

8485 BATTERY SAVER KIT INSTRUCTIONS

Thank you for purchasing our Shoebox Electronix Battery Saver kit! It should provide you with many years of useful service. In my own experience of designing and testing this unit, I have more than once been reminded to shut my headlight switch off after a drive to work on a foggy morning. Your Battery Saver has been built with conservatively rated quality components, and the utmost care in assembly, but if you need a replacement part, or the unit fails during the first 12 months after purchase, please contact us at shoebox-electronix@earthlink.net or 831-462-5530.

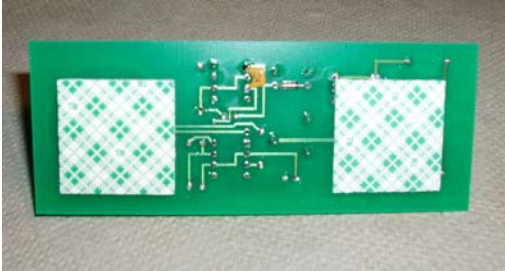
KIT CONTENTS

- 1 ea assembled & tested 8691B printed circuit board
- 1 ea 12" wire w/ RED RING lug
- 1 ea 12" wire w/ RED QUICK DISCONNECT lug
- 1 ea 12" wire w/ insulation removed from one end
- 2 ea RED TAP SPLICE connector
- 3 ea Tie Wraps
- 2 ea 3M Adhesive Pads
- 1 ea Alcohol Pad
- 1 ea Warranty Card

Check the contents of your kit to the kit contents list above. Also, this is a good time to read through the instructions to familiarize yourself with the installation procedure. You will be connecting three wires between your headlight switch and the circuit board connector. You will need a small regular screwdriver, a #2 Philips head screwdriver, and a pair of pliers. This project should take you one hour or less to complete.

PREPARE THE CIRCUIT BOARD

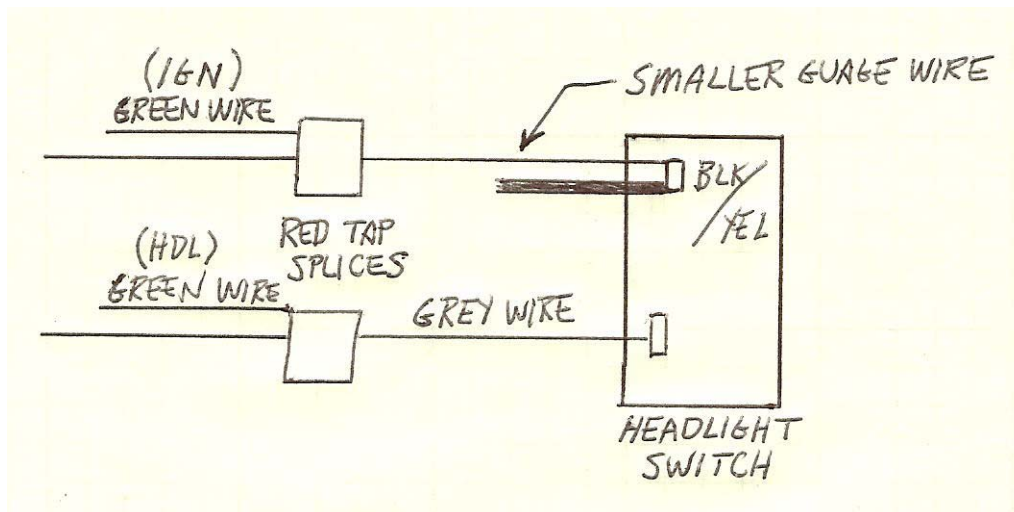
- 1) Remove the backing paper from one side of both adhesive pads.
- 2) Attach the adhesive pads to the circuit board as shown:

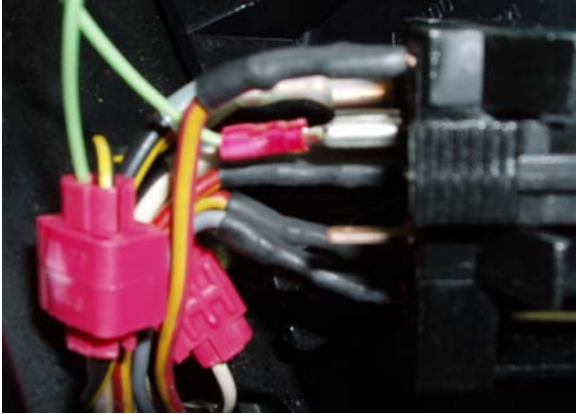


- 3) Connect the end of the wire that has no lug to IGN.
- 4) Connect the wire with RED RING LUG to GRD.
- 5) Connect the wire with the RED QUICK DISCONNECT to HDL.

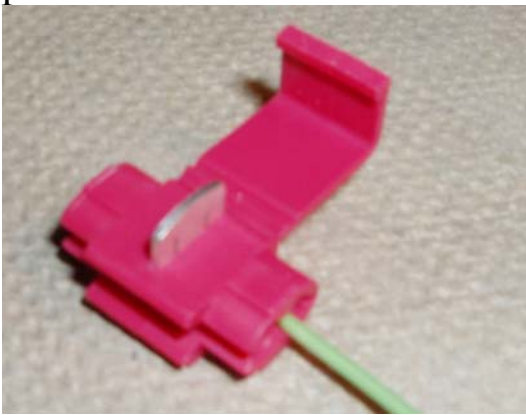
CONNECT THE WIRING

- 1) Remove the instrument panel top cover.
- 2) Remove the cable connector from the SEAT BELT / BRAKE indicator.
- 3) Remove the SEAT BELT / BRAKE indicator from the instrument cluster.
- 4) Remove the 4 philips head screws holding the instrument cluster in place
- 5) Slide the instrument cluster towards you about an inch or so.
- 6) Remove the HEADLIGHT SWITCH from the instrument cluster.
- 7) Push one RED TAP SPLICE onto the **smaller** gauge BLK/YEL wire connected to the HEADLIGHT SWITCH. (there are two BLK/YEL wires – one is a smaller gauge wire)





8) Place the green wire into the RED TAP SPLICE up against the stop as shown, and squeeze the connector closed with a pair of pliers. Hold the green wire against the stop to make sure it gets crimped. The cover should click into place.

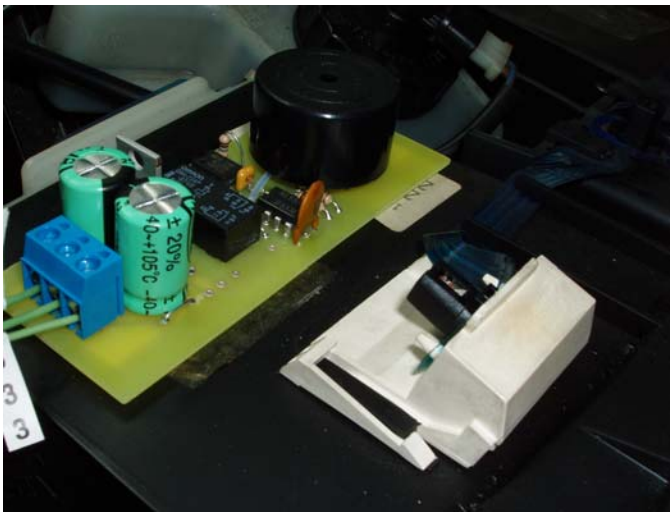


- 9) Cut the green wire that you previously terminated at the HDL connector on the circuit board right behind the RED QUICK DISCONNECT.
- 10) Place the end of this wire into the extra RED TAP SPLICE supplied with these instructions, and crimp the splice onto the GREY wire connected to the HEADLIGHT SWITCH. (See diagram previous page)
- 10) Replace the HEADLIGHT SWITCH into the instrument cluster, clicking both clips into place. Make sure the switch is firmly mounted.
- 11) Replace the SEAT BELT / BRAKE warning light.
- 12) Slide the instrument cluster to align its mounting holes on the dashboard.
- 13) Fasten the RED RING LUG to the dashboard using a Philips head screw you removed earlier on the left side closest to the headlight switch.
- 14) Fasten the instrument cluster in place using the remaining three screws.

- 15) Place the three tie wraps on the three wires – pull them taught and cut off the excess. Tuck the wiring down and out of the way.
- 16) Replace the SEAT BELT/BRAKE warning light cable connector.

INSTALL THE CIRCUIT BOARD

- 1) Clean the area on the top of your speedometer housing w/ the alcohol pad.
- 2) Remove the backing paper from the two adhesive pads on the circuit board.
- 3) Fasten the circuit board on top of your speedometer housing behind the white plastic bulb assembly as shown:



- 4) Replace the instrument panel cover.

TEST YOUR ALARM

With your ignition switch OFF, push your headlight switch one click to activate your parking lights. The alarm should beep for approximately five seconds, and then stop. If you turn your headlight switch back off before five seconds, the alarm should silence. The two inputs, IGN and HDL, ignition and headlight go to 12V when the ignition switch is on, and when the headlight switch is ON (either parking or headlights) respectively. These inputs can be checked at the blue connector using a voltmeter or a 12V test bulb from either input to GND (the center contact).

Visit our website www.shoebox-electronix.com for information about us, and other new Vanagon products. Thank you for your support!