

## PA Performance Alternator (87-93 5.0L) and PA Performance Premium Power Wire Kit (86-04 All):

### Required Tools:

- ✓ Ratchet
- ✓ 9/16, 5/8, 1/2, 13mm & 10mm sockets
- ✓ Wire cutters/strippers
- ✓ Soldering iron and solder
- ✓ Rotary Tool (used to trim alternator bracket w/ metal cutting wheels)
- ✓ Extra Zip Ties
- ✓ Volt meter

**Installation Time:** Approximately 2 hours

This 130 AMP alternator and power wire install was completed on an '89 Mustang GT.



### Alternator Installation Instructions:

**Step 1:** Disconnect the negative battery terminal.

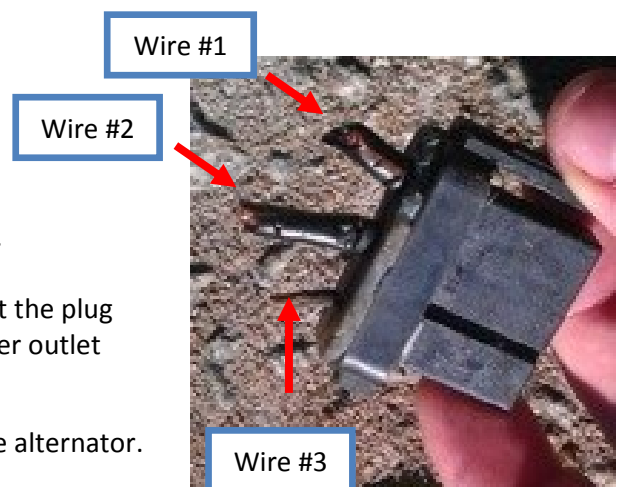
**Step 2:** Remove the serpentine belt.

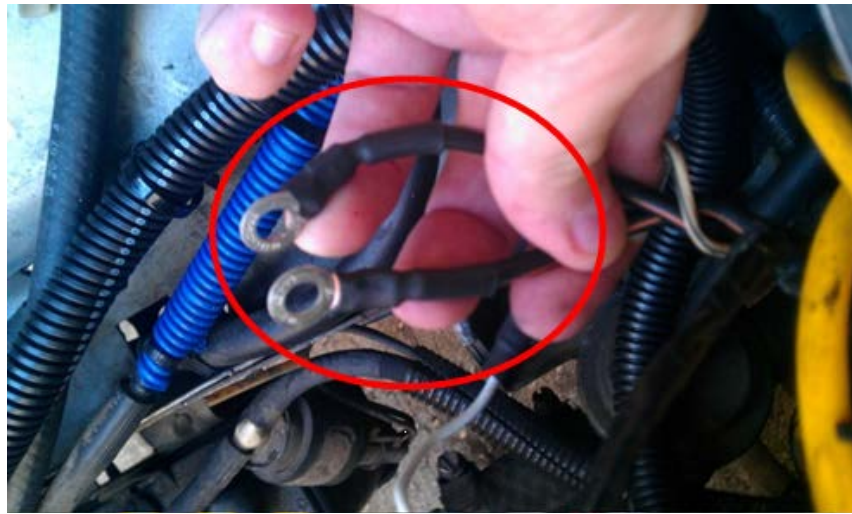
**Step 3:** Take off the cover of the air filter box/remove intake filter.

**Step 4:** There are (2) plugs on the alternator. Remove both and cut the plug with the (2) black/orange wires and the (1) white/black wire (power outlet plug) as seen in the picture to the right.

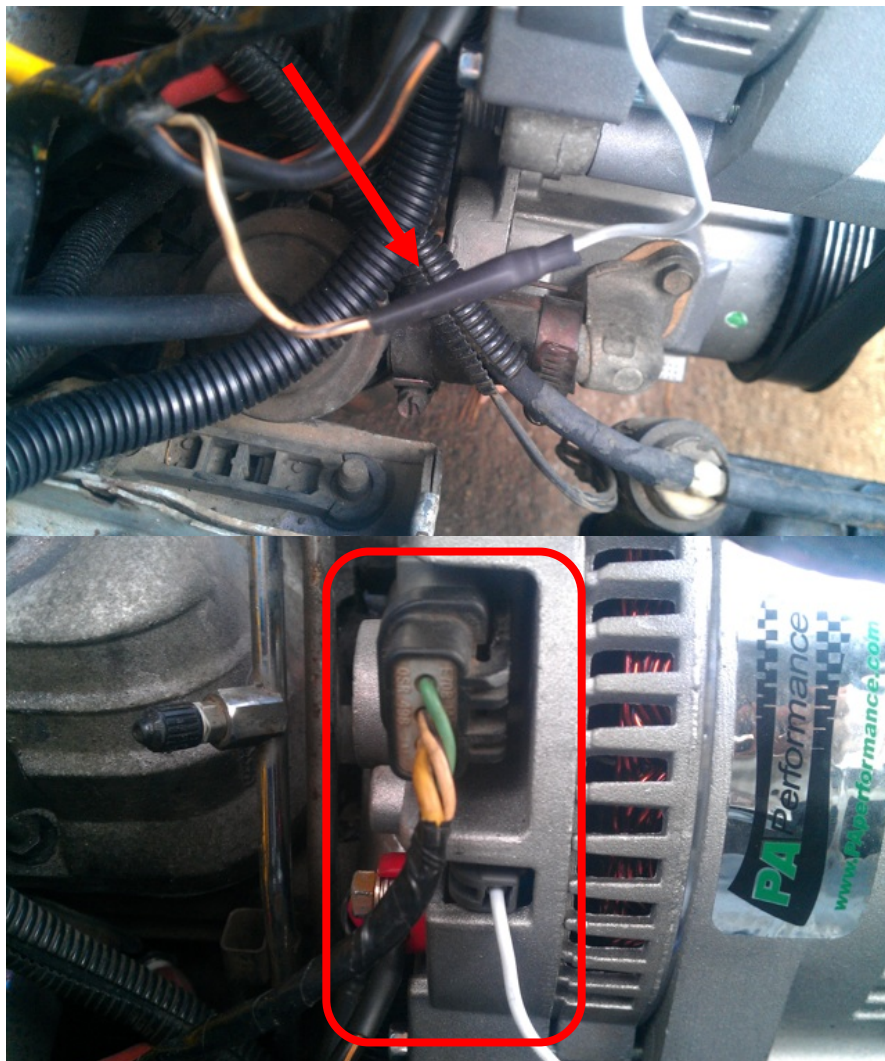
**Step 5:** Remove the top bolt (9/16) and the lower bolt (5/8) off the alternator. Wiggle the alternator back and forth to get it out of the bracket.

**Step 6:** Use a wire cutter/stripper tool to strip about ¼" of the insulation on the black/orange wires to expose the wire. Crimp, solder and heat shrink the (2) terminals that came with the new alternator on the ends of the large black/orange wires.





**Step 7:** Solder the in-line connector that came with the new alternator onto the small white/black stripe wire that you cut off the old plug (only the white single wire is going into the alternator). Please reference image below. Connect the stock plug from the original alternator and the new white wire plug as shown.



**Step 8:** There is a small mounting bushing in the lower part of the bracket where the lower bolt goes. You will have to knock that in toward the front of the car in order to install the new alternator.



**Step 9:** You will need to modify the mounting bracket due to the PA alternator being larger in diameter than stock unit. Test fit the alternator to see exactly how much modification will be needed. Use the rotary tool to trim the needed part of the bracket for clearance. **NOTE:** It is recommended to remove the bracket when cutting.



**Step 10:** Install the new alternator starting with the lower bolt (5/8) and finger tighten. Move to the top bolt, which is included with the new alternator (1/2") and again, finger tighten for now. **NOTE:** Use lock tight on the top bolt for extra hold.

**Step 11:** Reinstall the serpentine belt. Tighten down the mounting bolts snug at this time.

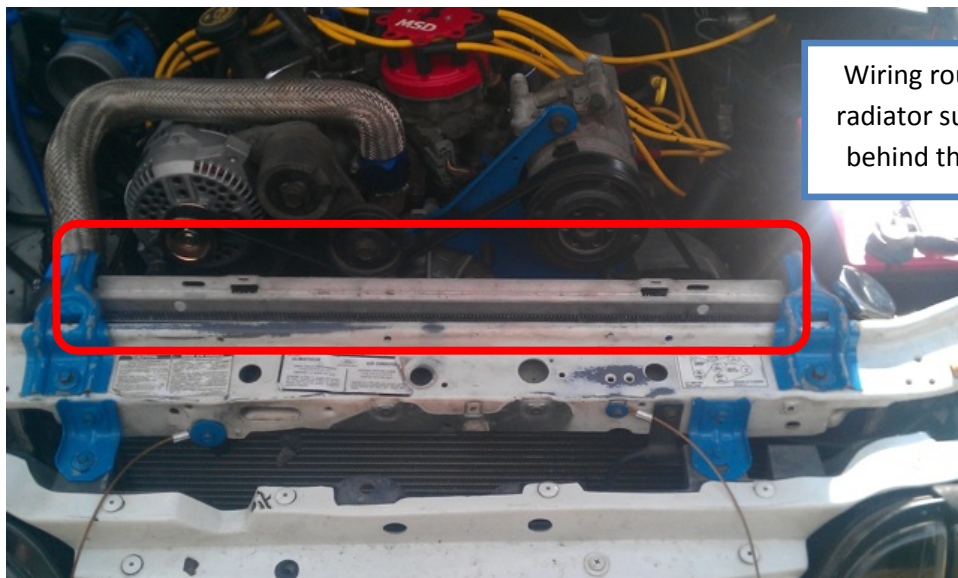
#### **Power Wire Installation Instructions:**

**NOTE:** The wire is one piece with the fuse already attached.

**Step 1:** Connect the shorter side of the power wire to the positive (+) side of the starter solenoid. Run the wire next to the battery, making sure it's in front of the radiator but under the radiator supports and goes around the back side of the alternator (reference photos below). Zip tie where you please to secure.

**NOTE:** The black square box holds the fuse inside it. It can be secured using zip ties, which is the route I decided to take, or you can use the mounting hardware and attach it on or near the battery tray.





Wiring routed under radiator supports and behind the radiator.

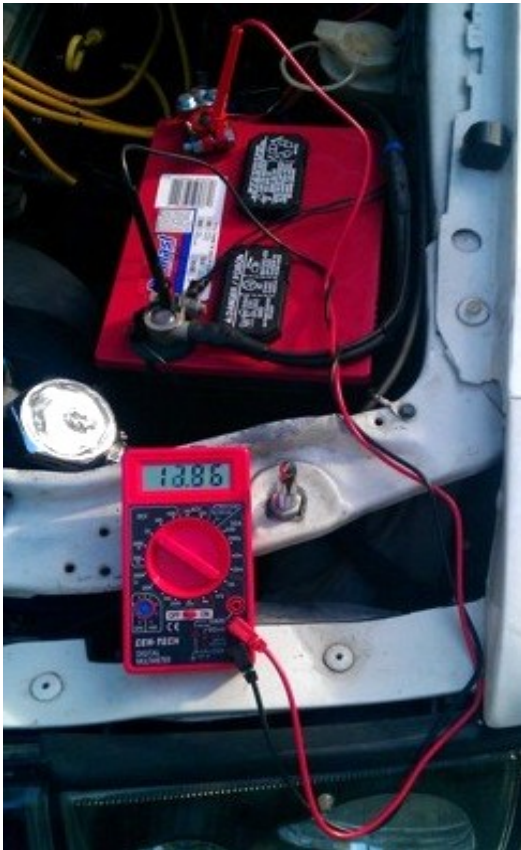
**Step 2:** Using a 10mm socket or wrench, attach the power wire and the (2) black/orange wires to the power stud on the back of the new alternator (as shown in the photo below). Do not over tighten the nut and be sure the wiring is not in the way of anything.





**Step 3:** Reinstall the air filter box cover/intake filter and connect the negative battery terminal.

**Step 4:** Using a DC volt meter, check the voltage between the negative and positive side of the battery – it should read 12+ volts. Start the car and check the voltage again – it should read between 13.8 to 14.4 volts if installed properly.



**FINISHED PRODUCT!!**



Installation Instructions written by AmericanMuscle customer Cameron Whitmire 11.23.11