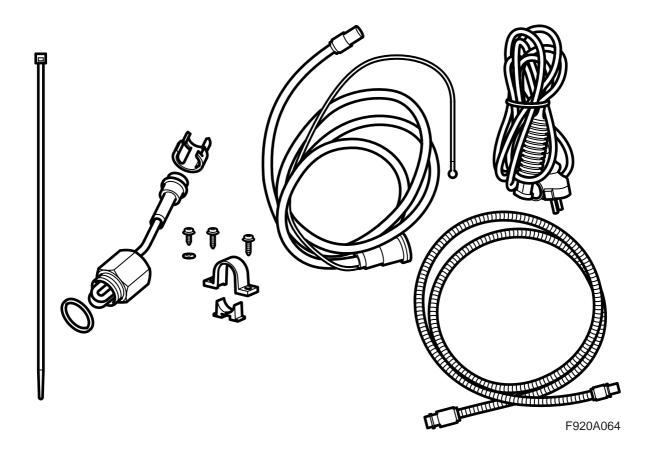


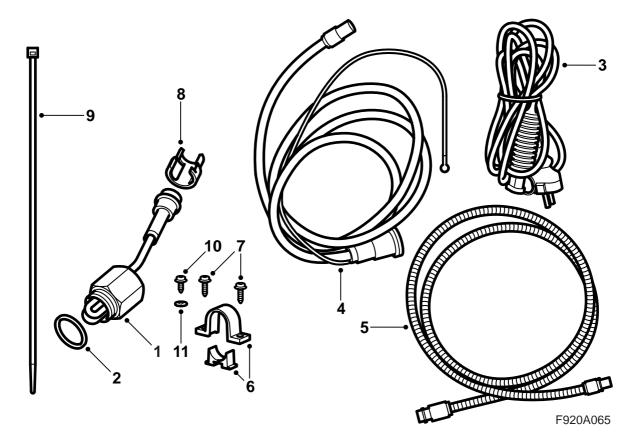
# MONTERINGSANVISNING · INSTALLATION INSTRUCTIONS MONTAGEANLEITUNG · INSTRUCTIONS DE MONTAGE

# Saab 9-3 B284E M06-

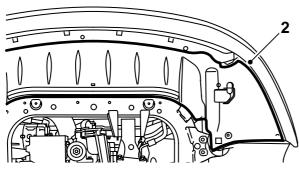
## Engine block heater

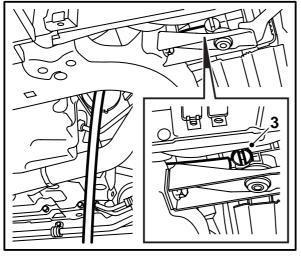
Accessories Part No.	Group	Date	Instruction Part No.	Replaces
32 025 698	9:87-46	Sep 05	32 025 612	

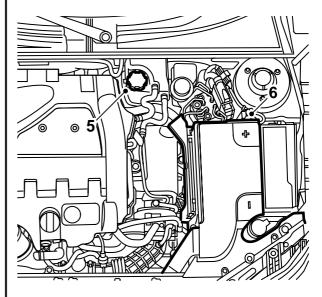




- 1 Heating element
- 2 Washer
- 3 Extension cable
- 4 Connector plug and supply connector cable
- 5 Supply connector cable, extension piece
- 6 Holder
- 7 Screw (x2)
- 8 Locking clip
- 9 Cable tie (x9)
- 10 Screw
- 11 Serrated washer

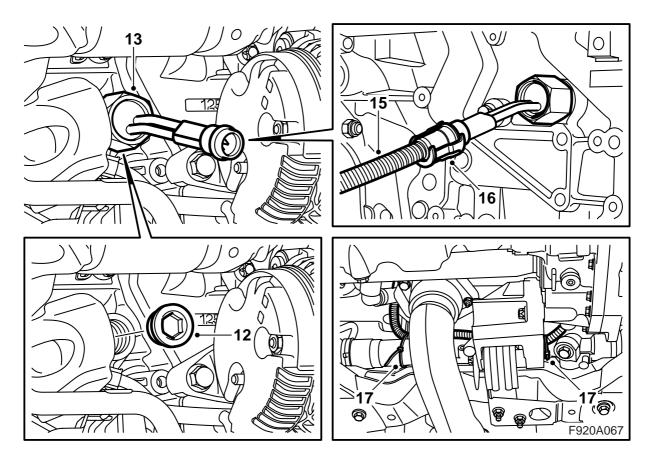






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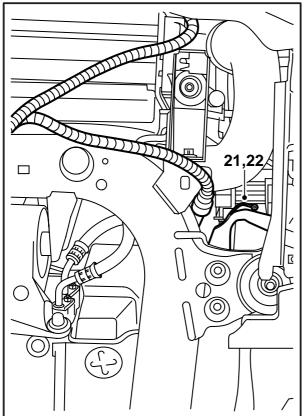
- 1 Raise the car.
- 2 Remove the spoiler shield, unplug the bumper connector and remove it from the holder on the spoiler shield.
- 3 Place a collection container under the radiator, connect a hose to the radiator and drain the coolant.
- 4 Lower the car.
- 5 Remove the expansion tank cap.
- 6 Remove the battery cover.
- 7 Disconnect the negative battery cable.
- 8 Guide one end of the extension cable down between the turbocharger and the front of the battery.
- 9 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.
- 10 Raise the car.
- 11 Turn off the radiator cock.

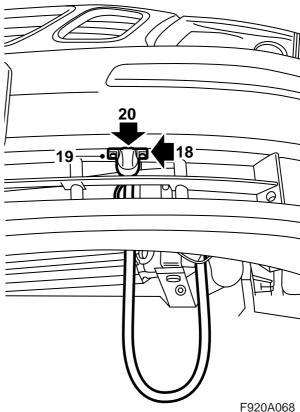


- 12 Remove the plug from the engine block.
- 13 Fit the heating element with the washer.
- 14 Tighten the heating element, use special tool, part no. 8996480.

### Tightening torque 100 Nm (74 lbf ft)

- 15 Connect the extension cable to the heating element.
- 16 Fit the locking clip.
- 17 Secure the extension cable with cable ties into the steering gear.





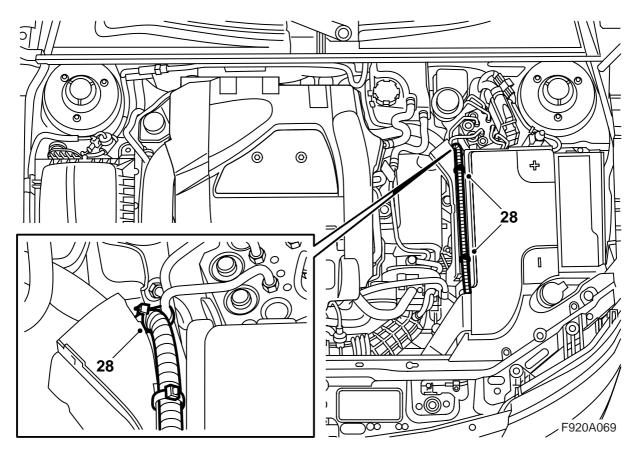
- 18 Lower the car to a suitable working height and run the supply connector cable through the bottom grille, between the pipes and between the radiator assembly and its left-hand bracket.
- 19 Mark out where the connecting plug holder is to be located, the arrow on the holder must be pointing forward, by placing the holder underneath the bumper with its front edge in line with the line in the bumper shell and in the centre of the opening. Make a hole with an awl.
- 20 Place the connector plug in the holder. The cover should open upward. Mount the holder on the bumper.
- 21 Detach the connector located on the structural member. Using a 3.5 mm bit, drill a hole in the structural member for the ground cable.

#### **Important**

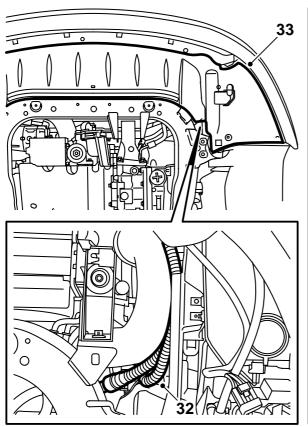
Drill the hole immediately next to the square hole.

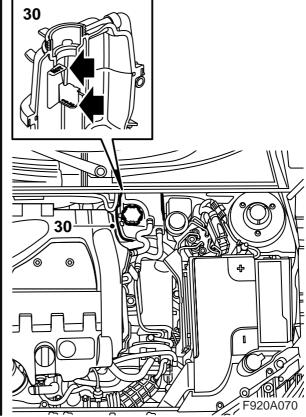
22 Scrape away the paint to make a good ground connection and secure the ground cable using the screw and serrated washer (the serrated washer should be placed between the ground cable terminal and the body). Apply thin anticorrosion protection.

- 23 Attach the connector located on the structural member.
- 24 Connect the supply connector cable to the extension cable.
- 25 Lower the car.



- 26 Connect the negative battery cable.
- 27 Fit the battery cover.
- 28 Secure the extension cable with cable ties in the battery cover and brake pipe.





- 29 Fill with coolant and fit the cap on the expansion tank. Check the system for leaks.
- 30 Bleed the cooling system in the following way:

#### **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.

- 31 Raise the car.
- 32 Place any excess supply connector cable between the charge air hose and the plastic shield. Secure with a cable tie.
- 33 Lift up the spoiler shield, fit the bumper connector into the holder and plug in the connector. Fit the spoiler shield.
- 34 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 mm<sup>2</sup>.
- 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