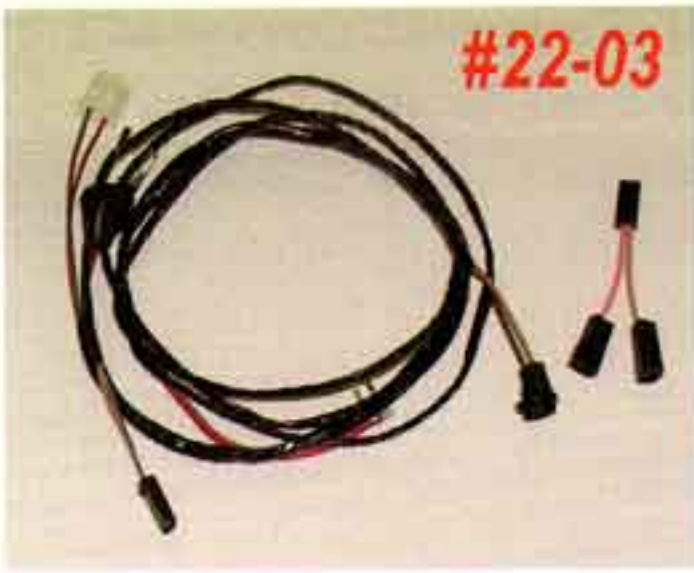


" THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

1955, 56 & 57 GENERATOR TO ALTERNATOR CONVERSION



When you start to add accessories to your Tri-5 car the stock generator just can't keep up with the voltage demand, it is also getting hard to find repair parts and they are expensive too. The stock generator only puts out 25 amps and that's not enough for a car that has an



updated radio, A/C, electric fan and maybe an electronic fuel injection unit. The stock generators are just not that reliable. If you are installing a new complete wiring harness you probably have the option of ordering the harness already set up for an alternator but if the cars has the stock harness it is a very easy to up grade the car to an alternator. The harness will plug into the stock harness and there is no wire cutting or splicing. A bracket and fan belt change is also necessary, we will install the new alternator, fan belt and bracket onto our 1956 project driver but we carry adaptor harnesses for all three year cars.

Tools Needed:

7/16" wrench
1/2" wrench
9/16" wrench
Ignition switch spanner wrench

Time Frame:

2 Hours

Parts Needed:

- #22-03 1956 Alternator Adapter Harness
- #49-12 Ignition switch spanner wrench
- #18-115 Alternator mounting bracket (short water pump)
small block engine, high mount
- #18-73 Alternator mounting bracket (short water pump)
big block engine, high mount
- #41-08 Alternator belt
- #18-79 66-amp Internally regulated alternator



Photo #1: The first thing to do when ever working on the electrical system on a car is to disconnect the negative battery cable.



Photo #2: The generator is mounted on the drivers side of the car rather if the car has a 6 cylinder or V-8 engine. The generator has two wires connected to the top rear of the case with a nut and lock washer, both these wires will need to be disconnected.

Photo #3: The upper adjusting arm for the generator attaches to the upper water pump bolt and has a slot where the belt tension is set off an ear on the generator case. The stock generator adjusting arm will be deleted so remove the



bolt on the generator and water pump and remove the fan belt.



Photo #4: The generator has two lower ears that mount to a bracket that is bolted to the exhaust manifold. Each ear has a 5/16" X 1-1/2" bolt.



Photo #5: The lower generator bracket is bolted to the exhaust manifold with two 3/8" X 1" bolts and lock washers, it is a good idea to use some penetrating spray on these bolts if they have been in for a while.



Photo #6a & 6b: The new alternator bracket #18-115 for the small block engines mounts to the front two intake bolts and the upper water pump bolts on the drivers side of the engine. By using the intake and water pump bolts this bracket will work on the early model engines that don't have any holes in the front of the cylinder heads. To remove the second intake bolts on the engine the water temptature sender must be removed. Remove the radiator cap and using the petcock drain the water from the radiator.



Photo #7a & 7b: The water temperature sender has 1/2" pipe threads and screws into the intake manifold just over the second intake bolt on the drivers side, with pipe thread the sender may be very tight so a 1/2" breaker bar and a 6-point socket is always a good idea to use when removing a temperature sender.



Photo #8a, 8b & 8c: The lower arm for the alternator bracket attaches using the upper water bolt, due to the different water pump castings the alternator bracket comes with three spacers so that the bracket can be spaced properly. Our water pump requires the long and short length spacer to align the bracket correctly to the intake bolts. The 3/8" X 2" bolt has a flat washer and will pass through the bracket, spacers and screw into the engine block, leave this bolt loose at this time.



Photo #9: The top of the bracket will bolt to the front two intake bolts, there are twelve flat washers that are supplied with the

bracket kit to allow for shimming between the bracket and intake manifold. With so many intakes out there it would be impossible to have perfect alignment every time. Our engine requires four washers on each bolt, torque these bolts to 24 lbs. now tighten the upper water pump bolt.



Photo #10: With the bracket in place install the water temperature sender back into the intake manifold, use a small amount of thread sealer on the threads and don't over tighten.



Photo #11: The mounting ear of the alternator #18-79 will fit between the two upper ear of the alternator bracket and is held in place with the 3/8" X 2-1/2" bolt with a lock nut. The adjusting plate will fit against the front side of the main mounting bracket and the ear with the 5/16" hole will bolt to the adjusting ear on the alternator. The adjusting bracket has a slot the a 3/8" X 1" bolt will pass through and screw into the main bracket, this is how the fan belt is adjusted.



Photo #13: Next place the fan belt #41-08 over the crank and water pulley and around the alternator pulley. Pull the alternator to the out side of the engine until the fan belt is tight and tighten the 9/16" adjusting bolt. The alternator bracket is built in such a way to clear the front oil fill tube and cap in the front of the intake manifold.



Photo #14: The adapter harness has a large red wire with a black boot that will connect to the 1/4" stud on the back of the alternator. The adapter harness also has a two pin connector that will plug into the side of the alternator also.

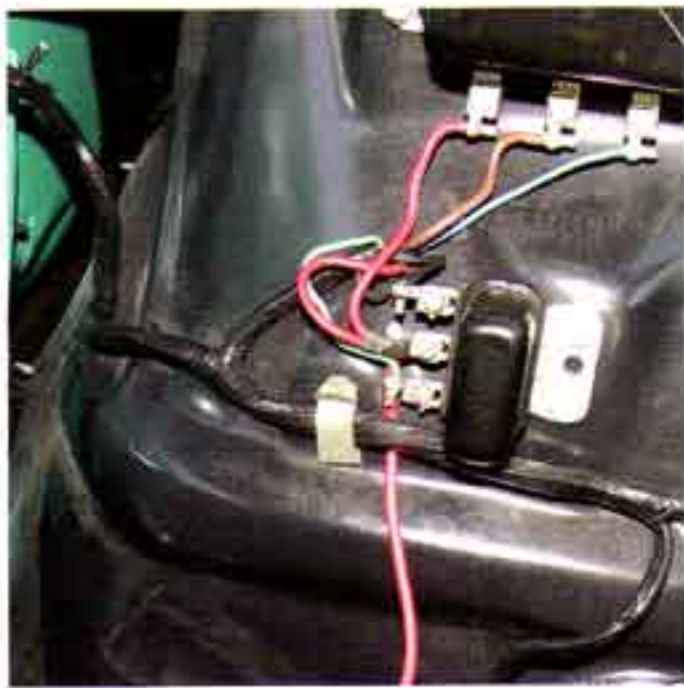


Photo #15: There is a large red wire with a 90 degree fork connector that will connect to the battery terminal lug on the horn relay. We are going to leave the stock voltage regulator in place so the wires can stay connected to the voltage regulator but if you want, the wires can be tapped up into the harness and be hidden.



Photo #16a & 16b: The new harness can be passed through the firewall using one of the holes in the speedometer cable grommet. Remove the grommet and place the wire in one of the holes and then install the grommet back into the firewall.

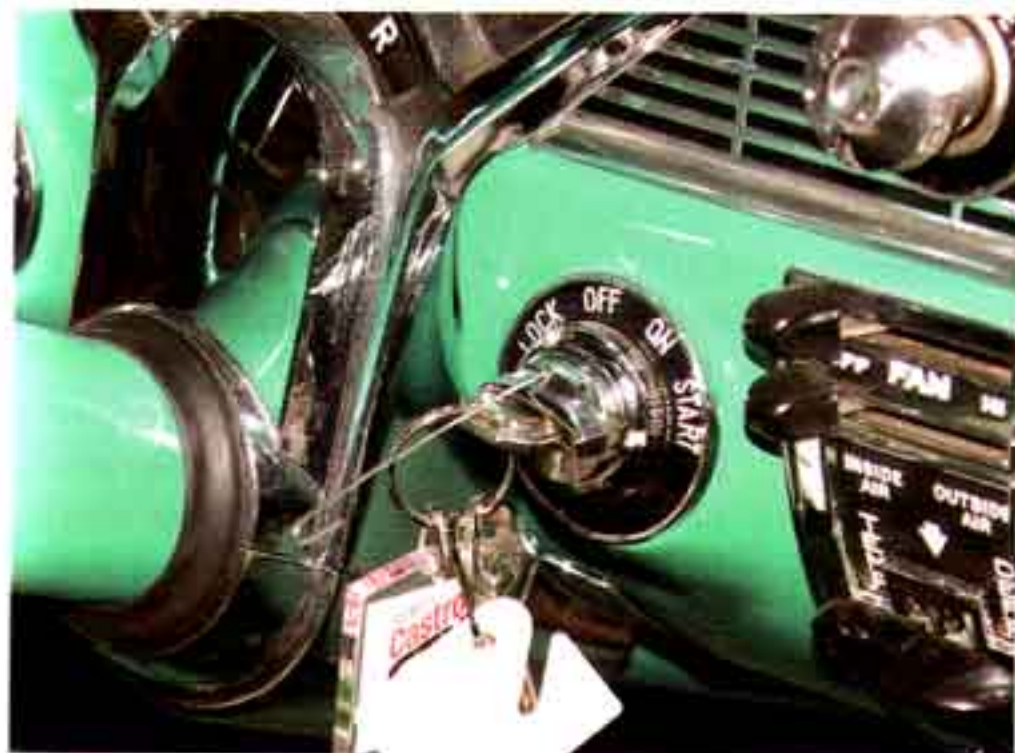


Photo #17a & 17b:

The adapter harness plugs into ignition switch and has a socket that will replace the stock socket for the "GEN" light on the dash board. To make the job easier we will remove the ignition switch from the dash board. First the lock cylinder will need to be removed, to remove the cylinder turn the key as far to the left as you can.



Then with a small paper clip insert it into the small hole on the face of the cylinder and then the key will turn to the left one more position, this will allow the cylinder to be removed.

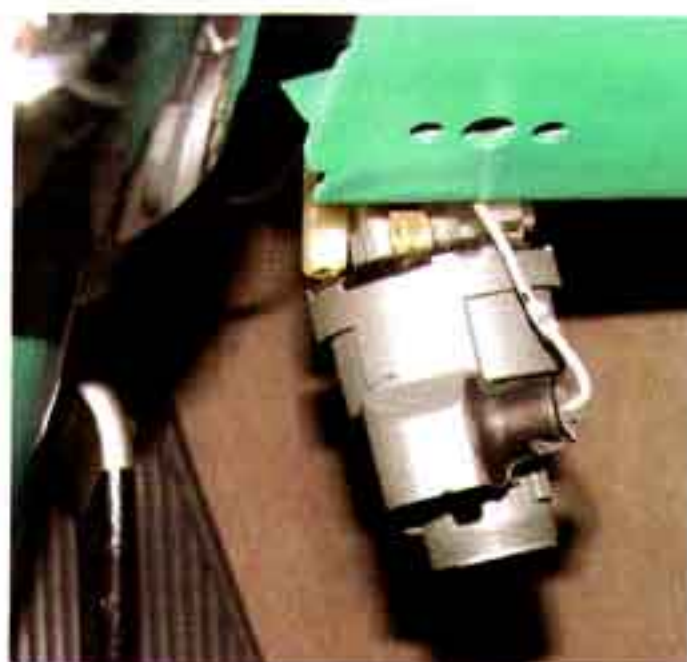


Photo #18a & 18b: Using an ignition switch spanner nut tool #49-12 unscrew the spanner nut from the ignition switch, this will allow the switch to drop down from the dash board.

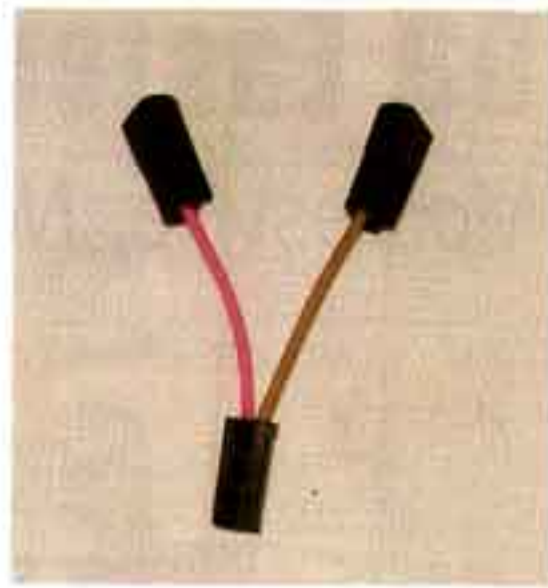
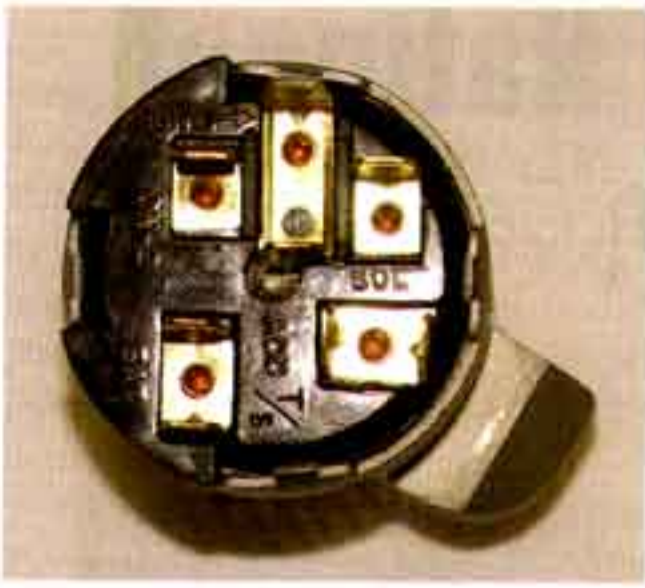


Photo #19a & 19b: On the back of the ignition there is a double terminal marked "ACC", the pink wire from the under dash harness plugs in here. Unplug the pink wire and plug in the Y-connector with the pink and tan wire.

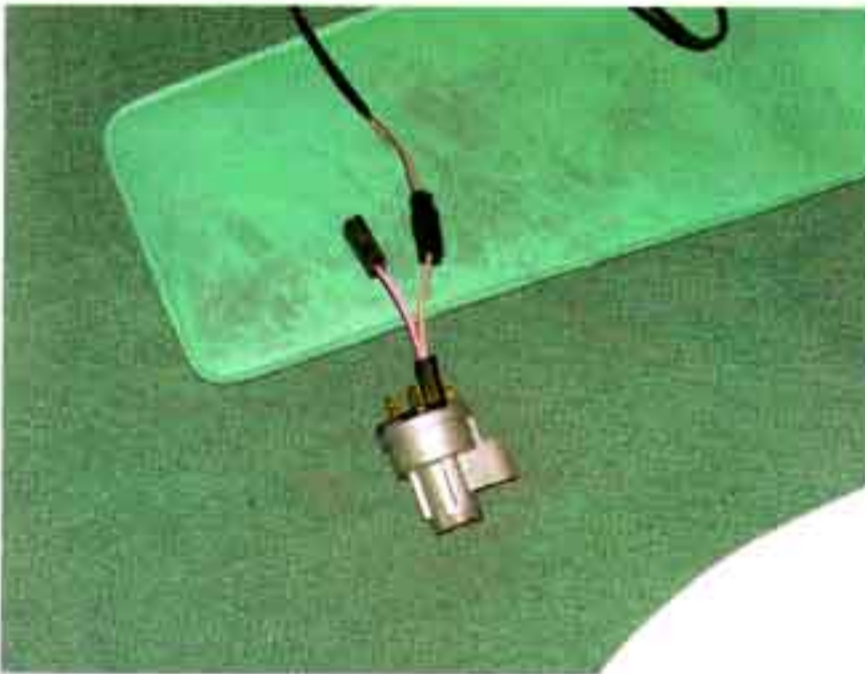
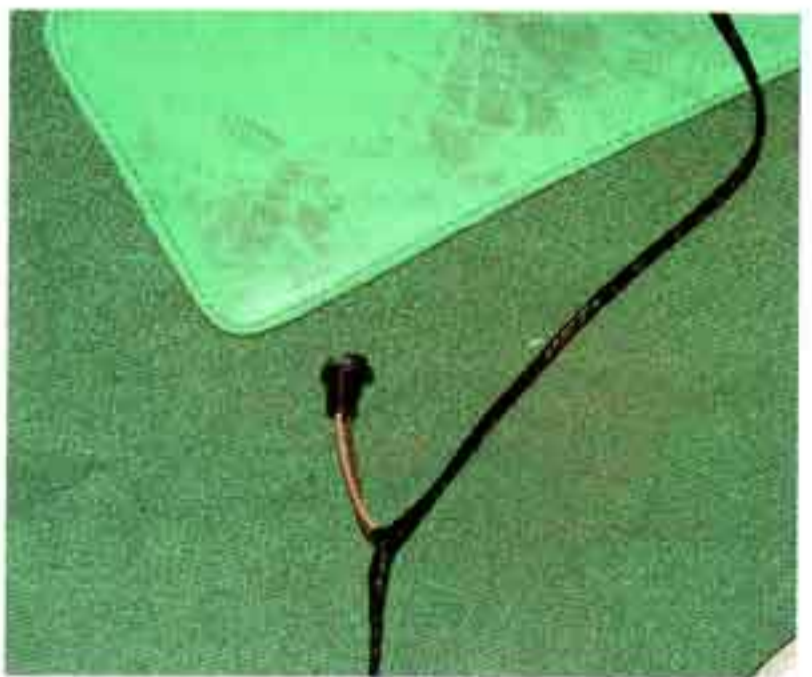


Photo #20: The tan wire from the adapter harness will plug into the tan side of the Y-connector and the pink wire from the under harness will plug into the pink side of the Y-connector.

Photo #21: The adapter harness has a socket that will replace the socket for the "GEN" light on the dashboard. Once all the connections have been done connect the battery and start the car. The "GEN" light will come on when the key is turned, but when the engine is started the light will go out if the charging system is working.



Good Luck! 