

G Installation documentation

Air-conditioning control for manual air-conditioning

Renault Megane

Left-hand drive vehicle

Manufacturer	Model	Type	Model year	EG-BE-No. / ABE
Renault	Megane	RFB	from 2018	e2* 2007/46* 0546*...

Validity	Equipment variants	Model
		Megane
Verified equipment variants	Manual air-conditioning	x

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1 List of abbreviations

KSG Air-conditioning control unit

PWM Pulse width modulator

RSH Relay and fuse holder of passenger compartment

Wire Cable

2 Installation notes

2.1 Information on Validity

This installation documentation applies to vehicles listed on page 1, 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.

2.2 Components used

Designation	Order number
Additional 'manual air-conditioning' control kit for Renault Megane 2018	1326586A

2.3 Validity Notes

This installation documentation applies only in combination with:

Designation	Order number
Installation kit for Renault Megane 2016 petrol and diesel	1324904_
Installation documentation for Renault Megane 2016 petrol and diesel	1324905_

or

Installation kit for Renault Megane 2016 diesel	1325331_
Installation documentation for Renault Megane 2016 diesel	1325332_

or

Installation kit for Renault Megane 2018 1.33 petrol	1326905_
Installation documentation for Renault Megane 1.33 petrol	1326906_

3 About this document

3.1 Purpose of the document

This installation documentation is part of the product and contains all the information required to ensure professional vehicle specific installation of the:

'Manual' air-conditioning control installation kit

3.2 Warranty and liability

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 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.

Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K).

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

The initial start-up 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.

3.2.1 Statutory regulations governing installation

The Thermo Top Evo heater has been type-tested and approved in accordance with ECE-R 10 (EMC) and ECE-R 122 (heater). 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.

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

3.3 Safety

Qualifications of installation personnel

The installation personnel must have the following qualifications:

- Successful completion of Webasto training
- Corresponding qualification for working on technical systems

Regulations and legal requirements

The regulations from the heater's general installation and operating instructions must be observed.

3.3.1 Safety information on installation

Danger posed by live parts

- ▶ Prior to installation, disconnect the vehicle from the voltage supply.
- ▶ Make sure the electrical system is earthed correctly.
- ▶ Always comply with legal requirements.
- ▶ Observe data on type label.

Danger of fire and leaking toxic gases due to improper installation

- ▶ Vehicle parts in the vicinity of the heater must be protected against excessive heating by the following measures:
 - ⇒ Maintain minimum safety distances.
 - ⇒ Ensure adequate ventilation.
 - ⇒ Use fire-resistant materials or heat shields.

Danger due to sharp edges

- Lacerations
- Short circuit due to electrical wire damage
- ▶ Fit protectors on sharp edges.

3.4 Using this document

Before installing and operating the heater, read this installation documentation, the installation instructions of the heater, the operating instructions and supplementary sheets provided.

3.4.1 Explanatory Notes on the Document

There is an identification mark near the respective work step to allow you to quickly allocate the other applicable documents to the Webasto components to be installed:

Generally valid Webasto documentation	
Vehicle-specific installation documentation	
Webasto Comfort A/C control	
Webasto Standard A/C control	
Tank extracting device (e.g. FuelFix)	
Exhaust end fastener (EFIX)	
Combustion air intake silencer	
Spacer bracket (ASH)	

3.4.2 Use of symbols



DANGER

Type and source of the risk

Consequences: Failure to follow the instructions can result in death

► Actions to protect yourself against risks.



WARNING

Type and source of the risk

Consequences: Failure to follow the instructions can lead to serious or even fatal injuries

► Actions to protect yourself against risks.



CAUTION

Type and source of the risk

Consequences: Failure to follow the instructions can lead to minor injuries

► Actions to protect yourself against risks.



Type and source of the risk

Consequences: Failure to follow the instructions can lead to material damage

► Actions to protect yourself against risks.



Reference to the vehicle manufacturer's specific documents.



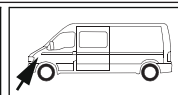
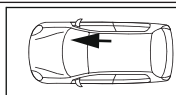
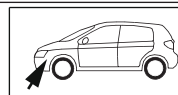
a note on a special technical feature

3.4.3 Work step identification marks

The ongoing work step is indicated on the outside top corner of the page:

Mechanical system	Electrical System	High-voltage	Coolant
Combustion air	Fuel	Exhaust gas	Software

3.4.4 Orientation aid



The arrow indicates the position on the vehicle and the viewing angle

3.4.5 Use of highlighting

Highlight	Explanation
►	Necessary action
⇒	Result of an action
1 / 12 / a1 / A	Position numbers for the image descriptions
① / ⑫	Position numbers for the image descriptions for electrical wires and wiring harnesses and coolant hose sections

4 Technical Information

Dimension specifications

- All dimensions specified in mm

Tightening torque specifications

- Tighten bolt connections in accordance with manufacturer's instructions or in accordance with state-of-the-art-technology

Necessary special tools

- Automatic wire stripper 0.2 - 6 mm²
- Crimping pliers for tab connector 0.14 – 6 mm²
- Crimping pliers for cable lugs 0.5 – 10 mm²
- Crimping pliers for connector 0.25 – 6 mm²
- Torque wrench for 2.0 - 10 Nm
- Webasto Thermo Test Diagnosis with current software

5 Preparing measures

5.1 Vehicle preparation



Further information can be found in the vehicle manufacturer's technical documentation.

- ▶ Disconnect the battery
- ▶ Remove the side instrument panel trim on the left
- ▶ Remove the footwell trim on the left
- ▶ Remove the lower instrument panel trim on the left
- ▶ Remove the centre console trim on the left and right
- ▶ Fold up the driver's side carpet

6 Installation overview

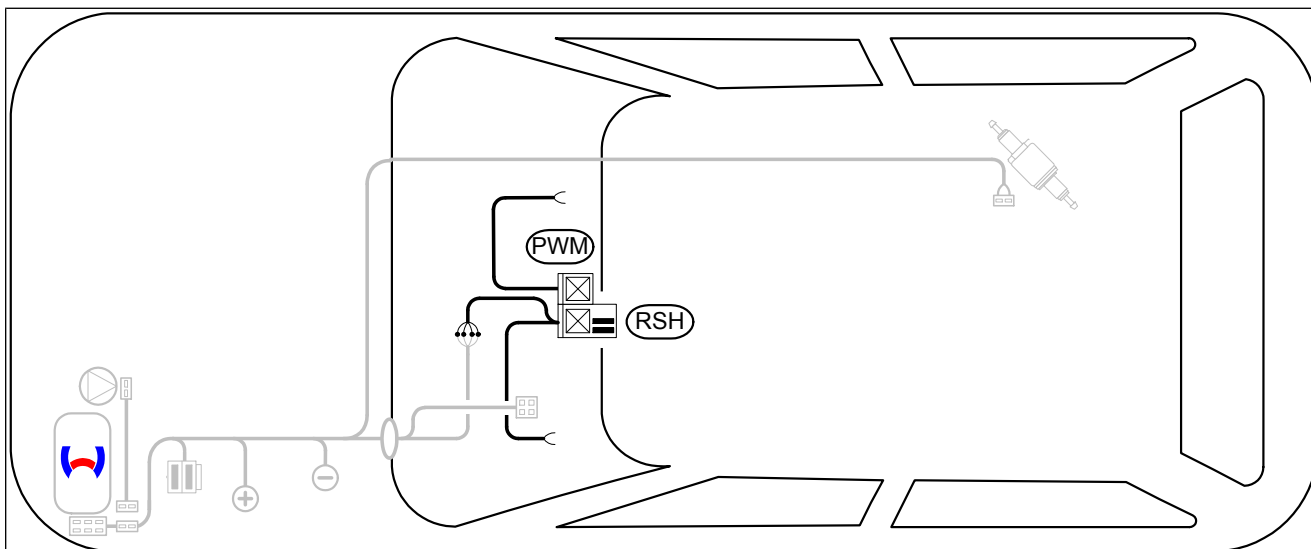


Fig. 1

Legend to installation overview

Abbreviation	Component
PWM	PWM GW
RSH	Relay and fuse holder of passenger compartment



7 Electrical system

7.1 Electrical system preparation

Assigning wires

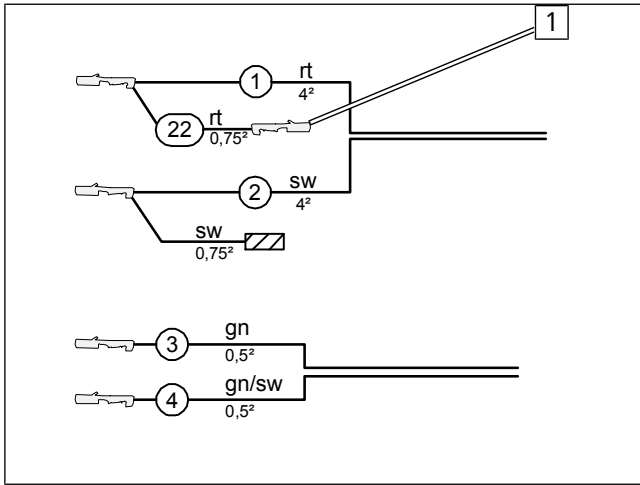


Fig. 2

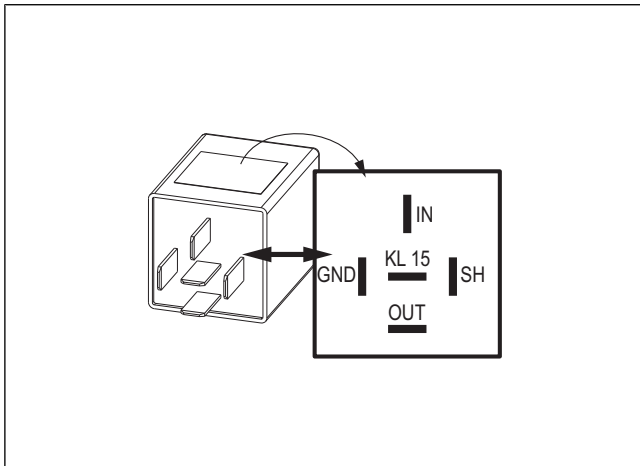


Fig. 3



Wire sections retain their numbering in the entire document.

- 1 6.3mm blade receptacle
- ① Red (rt) wire of fan wiring harness
- ② Black (sw) wire of fan wiring harness
- ③ Green (gn) wire from wiring harness of PWM control
- ④ Green/black (gn/sw) wire of PWM control wiring harness

► Check PWM Gateway settings when starting-up the heater, adjust if necessary.

Parameters	Setting
Duty cycle	65%
Frequency	400Hz
Voltage	not relevant
Function	Low side



Assembling PWM GW and RSH sockets, connecting wires

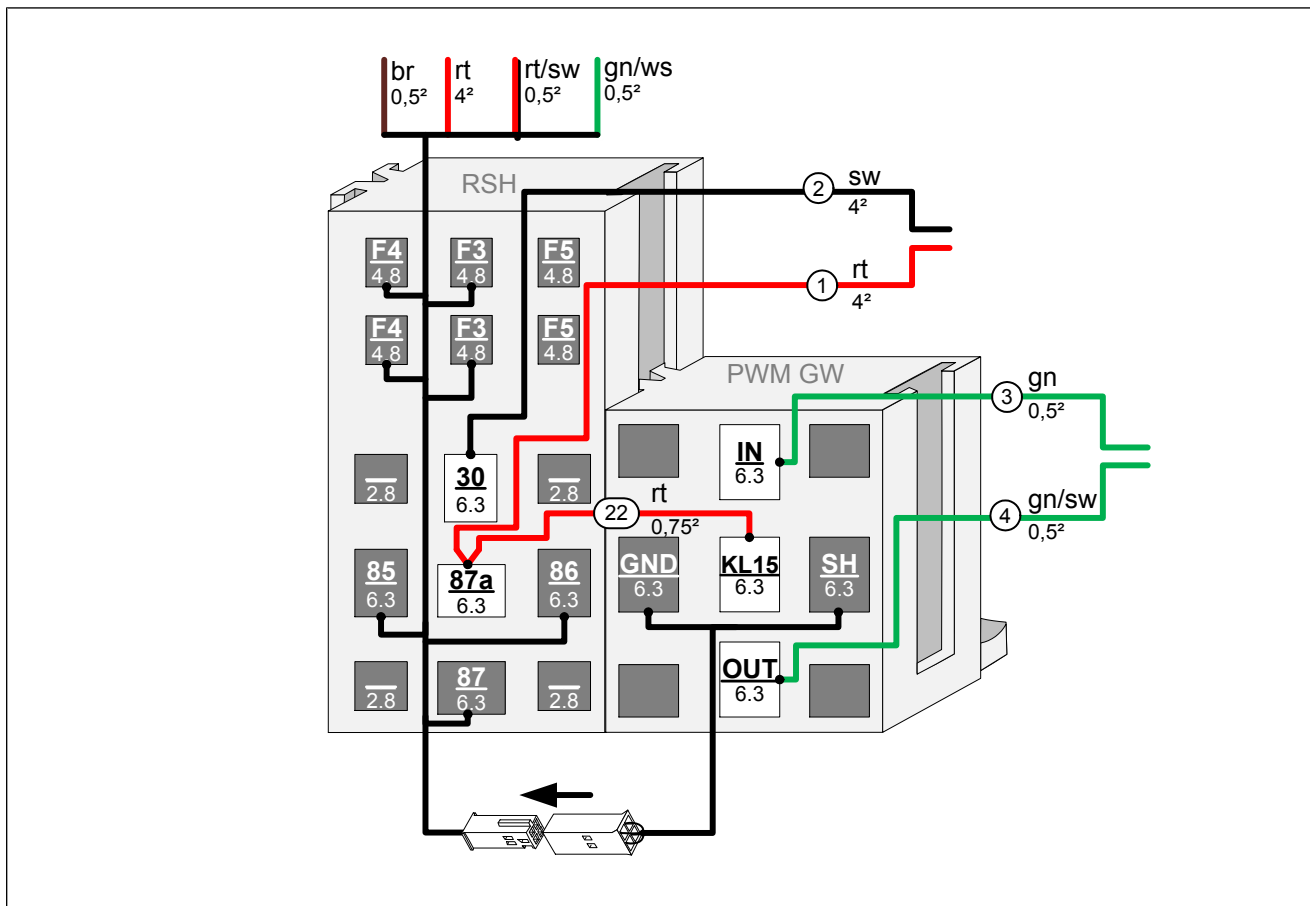


Fig. 4

Premounting RSH

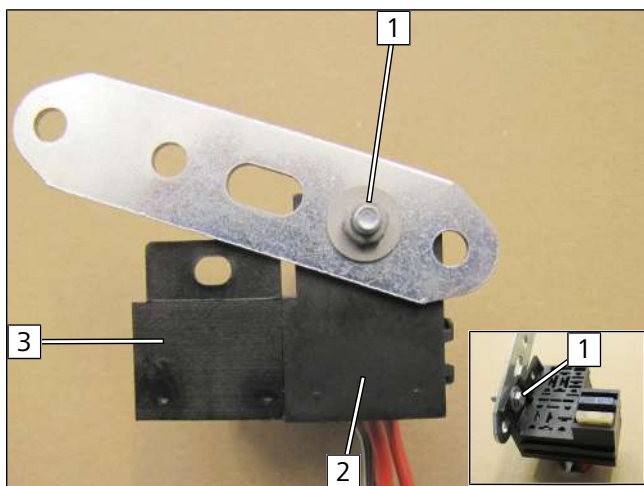
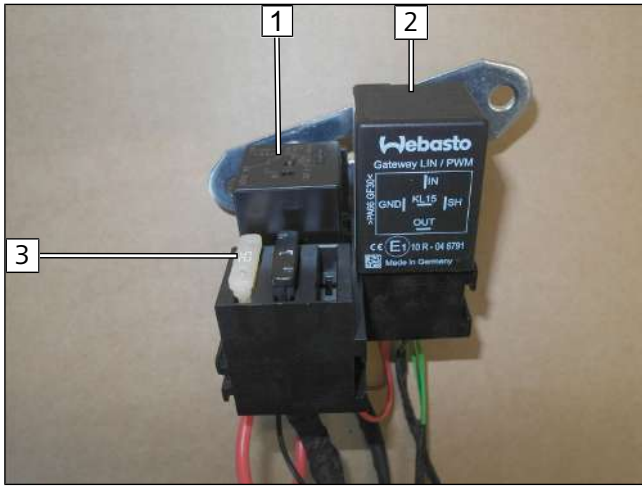


Fig. 5

- 1 M5x16 bolt, large diameter washer, RSH, perforated bracket, large diameter washer, nut
- 2 RSH
- 3 PWM GW socket



- 1 Relay K1
- 2 PWM GW
- 3 25A fuse F4

Fig. 6



7.2 Wiring diagram

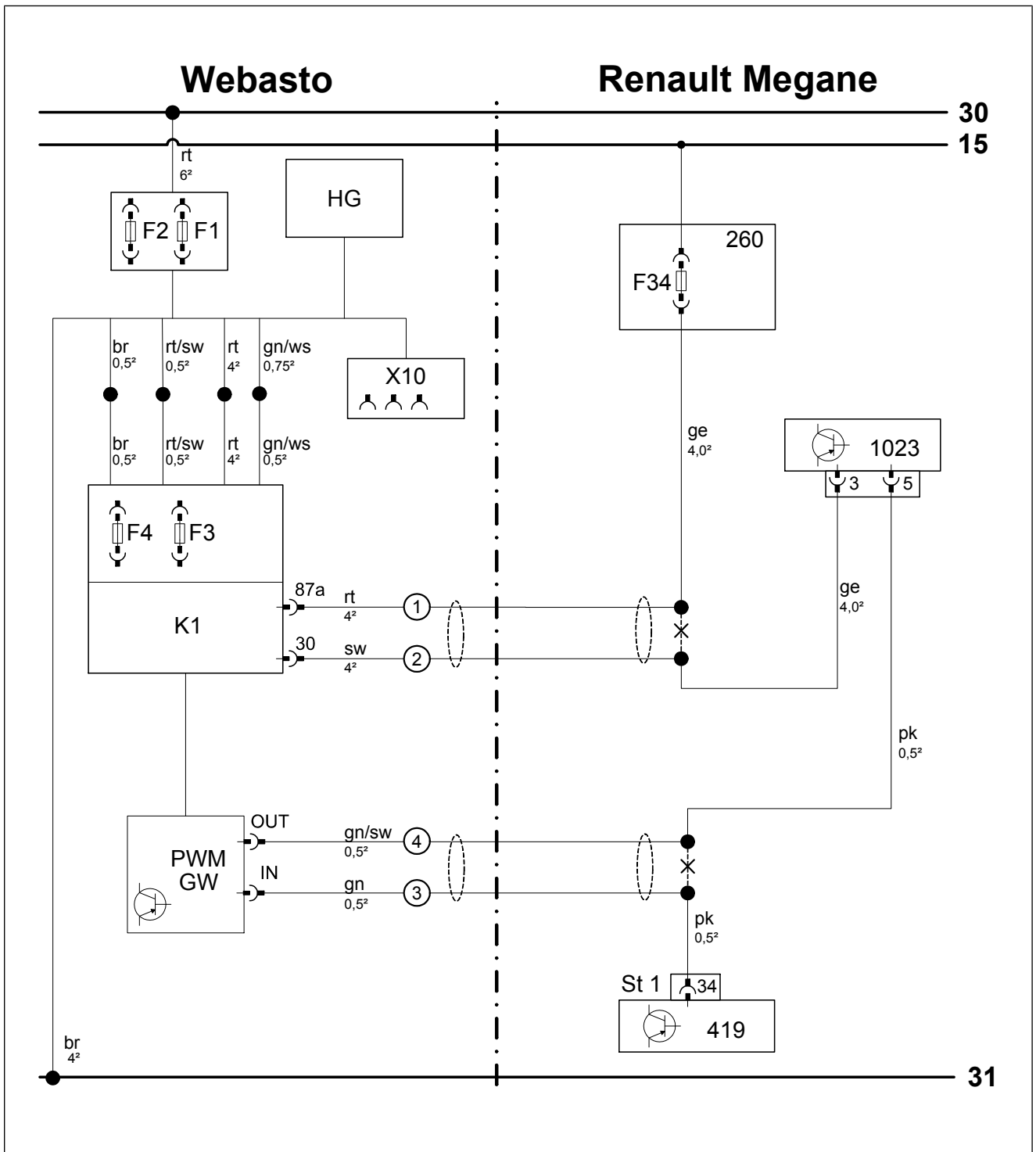


Fig. 7



Legend to wiring diagram

Vehicle components		Symbols	
Abbreviation	Component	Abbreviation	Designation
260	Relay and fuse box passenger compartment	X	Cutting point
F34	Fuse 40A		
1023	Fan controller		
419	KSG		
ST1	40-pin connector 419 (grey)		

Webasto components		Cable colours	
Abbreviation	Component	Abbreviation	Colour
A	Connector of CLR module wiring harness	br	brown
B	Socket of CLR module wiring harness	bg	beige
CCL GW	CAN CAN LIN Gateway	dbl	dark blue
CL GW	CAN LIN Gateway	dgn	dark green
CLR	Cold start module	ge	yellow
D1	Diode	gn	green
D2	Diode group	gr	grey
F0	Additional fuse for power supply	hbl	light blue
F1	Heater main fuse	hgn	light green
F2	Passenger compartment fan controller main fuse	or	orange
F3	Heater control fuse	pk	pink
F4	Fan controller fuse	rt	red
F5	Additional fuse	sw	black
HG	Heater TT-Evo	vi	violet
K1	Relay K1	ws	white
K2	Relay K2		
K3	Relay K3		
LIN GW	LIN Gateway		
PWM GW	Pulse width modulator gateway		
RSH	Relay and fuse holder of passenger compartment		
RTD	Temperature sensor		
X10	4-pin socket of heater control		



7.3 Fan controller

Routing wires, connecting same colour wires of wiring harnesses **1** and **4**

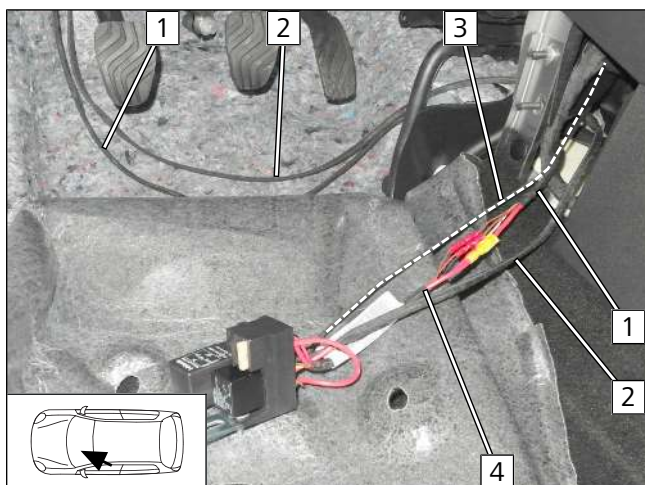


Fig. 8

- ▶ Route fan wiring harness **2** to the relay and fuse box in the passenger compartment.
- ▶ Route PWM control wiring harness **3** to the right side of the vehicle.

- 1** Heater wiring harness
- 4** RSH wiring harness

Mounting RSH and PWM GW

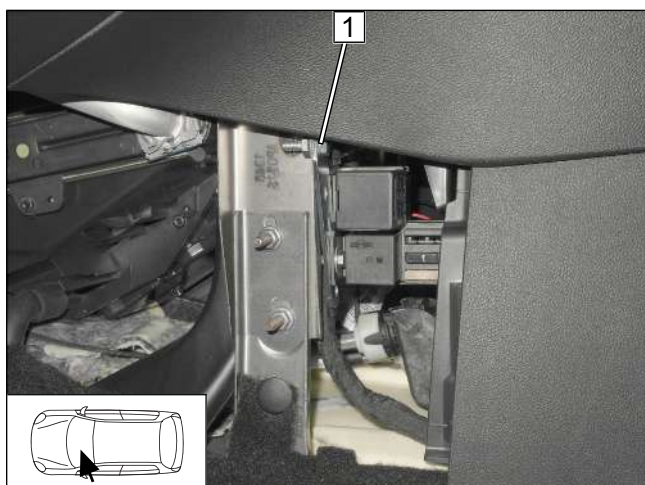


Fig. 9

- 1** M6x20 bolt, perforated bracket, original vehicle hole, flanged nut

View of passenger compartment relay and fuse box

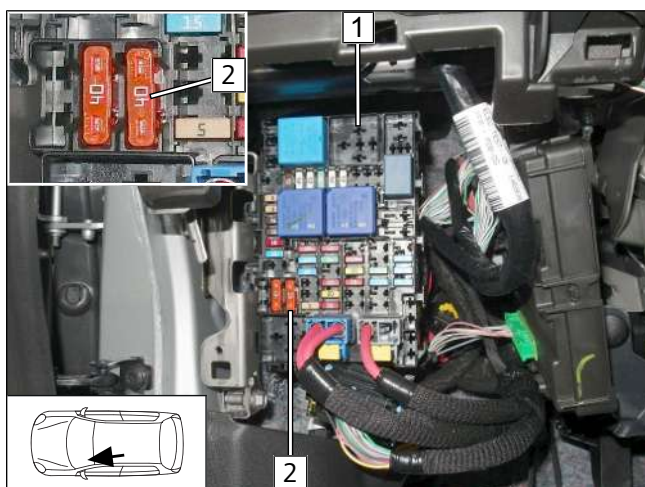


Fig. 10

- 1** Passenger compartment relay and fuse box
- 2** Fuse F34



Connecting fan controller

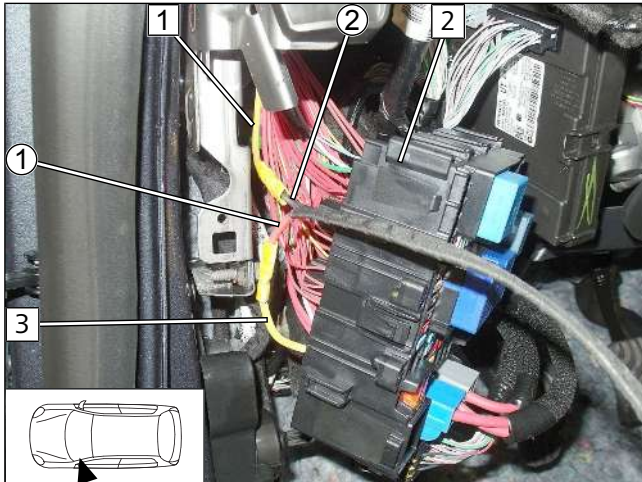


Fig. 11

► Detach passenger compartment relay and fuse box [2].

- [1] Yellow (ge) wire of fan controller connector (1023)
- [3] Yellow (ge) wire of fuse F34
- ① Red (rt) wire of K1/87a fan wiring harness
- ② Black (sw) wire of K1/30 fan wiring harness

View of KSG connector

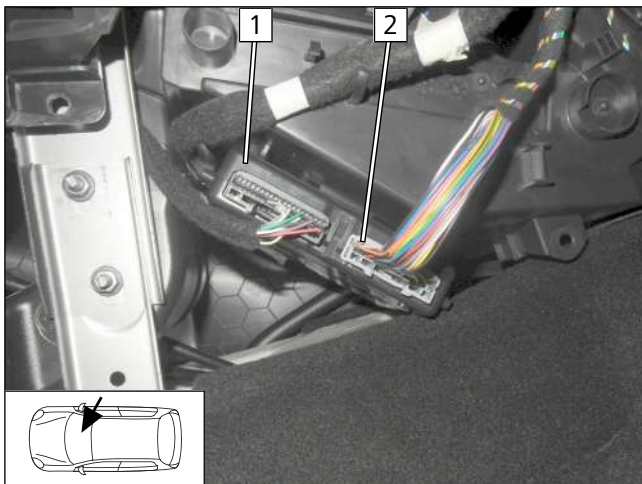


Fig. 12

- [1] KSG (419)
- [2] Connector St1

KSG connector St1 assignment on wiring side:

21	23	25	26	28	29					34					39	40
1		4	5	6	7	8	9	10							19	20

Connecting KSG

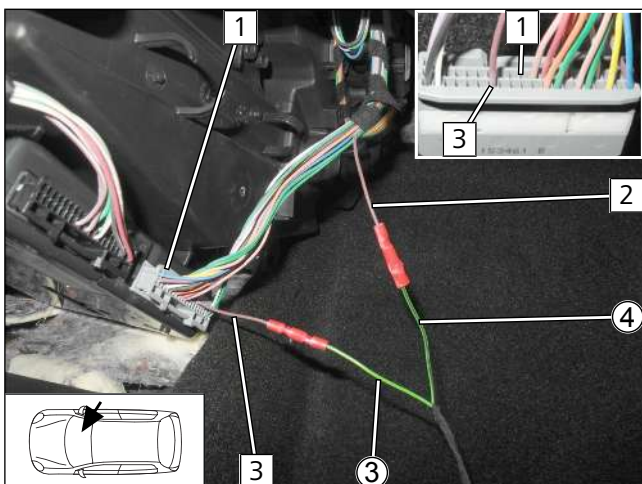


Fig. 13

- [1] KSG connector St1
- [2] Pink (pk) wire of fan controller 1023 / pin 5
- [3] Pink (pk) wire of 40-pin KSG connector St1 / pin 34
- ③ Green (gn) wire of PWM control wiring harness
- ④ Green/black (gn/sw) wire of PWM control wiring harness



8 Final work



- ▶ Final work is not carried out until the installation of the heater in the vehicle has been completed
- ▶ Check all electrical connections for firm seating
- ▶ Insulate and tie back loose lines



These are the original instructions. The German language is binding.
You can request your language if it is missing. The telephone number of each country can be found in the Webasto service centre leaflet or the website of the respective Webasto representative of your country.

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WWW.WEBASTO.COM

9 Operating instructions



Vehicles with passenger compartment monitoring:

Further information can be found in the vehicle operating instructions.

- ▶ Deactivate passenger compartment monitoring for the heating operation



Information regarding the heating time:

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.



Notes about the active parking heating mode

The vehicle fan is deactivated when the vehicle is opened and is available again once the ignition is switched on.

After the vehicle is closed again, it can take several minutes for it to be active again.



Note for parking heater function

Vehicle with 1.33 petrol engine:

Your vehicle is equipped with a passenger compartment preheating unit. There is **no** engine pre-heating.

All vehicles except for 1.33 petrol engine:

Your vehicle is equipped with a passenger compartment and engine preheating unit.

9.1 A/C control panel settings

Manual air-conditioning control panel

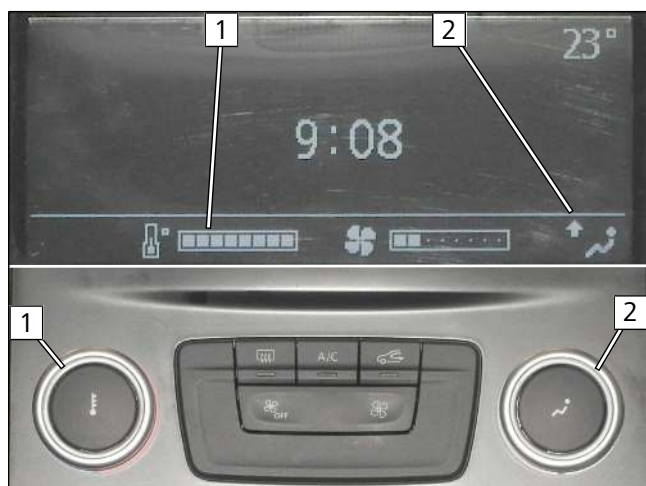


Fig. 14



Before parking the vehicle, make the following settings:

- 1 Temperature on both sides to 'max.'
- 2 Air outlet to windscreen



Setting the fan speed is not required, it will automatically be set to approx. 1/3.

9.2 Installation location of fuses

Fuses in engine compartment

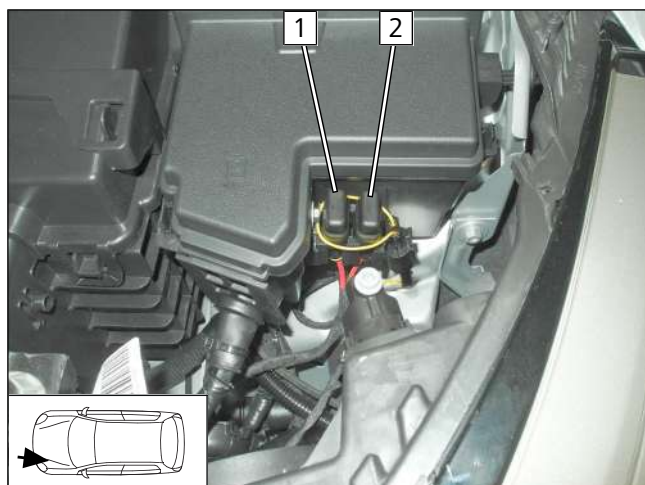


Fig. 15

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

Fuses in passenger compartment

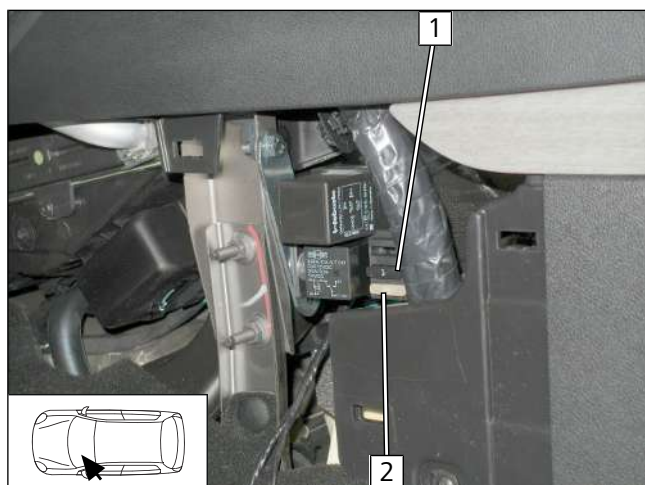


Fig. 16

- 1 F3 - 1A control element fuse
- 2 F4 - 25A fan controller fuse