

**▶ TASK** Perform charging circuit voltage drop tests; determine necessary action.



Time off \_\_\_\_\_  
 Time on \_\_\_\_\_  
 Total time \_\_\_\_\_

**CDX Tasksheet Number: C319**

1. Research the procedure and specifications for performing the charging circuit voltage drop tests in the appropriate service information.
  - a. **List the maximum allowable voltage drop (generator output terminal to battery positive post): \_\_\_\_\_ volts**
  - b. **List the maximum allowable voltage drop (generator housing to battery negative post): \_\_\_\_\_ volts**
  
2. Install the fender covers, exhaust hose(s), and wheel chocks, and set the parking brake.
  
3. Connect the DVOM as outlined in the appropriate service information.
  - a. List the points that each voltmeter test lead should be connected to, to test the voltage drop between the output terminal of the alternator and the positive post of the battery:
    - i. **DVOM black lead:** \_\_\_\_\_
    - ii. **DVOM red lead:** \_\_\_\_\_
  - b. List the points that each voltmeter test lead should be connected to, to test the voltage drop between the housing of the alternator and the negative post of the battery:
    - i. **DVOM black lead:** \_\_\_\_\_
    - ii. **DVOM red lead:** \_\_\_\_\_
  
4. Have your supervisor/instructor verify your test procedure and connections.  
**Supervisor's/instructor's initials:** \_\_\_\_\_
  
5. Conduct the charging system voltage drop test. **List the measured results:**
  - a. **Voltage drop between the alternator output terminal and battery positive post is:** \_\_\_\_\_ **V at:** \_\_\_\_\_ **A**
  - b. **Voltage drop between the alternator housing and battery negative post is:** \_\_\_\_\_ **V at:** \_\_\_\_\_ **A**
  
6. Compare your results to the manufacturer's specifications. **List your observations:**
  
  
7. **Determine any necessary action(s):**

8. Have your supervisor/instructor verify satisfactory completion of this procedure, any observations found, and any necessary action(s) recommended.

**Performance Rating**

**CDX Tasksheet Number: C319**

**0**

**1**

**2**

**3**

**4**

Supervisor/instructor signature \_\_\_\_\_ Date \_\_\_\_\_