



*Replacement Parts for  
Detroit Diesel® Series 60® Engines*  
**PARTS CATALOG**

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ENGINE SYSTEMS™

**11.1L, 12.7L Series 60 In-Frame Overhaul**

KIT NUMBER	COMPONENT NO.	QTY.	PART SIZE	PART DESCRIPTION	PART APPLICATION
FP-S60	FP-23519625	6		Cylinder Kit Complete	Engs. w/Standard Liner; 2.50 mm top ring; round piston design
	FP-23519637	6		Cylinder Kit Complete	Engs. w/Standard Liner; 3.50 mm top ring
	FP-23523951	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 2.50 mm top ring; round piston design
	FP-23523952	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 3.50 mm top ring
	FP-23523954	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 2.50 mm top ring; oval piston design
	FP-8929710	6	Std.	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929711	6	.254 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929712	6	.508 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929713	6	.762 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-23515581	6	Std.	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515582	6	.254 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515583	6	.508 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515584	6	.762 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-8929670A	6	Std.	Main Bearing Plain	
	FP-8929671A	6	.254 mm	Main Bearing Plain	
	FP-8929672A	6	.508 mm	Main Bearing Plain	
	FP-8929673A	6	.762 mm	Main Bearing Plain	
	FP-8929680	1	Std.	Main Bearing Flanged	
	FP-8929681	1	.254 mm	Main Bearing Flanged	
	FP-8929682	1	.508 mm	Main Bearing Flanged	
	FP-8929683	1	.762 mm	Main Bearing Flanged	
	FP-8929085	2	Std.	Thrust Washer	
	FP-8929697	2	.127 mm	Thrust Washer	
	FP-8929698	2	.254 mm	Thrust Washer	
	FP-8929102	1		Oil Pan Gasket	
	FP-23501572	1		Head Gasket Set	





## SERIES 60 ENGINES

### 11.1L, 12.7L Series 60 Complete Overhaul

KIT NUMBER	COMPONENT NO.	QTY.	PART SIZE	PART DESCRIPTION	PART APPLICATION
FP-S60-OH	FP-23519625	6		Cylinder Kit Complete	Engs. w/Standard Liner; 2.50 mm top ring; round piston design
	FP-23519637	6		Cylinder Kit Complete	Engs. w/Standard Liner; 3.50 mm top ring
	FP-23523951	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 2.50 mm top ring; round piston design
	FP-23523952	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 3.50 mm top ring
	FP-23523954	6		Cylinder Kit Complete	Engs. w/Top Liner Cooling (TLC); 2.50 mm top ring; oval piston design
	FP-8929710	6	Std.	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929711	6	.254 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929712	6	.508 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-8929713	6	.762 mm	Rod Bearing Pair	1.7100" or 43.430 mm O.A.L.
	FP-23515581	6	Std.	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515582	6	.254 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515583	6	.508 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-23515584	6	.762 mm	Rod Bearing Pair	1.8670." or 47.430 mm O.A.L.
	FP-8929670A	6	Std.	Main Bearing Plain	
	FP-8929671A	6	.254 mm	Main Bearing Plain	
	FP-8929672A	6	.508 mm	Main Bearing Plain	
	FP-8929673A	6	.762 mm	Main Bearing Plain	
	FP-8929680	1	Std.	Main Bearing Flanged	
	FP-8929681	1	.254 mm	Main Bearing Flanged	
	FP-8929682	1	.508 mm	Main Bearing Flanged	
	FP-8929683	1	.762 mm	Main Bearing Flanged	
	FP-8929085	2	Std.	Thrust Washer	
	FP-8929697	2	.127 mm	Thrust Washer	
	FP-8929698	2	.254 mm	Thrust Washer	
	FP-23512691	1		Complete Gasket Set	Crankshaft seals not included





<b>Engine Finding Index</b>			
Engine	Line No.	Engine	Line No.
11.1L 677 SOHC Turbo-Diesel L6 5.118" Bore.....	1	12.7L 774 SOHC Turbo-Diesel L6 5.118" Bore.....	2

<b>Engine Code Index</b>					
Engine Code	Engine Description	Line No.	Engine Code	Engine Description	Line No.
60 Series ... Multi-Purpose Engines.....	11.1L 677 SOHC Turbo-Diesel L6 5.118" Bore.....	1	60 Series ... Multi-Purpose Engines.....	12.7L 774 SOHC Turbo-Diesel L6 5.118" Bore.....	2

*Multi-Purpose Engines Series 60 Eng. 1*  
11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore

<b>CYL. HEAD &amp; PARTS</b>					
QTY	GASKETS	PART NO.	SIZE	DESCRIPTION	
1	Valve Cover Gasket	FP-23506153 *		Intermediate to upper rocker cover gskt.; 98.38" circumference; Diamond shaped 0.146" thick; For 3 piece cover; Use w/O.E. No. 23505973 rocker cover	
1	Valve Cover Gasket	FP-23511992 *		Intermediate to upper rocker cover gskt.; 98.38" circumference; Diamond shaped 0.186" thick; For 3 piece cover	
1	Valve Cover Gasket	FP-8929803 *		Lower to upper rocker cover gskt.; 106.68" circumference; Diamond shaped 0.146" thick; for 2 piece cover; Use w/O.E. No. 8929653 rocker cover	
1	Valve Cover Gasket	FP-23511991 *		Lower to upper rocker cover gskt.; 106.68" circumference; Diamond shaped 0.186" thick; For 2 piece cover	
1	Valve Cover Gasket	FP-23522269 *		New design rocker cover; Black polyacrylate	
1	Valve Cover Gasket	FP-23516322		Standard rocker cover; Gray silicone	
1	Breather Seal Ring	FP-5103646			
1	Head Gasket	FP-23530421			
1	Head Gasket	FP-23522588 +		When depleted use FP-23530421	
1	Head Set	FP-23501572			
<b>QTY</b>	<b>FREEZE PLUGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
2	Pipe Plug	FP-8923313		Cylinder head	
<b>QTY</b>	<b>HEAD BOLTS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
38	Head Bolt	FP-23530768 *			
38	Washer	FP-8929328		Cylinder head bolt	
<b>QTY</b>	<b>MISCELLANEOUS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
8	Bolt	FP-11504822		Rocker cover mntg.	
<b>QTY</b>	<b>MANIFOLD STUDS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
4	Exhaust Manifold Stud	FP-23507438		Manifold to Turbo; M10 x 1.5 x 44.0	
4	Exhaust Manifold Stud	FP-8929425		Manifold to Turbo; M10 x 1.5 x 50.0	
<b>QTY</b>	<b>VALVE</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
12	Intake	FP-8929589		30 deg. seat; Also available as Sealed Power No. V2514; 1.7320" Head Dia., .3421" Stem Dia., 8.4980" O.A.L.	
12	Exhaust	FP-23506350		Identification H	
12	Exhaust	FP-8929590		30 deg. seat; Identification U; Also available as Sealed Power No. V3947; 1.5760" Head Dia., .3421" Stem Dia., 8.4980" O.A.L.	
12	Exhaust Valve Kit	FP-23507504		Identification H; Incl. valve, valve seal, keeper & rotocap	
12	Exhaust Valve Kit	FP-23501577		Identification U; Incl. valve, valve seal, keeper & rotocap	
12	Intake Valve Kit	FP-23501576		Incl. valve, valve seal, keeper & rotocap	
48	Keeper	FP-8929573			
<b>QTY</b>	<b>VALVE SEAT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
12	Exh.	FP-8929126			
12	Int.	FP-8929127			
<b>QTY</b>	<b>VALVE GUIDE</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
24	Guide	FP-23518571		Exh.; 14.30MM - 14.32MM Dia.	
24	Guide	FP-23518572		Exh.; 14.43MM - 14.45MM Dia.	
<b>QTY</b>	<b>VALVE SPRING</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
24	Spring	FP-8929415		Exh.	
<b>QTY</b>	<b>VALVE MISC.</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>	
24	Rotocap	FP-8929105			
4	Isolator, Rocker Cover Bolt	FP-8929255		Use w/One piece rocker cover	
4	Isolator, Rocker Cover Bolt	FP-23517912		Use w/One piece rocker cover	
10	Isolator, Rocker Cover Bolt	FP-23517911		Use w/Two piece rocker cover	
1	Oil Fill Cap	FP-5117362			
1	Chain, Oil Filler Cap	FP-5113825			

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<b>1 Multi-Purpose Engines Series 60 Eng.</b> (cont.) 11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore				
<b>CYL. HEAD &amp; PARTS (cont.)</b>				
QTY	VALVE MISC. (cont.)	PART NO.	SIZE	DESCRIPTION
1	Crankcase Breather	FP-5101760		4"
QTY	VALVE SEAL	PART NO.	SIZE	DESCRIPTION
24	Valve Stem Seal	FP-23523930		
QTY	ROCKER PARTS	PART NO.	SIZE	DESCRIPTION
12	Adj. Screw	FP-23520819		Exh. valve adjusting
12	Adj. Screw	FP-23520818		Int. valve adjusting
30	Nut	FP-23514371		Arm adj. screw
30	Valve Button	FP-5138643		Arm adj. screw
<b>IGNITION</b>				
QTY	IGNITION	PART NO.	SIZE	DESCRIPTION
6	Spark Plug	FP-23515946		Natural gas Eng.
4	Bolt	FP-11504822		ECM mounting plate
8	Isolator Bushing	FP-23502879		ECM mounting; DDECII
8	Isolator Bushing	FP-23512307 *		ECM mounting; DDECIII
<b>ELECTRICAL</b>				
QTY	ELECTRICAL	PART NO.	SIZE	DESCRIPTION
5	Bolt	FP-11504822		Tach drive cover
1	Gasket	FP-8929130		Tach drive cover
<b>INT &amp; EXH MANIFOLDS</b>				
QTY	INT. & EXH. MANIFOLDS	PART NO.	SIZE	DESCRIPTION
12	Bolt	FP-8929357		Manifold to head; M10 x 1.5 x 1.20
3	Exhaust Manifold Gasket	FP-23511666		
3	Air Intake Gasket	FP-23517875		
<b>CAMSHAFT GROUP</b>				
QTY	TIMING	PART NO.	SIZE	DESCRIPTION
1	Bushing	FP-8929108		Cam Gear
1	Pipe Plug	FP-8924517		Gear case cover; 3/8" x 18 square
2	Dowel Pin	FP-8929015		Gear case housing
QTY	CAMSHAFT/LIFTER	PART NO.	SIZE	DESCRIPTION
2	Bolt	FP-11504822		Balance shaft thrust plate
1	Sealing Ring	FP-23521935		Thrust plate; Cylinder head
1	O-Ring	FP-23528491		Thrust plate; Gear housing
1	O-Ring	FP-8929318		Thrust plate; Gear housing; When depleted use FP-23528491
1	Oil Seal	FP-8929740		Cap bearing seal; .134" x .074" x .480"
2	Oil Seal	FP-23522975 *		Front cap seal
1	Oil Seal	FP-23521894		Thrust plate; Cylinder head
<b>ACCESSORY DRIVE</b>				
QTY	ACCESSORY DRIVE	PART NO.	SIZE	DESCRIPTION
1	Lock Ring	FP-23509204		Accessory drive
1	Lock Ring	FP-23511746		Accessory gear
1	Lock Ring	FP-8929062		Air compressor
1	Lock Ring	FP-23505643		Power steering pump
1	Ball Brg.	FP-23518178		Accessory drive
1	Ball Brg.	FP-23509203		Accessory gear shaft
1	Ball Brg.	FP-8929024		Bearing assembly
1	Ball Brg.	FP-23503704		Fan shaft inner
1	Ball Brg.	FP-23503535		Fan shaft outer
1	Cylindrical Brg.	FP-23511745		Accessory drive
2	Snap Ring	FP-8929064		Accessory drive; 3.121" OD
1	Retaining Ring	FP-8929216		Accessory drive; 1.618" OD
1	Retaining Ring	FP-8929063		Accessory drive; 3.734" OD
1	O-Ring	FP-8929253		Acc. drive cover; .139" x 4.609" ID
1	Gasket	FP-8929130		Upper right rear & cam access cover
1	Gasket	FP-8929299		Acc. drive front
1	Redi-Sleeve	99133		Use w/FP-8929154 seal
1	Oil Seal	FP-8929154		Oil accessory drive; Also available as National No. 484156V
<b>AIR COMPRESSOR</b>				
QTY	AIR COMPRESSOR	PART NO.	SIZE	DESCRIPTION
1	Ball Brg.	FP-8929820		
1	Drive Coupling	FP-5141773		Air compressor drive
1	Gasket	FP-8929299		Drive housing

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**Multi-Purpose Engines Series 60 Eng. 1**  
 11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore (cont.)

<b>AIR COMPRESSOR (cont.)</b>				
<b>QTY</b>	<b>AIR COMPRESSOR (cont.)</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Air Compressor Mounting Gskt.	FP-23515145		
<b>FUEL SYSTEM &amp; PARTS</b>				
<b>QTY</b>	<b>FUEL INJECTION</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Fuel Injector Seal Ring	FP-23515470		Injector hole tube
2	Fuel Injector Seal Ring	FP-5234699		Lower
1	Fuel Injector Seal Ring	FP-5234702		Upper
6	Injector Hole Tube Kit	FP-23501580		
6	Adj. Screw	FP-23520820		Injector adjusting
6	Bolt	FP-8929393 *		Injector clamp
<b>QTY</b>	<b>FUEL FILTERS &amp; PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Fuel Pump Coupling	FP-23505249		For high capacity fuel pump
1	Fuel Pump Coupling	FP-8929479		For std. capacity fuel pump
1	Fuel Pump Coupling	FP-8929787		15.875MM ID
1	Fuel Pump Drive	FP-23506558		For high capacity fuel pump
1	Fuel Pump Drive	FP-23511964		For std. capacity fuel pump
1	Fuel Pump Hub	FP-8929480		12.70MM ID
1	Fuel Pump Gear	FP-23506546		Drive gear; .375
1	Fuel Pump Gear	FP-23511959		Driven gear; .275
1	Fuel Pump Drive Shaft	FP-23506545		Drive shaft
1	Fuel Pump Drive Shaft	FP-23506549		Driven shaft
1	Fuel Cap	FP-23506555		Pump Relief Valve
1	Fuel Pump Check Valve Kit	FP-23506563 *		
1	Fuel Pump Check Valve	FP-8923528		Injector check valve
1	Fuel Pump Spacer	FP-23506560		Relief Valve
1	Fuel Pump Relief Valve Spring	FP-23506557 *		
1	Sealing Ring	FP-23506556		Relief valve
1	Cylindrical Brg.	FP-8923526		Fuel pump shaft
5	Bolt	FP-11504822		Fuel pump drive assy.
1	Fuel Pump Repair Part	FP-23506564		Relief valve shear pin
1	Fuel Pump Body Plug	FP-23506553		
1	O-Ring	FP-8929253		Fuel cover; .139" x 4.609" ID
1	O-Ring	FP-23524657		Fuel/water separator
1	Fuel Pump Drive Adapter Gskt.	FP-5150193		
1	Fuel Pump Gasket	FP-23505248		Fuel pump mounting
<b>QTY</b>	<b>TURBOCHARGER</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Turbocharger Exhaust Gasket	FP-8929529		Inlet connection
1	Turbocharger Oil Return Gskt.	FP-8929285		
<b>GOVERNOR</b>				
<b>QTY</b>	<b>GOVERNOR</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Retaining Ring	FP-9411502		Mechanical governor weight
<b>COOLING SYSTEM</b>				
<b>QTY</b>	<b>WATER PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Water Pump Shaft	FP-8929157		Front mounted pumps
1	Water Pump Shaft	FP-23505896		Gear case mounted pumps
1	Water Pump Impeller	FP-8929512		Front mounted pumps
1	Water Pump Impeller	FP-23517973		Gear case mounted pumps
1	Water Pump Repair/Rebuild Kit	FP-23509105		
1	Water Pump Cover	FP-8922383		Non-metallic
1	Woodruff Key	FP-8929334		FWP shaft
1	Water Pump Retainer Ring	FP-8929427		Bearing & seal
1	Water Pump Retainer Ring	FP-8922407		FWP cover
1	Water Pump Mech. Shaft Seal	FP-23522433		Unitized seal
1	Ball Brg.	FP-8929422		Water pump shaft
1	Lock Nut	FP-11509584		Water pump
1	Water Pump Gasket	FP-23507073		
1	Rect. or Square Seal	FP-23505024		Water pump cover
1	Water Pump Seal Ring	FP-8929158		Water pump; Front mounted pumps
1	Water Pump Seal Ring	FP-23520377		Water pump; Gear case mounted pumps
1	Water Pump Seal Ring	FP-8929510		Water pump cover; Front mounted pumps
1	Oil Seal	FP-5103951		Fan shaft
1	Oil Seal	FP-8929213		Fan spindle
1	Oil Seal	FP-8929134		Water pump; Lip type
1	O-Ring	FP-23512048		Water pump cover; Gear case mounted pumps
5	Bolt	FP-11504822		Fan mount support
2	Bolt	FP-11504822		Water pump cover

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<b>1 Multi-Purpose Engines Series 60 Eng.</b>				
<b>(cont.) 11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore</b>				
<b>COOLING SYSTEM (cont.)</b>				
<b>QTY</b>	<b>WATER PUMP (cont.)</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Retaining Ring	FP-8929216		Fan drive; 1.618" OD
1	Retaining Ring	FP-8929063		Fan drive; 3.734" OD
<b>QTY</b>	<b>HOSES</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
2	Silicone Hose	FP-8929875		Water bypass tube
2	Silicone Hose	FP-23506325		Water pump to cooler
<b>QTY</b>	<b>THERMOSTAT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Thermostat	FP-23503827		160 Deg.
1	Thermostat	FP-23503825		180 Deg.
1	Thermostat	FP-8929878		190 Deg.
2	Oil Seal	FP-5132155		Thermostat
<b>ENGINE BLOCK &amp; PARTS</b>				
<b>QTY</b>	<b>GASKETS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Oil Pan Gasket	FP-8929102		Standard oil pan; Gray silicone
1	Oil Pan Gasket	FP-23522279 *		Use for oil pan w/o cord modified seal system
10	Oil Pan Isolator Bushing	FP-23517242		Oil pan
10	Bolt	FP-11504571 *		Oil pan
1	Copper Washer	FP-23513842		Oil gauge adapter
1	Oil Seal	FP-8929740		Block to gear case; .134" x .074" x .480"
<b>QTY</b>	<b>GASKET SETS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Complete Overhaul Gasket Set	FP-23512691		Crankshaft seals not incl.
<b>QTY</b>	<b>CAM BEARINGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
7	Cam Brg.	FP-8929690	STD	
7	Cam Brg.	FP-8929691	.254MM	
7	Cam Brg.	FP-8929692	.508MM	
7	Cam Brg.	FP-8929693	.762MM	
<b>QTY</b>	<b>OIL COOLERS &amp; FILTERS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Oil Cooler	FP-8547625		4 plate
1	Oil Cooler	FP-8547626		8 plate
6	Bolt	FP-11504822		Transfer cooler adapter housing
2	O-Ring	FP-8929289		Oil cooler housing
1	Oil Cooler Core Gasket	FP-8929348		
2	Oil Cooler Seal Ring	FP-23508392		Filter adapter housing
1	Gasket	FP-23506247		Core housing
2	Rect. or Square Seal	FP-8929280		Oil cooler
<b>QTY</b>	<b>FREEZE PLUGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Pipe Plug	FP-8926993		
1	Pipe Plug	FP-8923313		Block
<b>CRANKSHAFT/OIL PUMP</b>				
<b>QTY</b>	<b>CRANKSHAFT &amp; OIL PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Crankshaft	FP-23515597		12 hole
1	Vibration Damper	FP-8929294		
1	Ball Brg.	FP-23503707		Position Clutch pilot
1	Oil Seal/Sleeve Kit	FP-23513578		Rear; Double lip wrap around
1	Oil Seal/Sleeve Kit	FP-23516969		Rear; Teflon lip
6	Washer	FP-5133981		Vibration damper
1	Lo Pressure Regulator Valve	FP-8922740		
1	Bushing	FP-5127978 *		Oil pump
1	Oil Pump Spring	FP-5126327		Outlet bypass valve
1	Bolt	FP-11504822		Inlet tube
4	Bolt	FP-11504822		Outlet pipe
2	Bolt	FP-11504822		Pressure regulator
2	Bolt	FP-11504822		Pressure relief vlv.
1	Bolt	FP-11504822		Screen bracket
1	Oil Pump Intake Gasket	FP-8929344		Pump to block
1	Oil Pump Outlet Gasket	FP-8929347		
1	Rect. or Square Seal	FP-8929341		Oil filter
1	Rect. or Square Seal	FP-8929340		Oil filter bypass
1	Lo Press. Reg. Body Gasket	FP-5117269		
1	Gasket	FP-8929302		Fill tube adapter
1	Gasket	FP-8929302		Oil filter cover
1	Oil Filter Seal Ring	FP-8929342		Oil filter adapter
1	Oil Drain Plug	FP-23511574		1" Pipe plug
<b>QTY</b>	<b>MAIN BEARINGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Main Set	7363M Std-10		
6	Plain Main Brg.	FP-8929670A	STD	

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\* New Item — Check For Availability



**Multi-Purpose Engines Series 60 Eng. 1**  
 11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore (cont.)

**CRANKSHAFT/OIL PUMP (cont.)**

QTY	MAIN BEARINGS (cont.)	PART NO.	SIZE	DESCRIPTION
6	Plain Main Brg.	FP-8929671A	.254MM	
6	Plain Main Brg.	FP-8929672A	.508MM	
6	Plain Main Brg.	FP-8929673A	.762MM	
1	Flanged Main Brg.	FP-8929680	STD	
1	Flanged Main Brg.	FP-8929681	.254MM	
1	Flanged Main Brg.	FP-8929682	.508MM	
1	Flanged Main Brg.	FP-8929683	.762MM	
1	Lower End Bearing Kit	FP-23531604 *		Incl. 1.7100" or 43.430MM O.A.L. rod bearings
1	Lower End Bearing Kit	FP-23531605		Incl. 1.8670" or 47.430MM O.A.L. rod bearings
1	Thrust Washer Set	FP-8929085S *		Position Upper; Also available as Sealed Power No. 4771F
2	Thrust Washer	FP-8929085		Position Upper
2	Thrust Washer	FP-8929697		Position Upper; .127MM oversize
2	Thrust Washer	FP-8929698		Position Upper; .254MM oversize

**CYLINDER COMPONENTS**

QTY	LINERS	PART NO.	SIZE	DESCRIPTION
6	Liner w/o Sealing Ring	FP-23532361 *		Engs. w/Standard liner
6	Liner w/o Sealing Ring	FP-8929442		Engs. w/Standard liner; When depleted use FP-23532361
6	Liner w/o Sealing Ring	FP-23530226 *		Engs. w/Top Liner Cooling (TLC)
6	Liner w/o Sealing Ring	FP-23523392		Engs. w/Top Liner Cooling (TLC); When depleted use FP-23530226
6	Wet Sleeve	FP-23531249 *		FP-23523392 liner incl.
6	Wet Sleeve	FP-23523948		FP-23523392 liner incl.; When depleted use FP-23531249
6	Wet Sleeve	FP-23532468 *		FP-8929442 liner incl.
6	Wet Sleeve	FP-23505278		FP-8929442 liner incl.; When depleted use FP-23532468
6	Cylinder Kit Complete	FP-23532590 *		Engs. w/Standard liner; 2.50MM top ring; round piston design
6	Cylinder Kit Complete	FP-23519625		Engs. w/Standard liner; 2.50MM top ring; round piston design; When depleted use FP-23532590
6	Cylinder Kit Complete	FP-23519637		Engs. w/Standard liner; 3.50MM top ring
6	Cylinder Kit Complete	FP-23523954		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; oval piston design
6	Cylinder Kit Complete	FP-23532555 *		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; round piston design
6	Cylinder Kit Complete	FP-23523951		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; round piston design; When depleted use FP-23532555
6	Cylinder Kit Complete	FP-23523952		Engs. w/Top Liner Cooling (TLC); 3.50MM top ring
6	Sealing Ring, Liner	FP-8929013		Crevice seal
12	Sealing Ring, Liner	FP-8929176		D-ring seal
6	Cntr. Bore Insert	FP-23525500		
6	Lower Block Bore Sleeve	FP-20042		

QTY	PISTONS	PART NO.	SIZE	DESCRIPTION
6	Piston Kit w/Pin & Retainers	FP-23519646		Engs. w/Top Liner Cooling (TLC) & 2.50MM top ring. Oval piston design
6	Piston Kit w/Pin & Retainers	FP-23519624		Engs. w/Top Liner Cooling (TLC) & 2.50MM top ring. Round piston design
6	Piston Kit w/Pin & Retainers	FP-23519635		Engs. w/3.50MM top ring
6	Piston Skirt	FP-23521802 *		Aluminum skirt for forged steel crown articulated piston
6	Piston Skirt	FP-23516681		Ductile iron for standard cross head piston
6	Pin	FP-8929087		
12	Piston Pin Bolt	FP-8929337		
12	Piston Pin Bolt Spacer	FP-8929504 *		
6	Piston Cooling Nozzle	FP-23528493 *		

QTY	CONNECTING RODS & BRGS.	PART NO.	SIZE	DESCRIPTION
12	Con. Rod Bolt	FP-8929355 *		
12	Con. Rod Nut	FP-8929019		
6	Rod Pair	FP-8929712	.508MM	O.A.L. 1.7100" or 43.430MM
6	Rod Pair	FP-8929713	.762MM	O.A.L. 1.7100" or 43.430MM
6	Rod Pair	FP-8929710	STD	O.A.L. 1.7100" or 43.430MM; Also available as Sealed Power No. 4770P
6	Rod Pair	FP-8929711	.254MM	O.A.L. 1.7100" or 43.430MM; Also available as Sealed Power No. 4770P .25MM
6	Rod Pair	FP-23515583	.508MM	O.A.L. 1.8670" or 47.430MM
6	Rod Pair	FP-23515584	.762MM	O.A.L. 1.8670" or 47.430MM
6	Rod Pair	FP-23515581	STD	O.A.L. 1.8670" or 47.430MM; Also available as Sealed Power No. 4770PA
6	Rod Pair	FP-23515582	.254MM	O.A.L. 1.8670" or 47.430MM; Also available as Sealed Power No. 4770PA .25MM

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<b>1 Multi-Purpose Engines Series 60 Eng.</b>				
<b>(cont.) 11.1L 677 SOHC Turbo-Diesel L6, 5.118" Bore</b>				
<b>CYLINDER COMPONENTS (cont.)</b>				
<b>QTY</b>	<b>PISTON RINGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Ring Set Single Cylinder	FP-23503747	STD	2.50MM top ring
6	Ring Set Single Cylinder	FP-23505729	STD	3.50MM top ring
6	Compression Ring	FP-8929845		Bottom
6	Compression Ring	FP-8929844		Top; 2.50MM
6	Compression Ring	FP-23504941		Top; 3.50MM
6	Oil Ring	FP-23515500		
6	Oil Ring Expander	FP-23529379 *		
6	Oil Ring Expander	FP-23515499		When depleted use FP-23529379
<b>KITS</b>				
<b>QTY</b>	<b>OVERHAUL KIT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	In-Frame Overhaul Kit	FP-S60		
1	Complete Overhaul Kit	FP-S60-OH		
<b>2 Multi-Purpose Engines Series 60 Eng.</b>				
<b>12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore</b>				
<b>CYL. HEAD &amp; PARTS</b>				
<b>QTY</b>	<b>GASKETS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Valve Cover Gasket	FP-23506153 *		Intermediate to upper rocker cover gskt.; 98.38" circumference; Diamond shaped 0.146" thick; For 3 piece cover; Use w/O.E. No. 23505973 rocker cover
1	Valve Cover Gasket	FP-23511992 *		Intermediate to upper rocker cover gskt.; 98.38" circumference; Diamond shaped 0.186" thick; For 3 piece cover
1	Valve Cover Gasket	FP-8929803 *		Lower to upper rocker cover gskt.; 106.68" circumference; Diamond shaped 0.146" thick; for 2 piece cover; Use w/O.E. No. 8929653 rocker cover
1	Valve Cover Gasket	FP-23511991 *		Lower to upper rocker cover gskt.; 106.68" circumference; Diamond shaped 0.186" thick; For 2 piece cover
1	Valve Cover Gasket	FP-23522269 *		New design rocker cover; Black polyacrylate
1	Valve Cover Gasket	FP-23516322		Standard rocker cover; Gray silicone
1	Breather Seal Ring	FP-5103646		
1	Head Gasket	FP-23530421		
1	Head Gasket	FP-23522588 +		When depleted use FP-23530421
1	Head Set	FP-23501572		
<b>QTY</b>	<b>FREEZE PLUGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
2	Pipe Plug	FP-8923313		Cylinder head
<b>QTY</b>	<b>HEAD BOLTS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
38	Head Bolt	FP-23530768 *		
38	Washer	FP-8929328		Cylinder head bolt
<b>QTY</b>	<b>MISCELLANEOUS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
8	Bolt	FP-11504822		Rocker cover mntg.
<b>QTY</b>	<b>MANIFOLD STUDS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
4	Exhaust Manifold Stud	FP-23507438		Manifold to Turbo; M10 x 1.5 x 44.0
4	Exhaust Manifold Stud	FP-8929425		Manifold to Turbo; M10 x 1.5 x 50.0
<b>QTY</b>	<b>VALVE</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
12	Intake	FP-8929589		30 deg. seat; Also available as Sealed Power No. V2514; 1.7320" Head Dia., .3421" Stem Dia., 8.4980" O.A.L.
12	Exhaust	FP-23506350		Identification H
12	Exhaust	FP-8929590		30 deg. seat; Identification U; Also available as Sealed Power No. V3947; 1.5760" Head Dia., .3421" Stem Dia., 8.4980" O.A.L.
12	Exhaust Valve Kit	FP-23507504		Identification H; Incl. valve, valve seal, keeper & rotocap
12	Exhaust Valve Kit	FP-23501577		Identification U; Incl. valve, valve seal, keeper & rotocap
12	Intake Valve Kit	FP-23501576		Incl. valve, valve seal, keeper & rotocap
48	Keeper	FP-8929573		
<b>QTY</b>	<b>VALVE SEAT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
12	Exh.	FP-8929126		
12	Int.	FP-8929127		
<b>QTY</b>	<b>VALVE GUIDE</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
24	Guide	FP-23518571		Exh.; 14.30MM - 14.32MM Dia.
24	Guide	FP-23518572		Exh.; 14.43MM - 14.45MM Dia.
<b>QTY</b>	<b>VALVE SPRING</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
24	Spring	FP-8929415		Exh.
<b>QTY</b>	<b>VALVE MISC.</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
24	Rotocap	FP-8929105		
4	Isolator, Rocker Cover Bolt	FP-8929255		Use w/One piece rocker cover

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**Multi-Purpose Engines Series 60 Eng. 2**  
**12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore (cont.)**

<b>CYL. HEAD &amp; PARTS (cont.)</b>				
<b>QTY</b>	<b>VALVE MISC. (cont.)</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
4	Isolator, Rocker Cover Bolt	FP-23517912		Use w/One piece rocker cover
10	Isolator, Rocker Cover Bolt	FP-23517911		Use w/Two piece rocker cover
1	Oil Fill Cap	FP-5117362		
1	Chain, Oil Filler Cap	FP-5113825		
1	Crankcase Breather	FP-5101760	4"	
<b>QTY</b>	<b>VALVE SEAL</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
24	Valve Stem Seal	FP-23523930		
<b>QTY</b>	<b>ROCKER PARTS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
12	Adj. Screw	FP-23520819		Exh. valve adjusting
12	Adj. Screw	FP-23520818		Int. valve adjusting
30	Nut	FP-23514371		Arm adj. screw
30	Valve Button	FP-5138643		Arm adj. screw
<b>IGNITION</b>				
<b>QTY</b>	<b>IGNITION</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Spark Plug	FP-23515946		Natural gas Eng's.
4	Bolt	FP-11504822		ECM mounting plate
8	Isolator Bushing	FP-23502879		ECM mounting; DDECII
8	Isolator Bushing	FP-23512307 *		ECM mounting; DDECIII
<b>ELECTRICAL</b>				
<b>QTY</b>	<b>ELECTRICAL</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
5	Bolt	FP-11504822		Tach drive cover
1	Gasket	FP-8929130		Tach drive cover
<b>INT &amp; EXH MANIFOLDS</b>				
<b>QTY</b>	<b>INT. &amp; EXH. MANIFOLDS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
12	Bolt	FP-8929357		Manifold to head; M10 x 1.5 x 1.20
3	Exhaust Manifold Gasket	FP-23511666		
3	Air Intake Gasket	FP-23517875		
<b>CAMSHAFT GROUP</b>				
<b>QTY</b>	<b>TIMING</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Bushing	FP-8929108		Cam gear
1	Pipe Plug	FP-8924517		Gear case cover; 3/8" x 18 square
2	Dowel Pin	FP-8929015		Gear case housing
<b>QTY</b>	<b>CAMSHAFT/LIFTER</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
2	Bolt	FP-11504822		Balance shaft thrust plate
1	Sealing Ring	FP-23521935		Thrust plate; Cylinder head
1	O-Ring	FP-23528491		Thrust plate; Gear housing
1	O-Ring	FP-8929318		Thrust plate; Gear housing; When depleted use FP-23528491
1	Oil Seal	FP-8929740		Cap bearing seal; .134" x .074" x .480"
2	Oil Seal	FP-23522975 *		Front cap seal
1	Oil Seal	FP-23521894		Thrust plate; Cylinder head
<b>ACCESSORY DRIVE</b>				
<b>QTY</b>	<b>ACCESSORY DRIVE</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Lock Ring	FP-23509204		Accessory drive
1	Lock Ring	FP-23511746		Accessory gear
1	Lock Ring	FP-8929062		Air compressor
1	Lock Ring	FP-23505643		Power steering pump
1	Ball Brg.	FP-23518178		Accessory drive
1	Ball Brg.	FP-23509203		Accessory gear shaft
1	Ball Brg.	FP-8929024		Bearing assembly
1	Ball Brg.	FP-23503704		Fan shaft inner
1	Ball Brg.	FP-23503535		Fan shaft outer
1	Cylindrical Brg.	FP-23511745		Accessory drive
2	Snap Ring	FP-8929064		Accessory drive; 3.121" OD
1	Retaining Ring	FP-8929216		Accessory drive; 1.618" OD
1	Retaining Ring	FP-8929063		Accessory drive; 3.734" OD
1	O-Ring	FP-8929253		Acc. drive cover; .139" x 4.609" ID
1	Gasket	FP-8929130		Upper right rear & cam access cover
1	Gasket	FP-8929299		Acc. drive front
1	Redi-Sleeve	99133		Use w/FP-8929154 seal
1	Oil Seal	FP-8929154		Oil accessory drive; Also available as National No. 484156V

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<b>2 Multi-Purpose Engines Series 60 Eng.</b>				
<b>(cont.) 12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore</b>				
<b>AIR COMPRESSOR</b>				
<b>QTY</b>	<b>AIR COMPRESSOR</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Ball Brg.	FP-8929820		
1	Drive Coupling	FP-5141773		Air compressor drive
1	Gasket	FP-8929299		Drive housing
1	Air Compressor Mounting Gskt.	FP-23515145		Air Compressor Mntg.
<b>FUEL SYSTEM &amp; PARTS</b>				
<b>QTY</b>	<b>FUEL INJECTION</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Fuel Injector Seal Ring	FP-23515470		Injector hole tube
2	Fuel Injector Seal Ring	FP-5234699		Lower
1	Fuel Injector Seal Ring	FP-5234702		Upper
6	Injector Hole Tube Kit	FP-23501580		
6	Adj. Screw	FP-23520820		Injector adjusting
6	Bolt	FP-8929393 *		Injector clamp
<b>QTY</b>	<b>FUEL FILTERS &amp; PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Fuel Pump Coupling	FP-23505249		For high capacity fuel pump
1	Fuel Pump Coupling	FP-8929479		For std. capacity fuel pump
1	Fuel Pump Coupling	FP-8929787		15.875MM ID
1	Fuel Pump Drive	FP-23506558		For high capacity fuel pump
1	Fuel Pump Drive	FP-23511964		For std. capacity fuel pump
1	Fuel Pump Hub	FP-8929480		12.70MM ID
1	Fuel Pump Gear	FP-23506546		Drive gear; .375
1	Fuel Pump Gear	FP-23511959		Driven gear; .275
1	Fuel Pump Drive Shaft	FP-23506545		Drive shaft
1	Fuel Pump Drive Shaft	FP-23506549		Driven shaft
1	Fuel Cap	FP-23506555		Pump Relief Valve
1	Fuel Pump Check Valve Kit	FP-23506563 *		
1	Fuel Pump Check Valve	FP-8923528		Injector check valve
1	Fuel Pump Spacer	FP-23506560		Relief Valve
1	Fuel Pump Relief Valve Spring	FP-23506557 *		
1	Sealing Ring	FP-23506556		Relief valve
1	Cylindrical Brg.	FP-8923526		Fuel pump shaft
5	Bolt	FP-11504822		Fuel pump drive assy.
1	Fuel Pump Repair Part	FP-23506564		Relief valve shear pin
1	Fuel Pump Body Plug	FP-23506553		
1	O-Ring	FP-8929253		Fuel cover; .139" x 4.609" ID
1	O-Ring	FP-23524657		Fuel/water separator
1	Fuel Pump Drive Adapter Gskt.	FP-5150193		
1	Fuel Pump Gasket	FP-23505248		Fuel pump mounting
<b>QTY</b>	<b>TURBOCHARGER</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Turbocharger Exhaust Gasket	FP-8929529		Inlet connection
1	Turbocharger Oil Return Gskt.	FP-8929285		
<b>GOVERNOR</b>				
<b>QTY</b>	<b>GOVERNOR</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Retaining Ring	FP-9411502		Mechanical governor weight
<b>COOLING SYSTEM</b>				
<b>QTY</b>	<b>WATER PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Water Pump Shaft	FP-8929157		Front mounted pumps
1	Water Pump Shaft	FP-23505896		Gear case mounted pumps
1	Water Pump Impeller	FP-8929512		Front mounted pumps
1	Water Pump Impeller	FP-23517973		Gear case mounted pumps
1	Water Pump Repair/Rebuild Kit	FP-23509105		
1	Water Pump Cover	FP-8922383		Non-metallic
1	Woodruff Key	FP-8929334		FWP shaft
1	Water Pump Retainer Ring	FP-8929427		Bearing & seal
1	Water Pump Retainer Ring	FP-8922407		FWP cover
1	Water Pump Mech. Shaft Seal	FP-23522433		Unitized seal
1	Ball Brg.	FP-8929422		Water pump shaft
1	Lock Nut	FP-11509584		Water pump
1	Water Pump Gasket	FP-23507073		
1	Rect. or Square Seal	FP-23505024		Water pump cover
1	Water Pump Seal Ring	FP-8929158		Water pump; Front mounted pumps
1	Water Pump Seal Ring	FP-23520377		Water pump; Gear case mounted pumps
1	Water Pump Seal Ring	FP-8929510		Water pump cover; Front mounted pumps
1	Oil Seal	FP-5103951		Fan shaft
1	Oil Seal	FP-8929213		Fan spindle
1	Oil Seal	FP-8929134		Water pump; Lip type

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**Multi-Purpose Engines Series 60 Eng. 2**  
12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore (cont.)

<b>COOLING SYSTEM (cont.)</b>				
<b>QTY</b>	<b>WATER PUMP (cont.)</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	O-Ring	FP-23512048		Water pump cover; Gear case mounted pumps
5	Bolt	FP-11504822		Fan mount support
2	Bolt	FP-11504822		Water pump cover
1	Retaining Ring	FP-8929216		Fan drive; 1.618" OD
1	Retaining Ring	FP-8929063		Fan drive; 3.734" OD
<b>QTY</b>	<b>HOSES</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
2	Silicone Hose	FP-8929875		Water bypass tube
2	Silicone Hose	FP-23506325		Water pump to cooler
<b>QTY</b>	<b>THERMOSTAT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Thermostat	FP-23503827		160 Deg.
1	Thermostat	FP-23503825		180 Deg.
1	Thermostat	FP-8929878		190 Deg.
2	Oil Seal	FP-5132155		Thermostat
<b>ENGINE BLOCK &amp; PARTS</b>				
<b>QTY</b>	<b>GASKETS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Oil Pan Gasket	FP-8929102		Standard oil pan; Gray silicone
1	Oil Pan Gasket	FP-23522279 *		Use for oil pan w/o cord modified seal system
10	Oil Pan Isolator Bushing	FP-23517242		Oil pan
10	Bolt	FP-11504571 *		Oil pan
1	Copper Washer	FP-23513842		Oil gauge adapter
1	Oil Seal	FP-8929740		Block to gear case; .134" x .074" x .480"
<b>QTY</b>	<b>GASKET SETS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Complete Overhaul Gasket Set	FP-23512691		Crankshaft seals not incl.
<b>QTY</b>	<b>CAM BEARINGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
7	Cam Brg.	FP-8929690	STD	
7	Cam Brg.	FP-8929691	.254MM	
7	Cam Brg.	FP-8929692	.508MM	
7	Cam Brg.	FP-8929693	.762MM	
<b>QTY</b>	<b>OIL COOLERS &amp; FILTERS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Oil Cooler	FP-8547625		4 plate
1	Oil Cooler	FP-8547626		8 plate
6	Bolt	FP-11504822		Transfer cooler adapter housing
2	O-Ring	FP-8929289		Oil cooler housing
1	Oil Cooler Core Gasket	FP-8929348		
2	Oil Cooler Seal Ring	FP-23508392		Filter adapter housing
1	Gasket	FP-23506247		Core housing
2	Rect. or Square Seal	FP-8929280		Oil cooler
<b>QTY</b>	<b>FREEZE PLUGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Pipe Plug	FP-8926993		
1	Pipe Plug	FP-8923313		Block
<b>CRANKSHAFT/OIL PUMP</b>				
<b>QTY</b>	<b>CRANKSHAFT &amp; OIL PUMP</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Crankshaft	FP-23515599		12 Hole
1	Vibration Damper	FP-8929502		
1	Ball Brg.	FP-23503707		Position Clutch pilot
1	Oil Seal/Sleeve Kit	FP-23513578		Rear; Double lip wrap around
1	Oil Seal/Sleeve Kit	FP-23516969		Rear; Teflon lip
6	Washer	FP-5133981		Vibration damper
1	Lo Pressure Regulator Valve	FP-8922740		
1	Bushing	FP-5127978 *		Oil pump
1	Oil Pump Spring	FP-5126327		Outlet bypass valve
1	Bolt	FP-11504822		Inlet tube
4	Bolt	FP-11504822		Outlet pipe
2	Bolt	FP-11504822		Pressure regulator
2	Bolt	FP-11504822		Pressure relief vlv.
1	Bolt	FP-11504822		Screen bracket
1	Oil Pump Intake Gasket	FP-8929344		Pump to block
1	Oil Pump Outlet Gasket	FP-8929347		
1	Rect. or Square Seal	FP-8929341		Oil filter
1	Rect. or Square Seal	FP-8929340		Oil filter bypass
1	Lo Press. Reg. Body Gasket	FP-5117269		
1	Gasket	FP-8929302		Fill tube adapter
1	Gasket	FP-8929302		Oil filter cover
1	Oil Filter Seal Ring	FP-8929342		Oil filter adapter
1	Oil Drain Plug	FP-23511574		1" Pipe plug

(continued on next page)

\* New Item — Check For Availability

<b>2 Multi-Purpose Engines Series 60 Eng.</b>				
<b>(cont.) 12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore</b>				
<b>CRANKSHAFT/OIL PUMP (cont.)</b>				
<b>QTY</b>	<b>MAIN BEARINGS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	Main Set	7363M Std-10		
6	Plain Main Brg.	FP-8929670A	STD	
6	Plain Main Brg.	FP-8929671A	.254MM	
6	Plain Main Brg.	FP-8929672A	.508MM	
6	Plain Main Brg.	FP-8929673A	.762MM	
1	Flanged Main Brg.	FP-8929680	STD	
1	Flanged Main Brg.	FP-8929681	.254MM	
1	Flanged Main Brg.	FP-8929682	.508MM	
1	Flanged Main Brg.	FP-8929683	.762MM	
1	Lower End Bearing Kit	FP-23531604 *		Incl. 1.7100" or 43.430MM O.A.L. rod bearings
1	Lower End Bearing Kit	FP-23531605		Incl. 1.8670" or 47.430MM O.A.L. rod bearings
1	Thrust Washer Set	FP-8929085S *		Also available as Sealed Power No. 4771F
2	Thrust Washer	FP-8929085		Position Upper
2	Thrust Washer	FP-8929697		Position Upper; .127MM oversize
2	Thrust Washer	FP-8929698		Position Upper; .254MM oversize
<b>CYLINDER COMPONENTS</b>				
<b>QTY</b>	<b>LINERS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Liner w/o Sealing Ring	FP-23532361 *		Engs. w/Standard liner
6	Liner w/o Sealing Ring	FP-8929442		Engs. w/Standard liner; When depleted use FP-23532361
6	Liner w/o Sealing Ring	FP-23530226 *		Engs. w/Top Liner Cooling (TLC)
6	Liner w/o Sealing Ring	FP-23523392		Engs. w/Top Liner Cooling (TLC); When depleted use FP-23530226
6	Wet Sleeve	FP-23531249 *		FP-23523392 liner incl.
6	Wet Sleeve	FP-23523948		FP-23523392 liner incl.; When depleted use FP-23531249
6	Wet Sleeve	FP-23532468 *		FP-8929442 liner incl.
6	Wet Sleeve	FP-23505278		FP-8929442 liner incl.; When depleted use FP-23532468
6	Cylinder Kit Complete	FP-23532590 *		Engs. w/Standard liner; 2.50MM top ring; round piston design
6	Cylinder Kit Complete	FP-23519625		Engs. w/Standard liner; 2.50MM top ring; round piston design; When depleted use FP-23532590
6	Cylinder Kit Complete	FP-23519637		Engs. w/Standard liner; 3.50MM top ring
6	Cylinder Kit Complete	FP-23523954		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; oval piston design
6	Cylinder Kit Complete	FP-23532555 *		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; round piston design
6	Cylinder Kit Complete	FP-23523951		Engs. w/Top Liner Cooling (TLC); 2.50MM top ring; round piston design; When depleted use FP-23532555
6	Cylinder Kit Complete	FP-23523952		Engs. w/Top Liner Cooling (TLC); 3.50MM top ring
6	Sealing Ring, Liner	FP-8929013		Crevice seal
12	Sealing Ring, Liner	FP-8929176		D-ring seal
6	Cntr. Bore Insert	FP-23525500		
6	Lower Block Bore Sleeve	FP-20042		
<b>QTY</b>	<b>PISTONS</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Piston Kit w/Pin & Retainers	FP-23519646		Engs. w/Top Liner Cooling (TLC) & 2.50MM top ring. Oval piston design
6	Piston Kit w/Pin & Retainers	FP-23519624		Engs. w/Top Liner Cooling (TLC) & 2.50MM top ring. Round piston design
6	Piston Kit w/Pin & Retainers	FP-23519635		Engs. w/3.50MM top ring
6	Piston Skirt	FP-23521802 *		Aluminum skirt for forged steel crown articulated piston
6	Piston Skirt	FP-23516681		Ductile iron for standard cross head piston
6	Pin	FP-8929087		
12	Piston Pin Bolt	FP-8929337		
12	Piston Pin Bolt Spacer	FP-8929504 *		
6	Piston Cooling Nozzle	FP-23528493 *		
<b>QTY</b>	<b>CONNECTING RODS &amp; BRGS.</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
12	Con. Rod Bolt	FP-8929355 *		
12	Con. Rod Nut	FP-8929019		
6	Rod Pair	FP-8929712	.508MM	O.A.L. 1.7100" or 43.430MM
6	Rod Pair	FP-8929713	.762MM	O.A.L. 1.7100" or 43.430MM
6	Rod Pair	FP-8929710	STD	O.A.L. 1.7100" or 43.430MM; Also available as Sealed Power No. 4770P
6	Rod Pair	FP-8929711	.254MM	O.A.L. 1.7100" or 43.430MM; Also available as Sealed Power No. 4770P .25MM
6	Rod Pair	FP-23515583	.508MM	O.A.L. 1.8670" or 47.430MM
6	Rod Pair	FP-23515584	.762MM	O.A.L. 1.8670" or 47.430MM
6	Rod Pair	FP-23515581	STD	O.A.L. 1.8670" or 47.430MM; Also available as Sealed Power No. 4770PA

(continued on next page)

**Multi-Purpose Engines Series 60 Eng. 2**  
12.7L 774 SOHC Turbo-Diesel L6, 5.118" Bore (cont.)

**CYLINDER COMPONENTS (cont.)**

<b>CONNECTING RODS &amp; BRGS. (cont.)</b>				
<b>QTY</b>		<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
6	Rod Pair	<b>FP-23515582</b>	<i>.254MM</i>	O.A.L. 1.8670" or 47.430MM; Also available as Sealed Power No. 4770PA .25MM
<b>PISTON RINGS</b>				
6	Ring Set Single Cylinder	<b>FP-23503747</b>	<i>STD</i>	2.50MM top ring
6	Ring Set Single Cylinder	<b>FP-23505729</b>	<i>STD</i>	3.50MM top ring
6	Compression Ring	<b>FP-8929845</b>		Bottom
6	Compression Ring	<b>FP-8929844</b>		Top; 2.50MM
6	Compression Ring	<b>FP-23504941</b>		Top; 3.50MM
6	Oil Ring	<b>FP-23515500</b>		
6	Oil Ring Expander	<b>FP-23529379 *</b>		
6	Oil Ring Expander	<b>FP-23515499</b>		When depleted use FP-23529379
<b>KITS</b>				
<b>QTY</b>	<b>OVERHAUL KIT</b>	<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
1	In-Frame Overhaul Kit	<b>FP-S60</b>		
1	Complete Overhaul Kit	<b>FP-S60-OH</b>		

# Numerical List



Part No.	Manufacturer and Line No.	Part No.	Manufacturer and Line No.	Part No.	Manufacturer and Line No.
FPS60*	DET 1, 2	FP23519624	DET 1, 2	FP8929176	DET 1, 2
FPS60OH*	DET 1, 2	FP23519625	DET 1, 2	FP8929213*	DET 1, 2
FP11504571*	DET 1, 2	FP23519635	DET 1, 2	FP8929216*	DET 1, 2
FP11504822	DET 1, 2	FP23519637	DET 1, 2	FP8929253	DET 1, 2
FP11509584	DET 1, 2	FP23519646	DET 1, 2	FP8929255	DET 1, 2
FP20042*	DET 1, 2	FP23520377	DET 1, 2	FP8929258	DET 1, 2
FP23501572	DET 1, 2	FP23520818*	DET 1, 2	FP8929285	DET 1, 2
FP23501576	DET 1, 2	FP23520819*	DET 1, 2	FP8929289	DET 1, 2
FP23501577	DET 1, 2	FP23520820*	DET 1, 2	FP8929294	DET 1
FP23501580	DET 1, 2	FP23521802*	DET 1, 2	FP8929299	DET 1, 2
FP23502879*	DET 1, 2	FP23521894	DET 1, 2	FP8929302	DET 1, 2
FP23503535	DET 1, 2	FP23521935	DET 1, 2	FP8929318	DET 1, 2
FP23503704	DET 1, 2	FP23522269*	DET 1, 2	FP8929328*	DET 1, 2
FP23503707	DET 1, 2	FP23522279*	DET 1, 2	FP8929334*	DET 1, 2
FP23503747	DET 1, 2	FP23522433	DET 1, 2	FP8929337	DET 1, 2
FP23503825	DET 1, 2	FP23522588+	DET 1, 2	FP8929340	DET 1, 2
FP23503827	DET 1, 2	FP23522975*	DET 1, 2	FP8929341	DET 1, 2
FP23504941	DET 1, 2	FP23523392	DET 1, 2	FP8929342	DET 1, 2
FP23505024	DET 1, 2	FP23523930	DET 1, 2	FP8929344	DET 1, 2
FP23505248	DET 1, 2	FP23523948	DET 1, 2	FP8929347	DET 1, 2
FP23505249*	DET 1, 2	FP23523951	DET 1, 2	FP8929348	DET 1, 2
FP23505278	DET 1, 2	FP23523952	DET 1, 2	FP8929355*	DET 1, 2
FP23505643*	DET 1, 2	FP23523954	DET 1, 2	FP8929357*	DET 1, 2
FP23505729	DET 1, 2	FP23524657*	DET 1, 2	FP8929393*	DET 1, 2
FP23505896	DET 1, 2	FP23525500*	DET 1, 2	FP8929415	DET 1, 2
FP23506153*	DET 1, 2	FP23528491*	DET 1, 2	FP8929422	DET 1, 2
FP23506247	DET 1, 2	FP23528493*	DET 1, 2	FP8929425*	DET 1, 2
FP23506325*	DET 1, 2	FP23529379*	DET 1, 2	FP8929427	DET 1, 2
FP23506350*	DET 1, 2	FP23530226*	DET 1, 2	FP8929442	DET 1, 2
FP23506545*	DET 1, 2	FP23530421*	DET 1, 2	FP8929479	DET 1, 2
FP23506546*	DET 1, 2	FP23530768*	DET 1, 2	FP8929480*	DET 1, 2
FP23506549*	DET 1, 2	FP23531249*	DET 1, 2	FP8929502	DET 2
FP23506553*	DET 1, 2	FP23531604*	DET 1, 2	FP8929504*	DET 1, 2
FP23506555*	DET 1, 2	FP23531605*	DET 1, 2	FP8929510	DET 1, 2
FP23506556*	DET 1, 2	FP23532361*	DET 1, 2	FP8929512	DET 1, 2
FP23506557*	DET 1, 2	FP23532468*	DET 1, 2	FP8929529	DET 1, 2
FP23506558*	DET 1, 2	FP23532555*	DET 1, 2	FP8929573	DET 1, 2
FP23506560*	DET 1, 2	FP23532590*	DET 1, 2	FP8929589*	DET 1, 2
FP23506563*	DET 1, 2	FP5101760	DET 1, 2	FP8929590*	DET 1, 2
FP23506564*	DET 1, 2	FP5103646	DET 1, 2	FP8929670A	DET 1, 2
FP23507073	DET 1, 2	FP5103951	DET 1, 2	FP8929671A	DET 1, 2
FP23507438*	DET 1, 2	FP5113825	DET 1, 2	FP8929672A	DET 1, 2
FP23507504	DET 1, 2	FP5117269	DET 1, 2	FP8929673A	DET 1, 2
FP23508392	DET 1, 2	FP5117362	DET 1, 2	FP8929680	DET 1, 2
FP23509105	DET 1, 2	FP5126327	DET 1, 2	FP8929681	DET 1, 2
FP23509203*	DET 1, 2	FP5127978*	DET 1, 2	FP8929682	DET 1, 2
FP23509204*	DET 1, 2	FP5132155	DET 1, 2	FP8929683	DET 1, 2
FP23511574	DET 1, 2	FP5133981	DET 1, 2	FP8929688	DET 1, 2
FP23511666	DET 1, 2	FP5138643	DET 1, 2	FP8929690	DET 1, 2
FP23511745*	DET 1, 2	FP5141773	DET 1, 2	FP8929691	DET 1, 2
FP23511746*	DET 1, 2	FP5150193	DET 1, 2	FP8929692	DET 1, 2
FP23511959*	DET 1, 2	FP5234699*	DET 1, 2	FP8929693	DET 1, 2
FP23511964*	DET 1, 2	FP5234702*	DET 1, 2	FP8929697	DET 1, 2
FP23511991*	DET 1, 2	FP8547625	DET 1, 2	FP8929698	DET 1, 2
FP23511992*	DET 1, 2	FP8547626	DET 1, 2	FP8929710*	DET 1, 2
FP23512048*	DET 1, 2	FP8922383	DET 1, 2	FP8929711*	DET 1, 2
FP23512307*	DET 1, 2	FP8922407	DET 1, 2	FP8929712*	DET 1, 2
FP23512691*	DET 1, 2	FP8922740	DET 1, 2	FP8929713*	DET 1, 2
FP23513578	DET 1, 2	FP8923313	DET 1, 2	FP8929740	DET 1, 2
FP23513842	DET 1, 2	FP8923526	DET 1, 2	FP8929787*	DET 1, 2
FP23514371	DET 1, 2	FP8923528*	DET 1, 2	FP8929803*	DET 1, 2
FP23515145	DET 1, 2	FP8924517	DET 1, 2	FP8929820*	DET 1, 2
FP23515470	DET 1, 2	FP8926993	DET 1, 2	FP8929844	DET 1, 2
FP23515499	DET 1, 2	FP8929013	DET 1, 2	FP8929845	DET 1, 2
FP23515500	DET 1, 2	FP8929015	DET 1, 2	FP8929875*	DET 1, 2
FP23515581	DET 1, 2	FP8929019	DET 1, 2	FP8929878	DET 1, 2
FP23515582	DET 1, 2	FP8929024	DET 1, 2	FP9411502*	DET 1, 2
FP23515583	DET 1, 2	FP8929062	DET 1, 2	7363M	DET 1, 2
FP23515584	DET 1, 2	FP8929063*	DET 1, 2	99133	DET 1, 2
FP23515597	DET 1	FP8929064*	DET 1, 2		
FP23515599	DET 2	FP8929085	DET 1, 2		
FP23515946	DET 1, 2	FP8929085S*	DET 1, 2		
FP23516322	DET 1, 2	FP8929087	DET 1, 2		
FP23516681	DET 1, 2	FP8929102*	DET 1, 2		
FP23516969	DET 1, 2	FP8929105	DET 1, 2		
FP23517242*	DET 1, 2	FP8929108*	DET 1, 2		
FP23517875	DET 1, 2	FP8929126	DET 1, 2		
FP23517911*	DET 1, 2	FP8929127	DET 1, 2		
FP23517912*	DET 1, 2	FP8929130	DET 1, 2		
FP23517973	DET 1, 2	FP8929134	DET 1, 2		
FP23518178*	DET 1, 2	FP8929154*	DET 1, 2		
FP23518571	DET 1, 2	FP8929157	DET 1, 2		
FP23518572	DET 1, 2	FP8929158	DET 1, 2		



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