

Improved, or restored headlight performance is a two step process. First comes BROWN WIRE SURGERY. Second, comes the addition of relays to the headlight circuit. These relays are commonly sold at AutoZone (and the like) so that guys can add high power consumption lights with low power switches. The concept applies to us in this manner:

1. Purchase two relays from AutoZone, roughly \$5.99 each. One relay for low beams, the other relay for high beams.
2. Mount these relays on your inner fender or on the firewall. I've heard guys also mount them under the dash near the glove box. I hate crawling under the dash.
3. **Disconnect the battery negative terminal from the vehicle.**
4. Tap into a fresh power supply with 10 gauge wire. I piggy-backed into my BROWN WIRE SURGERY feed line. Other guys go directly to the starter, other guys to the alternator. I find the starter is hard to get to, and the alternator method only provides power to the lights when the engine is running.
5. Feed each relay with this fresh power wire.
6. You will find a two prong fastener midway on each inner fender. These are the feed wires for your headlights. Disconnect both headlights here. Tape off unused connections.
7. Rewire each headlight with 12 gauge wire back to the relays. Don't forget to replace that ground wire with a fresh 12 gauge wire as well. If you can find them, replace the three prong female headlight connectors as well. If you cannot find new connectors, be sure to clean the existing ones thoroughly. Remember, the failure of your system is caused by bad or dirty connections.
8. Using the feed wires (the switch side) from one of those two abandoned fasteners in step #6; connect each wire to one of the relays using some 12 gauge wire. One wire is for high beams and the other is for low beams. Be sure to choose your colors wisely in this step, keeping high beams separate from low beams - - -or your switch will act backwards. Best to solder this connection rather than use yet another mechanical connector. Remember, the failure of your system is caused by too many connectors.
9. Connect a brand new ground wire from each relay to the car. 12 gauge wire is adequate.
10. Reconnect the battery. Reset the clock and radio buttons.
11. Enjoy bright lights.

Each relay should have five connections:

1. Power in - your new fresh supply from step #4
2. Ground - step #9
3. Switch - step #8
4. Power out - step #7 for left side
5. Power out - step #7 for right side

Some relays have a false positive terminal; in which case you will want to ignore that terminal. Both lights would then come off #4 as listed above. Check with your supplier for the proper connection when you get your relay.

You may want to switch to halogen bulbs; but I would not get crazy with those types with replaceable elements. Over the counter 7" bulbs are just fine.

Before you begin anything, it would be very interesting to you if you get a volt meter and measure your voltage AT the headlight; then at the battery. That will tell you the total loss you are currently experiencing throughout your system. Then make that same measurement when you are all done. It is amazing what 4 volts does.

**Did I mention to disconnect the battery before you start any electrical work on your car?**