

# Digital Multimeter Use for Electrical Problems

**Meets NATEF Task:** (A6-A-7) Demonstrate the proper use of a digital multimeter (DMM) during diagnosis of electrical circuit problems. (P-1)

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

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

\_\_\_\_\_ 1. Check service information on the correct procedure for checking charging system voltage.

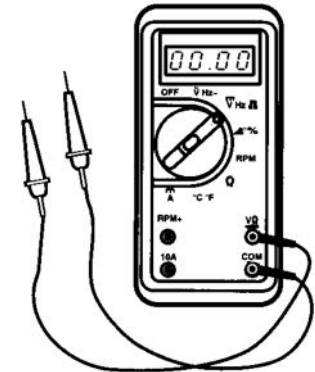
\_\_\_\_\_  
 \_\_\_\_\_

a. Which position on the digital multimeter should be selected to check charging system voltage?

\_\_\_\_\_  
 What is the specified voltage? \_\_\_\_\_  
 What is the actual voltage? \_\_\_\_\_

b. Which position should selected to check the voltage drop of the charging system? \_\_\_\_\_

What is the specified voltage drop? \_\_\_\_\_  
 What is the actual voltage drop? \_\_\_\_\_



\_\_\_\_\_ 2. Check service information regarding the specified resistance for spark plug wires.

Which position on the DMM should be selected to measure spark plug wire resistance? \_\_\_\_\_

What is the specified resistance? \_\_\_\_\_  
 What is the actual (measured) resistance? \_\_\_\_\_

\_\_\_\_\_ 3. Check service information regarding the specified battery drain test (parasitic draw) test procedures.

Which position on the DMM should be selected to measure battery electrical drain? \_\_\_\_\_

What is the specified maximum battery electrical drain? \_\_\_\_\_  
 What is the actual (measured) battery electrical drain? \_\_\_\_\_