

FORD MOTOR CO.

COOLING SYSTEM CAPACITY

Application	Quarts
300"	
"E" Models	14.7
F100 Man. Trans.	① 12.5
F100 Auto. Trans.	14.5
F150 & F250 (4x4)	① 14.5
F150 & F250 Calif.	14.5
F150 & F250 Except Calif.	12.5
F350	14.5
P350	18.1
302"	
F100	② 15.0
"U" Models Man. Trans.	16.0
"U" Models Auto. Trans.	18.0
351-W"	
"E" Models	③ 21.0
360"	
F100 Man. Trans.	④ 19.5
F100 Auto. Trans.	④ 22.0
F100 W/Air Conditioning	24.0
F150 & F250 Man. Trans.	⑤⑦ 19.5
F150 & F250 Auto. Trans.	⑥⑦ 19.5
F350	⑧ 22.5
F100 & F150 (4x4)	16.5
F250 (4x4)	⑨ 16.5
390"	
F100, F150 & F250	⑩⑨ 22.5
F350	⑩ 22.5
460"	
"E" Models	25.0
F150, F250 & F350	22.5

- ① — W/Extra Cooling, add 2.0 quarts.
- ② — W/Extra Cooling or Air Conditioning, add 2.5 quarts.
- ③ — W/Extra Cooling or Air Conditioning, add 4.0 quarts.
- ④ — W/Extra Cooling, capacity is 24.0 quarts.
- ⑤ — W/Extra Cooling, add 2.5 quarts.
- ⑥ — W/Extra Cooling, add 3.0 quarts.
- ⑦ — W/Air Conditioning, Super Cooling, or Heavy Duty Trailer Towing, capacity is 24.0 quarts.
- ⑧ — W/Extra Cooling or Air Conditioning, add 1.5 quarts.
- ⑨ — W/Super Cooling or Heavy Duty Trailer Towing, add 2.0 quarts.
- ⑩ — W/Air Conditioning, add 2.0 quarts.

THERMOSTAT

Application	① Initial Open	① Full Open
300" Engine		
Low Temp.	157-164.....	184-186
High Temp.	185-192.....	211-214
302" & 351-W" Engines		
Low Temp.	157-164.....	184
High Temp.	188-195.....	212
360", 390" & 460" Engines		
Low Temp.	157-162.....	182
High Temp.	175-182.....	200

① — Specifications are in °F.

WATER PUMP

300" "E", "F" & "P" MODELS

Removal — Drain cooling system. Loosen alternator adjusting arm bolt and remove drive belt. Remove air conditioning drive belt (if equipped). Remove fan, pulley and bolts from water pump hub. Disconnect heater hose and lower radiator hose at water pump. Remove water pump attaching bolts and water pump assembly.

2) Remove power steering pump attaching bolts and position pump to one side with hoses attached. Remove air conditioning bracket. Disconnect lower radiator hose and heater hose from water pump. Loosen by-pass hose clamp at water pump. Remove water pump attaching bolts and water pump assembly.

Installation — Clean all gasket surfaces, install new hoses (as required) and gaskets. Reverse removal procedure, tighten bolts, adjust drive belt tension and refill cooling system.

302" "U" & "F" MODELS

Removal — Drain cooling system. Remove bolts securing fan shroud (if equipped) to radiator and position shroud over fan. Disconnect lower radiator hose, heater hose, and by-pass hose at water pump. Remove drive belts, fan, spacer, pulley and bolts from water pump hub. Remove fan shroud. Loosen alternator pivot bolt and adjusting arm-to-water pump bolt. Remove water pump attaching bolts and water pump assembly.

Installation — Clean all gasket surfaces, install new hoses (as required) and gaskets. Reverse removal procedure, tighten bolts, adjust drive belt tension and refill cooling system.

351-W" "E" MODELS

Removal — 1) Remove air cleaner and intake duct assembly including closed crankcase ventilation hose and oil breather cap. Drain cooling system. Disconnect radiator hoses at radiator and oil cooler lines (if equipped). Remove radiator attaching bolts and remove radiator.

2) Remove drive belts, fan, spacer, pulley and bolts from water pump hub. Loosen alternator pivot bolt and adjusting

PRESSURE CAP

Application	PSI
All Models	13

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arm-to-water pump bolt. Disconnect heater hose and by-pass hose at water pump. Remove water pump attaching bolts and water pump assembly.

Installation – Clean all gasket surfaces, install new hoses (as required) and gaskets. Reverse removal procedure, tighten bolts, adjust drive belt tension and refill cooling system.

360" & 390" "F" MODELS

Removal – Drain cooling system. Loosen and remove drive belts. Remove fan, spacer, pulley and bolts from water pump hub. Disconnect lower radiator hose, heater hose and by-pass hose from water pump. Remove water pump attaching bolts and water pump assembly.

Installation – Clean all gasket surfaces, install new hoses (as required) and gaskets. Reverse removal procedure, tighten bolts, adjust drive belt tension and refill cooling system.

460" "E" & "F" MODELS

Removal – 1) Drain cooling system and remove all drive belts. Remove fan shroud attaching bolts. Remove fan, spacer, pulley and bolts from water pump hub. Remove fan shroud. Remove alternator adjusting arm attaching bolts and spacer, then position bracket to one side. Remove air conditioning

compressor (if equipped) attaching bolts and position compressor to left fender brace.

Installation – Clean all gasket surfaces, install new hoses as required, and new gaskets. Reinstall all related parts in reverse of removal procedure, tighten all bolts, adjust drive belt tension and refill cooling system.

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Water Pump Attaching Bolts	
"E" & "U" Models	
300"	15-20
302" & 351-W"	12-15
"F" & "P" Models	
300"	15-20
302" & 351-W"	12-15
360" & 390"	20-25
460"	12-15
Motor Home	12-15
Fan-to-Hub Bolts	
"E" & "U" Models	10-15
"F" & "P" Models	12-18