

Engine Cooling Systems

COOLING SYSTEM TROUBLE SHOOTING

CONDITION & POSSIBLE CAUSE	CONDITION & POSSIBLE CAUSE
<p>Engine Overheats With No Coolant Loss</p> <ul style="list-style-type: none"> • Low coolant level. • Thermostat stuck closed. • Faulty fan clutch. • Faulty electric fan motor. • Faulty thermal relay switches. • Water distribution tube clogged. • Radiator air flow passages blocked. • Incorrect coolant concentration. <p>Engine Overheats With External Coolant Loss</p> <ul style="list-style-type: none"> • Broken or slipping fan belt. • Thermostat stuck closed. • Water pump shaft broken. • Leaking freeze plug(s). • Faulty fan clutch. • Faulty electric fan motor. • Faulty thermal relay switches. • Faulty radiator pressure cap. • Water distribution tube clogged. <p>Noise</p> <ul style="list-style-type: none"> • Fan contacting shroud. • Loose water pump impeller. • Dry fan belt. • Rough surface on drive pulley. • Water pump bearing worn. • Improper alignment of fan belts. <p>Engine Overheats With Internal Coolant Leakage</p> <ul style="list-style-type: none"> • Cracked or warped intake manifold. • Blown cylinder head gasket. • Warped cylinder head or block. • Cracked cylinder head or block. 	<p>Engine Fails to Reach Normal Operating Temperature</p> <ul style="list-style-type: none"> • Thermostat stuck in open position. • Temperature gauge or light may be defective. • Faulty temperature sending unit. • Faulty thermal relay switches. <p>Poor Circulation of Coolant</p> <ul style="list-style-type: none"> • Plugged or restricted radiator. • Cylinder head or block water passages clogged or restricted. • Collapsed lower radiator hose. • Faulty water pump. <p>Excessive Foaming in Radiator</p> <ul style="list-style-type: none"> • Incorrect coolant concentration (system must be flushed). <p>Coolant Recovery System Inoperative</p> <ul style="list-style-type: none"> • Low coolant level. • Leak in system. • Radiator pressure cap loose or defective. • Overflow tube clogged or leaking. • Recovery bottle vent plugged. <p>No Coolant Flow Through Heater Core</p> <ul style="list-style-type: none"> • Plugged return pipe in water pump. • Heater hose collapsed or plugged. • Plugged heater core. • Plugged thermostat housing outlet. • Heater bypass hole in cylinder head plugged. • Faulty water valve.