

# Starter Disassembly and Testing

Meets ASE Task: (Not specified by ASE)

Name \_\_\_\_\_ Date \_\_\_\_\_ Time on Task \_\_\_\_\_

Make/Model/Year \_\_\_\_\_ VIN \_\_\_\_\_ Evaluation: 4 3 2 1

\_\_\_\_\_ 1. Clean and visually inspect the starter for physical damage such as a cracked or broken drive-end housing.

OK \_\_\_\_\_ NOT OK \_\_\_\_\_

\_\_\_\_\_ 2. Mark the location of the through bolts on the frame housing and make note of the location of a special through bolt used to retain a support bracket.

\_\_\_\_\_ used a support bracket \_\_\_\_\_ did not use a support bracket

\_\_\_\_\_ 3. Remove the solenoid (if it is a solenoid activated-type starter).

**CAUTION:** When removing the solenoid, use caution because the plunger return spring may cause the solenoid to be forced away from the starter when the attaching bolts (nuts) are removed.

\_\_\_\_\_ 4. Remove the through bolts.

\_\_\_\_\_ 5. Gently remove the brush-end housing and armature from the field housing.

\_\_\_\_\_ 6. Remove the shift fork and separate the drive-end housing from the field housing.

\_\_\_\_\_ 7. Visually inspect all the parts and note their condition.

armature OK \_\_\_\_\_ NOT OK \_\_\_\_\_ Notes: \_\_\_\_\_

brushes/holders OK \_\_\_\_\_ NOT OK \_\_\_\_\_ Notes: \_\_\_\_\_

field coils OK \_\_\_\_\_ NOT OK \_\_\_\_\_ Notes: \_\_\_\_\_

drive-end housing OK \_\_\_\_\_ NOT OK \_\_\_\_\_ Notes: \_\_\_\_\_

shift lever OK \_\_\_\_\_ NOT OK \_\_\_\_\_ Notes: \_\_\_\_\_

\_\_\_\_\_ 8. Set the multimeter to read ohms and check the resistance between the hot brushes and the field housing (should read OL).

OK \_\_\_\_\_ NOT OK \_\_\_\_\_

\_\_\_\_\_ 9. Check the armature on a growler for opens and shorts.

OK \_\_\_\_\_ NOT OK \_\_\_\_\_