

► TASK Verify engine operating temperature; determine needed action.

MAST
8A10

CDX Tasksheet Number: C398

Time off	_____
Time on	_____
Total time	_____

1. Research the following specifications in the service information.
 - a. Thermostat opening temperature: _____ °F/°C
 - b. Temperature at which the electric fan comes on (if equipped):
_____ °F/°C
 - c. Temperature at which the fan clutch engages (on) (if equipped):
_____ °F/°C
2. Apply the vehicle's parking brake and secure the vehicle with wheel chocks to prevent the vehicle from rolling.
3. Start the vehicle. Allow the vehicle to warm up while monitoring the engine temperature with the temp gun. Find the spot where the highest temperature reading is found on the engine side of the thermostat housing (on most engines). Monitor the temperature at that spot.

NOTE The temperature should rise to between the thermostat opening temperature and the electric (or clutch) fan "on" temperature (if equipped). If this happens, continue to the next step. If the engine doesn't get that hot, diagnose the problem and go to step 4 below. Do NOT allow the engine to overheat!

- a. If the engine is equipped with an electric fan, the temperature should vary between the electric fan "on" temperature and the electric fan "off" temperature. Record these temperatures:
 - i. Electric fan "on" temp: _____ °F/°C
 - ii. Electric fan "off" temp: _____ °F/°C
 - b. If the engine is equipped with a clutch fan, the temperature should rise above the thermostat opening temperature but not above the clutch fan engagement temperature. Record these two temperatures:
 - i. Clutch fan "engaged" temp: _____ °F/°C
 - ii. Clutch fan "disengaged" temp: _____ °F/°C
 - c. If the engine is equipped with a mechanical fan without a clutch, the temperature should rise to, or slightly above, the thermostat opening temperature and should remain fairly steady. Record this operating temperature:
 - i. Engine operating temperature: _____ °F/°C
4. If the engine did not reach the specified thermostat opening temperature, list the max temperature reached: _____ °F/°C
5. Determine any necessary action(s):

6. Have your supervisor/instructor verify satisfactory completion of this procedure, any observations found, and any necessary action(s) recommended.

Performance Rating

CDX Tasksheet Number: C398

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Supervisor/instructor signature _____ Date _____