



GVW-WR1-SA

Relay and Bulb Upgrade for 1986-91 Vanagon with South African Grill

The purpose of this kit is to install higher wattage headlights than stock. This kit uses relays to power the headlights directly, relieving the headlight and high beam switches of the headlight load. The original fuse locations and functions are retained.

This kit has been designed for easy installation. However, it does involve cutting and splicing into factory wiring. The installation of this kit is not within everyone's ability. Read through these instructions carefully and decide if installing it is for you. If not, please take your vehicle to an automotive electrician. Wiring errors can be troublesome and hazardous.

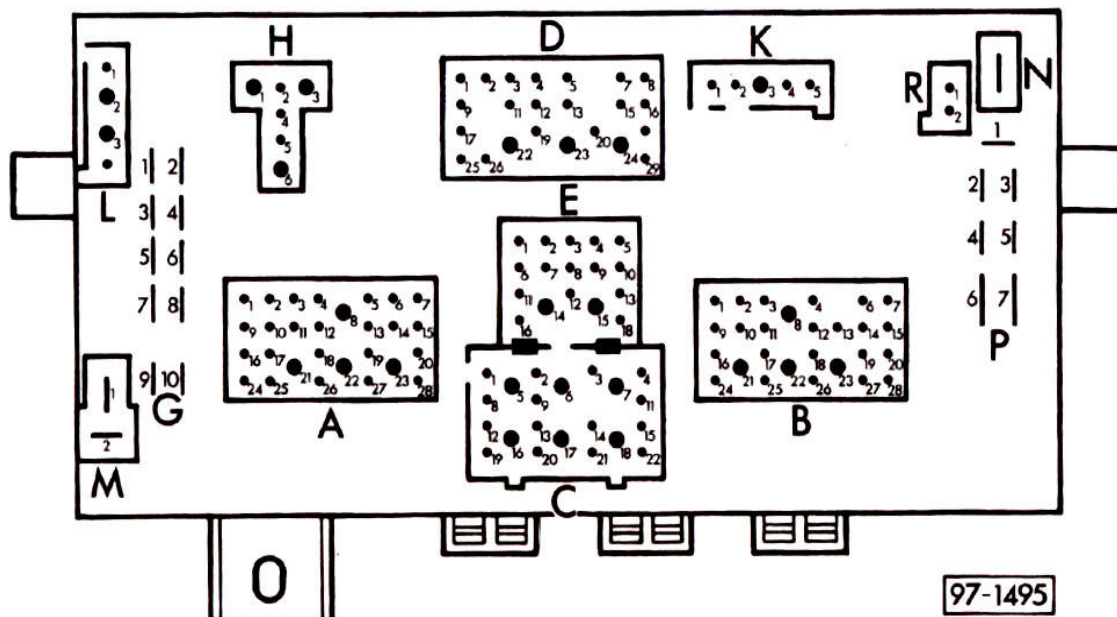
RELAY INSTALLATION

Tools Needed

Phillips Screwdriver
Wire Cutter
Wire Stripper
Solderless terminal crimper (a high quality crimper is a must)

Getting started

1. Disconnect negative terminal of battery (and secondary battery if equipped).
2. Remove the fuse box cover.
3. Unscrew fuse box assembly from the body.
4. Maneuver fuse box down to allow access to the back side.



Fuse panel rear view (1986-1991)

Wiring low beam relay (on the left when viewing relays from the top with lettering right side up)

1. Find the YELLOW wire coming from position 21 of connector A.
2. Cut this YELLOW wire about 4" from the connector and strip ¼" off of both of the cut ends.
3. Crimp the end of the cut wire coming from the fuse panel onto the end of the YELLOW or ORANGE wire of the low beam relay.
4. Crimp the other end of the cut wire onto the end of the WHITE wire of the low beam relay.

Wiring high beam relay (on the right when viewing relays from the top with lettering right side up)

1. Find the WHITE wire coming from position 22 of connector B.
2. Cut this WHITE wire about 4" from the connector and strip ¼" off of both of the cut ends.
3. Crimp the end of the cut wire coming from the fuse panel onto the end of the YELLOW or ORANGE wire of the high beam relay.
4. Crimp the other end of the cut wire onto the end of the WHITE wire of the high beam relay.

Final relay wiring

1. Connect the BLUE wires from both relays onto an open terminal in area P.
2. Connect the BLACK wires from both relays onto the grounding ring on the body above and to the left of the fuse panel.

Finish up

1. Mount relays to top of fuse box or any convenient place on body with Velcro strip.
2. Reinstall fuse box
3. Replace 10 amp fuses in locations 9 and 10 with 20 amp fuses.
4. Replace fuse box cover.
5. Reconnect negative terminal of battery/batteries.
6. Test low and high beam headlights (don't forget to turn your key to the ON position).

The installation of the relays is now complete.

BULB INSTALLATION

If you have previously installed the south Africa grill and light housings, simply replace your bulbs with the new high wattage units just as you would if you were replacing a burned out bulb. If you have not yet installed the grill and light housings, you can replace the bulbs with the higher wattage units before installing the grill and housings.

The H4 90/100 watt bulbs go into the large outer headlights. The H3 55 watt bulbs go in the smaller inner lights. Remove the rubber boot to gain access to the bulb on the inner lights.

Do not touch the glass part of the bulbs with your fingers. Fingerprints will trap heat and cause premature bulb failure. If you do touch the bulb, wipe it clean with a little rubbing alcohol on a clean cloth.