

# Water Heater

## Thermo Top Evo Parking Heater



# Installation Documentation Ford Tourneo Connect

## Validity

Manufacturer	Model	Type	EG-BE-No. / ABE
Ford	Tourneo Connect	DV 6	e1 * 2007 / 46 * 0272 * ...
Ford	Tourneo Connect	PJ2	e1 * 2001 / 116 * 0207 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm <sup>3</sup>	Engine code
1.6 TDCI	Diesel	SG	55	1560	UBGA
1.6 TDCI	Diesel	SG	70	1560	TZGA / TZGB
1.6 Duratorq CR TC	Diesel	SG	85	1560	DV6Q

SG = manual transmission

**From Model Year 2014**

**Left-hand drive vehicle**

**Verified equipment variants:** Without air-conditioning / Manual air-conditioning  
Front fog light

**Not verified:** Start-Stop  
Automatic air-conditioning

**Total installation time:** approx. 8.5 hours

# Ford Tourneo Connect

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## Necessary Components

- Basic delivery scope *Thermo Top Evo* in accordance with price list
- Installation kit Ford Tourneo Connect 2014 Diesel: **1322641A**
- Heater control in accordance with price list and upon consultation with end customer
- To be ordered additionally in case of optional installation of MultiControl CAR or push button: wiring harness extension: **1319724A**
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

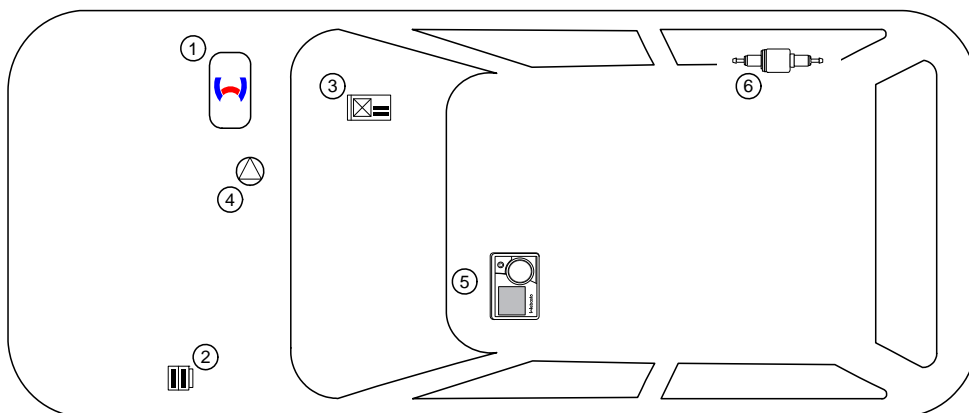
## Installation instructions:

- Arrange for the vehicle to be delivered with the tank only about ¼ full!
- The installation location of the push button in the case of Telestart or Thermo Call should be confirmed with the end customer.
- Depending on the available space and manufacturer's instructions, we recommend the use of a vehicle battery with more electrical capacity.

## Installation Overview

### Legend:

1. Heater
2. Engine compartment fuse holder
3. Passenger compartment relay and fuse holder
4. Circulating pump
5. MultiControl CAR
6. Metering pump



## Information on Total Installation Time

The total installation time includes the time needed for mounting and demounting of the vehicle-specific components, the heater specific installation time and all other times required for the system integration and initial start-up of the heater.

The total installation time may vary for vehicle equipment other than provided.

## Information on Operating and Installation Instructions

### 1 Important Information (not complete)

#### 1.1 Installation and Repair



The improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide, leading to serious injury or death.



To install and repair Webasto heating and cooling systems you need to have completed a special company training course and have the appropriate technical documentation, special tools and special equipment.



Installation and repair may ONLY be carried out by persons trained and certified in a Webasto training course. NEVER try to install or repair Webasto heating or cooling systems if you have not completed a Webasto training course, you do not have the necessary technical skills and you do not have the technical documentation, tools and equipment available to ensure that you can complete the installation and repair work properly.

Only use genuine Webasto parts. See the Webasto air and water heaters accessories catalogue for this purpose.

#### 1.2 Operation

To ensure safe operation, we recommend having the heater checked every two years by an authorised Webasto dealer, especially when used over a long period and/or under extreme environmental conditions.

Do not operate the heater in closed rooms due to the danger of poisoning and suffocation.

Always switch off the heater before refuelling.

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 228).

The heater may not be cleaned with a high-pressure cleaner.

#### 1.3 Please note

ALWAYS follow all Webasto installation and operating instructions and observe all warnings.

To become familiar with and understand all functions and properties of the heater, the operating instructions must be read carefully and observed at all times.

For proper, safe installation and repair work, the installation instructions with all warnings and safety information must be carefully read and observed at all times. Please always contact a workshop authorised by Webasto for all installation and repair work.

#### Important

**Webasto shall assume no liability for defects, damage and injuries resulting from a failure to observe the installation, repair and operating instructions of the information contained in them.**

**This liability exclusion particularly applies to improper installations and repairs, installations and repairs by untrained persons or in the case of a failure to use genuine spare parts.**

**The liability due to culpable disregard to life, limb or health and due to damage or injuries caused by a wilful or reckless breach of duty remain unaffected, as does the obligatory product liability.**

**Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. Connectors on electronic components must audibly snap into place during assembly.**

**Sharp edges should be fitted with rub protection. Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).**

**Observe the instructions and guidelines of the respective vehicle manufacturer for demounting and mounting vehicle specific components!**

**The initial startup is to be executed with the Webasto Thermo Test Diagnosis.**

**When installing a programmable control module (e.g. a PWM Gateway), the corresponding settings must be checked or adjusted.**

### 2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 04 5627

#### Note

The regulations of these guidelines are binding in the scope of the Directive 70/156/EEC and/or 2007/46/EC (for new vehicle models from 29/04/2009) and should also be observed in countries in which there are no special regulations.

#### Important

Failure to follow the installation instructions will result in the invalidation of the type approval for the heater and therefore invalidation of the general **homologation of the vehicle**.

#### Note

The heater is licensed in accordance with paragraph 19, section 3, No. 2b of the StVZO (German Road Traffic Licensing Authority).

### 2.1 Excerpt from ECE regulation 122 (heating system) paragraph 5 for the installation of the heater

Beginning of excerpt.

#### ANNEX VII

#### REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

##### 1. GENERAL REQUIREMENTS

1.7.1. A clearly visible tell-tale in the operator's field of view shall inform when the combustion heater is switched on or off.

##### 2. VEHICLE INSTALLATION REQUIREMENTS

###### 2.1. Scope

2.1.1. Subject to paragraph 2.1.2. combustion heaters shall be installed according to the requirements of this Annex.

2.1.2. Vehicles of category O having liquid fuel heaters are deemed to comply with the requirements of this Annex.

###### 2.2. Positioning of heater

2.2.1. Body sections and any other components in the vicinity of the heater must be protected from excessive heat and the possibility of fuel or oil contamination.

2.2.2. The combustion heater shall not constitute a risk of fire, even in the case of overheating. This requirement shall be deemed to be fulfilled if the installation ensures an adequate distance to all parts and suitable ventilation, by the use of fire resistant materials or by the use of heat shields.

2.2.3. In the case of M2 and M3 vehicles, the heater must not be positioned in the passenger compartment. However, an installation in an effectively sealed envelope which also complies with the conditions in paragraph 2.2.2 may be used.

2.2.4. The label referred to in paragraph 1.4 or a duplicate, must be positioned so that it can be easily read when the heater is installed in the vehicle.

2.2.5. Every reasonable precaution should be taken in positioning the heater to minimise the risk of injury and damage to personal property.

###### 2.3. Fuel supply

2.3.1. The fuel filler must not be situated in the passenger compartment and must be provided with an effective cap to prevent fuel spillage.

2.3.2. In the case of liquid fuel heaters, where a supply separate to that of the vehicle is provided, the type of fuel and its filler point must be clearly labelled.

2.3.3. A notice, indicating that the heater must be shut down before refuelling, must be affixed to the fuelling point. In addition a suitable instruction must be included in the manufacturer's operating manual.

###### 2.4. Exhaust system

2.4.1. The exhaust outlet must be located so as to prevent emissions from entering the vehicle through ventilators, heated air inlets or opening windows.

###### 2.5. Combustion air inlet

2.5.1. The air for the combustion chamber of the heater must not be drawn from the passenger compartment of the vehicle.

2.5.2. The air inlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

###### 2.6. Heating air inlet

2.6.1. The heating air supply may be fresh or recirculated air and must be drawn from a clean area not likely to be contaminated by exhaust fumes emitted either by the propulsion engine, the combustion heater or any other vehicle source.

2.6.2. The inlet duct must be protected by mesh or other suitable means.

###### 2.7. Heating air outlet

2.7.1. Any ducting used to route the hot air through the vehicle must be so positioned or protected that no injury or damage could be caused if it were to be touched.

2.7.2. The air outlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

End of excerpt.

In multilingual versions the German language is binding.

# Ford Tourneo Connect

## Information on Validity

This installation documentation applies to Ford Tourneo Connect Diesel vehicles - for validity, see page 1 - from model year 2014 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 this installation documentation.

Vehicle and engine types, equipment variants and specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

## Technical Information

### Special Tools

- Hose clamp pliers for self-clamping hose clamps
- Hose clamp pliers for Clic hose clamps of type W
- Automatic wire stripper 0.2 - 6mm<sup>2</sup>
- Crimping pliers for cable lug / tab connector 0.5 - 6mm<sup>2</sup>
- Torque wrench for 2.0 - 10 Nm
- Hose clamping pliers
- Metric thread-setter kit
- Webasto Thermo Test diagnosis with current software

### Dimensions

- All dimensions are in mm

### Tightening torque values

- Tightening torque values of 5x13 heater bolts and 5x11 heater stud bolts = 8Nm.
- Tightening torque values of 5x15 retaining plate of water connection piece bolts = 7Nm.
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art- technology.

## Explanatory Notes on Document

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

Special features are highlighted using the following symbols:

**Mechanical system**



**Specific risk of injury or fatal accidents**



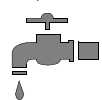
**Electrical system**



**Specific risk due to electrical voltage**



**Coolant circuit**



**Specific risk of damage to components**



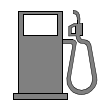
**Combustion air**



**Specific risk of fire or explosion**



**Fuel**



**Reference to general installation instructions of the Webasto components or to the manufacturer's vehicle-specific documents**



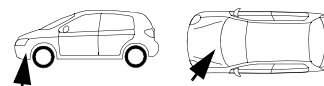
**Reference to a special technical feature**



**Exhaust gas**



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



**Software**



**Tightening torque according to the manufacturer's vehicle-specific documents**



# Ford Tourneo Connect

## Preliminary Work

### Vehicle

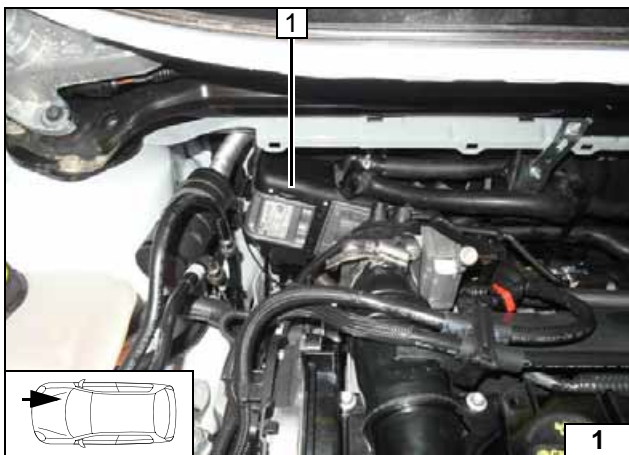
- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect and remove the battery.
- Remove the engine cover.
- Remove the windscreen wiper.
- Remove the upper cover of the coolant reservoir.
- Remove the cover of the coolant reservoir for the engine compartment.
- Drain the coolant according to the manufacturer's instructions.
- Remove the engine underdrive protection.
- Remove the footwell trim on the front passenger's side.
- Remove the glove compartment.

The following work should only be performed during the corresponding installation sequence:

- Detach the heat protection trim of the exhaust system in the area of the tank.
- Remove the exhaust pipe.
- Lower the fuel tank according to the manufacturer's instructions.

### Heater

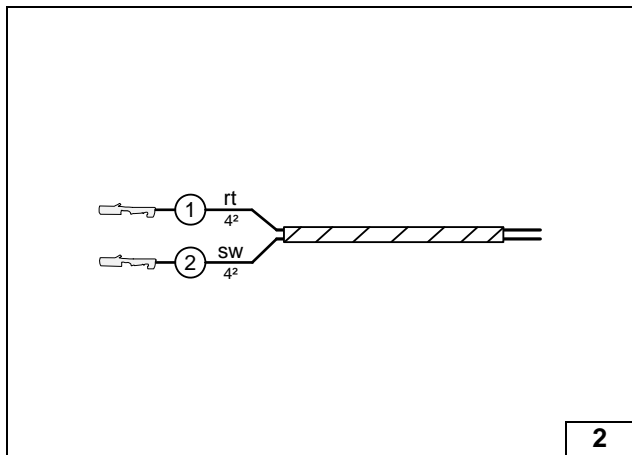
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) at the appropriate place in the engine compartment.



### Heater Installation Location

1 Heater

Installation location



### Preparing Electrical System

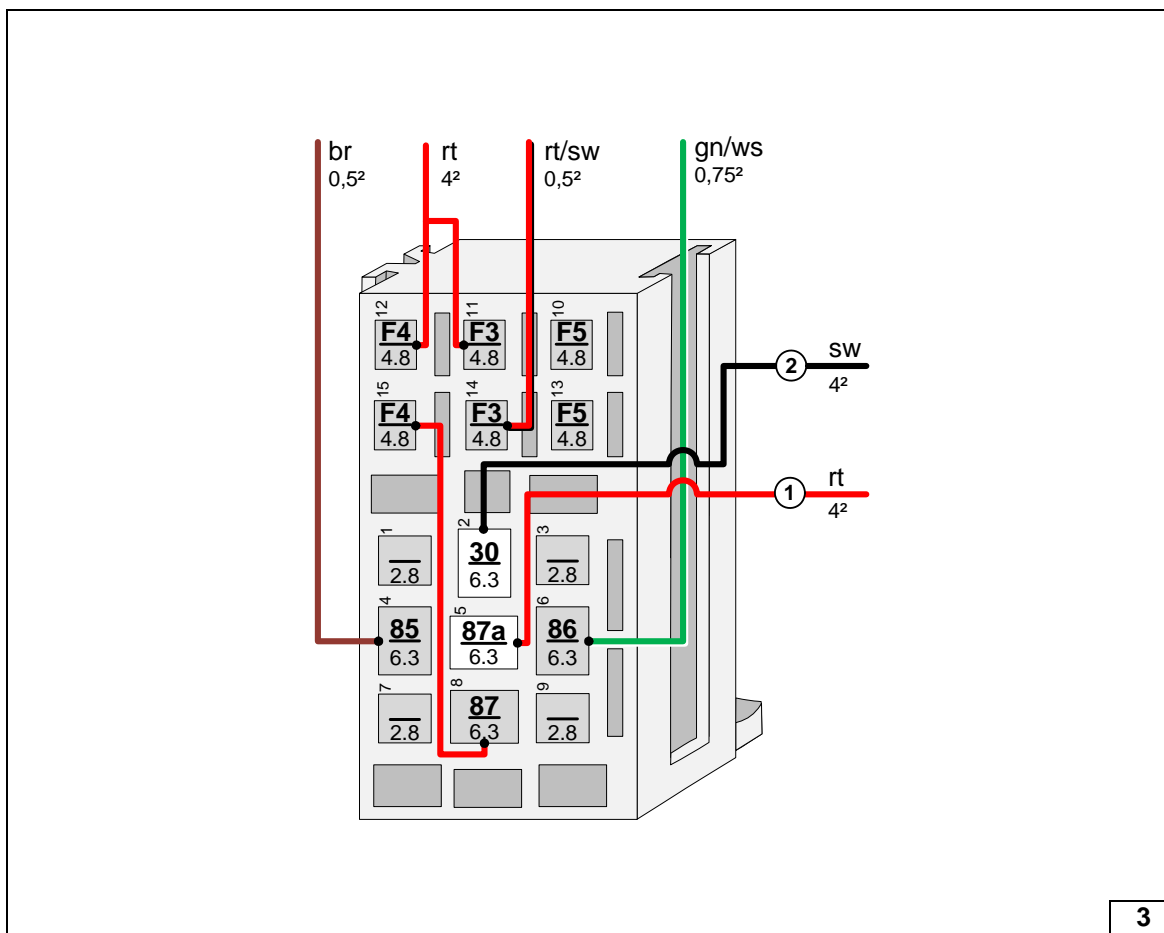
Wire sections retain their numbering in the entire document.

Produce all following electrical connections as shown in wiring diagram.

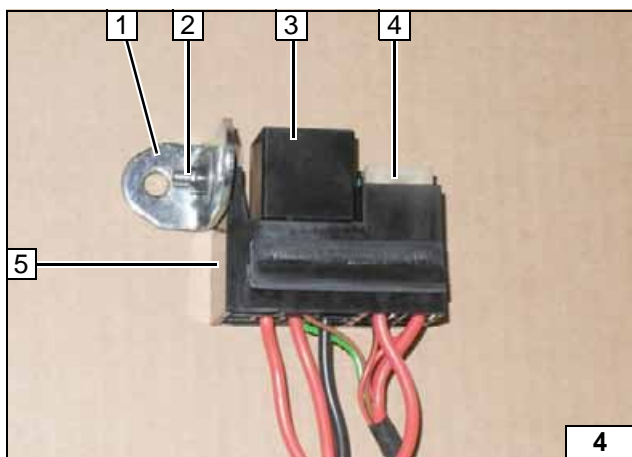
- ① Red (rt) wire of fan wiring harness
- ② Black (sw) wire of fan wiring harness



### Assigning wires



### Connecting wires to relay and fuse holder of passenger compartment



Insert K1 relay **3** after installation of angle bracket **1**.

- 2** M5x16 bolt, large diameter washer [2x], self-locking nut
- 4** 25A fuse F4
- 5** Passenger compartment relay and fuse holder



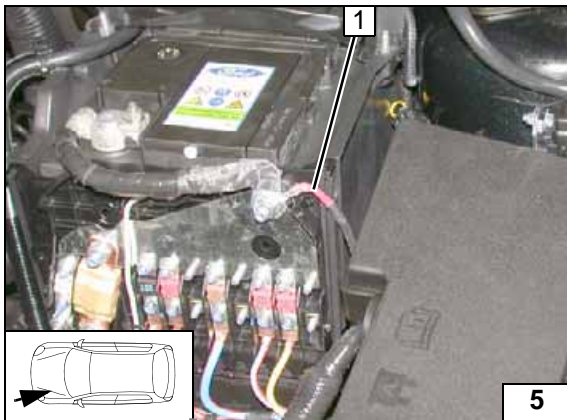
### Preparing relay and fuse holder of passenger compartment



Electrical System

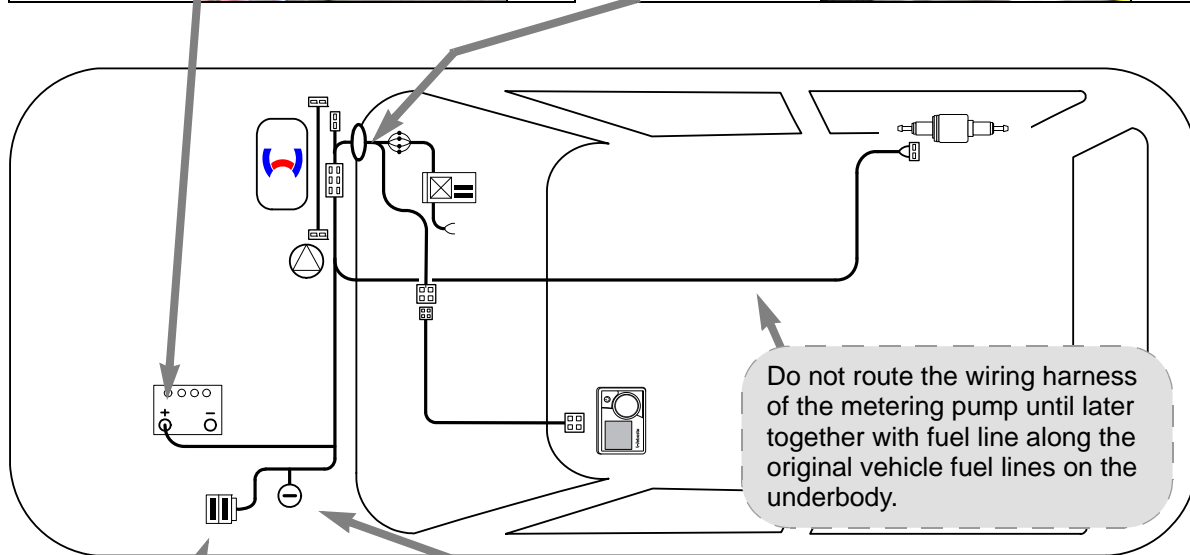
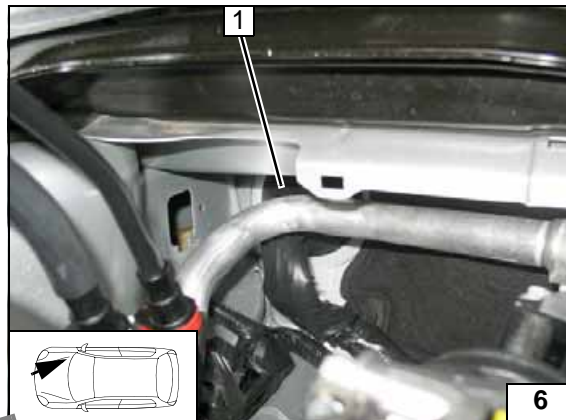
Positive wire

- 1 Positive wire on positive battery terminal

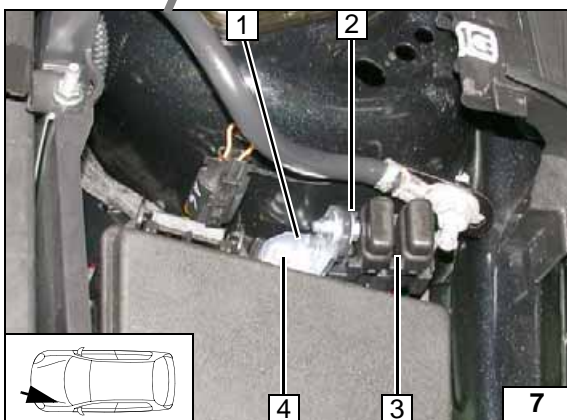


Wiring harness pass through

- 1 Protective rubber plug

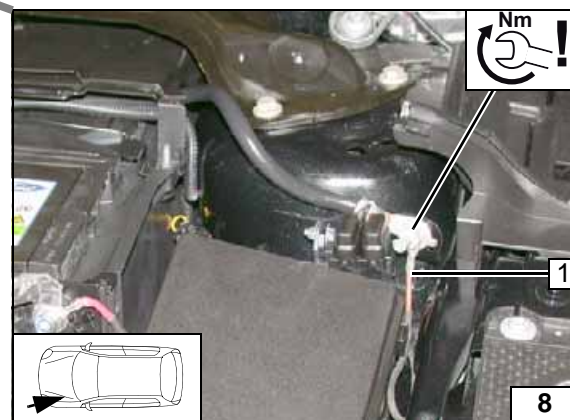


Wiring harness routing diagram



Fuse holder of engine compartment

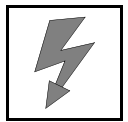
- 1 Angle bracket
- 2 M5x16 bolt, large diameter washer [2x], retaining plate of fuse holder, self-locking nut
- 3 Fuses F1-2
- 4 Original vehicle bolt



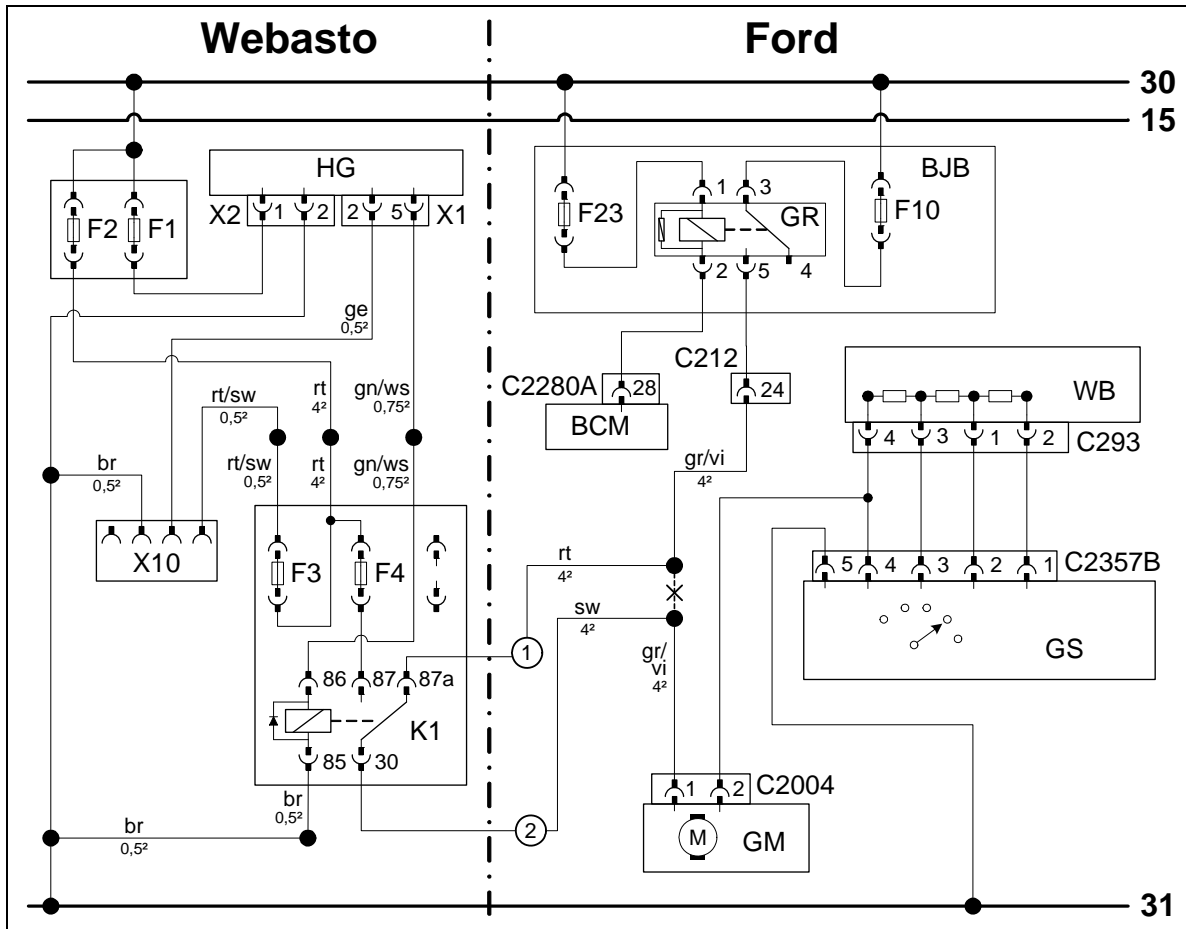
Earth wire

- 1 Earth wire, 8 mm dia. cable lug at original vehicle earth support point





Fan Controller

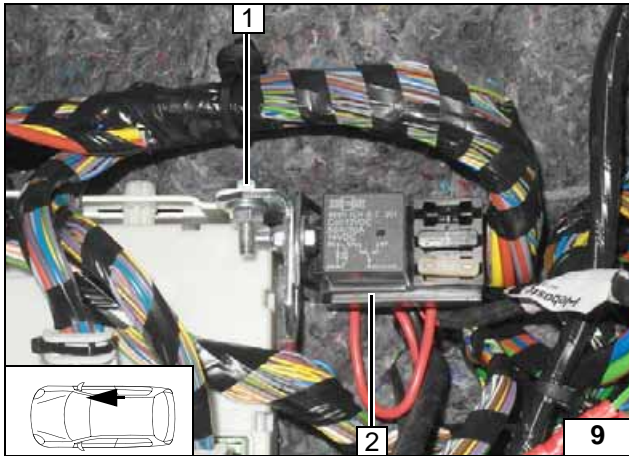


Wiring diagram

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	BJB	Battery junction box	rt	red
X1	6-pin heater connector	F10	40A fuse	sw	black
X2	2-pin heater connector	F23	5A fuse	ge	yellow
F1	20A fuse	GR	Fan relay	gn	green
F2	30A fuse	C212	Intermediate connector	vi	violet
X10	4-pin connector of heater control	WB	Resistor group	ws	white
F3	1A fuse	C293	Connector WB	br	brown
F4	25A fuse	BCM	A/C control unit	gr	grey
K1	Fan relay	C2280A	Connector BCM		
		GS	Fan switch		
		C2357B	Connector of GS		
		GM	Fan motor	X	Cutting point
		C2004	GM connector	Wiring colours may vary.	

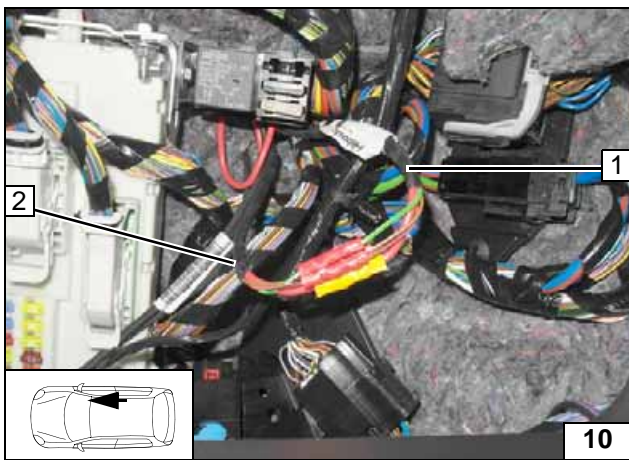
Legend





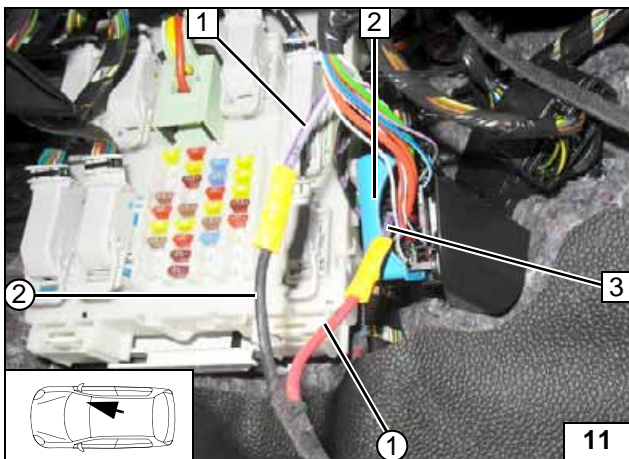
- 1 M6x20 bolt, flanged nut, existing hole
- 2 Premounted passenger compartment relay and fuse holder

Installing relay and fuse holder of passenger compartment



- 1 Wiring harness of passenger compartment relay and fuse holder
- 2 Wiring harness of heater

Connecting wiring harnesses using same colour wires

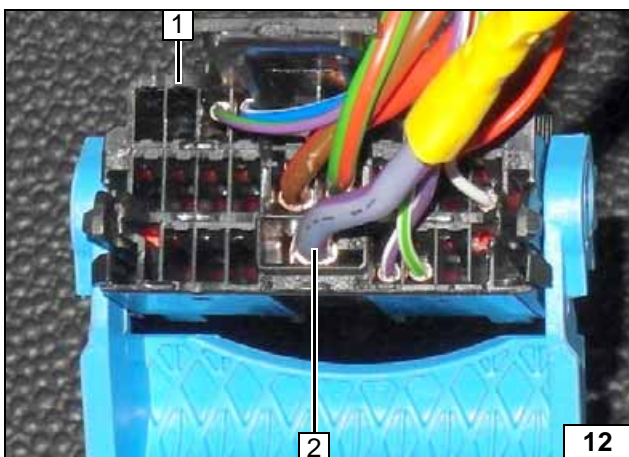


Connection to intermediate connector C212 before the fan motor (see following image).

- 1 Grey/violet (gr/vi) wire of fan motor
- 3 Grey/violet (gr/vi) wire of intermediate connector C212
- ① Red (rt) wire of K1/87a
- ② Black (sw) wire of K1/30

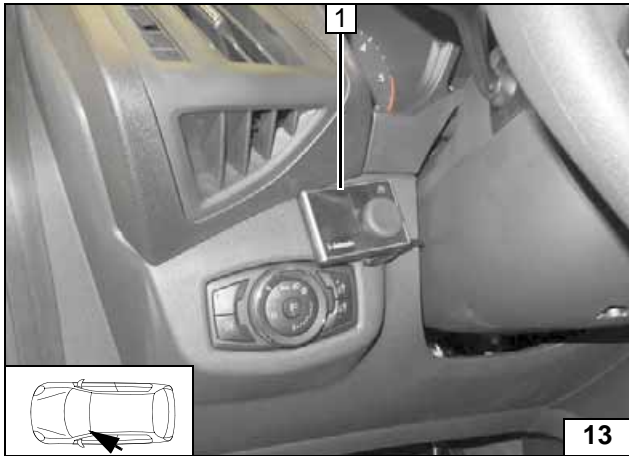


Connecting fan motor



- 1 Intermediate connector C212 disconnected
- 2 Socket of grey/violet (gr/vi) wire

Intermediate connector C212



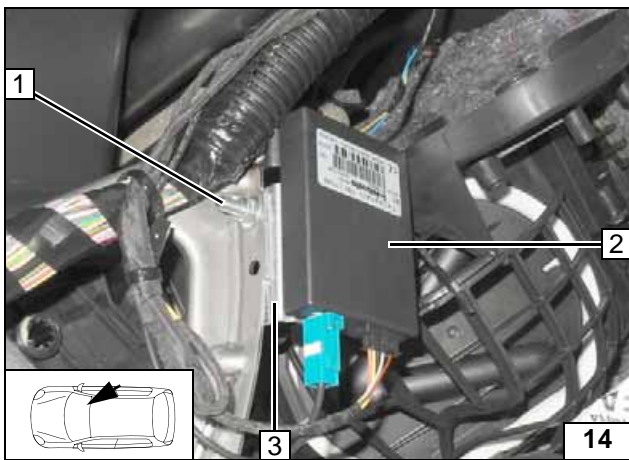
### MultiControl CAR

Use wiring harness extension!

- 1 MultiControl CAR



Installing  
MultiControl  
CAR

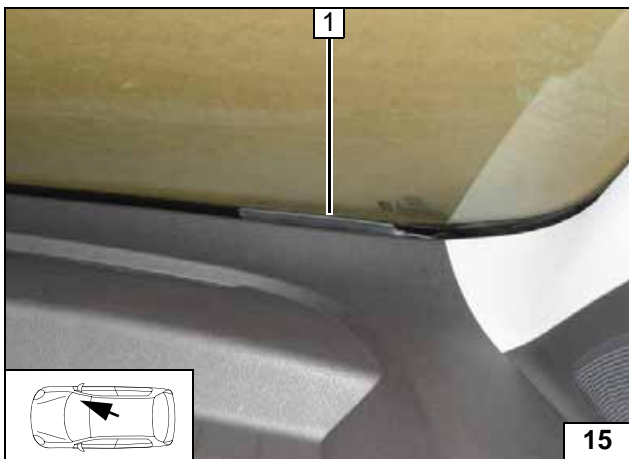


### Remote Option (Telestart)

- 1 M6x20 bolt, flanged nut, existing hole
- 2 Receiver
- 3 Receiver bracket (bend by 90° as shown)

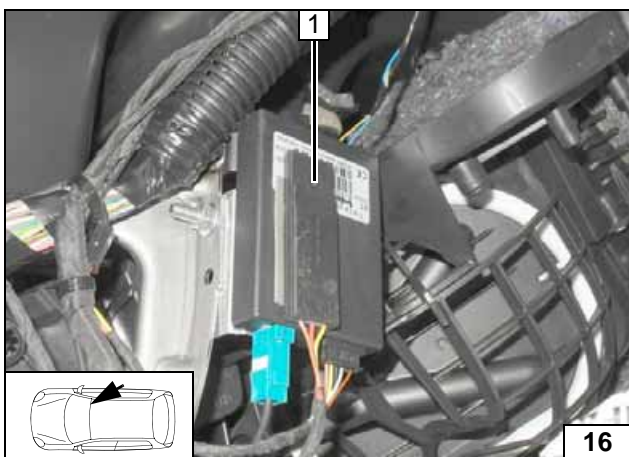


Mounting  
receiver



- 1 Antenna

Mounting  
antenna

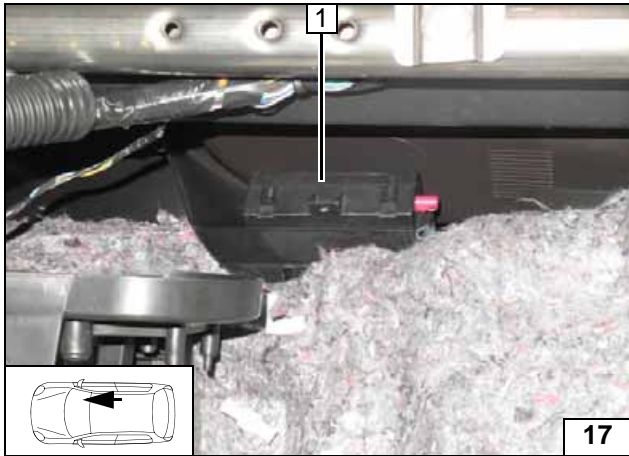
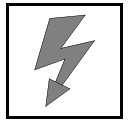


### Temperature sensor T100 HTM

Fasten temperature sensor 1 with adhesive tape.



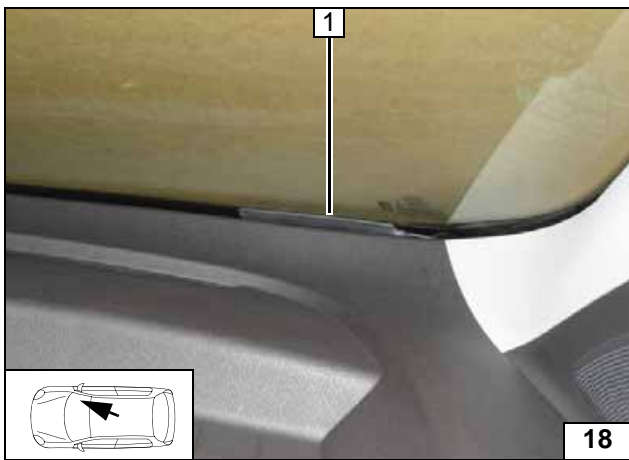
Mounting  
temperature  
sensor



### Thermo Call Option

Fasten receiver 1 with adhesive tape.

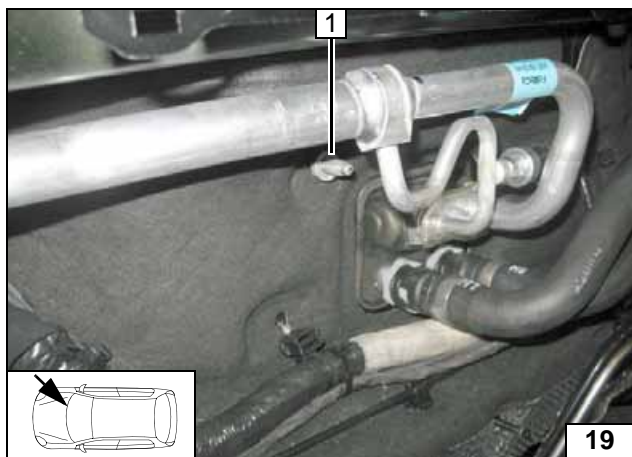
Mounting receiver



1 Antenna

Mounting antenna



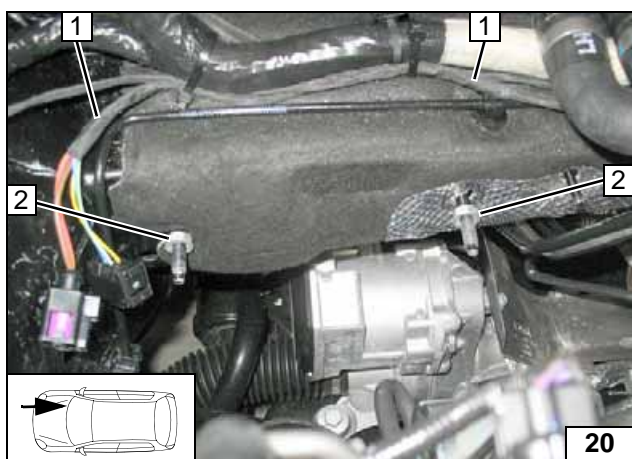


### Preparing Installation Location

Screw on M8 flanged nut 1 approx. 25mm on original vehicle stud bolt.



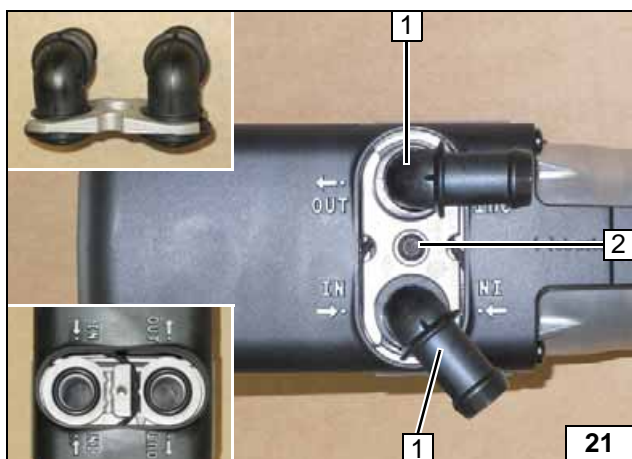
Premounting flanged nut



Route wiring harness of heater 1 to installation location. Screw on one M8 flanged nut 2 each approx. 25mm on original vehicle stud bolts. The flange of the nut should point in the direction of the engine.



Premounting flanged nut

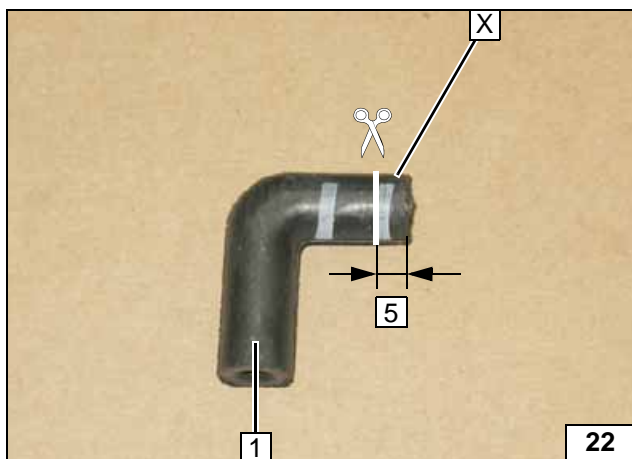


### Preparing Heater

- 1 Water connection piece, sealing ring [2x each]
- 2 5x15 self-tapping bolt, retaining plate of water connection pieces



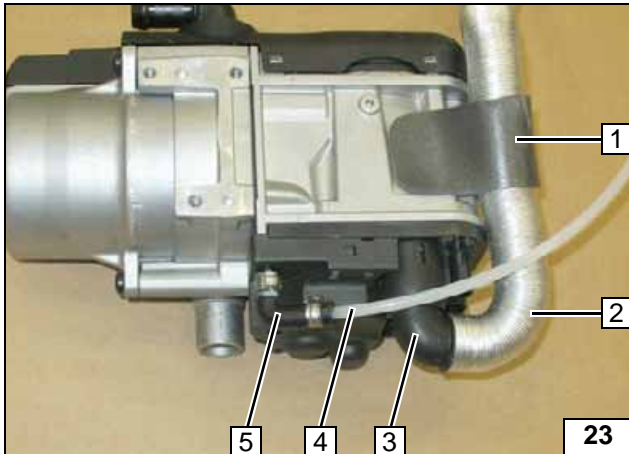
Mounting water connection pieces



Discard hose section X.

- 1 90° moulded hose

Cutting 90° moulded hose to length

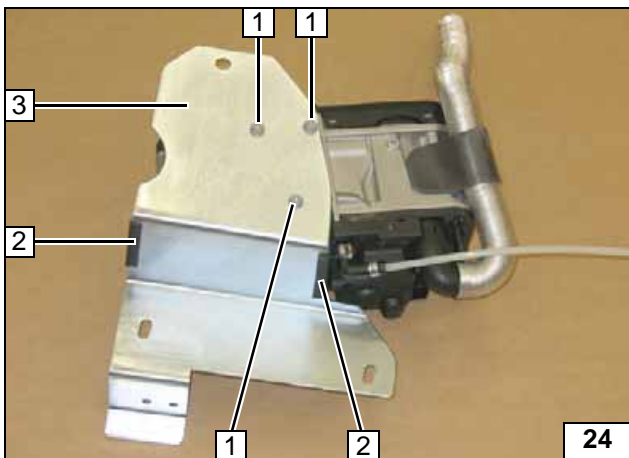


Mount combustion air pipe 2 on heater with insulation strip 1 as installation aid.



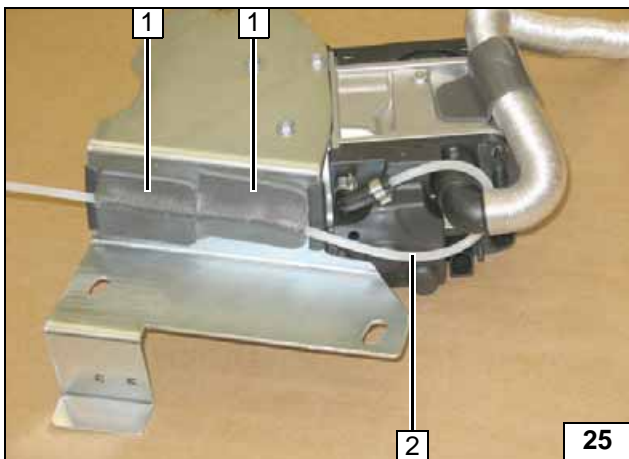
- 3 Air-intake manifold
- 4 Fuel line
- 5 90° moulded hose, 10 mm dia. clamp [2x]

**Premounting heater**



- 1 5x13 self-tapping bolt [3x]
- 2 50 mm edge protection [2x], divide at centre
- 3 Bracket

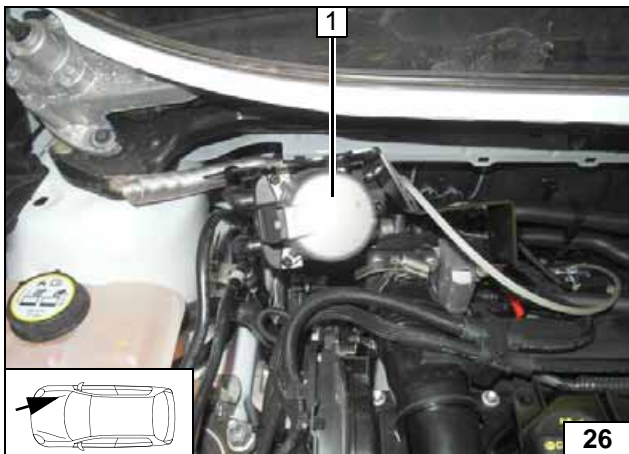
**Mounting bracket**



Fix fuel line 2 on bracket with a half insulation strip 1 each.



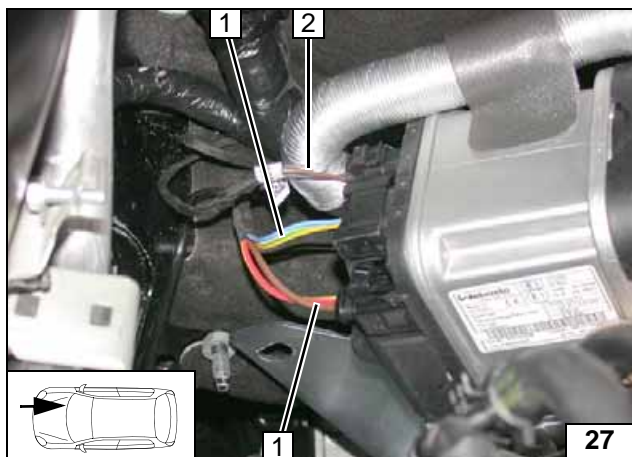
**Mounting fuel line**



**Inserting Heater**

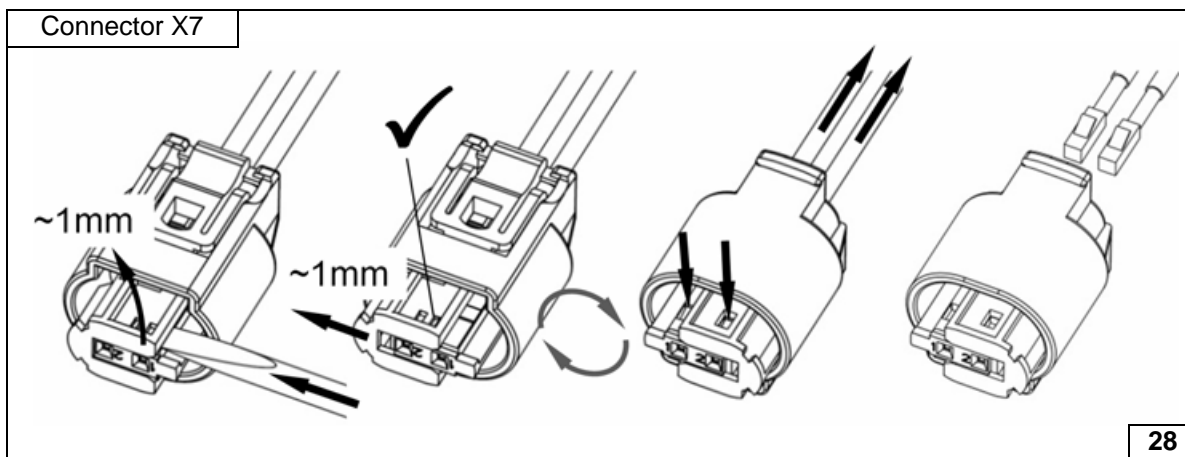
- 1 Insert heater at installation location

**Inserting Heater**



- 1 Wiring harness of heater [2x]
- 2 Circulating pump wiring harness

Mounting wiring harnesses



Dismantling connector of metering pump

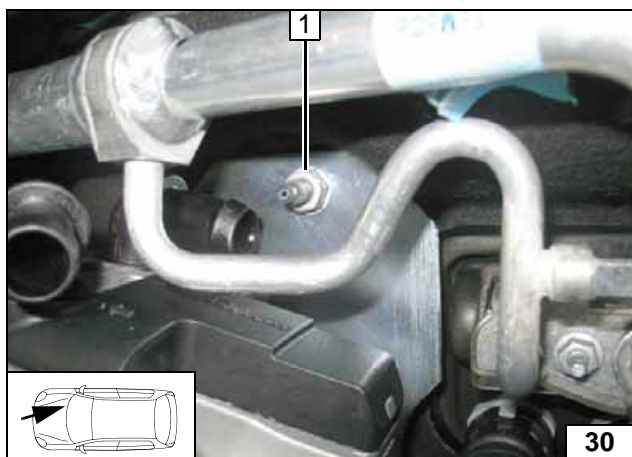


**Mounting Heater**

Mount heater on original vehicle stud bolt [3x]. Pull fuel line 1 with wiring harness of metering pump into 10 mm dia., 2100 mm long corrugated tube and route to the underbody along original vehicle lines.

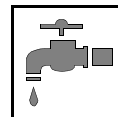
- 2 M8 flanged nut [2x]

Mounting heater



- 1 M8 flanged nut

Mounting heater

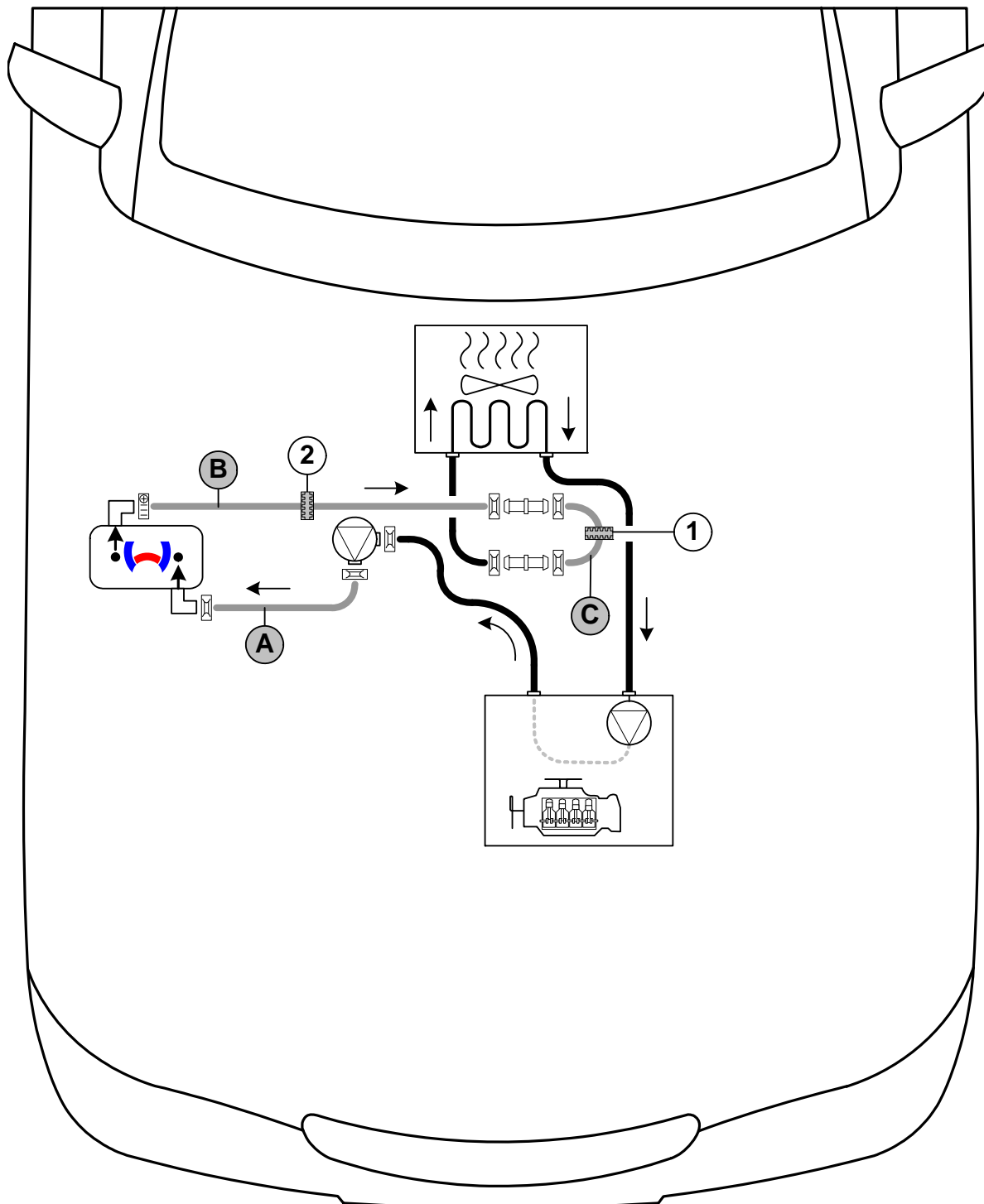


### Coolant Circuit



**WARNING!**


Any coolant running off should be collected in an appropriate container. Route hoses kink-free. Unless specified otherwise, always fasten using cable ties. Position clamps so that other hoses cannot be damaged. When installing the hoses, the heater must be filled with coolant.



The connection should be modelled on an "inline" circuit and based on the following diagram:



Hose routing diagram

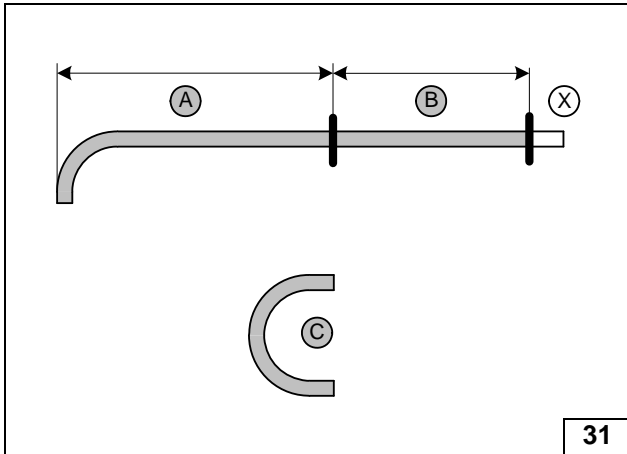
All spring clips  = 25 mm dia. Hose clamp  = 20-27mm dia.

All connecting pipes  = 18x18mm dia.

1 = black (sw) rubber isolator . 2 = Black (sw) rubber isolator  only in case of manual air-conditioning!





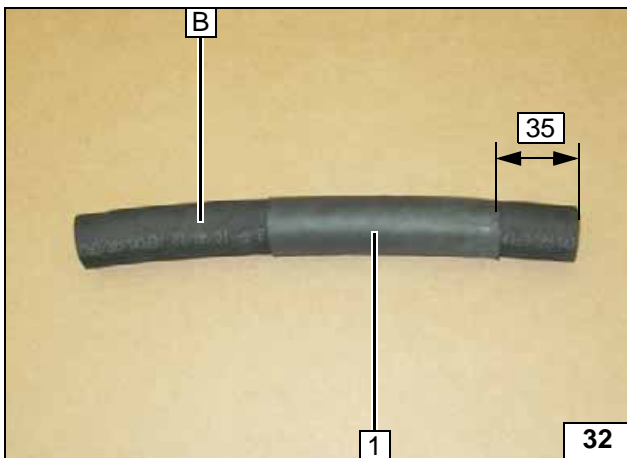


Discard section **X**.  
Hose **C** = 180°, 18 mm dia. moulded hose.

- A = 260
- B = 225

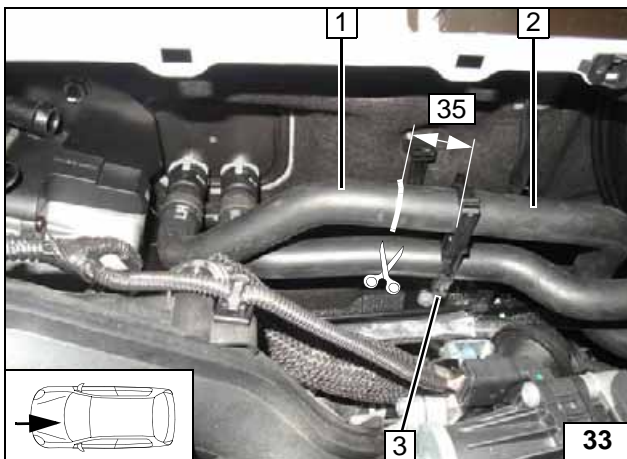


**Cutting hoses to length**



- 1 100 mm long heat shrink plastic tubing

**Preparing Hose B**

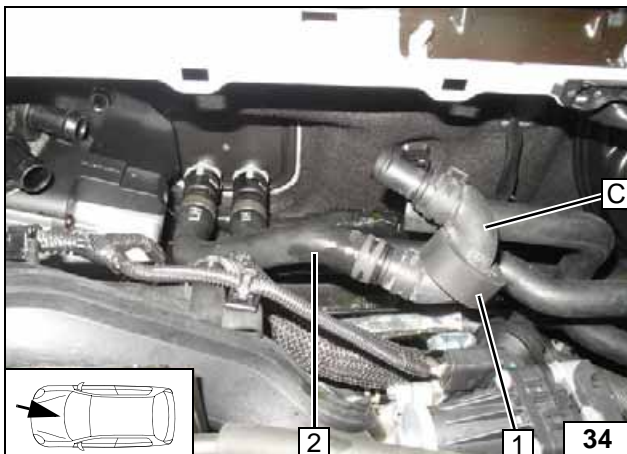


Cut hose of engine outlet / heat exchanger inlet at the marking.  
Open lock of original vehicle hose bracket **3**, will be relocked.

- 1 Hose on heat exchanger inlet
- 2 Hose of engine outlet



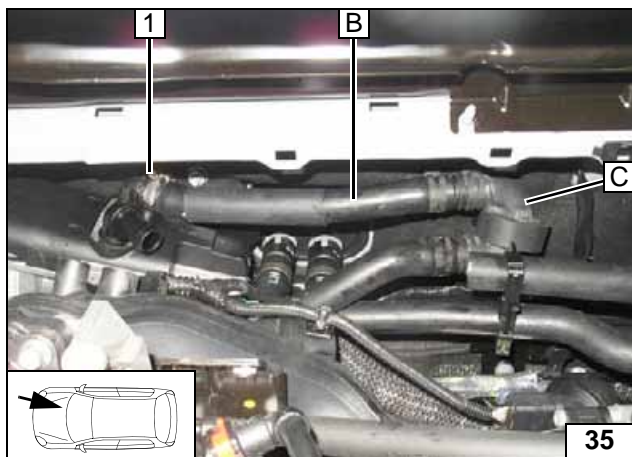
**Cutting point**



- 1 Black (sw) rubber isolator
- 2 Hose on heat exchanger inlet

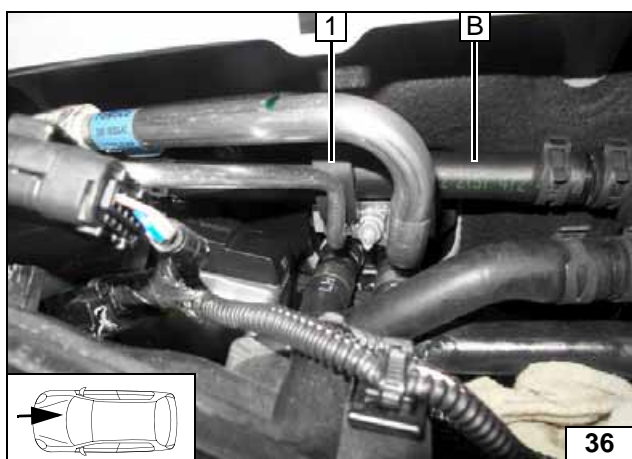
**Connecting heat exchanger inlet**





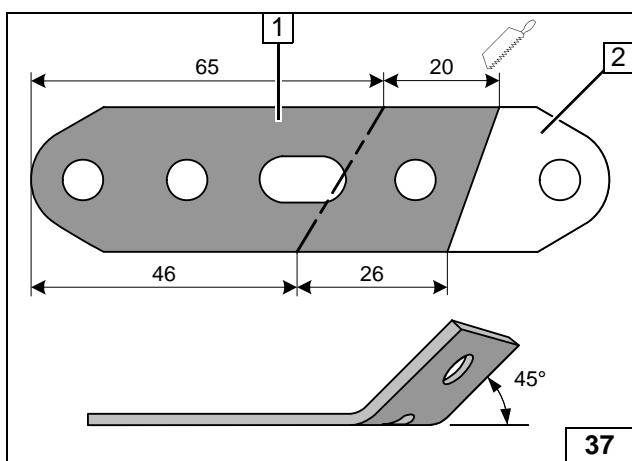
1 20-27mm dia. hose clamp (2.0 + 0.5 Nm tightening torque)

Connect-  
ing heater  
outlet



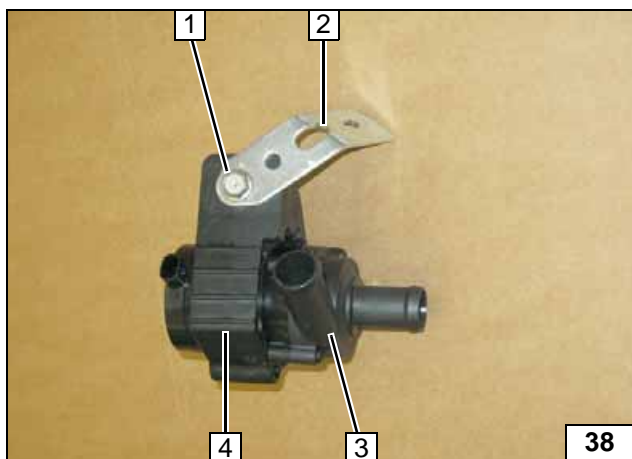
When the vehicle has air-conditioning, slide black (sw) rubber isolator 1 before the installation onto hose B and align it as shown.

Connect-  
ing heater  
outlet



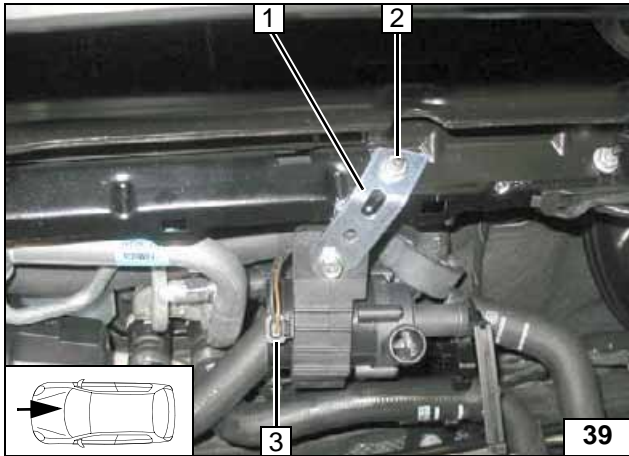
1 Perforated bracket  
2 Discard section

Cutting to  
length and  
bending  
perforated  
bracket



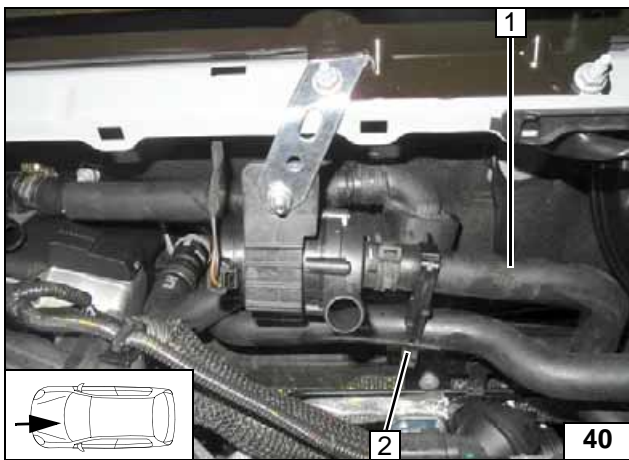
1 M6x25 bolt, flanged nut  
2 Perforated bracket  
3 Circulating pump  
4 Circulating pump mounting

Premount-  
ing circulat-  
ing pump



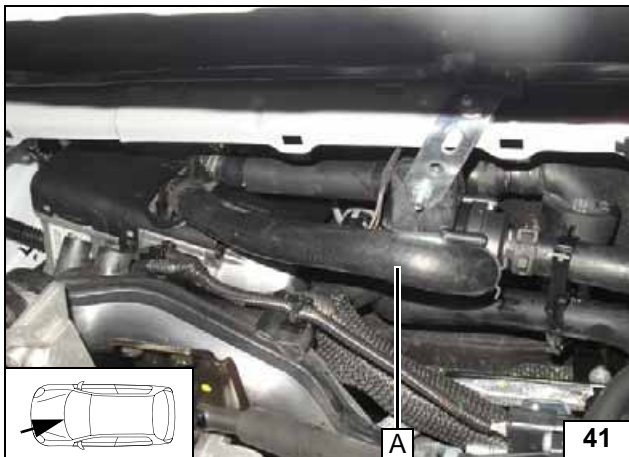
- 1 Perforated bracket
- 2 Original vehicle stud bolt, original vehicle nut
- 3 Mount wiring harness of circulating pump

Mounting circulating pump



- 1 Hose of engine outlet
- 2 Close lock of hose bracket

Connecting engine outlet

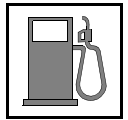


Align hoses. Ensure sufficient distance from neighbouring components.



Connecting heater inlet

# Ford Tourneo Connect



## Fuel

### CAUTION!

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

Any fuel running off should be collected in an appropriate container.

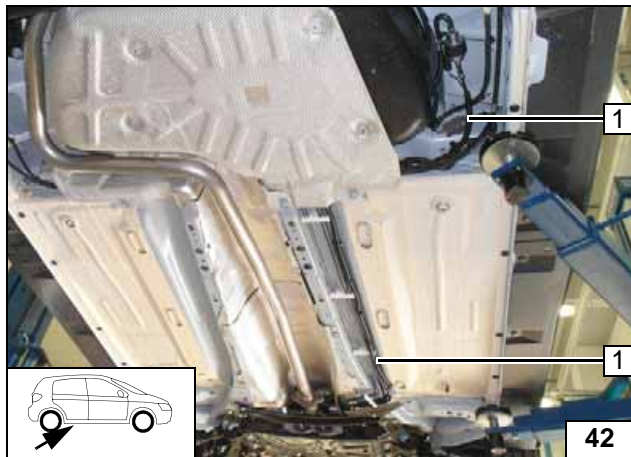
Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties. Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

### WARNING!

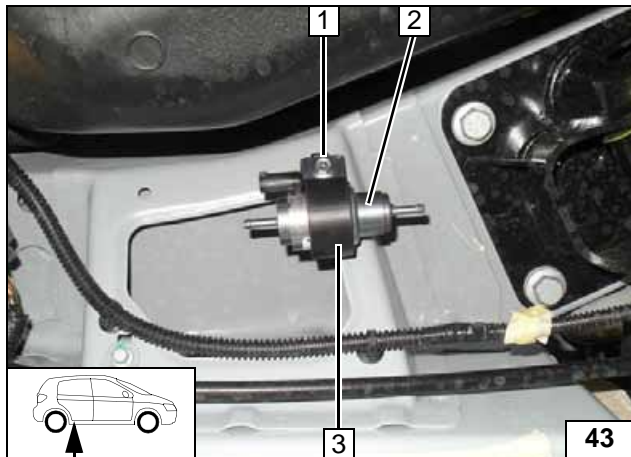
The fuel line and wiring harness are routed to the metering pump as shown in the wiring harness routing diagram.



### Routing lines



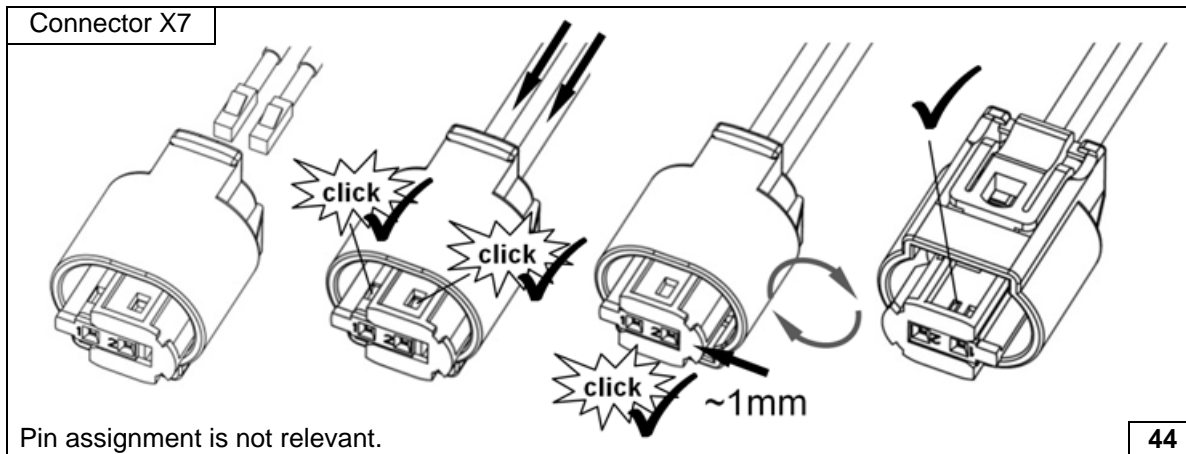
Route fuel line and wiring harness of metering pump in corrugated tube **1** along original vehicle lines to installation location of metering pump.



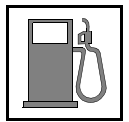
- 1 M6x25 bolt, support angle bracket, flanged nut, existing hole
- 2 Metering pump
- 3 Mounting of metering pump



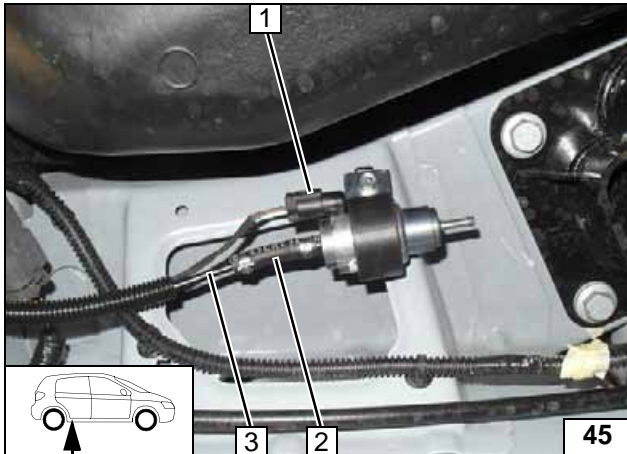
### Mounting metering pump



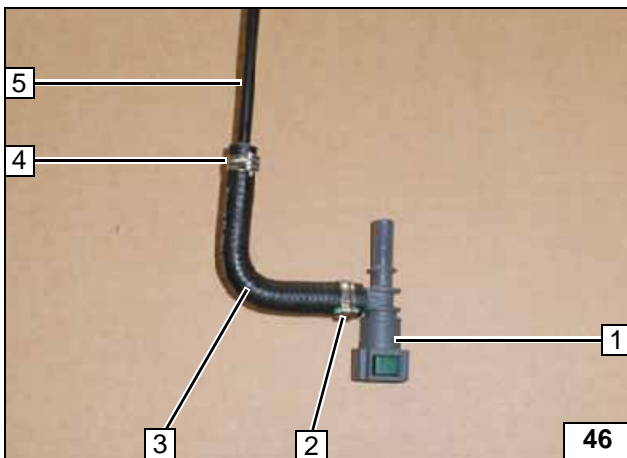
### Completing connector of metering pump



Connect-  
ing meter-  
ing pump



- 1 Wiring harness connector of metering pump X7
- 2 Hose section, 10 mm dia. clamp [2x]
- 3 Fuel line of heater



- 1 3 way connection piece
- 2 13.5 mm dia. clamp
- 3 90°, 4.5x7.5mm dia. moulded hose
- 4 10 mm dia. clamp
- 5 Fuel line of fuel standpipe

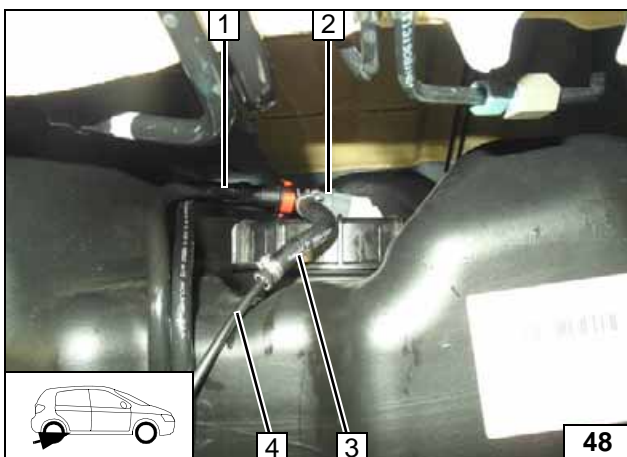
Preparing  
fuel stand-  
pipe



Lower fuel tank in accordance with the manufacturer's instructions (see following image). Remove return line 1 and connect to 3 way connection piece 2.



Preparing  
fuel stand-  
pipe



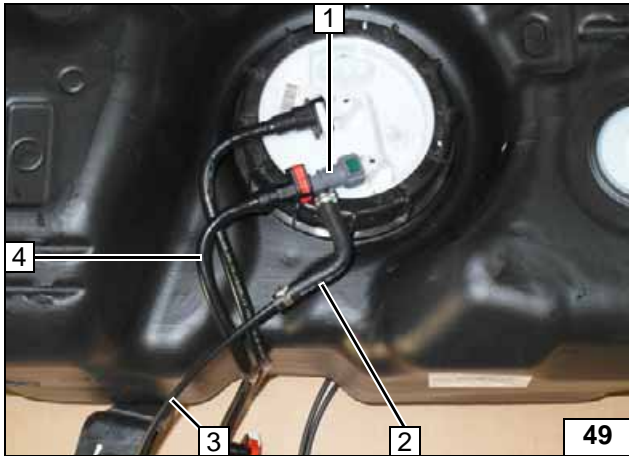
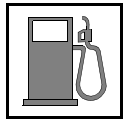
Make sure that the 3 way connection piece is correctly installed.

- 1 Return line
- 2 Connect to connection piece of return line (see following image)
- 3 90°, 4.5x7.5mm dia. moulded hose
- 4 Fuel line of fuel standpipe



Fuel extrac-  
tion



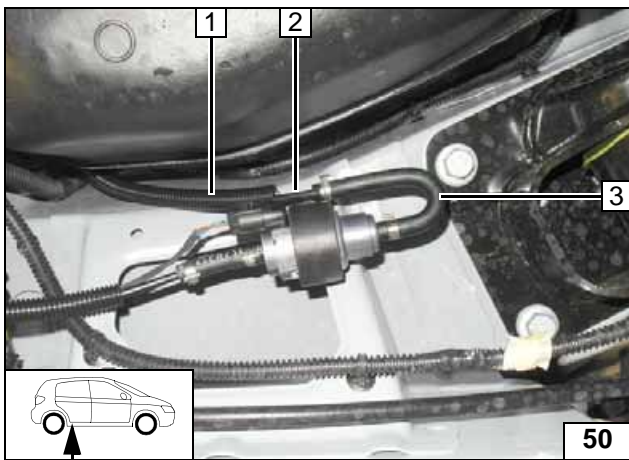


The fuel tank was removed for better display.

- 1 3 way connection piece connected to connection piece of return line
- 2 90° moulded hose
- 3 Fuel line of fuel standpipe
- 4 Return line



**Fuel extraction**

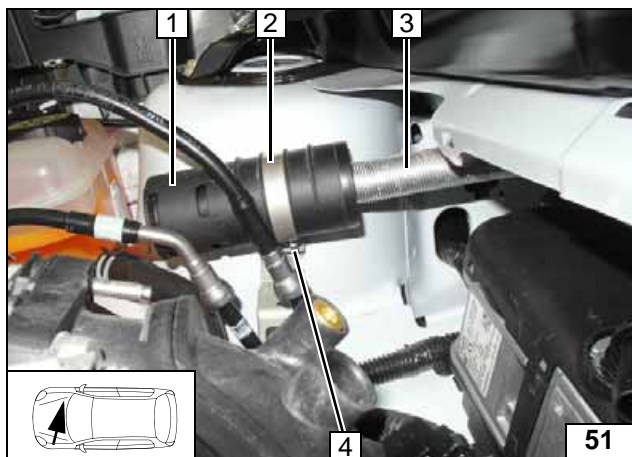
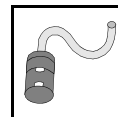


Mount fuel tank according to manufacturer's instructions. Slide 10mm dia. corrugated tube 1 onto fuel line of fuel standpipe 2. Ensure sufficient distance from neighbouring components, or correct.

- 3 180° moulded hose, 10 mm dia. clamp [2x]



**Connecting metering pump**

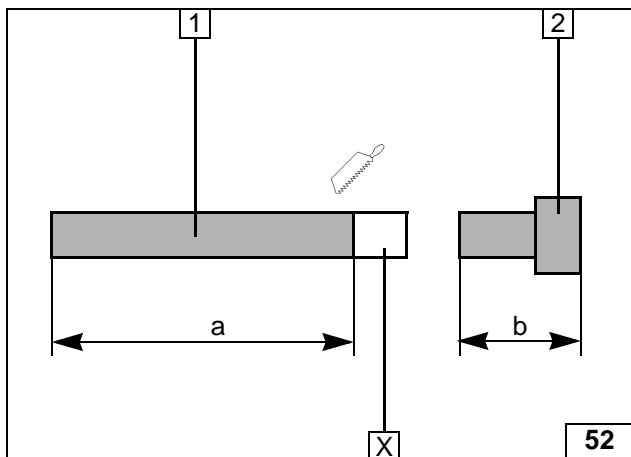
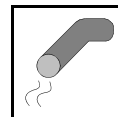


### Combustion Air

- 1 Silencer
- 2 51 mm dia. clamp
- 3 Combustion air pipe
- 4 M5x16 bolt, large diameter washer [2x], flanged nut, original vehicle hole (covered by clamp)



### Mounting silencer

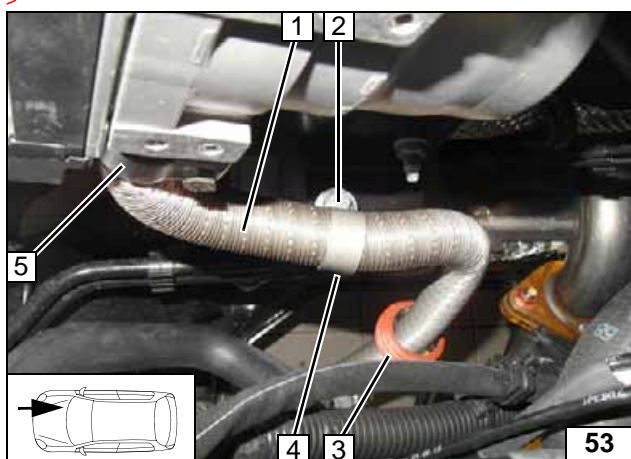


### Exhaust Gas

Discard section X.

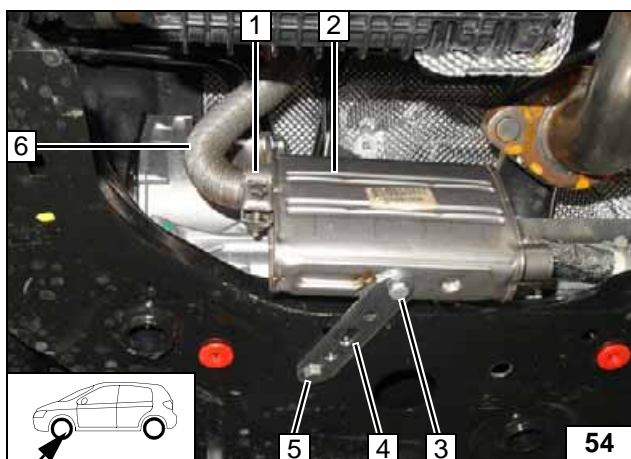
- 1 Exhaust pipe  
a =540
- 2 Exhaust end section  
b =150

Preparing  
exhaust  
pipe



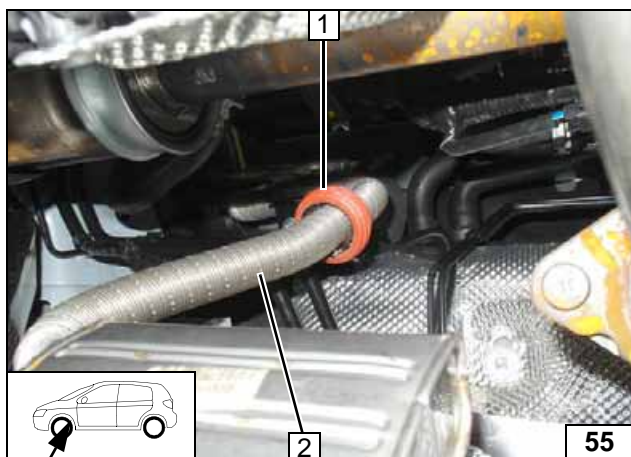
- 1 Exhaust pipe
- 2 M6x40 bolt, 20mm shim, flanged nut, existing hole in bracket
- 3 Position spacer bracket
- 4 P-clamp
- 5 Hose clamp

Mounting  
exhaust  
pipe



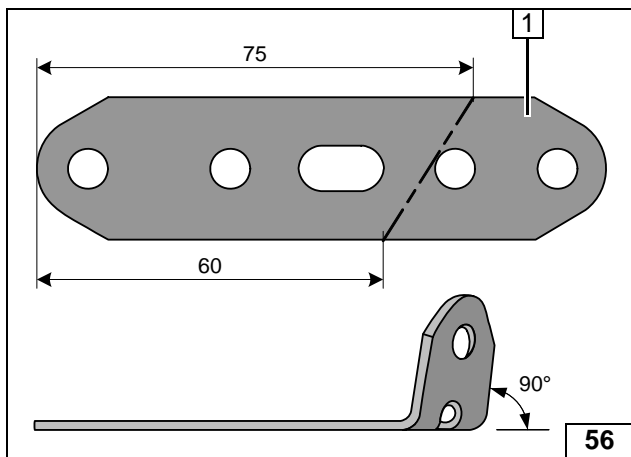
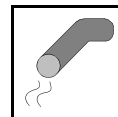
- 1 Hose clamp
- 2 Silencer
- 3 M6x16 bolt, spring lockwasher
- 4 Perforated bracket
- 5 M6x20 bolt, large diameter washer, flanged nut, existing hole
- 6 Exhaust pipe

Mounting  
silencer



- 1 Align spacer bracket with original vehicle lines
- 2 Exhaust pipe

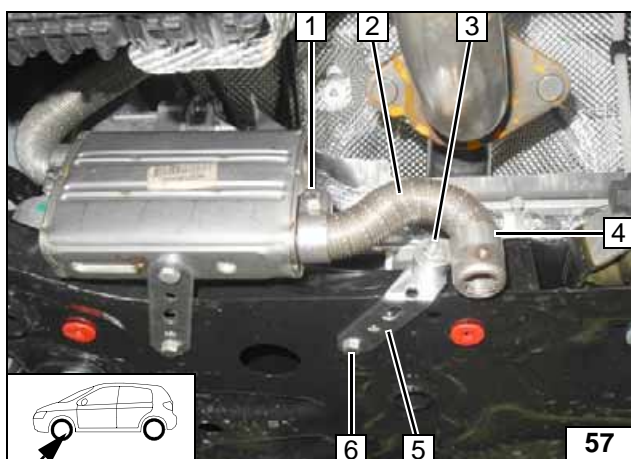
Aligning  
spacer  
bracket



1 Perforated bracket

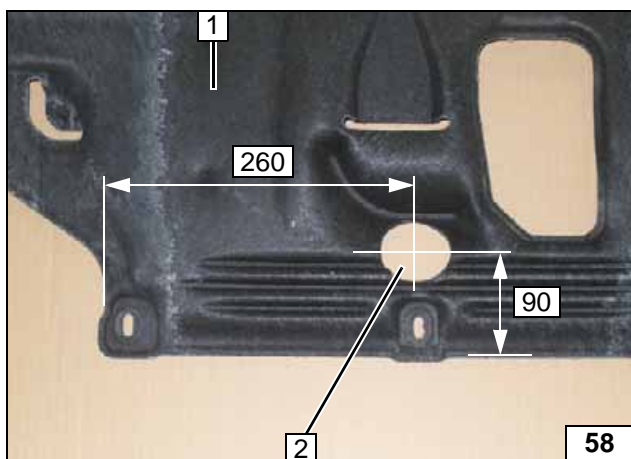


Angling down perforated bracket



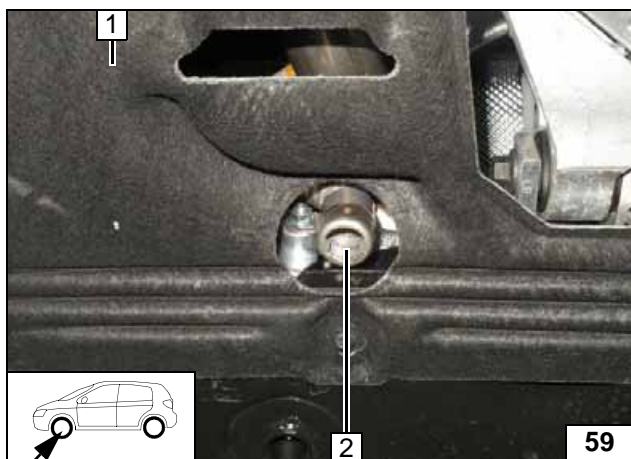
- 1 Hose clamp
- 2 Exhaust end section
- 3 M6x30 bolt, 15mm shim, flanged nut
- 4 P-clamp
- 5 Perforated bracket
- 6 M6x20 bolt, large diameter washer, flanged nut

Mounting exhaust end section



- 1 Underride protection
- 2 60 mm dia. hole

Cutting out underride protection



Install underride protection 1. Align exhaust end section 2 centrally in hole and flush with underride protection 1. Ensure sufficient distance from neighbouring components.



Aligning exhaust end section





### Final Work

#### WARNING!

Mount removed parts in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate and tie back all loose wires.

Only use manufacturer-approved coolant. Spray heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).



- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.**
- **Program MultiControl CAR, teach telestart transmitter.**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place the "Switch off parking heater before refuelling" caution label in the area of the filler neck.**
- **See installation instructions for initial startup and function check.**



## Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

**Note:**

We recommend matching the heating time to the driving time.

Heating time = driving time

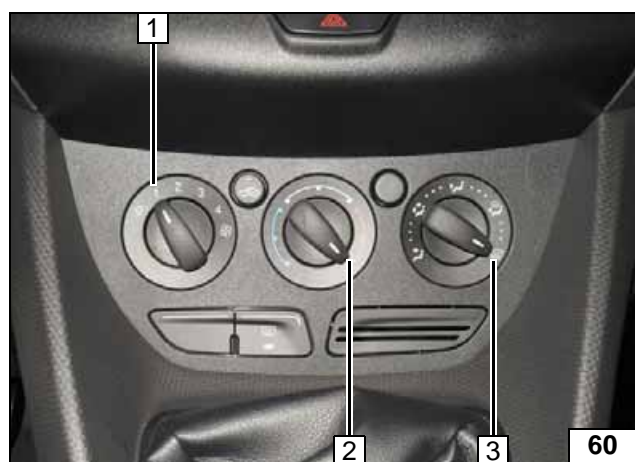
**Example:**

For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.

Passenger compartment monitoring, if installed, must be deactivated in addition to the vehicle settings for the heating operation.

Instructions for deactivation can be taken from the operating instructions manual of the vehicle.

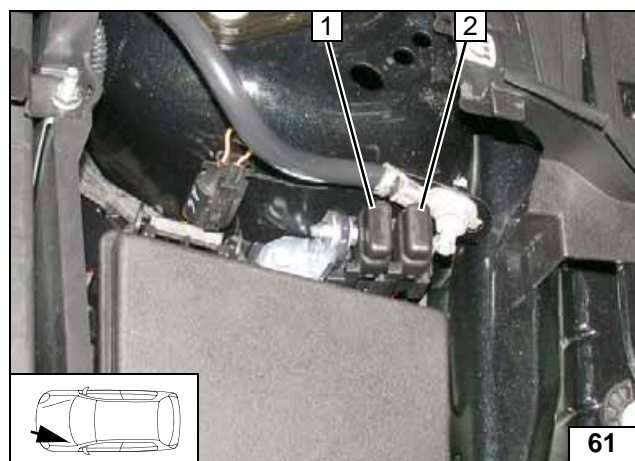
Before parking the vehicle, make the following settings:



- 1 Set fan to level "1", or max. "2"
- 2 Set temperature to "max."
- 3 Air outlet to windscreen

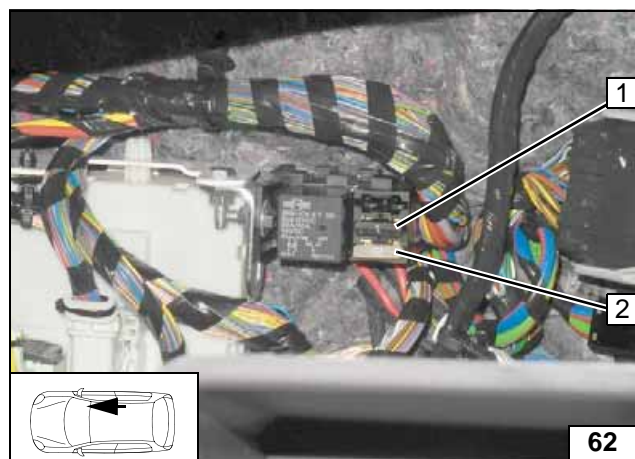


A/C control panel



- 1 30A main fuse F2 of passenger compartment
- 2 20A fuse F1 of heater

Fuses of engine compartment



Pull down glove compartment.

- 1 1A fuse F3 of heater control
- 2 25A fan fuse F4



Fuses of passenger compartment

