

INSTALLATION OF 12-VOLT ALTERNATOR ON FAIRMONT M9s AND M19s

By Charlie Hulsizer

I recently installed a 12-volt alternator/lighting system on my ex-B&M Fairmont M19, and would like to share the procedure with anyone else who would like to do a similar job. It is worth the trouble, as the car runs ten times better than it did with the six volt/drycell arrangement.

I used a Delcotron alternator which is found on all GM automobiles and light trucks from 1973 onward. This is a common, easy to get alternator, and a trouble free unit with a built in electronic regulator. You can get a great deal on one at a junkyard. If you can take it off a car yourself, and can cut the wires, take the two-contact connector that plugs in, snip the wires and leave yourself plenty of wire so you can use the connector. Do likewise with the single large wire that goes from the single post to the battery. This should have a nice protective boot to cover the terminal. Just to save yourself some hassle, if you can take the used alternator to your friendly local auto parts store and let them test it for you, you can assure yourself that you are installing a good part.

I was able to get a complete alternator bracket/lighting kit, minus alternator and headlight, from Dave Rose in New Jersey. This included the brackets, pulley, belt, battery box and wiring. Having all the goodies

made the job easier, and buying all the stuff piecemeal from Fairmont would put you in the poorhouse quick.

You must pop the flywheel off to install the pulley. I was able to get mine off without removing the engine and using the puller. I gingerly tapped the flywheel with a lead faced hammer, and it came off fairly easily. Yours may or may not come off so easily. You must remove the drive belt pulley before doing this, three 9/16" bolts. After you get the flywheel off, bolt the alternator pulley to the flywheel. The bolts go through the flywheel into the drive belt pulley. Caution! Make sure that the bolts that you used to secure the alternator belt pulley do not protrude too far and touch the car's drive belt, or it will ruin the belt!

Before you put the flywheel back on, attach the brackets to the block. You may or may not have to install longer mounting studs. Tighten up everything, and don't forget to put the alternator drive belt over the crankshaft before you put the flywheel back on!

The Delcotron alternator fits in place of the Motorola (the one this was designed for) perfectly; use a flat washer on each side of the big bolt for perfect belt alignment. Tighten the belt snugly, but no too tight.

I was lucky to get a 12-volt steel coil, and my car had a hole in the proper place to mount it. Wire it all up as per the schematic. You must cut out the hole in the control panel for the ammeter. I was able to get an old glass faced Stewart Warner job.

In the diagram below, you will see a so-called "idiot light". You must install this light or the alternator will not work. I'm not a whiz on things electrical, but this light excites the alternator and initiates the charging.

Also, I found out the hard way that you must use a hefty bulb, such as a GE 57 or equivalent. I tried a small 80 ma bulb from an electronics store, and it would not stay on and excite the alternator. The heavier bulb did the trick.

The alternator will not start charging until you get up to a reasonable RPM, then it will kick on. It will bring your battery up to a full charge quickly, and will work in both directions. I'm very pleased with the job on my car, and I feel that this was worth the time and trouble. Good luck!

