

Volvo 700/900 Lighting Harness Upgrade

[FAQ Home](#)

[Volvo Maintenance FAQ for 7xx/9xx/90 Cars](#)

How to Upgrade Your Headlamp Wiring Harness and Relays. [Dick Riess] The stock wiring harness allows some voltage loss at the headlamps that diminishes the already mediocre headlamp performance, especially on post-89 vehicles. Below are instructions and diagrams to help you fabricate a new harness and relay that maximizes voltage at the lamps and improves headlamp performance.

Parts List.

- 2- relay plug-ins
- 2- fuse holders, prefer weather protected
- 2 -fuses, I use 20 amp
- 2 -relays, Bosch 0 332019 150-010. These have a double 87 terminal so one can go to one light and other to opposite side. This is not an 87a terminal.
- 1- 9004 bulb, this can be used, burned out as the actual bulb will be wasted.
- 20- feet #12 wire (approx.)
- 12 -feet cable (wire) cover
- 2 -headlight plugs These replace the originals
- Spade connectors for ground to Volvo ground nest
- 2- #12 ends for attaching wires to + battery cable
- Various butt connectors for wiring
- Miscellaneous tape, solder.

Instructions for Fabrication and Installation.

Build from the relay plugs outward. Terminals 87 will be for low beam on one relay and for high beam on the other. For the side of the car with the battery, hook up approx. 18 inches of wire to the lead and fasten to either middle terminal of the head light plug in. For the other light hook approx. 6 feet of wire. You hook up headlight plug after you route the harness later. On the other relay hook up the 87's to the right side of the head light plug. This is the high beam. This is as you look down on the plug in when plugged into the light. The third lead is the ground and you just hook up a quick connect to go the Volvo ground nest on the fender.

Terminal 30 is the major input from the battery. Hook up your inline fuse holder to the wire lead from the relay plug and on the opposite end of the fuse holder pigtail hook up a fastener to be mounted to the + of the battery terminal. Terminal 86 is the trigger for the relay. This will go to one side of the modified bulb holder. One is for dim, the middle, and the other is outside, right side, high beam. The opposite side needs to be grounded. There is one more wire on the relay which is ground also, terminal 85.

With the modified bulb, note using hack saw and cutting carefully around the plastic. Use a small side cutter to snip the wires close to the bulb. Solder leads from the relay, center low beam, right high beam and the other ground. All grounds are necessary as I found out. I tried crimping leads to the modified bulb and it is not a good connection.

Note the relays are mounted on a small piece of strap metal from a radio mounting kit. This can then be mounted near the battery on one of the screws holding some of the plastic near the radiator.

Once harness is complete, suggest using a harness cover and routing it across in front of the radiator or wherever fans will not nick it. You can crimp on the opposite headlight plug. Tape off the one unused headlight plug and plug in the modified bulb. These do not even trigger the 'light out' indicator, except on my first harness which needs the bulb connector redone.

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