

FORD MOTOR CO. (Cont.)

460" "E" & "F" MODELS

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

2) If equipped with air pump, remove pump pulley and belt. Disconnect by-pass hose and remove pump pivot bolt. Loosen adjustment arm and remove air pump. Loosen alternator pivot bolt and remove attaching bolts and spacer. Remove adjustment arm bolt and remove alternator and bracket as an assembly.

3) Remove power steering pump and lay aside. Disconnect radiator lower hose and heater hose from water pump. Loosen by-pass hose clamp at pump and remove attaching 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.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Water Pump Attaching Bolts	
"F" Models	
300", 302" & 351"W	
351"M, & 400"	12-18
460"	15-21
Fan-to-Hub Bolts	12-18

GENERAL MOTORS

CHEVROLET & GMC COOLING SYSTEM CAPACITY

Application ^①	Quarts	Application ^①	Quarts
250"		400"	
C10/30, K10/K30 Man. Trans.	②15	K10/30 Auto. Trans.	⑤⑥18
C10/30, K10/K30 Auto. Trans.	②15.5	G20/30 Auto. Trans.	③20
G10/30	17	454"	
P10/30	13.5	C10 Auto. Trans.	22.5
292"		C20/30 Auto Trans.	⑦24
C10/30, K10/K30 Man. Trans.	②15	① - When General Motors is referred to within this manual (rather than Chevrolet or GMC), the numerical vehicle series designations will be abbreviated for common reference to both Chevrolet and GMC. Chevrolet will use numerical series designations as listed. GMC models will be identified as follows: 10 = 1500; 20 = 2500; 30 = 3500	
C10/30, K10/K30 Auto. Trans.	②15.5	② - Add 1/2 qt. with Air Conditioning.	
P10/30	13.5	③ - Add 1/2 qt with Heavy Duty Cooling.	
305"		④ - Add 1 qt. with Air Conditioning.	
C10 & C20, K10	17.5	⑤ - Add 1 qt. with Heavy Duty Cooling.	
C20	②18	⑥ - Add 2 qt. with Air Conditioning.	
G10	④19	⑦ - Add 1/2 qt. with Trans. Oil Cooler.	
350" Gas			
C10/30 K10/30	②17.5		
G10/30	20		
P20/30	③16.5		
350" Diesel	18.0		

CHEVROLET & GMC PRESSURE CAP

Application	PSI
All Models	15

CHEVROLET & GMC THERMOSTAT

Application	① Rating °F
All	195
① - Thermostat should be full open at 25°F above stamped rating and fully closed at 10°F below stamped rating.	

Engine Cooling Systems

GENERAL MOTORS (Cont.)

WATER PUMP

Removal — 1) Disconnect battery cable and drain cooling system. Remove accessory drive belts and disconnect water hoses from water pump. Remove fan (or fan clutch) to water pump hub attaching bolts and remove fan and pulley.

NOTE — On some vehicles, it may be necessary to loosen or remove alternator and (if equipped) air conditioning, power steering brackets to prevent removal interference.

2) Remove pump-to-block attaching bolts and remove water pump.

Installation — 1) Clean mating surfaces of pump and block. Place a 1/8" bead of suitable sealer along sealing edge of pump.

NOTE — 6 Cylinder and 350" Diesel engines use gaskets.

2) Position pump on block and retain with attaching bolts. Replace brackets (if removed) and reverse removal procedures to complete installation.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Water Pump Attaching Bolts	
6 Cyl. Engines	15
V8 Engines	30
V8 Diesel Engines	13

INTERNATIONAL HARVESTER

COOLING SYSTEM CAPACITY

Application	Quarts
4 Cyl. Engine	12
6 Cyl. Diesel Engine	12.5
V8 Engines	20

THERMOSTAT

Application	Ⓢ Initial Open	Ⓢ Full Open
4 Cylinder Engine	167-174.....	192
V8 Engines.....	167-174.....	192

Ⓢ — Specifications are in °F.

WATER PUMP

NOTE — Water pump removal information for International Harvester models was not available from manufacturer at time of publication.

JEEP

COOLING SYSTEM CAPACITY

Application	Quarts
All Models	
258" Engines	10.5
304" Engines	13
360" Engines	14

THERMOSTAT

Application	Ⓢ Initial Open	Ⓢ Full Open
6 Cylinder Engines	192-198.....	218
V8 Engines.....	192-198.....	218

Ⓢ — Specifications are in °F.

WATER PUMP

ALL 6 CYLINDER MODELS

Removal — 1) Drain cooling system and disconnect all hoses at water pump. Remove drive belts and separate fan shroud (if equipped) from radiator.

PRESSURE CAP

Application	PSI
All Models	15

JEEP (Cont.)

2) Remove fan and hub assembly and remove fan shroud. Remove water pump and gasket.

NOTE — On some models, fan removal may be easier if shroud is rotated 1/2 turn.

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

ALL V8 MODELS

Removal — 1) Drain cooling system and disconnect negative battery cable. Disconnect upper radiator hose at radiator. Loosen all drive belts. Separate fan shroud (if equipped) from radiator and position rearward on engine.

2) If equipped with a fluid drive fan, remove fan assembly (do not unbolt fan blades) and shroud at the same time. There is sufficient room to move fan assembly toward radiator and clear water pump. On all other models, remove fan and hub assembly.

3) If equipped with air conditioning, install a double nut on compressor bracket-to-water pump stud and remove stud.

NOTE — Removing this stud eliminates removing mounting bracket. Remove alternator and mount bracket assembly (position to one side with wires attached). If equipped with power steering, remove nuts attaching pump to rear half of mounting

bracket. Remove bolts attaching front half of bracket to rear half.

4) Remove remaining upper bolt from inner air pump support brace, loosen lower bolt and drop brace away from power steering front bracket. Remove front half of power steering bracket from water pump mounting stud. Disconnect heater hose, by-pass hose and lower 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 nuts and bolts, adjust drive belt tension and refill cooling system.

CAUTION — Check to be sure wire coil is installed in lower radiator hose. Failure to install this coil will result in the hose collapsing at high engine RPM.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Water Pump-to-Block	
258" Engines	9-18
All V8 Engines.....	18-33
Water Pump-to-Timing Cover	
304" & 360" Engines	3.3-4.6
Fan Blade-to-Hub	
All Models	12-25