Water Heater



Thermo Top C Parking Heater



Upgrade documentation

VW T5 from model year 2004 VW Amarok from model year 2012

Diesel with standard Webasto auxiliary heater Left-hand drive vehicle Climatronic



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

VW T5

Manufacturer	Model	Туре	EG BE No. / ABE
VW	T5	L148 / L225	e1 * 2001 / 116 * 0218 *
VW	T5	7HM / 7HMA	L148
VW	T5	7HCA / 7HX / 7X0	e1 * 2001 / 116 * 0220 *
VW	T5	7JO	e1 * 2007 / 46 * 0130 *

Motorisation	Engine code	Output in kW	Displacement in cm ³
1.9 TDI	AXC	63	1896
1.9 TDI	AXB	77	1896
2.0 TDI	CAAB	75	1968
2.5 TDI	AXD	96	2461
2.5 TDI	AXE	128	2461

VW Amarok

Manufacturer	Model	Туре	EG BE No. / ABE
VW	Amarok	2H	e1 * 2007 / 46 * 0356 *
VW	Amarok	2HS2	e1 * 2007 / 46 * 0750 *

Motorisation	Engine code	Output in kW	Displacement in cm ³
2.0 TDI	CDBA	90	1968
2.0 TDI	CDCA	120	1968
2.0 TDI	CSHA	132	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 should be confirmed with the end customer before installation.

Heater / Installation Kit

Quantity	Description	Order No.:
1	Upgrade kit VW T5 / Amarok Diesel Climatronic	9012104E
1	Heater control	see price list

Foreword

This Upgrade documentation applies to the VW T5 diesel vehicles from model year 2004 and later as well as the VW Amarok from model year 2012 and later with Webasto auxiliary heater fitted as standard - for validity, see page 1 - if 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 "Upgrade documentation".

However, the regulations of this Upgrade documentation and the "Operating Instructions" must 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 wires and tie back.

Sharp edges should be fitted with rub protection (split-open fuel hose).

Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

Special Tools

- Torque wrench for 2.0 10 Nm
- Hose clamping pliers
- Unlocking tool for radio navigation device
- Unlocking tool for the radio
- Hook

Preliminary Work

WARNING!

- If present, remove the battery cover.
- If present, remove the engine design cover.
- Disconnect the battery earth connection.
- Remove the partition wall behind the battery.
- Remove the lateral instrument panel trim on the driver's side.
- Remove the lower instrument panel trim on the driver's side.
- Clip out the speaker cover on the top left of the instrument panel (only in case of Telestart).
- Remove the entry trim on the driver's side.
- Expose the heater on the underbody and remove the connector (only for T5)

Remove page 13 "Operating Instructions for End Customer" and add to the vehicle operating instructions.



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



Coolant circuit

Exhaust gas

Combustion air

Software

Fuel









Special features are highlighted using the following symbols:



Specific risk of injury or fatal accidents.



Specific risk of damage to components.



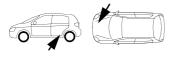
Specific risk of fire or explosion.



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



Reference to a special technical feature.

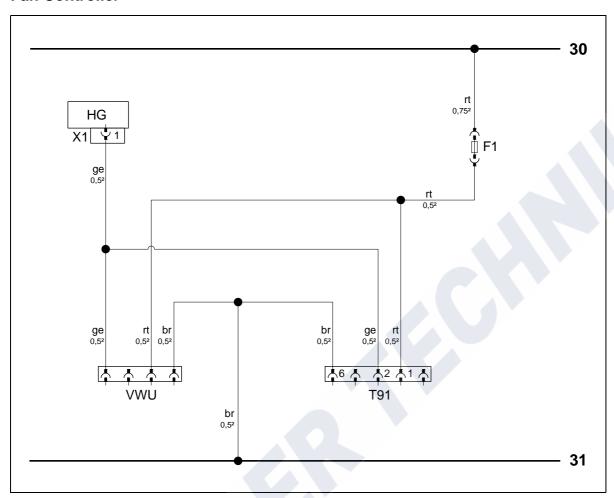


The arrow in the vehicle icon indicates the position on the vehicle and the viewing angle.

All dimensions are in mm! Tightening torque of hose clamps = 2.0 + 0.5 Nm! Tightening torque of Ejot screws, Ejot studs = 10 Nm!



Fan Controller



Components		Colours and symbols	
HG	Heater TT-Z/C	rt	red
X1	6-pin heater connector	br	brown
F1	1A fuse	ge	yellow
VWU	4-pin connector of digital timer		
T91	6-pin connector of Telestart receiver		
		Wiring colours may vary.	

Climatronic wiring diagram

Legend



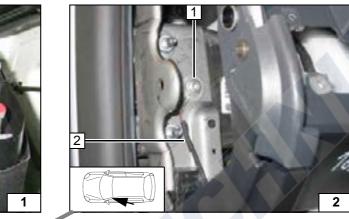
T5 Electrical System

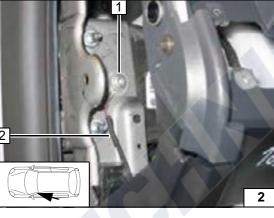
Positive wire

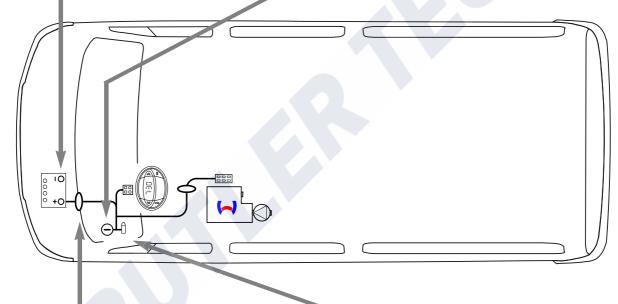
1 Positive wire on positive battery terminal

Earth wire

- 1 Original vehicle bolt, large diameter washer
- 2 Earth wire

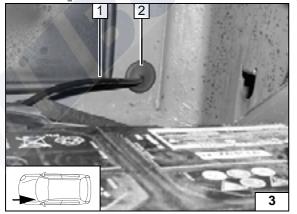


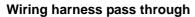




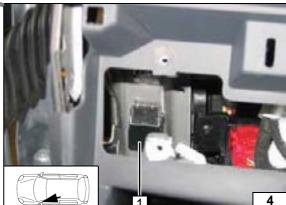


Wiring harness routing diagram





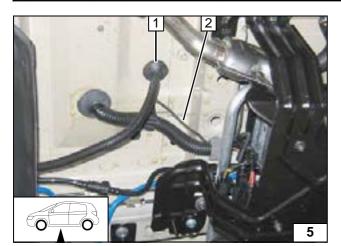
Route positive wire 1 from the passenger compartment through the protective rubber plug 2 into the engine compartment.



Fuse holder

Fasten fuse holder 1 with adhesive tape.

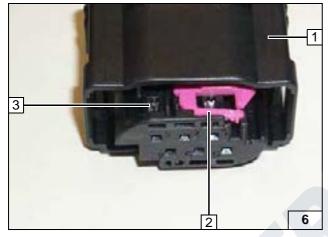




Route yellow (ge) wire 2 for heater control through protective rubber plug 1 to the heater.



Routing yellow (ge) wire

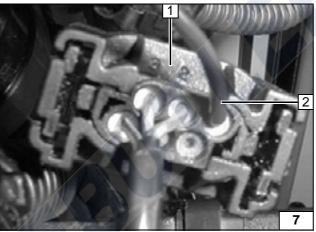


Disconnect 6-pin connector X1 1 from the heater. Unlock secondary locking device 2 of 6-pin connector (move to the right).



3 Socket Pin1





Lock yellow (ge) wire 2 into Pin 1 socket of connector X1 1. Close the secondary locking device again. Attach connector X1 1 to the heater.



Connecting heater connector





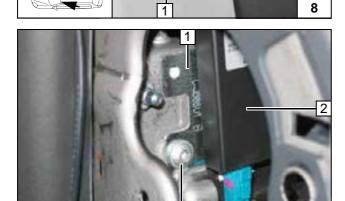


Mounting

digital tim-

[i]





Remote Option (Telestart)

The ESVT adapter wiring harness from the radio remote control installation kit is not required. Please dispose of it in a proper man-

Drill out bracket 1 to 6.5 mm dia. at position 3.

2 Receiver

1 Antenna

9

10

Digital Timer

1 Digital timer

3 Original vehicle bolt, earth wire, large diameter washer

Mounting receiver



Mounting antenna

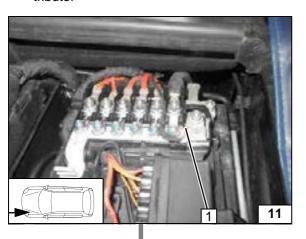
www.butlertechnik.com



Amarok Electrical System

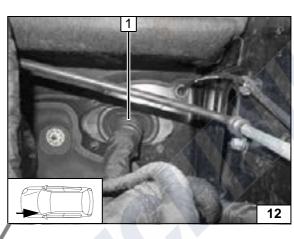
Positive wire

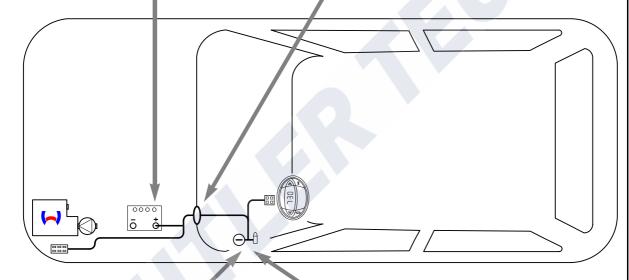
1 Positive wire on original vehicle positive distributor



Wiring harness pass through

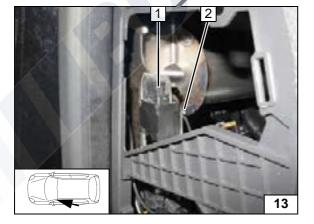
1 Protective rubber plug







Wiring harness routing diagram

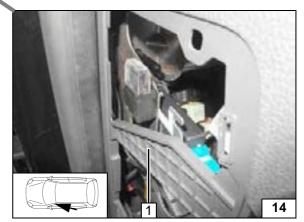


Fuse holder, earth wire

1 Fuse holder

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2 M4x16 countersunk head screw, original vehicle hole, large diameter washer, cable lug of earth wire, spring lockwasher, nut



Fuse holder, earth wire, Telestart

- 1 Fuse holder
- 2 M4x16 countersunk head screw, original vehicle hole, Telestart bracket, cable lug of earth wire, large diameter washer, spring lockwasher, nut



Status: 01.05.2013





Route yellow (ge) wire 1 to the heater.



Routing yellow (ge) wire

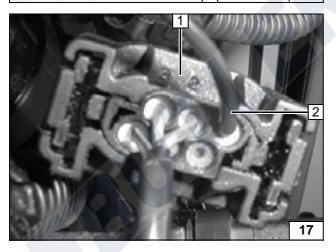


Disconnect 6-pin connector X1 1 from the heater. Unlock secondary locking device 2 of the 6-pin connector (move to the right).



3 Socket Pin1

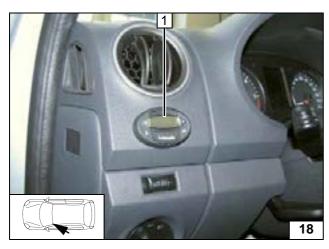




Lock yellow (ge) wire **2** into Pin 1 socket of connector X1 **1**. Close the secondary locking device again. Attach connector X1 **1** to the heater



Connecting heater connector

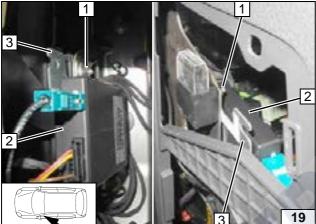


Digital Timer

1 Digital timer



Mounting digital timer



Remote Option (Telestart)

The ESVT adapter wiring harness from the radio remote control installation kit is not required. Please dispose of it in a proper manner.

Fasten bracket 3 on M4x16 bolt 1.

2 Receiver



Mounting receiver



1 Antenna

Mounting antenna

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Final Work

WARNING!

Mount removed parts in reverse order. Check all electrical connections for firm seating. Secure all loose cables using cable ties.



- Connect the battery.
- Set the digital timer, teach the Telestart
- Check the proper functioning of the parking heater, see the operating instructions/installation instructions.
- Place the "Switch off parking heater before refuelling" signboard near the filler neck.



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



Operating Instructions for End Customer

Feel the Drive

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

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

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

The "parking ventilation" function is not available.

Before parking the vehicle, no settings have to be made.

