

# Water Heater

## Thermo Top Evo Parking Heater



# Installation Documentation

## Mazda 5

### Validity

Manufacturer	Model	Type	EG-BE-Nr. / ABE
Mazda	5	CW	e1 * 2007 / 46 * 0433 * ...

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm <sup>3</sup>	Engine code
1.6	Diesel	6-speed SG	85	1560	Y6

SG = Manual transmission

**From Model Year 2011**  
**Left-hand drive vehicle**

**Verified equipment variants:** Manual / automatic air-conditioning system

Front fog light  
 Xenon with headlight washer system  
 Euro 5 exhaust emission standard

**Not verified:** Passenger compartment monitoring

**Total installation time:** about 8.5 hours

# Mazda 5

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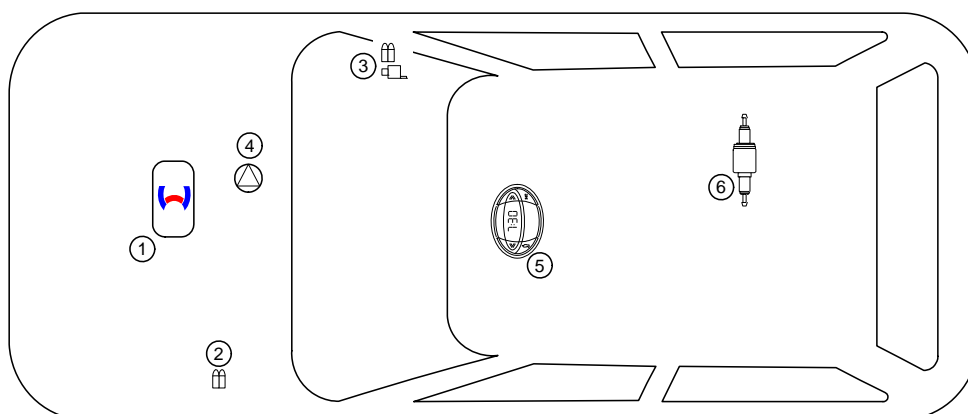
## Necessary Components

- Basic delivery scope *Thermo Top Evo* based on price list
- Installation kit for Mazda 5 2011 1.6 Diesel: **1316804B**  
Mazda Order No.: **4100-78-779A**
- Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and in consultation with end customer

## Installation Overview

### Legend:

1. Heater
2. Fuse holder of engine compartment
3. Fuse holder of passenger compartment
4. Circulating pump
5. Digital timer
6. Metering pump



## Notes 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 227).

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 an IPCU, the corresponding settings must be checked or adjusted before the installation.**

### 2 Statutory regulations governing installation

Guidelines	Thermo Top Evo
Heating Directive ECE R122	E1 00 0258
EMC Directive ECE R10	E1 03 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

For vehicles with an EU permit, no entry in accordance with § 19 Sub-Section 4 of Annex VIII b to the Road Traffic Act is required.

### 2.1 Excerpt from the directive 2001/56/EC Appendix VII 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.

# Mazda 5

## Notes on Validity

This installation document applies to the Mazda 5 1.6 Diesel vehicles - for validity, see page 1 - from model year 2011 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 other specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

## Technical Instructions

### Special Tools

- Hose clamp pliers for auto-tightening 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



### Electrical system



### Coolant circuit



### Combustion air



### Fuel



### Exhaust gas



### Software



### Specific risk of injury or fatal accidents



### Specific risk of damage to components



### Specific risk of fire and explosion



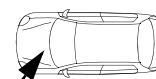
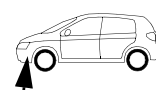
### Reference to general installation instructions of the Webasto components or to the manufacturer's vehicle-specific documents.



### Reference to a special technical feature



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



## Mazda 5

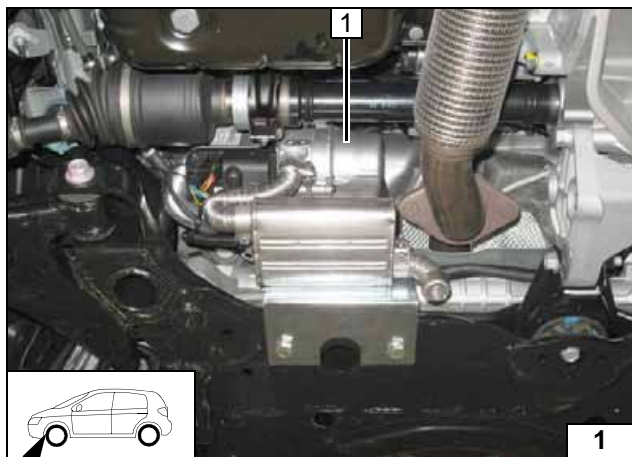
### Preliminary Work

#### Vehicle

- Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- Disconnect the battery and remove it with the battery box.
- Remove the underride protection of the engine.
- Remove the underbody trim on the right.
- Remove the fuel tank.
- Remove the A-pillar trim in the front passenger's side footwell.
- Remove the glove compartment.
- Remove the fuse box of the passenger compartment.

#### Heater

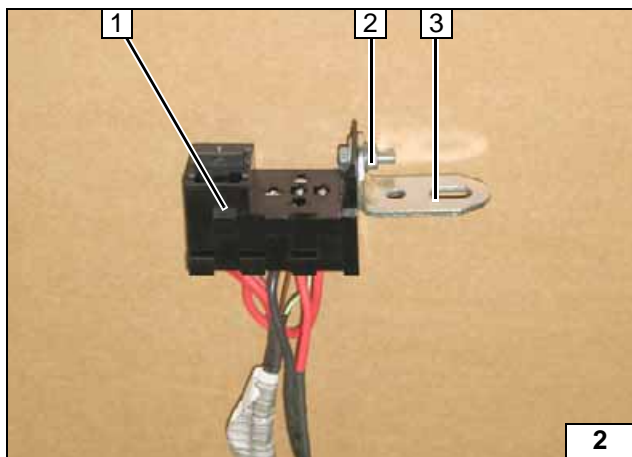
- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place inside the engine compartment.



#### Heater Installation Location

1 Heater

Installation  
location



### Preparing Electrical System

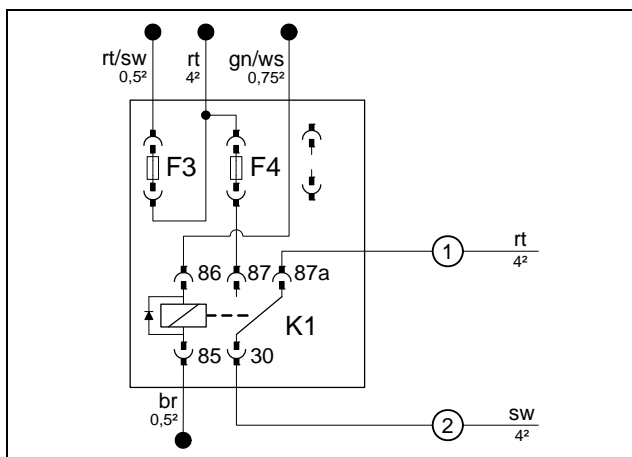
Wire sections retain their numbering through the entire document.

K1 relay will only be inserted after installation of fuse holder 1.

- 2 M5x16 bolt, washer [2x], nut
- 3 Angle bracket



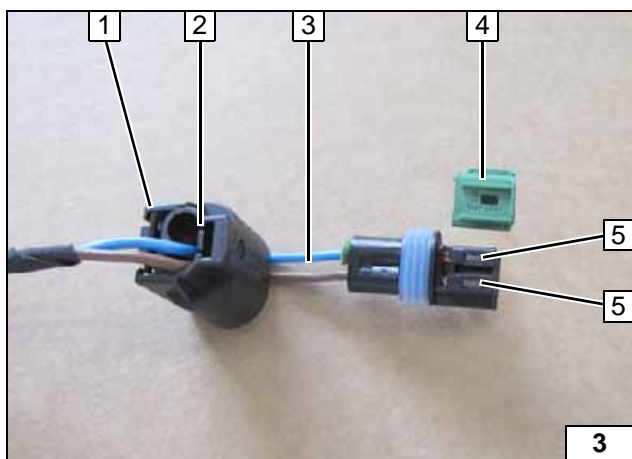
### Preparing fuse holder



Insert red (rt) wire 1 in K1/87a and black (sw) wire 2 in K1/30 socket. Insert 10 A fuse F4.



### Preparing fuse holder

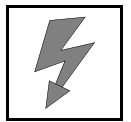


Complete connector of metering pump again after routing. Pin assignment is not relevant.

- 1 Connector housing
- 2 Lock
- 3 Blue/brown (bl / br) wires
- 4 Coding
- 5 Timer lock



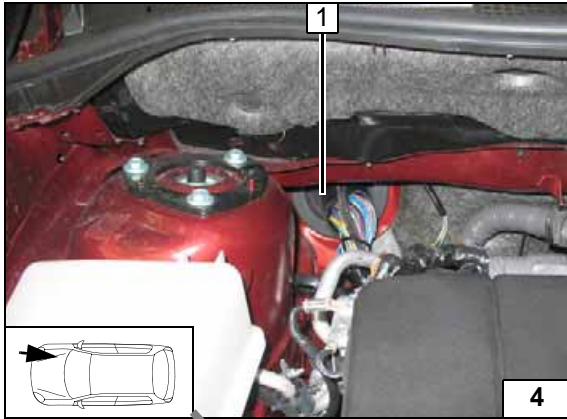
### Disassembling connector



## Electrical System

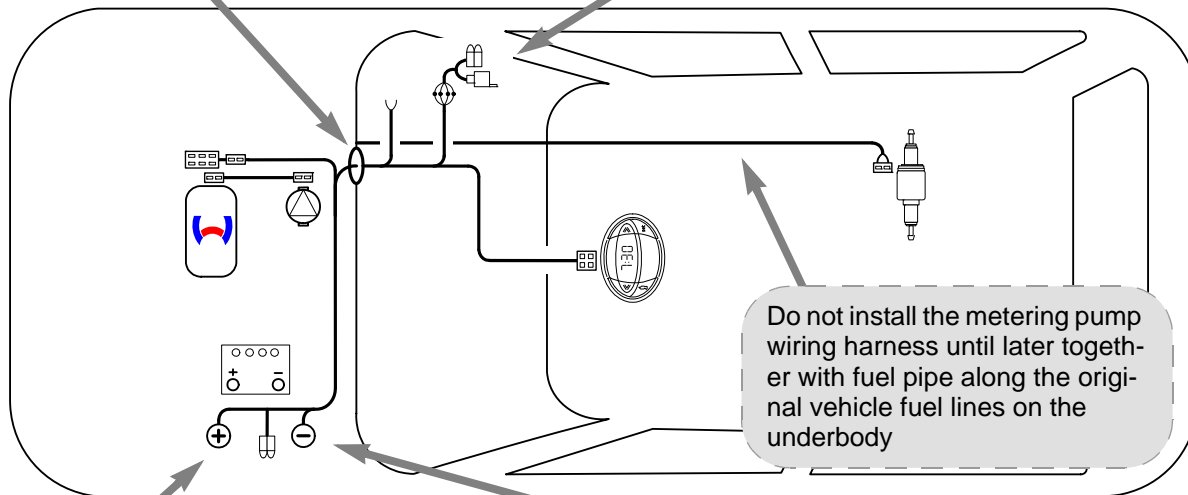
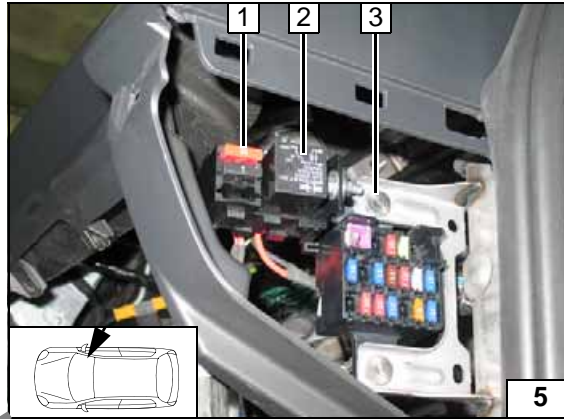
### Wiring harness pass through

- 1 Protective rubber plug

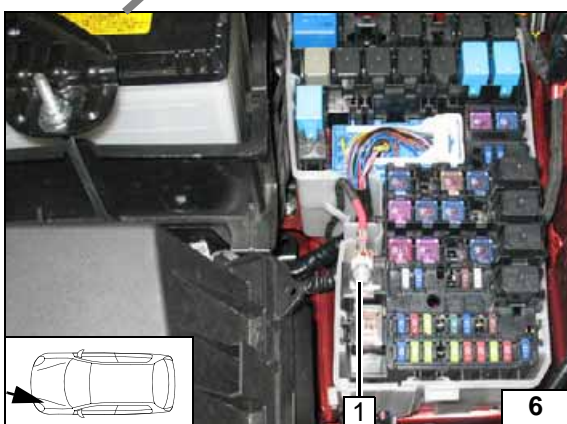


### Fuse holder of passenger compartment

- 1 F4 10A fuse
- 2 K1 relay
- 3 Original vehicle stud bolt of fuse holder

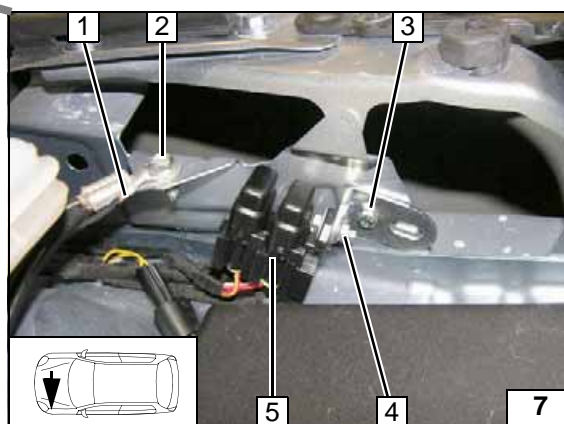


Wiring harness routing diagram



### Positive wire

Positive wire on original vehicle bolt 1.  
Tightening torque 8-12 Nm.



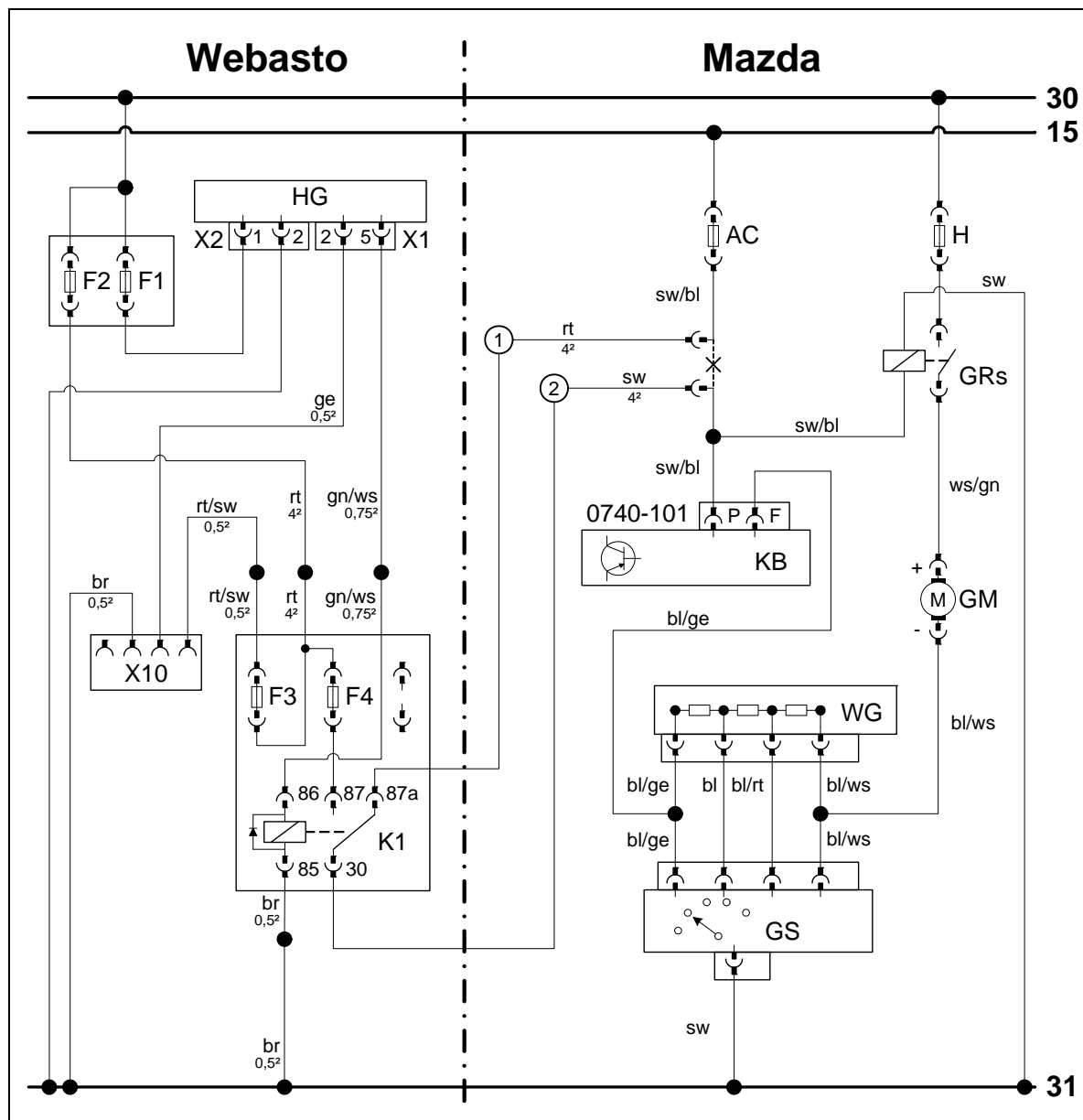
### Fuse holder in engine compartment

Earth wire 1 on original vehicle bolt 2.  
Tightening torque 8-12 Nm.

- 3 M6x20 bolt, angle bracket, large diameter washer, flanged nut, existing hole
- 4 M5x16 bolt, washer [2x], retaining plate of fuse holder, nut
- 5 F1-2 fuses



Manual Air-Conditioning Fan Controller



Wiring diagram

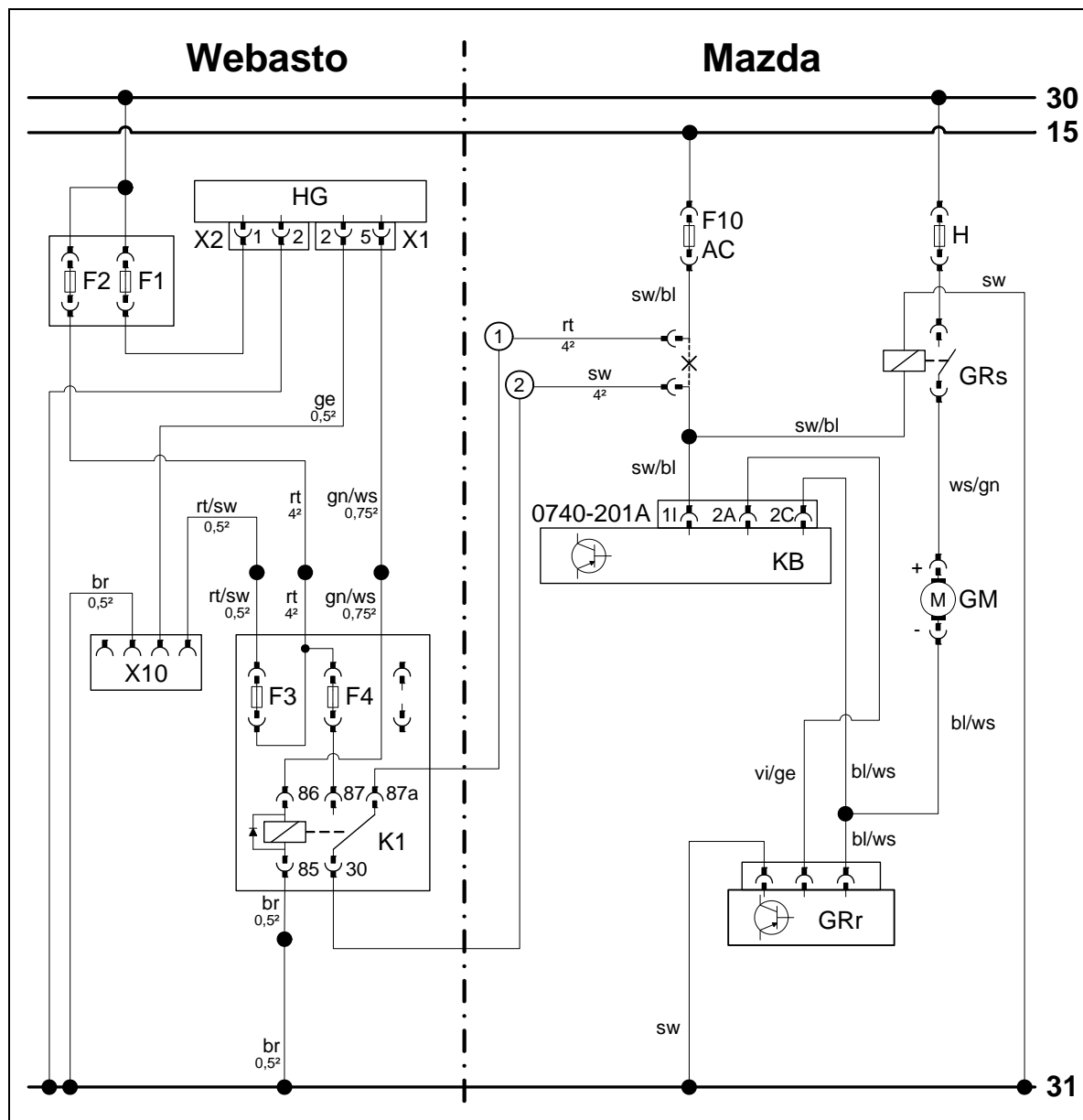
Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	AC	"AC" 10 A fuse	rt	red
X1	6-pin heater connector	H	"Heater1" 40A fuse	sw	black
X2	2-pin heater connector			ge	yellow
X10	4-pin connector of Heater control	GRs	Fan relay	gn	green
K1	Fan relay	0740-101	Connector KB	ws	white
F1	20A fuse	KB	A/C control panel	br	brown
F2	30A fuse	GM	Fan motor	bl	blue
F3	1A fuse	WG	Resistor group		
F4	10A fuse	GS	Fan switch		
				X	Cutting point
					Wiring colours may vary.

Legend





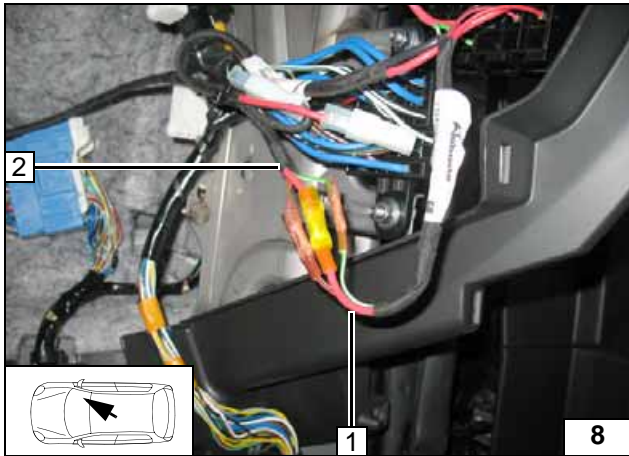
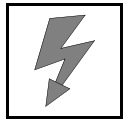
Automatic Air-Conditioning Fan Controller



Wiring diagram

Webasto components		Vehicle components		Colours and symbols	
HG	Heater TT-Evo	F10 AC	"AC" 10 A fuse	rt	red
X1	6-pin heater connector	H	"Heater1" 40A fuse	sw	black
X2	2-pin heater connector	GRs	Fan relay	ge	yellow
X10	4-pin connector of Heater control	0740-201A	Connector KB	gn	green
K1	Fan relay	KB	A/C control panel	vi	violet
F1	20A fuse	GM	Fan motor	ws	white
F2	30A fuse	GRr	Fan controller	br	brown
F3	1A fuse			bl	blue
F4	10A fuse				
				X	Cutting point
				Wiring colours may vary.	

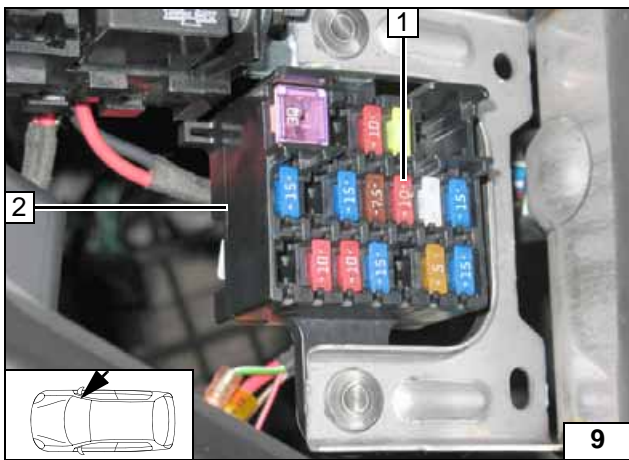
Legend



Connect same colour wires of wiring harness of passenger compartment fuse holder 1 to wiring harness of engine compartment fuse holder 2 according to wiring diagram.



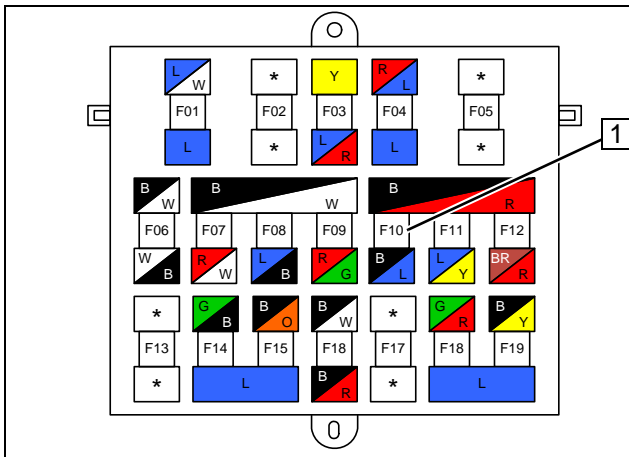
**Connect-  
ing wiring  
harnesses**



Connection takes place at outlet of original vehicle AC fuse 1, Detach fuse box 2.



**Fan con-  
troller**

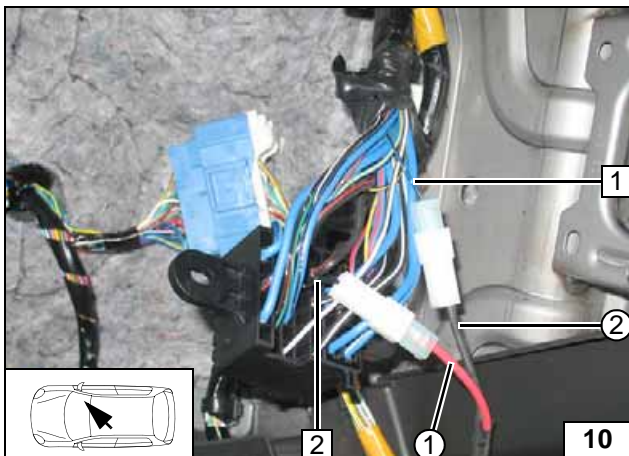


Fuse-side view.

1 AC fuse, 10A



**Fuse box  
view.**

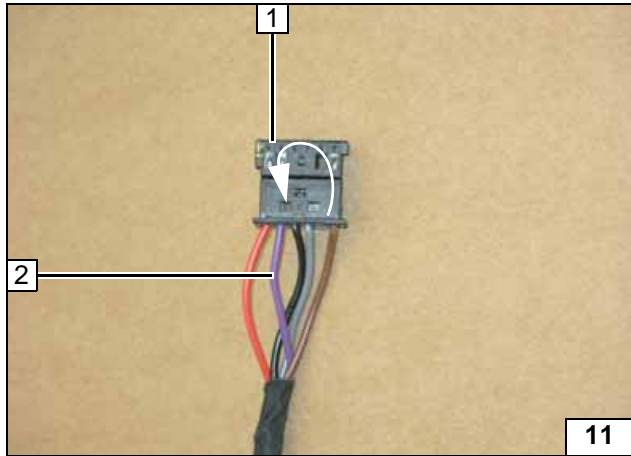
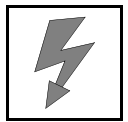


Produce connections as shown in wiring diagram.

- 1 Black/blue (sw/bl) wire from A/C control unit
- 2 Black/blue (sw/bl) wire from A/C fuse
- ① Red (rt) wire from K1/87a
- ② Black (sw) wire from K1/30



**Fan con-  
troller**



**Combination of Heater Controls**

Only for "silver" Telearstart  
Observe attached installation instructions  
for "black" Telearstart.

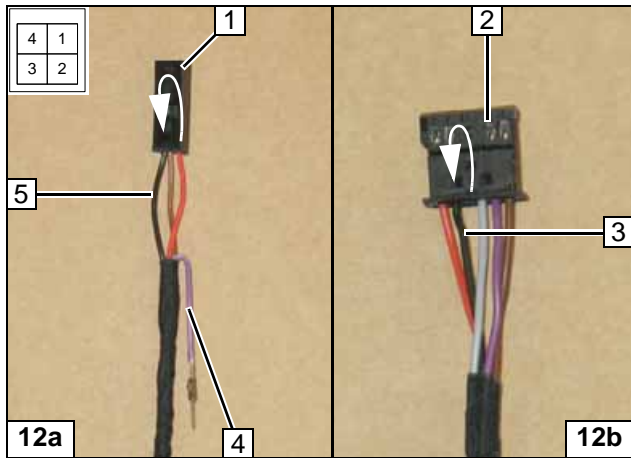


Preparing  
connector

Telearstart T91 with and without push button.

**Figure 11** (Y-adapter connector)

Detach violet (vi) wire 2 from 6-pin connector 1  
Pin 5 and insert it into Pin 2.



**Digital timer and Telearstart T91.**

**Figure 12a** (Coupling of Y-adapter, wire-side view)

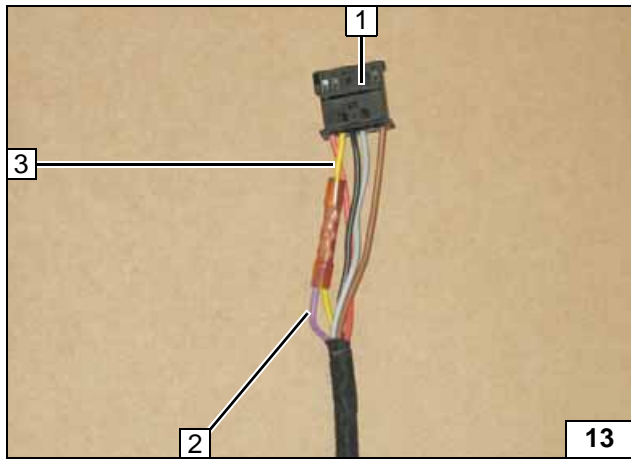
Detach violet (vi) wire 4 from 4-pin coupling 1  
Pin 1, insulate and tie back.  
Detach black (sw) wire 5 from 4-pin coupling 1  
Pin 2, and insert into Pin 1.

**Figure 12b** (Y-adapter connector)

Detach black (sw) wire 3 from 6-pin connector 2  
Pin 3 and insert it into Pin 2.



Preparing  
connector



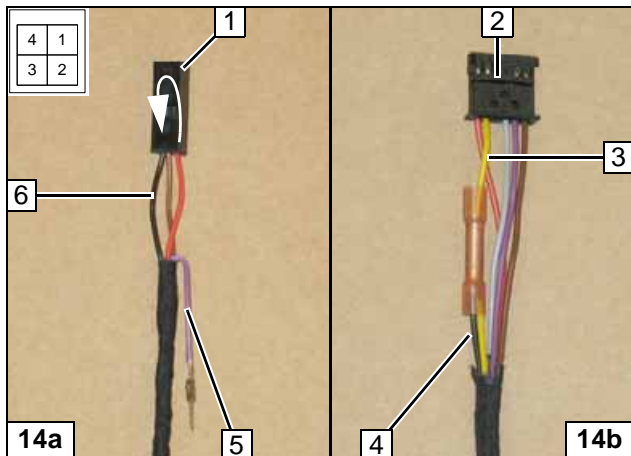
**Telearstart HTM100 with and without push button.**

**Figure 13** (Y-adapter connector)

Detach violet (vi) wire 2 from 6-pin connector 1  
Pin 5. Cut yellow (gb) wire 3 approx. 50mm before  
the connector 1. Connect violet (vi) wire 2  
and yellow (gb) wire 3 to connector.



Preparing  
connector



**Digital timer and Telearstart T100 HTM!**

**Figure 14a** (Coupling of Y-adapter, wire-side view)

Detach violet (vi) wire 5 from 4-pin coupling 1  
Pin 1, insulate and tie back.  
Detach black (sw) wire 6 from 4-pin coupling 1  
Pin 2, and insert into Pin 1.

**Figure 14b** (Y-adapter connector)

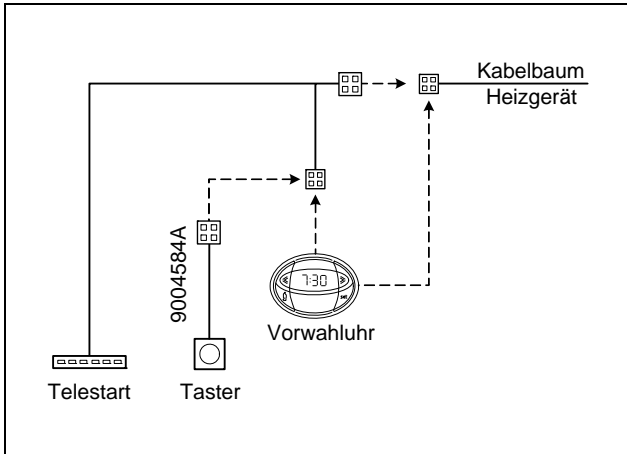
Detach black (sw) wire 4 from 6-pin connector 2  
Pin 3. Cut yellow (gb) wire 3 approx. 50mm before  
the connector 2. Connect black (sw) wire 4  
and yellow (gb) wire 3 to connector.



Preparing  
connector



Diagram of heater controls



### Digital Timer

- 1 Digital timer without switch of seat heater

Mounting digital timer



### Digital timer

- 1 Digital timer with switch of seat heater

Mounting digital timer

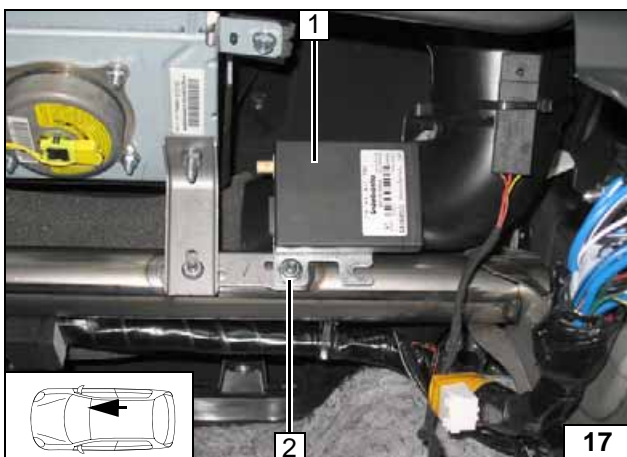


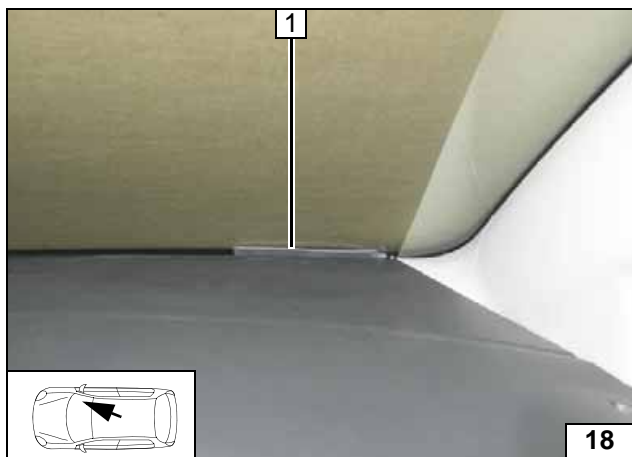
### Remote Option (Telestart)

Drill out hole at position 2 of bracket to 6.5mm dia.

- 1 Receiver
- 2 Original vehicle stud bolt, flanged nut

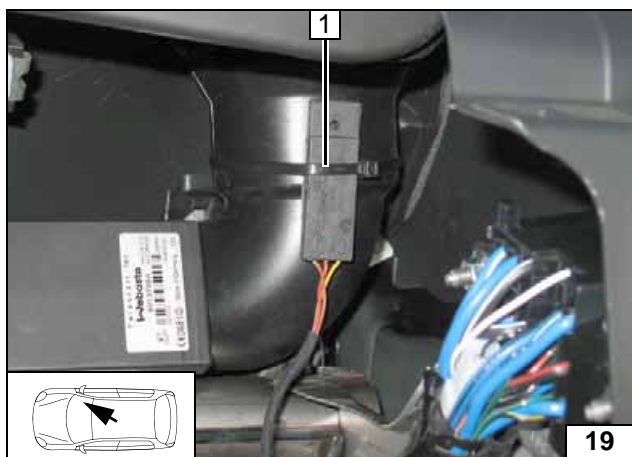
Mounting receiver





1 Antenna

Mounting antenna

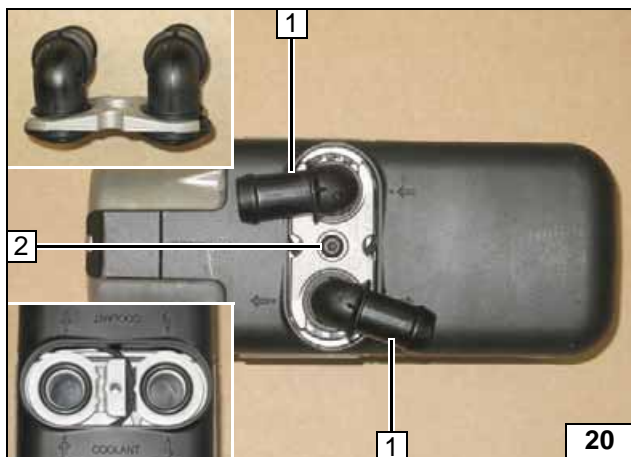


Temperature sensor T100 HTM

Fasten temperature sensor 1 with cable tie.



Mounting temperature sensor

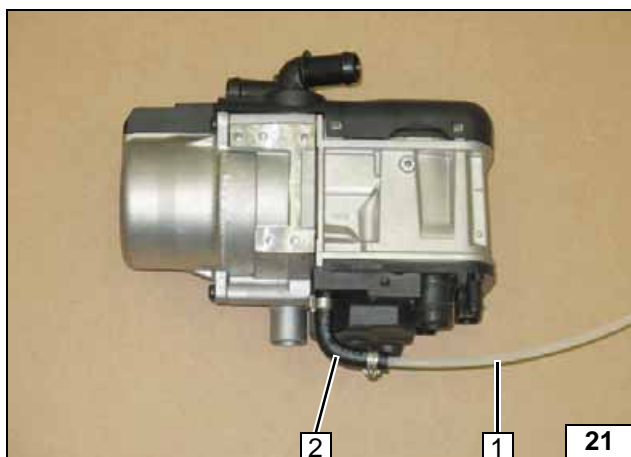


### Preparing Heater

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

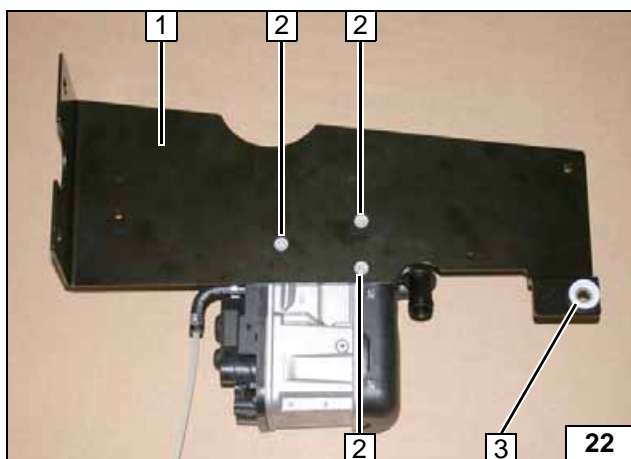


**Mounting water connection piece**



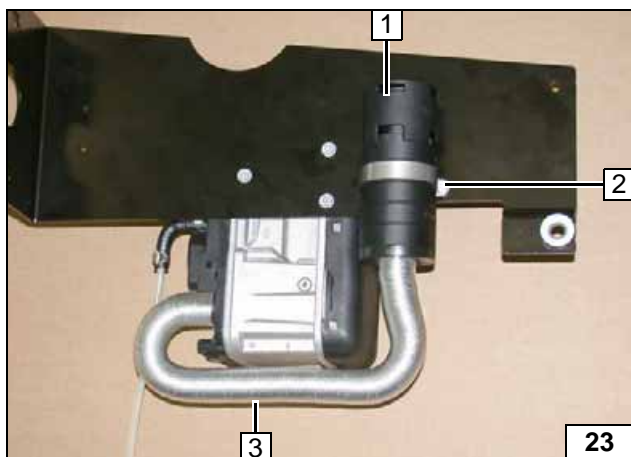
- 1 Fuel line
- 2 90° moulded hose, 10 mm dia. clamp [2x]

**Premounting fuel line**



- 1 Bracket
- 2 5x13 self-tapping bolt [3x]
- 3 Rubber buffer, sleeve installation

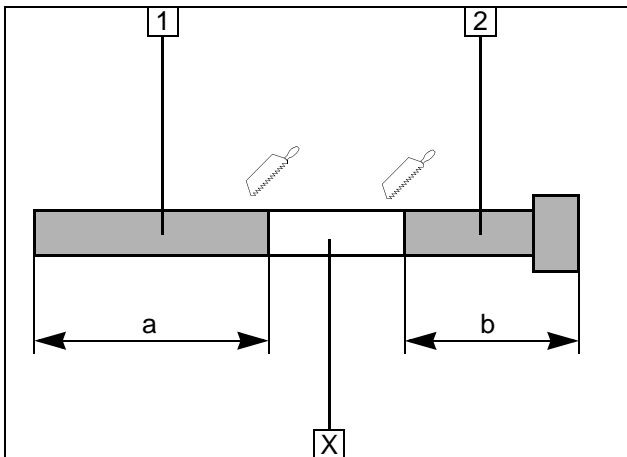
**Mounting bracket**



- 1 Silencer
- 2 M5x16 bolt, 51 mm dia. clamp, flanged nut
- 3 Combustion air pipe



**Mounting combustion air pipe**

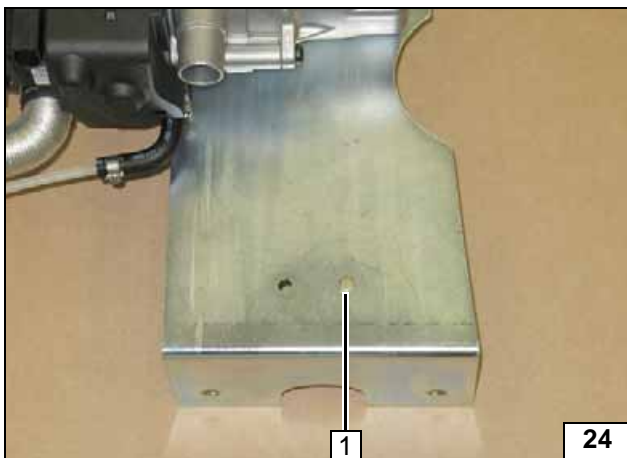


Discard section X.

- 1 Exhaust pipe  
a =200
- 2 Exhaust end section  
b =80

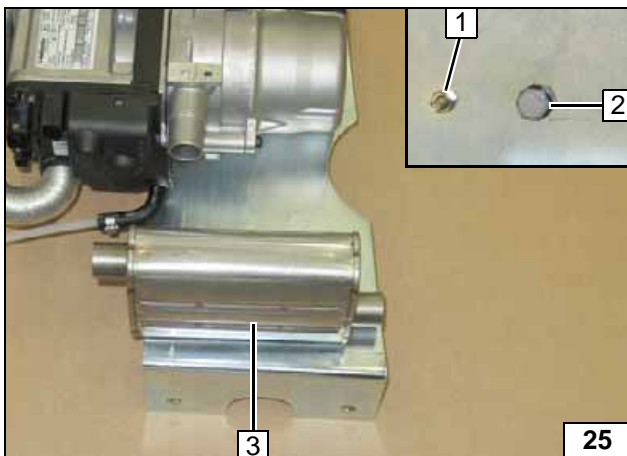


**Preparing exhaust pipe**



- 1 M4x12 bolt, nut from rear

**Installing twist protection**

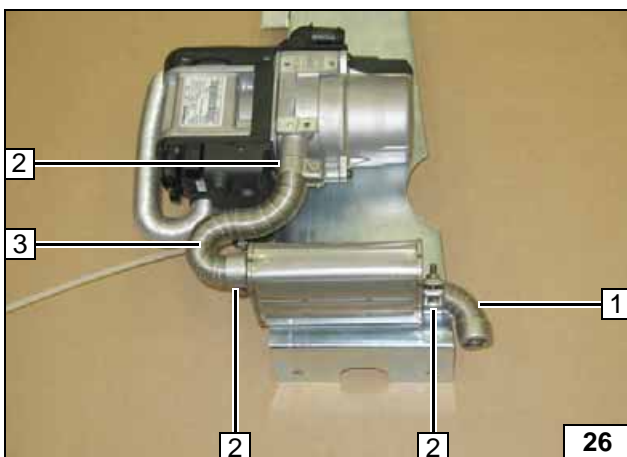


Position housing recess of silencer 3 over bolt head 1 (twist protection).

- 2 M6x12 bolt, spring lockwasher

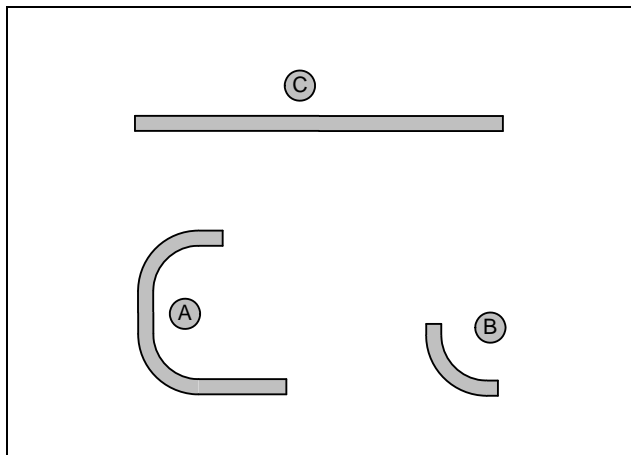


**Mounting silencer**



- 1 Exhaust end section
- 2 Hose clamp [3x]
- 3 Exhaust pipe

**Mounting exhaust pipe**

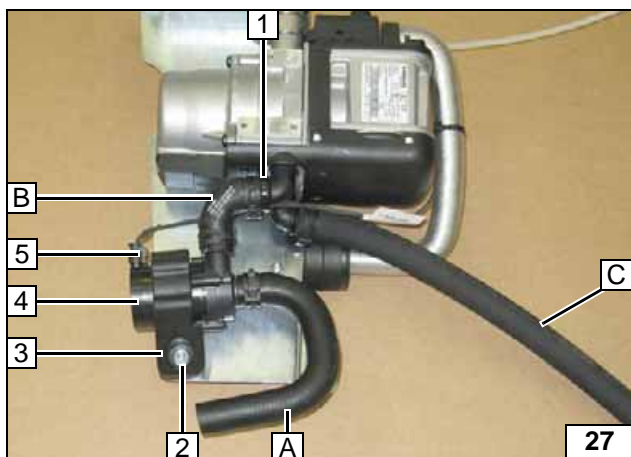


Discard section X.

- A = 180° Moulded hose
- B = 90° Moulded hose
- C = 400



**Cutting wa-  
ter hose to  
length**

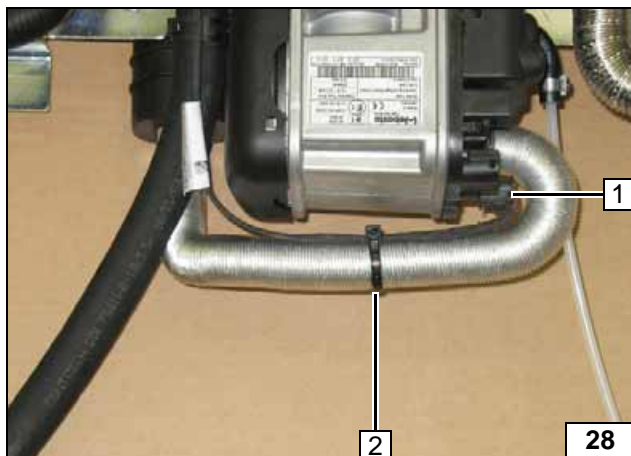


All spring clips = 25 mm dia.

- 1 Cable tie, wiring harness of circulating pump
- 2 M6x25 bolt, flanged nut
- 3 Intake of circulating pump
- 4 Circulating pump
- 5 Wiring harness of circulating pump

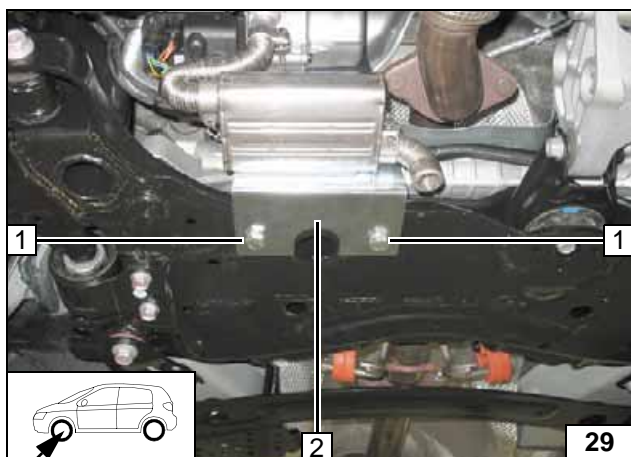


**Mounting  
circulating  
pump**



- 1 Wiring harness of circulating pump
- 2 Cable tie

**Mounting  
circulating  
pump**

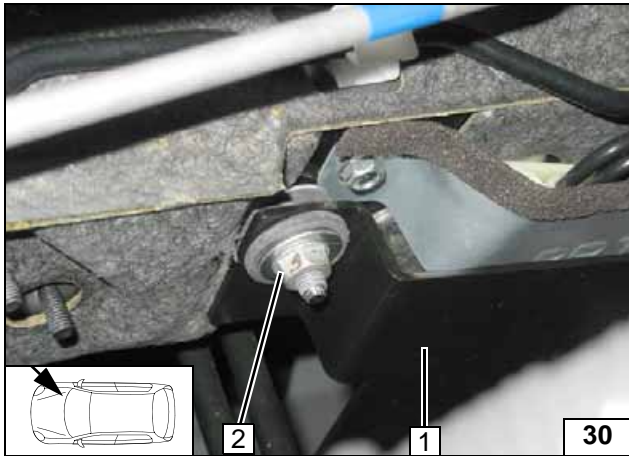


**Installing Heater**

- 1 M10x25 bolt, spring lockwasher, washer, existing threaded hole [2x each]
- 2 Bracket

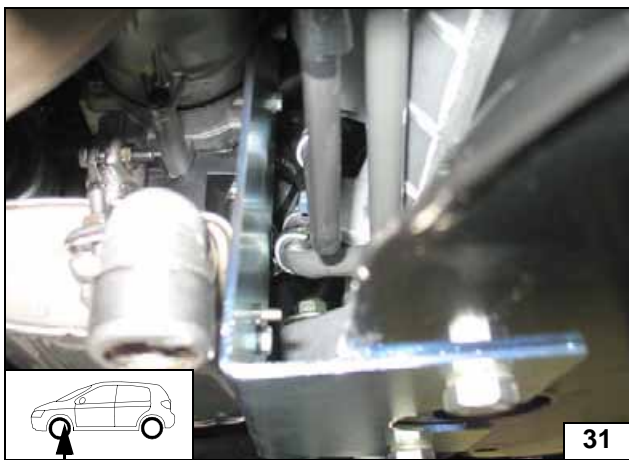
**Loosely  
mounting  
heater**





- 1 Bracket
- 2 Large diameter washer, M8 flanged nut, original vehicle stud bolt

**Mounting heater**



Align heater. Ensure sufficient distance from neighbouring components. Adhere to a minimum distance of 5 mm > from steering components and > 15mm > from transmission, cardan shaft and engine components. Tighten M10x25 bolts.



**Aligning heater**



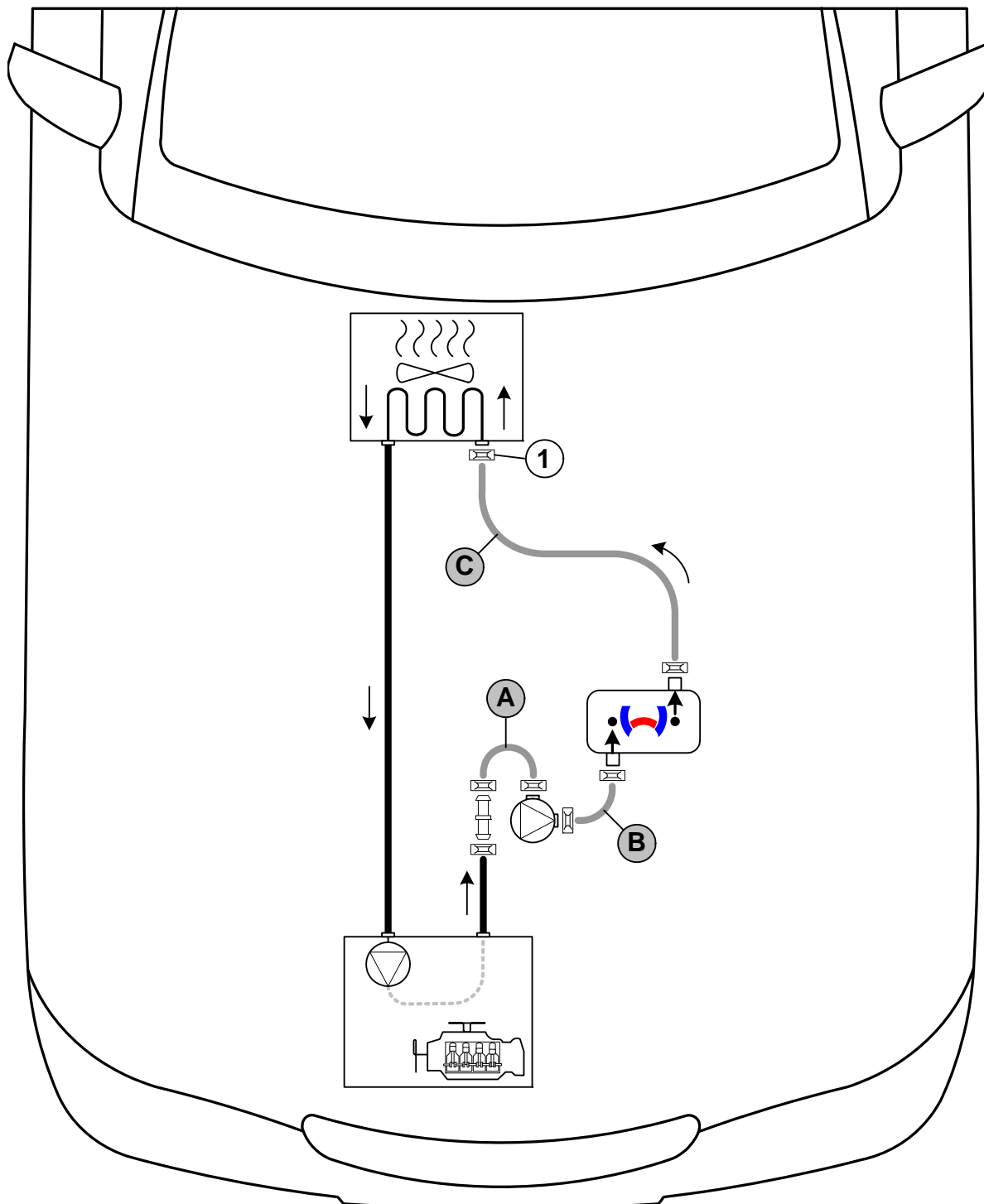
### Coolant Circuit

**WARNING!**


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


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


The displayed coolant circuit serves the purpose of primary heating of the passenger compartment.



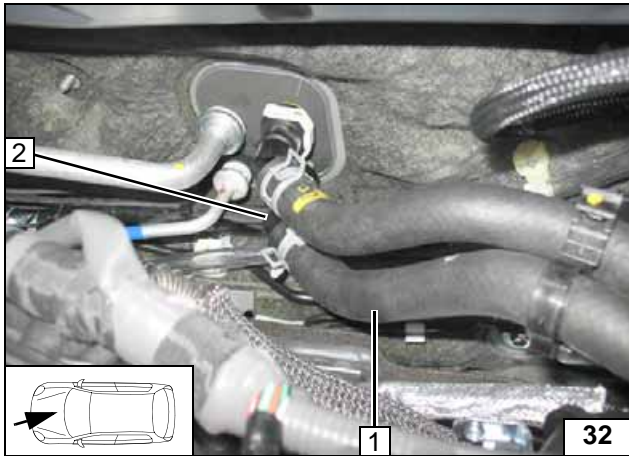
Hose routing diagram

All spring clips without a specific designation  = 25 mm dia.

1 = Original vehicle spring clip .

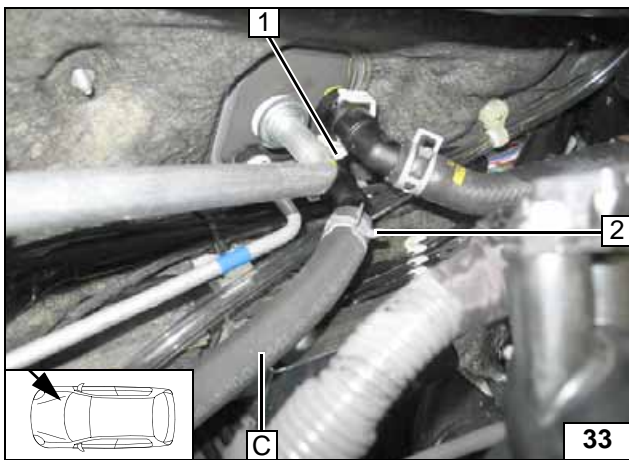
Connecting pipe  = 18x18mm dia.





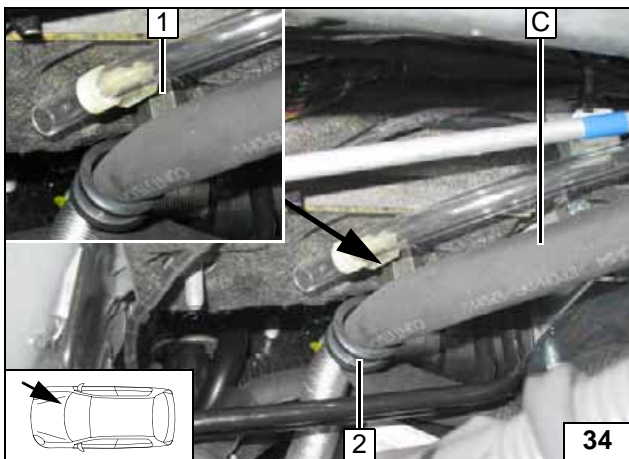
Pull hose of engine outlet / heat exchanger inlet 1 off coupling 2. Original vehicle spring clip will be reused.

**Cutting point**



- 1 Original vehicle coupling, turned to the right
- 2 Original vehicle spring clip

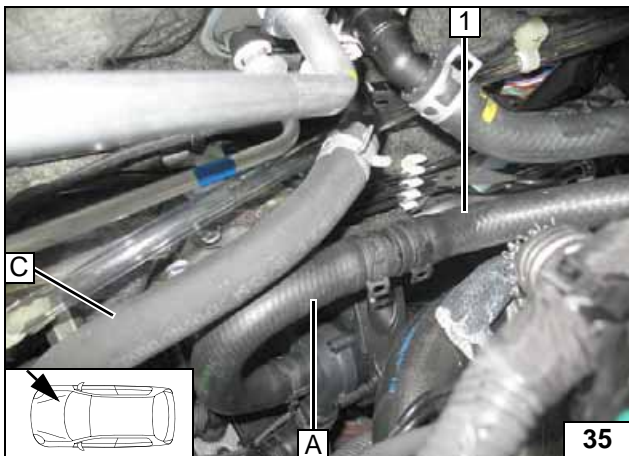
**Connecting heat exchanger inlet**



Install M6x30 spacer nut 1 on original vehicle stud bolt.

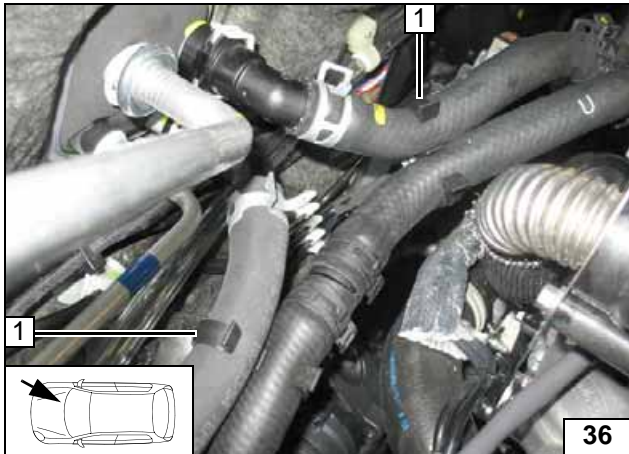
- 2 25mm dia. rubber-coated pipe clamp, M6x12 bolt, spring lockwasher on spacer nut

**Installing hose of heat exchanger inlet**



- 1 Engine outlet hose section

**Connecting engine outlet**

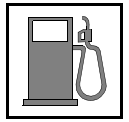


Align hoses. Ensure sufficient distance from adjacent components; correct if necessary.

- 1 Hose bracket [2x]

**Routing in engine compartment**

# Mazda 5



## Fuel

### CAUTION!

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

Catch any fuel running off with an appropriate container.

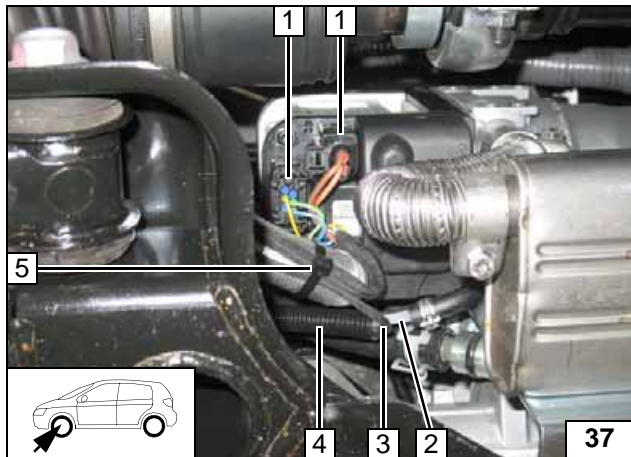
Install fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

### WARNING!

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



### Installing wiring harnesses



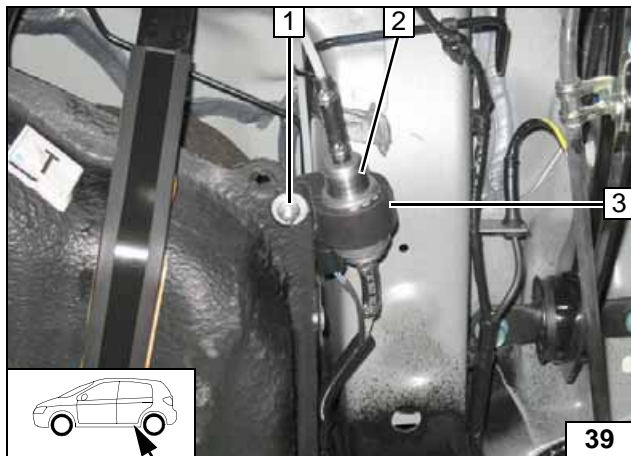
Split corrugated tube in the middle. Insert wiring harness of metering pump 3 and fuel line 2 into corrugated tube section 1 4 and route to installation location of metering pump.

- 1 Install wiring harness of heater [2x]
- 5 Cable tie



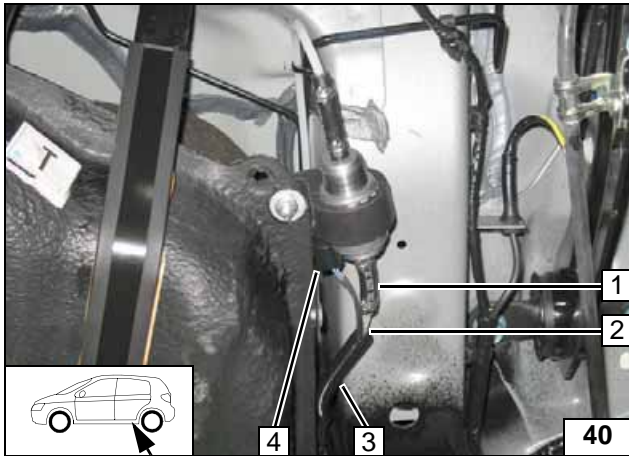
Fasten fuel line of heater and wiring harness of metering pump to the original vehicle fuel lines 1 with cable tie.

### Routing lines



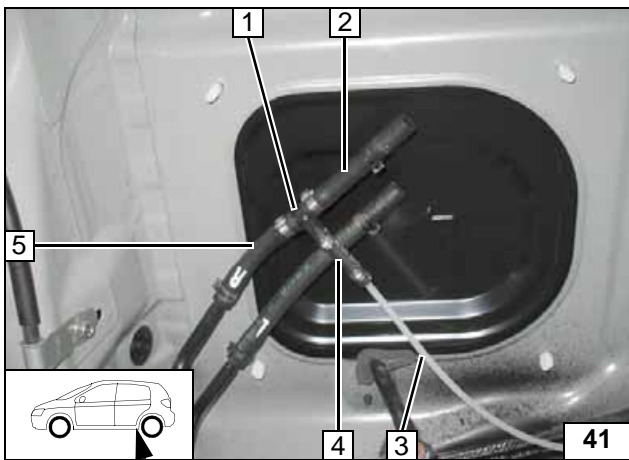
- 1 M6x25 bolt, large diameter washer [2x], flanged nut
- 2 Metering pump
- 3 Intake of metering pump

### Mounting metering pump



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

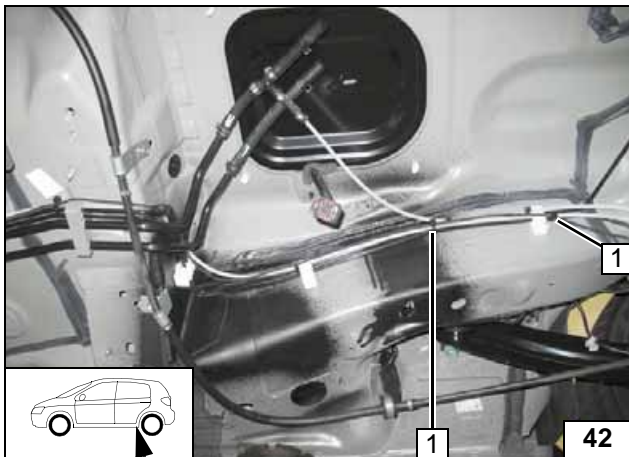
**Connect-  
ing meter-  
ing pump**



- 1 8x5x8 Fuel standpipe  
13.5 mm dia. clamp [2x]
- 2 Hose section of fuel-tank sending unit
- 3 Fuel line
- 4 Hose section, 10 mm dia. clamp [2x]
- 5 Hose section of motor return flow



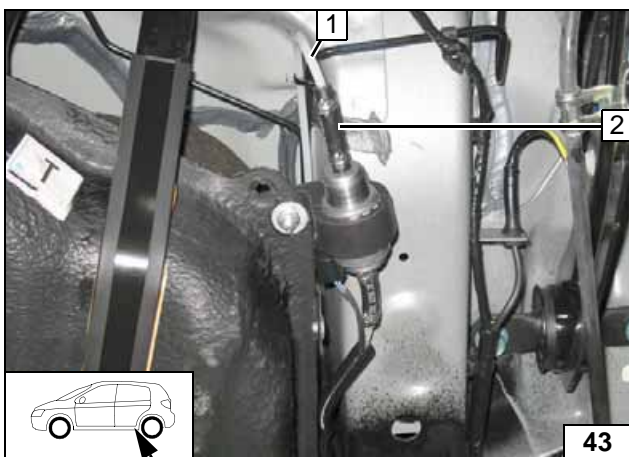
**Inserting  
fuel stand-  
pipe**



Fasten fuel lines and wiring harness of metering pump to the original vehicle fuel lines 1 with cable tie.



**Routing  
lines**



Check the position of the components; adjust if necessary. Check that they have freedom of movement.

- 1 Fuel line of fuel standpipe
- 2 Hose section, 10 mm dia. clamp [2x]



**Connect-  
ing meter-  
ing pump**



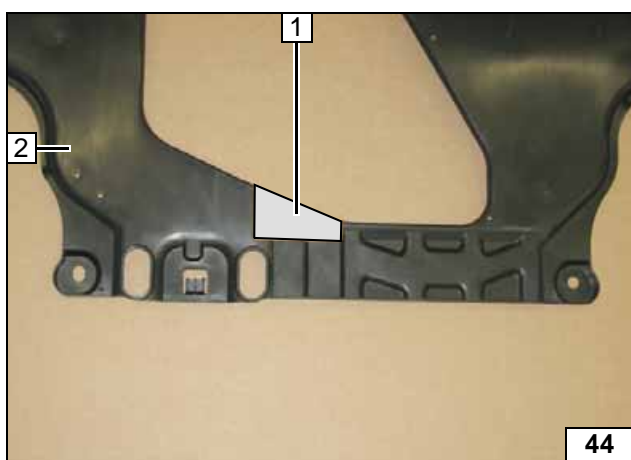
## Final Work

### 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).

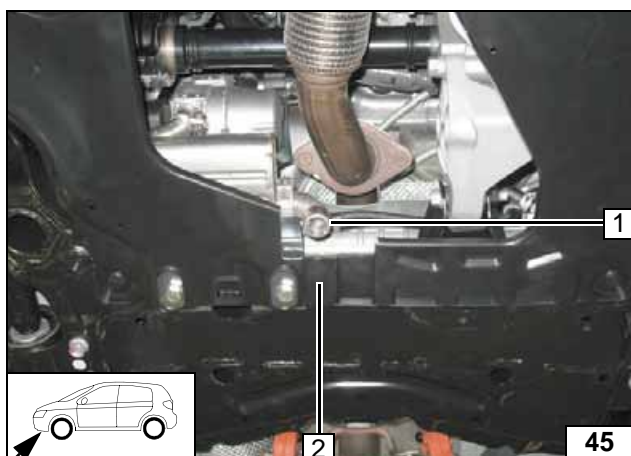


- **Connect the battery.**
- **Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications.**
- **Adjust digital timer, teach telestart remote option**
- **Make settings on A/C control panel according to the "Operating Instructions for End Customer".**
- **Place the signboard "Switch off parking heater before re-fuelling" in the area of the filler neck**
- **For initial startup and function test, see installation instructions**



Cut out underside protection **2** in the area of the marking **1**.

**Cutting out  
underside  
protection**



Align exhaust end section **1** downward and centre of the recess of the underside protection **2**



**Aligning  
exhaust  
end section**

Webasto Thermo & Comfort SE  
Postfach 1410  
82199 Gilching  
Germany  
Internet: [www.webasto.com](http://www.webasto.com)  
Technical Extranet:  
<http://dealers.webasto.com>

## Operating Instructions for Manual Air-Conditioning

Please remove page in case of manual air-conditioning and add it to the vehicle operating instructions.

**Note:**

We recommend matching the heating time to the driving time.

Heating time = driving time

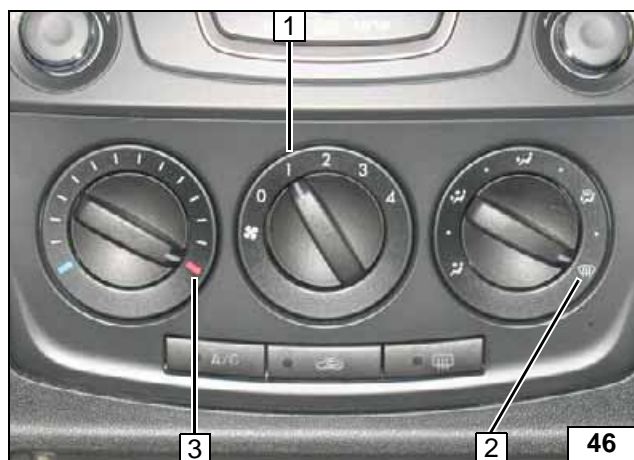
**Example:**

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.

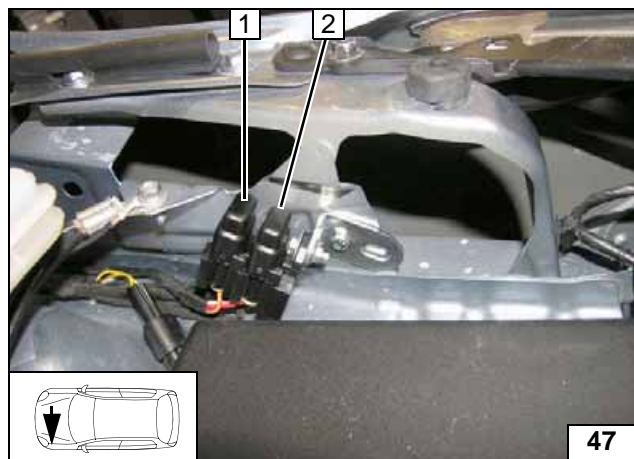
For information on deactivation, please see the vehicle owner's manual.

Before parking the vehicle, make the following settings:



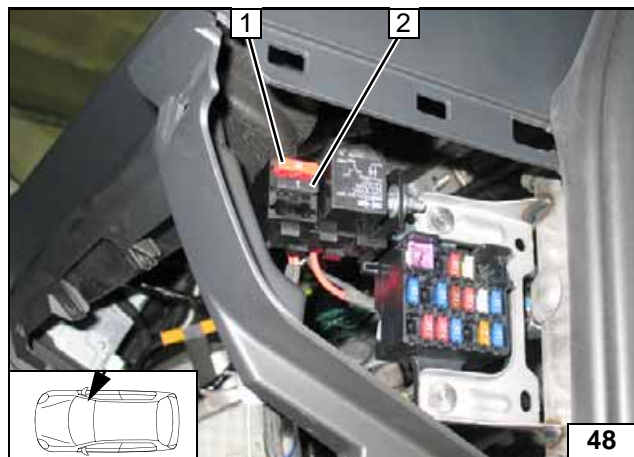
- 1 Set fan to level "1" or max. "2"
- 2 Air outlet to windscreen
- 3 Set temperature to "HI"

A/C control panel



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

Fuses of engine compartment



- 1 10A fan fuse F4
- 2 1A fuse F3 of heater control

Fuses of passenger compartment





## Operating Instructions for Automatic Air-Conditioning

Please remove page in case of automatic air-conditioning and add it 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.

For information on deactivation, please see the vehicle owner's manual.

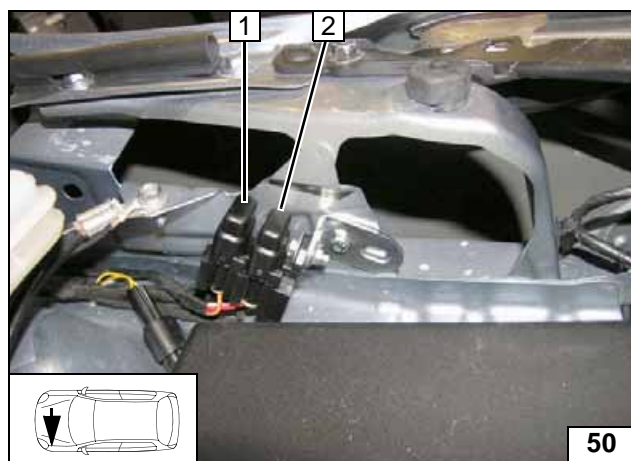
Before parking the vehicle, make the following settings:



- 1 Set fan to level "1" or max. "2"
- 2 Air outlet to windscreen
- 3 Set temperature to "29°C"

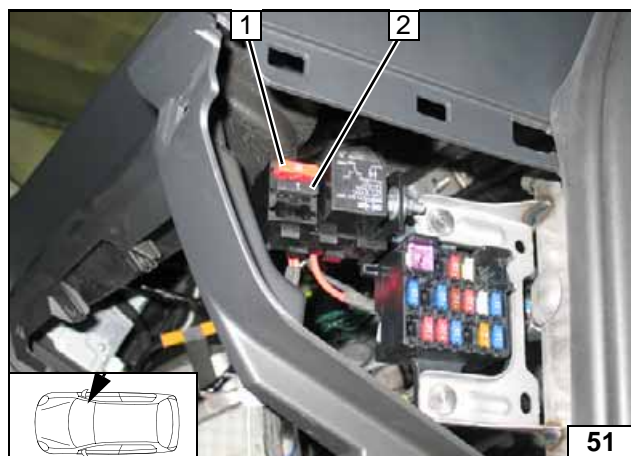


**A/C control panel**



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

**Fuses of engine compartment**



- 1 10A fan fuse F4
- 2 1A fuse F3 of heater control

**Fuses of passenger compartment**

