

# Alternator Rectifier Bridge Testing

Meets ASE Task: (Not specified by ASE)

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

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

\_\_\_\_\_ 1. Identify the type of alternator.

- \_\_\_\_\_ GM  
 \_\_\_\_\_ Ford  
 \_\_\_\_\_ Chrysler  
 \_\_\_\_\_ other (specify) \_\_\_\_\_

\_\_\_\_\_ 2. How many diodes are used in the rectifier bridge (2 per stator winding)?

- \_\_\_\_\_ 6  
 \_\_\_\_\_ 8  
 \_\_\_\_\_ other (specify) \_\_\_\_\_

\_\_\_\_\_ 3. Visually check the rectifier bridge for physical damage.

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

\_\_\_\_\_ 4. Set a digital multimeter to the diode check position.

\_\_\_\_\_ 5. Touch one meter lead to the terminal of the diode and the other lead to the heat sink for the same diode and record the reading. Reverse the leads and record the second reading. A good diode should read infinity (OL) one way and record a voltage drop reading of between 0.4 volt (400 mV) and 0.6 volt (600 mV) the other way.

reading for diode #1 = \_\_\_\_\_ and \_\_\_\_\_  
 reading for diode #2 = \_\_\_\_\_ and \_\_\_\_\_  
 reading for diode #3 = \_\_\_\_\_ and \_\_\_\_\_  
 reading for diode #4 = \_\_\_\_\_ and \_\_\_\_\_  
 reading for diode #5 = \_\_\_\_\_ and \_\_\_\_\_  
 reading for diode #6 = \_\_\_\_\_ and \_\_\_\_\_

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

\_\_\_\_\_ 6. Test the diode trio (if equipped) in a similar manner. OK \_\_\_\_\_ NOT OK \_\_\_\_\_

