

Starter Solenoid Testing

Meets ASE Task: Not specified.

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 for physical damage.

OK ☐ _____ NOT OK ☐ _____

- ☐ 2. Carefully remove the two retaining screws and the retaining nuts from the "M", "S", and "R" (if used) terminals.

- ☐ 3. Carefully remove the plastic end cap.

- ☐ 4. Visually check all solenoid parts for excessive wear or damage.

OK ☐ _____ NOT OK ☐ _____

- ☐ 5. 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 ☐ _____

- ☐ 6. Carefully reassemble the solenoid.

- ☐ 7. 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.

CAUTION: The plunger will be drawn in with great force, so keep your fingers away from between the plunger and the solenoid housing. OK ☐ _____ NOT OK ☐ _____

- ☐ 8. 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 ☐ _____

- ☐ 9. Based on the test results, what is the necessary action? _____
