

SkodaOctavia II

**Skoda**Octavia 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

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#### 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 <sup>3</sup>
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.

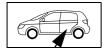
Specific risk of damage to components.

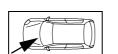
Specific risk of fire or explosion.

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



Reference to a special technical feature.



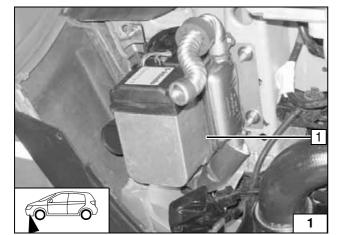


The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

#### **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





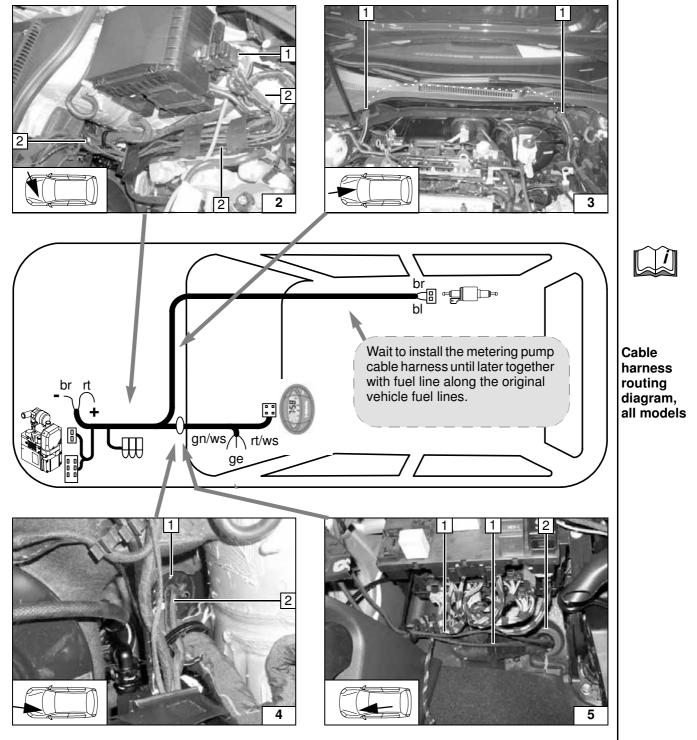
### **Electrical Connections**

#### 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)

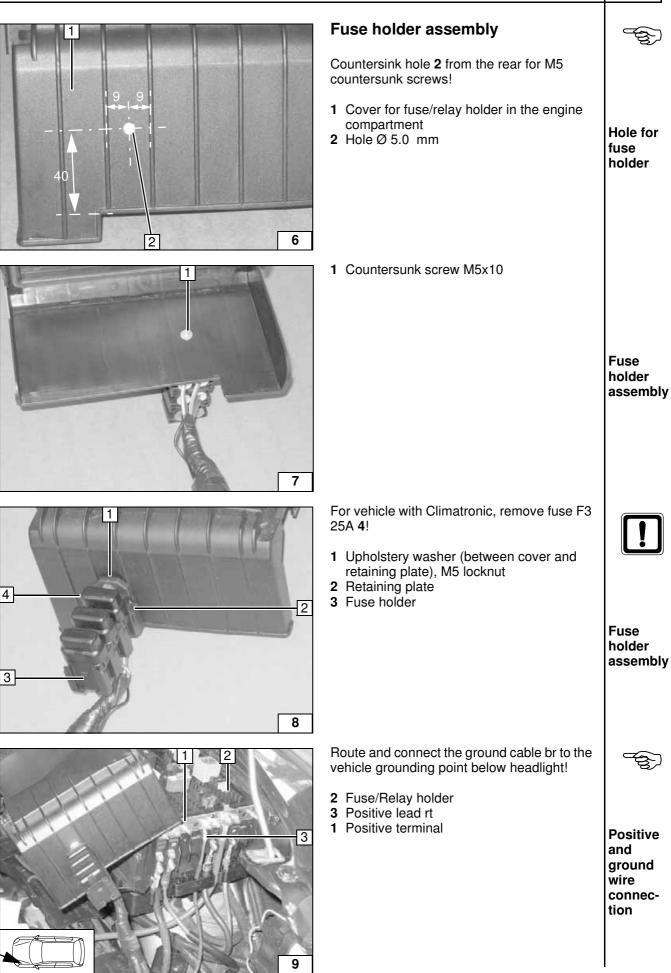


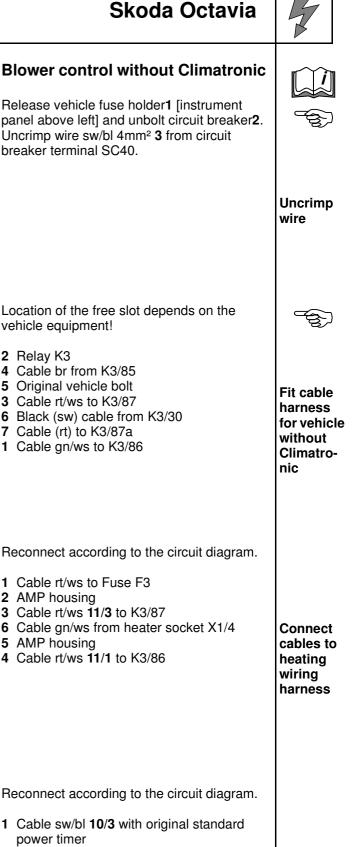
#### Cable harness feed-through

- 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 4mm<sup>2</sup> 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

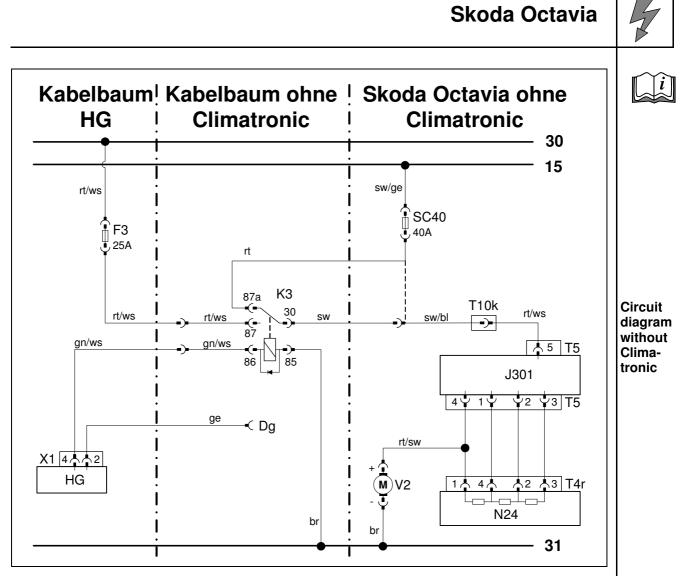
2

1

Connect

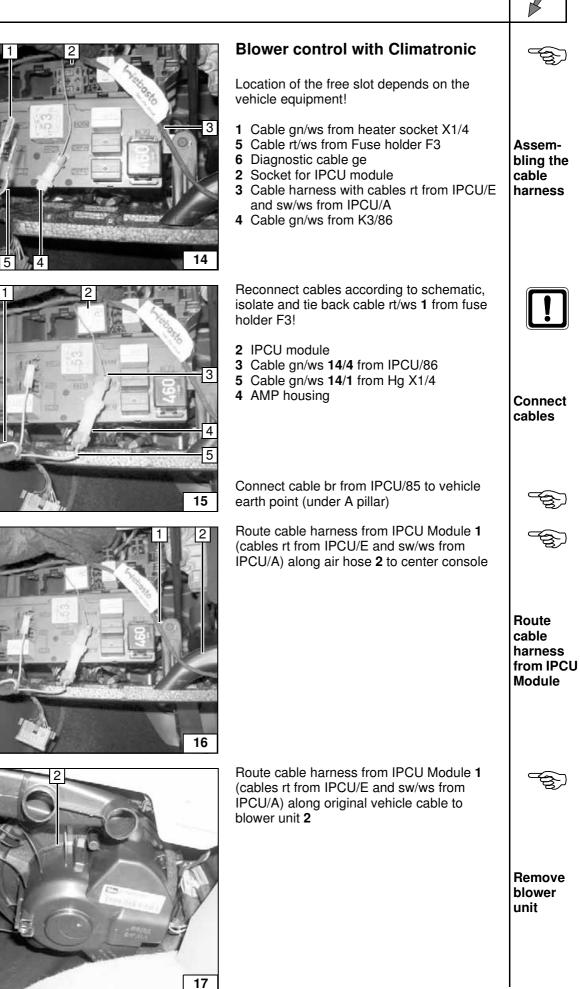
cables to

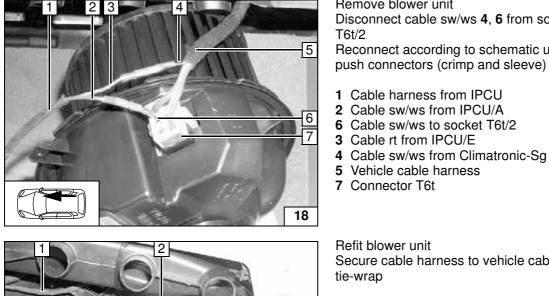
vehicle cable harness



•	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

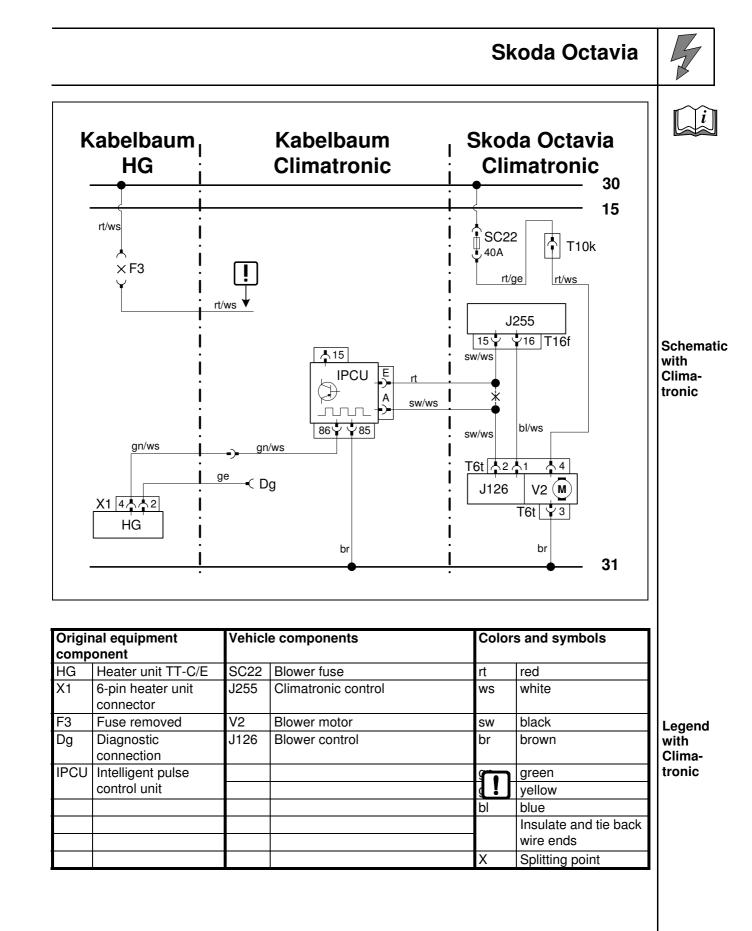
- 1 Cable harness from IPCU
- 2 Blower unit

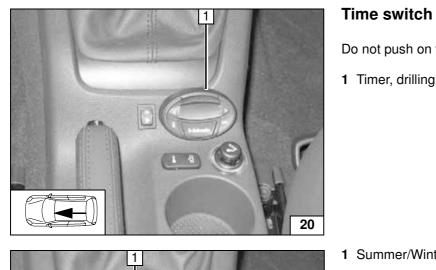
19

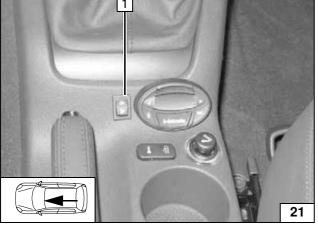




unit







Do not push on the display

1 Timer, drilling template

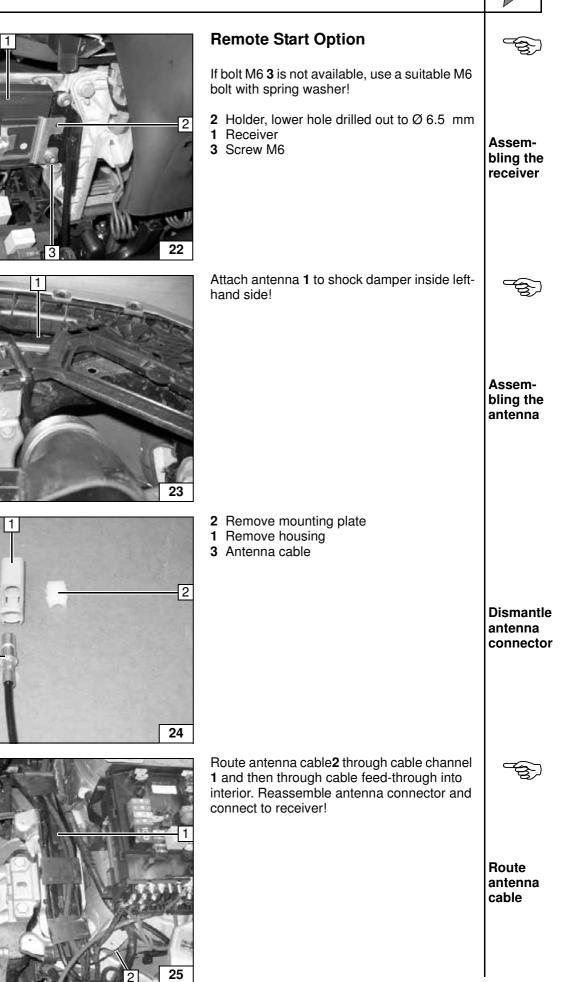


Timer option

1 Summer/Winter switch; hole Ø 12.0 mm



Summer/ winter switch option

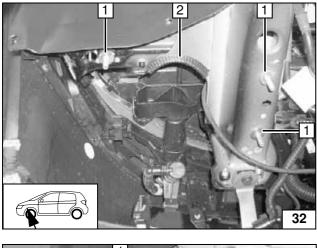


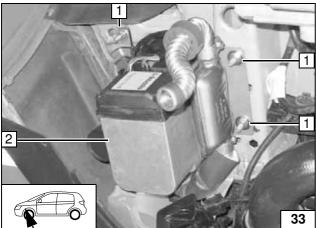
#### **Skoda Octavia** 5 $\square 0$ **Preassemble the Heater Unit** 1 1 Combustion air pipe a = 250 mm Cutting Dispose of section X the combustion air E pipe to length а X Ejot stay bolts, tightening torque 10 Nm. 1 ිනු 1 Ejot stay bolts Preassembling the heater unit 26 Ejot screw bolts tightening torque 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

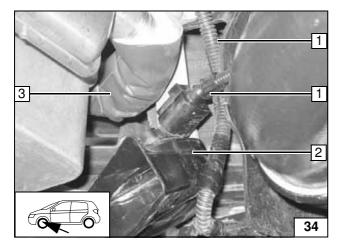
2

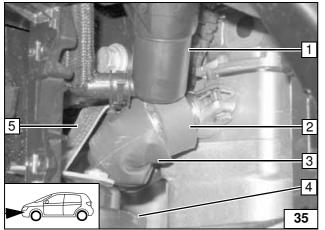
Pre-assemble exhaust system 2 1 1 Exhaust pipe a = 190 mm 2 Exhaust end section b = 240 mm Preparing the Dispose of section X exhaust pipe b а Form exhaust pipe as in Figure 27 and 28 TZ: slide on insulation 6 Silencer 3 1 M6x16 bolt, spring washer 2 Pre-assembled spacer nut M6x30 5 Exhaust pipe with 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.

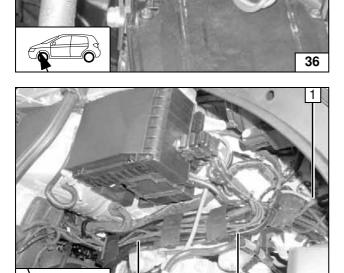
- 1 Headlight cleaning system
- 2 Rubber profile, red
- 3 Exhaust pipe with insulation
- 4 Horn
- 5 Horn bracket



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**

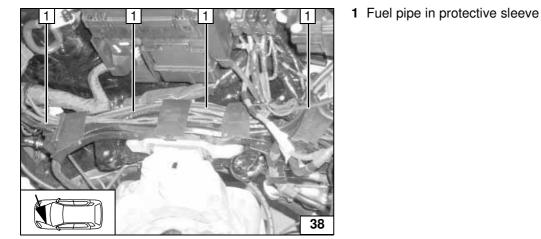
#### **CAUTION!**

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

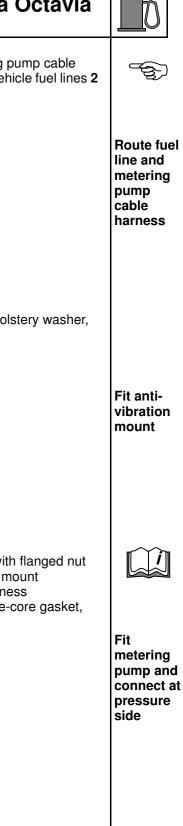
Feed fuel line with protective sleeve **3** and metering pump cable harness **2** through vehicle cable channel **4** Route fuel line together with metering pump cable harness **2** in vehicle cable channel **1**, **39**/1 to lower floor plate





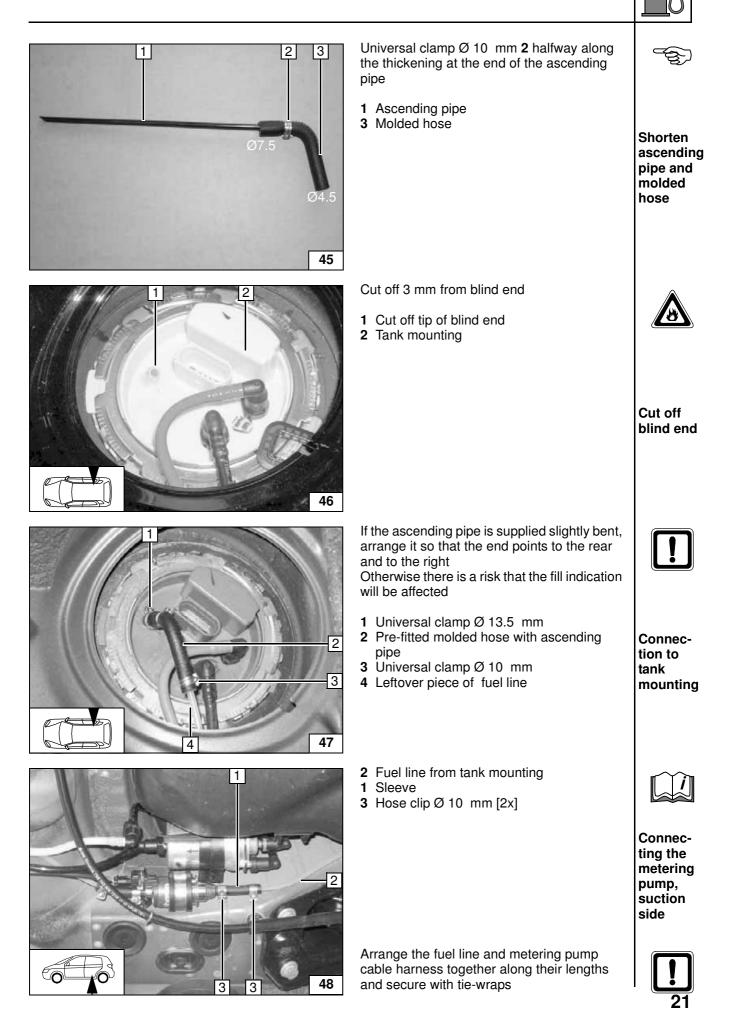


Route fuel line to bulkhead



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



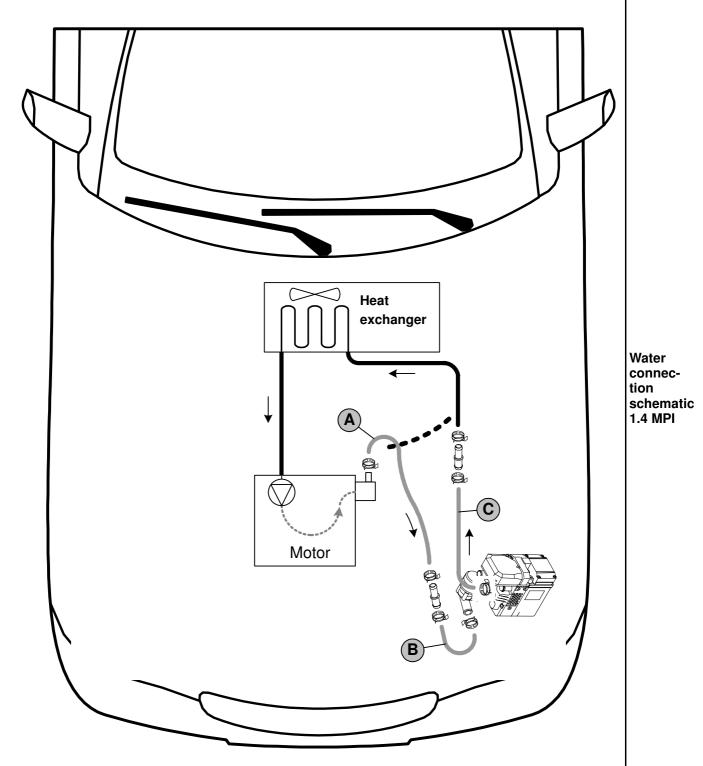
#### Water connection 1.4 MPI

#### WARNING!

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

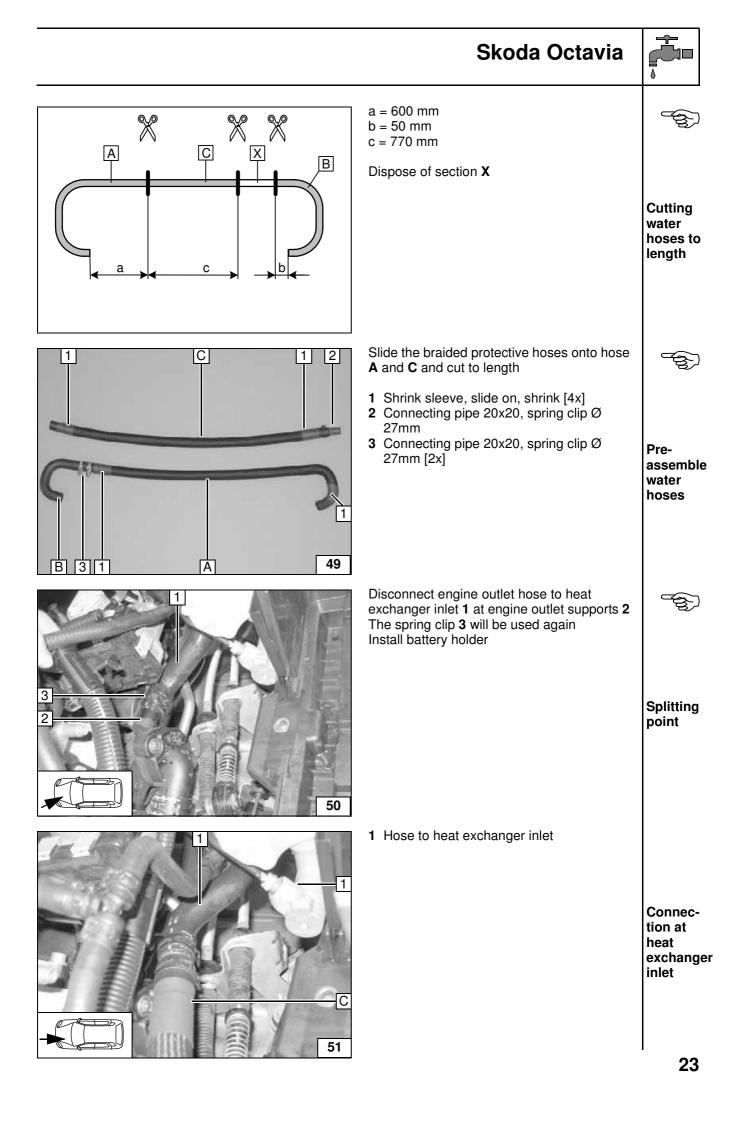
Position spring clips and hose clips so that no other hose can be damaged! Tighten all hose clamps to 2.0 +0.5 Nm.

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

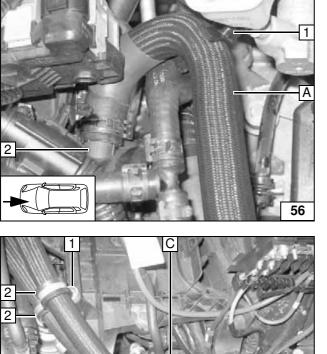


Spring clip = Ø 27 mm. All connecting pipes are Ø 20 mm x Ø 20 mm





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



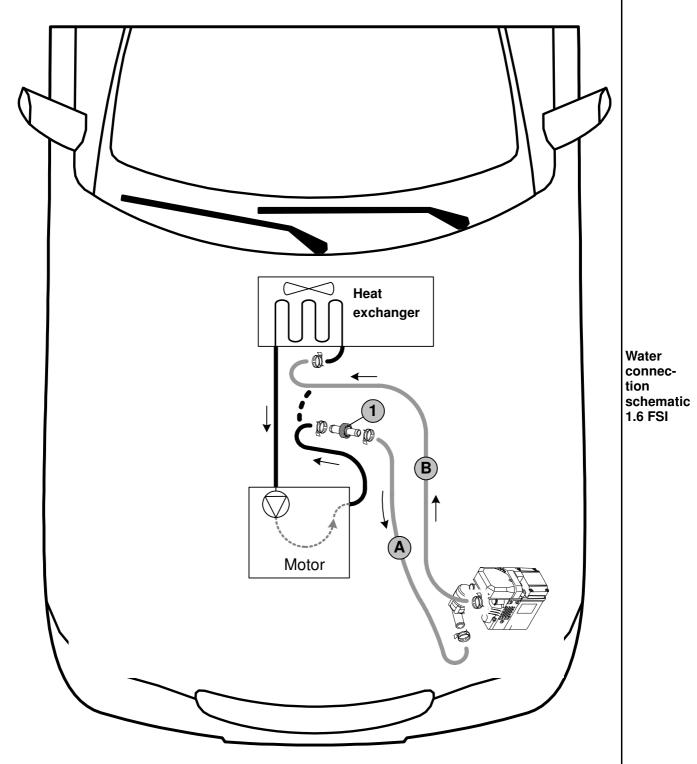
#### Water connection 1.6 FSI

#### WARNING!

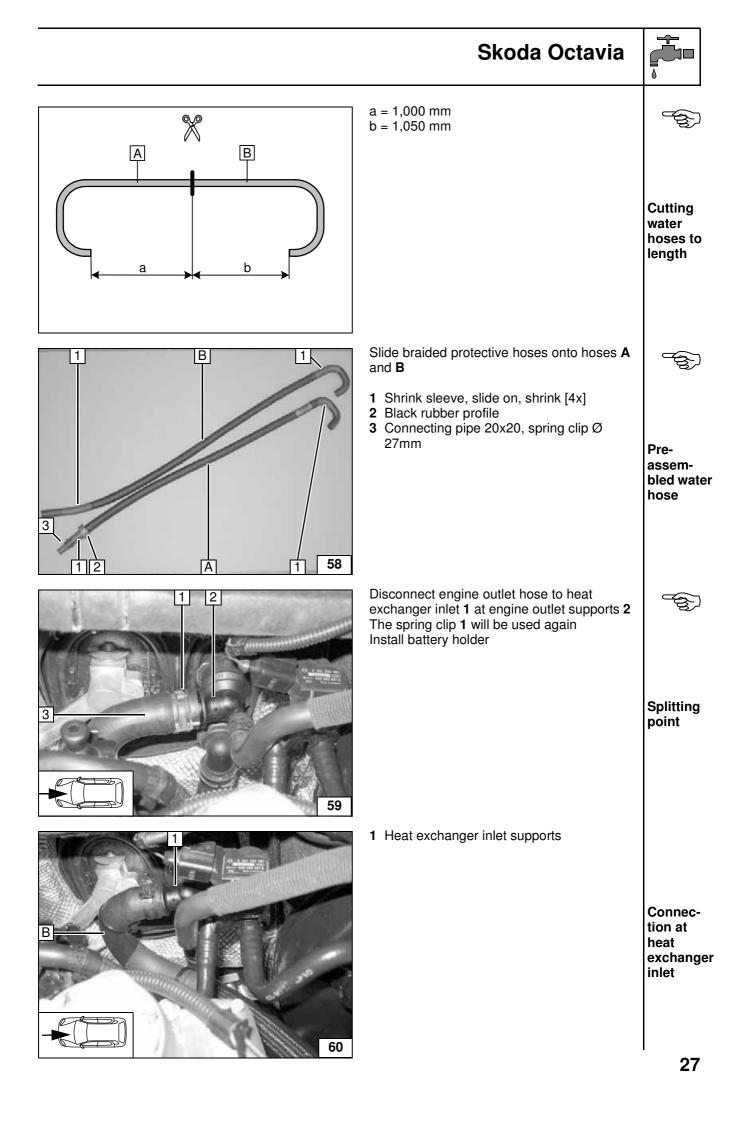
Any coolant water running off should be collected using an appropriate container! Route hoses so that they are kink-free.

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:

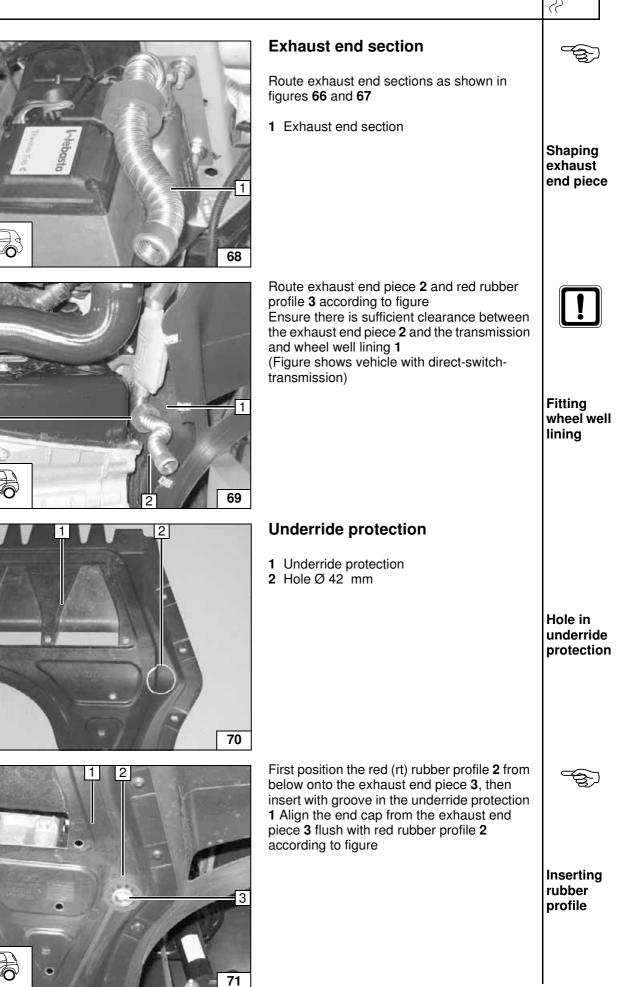


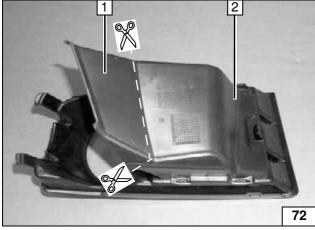
All spring clips =  $\emptyset$  27 mm. Connecting pipe =  $\emptyset$  20 mm x  $\emptyset$  20 mm **1** = Black rubber profile



# 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
	<ol> <li>Hose engine outlet</li> <li>Align rubber profile at the connection</li> </ol>	Connec- tion at engine outlet
	<ul> <li>1 Bolt M6x20, spring washer on free thread</li> <li>2 Rubberized hose clip Ø 29 mm [2x]</li> </ul>	Secure hoses A, B
	<ol> <li>Spacer</li> <li>Cable tie</li> </ol> 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

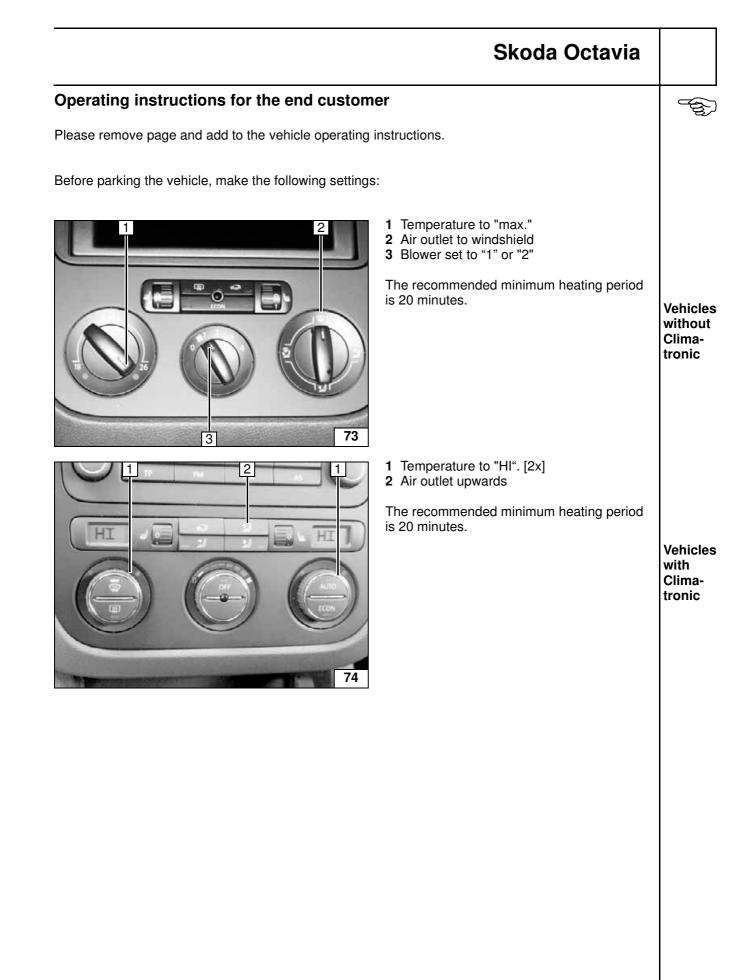
#### WARNING!

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)