Starter Relays and Solenoids

Meets ASE Task: A6 – C-3 – P-2

Name:_____ Date:_____ Time on Task:_____

Make/Model/Year:_____ VIN:_____

Evaluation (Enter number from 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 needed action? _____

_____