

Engine Cooling Systems

FORD MOTOR CO.

CAPACITY (in quarts)		
APPLICATION	STANDARD	OPTIONAL
1965		
170", 200"	9.5	.....
240"	16	.....
289" All exc. Galaxie, Custom	15	.....
Galaxie, Custom	16	.....
Lincoln	22.5	.....
Thunderbird	20.5	.....
All Others	21.5	.....
1966-67		
170", 200"	9.5	.....
240"	13	.....
289"	15	.....
Lincoln	23.5	.....
All Others	20.5	.....
1968		
170"	9.3	.....
200"	9	9.1
240"	12.8	13.4
289"	13.4	.....
302"	13.6	14.7
390"	20.2	20.6
427"	20.6	.....
428"	19.4	19.8
429"	18.9	19.2
Lincoln	23.5	23.5
1969		
170" Maverick	8.9	9.2
Falcon	9.3	.....
200" Maverick	8.7	8.9
Falcon	9.1	.....
Mustang	9.0	.....
240" Ford	14.3	.....
250" Fairlane, Mercury	9.9	.....
Mustang	9.8	.....
302" Exc. Ford, Mercury	13.5	15.0
Ford, Mercury	15.4	15.6
351" Fairlane, Montego	14.6	16.3
Mustang, Cougar	14.6	16.1
390" Fairlane, Montego	19.9	20.4
Mustang, Cougar	20.1	20.1
Ford, Mercury	20.1	20.5
428" Fairlane, Montego	19.1	.....
Mustang, Cougar	19.3	.....
429" Ford, Mercury	18.6	19.0
Thunderbird	18.5	19.0
Lincoln	19.5	.....
1970		
170"	9.2	9.2
200"	9.0	9.0
240"	14.4	14.4
250" Fairlane, Montego	11.4	11.4
Mustang	9.8	9.8

Engine Cooling Systems

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FORD MOTOR CO. (Cont.)

CAPACITY (in quarts)		
APPLICATION	STANDARD	OPTIONAL
302"	15.5	15.5
351"	16.5	16.5
390", 428"	20	20
429"	18.5	18.5
429" Cobra Jet & Boss	19.5	19.5
Lincoln	19.5	.....
1971		
1600 cc	6.75	.....
2000 cc	7.0	7.5
170"	9.0	9.2
200"	8.7	9.0
240"	14.1	14.1
250"	11.2	11.2
302" Exc. Ford, Mercury	15.1	15.5
Ford, Mercury	15.2	15.6
351" Exc. Mustang, Cougar, Ford, Mercury	15.3	16.3
Mustang, Cougar	15.7	16.3
Ford, Mercury	16.3	16.7
390"	20.3	20.9
400"	17.6	18.2
429" Exc. Thunderbird, Mercury	18.8	19.4
Mercury	18.8	18.8
Thunderbird, Cobra Jet, Super Cobra Jet	19.4	19.4
Lincoln	19.5	.....
1972		
1600 cc	7.8	.....
2000 cc	8.5	8.5
170"	9.2	.....
200"	9.0	.....
240"	14.2	14.2
250" Mustang	11.2	11.2
All Others	11.5	11.5
302" Mustang	15.2	15.5
All Others	15.2	15.2
351" Torino, Montego	15.5	15.8
Mustang, Cougar	15.8	15.8
Ford, Mercury, Meteor	16.3	16.7
400"	17.7	18.3
429" Thunderbird	18.8	19.8
All Others	18.8	18.8
460" Mercury	19.5	19.5
All Others	19.9	19.9
1973		
1600 cc	7.8	.....
2000 cc	8.5	.....
200" All Models	9.0	.....
250" Maverick, Comet	9.7	.....
250" Mustang, Cougar	11.2	.....
302" Maverick, Comet	13.4	14.2
302" Mustang, Cougar	15.2	15.6
351" C, CJ Mustang, Cougar	15.7	.....
351" C, CJ Torino, Montego	15.9	.....
351" W Torino, Montego	16.3	16.8
351" C Ford, Mercury	15.6	16.3
351" W Ford, Mercury	16.5	17.1
400" All Models	18.0	.....
429" Torino, Montego	18.8	.....
429" Ford, Mercury	19.4	.....
429" Thunderbird	18.8	19.5
460" Ford, Mercury, Lincoln, T-Bird	19.5	.....

FORD MOTOR CO. (Cont.)

FILL LEVEL

1964-67 Vertical Flow Radiators – Fill to bottom of filler neck.

1968-73 Vertical Flow Radiators – Fill to 1" (¾-1" Pinto) below bottom of filler neck.

1966-73 Cross Flow Radiators – Fill to "Fill Cold" mark when engine is cold.

THERMOSTAT

► **THERMOSTAT REPLACEMENT NOTE:** On all six cylinder engines when replacing thermostat, see if rocker cover front bolt boss extends into water passage at thermostat opening causing improper operation. If bolt boss interferes with thermostat, remove just enough of bottom of boss to provide proper clearance.

► **THERMOSTAT INSTALLATION NOTE:** On all six cylinder engines, coolant elbow gasket must be placed on cylinder head before thermostat is installed. Install thermostat with copper pellet (element) toward engine side of passage.

Thermostat is located in water outlet elbow. Test thermostat to see that they start to open at the correct temperatures as indicated in following table.

Thermostat Opening Temperatures ①

Year & Engine	Low Temp.	High Temp.
1964	155-162	185-192
1965 170", 200", 240", 430"	157-164	185-192
289", 352"	155-162	192-199
390", 427"	157-164	192-199
1966-67 170", 200", 430"	157-164	185-192
240", 390", 427", 462"	157-164	188-195
289", 352"	155-162	188-195
1968-73 (All Exc. Pinto)	157-164	188-195
Pinto	183-190	

① – All temperatures are in °F.

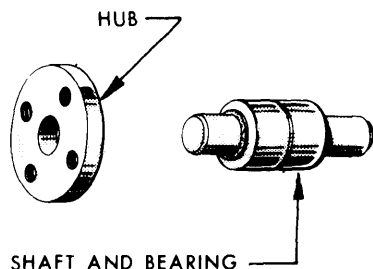
PRESSURE VALVE

1964-69 – Test radiator cap at 12-15 psi.

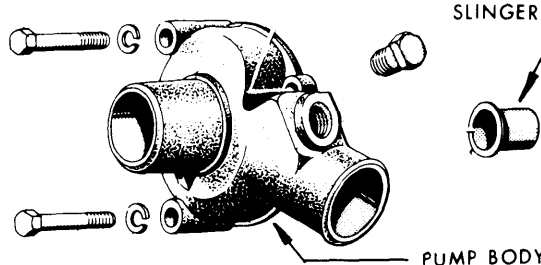
1970-73 – Test radiator cap at 12-16 psi.

WATER PUMP

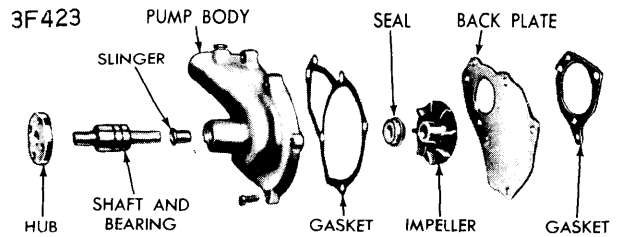
1964-67 – Special tool sets are available for water pump overhaul. Other suitable support plates and drivers may be used providing they support and apply pressure properly to shaft, bearing, housing, and other parts. *Observe the following specifications:*



SHAFT AND BEARING



144", 170", 200", 250" ENGINES WATER PUMP ASSEMBLY



223" ENGINE WATER PUMP ASSEMBLY

► **1964-67 144", 170", 200", 240" WATER PUMP NOTE:** Ford Motor Co. does not recommend overhaul or repair of water pump on these engines. If pump is damaged or worn remove and replace with new pump.

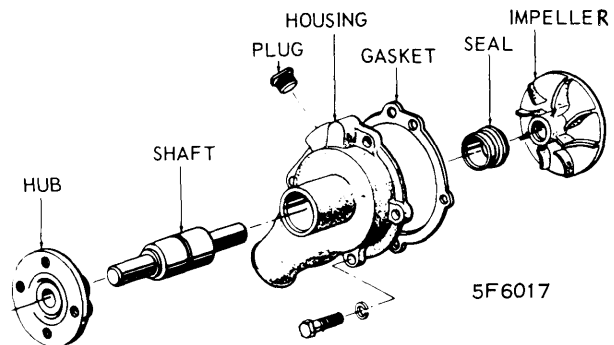
Water Pump Specifications

Year & Engine	① Impeller	② Hub
1964 223" .....	.015-.025"	4.32"
1964-67 260", 289" .....	.030-.050"	5.150"
1966-67 462" .....	.105-.115"	7.094"
1964-67 All Others .....	.070"	7.569"

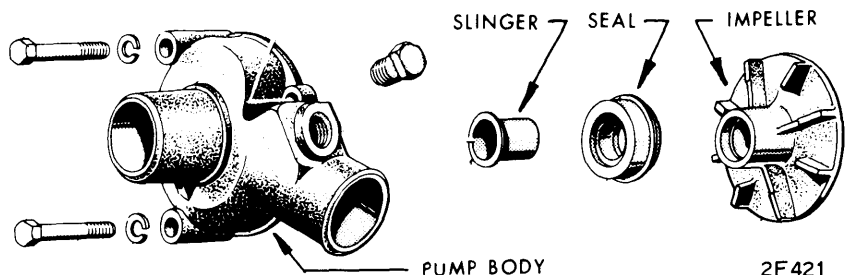
① – Distance between face of impeller and housing mounting face.

② – Distance from front face of pulley or hub to face of housing mounting legs.

1968-73 – Ford Motor Co. recommends replacement of water pump if wear or damage exists. No attempt to overhaul or repair should be made.



240" ENGINE WATER PUMP ASSEMBLY



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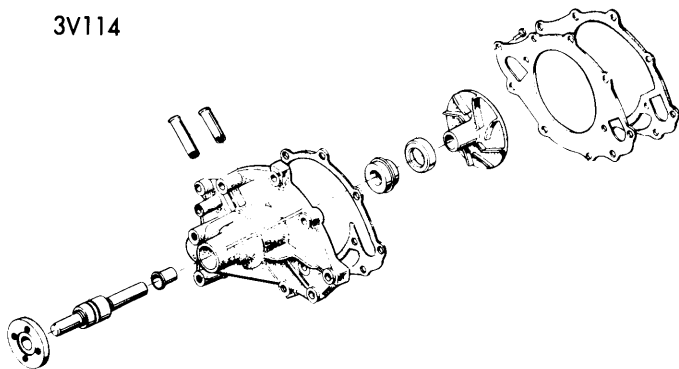
MAINTENANCE

1964-67 – Inspect, drain and clean cooling system every 24 months or 36,000 miles, whichever comes first.

1968-70 – Inspect, drain, clean and flush cooling system every 24 months.

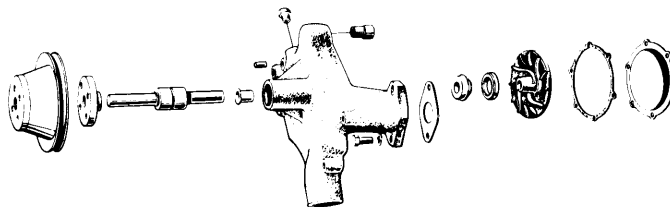
1971-73 – Inspect cooling system for rust and dirt every 12,000 miles. Drain, clean and flush cooling system every 24 months.

3V114



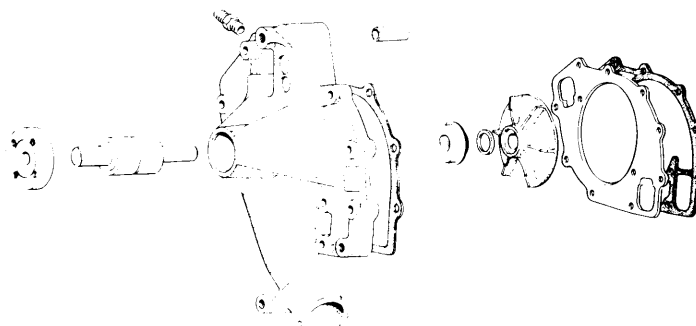
260", 289", 302", 351" W ENGINES WATER PUMP

3V115



352", 390", 410", 427", 428", 430", 462" ENGINES WATER PUMP

3V113



351"C, 400", 429", 460" ENGINES WATER PUMP