

# ENGINE COOLING SYSTEM TEST—'57 T-BIRD

## PRE-TEST INSPECTION AND CONFIGURATION:

1. \_\_\_\_\_ Ensure fan belt tension is proper.
2. \_\_\_\_\_ Inspect radiator, hoses, drains, and freeze plugs for any indications of leaks.
3. \_\_\_\_\_ Ensure radiator pressure cap will hold 13 PSI.
4. \_\_\_\_\_ Document the freezing point of the coolant, i.e. minus 34°F for 50/50 water and ethylene glycol solution.
5. \_\_\_\_\_ Ensure Heater TEMP control lever is all the way to the left.

## BASELINE TEST – COLD START:

Ambient air temperature \_\_\_\_\_°F. Engine start date: \_\_\_\_\_ time \_\_\_\_\_.

Monitor temperature on thermostat housing vs. radiator inlet for thermostat opening. At opening, record time \_\_\_\_\_, housing temperature \_\_\_\_\_°F, and mark temperature Gauge needle position with red pen.

***\* If thermostat opens above spec, hold test until it is replaced.***



## ENGINE IDLE MAXIMUM TEMPERATURE TEST:

For automatic transmission, hold the car with the brake and put the transmission in Drive, put manual transmission in neutral. Monitor temperature gauge until it either stops increasing or reaches the hot end dot of the white arc.

Record the time \_\_\_\_\_, temperature \_\_\_\_\_°F, and needle position.



## DRIVING RECOVERY TEST:

Drive at 40 - 60 MPH and monitor temperature gauge, if it increases to the hot end dot of the white arc, terminate the test, park the car and shut down to let the engine cool.

If the temperature stabilizes below the hot end dot of the white arc, record the time \_\_\_\_\_, temperature \_\_\_\_\_°F, and gauge needle position.



Record ambient air temperature \_\_\_\_\_°F.

Next, let the car cool completely, install new component.

After the engine cools overnight, run the BASELINE test through the DRIVING RECOVERY test again. The results from these two test sequences will provide insight into the effect of the new component.