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# CUMMINS NTA855 ENGINE



## PARTS CATALOG CUMMINS NTA855 ENGINE

PC2282 (01MAR90) English

JOHN DEERE WATERLOO WORKS  
PC2282 (01MAR90)

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ENGLISH

PC2282 01MAR90





# **Parts Catalog**

## **NTA855**

**Big Cam III  
Deere  
Model 8960  
PC-2282  
(March 1990)**



# Cummins Engine Co., Inc.

## New Parts Warranty

### Heavy Duty

#### COVERAGE

##### PRODUCTS WARRANTED

These warranties apply to New Parts marketed by Cummins for its engines (except those for A, B, and C series engines). They apply anywhere in the world where service is available through a Cummins distributor or full service dealer.\*

##### BASE WARRANTY

The Base Warranty covers any failures of parts on or after March 31, 1986, which result, under normal use and service, from defects in workmanship or material (Warrantable Failures). The coverage on cylinder kits designated by Cummins as "Premium Plus" extends two years, 200,000 miles (321,870 kilometers) or 7,200 hours of operation, whichever occurs first, from the date of first installation. The coverage on other parts extends one year, 100,000 miles (160,935 kilometers) or 3,600 hours of operation, whichever occurs first, from the date of first installation.

##### EXTENDED MAJOR COMPONENTS WARRANTY

The Extended Major Components Warranty covers Warrantable Failures on or after March 31, 1986, of engine cylinder blocks, crankshafts, flangeless NT camshafts\*\* and connecting rods (Covered Parts). Bushing and bearing failures are not included. This coverage begins with the expiration of the Base Warranty and ends three years, 300,000 miles (482,805 kilometers) or 10,800 hours of operation, whichever occurs first, from the date of first installation.

Both the Base Warranty and Extended Major Components Warranty apply to all Owners in the chain of distribution, and coverage continues to all subsequent Owners until the end of the respective periods of coverage.

#### CUMMINS RESPONSIBILITIES

##### DURING THE BASE WARRANTY

Cummins will pay for all parts and labor needed to repair the damage to the engine resulting from the Warrantable Failure. All labor costs will be paid in accordance with Cummins published Standard Repair Operation guidelines.

Cummins will pay for the lubricating oil, antifreeze, filter elements, and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay reasonable labor costs for engine removal and reinstallation when necessary to make the warranty repair.

When the parts are installed in a non-automotive engine, Cummins will pay reasonable travel expenses for mechanics to and from the engine site, or the repair dock in the case of a marine engine, including meals, mileage and lodging when it is necessary for mechanics to make on-site warranty repairs.

##### DURING THE EXTENDED MAJOR COMPONENTS WARRANTY

Cummins will pay for the Covered Part and for any Covered Part damaged by a Warrantable Failure of another Covered Part.

#### OWNER RESPONSIBILITIES

##### DURING THE BASE WARRANTY

Before expiration of the warranty, Owner must give notice to a Cummins distributor or full service dealer\* of a failure considered to be warrantable and have the repair performed by such facility.

If the part was installed in an automotive engine, the Owner must deliver the engine to the repair location. If installed in a marine engine, Owner is responsible for the cost of towing the boat to a repair dock and for any associated docking and harbor charges.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during warranty repairs except where such items are not reusable due to a Warrantable Failure.

##### DURING THE EXTENDED MAJOR COMPONENTS WARRANTY

Before expiration of the warranty, Owner must give notice to a Cummins distributor or full service dealer\* of a failure considered to be warrantable and deliver the defective and damaged Covered Parts to such facility.

Owner is responsible for the cost of all parts needed for the repair except for the defective Covered Part and for any Covered Part damaged by a Warrantable Failure of another Covered Part.

Owner is responsible for the cost of all labor needed to repair the engine, including the labor to remove and reinstall the engine. When Cummins elects to repair a part instead of replacing it, Owner is not responsible for the labor needed to repair the part.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during the repair.

##### DURING BOTH WARRANTIES

At the time when the parts are installed, Owner is responsible for the preparation of a written record containing the following: (1) the date of installation of the parts; (2) the engine serial number; (3) the engine miles, hours or kilometers of operation; (4) the parts installed, and (5) the location of the parts in the engine. The purpose of this record is to protect Owner's interests and support any claim for a Warrantable Failure.

Owner is responsible for the operation and maintenance of the engine as specified in Cummins Operation and Maintenance Manuals.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred by Owner as a result of a Warrantable Failure. Owner is responsible for non-engine repairs and for "down time" expenses, cargo damage and all business costs and losses resulting from a Warrantable Failure. CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

#### LIMITATIONS

Cummins is not responsible for failures resulting from Owner or Operator abuse or neglect, such as: operation without adequate coolant, fuel or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or air intake systems; improper storage, starting, warm-up, run-in or shutdown practices. Cummins is also not responsible for failures caused by incorrect fuel, or by water, dirt or other contaminants in the fuel.

Cummins does not warrant parts supplied by Cummins which bear the name of another company. These parts are warranted by their manufacturers and not by Cummins. This category of parts includes, but is not limited to: hydraulic pumps, alternators, starters, fans, air conditioning compressors, clutches, steering pumps, transmissions, torque converters, marine gears, air cleaners, filters and non-Cummins air compressors, power steering pumps, and engine compression brakes.

Parts provided may be new Cummins, Cummins approved rebuilt parts, or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

This warranty does not apply to parts furnished by Cummins at no charge to the Owner.

**INVEST IN THE BEST**

## Product Identification Information

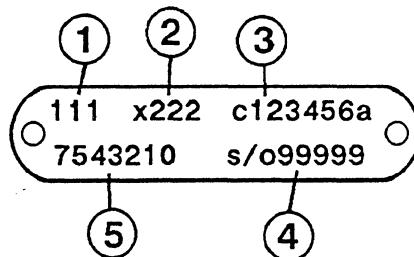
Data plates should be referred for parts identification.

### 1. ENGINE DATA PLATE

(3) Engine No.	S.O. No.					(1)
(2) Model	Ref. No.					
Advertised	Engine Cert	C.I.D.	Family	C.P.L.		
Conf. No.	Indent.					
Date of mfg.	Warranty start date					
Manufactured by Cummins Engine Co.						

1. Shop order number
2. Model designation
3. Engine serial number
4. Control parts list

### 2. FUEL PUMP DATA PLATE



1. Control parts list number
2. Calibration code
3. Serial number
4. Top level number
5. Fuel pump assembly number

This catalog was compiled by Pat Vails in Parts Communications.

## Customer Service Information

This customized Parts Catalog contains parts information for the following Cummins Engine Model(s):

NTA855-A370

D093585AX02

CPL 1194

SO 29259

Certain basic engine components have been matched to give optimum performance to your engine. The part numbers listed in this catalog for these components are for the above engine configuration. When ordering any of the Control Parts List (CPL) components listed below, please order by part description and engine serial number. Reference to the CPL number stamped on the engine data (name) plate will also help identify the proper service parts for your engine.

### Control Parts List (CPL) Components

Aftercooler	Page 53	Piston, engine	Page 65
Camshaft	Page 62	Turbocharger	Page 73
Cylinder Head	Page 69	Exhaust, manifold	Page 77
Injector	Page 71		

### USER INFORMATION

- Parts numbers appearing in ( ) are for identification purposes only and should not be used when ordering service replacement parts.
- The reference numbers appearing on the art pages is for publication use only.
- Assembly content is shown by part number indentation.
- Options are engineered production part groupings, specifically used for compiling engine orders.
- Option numbers are for reference only and are not sold for service.
- Use assembly and not option content to determine service parts replacement.

### ALWAYS SPECIFY ENGINE MODEL AND SERIAL NUMBER WHEN ORDERING PARTS FROM THIS CATALOG

Engine Model \_\_\_\_\_ Engine Serial No. \_\_\_\_\_

MFG Make \_\_\_\_\_ Model \_\_\_\_\_ Chassis No. \_\_\_\_\_

Fuel Pump Assembly No. \_\_\_\_\_ Injector No. \_\_\_\_\_

Belt, Fan \_\_\_\_\_ Belt, Water Pump \_\_\_\_\_ Belt, Gen. \_\_\_\_\_

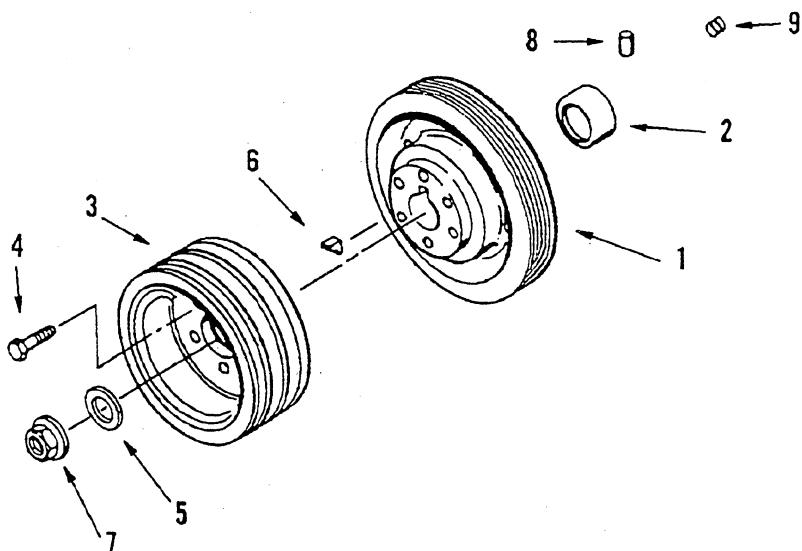
Element, Fuel Filter \_\_\_\_\_ Full Flow Lub. Filter \_\_\_\_\_

Air Cleaner \_\_\_\_\_ By-Pass Lub. Filter \_\_\_\_\_

Special Equipment \_\_\_\_\_

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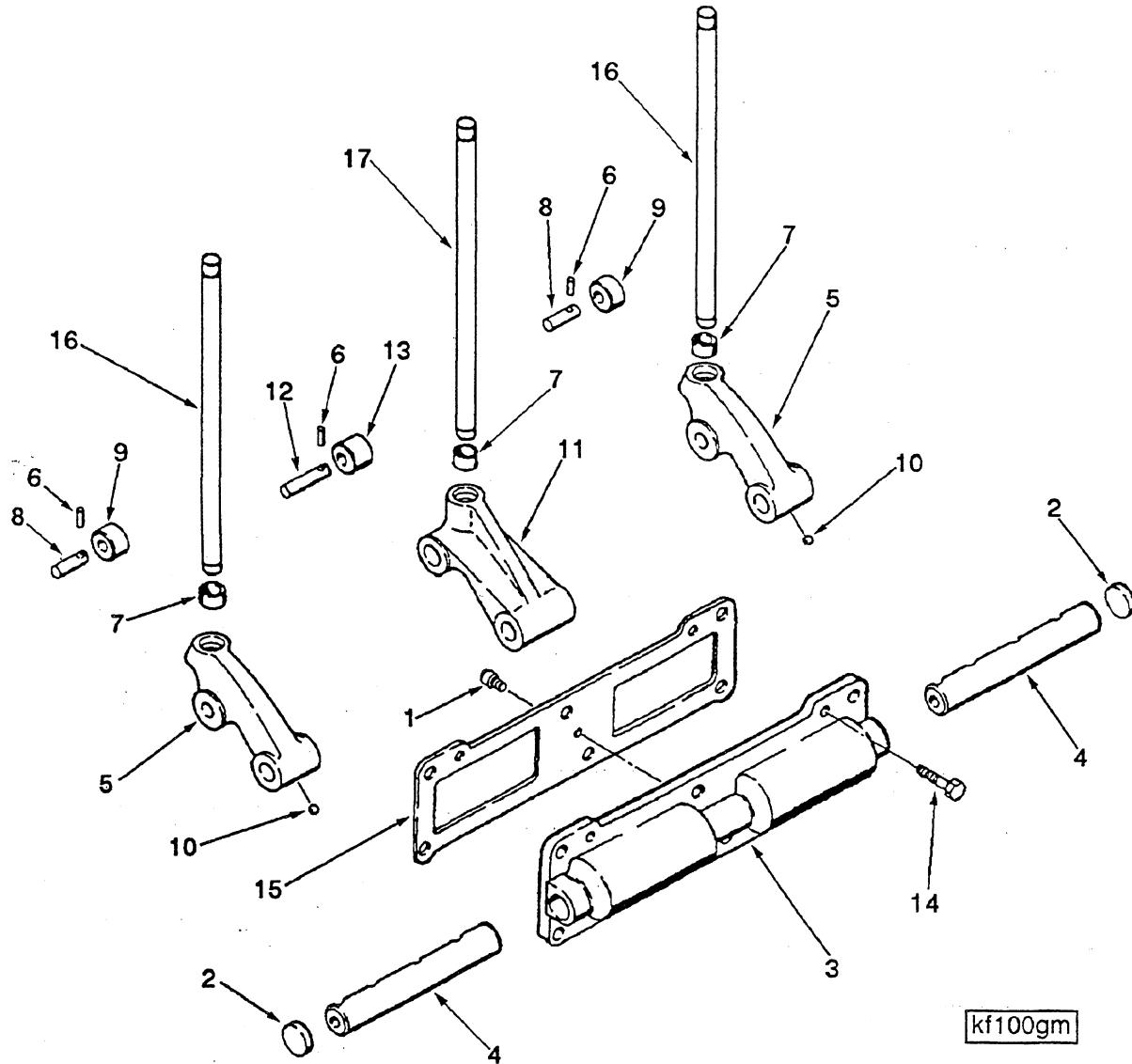
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ad100gb

Ref No.	Part Number	Part Name	Req	Remarks
		<b>ACCESSORY DRIVE PULLEY OPTION AD1116</b>		
1	3023473 (3013335)	Pulley, Accessory Drive	1	
2	190397	Pulley, Accessory Drive	1	
3	3036449	Sleeve, Wear	1	
		<b>Pulley, Accessory Drive</b>	1	One poly-vee groove on base pulley to drive water pump. Four grooves on add on pulley.
4	175833	<b>MOUNTING PARTS</b>	6	3/8 - 16 x 1 1/8 Inch
5	193136	Capscrew, Hexagon Head	1	1 3/4 Inch
6	3008947	Washer, Plain	1	
7	3012526	Seal, Keyway	1	
8	70550	Nut	1	
9	3013786	Dowel, Pin	1	
		Plug, Pipe	1	7/8 Inch

## NOTES

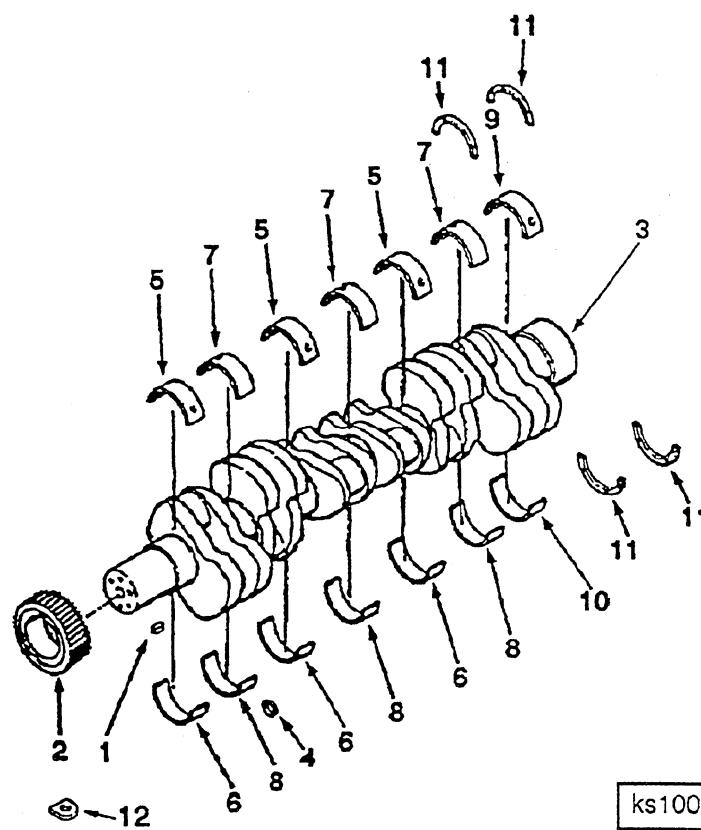


Group No. 04.01

## Cam Follower Housing

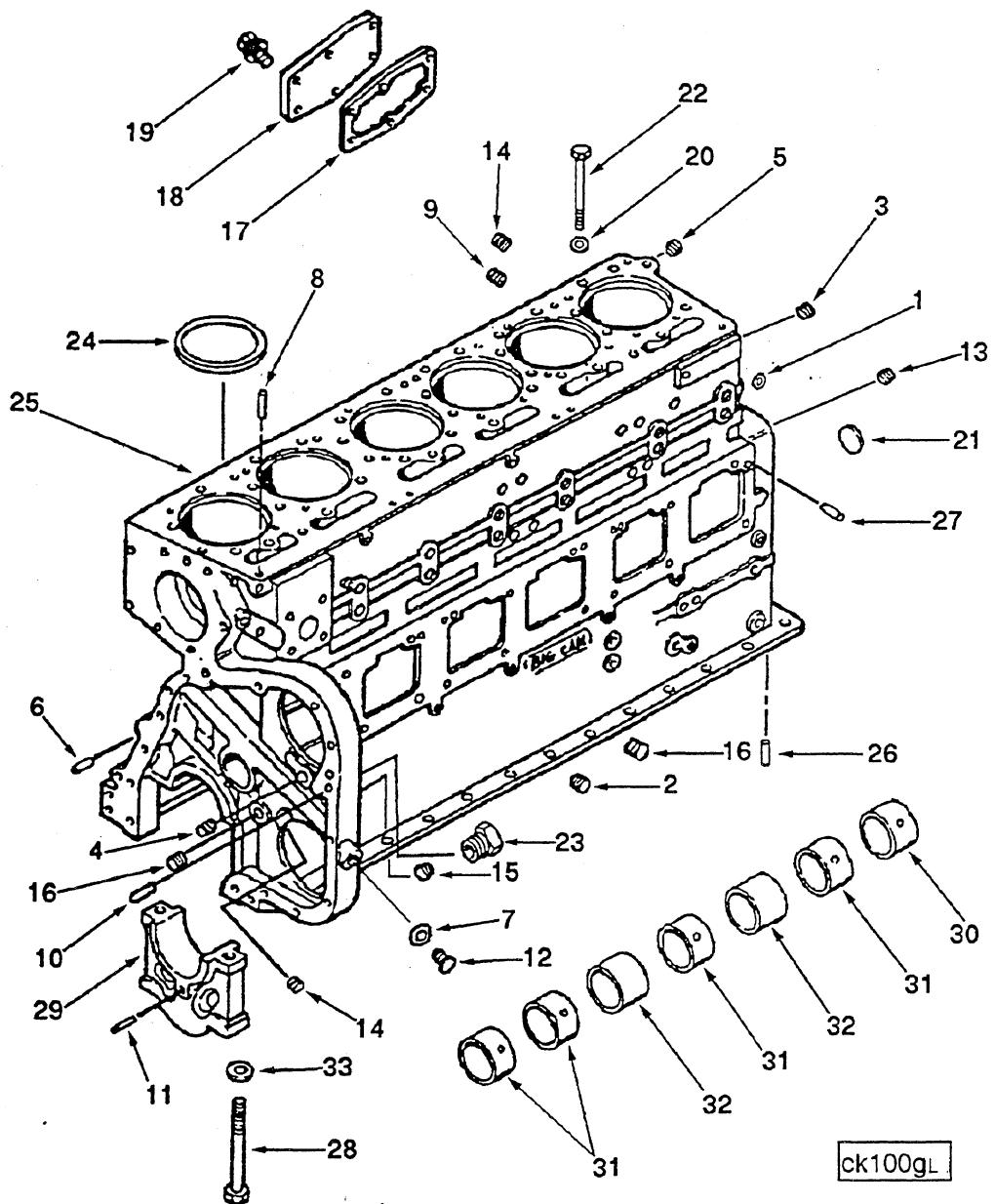
Option No. BP1300,  
PP1194

Ref No.	Part Number	Part Name	Req	Remarks
<b>CAM FOLLOWER HOUSING OPTION BP1300</b>				
1	3036939	Assembly, Cam Fol. Hsg.	3	
	69736	Screw, Lock	2	
2	3007634	Plug, Expansion	2	
3	3016887	Housing, Cam Follower	1	
4	3017031	Shaft, Cam Follower	2	
5	3056568	Lever, Cam Follower	4	
6	118939	Pin, Roll	1	
7	213559	Socket, Cam Follower	1	
8	3013331	Pin, Cam Follower Roller	1	
9	3036933	Roller, Cam Follower	1	
10	3056570	Plug, Ball	1	
11	3056569	Lever, Cam Follower	2	
6	118939	Pin, Roll	1	
7	213559	Socket, Cam Follower	1	
12	3013330	Pin, Cam Follower Roller	1	
13	3036934	Roller, Cam Follower	1	
<b>MOUNTING PARTS</b>				
14	S-129	Capscrew, Hexagon Head	18	3/8 - 24 x 1 Inch
16	3046420	Rod, Push	12	
17	3046430	Rod, Push Injector	6	
<b>OPTION PP1194</b>				
15	3041501	Gasket, Cam Follower Hsg.	3	CPL1194

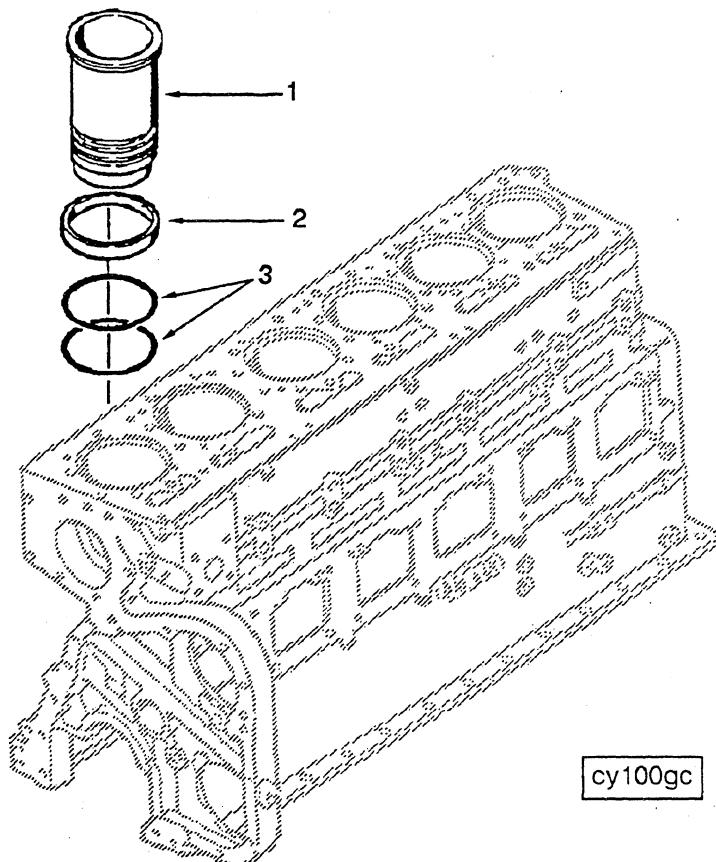


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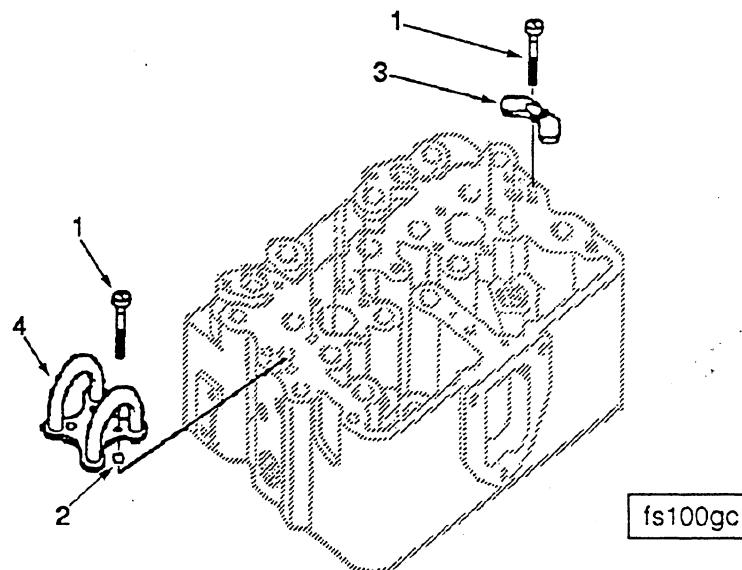
Ref No.	Part Number	Part Name	Req	Remarks
		CRANKSHAFT OPTION BP1300		
1	210179	Key	1	
2	3014614	Gear	1	
3	3608833	Crankshaft	1	
		MAIN BEARINGS		
4	3037045	Dowel, Ring	7	
	3801260	Set, Main Bearing	1	Standard
5	3019174	Bearing, Main	3	Upper 1, 3 and 5
6	3019180	Bearing, Main	3	Lower 1, 3 and 5
7	3019186	Bearing, Main	3	Upper 2, 4 and 6
8	3019192	Bearing, Main	3	Lower 2, 4 and 6
9	3019198	Bearing, Main	1	Upper 7
10	3019204	Bearing, Main	1	Lower 7
11	3019218	Bearing, Thrust	4	
12	3009213	Lockplate	14	
	3801261	Set, Main Bearing	1	0.010 Inch Oversize
	3801262	Set, Main Bearing	1	0.020 Inch Oversize
	3801263	Set, Main Bearing	1	0.030 Inch Oversize
	3801264	Set, Main Bearing	1	0.040 Inch Oversize



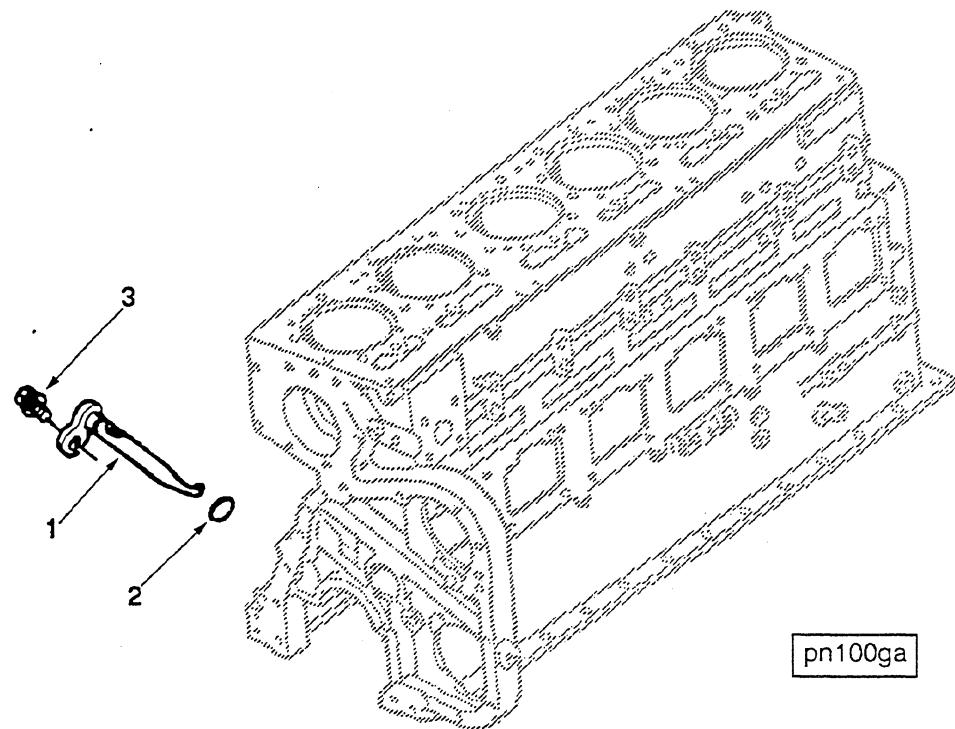
Ref No.	Part Number	Part Name	Req	Remarks
		<b>CYLINDER BLOCK</b>		
		<b>OPTION BP1300</b>		
1	3801743	Block, Cylinder	1	
1	S-679	Washer, Plain	1	
2	S-716	Plug, Expansion	1	
3	S-719	Plug, Expansion	1	1 Inch
4	S-911-B	Plug, Pipe	2	1/8 Inch
5	S-966-E	Plug, Pipe	1	1 Inch
6	60408	Dowel	3	
7	66292	Washer, Plain	1	
8	68445	Pin, Groove	6	
9	69901	Plug, Pipe	9	1/8 Inch
10	70653	Dowel	1	
11	202903	Pin, Roll	2	
12	210884	Plug, Threaded	1	
13	3008466	Plug, Pipe	2	1/4 Inch
14	3008468	Plug, Pipe	5	1/2 Inch
15	3008469	Plug, Pipe	2	3/4 Inch
16	3013786	Plug, Pipe	6	3/8 Inch
17	70089-1	Gasket, Cover Plate	1	
18	132019	Cover, Water Header	1	
19	3013904	Capscrew, Captive Washer	6	1/4 - 20 x 5/8 Inch
20	69699	Washer, Plain	36	
21	3011952	Plug, Expansion	1	
22	3013623	Capscrew, Hexagon Head	36	11/16-16 x 7 3/8 Inch
23	3046202	Plug, Threaded	1	
24	3054947	Ring, Liner Seal	A/R	0.0195 Inch (black)
24	3054948	Ring, Liner Seal	6	0.0205 Inch (white)
24	3054949	Ring, Liner Seal	A/R	0.0215 Inch (orange)
24	3019959	Ring, Liner Seal	A/R	0.031 Inch
24	3019960	Ring, Liner Seal	A/R	0.062 Inch
25	(3060622)	Block, Cylinder	1	
26	67211	Dowel, Rear Main	2	
27	68585	Dowel, Pin	6	
28	208346	Capscrew, Hexagon	14	3/4-16 x 6 5/8 Inch
29	3008047	Cap, Main Bearing	3	No. 1, 3, and 5
29	3008048	Cap, Main Bearing	3	No. 2, 4, and 6
29	3008049	Cap, Main Bearing	1	No. 7 only
	3801106	Kit, Camshaft Bushing	1	
30	3011951	Bushing, Camshaft	1	No. 7
31	3028075	Bushing, Camshaft	4	No. 1, 2, 4, and 6
32	3028269	Bushing, Camshaft	2	No. 3 and 5
33	3046246	Washer, Plain	14	



Ref No.	Part Number	Part Name	Req	Remarks
		<b>CYLINDER LINER KIT OPTION BP1300</b>		
1	3801826 (3055099)	Kit, Cylinder Liner	6	
2	215090	Liner, Cylinder	1	
3	3032874	Seal, Crevice	1	
		Seal, O-ring	2	

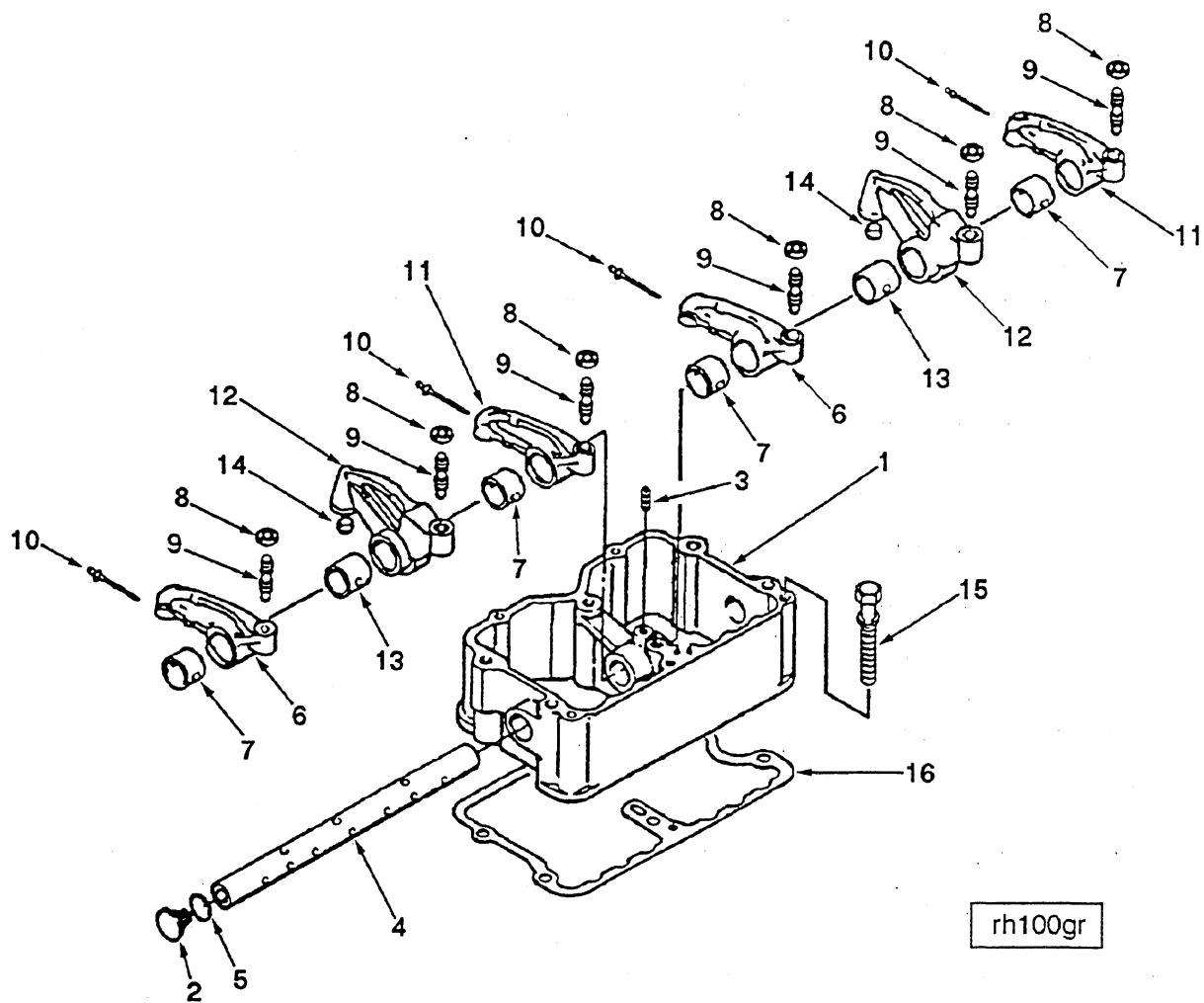


Ref No.	Part Number	Part Name	Req	Remarks
		FUEL CROSSOVER OPTION BP1300		
1	70772	Capscrew, Springite	12	
2	131026	Seal, O-ring	12	
3	135308	Plate, Cover	2	
4	147100	Crossover, Fuel Con.	2	



Ref No.	Part Number	Part Name	Req	Remarks
1	3014404 3013591 (3013590)	<b>PISTON COOLING NOZZLE OPTION BP1300</b> Assembly, Piston Nozzle Nozzle, Piston Cooling Nozzle, Piston Cooling Seal, O-ring Capscrew, Captive Washer	6 1 1 1 1	5/16 -24 x 5/8 Inch

## NOTES

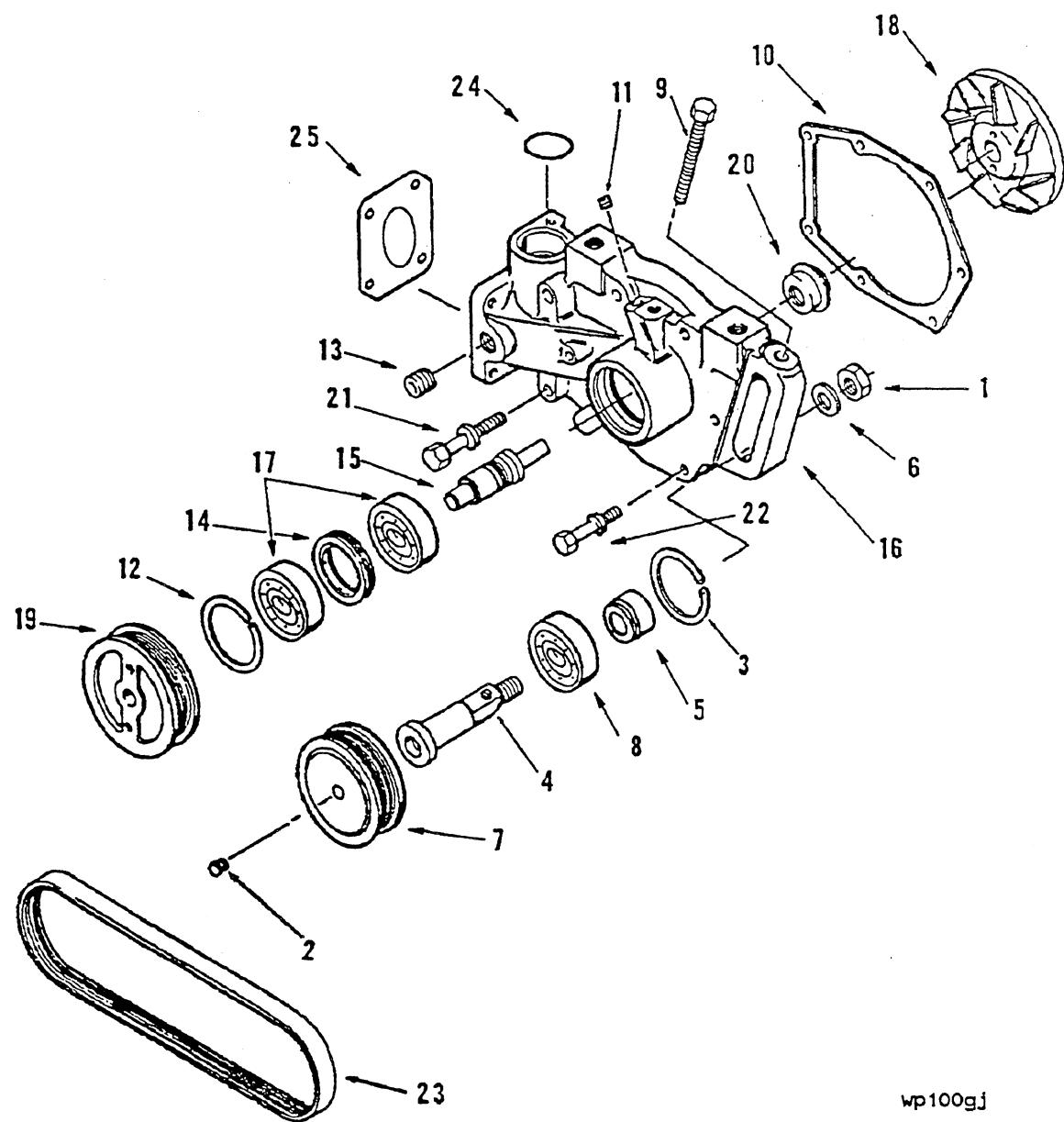


Group No. 03.01

**Rocker Lever Housing**

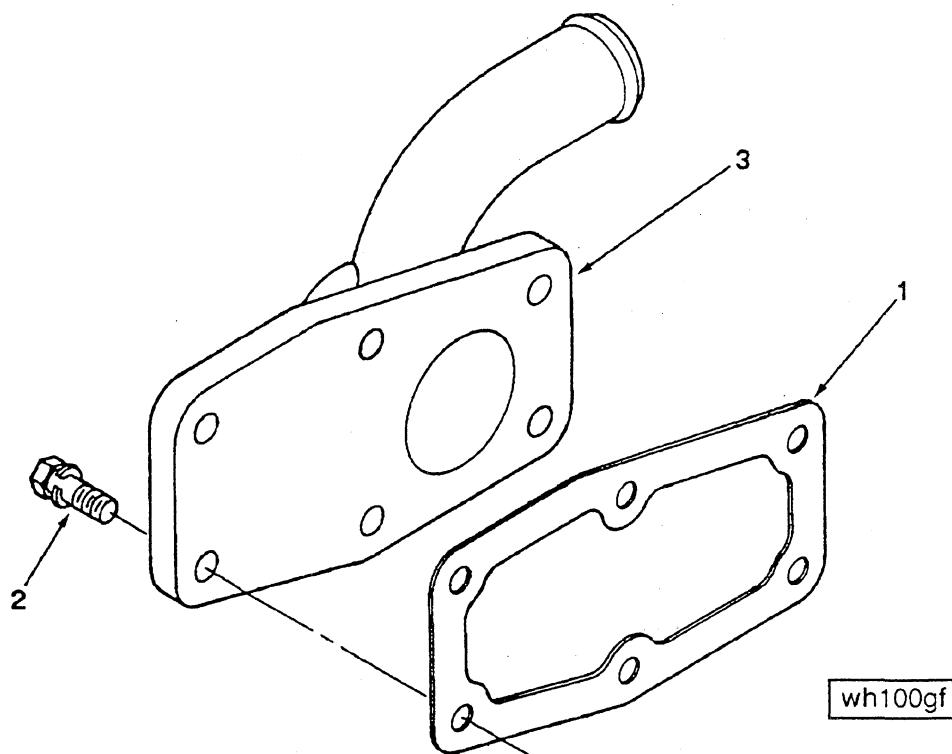
Option No. BP1300

Ref No.	Part Number	Part Name	Req	Remarks
<b>ROCKER LEVER HOUSING OPTION BP1300</b>				
1	3044788	Assembly, Rocker Housing	3	
1	3044787	Housing, Rocker Lever	1	
2	3038903	Plug	2	
3	168319	Screw, Rocker Lever Shaft	1	
4	3038904	Shaft, Rocker Lever	1	
5	3058653	Seal, O-ring	2	
6	BM-95162	Lever, Rocker	2	
7	140330	Bushing, Lever	1	
8	S-212	Nut, Adjusting Screw	1	
9	168306	Screw, Adjusting	1	
10	208084	Rivet, Blind	1	
11	BM-95161	Lever, Rocker	2	
7	140330	Bushing, Lever	1	
8	S-212	Nut, Adjusting Screw	1	
9	168306	Screw, Adjusting	1	
10	208084	Rivet, Blind	1	
12	AR-02308	Lever, Injector Rocker	2	
13	218153	Bushing, Lever	1	
14	194037	Socket	1	
8	S-212	Nut, Adjusting Screw	1	
9	168306	Screw, Adjusting	1	
15	3010589	Capscrew, Captive Washer	6	
16	3017750	Gasket, Rocker Lever Hsg	1	



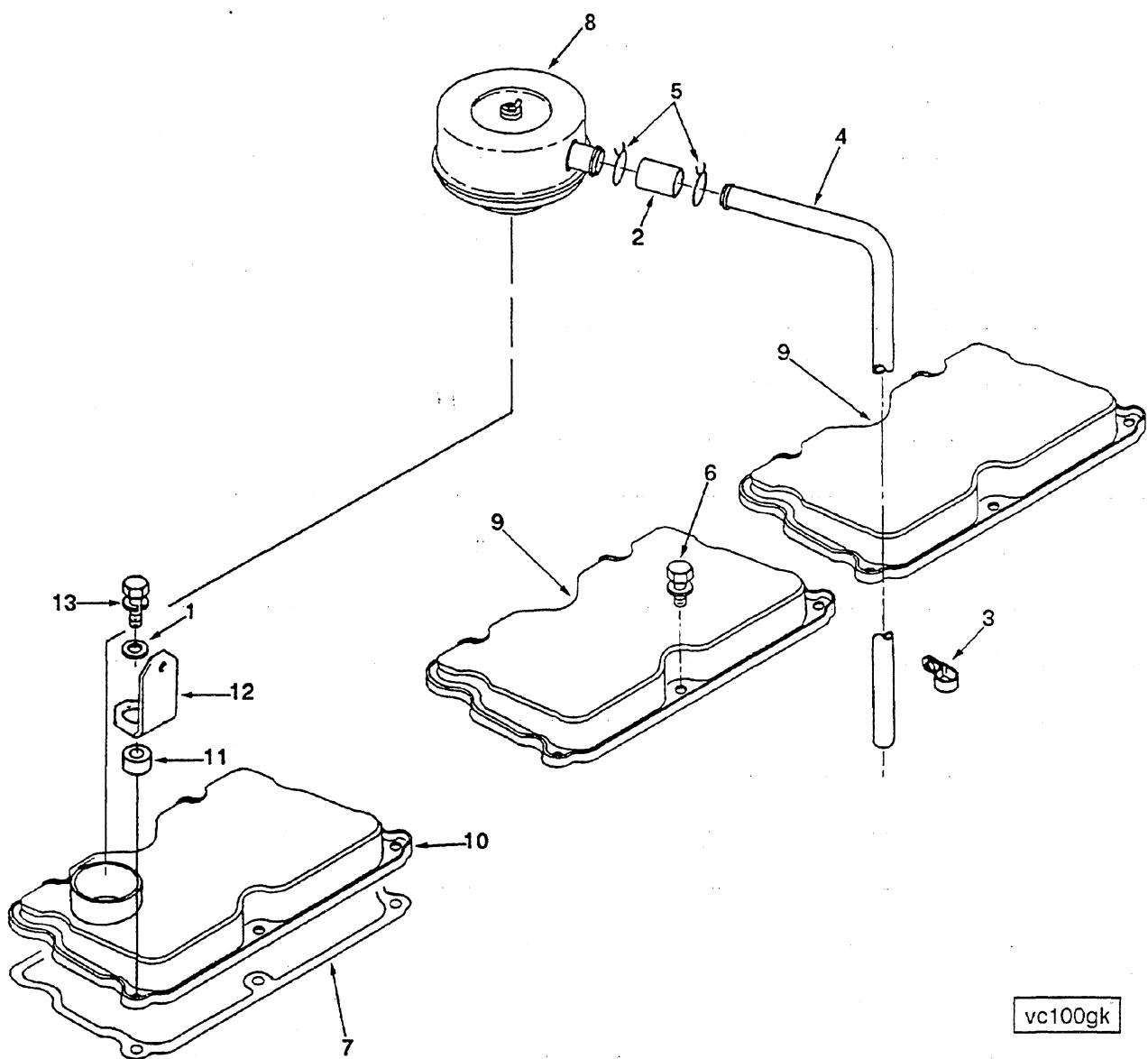
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Ref No.	Part Number	Part Name	Req	Remarks
<b>WATER PUMP/IDLER GEAR OPTION BP1300</b>				
1	3064919	Assembly, Water Pump Idler	1	
2	S-201	Nut, Heavy Hexagon	1	
3	S-965-E	Plug, Pipe	1	
4	S-16255	Ring, Retaining	1	
5	3050396	Shaft, Idler	1	
6	3050395	Spacer, Mounting	1	
7	213082	Washer, Plain	1	
8	215397	Pulley, Idler	1	
9	3063246	Bearing, Ball	1	
10	182706	Capscrew, Hexagon Head	1	1/2-13 x 5 5/8 Inch
11	3801708	Kit, Water Pump	1	
12	3002385	Gasket, Water Pump	1	
13	(3051408)	Assembly, Water Pump		
14	S-911-B	Plug, Pipe	2	1/8 Inch
15	S-16255	Ring, Retaining	1	
16	3013786	Plug, Pipe	1	3/8 Inch
17	196844	Spacer, Bearing	1	
18	3050394	Shaft, Water Pump	1	
19	3045163	Body, Water Pump	1	
20	3063246	Bearing, Ball	2	
21	3000888	Impeller, Water Pump	1	
22	3025861	Pulley, Water Pump	1	
23	3033677	Assembly, Seal and Seat	1	
24	43463-A	Seal, O-ring	1	
25	3024960	Gasket, Connection	1	
<b>MOUNTING PARTS</b>				
21	3012469	Capscrew, Captive Washer	2	3/8-24 x 3 1/4 Inch
22	3012468	Capscrew, Captive Washer	4	3/8-24 x 2 1/4 Inch
23	217638	Belt, V-ribbed	1	
<b>WATER PUMP REPAIR KITS</b>				
3	3801710	Kit, Wtr Pump Repair Minor	1	
24	S-16255	Ring, Retaining	1	
17	43463-A	Seal, O-ring	1	
10	3063246	Bearing, Ball	2	
25	3002385	Gasket, Water Pump	1	
20	3024960	Gasket, Connection	1	
14	3033677	Assembly, Seal and Seat	1	
18	3801712	Kit, Wtr Pump Repair Major	1	
15	196844	Spacer, Bearing	1	
18	3000888	Impeller, Water Pump	1	
15	3050394	Shaft, Water Pump	1	
	3801710	Kit, Wtr Pump Repair Minor	1	



Ref No.	Part Number	Part Name	Req	Remarks
1 2 3	70089-1 3011342 3028288	<b>WATER HEADER COVER</b> <b>OPTION BP1758</b> Gasket, Water Header Screw, Captive Washer Cap Connection, Water Outlet	1 6 1	Rear water header cover with outlet for aftercooler supply. Not compatible with hotstart plumbing. For BCIII engines.

## NOTES



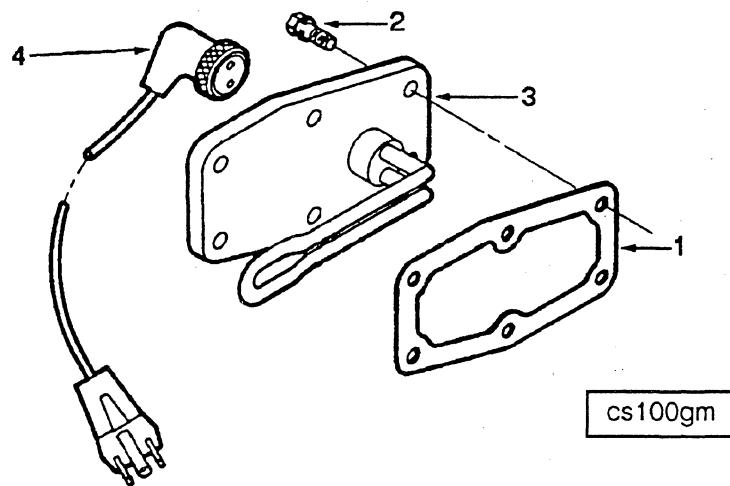
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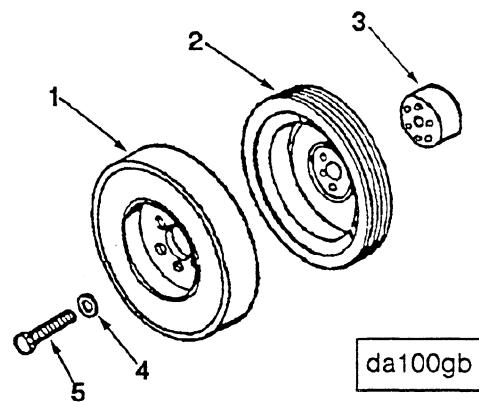
Breather And Valve Covers

Option No. BR1175

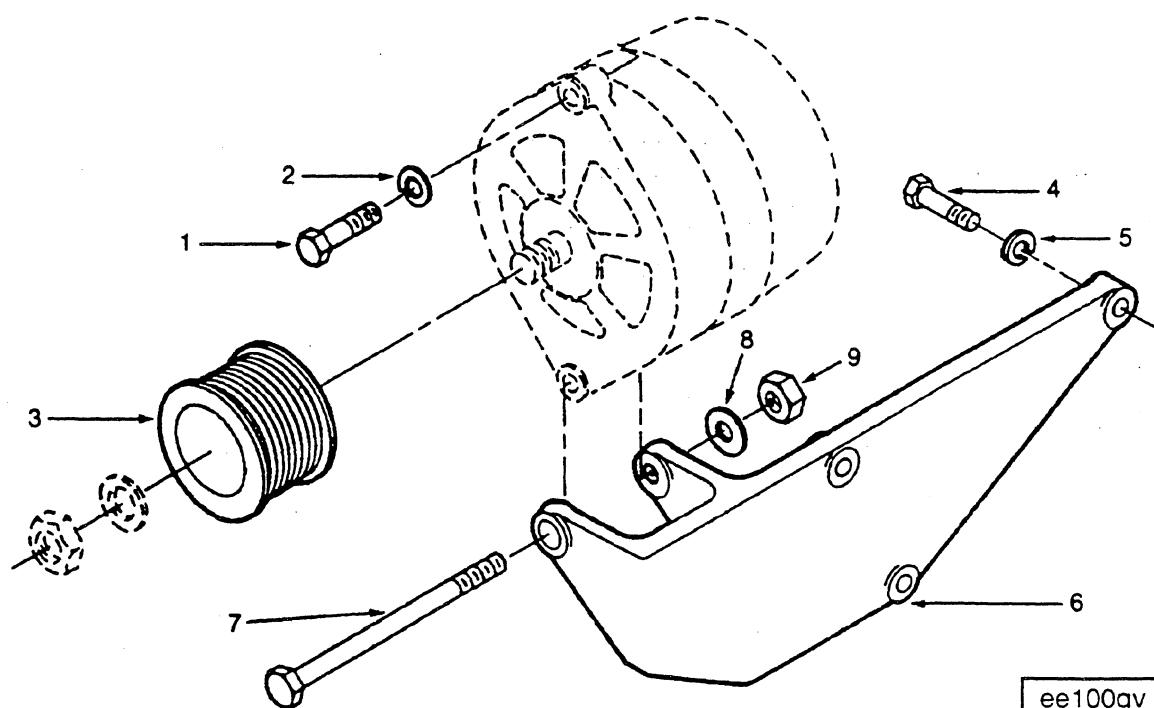
Ref No.	Part Number	Part Name	Req	Remarks
		<b>BREATHER AND VALVE COVERS</b>		
		<b>OPTION BR1175</b>		
1	S-622	Washer, Plain	1	
2	64775	Hose, Plain	1	
3	100269	Clip	1	
4	204152	Tube, Vent	1	
5	3008596	Clamp, Spring	2	
6	3038076	Screw, Captive Washer Cap	14	3/8 - 16 x 15/16 inch
7	3054841	Gasket, Valve Cover	3	
8	255180	Breather, Crankcase	1	
9	3006183	Cover, Rocker Lever	2	
10	3006188	Cover, Rocker Lever	1	
11	63385	Spacer, Water Conn	1	
12	3010564	Brace, Tube	1	
13	3012472	Screw, Captive Washer Cap	1	3/8 - 16 x 1 - 1/2 inch



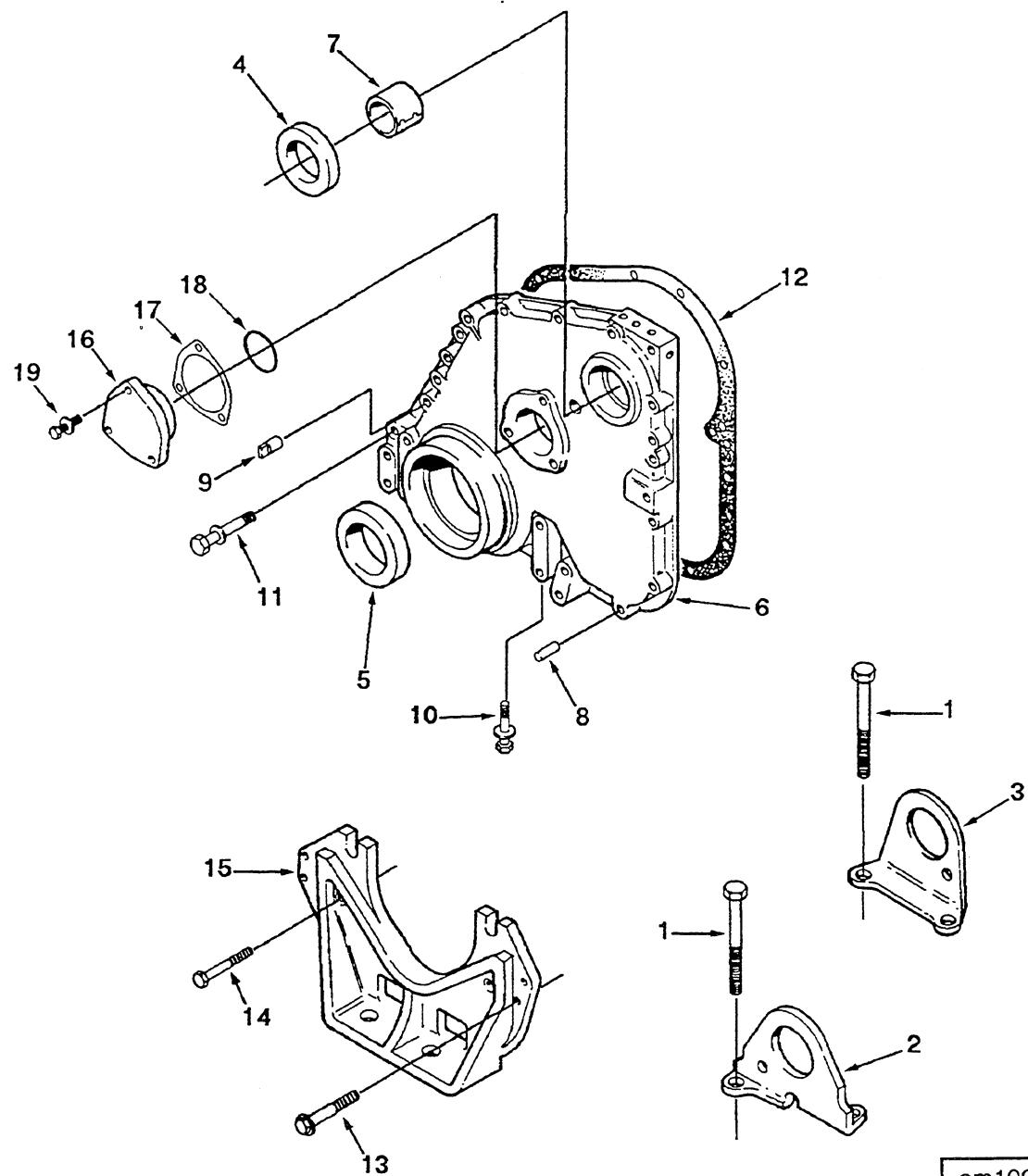
Ref No.	Part Number	Part Name	Req	Remarks
1 2 3 4	70089-1 3013904 3832162 3913106	BLOCK WATER HEATER OPTION CS1051  Gasket, Cover Plate Screw, Captive Washer Cap Heater, Engine Cable, Engine Heater	1 6 1 1	Block water heater, 115 volt, 1500 watts. Mounts in front water header port. Includes 12 inch cord.



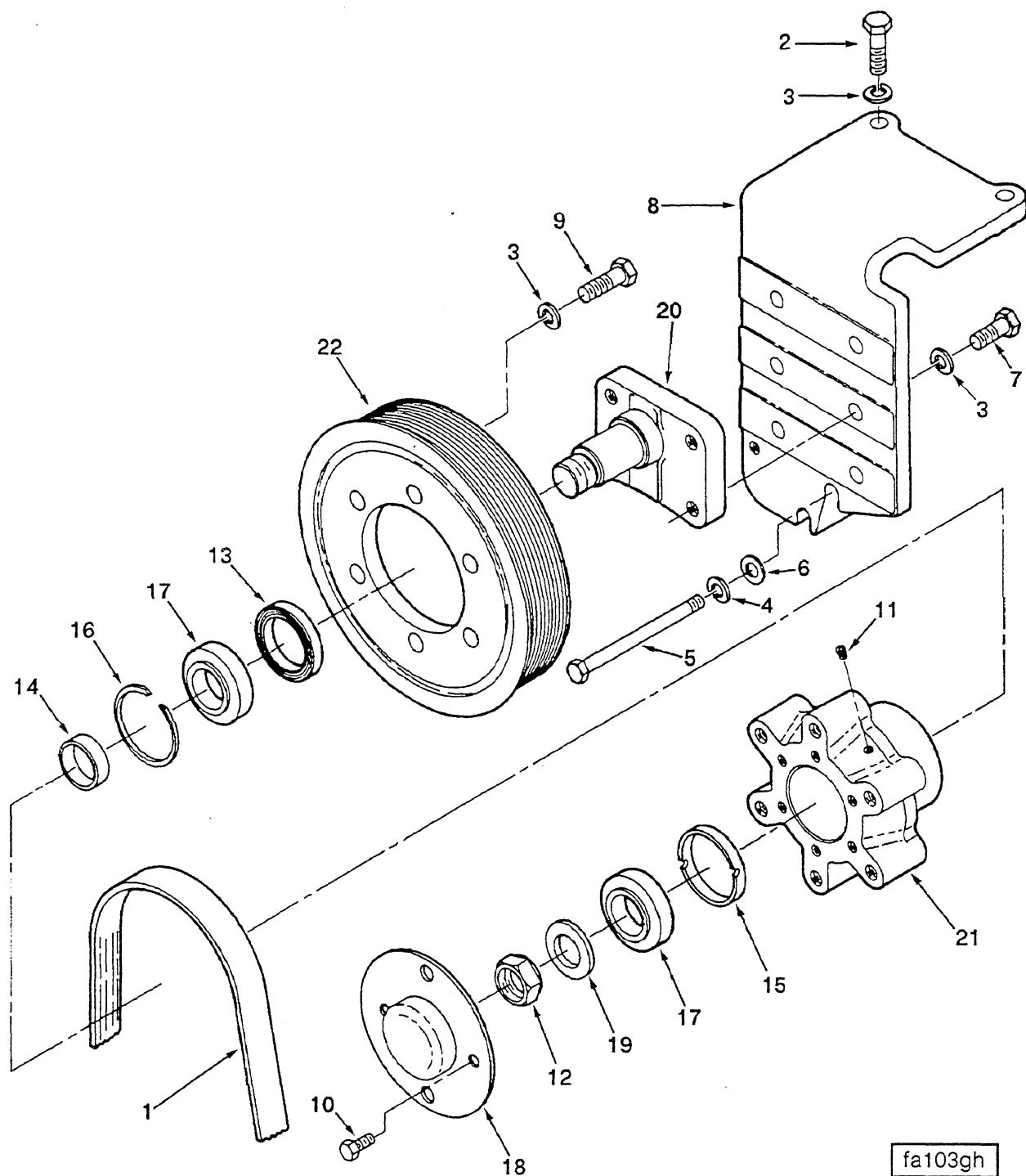
Ref No.	Part Number	Part Name	Req	Remarks
		<b>VIBRATION DAMPER OPTION DA1183</b>		
1	217323	Damper, Vibration	1	
2	3058488	Adapter, Crankshaft	1	
3	3062641	Pulley, Crankshaft	1	
4	127316	Washer, Plain	6	
5	213883	Screw, Head Locking Cap	6	



Ref No.	Part Number	Part Name	Req.	Remarks
		<b>ALTERNATOR MOUNTING ARRANGEMENT</b>		
		<b>OPTION EE1191</b>		
1	S-155	Screw, Hexagon Head Cap	1	7/16-14 x 1 1/2 inch
2	S-610	Washer, Lock	1	
3	3065954	Pulley, Alternator	1	
4	S-174-B	Screw, Hexagon Head Cap	3	3/8-16 x 1 3/8 Inch
5	S-604	Washer, Lock	3	
6	3065953	Support, Alternator	1	
7	S-151	Screw, Hexagon Head Cap	1	7/16-14 x 6 Inch
8	3042330	Washer, Plain	1	
9	555273	Nut, Lock	1	



Ref No.	Part Number	Part Name	Req	Remarks
		GEAR COVER OPTION EM1271		Narrow span two hole pad type front support with mounting surface located 8 in (203MM) below crank center line. Usually used with soft type mounting. Includes bare engine lifting brackets and plain aluminum gear cover. Lifting brackets located between front and middle rocker arm cover and at back of rear rocker arm cover. Includes cast-in oil transfer tube.
		LIFTING BRACKET		
1	S-176	Capscrew	4	1/2 - 13 x 5 Inch
2	170226	Bracket, Lifting	1	
3	3001726	Bracket, Lifting	1	
4	3020185	Seal, Oil	1	
5	3020186	Seal, Oil	1	
		GEAR COVER		
6	3052534 (3048033)	Cover, Gear	1	
7	132770	Cover, Gear	1	
8	60408	Bushing	1	
9	70653	Dowel, Pin	1	
10	3011712	Dowel, Pin	1	
11	3011714	Screw, Captive Washer Cap	11	7/16 - 20 x 2 3/16 Inch
12	3065115	Screw, Captive Washer Cap	3	7/16 - 20 x 3 Inch
		Gasket, Gear Cover	1	
		FRONT ENGINE SUPPORT		
13	3054889	Capscrew, Hexagon Head	6	7/16 - 20 x 2 3/4 Inch
14	3058664	Screw, Hexagon Head Cap	2	7/16 - 20 x 2 1/2 Inch
15	3063029	Support, Front Engine	1	
		OPTION PP1194		
16	3008530	Support, Camshaft Thrust	1	
	3060301	Assembly, Thrust Shim	1	
17	65259-A	Shim	1	0.010 Inch
17	65259-B	Shim	1	0.050 Inch
17	65259-C	Shim	1	0.020 Inch
17	185573	Shim	1	0.025 Inch
18	215705	Seal, O-ring	1	
19	3011715	Screw, Captive Washer Cap	3	3/8 - 16 x 1 3/16 Inch



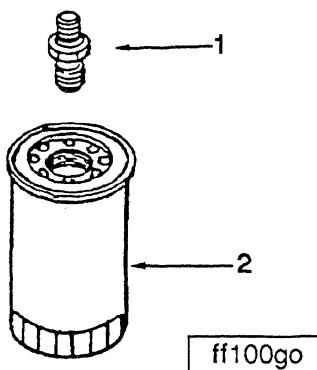
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Group No. 09.04

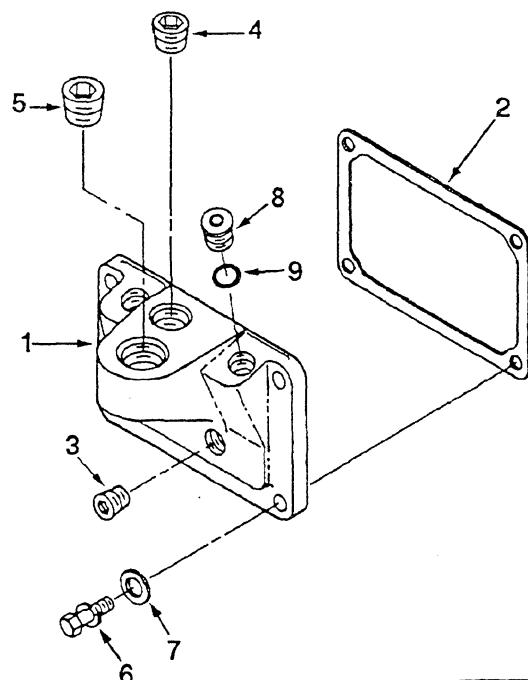
## Fan Arrangement

Option No. FA1316

Ref No.	Part Number	Part Name	Req	Remarks
		<b>FAN ARRANGEMENT</b> <b>OPTION FA1316</b>		
1	3064957	Belt, V Ribbed	1	
		<b>FAN BRACKET SUPPORT</b>		
2	S-149-B	Screw, Hexagon Head Cap	2	1/2 - 20 x 1 1/2 Inch
3	S-608	Washer, Lock	2	
4	S-610	Washer, Lock	2	
5	117897	Screw, Cap	2	7/16 - 20 x 5 1/4 Inch
6	3042330	Washer, Plain	2	
		<b>FAN SUPPORT</b>		
7	S-145	Screw, Hexagon Head Cap	4	1/2 - 13 x 1 1/4 Inch
3	S-608	Washer, Lock	4	
8	3063028	Support, Fan	1	
	3064949	Assembly, Fan Hub	1	
9	S-113	Screw, Hexagon Head Cap	6	1/2 - 13 x 1 1/2 Inch
10	S-117	Screw, Hexagon Head Cap	2	3/8 - 16 x 3/4 Inch
3	S-608	Washer, Lock	6	
11	S-911-B	Plug, Pipe	2	
12	142176	Nut, Lock	1	
13	200307	Seal, Oil		
14	217008	Spacer, Bearing	1	
15	217011	Spacer, Bearing	1	
16	3001280	Ring, Retaining	1	
17	3001281	Bearing, Roller	2	
18	3008883	Cover, Protective	1	
19	3012467	Washer, Plain	1	
20	3062639	Shaft, Fan Hub	1	
21	3062645	Hub, Fan	1	
22	3066516	Pulley, Fan	1	

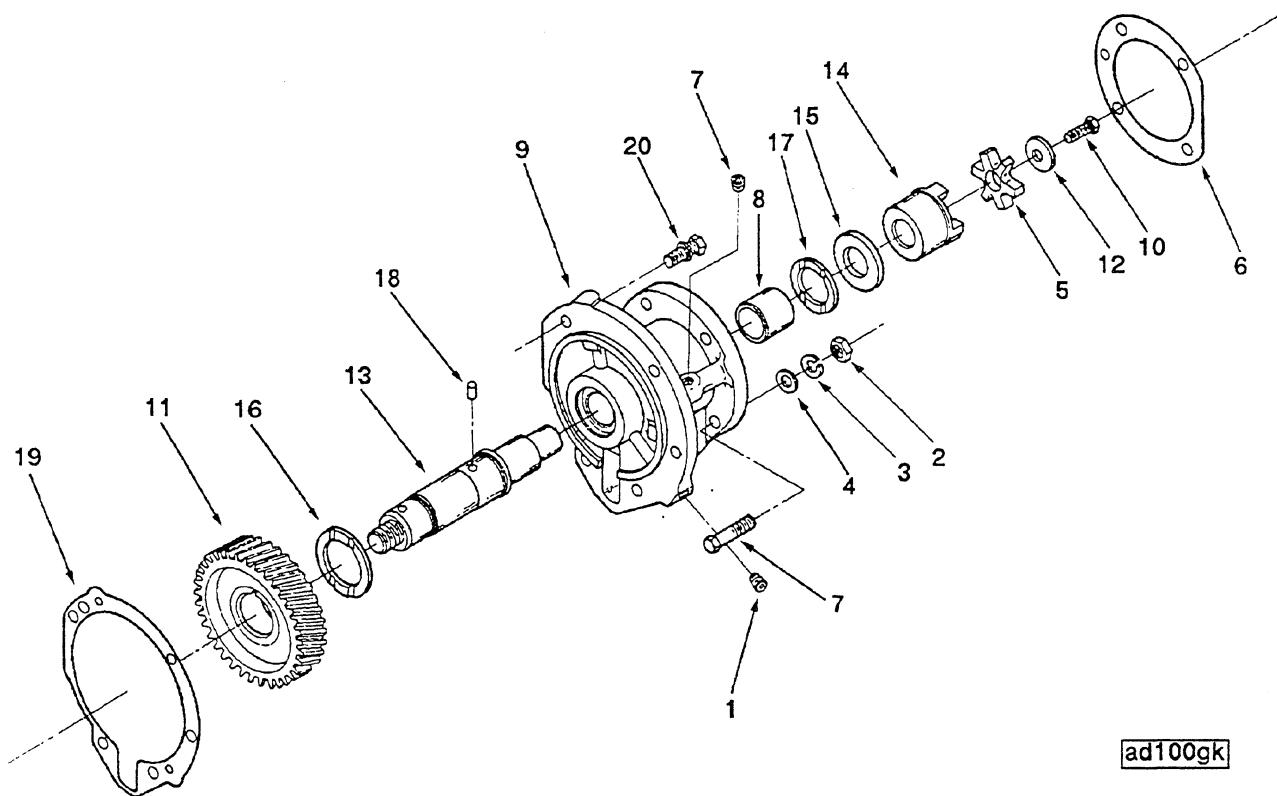


Ref No.	Part Number	Part Name	Req	Remarks
1 2	129866 3831132	FUEL FILTER OPTION FF1069  Union, Male Filter, Fuel	1 1	Single spin on water separator fuel filter with straight inlet fitting mounted on rear of fuel pump.  FS1212 Fleetguard



fo100gb

Ref No.	Part Number	Part Name	Req	Remarks
		OIL FILL ARRANGEMENT OPTION FO1036		
1	3031279	Cover, Hand Hole	1	
2	65274	Gasket, Hand Hole Cover	1	
3	3008468	Plug, Pipe	2	
4	3008469	Plug, Pipe	1	
5	3008470	Plug, Pipe	1	
6	3010596	Screw, Captive Washer Cap	4	
7	3042329	Washer, Plain	4	
8	3046202	Plug, Threaded	1	
9	3046201	Seal, O-ring	1	



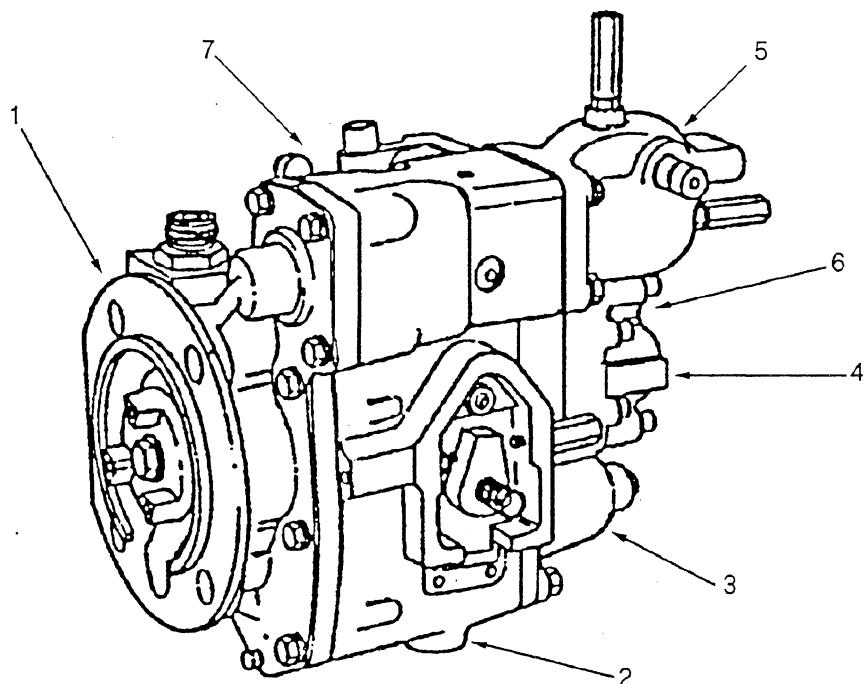
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Group No.

**Accessory Drive**

Option No. FP1519

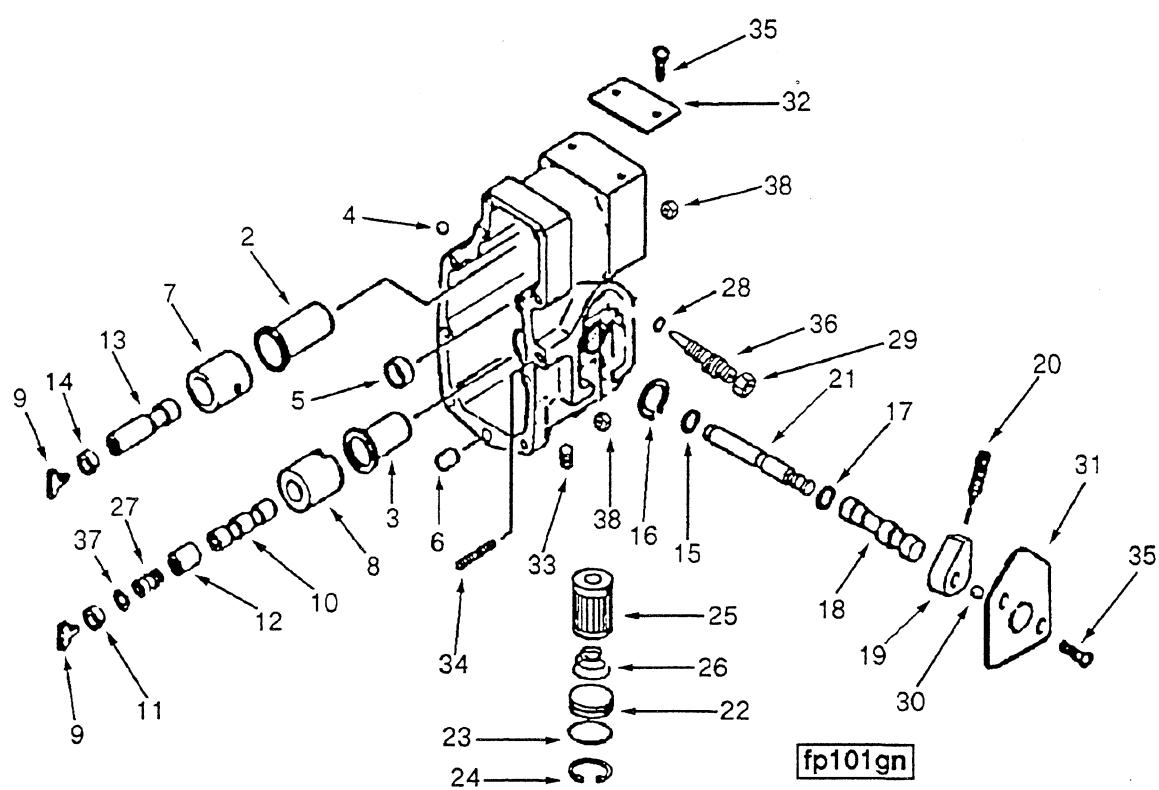
Ref No.	Part Number	Part Name	Req	Remarks
		<b>ACCESSORY DRIVE OPTION FP1519</b>		
1	S-140	Screw, Hexagon Head Cap	4	7/16 - 14 x 1 3/4 Inch
2	S-274	Nut, Heavy Hexagon Jam	4	7/16 - 14
3	S-610	Washer, Lock	4	7/16
4	69324	Washer, Plain	4	7/16
5	3046200	Spider, Jaw Coupling	1	
6	3048341	Gasket, Fuel Pump	1	
7	S-911-B	Plug, Pipe	2	1/8 - 27 NPTF
8	116391	Bushing	1	
9	3002170	Support, Fuel Pump	1	
10	129510	Screw, Hexagon Head Cap	1	3/8 - 16 x 1 Inch
11	142689	Gear, Accessory Drive	1	
12	170664	Washer, Plain	1	
13	3000171	Shaft, Accessory Drive	1	
14	3000175	Hub, Jaw Coupling	1	
15	3014103	Washer, Plain	1	
16	3026556	Bearing, Thrust	1	
17	3026557	Bearing, Thrust	1	
18	3034438	Pin, Groove	1	
19	200809	Gasket, Acc Drive Support	1	
20	3010590	Screw, Captive Washer Cap	5	7/16 - 20 x 1.13 Inch



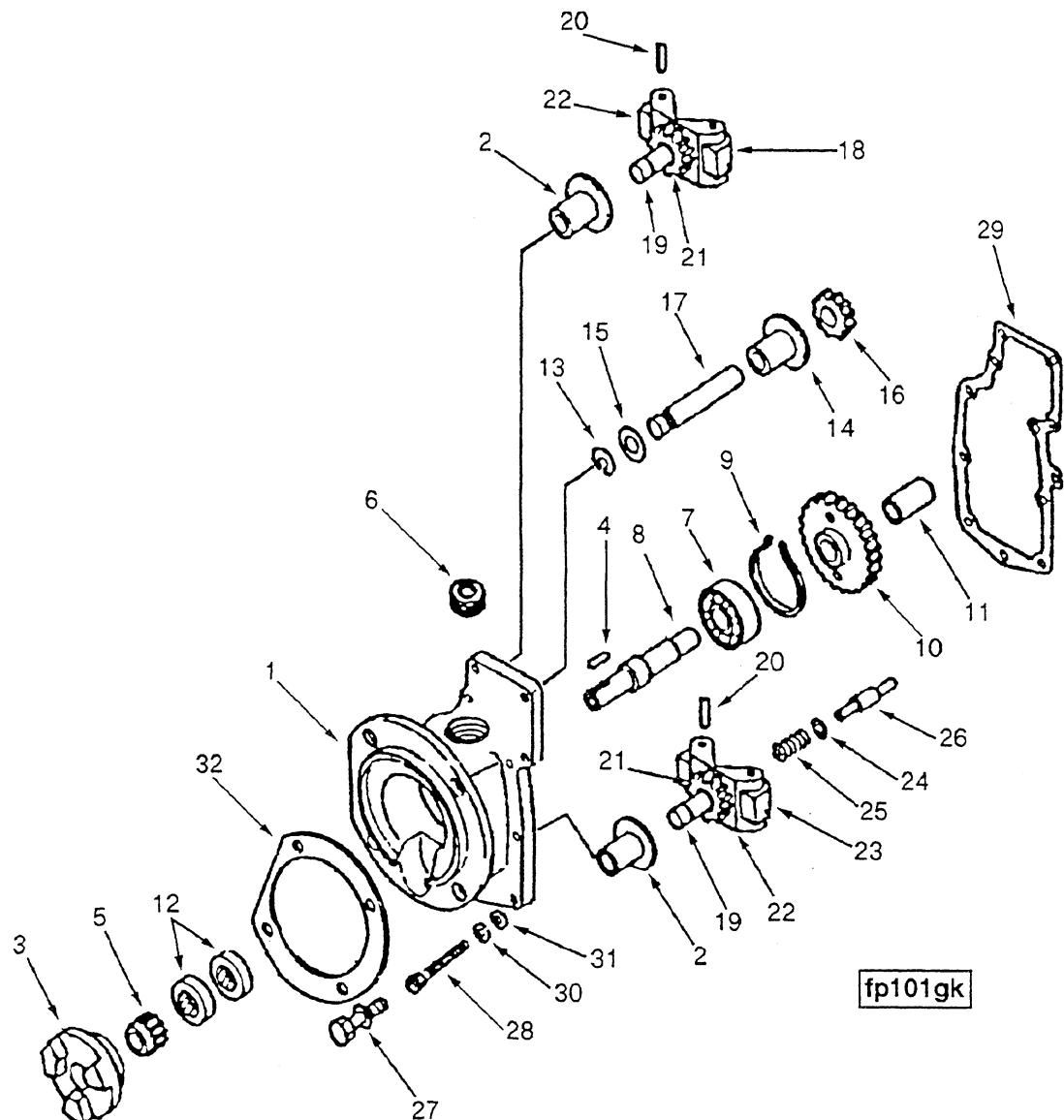
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Ref No.	Part Number	Part Name	Req	Remarks
		FUEL PUMP OPTION FP12306		
1	3067129	Assembly, Fuel Pump	1	
	3052863	Fuel Pump Front Cover	1	
2	3038668	Fuel Pump Housing	1	
3	44678	Spring Pack Cover	1	
4	3034217	Fuel Pump Gear Assembly	1	
5	3020523	VS Spring Pack	1	
6	BM-76340	Fuel Pump Damper	1	
7	3031298	AFC Assembly	1	Breakdown on following pages.

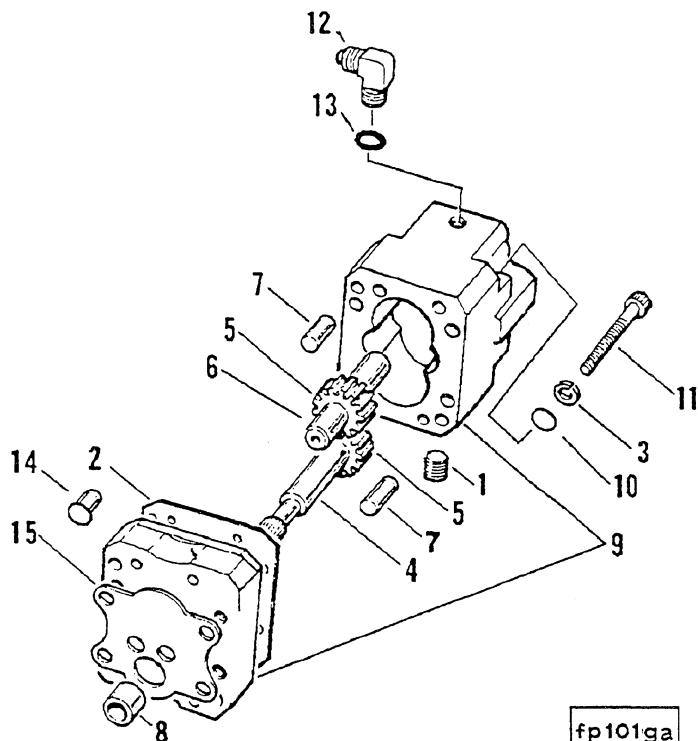
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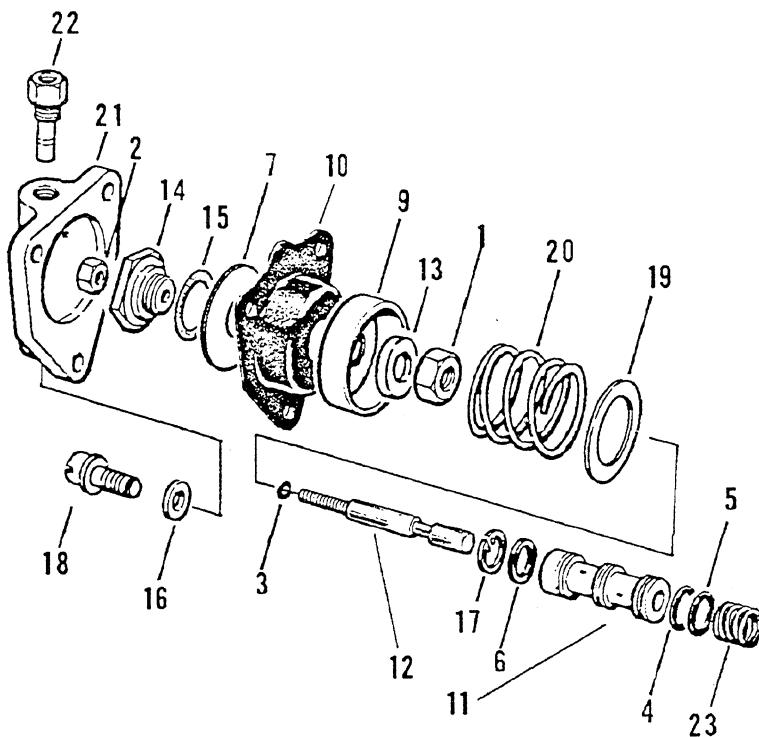
Ref No.	Part Number	Part Name	Req	Remarks
<b>FUEL PUMP HOUSING</b>				
1	3038668	Housing, Fuel Pump	1	
	3025695	Body, Fuel Pump	1	
2	108384	Sleeve, Spring Pack	1	
3	202682	Housing, Spring Pack	1	
4	214139	Ball, Plug AFC	3	
5	100193	Bushing, Tachometer Drive	1	
6	118227	Dowel, Ring	2	
7	3001735	Barrel, Governor	1	
8	218548	Barrel, Governor	1	
	3040760	Plunger, Governor	1	
9	70690	Driver, Governor Plunger	1	
10	3040750	Plunger, Governor	1	
11	3027633	Bearing, Thrust	1	
12	3048557	Spacer, Bearing	1	
	AR40230	Plunger, Governor	1	
9	70690	Driver, Governor Plunger	1	
13	212350	Plunger, Governor	1	
14	3035230	Bearing, Thrust	1	
15	100478	Seal, O-Ring	1	
16	163945	Ring, Retaining	1	
17	213768	Seal, O-Ring	1	
18	3006175	Screw, Fuel Pump Adjusting	1	1/4 - 28 x 1 3/4 Inches
19	3006343	Stop, Throttle Lever	1	
20	3006344	Screw, Set Hex Flat S'K'T	2	1/4 - 28 x 3/8 Inch
21	3046680	Shaft, Throttle	1	
22	201007	Plug, Fuel Screen Return	1	
23	145504	Seal, O-Ring	1	
24	128807	Ring, Retaining	1	
25	146483	Screen, Filter	1	
26	70700	Spring, Compression	1	
27	3035823	Spring, Compression	1	
28	68061-A	Seal, O-Ring	1	
29	S-248	Nut, Regular Hexagon	1	
30	213769	Plug, Ball	1	
31	3000446	Cover, Fuel Control	1	
32	105375	Nameplate	1	
33	3025460	Plug, Pipe	3	
34	3046407	Screw, Socket Set	1	1/4 - 28 x 1 1/2 Inches
35	S-2286	Screw, Drive	4	
36	214144	Valve, Needle	1	
37	101841	Shim	A/R	.005 Inch
37	101842	Shim	A/R	.010 Inch
37	101843	Shim	A/R	.020 Inch
38	S-251	Nut, Regular Hexagon Jam	2	1/4 - 28



Ref No.	Part Number	Part Name	Req	Remarks
<b>COVER &amp; WEIGHT ASSEMBLY</b>				
1	3052863	Cover, Front Fuel Pump	1	
	3028370	Cover and Bushing	1	
1	3063055	Cover, Fuel Pump	1	
2	163944	Bushing	2	
3	212613	Hub, Jaw Coupling	1	
4	212668	Key, Drive Gear	1	
5	212602	Gear, Tachometer Drive	1	
6	3040815	Plug, Threaded	1	
	3028372	Main Drive Assembly	1	
7	S-16052	Bearing, Ball	1	
8	212601	Shaft, Fuel Pump Drive	1	
9	212604	Ring, Retaining	1	
10	212605	Gear, Fuel Pump	1	
11	212639	Adapter, Spline	1	
12	3062676	Seal, Oil	2	
	AR40147	Shaft, Idler Gear	1	
13	135169	Ring, Retaining	1	
14	201010	Bushing	1	
15	201745	Ring, Thrust	1	
	AR74273	Shaft, Gear	1	
16	113244	Gear, Idler	1	
17	201008	Shaft, Idler	1	
	3024989	Assembly, Upper Weight	1	
18	163826	Weight, Governor	1	
19	211633	Shaft, Governor	1	
20	211635	Pin, Governor	2	
21	211636	Gear, Governor	1	
22	3006550	Carrier, Governor	1	
	3024991	Assembly, Lower Weight	1	
23	146437	Weight, Governor	1	
19	211633	Shaft, Governor	1	
20	211635	Pin, Governor	2	
21	211636	Gear, Governor	1	
22	3006550	Carrier, Governor	1	
24	144179	Shim	7	
25	143855	Spring, Compression	1	
26	144178	Plunger, Gov Weight Assist	1	
27	3017051	Screw, Captive Washer Cap	8	1/4 - 20 x 1 1/8 Inches
28	118226	Screw, Socket Head Cap	1	3/16 - 24 x 1 1/4 Inches
29	200998	Gasket, Front Housing	1	
30	S-607	Washer, Lock	1	
31	103089	Washer, Plain	1	
32	3048341	Gasket, Fuel Pump	1	

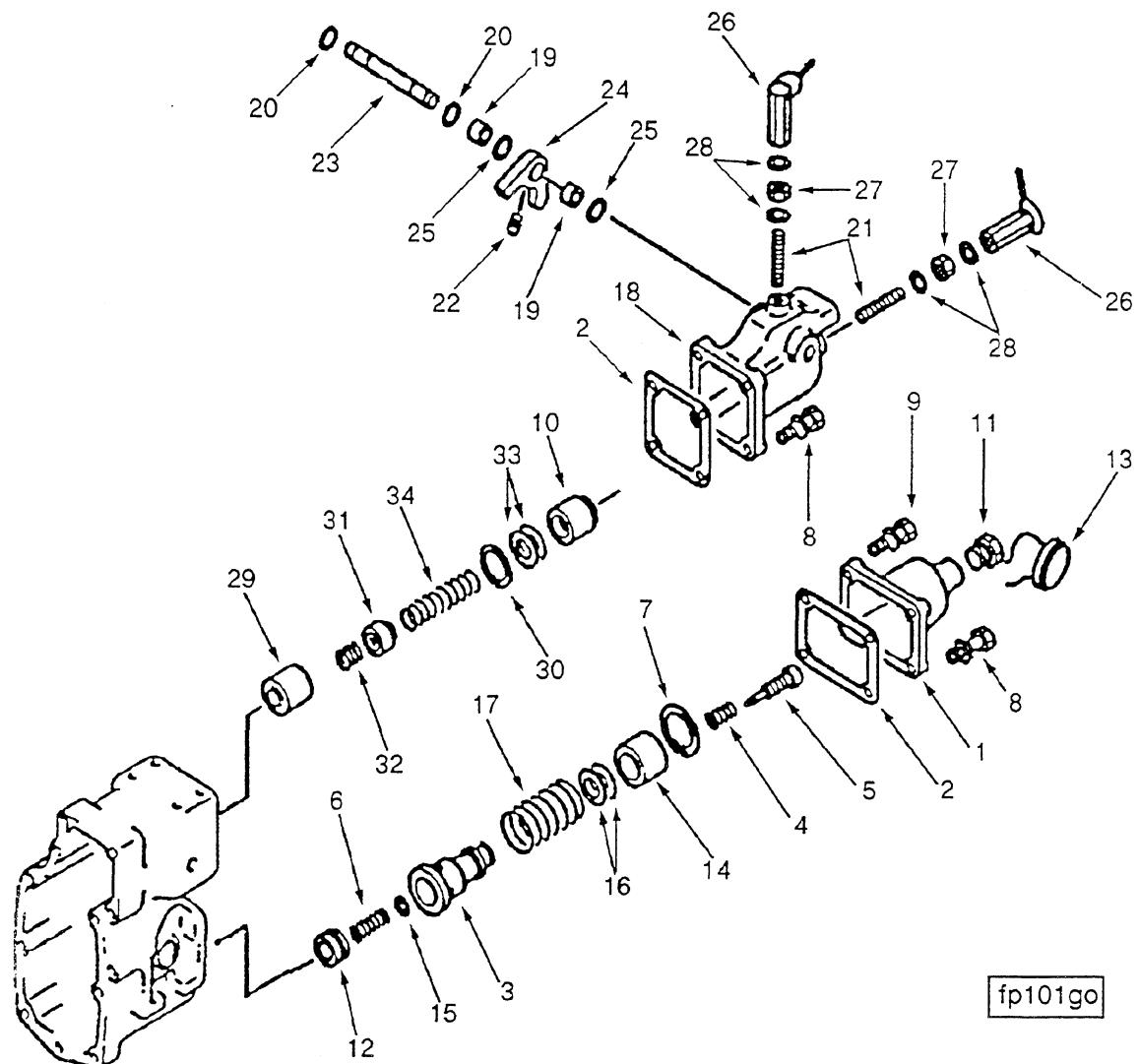


Ref No.	Part Number	Part Name	Req	Remarks
FUEL GEAR PUMP				
1	3034217	Assy., Fuel Pump Gear		3/4 inch gear pump.
1	3033742	Plug, Threaded	1	
2	110855	Gasket, Fuel Pump	1	
3	181466	Washer, Lock	2	
4	3016609	Gear and Shaft	1	
4	100215	Shaft, Fuel Pump Drive	1	
5	119363	Gear, Fuel Pumping	1	
5	3019616	Gear and Shaft	1	
5	119363	Gear, Fuel Pumping	1	
6	175864	Shaft, Fuel Pump Drive	1	
7	3029857	Pin, Roll	2	
8	3033719	Dowel, Ring	1	
9	3033732 (3033717) (3033722)	Assy., Housing & Cover	1	
		Housing, Fuel Pump Gear	1	
10	70704	Cover, Fuel Pump Gear	1	
10	70704	Washer, Plain	2	
11	70790	Capscrew, Socket Head	2	
12	3033740	Valve, Check Ball Elbow	1	
13	(3050625)	Seal, O-Ring	1	
13	3034412	Seal, O-Ring	1	
14	3050624	Valve, Pressure Regulator	1	
15	3026163	Gasket, Fuel Pump	1	

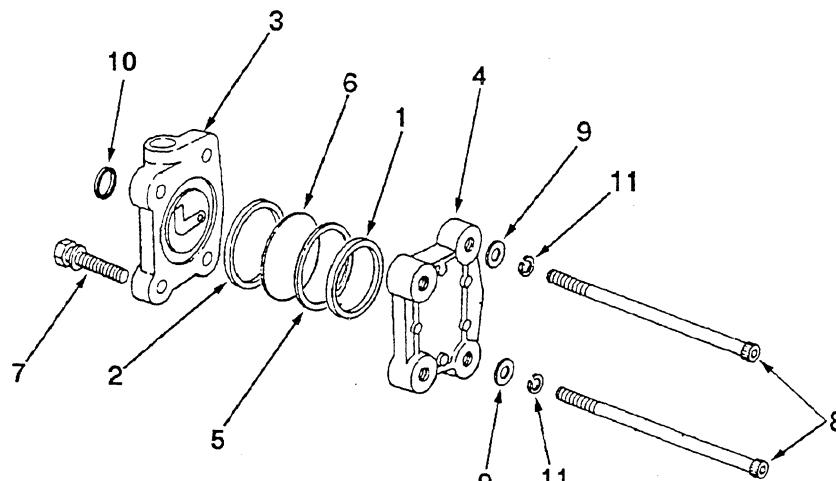


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Ref No.	Part Number	Part Name	Req	Remarks
AFC ASSEMBLY				
1	3031298	Assembly, Air Fuel Control	1	
1	S-213-A	Nut, Regular Hexagon	1	5/8 - 18
2	S-251	Nut, Regular Hexagon	1	1/4 - 28
3	68061-A	Seal, O-Ring	1	
4	70775	Seal, O-Ring	1	
5	145504	Seal, O-Ring	1	
6	145505	Seal, O-Ring	1	
7	214150	Washer, Plain	1	
9	3013810	Piston, Air Fuel Control	1	
10	3013811	Diaphragm	1	
11	3021068	Barrel	1	
12	3021676	Plunger	1	
13	3023088	Spacer, Mounting	1	
14	3023171	Insert, Air Fuel	1	
15	3044942	Seal, O-Ring	1	
16	70704	Washer, Plain	1	1/4 Inch
17	S-16240	Ring, Retaining	1	
18	70772-B	Capscrew, Captive	1	1/4 - 20 x 1 Inch
19	3001707	Shim, Air Fuel Control	1	
20	3000592	Spring, Compression	1	
21	3015520	Cover, Fuel Control	1	
22	3015522	Valve, Check	1	
23	3018655	Spring, Compression	1	To obtain specific calibration part numbers, refer to PT (type G) fuel pump calibration data manual.



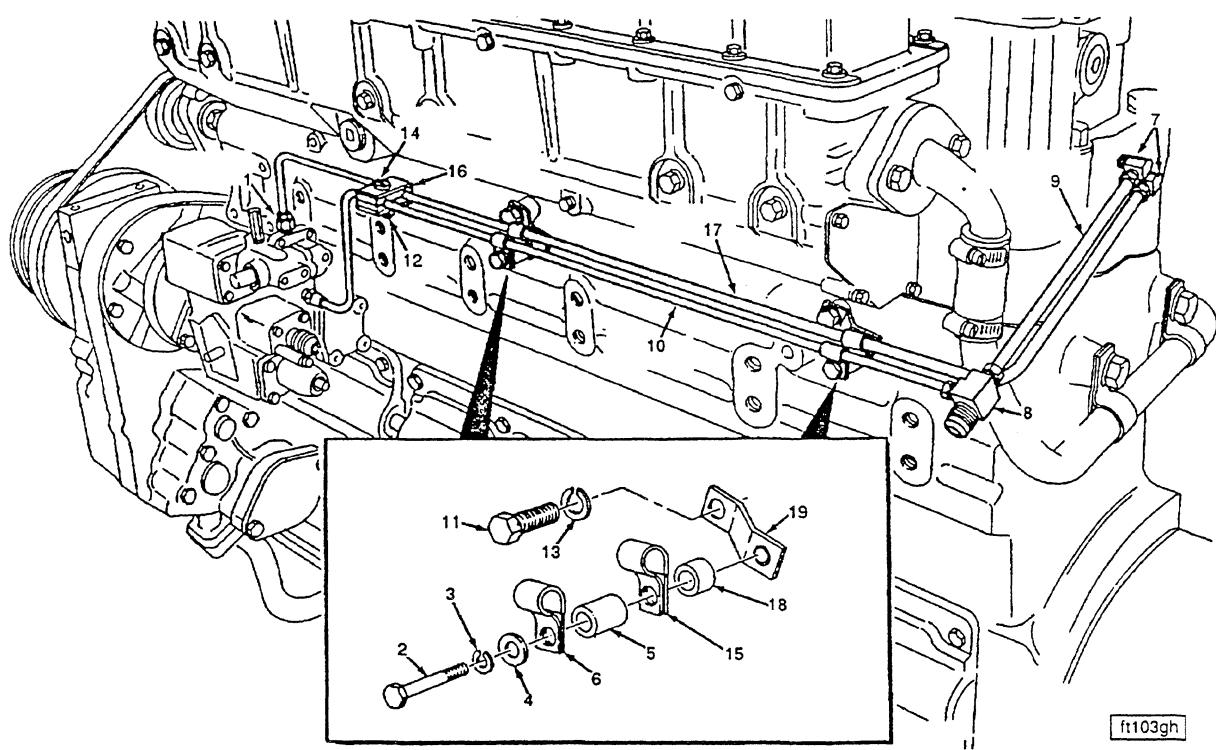
Ref No.	Part Number	Part Name	Req	Remarks
		GOVERNOR SPRING PACK		
1	44678	Cover, Spring Pack	1	
2	70705	Gasket, Flange	2	
3	3038216	Pack, Idle Spring	1	
3	3036474	Guide, Idle	1	
4	3032014	Spring, Compression	1	
5	70716	Screw, Knurled	1	
6	3018767	Spring, Compression	1	
7	S-16240	Ring, Retaining	2	
8	3017051	Screw, Captive Washer Cap	6	1/4 - 20 x 1 1/8 Inches
9	3017052	Screw, Captive Washer Cap	2	1/4 - 20 x 1 1/8 Inches
10	70836	Plunger, Throttle Lever	1	
11	3025459	Plug, Pipe	1	
12	141626	Plunger, Idle Spring	1	
13	3003156	Seal, Wire	2	
14	203346	Spacer, Mounting	1	
15	70715	Washer, Plain	1	
16	70717	Shim	A/R	.020 Inch
16	70717-A	Shim	A/R	.010 Inch
16	70717-B	Shim	A/R	.005 Inch
16	179068	Shim	A/R	.007 Inch
16	189800	Shim	A/R	.007 Inch
17	3004756	Spring, Compression	1	
	3020523	Cover & Bsh Assy VS Gov	1	
18	3016021	Housing, Governor	1	
19	3010941	Bushing	2	
20	70415	Seal, O-Ring	2	
21	109917	Screw, Socket Set	2	
22	70813	Screw, Set	1	
23	3010942	Shaft, Throttle	1	
24	70834	Stop, Throttle Shaft	1	
25	3010945	Seal, Dust	2	
26	110058	Nut, Fuel Pump Adjusting	2	1/4 - 28
27	S-270	Nut, Regular Hexagon	2	1/4 - 28
28	112408	Washer, Plain	4	13/16 Inch
	BM-30245	Pack, Idling	1	
29	70820	Plunger, Governor	1	
30	70823	Ring, Retaining	1	
31	70798	Guide, Spring	1	
32	70778	Spring, Compression	1	
33	70811	Shim	A/R	.020 Inch
33	70811-A	Shim	A/R	.010 Inch
33	70811-B	Shim	A/R	.005 Inch
34	109687	Spring, Governor	1	



fs100ga

Ref No.	Part Number	Part Name	Req	Remarks
<b>FUEL PUMP DAMPER OPTION FP12306</b>				
1	BM-76340 100099	Assembly, Fuel Pump Damper	1	
2	139988	Seal, Rectangular Ring	1	
3	153336	Seal, Rectangular Ring	1	
4	153338	Body, Fuel Pump Damper	1	
5	160514	Plate, Fuel Control	1	
6	202897	Washer, Plain	1	
7	3017051	Diaphragm, Damper	1	
8	S-174-C	Capscrew, Captive Washer	2	1/4 - 20 x 1 - 1/8 Inch
9	70704	Capscrew, Socket Head	2	1/4 - 20 x 3 - 1/2 Inch
10	151900	Washer, Plain	2	1/4 Inch
11	181466	Seal, Rectangular Ring	1	
		Washer, Lock	2	1/4 Inch

## NOTES

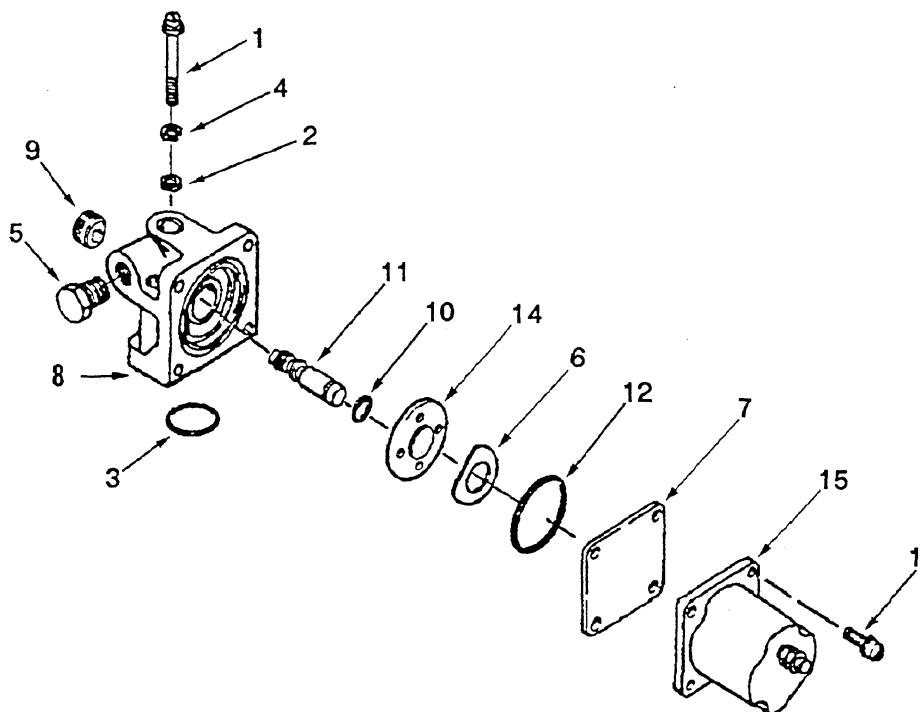


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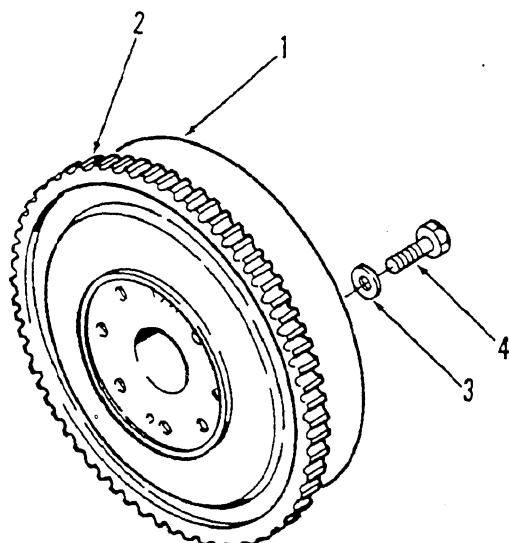
## Fuel Tubing

Option No. FT10037

Ref No.	Part Number	Part Name	Req	Remarks
		FUEL TUBING OPTION FT10037		
1	3018889	Connector, Female	1	
2	S-182-B	Screw, Hexagon Head Cap	2	
3	S-600	Washer, Lock	2	
4	S-631	Washer, Plain	2	
5	64709	Spacer, Filter	2	
6	180371	Clip	2	
7	181213	Elbow, Plain Adapter	2	
8	203863	Tee, Fuel Bypass	1	
9	3003578	Tube, Fuel Drain	1	
10	3003580	Tube, Fuel Bypass	1	
11	S-190-C	Screw, Hexagon Head Cap	2	
12	S-251	Nut, Regular Hexagon	1	
13	S-604	Washer, Lock	2	
14	S-1315	Screw, Pan Head Cap	1	
15	180372	Clip	2	
16	3007025	Clamp, Tube	2	
17	3013166	Tube, Fuel Supply	1	
18	3019301	Spacer, Mounting	2	
19	3033098	Brace, Tube	2	

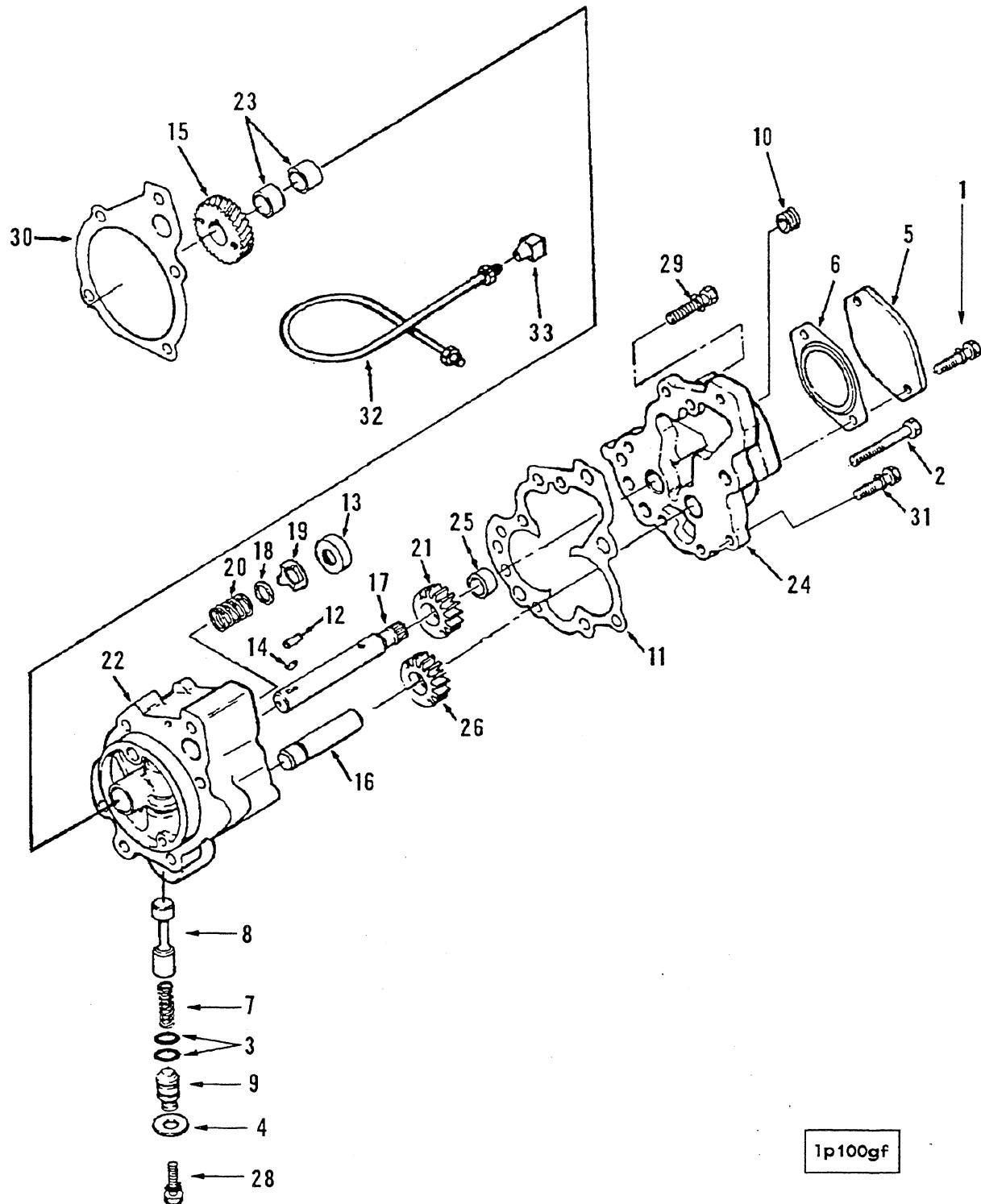


Ref No.	Part Number	Part Name	Req	Remarks
		FUEL VALVE OPTION FV8001		
1	S-189-C	Capscrew, Socket Head	2	
2	67684	Washer, Plain	2	
3	154087	Seal, Rectangular Ring	1	
4	181466	Washer, Lock	2	
5	3035342	Assembly, Shutoff Valve	1	
5	3025458	Plug, Pipe	1	
6	129768	Spring, Valve	1	
7	129839	Shield, Shutoff Valve	1	
7	129886	Assembly, Valve Body	1	
8	129826	Body, shutoff valve	1	
9	129838	Knob, Shutoff Valve Hsg.	1	
10	190876	Seal, O-ring	1	
11	3000266	Shaft, Shutoff Valve	1	
12	129888	Seal, Rectangular Ring	1	
13	187556	Capscrew, Hexagon Head	4	3/16-24 x 5/8 Inch
14	3030970	Disc, Valve	1	
15	3054611	Solenoid, Fuel Pump	1	

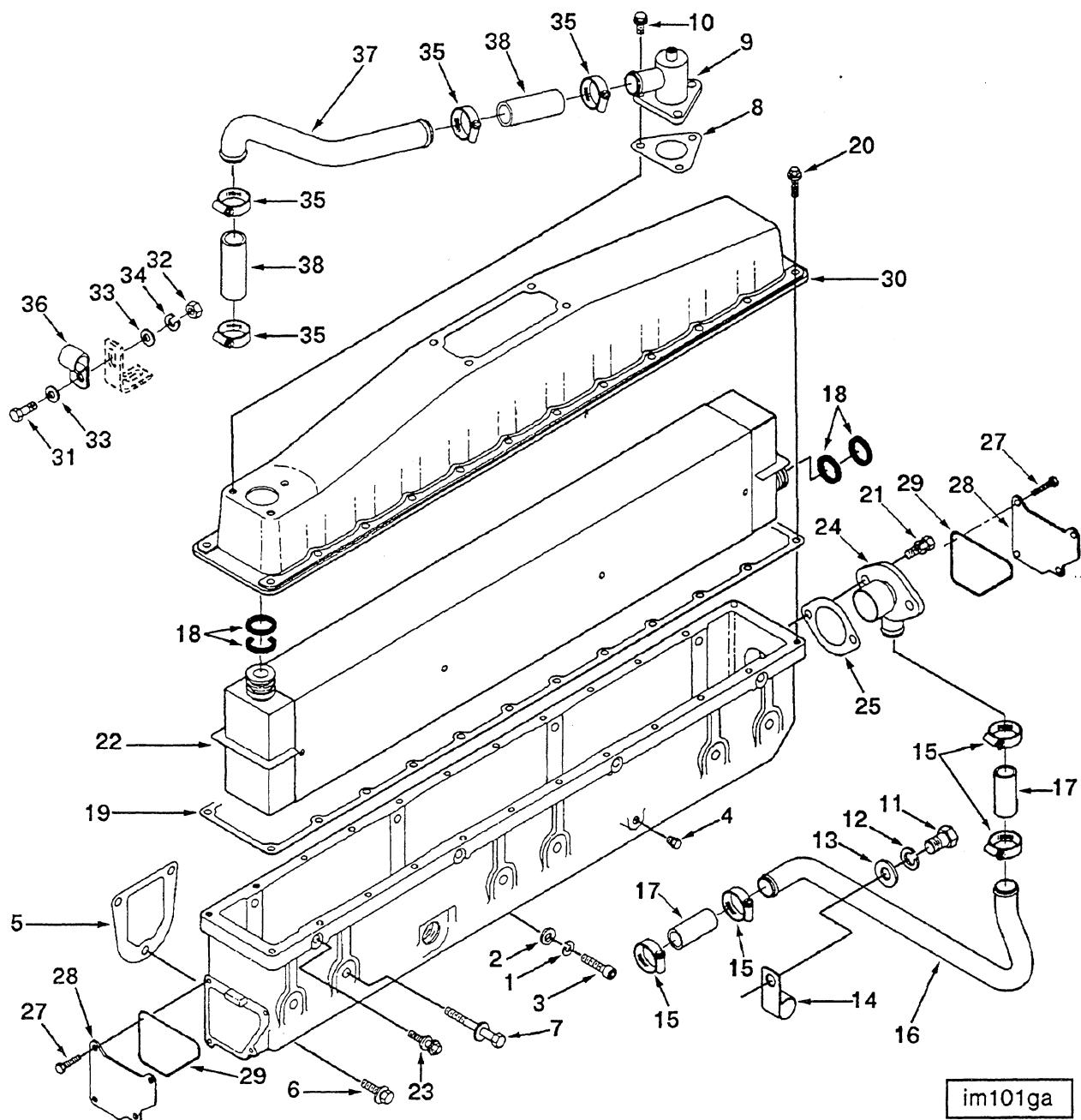


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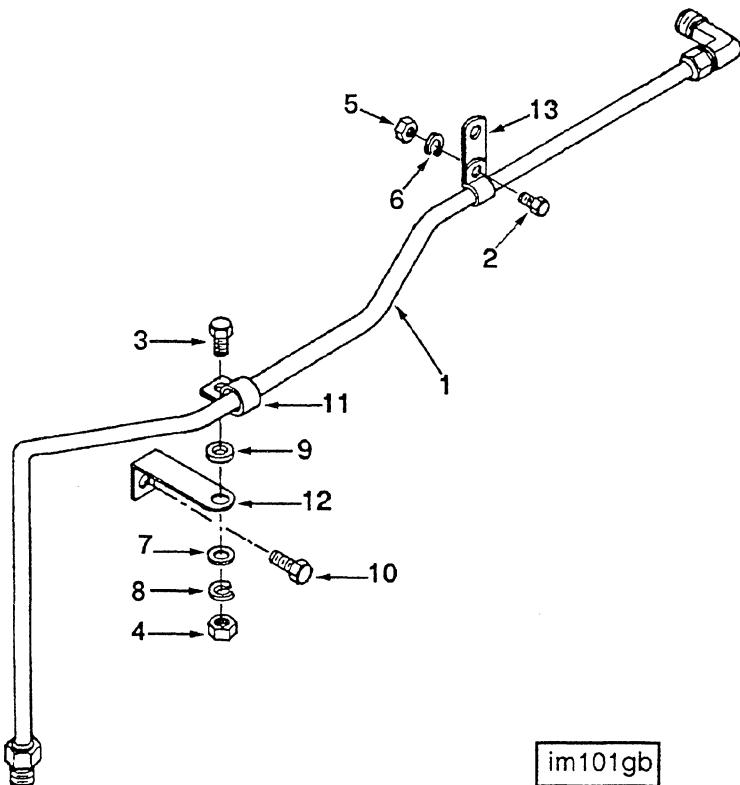
Ref No.	Part Number	Part Name	Req	Remarks
		<b>FLYWHEEL OPTION FW1186</b>		
1	3066469 (3066468)	Flywheel	1	
2	4851	Flywheel	1	
3	3025100	Gear, Flywheel Ring	6	
4	207386	Washer, Plain	6	inch
		Screw, Head Locking		



Ref No.	Part Number	Part Name	Req	Remarks
		OIL PUMP OPTION HD1056		
1	3821579	Assembly, Lube Oil Pump	1	
	3010595	Capscrew, Hexagon Head	2	3/8-16 x 1 Inch
2	S-142-A	Capscrew, Hexagon Head	2	7/16 - 20 x 4 1/2 Inch
3	145504	Seal, O-ring	2	
4	146161	Washer, Plain	1	
5	204048	Plate, Cover	1	
6	3004242	Gasket, Hydraulic Pump	1	
7	3010146	Spring, Pressure	1	
8	3012529	Plunger, Pressure	1	
9	3012726	Plug, Retainer	1	
10	3037536	Plug, Pipe	1	
11	3014778 (3821578)	Gasket, Pump Cover	1	
12	69519	Pump, Lub Oil	1	
13	179063	Dowel, Pin	1	
14	183695	Plug, Retainer	1	
15	204832	Key, Plain Woodruff	1	
16	3012531	Gear, Lube Oil Pump	1	
17	3012532	Shaft, Idler	1	
18	3014754	Shaft, Lube Oil Pump	1	
19	3014755	Washer, Plain	1	
20	3014756	Disc, Valve	1	
21	3045617	Spring, Bypass Valve	1	
22	3821577	Gear, Lube Oil Pump	1	
23	69521	Body, Lube Oil Pump	1	
24	3014964	Bushing	2	
25	69521	Cover, Lube Oil Pump	1	
26	3045622	Bushing	1	
28	3022589	Gear, Lube Oil Pump	1	
29	3022590	Capscrew, Captive Washer	1	5/16-18 x 5/8 Inch
30	3031434	Capscrew, Captive Washer	7	5/16-18 x 1 Inch
31	3034526	Gasket, Lube Oil Pump	1	
		Capscrew, Captive Washer	2	7/16-20 x 1 3/4 Inch
		PRESSURE SENSING HOSE		
32	3044849	Tube, Pressure Sensing	1	
33	3044854	Elbow, Plain Adapter	2	

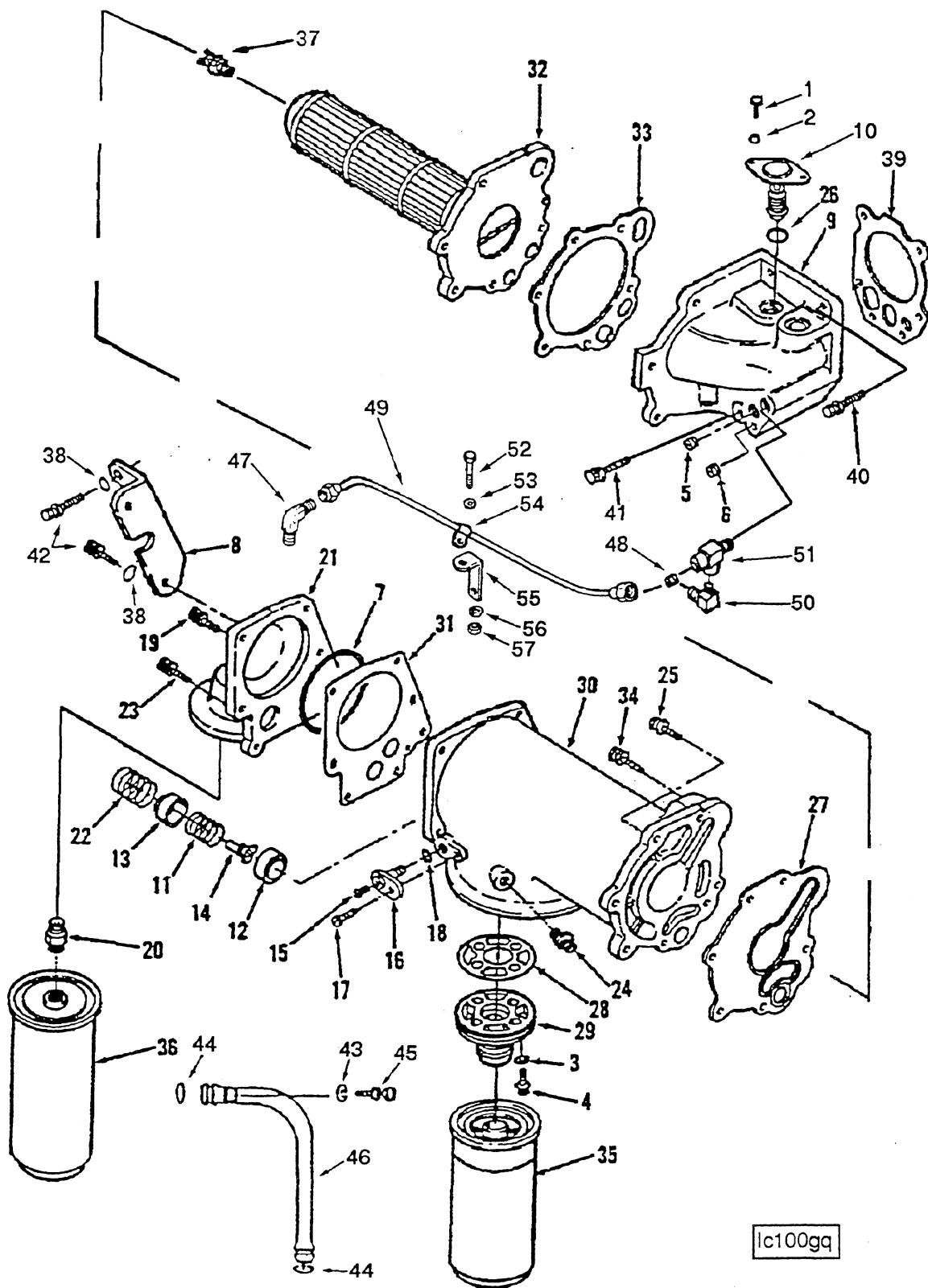


Ref No.	Part Number	Part Name	Req	Remarks
		<b>INTAKE MANIFOLD</b>		
		<b>OPTION IM1185</b>		
		<b>AIR MANIFOLD MOUNTING</b>		
1	S-604	Washer, Lock	1	
2	63842	Washer, Plain	1	
3	69047-A	Capscrew	1	3/8 - 16 x 1 1/2 Inch
4	70295	Plug, Pipe	1	
5	3008591	Gasket, Intake Manifold	3	
6	3011716	Capscrew, Captive Washer	2	3/8 - 16 x 1 3/8 Inch
7	3028967	Capscrew, Captive Washer	6	3/8 - 16 x 5 7/32 Inch
8	215044	Gasket, Water Trnsf. Conn.	1	
9	3013296	Connection, Water Outlet	1	
10	3015283	Capscrew, Captive Washer	3	5/16 - 18 x 3/4 Inch
		<b>REAR WATER TUBE</b>		
11	S-190	Capscrew	2	5/8 - 18 x 1 Inch
12	S-603	Washer, Lock	2	
13	S-658	Washer, Plain	2	
14	204263	Clip	2	
15	3010550	Clamp, Hose	4	
16	3028312	Tube, Water Transfer	1	
17	3818267	Hose, Plain	2	
		<b>AIR INTAKE INTERCOOLER</b>		
18	195952	Seal, O-ring	4	
19	216486	Gasket, Housing	1	
20	3005508	Capscrew, Hexagon Head	24	5/16 - 18 x 1 Inch
21	3012471	Capscrew, Captive Washer	2	3/8 - 16 x 1 1/8 Inch
22	3028997	Core, Aftercooler	1	
23	3030286	Capscrew, Captive Washer	8	5/16 - 18 x 1 1/2 Inch
24	3030843	Connection, Water Inlet	1	
25	3032348	Gasket, Water Trnsf. Conn.	1	
26	3036811	Manifold, Air Intake	1	
27	3001646	Screw, Self Tapping Metal	8	
28	3029815	Plate, Cover	2	
29	3029816	Seal, O-ring	2	
30	3046170	Cover, Aftercooler	1	
		<b>WATER TRANSFER TUBE</b>		
31	S-112	Capscrew, Hexagon Head	1	
32	S-223	Nut, Heavy Hexagon	1	
33	S-602	Washer, Plain	2	
34	S-604	Washer, Lock	1	
35	43828-A	Clamp, Hose	4	
36	107460	Clip	2	
37	3036844	Tube, Water Transfer	1	
38	3818267	Hose, Plain	2	

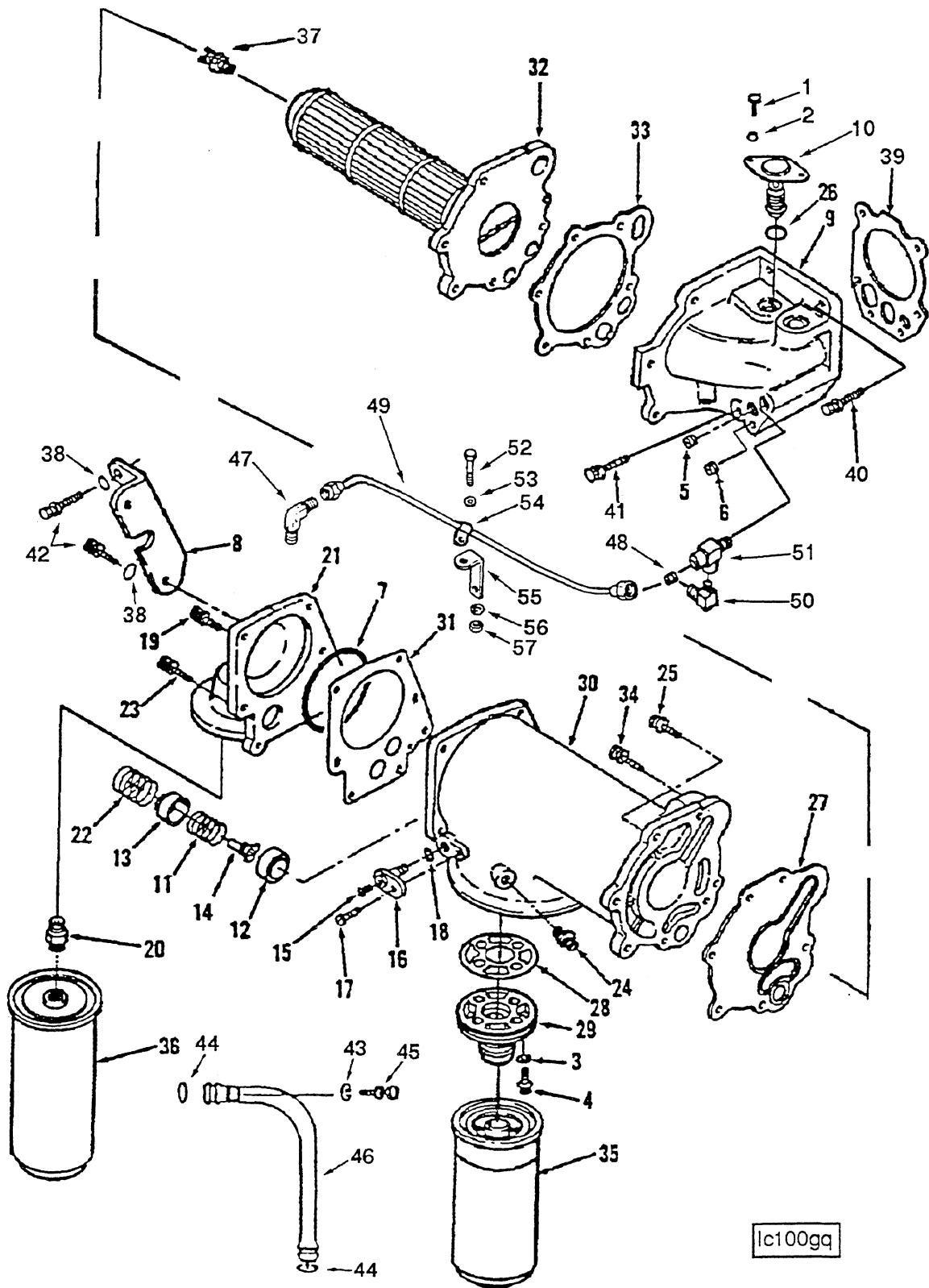


Ref No.	Part Number	Part Name	Req	Remarks
		MANIFOLD PRESSURE TUBE OPTION IM1810		For use on John Deere engines with short accessory drive less air compressor, AFC fuel pump without ASA, low profile air manifold with clearance to air compressor supply port.
1	3067495	Tube, Manifold	1	
2	S-121	Screw, Hexagon	1	
3	S-190-C	Screw, Hexagon	1	
4	S-205	Nut, Regular Hexagon	1	
5	S-251	Nut, Regular Hexagon	1	
6	S-600	Washer, Lock	1	
7	S-602	Washer, Plain	1	
8	S-604	Washer, Lock	1	
9	60724	Spacer, Belt	1	
10	69793	Screw, Hexagon Head Cap	1	
11	180371	Clip	1	
12	200015	Brace, Hose	1	
13	3031618	Clip	1	

## NOTES

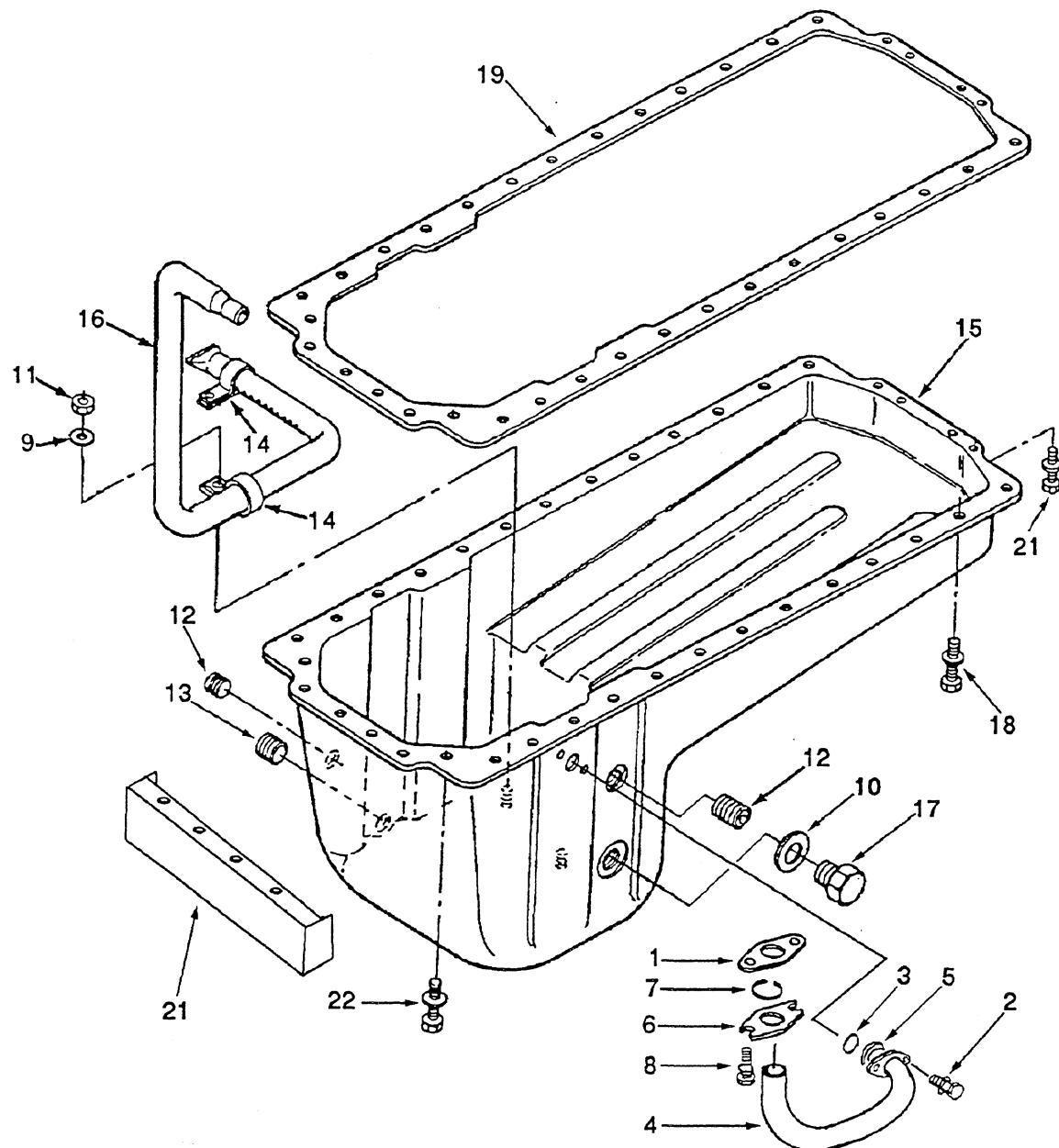


Ref No.	Part Number	Part Name	Req	Remarks
		LUBRICATING OIL COOLER/ FILTER OPTION LF1089		Lube oil filter/cooler arrangement with spin-on full flow LF-670 filter and spin- on bypass LF-777 filter mounted.
1	3053392	Assembly, Oil Cooler	1	
1	S-117	Capscrew, Hexagon Head	2	3/8-16 x 3/4 Inch
2	S-604	Washer, Lock	2	
3	70734	Washer, Plain	4	
4	115482	Capscrew, Twelve Point	4	5/16-18 x 1 1/4 Inch
5	3008466	Plug, Pipe	1	
6	3013786	Plug, Pipe	1	
7	3018695	Seal, Rectangular Ring	1	
8	3018697	Brace, Oil Cooler	1	
9	3027460	Support, Oil Cooler	1	
10	3023512	Valve, Bypass	1	
11	3030803	Spring, Compression	1	
12	3030804	Piston, Bypass Valve	1	
13	3030805	Piston, Pressure Sensing	1	
14	3030806	Plunger, Bypass Valve	1	
15	3031005	Capscrew, Pan Head	1	1/4 - 20 x 3/4 Inch
16	3035028	Assembly, Sensing Unit	1	
17	101996	Capscrew, Pan Head	1	
18	3030808	Seal, O-ring	1	
19	3035624	Capscrew, Captive Washer	3	3/8 - 16 x 1 1/2 Inch
	3037242	Head, Lub Oil Filter	1	
20	3037219	Insert, Filter Head	1	
21	(3037241)	Head, Lub Oil Filter	1	
22	3039296	Spring, Compression	1	
23	3040837	Capscrew, Captive Washer	2	3/8 - 16 x 2 1/4 Inch
24	3042619	Nipple, Coupling	1	
25	3044413	Capscrew, Captive Washer	6	3/8 - 16 x 2 Inch
26	3045979	Seal, O-ring	1	
27	3047465	Gasket, Cooler Housing	1	
28	3052128	Gasket, Filter Head	1	
29	3052129	Head, Lub Oil Filter	1	
30	3052210	Housing, Oil Cooler	1	
31	3052513	Gasket, Cooler Cover	1	
32	3045483	Core, Cooler	1	
33	3047464	Gasket, Cooler Cover	1	
34	3040838	Capscrew, Captive Washer	1	3/8 - 16 x 1 1/4 Inch
35	3313279	Element, Oil Filter	1	Fleetguard LF670
36	3313283	Element, Oil Filter	1	Fleetguard LF777
37	214345	Draincock	1	



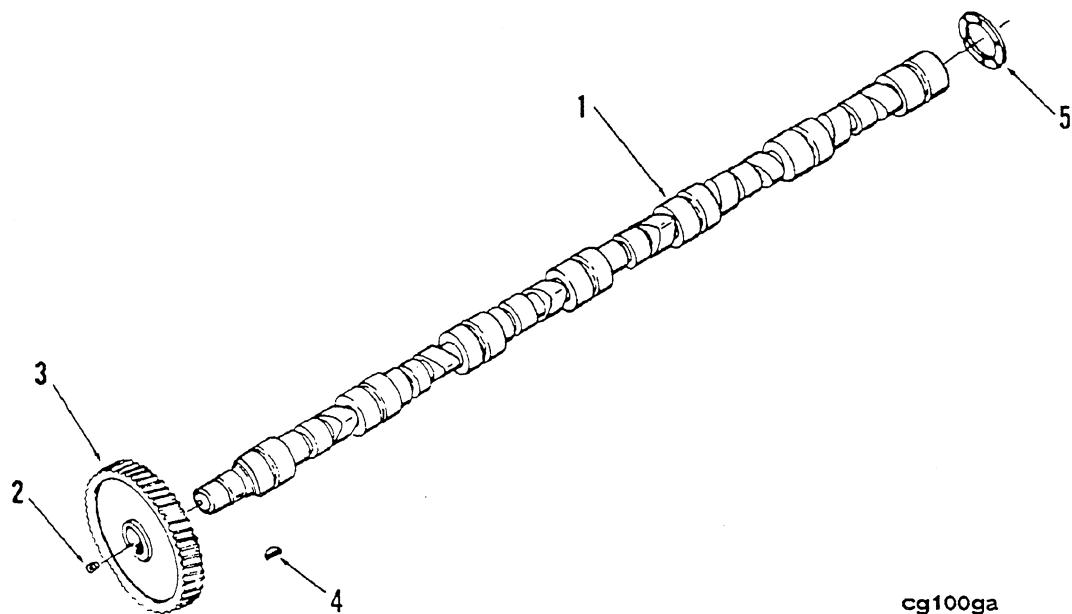
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Ref No.	Part Number	Part Name	Req	Remarks
		<b>LUBRICATING OIL COOLER/ FILTER OPTION LF1089</b>		
		<b>OIL COOLER MOUNTING</b>		
38	S-602	Washer, Plain	2	13/32 Inch
39	3031858	Gasket, Oil Cooler Support	1	
40	3010596	Capscrew, Captive Washer	3	3/8-16 x 1 1/4 Inch
41	3010597	Capscrew, Captive Washer	3	3/8-16 x 3 3/4 Inch
42	3044901	Capscrew, Captive Washer	2	1/4 - 20 x 7/8 Inch
		<b>WATER TRANSFER TUBE</b>		
43	S-626	Washer, Plain	1	
44	212161	Seal, O-ring	2	
45	3022589	Capscrew, Captive Washer	1	
46	3024666	Tube, Water Transfer	1	
		<b>LUBE OIL BYPASS TUBE</b>		
47	68645	Elbow, Male Adapter	1	
48	3008466	Plug, Pipe	1	
49	3037052	Tube, Lub Oil Bypass	1	
50	S-1040-A	Elbow, Male Adapter	1	
51	3818101	Tee, Street Pipe	1	
		<b>LUBE OIL BYPASS MOUNTING</b>		
52	S-117	Capscrew, Hexagon Head	1	
53	S-604	Washer, Lock	1	
54	108722	Clip	1	
55	109895	Bracket, Oil Gauge Tube	1	
56	S-602	Washer, Plain	1	
57	S-223	Nut, Heavy Hexagon	1	
		<b>OIL COOLER SEAL KIT</b>		
	3801199	Kit, Oil Cooler Seal	1	
44	212161	Seal, O-ring	2	
39	3008017	Gasket, Oil Cooler Support	1	
7	3018695	Seal, Rectangular Ring	1	
18	3030808	Seal, O-ring	1	
	3034579	Seal, Grommet	1	
26	3045979	Seal, O-ring	1	
33	3047464	Gasket, Cooler Cover	1	
27	3047465	Gasket, Cooler Housing	1	
	3052127	Gasket, Filter Head	1	
28	3052128	Gasket, Filter Head	1	
31	3052513	Gasket, Cooler Cover	1	
	3054445	Gasket, Cooler Cover	1	



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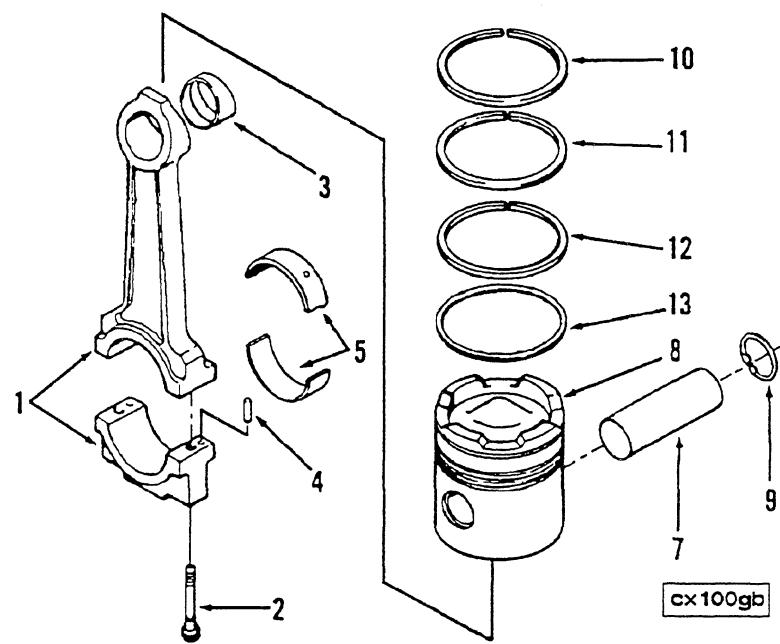
Ref No.	Part Number	Part Name	Req	Remarks
		<b>OIL PAN</b>		
		<b>OPTION OP1430</b>		
1	157551	Gasket, Oil Connection	1	
2	3010595	Capscrew, Captive Washer	2	3/8-16 x 1 Inch
3	3029847	Seal, O-ring	1	
4	3029848	Tube, Lube Oil Transfer	1	
5	3029850	Plate, Clamping	1	
6	3034830	Retainer, Seal	1	
7	3034986	Seal, Retangular Ring	1	
8	3035624	Capscrew, Captive Washer	2	3/8-16 x 1 1/2 Inch
	3046951	Assembly, Oil Pan	1	
9	S-626	Washer, Plain	2	
10	67946	Washer, Plain	1	1 - 1/32 Inch
11	69832	Nut, Hex	2	
12	3008468	Plug, Pipe	2	1/2 Inch
13	3008470	Plug, Pipe	1	1 Inch
14	3039267	Clip	2	
15	(3046947)	Pan, Oil	1	
16	3046948	Tube, Lube Oil Suction	1	
17	3055069	Plug, Threaded	1	1 Inch
		<b>OIL PAN MOUNTING</b>		
		<b>OPTION OP1726</b>		
18	3032674	Capscrew, Captive	28	7/16-20 x 1 1/8 Inch
19	3032861	Gasket, Oil Pan	1	
20	3048352	Capscrew, Captive Washer	4	5/16-24 x 1 Inch
21	3058675	Seal, Dust	1	
22	3818599	Capscrew, Captive Washer	4	



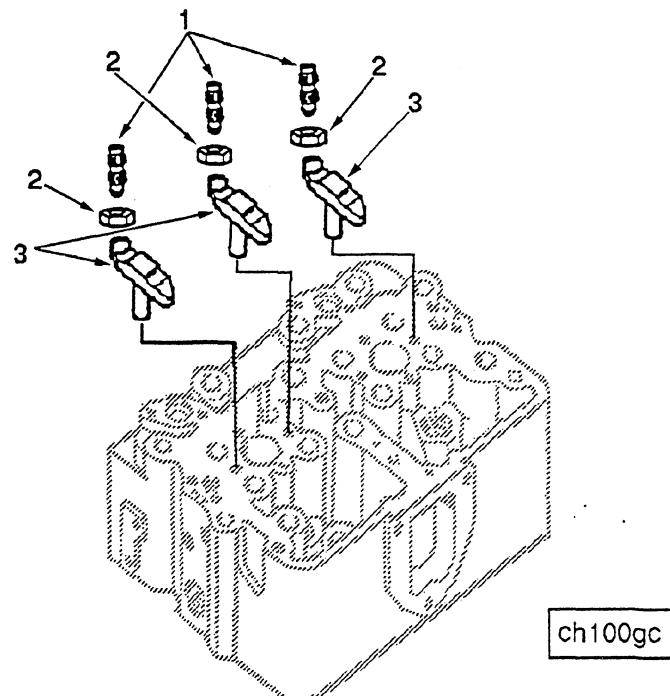
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Ref No.	Part Number	Part Name	Req	Remarks
1	3049024 (3042568)	CAMSHAFT OPTION PP1194	1	
1	68193	Camshaft	1	
2	3002901	Camshaft	1	
3	3065975	Plug, Pipe	1	
4	215233	Gear, Camshaft	1	
5		Key, Plain Woodruff	1	
		Bearing, Thrust	1	

## NOTES

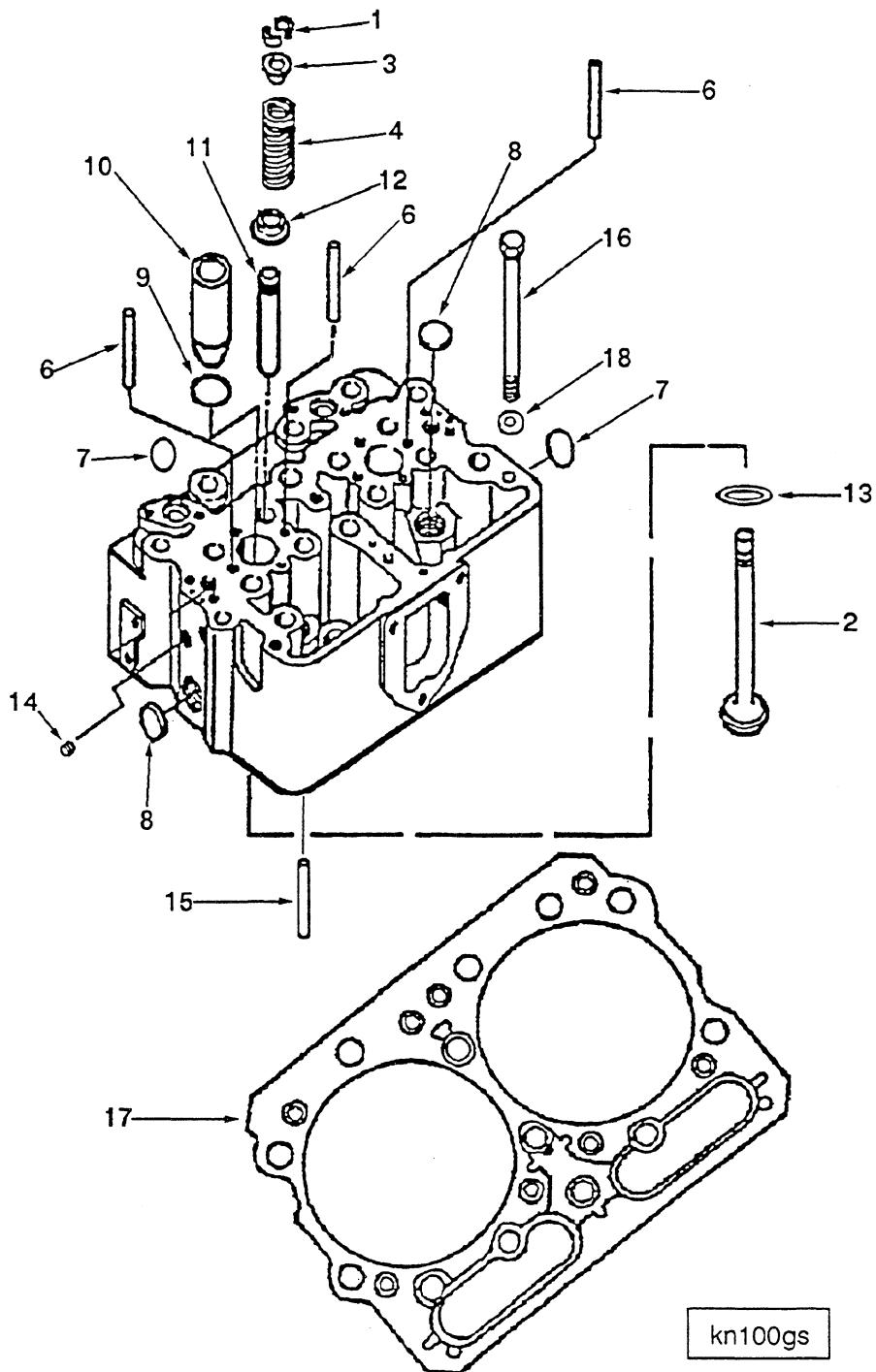


Ref No.	Part Number	Part Name	Req	Remarks
		<b>CONNECTING ROD</b>		
		<b>OPTION PP1194</b>		
1	3013930 (218808)	Assembly, Connecting Rod	6	
2	219153	Rod, Connecting	1	
3	187420	Bolt, Connecting Rod	2	
4	70550	Bushing, Piston Pin	1	
5	214950	Dowel	2	
5	214951	Bearing, Connecting Rod	2	Standard
5	214952	Bearing, Connecting Rod	2	0.010 Inch Oversize
5	214953	Bearing, Connecting Rod	2	0.020 Inch Oversize
5	214954	Bearing, Connecting Rod	2	0.030 Inch Oversize
7	191970	Bearing, Connecting Rod	2	0.040 Inch Oversize
		<b>PISTON</b>		
8	3801819 (3048808)	Kit, Piston	6	CPL1194
9	175755	Piston	1	
		Ring, Retaining	2	
		<b>PISTON RINGS</b>		
10	3801755	Set, Piston Ring	6	
11	218025	Ring, Compression	1	
12	216983	Ring, Compression	1	
13	3056429	Ring, Compression	1	
	218732	Ring, Oil	1	
		<b>CYLINDER KIT</b>		
	3801823 (3048808) (3055099)	Kit, Cylinder	6	
	191970	Piston, Engine	1	
	175755	Liner, Cylinder	1	
	215090	Pin, Piston	1	
	3032874	Ring, Retaining	2	
	3801755	Seal, O-ring	1	
		Seal, O-ring	2	
		Set, Piston Ring	1	



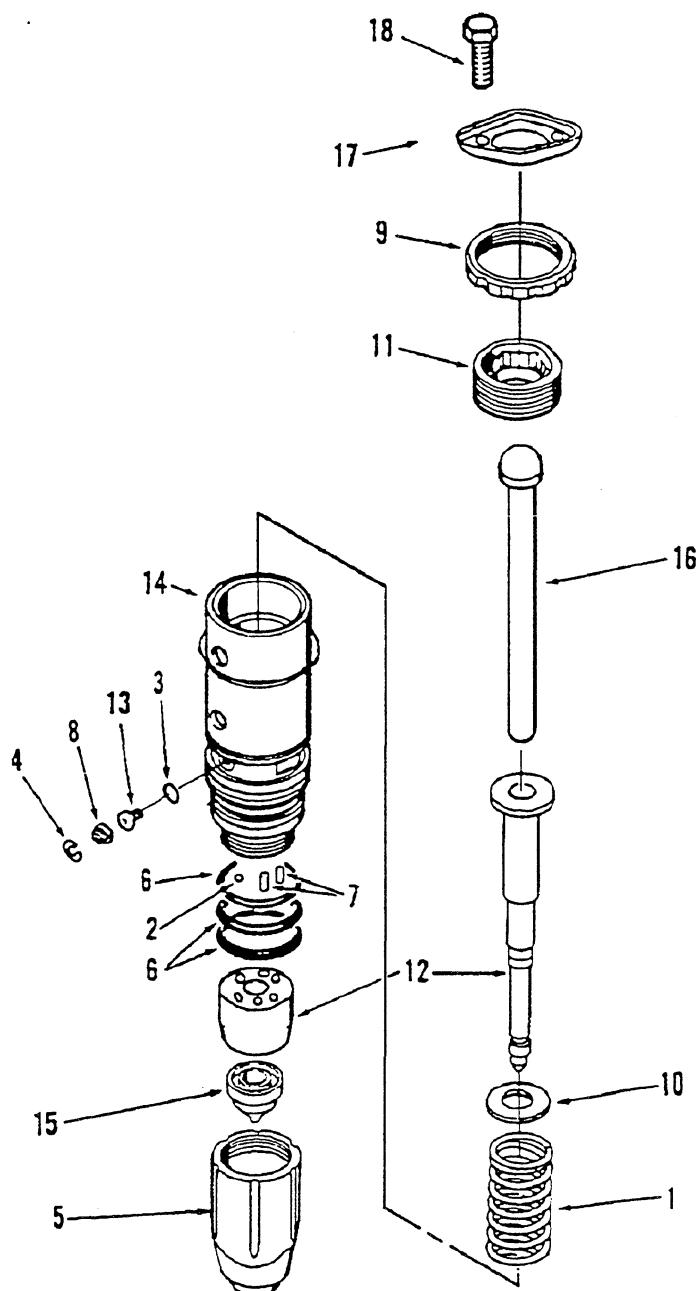
Ref No.	Part Number	Part Name	Req	Remarks
1 2 3	3030038 147389 203131 (3028293)	CROSSHEAD OPTION PP1194  Assembly, Crosshead Screw, Crosshead Nut, Heavy Hexagon Crosshead, Valve	12 1 1 1	

## NOTES



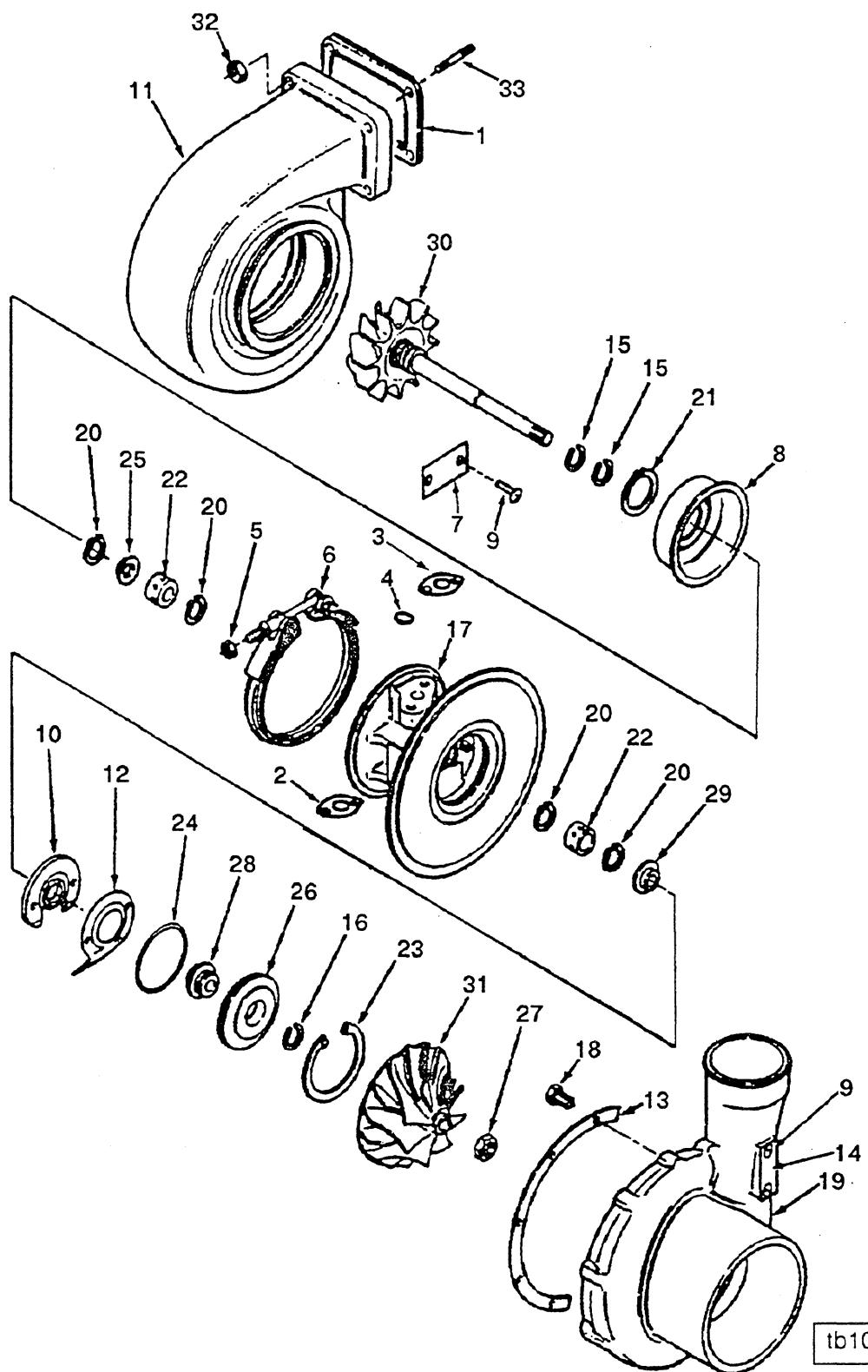
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Ref No.	Part Number	Part Name	Req	Remarks
		<b>CYLINDER HEAD</b>		
		<b>OPTION PP1194</b>		
1	3055098	Assembly, Cylinder Head	3	
	127554	Collet, Valve	16	
2	135957	Valve, Intake	4	
2	3040830	Valve, Exhaust	4	
3	170296	Guide, Valve Spring	8	
4	211999	Spring, Valve	8	
5	(3050418)	Head, Cylinder	1	
6	123558	Guide, Valve Crosshead	4	
7	3007634	Plug, Expansion	3	
8	3007635	Plug, Expansion	8	
9	3007759	Seal, O-ring	2	
10	3011934	Sleeve, Injector	2	
11	3050369	Guide, Valve Stem Intake	8	
12	3202144	Guide, Valve Spring	8	
13	200354	Insert, Valve Exhaust	4	
13	3017759	Insert, Valve Intake	4	
		<b>CYLINDER HEAD MOUNTING</b>		
14	S-911-B	Plug, Pipe	10	1/8 Inch
15	68445	Pin, Groove	6	
16	3013623	Capscrew, Hexagon Head	36	11/16-16 x 7 3/8 Inch
17	3047402	Gasket, Cylinder Head	3	
18	3060633	Washer, Plain	36	

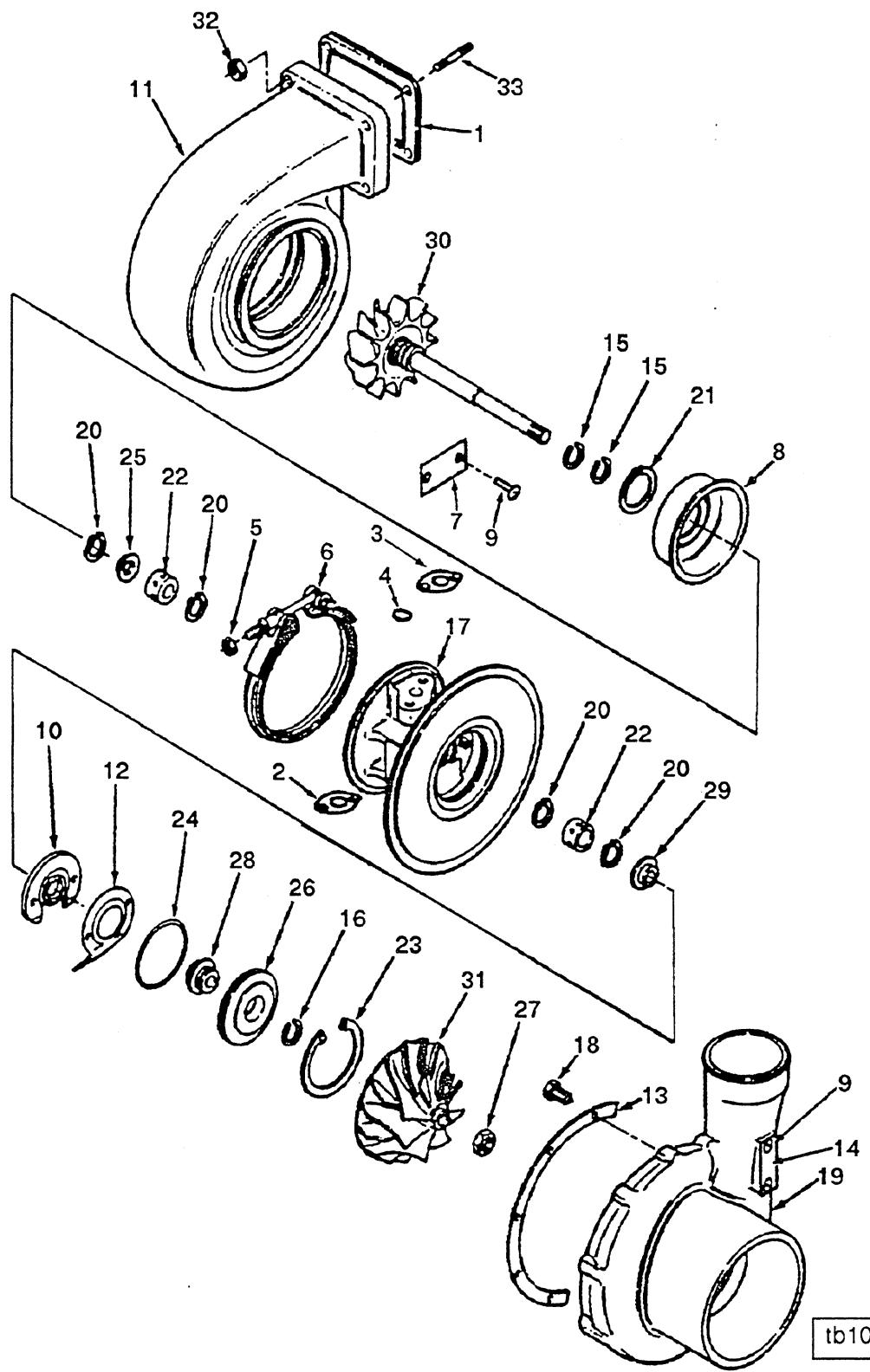


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Ref No.	Part Number	Part Name	Req	Remarks
		<b>INJECTOR</b> <b>OPTION PP1194</b>		
1	3047973	Assembly, Injector	6	
1	166009	Spring, Compression	1	
2	167157	Ball, Check	1	
3	173086	Gasket, Orifice Plug	1	
4	174299	Clip	1	
5	185138	Retainer, Injector Cup	1	
6	193736	O-ring	3	
7	203426	Pin, Roll	2	
8	3008706	Screen, Filter	1	
9	3000465	Nut, Lock	1	
10	3015469	Retainer, Injector Spring	1	
11	212954	Screw, Stop	1	
12	3047963	Assembly, Barrel & Plunger	1	
13	3045047	Plug, Orifice	1	
14	3000464	Adapter	1	
15	3023556	Cup, Injector	1	
		<b>MOUNTING PARTS</b>		
16	191916	Link, Injector Plunger	1	
17	3060447	Clamp, Injector	1	
18	3049333	Capscrew, Twelve Point	12	3/8 - 16 x 1 1/4 inch

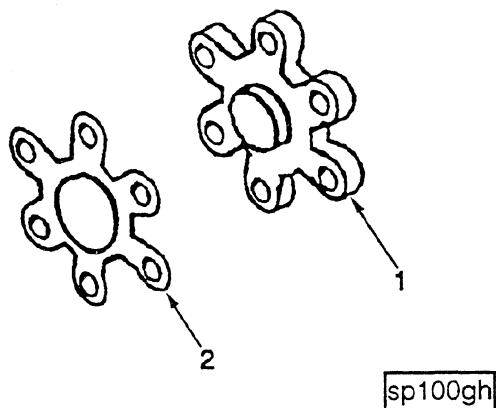


Ref No.	Part Number	Part Name	Req	Remarks
		TURBOCHARGER		
		OPTION PP1194		
1	3803108	Kit, Turbocharger	1	BHT3B
1	190849	Gasket, Exh Collector	1	
2	201048	Gasket, Connection	1	
3	201049	Gasket, Connection	1	
4	3037537	Seal, O-ring	1	
	(3527046)	Assembly, Turbocharger	1	
5	3503335	Nut, Hex	1	
6	3504959	Clamp, V-band	1	
7	3519021	Dataplate	1	
8	3519155	Shield, Turbo Heat	1	
9	3519163	Screw, Drive	4	
10	3519290	Bearing, Turbo Thrust	1	
11	3519351	Housing, Turbine	1	
12	3519401	Baffle, Oil	1	
13	3520981	Plate, Clamping	1	
14	3520992	Dataplate		
15	3521441	Seal, Split Ring	2	
16	3521442	Seal, Split Ring	1	
17	3522416	Housing, Turbo Bearing	1	
18	3526653	Capscrew, Captive Washer	10	
19	3527048	Housing, Compressor	1	
20	3709510	Ring, Retaining	4	
21	3718373	Ring, Retaining	1	
22	3722366	Bearing, Turbocharger	2	
23	3723863	Ring, Retaining	1	
24	3751948	Seal, O-ring	1	
25	3757753	Sleeve, Oil Control	1	
26	3759618	Plate, Oil Seal	1	
27	3519471	Nut, Lock	1	
28	3521439	Slinger, Oil	1	
29	3521440	Collar, Thrust	1	
30	3522075	Shaft and Wheel	1	
31	3527047	Impeller, Turbo	1	
		MOUNTING PARTS		
32	3056158	Nut, Hex	4	
33	3056155	Stud	4	

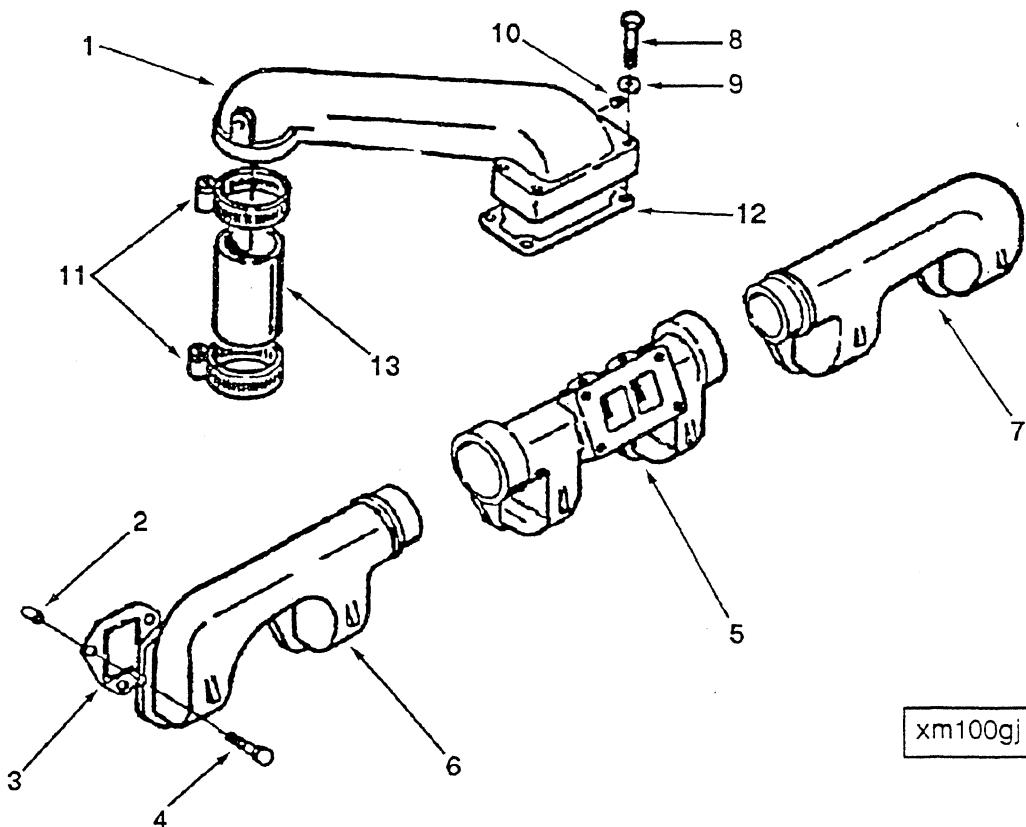


## Turbocharger Kits

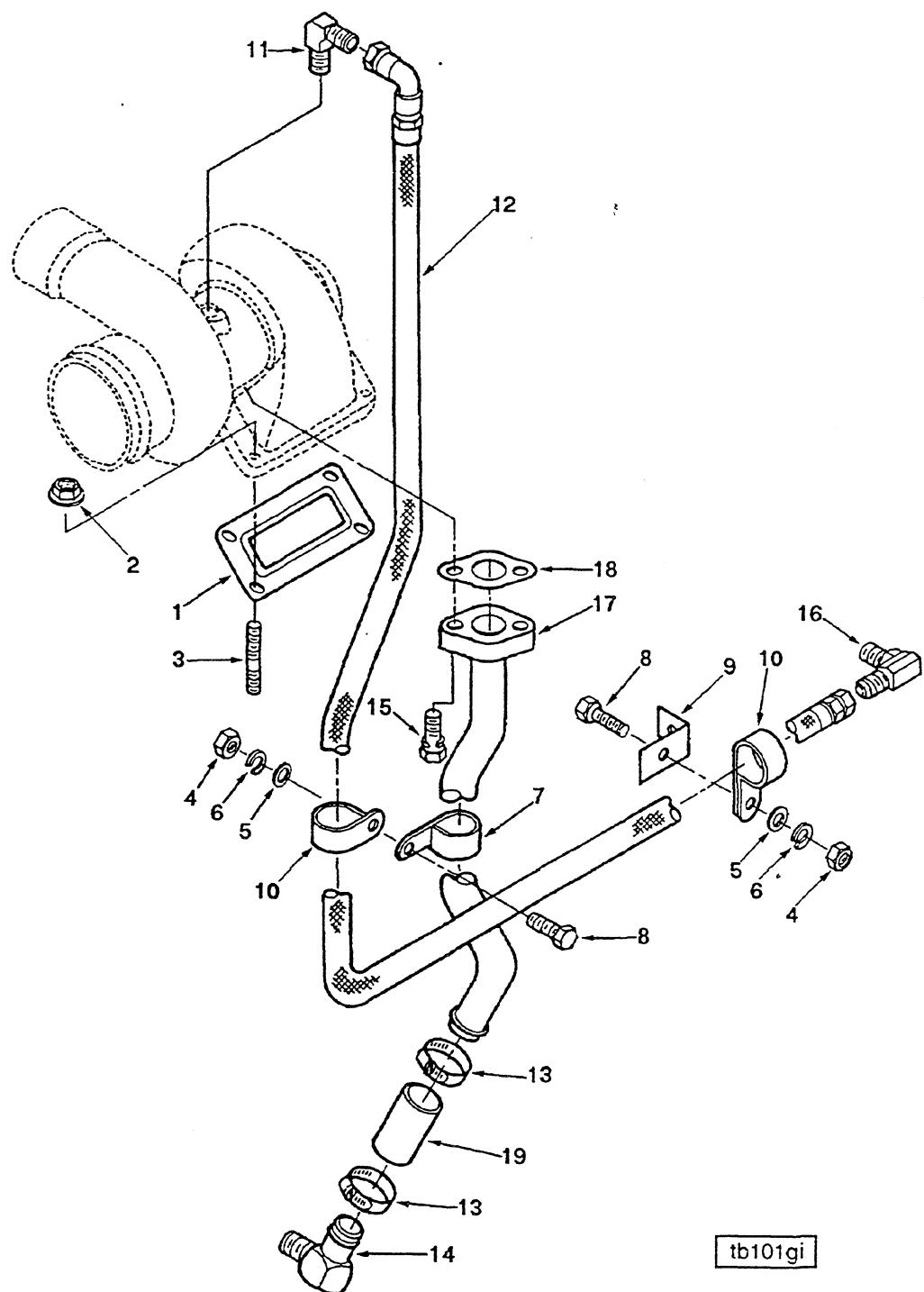
Ref No.	Part Number	Part Name	Req	Remarks
<b>TURBOCHARGER KITS</b>				
	3801523	Kit, Turbo Bearing	1	BHT3B
2	201048	Gasket, Connection	1	
3	201049	Gasket, Connection	1	
10	3519290	Bearing, Turbo Thrust	1	
15	3521441	Seal, Split Ring	2	
16	3521442	Seal, Split Ring	1	
20	3709510	Ring, Retaining	4	
22	3722366	Bearing, Turbo	2	
24	3751948	Seal, O-ring	1	
28	3521439	Slinger, Oil	1	
29	3521440	Collar, Thrust	1	
	3801522	Kit, Seal	1	BHT3B
2	201048	Gasket, Connection	1	
3	201049	Gasket, Connection	1	
15	3521441	Seal, Split Ring	2	
16	3521442	Seal, Split Ring	1	
20	3709510	Ring, Retaining	4	
24	3751948	Seal, O-ring	1	



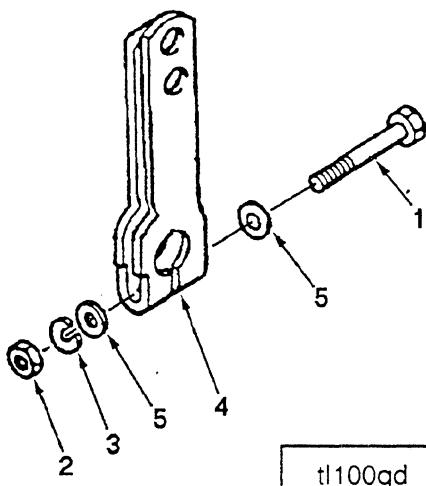
Ref No.	Part Number	Part Name	Req	Remarks
		<b>FAN SPACER OPTION SP1028</b>		
1	3005588	Spacer, Fan Pilot	1	.25 inch fan spacer (3.5 inch diameter B.C.)
2	3005592	Gasket, Fan Spacer	1	and gasket for use with the fixed center triangular fan drive arrangements.



Ref No.	Part Number	Part Name	Req	Remarks
		AIR CROSSOVER/ EXHAUST MANIFOLD OPTION TB1253		High side mounted HT3 turbocharger with exhaust outlet to front. Includes dry type exhaust manifold and crossover. Non TC cooler equipped engines. For use with John Deere engines only.
1	211657	Connection, Air Crossover	1	
2	105199	Pin, Groove	6	
3	3020943	Gasket, Exhaust Manifold	6	
4	3043647	Capscrew, Hexagon Head	10	
5	3026051	Manifold, Exhaust	1	
6	3031186	Manifold, Exhaust	1	
7	3031187	Manifold, Exhaust	1	
8	S-103-D	Capscrew	4	
9	S-679	Washer, Plain	4	
10	70295	Plug, Pipe	1	
11	208326	Clamp, T-bolt	2	
12	216487	Gasket, Crossover	1	
13	3060613	Hose, Plain	1	



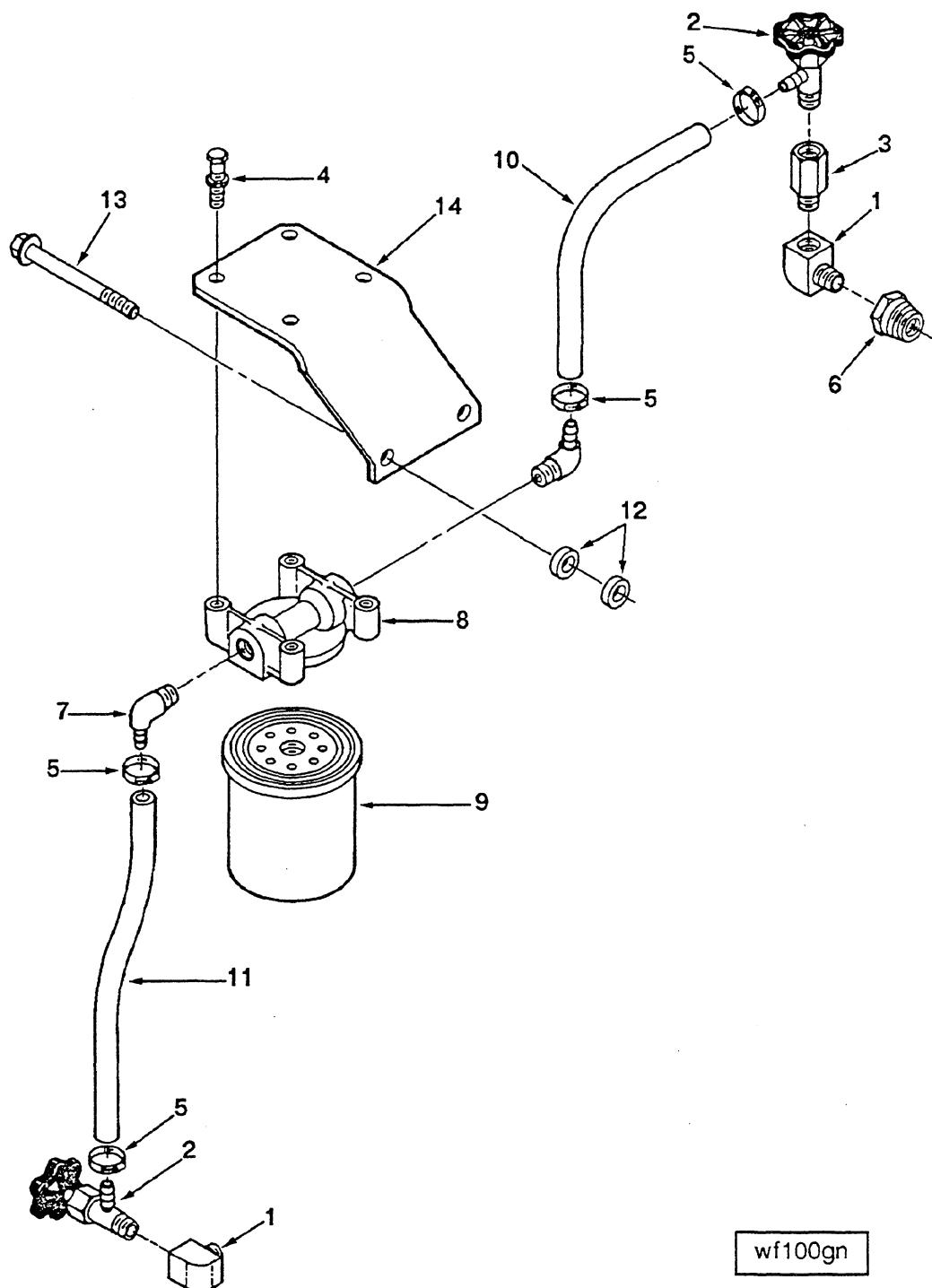
Ref No.	Part Number	Part Name	Req	Remarks
		<b>TURBOCHARGER MOUNTING OPTION TB1253</b>		
1	190849	Gasket, Exh Collector	1	
2	3056158	Nut, Hexagon Flange	4	
3	3056155	Stud	4	
4	S-205	Nut, Regular Hexagon	3	
5	S-602	Washer, Plain	3	
6	S-604	Washer, Lock	3	
7	69465	Clip	1	
8	69793	Capscrew, Hexagon Head	2	
9	70907	Support, Oil Gauge Tube	1	
10	108722	Clip	2	
11	142429	Elbow, Male Adapter	1	
12	209958	Hose, Flexible	1	
13	210753	Clamp, Hose	2	
14	3003536	Coupling, Elbow Hose	1	
15	3010596	Capscrew, Captive Washer	2	
16	3037535	Elbow, Male Union	1	
17	3067466	Tube, Tur Oil Drain	1	
18	3202117	Gasket, Connection	1	
19	3035174	Hose,Plain	1	



tl100gd

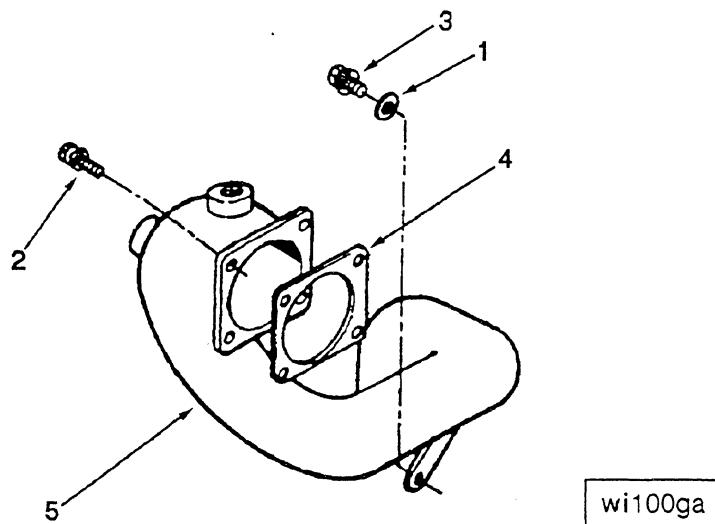
Ref No.	Part Number	Part Name	Req	Remarks
		<b>THROTTLE LEVER OPTION TL8005</b>		
1	S-159-B	Capscrew, Hexagon Head	1	
2	S-251	Nut, Regular Hexagon Jam	1	
3	S-600	Washer, Lock	1	
4	44680	Lever, Throttle	1	
5	70704	Washer, Plain	2	

## NOTES

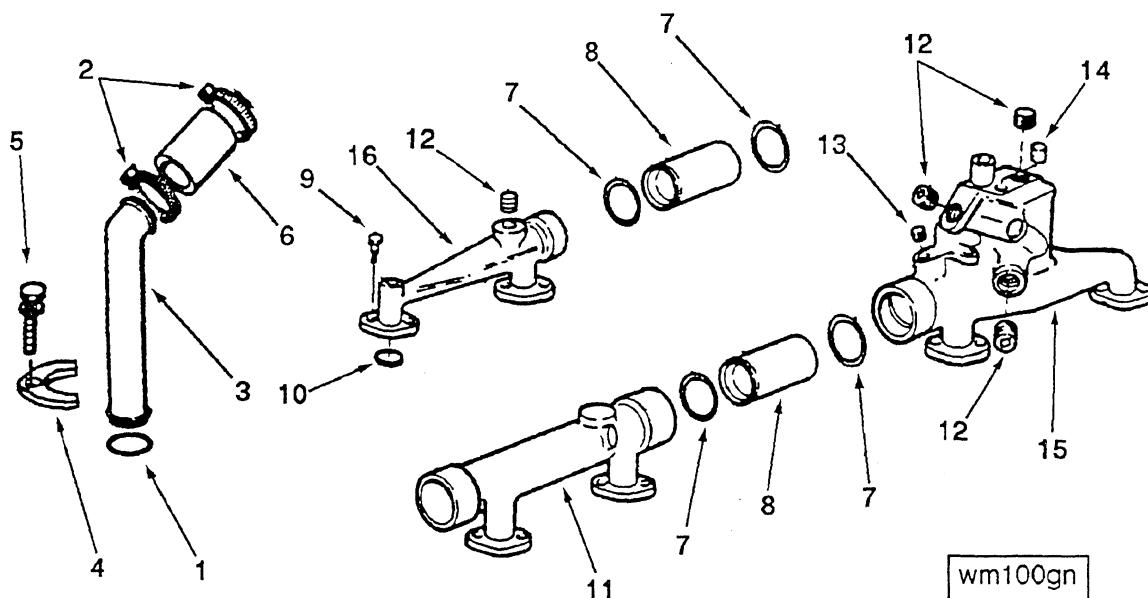


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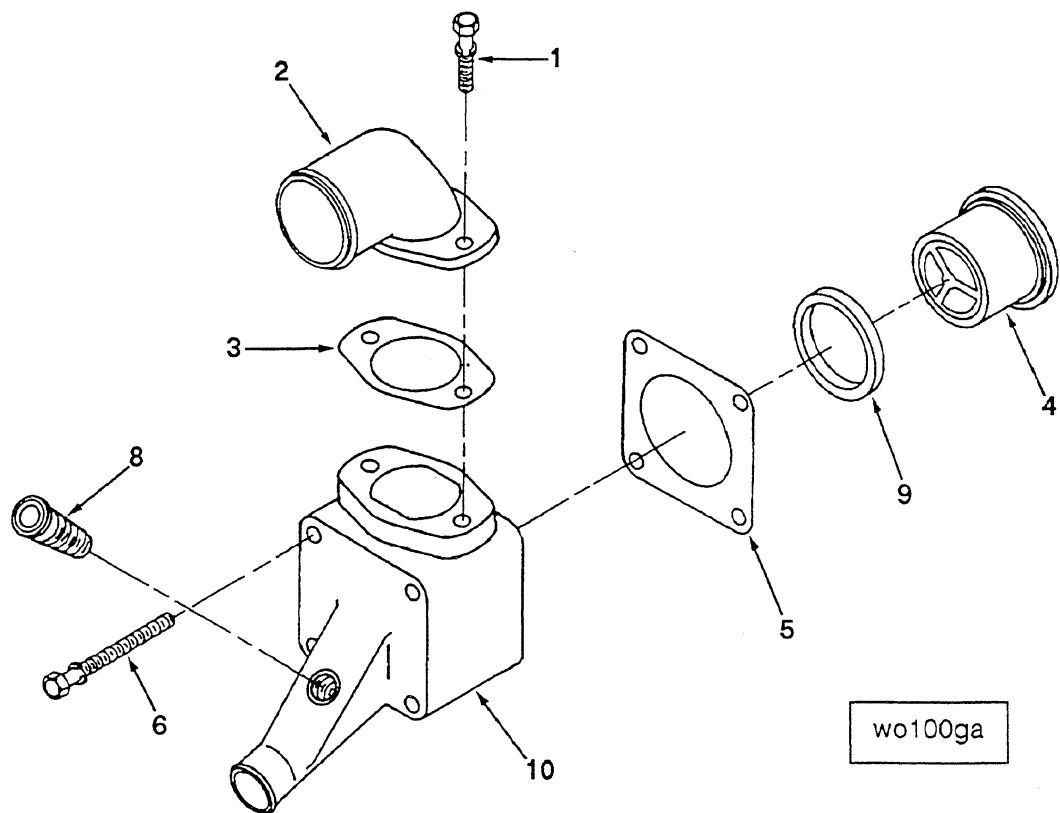
Ref No.	Part Number	Part Name	Req	Remarks
		<b>CORROSION RESISTOR OPTION WF1186</b>		
1	70470	Elbow, Street	2	
2	179901	Valve, Shutoff	2	
3	180221	Adapter, Plain Pipe	1	
4	3010596	Capscrew, Captive Washer	4	
5	3016190	Clamp, Hose	4	3/8 - 16 x 1 1/4 Inch
		<b>CORROSION RESISTOR MOUNTING</b>		
6	S-983	Bushing, Reducing Pipe	1	
7	179903	Coupling, Elbow Hose	2	
8	204163	Head, Fuel Filter	1	
9	3315116	Element, Cor. Resistor	1	
10	3062302	Hose, Plain	1	
11	3062304	Hose, Plain	1	
		<b>EXHAUST MOUNTING OPTION TB1792</b>		
12	109594	Washer, Plain	4	
13	3043649	Capscrew, Hexagon Head	2	
14	3060476	Bracket, Crn Resistor	1	7/16 - 14 x 4 3/16 Inch



Ref No.	Part Number	Part Name	Req	Remarks
		<b>WATER INLET CONNECTION OPTION WI1044</b>		
1	63842	Washer, Plain	1	
2	3010595	Capscrew, Captive Washer	4	
3	3012470	Capscrew, Captive Washer	1	
4	3024960	Gasket, Connection	1	
5	3028281	Connection, Water Transfer	1	



Ref No.	Part Number	Part Name	Req	Remarks
		<b>WATER MANIFOLD OPTION WM1085</b>		Water manifolds for use with dry type exhaust manifolds.
1	43463-A	Seal, O-ring	1	
2	3008690	Clamp, Hose	2	
3	213485	Tube, Water Bypass	1	
4	214617	Clamp, Tube	1	
5	3022589	Capscrew, Captive Washer	1	
6	3056139	Hose, Plain	1	
7	70624	Seal, O-ring	4	
8	130394	Connection, Water Bypass	2	
9	3010596	Capscrew, Captive Washer	12	5/16 - 18 x 5/8 Inch
10	3024709	Seal, Rectangular Ring	6	3/8 - 16 x 1 1/4 Inch
11	130118	Manifold, Water	1	Center
12	3008468	Plug, Pipe	4	
13	3008469	Plug, Pipe	2	
14	3025458	Plug, Pipe	1	
15	3015114	Manifold, Water	1	Front
16	3013001	Manifold, Water	1	Rear



Ref No.	Part Number	Part Name	Req	Remarks
<b>WATER OUTLET CONNECTION OPTION WO1045</b>				
1	3010595	Capscrew, Captive Washer	2	90 degree type 2.25 inch O.D. (57MM) water outlet connection mounted to top of top outlet thermostat housing and pointed forward.
2	3018764	Connection, Radiator	1	Includes 175-197 degree F thermostat
3	3019158	Gasket, Radiator	1	
4	201737	Thermostat	1	
5	208128	Gasket, Thermostat Housing	1	
6	3010597	Capscrew, Captive Washer	4	3/8 - 16 x 3 3/4 Inch
8	S-932-B	Coupling, Plain Hose	1	
9	186780	Seal, Thermostat	1	
10	3017748	Housing, Thermostat	1	

## Gasket Sets

Ref No.	Part Number	Part Name	Req	Remarks
<b>GASKET SETS</b>				
	3801330	Set, Upper Engine Gasket	1	
	S-1003-A	Seal, Grommet	2	
	43463-A	Seal, O-ring	1	
	70624	Seal, O-ring	4	
	100328	Seal, O-ring	2	
	109080	Seal, O-ring	1	
	116982	Lockplate	6	
	131026	Seal, O-ring	12	
	156545	Seal, O-ring	3	
	190849	Gasket, Exhaust Collector	1	
	195950	Gasket, Thermo Housing	1	
	195952	Seal, O-ring	4	
	208128	Seal, O-ring	4	
	212161	Seal, O-ring	2	
	215044	Gasket, Wtr Trf Connection	1	
	216487	Gasket, Connection	1	
	217037	Seal, O-ring	1	
	3008591	Gasket, Intake Mfld.	3	
	3012972	Gasket, Intake Manifold	1	
	3017750	Gasket, Rkr Lever Housing	3	
	3019158	Gasket, Radiator	1	
	3020943	Gasket, Exhaust Mfld.	6	
	3024709	Seal, Rectangular Ring	6	
	3032348	Gasket, Wtr Trf Connection	1	
	3047402	Gasket, Cylinder Head	1	
	3054841	Gasket, Rkr Lever Cover	3	

Ref No.	Part Number	Part Name	Req	Remarks
		GASKET SETS		
	3801235	Set, Lower Engine Gasket	1	
	40662-A	Gasket, Rear Cover	1	
	65274	Gasket, Hand Hold	1	
	67946	Washer, Plain	2	
	67963	Gasket, Suction Flange	1	
	70089-1	Gasket, Cover Plate	1	
	157551	Gasket, Lub Suc Connection	1	
	176027	Gasket	1	
	200307	Seal, Oil	1	
	200809	Gasket, Acc Drive Housing	1	
	215705	Seal, O-ring	1	
	3002385	Gasket, Water Pump	1	
	3004316	Seal, Oil	1	
	3005592	Gasket, Fan Spacer	1	
	3006736	Seal, Oil	1	
	3006737	Seal, Oil	1	
	3007442	Seal, O-ring	6	
	3008017	Gasket, Oil Cooler	1	
	3011931	Gasket, Connection	1	
	3014778	Gasket, Lub Oil Pump Cover	1	
	3018695	Seal, Rectangular Ring	1	
	3020000	Gasket, Cam Follower	3	
	3020001	Gasket, Cam Follower	3	
	3020002	Gasket, Cam Follower	3	
	3020004	Gasket, Cam Follower	3	
	3021705	Gasket, Gear Cover	1	
	3024960	Gasket, Connection	1	
	3029847	Seal, O-ring	1	
	3030808	Seal, O-ring	1	
	3030969	Seal, Rectangular Ring	1	
	3031434	Gasket, Lub Oil Pump	1	
	3034986	Seal, Rectangular Ring	1	
	3037421	Gasket, Flange	1	
	3038998	Seal, Oil	1	
	3045979	Seal, O-ring	1	
	3047464	Gasket, Lub Oil Clr Core	1	
	3047465	Gasket, Lub Oil Clr Hsg	1	
	3048341	Gasket, Fuel Pump	1	
	3049408	Gasket, Oil Pan	1	
	3049688	Gasket, Air Compressor	1	
	3052513	Gasket, Lub Oil Clr Cover	1	

Ref No.	Part Number	Part Name	Req	Remarks
<b>SETS AND KITS</b>				
	3801823	Kit, Cylinder	6	
	3801826	Kit, Liner	1	CPL1194
	3801819	Kit, Piston	1	CPL1194
	3801755	Set, Piston Ring	1	CPL1194
	3801710	Kit, Wtr Pump Repair Minor	1	
	3801712	Kit, Wtr Pump Repair Major	1	
	3801523	Kit, Turbo Bearing	1	
	3801522	Kit, Turbo Seal	1	
	3801235	Set, Lower Engine Gasket	1	
	3801330	Set, Upper Engine Gasket	1	
	3801328	Set, Single Head Gasket	1	



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