



'Webasto Comfort' Air-Conditioning Control

Installation Documentation VW / Skoda / Seat

Validity

Manufacturer	Model	Type	Model year	EG BE No. / ABE
VW	Golf VII	AU	From model year 2013	e1 * 2007 / 46 * 0623 * ...
VW	Golf VII Variant	AUV	From model year 2013	e1 * 2007 / 46 * 0627 * ...
VW	Sportsvan	AUV	From model year 2014	e1 * 2007 / 46 * 0627 * ...
VW	Passat	3C / 3G	From model year 2015	e1 * 2001 / 116 * 0307 * ...
VW	Tiguan	5N	From model year 2016	e1 * 2001 / 116 * 0450 * ...
Skoda	Octavia	5E	From model year 2013	e11 * 2007 / 46 * 0243 * ...
Skoda	Superb	3T / 3V	From model year 2015	e11 * 2001 / 116 * 0326 * ...
Skoda	Kodiaq	NS	From model year 2017	e8 * 2007 / 46 * 0249 * ...
Seat	Leon	5F	From model year 2013	e9 * 2007 / 46 * 0094 * ...
Seat	Ateca	5FP	From model year 2016	e9 * 2007 / 46 * 6394 * ...

Left-hand drive vehicle

Verified equipment variants: Climatronic

Passenger compartment monitoring (can be switched off in case of Golf)

Not verified:

Passenger compartment monitoring (Passat, Tiguan, Superb, Octavia, Kodiaq, Leon, Ateca)

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Necessary Components

Description	Order No.:
Additional kit 'Webasto Comfort' A/C control for VW / Skoda / Seat	1325012B

Information on Validity

This installation documentation applies only in combination with:

Description	Order No.:
Installation kit for VW Golf VII / Sportsvan petrol and diesel 2013 and Installation documentation for VW Golf VII / Sportsvan petrol and diesel 2013	1319108_ 1319109_
or	
Installation kit for VW Passat petrol and diesel 2015 and Installation documentation for VW Passat petrol and diesel 2015	1323791_ 1323792_
or	
Installation kit for VW Tiguan petrol and diesel 2016 and Installation documentation for VW Tiguan petrol and diesel 2016	1325134_ 1325135_
or	
Installation kit for Skoda Octavia petrol and diesel 2013 and Installation documentation for Skoda Octavia petrol and diesel 2013	1319885_ 1319886_
or	
Installation kit for Skoda Superb petrol and diesel 2015 and Installation documentation for Skoda Superb petrol and diesel 2015	1324216_ 1324217_
or	
Installation kit for Seat Leon petrol and diesel 2013 and Installation documentation Seat Leon petrol and diesel 2013	1319063_ 1319064_
or	
Installation kit for Seat Ateca petrol and diesel 2016 and Installation documentation for Ateca petrol and diesel 2016	1325256_ 1325257_
or	
Delivery scope for Skoda Kodiaq petrol 2017 or Delivery scope for Skoda Kodiaq diesel 2017 and Installation documentation for Skoda Kodiaq petrol and diesel 2017	1325804_ 1325774_ 1325775
or	
Delivery scope for VW / Skoda / Seat MQB A/B petrol 2013 or Delivery scope for VW / Skoda / Seat MQB A/B diesel 2013 and Installation documentation for VW Golf-Sportsvan / Passat / Skoda Superb petrol and diesel 2013 or Installation documentation for Skoda Octavia / Seat Leon petrol and diesel 2013	1325108_ 1325106_ 1325133_ 1325136_

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).

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.

Information on Validity

This installation documentation applies to VW / Skoda / Seat petrol and diesel vehicles - for validity, see 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.

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.

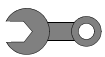
Tightening torque values

- 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.

Mechanics



Electrics



Software



Special features are highlighted using the following symbols:

Specific risk of damage to components.



Specific risk due to electrical voltage.



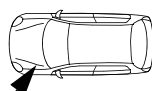
Specific risk of fire or explosion.



Reference to a special technical feature.



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



Reference to the manufacturer's vehicle-specific documents.



Reference to specific installation instructions of Webasto components (demonstrated with the example of the FuelFix).



Reference to general installation instructions of Webasto components.



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



Preliminary Work

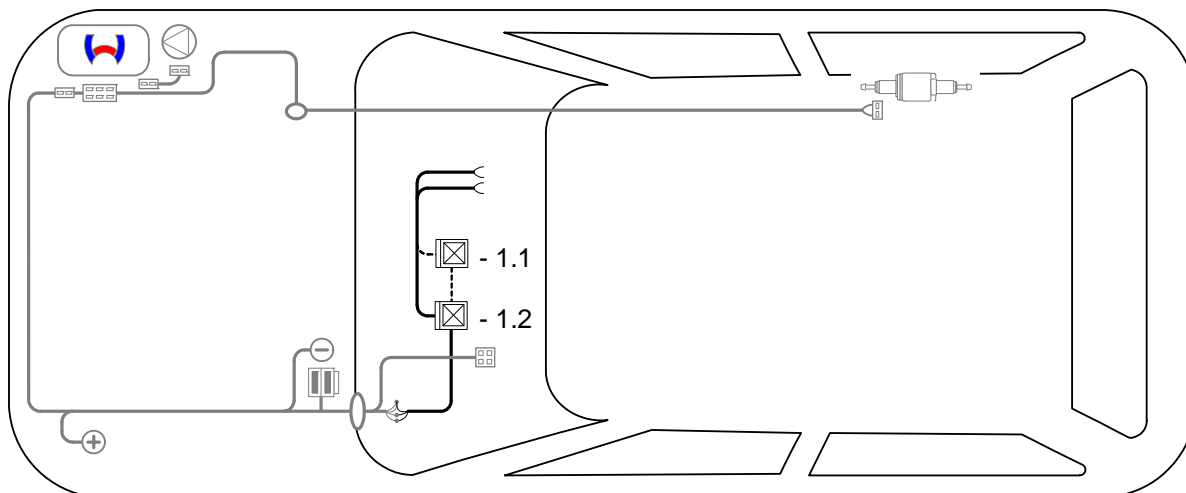
Vehicle



- Disconnect the battery.
- Remove the instrument panel trim on the driver's side.
- Remove the lateral centre tunnel trim on the right (VW Passat and Skoda Octavia).
- Remove the lateral centre tunnel trim on the left.
- Remove the lateral instrument panel trim on the driver's side.
- Remove the storage compartment under the instrument panel light switch on the driver's side.
- Remove the A/C control panel.



Electrical System

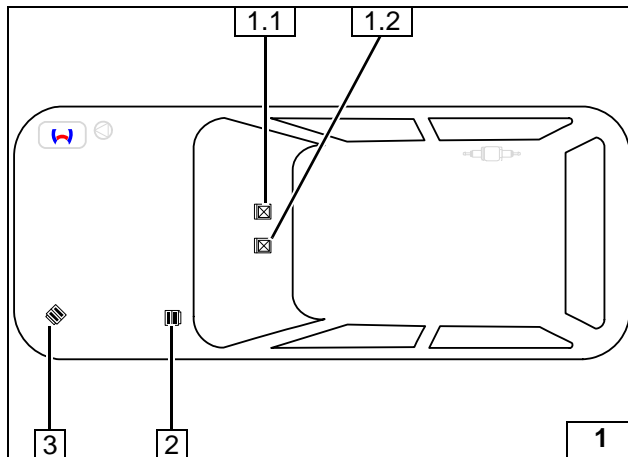
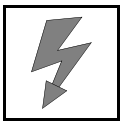


Wiring harness routing diagram

Legend:

1.1 - VW Passat

1.2 - VW Golf VII / Seat Ateca / Skoda Octavia / Skoda Superb / Skoda Kodiaq

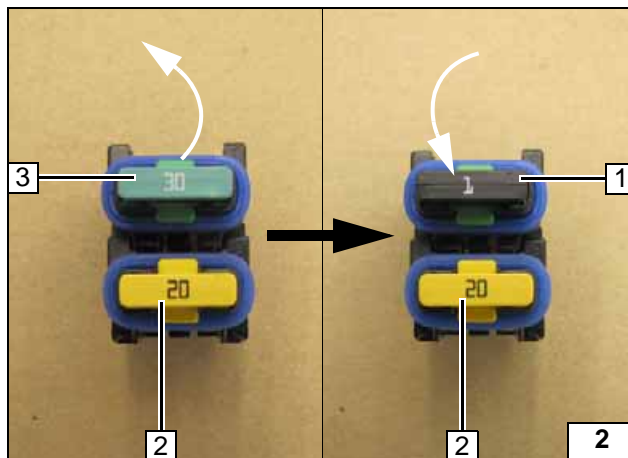


Preparing Electrical System

- 1.1 CCL Gateway VW Passat
- 1.2 CCL Gateway VW GolfVII / Seat Ateca / Skoda Octavia / Skoda Superb / Skoda Kodiaq
- 2 Engine compartment fuse holder, except for Kodiaq
- 3 Engine compartment fuse holder, Kodiaq



Installation overview

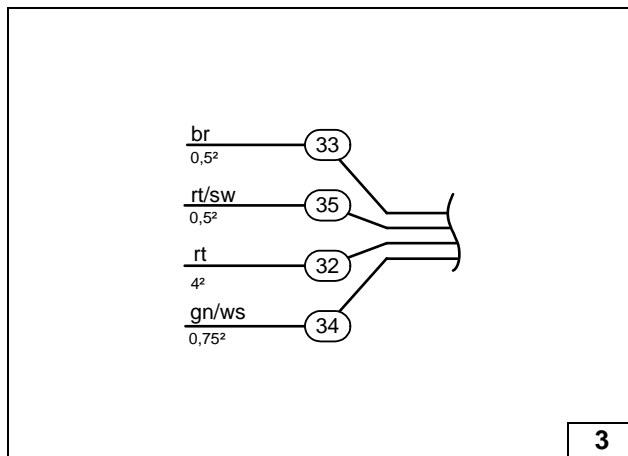


Replace passenger compartment 30A main fuse F2 3 with 1A fuse 1.

- 2 20A heater fuse F1



Preparing engine compartment fuses



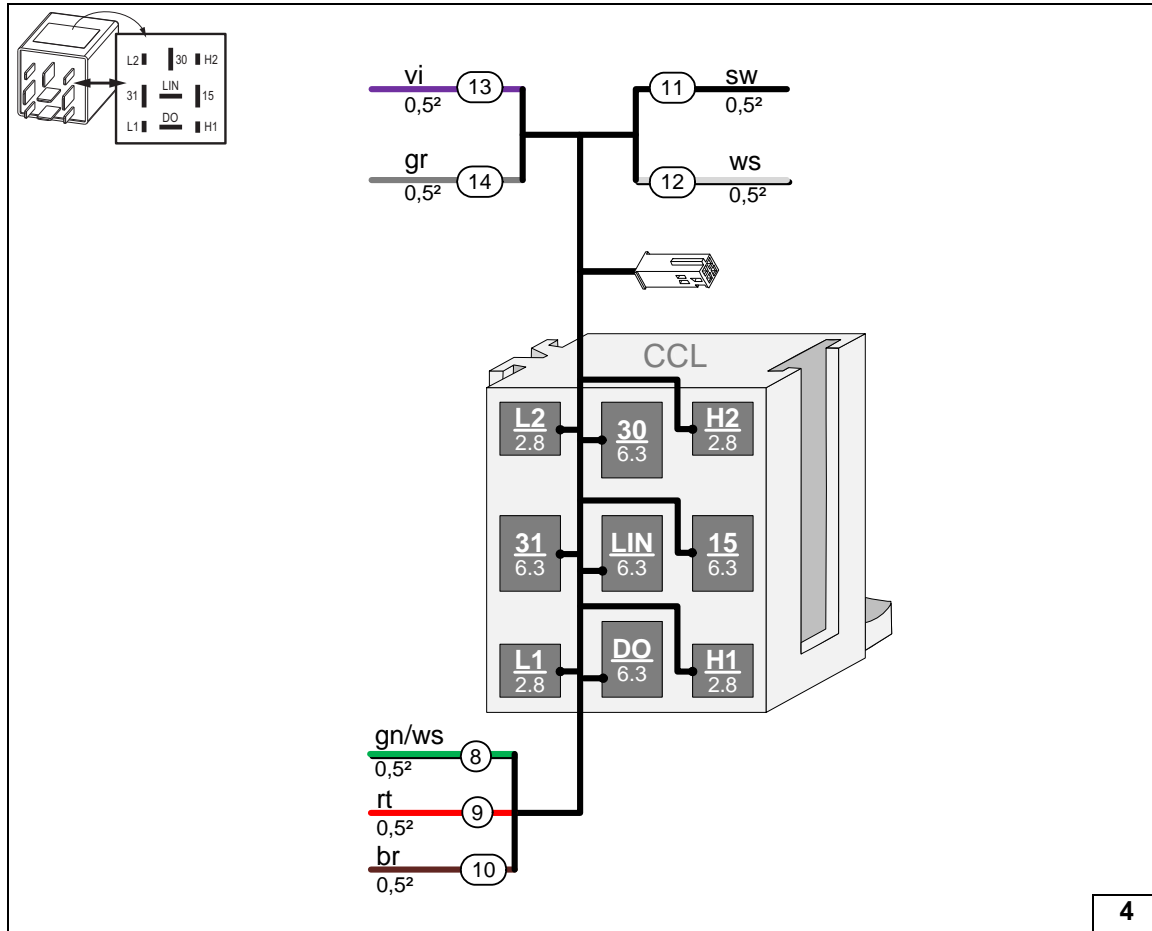
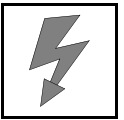
Wire sections retain their numbering in the entire document.

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

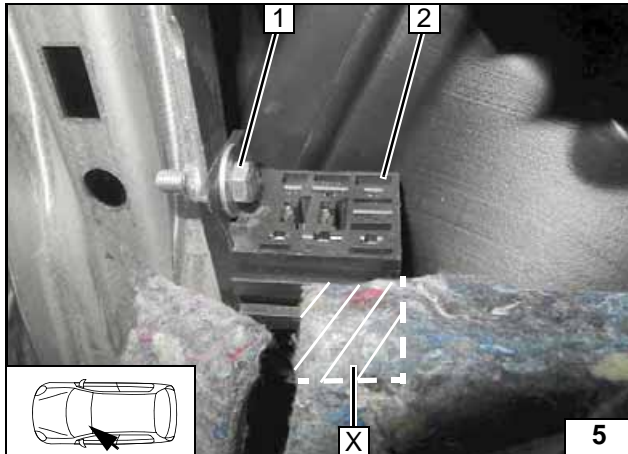
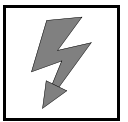
- ③② Red (rt) wire of heater wiring harness/ F2
- ③③ Brown (br) wire of heater wiring harness/ earth 31
- ③④ Green/white (gn/ws) wire of heater wiring harness/ X1/5
- ③⑤ Red/black (rt/sw) wire of heater wiring harness/ X10



Assigning wires



View of CCL-Gateway wiring harness/ assignment of wires to be used

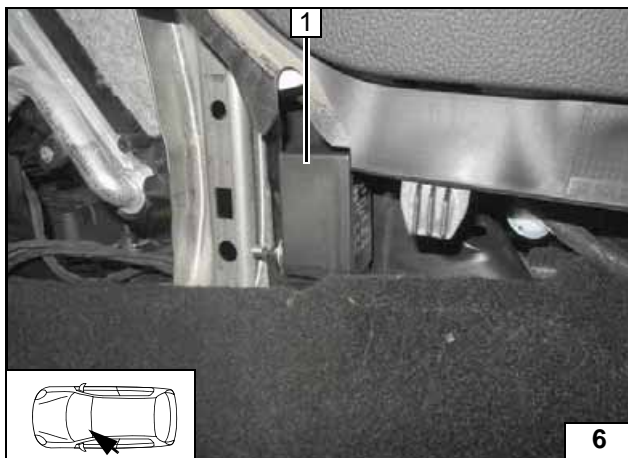


VW Golf VII, Skoda Octavia, Skoda Superb, Skoda Kodiaq, Seat Ateca

- 1 M5x16 bolt, large diameter washer [2x], original vehicle hole, nut
- 2 CCL Gateway socket

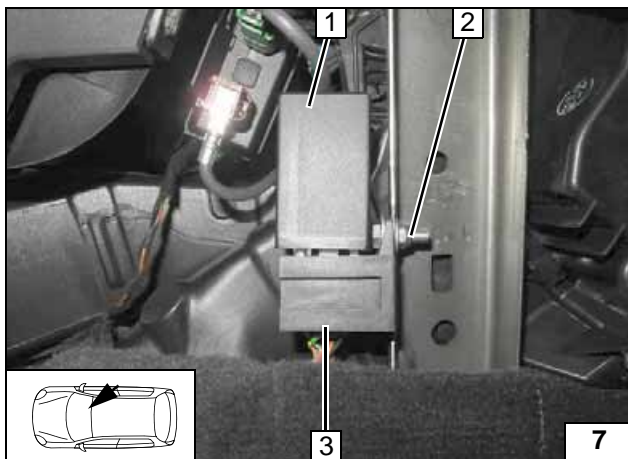
X =

Installing CCL Gateway socket



- 1 CCL Gateway

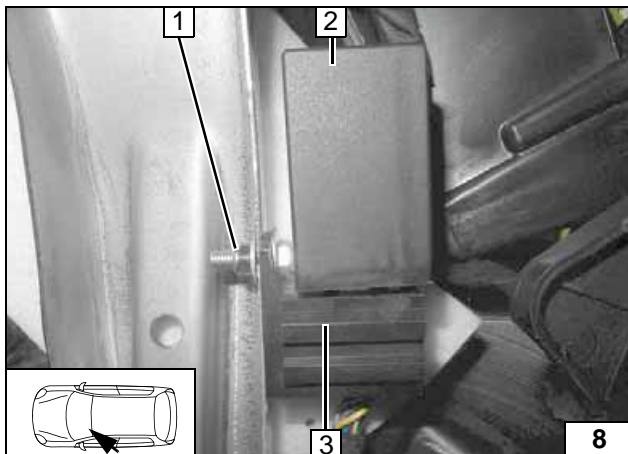
Installing CCL Gateway



VW Passat

- 1 CCL Gateway
- 2 M5x16 bolt, large diameter washer [2x], original vehicle hole, nut
- 3 CCL Gateway socket

Installing CCL Gateway



VW Golf VII Sportsvan / VW Tiguan / Seat Leon

- 1 M5x16 bolt, large diameter washer [2x], original vehicle hole, nut
- 2 CCL Gateway
- 3 CCL Gateway socket

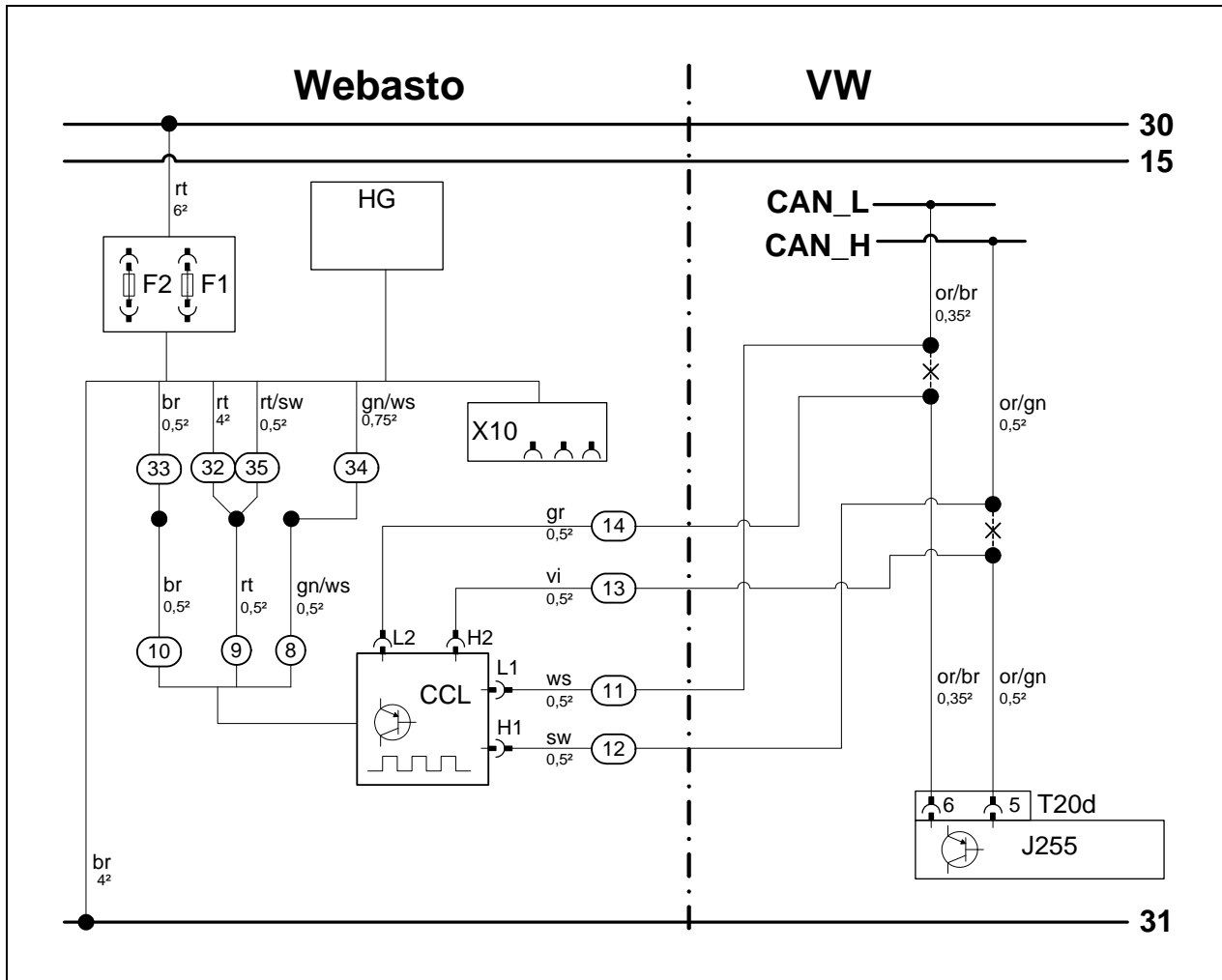
Installing CCL Gateway



Air-Conditioning Control



System wiring diagram



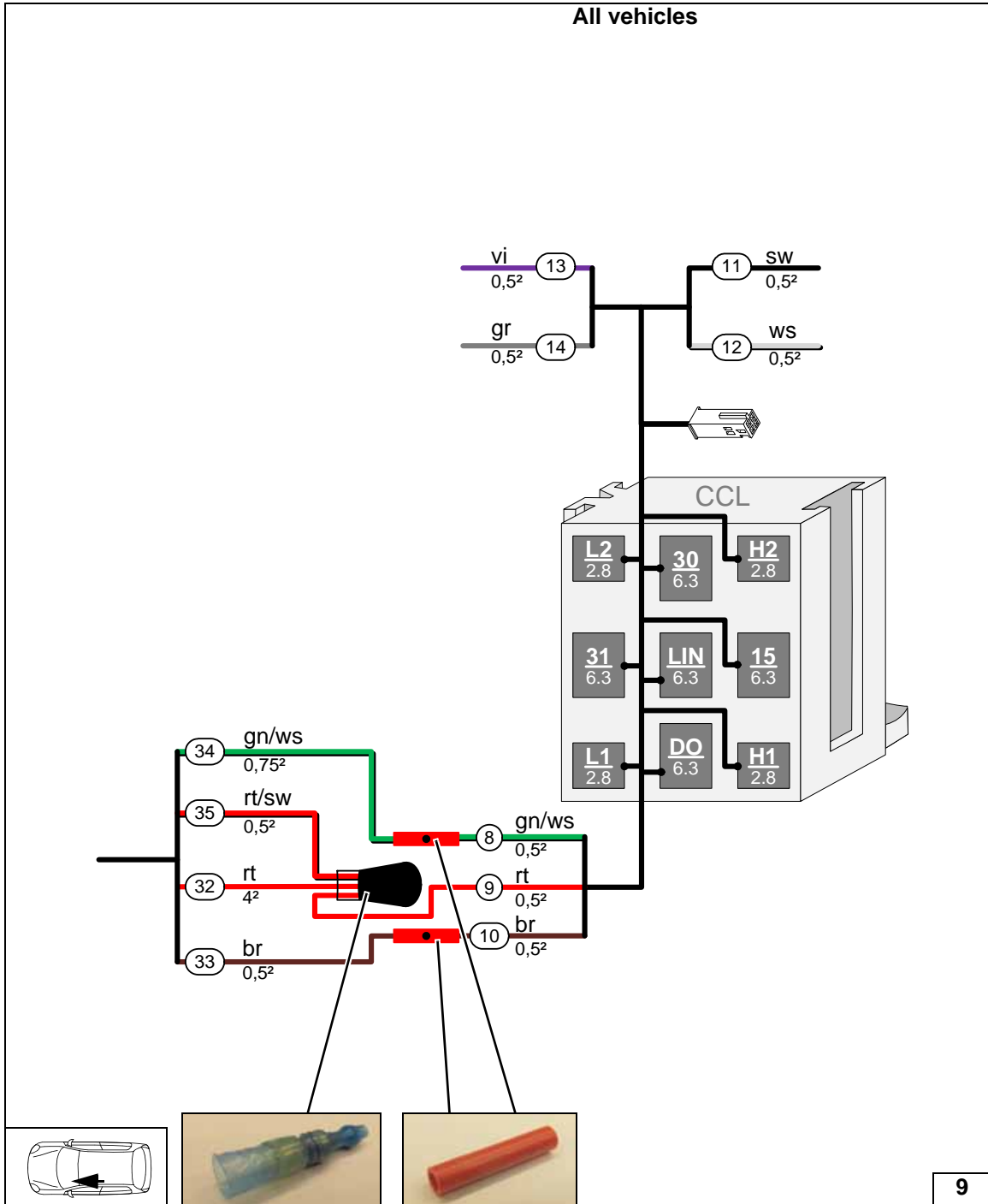
Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	J255	A/C control panel	rt	red
F1	20A fuse	T20d	20-pin connector J255	sw	black
F2	1A fuse			gn	green
X10	4-pin socket of heater control			ws	white
CCL	CCL- Gateway			br	brown
F1	20A fuse			gr	grey
				vi	violet
				or	orange
				X	Cutting point
				Wiring colours may vary.	

Legend

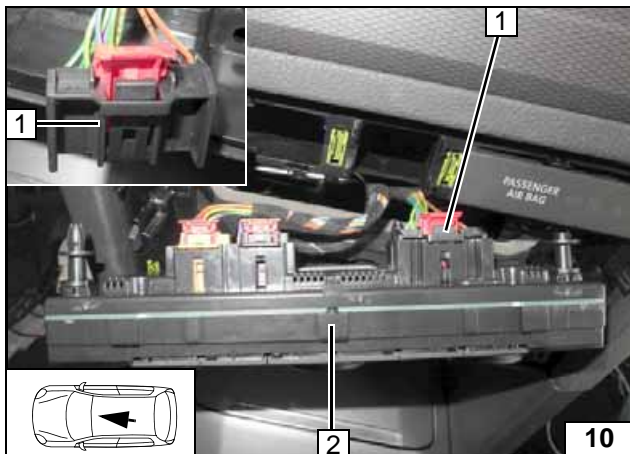


All vehicles

Connecting wires in passenger compartment

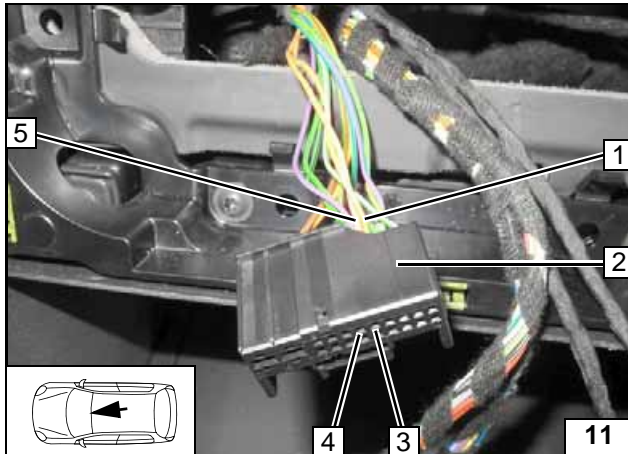
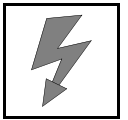


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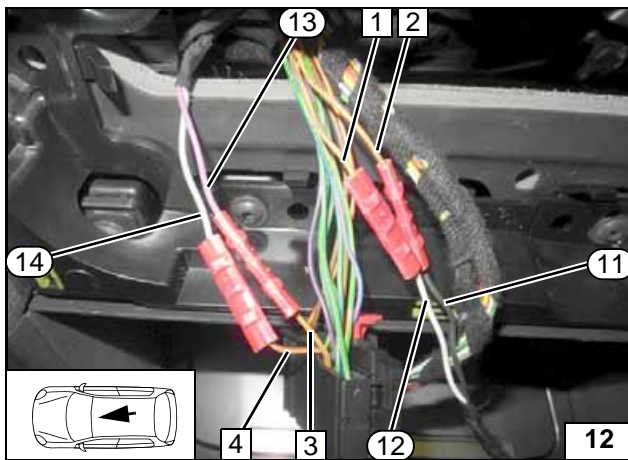
- 1 Connector T20d of A/C control panel
- 2 A/C control panel J255

Detaching connector T20d of A/C control panel



- 1 Orange/green (or/gn) wire of connector T20d / pin 5
- 2 Connector T20d of A/C control panel
- 3 Pin 5 of connector T20d
- 4 Pin 6 of connector T20d
- 5 Orange/brown (or/br) wire of connector T20d/Pin 6

View of connector T20d, A/C control panel



- 1 Orange/brown (or/br) wire of CAN Low
- 2 Orange/green (or/gn) wire of CAN High
- 3 Orange/green (or/gn) wire of connector T20d/Pin 5
- 4 Orange/brown (or/br) wire of connector T20d/Pin 6
- ⑪ Black (sw) wire of H1 from CCL Gateway wiring harness
- ⑫ White (ws) wire of L1 from CCL Gateway wiring harness
- ⑬ Violet (vi) wire of H2 from CCL Gateway wiring harness
- ⑭ Grey (gr) wire of L2 from CCL Gateway wiring harness

Connecting A/C control panel



Final Work



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 and tie back loose lines.



Determining the Version for A/C Control

Before parking the vehicle, set the display settings of the A/C control panel as follows:

1. Turn on manual mode in A/C control panel (button 'Auto' is not pressed).
2. Turn on parking heater.
3. Check the display values one minute after the automatic passenger compartment fan is activated.

When the following values are shown on the display of the A/C control panel:

- Temperature 26°C
- Fan level 3
- Air outlet towards the windscreen

then no settings on the A/C control panel are necessary for the parking heating mode.

The operating instructions:

'Operating instructions Version 1'

must be given to the end customer.

Make settings on the A/C control panel according to the '**Operating Instructions Version 1**'.

If, on the grounds of technical differences between different vehicle models and equipment variants, these values are not displayed, then the operating instructions:

'Operating Instructions Version 2'

must be given to the end customer.

Make settings on the A/C control panel according to the '**Operating Instructions Version 2**'.



Operating Instructions Version 1

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.

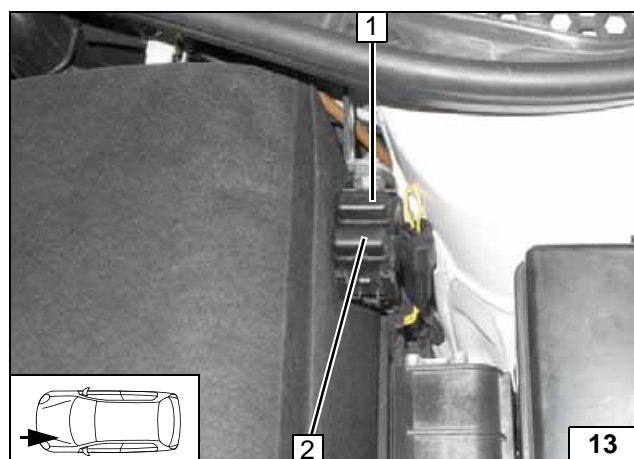
For instructions on deactivation, please refer to the operating instructions of the vehicle.



Note:

No additional settings are necessary for the vehicle's A/C control panel.

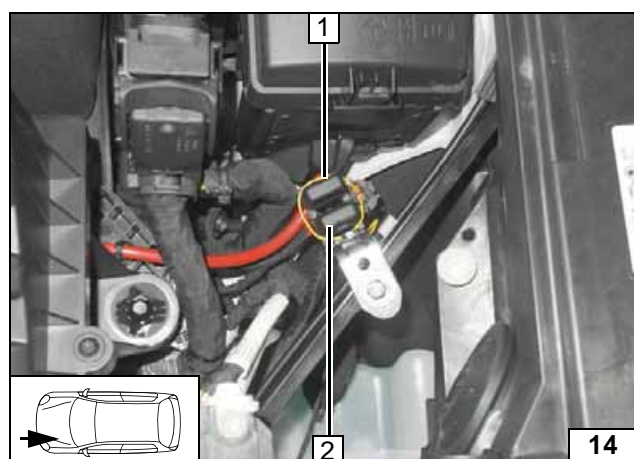
All necessary presettings like the fan speed, temperature and flap positioning will be automatically set.



Except for Kodiaq

- 1 1A A/C control and heater control fuse F2
- 2 20A heater fuse F1

Engine compartment fuses



Kodiaq

- 1 20A heater fuse F1
- 2 1A A/C control and heater control fuse F2

Engine compartment fuses



Operating instructions Version 2

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.

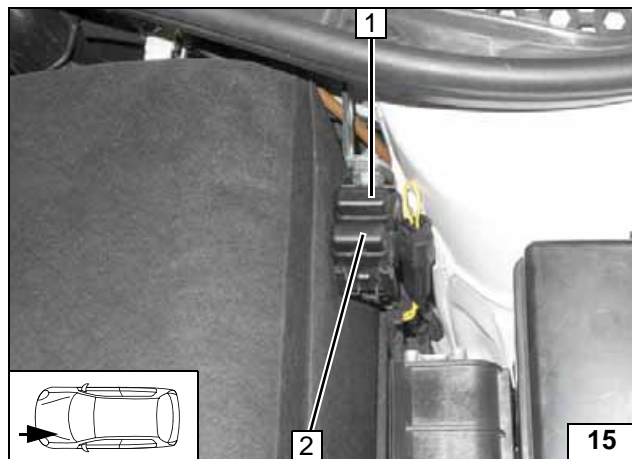
For instructions on deactivation, please refer to the operating instructions of the vehicle.

Note:

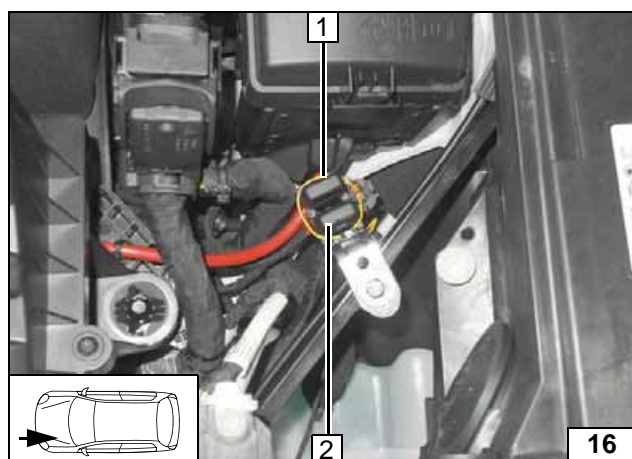
Before parking the vehicle, the following settings for the A/C control panel are necessary:

Automatic mode (button 'Auto' is pressed).

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



- 1 1A A/C control and heater control fuse F2
- 2 20A heater fuse F1



Kodiaq

- 1 20A heater fuse F1
- 2 1A A/C control and heater control fuse F2



Engine compartment fuses

Engine compartment fuses

