1980-1985 Vanagon Headlight Relays

Tools Required

Wire Stripper / Crimper | #2 Phillips Screwdriver | #3 Phillips Screwdriver

Installation Procedure

Remove the fuse block from the firewall under the left-hand corner of the dash. It is attached with two #3 Phillips head machine bolts. It will also be helpful to remove the metal mounting bracket from the fuse block for easier access to the connectors on the rear of the fuse block, it is held to the fuse block with two #2 Phillips head screws.

Carefully lower the fuse block so you can access the wire hookup tabs on the rear of the fuse block as well as the grounding star lugs. The wires may be a bit stiff, making it difficult to lower the fuse block, but steady gentle pressure should allow it to drop down enough to access all necessary connections. The fuses are numbered 1-12 from left to right.

Locate the stock ground connection for the headlights on the grounding trees (above the fuse box on the left wall area). The headlight grounds will be 2 brown wires joined together with a single 1/4" female disconnect terminal. Verify that you have the correct connector by pulling the ground wires while the headlights are on.

REMOVE THE NEGATIVE BATTERY CABLE NOW TO ENSURE SAFE INSTALLATION CONDITIONS!

Cut the stock connector off the headlight ground wires and crimp one of the provided 1/4" female disconnect terminals to each wire. Reinstall these ground wires to any free spot on the grounding stars to improve the ground path for the headlights. Since bad grounds are the number one reason for headlight problems, this step is important for decreased resistance and optimum lumen output.

RELAY WIRING CONNECTIONS

The 16GA Brown wires from both relays attach to the grounding stars above the fuse box. Install the 1/4" female piggyback disconnects to any empty male terminal. If there are no open tabs, remove one of the stock terminals, install one of the piggyback terminals and then push the stock terminal onto the extra tab on the piggyback terminal.

Remove the Yellow/Black wire with 1/4" female disconnect from the bottom tab on fuse #4 and push it onto the 1/4" male terminal (with white nylon sleeve) on the 16GA (thinner) Yellow wire on the low beam relay.

Connect the 12GA Yellow wire from the low beam relay to the male terminal on fuse #4 (the same one that you just pulled the Yellow/Black wire off).

Remove the White wire with 1/4" female disconnect from the bottom tab on fuse #6 and push it onto the 1/4" male terminal (with white nylon sleeve) on the 16GA (thinner) White wire on the high beam relay.

Connect the 12GA White wire from the high beam relay to the male terminal on fuse #6 (the same one that you just pulled the stock White wire off).

Mount the relays on the side wall under the dash (to the left of the grounding trees) by removing the backing from the high strength 3M VHB mounting tape and pressing them firmly in place.

POWER CONNECTIONS

The power for the headlights will be taken from the main supply wire that feeds the fuse block. The 10AWG wires with stock style terminals on the circuit breaker will allow power to be supplied to the relays without the need to cut any wires.

Unplug the largest red wire going to the lower tab on fuse #8 (not the short loop of wire that connects fuse #7 and fuse #8) and install it onto the male tab terminal on the 10AWG wire coming from the circuit breaker.

Plug the female terminal on the 10AWG wire from the circuit breaker onto the open tab on fuse #8 (where you just removed the stock wire).

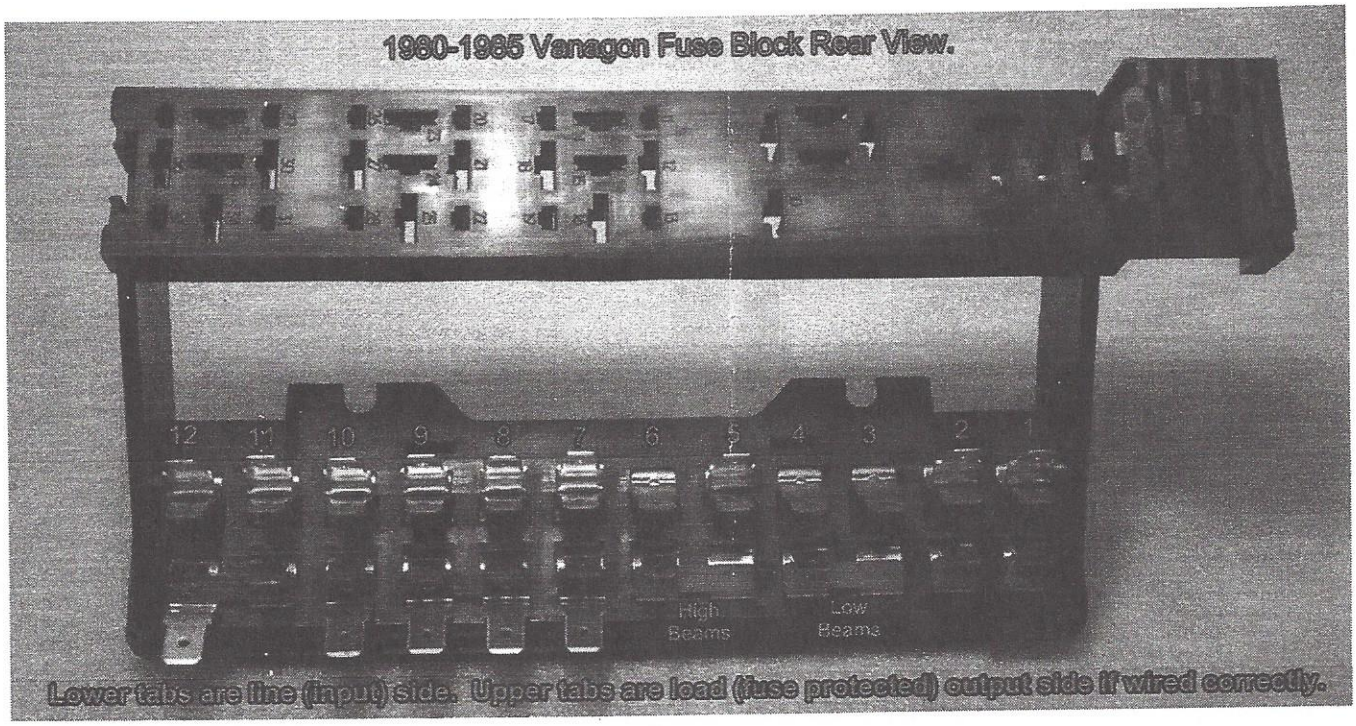
Mount the circuit breaker to the body of the van, slightly to the right hand side of the fuse block with the provided self drilling screws. Be sure to allow enough clearance for the fuse block bracket.

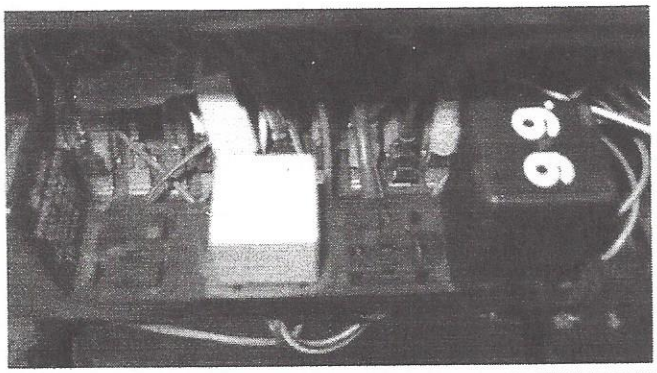
Route the red wires from the relays over to the circuit breaker and install the ring terminal onto the open post of the breaker. Tighten the nuts on both posts of the circuit breaker to ensure a solid electrical connection.

Push the red protective rubber boot onto the posts of the circuit breaker to reduce the possibility of electrical shorts.

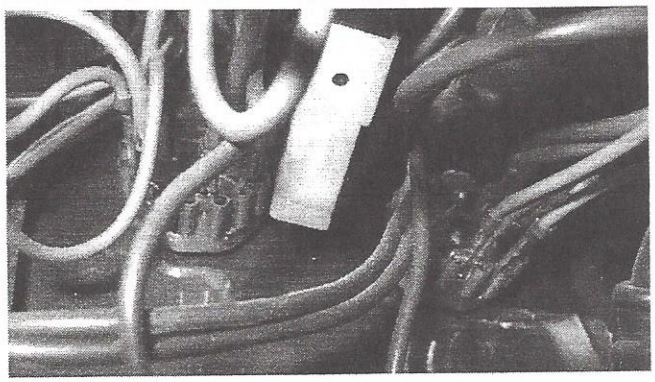
Reconnect the negative battery terminal and verify headlight operation. Your stock headlights will now be brighter, and you can now safely upgrade to higher output headlight bulbs without risk of overloading the headlight switch.

If you choose to install higher wattage bulbs, be sure to replace the high beam fuses (#5 & #6) with the supplied 10A GBC style fuses.





Once the fuse box has been lowered, you will be able to access the connection terminals. Be sure to complete the testing procedure on the first page to make the proper connections. Connect all wires to the "input/ supply" terminals so your headlights will be protected by the factory fuses.



These are the grounding stars on the left hand wall of the van above the fuse block. There should be several open tabs that will allow you to connect your new grounds. You can rearrange the ground terminals to make your connections easier.

All of the factory ground wires are brown. You may have to try pulling several wires to find the correct wires for the headlight grounds.