

SkodaOctavia II

SkodaOctavia II Combi

Legend:

- 1 Combustion air intake silencer
- 2 Thermo Top C/E heater unit
- 3 Blade-type fuse holder
- 4 Exhaust silencer
- 5 Time switch
- 6 Metering pump

Water Heater Unit

Thermo Top C Auxiliary Heating



Gasoline - from Model 2005 - left-hand drive only 1.4 MPI and 1.6 FSI

Order number: BHW 609004A, BHW 609004B (YHW 609004A, YHW 609004B)

Date: 25.07.2006 / Ident Np.: 9015671A

Installation

Table of Contents

| Validity Heater Unit / Installation Kit Foreword Special tools | 2 3 3 3 |
|---|------------------|
| Explanatory Notes on the Document | 4 |
| Preliminary Work | 5 |
| Heater Unit Installation Location | 5 |
| Connection of electrics | 6 |
| Assembly of fuse holder and relay K3 | 7 |
| Golf blower control without Climatronic | 8 |
| Golf blower control without Climatronic | 10 |
| Time switch option | 13 |
| Summer / winter switch option | 13 |
| Remote Start Option | 14 |
| Pre-assembling the Heater Unit | 15 |
| Pre-assembling exhaust system | 16 |
| Preparing heater unit installation location | 17 |
| Assembling the Heater Unit | 17 |
| Heater unit cable harness | 18 |
| | |

| Fuel connection | 19 |
|---|------|
| Assembling metering pump | 19 |
| Fuel take-off | 20 |
| Water connection 1.4MPI | 22 |
| Water connection 1.6FSI | 26 |
| Exhaust end section | 30 |
| Underride protection | 30 |
| Fog lamp orifice | 31 |
| Final Work | 31 |
| Adaptation of the passenger compartn | nent |
| monitoring | 31 |
| Operating Instructions for the End Customer | 32 |

Validity

| Manufacturer | Model | Туре | EG-BE No. / ABE |
|--------------|---------|------|-------------------------|
| Skoda | Octavia | 1Z | e11 * 2001 / 116 * 0230 |

| Engine type | Engine type | Power in kW | Engine capacity in cm ³ |
|-------------|-------------|-------------|------------------------------------|
| BCA | Gasoline | 55 | 1390 |
| BLF | Gasoline | 85 | 1595 |

Vehicle and engine types, equipment variants as well as national specifications, which are not listed in these installation instructions, have not been tested. Installation according to these installation instructions may, however, be possible.

The installation location of a time switch and summer / winter switch should be confirmed with the end customer before installation.

Heater Unit / Installation Kit

| Amount | Description | Order no.: |
|--------|---|-------------|
| 1 | LU Thermo Top C-B for vehicle without air conditioning or with Climatic | 9015612A |
| | Skoda Order No.: | BHW 609004A |
| | | YHW 609004A |
| or | · · · · · · | |
| 1 | LU Thermo Top C-B for vehicle with Climatronic | 9015613A |
| | Skoda Order No.: | BHW 609004B |
| | | YHW 609004B |

Additional required parts:

| Amount | Description | | Order no.: |
|----------|----------------------|------------------|---------------|
| 1 | 3-period time switch | | 130444B |
| | | Skoda Order No.: | BHW 000 001 |
| | | | YHW 000 001 |
| and / or | | · | |
| 1 | Remote start T90 | | 9014428A |
| | | Skoda Order No.: | BHW 000 002 A |
| | | | YHW 000 001 |

Foreword

These installation instructions apply to Skoda Octavia vehicles with 1.4 MPI and 1.6 FSI- engines - for validity, see page 2 - from model year 2004 and later, 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 C/P/E* are 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
- Vise-grip wrench

Explanatory Notes on the Document

To provide you with a quick overview of the individual working steps, you will find an identification mark on the outside top right corner of the page in question.

Mechanical work

Electrical connection

Water connection

Fuel connection

Exhaust system

Combustion air













Special features are highlighted using the following symbols:



!



Specific risk of injury or fatal accidents.

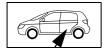
Specific risk of damage to components.

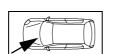
Specific risk of fire or explosion.

Reference to general installation instructions of Webasto components or to the manufacturer's vehiclespecific documents.



Reference to a special technical feature.



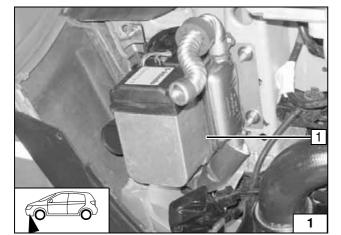


The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

Preliminary Work

WARNING!

- Open the tank cap, ventilate the tank.
- Close the tank cap again.
- Pressure in the cooling system!
- Copy the factory number from the original type label to the duplicate type label.
- Remove years that do not apply from the duplicate label.
- Attach the duplicate label (type label) in the appropriate place.
- Disconnect the battery.
- Remove the battery.
- Remove the battery holder.
- Remove the engine cover.
- Remove the front left wheel.
- Remove the front left section of the wheel-house panel.
- Remove left mist lamp or, for vehicle without mist lamp. remove left cover.
- Remove left headlight (only with remote start)
- Remove the underride protection
- Remove right underbody cover.
- Remove the rear seat bench.
- Open right tank mounting service lid.
- Remove the footwell panel on the driver's side
- Remove the lower dashboard panel on the driver's side
- Only for vehicles with Climatronic: Remove the footwell panel on the passenger's side



Heater Unit Installation Location

The installation location is in front of the left front wheel.

1 Heater unit

Installation location





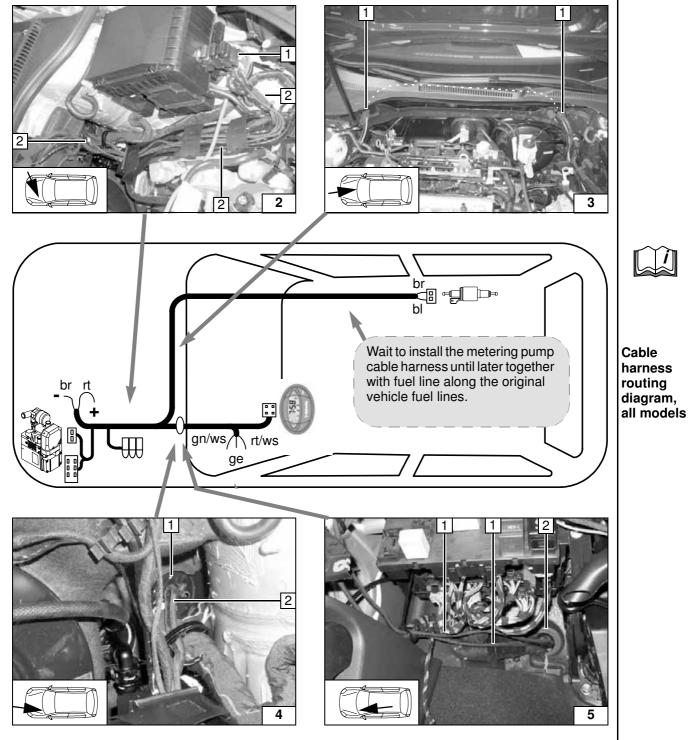
Electrical Connections

Fuse holder

- 1 Fuse holder (assembly, page 7)
- 2 Route the cables for the controls, blower control and metering pump in the cable channel to the bulkhead

Installation of cables

1 Metering pump cable harness together with fuel line in water channel (assembly, page 19)

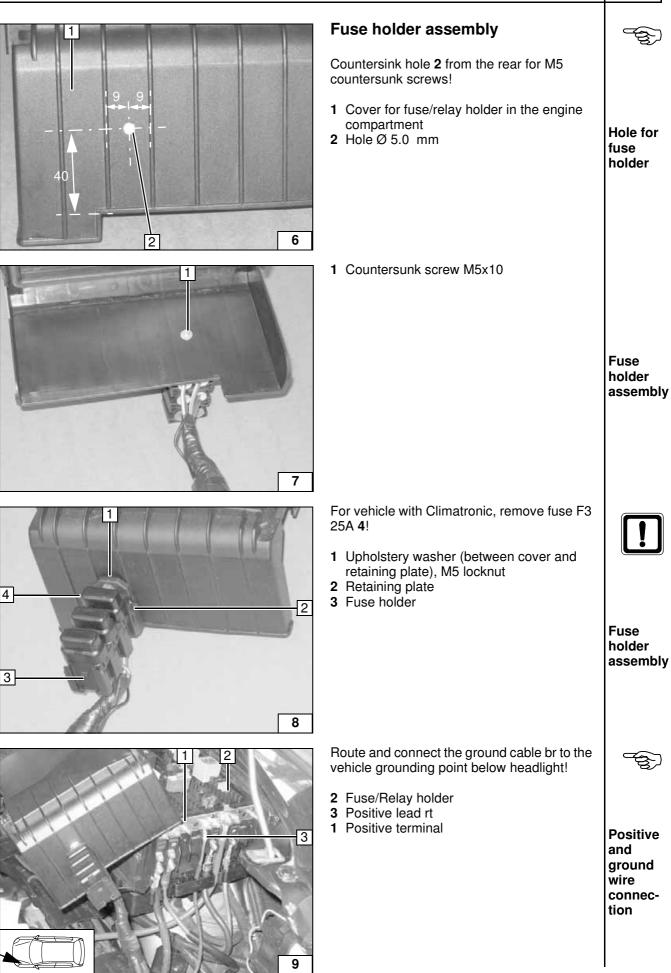


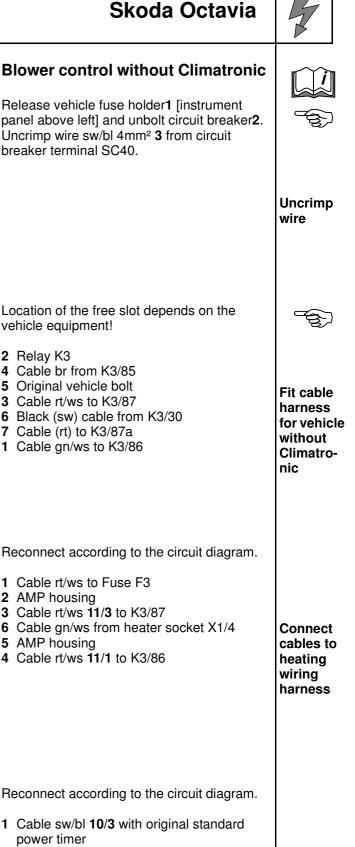
Cable harness feed-through

- 1 Original vehicle cable harness feed-through
- 2 Blower control and control cable harness (blower connection, pages 8-12; control connection, page 13)

Cable harness feed-through

- 2 Original vehicle cable harness feed-through
- 1 Blower control and control cable harness





panel above left] and unbolt circuit breaker2. Uncrimp wire sw/bl 4mm² 3 from circuit breaker terminal SC40. 3 10 Location of the free slot depends on the vehicle equipment! 2 Relay K3 4 Cable br from K3/85 5 Original vehicle bolt 3 Cable rt/ws to K3/87 6 Black (sw) cable from K3/30 7 Cable (rt) to K3/87a 1 Cable gn/ws to K3/86 11 Reconnect according to the circuit diagram. 1 Cable rt/ws to Fuse F3 **2** AMP housing 3 Cable rt/ws 11/3 to K3/87 6 Cable gn/ws from heater socket X1/4 5 AMP housing 4 Cable rt/ws 11/1 to K3/86 12 Reconnect according to the circuit diagram. 1 Cable sw/bl 10/3 with original standard power timer 2 AMP housing 3 Cable sw 11/6 from K3/30 4 Cable rt 11/7 from K3/87a inserted into fuse terminal SC40 13

1

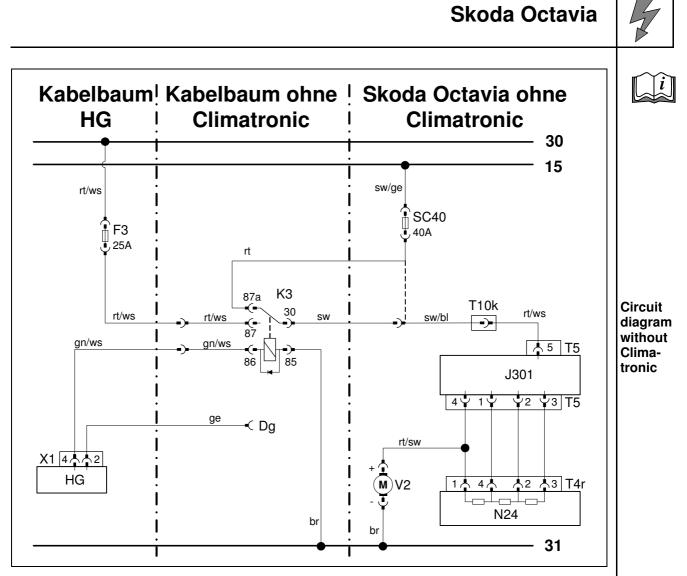
2

1

Connect

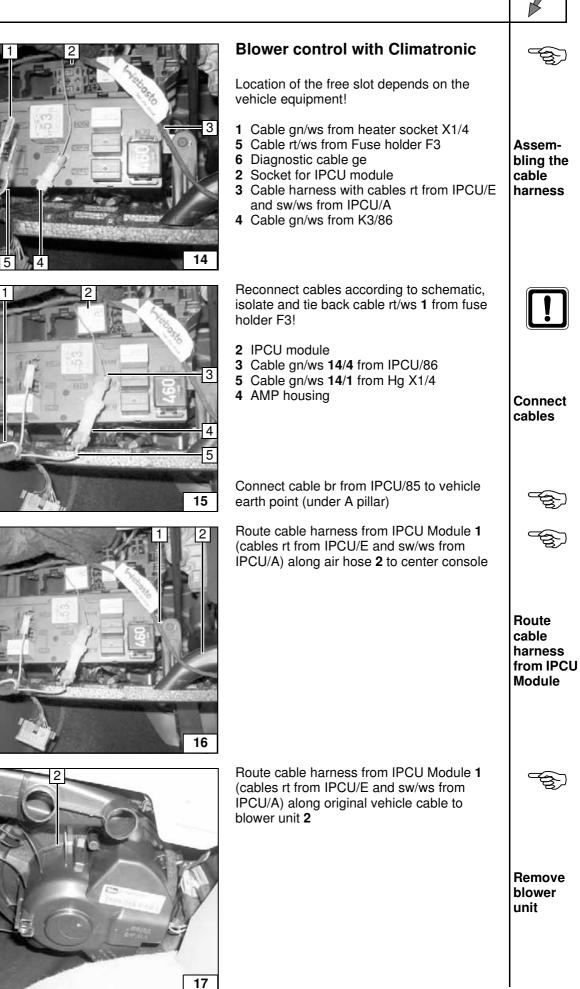
cables to

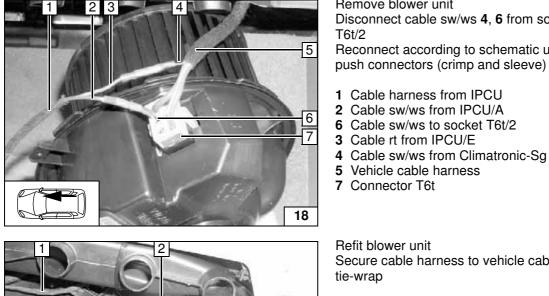
vehicle cable harness



| • | nal equipment ponent | Vehicl | e components | Colo | rs and symbols | |
|----|-----------------------------|--------|-----------------------------|------|----------------|--|
| HG | Heater unit TT-C/E | SC40 | Blower fuse | rt | red | |
| X1 | 6-pin heater unit connector | J301 | Air conditioning controller | WS | white | |
| F3 | Fuse | N24 | Resistor group | sw | black | |
| K3 | Blower relay | V2 | Blower motor | br | brown | |
| Dg | Diagnostic connection | Т | Terminal | gn | green | |
| | | | | ge | yellow | |
| | | | | bl | blue | |

end out ıaic







Remove blower unit Disconnect cable sw/ws 4, 6 from socket Reconnect according to schematic using

- 1 Cable harness from IPCU
- 6 Cable sw/ws to socket T6t/2
- 4 Cable sw/ws from Climatronic-Sg

Secure cable harness to vehicle cables with

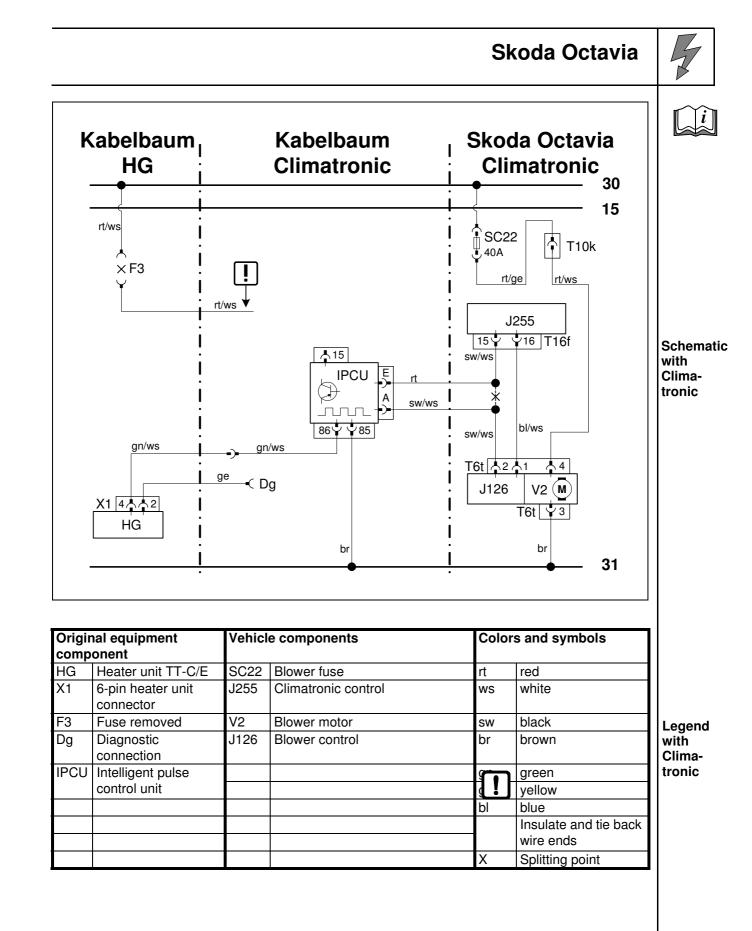
- 1 Cable harness from IPCU
- 2 Blower unit

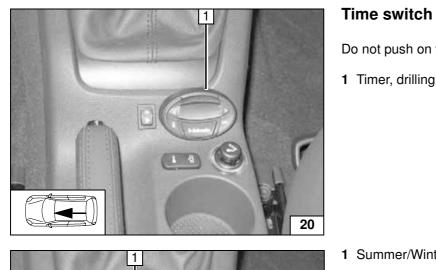
19

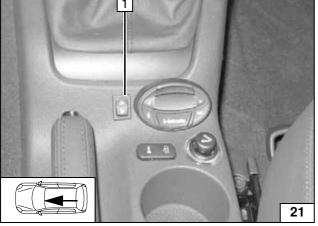




unit







Do not push on the display

1 Timer, drilling template

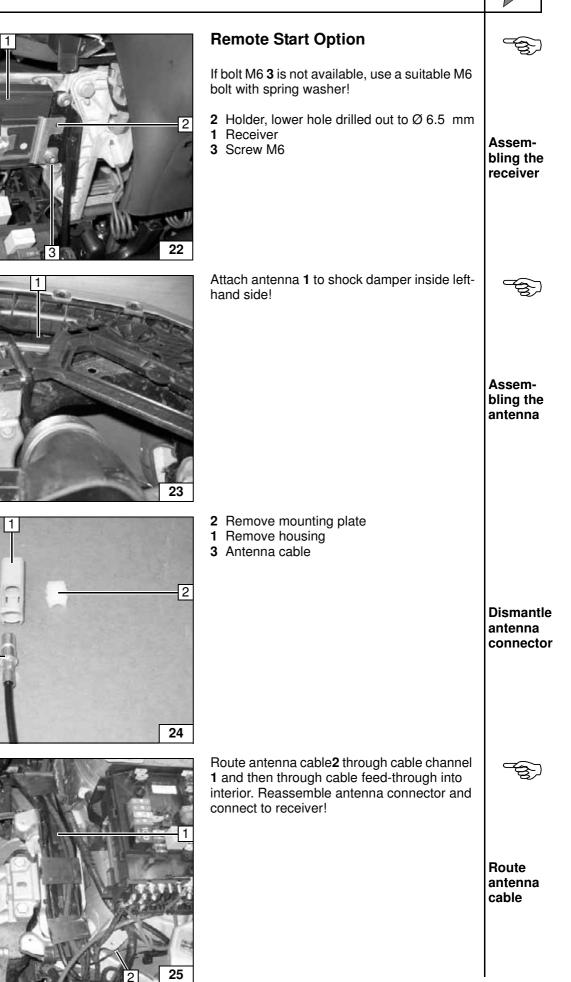


Timer option

1 Summer/Winter switch; hole Ø 12.0 mm



Summer/ winter switch option

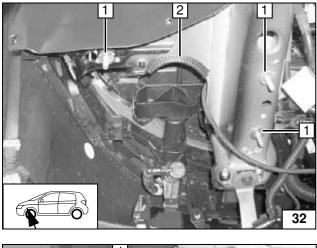


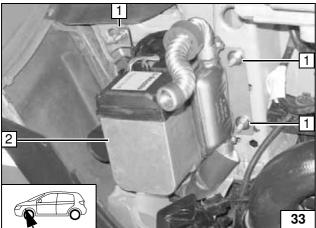
Skoda Octavia 5 $\square 0$ **Preassemble the Heater Unit** 1 1 Combustion air pipe a = 250 mm Cutting Dispose of section X the combustion air E pipe to length а X Ejot stay bolts, tightening torque 10 Nm. 1 ිනු 1 Ejot stay bolts Preassembling the heater unit 26 Ejot screw bolts tightening torque 10 Nm! 4 2 З 5 Bracket 2 Washer, ejot screw bolt [2x] 1 Spacer nut M6x30 4 Pre-prepared combustion air pipe (slotted side to Hg) Pre-5 3 Hose clamp assembling the heater unit 27 Ejot screw bolts tightening torque 10 Nm! 3 3 2 Note the installation position of the air intake silencer, see the Installation Instructions. 2 Strut 3 Ejot screw bolt [2x] 5 Mounting clip in heater hole 4 Combustion air intake silencer Pre-6 Combustion air pipe 4 assemble 8 Fuel line the Heater 1 Sleeve Unit 7 10 mm hose clamps [2x] 28 8 6 7 5

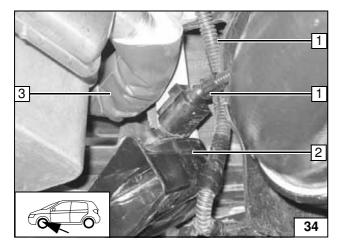
2

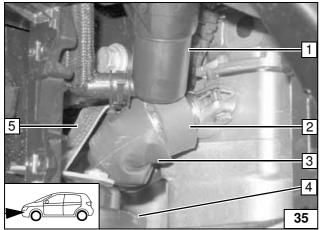
Pre-assemble exhaust system 2 1 1 Exhaust pipe a = 190 mm 2 Exhaust end section b = 240 mm Preparing the Dispose of section X exhaust pipe b а Form exhaust pipe as in Figure 27 and 28 TZ: slide on insulation 6 Silencer 3 1 M6x16 bolt, spring washer 2 Pre-assembled spacer nut M6x30 5 Exhaust pipe with insulation Pre-4 Rubber profile, red, without groove assemble **3** Hose clamp [2x] exhaust system 29 6 4 5 Form exhaust end piece 2 according to ž St figures 28 and 29 4 1 Exhaust pipe 1 4 Hose bracket 3 Rubber profile, red, without groove 3 Preassemble 2 exhaust system 30 1 Exhaust end section Preassemble exhaust 1 system











Preparing the installation location

Prevent upholstery washers falling out with adhesive

- 1 Upholstery washer on original vehicle stay bolts [3x]
- 2 Edge protection profile

Inserting edge protection

Installing the Heater Unit

- 1 Upholstery washer, locknut M8 [3x]
- 2 Heater unit (pre-assembled)

Assembling the heater unit

ිති

Check the exhaust system clearance with respect to original vehicle components and cables

- 3 Exhaust pipe
- 1 Vehicle cable harness (secured with tiewraps)
- 2 Horn

Align exhaust system

Check the exhaust system clearance with respect to original vehicle components and cables

Position rubber profile according to figure The illustration shows vehicle with headlight cleaning system.

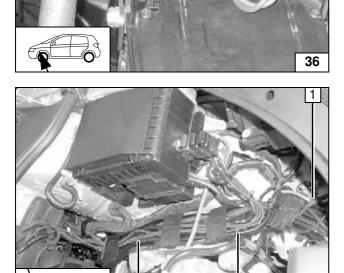
- 1 Headlight cleaning system
- 2 Rubber profile, red
- 3 Exhaust pipe with insulation
- 4 Horn
- 5 Horn bracket



Align exhaust system







1

3

Heater unit cable harness

Pay attention to the cable harness routing Risk of scuffing!

- 1 Heater unit cable harness
- 2 Clip-on cable clip in pre-pierced hole for the heater unit cover
- 3 Cable tie

2

37

Pay attention to the cable harness routing Risk of scuffing!

Route surplus heater unit cable harness **1** in the cable channel **2** underneath the battery and secure with tie-wraps!



Routing the cable harness

Fuel connection

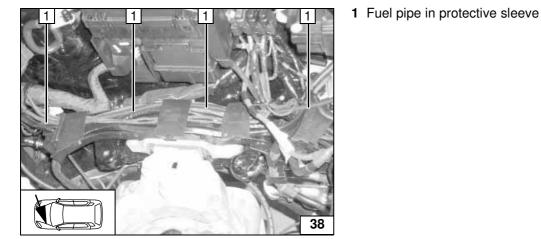
CAUTION!

Open the vehicle's tank-cap lock, ventilate the tank and then re-close the tank lock.

Catch any fuel running off with an appropriate container.

Route the fuel line and cable harness so that they are protected against stone impact!

Fit the fuel line and cable harness with edge protectors around sharp edges.



1 2

3

4

40

Route metering pump cable harness and fuel line in protective sleeve in water channel to right side of vehicle Cut off protective sleeve at cable feed-throughs **1** Pay special attention to the wiper shaft clearance

Route fuel line and metering pump cable harness

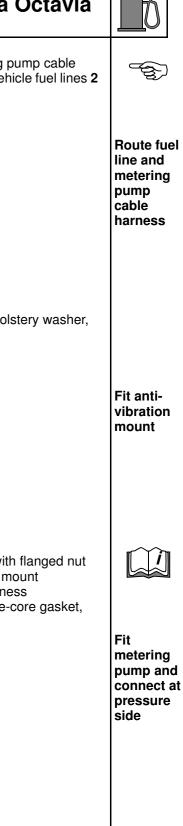
Feed fuel line with protective sleeve **3** and metering pump cable harness **2** through vehicle cable channel **4** Route fuel line together with metering pump cable harness **2** in vehicle cable channel **1**, **39**/1 to lower floor plate





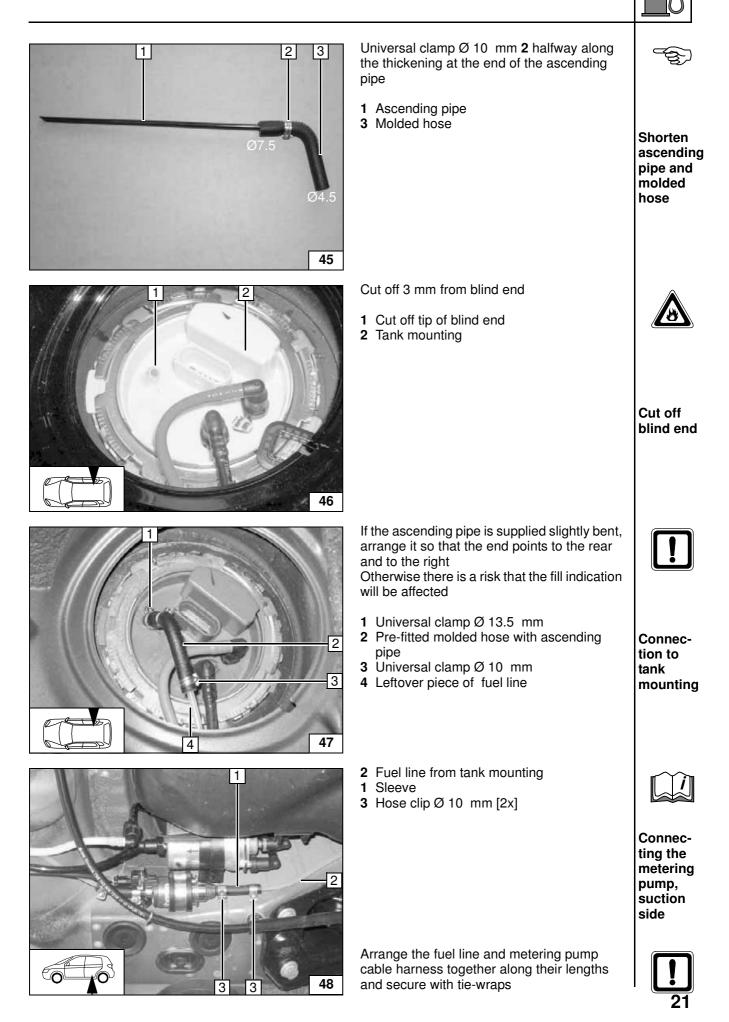


Route fuel line to bulkhead



Route fuel line and metering pump cable 1 2 harness along the original vehicle fuel lines 2 to the tank 1 Cable channel 41 2 Stopper removed 1 Anti-vibration mount, upholstery washer, locknut M6 6 42 4 Metering pump 3 4 2 3 Rubberized tube clamp with flanged nut fastened to anti-vibration mount 1 Metering pump cable harness 2 Connector housing, single-core gasket, connector contact 8 Fuel line 7 Sleeve 6 Hose clip Ø 10 mm [2x] 5 Stoppers refitted 43 **Fuel extraction** 2 1 1 Ascending pipe X 2 Molded hose Shorten ascending pipe and \mathbb{X} molded hose 44

8



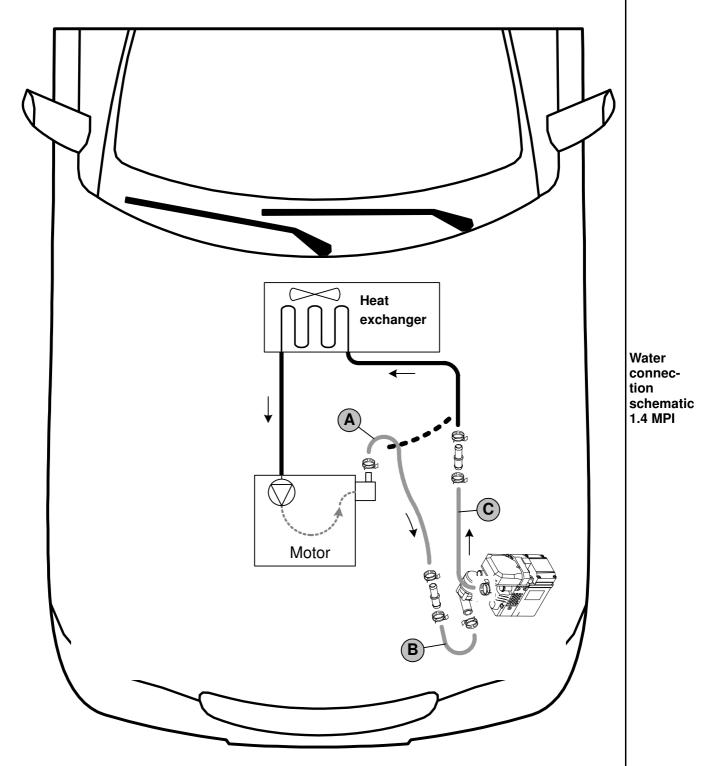
Water connection 1.4 MPI

WARNING!

Any coolant water running off should be collected using an appropriate container! Route hoses so that they are kink-free.

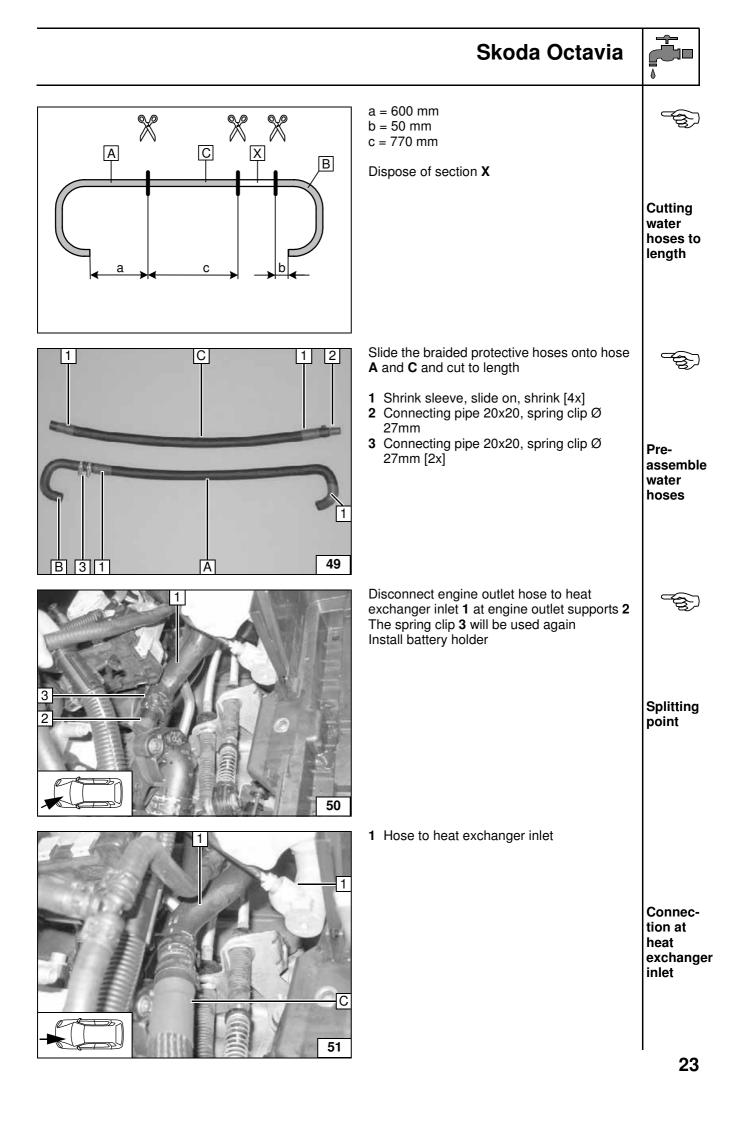
Position spring clips and hose clips so that no other hose can be damaged! Tighten all hose clamps to 2.0 +0.5 Nm.

The connection should be "inline" based on the following diagram:

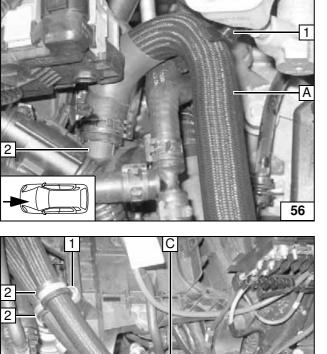


Spring clip = Ø 27 mm. All connecting pipes are Ø 20 mm x Ø 20 mm





| Skoda Octavia | |
|----------------------|---|
| | Route hose C to heater unit |
| 1 Heater unit outlet | Connec- tion to the heater unit outlet |
| 1 Heater unit outlet | Connec- tion to the heater unit inlet |
| | Route hose A to engine outlet 24 |



Before connecting, fill the water hoses with coolant

- 2 Engine outlet supports
- 1 Double clip 27x6 on hose **A** and brake line from main brake cylinder

Connection at engine outlet

1 Bolt M6x20, spring washer on free thread2 Rubberized hose clip Ø 29 mm [2x]

Secure hoses A, B and C

Arrange hose **A**, **B**, **C** along complete length and secure with tie-wraps

В



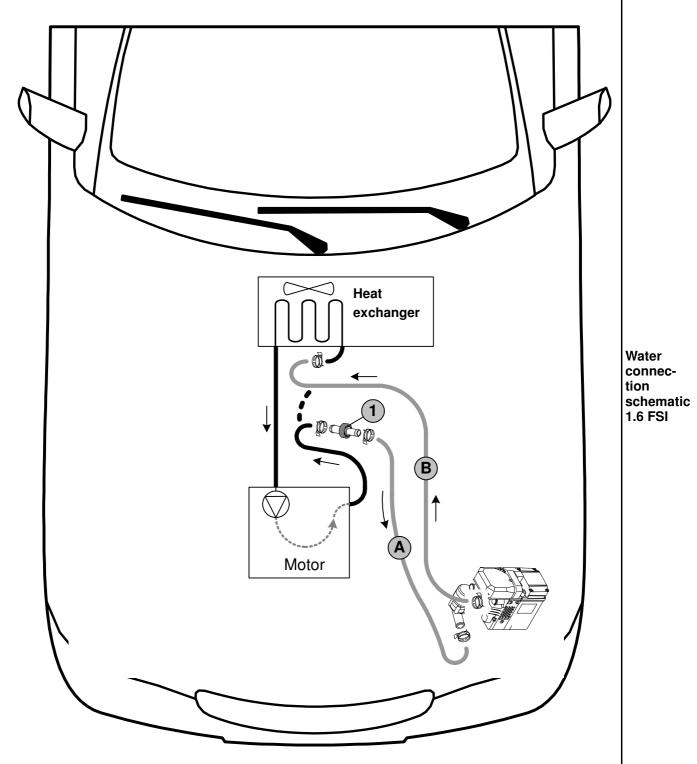
Water connection 1.6 FSI

WARNING!

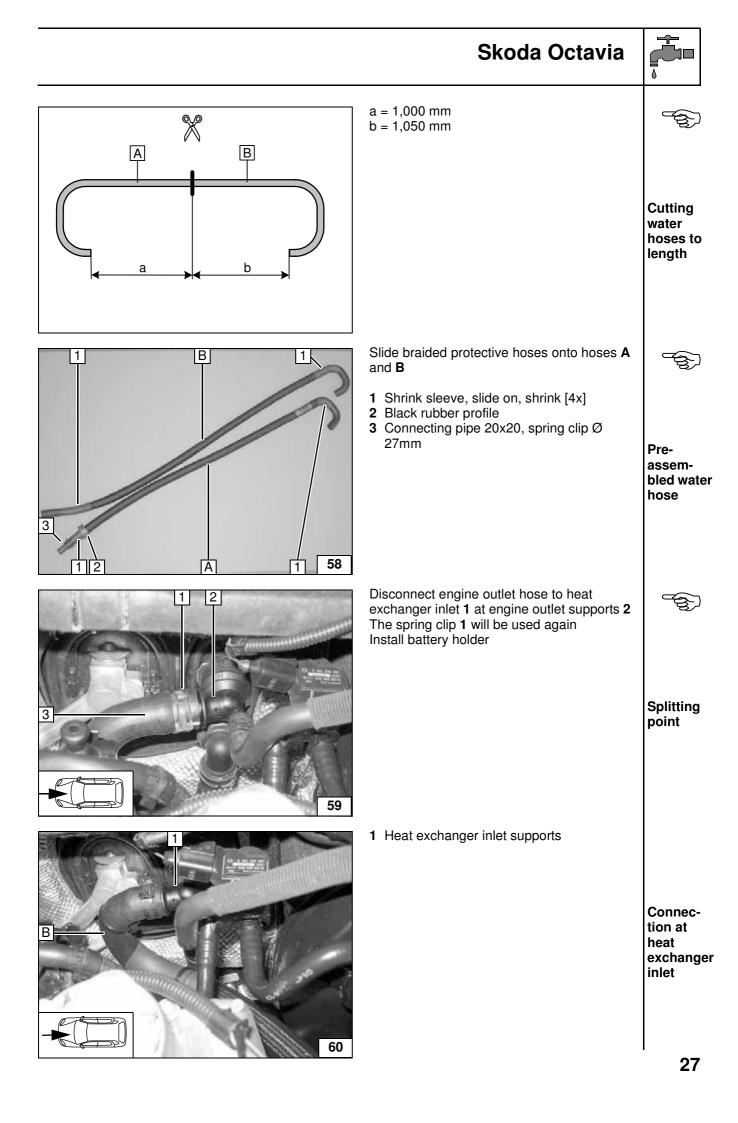
Any coolant water running off should be collected using an appropriate container! Route hoses so that they are kink-free.

Position spring clips and hose clips so that no other hose can be damaged! Tighten all hose clamps to 2.0 +0.5 Nm.

The connection should be "inline" based on the following diagram:

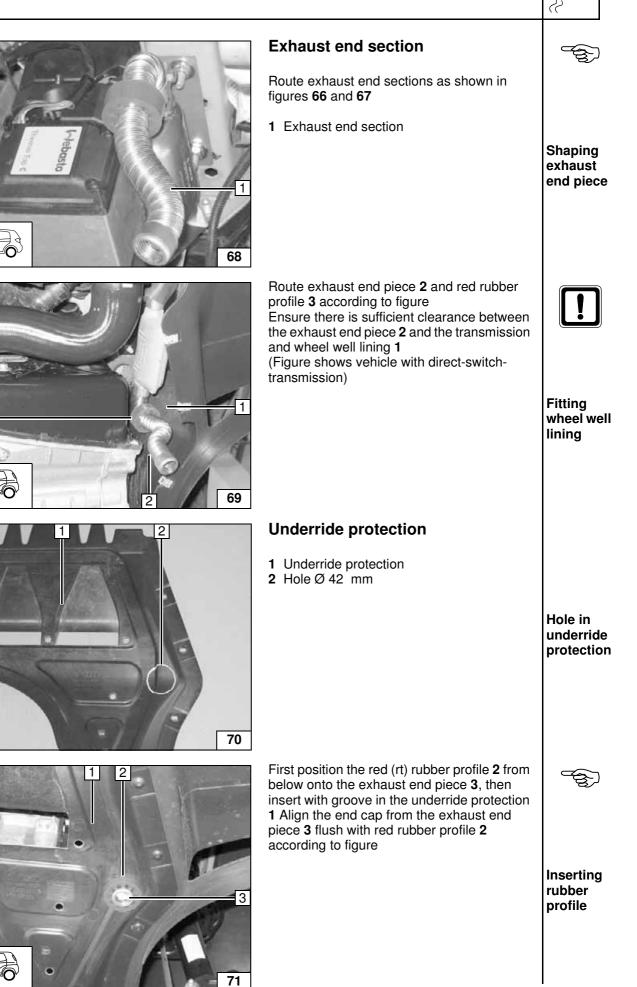


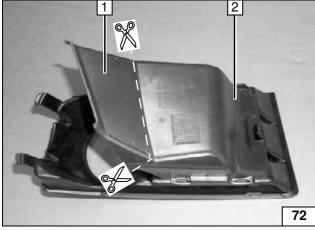
All spring clips = \emptyset 27 mm. Connecting pipe = \emptyset 20 mm x \emptyset 20 mm **1** = Black rubber profile



Skoda Octavia (ADD) R Routehose B to heater unit 61 1 Heater unit outlet В Connection to the heater unit outlet 62 1 1 Heater unit inlet Α Connection to the heater unit inlet 63 **Route hose** A to engine outlet 64

| | Skoda Octavia | |
|----|---|--|
| | Before connecting, fill the water hoses with coolant water | - Egg |
| | Hose engine outlet Align rubber profile at the connection | Connec- tion at engine outlet |
| | 1 Bolt M6x20, spring washer on free thread 2 Rubberized hose clip Ø 29 mm [2x] | Secure hoses A, B |
| | Spacer Cable tie Arrange hose A, B, C along complete length | Route hoses A, B |
| 67 | and secure with tie-wraps | |





Fog lamp orifice

- 1 Trim
- 2 Fog lamp orifice (depending on equipment)

Final work



Cut fog lamp orifice

WARNING!

Reassemble disassembled components in reverse order.

Check that all hose lines, spring clips and universal clips, and all electrical connections are securely fastened.

Secure all loose cables using cable clips.

Only use manufacturer-approved coolant.

Spray heating unit components with anti-corrosion wax (Tectyl 100K, Order No. 111 329).

- Connect battery.
- Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.
- Set the time switch.
- Set vehicle heating according to "Operating instructions for the end customer"
- Check that the auxiliary heating operates properly, see operating instructions / installation instructions.
- File accompanying original vehicle "operating instructions for the end customer" in the log book
- Attach the "Switch off auxiliary heating before re-fuelling" sticker onto the left side of the B-pillar.

Changing the sensitivity of the passenger compartment monitoring

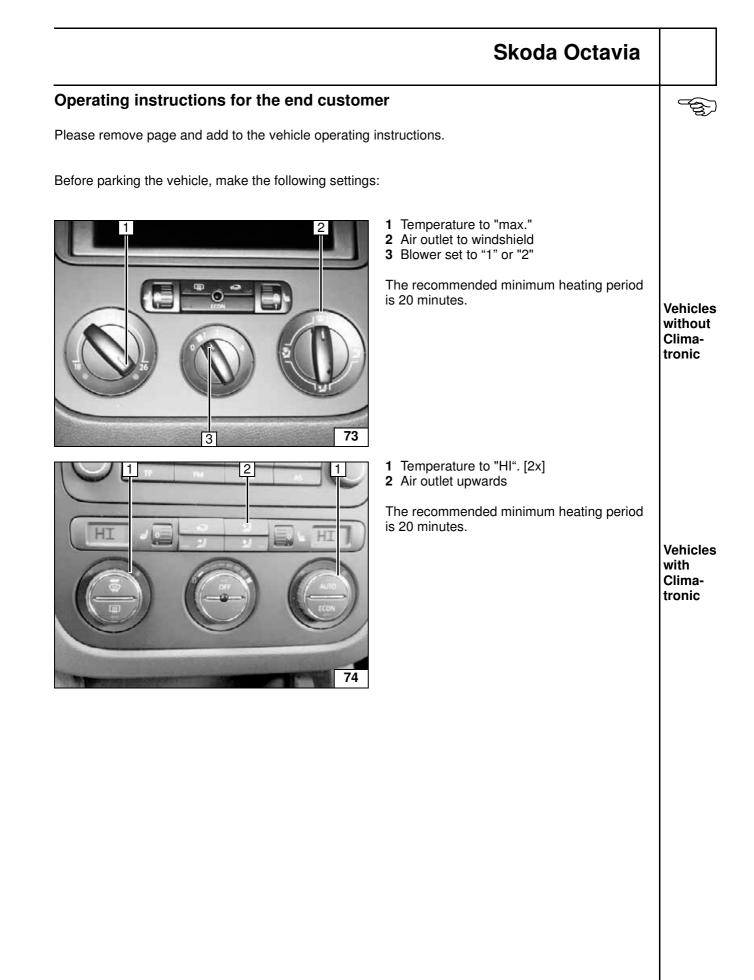
WARNING!

May only be carried out in authorized garage! Observe the valid repair manual for the vehicle in question!

- Connect the VAG Tester
- Call up Pos. 46 (Comfort system central module)
- Go to Pos. 10 (Adjustment)
- Obey the request to enter the code and enter the code 15
- Reduce the sensitivity of the interior monitoring to 50%
- Save this setting
- The adjustment of the interior monitoring is complete







Information about technical specifications, construction equipment, materials, guarantees and exterior appearance refers to the period when these installation instructions were published. The manufacturer reserves the right to make changes (including changes to the technical parameters with updates of single model series).

Manufacturer Webasto AG, Germany

No. BHW 609004A, BHW 609004B - Germany / 07.2006 (YHW 609004A, YHW 609004B)