

# Cylinder Leakage Test

Meets NATEF Task: (A1-A-11) Perform cylinder leakage tests; determine necessary action. (P-1)

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

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

- \_\_\_\_\_ 1. The engine should be at normal operating temperature.
- \_\_\_\_\_ 2. Rotate the engine until the piston of the cylinder being tested is at TDC on the compression stroke.
- \_\_\_\_\_ 3. Calibrate the cylinder leakage gauge.
- \_\_\_\_\_ 4. Install compressed air in the cylinder. Read the gauge.

\_\_\_\_\_ % of leakage

**Check one:**

- \_\_\_\_\_ **Good** - less than 10%
- \_\_\_\_\_ **Acceptable** - less than 20%
- \_\_\_\_\_ **Unacceptable** - higher than 20%
- \_\_\_\_\_ 5. Check the *source* of air leakage:
  - \_\_\_\_\_ a. **radiator** - possible blown head gasket or cracked cylinder head.
  - \_\_\_\_\_ b. **tail pipe** - defective exhaust valve(s).
  - \_\_\_\_\_ c. **carburetor or air inlet** - defective intake valve(s).
  - \_\_\_\_\_ d. **oil filler cap** - possible worn or defective piston rings.
- \_\_\_\_\_ 6. Based on the test results, what is the necessary action? \_\_\_\_\_

