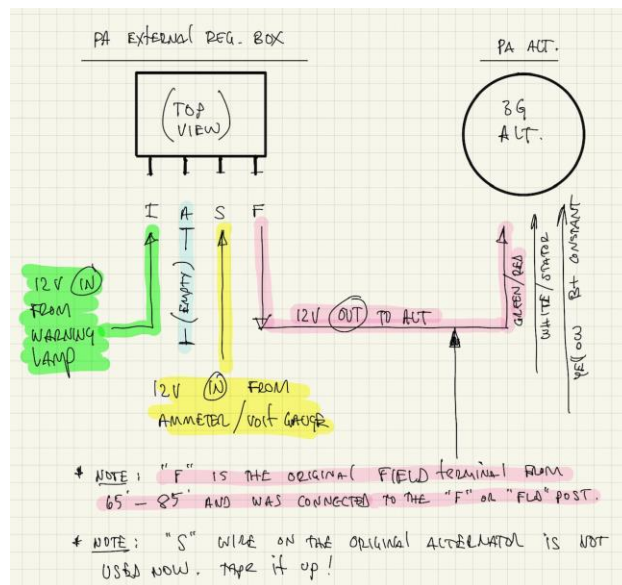


462802C 1G to 3G Conversion Kit and Alternator Diagnosis

1. Check the state of the battery. A battery in good working condition will show between 12V and 12.5V with nothing drawing on it. If your battery is below that level, chances are you have a bad battery.
2. Compare voltage at the battery to voltage at the output post of the alternator. There should be very little drop in voltage from the battery to the output post of the alternator. Any significant resistance on this wire could be detrimental to the operation of the alternator. If you show 0 voltage at the output post of the alternator, check the fuse or fusible link in the power wire going to the battery as it may be blown.
3. At the external regulator / metal box, make sure the plastic plug is connected securely. There are either 3 or 4 wires, cars with a lamp in the dash have 4, cars with an ammeter or voltmeter will have 3. In simple terms, voltage is sent IN the box from the instrument cluster on the I or S. The A is not used. Then voltage is sent OUT to the alternator on the F wire. You can measure with the key ON (same as step 4 below) to verify battery voltage on the I or A, and then on the F. The F voltage may be a little less, but it should have voltage. If you do not have voltage on I or A, you will need to troubleshoot this in the instrument cluster, this is not an issue with the alternator or the metal box. We have provided a simple diagram below for you to see a visual.
4. Check the voltage on the 3 wire Regulator Plug. Green wire with red stripe - This wire is the ignition key on/key off. With the key in the "on" position (Car Not Running) this wire should read between 1/2 volt to 1 volt less than battery voltage. White Wire - This wire is called the stator wire. This wire needs continuity from the voltage regulator plug to the grey clip that plugs into the alternator but will only have voltage when the engine is running and the alternator is charging, then it will be about 1/2 of charge voltage. Since we are troubleshooting currently, just be sure it is connected there is nothing to measure. Yellow wire- This wire is called the sense wire and is a reference wire for the voltage regulator, so it knows how much voltage to produce. This wire should always equal battery voltage.



**** Never under any circumstances remove the battery cable while the car is running! Doing this can damage the internal voltage regulator making the alternator no longer charge. This test only worked on early cars that had very low draw and an external mechanical voltage regulator. ***