

# **travelvolts**

## **ABLEMAIL ABMC1230, CTEK DUAL 250SA, Redarc 1225/1240 and RING RSCDC DC-DC chargers.**

**CAUTION:** Batteries can supply massive currents which can cause fire or explosion. Always take extra care when routing cables to avoid the possibility of damage. Never use naked flames or smoke near to batteries.

READ THESE INSTRUCTIONS FULLY BEFORE ATTEMPTING TO INSTALL THIS PRODUCT. READ IN CONJUNCTION WITH ANY INSTRUCTIONS PROVIDED BY THE EQUIPMENT MANUFACTURER. ANY APPARENT CONFLICTS MAY BE DUE TO VEHICLE SPECIFIC INFORMATION.

### **T5 & T6**

Remove drivers seat (or passenger seat if this is where you want to fit the battery) and seat base. If your van is Pre 2010 and has the convenience module under the drivers seat you will need to re locate this to fit the battery in. Remove the module from its bracket (2 screws). Once you have removed the seat base you can get to the 2 x screws that secure this bracket to the seat base. Discard the bracket and drill new fixing holes directly in the side of the seat base forward of the hand brake.

#### **T5 only**

Inside the van remove the lower dash panel on the passenger side. Begin by prying out the dash end panel with a screwdriver. Remove 6 x screws holding the lower dash panel in place. Top right corner is held with a clip and will have to be prised out with a screwdriver. Take care not to deform the plastic.



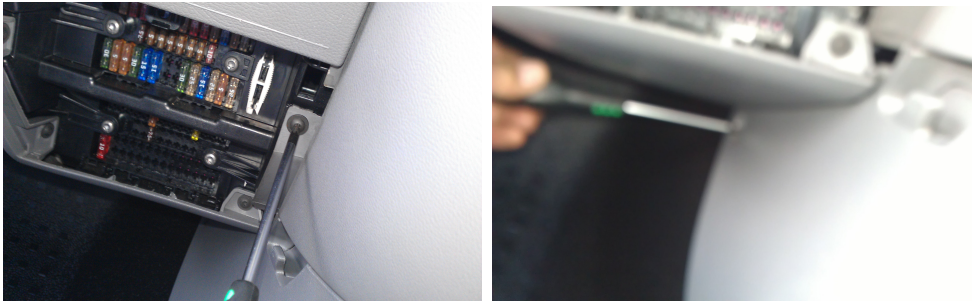
### **T6 only**

Remove dash end panel. Remove glove box. 3 screws along bottom edge. 4 screws along top edge inside glove box. Remove fuse box cover.



### **T5 only**

Remove the grey plastic cover from around the base of the gear stick. 1 x torx screw on passenger side by fuse box. 1 x torx screw in passenger footwell



You will also have to remove the black plastic panel above the pedals in the drivers foot well to access 2 x screws that hold the gear stick surround in place. The top corner of the gear stick surround on the drivers side is held with a clip. You may need to pry this out with a screwdriver.

### **T5 and T6**

Once you have removed these panels pull back the rubber floor mat in the top left hand corner of the passenger foot well. This will expose the sound deadening material around the top of the wheel arch. Find the cut out in the sound deadening material, there is a hole where will you see a black rubber grommet about 20 mm in dia.



Use a pair of long nosed pliers to remove this grommet. Turn the grommet inside out and cut off the hard centre nipple with a blade or side cutters. Re fit the grommet to the hole and feed the red or lilac cable (red and yellow for Ablemail) (sheathed end of long cable) through the grommet, about 500 mm of the cable is plenty.

**If this grommet is already occupied you will find another by pulling away the sound deadening material just below it.**

You should now be able to see this cable behind the battery under the bonnet. Attach the short sheathed cables to the fuse holders, red to 40 amp midi fuse (60 amp for Redarc 1240 and 30 amp for CTEK) to the cable that you just fed through. The small fuse is for the yellow wire of the Ablemail only.

When fitting to vehicles with standard alternator (pre 2015 as a rough guide only) the CTEK does not require the red wire to be connected and the Redarc only requires the blue wire to be connected if fitting with solar.



Retrieve enough cable to allow it to pass to the left of the battery and reach to the + terminal of the battery. Using the short bolt from the small plastic bag attach red cable to the battery + terminal.

(later vans will not have this facility. You should undo the existing nut that secures the cable to the battery + and place the lugs on the red and yellow cables under the OE cable before re attaching)

Now return to the inside of the van.

Feed the red or lilac cable into the plastic cable tunnel that goes under the rubber mat (this is easier if you release the black plastic cover and raise it slightly) and follow the route of existing wiring into the area beneath the drivers seat (or passenger seat), securing with cable ties as you go. At the same time feed the ignition sense wire (red for CTEK, blue for Redarc) with twin fuse adaptor from the fuse box area. For T6 remove the blue 15 amp fuse from the top of the centre column. Fit the fuse to the spare slot in the twin fuse adaptor supplied in the kit. For a T5 use fuse 19 from the middle row of the upper fuse box. For other vehicles find a fuse/supply that is live only with ignition on and use that.

Now fit the twin fuse adaptor into the place where you removed the 15 amp fuse from. Connect twin fuse adaptor to the red or blue cable supplied with your kit.



**Long cable set only:** Route the lilac cable under the rubber mat towards the B pillar, following the existing wiring to the seat belt. Drill a 14mm hole next to seat belt wiring and fit the supplied grommet. Run the cables through this grommet into the cavity behind the seat belt mechanism and into the voids behind the side panels. Run the cables to where your battery is and proceed as above.

### **All kits.**

Use these instructions in conjunction with any that are supplied by the manufacturer of your equipment. If there are apparent conflicts it is because the instructions provided here are optimised for your vehicle and intended use. Pay particular attention to any instruction regarding the order in which cables are connected to the charger.

Mount the control unit to the side of the seat base (or body work near to battery) where it will not interfere with battery location.

Connect the black or brown cable from the charger to the battery negative connector. Connect the thick black cable from the battery negative connector to the ground point on the vehicle floor under the seat.

If battery is at rear of van use earth point by rear light cluster.

Connect the fused cable from the charger to the leisure battery positive terminal.

Connect all cables to the control unit and make sure that all fuses are inserted (leisure battery fuse first).

Check that system functions with engine running in accordance with the LED display as per any manufacturers instructions.

## **ADDENDUM**

Please note that all kits supplied from 7/1/2019 will be supplied with midi fuses. Any references to (or pictures of) maxi fuses should be ignored.



## EXTRAS

### *Option for solar panel input.*

Connect the + from your solar panel to the brown wire on the Ablemail AMS1230 or to the terminal with the solar panel symbol on a CTEK Dual 250SA or to the brown wire of the Redarc BCDC1240D.

Connect the negative from your solar panel to any suitable ground point or to the battery negative terminal.

