.6 Volt to 12 V Conversion

Some of you guys are making way too big a deal of the 6V to 12V conversion on the 55 T Bird. For instance, you don't, or should not need a wiring diagram. You don't need to rewire the car. All the wire for the 6V system is twice as large as need be for 12V service. The only thing you need to change under the dash is the dash lamp bulbs and maybe the cigar lighter if you still smoke. The polarity for the clock must be changed to neg. ground from pos. ground. You may need to remove the clock to do this. There is a little tab that is designed to be positioned for pos. or neg. ground. Position it for neg. ground or just disconnect it if you like. Major damage will occur if it is powered up in reverse polarity. Install a 125 ohm 10 watt resistor in series with the 6 volt clock to drop the voltage to 6V or 7V. Of course the radio will need to be replaced, converted to 12V, or powered through a voltage dropping resistor. It is not polarity sensitive. Your choice, or do nothing and disconnect it. You do not need to change any switches or gauges. The fuel and temp gauges will work on 6 or 12 V and are not polarity sensitive. If you miss some of the lamps you can change them after they burn out, no big deal. The direction lamp flasher also must be changed for best performance but you can change it later. The fuses may need to be changed to values smaller than original or use the ones rated for the 56-57 Birds. The tail lamps, the back-up lamps and license plate lamp will need to be replaced with the 12V ones.

Now for the firewall forward, You do not need to change the battery cables, the horns, the horn relay or the starter. If converting to a generator install a 12V one and a 12V, 30 amp voltage regulator and wire it up exactly as the 6v ones. Or do the alternator conversion. This is done the same as a 12V gen. to alternator conversion. You will need to install 12V head lamps and park and direction lamps. No changes in lamp wiring or the light switch is necessary, leave it alone or repair it as necessary.

Of course you will need a 12V battery, there are 12v batteries that will fit the 55 battery carrier with little or no modifications, connect it neg. ground.

The 6V coil can be used but the polarity must be changed, just switch the bat. And dist. wires or install a 12 volt coil same as used on 56-73 Fords or get good used ones from salvage yards from 60-64 Falcons. They have yellow tops. Now for that very minor wiring change that has everyone confused. Install a 12V starter solenoid such as used on 56 through 73 Ford products. They are still cheap at AutoZone. It will have the extra ‘I’ terminal, ‘I’ as in ignition. Run a wire from the ‘I’ terminal of the 12V starter solenoid to the battery terminal of the coil, remove the ignition wire that is presently attached to the coil and add a new wire about a foot long to the bat. terminal before securing the nut. Now connect both the new wire
attached to the batt. terminal of the coil and the original ignition wire from the ignition switch to a new ignition resistor, Motorcraft # DY 35

When the job is done, before you start the engine, remove the field wire from the voltage regulator and strike it (draw an arc) to the battery terminal of the voltage regulator in order to properly polarize the generator then reconnect

the field wire to its' position on the voltage regulator.

The heater blower motor, the seat motors and window motors will work on 12V but they will run very fast. The seat motor running too fast should be no problem. The heater motor running on low speed will be acceptable. The window motors will require some expertise in use in order to prevent mechanical damage but most of my customers don't change them. Can if you want, They may cost you up to $300 ea. for 12V window motors. You might use a dropping resistor in the motor ground wire circuit to drop the voltage but I have not determined what the correct value would have to be. Maybe someone else knows. It will have to be a very high power resistor, maybe 1000 watts and it will give off some heat. I don't have a 6V window motor to test or I would give you the numbers. I would recommend just using the window motors as they are and release the window switch before the window gets to its' stop. This may take some practice but it is easy.

NOTE: Edited for clarity 2018