

# Brake Rotor Measurement

**Meets NATEF Task:** (A5-D-5) Clean, inspect, and measure rotor thickness, lateral runout, and thickness variation; determine necessary action. (P-1)

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

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

\_\_\_\_\_ 1. Visually inspect the brake rotor for:

- hard spots      **OK** \_\_\_\_\_ **NOT OK** \_\_\_\_\_ (requires replacement)
- excessive rust      **OK** \_\_\_\_\_ **NOT OK** \_\_\_\_\_
- deep grooves (over 0.060" deep)      **OK** \_\_\_\_\_ **NOT OK** \_\_\_\_\_

\_\_\_\_\_ 2. Check the service information and determine the specifications and measurements for thickness.

Minimum thickness = \_\_\_\_\_

Machine-to-thickness = \_\_\_\_\_

Actual thickness = \_\_\_\_\_ **OK** \_\_\_\_\_ **NOT OK** \_\_\_\_\_

\_\_\_\_\_ 3. Determine the specifications for thickness variation (parallelism).

\_\_\_\_\_

\_\_\_\_\_ 4. Using a micrometer, measure the thickness at four or more locations around the rotor to determine the thickness variation (parallelism). (Usually 0.0005" or less difference in the readings.)

A. \_\_\_\_\_ C. \_\_\_\_\_ E. \_\_\_\_\_

B. \_\_\_\_\_ D. \_\_\_\_\_ F. \_\_\_\_\_

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

\_\_\_\_\_ 5. Use a dial indicator and measure the runout of the rotor.

Runout = \_\_\_\_\_ (should be less than 0.005 in.)

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

\_\_\_\_\_ 6. Based on the measurements and manufacturer's recommendations, should the rotor be replaced or machined? Why? \_\_\_\_\_

\_\_\_\_\_

