

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? _____
