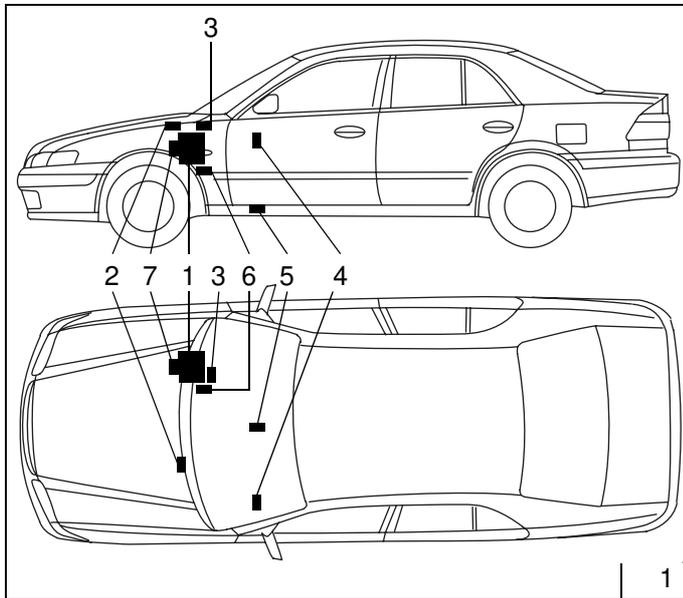


Water heater unit

Thermo Top C Auxiliary Heating

e1

00 0002



Pre-heater Z equipment for auxiliary heater C

Mazda 6

with standard Webasto Pre-heater

Up to Model 04 with chassis No. 600 000
4-door and 5-door e.g. 400 000 Combi

Diesel

only for left-hand drive vehicles

For validity, see page 2

Legend for figure 1:

- 1 Heater Thermo Top Z -D
- 2 Blower relay and fuse holder
- 3 Metering pump
- 4 Time switch
- 5 Exhaust silencer
- 6 Combustion air intake silencer
- 7 Circulation pump



WARNING!

Hazard warning:

The incorrect installation or repair of a Webasto heating and cooling system can cause a fire or lead to the output of lethal carbon monoxide gas. As a result, serious or fatal injuries can be caused.

For the installation and repair of Webasto heating and cooling system, special company training, technical documentation, special tools and special equipment are needed.

NEVER try to install or repair a Webasto heating or cooling system, if you have not successfully completed the company training and therefore lack the necessary technical skills and, for a skilled installation and repair, have the necessary technical documentation, tools and equipment available.

ALWAYS follow all Webasto installation and repair instructions and observe all warning instructions.

Webasto does not accept any liability for defects and damage that are attributable to an installation by untrained staff.

Table of Contents

Validity	2
Heater / Accessory kit	3
Foreword	3
General Instructions	3
Preliminary work	4
Electrical Connections	5
Installing the wiring harness	6
Heater Unit Control	6
Time switch	8
Telestart option / T80 Special	8
Blower control	9
Water connection	10
Exhaust System	12
Final work	12
Instructions for end users	13

Validity

Manufacturer	Model	Type	EG-BE no.
Mazda	6	GG	e1*98/14*0188*..
Mazda	6	GY	e1*98/14*0188*..

Engine type	Engine model	Power in kW	Engine capacity in cm ³
RF	Diesel / 4	100	1998
RFDI	Diesel / 4	89	1998

NOTE:

Vehicle types, engine types and equipment variants, which are not listed in these installation instructions, have not been tested.

Installation according to these installation instructions may, however, be possible.

Heater / Accessory kit

Quantity	Name	Order No.
1	Accessory kit Thermo Top Z for Thermo Top C with auxiliary heater	13 011 77E
Optional:		
1	Add-on kit Telestart T80 Special	13 020 93A

Foreword

These installation instructions apply for Mazda 6 vehicles with diesel engine - applicability see page 2 - model year 2002 to 2004, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded.

Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to these installation instructions.

However, the stipulations in the "installation instructions" and "operating and maintenance instructions" for the *Thermo Top Care* to be observed in any event.

The corresponding rules of technology and any information from the vehicle manufacturer should be observed during the installation work.

Special tools

Torque spanner for 2.0 - 10 Nm

Vice-grip wrench

WARNING:

Control of the heater is only possible with the 1533 time switch!

Instead of the 1533 time switch, the Telestart T80 Special mentioned above can be used.

Installation without the Telestart mentioned above or the 1533 time switch is not possible.

Control with different Telestarts, e.g. Thermo Call 1.1 is not possible!

The summer ventilation function is not possible!

General instructions

- Cover unfinished body areas, such as drill holes, with corrosion protection.
- Secure hoses, wires, and cable harnesses with cable clips and cover with protective hoses at friction locations.
- Fit sharp edges with edge protection (split open plastic hose).

Preliminary work

Engine Compartment

WARNING:

Disconnect the battery.

- Let off pressure from the cooling system.
- Remove the engine cover.

- Remove the complete fuel filter with holder and magnetic valve.

Vehicle Exterior

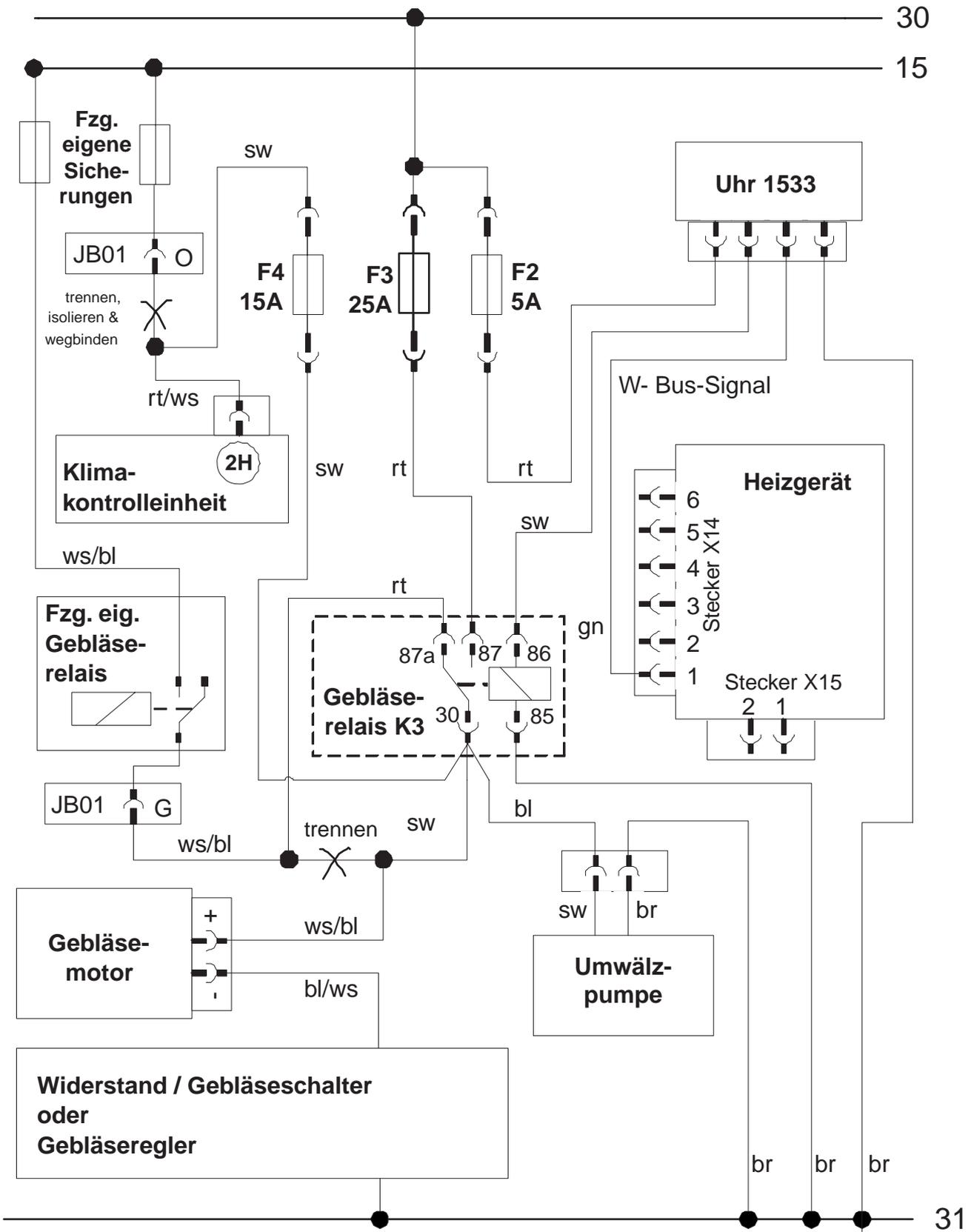
- Open the filler cover, release the pressure in the fuel system, close the filler cover.

Interior

- Remove the lower left A pillar upholstery

Electrical connection**Install the wiring harness**

- Cut out the acoustic mat (3/1) as shown in Figure 3
- Transfer the template for the flat fuse (3/2; 4/1), blower relay K3 (4/4; 4/3) according to figures 3 and 4

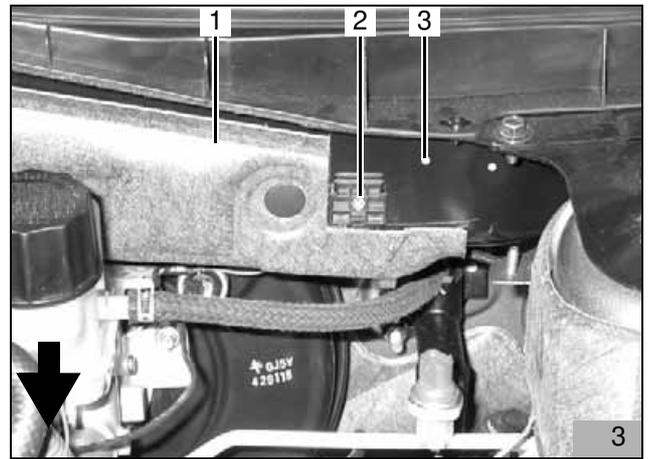


Hinweis: Nur Uhr 1533 verwendbar!

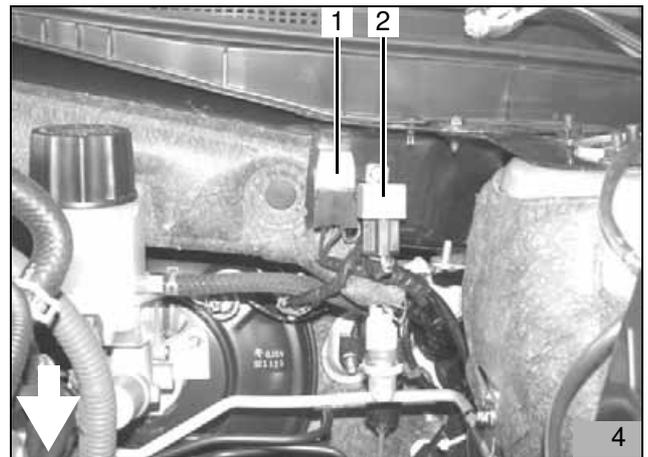
WARNING:

When drilling, watch out for underlying parts.

- Drill Ø 2.5 mm (3/2) for flat fuse holder mounting plate
- Attach flat fuse holder mounting plate with 3.5 x 13 self-tapping screws
- Attach blower relay K3 (4/2) together with the earth lead using 5.5 x 9.5 self-taping screws and lock washers to the water tanks
- Mount the flat fuse holder on the mounting plate



- Route the plus lead (5/1) to the positive support point on the relay holder and connect with a cable terminal



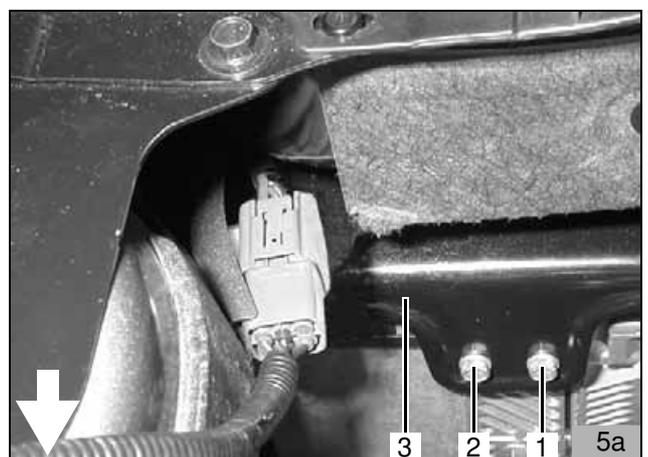
Heater Unit Control

The heater control is done according to circuit diagram Figure 2 to PIN 1 of socket X14 (6/2; 7/1) of the vehicle's own heater wiring harness.

NOTE:

The connection for the metering pump is not shown!

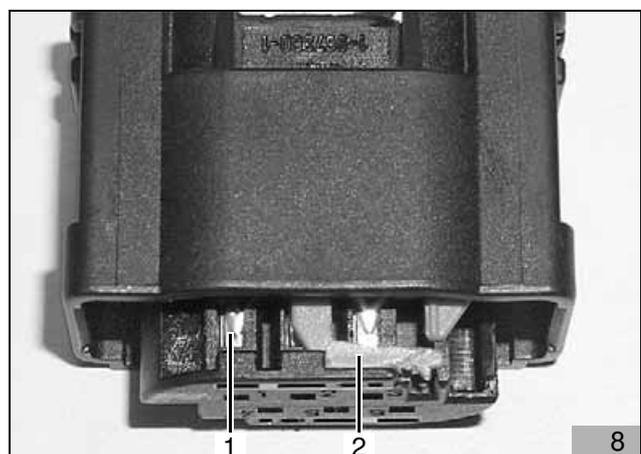
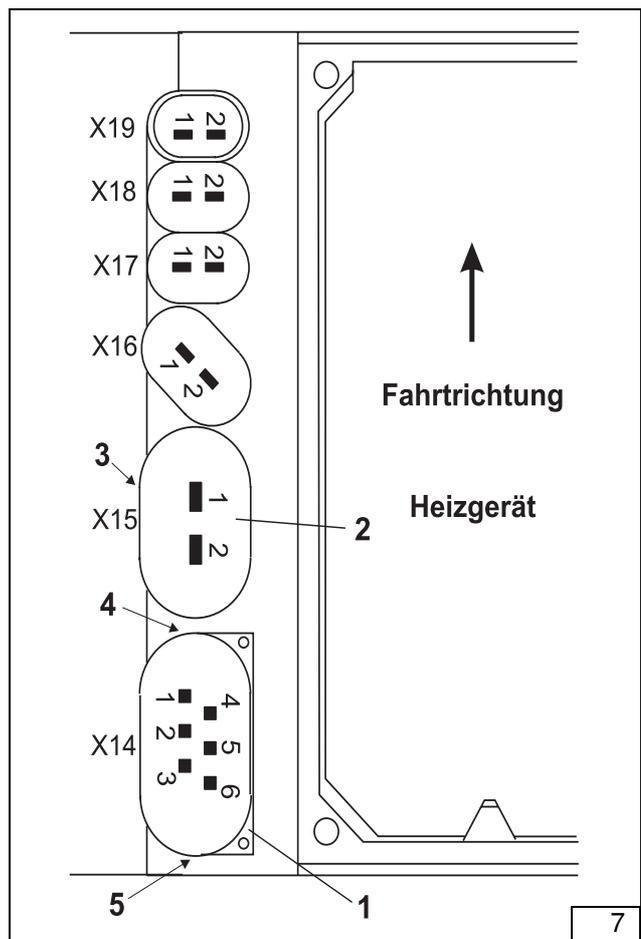
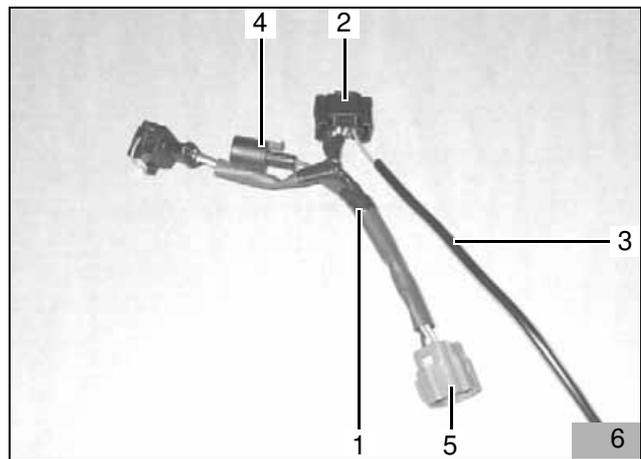
- Fit the metering pump holder (5a/3) at position (5a/1,2) on the heater
- Disconnect the wiring harness from the metering pump holder (5a/3) and connect the metering pump
- For easier installation of the heater socket, move the holder with the metering pump to one side



NOTE:

1. Remove socket X15 (7/2); latch on the left at position (7/3).
 2. Remove socket X14 (7/1); latch in front of and behind position (7/5) and (7/4).
- Assembly is done in the reverse order.

- Disconnect the wiring harness (6/1) with plugs (6/2; 7/1) and (6/4; 7/2) from the heater
- Disconnect plug (6/5) from the vehicle wiring harness and remove the heater wiring harness (6/1)
- Slide the plug latch (8/2) as shown in Figure 8 to the right
- Insert the green wire (6/3) from the timer switch in socket 1 of the 6-pin heater socket X14 (6/2; 8/1)
- Slide the latch (8/2) of the socket back to the left
- Refit the heater wiring harness (6/1)
- Connect the wiring harness to the metering pump

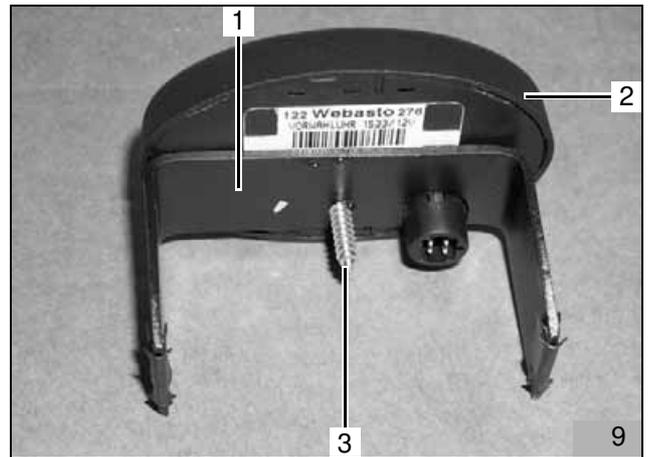


Time switch

WARNING:

When installing the time switch, do not press on the LCD display. Control of the heater is only possible with the 1533 time switch!

- Attach the timer switch with self-tapping screws (9/3) to the enclosed holder (9/1)



NOTE:

The installation position shown for the timer switch (10/1) is a recommendation! Before installing, please confirm the installation location with your customer.

- Connect the wiring harness to the timer switch and insert the timer switch (10/1) with holder in the pocket

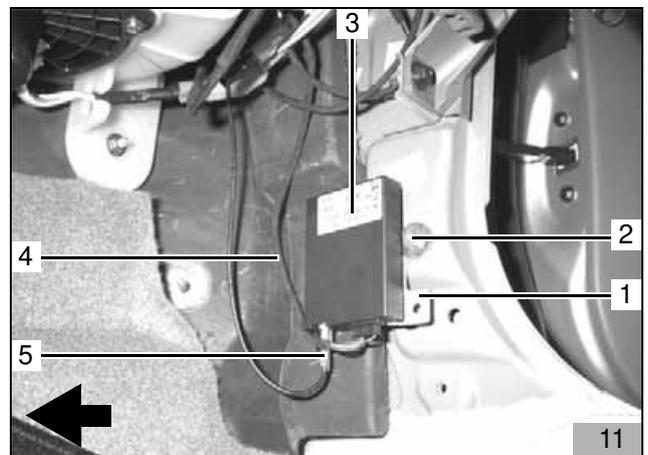


Telestart option / T80 Special

NOTE:

Please observe the general installation instructions for the Telestart remote start option ! Clean/degrease the mounting surface for the antenna before fitting the antenna!

- Drill a Ø 6.5 mm hole for the receiver holder (11/1) at position 11/2
- Secure the holder (11/1) with M6 x 12 screws (11/2), upholstery washers and flanged nuts to the prepared holes in the right A pillar, as shown in Figure 11
- Attach the receiver (11/3) to the holder (11/1) as shown in Figure 11
- Attach the antenna to the lower right of the windscreen
- Route the antenna cable downwards through the upholstery of the A pillar and then to the location of the receiver in the passenger footwell
- Reconnect all connections according the enclosed installation instructions
- Secure all wiring harnesses with cable ties
- Connect the enclosed Y-cable (11/4) to the receiver (11/3) and the clock cable
- Route the Y-cable to the installation location of the timer switch
- Connect the antenna (11/5) to the receiver

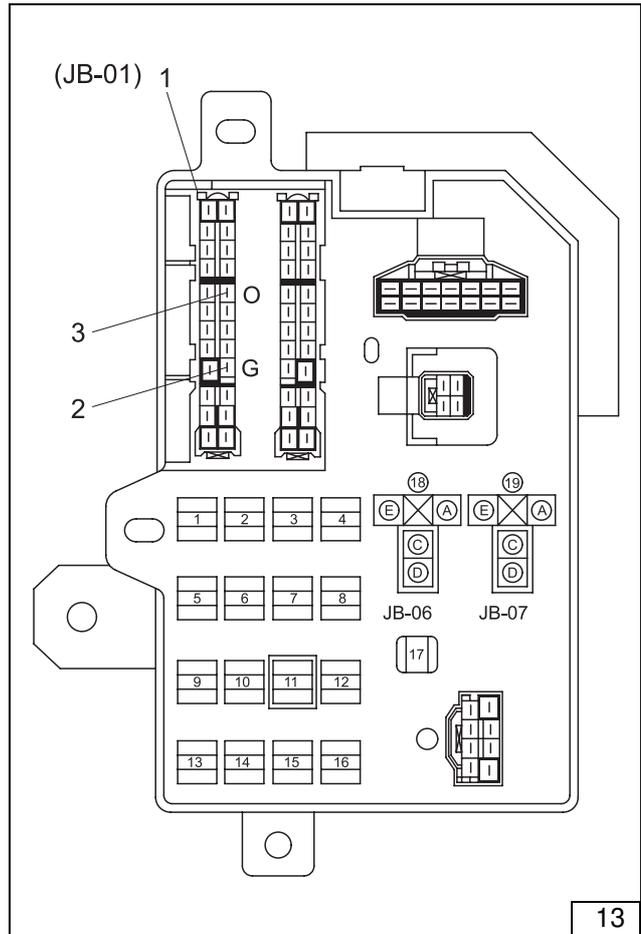
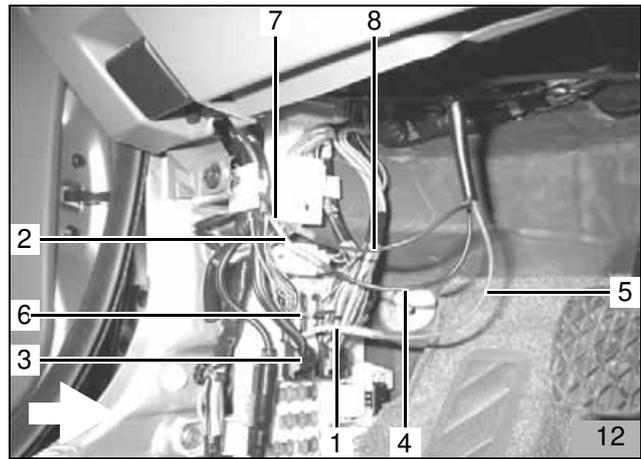


Blower control

The blower control is connected to Pin G (13/2) of socket JB 01 (12/5; 13/1) in the vehicle's own fuse/relay holder near the left A pillar

The air conditioner unit is connected to Pin O (15/3) of socket JB 01 (12/5; 13/1) in the vehicle's own fuse/relay holder near the left A pillar

- Re-connect the connections with the enclosed blue butt connector in accordance with circuit diagram Figure 2
- Remove the lead wt/bl (12/1, 2) from the vehicle's own blower relay to the blower motor approx. 50 mm from Pin G (13/2) of socket JB 01 (12/3; 13/1)
- Connect a lead sw 2.5 mm² (12/4) from the blower relay K3/30 to the lead wt/bl (12/2) to the blower motor
- Connect the lead red 2.5 mm² (12/5) from blower relay K3/87a with the lead wt/bl (12/1) from socket JB 01 (12/3; 13/1)
- Remove the lead rd/bl (12/6, 7) from the vehicle's own air conditioner unit approx. 50 mm from Pin O (13/3) of socket JB 01 (12/3; 13/1)
- Insulate and tie off the lead rd/wt (12/6) to socket JB 01 (12/3; 13/1)
- Connect the second lead sw 1.5 mm² (12/8) from blower relay K3/87a to the lead rd/wt (12/7) on the air conditioner control unit



Water connection

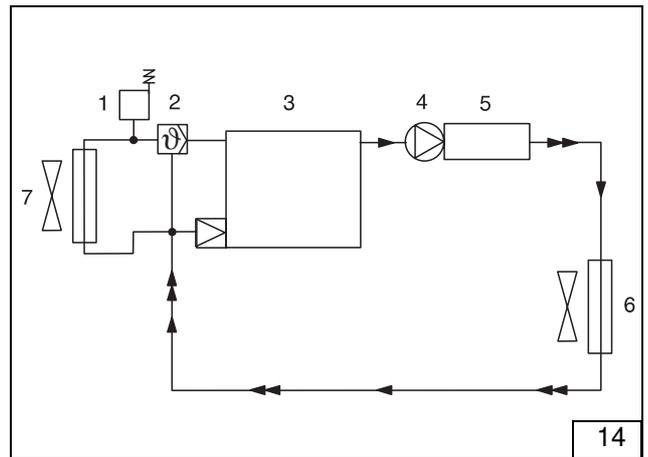
NOTE:

Tighten all hose clamps to 2.0 + 0.5 Nm.
 Any fuel running off should be collected using an appropriate container!
 Install hoses so that they are kink-free!

The following sections describe the connection of the circulation pump "in series" (Inline) between the vehicle engine outlet and the heater water inlet (Figure 14)

Legend for Figure 14:

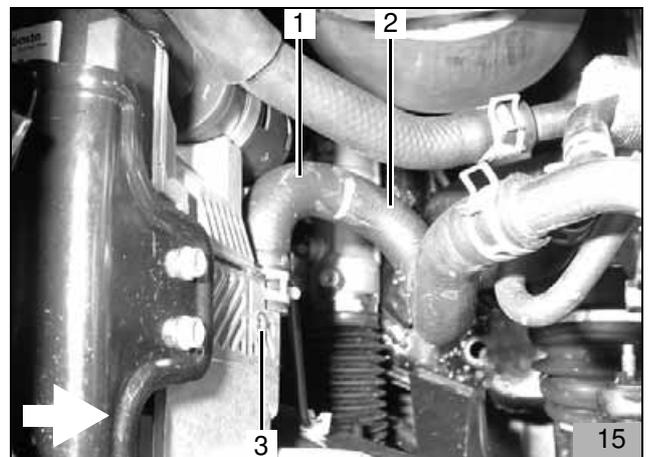
- 1 Expansion reservoir
- 2 Coolant thermostat
- 3 Vehicle engine
- 4 Circulation pump (heater unit)
- 5 Heater unit
- 6 Heat exchanger (vehicle)
- 7 Cooler



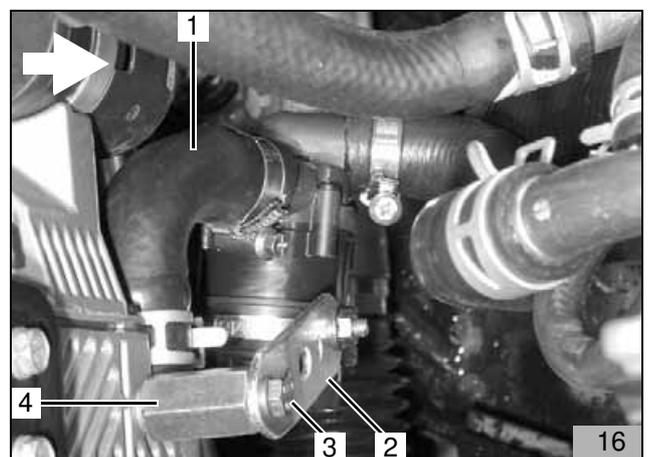
WARNING:

Position hose clamps so that no other hose can be damaged!

- Clamp the vehicle's own water hose (15/1, 2) from the engine water outlet to the heater water inlet with hose clamps
- Remove the vehicle's own water hose (15/1, 2) as shown in Figure 15



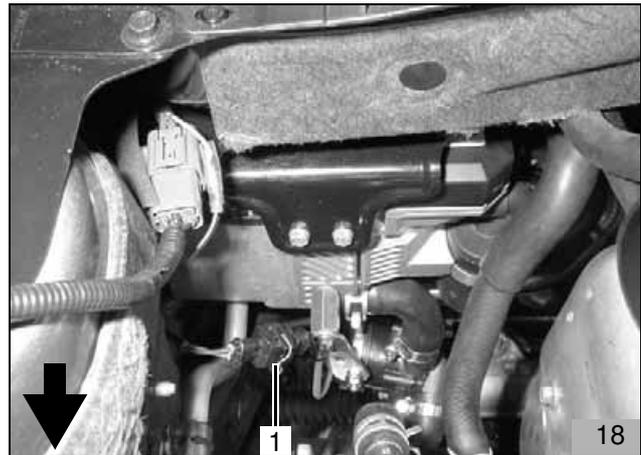
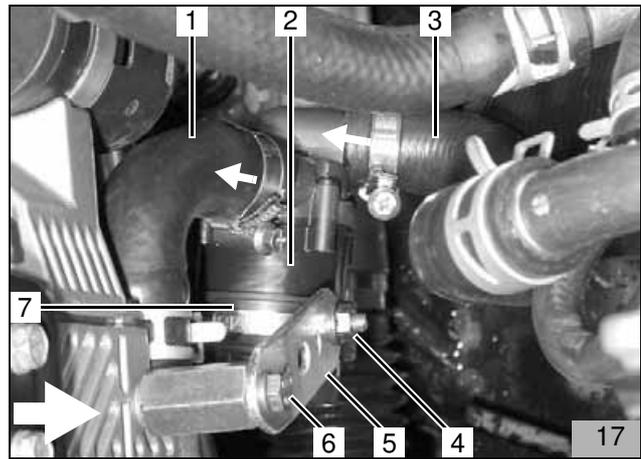
- Disconnect the hose section (15/1; 16/1) from the heater unit, bend downwards slightly as shown in Figure 16 and re-connect to the original sleeve
- Screw the enclosed ejot stay bolts at position (15/3) in the heater unit (torque 10 Nm)
- Screw M6 x 30 spacers (16/4) onto the stay bolts
- Loosely fit the strap (16/2) with M6 x 12 screws (16/3) and spring washers to the spacer (16/4)



NOTE:

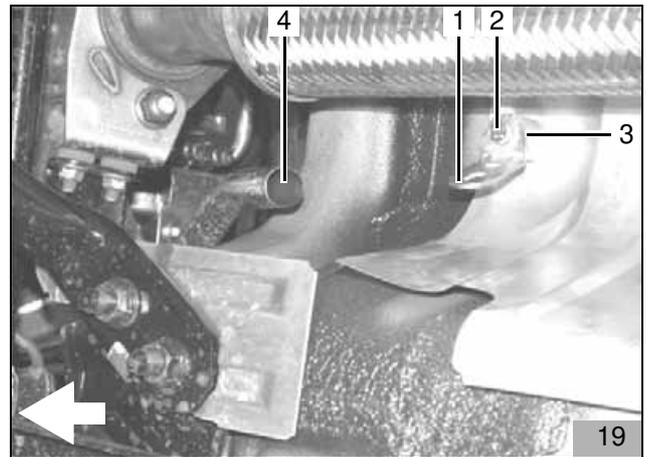
Observe the flow direction (arrow) of the circulation pump! The pressure side is towards the heater unit!

- Loosely fit the circulation pump (17/2) as shown in Figure 17 with 48 mm rubberised tube clamp (17/7), M6 x12 screws, and flanged nut to the mounting strap (17/5)
 - Fit the hose section (17/1) from the heater unit water inlet to the circulation pump water outlet and secure it with a hose clamp
 - Fit the hose section from the engine water outlet (17/3) to the circulation pump water outlet and secure it with a hose clamp
 - Tighten the screw connections (17/4, 6) of the mounting strap (17/5)
-
- Reconnect the plug to the circulation pump wiring harness (18/1)

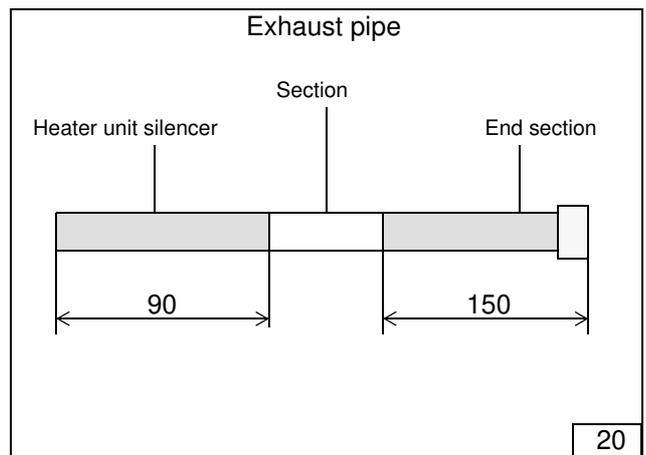


Exhaust System

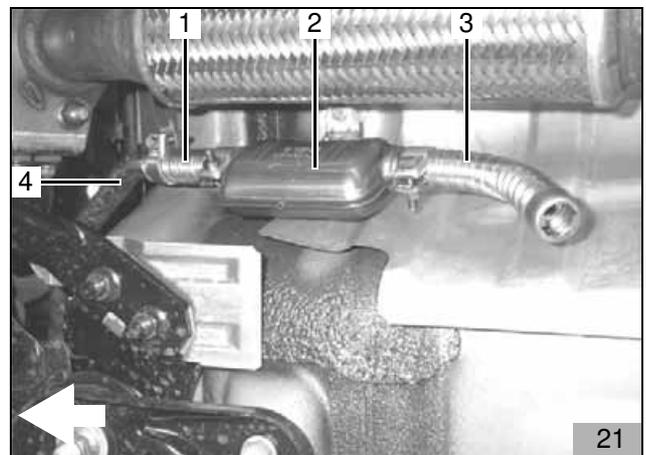
- Bend the enclosed angle bracket to approx. 45°
- Attach the angle bracket (19/1) with M6 x 60 screws (19/2), spring washers and 40 mm spacers (19/3) to the heat conducting plate as shown in Figure 19
- Bend the end of the exhaust pipe (19/4) from oval into round



- Shorten the exhaust pipe and exhaust pipe end piece as shown in Figure 20



- Secure the silencer (19/2) with M6 x 12 screws, upholstery washers and flanged nuts to the oblong hole of the angle bracket (19/1)
- Attach the 90 mm long exhaust pipe (21/1) as shown in Figure 21 to the exhaust pipe (21/4) and exhaust silencer (21/2) and secure with hose clamps
- Attach the 150 mm long exhaust pipe end piece (21/3) to the exhaust pipe (21/w) and secure with hose clamps
- Align and shape the exhaust pipe end piece (21/3) as shown in Figure 21



Final work

- Reassemble disassembled components in reverse order.
- Check that all hose lines, hose and tube clamps, and all electrical connections are securely fastened.
- Secure all loose lines using cable clips.
- Remove tools, such as vice-grip wrenches etc. from the engine compartment
- Spray heating unit components with anti-corrosion wax (Tectyl ML, Order No. 111329).
- Connect the vehicle battery
- Start the engine, bleed the water circuit according to the vehicle manufacturer's specifications, top up with cold water.
- Set the vehicle heater to "warm" and the blower to approx. 1/3
- Switch on the Webasto heating, see "Operating and Maintenance Instructions"
- Separate the instructions for end users and give them to the end user

Instructions for End Users

Please separate and add to the vehicle operating instructions!

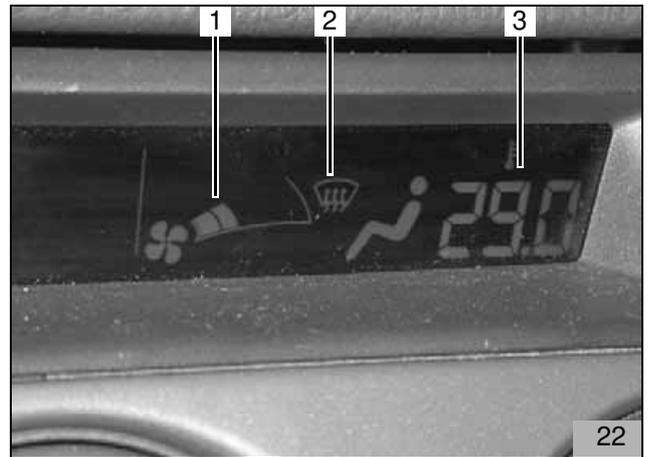
NOTE:

The summer ventilation function is not possible!
 An auxiliary heating installation with Telestart is only possible with the Telestart T80 Special!
 Operation without the timer switch is not possible!

Only for vehicles with automatic air conditioning

Before parking the vehicle, make the following settings:

- Air outlet (22/2; 23/2) to windscreen
- Temperature (22/3; 23/3) to max/warm
- Blower (22/1; 23/1) to level 2, possibly level 3



Error latching

- Switch on the timer switch with the remote control
 - wait for 3 seconds
 - Interrupt the power supply by removing the vehicle's 20 A fuse (24/1) as shown in Figure 24
 - wait for 3 seconds
 - Replace the vehicle's 20 A fuse (24/1)
- This switches on the heater unit.

