

Water Heater

Thermo Top P Parking Heater



Thermo Top V Parking Heater



Upgrade Documentation

Seat Alhambra / VW Touran / VW Sharan

Diesel

Seat Alhambra and VW Sharan from model year 2011

VW Touran from model year 2011 up to model year 2014

Left-hand drive vehicle



WARNING!

Hazard warning:

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.

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

NEVER attempt to install or repair Webasto heating or cooling systems if you have not successfully completed the company training and thereby acquired the required technical skills, or if you do not have access to the required technical documentation, tools and equipment needed to carry out correct installation and repairs.

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

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

Webasto does not accept any liability for defects and damage that are attributable to installation by untrained staff.

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Validity

Manufacturer	Model	Type	EG-BE No. / ABE
Seat	Alhambra	7N	e1 * 2007 / 46 * 0402 * ...

Engine type	Engine model	Output in kW	Displacement in cm³
CFFB	Diesel	103	1968
CFGB	Diesel	125	1968
CFGC	Diesel	130	1968

Manufacturer	Model	Type	EG-BE No. / ABE
VW	Touran	1T	e1 * 2001 / 116 * 0211 * ...
VW	Sharan	7N	e1 * 2007 / 46 * 0401 * ...

Engine type	Engine model	Output in kW	Displacement in cm³
CAYC	Diesel	77	1598
CFFB	Diesel	103	1968
CUVC	Diesel	110	1968
CFGC	Diesel	130	1968
CUWA	Diesel	135	1968

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

The installation location of the MultiControl CAR / LED should be confirmed with the end customer before installation.

Total installation time: approx. 4 hours

Upgrade Kit

Quantity	Description	Order No.:
1	Upgrade kit Seat Alhambra / VW Touran / VW Sharan without Climatronic USB	9015993D
or		
1	Upgrade kit Seat Alhambra / VW Touran / VW Sharan Climatronic USB	9015994D

Also required:

Quantity	Description	Order No.:
1	Heater control	See price list
1	Seat Alhambra / VW Sharan only In case of MultiControl CAR installation: MultiControl installation frame:	9030077_
1	LED operation indicator (if MultiControl will not be installed)	1317651_

Foreword

This installation documentation applies to Seat Alhambra / VW Touran / VW Sharan Diesel vehicles - for validity, see page 2 - 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'.

However, the stipulations in this 'installation documentation', the 'operating instructions' and 'installation instructions' of the installed heater should always be observed.

The corresponding rules of technology and any information from the vehicle manufacturer should be observed during the installation work.

Information on Total Installation Time

The total installation time includes the time needed for mounting and demounting 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.

General Instructions

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).

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

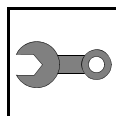
Special Tools

- Pulling aid

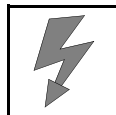
Explanatory Notes on Document

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.

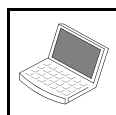
Mechanical System



Electrical System



Software



Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



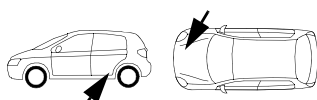
Specific risk of fire and explosion.



Reference to general installation instructions of 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.

All dimensions are in mm!

Tightening torque of hose clamps = 2.0 + 0.5 Nm!

Tightening torque of Ejet screws, Ejet studs = 10 Nm!

Preliminary Work

WARNING!

- **Check if the auxiliary heater is functioning (for example using the WTT diagnosis).**
- **Create and archive a printout or screenshot of the WTT diagnosis protocol.**
- Disconnect the battery earth connection.
- Copy the factory number from the original type label to the warranty processing sticker.
- Attach the warranty processing sticker in the appropriate place.
- Remove the coolant reservoir cap.
- Loosen the wheel well trim on the right and left, remove the bumper (to facilitate installation for Touran - connector X1 of heater wire, pin 2).
- Detach the intake silencer of the heater, remove the intake elbow (Touran only).
- Remove the glove box.
- Remove the lower instrument panel trim on the front passenger's side.
- Remove the air outlet nozzle on the left (to facilitate installation for Sharan vehicles).
- Remove the instrument panel trim on the driver's side (Touran only).
- Remove the lower A-pillar trim on the driver's side.
- Detach the central electrical box.
- Remove the upper A-pillar trim on the driver's side (only for Telestart).

Please remove page 20 'Operating Instructions for End Customer' and add to the operating instructions.

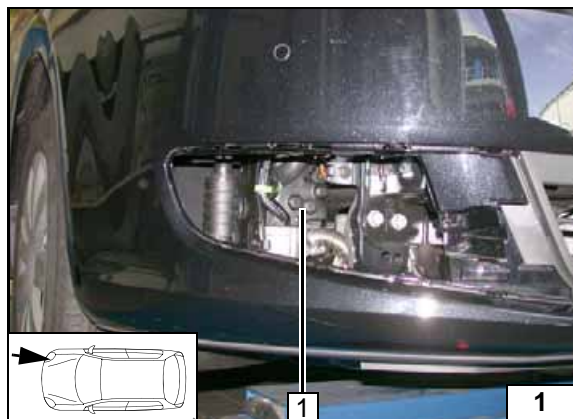




Electrical System

Installation location of auxiliary heater

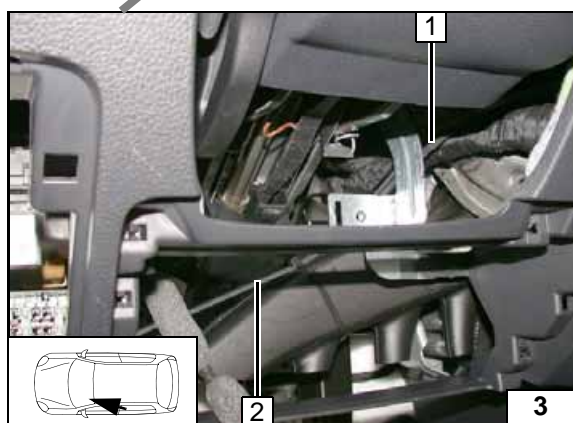
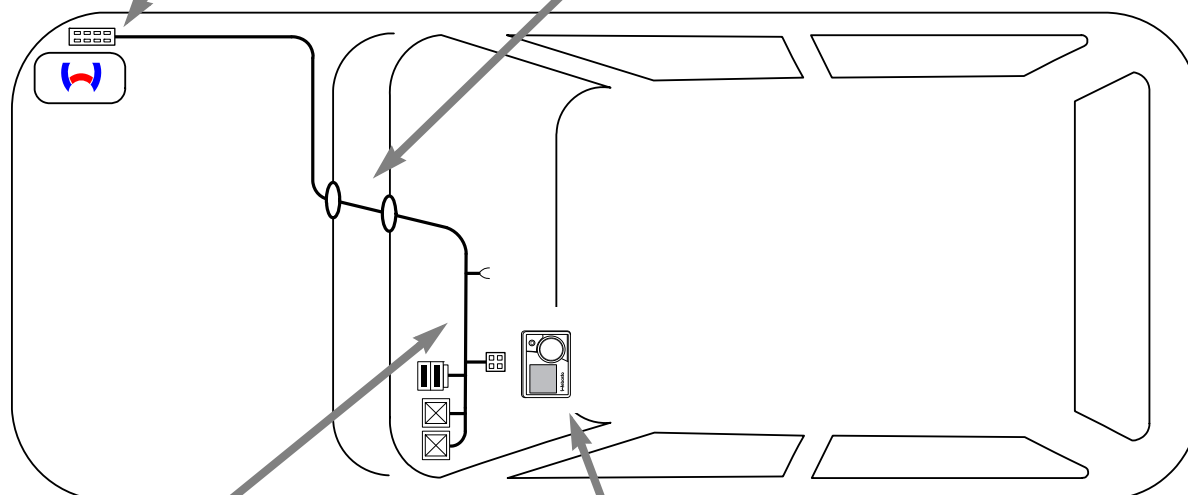
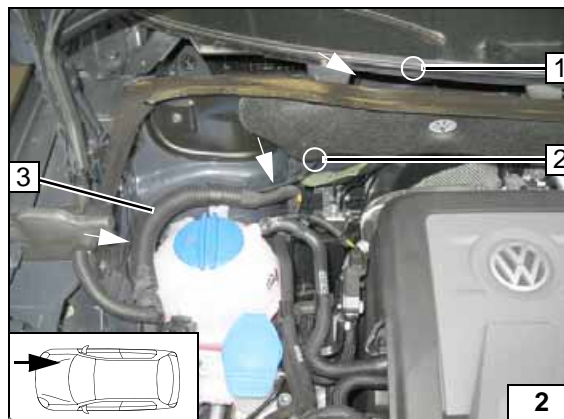
- 1 Heater



Wiring harness routing in engine compartment

Route yellow (ge) wire in original vehicle corrugated tube 3 to the heater.

- 1 Original vehicle rubber plug of passenger compartment
- 2 Original vehicle rubber plug of engine compartment



Wiring harness routing, passenger compartment

- 1 Yellow (ge) wire



MultiControl CAR



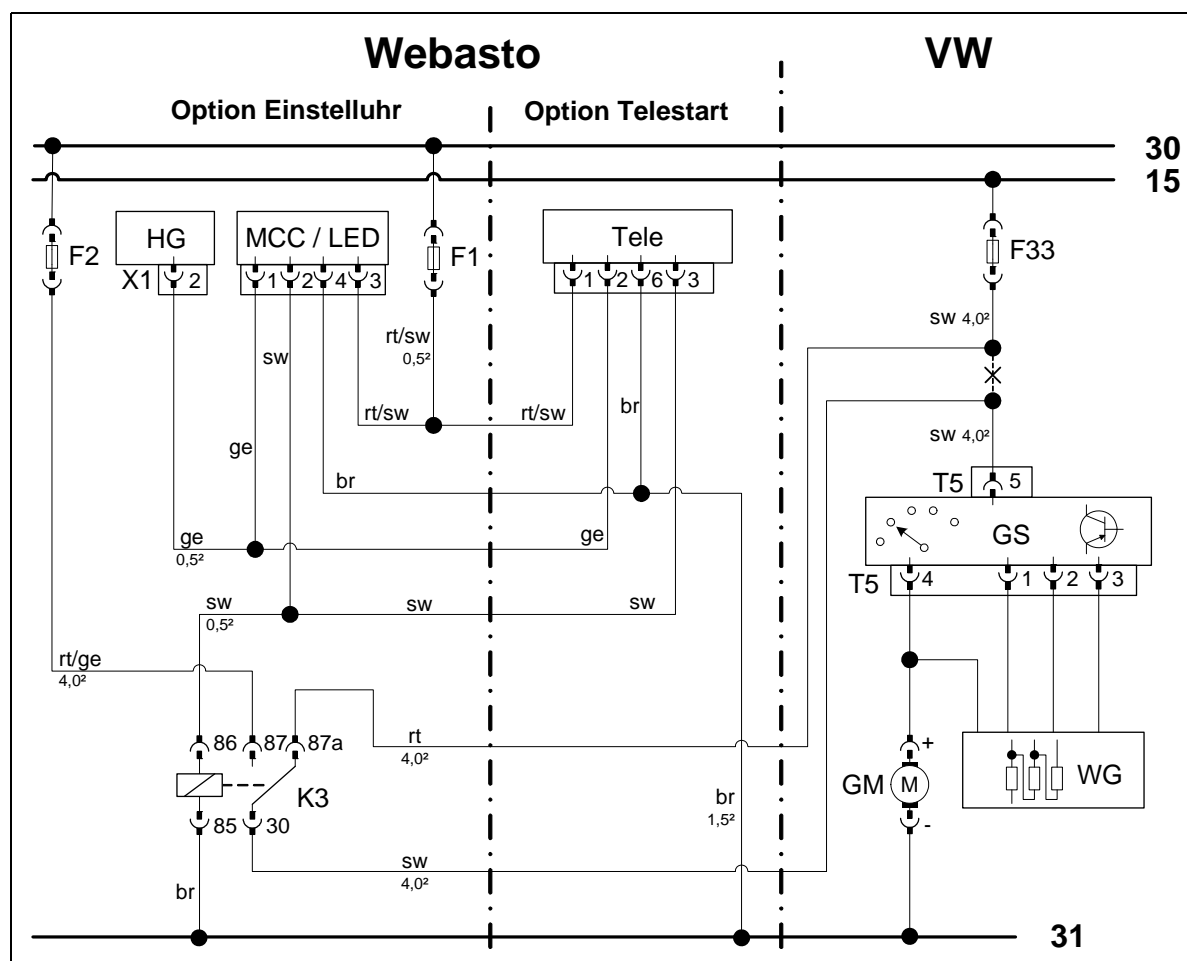
Wiring harness routing diagram



Fan Controller for Manual Air-Conditioning

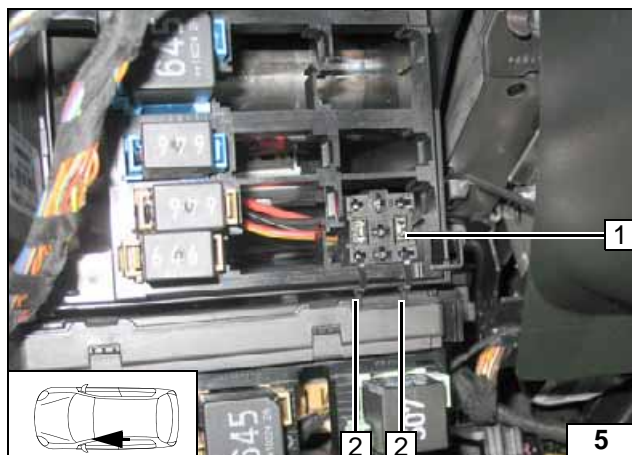


Wiring diagram



Webasto components		Vehicle components		Colours and symbols	
HG	TT-V / VEVO heater	F33	40 A fan fuse	rt	red
X1	8-pin heater connector	T5	GS connector	ws	white
F1	1A fuse	GS	J301 fan switch	sw	black
F2	40A fuse	WG	N24 resistor group	br	brown
MCC	MultiControl CAR	GM	V2 fan motor	ge	yellow
Tele	Telestart receiver				
K3	Fan relay				
LED	LED (only if Telestart is the sole heater control)				
				X	Cutting point
				Wiring colours may vary.	

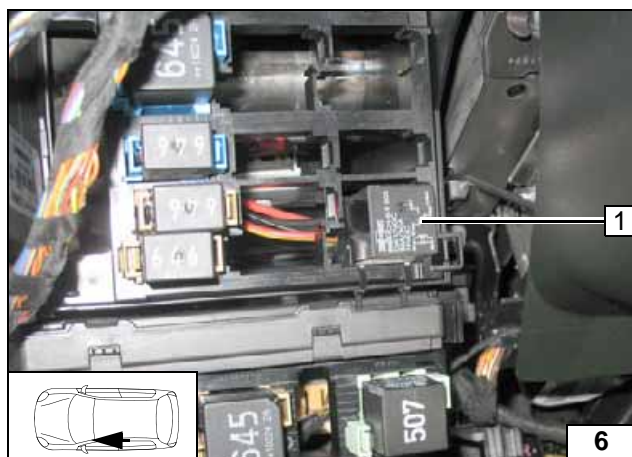
Legend



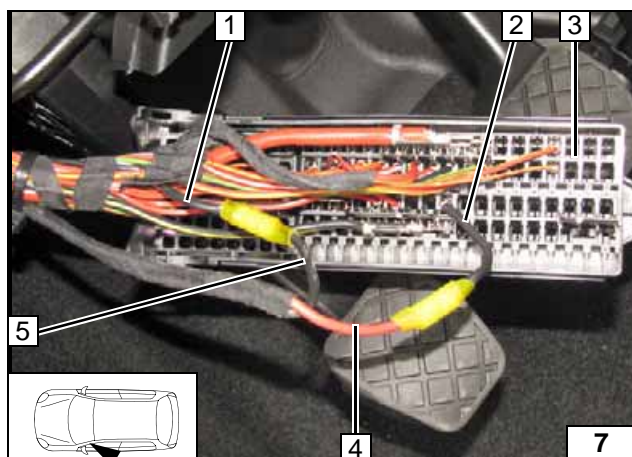
Insert socket of K3 relay **1** into free socket and fasten it to the relay carrier using two cable ties **2**.

Installing socket of K3 relay

1 K3 relay



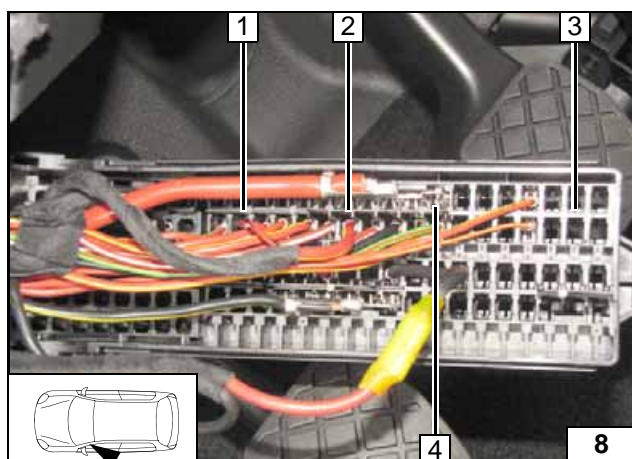
Inserting K3 relay



Connection to fuse carrier **3**.
Produce connections as shown in wiring diagram.

- 1** Black (sw) wire of fan motor
- 2** Black (sw) wire of F33 fuse
- 4** Red (rt) wire of K3/87a
- 5** Black (sw) wire of K3/30

Connection of fuse carrier



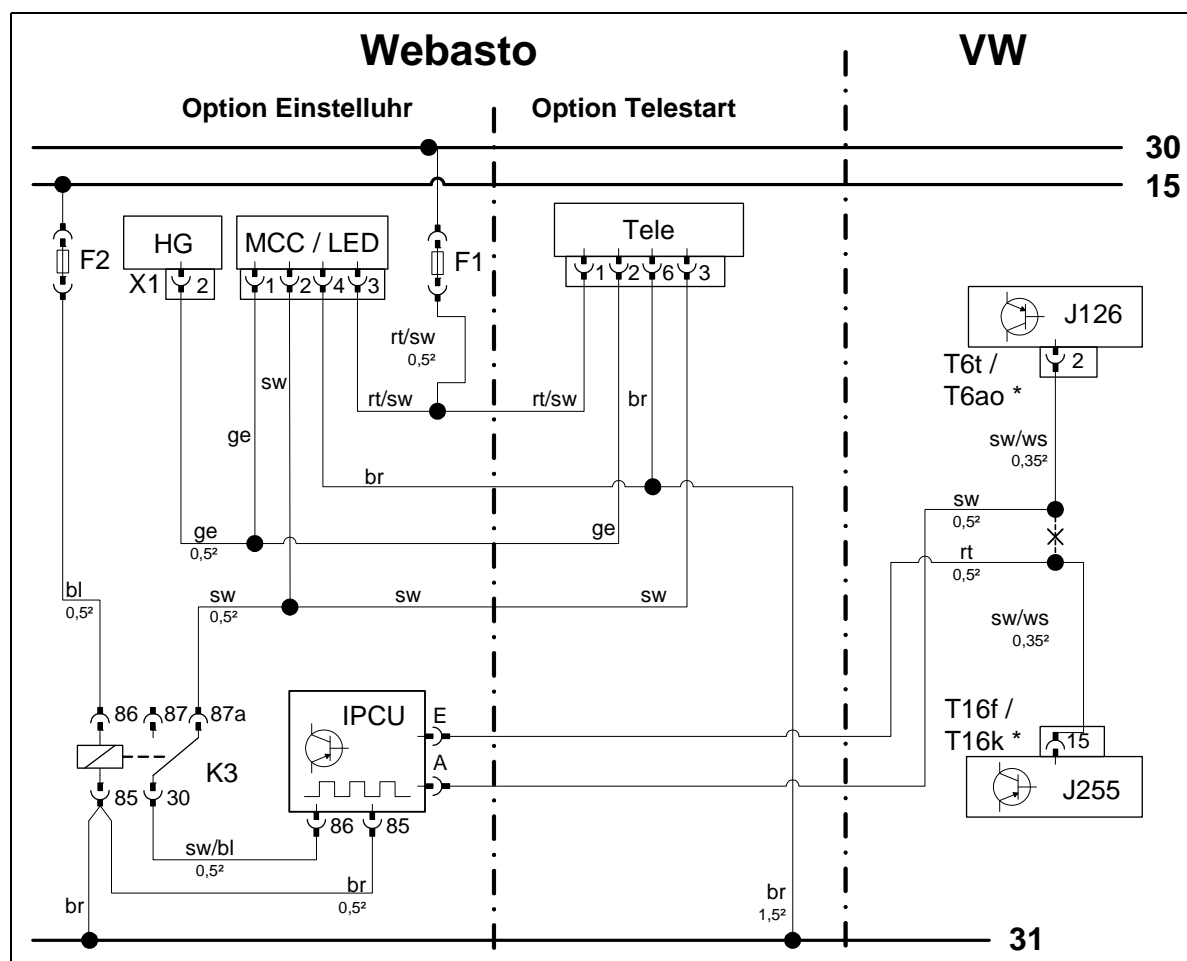
Connection to fuse carrier **3**.
Produce connections as shown in wiring diagram.
Insert 1A fuse F1 and 40A fuse F2.
Should no free terminal 30 socket be available, establish a jumper from support point **4** to socket for F1, F2.

- 1** Insert red/black (rt/sw) wire into free socket terminal 30
- 2** Insert red/yellow (rt/ge) wire into socket of terminal 30

Connection of fuse carrier



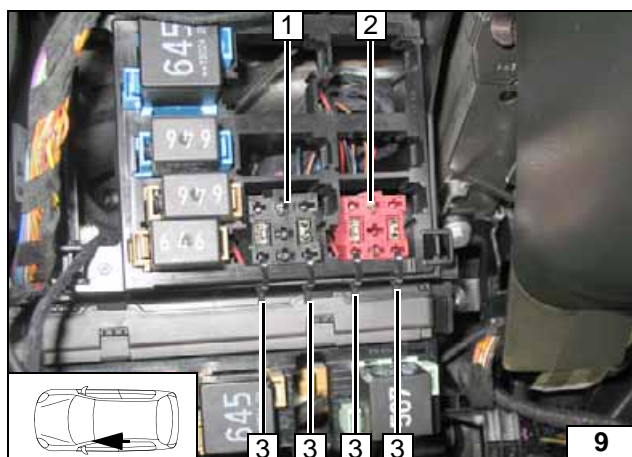
Fan Controller for Automatic Air-Conditioning



Wiring diagram

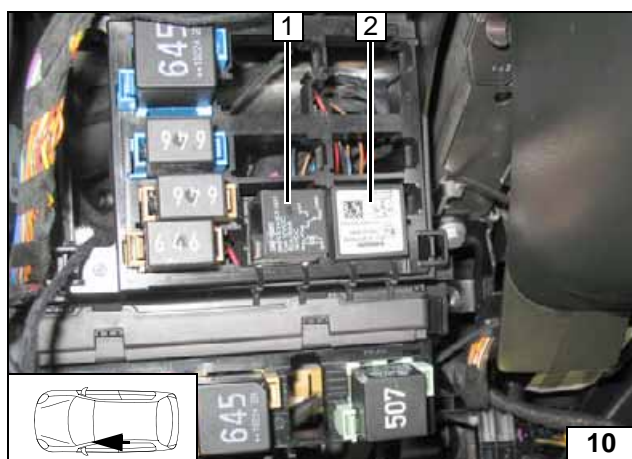
Webasto components		Vehicle components		Colours and symbols	
HG	TT-V / VEVO heater	J126	Fan controller	rt	red
X1	8-pin heater connector	T6t / T6ao	Connector of GR	ws	white
F1	1A fuse	J255	A/C control panel	sw	black
F2	1A fuse	T16f / T16k	Connector of KB	br	brown
MCC	MultiControl CAR			gn	green
Tele	Telestart receiver			bl	blue
K3	Fan relay			ge	yellow
LED	LED (only if Telestart is the sole heater control)				
IPCU	Pulse width modulator				
IPCU settings:					
Duty cycle: 30%					
Frequency: 400Hz				*	Depending on version
Voltage: 8V				X	Cutting point
Function: High side				Wiring colours may vary.	

Legend



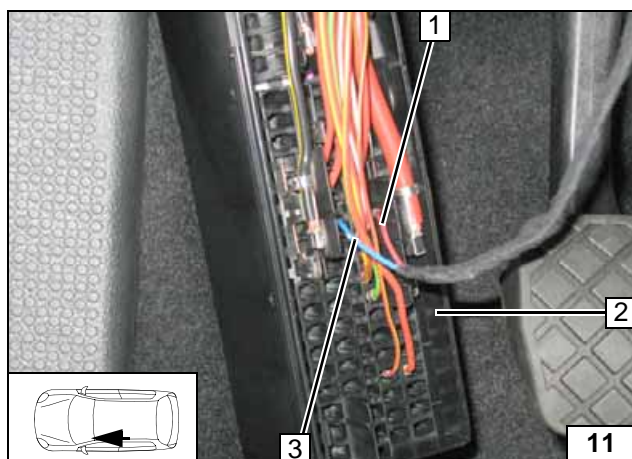
Insert socket of K3 relay **1** and socket of IPCU **2** into free sockets and fasten them to the relay carrier using two cable ties **3** each.

Installing socket of K3 relay



- 1** K3 relay
- 2** IPCU

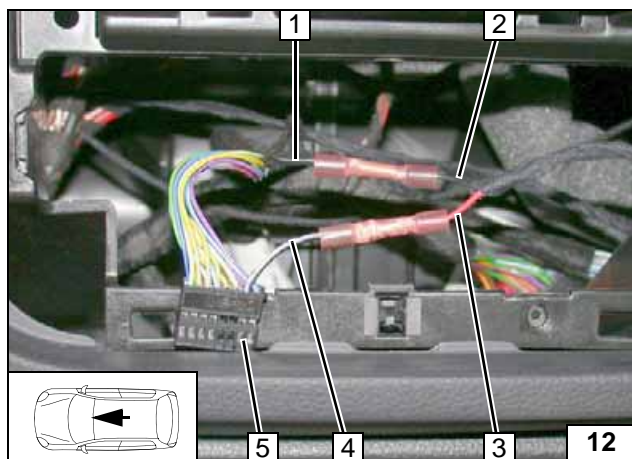
Attaching K3 relay and IPCU



Connection to fuse carrier **2**.
Produce connections as shown in wiring diagram.
Insert 1A fuse F1 and 1A fuse F2.

- 1** Insert red/black (rt/sw) wire into socket 54. If occupied, use free socket of terminal 30 row.
- 3** Insert blue (bl) wire into socket 27. If occupied, use free socket of terminal 15 row.

Connection of fuse carrier

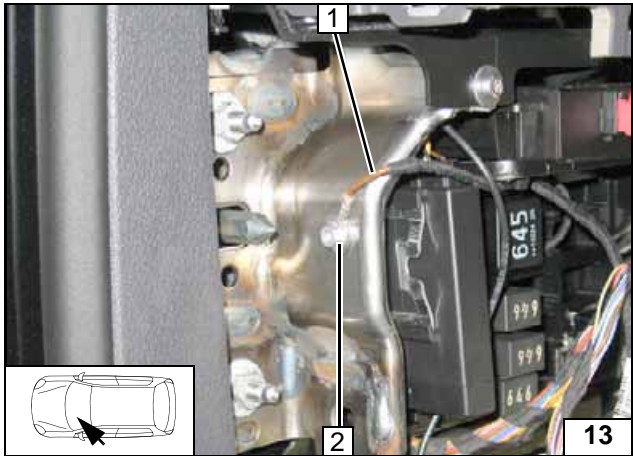


Connection to connector T16f **5** of A/C control panel. Produce connections as shown in wiring diagram.

- 1** Black/white (sw/ws) wire of fan controller
- 2** Black (sw) wire of IPCU/A
- 3** Red (rt) wire of IPCU/E
- 4** Black/white (sw/ws) wire of connector T16f, pin 15

Connecting A/C control panel





Connecting Wiring Harness

Earth wire

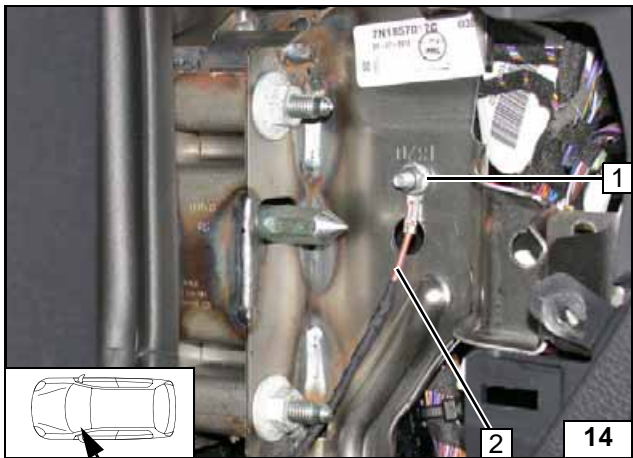
VW Touran

Produce connections as shown in wiring diagram.

- 1 Brown (br) earth wire
- 2 M5x16 bolt, flanged nut, existing hole



Earth connection



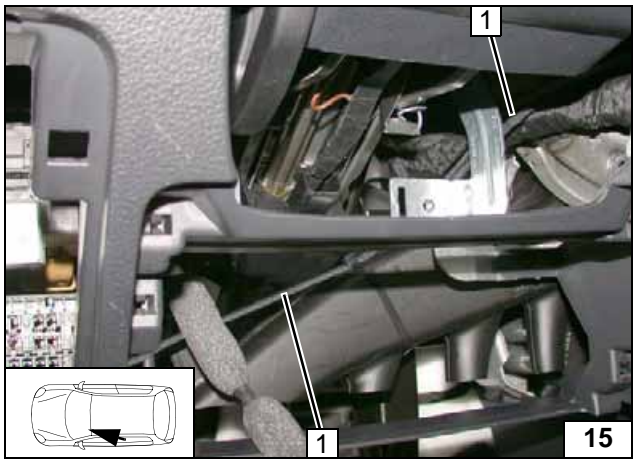
Seat Alhambra / VW Sharan

Produce connections as shown in wiring diagram.

- 1 M6x20 bolt, flanged nut, existing hole
- 2 Brown (br) earth wire



Earth connection



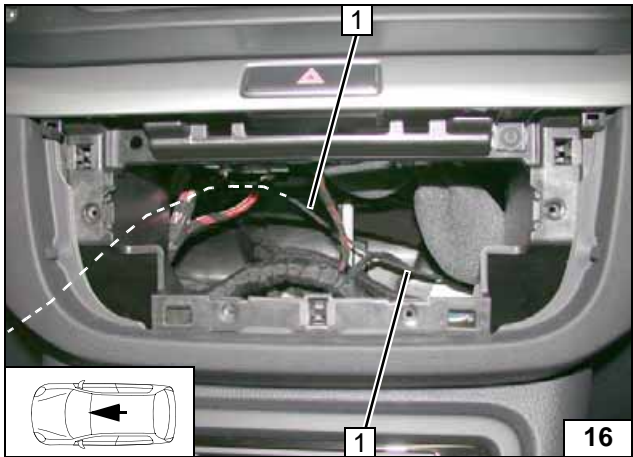
Route yellow (ge) wire to heater

Route yellow (ge) wire to the heater using a pulling aid.

- 1 Yellow (ge) wire

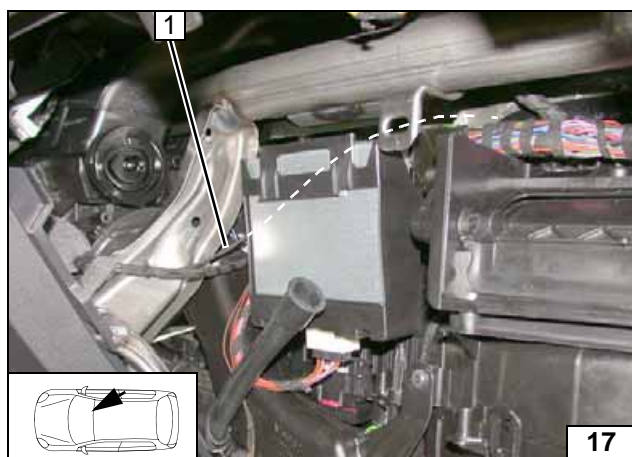


Routing yellow (ge) wire



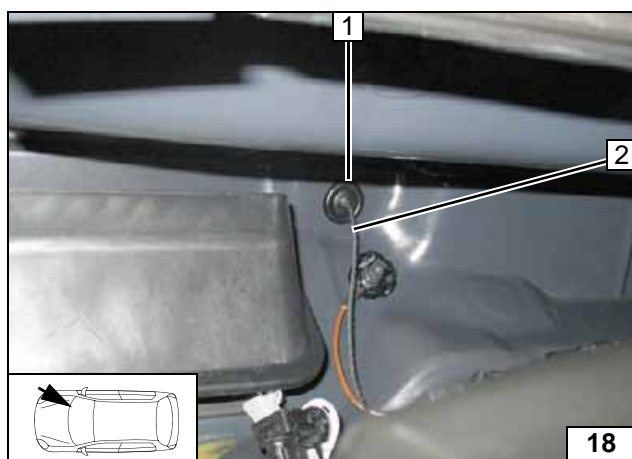
- 1 Yellow (ge) wire

Routing yellow (ge) wire



1 Yellow (ge) wire

Routing
yellow (ge)
wire



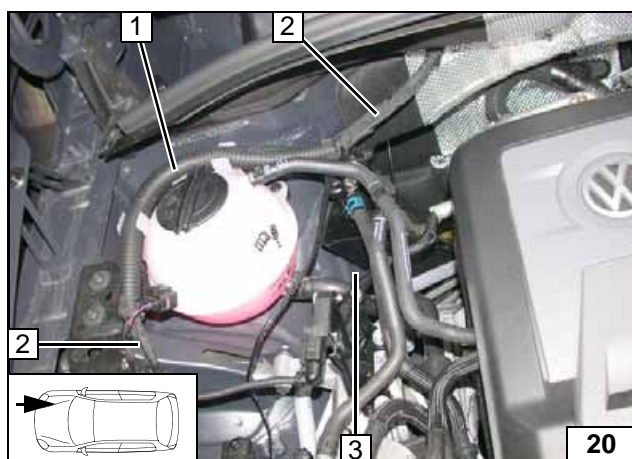
Route yellow (ge) wire 2 through original vehicle protective rubber plug 1 into the coolant reservoir using a pulling aid.

Routing
yellow (ge)
wire



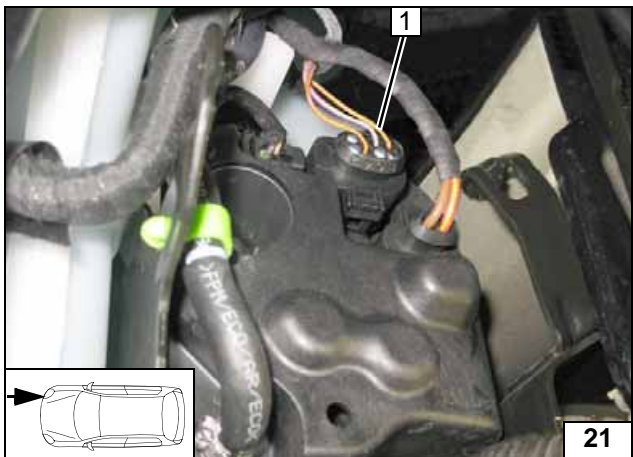
Route yellow (ge) wire 1 through original vehicle protective rubber plug 2 into the engine compartment using a pulling aid.

Routing
yellow (ge)
wire



Route yellow (ge) wire 2 in original vehicle corrugated tube 1 to the heater installation location.

Routing
yellow (ge)
wire



Connecting yellow (ge) wire

VW Touran.
Remove intake manifold and intake silencer.

All vehicles!

- 1 8-pin connector of heater



**Discon-
necting
connector**



Image shows VW Sharan.
Detach 8-pin connector 1 from heater. Re-
move sealing plug of Pin 2. Pull out lock 2 . In-
sert yellow (ge) wire 3 into socket 2. Close
lock.



**Connect-
ing heater**

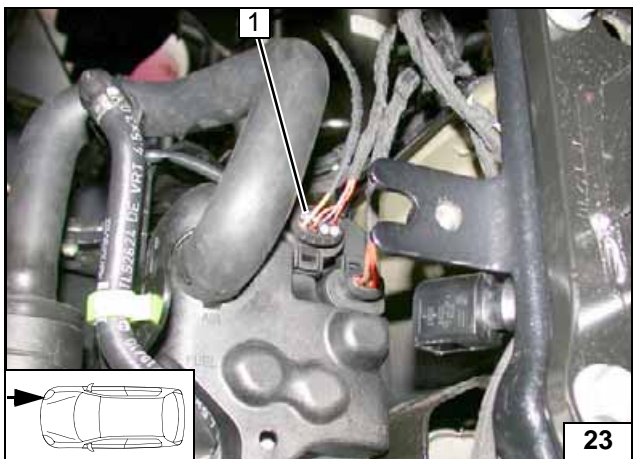
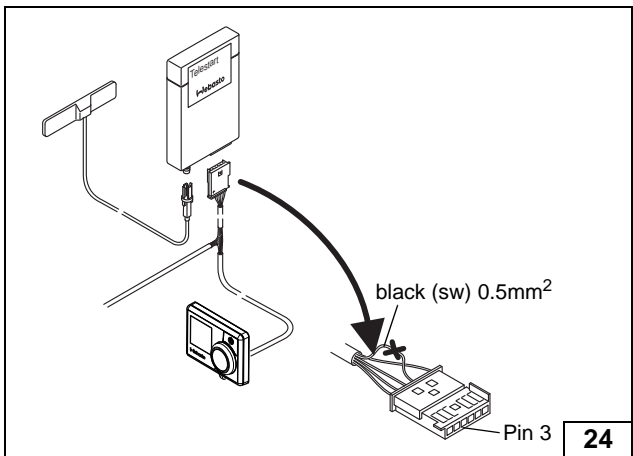


Image shows VW Sharan.
Attach 8-pin connector 1 to heater.

VW Touran only!
Re-install intake elbow and intake silencer.



**Installing
connector**

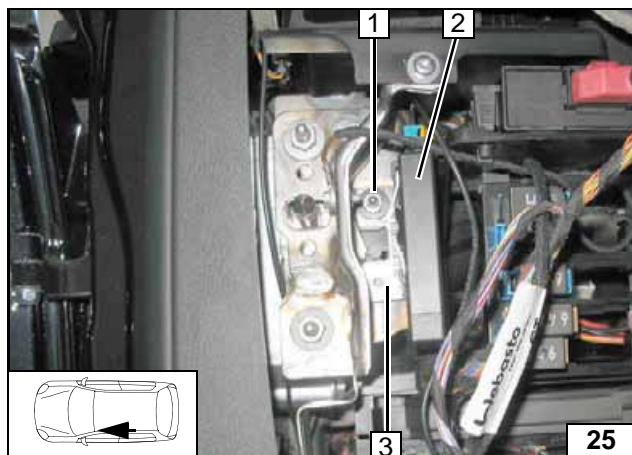


Remote Option (Telestart)

When installing digital timer at the same time,
black (sw) wire 0.5mm² on socket pin 3 has to
be separated about 50mm ahead of the Tele-
start connector and insulated on both wire
ends.



**Connect-
ing receiv-
er**



VW Touran

Drill out bracket 3 at position 1 to 6.5 mm dia. and angle it down by 90°.

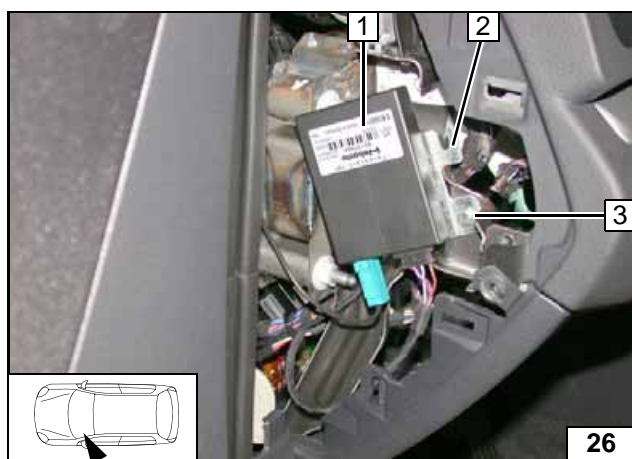
Warning!

The teaching of the receiver is only conducted after software installation.

- 1 Flanged nut, existing stud bolt
- 2 Receiver



Installing receiver



Seat Alhambra / VW Sharan

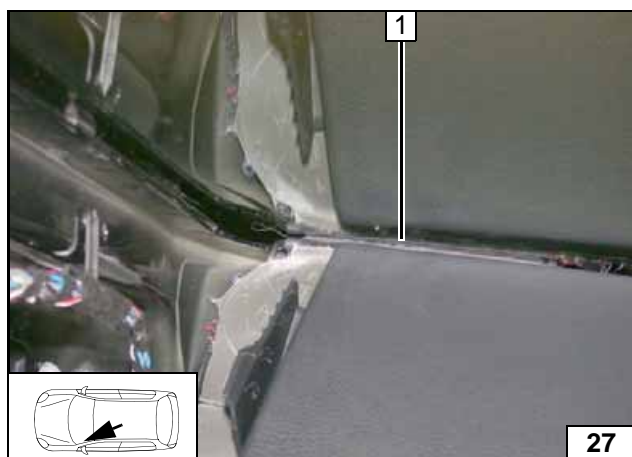
Warning!

The teaching of the receiver is only conducted after software installation.

- 1 Receiver
- 2 Bracket
- 3 M5x16 bolt, large diameter washer, flanged nut, existing hole



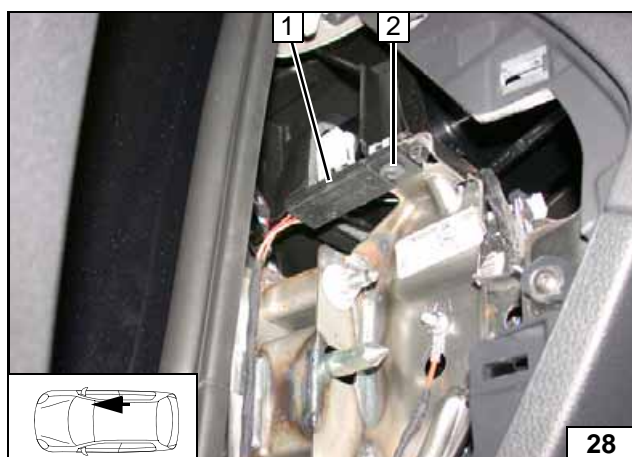
Installing receiver



All vehicles

- 1 Aerial

Installing aerial



Only for Telestart T100 HTM

- 1 Temperature sensor T100 HTM
- 2 Original vehicle bolt



Installing temperature sensor

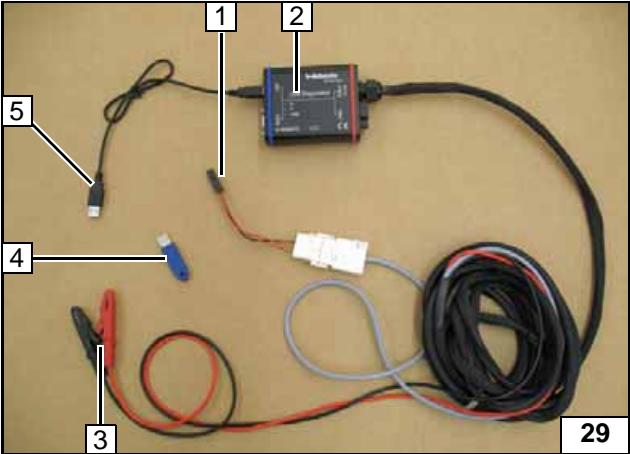


Installing Upgrade

- Connecting the vehicle battery

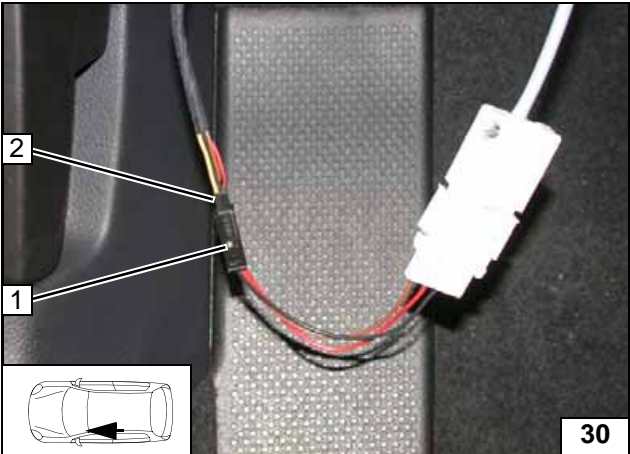


Accessories for the installation



To establish communications with the heater control unit, connect the WTT Diagnosis connection cable (USB) **5** to a free port on your Laptop/PC (USB).

- 1 Adapter wiring harness to digital timer connector
- 2 WTT diagnosis adapter
- 3 Positive and earth wire (will not be used)
- 4 Dongle. Connect to laptop/PC (USB).
- 5 USB connection cable (already connected to the WTT diagnosis adapter here)



Warning:
The Webasto Diagnosis Tool (WTT) program must be closed on your computer!

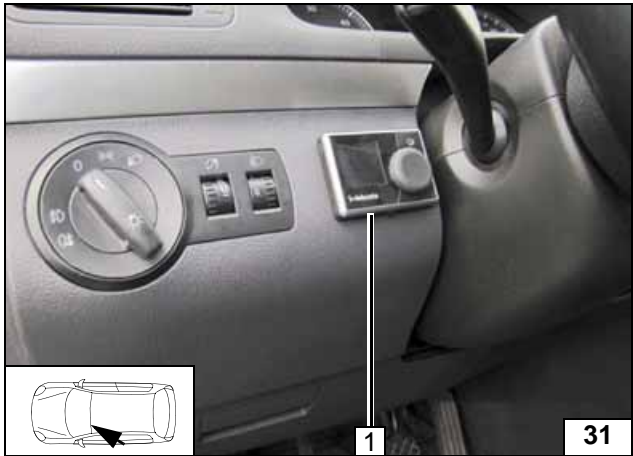
- 1 Connector of adapter wiring harness
- 2 Connector of digital timer wiring harness

Launch the upgrade software as explained in the quick start guide



Establishing connection





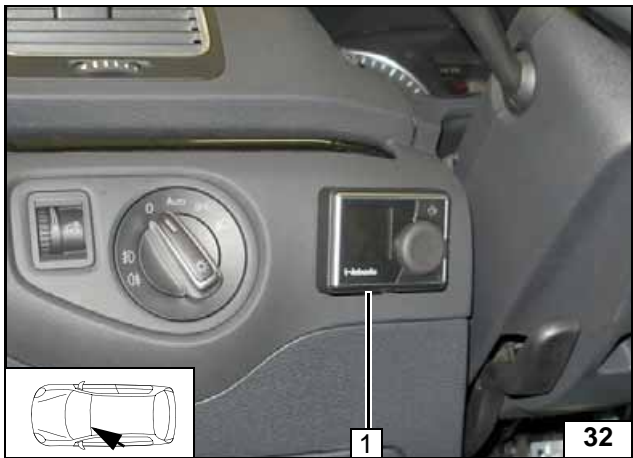
MultiControl CAR Option

VW Touran

- 1 MultiControl CAR



**Installing
MultiControl
CAR**

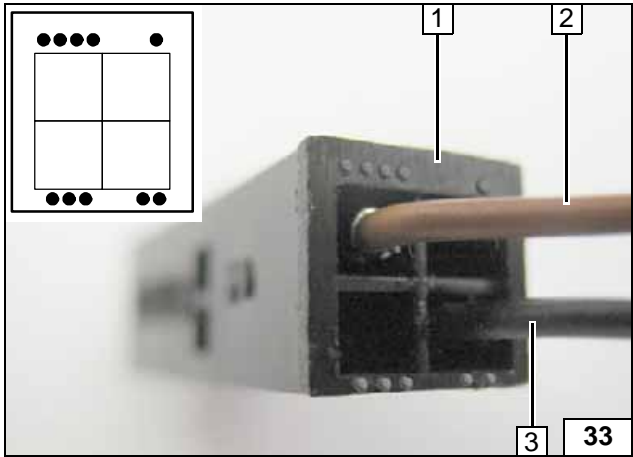


Seat Alhambra / VW Sharan

- 1 MultiControl CAR



**Installing
MultiControl
CAR**



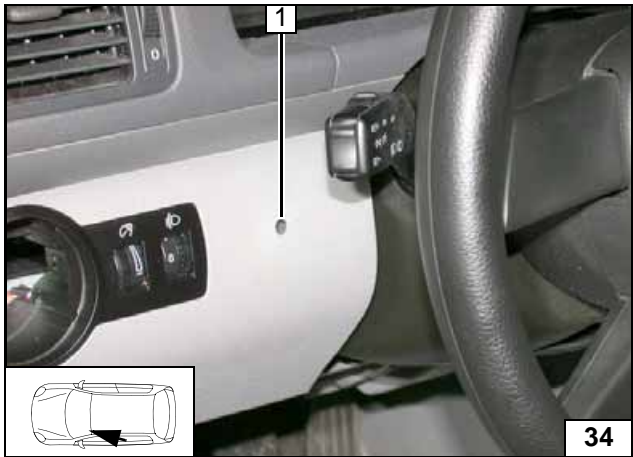
LED Installation Option

The LED is only installed in case no digital timer is being installed.
Insert brown (br) and black (sw) wires into provided connector 1. Pin assignment is distinguished by raised dots.

- 2 Brown (br) wire of clock connector, Pin 4
- 3 Black (sw) wire of clock connector, Pin 2



**Inserting
wires**



LED installation for VW Touran.

Image shows VW Touran.
Install the storage compartment on the driver's side. Pre-drill 2.5mm dia. hole 1 remove the storage compartment again.



**Hole for
LED**

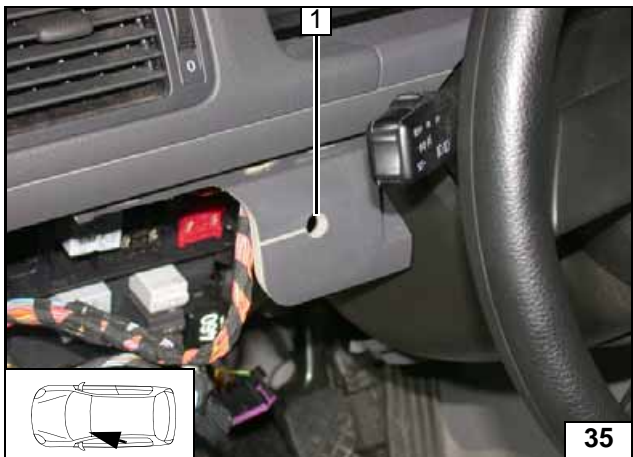


Image shows VW Touran.
14mm dia. hole 1 in rear stiffener. When drilling, be careful of components located behind!



Hole for LED pass through

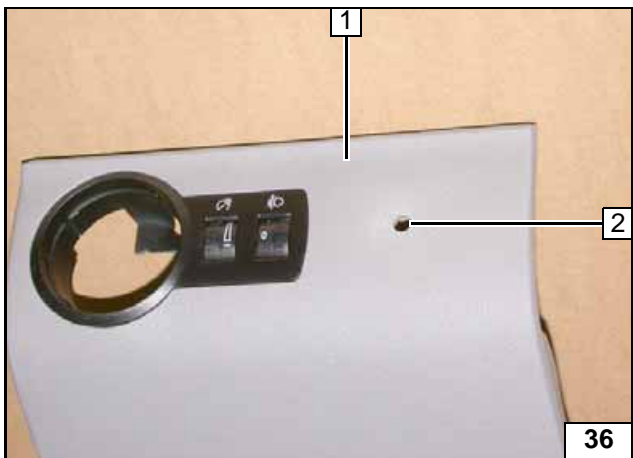


Image shows VW Touran.
1 Storage compartment
2 Drill out 8.2mm dia. hole and deburr it



Hole for LED

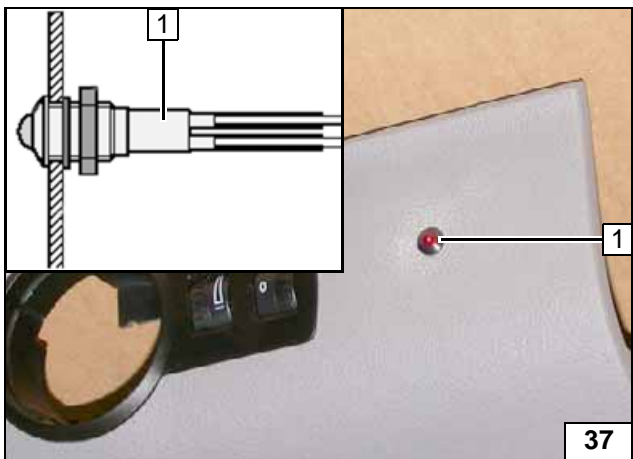


Image shows VW Touran.
1 LED, washer, union nut



Inserting LED

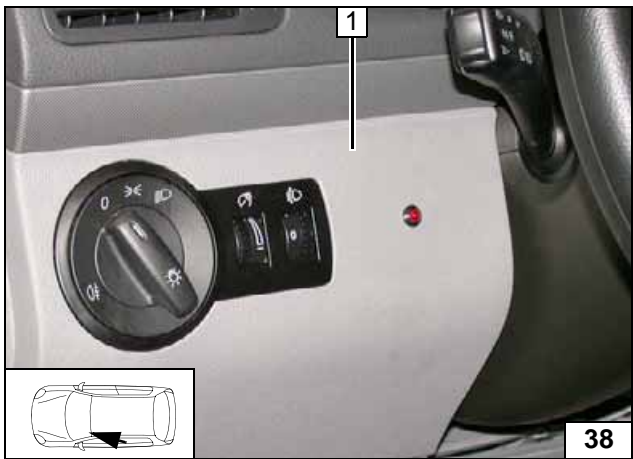
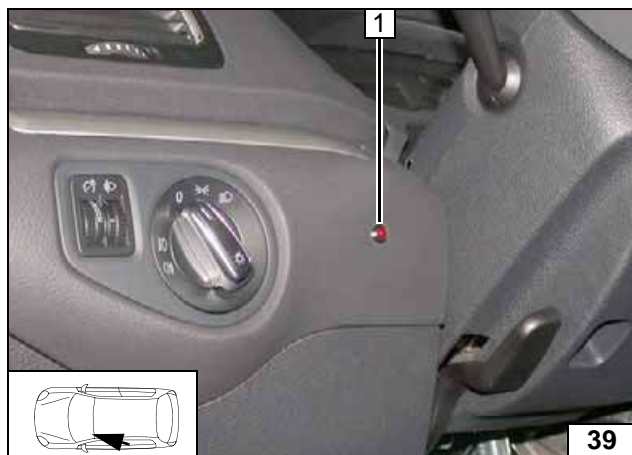


Image shows VW Touran.
Prior to storage compartment installation, connect LED connector with connection wiring harness of digital timer.



Installing storage compartment



LED installation for Seat Alhambra / VW Sharan!

All installation steps are conducted analogous to those of the VW Touran.

- 1 LED installation location



Installing LED



Final Work

WARNING!

Reassemble the components in reverse order. Check all electrical connections for firm seating. Insulate and tie back all loose lines.

Spray the heater components with anti-corrosion wax (Tectyl 100K).

- Program MultiControl CAR, teach Telestart transmitter.
- Make settings on A/C control panel according to the 'Operating Instructions for End Customer'.
- Place the 'Switch off parking heater before refuelling' caution label near the filler neck.



Adjusting Passenger Compartment Monitoring

The adjustment of the passenger compartment monitoring is to be done using the VAG tester.

Using the 'Controlled functions' menu, the sensitivity of the passenger compartment monitoring is to be reduced to 50%. After saving the new setting, the adjustment is finished.

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

Operating Instructions for End Customer

Please remove page and add to the vehicle operating instructions.

Note:

We recommend matching the heating time to the driving time.

Heating time = driving time

Example:

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

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

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

Before parking the vehicle, make the following settings:

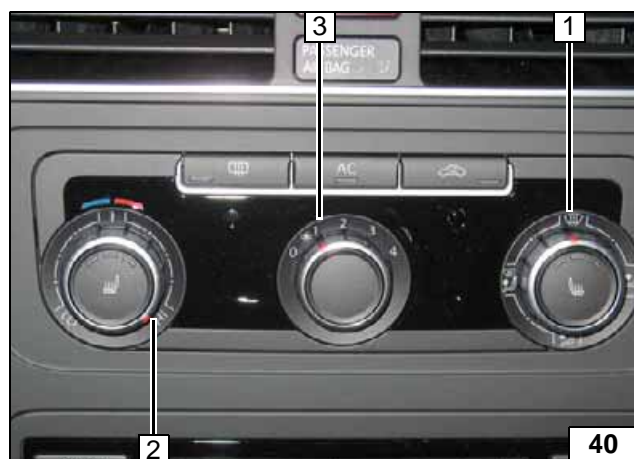


Image shows heater control up to model year 2012.

From model year 2013, please adjust settings for temperature, air outlet and fan in accordance with the instructions in the vehicle logbook.

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



Image shows heater control up to model year 2012.

From model year 2013 please adjust settings for temperature and air outlet in accordance with the instructions in the vehicle logbook.

- 1 Air outlet to windscreen
- 2 Set temperature on both sides to 'HI'



Climatic



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