ENGINE COOLANT CAPACITIES (Cont.)

GENERAL MOTORS (Cont.)

PONTIAC

Application	CAPACITY (Qts.) Standard	With A/C
Sunbird		
151" 4-Cyl.	11.7	12.5
231" 6-Cyl.	13.4	13.4
Phoenix		
151" 4-Cyl.	12.3	12.4
231" 6-Cyl.	13.8	13.9
305" V-8	15.9	16.2
350" V-8	16.0	16.7
Firebird, Firebird Esprit, Formula & Trans Am		
231" 6-Cyl.	13.1	13.1
305" V-8	17.5	17.7
350" V-8	17.5	17.7
400" V-8		①22.9
403" V-8	16.8	②17.5
LeMans, Grand Am, Grand LeMans		
231" 6-Cyl.	12.7	12.7
301" V-8	18.4	19.3
305" V-8	14.0	14.9
350" V-8	14.0	14.9
Grand Prix, Grand Prix LJ, Grand Prix SJ		
231" 6-Cyl.	12.9	12.9
301" V-8	18.4	19.3
305" V-8	14.0	14.9
Catalina, Bonneville, Bonneville Brougham		
231" 6-Cyl.	12.9	12.9
301" V-8	18.6	③18.5
350" (X) V-8	14.2	15.3
350" (R) V-8	15.0	④14.9
400" V-8	19.9	21.0
403" V-8	16.1	⑤16.0

① – With Hvy. Duty Cool. ④ – 16.1, Hvy. Duty Cool.
② – 19.4, Hvy. Duty Cool. ⑤ – 17.2, Hvy. Duty Cool.
③ – 19.7, Hvy. Duty Cool.

THERMOSTAT

Several types of thermostats are used due to coolant flow pattern being different in area of thermostat housing. Be sure to use correct part number when replacement is necessary.

PRESSURE CAP

All models use a 15 lb. radiator cap. Test at 14-17 lbs.

WATER PUMP

Water pumps are serviced as an assembly only.

MAINTENANCE

Inspect cooling system every 12 months or 15,000 miles. Drain and flush cooling system every 24 months or 30,000 miles.

COOLING SYSTEM TROUBLESHOOTING (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.
Engine over heats with internal coolant leakage.	Cracked intake manifold, blown head gaskets or warped head or engine block. Cracked cylinder head or engine block.
Excessive foaming in radiator.	Improper ratio of water to coolant. System must be flushed.
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.