**Meets ASE Task:** (A7-C-3) P-2 Diagnose temperature control problems in the HVAC system related to the engine cooling system, including electric heating; determine needed action.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Time on Task:\_\_\_\_\_\_\_\_\_\_\_\_\_

Make/Model/Year:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VIN:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluation (Enter number from 4, 3, 2, 1) :\_\_\_\_\_\_\_\_\_

**Heating System Performance Check**

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**[ ]  1.** Check the front of the radiator and air-conditioning condenser for debris that could

 limit airflow. Clean as required.

 **OK [ ]  NOT OK [ ]**

**[ ]  2.** Perform a thorough visual inspection of the cooling system. Look for hoses that may

 be leaking, cut, or swollen.

 **OK [ ]  NOT OK [ ]**

**[ ]  3.** Start the engine and operate the heater and air-conditioning controls for proper

 operation including:

 defroster (airflow to windshield) **OK [ ]  NOT OK [ ]**

 heater (airflow to floor) **OK [ ]  NOT OK [ ]**

 A/C (airflow to vents) **OK [ ]  NOT OK [ ]**

 blower motor on all speeds **OK [ ]  NOT OK [ ]**

**[ ]  4.** Using an infrared pyrometer, measure the temperature of the upper radiator hose.

 Temperature = \_\_\_\_\_\_\_\_ (should be close to the same temperature as the

 thermostat rating)

 **OK [ ]  NOT OK [ ]**

**[ ]  5.** Based on the test results, what is the needed action? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_