

Webasto Heater Remote Control

This is a modification to an Audi A8 D3 3.0 TDI 2004. Though it could suit other models.

All the usual disclaimers apply, what you do is up to you. At least enjoy the read.

The modification is to enable the remote operation of the Webasto heater so that the interior can be defrosted prior to opening the car. The Webasto heater was a standard fitting to diesels during my cars era, and is a prerequisite for this modification. The OEM method of doing this includes a pump, valves and some pipework and as usual with Audi is rather expensive. If this costs more than a tenner then you have purchased a gold plated remote control. A T6 Torque screwdriver will be required.

The modification is very easy to do but very good soldering skills are necessary. The small pads on the printed circuit board are 1.6mm diameter and are only 1.0mm apart, with a track running between them.

Before starting this modification it is a reasonable idea to check that your vehicle is able to work in this way. After the vehicle has been stationary and locked for long enough to have electrically “gone to sleep” (usually 30 minutes should be long enough), enter the car but do not put the ignition key into the ignition switch. Press and hold the Climate Control Unit ON/OFF switch until the unit lights up, this will include the last temperature settings used (during cold weather I set mine to “HI” when parking for the night). MAKE A NOTE OF HOW LONG THIS TAKES, it is the minimum that the remote button must be pressed down and held when turning the heater on remotely.

After a few minutes, if it is cold enough, and enough fuel in the tank, the Webasto will fire up. If not check with VCDS that Control Module 18 Aux Heater Channel 16 = 1 (Activate Aux Heater) & Channel 19 = 0 (Use Aux Heater). If this has worked then we are good to go.

There is no visual feedback within this modification’s operation. When I first started this I designed it with a feedback LED in the car but realised this would be useless because if you needed the heater on then your windows would be iced up rendering the feedback LED invisible. Thus feedback became an unnecessary complication.

The Climate Control Unit can be switched Off via the same ON/OFF switch or by switching the ignition on and using the car.

Because there are no heavy currents transferred in this modification only thin wires will be needed. I used the wires from a six way security cable. The cable is the type used in security alarms, individual wires including insulation are only 1mm.

The J255 unit has **Component Protection** and swapping out will mean an expensive trip to the stealers so stay with the original.

Here is the Climate Control Unit J255 that is going to be modified.



Marked here are the two pads that will have wires soldered to them



Now you should have an idea of how difficult the task ahead is.

The Climate Control Unit J255 ON/OFF switch is a normally open contact that is closed whilst the switch is pressed and open when it is released.

The modification is wiring a relay normally open contacts across the ON/OFF switch contacts so that when the relay is energised it simulates pressing the ON/OFF switch thus turning the Climate Control Unit J255 ON. A second operation of the relay would simulate a second pressing of the ON/OFF switch thus turning the Climate Control Unit J255 OFF.

The remote control that is used is easily obtainable on E-Bay for about £5.00. Here is an example

DC12V 10A Relay Wireless RF Remote Control Switch Transmitter + Receiver Set

There are a few variants though it would be most practical if the fob you buy has only one button like mine. The important note is that it has a “Jog” facility.

“Jog” is the same as the Climate Control Unit J255 ON/OFF switch. That is ON whilst pressed and OFF when released. These remotes have two other modes besides “Jog” but all three modes are programmable.

Check that there is no connection from the relay operating contacts to any part of the circuitry within the receiver other than the three screw terminals. That means the common, normally closed and the normally open contacts are isolated from everything else.

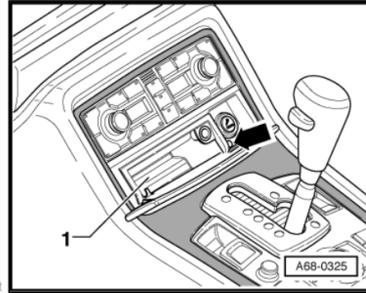


One I was looking at a while back had a solder bridge between the operating contact and 12 volt +ve. It was easily rectified by melting the solder bridge. I’ve not seen one like that for a few years.

Remove Ashtray and Holder

Removing Ashtray

- Move selector lever to „S“.
- Switch off ignition.
- Open ashtray (front).
- Press button -arrow-.
- Pull out ashtray insert -1-.

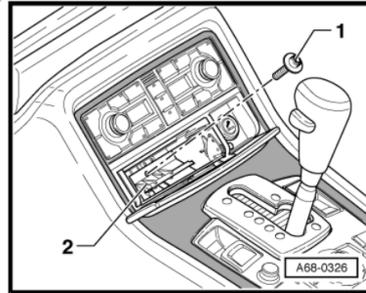


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- Remove bolt -1-.
- Pull ashtray (front) -2- out of centre console.
- Unplug electrical connector.

Installing

Install in reverse order of removal.



Remove Centre Console Trim

This might seem difficult at first but with upwards steady pressure from just below the ashtray aperture it will lift.

Be aware that the top will be very close to the dash so be careful not to mark the material.

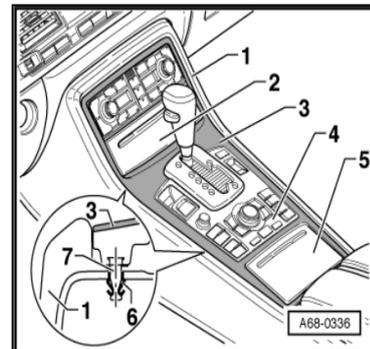
Once you have lifted it clear and manoeuvred it off the gear selector you will be able to turn it over and unplug the connectors.

Removing trim for centre console with multimedia operating unit

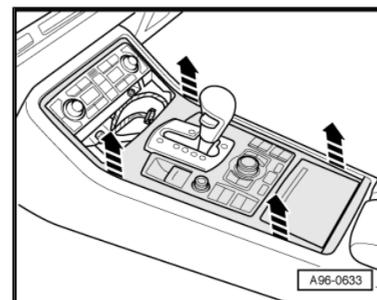
- Lift trim for centre console -3- with multimedia operating unit -4- and front centre console cup holder -5- off centre console -1-.

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- Unplug electrical connectors.
- Detach trim for centre console with multimedia operating unit and front centre console cup holder.
- Remove multimedia operating unit

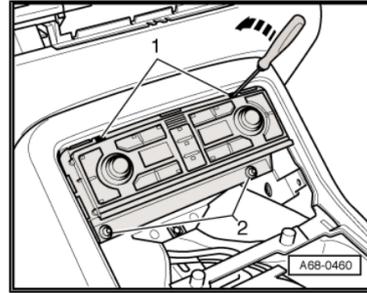


- Lift off centre console switch trim -arrows-.
- Unplug electrical connectors.

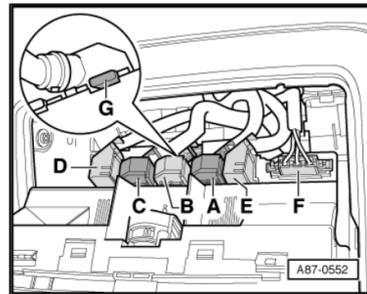


Remove Climate Control Unit J255

- Unscrew bolts -2-.
- Release retaining springs -1- with small screwdriver -arrow-.
- Swivel top edge of Climatronic control unit -J255- to rear.
- Take Climatronic control unit out of mounting.



- Unplug electrical connectors -A ... E- by releasing retaining tab -G-.
- Unplug electrical connector -F-.



There are 10 x T6 torque screws holding Climate Control Unit J255 together.

Four hold the case to the front panel. Remove these four, one on each corner.



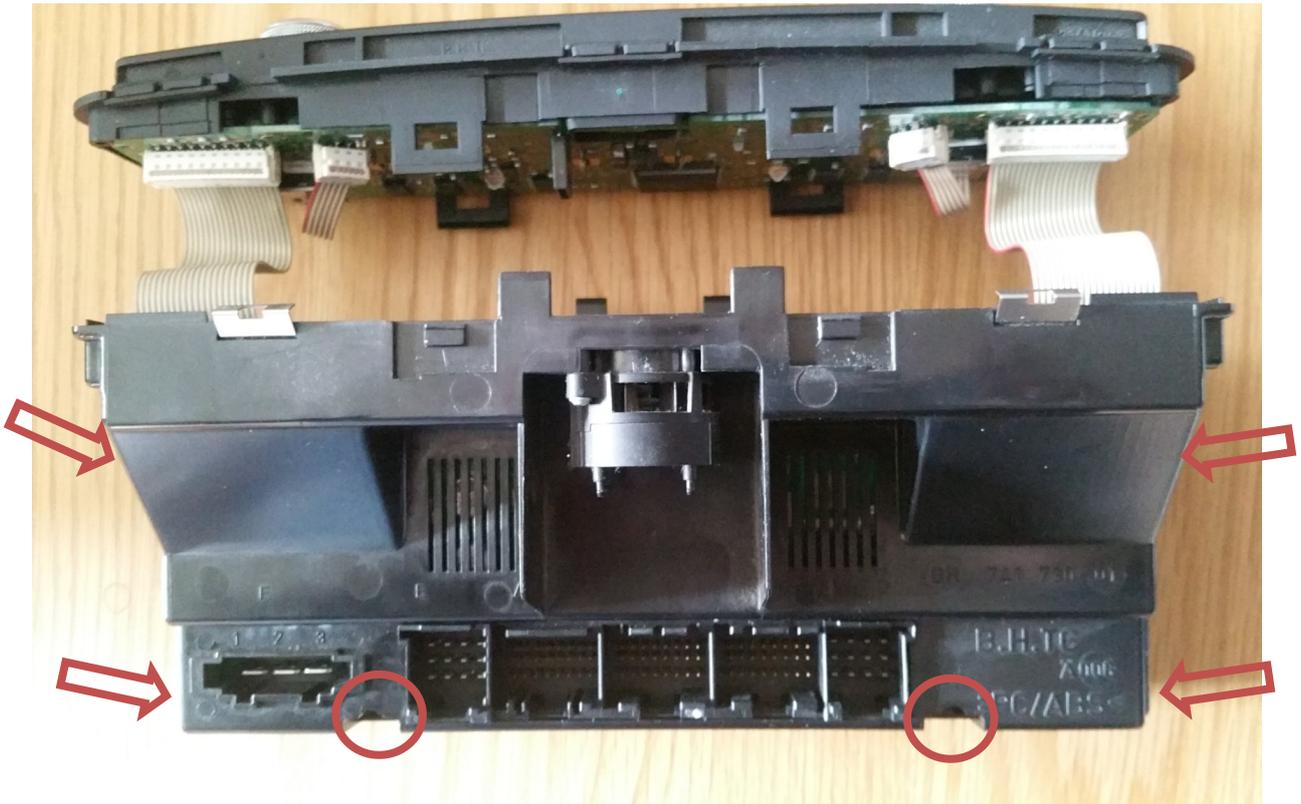
The front panel can now be taken from the case by lifting the four tabs, two on the top and two on the bottom.

Here are the top pair, bottom pair are exactly the same. There is a small cut-out on each where a small screwdriver blade can fit to enable lifting them.



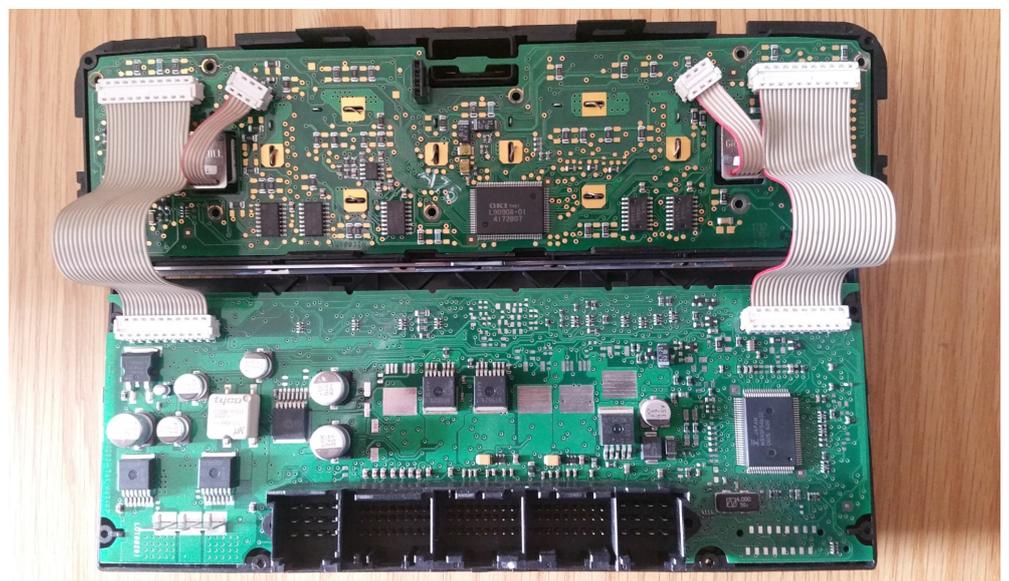
The remaining six T6 screws hold the two part case together.

Remove the six torque screws.



The larger top part can be set aside.

Try and keep the printed circuit board in the bottom part. No problem if they come apart.



There are three wires to be soldered to the two printed circuit boards.

Here are the areas where these wires are connected,

The yellow arrow is the F2 contact which is Permanent Live (T30) and this will be used as the 12 volt supply for the remote receiver. The F2 contact pad is rather large and will require a fair bit of heat to solder successfully. Scraping the surface prior to tinning would help.

The two red arrows are the small pads that the other two wires connect to. Which way round you connect these two is not important because they only connect to the normally open contacts of the remote relay. They are not polarity sensitive.

The following pictures show how the three connections are made from the remote receiver to J255.

The three wires can be passed through the cooling slots in the top piece of the J255 case without any holes being drilled.

The 12 volt negative or earth can be made on one of the gear selector mounting bolts. These four bolts face upwards through anchored nuts. A 10mm nut, washer and crimped terminal would be ideal.

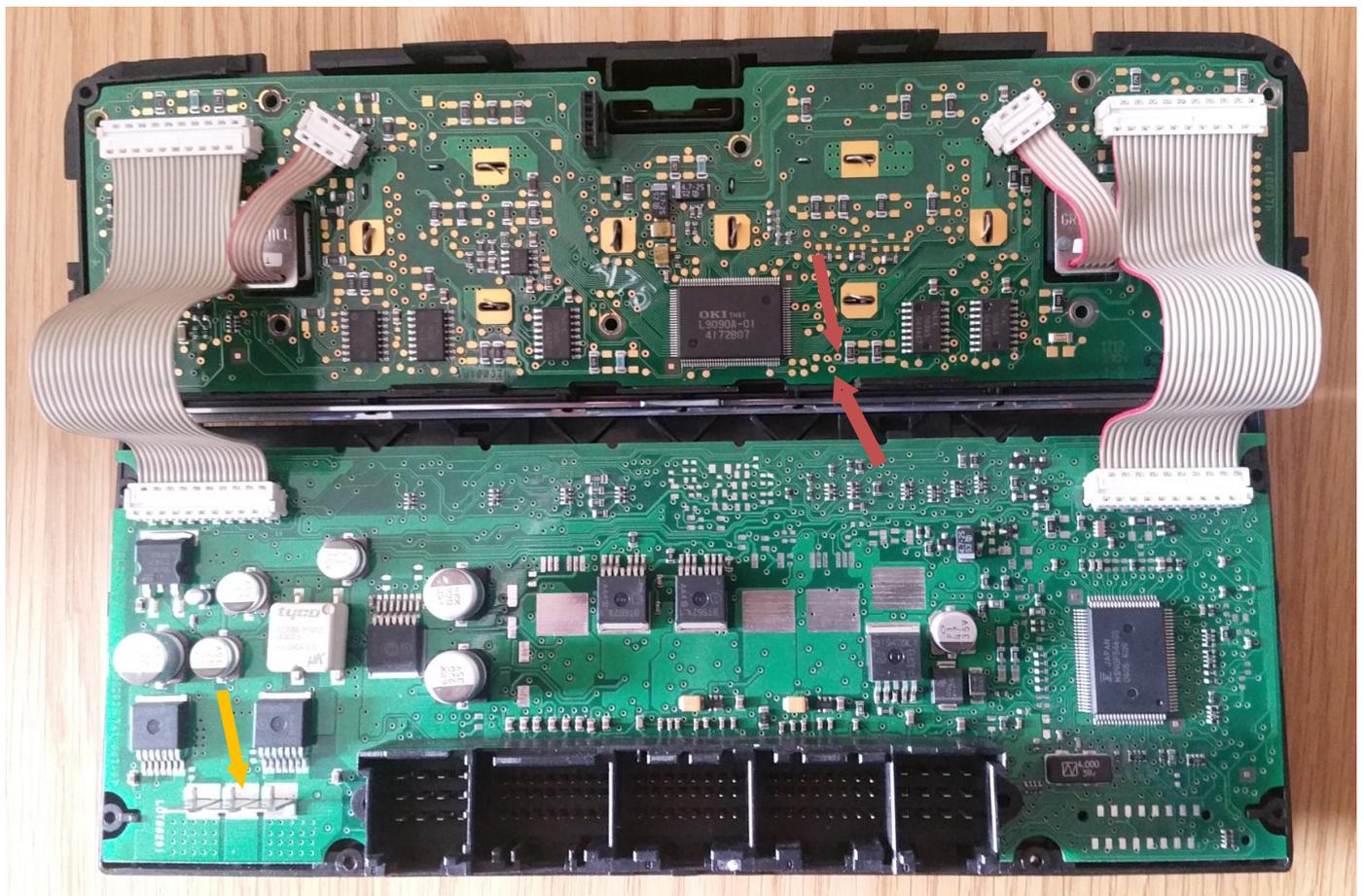
The receiver should fit alongside the gear selector and underneath the centre console trim.

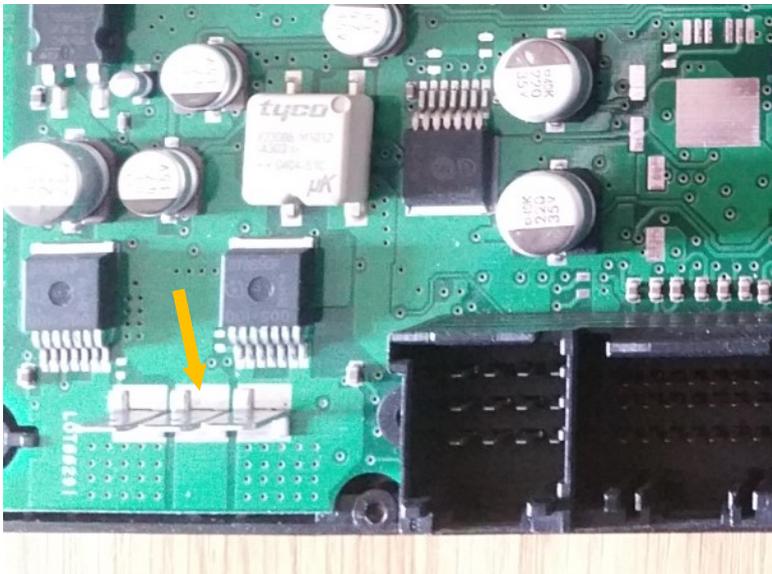
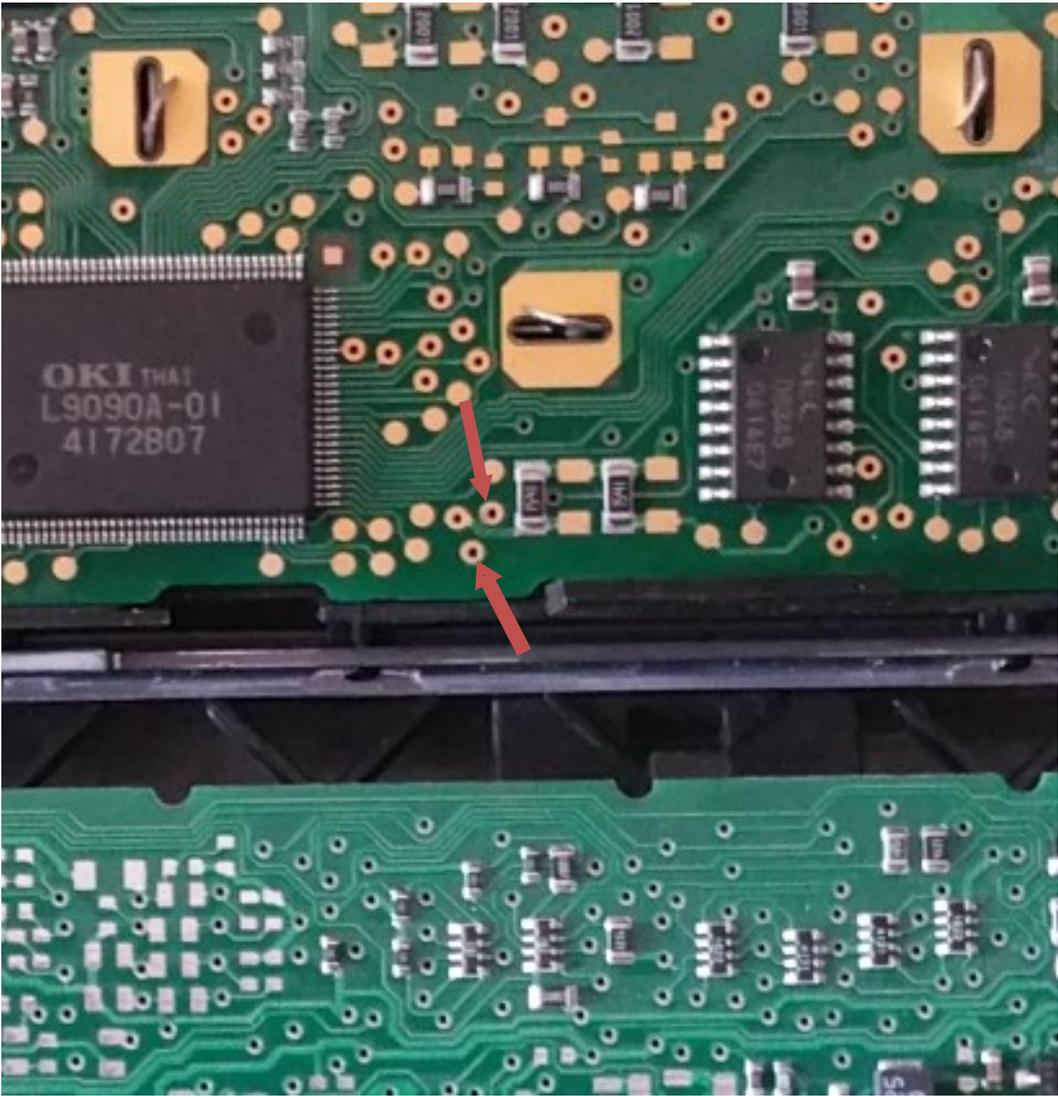
After testing reassemble everything in the reverse order.

To operate press and hold the remote button for slightly longer than the time delay.

You do remember the time delay??? If not reread page one.

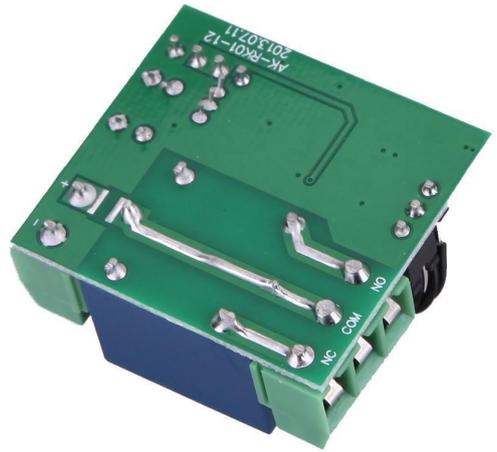
This is a cheap and nasty non-OEM addition and the soldering could be a stopper. If in doubt don't do it or ask somebody with good soldering skills to do that part for you. If you are passing through Wigan, PM me. **Remember, J255 unit has CP.**







FRIEND SHOPS852



FRIEND SHOPS852

