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

**Meets ASE Task:** (A1-D-3) P-1 Perform cooling system pressure and dye tests to identify leaks; check coolant condition and level; inspect and test radiator, pressure cap, coolant recovery tank, heater core, gallery plugs; determine needed action.

**Radiator Testing with an Infrared Pyrometer**

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

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

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

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

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

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**1.** Check to see if an infrared pyrometer can be aimed to most areas of the radiator from

the engine side.

**NOTE:** The fan(s) shroud may have to be removed to gain access.

**2.** What had to be removed to allow access? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**3.** Start the engine and operate until normal operating temperature is achieved and the

thermostat is fully open.

**4.** Using an infrared pyrometer, measure the radiator at the inlet, middle, and outlet

sections and record the readings.

Inlet = \_\_\_\_\_\_\_\_\_\_ (should be the hottest)

Middle = \_\_\_\_\_\_\_\_\_\_ (should be cooler than the inlet section)

Outlet = \_\_\_\_\_\_\_\_\_\_ (should be cooler than the middle)

**OK  NOT OK**

**5.** Aim the infrared pyrometer to all sections of the radiator and look for any areas that

are cooler than the surroundings which indicate a restricted or clogged portion of the

radiator.

**OK  NOT OK**

**6.** Reinstall any shrouds removed to gain access to the radiator.

**7.** Based on the inspection and temperature tests, what is the necessary action?

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

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