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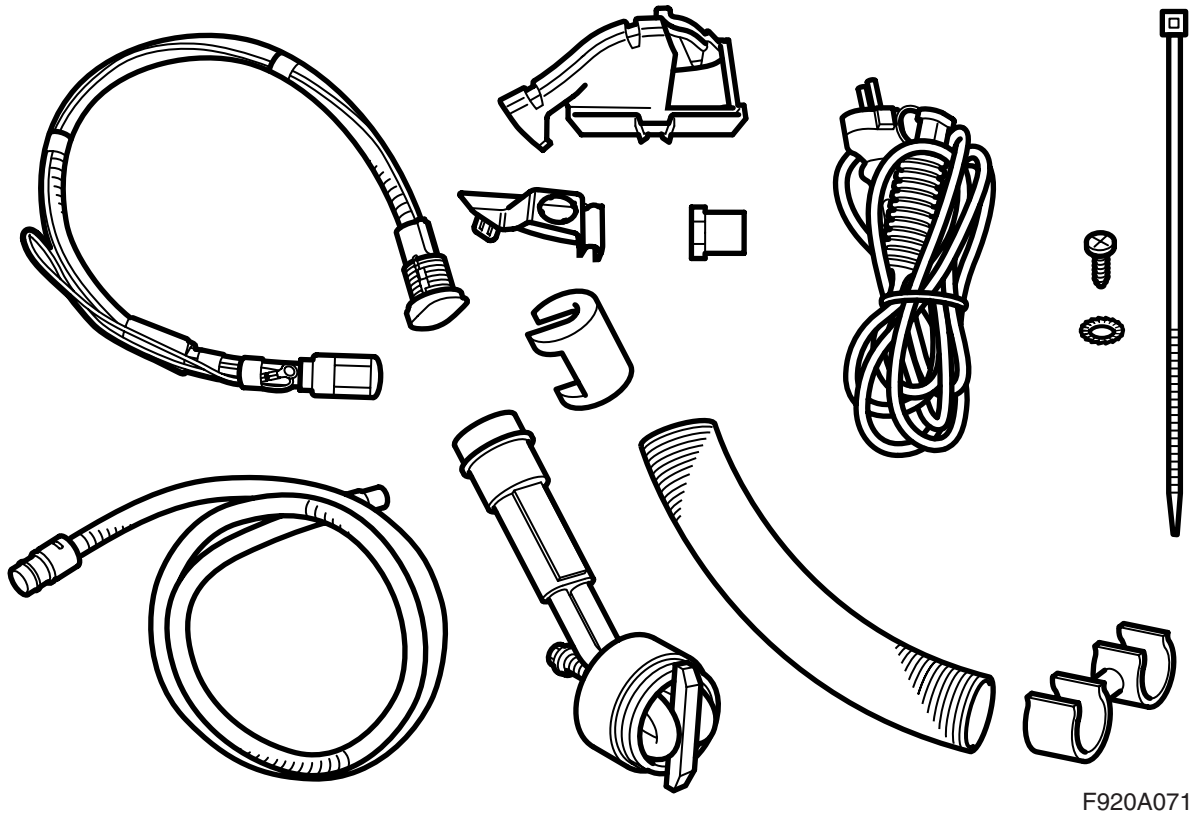
Saab 9-3 Z18XE M08-

Engine block heater

Accessories Part No.	Group	Date	Instruction Part No.	Replaces
32 026 188		**Oct 07**	**32 026 196**	



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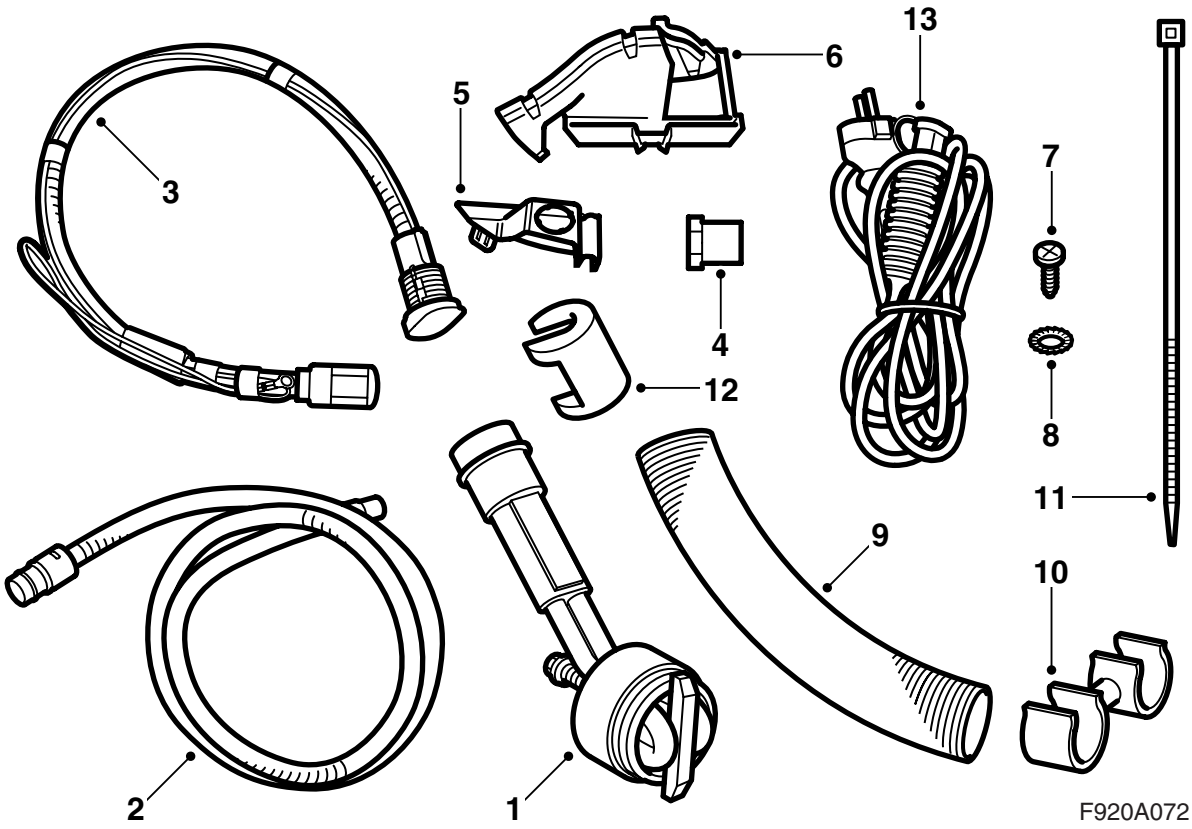
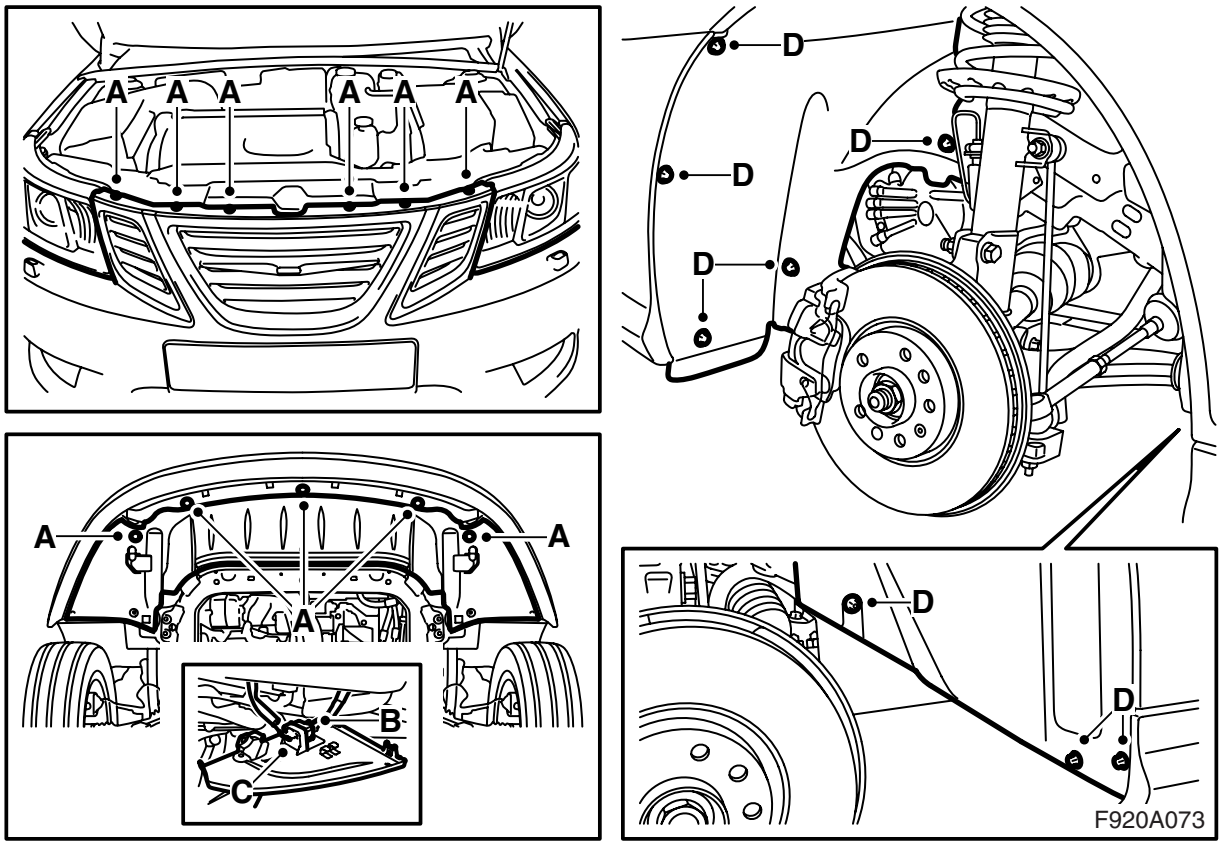


1 Heating element
2 Connecting cable extension piece
3 Connecting cable with ground cable
4 Plastic nut
5 Outer bracket
6 Inner bracket
7 Screw
8 Serrated washer
9 Heat shield
10 Clip (not used)
11 Cable tie
12 Retaining clip (x2)
13 Extension cable



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.

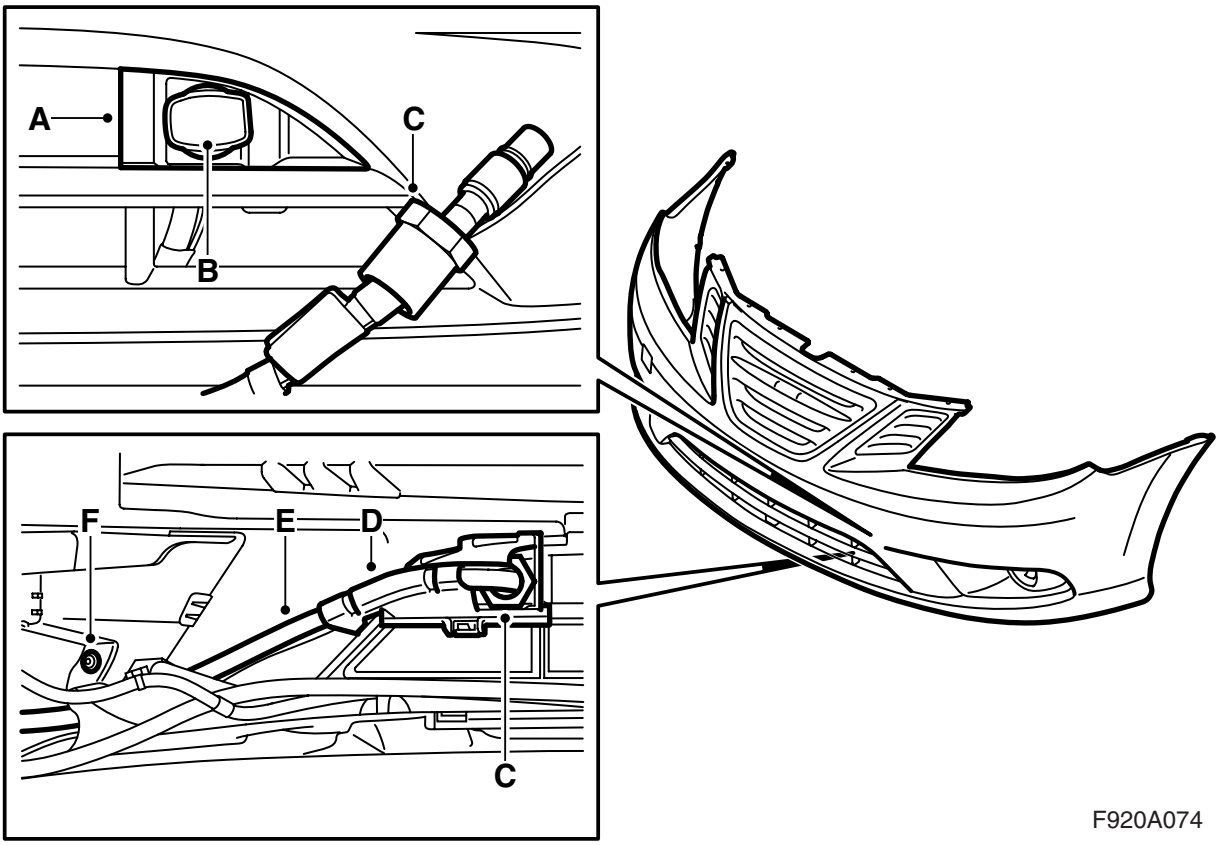
5 Place a receptacle under the engine, open the drain plug on the bottom of the coolant pump and drain the coolant.

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

6 Remove the left-hand front wheel.

7 Remove the left-hand front wing liner (D).

8 Remove the bumper shell.



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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).

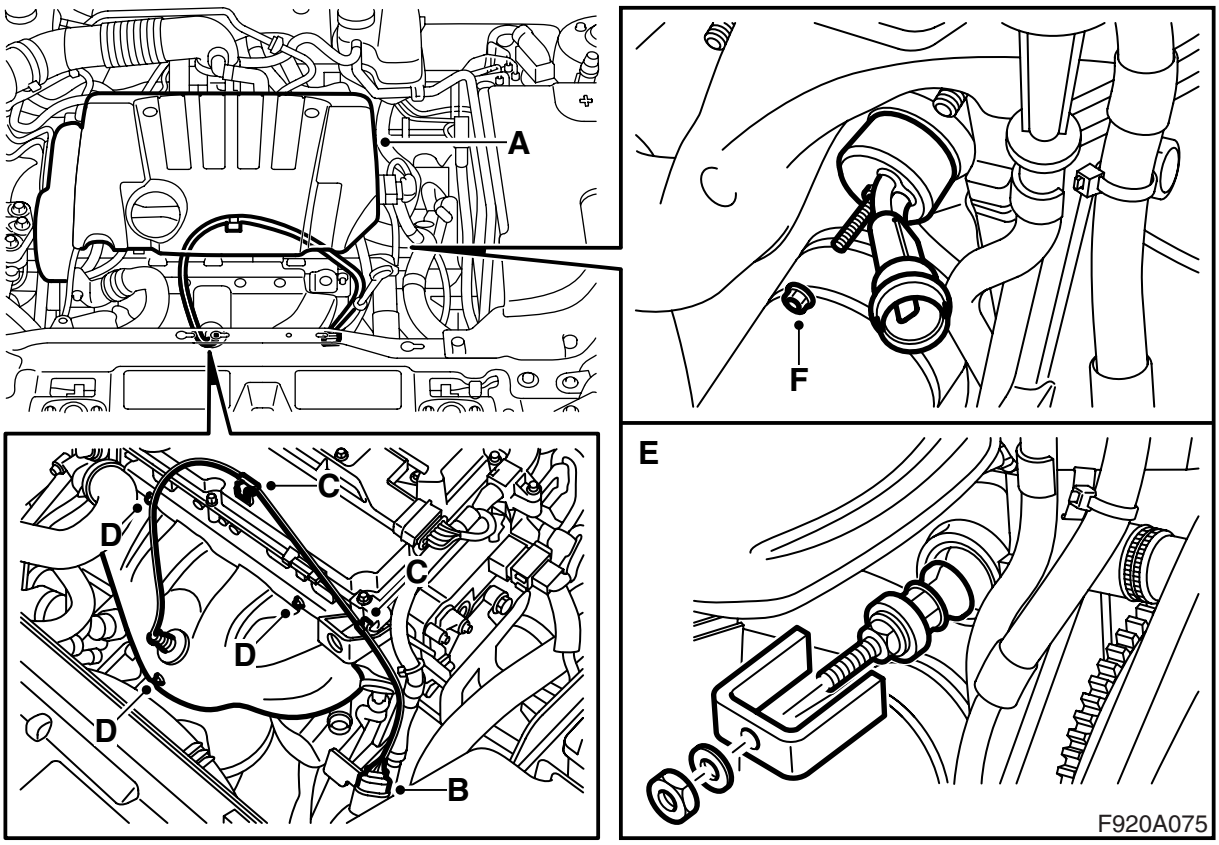
11 Turn the bumper over.

12 Fit the inner bracket (D), make sure 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 Remove the engine cover (A).

17 Unplug the oxygen sensor's connector (A) and unhook the oxygen sensor's wiring harness from the clips (C).

18 Remove the exhaust manifold's heat shield (D).

19 Remove the frost plug (E) using tool 260 147 020. Use a long 17 mm socket for example. Clean the sealing surface on the engine block.

20 Apply non-acidic Vaseline, part no. 30 06 665, or equivalent to the engine block heater O-ring.

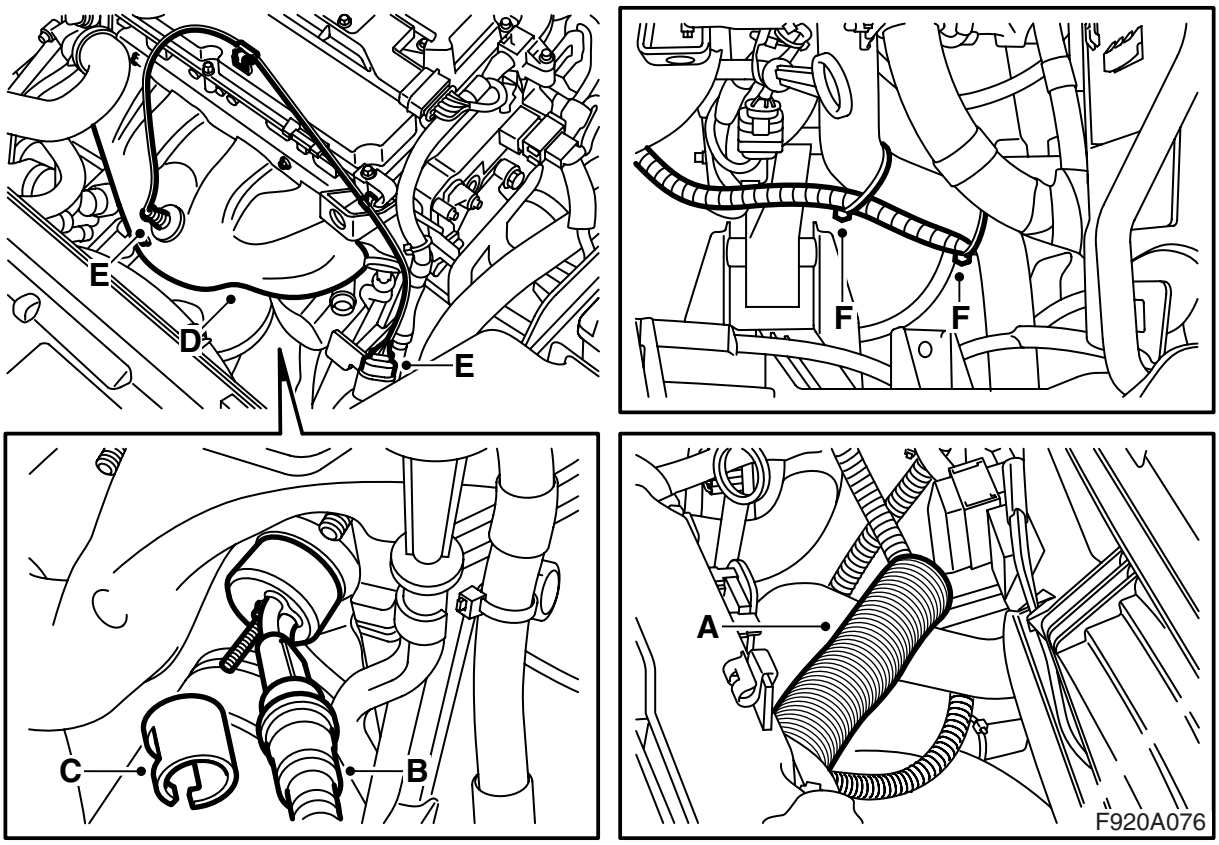
21 Adjust the T-shaped support on the engine block heater, so that it is located between both heating coils, align the heater in the cylinder block and fit it with the electrical connection located between the exhaust manifold and the oil dipstick.

Important

There must be approx. 10 mm between the engine block heater and the oil dipstick.

22 Fit the nut (F).

Tightening torque 3.5 Nm (2.5 lbf ft)



23 Guide the heat shield onto the cable (A).

24 Apply non-acidic Vaseline, part no. 30 15 286, or equivalent on the connecting cable O-ring and connect the cable (B) to the engine block heater.

⚠ WARNING

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

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

26 Secure the heat shield (A) on top of the electrical connection and pinch the ends of the heat shield.

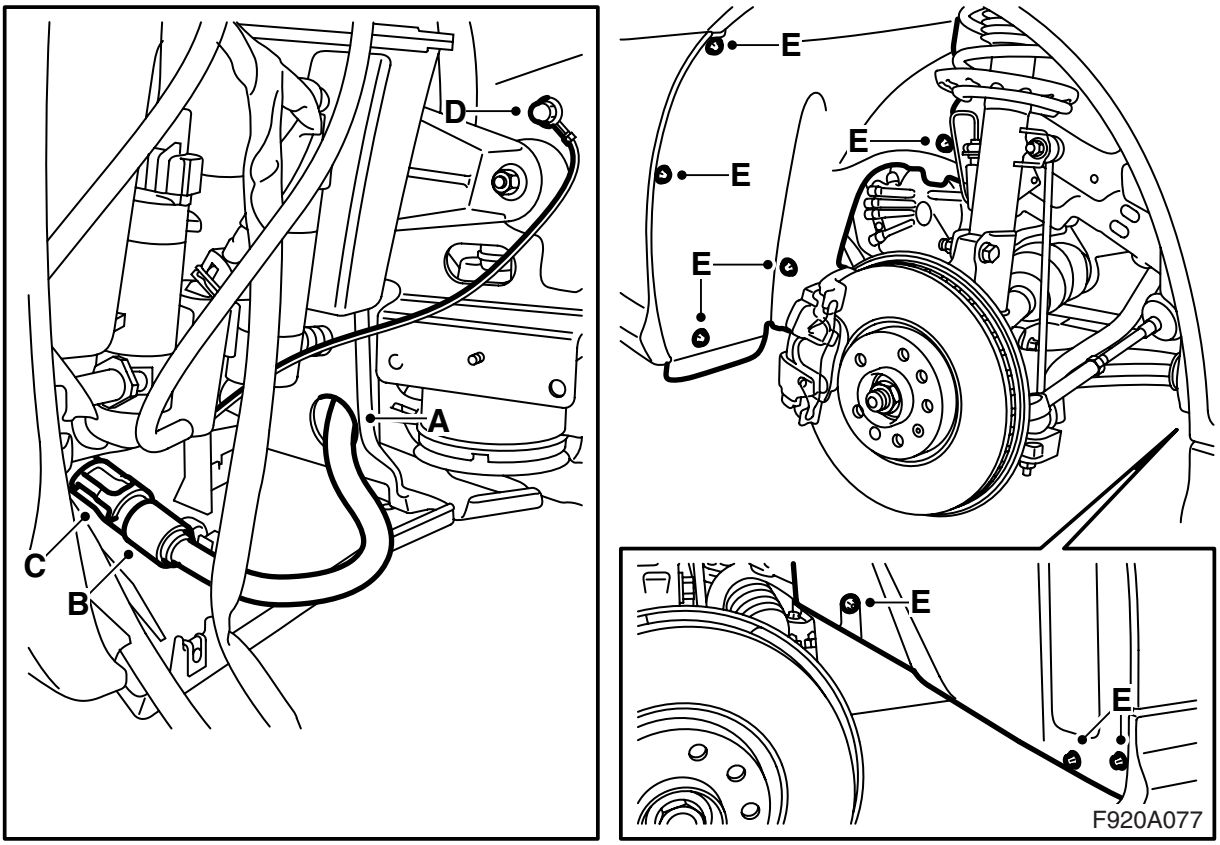
27 Fit the exhaust manifold's heat shield (D).

28 Fit the oxygen sensor's wiring harness into the clips and plug in the connector (E). Fit the connector to the bracket (E).

29 Secure the connecting cable with cable ties (F). Bend the cable in an even curve so that it can take up any engine movement.

⚠ 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.



30 Raise the car.

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

32 Fit the 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.

33 Connect the extension cable (B) to the connecting cable, 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 space in the bumper, and secure with a cable tie.

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

35 Fit the wing liner (E).

36 Fit the left-hand front wheel.

37 Lower the car.

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

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

40 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.

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 mm^2.
- 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