

## FORD MOTOR CO.

### COOLING SYSTEM CAPACITY

Application	Quarts
300"	
"E" Models .....	15.5
"E" Models W/Aux. Heater .....	17.3
F100 & 150 Man. Trans. ....	12.5
F100 & 150 Auto. Trans. ....	14.5
F150 & 250 4-WD & F350 .....	14.5
302"	
"U" Models (Bronco) Man. Trans. ....	15
"U" Models (Bronco) Auto. Trans .....	17
F100 Man. Trans. ....	15
F100 Auto. Trans. ....	17.5
F100 W/Air Cond. ....	17.5
351"-M	
F100 Man. Trans. ....	19.5
F100 Auto. Trans. ....	22
F100 W/Air Cond. ....	24
F100 W/Super Cooling Package .....	24
F150 & 250 .....	19.5
F150 & 250 W/Air Cond. ....	22
F150 & 250 W/Towing Package .....	22
F150 & 250 4-WD & F350 .....	22
351"-W	
"E" Models .....	17
"E" Models W/Air Cond. ....	20
400"	
"F" Models (Inc. 4-WD) .....	22
F100, 150 & 250 W/Super Cooling Package .....	24
460"	
"E" Models .....	28
"F" Models .....	22.5

### PRESSURE CAP

Application	PSI
All Models .....	13

### THERMOSTAT

**NOTE** — Due to the different variations of emission control devices and the geographical areas for which the vehicles are manufactured, the thermostats will vary from one model to another. Either a 160°, 180° or a 190° thermostat may be used.

### WATER PUMP

#### 300" "E" & "F" 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 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.

#### 351"-M & 400" "F" MODELS

**Removal** — 1) Drain cooling system and disconnect battery ground cable. Remove fan shroud bolts and position back over engine. Remove fan and spacer from pump. Remove air conditioning drive belt if equipped. Also remove compressor mount to water pump.

2) Loosen alternator and remove drive belt. Loosen power steering pump and remove drive belt. Remove water pump pulley. Remove alternator and bracket without disconnecting wires and position out of way.

3) Remove power steering pump and bracket without disconnecting lines and position out of way. Disconnect heater hose at water pump. Disconnect lower radiator hose at water pump. Remove water pump bolts and remove water pump.

**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.

## FORD MOTOR CO. (Cont.)

**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.

remaining water pump bolts. Remove water pump from engine. Remove separator plate from water pump.

### 460" "E" & "F" MODELS

**Removal** — 1) Drain cooling system. Remove fan shroud bolts. Remove fan assembly from water pump. Remove shroud. Loosen power steering pump bolts. If equipped with air conditioning, loosen compressor bolts and remove compressor and power steering drive belts.

2) Loosen alternator pivot bolts. Remove two attaching bolts and spacer. Remove drive belt, then rotate bracket out of the way. If equipped with air conditioning, remove mounting bolts and remove compressor. Wire out of way to the left fenderwell without disconnecting lines.

3) Disconnect lower radiator hose and heater hose at water pump. Loosen by-pass hose clamp at water pump. Remove

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Water Pump Attaching Bolts	
"E" & "U" Models	
300" .....	15-20
302" & 351-W" .....	12-15
"F" Models	
300" .....	15-20
302" & 351-W" .....	12-15
351"-M & 400" .....	12-18
460" .....	12-15
Motor Home .....	12-15
Fan-to-Hub Bolts	
"E" & "U" Models .....	10-15
"F" Models .....	12-18