

# Model A Ford Tech Tips

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## 6V and 12V Alternator Repair

Sourcing Repair Parts can save Big \$\$\$

We recently went on our first MAFCA national tour, The Canyonlands Tour, Oct 6-10, 2019. 350 Model A's, 3 National Parks, several State Parks, 500 miles touring, beautiful scenery, great comradery... ok, we had a blast, but let's get to the point...

My car broke down on the last day of the tour, driving a curvy mountain pass up to Bryce Canyon National Park. Under the hood I found burned out points and a blown fuse. Adjusting the points gap and using my only spare fuse got me about 500 feet and parked in a safe place to wait for the trailer. At the farewell banquet the boys were all trying to diagnose the problem. We came up empty, so I said I'd report my findings after I got home and found the problem.

Well here it is... a bad voltage regulator in the alternator. It was running hot, pushing 18.5 volts and 50+ amps. That heated the arm on the points until they bent and closed the gap, at that point it blew the 30 amp fuse.

I went online and found a repair kit for \$30; voltage regulator, brush holder, and diode trio, with easy to follow instructions. That solved my problem. During my research I also learned more about alternators than I ever needed to know, along with sourcing parts at really good prices. Some of this may be worth sharing with the club.

The alternator we all use is a Delco Remy series 10si, single wire (self exciting) alternator. This "GM style" alternator goes by many part numbers and names, but they are all the same. A good look-up number is 7127-SE. The 12 volt option is a 63 amp alternator. A 6 volt version gives you half, 31 amps.

#### Delco 10Si Alternator, Part # 7127-SE

This is the same (12 volt, negative ground) alternator that Nu-Rex and Snyder's sell for \$220 (\$191 + shipping & tax). At that price there is plenty of room to save some real money, if you can find part numbers and source the parts. (keep reading, I'll name names) I fixed my bad alternator and bought a new one for a spare at half that price. If you need the 6 volt, positive ground option, add \$40.

The only difference for the Model A from a stock Delco 10si is:

- Wide 5/8" pulley (3/8" standard)
- Mounting Bracket (see improved mounting bracket below)
- Painted Black, (Silver standard)
- 12 volt negative ground only (See 6 volt conversion kit below)

I found the alternator at DB Electrical, brand new- not rebuilt, for \$74 with free shipping. I painted it black and it's now my spare.

### https://www.dbelectrical.com/

Delco 10si, #7127-3-Widebelt, \$74.05 with wide 5/8" pulley.

I found the Repair Kits and Conversion Kits at AlternatorParts.com. https://store.alternatorparts.com/

Now for my big find... you need 6 volt, positive ground? The same place that sells the repair kit for \$30 has a 6 volt, positive ground conversion kit for \$40 with easy to follow step-by-step instructions. They even have a slick YouTube video.

The repair kits come with a voltage regulator, brush holder, and diode trio.

The conversion kit has the same, plus a bridge rectifier and appropriate grounding/insulating parts. The voltage regulator makes it 6 or 12 volt. The bridge rectifier makes it positive or negative ground. They also sell all the bearings, etc. for a complete rebuild if needed.

6V Voltage Regulator repair kit #D110SiSE6VRK	\$29.95
12V Voltage Regulator repair kit #SE590	\$29.95
6 Volt, Positive ground conversion kit # D110SiSE6VCKP	\$39.95

All of this is "novice easy". I had never opened an alternator before and had no problems.



Bert's Model A Store sells the best designed alternator bracket on the market, and it's \$10 cheaper than the competition. This one has both the rigid "welded H" bottom bracket And an upper support arm that's far superior to that skimpy push T bar thing on the bottom.

#### https://modelastore.com/

Part # A-10131 Alternator Bracket and Support Set - \$30.00



Enjoy, and keep the rubber side down.

- Willie