



# A/C control 'Comfort'

# Installation Documentation Renault Kadjar

## **Validity**

Manufacturer	Model	Туре	EG-BE No. / ABE
Renault	Kadjar	RFE	e11 * 2007 / 46 * 0475

From model year 2015 Left-hand drive vehicle

Verified equipment variants: 2 zone automatic air-conditioning

Not verified: Passenger compartment monitoring

**Exclusion:** Manual air-conditioning

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## **Necessary Components**

Additional kit A/C control 'Comfort' for Nissan Qashqai / X-Trail / Renault Kadjar / 2014 : 1324068A

## **Information on Validity**

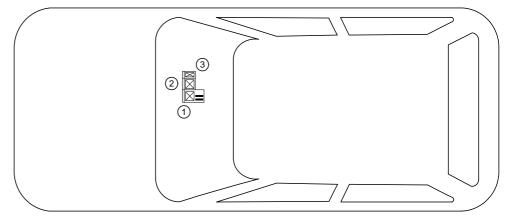
This installation documentation applies only for:

- Installation kit for Nissan Qashqai 2014 / Renault Kadjar 2015 petrol and diesel: 1324081\_
- Installation documentation for Qashqai 1.2/1.6 P, 1.5D and Kadjar 1.2P with SG 1324082\_
- Installation documentation Kadjar 1.6D with SG: 1324287\_

## **Installation Overview**

## Legend:

- Passenger compartment relay and fuse holder
- 2. CL Gateway
- 3. K2 relay



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#### 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 have to audibly click into place during installation.

Sharp edges should be fitted with rub protection. 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 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

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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 StV-ZO (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 gas 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
- 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.

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In multilingual versions the German language is binding.

## Information on Validity

This installation documentation applies to Renault Kadjar vehicles - for validity, see page 1 - from model year 2015 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 Information**

#### **Special Tools**

- Automatic wire stripper, 0.2 6mm²
- Crimping pliers for cable lug / tab connector, 0.5 6mm²
- Torque wrench for 2.0 10 Nm
- Webasto Thermo Test Diagnosis with current software

#### **Dimensions**

· All dimensions are in mm.

#### **Tightening torque values**

Tighten 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:



**Electrical System** 





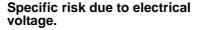
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Software



Specific risk of damage to components.



Specific risk of injury or fatal accidents.



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



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

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





## **Preliminary Work**

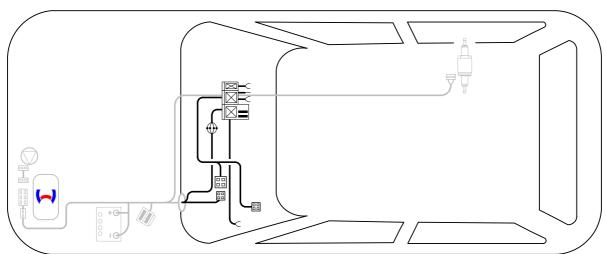
#### Vehicle



- Disconnect the battery.
- Remove the lateral instrument panel trim on the left.
- Remove the centre console trim on the left.
- Remove the lateral instrument panel trim on the left.
- Remove the lower instrument panel trim on the driver's side.
- Remove the centre console trim on the right (see trim installation instructions).



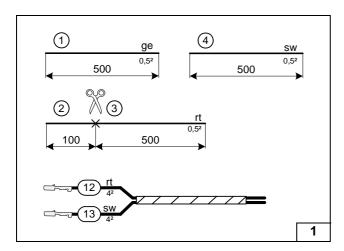
## **Electrical System**





Wiring harness routing diagram for passenger compartment





## **Preparing Electrical System**

Wire sections retain their numbering in the entire document.

Produce all following electrical connections as shown in the wiring diagram.

- 12) Red (rt) wire of fan wiring harness
- 13 Black (sw) wire of fan wiring harness



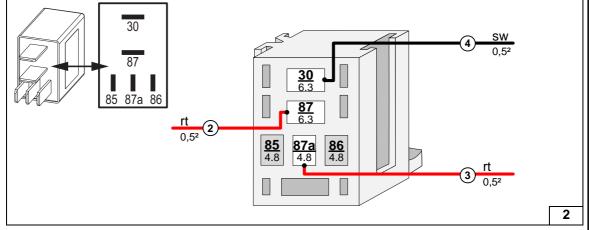
Cutting to length / assigning wires

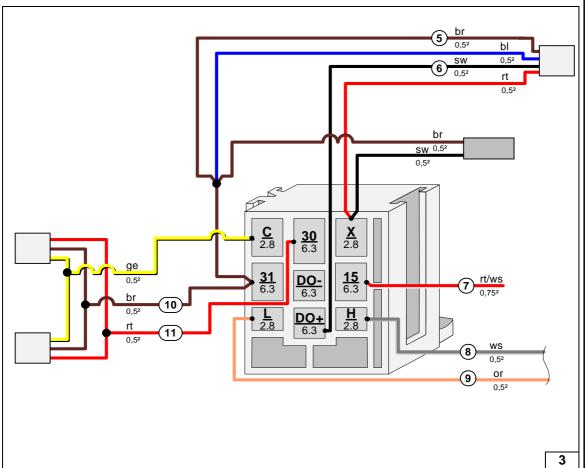


Connecting wires to socket of K2 relay



View of wiring harness and CL Gateway socket/ Assignment of wires to be used

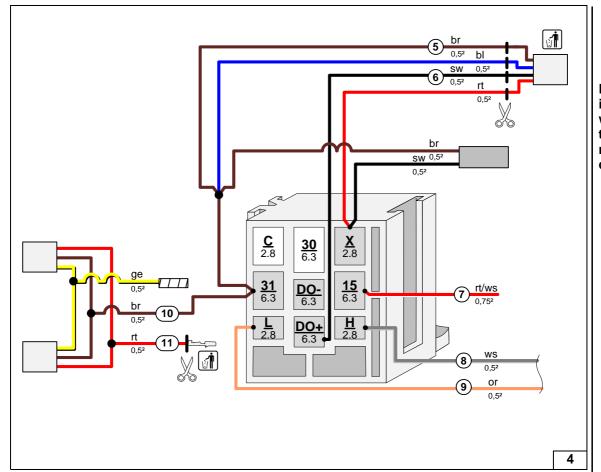




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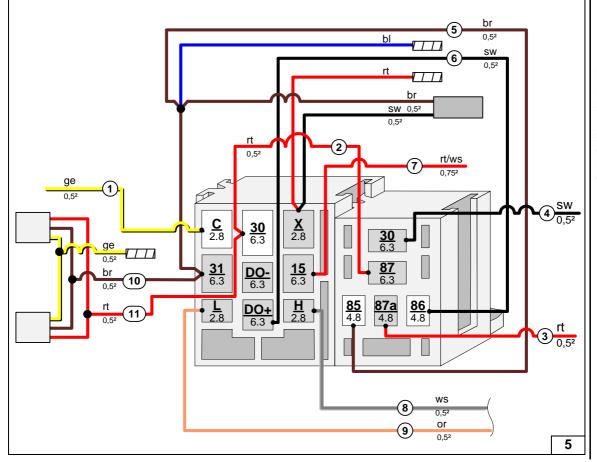




Detaching / insulating wires, cutting off connector and contacts

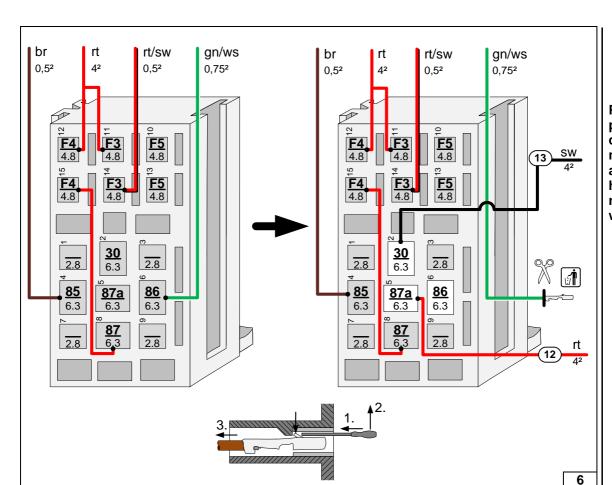


Interlocking **CL Gateway** socket and K2 relay socket / connecting/ insulating wires



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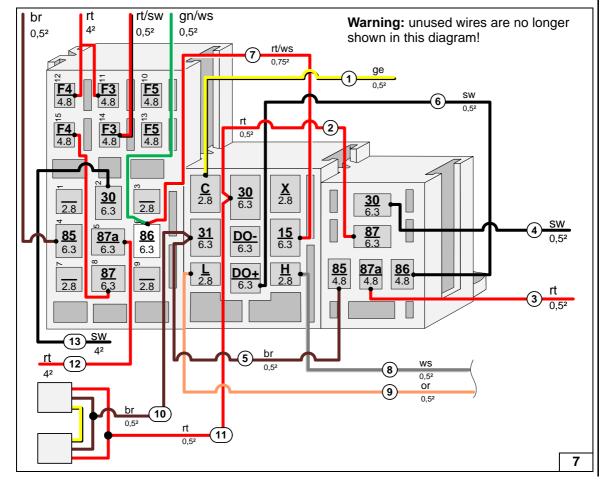


Preparing passenger compart-ment relay and fuse holder, connecting wires



Interlocking passenger compart-ment relay and fuse holder with CL Gateway and K2 relay sockets/ connecting wires to K1 relay, terminal 86

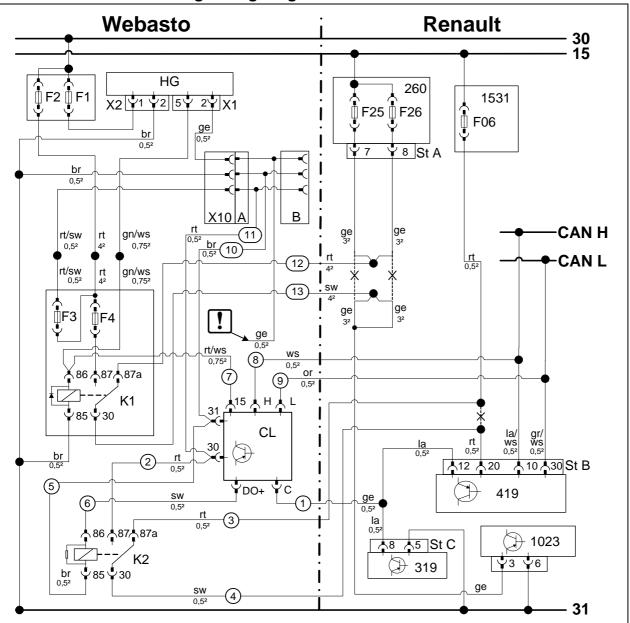
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**Automatic Air-Conditioning Wiring Diagram** 



Weba	sto components	Vehicle	components	Colours and symbols			
HG	TT-Evo heater	260	Passenger compartment central electrical box	rt	red		
X1	6-pin heater connector	F25	20A fuse	sw	black		
X2	2-pin heater connector	F26	20A fuse	ge	yellow		
F1	20A fuse	St A	White connector 260	gn	green		
F2	30A fuse	1531	Fuse box	ws	white		
X10	4-pin heater control con-	F06	10A fuse	br	brown		
	nector	419	A/C control unit	gr	grey		
Α	4-pin adapter connector	St B	Black connector 419	or	orange		
В	4-pin female adapter connector	1023	Fan controller	la	salmon		
F3	1A fuse	319	A/C control panel				
F4	25A fuse	St C	Black connector 319				
K1	Fan relay				Insulate wire end and tie		
CL	CL Gateway			اك	back		
K2	Additional relay			Х	Cutting point		
				Wiring	colours may vary.		

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Automatic air-conditioning wiring diagram

Legend





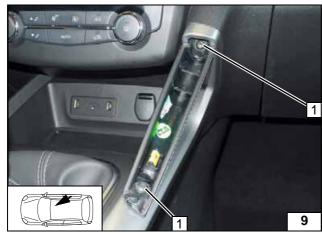


## **Trim Installation Instructions**

Detach trim 2 in the lower area from retaining clamp 1 by pulling it upwards, then pull the end from the upper guide.

1 Fastening clip

Removing lateral grip trim



1 Original vehicle bolt [2x]

Removing bolts

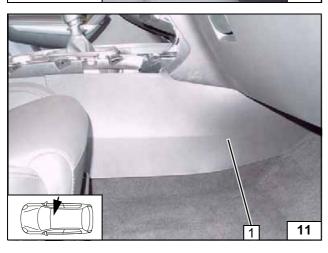




1 Decorative lateral trim on the right Fastening points, attached with clips [6x]

> Removing right decorative trim





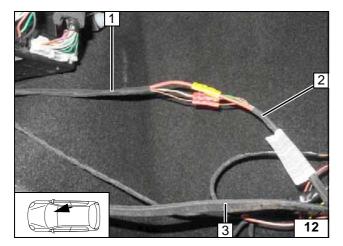
1 Lateral trim on the right



Removing right lateral trim

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#### Fan Controller

Route heater wiring harness 1 to the front passenger's side.

Route fan wiring harness 3 (red (rt) wire 12 and black (sw) wire 13) to the A-pillar on the driver's side.

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

1 A/C control unit connector St B

Connecting same colour wires of wiring harnesses



- (3) Red (rt) wire of K2/87a
- (4) Black (sw) wire of K2/30

Connecting A/C control unit

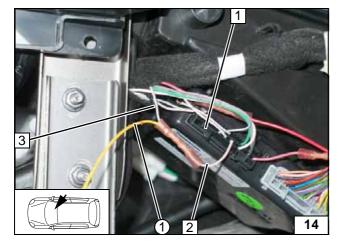


Connector B on wiring side:

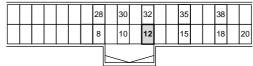


- 1 A/C control unit connector St B
- 2 Salmon (la) wire of connector St B/ pin 12
- 3 Salmon (la) wire of connector St C/ pin 8, A/C control panel
- 1 Yellow (ge) wire of CL Gateway/ C

Connecting A/C control unit



Connector St B on wiring side:



- 1 Grey/white (gr/ws) wire of CAN L
- 2 Grey/white (gr/ws) wire of connector St B/pin 30
- 3 A/C control unit connector St B
- 4 Salmon/white (la/ws) wire of connector St B/ pin 10
- 5 Salmon/white (la/ws) wire of CAN H
- 8 White (ws) wire of CL Gateway/ H
- 9 Orange (or) wire of CL Gateway/ L

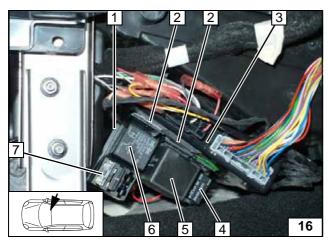
Connector St B on wiring side:

						28		30	32		35		38	
						8		10	12		15		18	20

Connecting A/C control unit

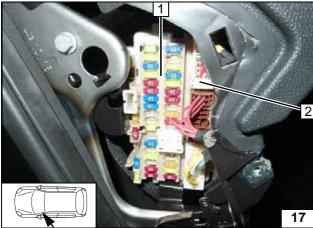
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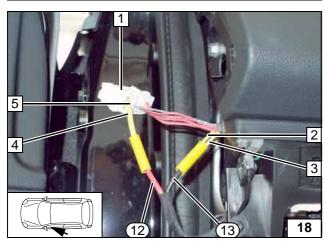
- Passenger compartment relay and fuse holder, premounted
- 2 Double-sided adhesive tape [2x]
- 3 A/C control unit
- 4 K2 relay
- 5 CL Gateway
- 6 K1 relay
- 7 25A fuse F4

Installing passenger compartment relay and fuse holder



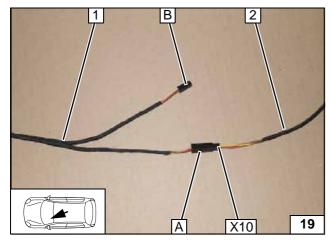
- Passenger compartment central electrical box
- 2 Connector St A

View of connector St A in passenger compartment central electrical box



- 1 Connector St A, disconnected
- 2 Yellow (ge) wire of fan controller, pin 3
- 3 Yellow (ge) wire of fan controller, pin 3
- 4 Yellow (ge) wire of connector St A, pin 7
- 5 Yellow (ge) wire of connector St A, pin 8
- (12) Red (rt) wire of K1/87a, fan wiring harness
- (13) Black (sw) wire of K1/30, fan wiring harness

Connecting fan controller



- 1 CL Gateway wiring harness
- 2 Wiring harness from heater to heater control
- A Adapter connector
- **B** Female adapter connector to connect the heater control

X10 Plug

Connecting heater control wiring harness

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## **Final Work**

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**Warning:** 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 loose wire ends and tie back.

• Make settings on the A/C control panel according to the 'Comfort operating instructions'.

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Webasto Thermo & Comfort SE Postfach 1410 82199 Gilching Germany Internet: www.webasto.com Technical Extranet: http://dealers.webasto.com



## 'Comfort' Automatic Air-Conditioning Operating Instructions

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 for the heating operation. For instructions on deactivation, please refer to the operating instructions of the vehicle.

## (3)



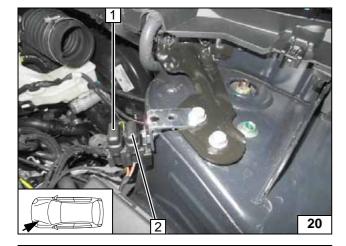
#### Note:

When unlocking the vehicle (during the parking heating operation), the parking heater already deactivates the fan controller. The original functions are available when switching on the ignition. After locking the vehicle, it takes the parking heater several minutes to activate the fan controller.

Your vehicle is equipped with a Comfort air-conditioning control system.

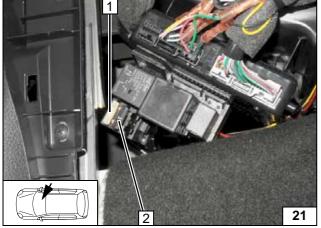
This means that **no** settings are required on the A/C control panel before parking the vehicle.

All necessary presettings like the fan speed, temperature and flap positioning will be automatically set.



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

Engine compartment fuses



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

Passenger compartment fuses