

# Engine Cooling Systems

## ENGINE COOLANT CAPACITIES (Cont.)

### CHRYSLER CORP.

Application	CAPACITY (Qts.)	
	Standard	With A/C
6-Cyl.		
Aspen & Volare .....	12	14
Monaco .....	13	14.5
318" V8		
Aspen & Volare .....	16	17.5
Diplomat & LeBaron .....	16	17.5
Monaco & Charger .....	16.5	18
Royal Monaco .....	17.5	17.5
360" V8 .....	16	16
400" V8 .....	16.5	16.5
440" V8 .....	16	16

### THERMOSTAT

Thermostat is a wax pellet type with an opening temperature of 195°F. Bring engine to normal operating temperature and check coolant temperature. It should be stable at 187-195°F. Replace thermostat if it fails to fall within operating range.

### PRESSURE VALVE

All models use a 16 lb. pressure cap which should be tested at 14-17 lbs. Cap is also equipped with a vent valve in center of

cap that allows a small flow through the cap when temperature is below boiling, but closes when boiling point is reached.

**CAUTION** — Warning words "DO NOT OPEN HOT" printed on radiator pressure cap are a safety precaution and should be heeded whenever engine is warm.

### WATER PUMP

Pump is serviced as an assembly only. When replacing water pump do not install a standard pump on any air conditioned vehicle or vice versa. It is possible to replace pump without discharging air conditioning system. When replacing a water pump because of a bearing or shaft failure, carefully inspect the fan for cracks, loose blades or rivets caused by excessive vibration. If any of these problems are found, fan should also be replaced.

### MAINTENANCE

After 24 months or 24,000 miles of operation and every 12 months or 15,000 miles thereafter, inspect, drain, clean and back-flush entire cooling system.

### FORD MOTOR CO.

CAPACITY (Qts.)					
Application	Standard	With A/C	Application	Standard	With A/C
Pinto & Bobcat			LTD II, Cougar, Thunderbird		
2300 cc 4-Cyl. ....	8.7	9.1	351" W V8 .....	15.9	16.2
2800 cc V6 .....	8.5	9.2	351" M V8 .....	②17.0	17.0
Mustang II			400" V8 .....	②17.0	17.0
2300 cc 4-Cyl. ....	8.5	9.1	Ford, Mercury, Meteor		
2800 cc V6 .....	①8.3	9.0	351" M V8 .....	17.2	17.2
302" V8 .....	16.3	16.3	400" V8 .....	②17.2	17.2
Maverick & Comet			460" V8 .....	②18.5	18.5
200" 6-Cyl. ....	8.7	8.9	Mark V		
250" 6-Cyl. ....	9.6	9.6	400" V8 .....		17.5
302" V8 .....	13.5	14.1	460" V8 .....		19.4
Granada & Monarch			Lincoln		
200" 6-Cyl. ....	9.9	9.9	400" V8 .....		17.1
250" 6-Cyl. ....	10.5	10.7	460" V8 .....		③18.5
302" V8 .....	14.6	14.6			
351" W V8 .....	15.7	15.7			
LTD II & Cougar					
302" V8 .....	14.8	15.1			

① — With A.T. add .5 Qts.  
 ② — Police & Taxi Models or T.T. Pkg. add .5 Qts.  
 ③ — With 3.00:1 Axle Ratio add .5 Qts.

**NOTE** — Add 1 Qt. with closed cooling systems

### THERMOSTAT

On all engines except V6, thermostat is located in water outlet elbow. On V6 engines, thermostat is located on bottom of water pump housing. Thermostat housing connects to lower radiator hose. Test thermostat to see that it starts to open, and is fully open at specified temperatures.

### Thermostat Opening Temperatures (°F)

Application	Starts Open	Fully Open
All Engines .....	188-195	212-215

## ENGINE COOLANT CAPACITIES (Cont.)

### FORD MOTOR CO. (Cont.)

#### PRESSURE VALVE

Mustang, Pinto, Bobcat, Maverick and Comet models all use a 13 psi pressure cap which should be tested at 11-17 psi. All other models use a 16 psi cap which should be tested at 13-19 psi.

#### WATER PUMP

Ford Motor Co. recommends replacement of water pump if wear or damage exists. No attempt to overhaul or repair pump should be made.

#### MAINTENANCE

**NOTE** – Vehicles designate maintenance schedule "A" or "B" on glovebox and engine emission control information decal.

Inspect cooling system every 15 months or 15,000 miles on vehicles with maintenance schedule "B", and every 20 months or 20,000 miles on vehicles with maintenance schedule "A". Drain, clean and flush system if inspection indicates sufficient dirt or rust to impair cooling ability. Ford Motor Co. recommends that coolant should be replaced every 40 months or 40,000 miles.

## GENERAL MOTORS

### BUICK

Application	CAPACITY (Qts.)	
	Standard	With A/C
Skyhawk		
231" V6	①11.5	①11.5
Skylark		
231" V6	12.7	12.8
301" V8	18.6	19.2
350" V8	15.6	15.6
LeSabre, Estate Wagon, Electra, Riviera		
231" V6	12.0	12.0
301" V8	17.2	②17.1
350" V8 (Dist. Frt.)	14.2	②14.1
350" V8 (Dist. Rear.)	14.6	②14.5
403" V8	15.7	②15.6
Century & Regal		
231" V6 (Man. Trans.)	12.9	12.8
231" V6 (Auto Trans.)	12.8	12.7
350" V8 (Dist. Frt.)	14.3	③14.9
350" V8 (Dist. Rear.)	15.3	③15.9
403" V8	16.4	③17.0

① – Calif. & High Alt. add .5 Qts.  
 ② – With Hvy. Duty Cooling add .9 Qts.  
 ③ – With Hvy. Duty Cooling add 1.3 Qts.

#### THERMOSTAT

Thermostat should operate at 195°F on all engines.

#### PRESSURE VALVE

All models use a 15 lb. radiator cap.

#### WATER PUMP

Water pump should be serviced as an assembly only if there is excessive endplay or roughness in bearing operation.

#### MAINTENANCE

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

### CADILLAC

Application	CAPACITY (Qts.)	
	Capacity	
Seville	17.2	
Eldorado	25.7	
All Others	20.8	

#### THERMOSTAT

Thermostat should initially open at 177-182°F. and be fully open at 202°F.

#### PRESSURE VALVE

All models use a 15 lb. radiator cap. Test at 13.5-16.5 lbs.