

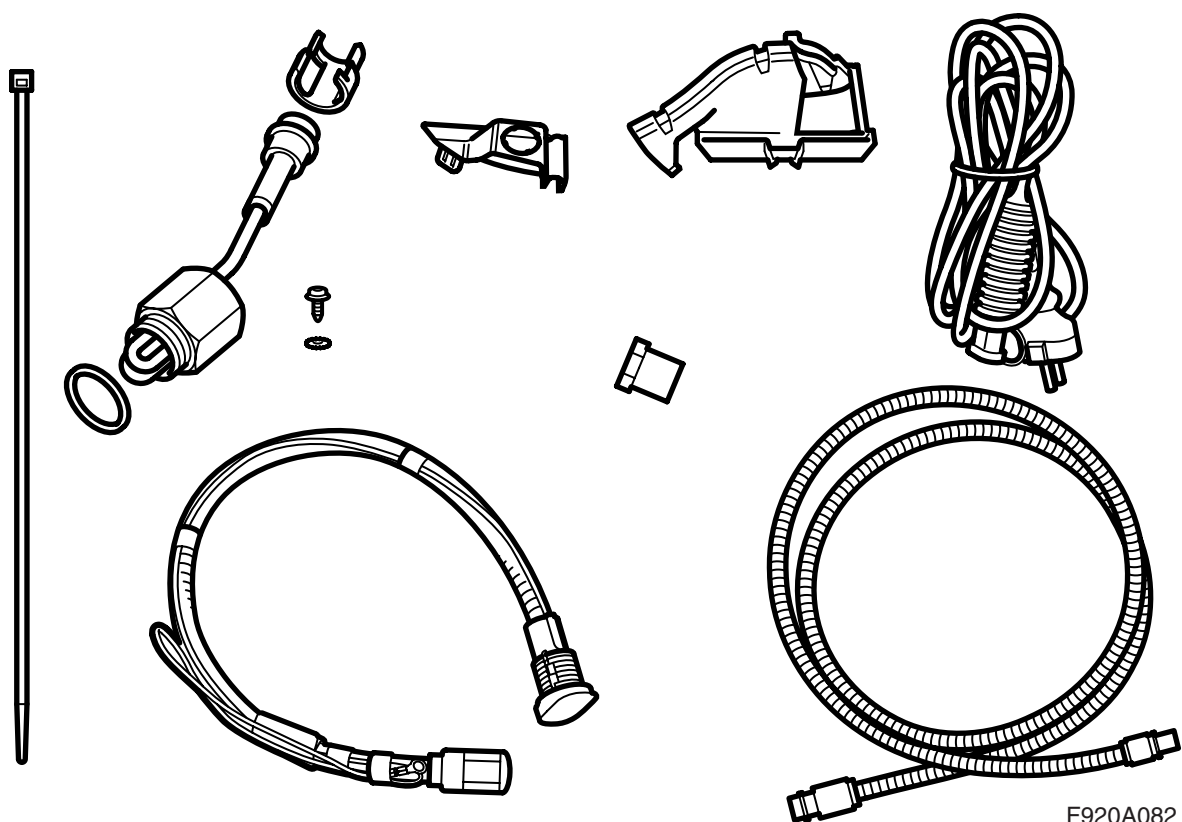


MONTERINGSANVISNING · INSTALLATION INSTRUCTIONS MONTAGEANLEITUNG · INSTRUCTIONS DE MONTAGE

Saab 9-3 B284 M08-

Engine block heater

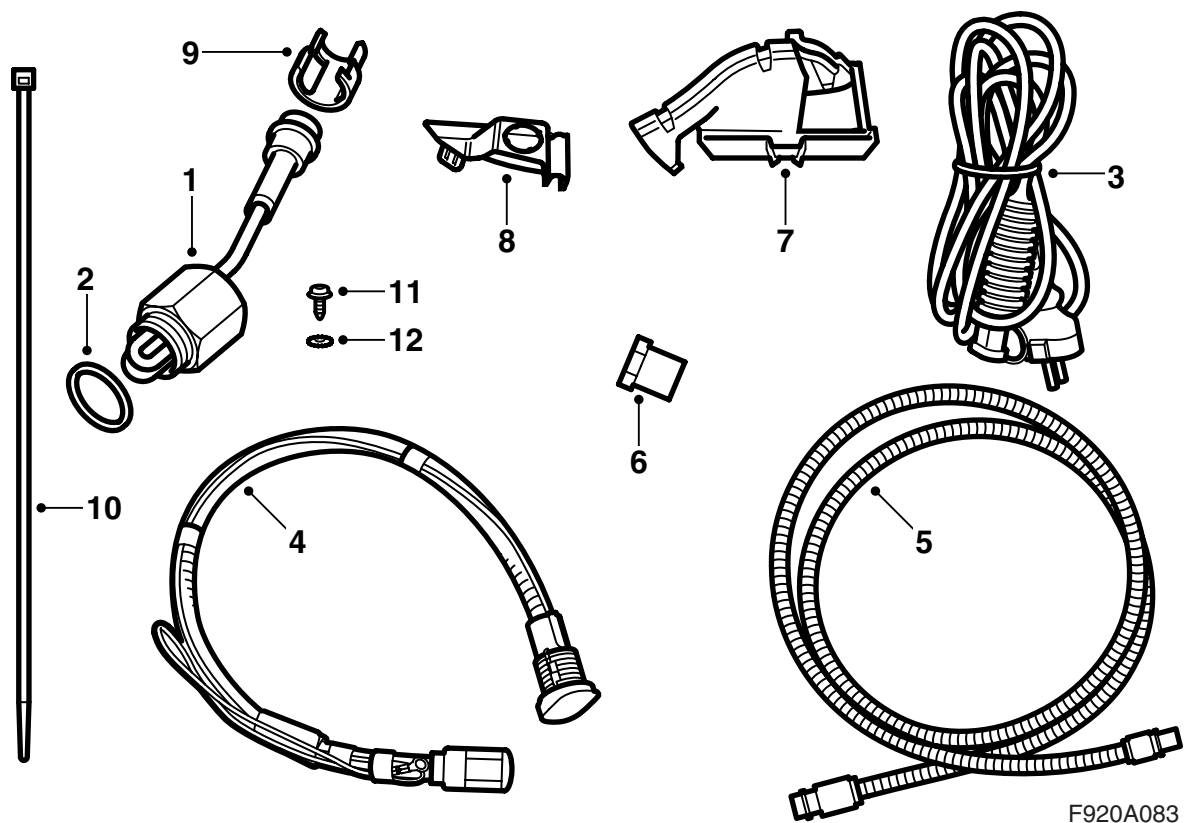
Accessories Part No.	Group	Date	Instruction Part No.	Replaces
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Instructions for cars with standard front, see page 4

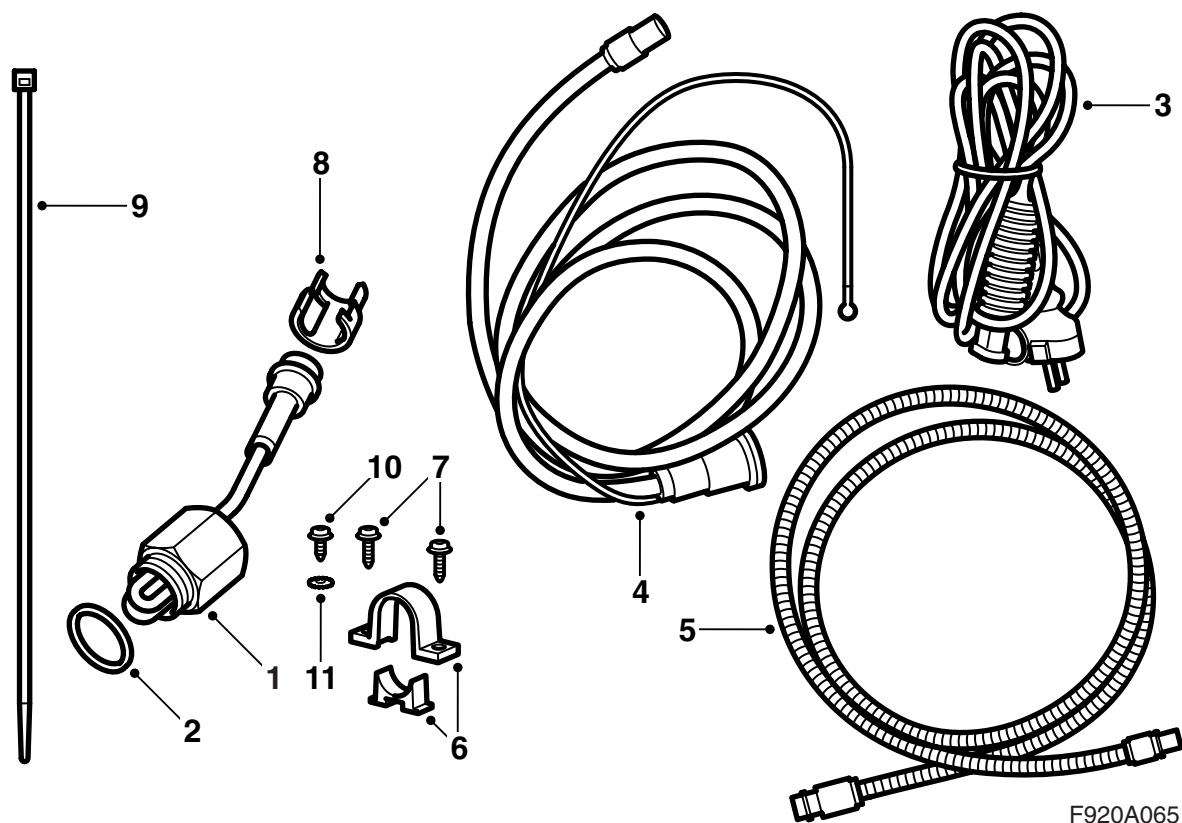
Instructions for cars with Aero front, see page 9



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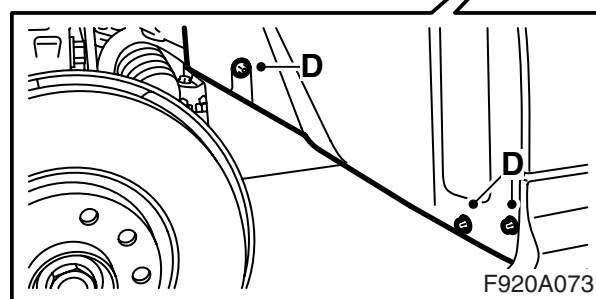
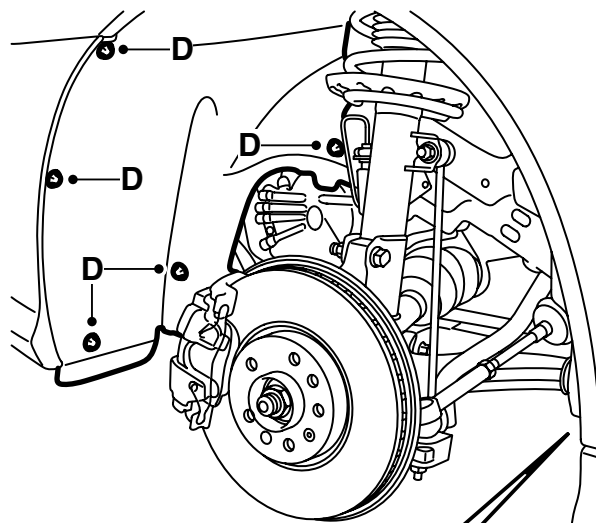
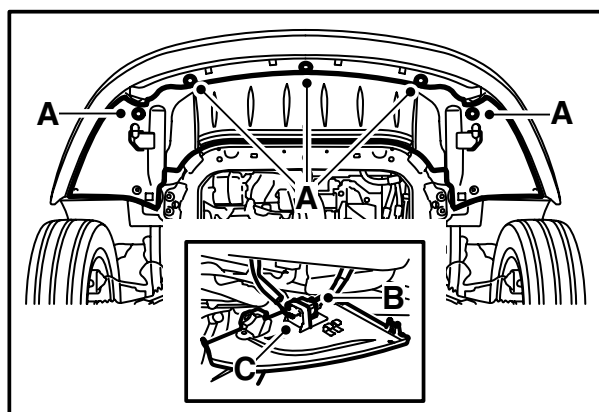
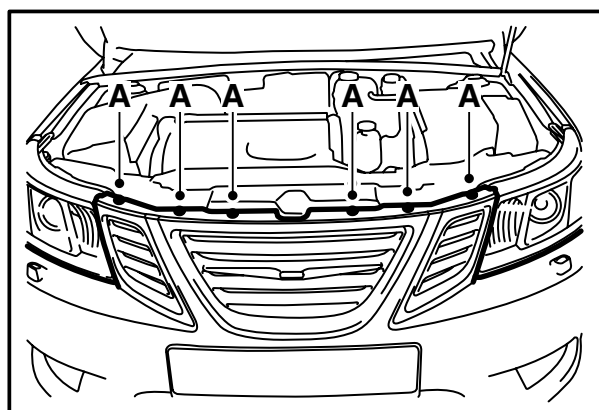
Cars with standard front

- 1 Heating element
- 2 Washer
- 3 Extension cable
- 4 Connecting cable with ground cable
- 5 Connecting cable, extension piece
- 6 Plastic nut
- 7 Inner bracket
- 8 Outer bracket
- 9 Retaining clip (x2)
- 10 Cable tie
- 11 Screw
- 12 Serrated washer

**Cars with Aero front**

- 1 Heating element
- 2 Washer
- 3 Extension cable
- 4 Connecting cable with ground cable
- 5 Connecting cable, extension piece
- 6 Holder
- 7 Screw (x2)
- 8 Retaining clip
- 9 Cable tie
- 10 Screw
- 11 Serrated washer

Cars with standard front



- 1 Remove the expansion tank cap.

⚠ WARNING

The cooling system is under pressure. Hot coolant and steam can be released.

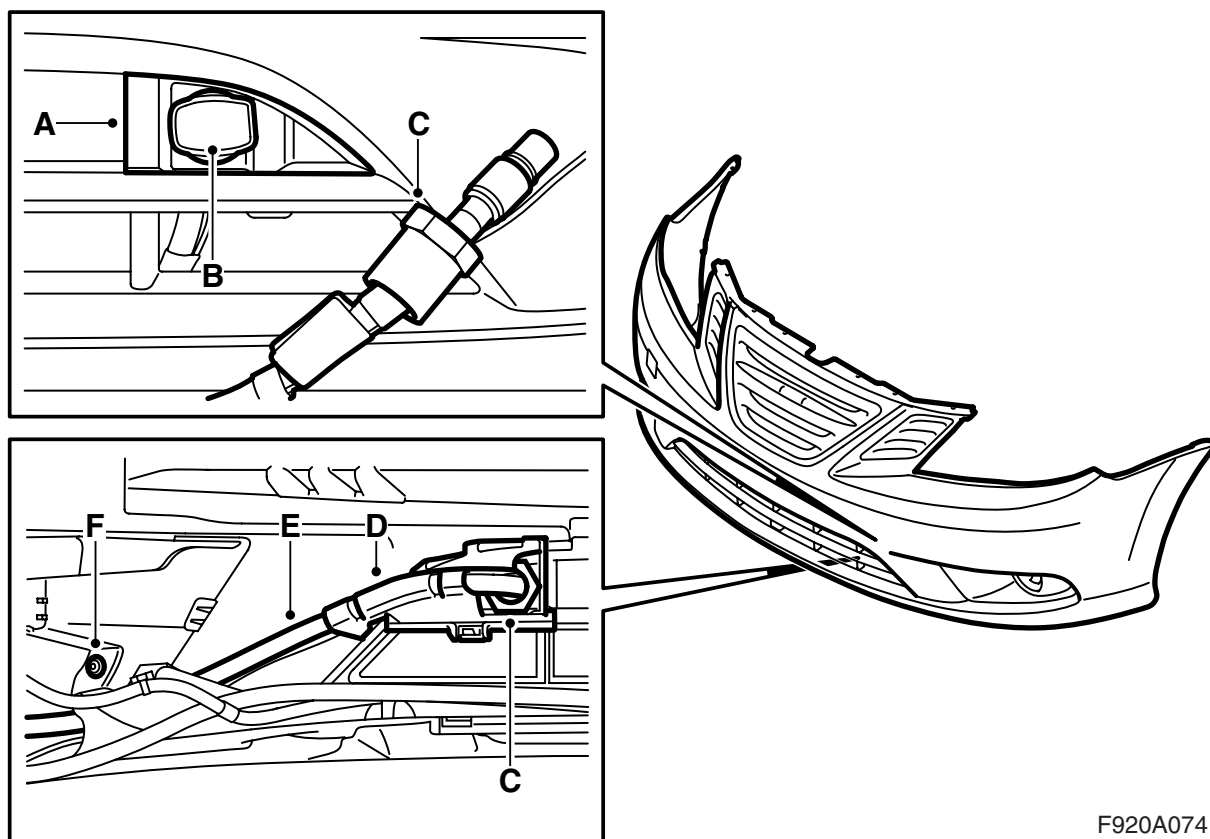
- Therefore, open the cap slowly to release the pressure.
- Carelessness can cause eye and burn injuries

- 2 Remove the bumper's upper screws (A).
 - 3 Raise the car.
 - 4 Remove the bumper's lower screws (A), unplug the bumper's connector (B) and remove it from the holder (C) on the spoiler shield.
- Cars with headlamp washers:** Unhook the hose from the spoiler shield.
- 5 Place a receptacle under the engine, open the drain plug on the bottom of the coolant pump and drain the coolant. Close the drain plug.

- 6 Remove the left-hand front wheel.
- 7 Remove the left-hand front wing liner (D).
- 8 Remove the bumper shell.

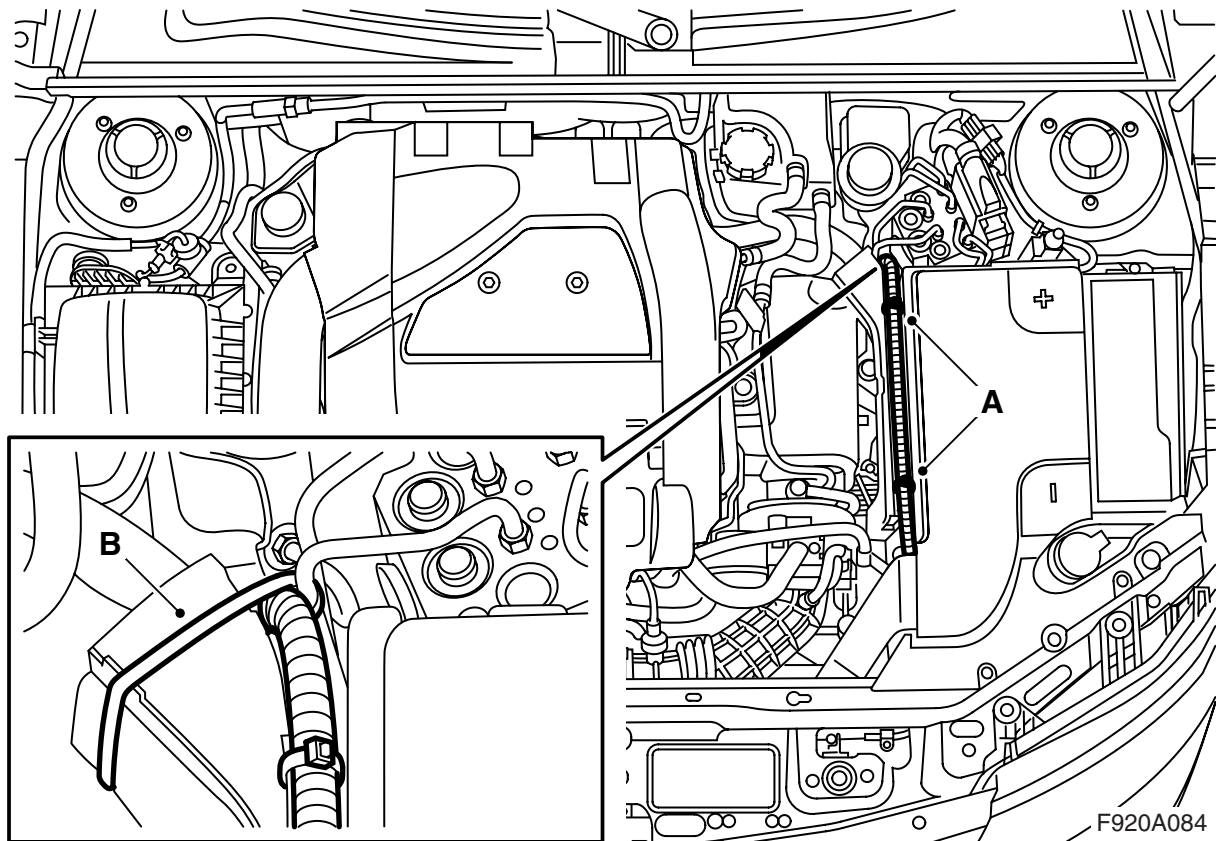
⚠ WARNING

Exercise caution if the engine is hot. Coolant is hot and there is also the risk of burns from the exhaust manifold.



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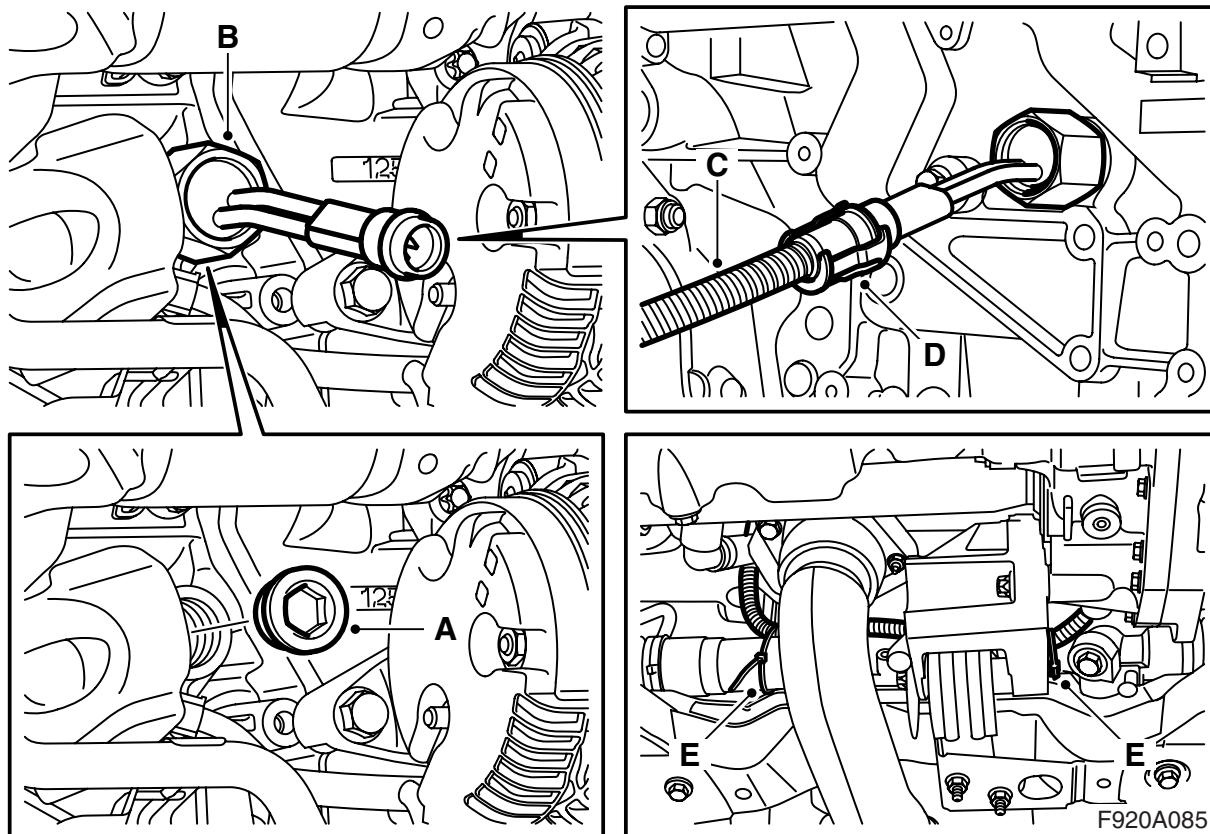
- 9 Fit the bracket (A) to the bumper. The bracket should snap in.
- 10 Route the connecting cable (B) through the bracket and fit the nut (C).
- 11 Turn the bumper over.
- 12 Fit the inner bracket (D), check that it locks, and fit the connecting cable (E) in the bracket.
- 13 Tighten the nut (C) by hand.
- 14 Undo the screw (F) for the fog light, route the connecting cable (E) under the fog light bracket. Refit the screw (F).



- 15 Lower the car.
- 16 Guide one end of the extension cable down between the turbocharger and the front of the battery.
- 17 Route the extension cable in the recess on the battery cover. Route the other end of the extension cable backwards and push it down by the brake pipes and further down on the rear of the gearbox.
- 18 Secure the extension cable with cable ties in the battery cover (A) and the output on the duct (B). Adapt the attachment of the extension cable with regard to the length to the heating element.

**WARNING**

Make sure the cable does not rub against any sharp edges or hot surfaces. Damage caused by chafing and melting could cause a short circuit or even fire.



- 19 Raise the car.
- 20 Remove the plug (A) from the engine block.
- 21 Fit the heating element (B) with the washer.
- 22 Tighten the heating element, use special tool, part no. 8996480.

Tightening torque 100 Nm (75 lbf ft)

- 23 Connect the extension cable (C) to the heating element, apply non-acidic Vaseline, part no. 30 15 286, or equivalent on the connecting cable O-ring and connect the cable to the heating element.

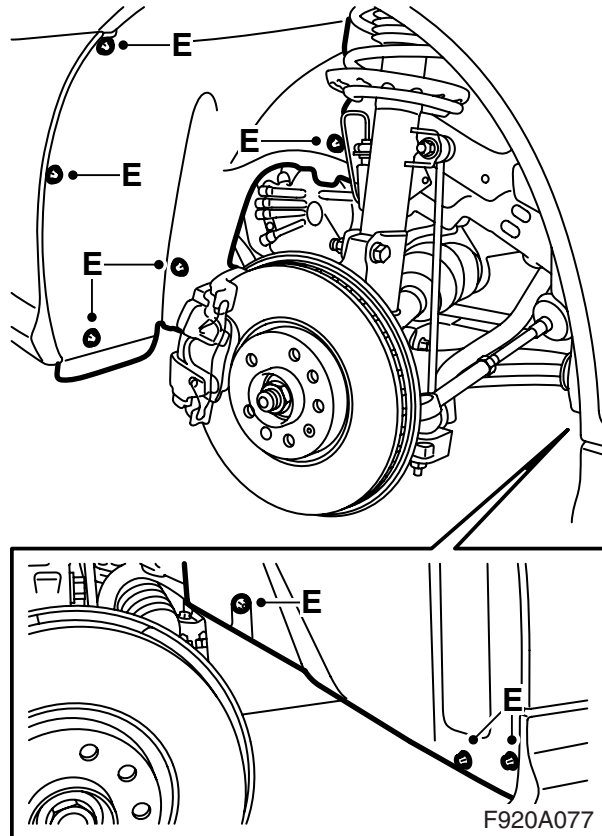
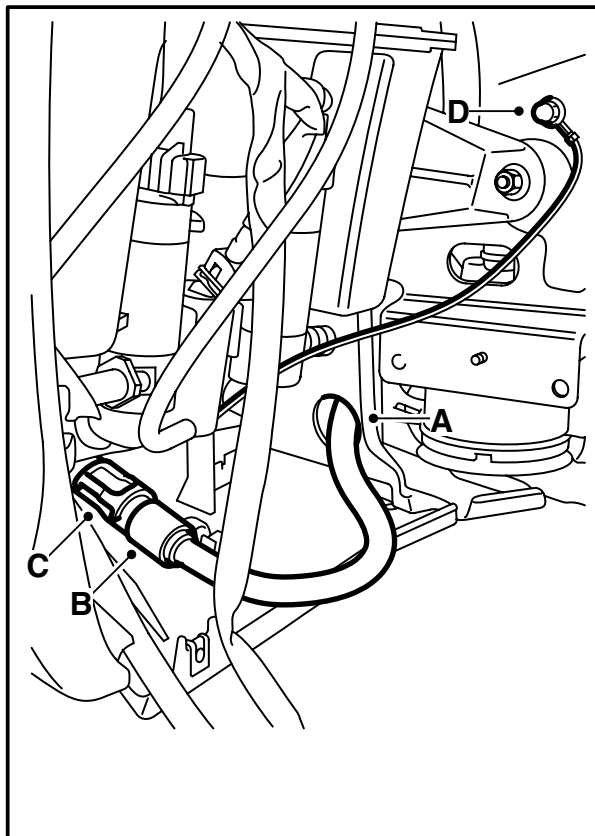
- 24 Fit the retaining clip (D) over the connection. A click should be heard when the retaining clip is fitted correctly.
- 25 Secure the extension cable with cable ties (E) to the steering gear.

⚠ WARNING

It is essential to lubricate the connecting cable O-ring before it is connected and to ensure that all connections are pressed in firmly. A bad contact can cause overheating and fire.

⚠ WARNING

Make sure the cable does not rub against any sharp edges or hot surfaces. Damage caused by chafing and melting could cause a short circuit or even fire.



26 Route the connecting cable through the hole (A).

27 Fit the front bumper shell, fit the bumper's connector into the holder and plug in the connector.

Cars with headlamp washers: Hook the hose to the spoiler shield.

28 Apply non-acidic Vaseline, part no. 30 15 286, or equivalent on the connecting cable O-ring and connect the extension cable (B) to the branch connector/connecting cable.

29 Fit the retaining clip (C) over the connection. A click should be heard when the retaining clip is fitted correctly.

Fit any excess connecting cable in the bumper space and secure with cable ties.

WARNING

It is essential to lubricate the connecting cable O-ring before it is connected and to ensure that all connections are pressed in firmly. A bad contact can cause overheating and fire.

30 Fit the ground cable to the grounding point (D) with the existing domed nut.

31 Fit the front wing liner (E).

32 Fit the left-hand front wheel.

33 Lower the car.

34 **Cars with headlamp washers:** Check the function of the headlamp washers.

35 Fill with coolant and fit the cap on the expansion tank. Check the system for leaks.

36 Bleed the cooling system in the following way:

WARNING

The cooling system is under pressure. Hot coolant and steam can be released.

- Therefore, open the cap slowly to release the pressure.
- Carelessness can cause eye and burn injuries

Note

The A/C or ACC should be turned OFF.

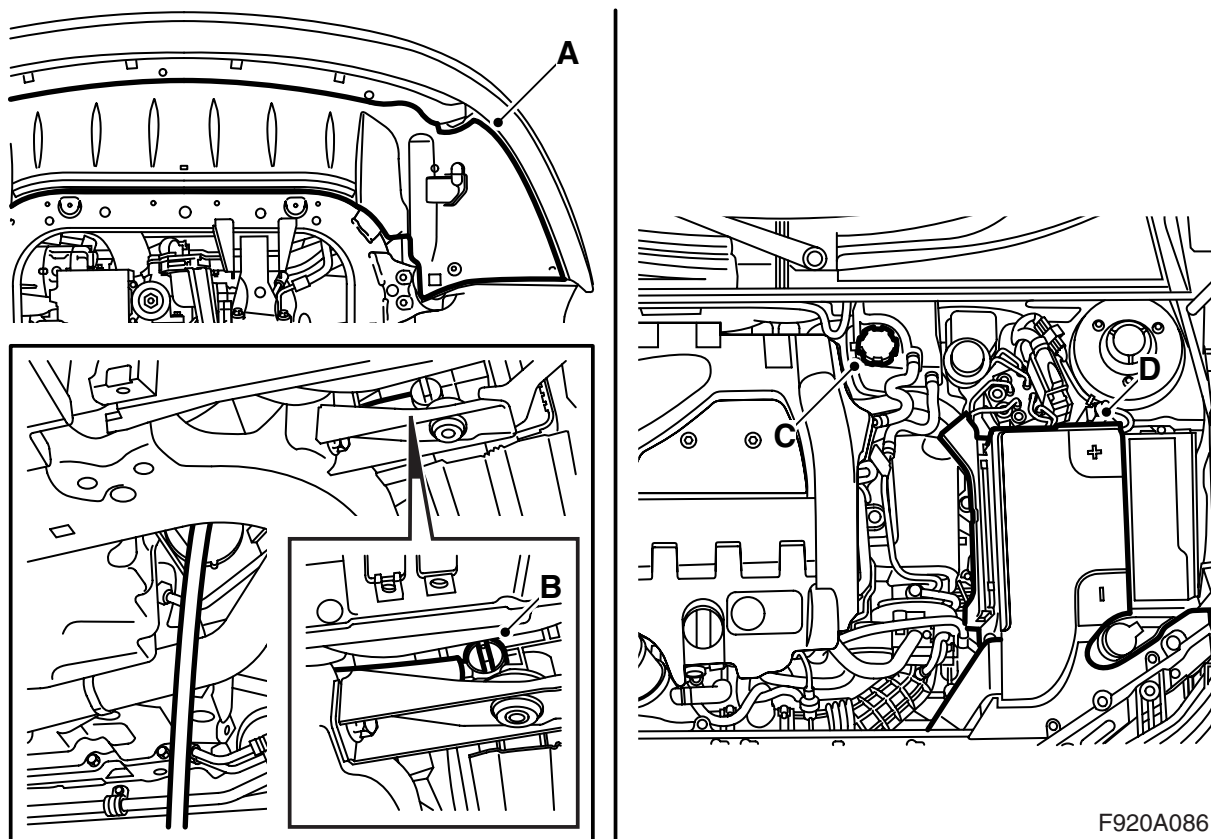
Fill the cooling system to the MAX level. Close the cap on the expansion tank, start the engine and run it to operating temperature at varying engine speeds.

Make sure there is a continuous flow of coolant from the hose leading from the thermostat housing to the expansion tank.

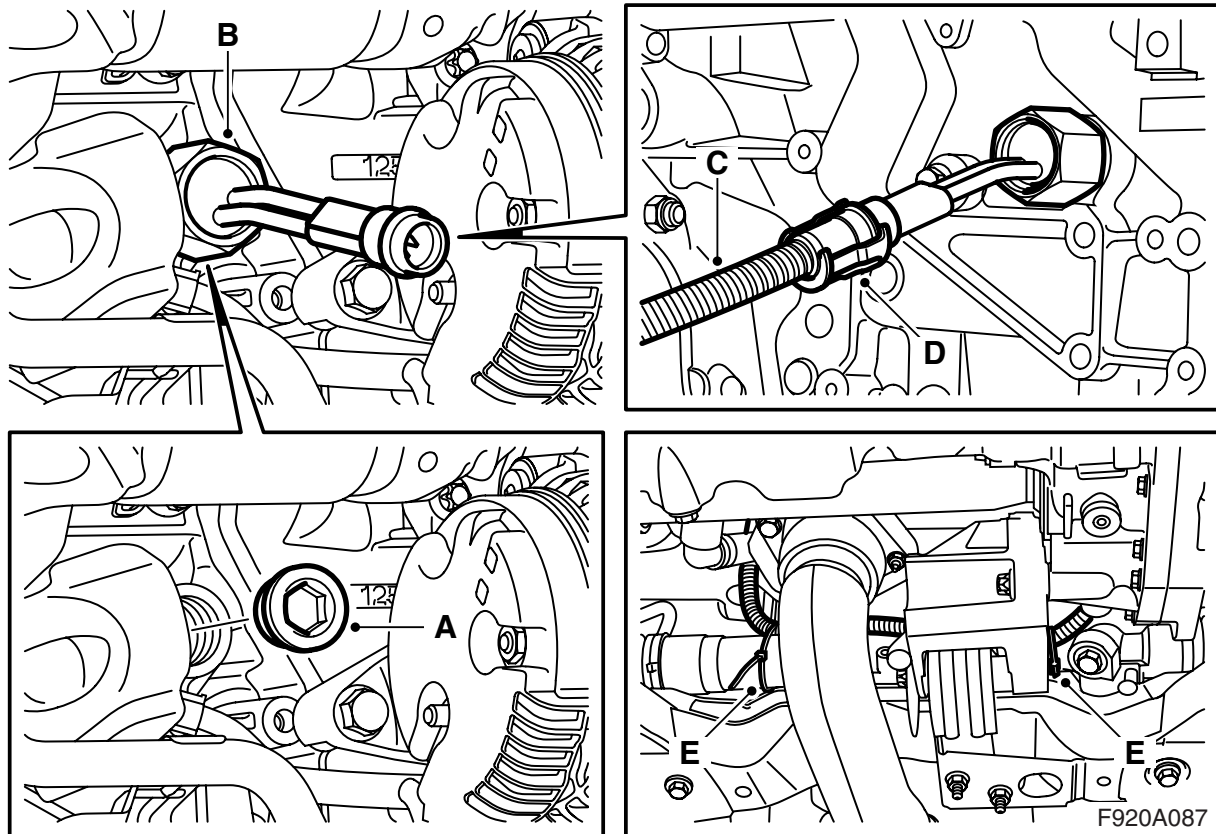
Run the engine until the thermostat opens.

Carefully open the expansion tank cap and top up to the MAX level. Close the cap. Switch off the engine and if necessary top the coolant up to the MAX level.

Cars with Aero front



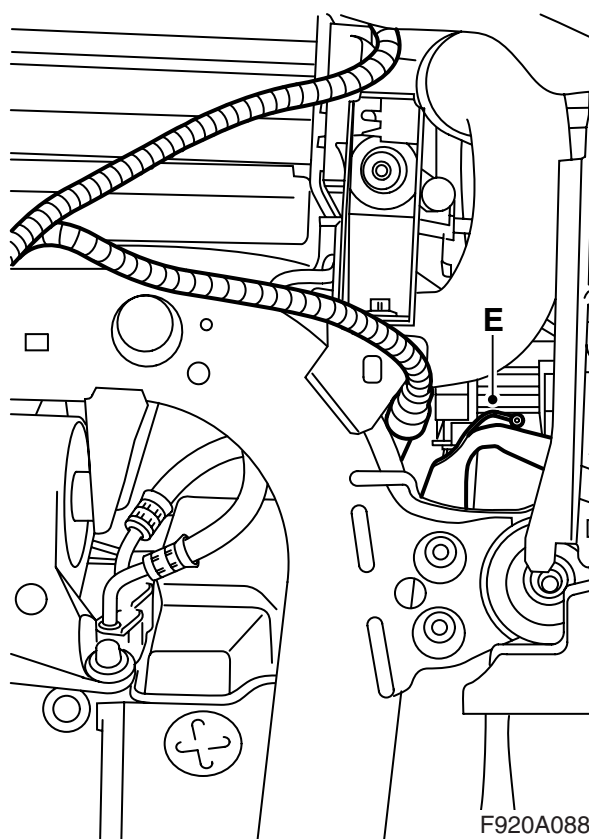
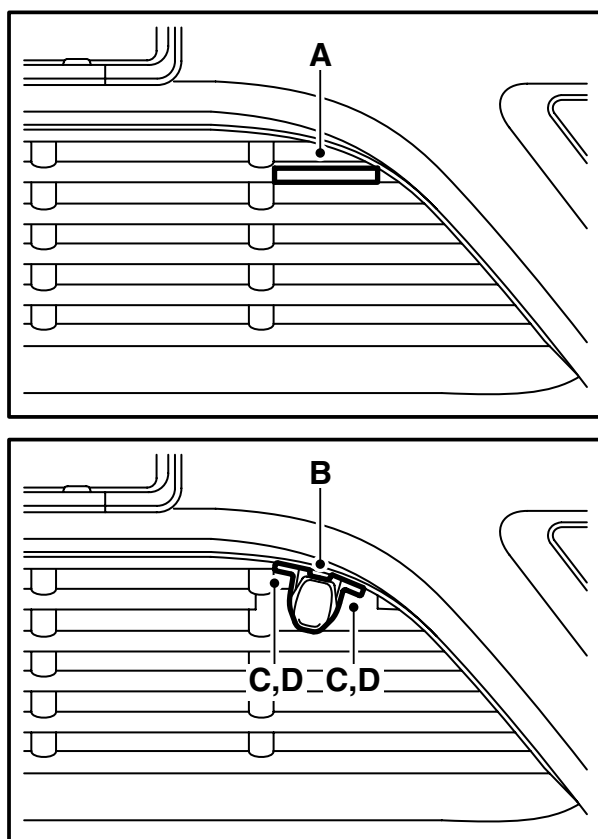
- 1 Raise the car.
- 2 Remove the spoiler shield (A), unplug the bumper connector and remove it from the holder on the spoiler shield.
Cars with headlamp washers: Unhook the hose from the spoiler shield.
- 3 Place a receptacle under the radiator. Connect a hose to the radiator (B) and drain the coolant.
- 4 Lower the car.
- 5 Remove the expansion tank cap (C).
- 6 Remove the battery cover (D).
- 7 Guide one end of the extension cable down between the turbocharger and the front of the battery.
- 8 Route the extension cable between the battery and the turbocharger. Guide the other end of the extension cable backwards and push it down by the brake pipes and further down on the rear side of the gearbox.



- 9 Raise the car.
 - 10 Turn off the radiator cock.
 - 11 Remove the plug (A) from the engine block.
 - 12 Fit the heating element (B) with the washer.
 - 13 Tighten the heating element, use special tool, part no. 8996480.
- Tightening torque 100 Nm (75 lbf ft)**
- 14 Connect the extension cable (C) to the heating element.
 - 15 Fit the retaining clip (D).
 - 16 Secure the extension cable with cable ties (E) in the steering gear.

⚠ WARNING

Make sure the cable does not rub against any sharp edges or hot surfaces. Damage caused by chafing and melting could cause a short circuit or even fire.



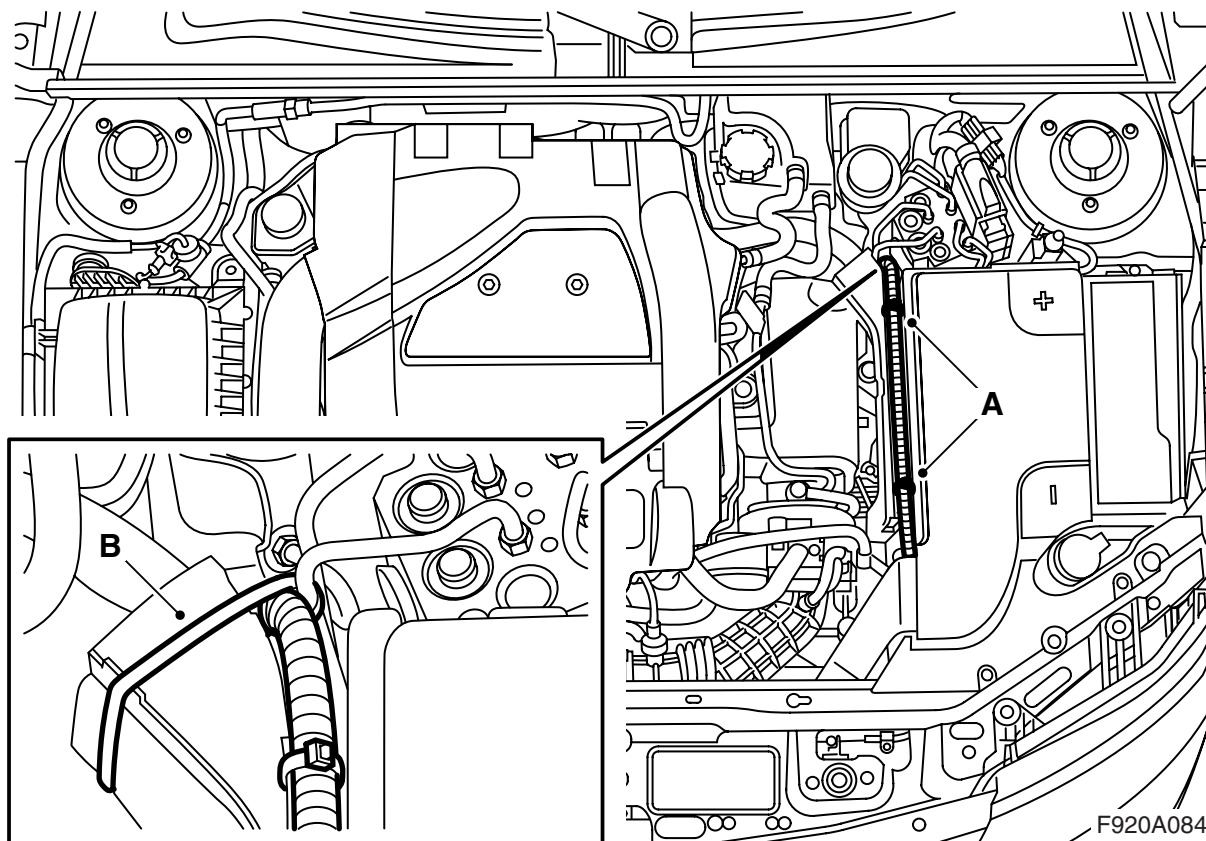
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- 17 Saw away the grille using a jig saw in accordance with the marking (A).
- 18 Align the holder in accordance with position (B), as far in towards the grille as possible to prevent the connector from protruding. The holder should fit into the bumper radius. Make the hole with an awl (C).
- 19 Fit the connector plug in the holder, the arrow on the holder should point forward and the cover should open upward. Fit the holder with the screws (D).
- 20 Detach the connector located on the structural member. Using a 3.5 mm bit, drill a hole in the structural member (E) for the ground cable.

Important

Drill the hole immediately next to the square hole.

- 21 Scrape away the paint to make a good ground connection and secure the ground cable using the screw and serrated washer (E) (the serrated washer should be located between the ground cable terminal and the body). Apply thin anti-corrosion protection.
- 22 Plug in the connector located on the structural member.
- 23 Plug the connecting cable into the extension cable.



- 24 Lower the car.
- 25 Fit the battery cover.
- 26 Secure the extension cable with cable ties (A) in the battery cover and at the output of the wiring harness duct (B).

⚠ WARNING

Make sure the cable does not rub against any sharp edges or hot surfaces. Damage caused by chafing and melting could cause a short circuit or even fire.

- 27 Fill with coolant and fit the cap on the expansion tank. Check the system for leaks.

- 28 Bleed the cooling system in the following way:

⚠ WARNING

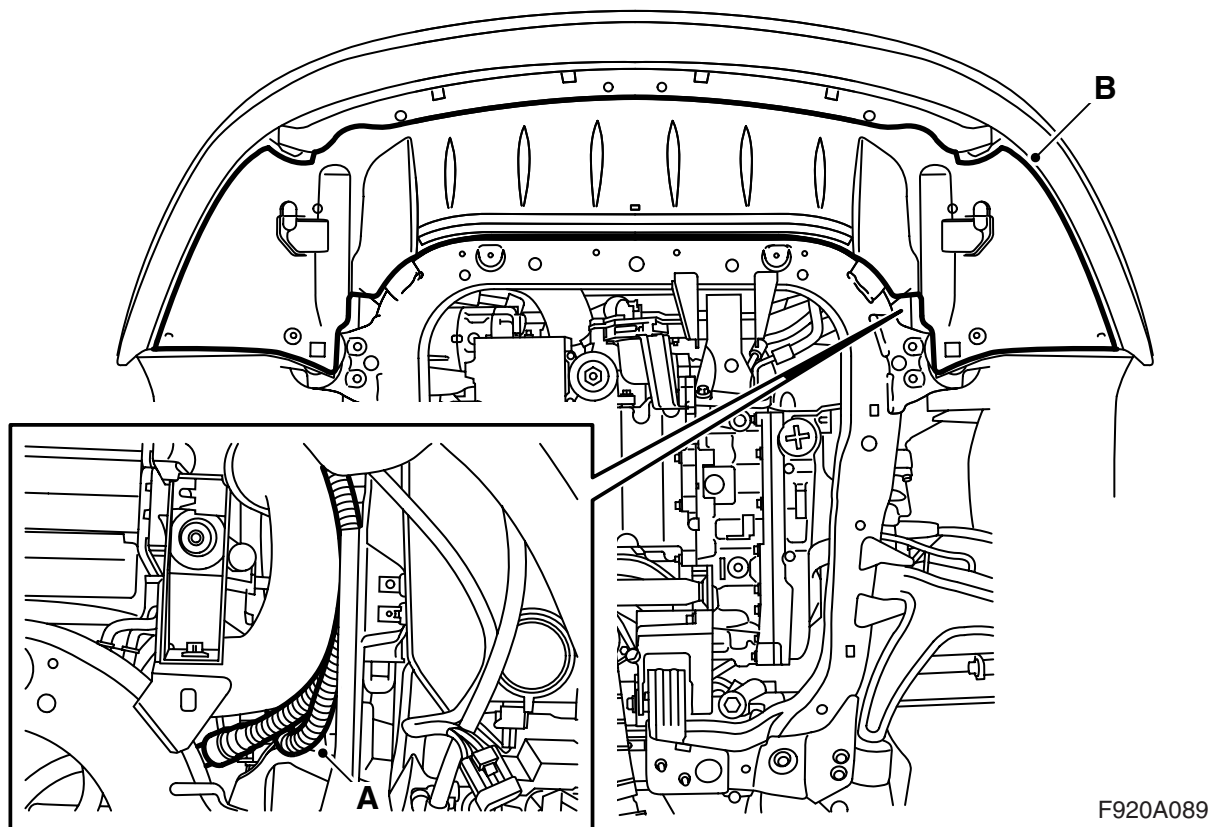
The cooling system is under pressure. Hot coolant and steam can be released.

- Therefore, open the cap slowly to release the pressure.
- Carelessness can cause eye and burn injuries

Note

The A/C or ACC should be turned OFF.

Fill the coolant system to the MAX level. Close the expansion tank cap. Start the engine and run at varying engine speeds until the radiator fan cuts in. Carefully open the expansion tank cap and top up to the MAX level. Close the cap. Switch off the engine and if necessary top the coolant up to the MAX level.



- 29 Raise the car.
 - 30 Fit any excess connecting cable (A) between the charge air hose and the plastic shield. Secure with cable ties.
 - 31 Lift up the spoiler shield, fit the bumper connector into the holder and plug in the connector. Fit the spoiler shield (B).
- Cars with headlamp washers:** Hook the hose to the spoiler shield.
- 32 Lower the car.

User instructions

- The extension cable must be made of oil-resistant rubber and approved for outdoor use with a cross-sectional area of at least 3x1.5 mm².
- The heater system may only be connected to a grounded socket.
- Handle all cables with care. Pay particular attention to the risk of pinching between the bonnet and the body of the car and the risk of cuts on sharp metal components.



WARNING

Check the ground connection between the connecting cable ground pin, the heater casing and the car body regularly to prevent electric shocks.

- Inspect regularly the extension cable for damage or ageing. Damaged cables must be renewed immediately.

Note

The function of the heater will be at risk if:

- there are impurities in the coolant
- the coolant level is too low or if there is air in the system
- there is ice slush in the system
- radiator sealant is used