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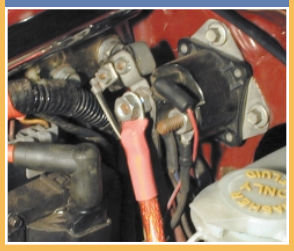
Alternator Power Wire Upgrade

The following procedure documents in order the steps necessary to upgrade the power (or B+) wire from the alternator output terminal to the vehicle.

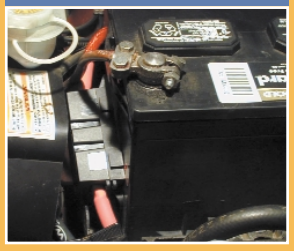
We do not guarantee that these instructions are perfect nor guarantee the results; however the following instructions represent this same upgrade done in our shop by our staff.

As always, use care in working on any vehicle.
Take any necessary precautions you feel are needed in addition to any we mention - and remember - **SAFETY FIRST!**

Step 3
Picture 1



Step 7
Picture 2



Step 8
Picture 3

1. **Disconnect the battery negative (-) terminal** from the battery and move it to the side to prevent accidental contact during the installation.

2. **On the driver side inner fender,** remove the plastic shroud covering the starter solenoid and other wires. This is typically done with a Phillips head screwdriver. The top screw is not difficult, the lower screw requires a short (or "stubby") screwdriver.

3. **Remove the nut from the battery positive (+) side of the solenoid** using a 9/16" wrench or socket. (you will see in picture #1 - this terminal is the one with a number of wires on it)

4. **Lay the Pa-Performance wiring kit flat -** locate the short end closest to the fuse holder. This is the end that will be installed on the solenoid terminal under the nut removed in step #3.

5. **Optional: a protective plastic wire loom has been provided with the kit.** If you wish to use it, this is the time to install it carefully over the red power wire. Starting at one end, feed the wire into the loom and work your way to the other end. You may need to cut the loom at the fuse holder and again at the other side. If so, use extreme caution not to damage the protective cover on the red power wire or the wire itself. If damage occurs, do not use the kit. Electrical shock, fire or serious injury could result.

6. **With the fuse holder pointing towards the ground,** place the wire terminal on the battery positive (+) terminal. It is very important that all of the wires are situated flat and such that they lay tightly together. Once laying flat - reinstall the nut removed in step # 3 and tighten using a 9/16" wrench or socket. Be careful not to over tighten. The terminal stud is typically copper and very soft!

7. **Route the wire so the fuse holder is located under the battery tray** or next to the battery as shown in picture #2. (Optional; If you locate the fuse holder near a flat surface and want to mount it solid, screws are provided. Always Use Caution drilling through any area not to damage hidden wires, fuel lines or other critical items.)

8. **Route the wire behind the battery and over the radiator -** but under the two radiator supports - and across the front of the vehicle. Continue to route the wire under or behind the air box. Use the provided wire ties to secure the wire in several locations to prevent it from being caught in the fan, rubbing other surfaces or hanging loose. You can see our sample routing in picture #3.

Step 9
Picture 4

9. **Remove the nut from the Power Output (B+) stud** on the alternator with a 10mm wrench and loop the new wire as shown in picture # 4 so it can be placed flat on the terminal along with the stock wires. All three wires will not fit on one side of the terminal - so they MUST be located on opposite sides as shown.

10. **Reinstall the nut using a 10mm wrench,** being careful that the wire terminals are seated flat. Do not over tighten this nut or internal alternator damage will result.

11. **Review the path of the wire** and be sure one final time that the wire is not pinched or damaged and it is securely tied to existing wires or surfaces.

12. **Reconnect the battery negative terminal -** disconnected in step #1.

13. **Start the vehicle to assure nothing is abnormal.** If desired, test the system using a DC volt meter, measuring with the positive lead to the positive (+) terminal of the battery and the negative lead to the negative (-) terminal of the battery. With all accessories off and a fully charged battery the DC voltmeter should register approximately 13.8 to 14.4 volts (consult the volt meter user manual for instructions if you are unfamiliar with the use of this instrument).

NOTE: this wiring kit is an "UPGRADE" and not intended to replace the OEM wiring harness. Some vehicles use the OEM harness for other functions and must not be disconnected or replaced by the kit installed here.

That completes the steps we took to install our Alternator Power Wire. If you have any questions or obsevations you can e-mail us.