Starter Relays and Solenoids

Meets NATEF Task: (A6-C-3 and A6-C-5) Inspect and test starter relays, solenoids, connections, and wires; determine necessary action. (P-2)

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

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

_____ **1.** Clean and visually inspect the starter solenoid and/or relay for physical damage.

OK _____ **NOT OK** _____

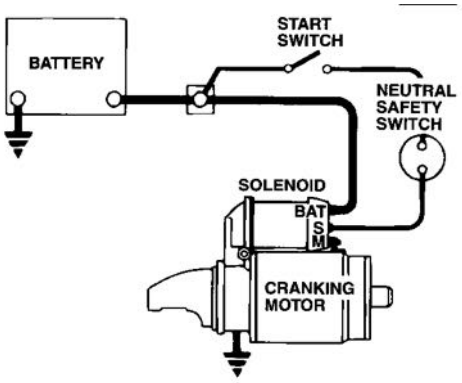
_____ **2.** Set a digital multimeter (DMM) to read ohms (low scale) and check the hold-in coil and the pull-in coil.

Pull-in coil. Measure between terminals "S" and "M":
resistance = _____ (should be 0.2 to 0.4 ohm) **OK** _____ **NOT OK** _____

Hold-in coil. Measure between terminals "S" and the solenoid housing:
resistance = _____ (should be 0.4 to 0.6 ohm) **OK** _____ **NOT OK** _____

_____ **3.** Test the pull-in winding by applying 12 volts to terminal "S" and ground to terminal "M." Check that the plunger will be drawn into the solenoid.

OK _____ **NOT OK** _____



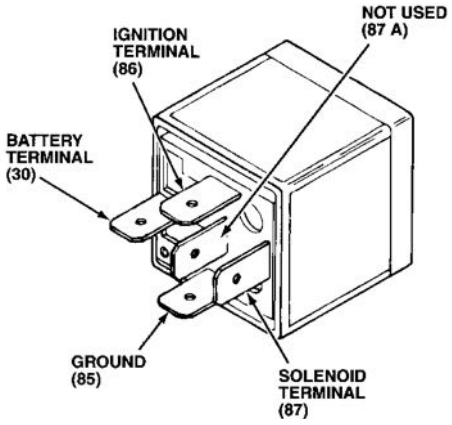
_____ **4.** Check the hold-in winding by connecting 12 volts to terminal "S" and the other wire to ground. The plunger should be drawn into the solenoid housing.

OK _____ **NOT OK** _____

_____ **5.** Measure coil resistance of the relay (terminals 86 and 85).

Resistance = _____ ohms
(should be 60 to 100 ohms)

OK _____ **NOT OK** _____



_____ **6.** What is the necessary action?

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