Alternator Fusible Link Check

Meets NATEF Task: (A6-D-2) Diagnose the charging system for the cause of undercharge, no-charge, and overcharge conditions (P-1)

Name _____ **Date** _____ **Time on Task** _____

Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

Alternators produce electrical power to supply the electrical needs of the vehicle and to keep the battery fully charged. The output terminal of the generator (usually labeled "B" or "BAT") connects to the positive (+) terminal of the battery through a fusible link. The purpose of the fusible link is to protect the electrical system from a possible fire if the alternator happens to short to ground. If the wire or alternator shorts to ground, all electrical energy available in the battery could overheat the connecting wiring unless a fusible link is present to open the circuit.

To check that the fusible link is not melted (open), use the following methods:

Method 1 - Connect a 12-volt test light to a good body or chassis ground and touch the test light probe to the output terminal of the alternator. The test light *should* light.

OK ____ **NOT OK** ____

Method 2 - Connect the red lead of a voltmeter to the output terminal of the battery and the black lead to the case of the alternator. The meter should read battery voltage (about 12.6 volts).

OK ____ **NOT OK** ____