Cooling System Tests

Meets NATEF Task: (A1-A-2) Identify and interpret engine concern; determine necessary action. (P-1)

Name _____ **Date** _____ **Time on Task** _____

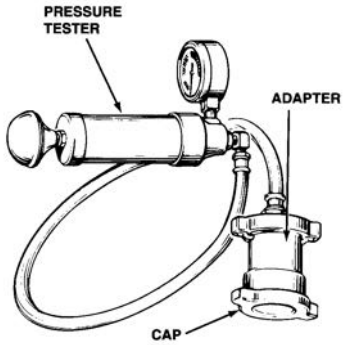
Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

_____ **1.** Check service information for the specified cooling system tests and specifications.

_____

_____ **2.** Pressure test the cooling system using a hand-operated pressure tester as per the tester manufacturer's instructions. Results:

☐ OK – pressure held
☐ NOT OK – pressure dropped
Describe the fault found: _____



_____ **3.** Pressure test the pressure cap using a hand-operated pressure tester.

☐ OK – pressure held
☐ NOT OK

_____ **4.** Check the cooling system for presence of combustion gases. Check the procedure used.

☐ Exhaust gas analyzer checking for HC emissions
☐ Coated paper that changes color
☐ Liquid tester that changes color
☐ Other (describe) _____

_____ **5.** Results of combustion gas test:

☐ Negative (no combustion gases discovered in coolant)
☐ Positive (combustion gas discovered in coolant)

_____ **6.** Check temperature of cooling system using an infrared pyrometer or other suitable temperature measuring instrument.

☐ Check the radiator for cool areas, which could indicate blockages
☐ Compare temperature of the cooling system hoses to thermostat rating

_____ **7.** Based on the cooling system tests, what is the necessary action? _____