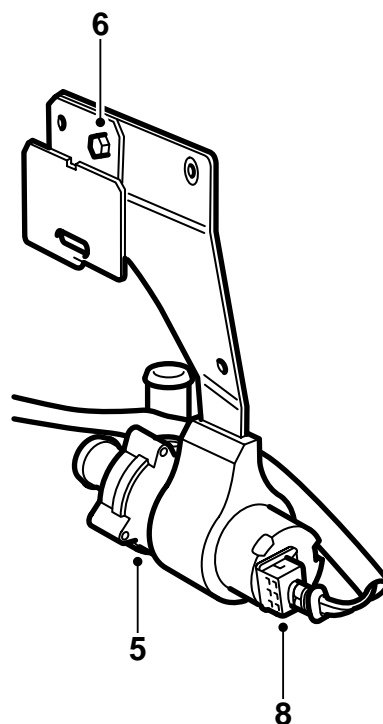
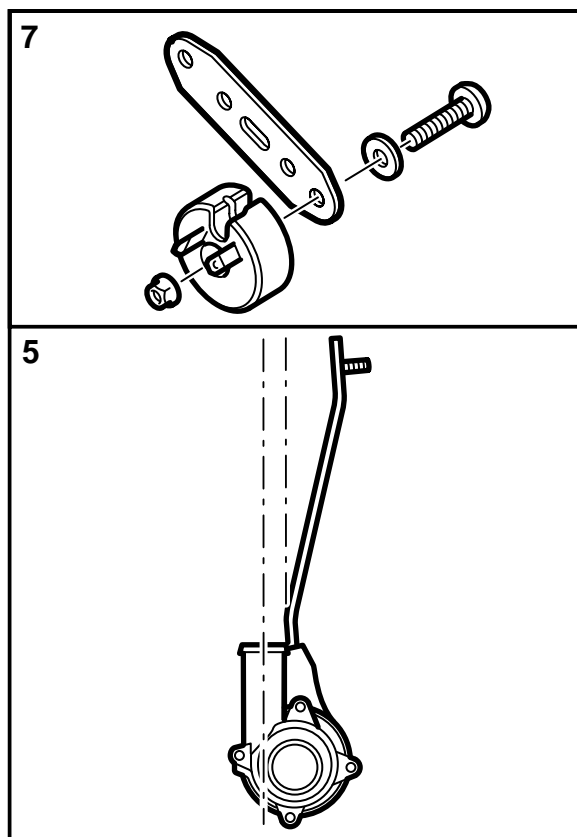
LHD

- 1 Read fully through the installation instructions and check that all the parts are present in the kit.
- 2 Lay covers on the wings and remove the cap on the coolant system expansions tank.

 **WARNING**

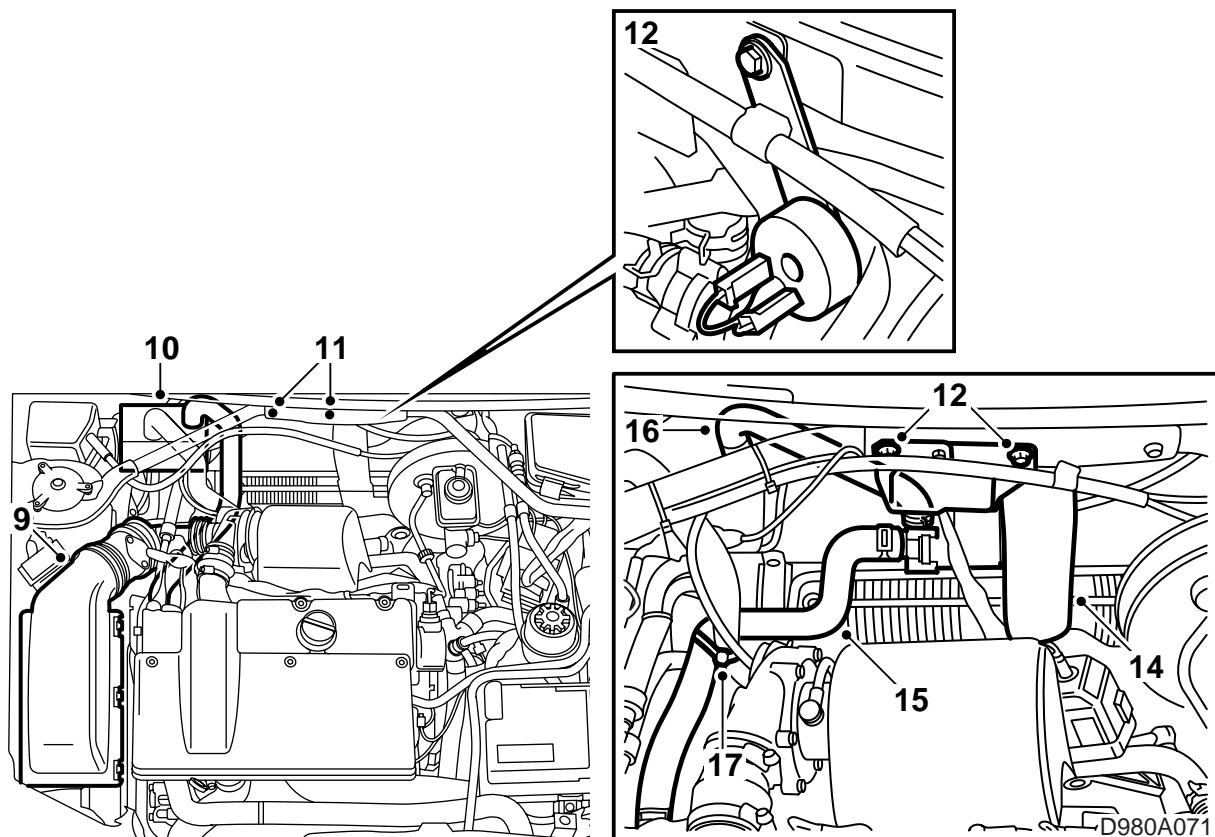
Take care if the car engine is warm. The engine coolant can be hot. There is also a risk of burns from the turbocharger and the exhaust manifold.

- 3 Raise the car. Remove the bottom engine cover.
- 4 Prepare a receptacle for the engine coolant. Open the drain plug, connect a hose and drain the coolant.



D980A070

- 5 Lower the car. Apply acid-free vaseline, part no. 30 06 665, on the pump housing and the inside of the bracket. Press the coolant pump into the bracket, making sure the pump outlet is pointing in direction shown in the illustration.
- 6 Fit the main fuse box mounting to the coolant pump bracket with the M6 nut.
- 7 **MCC:** Fit the resistor to its mounting with the screw, washer and nut (M5).
- 8 Connect the wiring harness cable with the 2-pin connector to the coolant pump.



- 9 Undo the lid to the air cleaner, which also contains the mass air flow sensor. Detach the turbo-charger inlet hose and the crankcase ventilation.

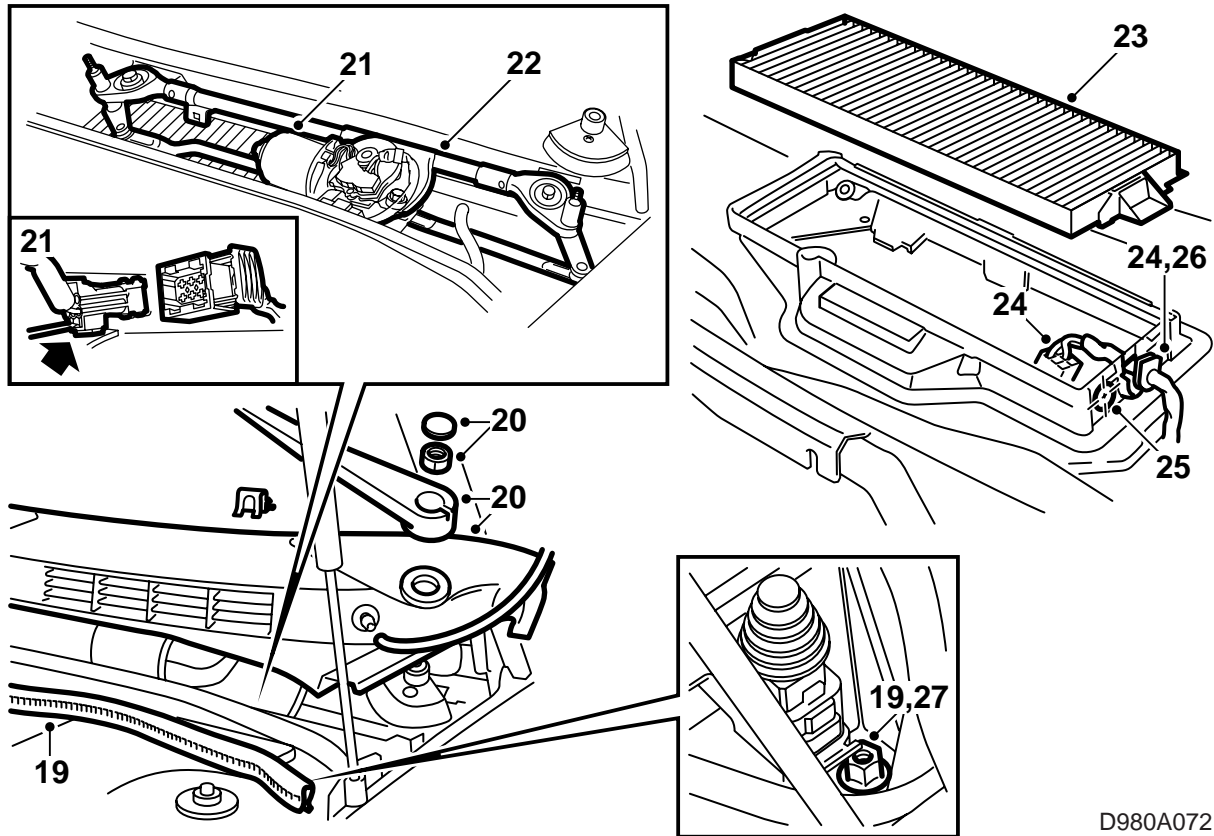
Unplug the mass air flow filter connector.

Note

Cover the generator to prevent it from being damaged if coolant should run out.

- 10 Undo the coolant hose from the generator bracket and heater. Cut the cable tie and remove the hose.
- 11 Remove the left-hand and centre screws securing the stay between the suspension struts in the bulkhead.
- 12 Fit the coolant pump bracket (with the main fuse box mounting) with the screws on the stay. Tighten the nut on the main fuse box mounting.
- MCC:** Fit the resistor with its mounting using the centre screw on the stay. Connect the main fuse box cables to the resistor.
- Tightening torque 8 Nm (6 lbf ft)**
- 13 Lay the main fuse box cables behind the coolant pump bracket.
- 14 Make sure the drainage from the bulkhead partition is free and not pinched, preventing any water from running out.

- 15 Fit the coolant hose (suction hose) to the generator bracket and to the coolant pump inlet with hose clips.
- 16 Connect the coolant hose (delivery hose) between the coolant pump outlet and the heater inlet.
- 17 Secure the hoses with cable ties, see illustration.
- 18 Hook the main fuse box to the mounting on the coolant pump bracket. Make sure the cables are not pinched.



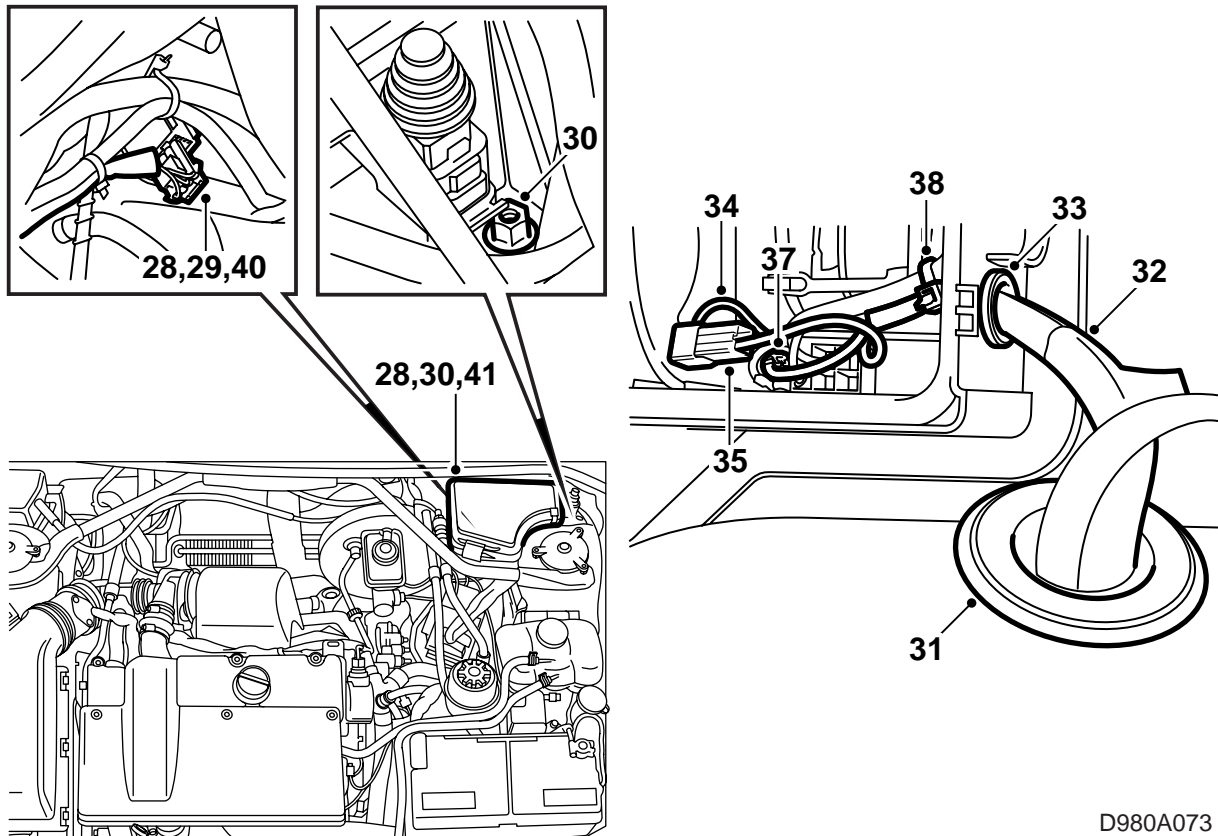
D980A072

- 19 **ACC:** Undo the sealing strip and nut securing the main fuse box. Lift up the main fuse box.
- 20 **MCC:** Remove the wiper arms, sealing strip and windscreen cover.
- 21 **MCC:** Remove the cover over the wiper motor and unplug the connector.
- 22 **MCC:** Remove the wiper unit, 4 bolts.
- 23 **MCC:** Remove the cabin air filter.
- 24 **MCC:** Unplug the connector and lift away the existing cable grommet in the fan housing.

Note

Make sure the sealing strip is not damaged and that no cuttings fall into the fan housing.

- 25 **MCC:** Put aside the cables and drill a 15 mm hole in the fan housing as illustrated. Remove the protection against cuttings.
- 26 **MCC:** Replace the rubber grommet and plug in the connector.
- 27 **MCC:** Undo the nut securing the main fuse box. Lift up the main fuse box.



D980A073

- 28 Lift up the SID connector. Remove the seal on the connector and spray Kontakt 61, part no. 30 04 520, on the pins.

⚠ WARNING

Make sure the cables are not lying against sharp edges or warm surfaces. Wear and heat damage can cause short circuits.

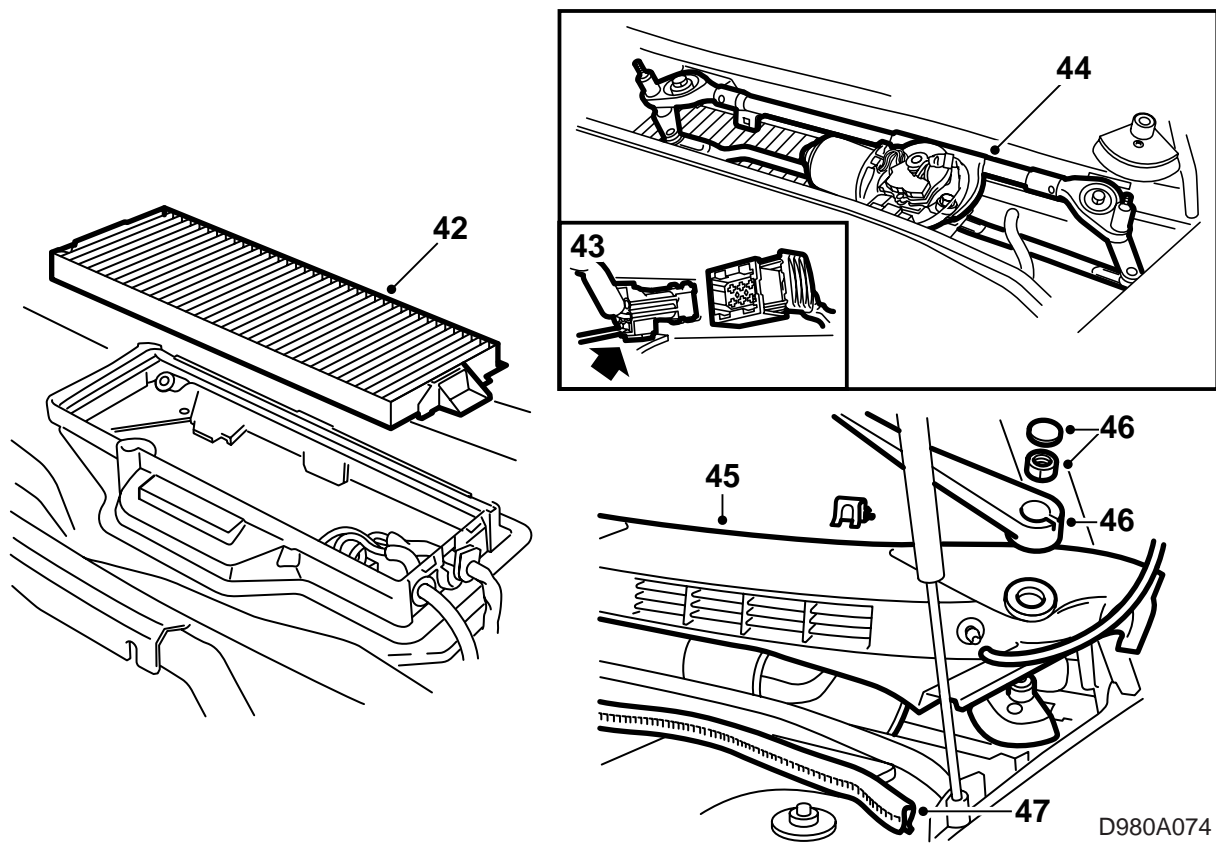
- 29 **ACC:** Run the main fuse box cable with the 4-pin connector behind the brake servo and plug it into the connector on the cable from SID. Secure with cable ties.
- 30 **ACC:** Fit the main fuse box and sealing strip.
- 31 **MCC:** Carefully make a hole in the existing rubber grommet, see illustration.
- 32 **MCC:** Run the remaining two main fuse box cables (with uninsulated cable lugs) behind the brake servo and in through the wall to the bulkhead partition space.
- 33 **MCC:** Thread the rubber grommet included in the kit onto the cables and insert them through the drilled hole in the fan housing.
- 34 **MCC:** Detach the pin with the orange cable in the fan housing and fit the angled connector to the pin.
- 35 **MCC:** Fit the straight connector to the pin on the blue cable.

- 36 **MCC:** Couple together the orange and blue cables.
- 37 **MCC:** Plug the green cable (with angled pin) to the fan connector pin.
- 38 **MCC:** Secure the cables to the existing wiring harness in the fan housing.
- 39 **MCC:** Seal both grommets with Teroson T242, part no. 30 15 781, or equivalent sealant.

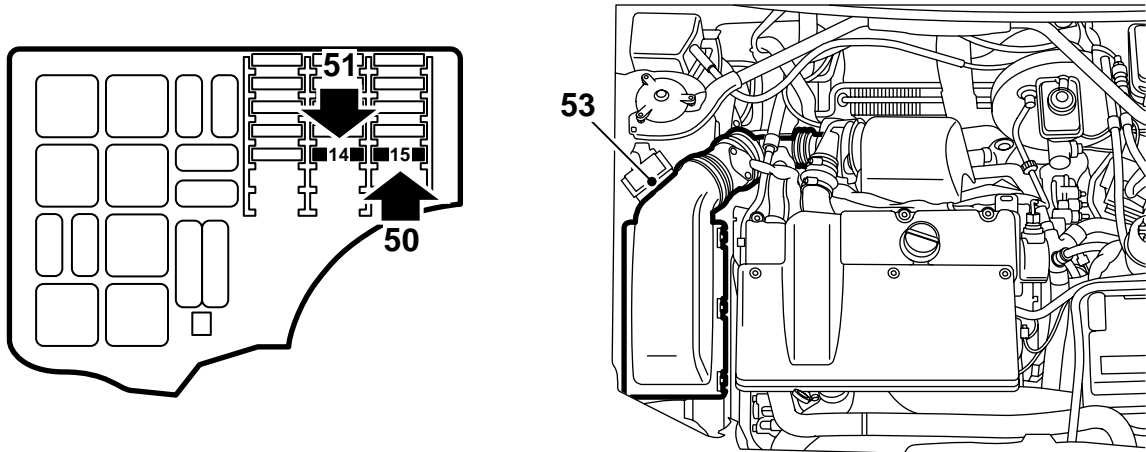
⚠ WARNING

Make sure the cables are not lying against sharp edges or warm surfaces. Wear and heat damage can cause short circuits.

- 40 **MCC:** Plug in the 4-pin connector to the connector on the cable coming from SID. Secure both cables with cable ties.
- 41 **MCC:** Fit the main fuse box.



- 42 **MCC:** Fit the cabin air filter.
- 43 **MCC:** Fit the wiper unit, four screws and plug in the connector.
- 44 **MCC:** Fit the wiper motor cover.
- 45 **MCC:** Fit the windscreen cover.
- 46 **MCC:** Fit the wiper arms.
- 47 **MCC:** Fit the rubber strip.



D980A075

- 48 Remove the cover on the main fuse box.
- 49 Clean the inside of the cover and affix the label marked PARK. HTR 20 A over the marking on position 15.
- 50 Replace fuse 15 with the 20 A fuse included in the kit.
- 51 Fit the 10 A fuse included with the kit in position 14 (ADD. HTR./WAT. PUMP).
- 52 Refit the main fuse box cover.
- 53 Fit the air cleaner cover with mass air flow sensor and turbocharger inlet hose. Fit the hose for the crankcase ventilation.
Plug in the mass air flow sensor connector
- 54 Raise the car. Detach the coolant drain hose and tighten the drain plug.
- 55 Fit the bottom engine cover.
- 56 Lower the car. Fill with coolant and check for leaks.
- 57 Program the parking heater with the diagnostic tool: Diagnosis, model year, car model, Body, SID, Programming, Activating, Parking heater
Select: Activate by timer and outdoor temperature.

- 58 Bleed the cooling system in the following way:

Note

ACC or A/C should be OFF.

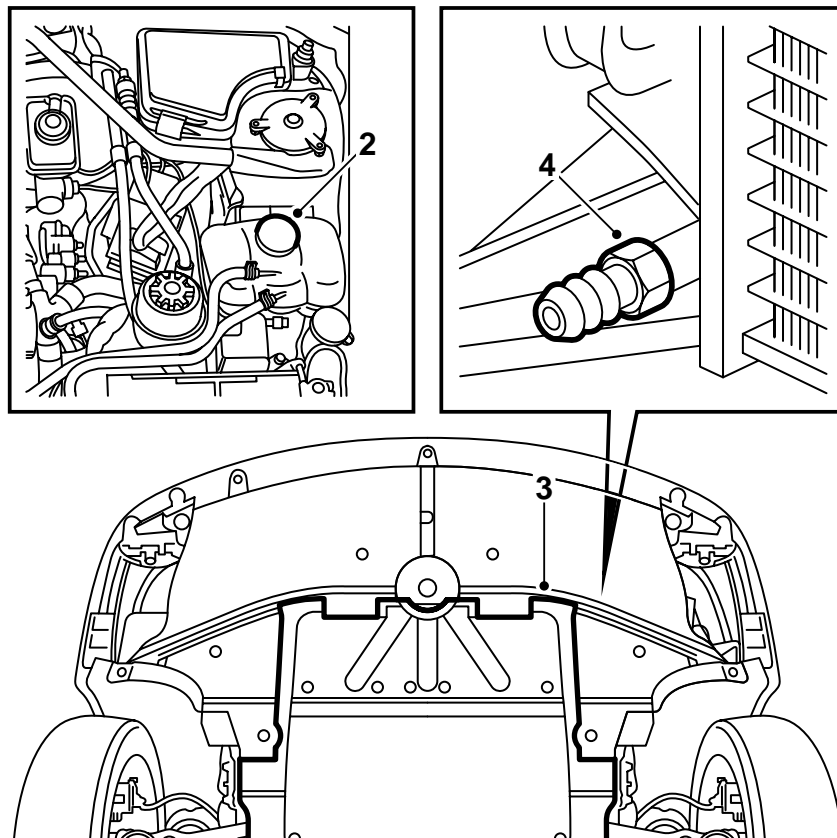
Connect an exhaust hose to the auxiliary heater.

Start the engine and make sure there is a continuous flow of coolant through the hose from the thermostat housing to the expansion tank.

Start the auxiliary heater manually on the SID panel.

Run the engine until the thermostat has opened. Then, turn off the engine, carefully open the lid to the expansion tank and top up to MAX level as necessary. Close the lid.

- 59 Make sure there are no leaks in the coolant system and that the heater is working by starting it manually.
- 60 Clean the inside of the tank hatch and affix the warning label.
- 61 Place the installation instructions in the car and draw the customer's attention to the user instructions at the end of section "Technical data" under the heading "Engine and cabin heater" in the user manual.



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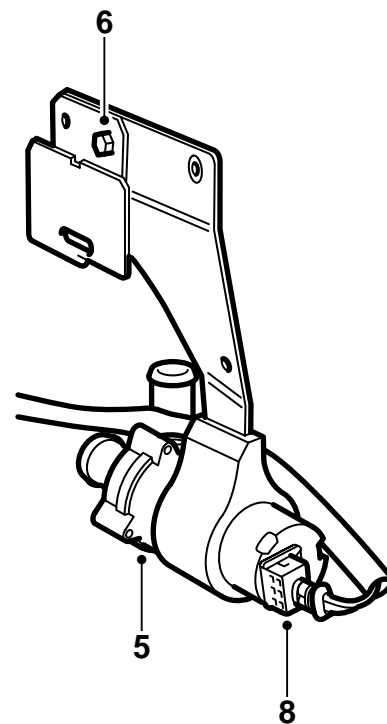
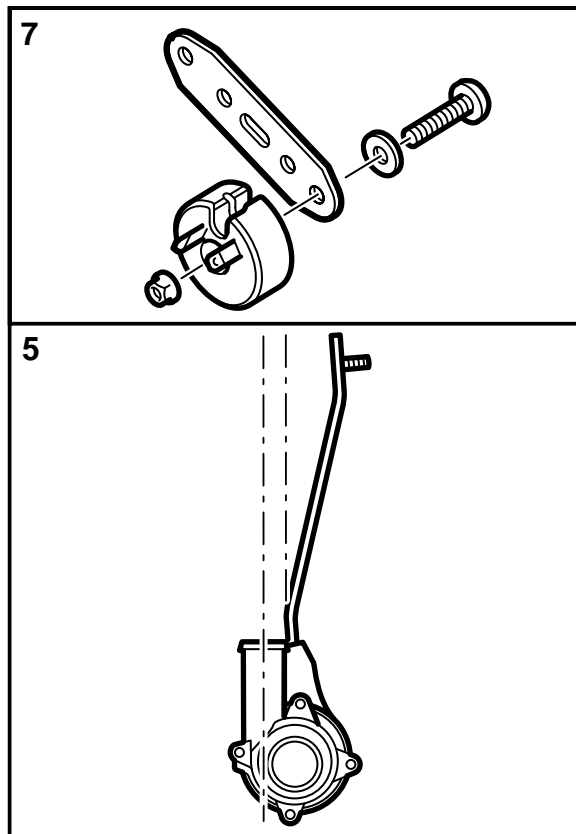
RHD

- 1 Read fully through the installation instructions and check that all the parts are present in the kit.
- 2 Lay covers on the wings and remove the cap on the coolant system expansions tank.

 **WARNING**

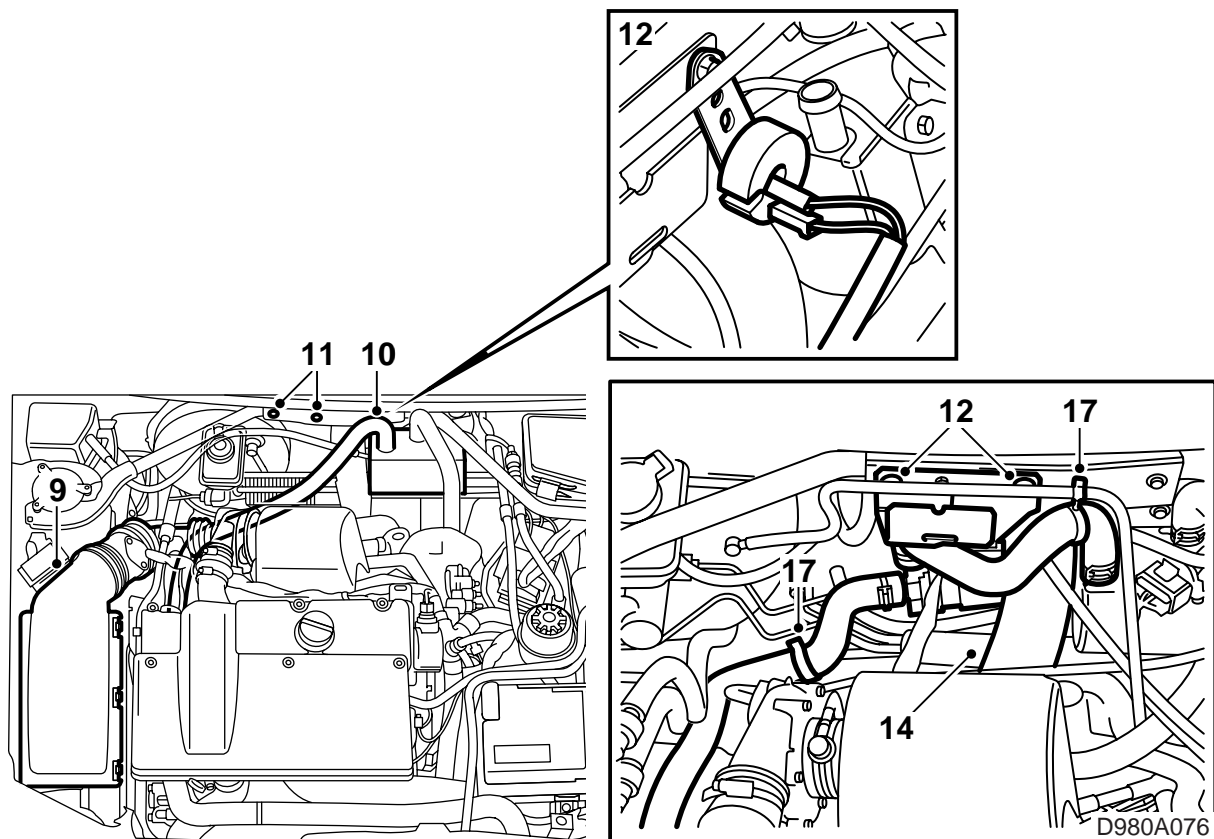
Take care if the car engine is warm. The engine coolant can be hot. There is also a risk of burns from the turbocharger and the exhaust manifold.

- 3 Raise the car. Remove the bottom engine cover.
- 4 Prepare a receptacle for the engine coolant. Open the drain plug, connect a hose and drain the coolant.



D980A070

- 5 Lower the car. Apply acid-free vaseline, part no. 30 06 665, on the pump housing and the inside of the bracket. Press the coolant pump into the bracket, making sure the pump outlet is pointing in direction shown in the illustration.
- 6 Fit the main fuse box mounting to the coolant pump bracket with the M6 nut.
- 7 **MCC:** Fit the resistor to its mounting with the screw, washer and nut (M5).
- 8 Connect the wiring harness cable with the 2-pin connector to the coolant pump.



- 9 Undo the lid to the air cleaner, which also contains the mass air flow sensor. Detach the turbo-charger inlet hose and the crankcase ventilation.

Unplug the mass air flow filter connector.

Note

Cover the generator to prevent it from being damaged if coolant should run out.

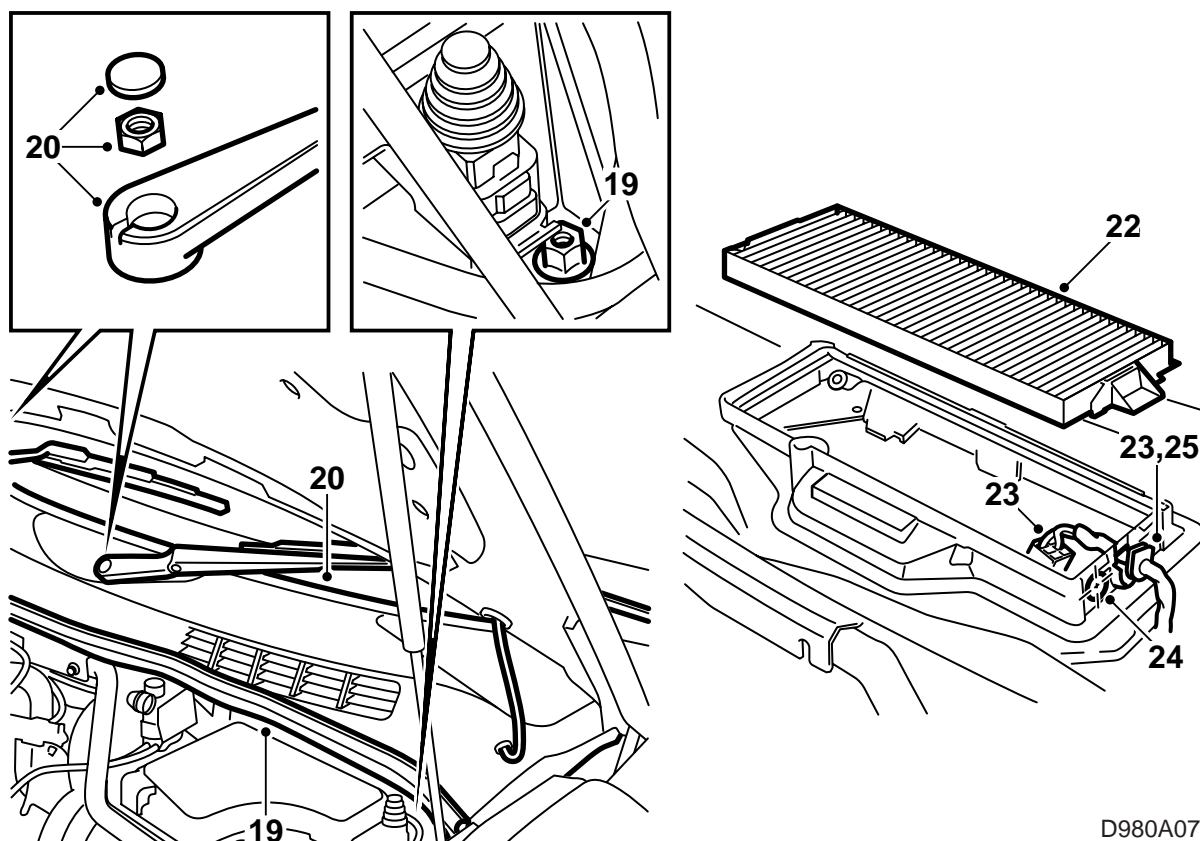
- 10 Undo the coolant hose from the generator bracket and heater. Cut the cable ties on the hoses to the vacuum box and vacuum pump and remove the hose.
- 11 Remove the left-hand and centre screws securing the stay between the suspension struts in the bulkhead.
- 12 Fit the coolant pump bracket (with the main fuse box mounting) with the screws on the stay. Make sure there is sufficient room between the brake pipes and the coolant pump. If necessary, push aside the brake pipes with the shaft of a hammer or similar.

Tighten the nut on the main fuse box mounting.

MCC: Fit the resistor with its mounting using the centre screw on the stay. Connect the main fuse box cables to the resistor.

Tightening torque 8 Nm (6 lbf ft)

- 13 Lay the main fuse box cables behind the coolant pump bracket.
- 14 Make sure the drainage from the bulkhead partition is free and not pinched, preventing any water from running out.
- 15 Fit the coolant hose (suction hose) to the generator bracket and to the coolant pump inlet with hose clips.
- 16 Connect the coolant hose (delivery hose) between the coolant pump outlet and the heater inlet. Make sure the resistor is not touching the coolant hoses.
- 17 Secure the hoses with cable ties, see illustration.
- 18 Hook the main fuse box to the mounting on the coolant pump bracket. Make sure the cables are not pinched.



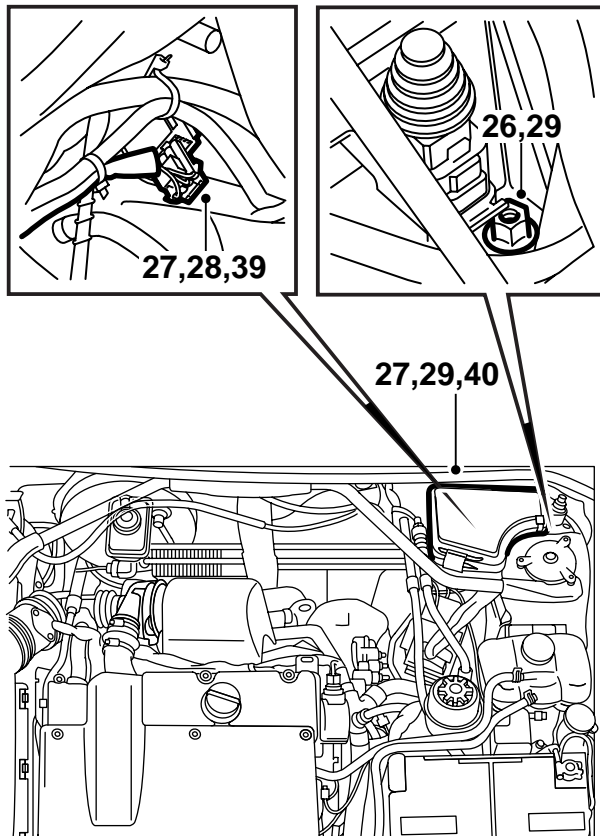
D980A077

- 19 **ACC:** Undo the sealing strip and nut securing the main fuse box. Lift up the main fuse box.
- 20 **MCC:** Remove the wiper arms, sealing strip and windscreen cover.
- 21 **MCC:** Remove the cover over the wiper motor.
- 22 **MCC:** Remove the cabin air filter.
- 23 **MCC:** Unplug the connector and lift away the existing cable grommet in the fan housing.

Note

Make sure the sealing strip is not damaged and that no cuttings fall into the fan housing.

- 24 **MCC:** Put aside the cables and drill a 15 mm hole in the fan housing as illustrated. Remove the protection against cuttings.
- 25 **MCC:** Replace the rubber grommet and plug in the connector.

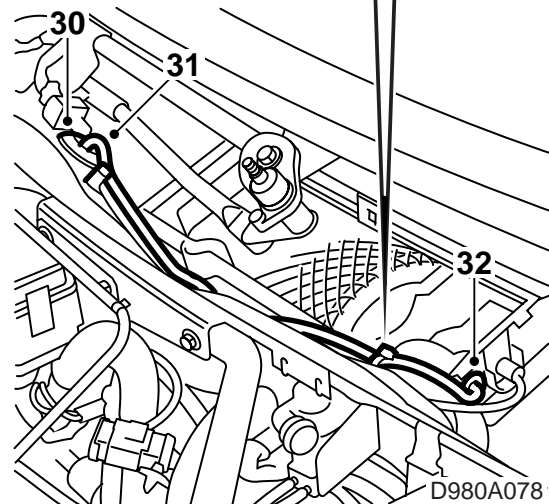
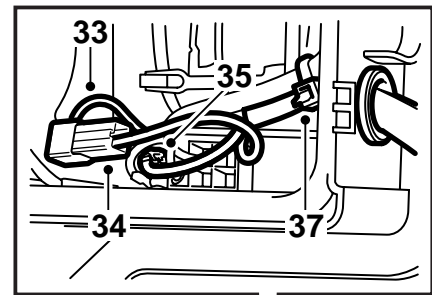


- 26 **MCC:** Undo the nut securing the main fuse box. Lift up the main fuse box.
- 27 Lift up the SID connector. Remove the seal on the connector and spray Kontakt 61, part no. 30 04 520, on the pins.

! WARNING

Make sure the cables are not lying against sharp edges or warm surfaces. Wear and heat damage can cause short circuits.

- 28 **ACC:** Run the main fuse box cable with the 4-pin connector behind the brake servo and plug it into the connector on the cable from SID. Secure with cable ties.
- 29 **ACC:** Fit the main fuse box and sealing strip.
- 30 **MCC:** Carefully make a hole in the existing rubber grommet, see illustration.
- 31 **MCC:** Run the remaining two main fuse box cables (with uninsulated cable lugs) behind the brake servo and in through the wall to the bulkhead partition space.
- 32 **MCC:** Thread the rubber grommet included in the kit onto the cables and insert them through the drilled hole in the fan housing.
- 33 **MCC:** Detach the pin with the orange cable in the fan housing and fit the angled connector to the pin.

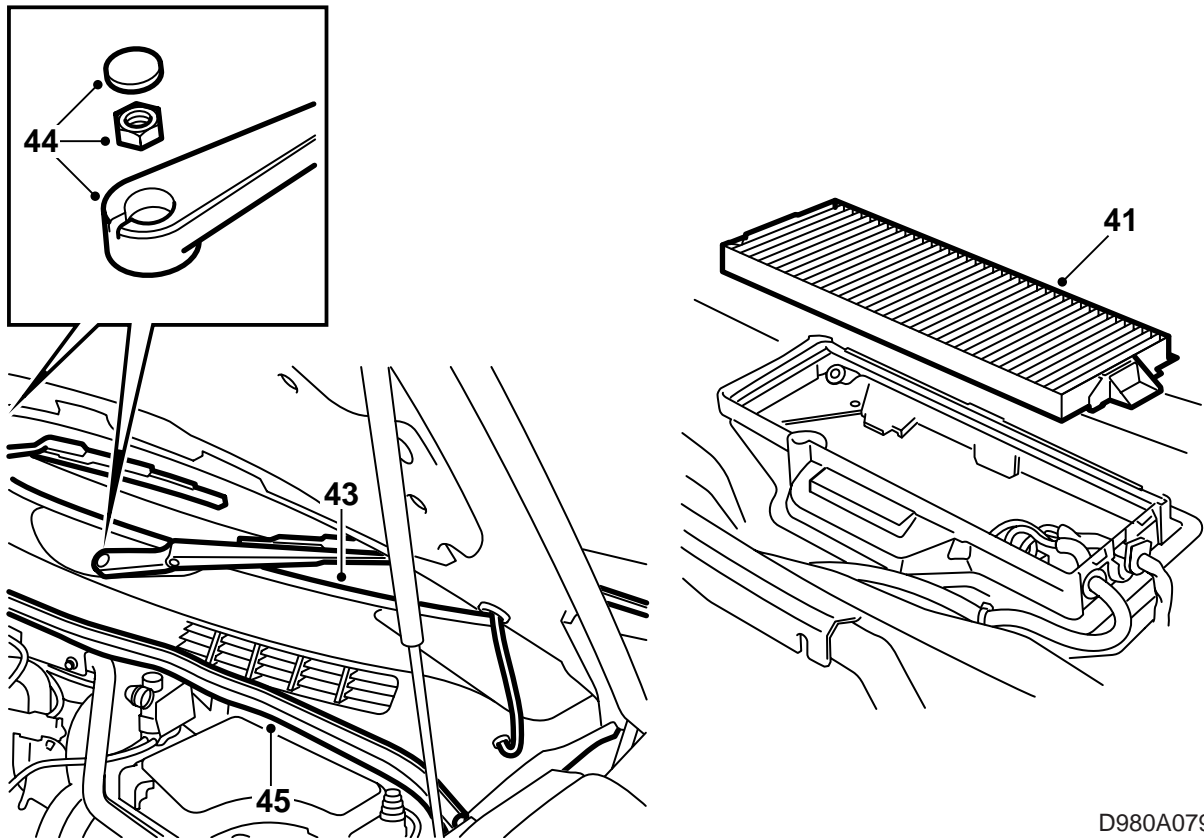


- 34 **MCC:** Fit the straight connector to the pin on the blue cable.
- 35 **MCC:** Couple together the orange and blue cables.
- 36 **MCC:** Plug the green cable (with angled pin) to the fan connector pin.
- 37 **MCC:** Secure the cables to the existing wiring harness in the fan housing.
- 38 **MCC:** Seal both grommets with Teroson T242, part no. 30 15 781, or equivalent sealant.

! WARNING

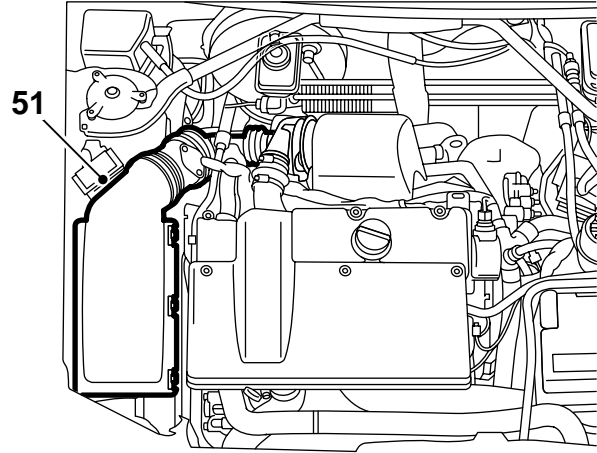
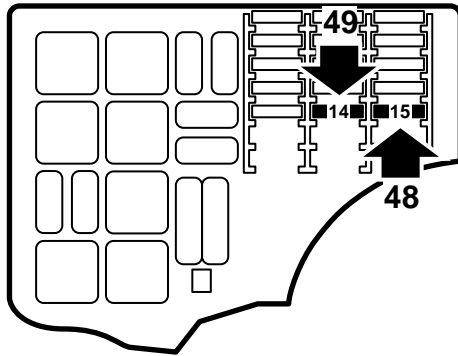
Make sure the cables are not lying against sharp edges or warm surfaces. Wear and heat damage can cause short circuits.

- 39 **MCC:** Plug in the 4-pin connector to the connector on the cable coming from SID. Secure both cables with cable ties.
- 40 **MCC:** Fit the main fuse box.



D980A079

- 41 **MCC:** Fit the cabin air filter.
- 42 **MCC:** Fit the wiper motor cover.
- 43 **MCC:** Fit the windscreen cover.
- 44 **MCC:** Fit the wiper arms.
- 45 **MCC:** Fit the rubber strip.



D980A080

- 46 Remove the cover on the main fuse box.
- 47 Clean the inside of the cover and affix the label marked PARK. HTR 20 A over the marking on position 15.
- 48 Replace fuse 15 with the 20 A fuse included in the kit.
- 49 Fit the 10 A fuse included with the kit in position 14 (ADD. HTR./WAT. PUMP).
- 50 Refit the main fuse box cover.
- 51 Fit the air cleaner cover with mass air flow sensor and turbocharger inlet hose. Fit the hose for the crankcase ventilation.
Plug in the mass air flow sensor connector
- 52 Raise the car. Detach the coolant drain hose and tighten the drain plug.
- 53 Fit the bottom engine cover.
- 54 Lower the car. Fill with coolant and check for leaks.
- 55 Program the parking heater with the diagnostic tool: Diagnosis, model year, car model, Body, SID, Programming, Activating, Parking heater
Select: Activate by timer and outdoor temperature.

- 56 Bleed the cooling system in the following way:

Note

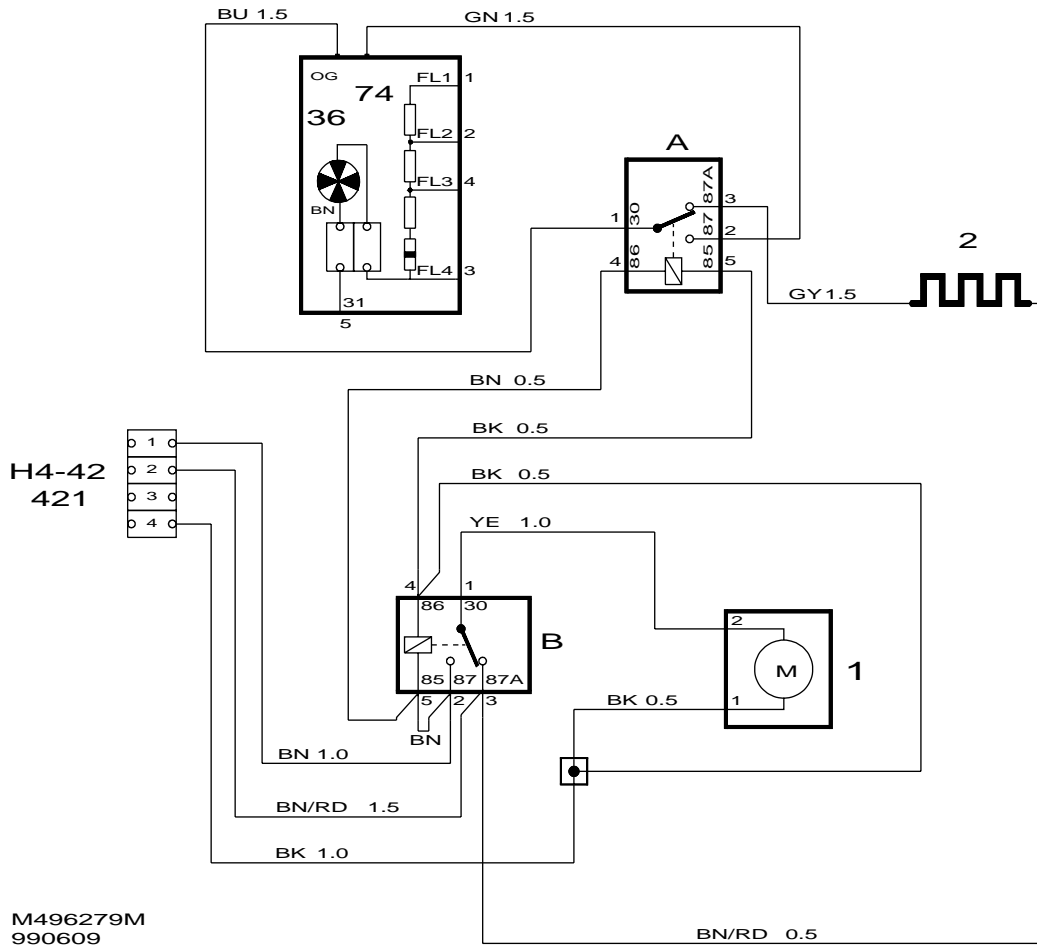
ACC or A/C should be OFF.

Connect an exhaust hose to the auxiliary heater. Start the engine and make sure there is a continuous flow of coolant through the hose from the thermostat housing to the expansion tank.

Start the auxiliary heater manually on the SID panel.

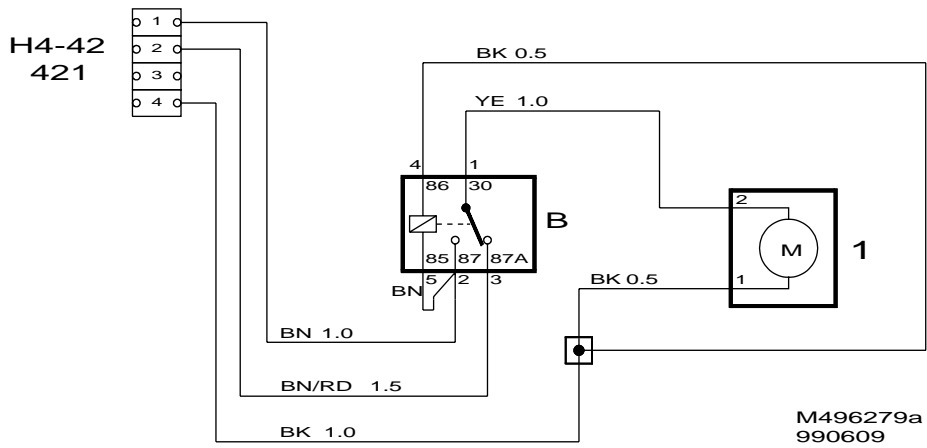
Run the engine until the thermostat has opened. Then, turn off the engine, carefully open the lid to the expansion tank and top up to MAX level as necessary. Close the lid.

- 57 Make sure there are no leaks in the coolant system and that the heater is working by starting it manually.
- 58 Clean the inside of the tank hatch and affix the warning label.
- 59 Place the installation instructions in the car and draw the customer's attention to the user instructions at the end of section "Technical data" under the heading "Engine and cabin heater" in the user manual.



Wiring diagram, MCC, LHD, RHD

A	B	1	2	36	74	H4-42
Motor, radiator fan, right	Relay, water pump	Water pump	Resistor	Motor, cabin fan; in centre between bulkhead wall and partition wall	Resistor, cabin fan; under cabin air filter on left-hand side	Connection, parking heater; by bulkhead grommet under main fuse box 342a/b in engine bay



Wiring diagram, ACC, LHD, RHD

B	1	H4-42
Relay, water pump	Water pump	Connection, parking heater; by bulkhead grommet under main fuse box 342a/b in engine bay