[ ]  1. Check service information for specified procedures and voltage drop specifications of the charging circuit.

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

Meets ASE Task: A6 – D-4 – P-1

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

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

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

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

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

**Charging Circuit Voltage Drop**

[ ]  2. Connect one test lead of a digital multimeter set to read DC volts to the alternator output terminal and the positive (+) terminal of the battery.

[ ]  3. Start the engine and run to 2,000 RPM (fast idle).

 [ ]  4. Turn on the headlights to force the alternator to charge the battery.

 [ ]  5. The voltage drop reading should not exceed 0.40 volt.

\_\_\_\_\_ = the voltage drop of the *insulated* (power side) of the charging circuit (between the output terminal of the alternator and the positive (+) terminal of the battery).

 OK [ ]  \_\_\_\_\_ NOT OK [ ] \_\_\_\_\_

[ ]  6. To test if the generator is properly grounded, continue operating the engine at a fast idle with the lights on, connect the meter leads to the case of the alternator and the negative (-) terminal of the battery. A reading of greater than 0.20 volt indicates a poor alternator ground.

 \_\_\_\_\_ = the voltage drop of the *ground side* of the alternator (between the rear housing of the alternator and the negative (-) terminal of the battery).

 OK [ ] \_\_\_\_\_ NOT OK [ ] \_\_\_\_\_

[ ]  7. Based on the test results, what is the needed action? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

