

Radiator Testing with an Infrared Pyrometer

Meets ASE Task: A1 – D-4 – P-1

Name: _____ Date: _____ Time on Task: _____

Make/Model/Year: _____ VIN: _____

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

- 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? _____

- 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? _____
