

Engine Cooling Systems

6a-11

COOLING SYSTEM TROUBLE SHOOTING (ALL MODELS)

CONDITION	CAUSE
Engine over heats with no coolant loss.	Coolant level low. Thermostat stuck closed or partially closed. Fan clutch not working. Water distribution tube clogged. Radiator air flow passages blocked by debris.
Engine over heats with external coolant loss.	Broken or slipping fan belt. Thermostat stuck closed or partially closed. Water pump shaft broken. Leaking freeze plugs. Fan clutch not operating. Defective radiator cap. Water distribution tube clogged.
Engine fails to reach normal operating temperature.	Thermostat stuck in open position. Temperature gauge or light may be defective indicating normal operating temperature. Check sending unit also. Check for correct thermostat opening and closing temperatures. Test as shown in thermostat testing procedure.
Engine over heats with internal coolant leakage.	Check for: Cracked intake manifold, Blown head gaskets, Warped head or engine block surfaces. Cracked cylinder head or engine block.
Excessive foaming in radiator.	Drain and flush complete cooling system thoroughly. Refill cooling system with new 50/50 coolant solution.
Poor circulation of coolant.	Check top of radiator tubes visually for evidence of plugged or restricted radiator. Check for restriction in cylinder heads or engine block for internal clogging. Check for collapsed lower radiator hose.