**Meets ASE Task: :** (A6-C-3) P-2 Inspect and test starter relays and solenoids; determine needed action.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Time on Task:\_\_\_\_\_\_\_\_\_\_\_\_\_

Make/Model/Year:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VIN:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluation (Enter number from 4, 3, 2, 1) :\_\_\_\_\_\_\_\_\_

**Starter Relays and Solenoids**

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**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. M**easure between terminals “S” and “M”:

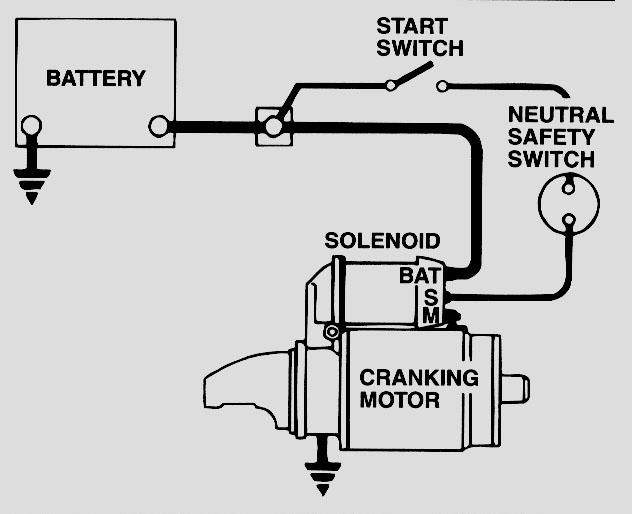
resistance = \_\_\_\_\_\_ (should be 0.2 to 0.4 ohm) **OK  NOT OK**

**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**

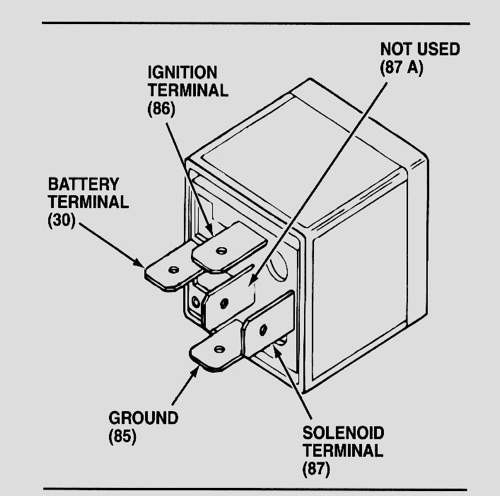
**4.** Check the hold-in winding by connecting 12 volts

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 needed action?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_