Water Heater



Thermo Top VEVO Parking Heater
Thermo Top V Parking Heater



Upgrade documentation

Seat Alhambra / VW Touran / VW Sharan

Diesel From model year 2011 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	Туре	EG BE No. / ABE
Seat	Alhambra	7N	e1 * 2007 / 46 * 0402 *

Engine type	Engine model	Output in kW	Displacement in cm ³
CFFB	Diesel	103	1968
CFGB	Diesel	125	1968
CFGC	Diesel	130	1968

Manufacturer	Model	Туре	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 cm ³
CAYC	Diesel	77	1598
CFFB	Diesel	103	1968
CFGC	Diesel	130	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 digital timer / LED should be confirmed with the end customer before installation.

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Upgrade Kit

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

Also required:

Quantity	Designation	Order No.:
1	Heater control	See price list
1	LED Operation Indicator (if digital timer will not be installed)	1317651A

Foreword

This installation documentation is applicable 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.

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.

Sharp edges should be fitted with rub protection. Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

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

Special Tools

- Pulling aid

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Explanatory Notes on Document

To provide you with a quick overview of the individual working steps, you will find an identification mark on the outside top right corner of the page in question.

Mechanical system











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 or explosion.



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



Reference to a special technical feature.



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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 Ejot screws, Ejot studs = 10 Nm!

Preliminary Work

WARNING!

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- 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 serial number from the original type label to the warranty processing label.
- Attach the warranty processing label 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 HG Wire Pin 2).
- Detach the intake silencer of the heater, remove the intake manifold (Touran only).
- Remove the glove compartment
- 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).

Remove page 20 "Operating Instructions for End Customer" and add to the vehicle operating instructions.

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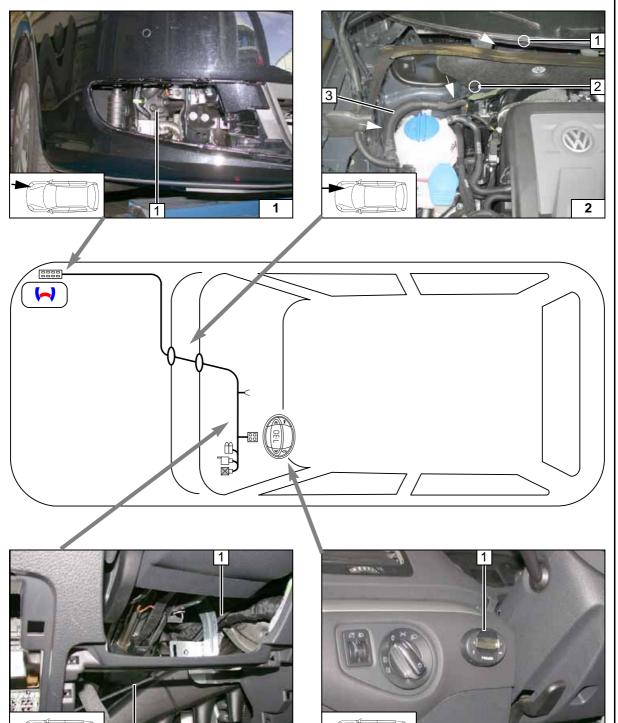
Electrical System Installation location of auxiliary heater

1 Heater

Wiring harness routing, engine compartment

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

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



Wiring harness routing, passenger compartment

1 Yellow (ge) wire

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Digital timer

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1 Digital timer

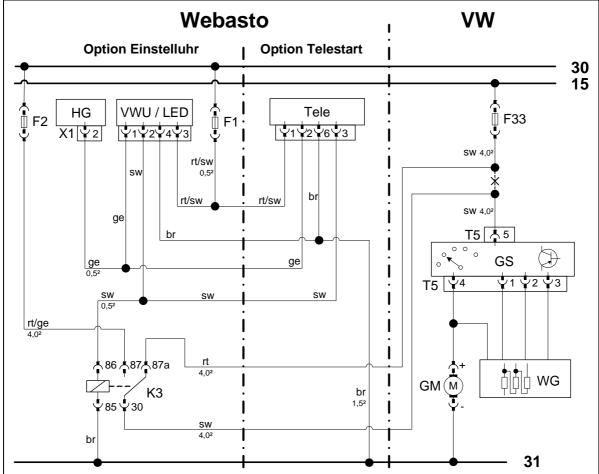




Wiring harness routing diagram



Fan Control for Manual Air-Conditioning



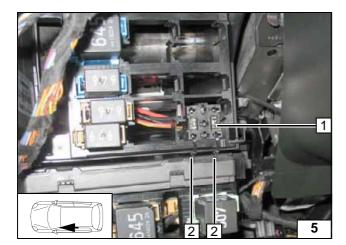
Webas	sto components	Vehic	le components	Colo	urs and symbols
HG	TT-V / VEVO heater	F33	40 A fan fuse	rt	red
X1	8-pin heater connector	T5	GS connector	ws	white
F1	1A fuse	GS	J301 fan switch	sw	black
F2	40A fuse	WG	N24 resistor group	br	brown
VWU	Digital timer	GM	V2 fan motor	ge	yellow
Tele	Receiver of Telestart				
K3	Fan relay				
LED	LED (only if Telestart is				
	the sole heater control)				
				Х	Cutting point
				Wirin	g colours may vary

i

Wiring diagram

Legend

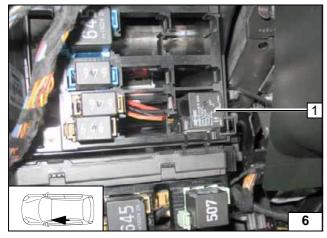




Insert socket of K3 relay 1 into free socket and fasten it to the relay carrier using two cable ties 2.

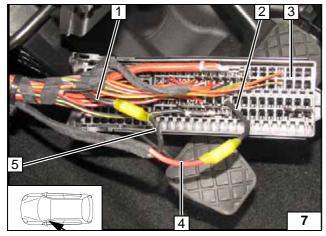


Installing socket of K3 relay



1 K3 relay



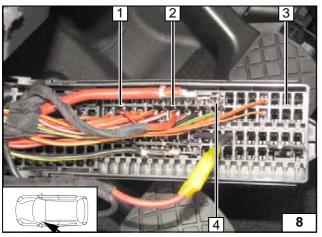


Connection to fuse carrier **3**. Produce connections as shown in wiring diagram.



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

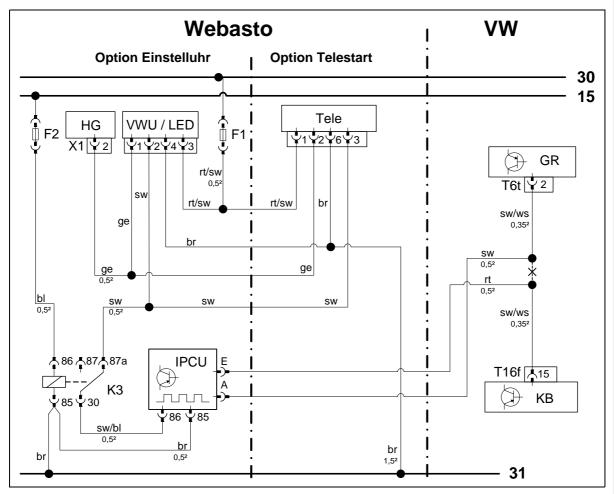
- 1 Insert red/black (rt/sw) wire into free socket terminal 30
- 2 Insert red/yellow (rt/ge) wire into socket of terminal 30



Connection of fuse carrier



Automatic Air-Conditioning Fan Control



Webas	to components	Vehicl	e components	Colo	urs and symbols
HG	TT-V / VEVO heater	GR	Fan controller	rt	red
X1	8-pin heater connector	T6t	Connector GR	WS	white
F1	1A fuse	T16f	Connector KB	SW	black
F2	1A fuse	KB	Air-conditioning control panel	br	brown
VWU	Digital timer			gn	green
Tele	Receiver of Telestart			bl	blue
K3	Fan relay			ge	yellow
LED	LED (only if Telestart is the sole heater control)				
IPCU	Pulse width modulator				
IPCU adjustment values:					
Duty-Cycle: 30%					
Freque	Frequency: 400Hz				
Voltage	Voltage: 8V			Х	Cutting point
Function	on: High-side			Wiring	g colours may vary.

Status: 10.09.2013

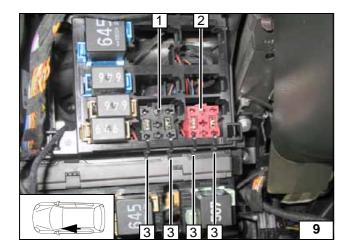
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Wiring diagram

Legend

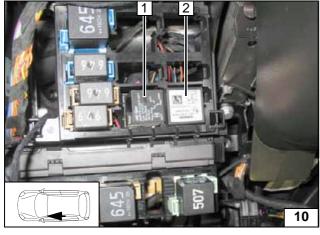




Insert socket of K3 relay 1 and socket of IPCU 2 into free sockets and fasten them to the relay carrier using two cable ties 3 each.



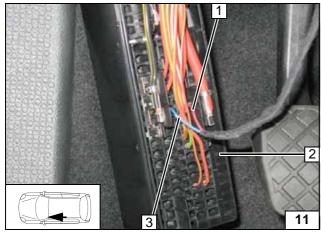
Installing socket of K3 relay



1 K3 relay 2 IPCU



Attaching K3 relay and IPĆU



Connection to fuse carrier 2. Produce connections as shown in wiring dia-

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
- 3 Insert blue (bl) wire into socket 27. If occupied, use free socket of terminal 15 row.

Connection of fuse carrier



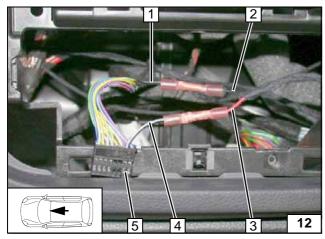


- 1 Black/white (sw/ws) wire from fan controller
- 2 Black (sw) wire from IPCU/A
- 3 Red (rt) wire of IPCU/E

Status: 10.09.2013

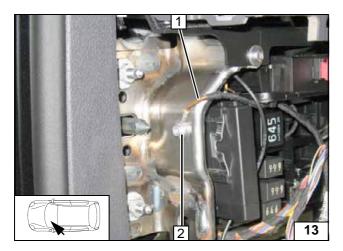
4 Black/white (sw/ws) wire of connector T16f, Pin 15

Connecting A/C control panel



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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

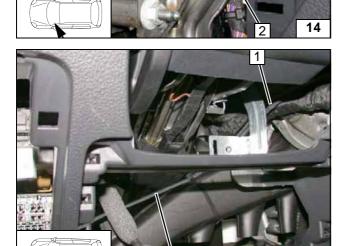


Seat Alhambra / VW Sharan

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

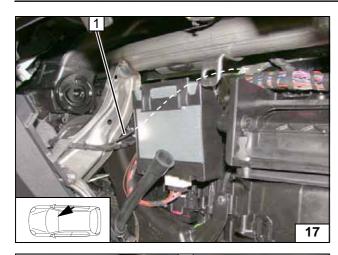


Routing yellow (ge) wire



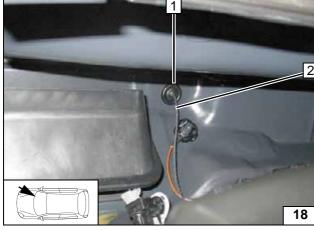
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1 Yellow (ge) wire

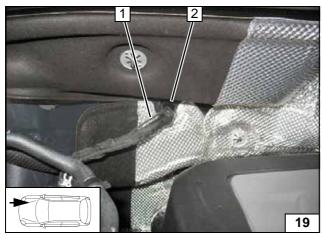
Routing yellow (ge) wire



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



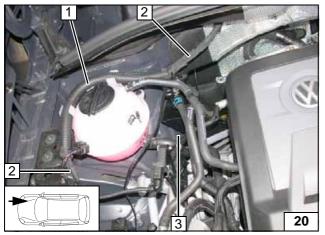
Routing yellow (ge) wire



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



Routing yellow (ge) wire

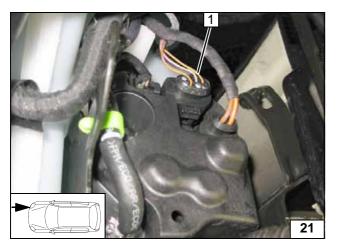


Route yellow (ge) wire **2** in original vehicle corrugated tube **1** to the installation location of the heater.



Routing yellow (ge) wire





Connect yellow (ge) wire.

VW Touran.

Remove intake manifold and intake silencer.

All vehicles.

1 8-pin connector of heater

Disconnecting connector

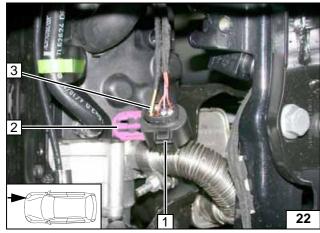


Image shows VW Sharan. Detach 8-pin connector 1 from heater. Remove sealing plug of Pin 2. Pull out lock 2. Insert yellow (ge) wire 3 into socket 2. Close



Connecting heater

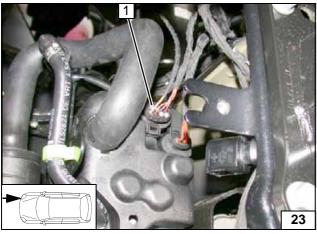


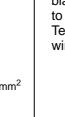
Image shows VW Sharan. Attach 8-pin connector 1 to heater.



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

Installing connector

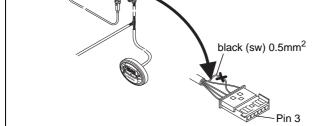




When installing digital timer at the same time, black (sw) wire 0.5mm^2 on socket Pin 3 has to be separated about 50mm ahead of the Telestart connector and insulated on both wire ends.

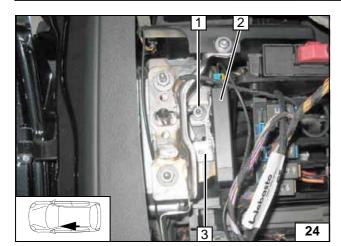


Connecting receiver



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VW Touran

Drill out bracket $\bf 3$ at position $\bf 1$ 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



Mounting receiver



Seat Alhambra / VW Sharan

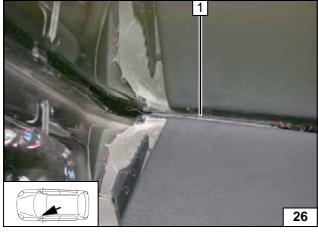
Warning!

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



Mounting receiver



All vehicles

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1 Antenna

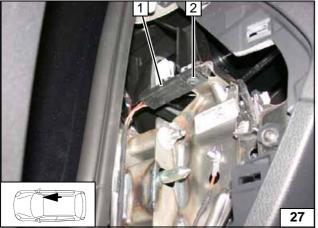




- 1 Temperature sensor T100 HTM
- 2 Original vehicle bolt



Installing temperature sensor



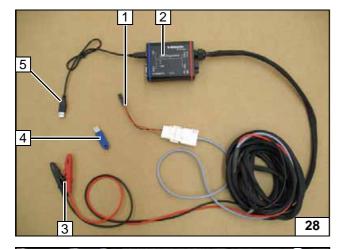
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Installing Upgrade

- Connecting the vehicle battery





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



Accesso-

ries for the

installation

- 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)





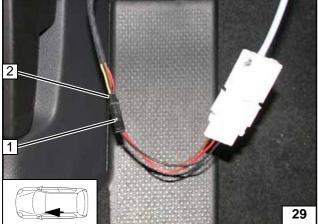
The program of the Webasto diagnosis tool (Webasto Thermo Test V2...) may not be running on the used laptop/PC.



2 Connector of digital timer wiring harness



Establishing connection



- Start upgrade program by selecting "Aufrüs- tung.exe" - Select your language - Select your language	Starting with the Windows Explorer	Starting with the CD
- Follow the menu instructions	tung.exe" - Select your language	

Disconnect the connection after the "*Upgrade successful*" message.

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Installing Digital Timer

VW Touran.

1 Digital timer



Installing digital timer



1 Digital timer



Installing digital timer



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.



3 Black (sw) wire of clock connector, Pin 2



Inserting wires



Image shows VW Touran. Install stowage compartment on the driver's

Pre-drill 2.5mm dia. 1 Remove stowage compartment again.



LED



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Hole for



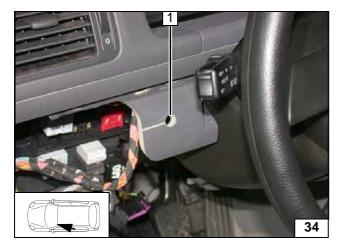


Image shows VW Touran. 14mm dia. hole **1** in rear stiffener. When drilling, watch components located behind!



Hole for **LED** pass through

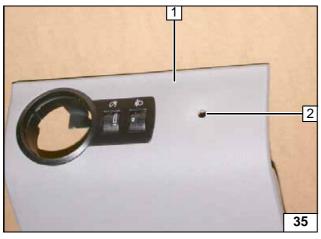
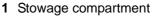


Image shows VW Touran.







Hole for LED

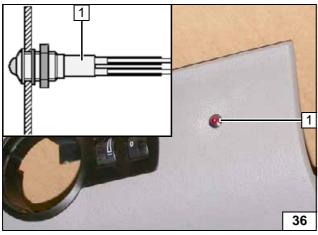
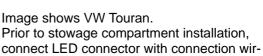


Image shows VW Touran.

1 LED, washer, union nut



Inserting **LED**

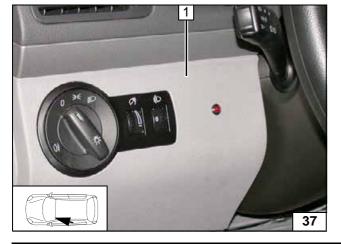


ing harness of digital timer.

1 Stowage compartment



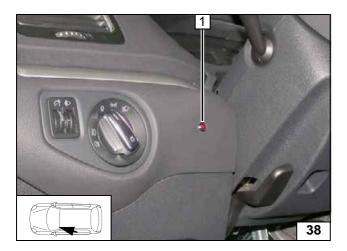
stowage



Installing compartment

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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 disassembled components in reverse order. Check all electrical connections for firm seating. Insulate all loose wires and tie back.

Spray heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Adjust digital timer, teach Telestart transmitter
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Place "Switch off parking heater before refuelling" signboard in the area of 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 information on deactivation, please see the vehicle owner's manual.



Before parking the vehicle, make the following settings:

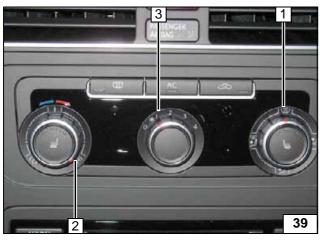


Image shows heater control up to model year 2012!

year 2012! Starting with 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"



Climatic

Image shows heater control up to model year 2012!

Starting with 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".

Climatronic



