



## **IPD Products for Natural Gas Engines**

Caterpillar® G342

Caterpillar® G342

Caterpillar® G353

Caterpillar® G379

Caterpillar® G398

Caterpillar® G399

Caterpillar® G3304

Caterpillar® G3306

Caterpillar® G3406

Caterpillar® G3408

Caterpillar® G3412

Caterpillar® G3508

Caterpillar® G3512

Caterpillar® G3516

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# IPD parts for Caterpillar® G342 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 71B 1 - Up</b>			
<b>For Cylinder Heads Using 3/8" Stem Valves</b>			
Valve , Exhaust	1W1819	6	
Valve , Intake	1W1818	6	
Guide, Exhaust and Intake	1W1816	12	
Insert, Valve Seat Exhaust	8M9810	6	
Insert, Valve Seat Intake	9M8745	6	
Valve Lock	2A4429	24	
Rotocoil	7N7639	12	
Spring, Valve Inner ( Double )	9M5349	12	
Spring, Valve Outer ( Double )	9M5350	12	
Retainer, Spring	2N9297	12	
Spacer, Valve Guide	3N1414	12	
Screw, Rocker Arm Adjusting	1A0744	12	
Bushing, Rocker Arm	3F7445	12	
Plug	3B0623	28	
Plug	5M6214	2	
Spark Plug Adapter	7L0917	6	
Spark Plug Adapter Gasket	6L1576	6	Metal Gasket
Spark Plug Adapter Seal	6L7816	6	71B495 - Up
Spark Plug Adapter Seal	6B7021	6	71B 1 - 494
Director, Water	5H7071	24	
<b>For Cylinder Heads Using 1/2" Stem Valves</b>			
Valve , Exhaust	8H1993	6	
Valve , Intake	8H1994	6	
Guide, Exhaust and Exhaust	7N2051	12	
Insert, Valve Seat Exhaust	8M9810	6	
Insert, Valve Seat Intake	9M8745	6	
Valve Lock	3B1143	36	
Rotocoil	7N7639	12	
Spring, Valve Inner ( Double )	9M5349	12	
Spring, Valve Outer ( Double )	9M5350	12	
Retainer, Spring	3B1142	12	
Spacer, Valve Guide	3N1414	12	
Screw, Rocker Arm Adjusting	1A0744	12	
Bushing, Rocker Arm	3F7445	12	
Spark Plug Adapter	7L0917	6	
Spark Plug Adapter Gasket	6L1576	6	Metal Gasket
Spark Plug Adapter Seal	6L7816	6	71B495 - Up
Spark Plug Adapter Seal	6B7021	6	71B 1 - 494
Director, Water	5H7071	24	

# IPD parts for Caterpillar® G342 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Overhaul Gasket Set	342071	1	Non Spacer Plated Block
Overhaul Gasket Set	342081	1	Spacer Plated Block
In Frame Gasket Set	342072	1	Non Spacer Plated Block
Multiple Cylinder Head Gasket Set	342073	1	Non Spacer Plated Block
Multiple Cylinder Head Gasket Set	342083	1	Spacer Plated Block
Gasket, Oil Pan	2P3759	1	
Gasket, Valve Cover	7N9352	2	
Gasket, Side Door	6L5465	2	
Water Pump Gasket Set	6V4553	1	71B 1 - 2330
Water Pump Gasket Set	5P9241	1	71B 2331 - Up
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	8N7923	6	71B 750 - Up
Main Bearing Standard	8N7928	1	71B 750 - Up
Main Bearing .025"	8N7924	6	71B 750 - Up
Main Bearing .025"	8N7929	1	71B 750 - Up
Main Bearing .050"	8N7925	6	71B 750 - Up
Main Bearing .050"	8N7930	1	71B 750 - Up
Rod Bearing Standard	2M6499	6	71B 1 - 749
Rod Bearing Standard	8N7933	6	71B 750 - Up
Rod Bearing .025"	8N7934	6	71B 750 - Up
Rod Bearing .050"	8N7935	6	71B 750 - Up
Cam Bearing	4H9640	2	
Cam Bearing	8F8523	3	
Bushing, Front Cover	4H9640	2	
Bushing, Connecting Rod	4M9183	6	

# IPD parts for Caterpillar® G342 Engines

<b>CYLINDER KITS AND COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Piston and Liner Assembly	PLG7M3681	6	7.5 : 1 CR
Piston and Liner Assembly	PLG7M3680	6	10.5 : 1 CR
Piston Body	7M3681	6	7.5 : 1 CR
Piston Body	7M3680	6	10.5 : 1 CR
Ring Group	3S4058	6	
Liner, Cylinder	8N5676	6	
Pin, Piston	7N9809	6	
Retainer, Piston Pin	7M4926	12	
Gasket Kit (Liner O Rings and Seal)	5P9221	6	Contains 3 - 6L7812 and 1 - 8N4638
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature 170'	9S3808	2	170 Degree 71B 1 - 220
Regulator, Water Temperature 170'	6I4954	2	170 Degree 71B 221 - 378
Regulator, Water Temperature 180'	4W4794	2	180 Degree 71B 379 - Up
Regulator, Water Temperature 170'	1209453	2	New Sealed Design
Regulator, Water Temperature 180'	2485513	2	New Sealed Design
Seal Assembly	4N7526	1	71B 1 - 2330
Seal Assembly	1664376	1	71B 2331 - Up
Seal, O Ring	3S3535	1	
Ring	2S3966	1	
Seal, Rubber	4H9836	1	
Gasket	4H8891	1	
Gasket	4H8890	1	
<b>MISCELLANEOUS COMPONENTS</b>			
<b>Crankshaft Components</b>			
Seal, Front	8H7319	1	71B 1 - 749
Seal, Rear	6H4498	1	71B 1 - 749
Seal, Front	2S1509	1	71B 750 - Up
Seal, Rear	2W2191	1	71B 750 - Up
Seal, Front	9N2539	1	71B 750 - Up Oversize Use With 9J0110
Sleeve, Front	9J0110	1	71B 750 - Up Use With 9N2539

# IPD parts for Caterpillar® G353 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 64B 1 - Up</b>			
<b>For Cylinder Heads Using 3/8" Stem Valves</b>			
Valve , Exhaust	2W3211	6	
Valve , Intake	1W8606	6	
Guide, Exhaust	2N9299	6	
Guide, Intake	2N9298	6	
Insert, Valve Seat Exhaust	1S5738	6	
Insert, Valve Seat Intake	5S1757	6	
Valve Lock	2A4429	24	
Rotocoil	7N7639	12	Use With Correct Springs
Spring, Valve Inner ( Double )	9M5349	12	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	12	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	12	Use With 7N7639 Rotocoil
Shield	8N7780	6	
Retainer, Spring Exhaust	2N9297	6	
Retainer, Spring Intake	1W3062	6	Includes 8N7780 Shield
Spacer, Valve Guide	3N1414	12	
Button, Rocker Arm	8F8858	12	
Ring, Button Retaining	9F7707	12	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	12	
Bushing, Rocker Arm	3F7445	12	
Plug	3B0645	30	
Spark Plug Adapter	7L0918	6	
Spark Plug Adapter Gasket	6L1576	6	Metal Gasket
Spark Plug Adapter Seal	6L7816	6	
Director, Water	5H7071	24	
<b>For Cylinder Heads Using 1/2" Stem Valves</b>			
Valve , Exhaust	8N3723	6	With Correct Serial Numbers
Valve , Exhaust	5S5323	6	With Correct Serial Numbers
Valve , Intake	7M7817	6	
Guide, Exhaust	6N8847	6	
Guide, Intake	4N3664	6	
Insert, Valve Seat Exhaust	1S5738	6	
Insert, Valve Seat Intake	5S1757	6	
Valve Lock	3B1143	36	
Rotocoil	7N7639	12	Use With Correct Springs

# IPD parts for Caterpillar® G353 Engines

For Cylinder Heads Using 1/2" Stem Valves Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Spring, Valve Inner ( Double )	9M5349	12	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	12	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	12	Use With 7N7639 Rotocoil
Shield	8N7780	6	
Retainer, Spring Exhaust	3B1142	6	
Retainer, Spring Intake	3H5867	6	Use with 8F9206
Spacer, Valve Guide	3N1414	12	
Button, Rocker Arm	8F8858	12	
Ring, Button Retaining	9F7707	12	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	12	
Bushing, Rocker Arm	3F7445	12	
Plug	3B0645	30	
Spark Plug Adapter	7L0918	6	
Spark Plug Adapter Gasket	6L1576	6	Metal Gasket
Spark Plug Adapter Seal	6L7816	6	
Director, Water	5H7071	24	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	2P7630	1	Basic
Oil Pan Gasket	2L3451	1	
Side Door Gasket	6L5490	2	
Water Pump Gasket Set	5P8974	1	
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	1N4316	1	64B 312 - UP
Main Bearing Standard	1N4317	4	64B 312 - UP
Main Bearing Standard	1N4318	1	64B 312 - UP
Main Bearing Standard	1N4331	1	64B 312 - UP
Main Bearing .025"	1N4319	1	64B 312 - UP
Main Bearing .025"	1N4320	4	64B 312 - UP
Main Bearing .025"	1N4321	1	64B 312 - UP
Main Bearing .025"	1N4332	1	64B 312 - UP
Main Bearing .050"	1N4322	1	64B 312 - UP
Main Bearing .050"	1N4323	4	64B 312 - UP
Main Bearing .050"	1N4324	1	64B 312 - UP
Main Bearing .050"	1N4333	1	64B 312 - UP

# IPD parts for Caterpillar® G353 Engines

<b>ENGINE BEARINGS AND BUSHINGS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Rod Bearing Standard	1N4336	6	
Rod Bearing .025"	1N4337	6	
Rod Bearing .050"	1N4338	6	
Cam Bearing	2H2330	6	
Cam Bearing	2H7878	1	
Bushing, Connecting Rod	8N2275	6	
Bushing, Rocker Arm	3F7445	12	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG3S1824	6	7.0 : 1 CR
Piston and Liner Assembly	PLG3S1826	6	10.0 : 1 CR
Piston Body	3S1824	6	7.0 : 1 CR
Piston Body	3S1826	6	10.0 : 1 CR
Ring Group	1W6055	6	
Liner, Cylinder	8N9174	6	
Pin, Piston	7N9810	6	
Retainer, Piston Pin	7M4926	12	
Gasket Kit (Liner O Rings and Seal)	5P8970	6	Contains 3 - 6L7815 and 1 - 8N4708
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature 180'	6N4540	1	180 Degree
Seal Group, Water Pump	4N7526	1	
Seal	6L5473	1	
<b>MISCELLANEOUS COMPONENTS</b>			
<b>Crankshaft Components</b>			
Crankshaft Seal, Rear	2W2191	1	Piston Ring Type
<b>Cylinder Block Repair</b>			
Sleeve, " Z " Stepped	1W6265	A/R	4 Per Block
Sleeve, " Z " Stepped	1W6266	A/R	4 Per Block
Sleeve, " Z " Stepped	1W6267	A/R	4 Per Block
Sleeve, Cast Iron	5P0936	A/R	

# IPD parts for Caterpillar® G379 Engines

DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 72B 1 - Up</b>			
<b>For Cylinder Heads Using 3/8" Stem Valves</b>			
Valve , Exhaust	2W3211	8	
Valve , Intake	1W8606	8	
Guide, Exhaust	2N9299	8	
Guide, Intake	2N9298	8	
Insert, Valve Seat Exhaust	1S5738	8	
Insert, Valve Seat Intake	5S1757	8	
Valve Lock	2A4429	32	
Rotocoil	7N7639	16	Use With Correct Springs
Spring, Valve Inner ( Double )	9M5349	16	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	16	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	16	Use With 7N7639 Rotocoil
Shield	8N7780	8	
Retainer, Spring Exhaust	2N9297	8	
Retainer, Spring Intake	1W3062	8	Includes 8N7780 Shield
Spacer, Valve Guide	3N1414	16	85
Button, Rocker Arm	8F8858	16	
Ring, Button Retaining	9F7707	16	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	16	
Bushing, Rocker Arm	3F7445	16	
Plug	3B0645	32	8 Per Cylinder Head
Spark Plug Adapter	7L0918	8	
Spark Plug Adapter Gasket	6L1576	8	Metal Gasket
Spark Plug Adapter Seal	6L7816	8	
Lifter, Valve	1021561	16	
Director, Water	5H7071	32	
<b>For Cylinder Heads Using 1/2" Stem Valves</b>			
Valve , Exhaust	8N3723	8	Serial # 72B 1 - 84
Valve , Exhaust	5S5323	8	With Correct Serial Numbers
Valve , Intake	7M7817	8	
Guide, Exhaust	6N8847	8	
Guide, Intake	4N3664	8	
Insert, Valve Seat Exhaust	1S5738	8	
Insert, Valve Seat Intake	5S1757	8	
Valve Lock	3B1143	48	
Rotocoil	7N7639	16	Use With Correct Springs

# IPD parts for Caterpillar® G379 Engines

For Cylinder Heads Using 1/2" Stem Valves Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Spring, Valve Inner ( Double )	9M5349	16	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	16	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	16	Use With 7N7639 Rotocoil
Shield	8N7780	8	
Retainer, Spring Exhaust	3B1142	8	
Retainer, Spring Intake	3H5867	8	Use with 8F9206
Spacer, Valve Guide	3N1414	16	
Button, Rocker Arm	8F8858	16	
Ring, Button Retaining	9F7707	16	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	16	
Bushing, Rocker Arm	3F7445	16	
Plug	3B0645	32	8 Per Cylinder Head
Spark Plug Adapter	7L0918	8	
Spark Plug Adapter Gasket	6L1576	8	Metal Gasket
Spark Plug Adapter Seal	6L7816	8	
Lifter, Valve	1021561	16	
Director, Water	5H7071	32	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	2S7521	1	Serial # 72B 1 - 468
Overhaul Gasket Set	379021	1	72B 469 - Up Non Turbocharged
Overhaul Gasket Set ( Composite )	379021CP	1	72B 469 - Up Non Turbocharged
Overhaul Gasket Set	379031	1	72B 469 - Up Turbocharged, Aftercooled
Overhaul Gasket Set ( Composite )	379031CP	1	72B 469 - Up Turbocharged, Aftercooled
In Frame Gasket Set	379022	1	72B 469 - Up Non Turbocharged
In Frame Gasket Set ( Composite )	379022CP	1	72B 469 - Up Non Turbocharged
In Frame Gasket Set	379032	1	72B 469 - Up Turbocharged, Aftercooled
In Frame Gasket Set ( Composite )	379032CP	1	72B 469 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	379023	1	72B 469 - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	379023CP	1	72B 469 - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	379033	1	72B 469 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	379033CP	1	72B 469 - Up Turbocharged, Aftercooled
Single Cylinder Head Gasket Set	399054	4	72B 1 - Up Includes Ferrule Assemblies
Single Cylinder Head Gasket Set	399054CP	4	72B 1 - Up Includes Ferrule Assemblies
Cylinder Head Gasket ( Metal Clad )	3N3220	4	
Cylinder Head Gasket ( Composite )	3N3220CP	4	

# IPD parts for Caterpillar® G379 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Gasket, Oil Pan	8L5457	1	
Gasket, Side Door	1F9223	4	
Gasket, Valve Cover	6L3352	4	Old Style
Seal, Valve Cover	2N3597	4	New Style
Gasket, Water Cover	1F4419	4	
Water Pump Gasket Set	3S1723	1	72B 1 - 467
Water Pump Gasket Set	6V5426	1	72B 468 - 685
Water Pump Gasket Set	6V3743	1	72B 686 - Up
<b>NOTE: " CP " following part number indicates set contains IPD Composite Cylinder Head Gasket</b>			
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	8N7764	5	
Main Bearing .025"	8N7765	5	
Main Bearing .050"	8N7766	5	
Rod Bearing Standard	8N7769	8	
Rod Bearing .025"	8N7770	8	
Rod Bearing .050"	8N7771	8	
Thrust Plates	4L4653	2	
Cam Bearing	5L2894	5	
Bushing, Connecting Rod	8N2275	8	
Bushing, Rocker Arm	3F7445	16	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG3S1824	8	7.0 : 1 CR
Piston and Liner Assembly	PLG3S1826	8	10.0 : 1 CR
Piston Body	3S1824	8	7.0 : 1 CR
Piston Body	3S1826	8	10.0 : 1 CR
Ring Group	1W6055	8	
Liner, Cylinder	8N9174	8	
Pin, Piston	7N9810	8	
Retainer, Piston Pin	7M4926	16	
Gasket Kit (Liner O Rings and Seal)	5P8970	8	Contains 3 - 6L7815 and 1 - 8N4708

# IPD parts for Caterpillar® G379 Engines

COOLING SYSTEM COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Regulator, Water Temperature 170'	6I4954	4	170 Degree
Regulator, Water Temperature 180'	4W4794	4	180 Degree
Regulator, Water Temperature 190'	7C3095	4	190 Degree
Regulator, Water Temperature 170'	1209453	4	New Sealed Design
Regulator, Water Temperature 180'	2485513	4	New Sealed Design
Regulator, Water Temperature 190'	2477133	4	New Sealed Design
Gasket, Regulator Housing	2N0741	4	
Seal, Regulator	3S9643	4	
Water Pump Rebuild Kit	1W7080	1	With 5N4378 Water Pump Shaft
Seal Assembly	4N7526	1	72B 1 - 683
Seal Assembly	1664376	1	72B 684 - Up
Shaft, Water Pump	5N4378	1	For 4L8800 Water Pump Group
Shaft, Water Pump	5N1883	1	For 2N0955 Water Pump Group
Seal, O Ring	1H8278	1	
Ring	2S3966	1	Use With 4N7526
Washer, Sealing	5L5840	A/R	
Seal, Rubber	3S3535	1	Use With 2S3966
Gasket, Shim	4L6706	A/R	Use 1 to 10
Gasket, Drain Plug	5B3265	1	
Gasket, Water Pump Mounting	4L3437	1	
Bearing, Fresh Water Pump	5L2660	2	1 in Water Pump and 1 in Carrier
Lock	7F7510	10	72B 684 - Up
Seal	8J6775	8	72B 684 - Up
Gasket, Retainer	4L9965	1	
Seal, Shaft Oil	2N2560	1	
Washer, Hardened	5M2894	8	Use With 5L5840
Adapter	6N4744	1	Use With 6N9313
Seal Ring ( Metal )	6N5476	1	Use With 6N9313
Seal Ring ( Rubber )	6N5475	1	Use With 6N9313
Tube, Water	5L9371	8	Cast Iron
Seal Ring, Water Tube	6L7817	8	
Oil Cooler Core	6N9237	1	( New )

# IPD parts for Caterpillar® G379 Engines

MISCELLANEOUS COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Crankshaft Components</b>			
Seal, Front Directional	4W2606	1	Standard Rotation
Seal, Rear Directional	4W2607	1	Standard Rotation
Seal Group, Crankshaft Conversion	4W2568	1	Front Standard Rotation
Seal Group, Crankshaft Conversion	4W2569	1	Rear Standard Rotation
Seal Group, Crankshaft Conversion	4W2570	1	Front Opposite Rotation
Seal Group, Crankshaft Conversion	4W2571	1	Rear Opposite Rotation
Adapter, Crankshaft Seal	4W2566	1	Front Standard Rotation
Adapter, Crankshaft Seal	4W2567	1	Rear Standard Rotation
Adapter Gasket	5L2093	2	
Baffle	8L3972	2	
<b>Cylinder Block Repair</b>			
Sleeve, " Z " Stepped	1W6265	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6266	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6267	A/R	" Z " Type
Sleeve, Cast Iron	5P0936	A/R	" L " Type

# IPD parts for Caterpillar® G398 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 73B 1 - Up</b>			
<b>For Cylinder Heads Using 3/8" Stem Valves</b>			
Valve , Exhaust	2W3211	12	
Valve , Intake	1W8606	12	
Guide, Exhaust	2N9299	12	
Guide, Intake	2N9298	12	
Insert, Valve Seat Exhaust	1S5738	12	
Insert, Valve Seat Intake	5S1757	12	
Valve Lock	2A4429	48	
Rotocoil	7N7639	24	Use With Correct Springs
Spring, Valve Inner ( Double )	9M5349	24	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	24	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	24	Use With 7N7639 Rotocoil
Shield	8N7780	12	
Retainer, Spring Exhaust	2N9297	12	
Retainer, Spring Intake	1W3062	12	Includes 8N7780 Shield
Spacer, Valve Guide	3N1414	24	
Button, Rocker Arm	8F8858	24	
Ring, Button Retaining	9F7707	24	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	24	
Bushing, Rocker Arm	3F7445	24	
Plug	3B0645	48	8 Per Cylinder Head
Spark Plug Adapter	7L0918	12	
Spark Plug Adapter Gasket	6L1576	12	Metal Gasket
Spark Plug Adapter Seal	6L7816	12	
Lifter, Valve	1021561	24	
Director, Water	5H7071	48	
<b>For Cylinder Heads Using 1/2" Stem Valves</b>			
Valve , Exhaust	8N3723	12	Serial # 73B 1 - 81
Valve , Exhaust	5S5323	12	With Correct Serial Numbers
Valve , Intake	7M7817	12	
Guide, Exhaust	6N8847	12	
Guide, Intake	4N3664	12	
Insert, Valve Seat Exhaust	1S5738	12	
Insert, Valve Seat Intake	5S1757	12	
Valve Lock	3B1143	72	
Rotocoil	7N7639	24	Use With Correct Springs

# IPD parts for Caterpillar® G398 Engines

For Cylinder Heads Using 1/2" Stem Valves Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Spring, Valve Inner ( Double )	9M5349	24	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	24	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	24	Use With 7N7639 Rotocoil
Shield	8N7780	12	
Retainer, Spring Exhaust	3B1142	12	
Retainer, Spring Intake	3H5867	12	Use with 8F9206
Spacer, Valve Guide	3N1414	24	
Button, Rocker Arm	8F8858	24	
Ring, Button Retaining	9F7707	24	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	24	
Bushing, Rocker Arm	3F7445	24	
Plug	3B0645	48	8 Per Cylinder Head
Spark Plug Adapter	7L0918	12	
Spark Plug Adapter Gasket	6L1576	12	Metal Gasket
Spark Plug Adapter Seal	6L7816	12	
Lifter, Valve	1021561	24	
Director, Water	5H7071	48	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	398081	1	73B 1 - 905 Non Turbocharged
Overhaul Gasket Set ( Composite )	398081CP	1	73B 1 - 905 Non Turbocharged
Overhaul Gasket Set	398161	1	73B 906 - Up Non Turbocharged
Overhaul Gasket Set ( Composite )	398161CP	1	73B 906 - Up Non Turbocharged
Overhaul Gasket Set	398091	1	73B 906 - Up Turbocharged, Aftercooled
Overhaul Gasket Set ( Composite )	398091CP	1	73B 906 - Up Turbocharged, Aftercooled
In Frame Gasket Set	398162	1	73B 906 - Up Non Turbocharged
In Frame Gasket Set ( Composite )	398162CP	1	73B 906 - Up Non Turbocharged
In Frame Gasket Set	398092	1	73B 906 - Up Turbocharged, Aftercooled
In Frame Gasket Set ( Composite )	398092CP	1	73B 906 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	398083	1	73B 1 - 905 Non Turbocharged
Multiple Cylinder Head Gasket Set	398083CP	1	73B 1 - 905 Non Turbocharged
Multiple Cylinder Head Gasket Set	398163	1	73B 906 - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	398163CP	1	73B 906 - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	398093	1	73B 906 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	398093CP	1	73B 906 - Up Turbocharged, Aftercooled
Single Cylinder Head Gasket Set	399054	6	73B 1 - Up Includes Ferrule Assemblies
Single Cylinder Head Gasket Set	399054CP	6	73B 1 - Up Includes Ferrule Assemblies

# IPD parts for Caterpillar® G398 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Cylinder Head Gasket ( Metal Clad )	3N3220	6	
Cylinder Head Gasket ( Composite )	3N3220CP	6	
Gasket, Oil Pan	8L5457	1	
Gasket, Side Door	1F9223	6	
Gasket, Valve Cover	6L3352	6	Old Style
Seal, Valve Cover	2N3597	6	New Style
Gasket, Water Cover	1F4419	6	
Water Pump Gasket Set	3S1723	1	Check Serial Number
Water Pump Gasket Set	6V5426	1	73B 1 - 905
Water Pump Gasket Set	6V6384	1	73B 906 - 1310
Water Pump Gasket Set	6V6385	1	73B 1311 - Up
<b>NOTE: " CP " following part number indicates set contains IPD Composite Cylinder Head Gasket</b>			
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	8N7764	7	
Main Bearing .025"	8N7765	7	
Main Bearing .050"	8N7766	7	
Rod Bearing Standard	8N7769	12	
Rod Bearing .025"	8N7770	12	
Rod Bearing .050"	8N7771	12	
Thrust Plates	4L4653	2	
Cam Bearing	5L2894	7	
Bushing, Connecting Rod	8N2275	12	
Bushing, Rocker Arm	3F7445	24	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG3S1824	12	7.0 : 1 CR
Piston and Liner Assembly	PLG3S1826	12	10.0 : 1 CR
Piston Body	3S1824	12	7.0 : 1 CR
Piston Body	3S1826	12	10.0 : 1 CR
Ring Group	1W6055	12	
Pin, Piston	7N9810	12	
Retainer, Piston Pin	7M4926	24	
Gasket Kit (Liner O Rings and Seal)	5P8970	12	Contains 3 - 6L7815 and 1 - 8N4708

# IPD parts for Caterpillar® G398 Engines

COOLING SYSTEM COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Regulator, Water Temperature 170'	6I4954	4	170 Degree
Regulator, Water Temperature 180'	4W4794	4	180 Degree
Regulator, Water Temperature 190'	7C3095	4	190 Degree
Regulator, Water Temperature 170'	1209453	4	New Sealed Design
Regulator, Water Temperature 180'	2485513	4	New Sealed Design
Regulator, Water Temperature 190'	2477133	4	New Sealed Design
Gasket, Regulator Housing	2N0741	4	
Seal, Regulator	3S9643	4	
Water Pump Rebuild Kit	1W7080	1	With 5N4378 Water Pump Shaft
Seal Assembly	4N7526	1	Large Case
Seal Assembly	1664376	1	
Shaft, Water Pump	5N4378	1	Long Shaft
Shaft, Water Pump	5N1883	1	Short Shaft
Seal, O Ring	1H8278	1	
Ring	2S3966	1	Use With 4N7526
Washer, Sealing	5L5840	8	
Seal, Rubber	3S3535	1	Use With 2S3966
Gasket, Shim	4L6706	A/R	Use 1 to 10
Gasket, Drain Plug	5B3265	1	
Gasket, Water Pump Mounting	4L3437	1	
Bearing, Water Pump	4L3756	1	
Bearing, Fresh Water Pump	5L2660	2	1 in Water Pump and 1 in Carrier
Lock	7F7510	A/R	
Seal	8J6775	8	
Gasket, Retainer	4L9965	1	
Seal, Shaft Oil	2N2560	1	
Washer, Hardened	5M2894	8	Use With 5L5840
Adapter	6N4744	1	Use With 6N9313
Seal Ring ( Metal )	6N5476	1	Use With 6N9313
Seal Ring ( Rubberl )	6N5475	1	Use With 6N9313
Tube, Water	5L9371	12	Cast Iron
Seal Ring, Water Tube	6L7817	12	
Oil Cooler Core	6N9235	1	( New )

# IPD parts for Caterpillar® G398 Engines

MISCELLANEOUS COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Crankshaft Components</b>			
Seal, Front Directional	4W2606	1	Standard Rotation
Seal, Rear Directional	4W2607	1	Standard Rotation
Seal Group, Crankshaft Conversion	4W2568	1	Front Standard Rotation
Seal Group, Crankshaft Conversion	4W2569	1	Rear Standard Rotation
Seal Group, Crankshaft Conversion	4W2570	1	Front Opposite Rotation
Seal Group, Crankshaft Conversion	4W2571	1	Rear Opposite Rotation
Adapter, Crankshaft Seal	4W2566	1	Front Standard Rotation
Adapter, Crankshaft Seal	4W2567	1	Rear Standard Rotation
Adapter Gasket	5L2093	2	
Baffle	8L3972	2	
<b>Cylinder Block Repair</b>			
Sleeve, " Z " Stepped	1W6265	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6266	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6267	A/R	" Z " Type
Sleeve, Cast Iron	5P0936	A/R	" L " Type

# IPD parts for Caterpillar® G399 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 49C 1 - Up</b>			
<b>For Cylinder Heads Using 3/8" Stem Valves</b>			
Valve , Exhaust	2W3211	16	
Valve , Intake	1W8606	16	
Guide, Exhaust	2N9299	16	
Guide, Intake	2N9298	16	
Insert, Valve Seat Exhaust	1S5738	16	
Insert, Valve Seat Intake	5S1757	16	
Valve Lock	2A4429	64	
Rotocoil	7N7639	32	Use With Correct Springs
Spring, Valve Inner ( Double )	9M5349	32	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	32	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	32	Use With 7N7639 Rotocoil
Shield	8N7780	16	
Retainer, Spring Exhaust	2N9297	16	
Retainer, Spring Intake	1W3062	16	Includes 8N7780 Shield
Spacer, Valve Guide	3N1414	32	
Button, Rocker Arm	8F8858	32	
Ring, Button Retaining	9F7707	32	For 8F8858
Screw, Rocker Arm Adjusting	1A0744	32	
Bushing, Rocker Arm	3F7445	32	
Plug	3B0645	64	8 Per Cylinder Head
Spark Plug Adapter	7L0918	16	
Spark Plug Adapter Gasket	6L1576	16	Metal Gasket
Spark Plug Adapter Seal	6L7816	16	
Lifter, Valve	1021561	32	
Director, Water	5H7071	64	
<b>For Cylinder Heads Using 1/2" Stem Valves</b>			
Valve , Exhaust	5S5323	16	
Valve , Intake	7M7817	16	
Guide, Exhaust	6N8847	16	
Guide, Intake	4N3664	16	
Insert, Valve Seat Exhaust	1S5738	16	
Insert, Valve Seat Intake	5S1757	16	
Valve Lock	3B1143	96	
Rotocoil	7N7639	32	Use With Correct Springs

# IPD parts for Caterpillar® G399 Engines

For Cylinder Heads Using 1/2" Stem Valves Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Spring, Valve Inner ( Double )	9M5349	32	Use With 7N7639 Rotocoil
Spring, Valve Outer ( Double )	9M5350	32	Use With 7N7639 Rotocoil
Spring, Valve ( Single )	7S6323	32	Use With 7N7639 Rotocoil
Shield	8N7780	16	
Retainer, Spring Exhaust	3B1142	16	
Retainer, Spring Intake	3H5867	16	Use with 8F9206
Spacer, Valve Guide	3N1414	32	
Button, Rocker Arm	8F8858	32	
Ring, Button Retaining	9F7707	32	
Screw, Rocker Arm Adjusting	1A0744	32	
Bushing, Rocker Arm	3F7445	32	
Plug	3B0645	64	8 Per Cylinder Head
Spark Plug Adapter	7L0918	16	
Spark Plug Adapter Gasket	6L1576	16	Metal Gasket
Spark Plug Adapter Seal	6L7816	16	
Lifter, Valve	1021561	32	
Director, Water	5H7071	64	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	9S4317	1	49C 1 - 261
Overhaul Gasket Set	399121	1	49C 261 - Up - Up Non Turbocharged
Overhaul Gasket Set ( Composite )	399121CP	1	49C 261 - Up - Up Non Turbocharged
Overhaul Gasket Set	399131	1	49C 261 - Up Turbocharged, Aftercooled
Overhaul Gasket Set ( Composite )	399131CP	1	49C 261 - Up Turbocharged, Aftercooled
In Frame Gasket Set	399122	1	49C 261 - Up - Up Non Turbocharged
In Frame Gasket Set ( Composite )	399122CP	1	49C 261 - Up - Up Non Turbocharged
In Frame Gasket Set	399132	1	49C 261 - Up Turbocharged, Aftercooled
In Frame Gasket Set ( Composite )	399132CP	1	49C 261 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	399123	1	49C 261 - Up - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	399123CP	1	49C 261 - Up - Up Non Turbocharged
Multiple Cylinder Head Gasket Set	399133	1	49C 261 - Up Turbocharged, Aftercooled
Multiple Cylinder Head Gasket Set	399133CP	1	49C 261 - Up Turbocharged, Aftercooled
Single Cylinder Head Gasket Set	399054	8	49C 1 - Up Includes Ferrule Assemblies
Single Cylinder Head Gasket Set	399054CP	8	49C 1 - Up Includes Ferrule Assemblies
Cylinder Head Gasket ( Metal Clad )	3N3220	8	
Cylinder Head Gasket ( Composite )	3N3220CP	8	

# IPD parts for Caterpillar® G399 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Gasket, Oil Pan	8L5457	1	
Gasket, Side Door	1F9223	8	
Gasket, Valve Cover	6L3352	8	Old Style
Seal, Valve Cover	2N3597	8	New Style
Gasket, Water Cover	1F4419	8	
Water Pump Gasket Set	8S1892	1	Check Serial Number
Water Pump Gasket Set	6V6384	1	49C 261 - 567
Water Pump Gasket Set	6V6385	1	49C 568 - Up
Water Pump Gasket Set	6V5427	1	For 2N0955 Water Pump Group
<b>NOTE: " CP " following part number indicates set contains IPD Composite Cylinder Head Gasket</b>			
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	8N7764	9	
Main Bearing .025"	8N7765	9	
Main Bearing .050"	8N7766	9	
Rod Bearing Standard	8N7769	16	
Rod Bearing .025"	8N7770	16	
Rod Bearing .050"	8N7771	16	
Thrust Plates	4L4653	2	
Cam Bearing	5L2894	9	
Bushing, Connecting Rod	8N2275	16	
Bushing, Rocker Arm	3F7445	32	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG3S1824	16	7.0 : 1 CR
Piston and Liner Assembly	PLG3S1826	16	10.0 : 1 CR
Piston Body	3S1824	16	7.0 : 1 CR
Piston Body	3S1826	16	10.0 : 1 CR
Ring Group	1W6055	16	
Liner, Cylinder	8N9174	16	
Pin, Piston	7N9810	16	
Retainer, Piston Pin	7M4926	32	
Gasket Kit (Liner O Rings and Seal)	5P8970	16	Contains 3 - 6L7815 and 1 - 8N4708

# IPD parts for Caterpillar® G399 Engines

COOLING SYSTEM COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Regulator, Water Temperature 170'	6I4954	4	170 Degree
Regulator, Water Temperature 180'	4W4794	4	180 Degree
Regulator, Water Temperature 190'	7C3095	4	190 Degree
Regulator, Water Temperature 170'	1209453	4	New Sealed Design
Regulator, Water Temperature 180'	2485513	4	New Sealed Design
Regulator, Water Temperature 190'	2477133	4	New Sealed Design
Gasket, Regulator Housing	2N0741	4	
Seal, Regulator	3S9643	4	
Water Pump Rebuild Kit	1W7080	1	Contains 5N4378 Water Pump Shaft
Seal Assembly	4N7526	1	Large Case
Seal Assembly	1664376	1	
Shaft, Water Pump	5N4378	1	Long Shaft
Shaft, Water Pump	5N1883	1	Short Shaft
Seal, O Ring	1H8278	1	
Ring	2S3966	1	Use With 4N7526
Washer, Sealing	5L5840	8	
Seal, Rubber	3S3535	1	Use With 2S3966
Gasket, Shim	4L6706	A/R	Use 1 to 10
Gasket, Drain Plug	5B3265	1	
Gasket, Water Pump Mounting	4L3437	1	
Bearing, Water Pump	4L3756	1	
Bearing, Fresh Water Pump	5L2660	1	
Lock	7F7510	A/R	
Seal	8J6775	8	
Gasket, Retainer	4L9965	1	
Seal, Shaft Oil	2N2560	1	
Washer, Hardened	5M2894	8	Use With 5L5840
Adapter	6N4744	1	Use With 6N9313
Seal Ring ( Metal )	6N5476	1	Use With 6N9313
Seal Ring ( Rubber )	6N5475	1	Use With 6N9313
Tube, Water	5L9371	16	Cast Iron
Seal Ring, Water Tube	6L7817	16	
Oil Cooler Core	6N9236	1	( New )

# IPD parts for Caterpillar® G399 Engines

MISCELLANEOUS COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Crankshaft Components</b>			
Seal, Front Directional	4W2606	1	Standard Rotation
Seal, Rear Directional	4W2607	1	Standard Rotation
Seal Group, Crankshaft Conversion	4W2568	1	Front Standard Rotation
Seal Group, Crankshaft Conversion	4W2569	1	Rear Standard Rotation
Seal Group, Crankshaft Conversion	4W2570	1	Front Opposite Rotation
Seal Group, Crankshaft Conversion	4W2571	1	Rear Opposite Rotation
Adapter, Crankshaft Seal	4W2566	1	Front Standard Rotation
Adapter, Crankshaft Seal	4W2567	1	Rear Standard Rotation
Adapter Gasket	5L2093	2	
Baffle	8L3972	2	
<b>Cylinder Block Repair</b>			
Sleeve, " Z " Stepped	1W6265	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6266	A/R	" Z " Type
Sleeve, " Z " Stepped	1W6267	A/R	" Z " Type
Sleeve, Cast Iron	5P0936	A/R	" L " Type

# IPD parts for Caterpillar® G3304 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 37Y 1 - 1019</b>			
Valve , Exhaust	2W2877	4	Short Style 5.470"
Valve , Intake	2W2621	4	Short Style 5.470"
Guide, Intake & Exhaust	4W9176	8	
Plug , Rocker Arm Shaft End	0L1026	2	
Insert, Valve Seat Exhaust	7N1649	4	
Insert, Valve Seat Intake	1070268	4	
Valve Lock	2A4429	16	
Rotocoil	1031800	8	Turbocharged
Rotocoil	1W5300	8	Natural Aspirated ( Includes 6N7174 )
Shield	6N7174	8	
Nut, Rocker Arm Adjusting	1B4203	8	
Spring, Valve	7S7144	8	
Valve Lifter	7S3161	8	
Water Director Seal Ring	9Y1798	12	
Water Director Seal Ring	7N8018	4	
Plug, Cup	3B0623	4	
Spark Plug Adapter	7N1743	4	
Spark Plug Adapter Gasket	2N7174	4	Metal Gasket
Spark Plug Adapter Seal	7S3206	4	
<b>Engine Serial # 37Y 1020 - Up N4F 1 - Up</b>			
Valve , Exhaust	7W7491	4	Long Style 6.400"
Valve , Intake	7W7490	4	Long Style 6.400"
Guide, Intake & Exhaust	9Y7895	8	
Intake Valve Guide Seal	7W9143	4	
Spacer, Valve Guide	7W7488	8	
Insert, Valve Seat Exhaust	7N1649	4	
Insert, Valve Seat Intake	1070268	4	
Valve Lock	2A4429	16	
Rotocoil	1031800	8	Turbocharged
Rotocoil	1W5300	8	Natural Aspirated ( Includes 6N7174 )
Shield	6N7174	8	
Spring, Valve	7S7144	8	
Valve Lifter	7S3161	8	
Water Director Seal Ring	9Y1798	12	
Water Director Seal Ring	7N8018	4	
Plug, Cup	3B0623	4	
Spark Plug Adapter	7N1743	4	
Spark Plug Adapter Gasket	2N7174	4	Metal Gasket
Spark Plug Adapter Seal	7S3206	4	

# IPD parts for Caterpillar® G3304 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Overhaul Gasket Set	304151	1	37Y 1 - Up
In Frame Overhaul Set	304152	1	37Y 1 - Up
Cylinder Head Gasket Set	304153	1	37Y 1 - Up
Oil Pan Gasket	8S1963	1	Sump to Plate
Oil Pan Plate Gasket	5S6045	1	Plate to Cylinder Block
Valve Cover Gasket	8S1606	1	If Long Valves Order 1 Additional
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	2323233	5	
Main Bearing .010"	8N8225	A/R	
Main Bearing .020"	8N8226	A/R	
Main Bearing .030"	8N8227	A/R	
Rod Bearing Standard	4W5739	4	
Rod Bearing .010"	8N8221	A/R	
Rod Bearing .020"	8N8222	A/R	
Rod Bearing .030"	8N8223	A/R	
Thrust Plate	1003652	2	
Cam Bearing	7M4046	2	
Cam Bearing	9M5477	1	
Balance Shaft Bushings	9Y2991	4	
Balance Shaft Bushings	9Y2992	2	
Bushing, Connecting Rod	8N0702	4	Straight Rod 37Y 1 - 472
Bushing, Connecting Rod	8N1985	4	Tapered Rod 37Y 473 - UP N4F 1 - Up
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG4P2654	4	10.5 : 1 CR
Piston and Liner Assembly	PLG4P2655	4	8.1 : 1 CR
Piston Body	4P2654	4	10.5 : 1 CR
Piston Body	4P2655	4	8.1 : 1 CR
Ring Group	3300RS5	4	1 Each 4P2656, 4P2657, 4P2658
Liner, Cylinder	1105800	4	
<b>NOTE: Pistons will fit only NEW STYLE tapered connecting rods</b>			

# IPD parts for Caterpillar® G3304 Engines

<b>CYLINDER KITS AND COMPONENTS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Pin, Piston	7N9804	4	1.50" Pin
Retainer, Piston Pin	9H4015	8	
Gasket Kit (Liner O Rings and Seal)	5P8768	4	Includes 3 5S6670 and 1 2W6134
Connecting Rod	8N1984	4	Tapered Rod, NEW
<b>NOTE: Pistons will fit only NEW STYLE tapered connecting rods</b>			
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature 175'	1118010	1	175 Degree
Regulator, Water Temperature 190'	1167577	1	190 Degree
Gasket, Regulator	7N0944	2	
Water Pump Overhaul Kit	IPD7055	A/R	See Note
Water Pump Overhaul Kit	IPD1616	A/R	See Note
Water Pump Rebuild Kit	1W7054	A/R	37Y 1-372 with shaft # 1P9929
Water Pump Rebuild Kit	1W7055	A/R	37Y 373 - up with shaft # 7N5899
Water Pump Rebuild Kit	8T1616	A/R	37Y 373 - up with shaft # 2W7255
Impeller, Water pump	7N5910	1	37Y 373 - Up
Seal Group, Water Pump	1313815	1	37Y 1 - 372
Seal Group, Water Pump	4W3864	1	37Y 373 - Up
Seal, Water Pump Oil	6V3988	1	37Y 1 - Up
Seal, Water Pump Oil	8C5210	1	37Y 373 - Up ( Optional Teflon )
Shaft, Water Pump	1P9929	1	37Y 1 - 372
Shaft, Water Pump	2W7255	1	With Correct Serial & Arrangement #
Shaft, Water Pump	7N5899	1	With Correct Serial & Arrangement #
Bearing, Water Pump Drive Gear	1B3867	1	
Bearing, Water Pump Drive Gear	6H3957	1	
Filter, Weep Hole	4N5834	1	37Y 373 - Up
Bolt, Gear Retaining	5P0076	1	37Y 373 - Up
Bolt, Impeller Retaining	4L6454	1	
Gasket, Water Pump Cover	8N5928	1	
Lock washer, Gear Retaining Bolt	3B4506	1	
Plug, Pipe	5M6213	1	
Seal Ring, Water Pump Mounting	5F3106	1	
Washer, Impeller	9M6527	1	
Washer, Water Pump Cover	5M2894	4	
<b>IPD Overhaul Kit contains shaft, bearings, seals, and gaskets for complete overhaul and mounting.</b>			

# IPD parts for Caterpillar® G3304 Engines

<b>OIL SYSTEM COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Oil Pump Group	6I1346	1	New, Double Stage
Oil Pump Repair Kit	IPD1346RK	1	For 6I1346 Oil Pump
Shaft, Assembly	8S0493	1	
Shaft, Assembly	2P6245	1	
Gear, Oil Pump	6N1036	2	8 Teeth
Valve, Pressure Relief	4P3546	1	
Key	1B8709	1	
Bolt	0S1591	1	
Valve, Pressure Relief	4P3546	1	
Oil Cooler	7N0110	1	
<b>Oil Pump Part For Both Single and Double Stage Oil Pumps</b>			
Oil Pump Idler Bushing	1969988	1	
Bearing	8S6511	4	
Idler Bushing	1950302	1	
Oil Pump Idler Shaft	2P1170	1	
<b>MISCELLANEOUS COMPONENTS</b>			
<b>Crankshaft Components</b>			
Crankshaft	4N7692	1	37Y 1 - 1583 New
Crankshaft Seal, Rear	4W0452	1	
Crankshaft Seal, Front	9Y9895	1	
Crankshaft Wear Sleeve, Rear	2P3858	1	
Plugs	9F2247	4	
<b>Camshaft Components</b>			
Camshaft Kit	9Y1723	1	Contains Camshaft and Lifters
Camshaft	7C3862	1	New
Lifters	7S3161	8	
Camshaft Lock	8S1491	1	
<b>Cylinder Block Repair</b>			
Sleeve, Counterbore Salvage	5P1622	A/R	" L " Type
Sleeve, Counterbore Salvage	5P1622O/S	A/R	" L " Type Oversize

# IPD parts for Caterpillar® G3306 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 7Y 1 - Up ( Short Valve )      G6X 1 - Up</b>			
Valve , Exhaust	2W2877	6	Short Style 5.470"
Valve , Intake	2W2621	6	Short Style 5.470"
Guide, Intake & Exhaust	4W9176	12	With Correct Serial and Arrangement #'s
Guide, Intake & Exhaust	7E1551	12	With Correct Serial and Arrangement #'s
Insert, Valve Seat Exhaust	7N1649	6	
Insert, Valve Seat Intake	5S7218	6	7Y 1 - 283
Insert, Valve Seat Intake	1070268	6	7Y 284 - Up
Valve Lock	2A4429	24	
Rotocoil	1031800	12	Turbocharged
Rotocoil	1W5300	12	Natural Aspirated ( Includes 6N7174 )
Shield	6N7174	12	
Nut, Rocker Arm Adjusting	1B4203	12	
Spring, Valve	7S7144	12	
Valve Lifter	7S3161	12	
Water Director Seal Ring	9Y1798	12	
Water Director Seal Ring	7N8018	6	
Plug, Cup	3B0623	6	
Spark Plug Adapter	7N1743	6	
Spark Plug Adapter Gasket	2N7174	6	Metal Gasket
Spark Plug Adapter Seal	7S3206	6	
<b>Engine Serial # 7Y 1 - Up ( Long Valve )</b>			
Valve , Exhaust	7W7491	6	Long Style 6.400"
Valve , Intake	7W7490	6	Long Style 6.400"
Guide, Intake & Exhaust	9Y7895	12	
Intake Valve Guide Seal	7W9143	6	7Y 2856 - Up
Spacer, Valve Guide	7W7488	12	
Insert, Valve Seat Exhaust	7N1649	6	
Insert, Valve Seat Intake	5S7218	6	7Y 1 - 283
Insert, Valve Seat Intake	1070268	6	7Y 284 - Up
Valve Lock	2A4429	24	
Rotocoil	1031800	12	Turbocharged
Rotocoil	1W5300	12	Natural Aspirated ( Includes 6N7174 )
Shield	6N7174	12	
Spring, Valve	7S7144	12	
Valve Lifter	7S3161	12	
Water Director Seal Ring	9Y1798	18	7Y 2079 - Up
Plug, Cup	3B0623	6	
Spark Plug Adapter	7N1743	6	
Spark Plug Adapter Gasket	2N7174	6	Metal Gasket
Spark Plug Adapter Seal	7S3206	6	

# IPD parts for Caterpillar® G3306 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Overhaul Gasket Set	306341	1	7Y 1 - Up Turbocharged
Overhaul Gasket Set	306351	1	7Y 1 - Up Non Turbocharged
In Frame Overhaul Set	306342	1	7Y 1 - Up Turbocharged
In Frame Overhaul Set	306352	1	7Y 1 - Up Non Turbocharged
Cylinder Head Gasket Set	306343	1	7Y 1 - Up Turbocharged
Cylinder Head Gasket Set	306353	1	7Y 1 - Up Non Turbocharged
Oil Pan Gasket	1694199	1	Sump to Plate
Oil Pan Plate Gasket	1694200	1	Plate to Cylinder Block
Valve Cover Gasket, Cork	8S1605	1	If Long Valves Order 1 Additional
Valve Cover Seal, Molded	1331247	1	If Long Valves Order 1 Additional
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	2323233	7	
Main Bearing .010"	8N8225	A/R	
Main Bearing .020"	8N8226	A/R	
Main Bearing .030"	8N8227	A/R	
Rod Bearing Standard	4W5739	6	
Rod Bearing .010"	8N8221	A/R	
Rod Bearing .020"	8N8222	A/R	
Rod Bearing .030"	8N8223	A/R	
Thrust Plate	6N8940	2	.185 " Thick 7Y 1 - 290
Thrust Plate	9S3037	2	.232 " Thick
Thrust Plate	1003652	2	.215 " Thick 7Y 291 - Up G6X 1 - Up
Cam Bearing	7M4046	4	
Cam Bearing	9M5477	1	
Bushing, Connecting Rod	8N0702	6	Straight Rod 7Y 1 - 437
Bushing, Connecting Rod	8N1985	6	Tapered Rod 7Y 238 - Up G6X 1 - Up
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG4P2654	6	10.5 : 1 CR
Piston and Liner Assembly	PLG4P2655	6	8.1 : 1 CR
Piston Body	4P2654	6	10.5 : 1 CR
Piston Body	4P2655	6	8.1 : 1 CR
Ring Group	3300RS5	6	1 Each 4P2656, 4P2657, 4P2658

# IPD parts for Caterpillar® G3306 Engines

<b>CYLINDER KITS AND COMPONENTS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Liner, Cylinder	1105800	6	
Pin, Piston	7N9804	6	1.50" Pin
Retainer, Piston Pin	9H4015	12	
Gasket Kit (Liner O Rings and Seal)	5P8768	6	Includes 3 5S6670 and 1 2W6134
Connecting Rod	8N1984	6	Tapered Rod, NEW
<b>Pistons will fit only NEW STYLE tapered connecting rods</b>			
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature 175'	1118010	1	175 Degree
Regulator, Water Temperature 190'	1167577	1	190 Degree
Gasket, Regulator	7N0944	2	
Water Pump Overhaul Kit	IPD7055	A/R	See Note
Water Pump Overhaul Kit	IPD1616	A/R	See Note
Water Pump Rebuild Kit	1W7054	A/R	7Y 1-408 with shaft # 1P9929
Water Pump Rebuild Kit	1W7055	A/R	7Y 409 - 1613 - up with shaft # 7N5899
Water Pump Rebuild Kit	8T1616	A/R	7Y 1614 - up with shaft # 2W7255
Impeller, Water Pump	7N5910	1	Use With 7N5899 and 2W7255 Shafts
Seal Group, Water Pump	1313815	1	Use With 8T1616 Kit
Seal Group, Water Pump	4W3864	1	Use With 1W7054 and 1W7055 Kit
Seal, Water Pump Oil	8H9520	1	7Y 1-408 with shaft # 1P9929
Seal, Water Pump Oil	8C5210	1	7Y 409 - Up
Shaft, Water Pump	2W7255	1	Included in 8T1616 Kit
Shaft, Water Pump	1P9929	1	Included in 1W7054 Kit
Shaft, Water Pump	7N5899	1	Included in 1W7055 Kit
Bearing, Water Pump Drive Gear	1B3867	1	
Bearing, Water Pump Drive Gear	6H3957	1	
<b>IPD Overhaul Kit contains shaft, bearings, seals, and gaskets for complete overhaul and mounting.</b>			

# IPD parts for Caterpillar® G3306 Engines

<b>OIL SYSTEM COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Oil Pump Group	6I1346	1	New, Double Stage
Oil Pump Repair Kit	IPD1346RK	1	For 6I1346 Oil Pump
Shaft, Assembly	8S0493	1	
Shaft, Assembly	2P6245	1	
Gear, Oil Pump	6N1036	2	8 Teeth
Valve, Pressure Relief	4P3546	1	
Key	1B8709	1	
Bolt	0S1591	1	
Valve, Pressure Relief	4P3546	1	
<b>Oil Pump Part For Both Single and Double Stage Oil Pumps</b>			
Oil Pump Idler Bushing	1969988	1	
Bearing	8S6511	4	
Idler Bushing	1950301	1	
Oil Pump Idler Shaft	2P1170	1	
<b>MISCELLANEOUS COMPONENTS</b>			
<b>Crankshaft Components</b>			
Crankshaft	2W7458	1	New
Crankshaft Seal, Rear	4W0452	1	
Crankshaft Seal, Front	9Y9895	1	
Crankshaft Wear Sleeve, Rear	2P3858	1	
Plugs	9F2247	6	
<b>Camshaft Components</b>			
Camshaft Kit	4P2942	1	Contains Camshaft and Lifters
Camshaft	7E9980	1	New
Lifters	7S3161	12	
Camshaft Lock	8S1491	1	
<b>Cylinder Block Repair</b>			
Sleeve, Counterbore Salvage	5P1622	A/R	" L " Type

# IPD parts for Caterpillar® G3406 Engines

<b>VALVE TRAIN AND CYLINDER HEAD COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
<b>Engine Serial # 4FD 1 - 342</b>			
Valve , Exhaust	2W2443	12	30 Degree 7.14" Length
Valve , Intake	1152368	12	30 Degree
Guide, Intake & Exhaust	1516235	24	
Insert, Valve Seat Exhaust	4W4325	12	30 Degree
Insert, Valve Seat Intake	4N5893	12	30 Degree
Valve Lock	2A4429	48	
Rotocoil	6N7175	24	Includes 6N7174
Shield	6N7174	24	Use with 6N7175
Spring, Valve	4N5906	24	
Valve Lifter Repair Kit	1055139RK	12	Roller & Pin set
Spring, Lifter Guide	3056843	12	Lifter Clip
Plug, Cup	3B0623	10	
Plug, Cup	3B0645	12	
Spark Plug Adapter	7W3860	6	
Spark Plug Adapter Gasket	2N7174	6	Metal Gasket
Spark Plug Adapter Seal	2S2251	6	
Stud, Taperlock	6L8562	1	
Stud, Taperlock	4S6137	11	
Bolt, Cylinder Head	5F4899	12	
Washer, Cylinder Head	5H1504	20	
Water Seal	3E6772	24	
<b>Engine Serial # 4FD 343 - Up and 1RK 1 - Up</b>			
Valve , Exhaust	1018314	12	20 Degree
Valve , Intake	1227353	12	Use With 1227352
Guide, Intake & Exhaust	1516235	24	
Insert, Valve Seat Intake	1227352	12	
Insert, Valve Seat Exhaust	1986529	12	20 Degree
Valve Lock	2A4429	48	
Rotocoil	6N7154	24	No Shield
Spring, Valve	4N5906	24	
Valve Lifter Repair Kit	1055139RK	12	Roller & Pin Set
Spring, Lifter Guide	3056843	12	Lifter Clip
Plug, Cup	3B0623	10	
Plug, Cup	3B0645	12	
Spark Plug Adapter	7W3860	6	
Spark Plug Adapter Gasket	2N7174	6	Metal Gasket
Spark Plug Adapter Seal	2S2251	6	
Bolt, Cylinder Head	5F4899	12	
Washer, Cylinder Head	5H1504	20	
Water Seal	3E6772	24	

# IPD parts for Caterpillar® G3406 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Thick Head</b>			
Valve , Exhaust	2120933	12	20 Degree 7.6201" Length
Valve , Intake	2120932	12	20 Degree 7.6201" Length
Insert, Valve Seat Exhaust	2120936	12	20 Degree
Insert, Valve Seat Intake	2143286	12	20 Degree
Valve Lock	2A4429	48	
Rotocoil	6N7154	24	No shield
Spring, Valve	4N5906	24	
Valve Lifter Repair Kit	1055139RK	12	With Correct Serial & Arrangement #
Spring, Lifter Guide	3056843	12	Lifter Clip
Plug, Cup	3B0623	10	
Plug, Cup	3B0645	12	
Spark Plug Adapter Gasket	2N7174	6	Metal Gasket
Spark Plug Adapter Seal	1090073	6	
Water Seal	3E6772	24	
Washer for Cylinder Head Bolt	5H1504	10	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	406221	1	Non Turbocharged
Overhaul Gasket Set	406261	1	Turbocharged
In Frame Overhaul Set	406222	1	Non Turbocharged
Cylinder Head Gasket Set	406223	1	Non Turbocharged
Cylinder Head Gasket Set	406263	1	Turbocharged
Oil Pan Gasket	4N1151-6	1	
Valve Cover Gasket	5P5678	6	Order by the Meter
Water Pump Gasket Set	1282922	1	
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	3215746	7	
Main Bearing .010"	4W5492-010	A/R	
Main Bearing .025"	4W5698	A/R	
Main Bearing .050"	4W5699	A/R	
Rod Bearing Standard	9Y9497G	6	Narrow Journal Crankshaft (1.535" Wide)
Rod Bearing .010"	9Y9497G-010	A/R	Narrow Journal Crankshaft (1.535" Wide)
Rod Bearing .025"	4W5702G	A/R	Narrow Journal Crankshaft (1.535" Wide)
Rod Bearing .050"	4W5703G	A/R	Narrow Journal Crankshaft (1.535" Wide)

# IPD parts for Caterpillar® G3406 Engines

<b>ENGINE BEARINGS AND BUSHINGS Continued</b>			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Rod Bearing Standard	9Y7735G	6	4FD 306 -Up & 1RK 1 - Up (1.930 " Wide)
Rod Bearing .025"	7E0558	A/R	4FD 306 -Up & 1RK 1 - Up (1.930 " Wide)
Rod Bearing .050"	7E0559	A/R	4FD 306 -Up & 1RK 1 - Up (1.930 " Wide)
Thrust Plate	2531752	2	
Cam Bearing	4N0685	6	
Cam Bearing	4N6658	1	
Bushing, Connecting Rod	8N0705	6	Straight Rods
Bushing, Connecting Rod	8N0706	6	Narrow Tapered Rods (1.540" Wide)
Bushing, Connecting Rod	8N2018	6	Wide Tapered Rods (1.850" Wide)
Bushing, Connecting Rod	4P8495	6	Wide Tapered Rods With Relief on ID
Idler Bushing	1317123	1	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG7E3888	6	10.0 : 1 C.R.
Piston and Liner Assembly	PLG4P8996	6	Gallery Cooled Piston 10.3 :1 C.R.
Piston and Liner Assembly	PLG7E3888/CS	6	10.0 : 1 C.R. w/ Crevice Seal Liner
Piston and Liner Assembly	PLG4P8996/CS	6	Gallery Cooled Piston w/ Crevice Seal Liner
Piston Body	7E3888	6	10.0 : 1 C.R.
Piston Body	4P8996	6	Gallery Cooled Piston 10.3:1 C.R.
Ring Group	7E3888SI	6	For 7E3888 Pistons
Ring Group	G3400RS	6	For 4P8996 Gallery Cooled Piston Only
Liner, Cylinder	2W6000	6	
Liner, Cylinder Crevice Seal Design	2W6000CSWS	6	Crevice Seal Design With Seals
Pin, Piston	8N1608	6	
Retainer, Piston Pin	7E5665	12	
Gasket Kit (Liner O Rings and Seal)	1183732	6	Contains 3 - 1102220 & 1 - 9L5854
Gasket Kit (Liner O Rings and Seal)	1183732CS	6	Crevice Seal Design Liner Only

# IPD parts for Caterpillar® G3406 Engines

COOLING SYSTEM COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Regulator, Water Temperature 180'	4W4794	1	180 Degree
Regulator, Water Temperature 190'	7C3095	1	190 Degree
Regulator, Water Temperature 180'	2485513	1	New Sealed Design
Regulator, Water Temperature 190'	2477133	1	New Sealed Design
Water Pump Overhaul Kit	IPD6289A	1	See Note Below
Water Pump Rebuild Kit	1293068	1	4FD 1 - 368
Water Pump Rebuild Kit	1293069	1	4FD 369 - Up & 1RK 1 - Up
Seal Group, Water Pump	4W3864	1	
Seal, Water Pump Oil	8C3100	1	
Shaft, Water Pump	1354928	1	
Seal, Regulator	3S9643		
Adapter, Inlet	7C9222		
Bearing, Water Pump Drive Gear	1B3867	1	4FD 1 - 368
Bearing, Water Pump Drive Gear	2L5271	1	4FD 1 - 368
Bearing Assy., Water Pump Drive Gear	1087930	1	4FD 369 - Up & 1RK 1 - Up
<b>IPD Overhaul Kit contains shaft, bearings, seals, and gaskets for complete overhaul and mounting.</b>			
OIL SYSTEM COMPONENTS			
Oil Pump Repair Kit	IPD3400RK	1	Incl. shafts, seals & bearings
Oil Pump Repair Kit ( Minor )	IPD3400RKM	1	Does not include shafts
Oil Cooler	2W1008	1	
Valve, Pressure Relief	4P3546	1	
MISCELLANEOUS COMPONENTS			
<b>Crankshaft Components</b>			
Crankshaft	7C4859WOG	1	New, Without Gear (narrow bearings only)
Crankshaft Seal, Rear	1425868	1	
Crankshaft Seal, Front	1425867	1	
<b>Camshaft Components</b>			
Camshaft	8N9245WOG	1	New w / Correct Serial & Arrangement #'s
<b>Cylinder Block Repair</b>			
Insert, Stainless Steel	9Y3368	A/R	.032" Thick
Insert, Stainless Steel	2W3815	A/R	.062" Thick

# IPD parts for Caterpillar® G3408 Engines

VALVE TRAIN AND CYLINDER HEAD COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 6NB 6FW 8YR 3WR</b>			
<b>Thin Head</b>			
Valve , Exhaust	1018314	16	20 Degree 7.14" Length
Valve , Intake	1227353	16	Use With 1227352
Guide, Intake & Exhaust	1511330	32	
Insert, Valve Seat Exhaust	1986529	16	20 Degree
Insert, Valve Seat Intake	1227352	16	Use With 1227353
Valve Lock	2A4429	64	
Rotocoil	6N7175	32	Includes 6N7174
Shield	6N7174	32	
Spring, Valve	4N5906	32	
Valve Lifter Repair Kit	1055139RK	16	
Spring, Lifter Guide	3056843	16	Lifter Clip
Plug, Cup	3B0623	16	
Plug, Cup	3B0645	12	
Spark Plug Adapter	7W3860	8	
Spark Plug Adapter Gasket	2N7174	8	Metal Gasket
Spark Plug Adapter Seal	2S2251	8	
Water Seal	3E6772	16	
<b>Thick Head</b>			
Valve , Exhaust	2120933	16	20 Degree 7.6201" Length
Valve , Intake	2120932	16	20 Degree 7.6201" Length
Guide, Exhaust	2137537	16	
Guide, Intake	2137536	16	
Insert, Valve Seat Exhaust	1986529	16	20 Degree
Insert, Valve Seat Intake	1227352	16	20 Degree
Valve Lock	2A4429	64	
Rotocoil	6N7154	32	No shield
Spring, Valve	4N5906	32	
Valve Lifter Repair Kit	1055139RK	16	With Correct Serial & Arrangement #
Spring, Lifter Guide	3056843	16	Lifter Clip
Plug, Cup	3B0623	16	
Plug, Cup	3B0645	12	
Spark Plug Adapter	7W3860	8	
Spark Plug Adapter Gasket	2N7174	8	Metal Gasket
Spark Plug Adapter Seal	2S2251	8	
Water Seal	3E6772	16	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	408261	1	Turbo Aftercooled
Cylinder Head Gasket Set	408263	1	Multiple Head Set
Oil Pan Gasket	4N1151	1	
Oil Pan Gasket	4N1151-8	1	Optional 1 Pc. Gasket

# IPD parts for Caterpillar® G3408 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS Continued</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Valve Cover Gasket	5P5678	8	Order By The Meter
Valve Cover Gasket	5P5678-08	1	(Both Valve Covers)
Water Pump Gasket Set	6V2543	1	With Correct Serial & Arrangement #
Water Pump Gasket Set	1049636	1	With Correct Serial & Arrangement #
Water Pump Gasket Set	2177884	1	With Correct Serial & Arrangement #
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	3215746	5	
Main Bearing .010"	4W5492-010	A/R	
Main Bearing .025"	4W5698	A/R	
Main Bearing .050"	4W5699	A/R	
Rod Bearing Standard	9Y9497G	8	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .010"	9Y9497G-010	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .025"	4W5702G	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .050"	4W5703G	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing Standard	9Y7735G	8	Wide Journal Crankshaft ( 1.930 " Wide )
Rod Bearing .025"	7E0558	A/R	Wide Journal Crankshaft ( 1.930 " Wide )
Rod Bearing .050"	7E0559	A/R	Wide Journal Crankshaft ( 1.930 " Wide )
Thrust Plate	2531752	2	
Cam Bearing	4N0685	3	
Cam Bearing	4N6658	2	
Bushing, Connecting Rod	8N0705	8	Straight Rods
Bushing, Connecting Rod	8N0706	8	Narrow Tapered Rods ( 1.540" Wide )
Bushing, Connecting Rod	8N2018	8	Wide Tapered Rods ( 1.850" Wide )
Bushing, Connecting Rod	4P8495	8	Wide Tapered Rods With Relief on ID
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG7E3888	8	10.0 : C.R.
Piston and Liner Assembly	PLG4P8996	8	Gallery Cooled 9.7 : 1 C.R.
Piston and Liner Assembly	PLG1607994	8	8.5 : 1 C.R.
Piston and Liner Assembly	PLG7E3888/CS	8	With IPD Crevice Style Liner
Piston and Liner Assembly	PLG4P8996/CS	8	With IPD Crevice Style Liner
Piston and Liner Assembly	PLG1607994/CS	8	With IPD Crevice Style Liner
Piston Body	7E3888	8	10.0 : C.R.
Piston Body	4P8996	8	Gallery Cooled 9.7 : 1 C.R.
Piston Body	1607994	8	8.5 : 1 C.R.
Ring Group	7E3888SI	8	For 7E3888 Piston Only
Ring Group	G3400RS	8	

# IPD parts for Caterpillar® G3408 Engines

CYLINDER KITS AND COMPONENTS Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Liner, Cylinder	2W6000	8	
Liner, Cylinder Crevice Seal Design	2W6000CSWS	A/R	IPD Crevice Style Liner With Seals
Pin, Piston	8N1608	8	
Retainer, Piston Pin	7E5665	16	
Gasket Kit (Liner O Rings and Seal)	1183732	8	Contains 3 - 1102220 and 1 - 9L5854
Gasket Kit (Liner O Rings and Seal)	1183732CS	8	Crevice Seal Design Liner Only
COOLING SYSTEM COMPONENTS			
Regulator, Water Temperature 180'	4W4794	2	180 Degree
Regulator, Water Temperature 190'	7C3095	2	190 Degree
Regulator, Water Temperature 180'	2485513	2	New Sealed Design
Regulator, Water Temperature 190'	2477133	2	New Sealed Design
Water Pump Rebuild Kit	1293068	1	With Correct Serial & Arrangement #
Water Pump Rebuild Kit	1293069	1	With Correct Serial & Arrangement #
Seal Group, Water Pump	1313815	1	
Seal Group, Water Pump	4W3864	1	
Seal, Water Pump Oil	8C3100	1	
Shaft, Water Pump	1354928	1	
Seal, Regulator	3S9643	2	
Adapter, Inlet	1012749	1	
Bearing, Water Pump Drive Gear	2L5271	1	
Bearing, Water Pump Drive Gear	1B3867	1	
Bearing, Water Pump Drive Gear	1087930	1	Roller Type
MISCELLANEOUS COMPONENTS			
Crankshaft Components			
Crankshaft	1W5009	1	
Crankshaft Seal, Rear	1425868	1	Standard Rotation
Crankshaft Seal, Front	1425867	1	Standard Rotation
Cylinder Block Repair			
Insert, Stainless Steel	9Y3368	A/R	.032" Thick
Insert, Stainless Steel	2W3815	A/R	.062" Thick

# IPD parts for Caterpillar® G3412 Engines

<b>VALVE TRAIN AND CYLINDER HEAD COMPONENTS</b>			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Engine Serial # 7DB , 3NK , 6ZM , 8LW</b>			
Valve , Exhaust	2W2443	24	30 Degree 7.14" Length
Valve , Exhaust	1018314	24	20 Degree 7.14" Length
Valve , Intake	1227353	24	Use With 1227352
Guide, Intake & Exhaust	1511330	48	With Correct Serial Number
Insert, Valve Seat Exhaust	4W4325	24	30 Degree
Insert, Valve Seat Exhaust	1986529	24	20 Degree
Insert, Valve Seat Intake	4N5893	24	
Insert, Valve Seat Intake	1227352	24	Use With 1227353
Valve Lock	2A4429	96	
Rotocoil	6N7175	48	Includes 6N7174
Rotocoil	6N7154	48	No Shield
Shield	6N7174	48	Oil Shield ( As Needed )
Spring, Valve	4N5906	48	
Valve Lifter Repair Kit	1055139RK	24	
Spring, Lifter Guide	3056843	24	Lifter Clip
Plug, Cup	3B0623	24	
Plug, Cup	3B0645	20	
Spark Plug Adapter	7W3860	12	With Correct Serial Number
Spark Plug Adapter Gasket	2N7174	12	Metal Gasket
Spark Plug Adapter Seal	2S2251	12	
Water Seal	3E6772	24	
<b>Engine Serial # 7DB , 3NK , 6ZM , 8LW ( Thick Cylinder Heads Only )</b>			
Valve , Exhaust	2120933	24	20 Degree 7.62" Length
Valve , Intake	2120932	24	20 Degree 7.62" Length
Guide, Exhaust	2137537	24	
Guide, Intake	2137536	24	
Insert, Valve Seat Exhaust	1986529	24	20 Degree
Insert, Valve Seat Intake	1227352	24	20 Degree
Valve Lock	2A4429	96	
Rotocoil	6N7154	48	No Shield
Spring, Valve	4N5906	48	
Valve Lifter Repair Kit	1055139RK	24	
Spring, Lifter Guide	3056843	24	Lifter Clip
Plug, Cup	3B0623	24	
Plug, Cup	3B0645	20	
<b>Engine Serial # 7DB , 3NK , 6ZM , 8LW ( Thick Cylinder Heads Only ) Continued</b>			
Spark Plug Adapter Gasket	2N7174	12	Metal Gasket
Spark Plug Adapter Seal	2S2251	12	
Water Seal	3E6772	24	

# IPD parts for Caterpillar® G3412 Engines

<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Overhaul Gasket Set	412091	1	7DB1 - UP Non Turbo
Overhaul Gasket Set	412111	1	7DB1 - UP Turbo Aftercooled
Multiple Cylinder Head Gasket Set	412093	1	7DB1 - UP Non Turbo
Multiple Cylinder Head Gasket Set	412113	1	7DB1 - UP Turbo Aftercooled
Single Cylinder Head Gasket Set	412114	A/R	7DB1 - UP Single Head Set
Oil Pan Gasket	4N1151	1	Puzzle Style
Oil Pan Gasket	4N1151-12	1	1 Piece Pan Gasket
Valve Cover Gasket	5P5678-13	1	(Both Valve Covers)
Valve Cover Gasket	5P5678-07	1	( One Valve Cover )
Water Pump Gasket Set	6V2543	1	With Correct Serial Number
Water Pump Gasket Set	1036192	1	With Correct Serial Number
Water Pump Gasket Set	2177884	1	With Correct Serial Number
<b>ENGINE BEARINGS AND BUSHINGS</b>			
Main Bearing Standard	3215746	7	
Main Bearing .010"	4W5492-010	A/R	
Main Bearing .025"	4W5698	A/R	
Main Bearing .050"	4W5699	A/R	
Rod Bearing Standard	9Y9497G	12	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .010"	9Y9497G-010	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .025"	4W5702G	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing .050"	4W5703G	A/R	Narrow Journal Crankshaft ( 1.535" Wide )
Rod Bearing Standard	9Y7735G	12	Wide Journal Crankshaft ( 1.930 " Wide )
Rod Bearing .025"	7E0558	A/R	Wide Journal Crankshaft ( 1.930 " Wide )
Rod Bearing .050"	7E0559	A/R	Wide Journal Crankshaft ( 1.930 " Wide )
Thrust Plate	2531752	2	
Cam Bearing	4N0685	5	
Cam Bearing	4N6658	2	
Bushing, Connecting Rod	8N0705	12	Straight Rods
Bushing, Connecting Rod	8N0706	12	Narrow Tapered Rods ( 1.540" Wide )
Bushing, Connecting Rod	8N2018	12	Wide Tapered Rods ( 1.850" Wide )
Bushing, Connecting Rod	4P8495	12	Wide Tapered Rods With Relief on ID

# IPD parts for Caterpillar® G3412 Engines

CYLINDER KITS AND COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
Piston and Liner Assembly	PLG7E3888	12	10.0 : C.R.
Piston and Liner Assembly	PLG4P8996	12	Gallery Cooled 9.7 : 1 C.R.
Piston and Liner Assembly	PLG1607994	12	8.5 : 1 C.R.
Piston and Liner Assembly	PLG7E3888/CS	12	IPD Crevice Style Liner
Piston and Liner Assembly	PLG4P8996/CS	12	IPD Crevice Style Liner
Piston and Liner Assembly	PLG1607994/CS	12	IPD Crevice Style Liner
Piston Body	7E3888	12	10.0 : C.R.
Piston Body	4P8996	12	Gallery Cooled 9.7 : 1 C.R.
Piston Body	1607994	12	8.5 : 1 C.R.
Ring Group	7E38888SI	12	For Use Only With 7E3888 Piston
Ring Group	G3400RS	12	
Liner, Cylinder	2W6000	12	
Liner, Cylinder Crevice Seal Design	2W6000CSWS	12	IPD Crevice Style Liner With Seals
Pin, Piston	8N1608	12	
Retainer, Piston Pin	7E5665	24	
Gasket Kit (Liner O Rings and Seal)	1183732	12	Contains 3 - 1102220 and 1 - 9L5854
Gasket Kit (Liner O Rings and Seal)	1183732CS	12	Crevice Seal Design Liner Only
COOLING SYSTEM COMPONENTS			
Regulator, Water Temperature 180'	4W4794	2	180 Degree
Regulator, Water Temperature 190'	7C3095	2	190 Degree
Regulator, Water Temperature 180'	2485513	2	New Sealed Design
Regulator, Water Temperature 190'	2477133	2	New Sealed Design
Seal, Regulator	3S9643	2	
Water Pump Rebuild Kit	1293068	1	With Correct Serial & Arrangement #
Water Pump Rebuild Kit	1293069	1	With Correct Serial & Arrangement #
Water Pump Rebuild Kit	1386744	1	With Correct Serial & Arrangement #
Seal Group, Water Pump	4W3864	1	With Correct Serial & Arrangement #
Seal Group, Water Pump	1313815	1	With Correct Serial & Arrangement #
Seal Group, Water Pump	1280317	1	With Correct Serial & Arrangement #
Shaft, Water Pump	1354928	1	With Correct Serial & Arrangement #
Seal, Oil	8C3100	1	
Adapter, Inlet	1012749	1	With Correct Serial Number
Bearing Assembly, Water Pump	1087930	1	With Correct Serial Number ( roller type )
Bearing, Water Pump	1B3867	1	With Correct Serial Number
Bearing, Water Pump	2L5271	1	With Correct Serial Number

# IPD parts for Caterpillar® G3412 Engines

MISCELLANEOUS COMPONENTS			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Crankshaft Components</b>			
Crankshaft	1W6213	1	With Correct Serial Number
Crankshaft	2W4088	1	With Correct Serial Number
Crankshaft Seal, Rear	1425868	1	Standard Rotation
Crankshaft Seal, Front	1425867	1	Standard Rotation
<b>Cylinder Block Repair</b>			
Insert, Stainless Steel	9Y3368	A/R	.032" Thick
Insert, Stainless Steel	2W3815	A/R	.062" Thick

# IPD parts for Caterpillar® G3508 Engines

<b>VALVE TRAIN AND CYLINDER HEAD COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Valve, Intake and Exhaust	1047184	32	20 Degree
Valve, Intake and Exhaust	3089177	32	LANDFILL ONLY
Lock, Valve	2A4429	64	
Spring, Inner Valve	7N1903	32	
Spring, Outer Valve	7N1904	32	
Rotocoil	1976999	32	
Guide, Intake	9Y1847	16	
Guide, Exhaust	9Y1846	16	
Guide, Intake Methane ( Landfill )	1845495	16	
Guide, Exhaust Methane ( Landfill )	1845494	16	
Seal, Valve Stem Methane	1977006	32	
Insert, Intake and Exhaust	6I1713	32	.460" Depth
Plug Cup	3B0623	40	25.73 mm OD
Seal, O-Ring	3J7354	8	
Plug Cup	3B0645	40	32.08 mm OD
Water Seal	2045426	32	
Water Seal	2045427	32	
Lifter, Valve	2636679	16	
Repair Kit, Valve Lifter	2636679RK	A/R	
Spring, Lifter Guide	7N4782	16	Lifter Clip
Rocker Arm Button	8F8858	16	
Retaining Ring	9F7707	16	
Screw, Rocker Arm Adjusting	2002003	16	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	508031	1	2JF1-UP Magneto With Wet Manifold
Overhaul Gasket Set	508041	1	9TG1-UP,4WD1-UP Wet Manifold
Multiple Cylinder Head Gasket Set	508033	1	2JF1-UP Magneto With Wet Manifold
Multiple Cylinder Head Gasket Set	508043	1	9TG1-UP,4WD1-UP Wet Manifold
Single Cylinder Head Gasket Set	508044EM	8	E.I.S. And Magneto Ignition Systems
Single Cylinder Head Gasket Set	516114	8	Dry Ceramic Manifold
Oil Pan Gasket	7E2631	1	
Block Side Cover Seal	2720757	8	
Camshaft Cover Seal	2720758	8	
Valve Cover Seal	2720759	8	

# IPD parts for Caterpillar® G3508 Engines

<b>ENGINE BEARINGS AND BUSHINGS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Main Bearing Standard	1496031	5	
Main Bearing .025"	1050254	A/R	
Rod Bearing Standard	1077330	8	
Rod Bearing .025"	1077331	A/R	
Thrust Plate	7C6209	2	
Cam Bearing	7N2048	10	Early Style
Cam Bearing	1161359	10	Late Style
Bushing, Connecting Rod	1181655	8	
Idler Bushing	8N5301	1	
Bushing, Rocker Arm	1W4594	16	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG1014140	8	8.0:1 Compression Ratio
Piston and Liner Assembly	PLG6I4609	8	11.0:1 Compression Ratio
Piston Body	1014140	8	8.0:1 Compression Ratio
Piston Body	6I4609	8	11.0:1 Compression Ratio
Ring Group	7E2899	8	
Liner, Cylinder	1106993	8	8.3317" ( Thick Flange )
Liner, Cylinder	1238206	8	8.1500" ( Thin Flange )
Pin, Piston	1388506	8	
Retainer, Piston Pin	8N7296	16	
Gasket Kit (Liner O Rings and Seal)	6V3774	8	Contains 3-7N2046 And 1-8N4707
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature	6I4950	4	180 Degree
Regulator, Water Temperature	7C3095	4	190 Degree
Regulator, Water Temperature	2485513	4	180 Degree New Sealed Design
Regulator, Water Temperature	2477133	4	190 Degree New Sealed Design
Seal, Regulator	3S9643	4	

# IPD parts for Caterpillar® G3508 Engines

<b>COOLING SYSTEM COMPONENTS Continued</b>			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Water Pump Groups 6I3520, 7E9781, 7E9782, 2128168, 2128169, 2128166</b>			
<i>Water Pump Rebuild Kit</i>	2219278	1	Contains items below
Seal Group - Basic	4W3864	1	With Correct Water Pump Group
Washer - Thrust	5N4383	2	With Correct Water Pump Group
Shim-Carrier	8M2933	4	With Correct Water Pump Group
Seal-Lip Type	9X4594	1	With Correct Water Pump Group
Bearing-Sleeve	1275400	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128179	1	With Correct Water Pump Group
Impeller (Press Fit)	2128183	1	With Correct Water Pump Group
<b>Water Pump Groups 1664381, 1664378, 2128172, 2128177</b>			
<i>Water Pump Rebuild Kit</i>	2225152	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128184	1	With Correct Water Pump Group
<b>Water Pump Groups 1664380, 1664377, 2128175, 2128176</b>			
<i>Water Pump Rebuild Kit</i>	2225153	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128187	1	With Correct Water Pump Group
<b>CRANKSHAFT COMPONENTS</b>			
Seal, Crankshaft Front	1138432	1	Standard Rotation
Seal, Crankshaft Rear	1138433	1	Standard Rotation

# IPD parts for Caterpillar® G3512 Engines

<b>VALVE TRAIN AND CYLINDER HEAD COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Valve, Intake and Exhaust	1047184	48	20 Degree
Valve, Intake and Exhaust	3089177	48	LANDFILL ONLY
Lock, Valve	2A4429	96	
Spring, Inner Valve	7N1903	48	
Spring, Outer Valve	7N1904	48	
Rotocoil	1976999	48	
Guide, Intake	9Y1847	24	
Guide, Exhaust	9Y1846	24	
Guide, Intake Methane ( Landfill )	1845495	24	
Guide, Exhaust Methane ( Landfill )	1845494	24	
Seal, Valve Stem Methane	1977006	24	
Insert, Intake and Exhaust	6I1713	48	.460" Depth
Plug Cup	3B0623	60	25.73 mm OD
Seal, O-Ring	3J7354	24	
Plug Cup	3B0645	60	32.08 mm OD
Water Seal	2045426	48	
Water Seal	2045427	48	
Lifter, Valve	2636679	24	
Repair Kit, Valve Lifter	2636679RK	24	
Spring, Lifter Guide	7N4782	24	Lifter Clip
Rocker Arm Button	8F8858	24	
Retaining Ring	9F7707	24	
Screw, Rocker Arm Adjusting	2002003	24	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	512011	1	4KC1-UP Magneto Ignition
Overhaul Gasket Set	512021	1	5JD1-UP Electronic Ignition
In Frame Gasket Set	512012	1	4KC1-UP Magneto Ignition
In Frame Gasket Set	512022	1	5JD1-UP Electronic Ignition
Multiple Cylinder Head Gasket Set	512013	1	4KC1-UP Magneto Ignition
Multiple Cylinder Head Gasket Set	512023	1	5JD1-UP Electronic Ignition
Multiple Cylinder Head Gasket Set	512113	1	5JD1-UP , 7NJ1-UP Late E.I.S.
Single Cylinder Head Gasket Set	508044EM	12	E.I.S. And Magneto Ignition Systems
Single Cylinder Head Gasket Set	516114	12	Dry Ceramic Manifold
Oil Pan Gasket	7E2631	1	
Block Side Cover Seal	2720757	12	
Camshaft Cover Seal	2720758	12	
Valve Cover Seal	2720759	12	

# IPD parts for Caterpillar® G3512 Engines

<b>ENGINE BEARINGS AND BUSHINGS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Main Bearing Standard	1496031	7	
Main Bearing .025"	1050254	A/R	
Rod Bearing Standard	1077330	12	
Rod Bearing .025"	1077331	A/R	
Thrust Plate	7C6209	2	
Cam Bearing	7N2048	14	Early Style
Cam Bearing	1161359	14	Late Style
Bushing, Connecting Rod	1181655	12	
Idler Bushing	8N5301	1	
Bushing, Rocker Arm	1W4594	24	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG1014140	12	8.0:1 Compression Ratio
Piston and Liner Assembly	PLG614609	12	11.0:1 Compression Ratio
Piston Body	1014140	12	8.0:1 Compression Ratio
Piston Body	614609	12	11.0:1 Compression Ratio
Ring Group	7E2899	12	
Liner, Cylinder	1106993	12	8.3317" ( Thick Flange )
Liner, Cylinder	1238206	12	8.1500" ( Thin Flange )
Pin, Piston	1388506	12	
Retainer, Piston Pin	8N7296	24	
Gasket Kit (Liner O Rings and Seal)	6V3774	12	Contains 3-7N2046 And 1-8N4707
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature	6I4950	4	180 Degree
Regulator, Water Temperature	7C3095	4	190 Degree
Regulator, Water Temperature	2485513	4	180 Degree New Sealed Design
Regulator, Water Temperature	2477133	4	190 Degree New Sealed Design
Seal, Regulator	3S9643	4	

# IPD parts for Caterpillar® G3512 Engines

COOLING SYSTEM COMPONENTS Continued			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Water Pump Groups 6I3520, 7E9781, 7E9782, 2128168, 2128169, 2128166</b>			
<i>Water Pump Rebuild Kit</i>	2219278	1	Contains items below
Seal Group - Basic	4W3864	1	With Correct Water Pump Group
Washer - Thrust	5N4383	2	With Correct Water Pump Group
Shim-Carrier	8M2933	4	With Correct Water Pump Group
Seal-Lip Type	9X4594	1	With Correct Water Pump Group
Bearing-Sleeve	1275400	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128179	1	With Correct Water Pump Group
Impeller (Press Fit)	2128183	1	With Correct Water Pump Group
<b>Water Pump Groups 1664381, 1664378, 2128172, 2128177</b>			
<i>Water Pump Rebuild Kit</i>	2225152	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128184	1	With Correct Water Pump Group
<b>Water Pump Groups 1664380, 1664377, 2128175, 2128176</b>			
<i>Water Pump Rebuild Kit</i>	2225153	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128187	1	With Correct Water Pump Group
<b>CRANKSHAFT COMPONENTS</b>			
Seal, Crankshaft Front	1138432	1	Standard Rotation
Seal, Crankshaft Rear	1138433	1	Standard Rotation

# IPD parts for Caterpillar® G3516 Engines

<b>VALVE TRAIN AND CYLINDER HEAD COMPONENTS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Valve, Intake and Exhaust	1047184	64	20 Degree
Valve, Intake and Exhaust	3089177	64	LANDFILL ONLY
Lock, Valve	2A4429	128	
Spring, Inner Valve	7N1903	64	
Spring, Outer Valve	7N1904	64	
Rotocoil	1976999	64	
Guide, Intake	9Y1847	32	
Guide, Exhaust	9Y1846	32	
Guide, Intake Methane ( Landfill )	1845495	32	
Guide, Exhaust Methane ( Landfill )	1845494	32	
Seal, Valve Stem Methane	1977006	32	
Insert, Intake and Exhaust	611713	64	.460" Depth
Plug Cup	3B0623	80	25.73 mm OD
Seal, O-Ring	3J7354	32	
Plug Cup	3B0645	80	32.08 mm OD
Water Seal	2045426	64	
Water Seal	2045427	64	
Lifter, Valve	2636679	32	
Repair Kit, Valve Lifter	2636679RK	A/R	
Spring, Lifter Guide	7N4782	32	Lifter Clip
Rocker Arm Button	8F8858	32	
Retaining Ring	9F7707	32	
Screw, Rocking Arm Adjusting	2002003	32	
<b>GASKET SETS AND MISCELLANEOUS GASKETS</b>			
Overhaul Gasket Set	516011	1	3RC 1-UP Magneto Ignition
Overhaul Gasket Set	516021	1	8LD 1-UP, 4EK 1-UP E.I.S. Wet Manifold
Overhaul Gasket Set	516111	1	8LD 1-UP, 4EK 1-UP E.I.S. Dry Manifold
In Frame Gasket Set	516012	1	3RC 1-UP Magneto Ignition
In Frame Gasket Set	516022	1	8LD 1-UP, 4EK 1-UP E.I.S.
Multiple Cylinder Head Gasket Set	516013	1	3RC 1-UP Magneto Ignition
Multiple Cylinder Head Gasket Set	516023	1	8LD 1-UP, 4EK 1-UP E.I.S. Wet Manifold
Multiple Cylinder Head Gasket Set	516113	1	8LD 1-UP, 4EK 1-UP E.I.S. Wet Manifold
Single Cylinder Head Gasket Set	508044EM	16	E.I.S. And Magneto Ignition Systems
Single Cylinder Head Gasket Set	516114	16	Dry Ceramic Manifold
Oil Pan Gasket	7E2631	1	
Block Side Cover Seal	2720757	16	
Camshaft Cover Seal	2720758	16	
Valve Cover Seal	2720759	16	

# IPD parts for Caterpillar® G3516 Engines

<b>ENGINE BEARINGS AND BUSHINGS</b>			
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QTY. REQ.</b>	<b>COMMENTS</b>
Main Bearing Standard	1496031	9	
Main Bearing .025"	1050254	A/R	
Rod Bearing Standard	1077330	16	
Rod Bearing .025"	1077331	A/R	
Thrust Plate	7C6209	2	
Cam Bearing	7N2048	18	Early Style
Cam Bearing	1161359	18	Late Style
Bushing, Connecting Rod	1181655	16	
Idler Bushing	8N5301	1	
Bushing, Rocker Arm	1W4594	32	
<b>CYLINDER KITS AND COMPONENTS</b>			
Piston and Liner Assembly	PLG1014140	16	8.0:1 Compression Ratio
Piston and Liner Assembly	PLG6I4609	16	11.0:1 Compression Ratio
Piston Body	1014140	16	8.0:1 Compression Ratio
Piston Body	6I4609	16	11.0:1 Compression Ratio
Ring Group	7E2899	16	
Liner, Cylinder	1106993	16	8.3317" ( Thick Flange )
Liner, Cylinder	1238206	16	8.1500" ( Thin Flange )
Pin, Piston	1388506	16	
Retainer, Piston Pin	8N7296	32	
Gasket Kit (Liner O Rings and Seal)	6V3774	16	Contains 3-7N2046 And 1-8N4707
<b>COOLING SYSTEM COMPONENTS</b>			
Regulator, Water Temperature	6I4950	4	180 Degree
Regulator, Water Temperature	7C3095	4	190 Degree
Regulator, Water Temperature	2485513	4	180 Degree New Sealed Design
Regulator, Water Temperature	2477133	4	190 Degree New Sealed Design
Seal, Regulator	3S9643	4	

# IPD parts for Caterpillar® G3516 Engines

<b>COOLING SYSTEM COMPONENTS Continued</b>			
DESCRIPTION	PART NUMBER	QTY. REQ.	COMMENTS
<b>Water Pump Groups 6I3520, 7E9781, 7E9782, 2128168, 2128169, 2128166</b>			
<i>Water Pump Rebuild Kit</i>	2219278	1	Contains items below
Seal Group - Basic	4W3864	1	With Correct Water Pump Group
Washer - Thrust	5N4383	2	With Correct Water Pump Group
Shim-Carrier	8M2933	4	With Correct Water Pump Group
Seal-Lip Type	9X4594	1	With Correct Water Pump Group
Bearing-Sleeve	1275400	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128179	1	With Correct Water Pump Group
Impeller (Press Fit)	2128183	1	With Correct Water Pump Group
<b>Water Pump Groups 1664381, 1664378, 2128172, 2128177</b>			
<i>Water Pump Rebuild Kit</i>	2225152	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128184	1	With Correct Water Pump Group
<b>Water Pump Groups 1664380, 1664377, 2128175, 2128176</b>			
<i>Water Pump Rebuild Kit</i>	2225153	1	Contains items below
Bolt	0S1618	2	With Correct Water Pump Group
Seal-O-Ring	3D2824	1	With Correct Water Pump Group
Filter	4N5834	2	With Correct Water Pump Group
Washer - Thrust	7N4758	1	With Correct Water Pump Group
Seal-Lip Type	8C5236	1	With Correct Water Pump Group
Washer-Hard	9M1974	2	With Correct Water Pump Group
Ring As.	1664374	1	With Correct Water Pump Group
Seal Gp-E	1664376	1	With Correct Water Pump Group
Shaft (Straight Joint Press Fit)	2128180	1	With Correct Water Pump Group
Impeller (Press Fit)	2128187	1	With Correct Water Pump Group
<b>CRANKSHAFT COMPONENTS</b>			
Seal, Crankshaft Front	1138432	1	Standard Rotation
Seal, Crankshaft Rear	1138433	1	Standard Rotation



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## IPD ENGINE MODEL SUMMARY

### CATERPILLAR®

D3508 / D3512 / D3516 / D3524

G3508 / G3512 / G3516 / G3520

D3406 / D3408 / D3412

D3406E / D3408E / D3412E

G3406 / G3408 / G3412

D3304 / D3306 / D333

G3304 / G3306 / G333

3204 / 3208

3114 / 3116 / 3126

3064 / 3066

D379 / D398 / D399

G379 / G398 / G399

D353 / G353

D339 / D342 / G342

D343 / D346 / D348

C15, C12, C10 / 3176C, C9

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