

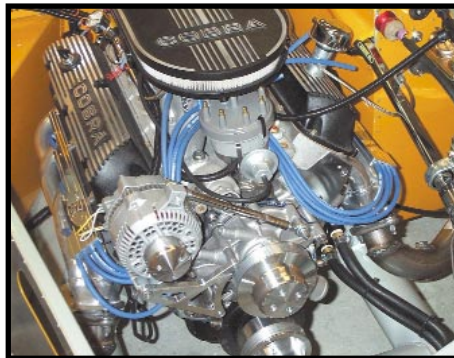
## 3G Ford Alternator Installation

(or Upgrade of 1G to 3G Ford Alternator) on Vehicles with No Prior System  
(installation for cars where no existing OEM stock wiring harnesses / wires exist)

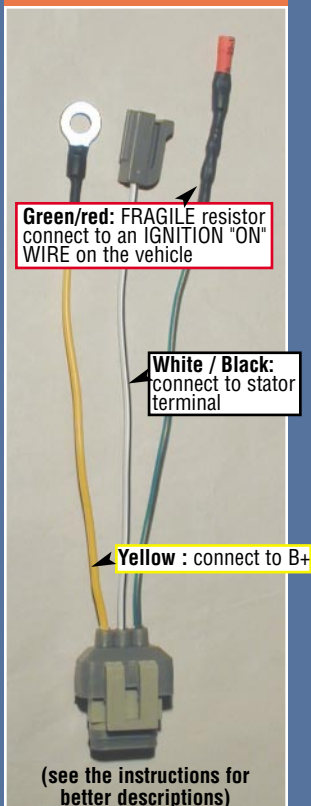
We do not guarantee that these instructions are perfect nor guarantee the results;  
however the following instructions represent this same upgrade done in our shop by our staff.

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!**



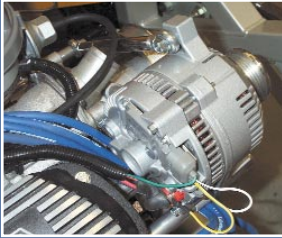
Steps 8-10  
Picture 1



**Note:** If the vehicle has no existing alternator - skip steps 2 through 6.

1. Disconnect the Battery (-) wire from the battery.
2. Locate the existing alternator. Loosen the top and bottom mounting bolts.
3. Remove the belt.
4. Locate any wires on the rear of the unit and disconnect them all.
5. Remove the threaded mounting bolt.
6. Remove the long mounting bolt while supporting the alternator - and remove the alternator from the vehicle.
7. Get the new 3G alternator and install the regulator plug included
8. Yellow to B+ stud on the rear of the alternator, we put an eye or ring terminal on the yellow so it will attach to the B+ easily.
9. White/black to the stator plug, and the stator plug has been attached to the white / black wire for you. It can be plugged into the corresponding plug on the rear of the alternator. (if the vehicle has an electric choke, it should be connected to this wire using a crimp or solder connection)

Steps 8-11  
Picture 2



10. **Green/red attaches to an IGNITION "ON" WIRE on the vehicle.** An IGNITION "ON" WIRE is one that gets 12 volts when the ignition key is turned ON. This wire must have 12 volts continually with the key on, not interrupted by accessories. This is where the alternator is "Turned ON" any interruption will turn the alternator on and off and cause damage. The red butt connector can be crimped to the wire you select from the wiring harness. NOTE: We have installed a REQUIRED resistor in this wire - under the shrink-wrap. It is REQUIRED and it is also FRAGILE. Avoid bending it or damage to it - the alternator will fail and warranties void if this is removed or inoperable due to damage.
11. **Connect the B+ Wire.** We strongly recommend the use of a #6 or #4 wire for the B+ output. It will run from the B+ stud on the alternator to the B+ (battery) side of the fender mounted starter solenoid. PA-Performance has a power wire kit available - or you may make or buy one of your own. This new wire MUST include a fusible link (or a fuse) for protection. Any auto parts store can supply you with one. The value of that fuse or fusible link should be 125-200 amps.
12. **Connect the GROUND Wire.** Make sure there is a good clean ground wire (#6 or #4) which we recommend connecting to the mounting foot of the alternator or the threaded hole on the back of the alternator.
13. **At this point all of the wires should be connected.**
14. **Mount the new alternator in place.** In some cases you may need to cut a small piece off of the thin spacer removed from the wide mounting foot from the old alternator installation - most times they are the same from the OEM unit. Just check as this determines belt alignment with the other pulleys. A quick way to check is to measure the wide mounting feet on the old and new alternator. They should match, if not, spacer shims may be needed.

Step 18  
Picture 3



15. **Tighten the lower mounting bolt.**
16. **Apply the appropriate belt tension.**
17. **Tighten the threaded mounting bolt.**
18. **Look it all over, make sure the wires are not pinched.**
19. **Reconnect the negative battery wire.**
20. **Start the vehicle and connect a DC voltmeter** 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 12.8 to 14.6 volts. (reference voltage measurements taken with stock diameter pulley)

*That completes the steps we took to install a 3G Ford Alternator.  
If you have any questions or observations you can e-mail us.*