

Table of Contents

Parts needed:	2
Telestart T91 kit - VW Part No. ZDK054356.....	2
Overhead Timer - VW Part No. 7L6 919 044 S.....	6
Heater Core for stationary heater - VW Part No. 7L6 819 953 F	7
Parking heater options	10
Parking heater controlled via Telestart remote.....	10
Parking heater controlled via overhead timer	10
Parking heater controlled via both Telestart remote and overhead timer	10
Installation of Telestart T91 Remote Kit	10
Replacing the overhead compass module with the timer	21
Replacing the Auxiliary Heater Electronics	23
Coding	27
Parking heater controlled via Telestart remote.....	27
Parking heater controlled via overhead timer	27
Parking heater controlled via both Telestart remote and overhead timer	27
Notes	27

Do It Yourself instruction on how to convert the built-in auxiliary heater found in US spec Touareg V10 TDI models to a parking heater. Instructions here include the installation of the remote control kit (Telestart T91) as well as in-cabin control and timer. Instructions are provided without any warranty and are to be used at your own risk.

Parts needed:

Telestart T91 kit - VW Part No. ZDK054356.

Picture 1 - Box with the kit inside



Picture 2 - Telestart module with mounting hardware and 1A fuse



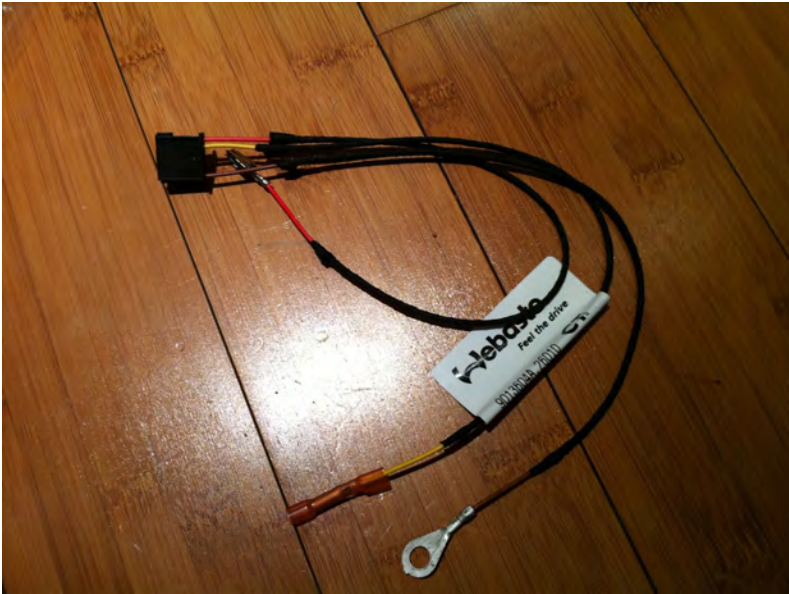
Picture 3 - Telestart module close-up



Picture 4 - Remote fob



Picture 5 - Telestart module harness – brown cable is ground, red cable goes to fuse box and yellow cable connect with the extension going to PIN1 on the aux. heater control harness



Picture 6 - Telestart antenna



Picture 7 - Extension yellow cable – one side goes to PIN1 of aux. heater harness the other side connects to yellow cable from Telearstart module harness (shown in **Picture 5**)



Picture 8 - Telestart module side view – antenna connector on the left and male connector for the harness on the right



Overhead Timer - VW Part No. 7L6 919 044 S

There are part# variations depending on the interior color. These apply to MY2004-2006

- 7L6 919 044 S 5J6 - crystal grey
- 7L6 919 044 S 7G8 - beige
- 7L6 919 044 S 7H7 - sunshine beige

MY2007 has one more color in the list

7L6 919 044 S 28U – latte macchiato (brown)

Picture 9 – Front



Picture 10 – Back



Heater Core for stationary heater - VW Part No. 7L6 819 953 F

NOTE: It appears there are two different variations of the Webasto heater – additional heater (Part# 7L6 815 071) and stationary heater (Part#7L6 819 008). The difference between these two is in the heater electronics. Below ETKA screenshot shows the part numbers for each of these:

POS	PART NUMBER	NAME	REMARKS	QTY	MODEL
		additional heater for circuit stationary heater for circuit	TT-Z19D TT-C69/TT-C76		
1	7L6 815 071 F	heater for additional heater	TT-Z19-D	1	diesel eng.
(1)	7L6 819 008 G	heater for stationary heater	TT-C69-D	1	diesel eng.

Some US V10 TDIs (it appears MY 2004 ones) came with the correct (stationary) heater from the factory. 2006 and newer US V10 models came with the incorrect (additional) heater. The best way to determine which variation of the heater you have is to hook up a VAG-COM and check the part # of address 18 (Aux. Heater). Here are sample readings from both additional and stationary heaters taken with VAG-COM:

Additional heater:

Address 18: Aux. Heat Labels: None
 Part No: 7L6 815 071 D
 Component: Standheizung E1MAC
 Coding: 0000100
 Shop #: WSC 31414 000 00000
 VCID: 336EABB52B47

Stationary heater:

Address 18: Aux. Heat Labels: None
 Part No: 7L6 819 008 G
 Component: Standheizung E1MAC
 Coding: 0000020
 Shop #: WSC 00000 000 00000
 VCID: 3A7086910CD9

Picture 10 – Heater core comes with the electronics



Picture 11 – Top view



Parking heater options

Depending on your preference there are a few options on how to control the parking heater – via Telestart remote, via overhead timer, via both Telestart remote and overhead timer, and also a GSM phone, which will not be detailed in this document.

Parking heater controlled via Telestart remote

This allows you to operate the heater via a 2-button remote fob. You can start, stop the heater, switch between heating/cooling modes, change run time. This option requires the following:

- Telestart T91 Remote Kit as mentioned in the “Parts needed” section above.

Parking heater controlled via overhead timer

This allows you to operate the heater via the overhead compass module within the cabin. This does not provide remote control capabilities but allows you to program the heater to start on a scheduled time. It also allows you to switch between heating/cooling mode, change run time, start/stop the heater manually. This option requires the following:

- Overhead timer as mentioned in the “Parts needed” section above
- Heater core for stationary heater (Part# 7L6 819 008) as mentioned in the “Parts needed” section above. **Make sure to read the NOTE section there carefully as there are two variations of the Webasto heaters that come in the Touareg.**

Parking heater controlled via both Telestart remote and overhead timer

This option is a combination of the two above. If you chose to have both the remote control and timer features mentioned above you will need the following:

- Telestart T91 Remote Kit as mentioned in the “Parts needed” section above.
- Overhead timer as mentioned in the “Parts needed” section above
- Heater core for stationary heater (Part# 7L6 819 008) as mentioned in the “Parts needed” section above. **Make sure to read the NOTE section there carefully as there are two variations of the Webasto heaters that come in the Touareg.**

Installation of Telestart T91 Remote Kit

Start by removing the front left wheel and then remove the wheel well to expose the Webasto heater.

Picture 12 – Webasto heater under driver’s side front fender



Unplug the Aux. Heater power and control harnesses. These go into plugs 1 and 2 (left to right) on **Picture 11**.

Picture 13 – Control and power cables plugged on top of the heater.



Take the control harness and detach the cover of the harness and pull it up as shown in **Picture 14**. There are two pins on both side of the cover that need to

be pushed before the cover will slide up. PIN1 is the very left whole with the blue cap on the front row. The green lock slides to the right before the pin1 yellow cable is installed.

Picture 14 – Harness cover pulled up



Picture 15 – Top view of the pin layout with pin1 cap removed and yellow cable ready to be installed



Run the pin1 cable along the cable feeds and through to the inside of the engine compartment. I used the opening next to air filter box and the ground charging pin.

Picture 16



Picture 17



I then run the cable behind the firewall using the corner opening under the rubber seal of the hood.

Picture 18

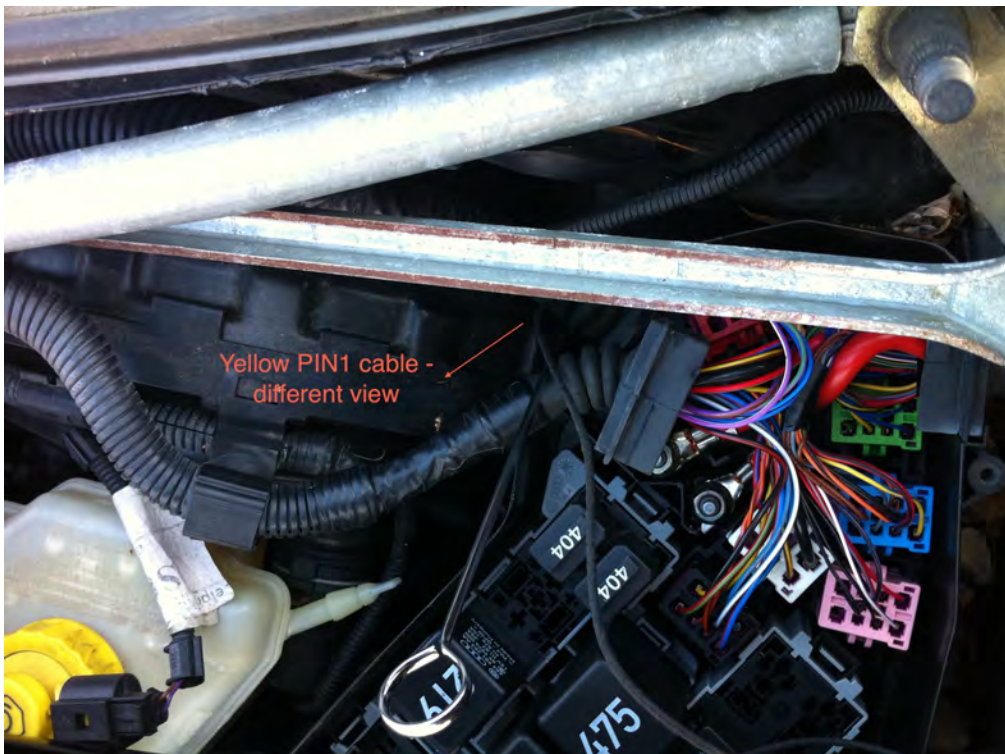


I then removed the fuse cover and the plastic covering the wiper arms to expose the rubber plug behind the firewall where I poked a hole to run the pin1 cable inside the cabin. I poked a small hole in order to ensure that no water would go inside the cabin through it. You can seal this with silicone if you want to but in my case the hole was tight enough to keep water out. I taped the end of the wire to a metal skewer and fished the wire inside. I had previously lubricated the skewer and wire to make it easier. Once the wire was inside I removed the skewer.

Picture 19 – skewer and wire through the hole



Picture 20 – another view



Picture 21 – another view with skewer



Picture 22 – After wiper arm and fuse cover replaced



Then it was time to move inside the car and to the fuse box. In order to expose the fuse box I remove the wood trim and the left cover as shown in **picture 23** below. There are 2 screws that hold the fusebox to the frame which I removed to gain flexibility. The fusebox back cover also had to be removed as shown in **picture 24**

Picture 23 – left fusebox side with plastics and covers removed

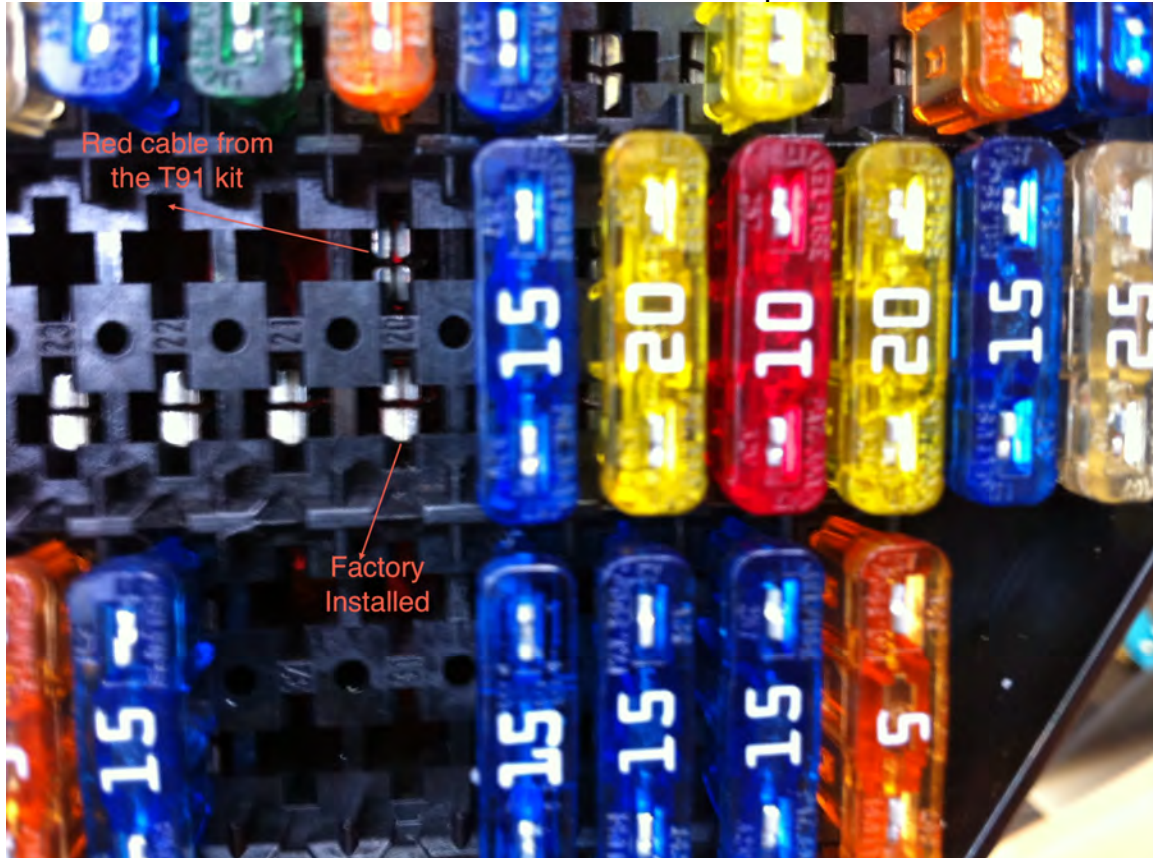


Picture 24 – red arrow shows the fusebox back cover



I then run the red power cable from the T91 kit to the fuse box. The instructions that came with the kit specified that fuse 30 is to be used but in my case slot 30 was already in use. I located an empty slot (slot 20) which also had a power source already available. As I had no room for error with only one cable I first ensured that slot 20 was hot even after locking the car. This is required if you want the T91 to function at all times. I then plugged the red wire to slot 20 permanently

Picture 25 – fusebox slot 20 with red T91 wire on top



I then plugged the 1A fuse that came with the kit in slot 20 and mounted the T91 module. I used the top fusebox screw to both mount the module and ground it. This is shown in **picture 26**. I also used zip ties to organize the T91 wires.

Where you mount the antenna is up to you – I chose to install mine above rear view mirror hidden under the headliner. It comes with mounting tape but I chose not to glue it. I then run the antenna wire to the driver's side and down behind the door column (make sure the wire does not obstruct the curtain airbag).

Replace all plastic covers and wood trim in reverse order. The T91 kit comes with user manual in english. You can follow the instructions provided there to pair the remote control with the module.

Replacing the overhead compass module with the timer

Replacing the module is straight forward – the connector and wiring are the same for both the old and the new modules. Start by sliding a calling card or similar in the back of the module to depress the clips and pull down as show in **picture 27** below. You can use the new module to note the location of the clips and get a better idea.

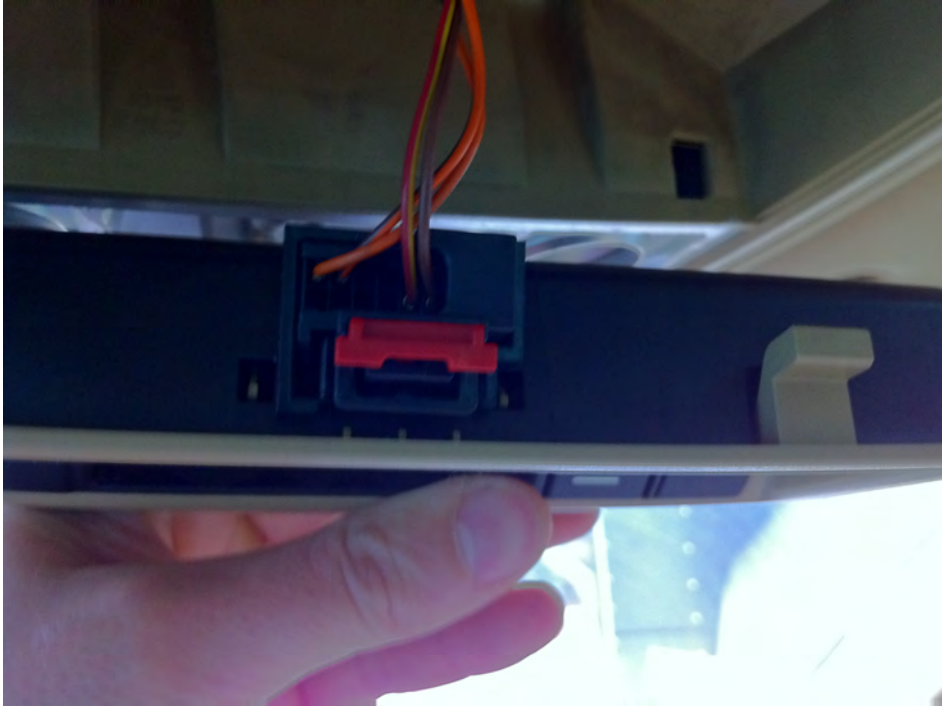
Picture 27 – Prop open the back side of the module by sliding in a plastic card or similar.



Picture 28 – View from the back



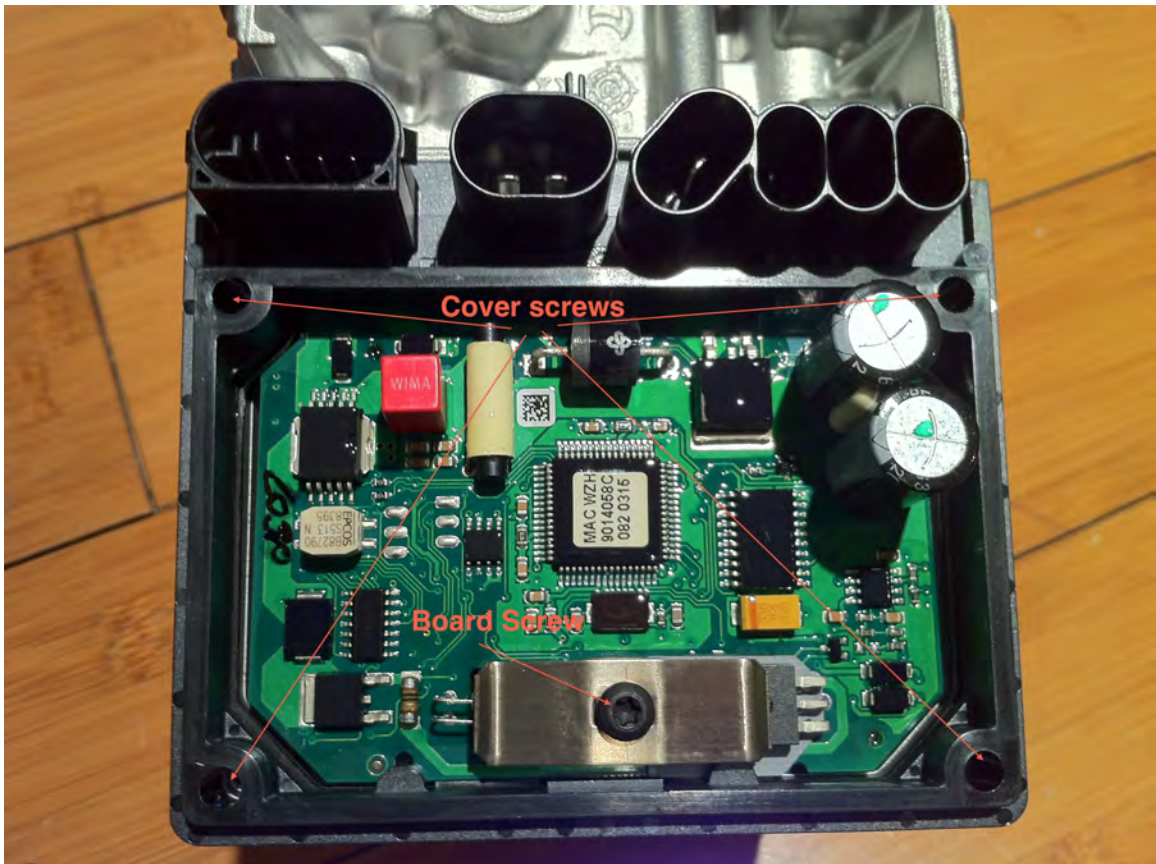
Picture 29 – Pull the red locking clip and unplug the module



Replacing the Auxiliary Heater Electronics

This assumes that the front left wheel and wheel well have already been removed. First let's disassemble the new heater core and take the electronics out. Start by removing the 4 torx screws that hold the cover. You may need to use a flat screwdriver to pry the cover from the electronics board. Do NOT pull both the electronics board and cover at the same time.

Picture 30 – top of the heater with cover removed. Electronics board is fixed with one torx screw as noted



Picture 31 shows the cover and the electronics detached from the heater core.

Picture 31



Apply the same steps to remove the electronics board from the old heater. I decided to loosen up the mounting bracket of the Webasto under the fender for easier access. You will also have to disconnect harnesses 3 and 4 (left to right) shown in **picture 32** below. Note that harness 5 on the old electronics board has a jumper – the new board has slot 5 inactive and does not need the jumper. You can do this by lifting the front end up and sliding the electronics board out slightly and then unplugging the harnesses. Space might be tight so be patient.

Picture 32 – The replaced old circuit board with jumper in slot 5



Coding

Parking heater controlled via Telestart remote

If you went with this option there is no coding required. Leave the coding value for Address 18(Aux. Heater) as is.

Parking heater controlled via overhead timer

If you went with this option ensure that Address 18(Aux. Heater) coding is 0000020 as shown below. If your V10 came with the stationary heater (Part# 7L6 819 008) the default factory coding will be 0000030. If you leave this value the Webasto will not respond to the commands from the overhead timer.

Address 18: Aux. Heat Labels: None
Part No: 7L6 819 008 G
Component: Standheizung E1MAC
Coding: 0000020
Shop #: WSC 00000 000 00000
VCID: 3A7086910CD9

You will also need to make sure Address 18(Aux. Heater) -> Adaptation -> Channel 004 value reads "0". This disables the supervision of the coolant circulation valve (N279). The North American V10s do not have this installed from the factory. Leaving the value to "1" will cause the Webasto to throw error codes.

Parking heater controlled via both Telestart remote and overhead timer

Coding requirements for this option are identical to the "Parking heater controlled via overhead timer" ones above.

Notes

It has been observed that if you have the Telestart T91 remote with the additional heater (part# 7L6 815 071) you will need to "awaken" the car to make the Webasto listen to the Webasto key fob start command and fire up properly. Unlocking and locking the car with the regular key fob can achieve this "awakening".

The procedures and steps described above have not been confirmed to work on a 2008 V10 (T2).

I tried to make this document as detailed as needed but if you need clarification on anything send me a message – my user in clubtouareg.com is “.V10TDI” and “V10TDI” on vvvortex.com