## Water heater unit

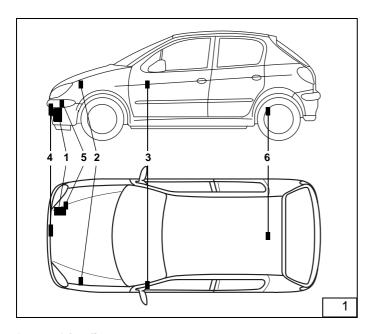


## Thermo Top C Additional heating



## Thermo Top E Additional Heating





## Installation instructions

Peugeot 307 Peugeot 307 CC Peugeot 307 SW / Break

Gasoline and diesel

For left-hand drive vehicles only

For validity, see page 2

### Legend for figure 1:

- 1 Thermo Top C, E B/D Heater Unit
- 2 Blade-Type Fuse Holder and Blower Relay
- 3 Time switch
- 4 Exhaust silencer
- 5 Combustion air intake pipe
- 6 Metering pump

# <u>/!</u>\

#### **WARNING!**

#### **Hazard warning:**

Incorrect installation or repair of Webasto heating and cooling systems may cause a fire or result in the emission of carbon monoxide, which can be fatal. Serious or fatal injuries can be caused as a result.

Specialist company training, technical documentation, specialized tools and equipment are required to install and repair Webasto heating and cooling systems.

NEVER attempt to install or repair Webasto heating or cooling systems if you have not successfully completed the company training and thereby acquired the required technical skills or if you do not have access to the required technical documentation, tools and equipment needed to carry out correct installation and repairs.

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**

Peugeot 307	1	Fuel connection	46
Peugeot 307 SW / Break	1	Exhaust System	49
Validity	2	Combustion air intake pipe	50
Heater Unit / Installation Kit	4	Final work	50
Foreword	4	Operating instructions for the end customer	51
Special Tools	4	,	
General Instructions	4		
Heater Unit Installation Location	5		
Cable harness assembly	6		
Blower control	11		
Time Switch and			
Summer / winter switch option	13		
Remote start option	14		
Thermo Call TC1.1 option	15		
Installing the Heater Unit	16		
Connection to the water circuit	19		
Preparing the water hoses	19		
Water connection	26		

## **Validity**

Manufacturer	Model	Туре	EG-BE no.
Peugeot	307	3*KFW	e2*98/14*0242*

Engine type	Engine model	Power in kW	Engine capacity in cm <sup>3</sup>	
KFW	Otto (spark-ignition)	55	1360	

Manufacturer	Model	Туре	EG-BE no.
Peugeot	307	3*NFU	e2*98/14*0243*

Engine type	Engine model	Power in kW	Engine capacity in cm <sup>3</sup>
NFU	Otto (spark-ignition)	80	1587

Manufacturer	Model	Туре	EG-BE no.
Peugeot	307	3*RFN	e2*98/14*0244*

Engine type	Engine model	Power in kW	Engine capacity in cm <sup>3</sup>
RFN	Otto (spark-ignition)	100	1997

Manufacturer	Model	Туре	EG-BE no.
Peugeot	307	3*RFK	e2*2001/116*0290*

Engine type	Engine model	Power in kW	Engine capacity in cm <sup>3</sup>
RFK	Otto (spark-ignition)	130	1997

			Туре	
Manufacturer	Model	Model		EG-BE no.
Peugeot	307		3*RHY	e2*98/14*0245*
Engine type	Engine model	Power	in kW	Engine capacity in cm <sup>3</sup>
RHY	Diesel	66		1997
Manufacturer	Model		Туре	EG-BE no.
Peugeot	307		3*8HZ	e2*98/14*0251*
Engine type	Engine model	Power	in kW	Engine capacity in cm <sup>3</sup>
8HZ	Diesel	50		1398
	1		Туре	
Manufacturer	Model	Model		EG-BE no.
Peugeot	307		3*RHS	e2*98/14*0252*
Engine type	Engine model	Powe	r in kW	Engine capacity in cm <sup>3</sup>
RHS	Diesel (FAP)	79		1997
Manufacturer	Model		Туре	EG-BE no.
Peugeot	307		3*RHR	e2*2001/116*0290*
Engine type	Engine model	Powe	er in kW	Engine capacity in cm <sup>3</sup>
RHR	Diesel (FAP)	100		1997
Manufacturer	Model		Туре	EG-BE no.
Peugeot	307		3*9HZ	e2*2001/116*0290*
Engine type	Engine model	Powe	er in kW	Engine capacity in cm <sup>3</sup>
9 Hz	Diesel (FAP)	80		1560
9112	Diesei (i Ai )	00		1300

#### 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 unit / Installation kit

Quantity	Name	Order No.
1	Water heater unit Thermo Top E - gasoline with scope of delivery	668 90C
	or	
1	Water heater unit Thermo Top E - diesel with scope of delivery	668 89C
	or	
1	Water heater unit Thermo Top Z/C - gasoline with scope of delivery	906 04D
	or	
1	Water heater unit Thermo Top Z/C - diesel with scope of delivery	892 44D
Also requ	uired:	
1	Peugeot 307 installation kit Thermo Top C, E	13 006 77C
Also requ	uired for automatic air conditioning:	

### .

1 Peugeot 307/406 installation kit *Thermo Top C, E* 662 99A

#### **Foreword**

These installation instructions apply to Peugeot 307 / SW / Break gasoline and diesel vehicles - for validity, see title page - from model year 2001 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, where this is the case the stipulations in the "installation instructions" and "operating and maintenance instructions" for the *Thermo Top C* should be observed.

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

### Special tools

Vice-grip wrench Torque spanner for 2.0 - 10 Nm

#### **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**

- Remove years that do not apply from the duplicate label
- Attach the duplicate label (type label) in the appropriate location.

### **Engine Compartment**

#### **WARNING:**

Disconnect the battery.

- Remove the batters and the bracket.
- Open the cooler cap, let off pressure.
- Close the cooler cap again.
- Remove the air filter housing
- Remove the cable holder.

#### Only for vehicles with diesel engines.

- Remove the engine cover.

#### Only for vehicles with 8 Hz engines.

- Remove the battery holder.

#### **Vehicle Exterior**

- Open the filler cover, release the pressure in the fuel system, close the filler cover.
- Remove the front left wheel-house panel
- Remove the front bumper.
- Remove the underbody panel on the right in front of the original vehicle tank.

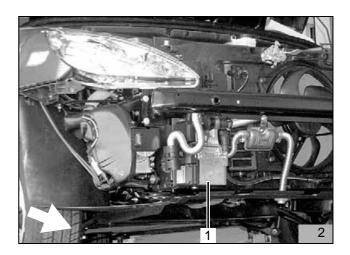
#### Interior

- Remove the lower dashboard panel on the driver's side
- Remove the A pillar and rocker panel strip in the foot area on the driver's side.
- Lift up the rear seat bench.
- Remove the service cap on the tank mounting.

#### Heater unit installation location

The heater unit (1) is installed on the front right behind the bumper according the to the figure.

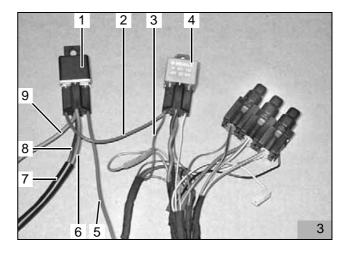
This is installed vertically, with the exhaust outlet to the left.

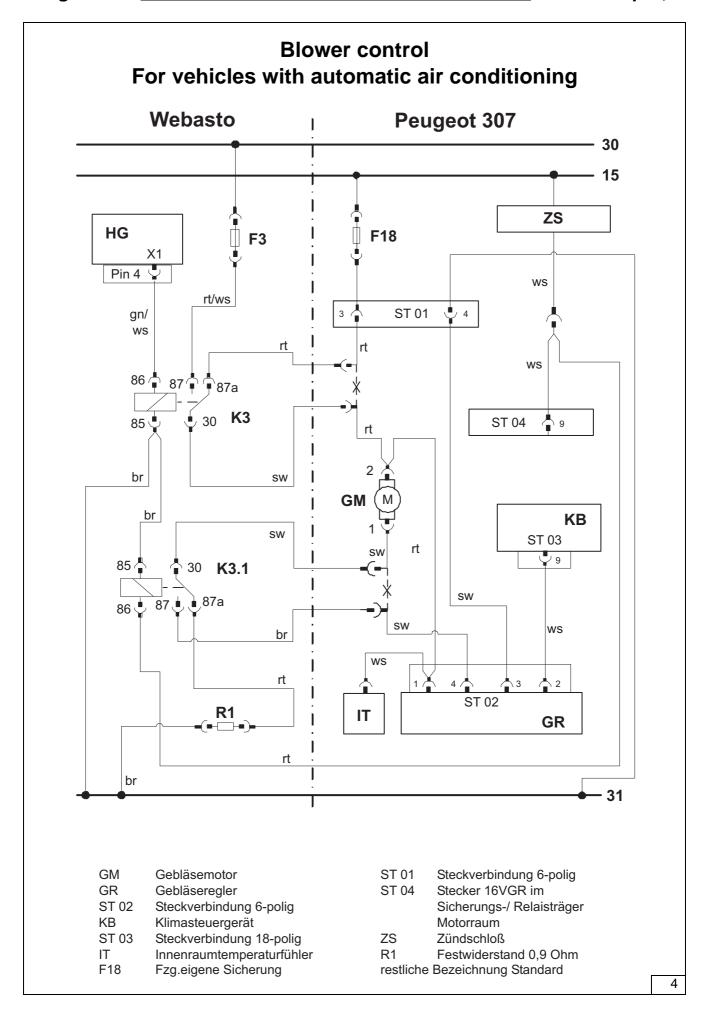


## Cable harness assembly

## Pre-assembly for automatic air conditioning

- Cut two a 300 mm section and two 100 mm sections each from the enclosed brown 2.5 mm wire <sup>2</sup>.
- Uncrimp the brown wire (3) from the K3 blower relay (4) terminal 85.
- Connect the cut brown 2.5 mm wire <sup>2</sup> that is 100 mm long (2) and the brown wire (3) to the K3 blower relay (4) terminal 85.
- Connect the free end of the brown 2.5 mm wire <sup>2</sup> that is 100 mm long (2) to the supplementary relay K3.1 (1) terminal 85.
- Connect the cut brown 2.5 mm wire <sup>2</sup> that is 300mm long (9) to the supplementary relay K3.1 (1) terminal 87a.
- Connect the enclosed red 0.75mm wire <sup>2</sup> that is 500mm long (5) to the supplementary relay K3.1 (1) terminal 86.
- Connect the enclosed black wire (6) to the supplementary relay K3.1 (1) terminal 30.
- Connect the remaining brown wire (8) to the supplementary relay K3.1 (1) terminal 87.
- Pull the brown wire (8) and black wire (6) together into the enclosed insulating hose (7).





# Installation with automatic air conditioning

The installation location is the fuse and relay box to the left of the air filter.

#### NOTE:

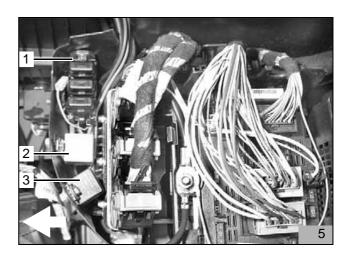
Pay attention to the free movement of the housing cover.

Remove any reinforcements in the relay box near the fastening points for the blower relay and the fuse holder.

#### **WARNING:**

When drilling, watch out for underlying components and wires.

- Bore 3 holes of Ø 5.5 mm in the fuse and relay box.
- Fasten the fuses (1), K3 blower relay (2) and K3.1 supplementary relay (3) with 3 M5x12 bolts, 6 washers, and 3 M5 flanged nuts as shown.
- Connect according to illustration 4 in the circuit diagram.

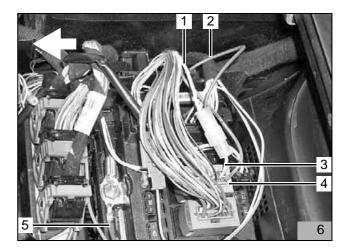


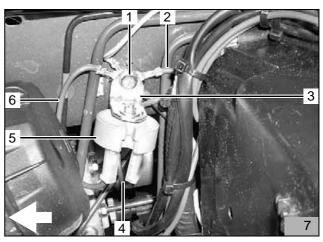
- Connect the positive wires (5) to the positive terminal in the fuse and relay box.
- Separate the white wire (1,3) from the ignition as shown in figure 9 about 50 mm before the connector 16VGR (4) pin 9.
- Crimp in the red wire (2) from the supplementary relay K3.1 terminal 86, together with the white wire (1) into the blade receptacles.
- Crimp the white wire (3) in the flat connector.
- Slide on the housing and connect the flat connector and the blade receptacles.

## **WARNING:**

This resistor will be hot!
Ensure sufficient distance from adjacent components.

- Run the grounding line from the heater unit (2) and the brown wire 2.5 mm <sup>2</sup> (4) from the relay K3.1/87a to the original vehicle grounding point (1).
- Fasten the grounding line from the heater unit (2) and the cut 100mm brown wire (6) with 6 mm cable socket together with the bracket (3) to the original vehicle grounding point (1).
- Secure the resistor (5) with the bolt M5x20, washer and nut to the bracket (3).
- Connect the brown 2.5 mm<sup>2</sup> wire (4) from the relay K3.1/87a and the brown 100 mm long wire (6) from the grounding point to the resistor.





# Preassembly and installation with manual air conditioning

#### NOTE:

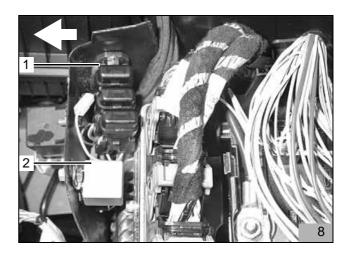
Pay attention to the free movement of the housing cover.

Remove any reinforcements in the relay box near the fastening points for the blower relay and the fuse holder.

#### **WARNING:**

When drilling, watch out for underlying components and wires.

- Bore 2 holes of Ø 5.5 mm in the fuse and relay box.
- Fasten the fuses (1) and K3 blower relay (2) with 2 M5x12 bolts, 4 washers, and 2 M5 flanged nuts as shown.
- Replace the F3 fuse with the enclosed 10 amp fuse.
- Connect the positive wire to the positive terminal in the fuse and relay box.
- Connect the ground wire to the battery negative terminal



## **Installing the Cable Harnesses**

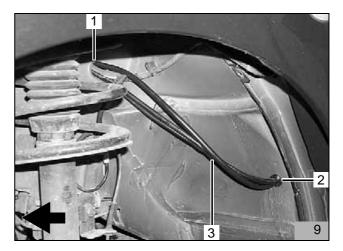
#### For all vehicles

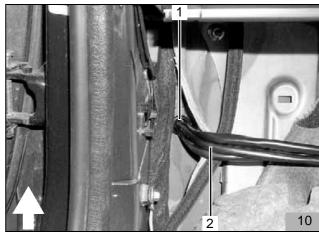
- Run the heater unit cable harness along the original vehicle cable harness / battery positive terminal from the fuse and relay box to the right and then behind the original vehicle cooler to the heater unit installation location.
- Run the metering pump cable harness on the wheel house back to the cooling water reservoir.
- Run the metering pump cable harness behind the cooling water reservoir cover to the right side of the vehicle.
- Secure cable harnesses with cable ties.
- Run the time switch cable harness, blower controller cable harness (from blower relay K3), and the cable harness from the supplementary relay K3.1 (only with automatic air conditioning) from the fuse and relay box down and through the engine compartment along the frame side rail to the brake amplifier.
- Run the cable harnesses (3) from the brake amplifier through the existing feed-through (1) into the wheel house.

#### **WARNING:**

When drilling, watch out for underlying components and wires.

- Drill Ø 18mm bore hole (2) in passenger compartment as shown in the figure.
- Insert enclosed cable sleeves (10/1; 9/2) in the bore hole.
- Run the cable harnesses (9/3; 10/2) from the wheel house into the passenger compartment as shown in figure 9 and 10.
- Secure cable harnesses with cable ties.





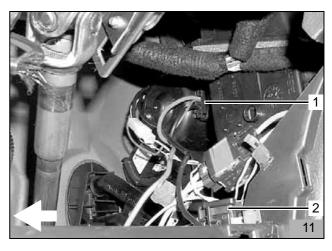
#### **Blower control**

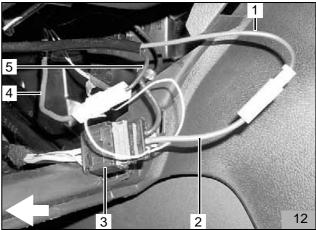
## **Automatic air conditioning**

#### NOTE:

The positive triggering of the blower engine is between the six-pin plug connection (2) pin 3 and the two pin connector (1) pin 2 on the blower motor.

- Separate the red wire (2.4) from the original vehicle fuses to the blower motor approx. 500 mm before the connector (3) pin 3.
- Connect according to illustration 4 in the circuit diagram.
- Connect the red (rt) wire (1) from the blower relay K3/87a with the red (rt) from the original vehicle fuse.
- Connect the black wire (5) from K3/30 with the red
   (4) wire to the blower motor.

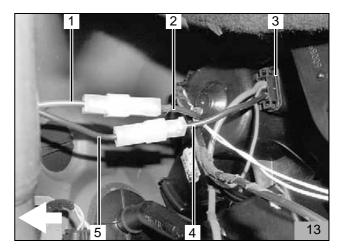




#### NOTE:

The ground triggering of the blower motor is between the two pin connector (3) on the blower motor pin 1 and the 6 pin connector on the blower controller pin 4.

- Separate the original vehicle black wire (2,4) from the blower motor to the blower regulator pin 1 as shown in the figure approx. 50 mm before the connector (3).
- Connect according to illustration 4 in the circuit diagram.
- Connect the brown wire (1) from the supplementary relay K3.1/87 with the black wire (2) to the blower controller.
- Connect the black wire (5) from the supplementary relay K3.1/30 with the black wire (4) from the blower motor.



#### NOTE:

On the vehicles checked with passenger compartment monitoring, no alarms were triggered during heating operation (test with maximum blower speed).

Triggering the passenger compartment monitoring is not provided for in the current vehicles.

## Manual air conditioning

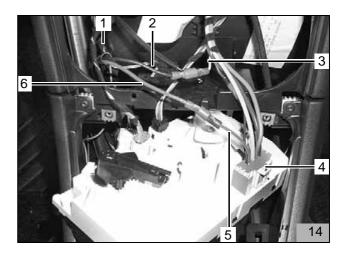
Re-connect the connections with the enclosed round connectors in accordance with circuit diagram Figure 15. The air conditioning control is triggered at pin 4 on the 5 pin connector in the air conditioning control.

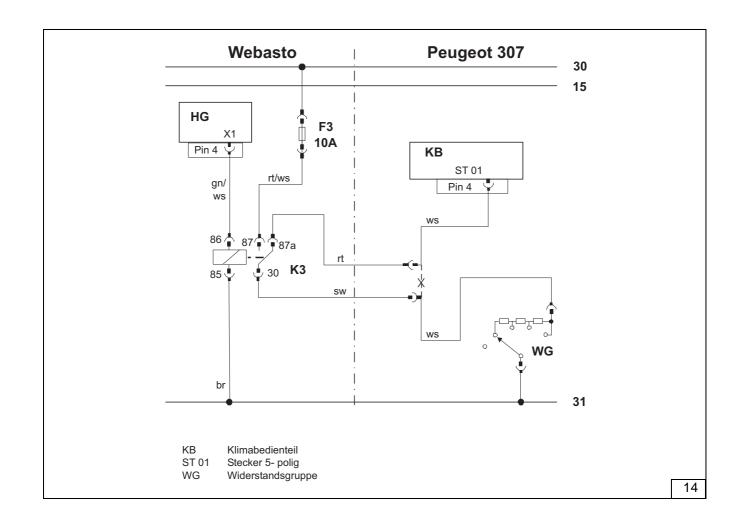
- Run the blower control cable harness (1) as shown in figure 22 to the air conditioning control.
- Separate the white wire (3.5) to the air conditioning control approx. 50mm before pin 4 on the 5 pin connector (4) in the air conditioning control.
- Connect the white wire (5) to the air conditioning control as shown in the figure with the red wire (6) K3/87a blower relay.
- Connect the white wire (3) to the resistor group as shown in the figure with the black wire (2) K3/30 blower relay.



On the vehicles checked with passenger compartment monitoring, no alarms were triggered during heating operation (test with maximum blower speed).

Triggering the passenger compartment monitoring is not provided for in the current vehicles.





# Time Switch and Summer / winter switch option

#### **CAUTION**

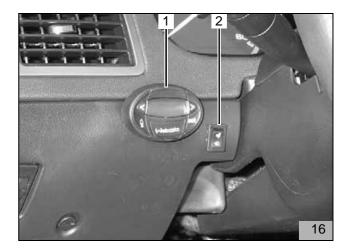
When installing the time switch, do not press on the LCD display.

#### NOTE

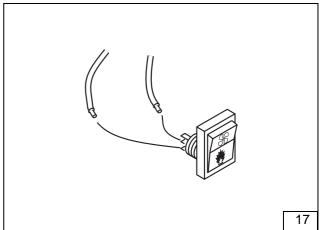
The installation location shown for the time switch (1) and the summer / winter switch (2) is a recommendation.

Before installing, please confirm the installation location with your customer.

- Attach the drilling template for the time switch at the desired position.
- Drill two holes as on the template.
- Remove the template.
- Pull the time switch cable harness through the hole and connect the plug to the time switch.
- Fasten the time switch (1) with the self-tapping screw.
- Attach cover to time switch.



- Transfer the hole image for the summer / winter switch (2) to the desired position and drill Ø 12mm hole.
- Pull the summer / winter switch cable through the hole.
- Connect the brown and violet wires, as shown in the figure, to the switch (lower contacts).
- Fasten the summer / winter switch with the tooth lock washer and nut.



## **Remote start option**

#### NOTE:

Please observe the general installation instructions for the Telestart remote start option.

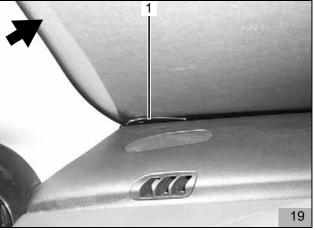
- Fasten the bracket (2) with bolt M5x12, washer and flanged nut in previously drilled hole.
- Slide the receiver (1) on the bracket (2)



#### NOTE:

Clean/degrease the mounting surface for the antenna before fitting the antenna!

- Attach the antenna (1) as shown.
- Run antenna cable to the receiver.
- Make all connections according to the enclosed installation instructions.
- Secure all wiring harnesses with cable ties

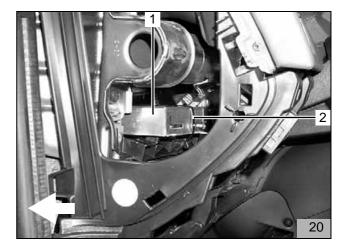


## **Thermo Call TC1.1 option**

#### NOTE:

Please observe the general installation instructions for the TC1.1 option.

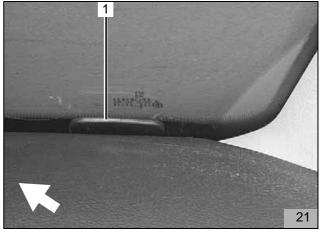
- Position the receiver (1) on the fuse holder.
- Position the receiver (1) with the cable clip (2) on the fuse holder.



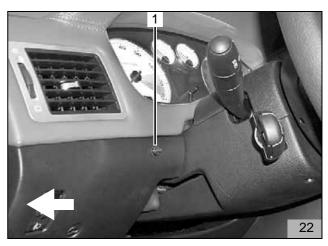
#### NOTE:

Clean/degrease the mounting surface for the antenna before fitting the antenna!

- Attach the antenna (1) as shown in the figure.
- Run antenna cable to the receiver.



- Assemble the tip switch (1) as shown in the figure.
- Make all connections according to the enclosed installation instructions.
- Secure all wiring harnesses with cable ties

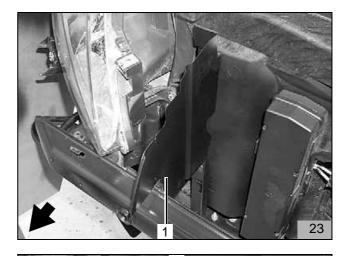


## **Installing the Heater Unit**

## **Preparing the Installation Location**

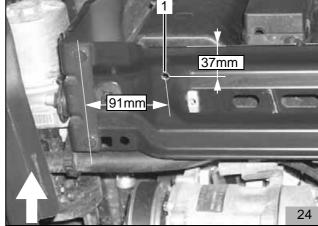
#### For vehicles with wind deflector

- Remove wind deflector (1) and dispose.

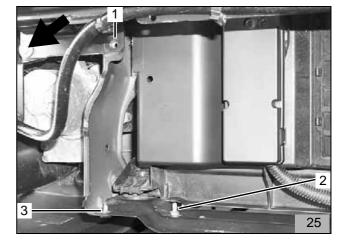


### For all vehicles

- Transfer the hole image (1) to the cross strut as shown in the figure.
- Drill a Ø 7.0mm bore hole according to the figure.



- Insert the M6x20 screw (2) from below in the hole (24/1) and from above add two washers and a bolt protector.
- Unscrew the original vehicle bolt in position (1).
- Unscrew the original vehicle nut in position (3).



26

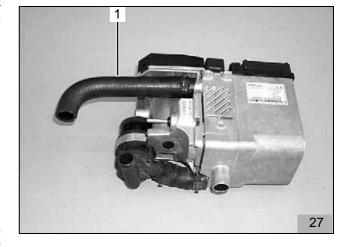
Section (Will be used again)

#### Pre-assemble the Heater Unit

Cut the supplied water hose into a section, as shown in the figure:

1 x 80 mm + 90° bend (1) (from the heater unit water outlet to the 1,200mm long water hose).

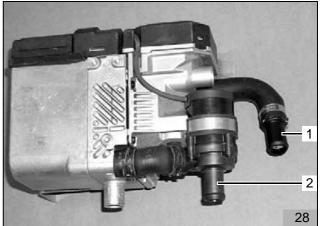
- Slide the 80mm long water hose (1) with the straight end onto the heater unit water outlet, align as shown in the figure and fasten with spring band clamp.



80

Section

- Insert the 20x20 (1) connecting pipe in the 80 mm long water hose (27/1) and secure with hose clamps.
- Replace the circulation pump cover with the enclosed cover (2) with axial water inlet.



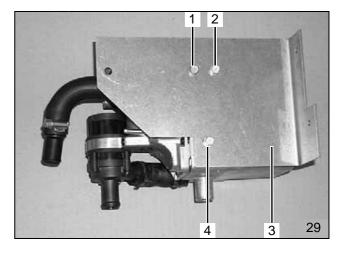
#### **WARNING:**

Only use the special EJOT PT screws included in the delivery to fasten the heater unit. (Tightening torque 10 Nm)

#### NOTE:

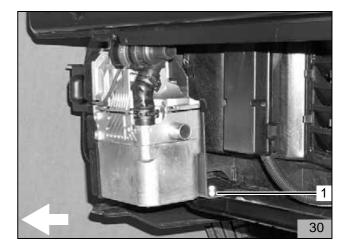
Insert two washers at position (4) between the heater unit and the bracket.

- Fasten the pre-assembled heater unit on the bracket (3) with Ejot screw bolts (2, 3, 4), also add two washers between the heater unit and the bracket at position (4) (tightening torque 10 Nm).



## Installing the heater unit

- Assemble the bracket with heater unit on the preassembled M6x20 bolt and the original vehicle bolt (31/2) as shown in figure 30 and figure 31.



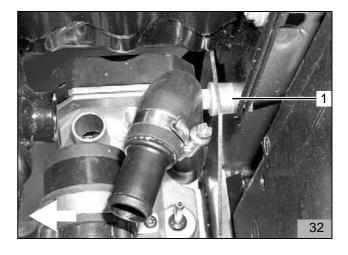
#### NOTE:

Insert a 10mm spacer washer between the bracket and the crossarm at position (31/2; 32/1).

- Fasten the heater unit bracket to position (1) with the original vehicle nut.
- Fasten the heater unit bracket to position (30/1) with the flanged nut as shown in figure 30.



- Fasten the heater unit bracket to position (1) with the original vehicle bolt and 10 mm spacer washer.



#### Connection to the water circuit.

#### NOTE:

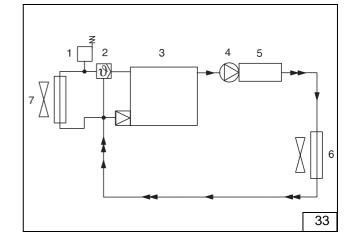
Tighten all hose clamps to 2.0 + 0.5 Nm. Any fuel running off should be collected using an appropriate container!

Install hoses so that they are kink-free!

The following sections describe the installation of the heater unit "inline" in the cooling water circulation of the vehicle.

#### Legend:

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



## Preparing the water hoses

# KFW 1.4 I gasoline and NFU 1.6 I gasoline with shift gears

 Cut the supplied water hose into two sections, as shown:

1 x 80 mm + 90° bend (31) (preassembled on the heater unit)

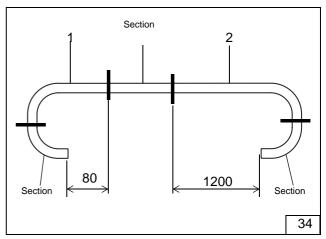
1 x 1,200 mm + 90 $^{\circ}$  bend (2) (from the 80mm long water hose (34/1) to the 380mm long water hose (35/2)).

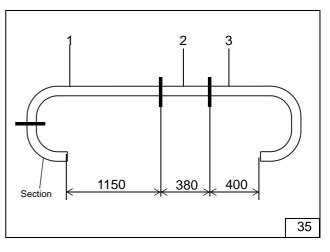
- Cut the water hose supplied in the kit into three sections, as shown:

1 x 1,150 mm + 90° bend (1) (from the heater unit water inlet to the 400mm long water hose (3)).

1 x 380 mm straight (2) (from the 1200 mm long water hose (34/2) to the original vehicle water hose / heat exchanger water inlet).

 $1 \times 400 \text{ mm} + 180^{\circ} \text{ bend (3)}$  (from the 1,150mm long water hose (1) to the original vehicle water hose / engine exhaust).





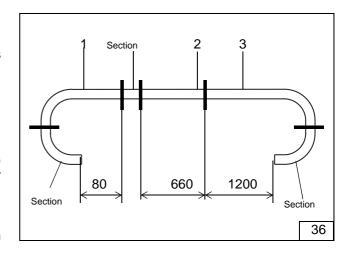
## NFU 1.6 I gasolinewith automatic drive

 Cut the supplied water hose into three sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

1 x 660 mm straight (2) (from the 1200 mm long water hose (3) to the original vehicle water hose / heat exchanger water inlet).

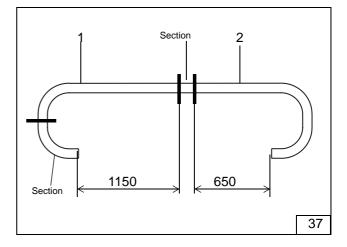
- 1 x 1,200 mm + 90° bend (3) (from the 80mm long water hose (1) to the 660 mm long water hose (2)).



- Cut the water hose supplied in the kit into two sections, as shown:

1 x 1,150 mm + 90 $^{\circ}$  bend (1) (from the heater unit water inlet to the 650mm long water hose (2)).

1 x 650 mm + 180° bend (2) (from the 1,150mm long water hose (1) to the original vehicle water hose / engine water outlet).



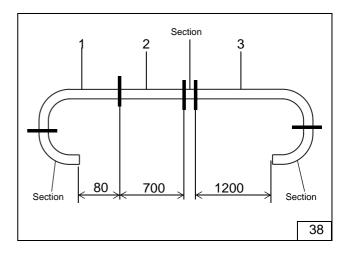
## RFN 2.0 I gasoline

 Cut the supplied water hose into two sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

1 x 700 mm straight (2) (from the 1200 mm long water hose (3) to the original vehicle water hose / heat exchanger water inlet).

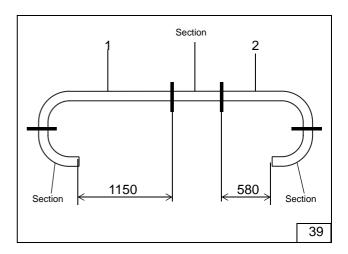
1 x 1,200 mm + 90 $^{\circ}$  bend (3) (from the 80mm long water hose (1) to the 700mm long water hose (2)).



- Cut the water hose supplied in the kit into three sections, as shown:

1 x 1,150 mm + 90 $^{\circ}$  bend (1) (from the heater unit water inlet to the 580mm long water hose (2)).

1 x 580 mm + 90 $^{\circ}$  bend (2) (from the 1,150mm long water hose (1) to the original vehicle water hose / engine exhaust).



#### 8 Hz 1.4 I diesel and 9 Hz 1.6 I diesel

 Cut the supplied water hose into two sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

1 x 1,200 mm + 90 $^{\circ}$  bend (2) (from the 80mm long water hose (1) to the 350mm long water hose (41/2)).

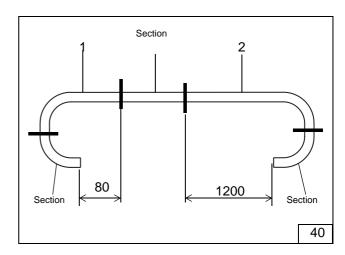
- Cut the water hose supplied in the kit into three sections, as shown:

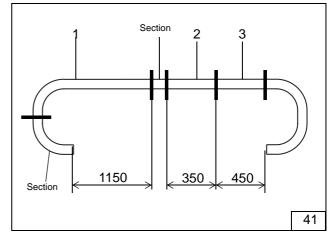
1 x 1,150 mm + 90° bend (1) (from the heater unit water inlet to the 450mm long water hose (3)).

1 x 350 mm straight (2) (from the 1200 mm long water hose (40/2) to the original vehicle water hose / heat exchanger water inlet).

1 x 450 mm straight (3) (from the 1,150mm long water hose (1) to the enclosed 180° bend ( $\emptyset$  = 18)).

1 x 180° bend enclosed (Ø 18) (from the 450mm long straight water hose (3) to the original vehicle water hose / engine exhaust).





## RHY 2.0 I diesel and RHS 2.0 FAP diesel

 Cut the supplied water hose into two sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

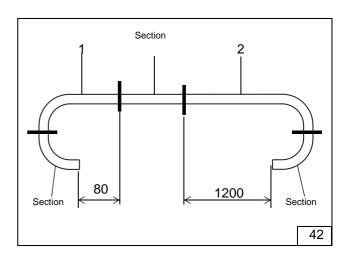
1 x 1,200 mm + 90° bend (2) (from the 80mm long water hose (1) to the 480mm long water hose (2)).

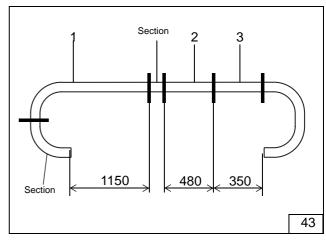
Cut the water hose supplied in the kit into three sections, as shown:

1 x 1,150 mm + 90 $^{\circ}$  bend (1) (from the heater unit water inlet to the 350mm long water hose (3)).

1 x 480 mm straight (2) (from the 1200 mm long water hose (42/2) to the original vehicle water hose / heat exchanger water inlet).

1 x 350 mm straight (3) (from the 1,150mm long water hose (1) to the original vehicle water hose / engine exhaust).





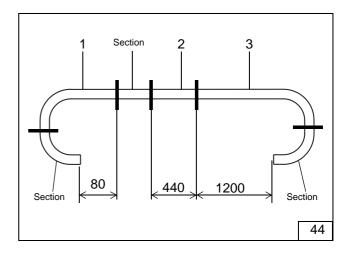
#### RHR 2.0 I HDI

 Cut the supplied water hose into three sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

1 x 1,200 mm + 90° bend (3) (from the 80mm long water hose (1) to the 440mm long water hose (2)).

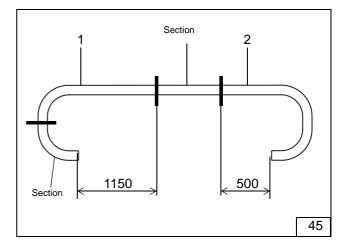
1 x 440 mm straight (2) (from the 1200 mm long water hose (3) to the original vehicle water hose / heat exchanger water inlet).



- Cut the water hose supplied in the kit into two sections, as shown:

1 x 1,150 mm + 90 $^{\circ}$  bend (1) (from the heater unit water inlet to the 500mm long water hose (2)).

1 x 500 mm + 180° bend (2) (from the 1,150mm long water hose (1) to the original vehicle water hose / engine exhaust).



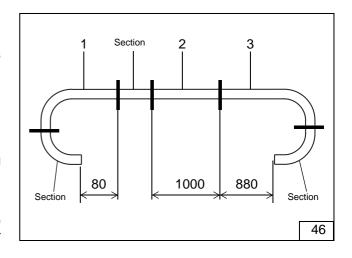
## RFK 2.0 I gasoline

 Cut the supplied water hose into three sections, as shown:

1 x 80 mm + 90° bend (1) (preassembled on the heater unit)

1 x 880 mm + 90° bend (3) (from the heater unit water inlet to the 920mm long water hose (47/1)).

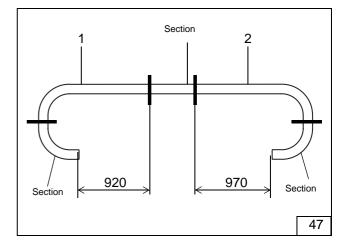
1 x 1,000 mm straight (2) (from the 970mm long water hose (47/2) to the original vehicle water hose / heat exchanger water inlet).



- Cut the water hose supplied in the kit into two sections, as shown:

1 x 920 mm + 90° bend (1) (from the 880 mm long water hose (46/3) to the original vehicle water hose / engine exhaust).

 $1 \times 970 \text{ mm} + 90^{\circ} \text{ bend (2)}$  (from the 80 mm long water hose (46/1) to the 1,000mm long water hose (46/2)).



#### Water connection

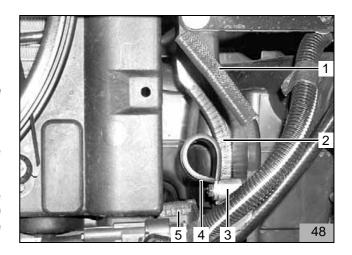
## All vehicles, except RFK 2.0l gasoline.

Running the hose from the heater unit in the engine compartment

#### NOTE:

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

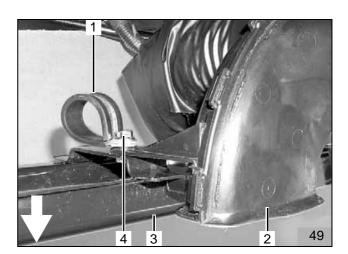
- Loosely pre-assemble the rubberized 34mm tube clamps (4) with the 15 mm spacer sleeve (3), M6x30 bolt, body washer and flanged nut on the hole to the left of the cooler as shown in the figure.
- Cut off three edge protection pieces (1,2,5) from the enclosed edge protection.
- Slide on and position the three edge protection pieces according to the figure.



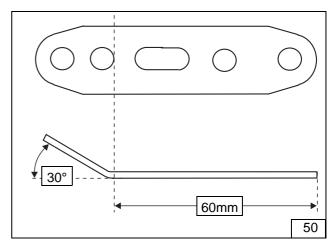
#### NOTE:

The air inlet channel (2) is not available in all engine versions.

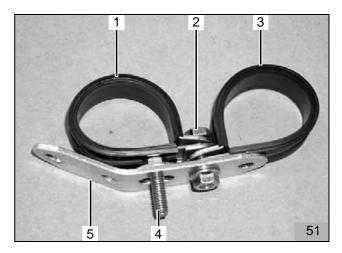
- Remove the fastening pin (4) if present.
- Loosely pre-assemble the rubberized 34mm tube clamps (1) according to the figure with the M6x20 bolt and M6 flanged nut together with the air inlet channel (2) onto the opening in the traverse (3) onto the opening in the traversent.



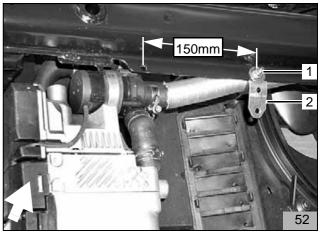
- Bend the enclosed fastening strip according to the figure.



- Insert the M6x20 screw (4) according to the figure with the body washer in the oblong hole on the bend fastening strap (5).
- Loosely pre-assemble the rubberized 34mm tube clamps (1,3) according to the figure with the M6x20 bolt and M6 flanged nut.



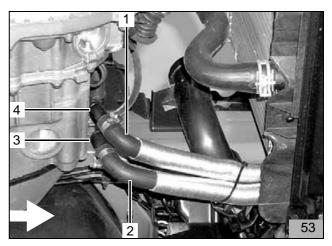
- Drill a Ø 6.5mm bore hole at position (1) in the crosspiece according to the figure.
- Insert the preassembled fastening strap (2) into the hole with the bolt (51/4) according to the figure and fasten to the cross-piece with the body washer and the flanged nut.
- Slide the 1,000 mm heat protection hose on the 1,200 mm long water hose.
- Slide the 1,000 mm heat protection hose on the 1,150mm long water hose.

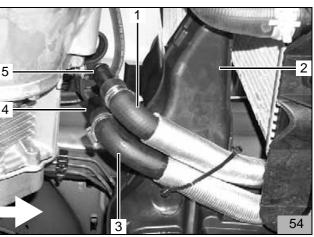


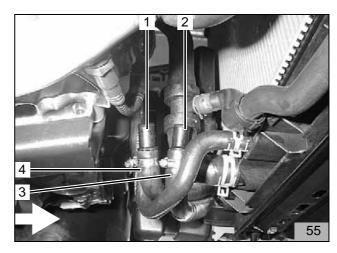
#### NOTE:

Figure 53 shows the vehicle without a resonator. Figure 54 shows the vehicle with a resonator (52/2). Figure 55 shows the vehicle with an automatic transmission.

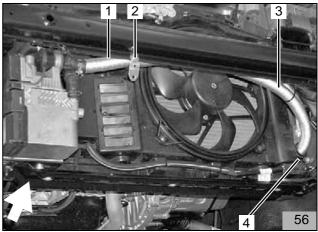
- Run the 1,150mm long water hose (53/2 or 54/3; 56/1,3 and 55/3) from the engine compartment through the right rubberized tube clamp (56/4) to the front as shown in the figures 53 to 58.
- Run the 1,200 mm long water hose (53/1 or 54/1; 56/3 and 55/4) from the engine compartment over the 1150 mm water hose to the front as shown in the figures 53 to 58.
- Align both 90° bends up as shown in figure 53, figure 54 or figure 55.
- Insert the 20x20 (53/3,4; 54/4,5; 55/1,2) connecting pipe in the 1,150mm long water hose and in the 1,200 mm long water hose and secure with hose clamps.



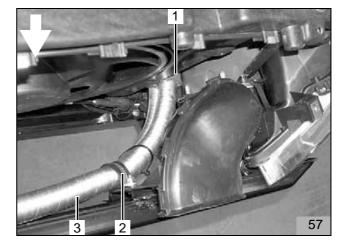




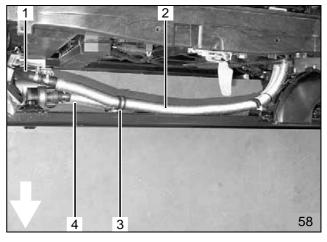
- Run the 1,150mm long water hose (56/1,3; 53/2 or 54/3 and 55/3) on the traverse to the right.
- Run the 1,150mm long water hose (1,3) through the lower rubberized tube clamp to position (2) as shown in the figure.



- Slide the red rubber profile without groove (1) on the 1,200mm long water hose (3) and position as shown in the figure.
- Run the 1,200mm long water hose (3) through the rubberized tube clamp to position (2) on the traverse as shown in the figure.
- Run the 1,200mm long water hose (3) through the upper rubberized tube clamp (58/3).



- Slide the 1150mm long water hose (4) onto the heater unit water inlet and fasten with hose clamp.
- Fasten the 1,200mm long water hose (2) on the connecting pipe in the pre-assembled 80mm long water hose (1) and secure with hose clamps

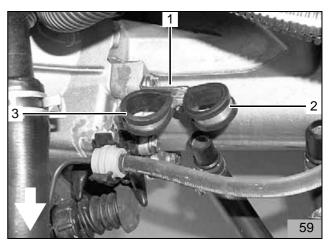


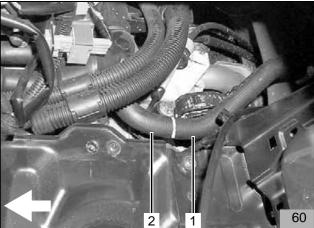
# KFW 1.4 I gasoline and NFU 1.6 I gasoline with shift gears

#### NOTE:

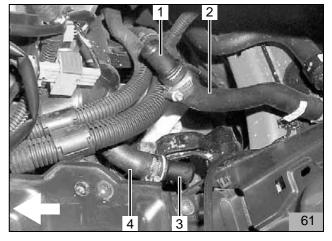
Position hose clamps so that no other hose can be damaged!

- Drill enclosed angle bracket (1) open to Ø 8.5mm on the short leg.
- Fasten the bracket (1) to the gear according to the figure with the enclosed screw.
- Loosely pre-assemble the two rubberized 29mm tube clamps (2.3) onto the bracket according to the figure with the M6x20 bolt and M6 flanged nut.
- Clamp the vehicle's own water hose (1, 2) from the engine water outlet to the heat exchanger water inlet with hose clamps.
- Separate the original vehicle water hose at the mark according to the figure.

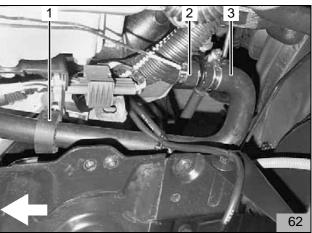




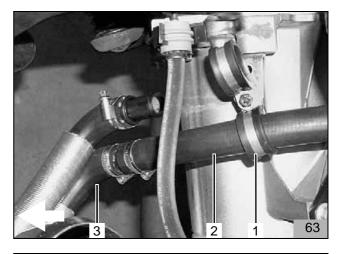
- Insert connecting pipes 17x20 (3) in original vehicle hose section (4) from the engine outlet and fasten with hose clamps.
- Insert connecting pipe 17x20 (1) in original vehicle hose section (2) to the heat exchanger and fasten with hose clamps.



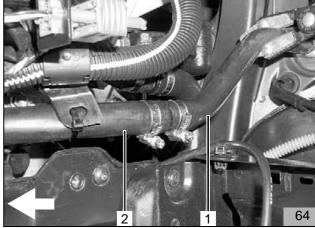
- Slide the 400mm long water hose (3) with 180° bend onto the original vehicle hose section (2) from the engine water outlet, align according to the figure and fasten with hose clamp.
- Slide the black rubber profile (1) on the 400mm long water hose (3).



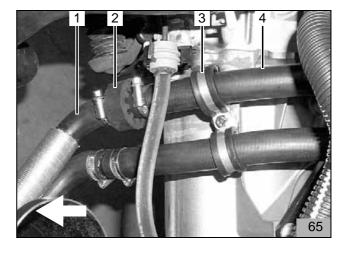
- Run the 400mm long water hoses (2) through the left rubberized tube clamp (1) as shown in the figure.
- Fasten the 400mm long water hose (2) on the connecting pipe in the 1150 mm long water hose (3) and secure with hose clamps



- Slide the 380mm long water hose (2) onto the original vehicle hose section (1) to the heat exchanger water inlet according to the figure and fasten with hose clamp.



- Run the 380mm long water hoses (4) through the right rubberized tube clamp (3) as shown in the figure.
- Slide the 380mm long water hose (4) onto the 1,200mm long water hose section (1) to the heater unit water inlet, also slide on the black rubber profile (2) and fasten both water hoses with hose clamp.
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Secure all water hoses with cable ties.



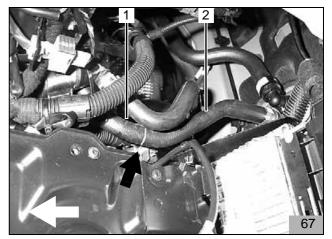
### NFU 1.6 I gasoline with automatic drive

#### NOTE:

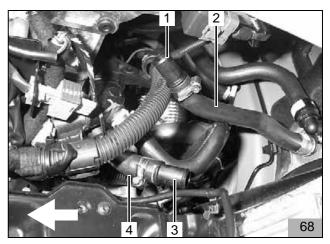
Insert two washers between the original vehicle hose mounting and the bracket (1) to compensate for the beads.

- Secure the enclosed bracket (1) to the engine block with the original vehicle bolt (2), insert two washers between the hose bracket and the bracket.

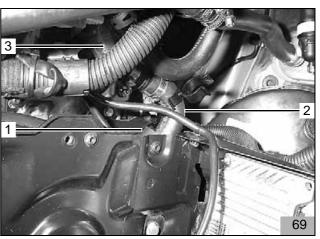
- 2
- Clamp the vehicle's own water hose (1, 2) from the engine water outlet to the heat exchanger water inlet with hose clamps.
- Separate the original vehicle water hose (1,2) as shown in the figure (arrow).



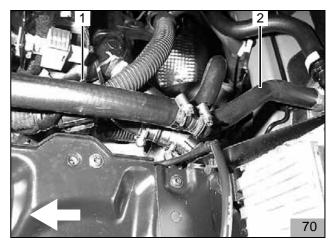
- Insert connecting pipes 17x20 (3) in original vehicle hose section (4) from the engine outlet and fasten with hose clamps.
- Insert connecting pipe 17x20 (1) in original vehicle hose section (2) to the heat exchanger and fasten with hose clamps.



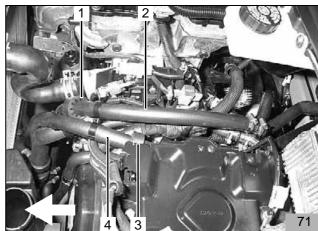
- Slide the 650 mm long water hose (2) with 180° bend onto the connecting pipe (68/3) from the original vehicle hose section for the (3) engine water outlet, align as shown in the figure and fasten with hose clamp.
- Slide the black rubber profile (1) onto the 650 mm water hose (2) and position under the battery mounting as shown in the figure.



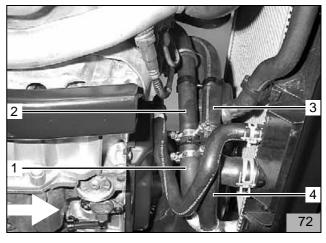
- Fasten the 660mm long water hose (1) on the connecting pipe (68/1) to the original vehicle hose section (2) and secure with hose clamps.



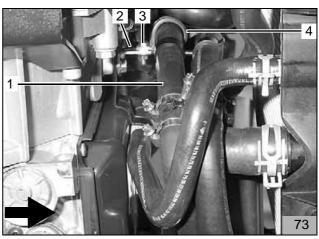
- Slide the black rubber profile (3) onto the water hose
   (4) and position according to the figure.
- Slide the black rubber profile (1) onto the water hose (2) and position according to the figure.
- Run the both water hoses (2,4) in the engine compartment as shown in the figure.



- Connect the water hose (2) to the heater unit water inlet with the water hose (1) from the heater unit water outlet and secure with a hose clamp.
- Connect the water hose (3) from the engine water outlet with the water hose (4) from the heater unit water inlet and secure with a hose clamp.



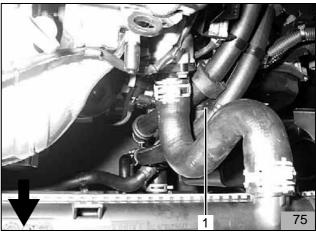
- Fasten the water hose (1) for the heat exchangerheater unit water outlet to the bracket (2) with the 29 mm rubberised tube clamp (4), M6x20 bolt (3) and flanged nut as shown in the figure.



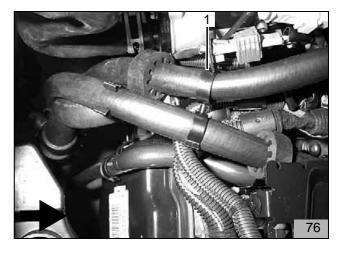
- Insert the enclosed spacer bracket (1) according to the figure.



- Insert the enclosed spacer bracket (1) according to the figure.



- Insert the enclosed spacer bracket (1) according to the figure.
- Position and align all rubberised profiles as shown in the figures 69, 75 and 76.
- Align the water hoses as shown in the figures 69 to 76 and fasten with cable clips.

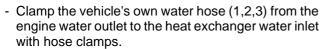


## RFN 2.0 I gasoline

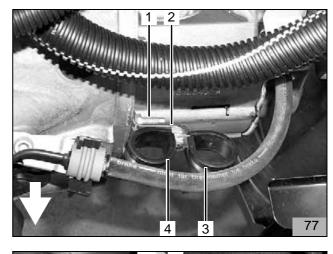
#### NOTE:

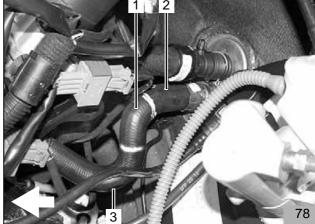
Position hose clamps so that no other hose can be damaged!

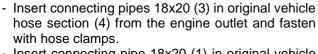
- Fasten the enclosed bracket (2) to the existing stay bolts (1) on the gear according toe figure.
- Loosely pre-assemble the two rubberized 29mm tube clamps (3,4) onto the bracket according to the figure with the M6x20 bolt and M6 flanged nut.



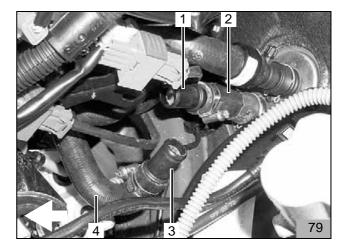
- Separate the original vehicle water hose at the mark according to the figure.
- Dispose of the separated hose section (1).



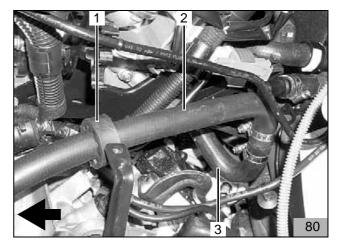




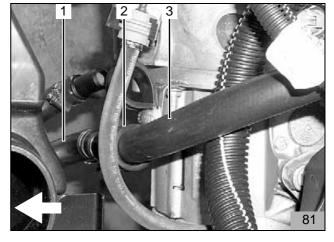
- Insert connecting pipe 18x20 (1) in original vehicle hose section (2) to the heat exchanger and fasten with hose clamps.



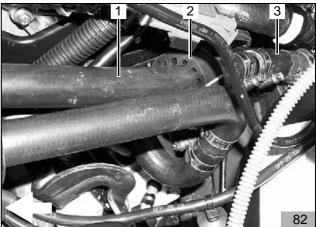
- Slide the 580mm long water hose (2) with 90° bend onto the original vehicle hose section (3) from the engine water outlet, align according to the figure and fasten with hose clamp.
- Slide the black rubber profile (1) on the 580mm long water hose (2).



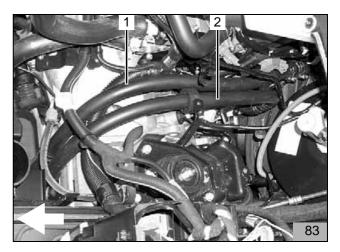
- Run the 580mm long water hoses (83/2) as shown in figure 83.
- Run the 580mm long water hoses (3) through the left rubberized tube clamp (2) as shown in the figure.
- Fasten the 580mm long water hose (3) on the connecting pipe in the 1150 mm long water hose (1) and secure with hose clamps



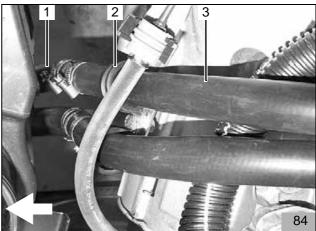
- Slide the 700mm long water hose (1) onto the original vehicle hose section (3) to the heat exchanger water inlet according to the figure and fasten with hose clamp.
- Slide the black rubber profile (2) on the 700mm long water hose (2).



- Run the 700 mm water hose (1) in the engine compartment as shown in the figure.



- Run the 700mm long water hoses (3) through the right rubberized tube clamp (2) as shown in the figure.
- Slide the 700mm long water hose (3) onto the 1,200mm long water hose (1) from the heater unit water outlet and fasten with hose clamp.
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Secure all water hoses with cable ties.

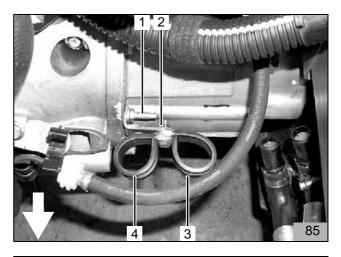


#### 8 Hz 1.4 I diesel and 9 Hz 1.6 I diesel

#### NOTE:

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

- Fasten the enclosed bracket (2) to the existing stay bolts (1) on the gear according toe figure.
- Loosely pre-assemble the two rubberized 29mm tube clamps (3,4) onto the bracket according to the figure with the M6x20 bolt and M6 flanged nut.



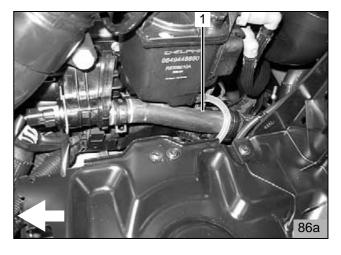
#### 8 Hz 1.4 I Diesel

- Clamp the vehicle's own water hose (1) with hose clamps.
- Pull the original vehicle water hose from the engine water outlet to the heat exchanger water inlet off of the engine outlet.



#### 9 Hz 1.6 I Diesel

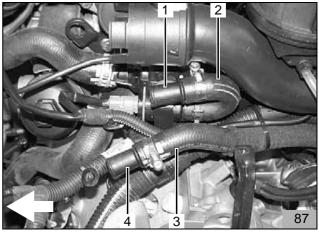
- Clamp the vehicle's own water hose (1) with hose clamps.
- Pull the original vehicle water hose from the engine water outlet to the heat exchanger water inlet off of the engine outlet.



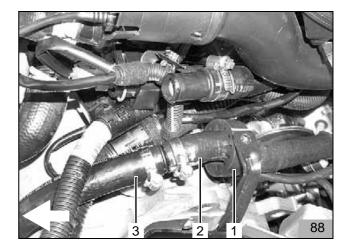
#### 8 Hz 1.4 I diesel and 9 Hz 1.6 I diesel

The water connection is shown on 8 Hz.

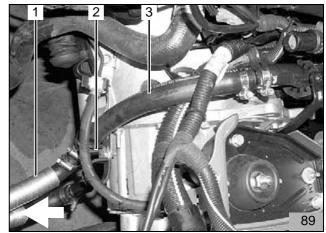
- Fit the enclosed  $180^{\circ}$  bend (2) ( $\emptyset = 18$ mm) on the engine outlet, align as shown in the figure and fasten with the original hose clamp.
- Insert connecting pipe 18x20 (1) in 180° bend (2) and fasten with hose clamps.
- Insert connecting pipe 18x20 (4) in original vehicle hose section (3) to the heat exchanger water inlet and fasten with hose clamps.



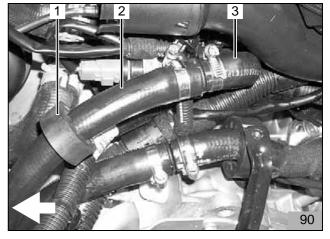
- Slide the black rubber profile (1) on the original vehicle hose section (2).
- Slide the 350mm long water hose (3) onto the connecting pipe in the original vehicle hose section (2) from the heat exchanger water inlet, align according to the figure and fasten with hose clamp.



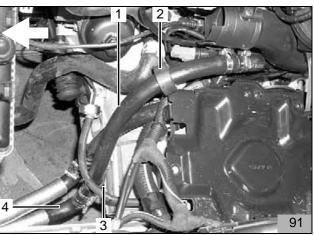
- Run the 350mm long water hoses (3) through the right rubberized tube clamp (2) as shown in the figure.
- Fasten the 350mm long water hose (3) on the connecting pipe in the 1,200mm long water hose (1) and secure with hose clamps



- Slide the 450mm long water hose (2) onto the 180° bend (3) align as shown in the figure and fasten with hose clamp.
- Slide the black rubber profile (1) on the 450mm long water hose (2).



- Run the 450mm long water hoses (1) through the left rubberized tube clamp (3) as shown in the figure.
- Slide the 450mm long water hose (1) onto the 1150mm long water hose section (4) to the heater unit water inlet and fasten with hose clamp.
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Install the battery support and align the rubber profile (2) as shown in the illustration.
- Secure all water hoses with cable ties.

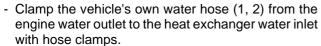


### RHY 2.0 I diesel and RHS 2.0 FAP diesel

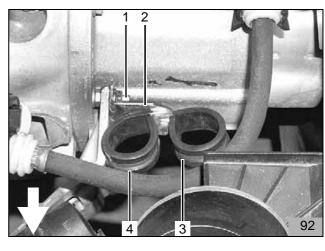
#### NOTE:

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

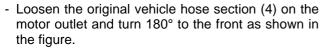
- Fasten the enclosed bracket (2) to the existing stay bolts (1) on the gear according toe figure.
- Loosely pre-assemble the two rubberized 29mm tube clamps (3,4) onto the bracket according to the figure with the M6x20 bolt and M6 flanged nut.



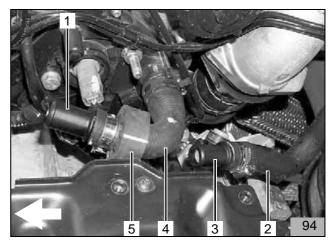
- Separate the original vehicle water hose as shown in the figure.

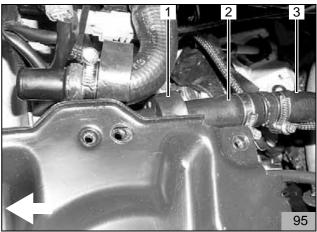




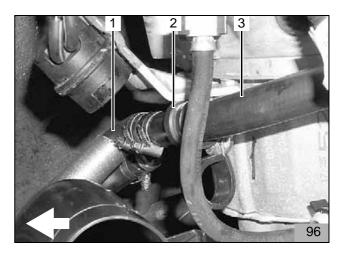


- Refasten the original vehicle hose section (4) to the motor outlet with original vehicle hose clamps.
- Slide the black rubber profile (5) on the original vehicle hose section (4).
- Insert connecting pipes 18x20 (1) in original vehicle hose section (4) from the engine outlet and fasten with hose clamps.
- Insert connecting pipe 18x20 (3) in original vehicle hose section (2) to the heat exchanger and fasten with hose clamps.
- Slide the 480mm long water hose (3) onto the connecting pipe in the original vehicle hose section (3) to the heat exchanger water inlet, align according to the figure and fasten with hose clamp.
- Slide the black rubber profile (1) on the 480mm long water hose (2).

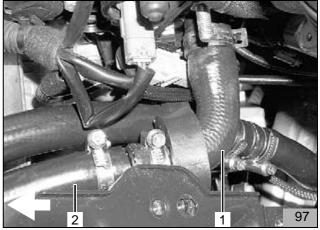




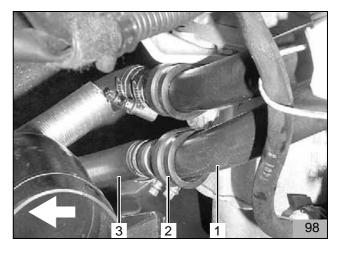
- Run the 480mm long water hoses (3) through the right rubberized tube clamp (2) as shown in the figure.
- Fasten the 480mm long water hose (3) on the connecting pipe in the 1,200mm long water hose (1) and secure with hose clamps



- Slide the 350mm long water hose (2) onto the original vehicle hose section (1) from the motor outlet, align as shown in the figure and fasten with hose clamp.



- Run the 350mm long water hoses (1) through the left rubberized tube clamp (2) as shown in the figure.
- Slide the 350mm long water hose (1) onto the 1150mm long water hose section (3) to the heater unit water inlet and fasten with hose clamp.
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Secure all water hoses with cable ties.

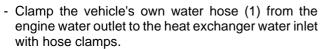


### RHR 2.0 I HDI

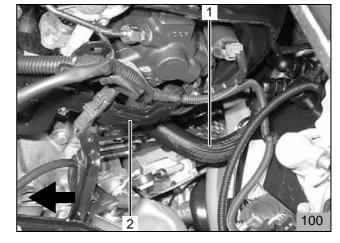
#### NOTE:

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

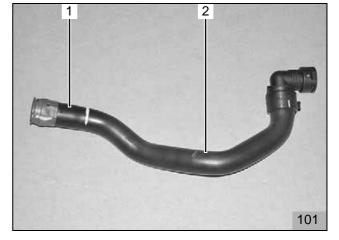
- Fasten the enclosed bracket (2) to the existing bolt (1) on the gear according toe figure.
- Loosely pre-assemble the two rubberized 29mm tube clamps (3,4) onto the bracket according to the figure with the M6x20 bolt and M6 flanged nut.



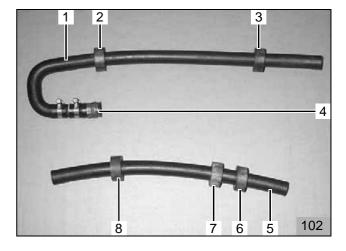
- Remove the water hose (1) and the protective hose.
- Remove the mounting (2)



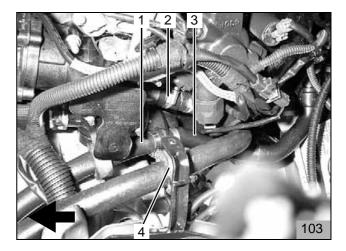
- Separate the original vehicle water hose (1,2) at the mark according to the figure.
- Reinstall the original vehicle hose piece (2) on the heat exchanger water inlet.



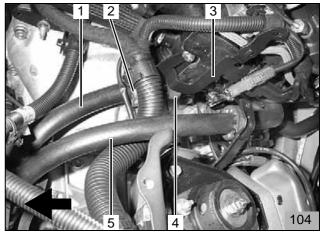
- Connect the hose section (101/1, 102/4) from the motor outlet and the 500mm water hose (102/1, 45/2) as shown with the connecting pipe 20x20mm and hose clamps.
- Slide the black rubber profile (2,3) onto the water hose (1) according to the figure.
- Slide the black rubber profile (6,7,8) onto the 440 mm water hose (102/5, 44/2) according to the figure.



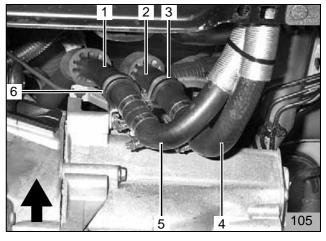
- Slide the preassembled water hose (2) on the engine water outlet and place as shown in the figure.
- Position the black rubber profile (4) as shown in the figure and fasten with cable clips.
- Fasten the 440mm long water hose (102/5, 103/1) and the original vehicle water hose (3) to the Heat exchanger water inlet with the 20/20 connecting pipe hose clamps.



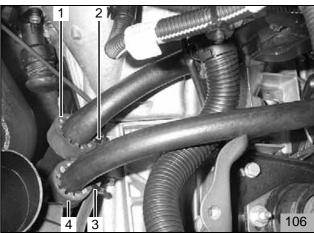
- Run the 440mm long water hose (1) and the preassembled water hose (5) before the gears to the bottom.
- Refit the mounting (3)
- Position the black rubber profile (2.4) as shown in the figure.



- Run the 440mm long water hose (104/1; 105/1) through the right rubberized tube clamp (6).
- Connect the 440mm long water hose (1) and 1,200mm long water hose (105/5, 44/3) with the 20/20 connecting pipe and hose clamps.
- Run the water hose (104/5; 105/2) through the left rubberized tube clamp (3).
- Connect the 440mm long water hose (2) and 1,150mm long water hose (105/4, 45/1) with the 20/20 connecting pipe and hose clamps.



- Position the black rubber profile (1.4) to the original vehicle line as shown in the figure.
- Fasten the black rubber profile (1,4) with cable clips (2,3).
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Secure all water hoses with cable ties.

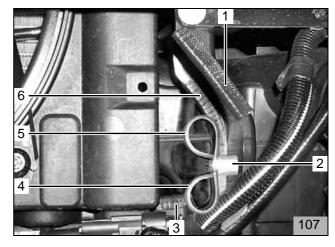


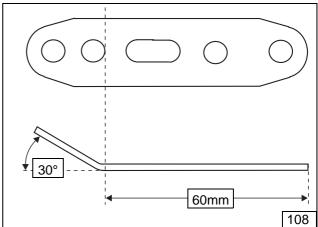
## RFK 2.0 I gasoline

#### NOTE:

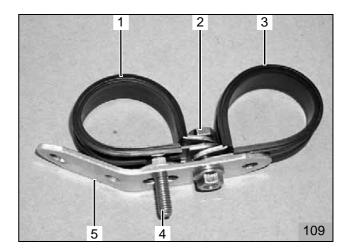
Position hose clamps so that no other hose can be damaged!

- Loosely pre-assemble the rubberized 29mm tube clamps (4.5) with the 15 mm spacer sleeve (2), M6x30 bolt, body washer and flanged nut on the hole to the left of the cooler as shown in the figure.
- Cut off three edge protection pieces (1,3,6) from the enclosed edge protection.
- Slide on and position the three edge protection pieces according to the figure.
- Bend the enclosed fastening strip according to the figure.

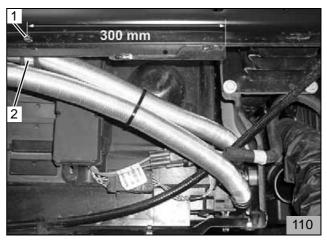




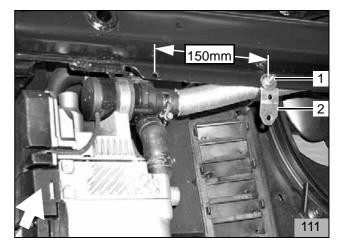
- Insert the M6x20 screw (4) according to the figure with the body washer in the oblong hole on the bend fastening strap (5).
- Loosely pre-assemble the rubberized 34mm tube clamps (1,3) according to the figure with the M6x20 bolt and M6 flanged nut.



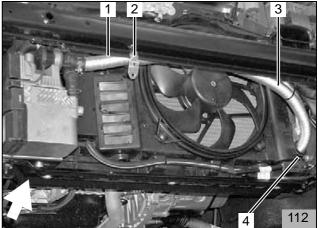
- Drill a Ø 6.5mm bore hole at position (1) in the crosspiece according to the figure.
- Fasten the rubberised tube clamp (2) with the M6x20 bolt and the flanged nut to the cross traverse.

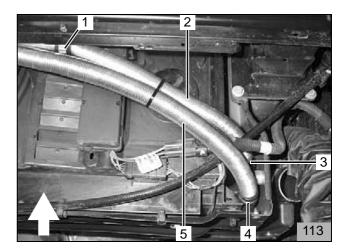


- Drill a Ø 6.5mm bore hole at position (1) in the crosspiece according to the figure.
- Insert the preassembled fastening strap (2) into the hole with the bolt (109/4) according to the figure and fasten to the cross-piece with the body washer and the flanged nut.
- Slide the 1,000 mm heat protection hose on the 880mm long water hose.
- Slide the 1,000 mm heat protection hose on the 970mm long water hose.

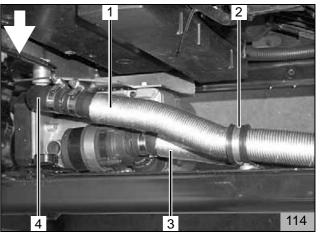


- Run the 880mm long water hose (112/1,3; 46/3 or 113/5) on the heater unit water inlet.
- Run the 880mm long water hose (1,3) through the lower tube clamp at position (2) to the left.
- Run the 880mm long water hose (1,3 or 112/5) through the lower tube clamp at position (113/4) in the engine compartment.

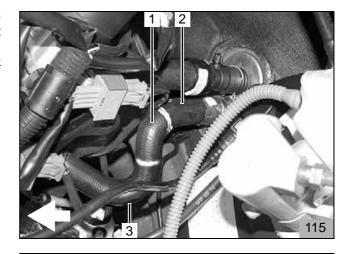




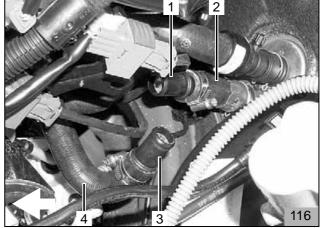
- Fasten the 880mm long water hose (3) with hose clamps onto the heater unit water inlet.
- Slide the 970mm long water hose (114/1; 47/2) onto the water hose (4).
- Run the 970mm long water hose (1) through the upper tube clamp at position (2) to the left.
- Run the 970mm long water hose (114/1 or 113/2) through the tube clamp (113/1) and tube clamp (113/3) in the engine compartment.
- Fasten the 970mm long water hose (1) with hose clamps onto the water hose (4).



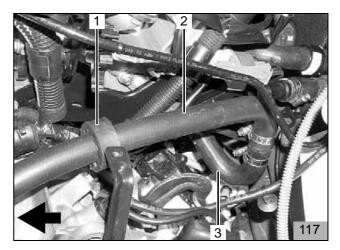
- Clamp the vehicle's own water hose (1,2,3) from the engine water outlet to the heat exchanger water inlet with hose clamps.
- Separate the original vehicle water hose at the mark according to the figure.
- Dispose of the separated hose section (1).



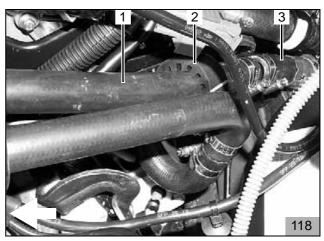
- Insert connecting pipes 18x20 (3) in original vehicle hose section (4) from the engine outlet and fasten with hose clamps.
- Insert connecting pipe 18x20 (1) in original vehicle hose section (2) to the heat exchanger and fasten with hose clamps.



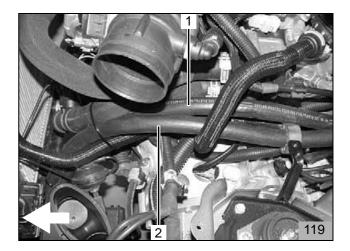
- Slide the 920mm long water hose (2) with 90° bend onto the original vehicle hose section (3) from the engine water outlet, align according to the figure and fasten with hose clamp.
- Slide the black rubber profile (1) on the 920mm long water hose (2) and position according to the figure.



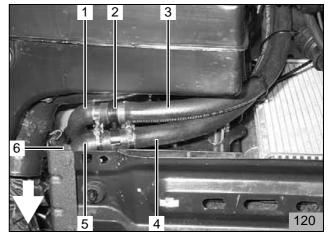
- Slide the 1,000mm long water hose (1) onto the original vehicle hose section (3) to the heat exchanger water inlet according to the figure and fasten with hose clamp.
- Slide the black rubber profile (2) on the 1,000mm long water hose (1) and position according to the figure.



- Run the 1,000mm water hose (1) and 920 mm long water hose (2) in the engine compartment as shown in the figure.



- Connect the 920mm long water hose (4) and 880 mm long water hose (5) with the 20/20 connecting pipe and hose clamps.
- Connect the 1,000mm long water hose (3) and 970mm long water hose (1) with the 20/20 connecting pipe and hose clamps.
- Cut down the enclosed cloth fuel hose (6) to approx. 35mm.
- Slide the cloth fuel hose (6) on the original vehicle bolt.
- Insert the spacer bracket (2) according to the figure.
- Align all water hoses.
- Tighten all rubberised tube clamp.
- Align all rubber profiles.
- Secure all water hoses with cable ties.



### **Fuel connection**

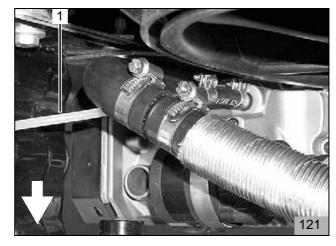
#### **WARNING:**

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

Catch any fuel running off with an appropriate container.

Install the fuel line so that it is protected from impact by rocks! Fit the fuel line and cable harness with edge protectors around sharp edges.

- Fasten the 5,000 mm long Mecanyl fuel line (1) to the heater unit with hose section and Ø 10mm hose clamps as shown in the figure.
- Run the Mecanyl fuel pipe (1) on the wheel house to the engine compartment rear bulk.
- Route the Mecanyl fuel line together with the metering pump cable harness along the original vehicle fuel lines on the engine compartment rear bulk down and from there on the underbody to the fuel tank.



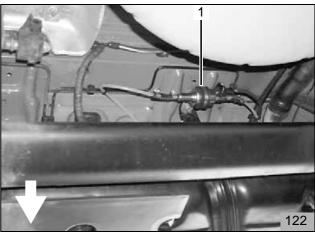
## **Metering pump**

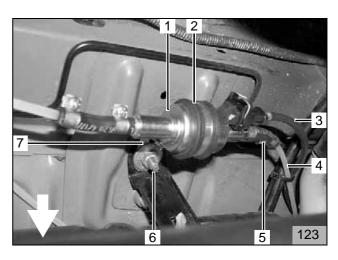
#### NOTE:

Note the installation position of the metering pump, see the "Installation Instructions"!

The metering pump (1) is installed behind the vehicle fuel tank as shown in the figure.

- Fasten the bracket (7) to the stay bolts (6) on the tank mount with the oblong hole as shown in the figure.
- Fasten the metering pump (1) with silent block, rubber tube clamp (2) and flanged nuts to the short end of the bracket (7).
- Run the cable harness for the metering pump (3) and the Mecanyl fuel pipe (4) from the heater unit along the fuel tank to the metering pump.
- Cut the metering pump cable harness (3) on the metering pump (1) into sections, put on the protective rubber sleeve, crimp on the flat connector, complete the connector housing, and put the cable harness on the metering pump.
- Cut the Mecanyl fuel line (4) (from the heater unit) and connect with the hose section (5) and the 10 mm hose clips to the pressure side of the metering pump (side with the connector).
- Secure fuel line and cable harness with cable ties.

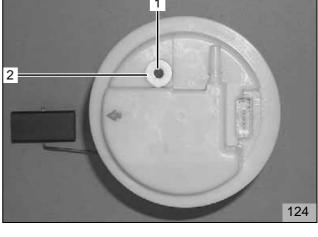


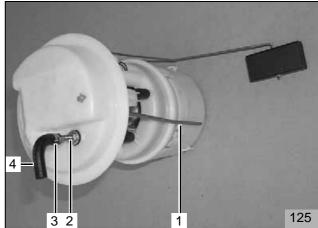


## Fuel take-off for gasoline engine

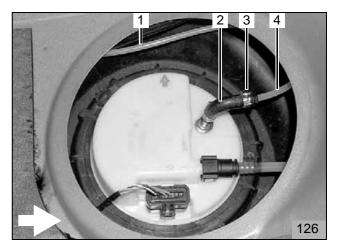
The fuel is extracted with the fuel extractor from the tank mounting.

- Remove tank mounting according to manufacturer's instructions
- Transfer the hole image (1) with the enclosed body washer (2) to the tank mounting according to the figure.
- Drill Ø 6.0mm bore hole (1) in the tank mounting according to the figure.
- Shape and cut the tank extracting device according to the enclosed template.
- Fasten the tank extracting device (1,2) in the tank mounting according to the enclosed installation instructions.
- Slide on the enclosed 90° moulded hose (4) (inner diameter increasing from 3.5 mm to 4.5 mm) with the Ø3.5 mm end on the tank extracting device (2).
- Fasten the 90° moulded hose with the enclosed 9 mm universal clamp (3) according to the figure.
- Install the tank mounting again according to manufacturer's instructions.

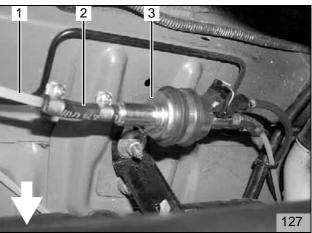




- Insert the 1000 mm long Mecanyl fuel line (1,4) in the 90° moulded hose (2) and fasten with universal clamp (3) according to the figure.



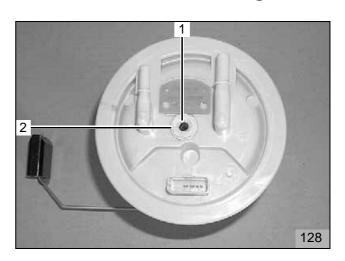
- Run the Mecanyl fuel pipe (126/1,4; 127/1) to the metering pump (3) and cut into sections.
- Fasten the Mecanyl fuel line (1) to the suction side of the metering pump (3) with a hose section (2) and hose clamps.

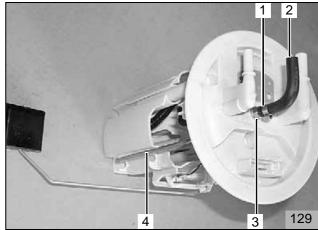


## Fuel take-off for diesel engine

The fuel is extracted with the fuel extractor from the tank mounting.

- Remove tank mounting according to manufacturer's instructions
- Transfer the hole image (1) with the enclosed body washer (2) to the tank mounting according to the figure.
- Drill Ø 6.0mm bore hole (1) in the tank mounting according to the figure.
- Shape and cut the tank extracting device according to the enclosed template.
- Fasten the tank extracting device (3.4) in the tank mounting according to the enclosed installation instructions.
- Slide on the enclosed 90° moulded hose (2) (inner diameter increasing from 3.5 mm to 4.5 mm) with the Ø3.5 mm end on the tank extracting device (3).
- Fasten the 90° moulded hose with the enclosed 9 mm universal clamp (1) according to the figure.
- Install the tank mounting again according to manufacturer's instructions.

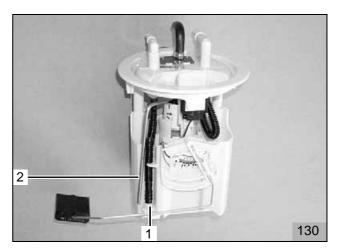




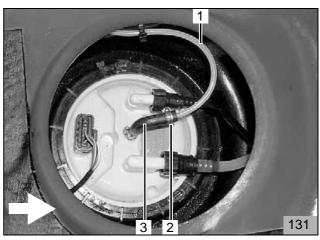
## NOTE:

Figure 130 shows the HDi FAP tank mounting.

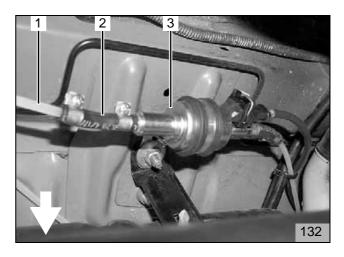
- Run the tank extracting device (2) along the fuel return line (1) as shown in the figure.



- Insert the 1000 mm long Mecanyl fuel line (1) in the 90° moulded hose (3) and fasten with 10 mm universal clamp (2) according to the figure.



- Run the Mecanyl fuel pipe (131/1; 132/1) to the metering pump (3) and cut into sections.
- Fasten the Mecanyl fuel line (1) to the suction side of the metering pump (3) with a hose section (2) and hose clamps.

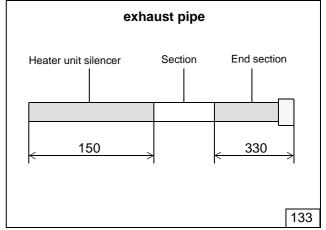


## **Exhaust System**

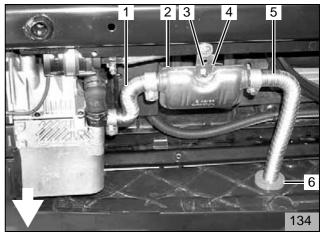
#### **WARNING:**

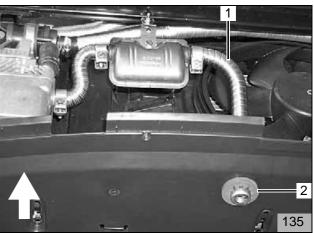
When assembling the exhaust system, ensure sufficient space to the hoses and lines components.

- Shorten the exhaust pipe and exhaust pipe end piece as shown in the figure.



- Tighten the exhaust silencer (2) to the fastening strap (4) with the M6x20 bolt (3) and flanged nut.
- Put the 150 mm long exhaust pipe (1) on the heater unit, tighten with the hose clamp and shape as shown in the figure.
- Slide the 150 mm long exhaust pipe (1) on the exhaust silencer (2) and fasten with the hose clamp.
- Put the exhaust pipe end piece (5) on the exhaust silencer (2) and tighten with the hose clamp
- Drill a Ø 42mm bore hole at position (6) in the panelling according to the figure.
- Align and shape the exhaust pipe end piece (1) as shown in Figure 2 and insert this in the panelling with the red rubber profile (2) with groove.



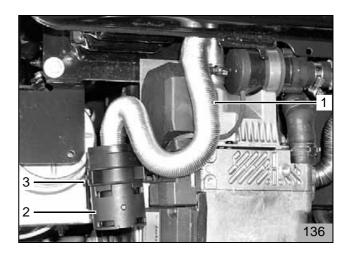


## Combustion air intake pipe

#### NOTE:

Note the installation position of the air intake silencer, see the Installation Instructions.

- Put the combustion air intake line (1) with the cut open side on the heater unit combustion air supports and fasten with the hose clamp.
- Turn the combustion air intake silencer (2) in to the stop in the combustion air intake line.
- Run the combustion air line according to the figure.
- Punch out perforated hole in the heater unit cover.
- Insert retaining clip (3) in the bore hole.
- Insert the combustion air intake silencer (2) in the retaining clip (3) as shown in the figure.



#### Final work

- Install and connect the vehicle battery
- 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).
- Start engine, bleed water circuit according to the repair instructions, fill up with coolant.
- Switch on the Webasto heating, see "Operating and Maintenance Instructions"

#### NOTE:

Fill out the installation confirmation on the back side of the EG type approval and give this to the customer.

## Operating instructions for the end customer

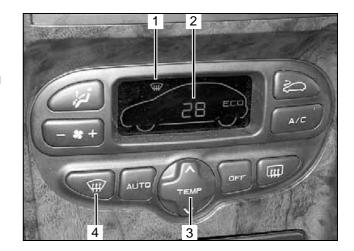
### NOTE:

Please separate and add to the vehicle operating instructions!

## For vehicles with automatic air conditioning

Before parking the vehicle, please make the following settings:

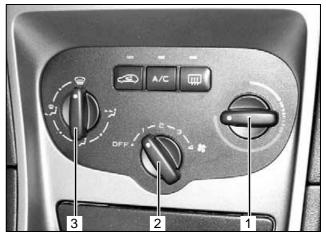
- Set the temperature (2,3) to max/warm.
- Set the air outlet (1.4) to the windshield.



# For vehicles without automatic air conditioning

Before parking the vehicle, please make the following settings:

- Set the temperature (1) to max/warm.
- Set the air outlet (3) to the windshield.
- Set blower (2) to level 1 (possibly level 2).





Webasto AG Post box 80 - D-82132 Stockdorf - Hotline 0 18 05 / 93 22 78 Hotfax (0395) 55 92-353 - http://www.webasto.de

PEUGOT 307 Benzin



PEUGOT 307 Diesel

