

# Alternator Stator Testing

Meets NATEF Task: Not specified by NATEF

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

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

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

\_\_\_\_\_ **Wye** (has three terminals with one wire at each terminal and a wire junction)

\_\_\_\_\_ **Delta** (has three terminals with two wires at each terminal)

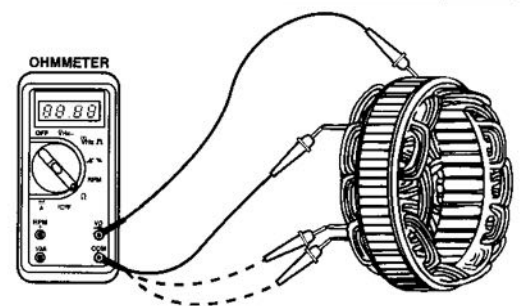


\_\_\_\_\_ 2. Visually inspect the rotor for faults such as burned insulation due to overheating or broken wires.

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

\_\_\_\_\_ 3. Set a digital multimeter to read ohms (low scale).

\_\_\_\_\_ 4. Measure the resistance between all three terminals of the stator two at a time. The resistance will be low (usually less than 2 ohms). If high or infinity, the stator is defective.



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

\_\_\_\_\_ 5. To check if the stator windings are shorted-to-ground, connect one lead of the meter (still set to read ohms) to the steel laminations of the stator and touch the other lead to each of the three terminals. The reading on all three terminals should be infinity (OL).

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