

Engine Cooling Systems

5-227

CHEVROLET

CAPACITY (in quarts)		
APPLICATION	STANDARD	OPTIONAL
1965		
153"	9	.....
194", 230"	12	.....
283"	17	.....
327" (Exc. Corvette)	16	.....
(Corvette)	19	.....
396" (325 HP)	23	.....
(425 HP)	24	.....
409"	22	.....
1966-67		
153"	9	.....
194", 230"	12	.....
250"	13	.....
283", 302"	16	.....
327" (Exc. Corvette)	15	.....
(Corvette)	16	.....
350"	15	.....
396"	23	.....
427" (390 HP)	22	.....
(All Others)	23	.....
1968		
153"	9	9
230"	12	12
250"	12	13
302"	16	.....
307"	17	18
327" (210 HP)	16	16
(250, 300, 325 HP)	15	16
(275 HP Exc. Chevrolet)	16	17
(275 HP Chevrolet)	15	16
(350 HP)	17	17
350" (Exc. Chevy II)	15	16
(Chevy II)	16	16
396" (325 HP Chevrolet)	22	22
(325 HP Camaro)	23	23
(325 HP Chevelle)	24	24
(350 HP)	24	24
427"	22	22
1969		
153"	9	9
230"	13	13
250"	12	12
302"	16	.....
307" (Chevelle)	17	18
(Nova)	17	17
327" (Chevrolet)	17	17
(Camaro)	17	18
350" (Chevelle, Camaro)	16	17
(Chevrolet)	15	16
(Nova)	16	16
(Corvette)	15	18
396"	23	24
427" (Chevrolet)	22	23
(Corvette)	22	.....

Engine Cooling Systems

CHEVROLET (Cont.)

CAPACITY (in quarts)		
APPLICATION	STANDARD	OPTIONAL
1970		
153"	9	9
230", 250"	12	13
307"	15	16
350"	16	16
396"	23	23
400"	23	24
454"	22	23
1971		
140"	6.5	7.0
250"	12	12
307"	15	16
350" (Exc. Corvette)	16	17
(270 HP Corvette)	15	16
(330 HP Corvette)	18	19
400"	16.5	17.5
402" (Exc. Camaro)	23	24
(Camaro)	24	25
454" (365 HP Exc. Corvette)	23	24
(365 HP Corvette)	22	23
(425 HP Exc. Corvette)	22	23
(425 HP Corvette)	20	21
1972		
140"	6.5	7.0
250" (Exc. Camaro)	12	12
(Camaro)	12	13
307"	15	16
350" (Exc. Chevrolet, Corvette)	16	16
(Chevrolet)	16	17
(200 HP Corvette) ①	15	18
(255 HP Corvette) ①	18	18
400"	16	17
402" (Exc. Camaro, Monte Carlo)	23	24
(Camaro)	24	24
(Monte Carlo)	24	24
454" (Exc. Monte Carlo, Corvette)	22	23
(Monte Carlo)	23	24
(Corvette)	22	24
1973		
140"	8.6	9.0
250"	14.0	16.0
307"	17.0	20.0
350" (Exc. Corvette)	18.0	20.0
(Corvette)	19.0	21.0
400"	18.0	20.0
454" (Exc. Chevrolet)	24.0	26.0
(Chevrolet)	24.0	27.0

① – Net Horsepower.

CHEVROLET (Cont.)

FILL LEVEL

All Vertical Flow Radiators – Fill to bottom of filler neck when warm, fill to 1" below bottom of filler neck when cold.

All Cross Flow Radiators – Fill to 3" below bottom of filler neck when cold.

NOTE – If equipped with dealer installed coolant recovery system keep overflow tank 1/2 full. Do NOT remove radiator cap to check coolant level.

THERMOSTAT

Thermostat applications and testing are as follows:

Application	ⓐ Initial Open	ⓑ Fully Open
1965-66	177-183	205
1967 (4 & 6 Cyl.)	192-198	220
(V8)	177-183	205
1968-69	192-198	220
1970 (Exc. 350" H.P.)	192-198	220
(350" Hi. Perf.)	177-183	205
1971 (Exc. 350", 454" H.P.)	192-198	220
(350", 454" Hi Perf.)	177-183	205
1972-73 (Exc. 350" H.P.)	192-198	220
(350" Hi. Perf.)	177-183	205

ⓐ – All temperatures in °F.

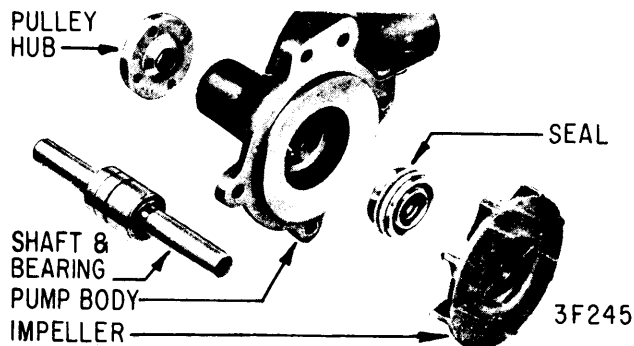
PRESSURE VALVE

All models use a 15 lb. pressure cap, test at 14-16 lbs.

WATER PUMP

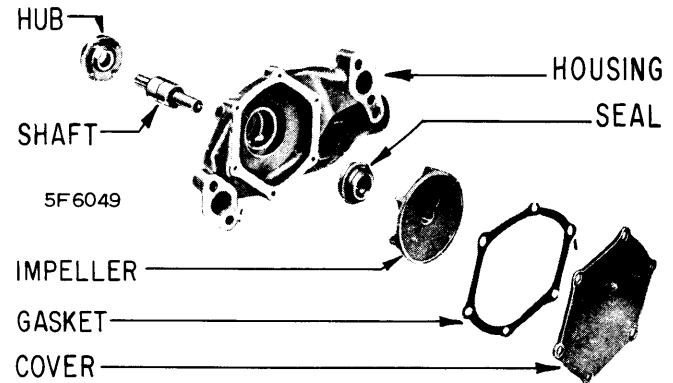
NOTE – 1971-73 water pumps are serviced as an assembly only.

See illustration for arrangement of parts. Use suitable drivers and supports when overhauling water pump. Mark position of hub on shaft before disassembling pump so hub can be reinstalled in same position. Observe the following when reassembling pump: Seal outer flange must bottom against pump body. Press hub on shaft to same mark made at disassembly or use special Hub Locating Gauge J-9583 or J-22162 and see table below for hub locating position. Press impeller on shaft so there is .010-.035" clearance between impeller vanes and pump body.



4 & 6 CYL. WATER PUMP (TYPICAL)

CAUTION – Shaft and bearing assembly must not be pushed out of housing by applying force on shaft, or bearings will be damaged. Shaft and bearing assembly should be pressed out of rear of pump body only. Keep thermostatic fan clutch in vertical position to prevent fluid leakage.



V8 WATER PUMP (TYPICAL)

Fan Hub Location On Water Pumps

Application	ⓐ Hub Location
1964-67	
153"	3 7/8"
194" (Chevy II)	3 7/8"
(Chevelle)	3 1/8"
230" (Exc. Chevelle)	3 7/8"
(Chevelle)	ⓑ 4 3/8"
250" (Exc. Chevelle)	3 7/8"
(Chevelle)	ⓑ 4 3/8"
283", 327", 350"	5 9/16"
396", 409", 427"	5 3/4"
1968	
153", 230", 250"	ⓐ 3 7/8"
302"	5 11/16"
307", 350"	5 9/16"
327" (Exc. Hi Perf. Corvette)	5 9/16"
(Hi Perf. Corvette)	5 11/16"
396", 427"	5 3/4"
1969	
153", 230", 250"	ⓐ 3 7/8"
302", 307", 327"	6 15/16"
350" (Exc. Corvette)	6 15/16"
(Corvette)	5 9/16"
396", 427" (Exc. 427" Corvette)	7 9/32"
427" Corvette	5 3/4"
1970	
153", 230", 250"	3 7/8"
307"	6 15/16"
350" (Exc. Corvette)	6 15/16"
(Corvette)	5 9/16"
396"	7 9/32"
400" (265 HP)	6 15/16"
(330 HP)	7 9/32"
454"	7 9/32"

ⓐ – Distance from hub front to pump housing machined surface.

ⓑ – 3 1/8" for 1967 Chevelle with air conditioning.

ⓒ – 3 1/8" for 1968-69 Chevy II with air conditioning.

MAINTENANCE

Inspect, drain, clean and flush cooling system every 24 months.