

Service Parts

Engine

Engine Models:

John Deere 6081

Generator Models:

125-230 kW

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Introduction

This manual lists service replacement parts for John Deere 6081 engines.

At the time of print this manual applied to the engine models listed in the Specification Number Index. On occasion this manual may apply to engines not listed in the Specification Number Index.

Information in this publication represents data available at the time of print. The generator set manufacturer reserves the right to change this publication and the products represented without notice and without any obligation or liability whatsoever.

This manual includes the following main sections:

Table of Contents. Lists the sections of the manual.

Introduction (and other information sections). Contains introductory material about part numbers, illustrations, and hardware.

Index. Lists the engine models and groups.

Group Parts Lists. List the part numbers of parts in the groups.

Numbering System Significance

This manual uses the following numbering systems:

Engine Model. The product identification number located on the engine nameplate. Engines break down into groups.

Group Number. A unique number representing a parts group needed to assemble an engine function. For example, Group 1 is the Air Intake group.

Variation Number. A group might have several variations. Each variation performs the same function with different parts lists. For example, a 12-volt alternator and 24-volt alternator both perform the same function, but, with different parts. Each difference requires a group variation or module number.

Part Number. The part number identifies an individual assembly, subassembly, component, or accessory kit.

Illustrations

Illustrations (or exploded-view drawings) best representing the widest range of variations accompany most groups in this manual. Illustrations do not depict all details and may not show all parts. Do not use illustrations for assembly or disassembly instructions.

x:in:004:004

How to Find Part Numbers

Use the following steps to locate a service replacement part.

1. Locate the engine nameplate to **identify the engine model number**.
2. **Turn to the Specification Number Index.** The first column lists the engine model numbers. The headings identify the groups of parts that make up the engine.
3. **Identify the group** most likely to include the service part number.
4. **Find the group variation number** at the intersection of the model row and the group column. Note the variation number.
5. **Page forward to locate the group** identified in step 3 or find the appropriate page in the Table of Contents.
6. **Find the part on the illustration** and note the item number of the part or **find the part description in the parts list**.
7. Select **the part number that corresponds to your group variation**. The first column lists the illustration item number. Find the variation identified in the Specification Number Index in the appropriate column on the right side of the parts list table. Find the quantity used at the intersection of the item number row and the variation column. A blank space at the intersection means the variation/module does not use that part number.

Hardware References

Many common hardware items do not appear in parts manuals or will appear as common hardware entries. A common hardware entry lists the size of the hardware. For example, an item that appears as "Hardware, 3/8-16" in the text means that the piece is 3/8-16 size. Obtain common hardware locally.

Some hardware items require a specific size or some other characteristic. In that case, use the part number listed in the text.

When replacing hardware, do not substitute inferior grade hardware. Replacement hardware grade should be equal to or better than the grade of the manufacturer's original hardware.

Specification Number Index

Group Title		Air Intake	Water Pump	Thermostat & Housing	Fan Belts	Fan Drive	Camshaft	Rocker Arms	Rocker Arm Cover	Fuel Injection Pump	Injection Lines and Nozzle	Governor Levers	Cylinder Block & Fittings	Crankshaft
Group No.	1	2a	2b	2c	2d	4a	4b	4c	5a	5b	5c	7a	8a	
Model	VARIATION NUMBER													

125/135 kW													
6081T, 12 V, 60 Hz	1726	2014	2102	2402	2336	4602	4902	1101	1606	1606	1606	4603	4702
6081T, 12 V, 60 Hz*	1726	2014	2102	2402	2336	4602	4902	1101	1606	1606	1606	4603	4702
6081T, 12 V, 50 Hz	1726	2014	2102	2402	2336	4602	4902	1101	1610	1610	1610	4603	4702
6081T, 24 V, 60 Hz	1726	2014	2102	2402	2336	4602	4902	1101	1606	1606	1606	4603	4702
6081T, 24 V, 50 Hz	1726	2014	2102	2402	2336	4602	4902	1101	1610	1610	1610	4603	4702
150 kW													
6081A, 12 V, 60 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1619	1619	1619	4602	4702
6081A, 12 V, 60 Hz†	1731	2014	2102	2402	2336	4602	4902	1101	1619	1619	1619	4602	4702
6081A, 12 V, 50 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1603	1607	1607	4602	4702
6081A, 12 V, 50 Hz†	1731	2014	2102	2402	2336	4602	4902	1101	1603	1607	1607	4602	4702
6081A, 24 V, 60 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1619	1619	1619	4602	4702
6081A, 24 V, 50 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1603	1607	1607	4602	4702
6081A, 24 V, 60 Hz†	1731	2014	2102	2402	2336	4602	4902	1101	1619	1619	1619	4602	4702
6081A, 24 V, 50 Hz†	1731	2014	2102	2402	2336	4602	4902	1101	1603	1607	1607	4602	4702
180 kW													
6081A, 12 V, 60 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1622	1622	1622	4602	4702
6081A, 12 V, 50 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1607	1607	1607	4602	4702
6081A, 24 V, 60 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1622	1622	1622	4602	4702
6081A, 24 V, 50 Hz	1731	2014	2102	2402	2336	4602	4902	1101	1607	1607	1607	4602	4702
6081A, 12 V, 60 Hz‡	1731	2014	2102	2438	237A	4602	4902	1101	1622	1622	1622	4602	4702
6081A, 12 V, 50 Hz‡	1731	2014	2102	2438	237A	4602	4902	1101	1607	1607	1607	4602	4702
6081A, 24 V, 60 Hz‡	1731	2014	2102	2438	237A	4602	4902	1101	1622	1622	1622	4602	4702
6081A, 24 V, 50 Hz‡	1731	2014	2102	2438	237A	4602	4902	1101	1607	1607	1607	4602	4702

* These units are equipped with model 4U7 alternators.

† These units are equipped with model 4U9 alternators.

‡ These engines are used on REOZJB or DSEJB model generator sets.

Specification Number Index

Group Title	Air Intake Water Pump Thermostat & Housing Fan Belts Fan Drive Camshaft Rocker Arms Rocker Arm Cover Fuel Injection Pump Injection Lines and Nozzle Governor Levers Cylinder Block & Fittings Crankshaft													
	Group No.	1	2a	2b	2c	2d	4a	4b	4c	5a	5b	5c	7a	8a
	Model	VARIATION NUMBER												

200 kW													
6081A, 24 V, 60 Hz	1731	2001	2102	2401	2305	4602	4902	1101	1684	1684	1684	4602	4702
6081A, 24 V, 50 Hz	1731	2001	2102	2401	2305	4602	4902	1101	1687	1687	1687	4602	4702
6081A, 24 V, 60 Hz‡	1731	2001	2102	2401	238A	4602	4902	1101	1684	1684	1684	4602	4702
6081A, 24 V, 50 Hz‡	1731	2001	2102	2401	238A	4602	4902	1101	1687	1687	1687	4602	4702
230 kW													
6081A, 24 V, 60 Hz‡	1731	2001	2102	2402	236A	4602	4902	1101	1684	1684	1684	4602	4702
6081A, 24 V, 50 Hz‡	1731	2001	2102	2402	236A	4602	4902	1101	1687	1687	1687	4602	4702

‡ These engines are used on REOZJB or DSEJB model generator sets.

Specification Number Index

Group Title	<i>Crankshaft Pulley</i>	<i>Main Thrust Bearing</i>	<i>Crankshaft Oil Seal</i>	<i>Cylinder Head</i>	<i>Dipstick</i>	<i>Starter Motor</i>	<i>Starter Parts</i>	<i>Exhaust Manifold</i>	<i>Flywheel</i>	<i>Flywheel Housing</i>	<i>Fuel Pump</i>	<i>Fuel Filter</i>	<i>Timing Gear Cover</i>
Group No.	8b	8c	8d	9	10	11a	11b	12	13a	13b	14	15	18
Model	VARIATION NUMBER												

125/135 kW													
6081T, 12 V, 60 Hz	1304	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1606	3518	7701
6081T, 12 V, 60 Hz*	1304	4702	1400	5109	4002	3004	3004	2812 6406	1506	1401	1606	3518	7701
6081T, 12 V, 50 Hz	1345	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1610	3518	7701
6081T, 24 V, 60 Hz	1304	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1606	3518	7701
6081T, 24 V, 50 Hz	1345	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1610	3518	7701
150 kW													
6081A, 12 V, 60 Hz	1304	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1619	3507	7701
6081A, 12 V, 60 Hz†	1304	4702	1400	5109	4002	3004	3004	2812 6406	1506	1401	1619	3507	7701
6081A, 12 V, 50 Hz	1345	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1607	3507	7701
6081A, 12 V, 50 Hz†	1345	4702	1400	5109	4002	3004	3004	2812 6406	1506	1401	1607	3507	7701
6081A, 24 V, 60 Hz	1304	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1619	3507	7701
6081A, 24 V, 50 Hz	1345	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1607	3507	7701
6081A, 24 V, 60 Hz†	1304	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1619	3507	7701
6081A, 24 V, 50 Hz†	1345	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1607	3507	7701
180 kW													
6081A, 12 V, 60 Hz	1345	4702	1400	5109	4002	3004	3004	2812 6406	1506	1401	1622	3507	7701
6081A, 12 V, 50 Hz	1307	4702	1400	5109	4002	3004	3004	2812 6406	1506	1401	1607	3507	7701
6081A, 24 V, 60 Hz	1306	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1622	3507	7701
6081A, 24 V, 50 Hz	1307	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1607	3507	7701
6081A, 12 V, 60 Hz‡	1304	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1622	3507	7701
6081A, 12 V, 50 Hz‡	1345	4702	1400	5109	4002	3004	3004	2812 6406	1505	1424	1607	3507	7701
6081A, 24 V, 60 Hz‡	1304	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1622	3507	7701
6081A, 24 V, 50 Hz‡	1345	4702	1400	5109	4002	3016	3016	2812 6406	1505	1424	1607	3507	7701

* These units are equipped with model 4U7 alternators.

† These units are equipped with model 4U9 alternators.

‡ These engines are used on REOZJB or DSEJB model generator sets.

Specification Number Index

Group Title	<i>Crankshaft Pulley</i>	<i>Main Thrust Bearing</i>	<i>Crankshaft Oil Seal</i>	<i>Cylinder Head</i>	<i>Dipstick</i>	<i>Starter Motor</i>	<i>Starter Parts</i>	<i>Exhaust Manifold</i>	<i>Flywheel</i>	<i>Flywheel Housing</i>	<i>Fuel Pump</i>	<i>Fuel Filter</i>	<i>Timing Gear Cover</i>
Group No.	8b	8c	8d	9	10	11a	11b	12	13a	13b	14	15	18
Model	VARIATION NUMBER												

200 kW													
6081A, 24 V, 60 Hz	1306	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1684	3507	7701
6081A, 24 V, 50 Hz	1345	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1687	3507	7701
6081A, 24 V, 60 Hz‡	1306	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1684	3507	7701
6081A, 24 V, 50 Hz‡	1345	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1687	3507	7701
230 kW													
6081A, 24 V, 60 Hz‡	1306	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1684	3507	7701
6081A, 24 V, 50 Hz‡	1345	4702	1400	5109	4002	3016	3016	2812 6406	1506	1401	1687	3507	7701

‡ These engines are used on REOZJB or DSEJB model generator sets.

Specification Number Index

Group Title	<i>Oil Pan</i>	<i>Oil Cooler</i>	<i>Oil Cooler Bypass Valve</i>	<i>Piston & Connecting Rod</i>	<i>Oil Pump</i>	<i>Oil Pump Intake</i>	<i>Oil Filter</i>	<i>Gasket Kits</i>	<i>Short Block</i>	<i>Turbocharger and Lines</i>	<i>Alternator</i>	<i>Alternator Brackets</i>
Group No.	21a	21c	21d	22	25a	25b	25c	39	42	50a	51a	51b
Model	VARIATION NUMBER											

125/135 kW												
6081T, 12 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	1	6501	3140	6203
6081T, 12 V, 60 Hz*	1906	5901	5901	4803	5002	1906	5901	1	1	6501	3140	6203
6081T, 12 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	1	6501	3140	6203
6081T, 24 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	1	6501	3142	6203
6081T, 24 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	1	6501	3142	6203
150 kW												
6081A, 12 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6506	3140	6203
6081A, 12 V, 60 Hz†	1906	5901	5901	4803	5002	1906	5901	1	2	6506	3140	6203
6081A, 12 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3140	6203
6081A, 12 V, 50 Hz†	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3140	6203
6081A, 24 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6506	3142	6203
6081A, 24 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3142	6203
6081A, 24 V, 60 Hz†	1906	5901	5901	4803	5002	1906	5901	1	2	6506	3142	6203
6081A, 24 V, 50 Hz†	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3142	6203
180 kW												
6081A, 12 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6530	3140	6203
6081A, 12 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3140	6203
6081A, 24 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6530	3142	6203
6081A, 24 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6511	3142	6203
6081A, 12 V, 60 Hz‡	1913	5901	5901	4803	5002	1913	5901	1	2	6530	3107	6203
6081A, 12 V, 50 Hz‡	1913	5901	5901	4803	5002	1913	5901	1	2	6511	3107	6203
6081A, 24 V, 60 Hz‡	1913	5901	5901	4803	5002	1913	5901	1	2	6530	3142	6203
6081A, 24 V, 50 Hz‡	1913	5901	5901	4803	5002	1913	5901	1	2	6511	3142	6203

* These units are equipped with model 4U7 alternators.

† These units are equipped with model 4U9 alternators.

‡ These engines are used on REOZJB or DSEJB model generator sets.

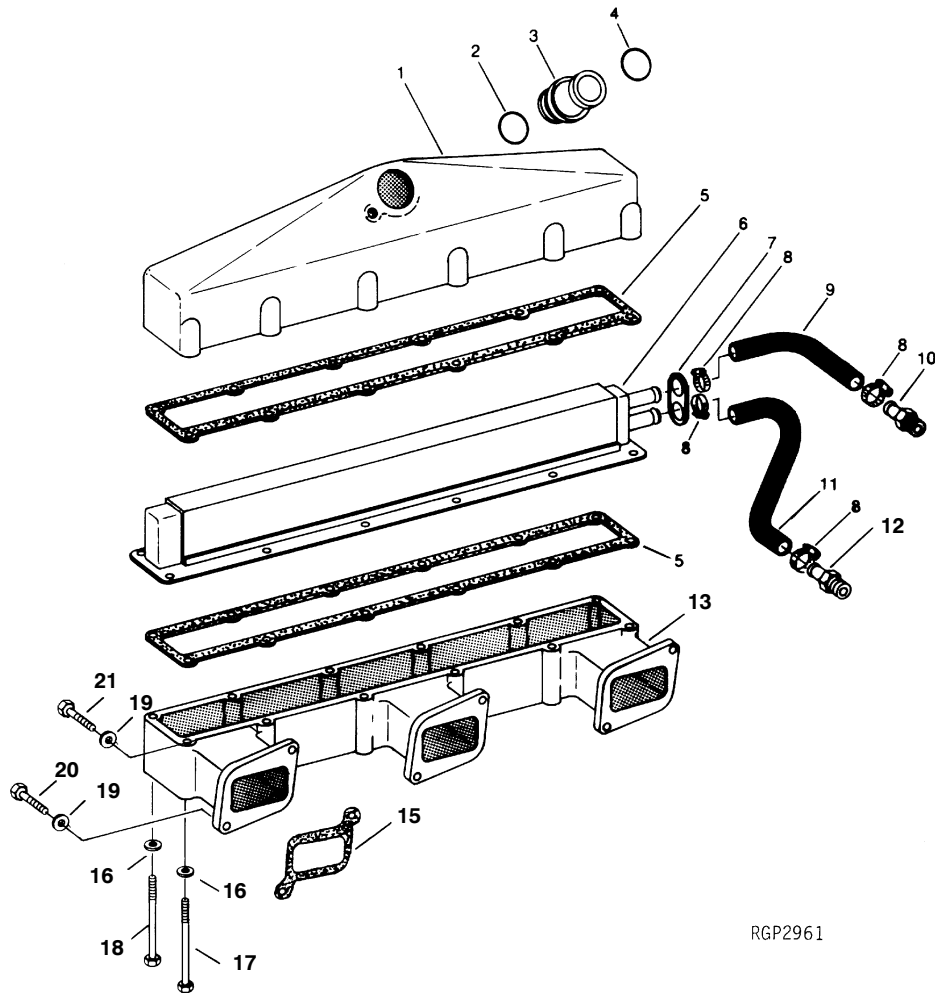
Specification Number Index

Group Title	<i>Oil Pan</i>	<i>Oil Cooler</i>	<i>Oil Cooler Bypass Valve</i>	<i>Piston & Connecting Rod</i>	<i>Oil Pump</i>	<i>Oil Pump Intake</i>	<i>Oil Filter</i>	<i>Gasket Kits</i>	<i>Short Block</i>	<i>Turbocharger and Lines</i>	<i>Alternator</i>	<i>Alternator Brackets</i>
Group No.	21a	21c	21d	22	25a	25b	25c	39	42	50a	51a	51b
Model	VARIATION NUMBER											

200 kW												
6081A, 24 V, 60 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6532	3142	6202
6081A, 24 V, 50 Hz	1906	5901	5901	4803	5002	1906	5901	1	2	6535	3142	6202
6081A, 24 V, 60 Hz‡	1913	5901	5901	4802	5002	1913	5901	1	2	6532	3142	6202
6081A, 24 V, 50 Hz‡	1913	5901	5901	4802	5002	1913	5901	1	2	6535	3142	6202
230 kW												
6081A, 24 V, 60 Hz‡	1913	5901	5901	4802	5002	1913	5901	1	2	6532	3142	6202
6081A, 24 V, 50 Hz‡	1913	5901	5901	4802	5002	1913	5901	1	2	6535	3142	6202

‡ These engines are used on REOZJB or DSEJB model generator sets.

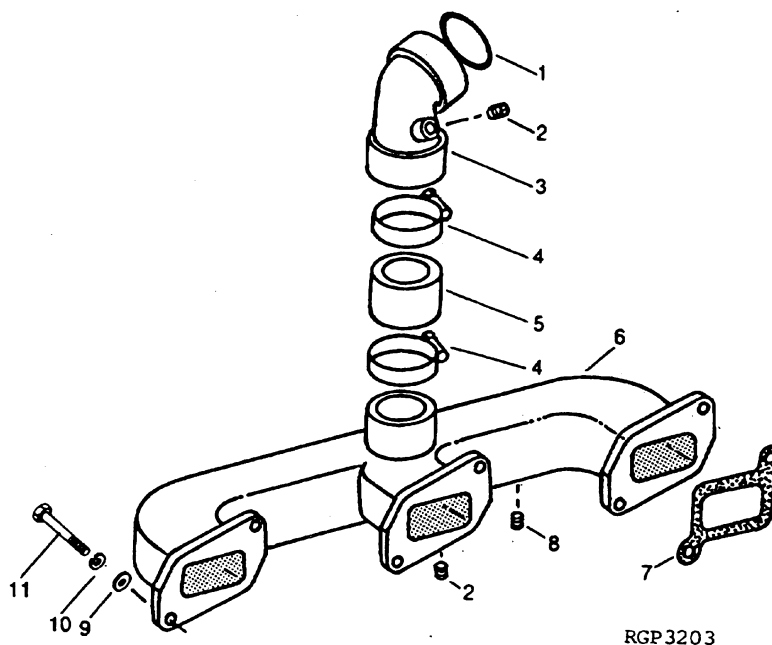
Group 1: Air Intake



Item	Part Number	Description	Quantity Variation Number 1731
1	352787	Cover	1
2	352803	O-ring	1
3	352781	Coupling	1
4	352799	O-ring	1
5	223893	Gasket	2
6	223967	Aftercooler	1
7	223736	Seal	1
8	#	Clamp	4
9	352711	Hose, outlet	1
10	223733	Fitting, hose	2
11	352710	Hose, inlet	1
12	223461	Fitting, hose	1
13	352789	Intake manifold	1
14	#	Plug, pipe, 3/4 in. (not shown)	1
15	352712	Gasket	3
16	#	Washer, 11/32 in. x 11/16 in. x 0.065 in.	12
17	#	Screw, 5/16 in. x 3 3/4 in.	6
18	#	Screw, 5/16 in. x 2 1/4 in.	6
19	#	Washer, 13/32 in. x 7/8 in. x 0.120 in.	6
20	#	Screw, 3/8 in. x 2 1/4 in.	6
21	#	Screw, 3/8 in. x 1 3/4 in.	3

Common hardware; procure locally.

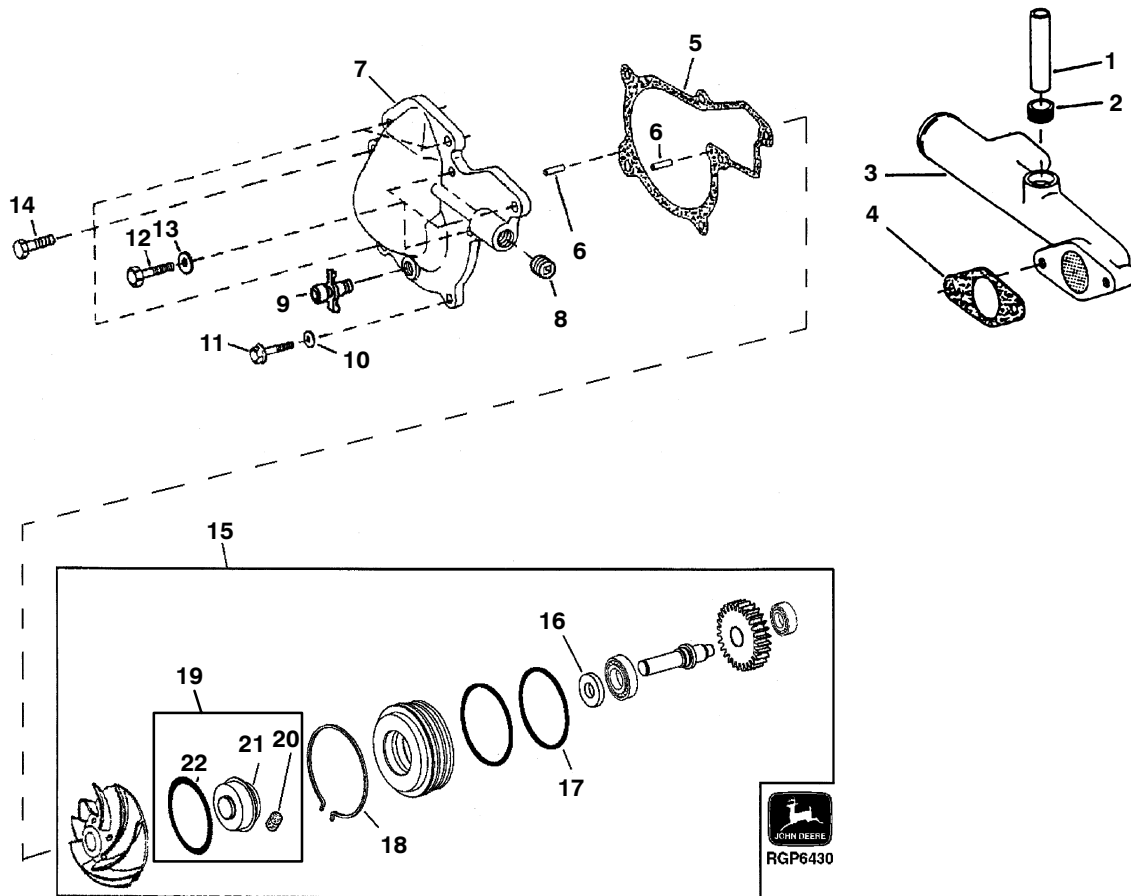
Group 1: Air Intake



Item	Part Number	Description	Quantity
			Variation Number 1726
1	223885	O-ring	1
2	#	Plug, pipe, 3/8 in.	2
3	352777	Coupling	1
4	352706	Clamp	2
5	352798	Hose, 76 mm x 51 mm	1
6	352808	Manifold, intake	1
7	352712	Gasket	3
8	224268	Plug, pipe	1
9	#	Washer, 13/32 in. x 7/8 in. x 0.120 in.	6
10	#	Washer, lock	6
11	#	Screw, 3/8 in. x 1 1/2 in.	6

Common hardware; procure locally.

Group 2a: Water Pump

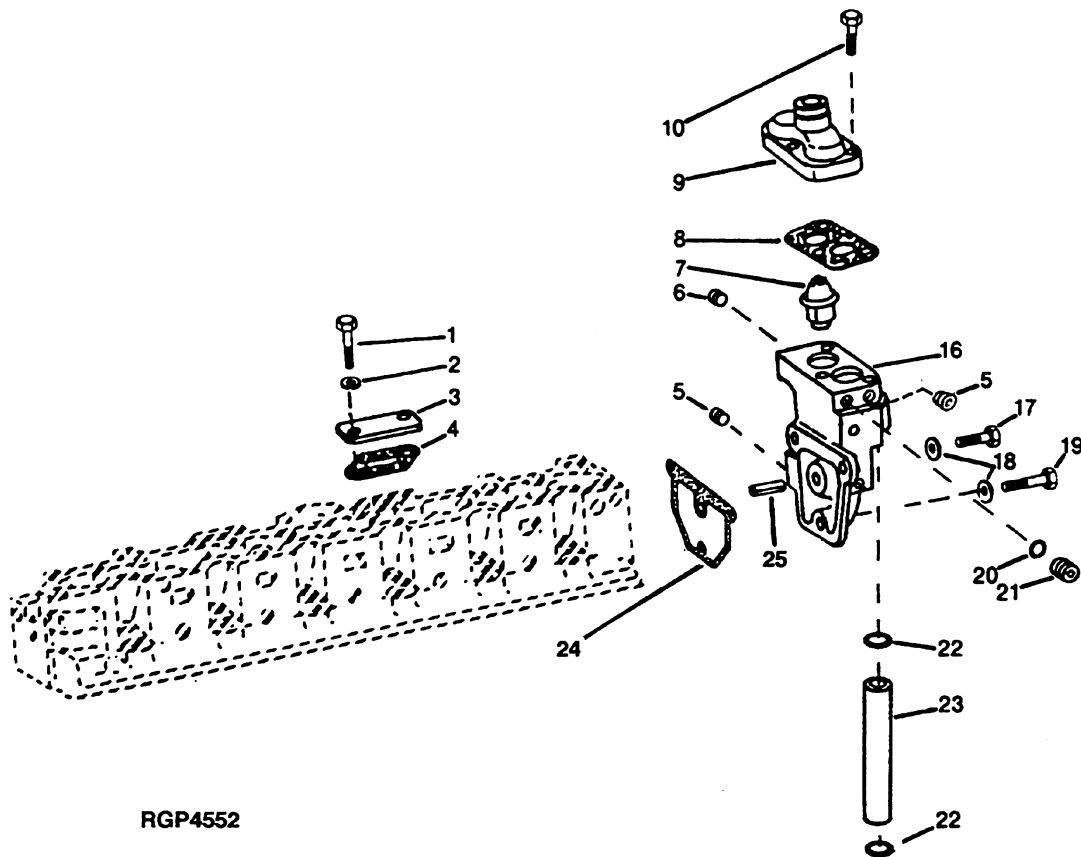


Item	Part Number	Description	Quantity	
			Variation Number 2014	2001
1	352772	Tube	1	1
2	352858	Seal	1	1
3	352771	Housing	1	1
4	352774	Gasket	1	1
5	352737	Gasket	1	1
6	352726	Pin, dowel	2	2
7	352770	Cover, right hand	1	1
8	223461	Fitting, hose	1	1
8	#	Plug, pipe, 1/2 in.	1	1
9	223435	Valve, drain	1	1
10	#	Washer, 11/32 in. x 11/16 in. x 0.065 in.	1	1
11	#	Screw, 5/16 in. x 3 3/4 in.	1	1
12	#	Screw, 3/8 in. x 1 1/8 in.	3	3
13	#	Washer, 10.5 mm x 18 mm x 1.6 mm	3	3
14	#	Screw, 3/8 in. x 1 1/4 in.	2	2
15	352851	Water pump	1	
15	GM18799	Water pump		1
16	352816	Seal	1	1
17	352761	O-ring	2	2
17	GM18807	Kit, O-ring (includes O-rings and retaining ring)	1	1
18	352752	Ring, retaining	1	1
19	352842	Kit, water pump seal	1	1
20	352812	Filter	1	1
21	X	Seal	1	1
22	GM18756	O-ring	1	1

Common hardware; procure locally.

X Not sold separately.

Group 2b: Thermostat and Housing

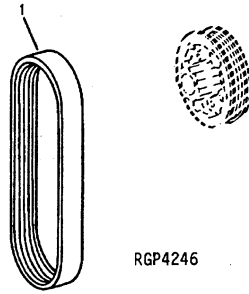


RGP4552

Item	Part Number	Description	Quantity
			Variation Number 2102
1	#	Screw, 3/8 in. x 7/8 in.	4
2	#	Washer, 13/32 in. x 13/16 in. x 0.065 in.	4
3	223881	Strap	2
4	223892	Gasket	2
5	#	Plug, pipe, 1/2 in.	2
6	#	Plug, pipe, 3/4 in.	1
7	223676	Thermostat	2
8	223762	Gasket	1
9	223879	Cover	1
10	#	Screw, 3/8 in. x 1 1/4 in.	3
16	352724	Manifold	1
17	#	Screw, 3/8 in. x 3 5/8 in.	2
18	#	Washer	3
19	#	Screw, 3/8 in. x 1 3/4 in.	1
20	#	O-ring	1
21	#	Plug, fitting	1
22	223851	O-ring	3
23	352772	Tube	1
24	223882	Gasket	1
25	352701	Pin, spring	1

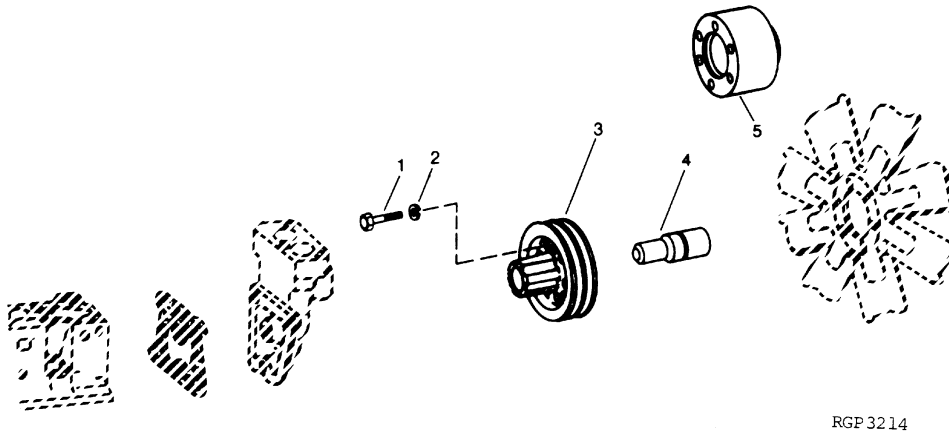
Common hardware; procure locally.

Group 2c: Fan Belt



Item	Part Number	Description	Quantity		
			Variation Number		
			2402	2401	2438
1	352793	Fan belt, 66.9 in. long	1		
1	GM19306	Fan belt, 65.9 in. long		1	
1	GM22374	Fan belt, 8 rib			1

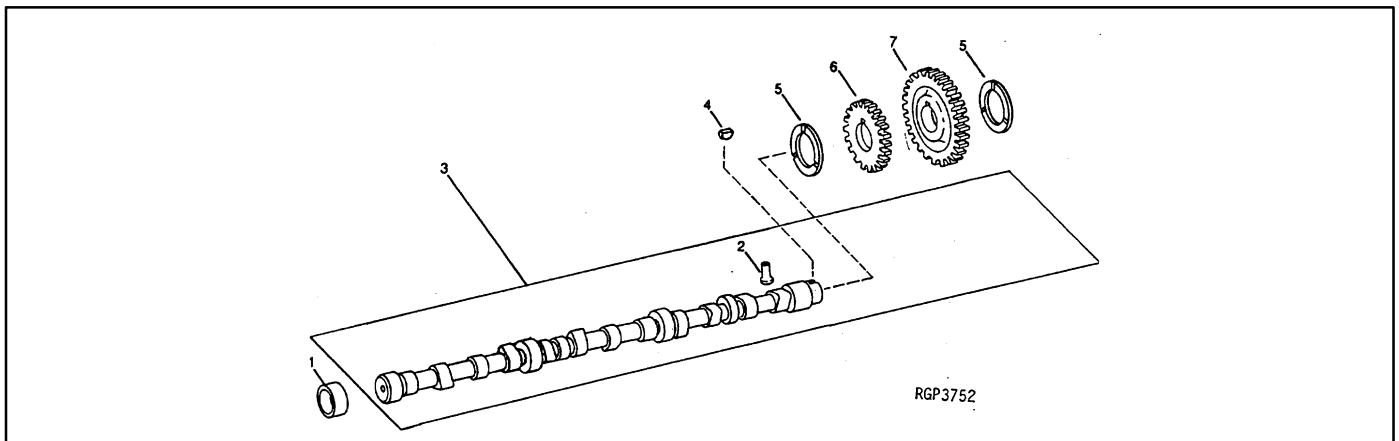
Group 2d: Fan Drive



Item	Part Number	Description	Quantity				
			Variation Number				
			2336	2305	236A	237A	238A
1	#	Screw, 3/8 in. x 1 1/4 in.	6	6	6	6	6
2	—	Not used					
3	352747	Pulley (not as shown)	1			1	
3	GM19307	Pulley (not as shown)		1			1
3	GM22375	Pulley (not as shown)			1		
4	352708	Bearing	1	1	1	1	1
5	223735	Spacer	1	1	1	1	1

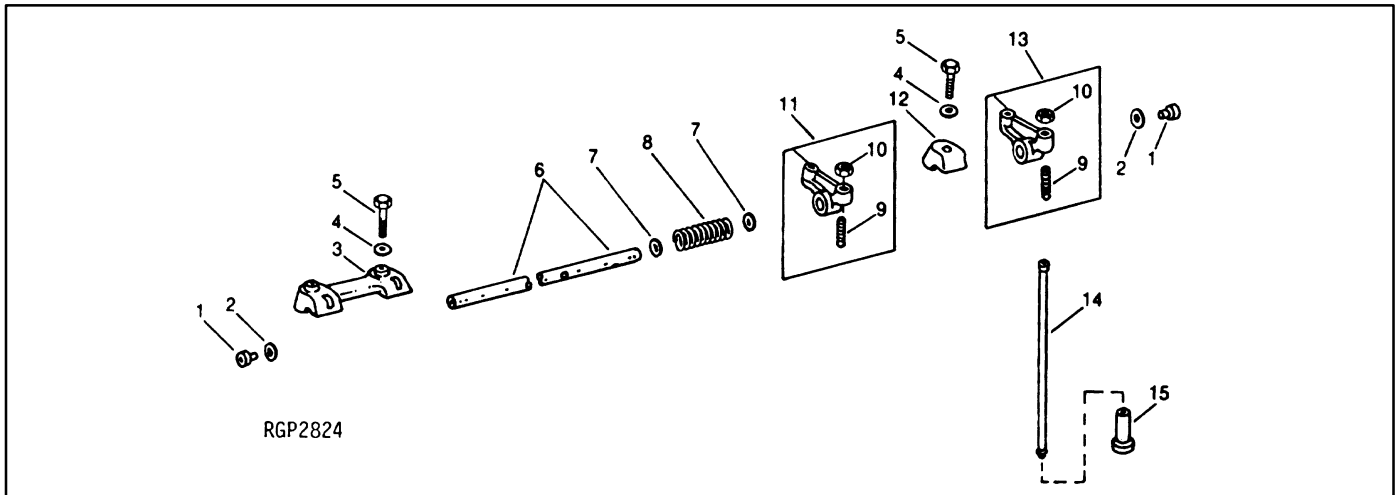
Common hardware; procure locally.

Group 4a: Camshaft



Item	Part Number	Description	Quantity Variation Number 4602
1	223889	Bushing	4
2	352425	Follower, cam	12
3	352844	Camshaft	1
4	352700	Shaft key, 3/16 in. x 1 1/4 in.	1
5	352720	Washer, thrust	2
6	352716	Gear	1
7	352727	Gear	1

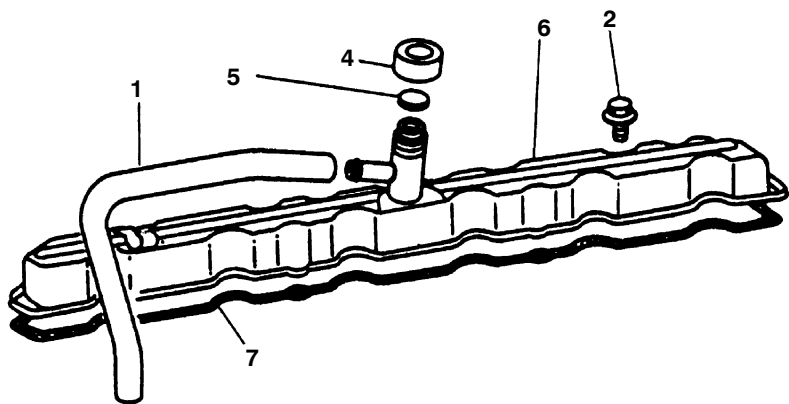
Group 4b: Rocker Arms



Item	Part Number	Description	Quantity Variation Number 4902
1	223480	Plug	2
2	223740	Washer	2
3	223832	Clamp, dual rocker arm	2
4	223743	Washer	6
5	#	Screw, 7/16-14 x 1 3/4 in.	6
6	223843	Shaft, rocker arm	1
7	223844	Washer	10
8	223739	Spring	5
9	223749	Screw, set	12
10	#	Nut, 3/8-16	12
11	223936	Arm, rocker	6
12	223745	Clamp, single rocker arm	2
13	223937	Arm, rocker	6
14	223877	Rod, push	12
15	223906	Follower, cam	12

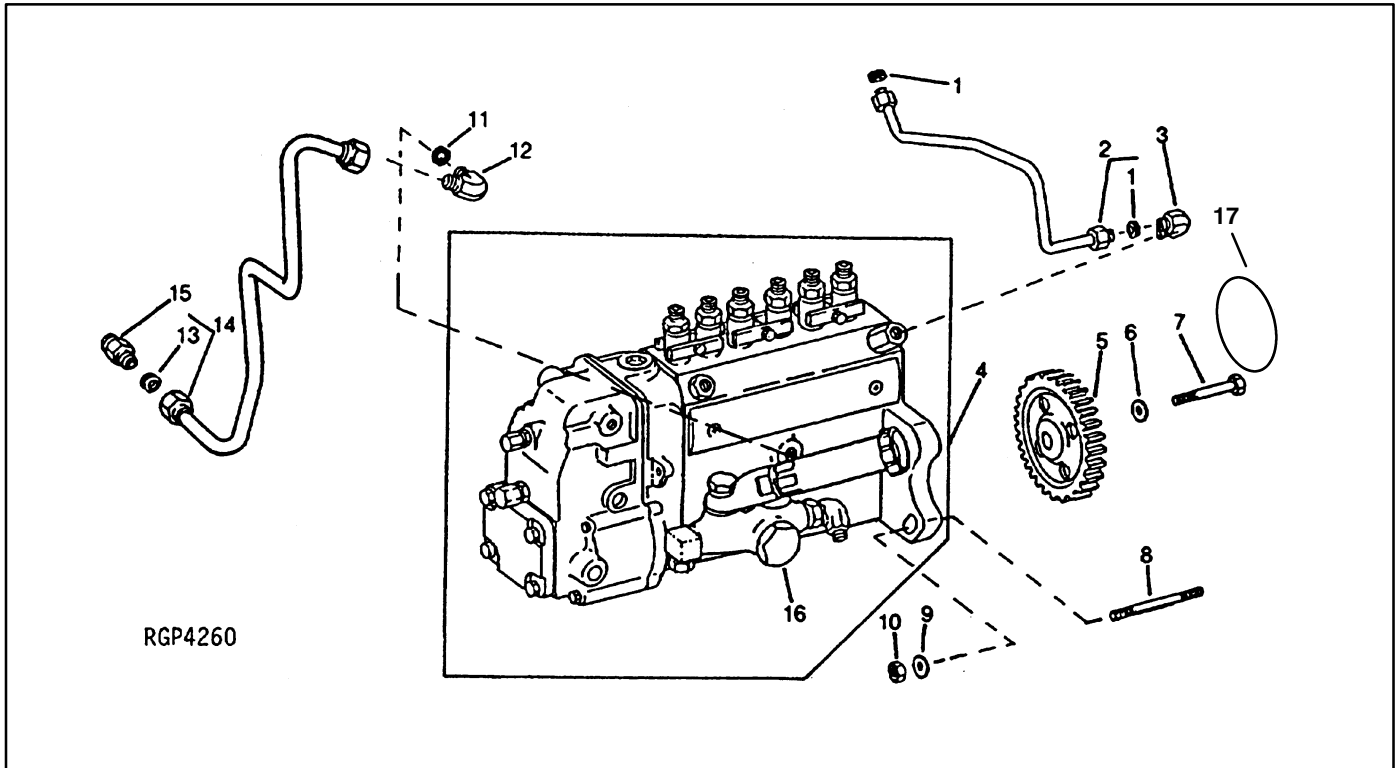
Common hardware; procure locally.

Group 4c: Rocker Arm Cover



Item	Part Number	Description	Quantity
			Variation Number 1101
1	—	Not used	
2	352702	Screw, with washer	8
3	352703	Clamp (not shown)	1
4	223630	Cap	1
5	223636	Gasket	1
6	223714	Cover	1
7	223771	Gasket	1

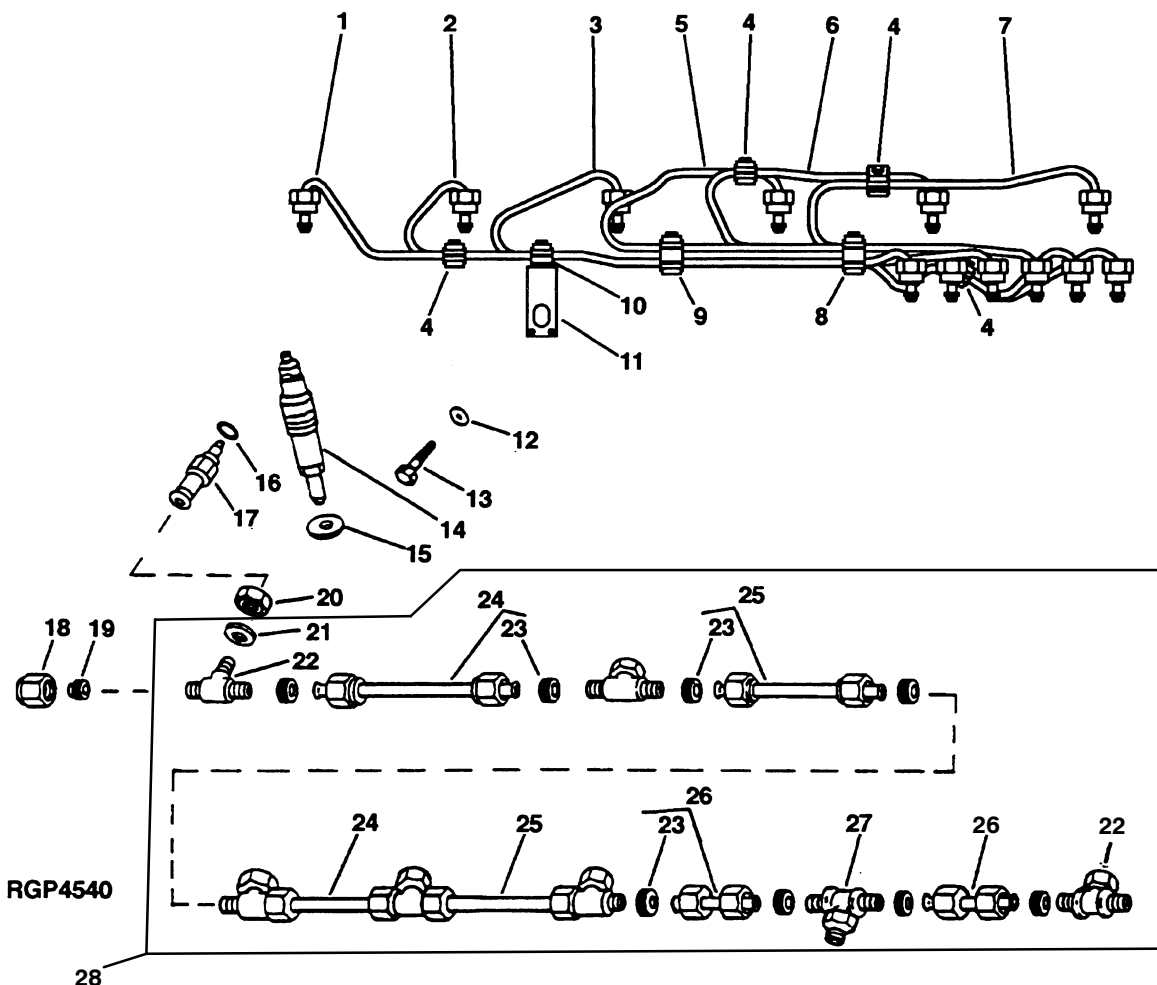
Group 5a: Fuel Injection Pump



Item	Part Number	Description	Quantity							
			Variation Number							
			1606	1610	1619	1603	1622	1607	1684	1687
1	223476	Packing	2	2	2	2	2	2	2	2
2	352831	Line, fuel	1	1						
2	352834	Line, fuel			1	1	1	1		
2	GM18802	Line, fuel							1	1
3	223837	Fitting, elbow (engine serial #087549 and before)	1	1	1	1	1	1	1	1
3	GM18815	Fitting (engine serial #087550 and after)							1	1
3	223862	O-ring (engine serial #087550 and after)							1	1
4	352877	Pump, fuel injection, A2500	1							
4	352892	Pump, fuel injection, A2500		1						
4	352878	Pump, fuel injection, Bosch P3000			1					
4	352893	Pump, fuel injection, Bosch P3000				1				
4	352880	Pump, fuel injection, Bosch P7100					1			
4	352894	Pump, fuel injection, Bosch P7100						1		
4	GM19308	Pump, fuel injection, Bosch P7100							1	
4	GM22376	Pump, fuel injection, Bosch P7100								1
5	352717	Gear	1	1						
5	352750	Gear			1	1	1	1	1	1
6	Not used	Washer								
7	#	Screw	4	4	4	4	4	4	4	4
8	#	Stud	4	4	4	4	4	4	4	4
8	352728	Stud							4	4
9	#	Washer	4	4	4	4	4	4	4	4
10	#	Nut, flange, 3/8 in.	4	4	4	4	4	4	4	4
11	352804	O-ring	1	1	1	1	1	1		
11	223862	O-ring							1	1
12	352705	Fitting, elbow	1	1						
12	223712	Fitting, elbow			1	1	1	1	1	1
13	223836	Packing	1	1	1	1	1	1	1	1
14	352835	Line, oil	1	1						
14	352862	Line, oil			1	1	1	1	1	1
15	223857	Fitting	1	1						
15	352895	Fitting, elbow			1	1	1	1	1	1
16	See Group 14	Pump, fuel	1	1	1	1	1	1	1	1
17	352805	O-ring			1	1	1	1	1	1

Common hardware; procure locally.

Group 5b: Fuel Injection Nozzles and Lines



Item	Part Number	Description	Quantity							
			Variation Number							
			1606	1610	1619	1603	1622	1607	1684	1687
1	352888	Line, fuel, No. 6	1	1						
1	352829	Line, fuel, No. 6			1	1				
1	352850	Line, fuel, No. 6					1	1	1	1
2	352887	Line, fuel, No. 5	1	1						
2	352828	Line, fuel, No. 5			1	1				
2	352849	Line, fuel, No. 5					1	1	1	1
3	352886	Line, fuel, No. 4	1	1						
3	352827	Line, fuel, No. 4			1	1				
3	352848	Line, fuel, No. 4					1	1	1	1
4	223811	Strap	4	4			4	4	5	5
4	352740	Strap			5	5				
4	223808	Clamp	8	8	5	5	8	8	10	10
4	223854	Clamp							1	1
4	223812	Strap	4	4			4	4	5	5
4	352741	Strap			5	5				
4	#	Screw, 0.190 in. x 7/8 in.	4	4			4	4		
4	#	Bolt			10	10				

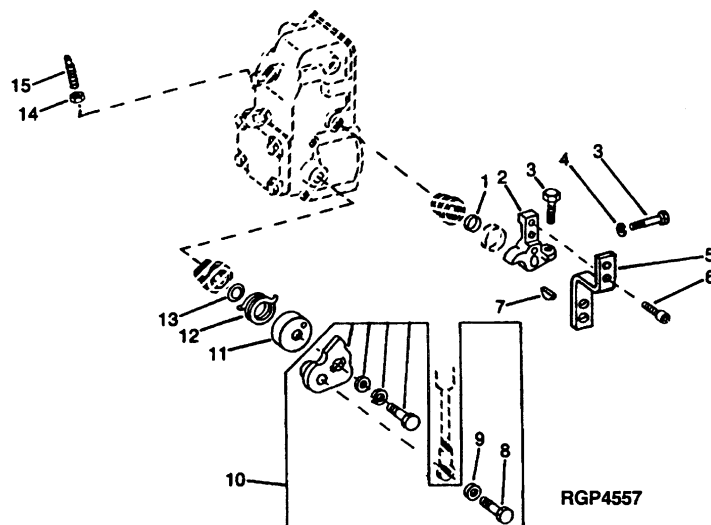
Common hardware; procure locally.

Group 5b: Fuel Injection Nozzles and Lines

Item	Part Number	Description	Quantity							
			Variation Number							
			1606	1610	1619	1603	1622	1607	1684	1687
5	352885	Line, fuel, No. 3	1	1						
5	352826	Line, fuel, No. 3			1	1				
5	352847	Line, fuel, No. 3					1	1	1	1
6	352884	Line, fuel, No. 2	1	1						
6	352825	Line, fuel, No. 2			1	1				
6	352846	Line, fuel, No. 2					1	1		
6	352846	Line, fuel, No. 2 (engine serial #081549 and before)							1	1
6	GM19309	Line, fuel, No. 2 (engine serial #081550 and after)							1	1
7	352883	Line, fuel, No. 1	1	1						
7	352824	Line, fuel, No. 1			1	1				
7	352845	Line, fuel, No. 1					1	1		
7	352845	Line, fuel, No. 1 (engine serial #081549 and before)							1	1
7	GM19310	Line, fuel, No. 1 (engine serial #081550 and after)							1	1
8	223810	Strap	2	2			2	2	1	1
8	352742	Strap			1	1				
8	223845	Clamp	1	1	1	1	1	1		
8	223813	Strap	1	1			1	1	1	1
8	352743	Strap			1	1			1	1
8	#	Screw	2	2			2	2	2	2
8	#	Bolt			2	2				
8	223809	Clamp, half			2	2	8	8	2	2
9	223811	Strap	1	1	1	1	1	1	1	1
9	223808	Clamp	1	1	1	1	1	1	1	1
9	223854	Clamp	1	1	1	1	1	1		
9	223845	Clamp							1	1
9	223855	Clamp	1	1	1	1	1	1	1	1
9	223812	Strap	1	1			1	1		
9	352740	Strap			1	1				
9	223813	Strap							1	1
9	352741	Strap							1	1
9	#	Screw, 0.190 in. x 1 1/2 in.	1	1			1	1		
9	#	Bolt			1	1				
10	223810	Strap	1	1			1	1		
10	352741	Strap			1	1				
10	223809	Clamp, half	2	2	2	2	2	2	2	2
10	#	Screw, 0.190 in. x 7/8 in.	2	2			2	2	1	1
10	#	Bolt			1	1				
10	GM19311	Gasket							1	1
11	352823	Absorber	1	1			1	1		
11	352795	Absorber			1	1			1	1
12	#	Washer, 13/32 in. x 13/16 in. x 0.120 in.	1	1	1	1	1	1	1	1
13	#	Screw, M10 x 20	1	1	1	1	1	1	1	1
14	352873	Nozzle	6	6						
14	352866	Nozzle			6	6	6	6		
14	GM19312	Nozzle							6	6
14	223788	O-ring							6	6
15	360604	Washer	6	6	6	6	6	6	6	6
16	223858	O-ring	6	6	6	6	6	6	6	6
17	GM22472	O-ring (engine serial #087550 and after)	6	6	6	6	6	6	6	6
17	223887	Fitting	6	6	6	6	6	6	6	6
17	GM22473	Connector (engine serial #087550 and after)	6	6	6	6	6	6	6	6
18	223477	Nut, tube	1	1	1	1	1	1	1	1
19	223710	Plug	1	1	1	1	1	1	1	1
20	223517	Nut, tube	6	6	6	6	6	6	6	6
21	223518	Washer (engine serial #087549 and before)	6	6	6	6	6	6	6	6
22	223519	Fitting, tee (engine serial #087549 and before)	6	6	6	6	6	6	6	6
23	223476	Packing (engine serial #087549 and before)	11	11	11	11	11	11	11	11
24	223929	Line, fuel (engine serial #087549 and before)	2	2	2	2	2	2	2	2
25	223930	Line, fuel (engine serial #087549 and before)	2	2	2	2	2	2	2	2
26	223974	Line, fuel (engine serial #087549 and before)	2	2	2	2	2	2	2	2
27	223912	Fitting, tee (engine serial #087549 and before)	1	1	1	1	1	1	1	1
28	GM19313	Line, fuel (engine serial #087550 and after)	1	1	1	1	1	1	1	1

Common hardware; procure locally.

Group 5c: Fuel Injection Pump Levers

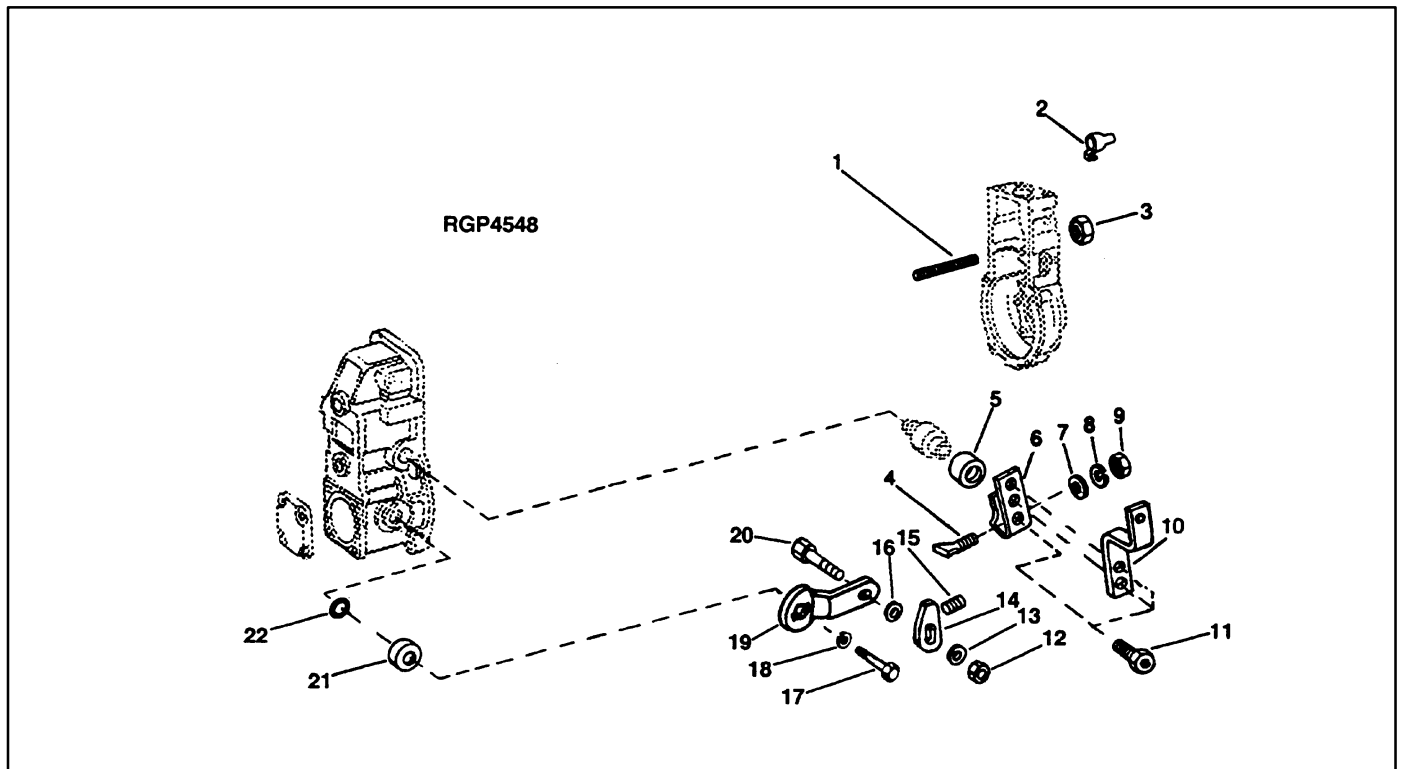


Item	Part Number	Description	Quantity	
			Variation Number 1606	1610
1	X	Seal	1	1
2	X	Lever	1	1
3	#	Screw	2	2
4	#	Washer, lock	2	2
5	X	Lever, throttle	1	1
6	#	Screw, M6 x 16	2	2
7	#	Key, shaft	1	1
8	#	Screw, 1/4 in. x 1 in.	1	1
9	#	Washer, 9/32 in. x 5/8 in. x 0.065 in.	1	1
10	X	Lever, shutoff	1	1
11	X	Retainer	1	1
12	Not used	Spring	1	1
13	X	O-ring	1	1
14	#	Nut, lock	1	1
15	#	Screw, set	1	1

Common hardware; procure locally.

X Not sold separately.

Group 5c: Fuel Injection Pump Levers

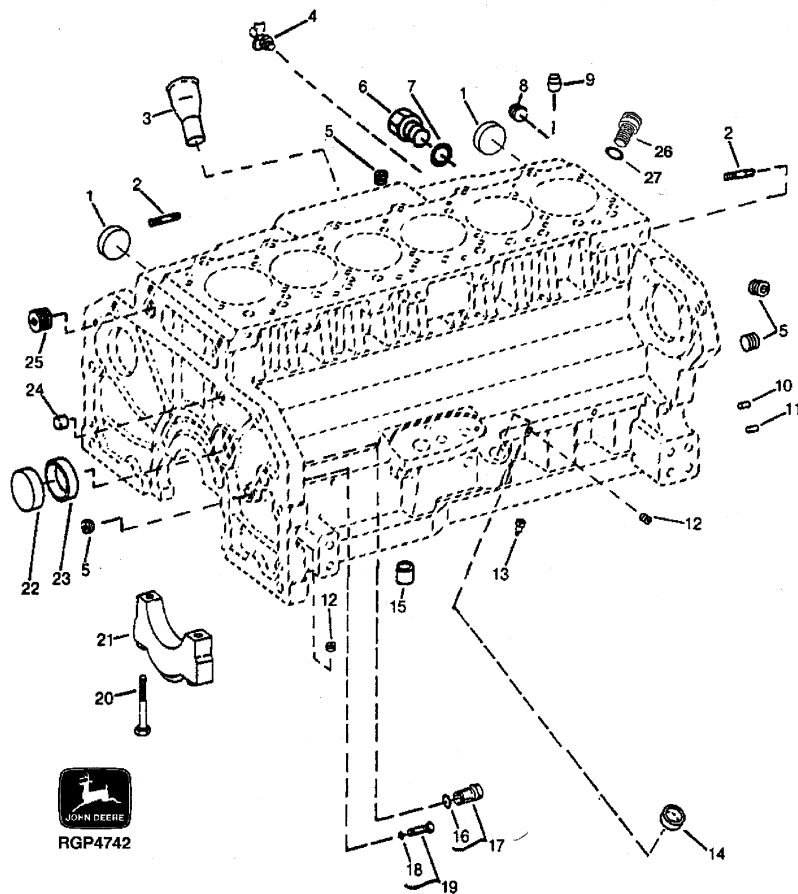


Item	Part Number	Description	Quantity					
			Variation Number					
			1619	1603	1622	1607	1684	1687
1	#	Screw, set	1	1	1	1	1	1
2	X	Packing	1	1	1	1	1	1
3	#	Nut	1	1	1	1	1	1
4	#	Pin	1	1	1	1	1	1
5	X	Seal	1	1	1	1	1	1
6	X	Lever	1	1	1	1	1	1
7	#	Washer, 6.4 mm x 12 mm x 1.6 mm	1	1	1	1	1	1
8	#	Washer, lock	2	2	2	2	2	2
9	#	Nut	1	1	1	1	1	1
10	X	Lever, throttle	1	1	1	1	1	1
11	#	Screw, M6 x 16	2	2	2	2	2	2
12	#	Nut, 1/4 in.	1	1	1	1	1	1
13	#	Screw	1	1	1	1	1	1
14	X	Fitting	1	1	1	1	1	1
15	#	Screw, set, 0.164 in. x 1/2 in.	1	1	1	1	1	1
16	#	Washer	1	1	1	1	1	1
17	#	Screw	1	1	1	1	1	1
18	#	Washer, lock	2	2	2	2	2	2
19	X	Lever, shutoff	1	1	1	1	1	1
20	#	Screw, 1/4 in. x 3/4 in.	1	1	1	1	1	1
21	X	Retainer	1	1	1	1	1	1
22	X	O-ring	1	1	1	1	1	1

Common hardware; procure locally.

X Not sold separately.

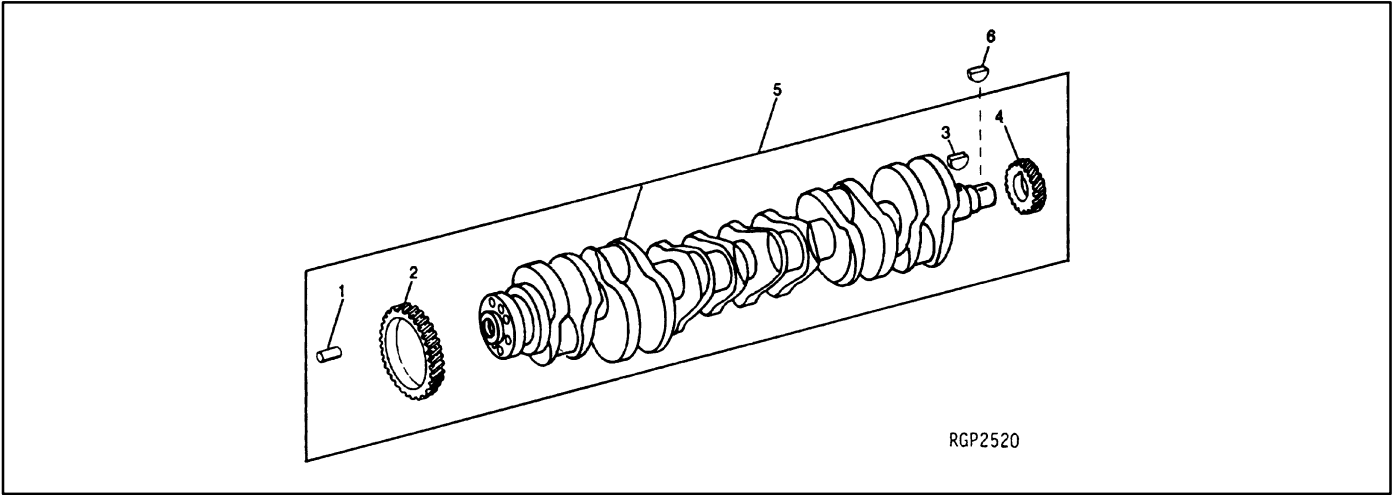
Group 7a: Cylinder Block Fittings



Item	Part Number	Description	Quantity	
			Variation Number 4602	4603
1	224157	Cap	2	2
2	352728	Stud	5	5
3	352758	Tube, dipstick	1	1
4	223435	Valve, drain	1	1
5	#	Plug, pipe, 1/2 in.	1	3
6	223462	Plug, drain	1	1
7	223988	O-ring	1	1
8	#	Plug, pipe, 3/4 in.	1	1
9	223755	Bushing	2	2
10	223737	Pin, dowel	2	2
11	223731	Pin, dowel	2	2
12	#	Plug, pipe	6	6
13	GM18717	Orifice	6	6
14	352796	Cap	1	1
15	GM18727	Bushing	2	2
16	223747	O-ring	1	1
17	GM18691	Plug	1	1
18	223665	O-ring	1	1
19	223684	Plug	1	1
20	352760	Bolt	14	14
21	352748	Bearing cap, main	6	6
21	352813	Bearing cap, thrust	1	1
22	223866	Cap	1	1
23	223889	Bushing	4	4
24	223814	Pin, dowel	1	1
25	#	Plug, pipe, 1 in.	1	1
26	GM18729	Plug	1	
27	GM18659	O-ring	1	

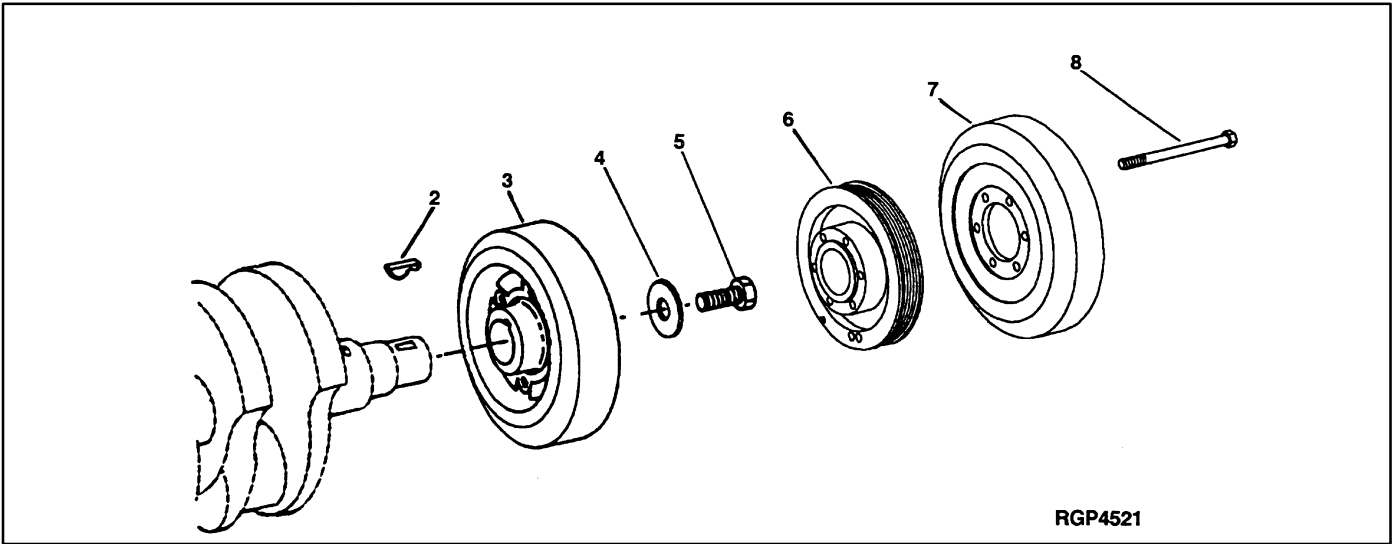
Common hardware; procure locally.

Group 8a: Crankshaft



Item	Part Number	Description	Quantity
			Variation Number 4702
1	223754	Pin, dowel	1
2	223819	Gear	1
3	352746	Key, 1/8 in. x 0.625 in.	1
4	352715	Gear	1
5	352841	Crankshaft	1
6	352731	Key	1

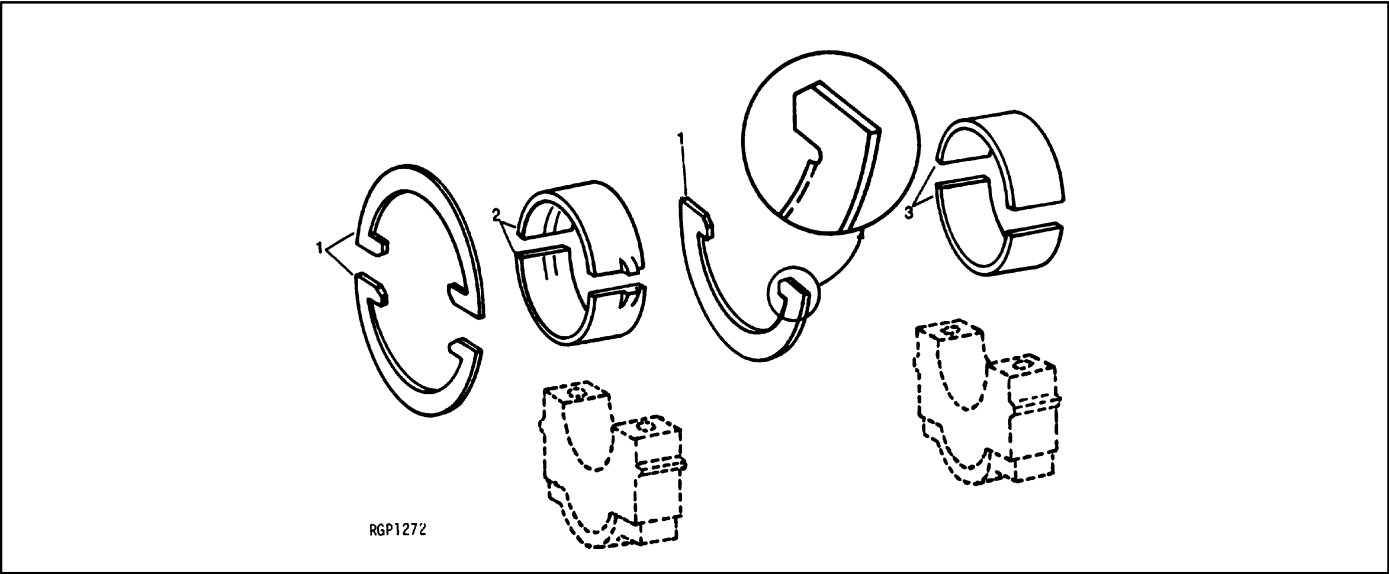
Group 8b: Crankshaft Pulley



Item	Part Number	Description	Quantity			
			Variation Number			
2	352731	Key, special	1	1	1	1
3	352832	Dampener, torsional	2			
3	352881	Dampener, torsional		1		1
3	352389	Dampener, torsional			1	
4	#	Washer	1	1	1	1
5	#	Screw, cap	1	1	1	1
6	352721	Pulley, crankshaft	1		1	1
6	352779	Pulley, crankshaft		1		
7	352882	Absorber		1		
8	#	Screw, cap	6	6	6	6

Common hardware; procure locally.

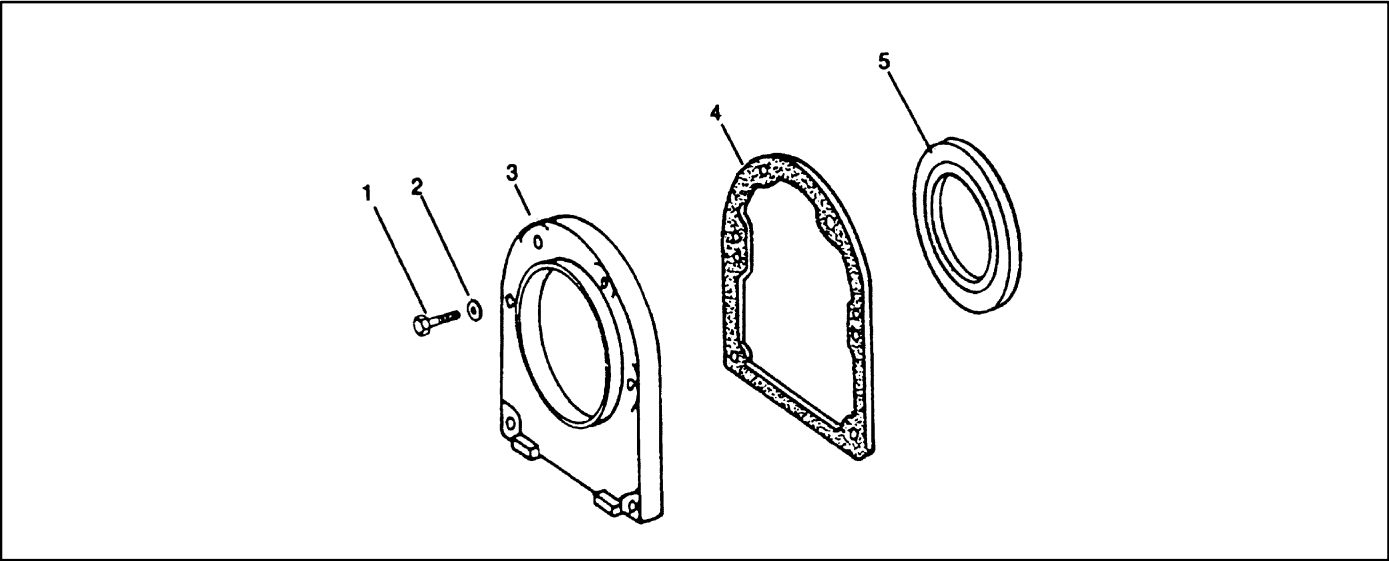
Group 8c: Main Thrust Bearing



Item	Part Number	Description	Quantity
			Variation Number 4702
1	352864	Washer, thrust (set of 3)	1
2	352854	Bearing, thrust, standard (set)	1
3	352853	Bearing, standard (set)	AR

AR As Required

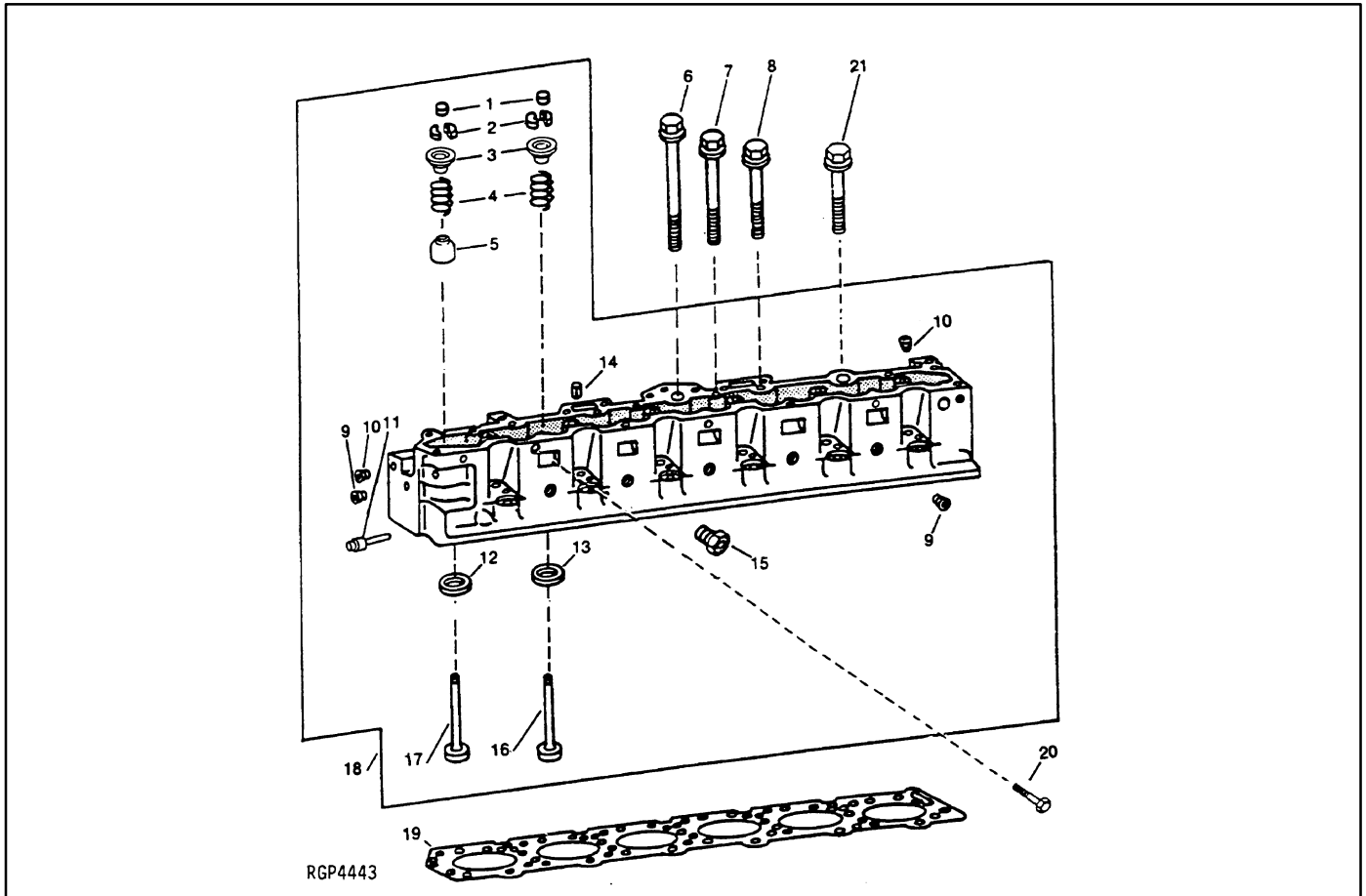
Group 8d: Crankshaft Oil Seal



Item	Part Number	Description	Quantity
			Variation Number 1400
1	#	Screw, cap, 5/16 in. x 1.120 in.	6
2	#	Washer, 11/32 in. x 11/16 in. x 0.065 in.	6
3	352773	Housing	1
4	223738	Gasket	1
5	223933	Seal	1

Common hardware; procure locally.

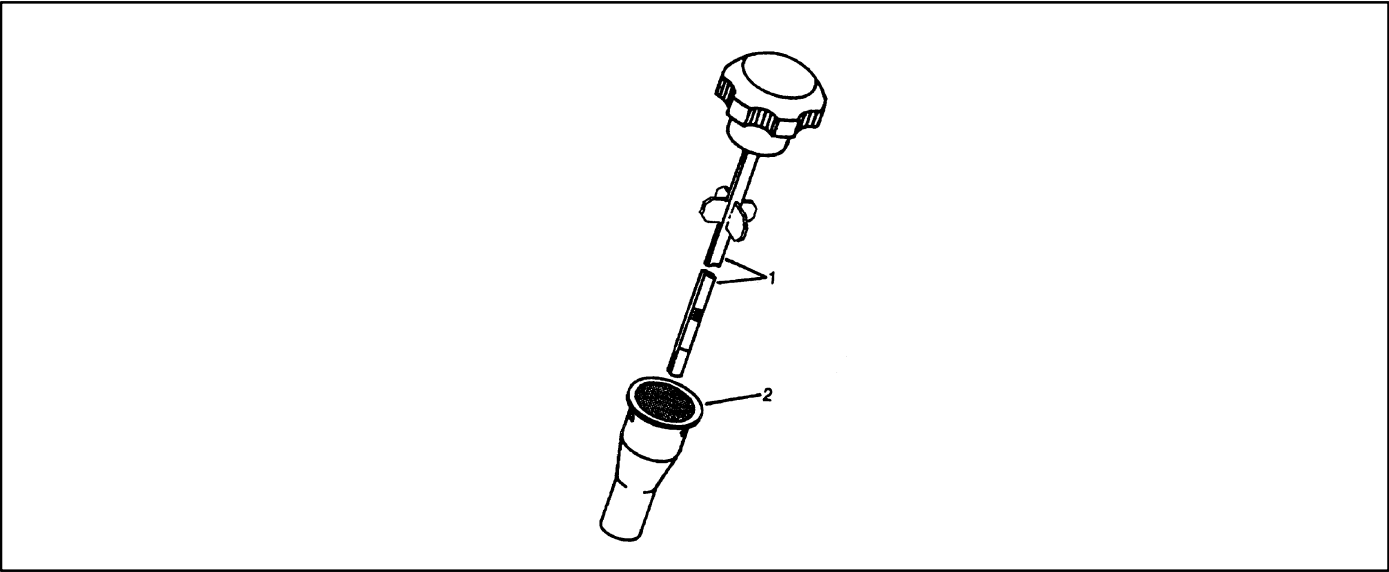
Group 9: Cylinder Head and Valves



Item	Part Number	Description	Quantity Variation Number 5109
1	223617	Cap	12
2	223612	Retainer	24
3	352714	Cap	12
4	223905	Spring	12
5	224140	Shield	6
6	352755	Screw, cylinder head, 9/16 in. x 8.0 in.	7
7	352754	Screw, cylinder head, 9/16 in. x 6.9 in.	8
8	352744	Screw, cylinder head, 9/16 in. x 5.3 in.	6
9	#	Plug, pipe, 3/4 in.	10
10	#	Plug, pipe, 1/2 in.	2
11	352704	Plug	1
12	352735	Insert, valve seat, exhaust	6
13	352751	Insert, valve seat, intake	6
14	#	Pin, spring, 3/16 in. x 3/4 in.	1
15	223856	Plug, pipe	1
16	223869	Valve, intake, standard	6
16	224136	Valve, intake, 0.08 mm (.003 in.) O/S	6
16	224149	Valve, intake, 0.38 mm (.015 in.) O/S	6
16	224142	Valve, intake, 0.7 mm (.030 in.) O/S	6
17	223870	Valve, exhaust, standard	6
17	224134	Valve, exhaust, 0.08 mm (.003 in.) O/S	6
17	224143	Valve, exhaust, 0.38 mm (.015 in.) O/S	6
17	224135	Valve, exhaust, 0.7 mm (.030 in.) O/S	6
18	352860	Head, cylinder	1
19	352840	Gasket	1
20	#	Screw, cap, 5/8 in. x 3/4 in.	1
21	352753	Screw, cylinder head, 9/16 in. x 5.9 in.	5

Common hardware; procure locally.

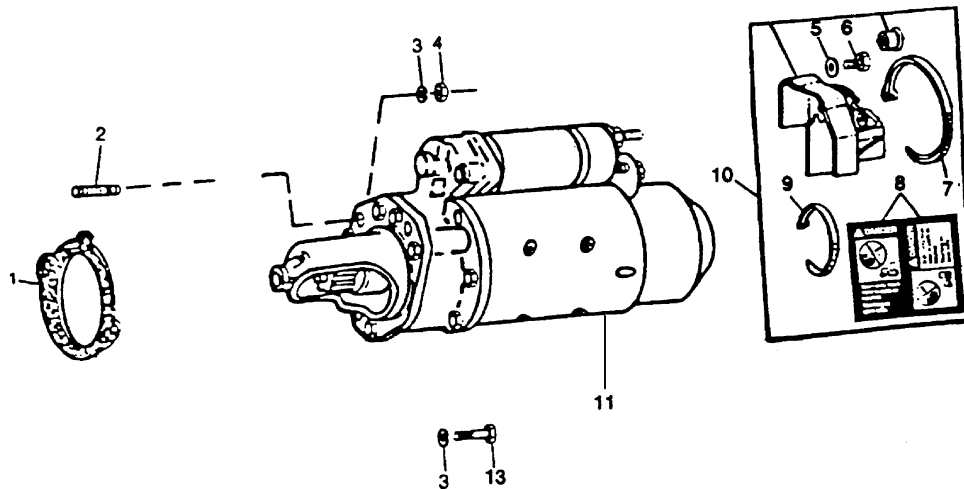
Group 10: Dipstick



Item	Part Number	Description	Quantity
			Variation Number
1	352843	Dipstick left side service	4002
2	352758	Tube, dipstick	1

4003			
1	GM18797	Dipstick (right side service)	1
2	GM18688	Tube (right side service)	1

Group 11a: Starting Motor



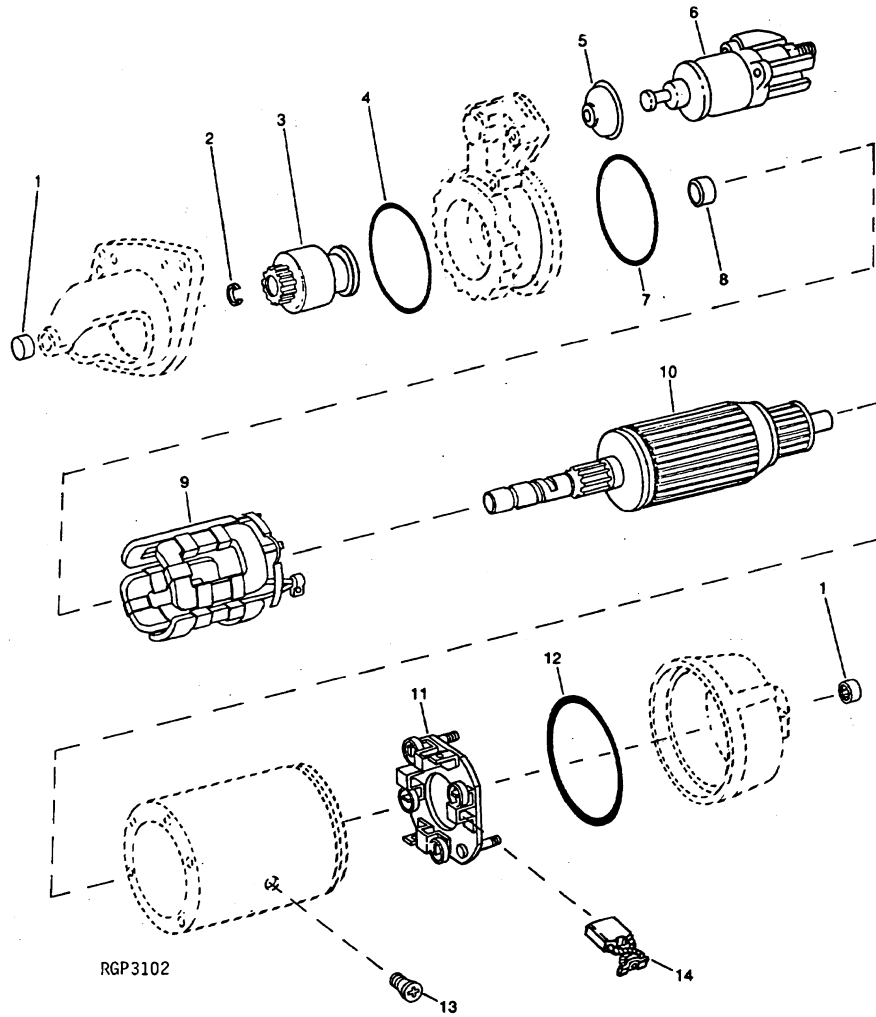
RGP4309

Item	Part Number	Description	Quantity	
			Variation Number 3004	Variation Number 3016
1	223791	Gasket	1	1
2	#	Stud	1	1
3	#	Washer, 10.5 mm x 18 mm x 1.6 mm	1	
4	#	Nut, flange	1	1
5	#	Nut		1
6	#	Shim	1	
6	#	Screw	1	
6	#	Nut		1
7	#	Band, tie	1	1
8	x	Label	1	1
9	#	Band, tie	1	1
10	352819	Cover	1	
10	352817	Cover		1
11	352390	Starter, 12 V	1	
11	352391	Starter, 24 V		1
13	#	Screw, cap, 3/8 x 1 3/8 in.	2	2

Common hardware; procure locally.

X Not sold separately.

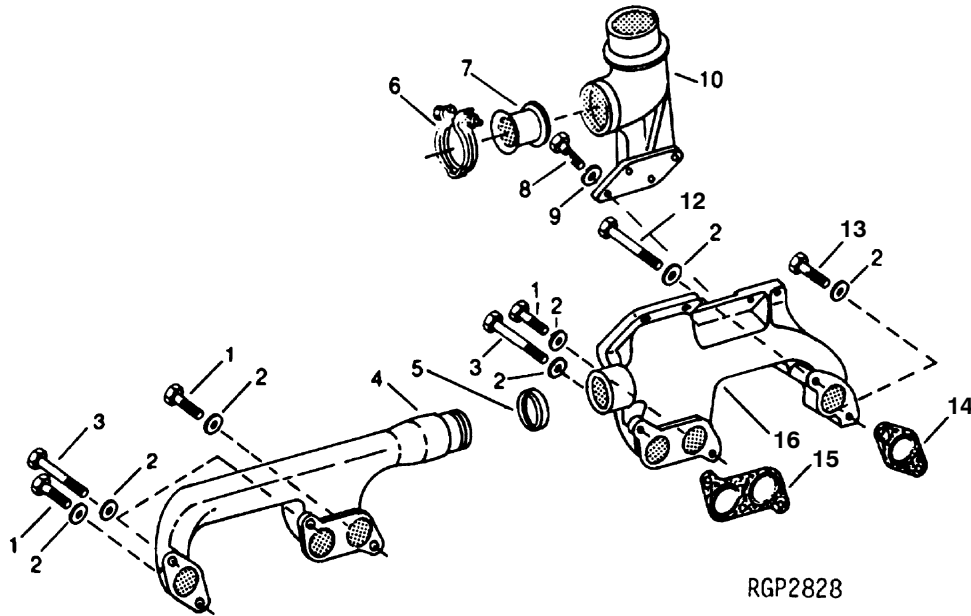
Group 11b: Starting Motor Parts



Item	Part Number	Description	Quantity	
			Variation Number 3004	3016
1	336152	Bearing, needle	2	
1	352398	Bushing		2
2	336154	Ring, snap	1	
3	360010	Clutch	1	
3	352392	Drive		1
4	X	Washer	1	
4	X	O-ring		1
5	X	Cover	1	
6	224370	Switch	1	
6	352393	Switch		1
7	X	O-ring	1	
7	X	O-ring		1
8	336153	Bushing	1	
9	X	Coil, field winding	1	
9	X	Coil, field winding		1
10	X	Armature	1	
10	X	Armature		1
11	X	Holder	1	
11	X	Holder		1
12	X	O-ring	1	
12	X	O-ring		1
13	#	Screw	4	
14	336150	Brush	4	
14	352394	Brush		4
15	X	O-ring		1

X Not sold separately.

Group 12: Exhaust Manifold

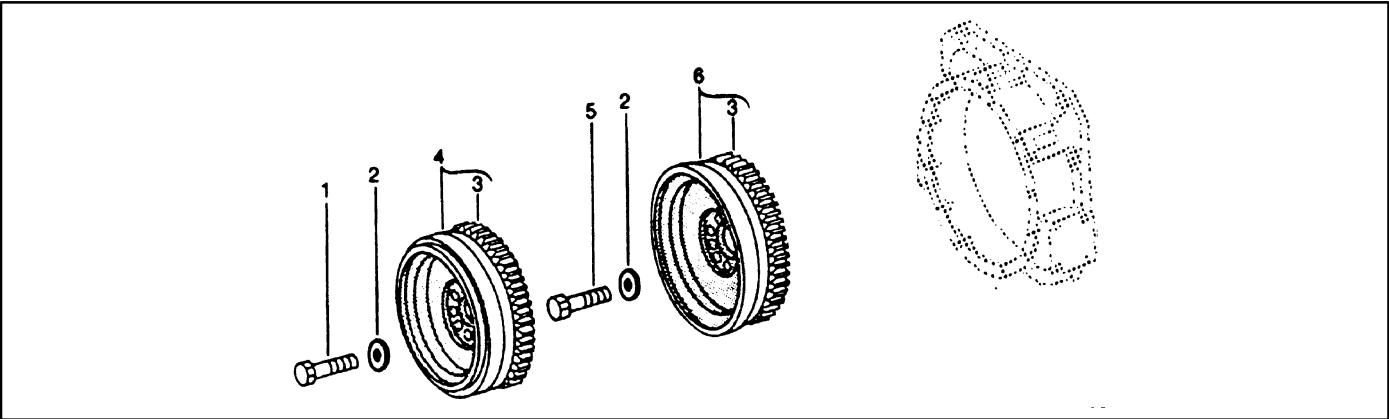


RGP2828

Item	Part Number	Description	Quantity
			Variation Number 2812/6406
1	#	Screw, cap, 3/8 in. x 1 3/4 in. (lower)	3
2	#	Washer, 10.5 mm x 17.5 mm x 3 mm	8
3	#	Screw, cap, 3/8 in. x 3 in.	3
4	223761	Manifold, exhaust	1
5	223807	Ring	1
6	224132	Clamp	1
7	223891	Adapter	1
8	#	Screw	4
9	#	Washer	4
10	223907	Fitting, elbow	1
11	#	Plug, pipe, 1/8 in. (not shown)	1
12	#	Screw, cap, 3/8 in. x 3 3/8 in.	1
13	#	Screw, cap, 3/8 in. x 1 3/4 in. (lower front)	1
14	223868	Gasket	2
15	223867	Gasket	2
16	223880	Manifold, exhaust	1

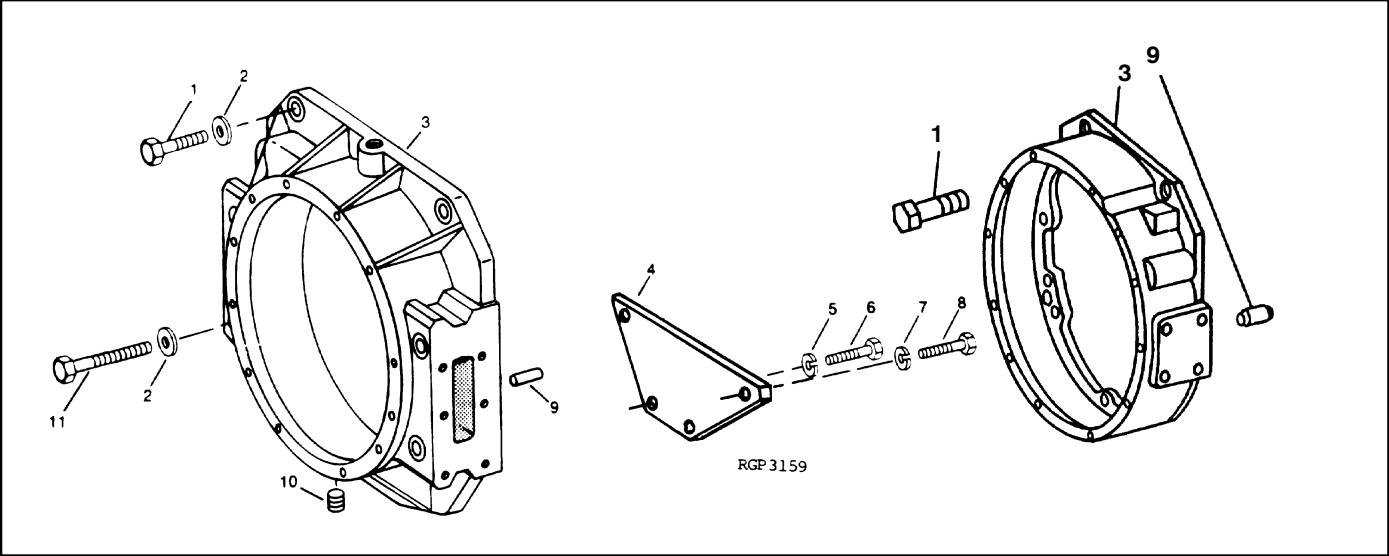
Common hardware; procure locally.

Group 13a: Flywheel



Item	Part Number	Description	Quantity	
			Variation Number 1505	Variation Number 1506
1	223864	Screw, cap	6	
2	223983	Washer	6	6
3	223750	Gear	1	1
4	352865	Flywheel	1	
5	223752	Bolt		6
6	223708	Flywheel		1

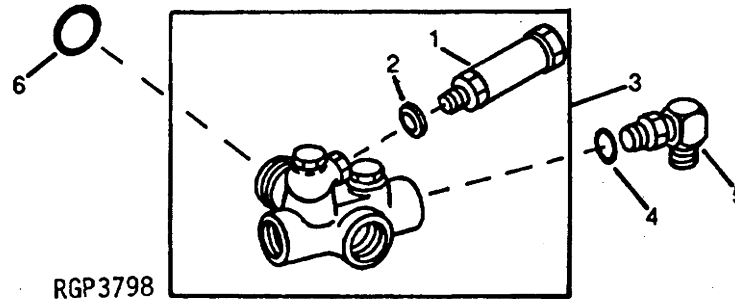
Group 13b: Flywheel Housing



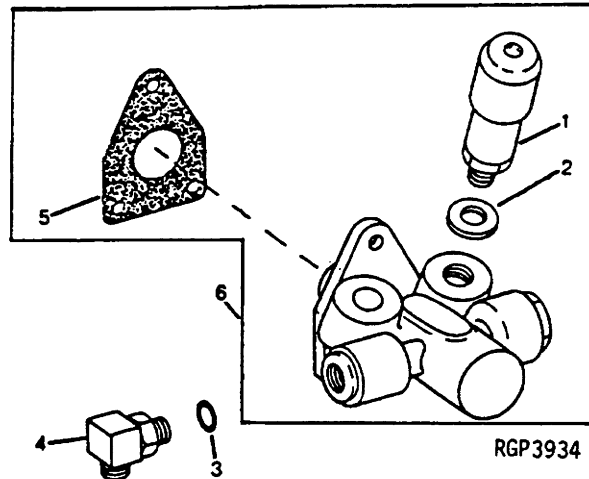
Item	Part Number	Description	Quantity	
			Variation Number 1424	Variation Number 1401
1	#	Screw, cap, upper, 3/4 in. x 2 1/2 in.	2	
1	#	Screw, cap, 3/4 in. x 2 1/4 in.		6
2	#	Washer	6	
3	352757	Housing	1	
3	352756	Housing		1
4	223803	Cover	1	
5	#	Washer, lock, 3/8 in.	2	
6	#	Screw, cap, 1/2 in. x 7/8 in.	2	
7	#	Washer, lock, 1/2 in.	2	
8	#	Screw, cap, 3/8 in. x 1/2 in.	2	
9	352707	Pin, dowel	2	2
10	223748	Plug, drain	1	
11	#	Screw, cap, lower, 3/4 in. x 5 1/2 in.	4	

Common hardware; procure locally.

Group 14: Fuel Transfer Pump

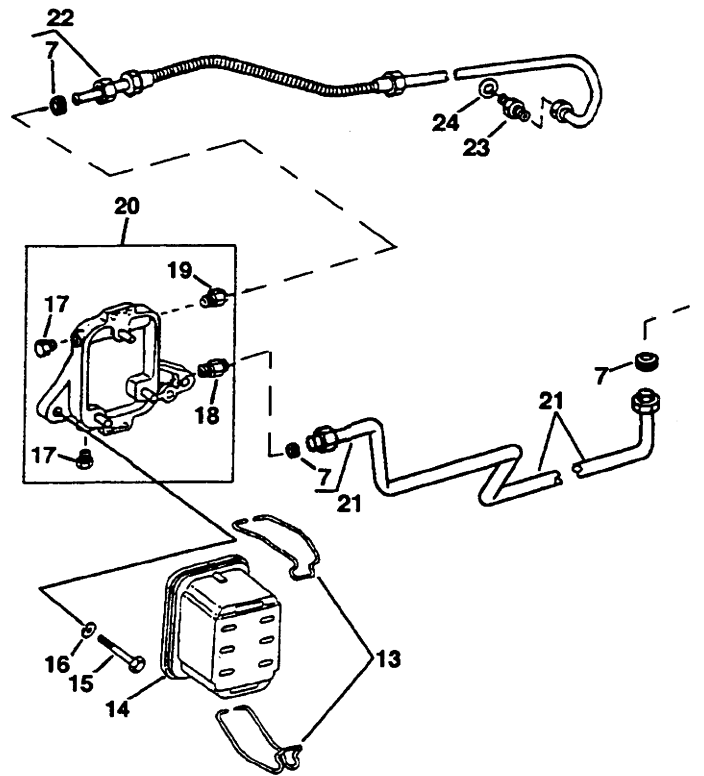


Item	Part Number	Description	Quantity	
			Variation Number 1606	Variation Number 1610
1	223709	Primer, hand	1	1
2	223824	Washer	2	2
3	352833	Pump, fuel	1	1
4	223742	O-ring	2	2
5	223921	Fitting, elbow, outlet	1	1
5	223972	Fitting, elbow, inlet	1	1
6	223830	O-ring	1	1



Item	Part Number	Description	Quantity					
			Variation Number					
			1603	1619	1622	1607	1684	1687
1	352830	Primer, hand	1	1	1	1	1	1
2	223800	Washer	1	1	1	1	1	1
3	223742	O-ring	2	2				
4	223921	Fitting, elbow, M14 x 5/8 in.	2	2				
4	223972	Fitting, elbow, 37 degree flare			2	2	2	2
5	223839	Gasket	1	1	1	1	1	1
6	352821	Pump, fuel	1	1				
6	352820	Pump, fuel			1	1	1	1

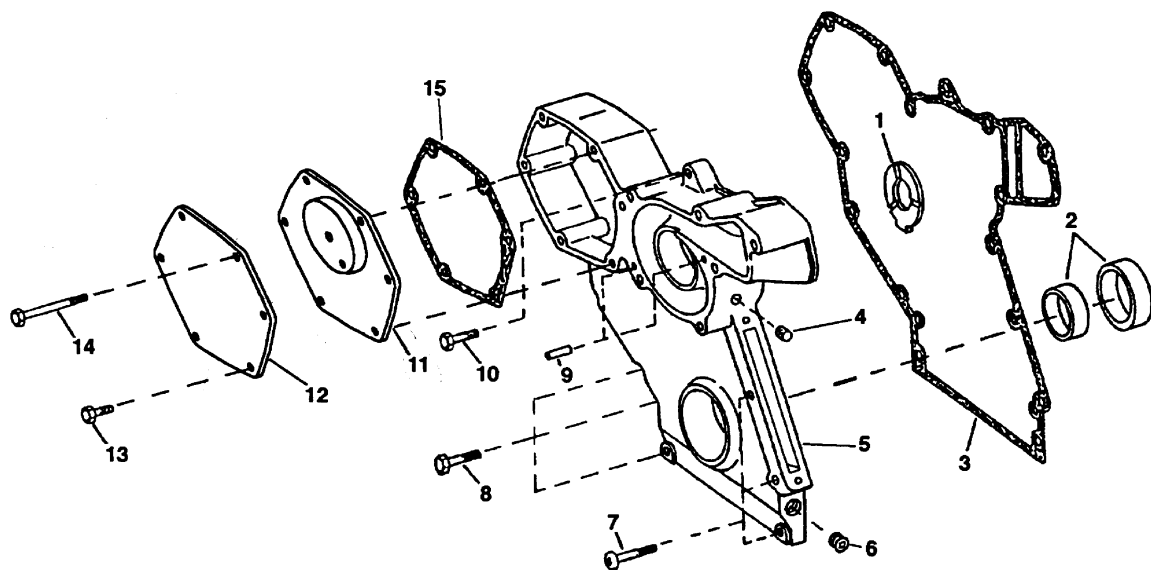
Group 15: Fuel Filter



Item	Part Number	Description	Quantity		
			Variation Number		
			3518	3519	3507
7	223835	Packing	5	5	3
13	223899	Bracket	2	2	2
14	224236	Element, filter	1	1	1
15	#	Screw, cap, 7/16 in. x 1 1/4 in.	2	2	2
16	#	Washer, 15/32 in. x 59/64 in. x 0.065 in.	2	2	2
17	352736	Plug	2	2	2
18	352838	Valve, check	1	1	1
19	352839	Fitting	1	1	1
20	223957	Base	1	1	1
21	352876	Line, fuel	1		
21	352396	Line, fuel		1	1
22	352822	Line, fuel	1		
22	352397	Line, fuel		1	
22	GM19315	Line, fuel			1
23	GM18759	Fitting	1	1	1
24	GM18783	Fitting	1	1	1

Common hardware; procure locally.

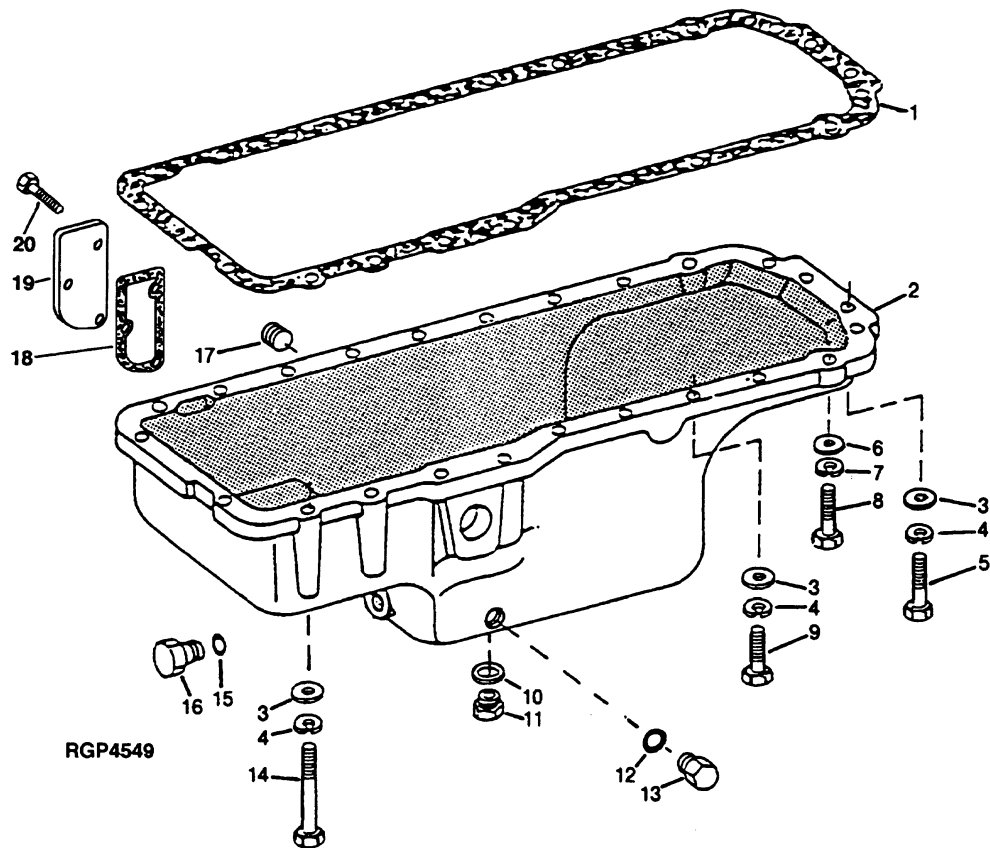
Group 18: Timing Gear Cover



Item	Part Number	Description	Quantity
			Variation Number 7701
1	352720	Washer, thrust	1
2	223677	Seal	1
3	352738	Gasket	1
4	352812	Filter	1
5	352759	Cover	1
6	#	Plug, 3/8 in.	1
7	#	Screw, cap, left side	2
8	#	Screw, cap, right side	3
9	352726	Pin, dowel	2
10	#	Screw, cap, 3/8 in. x 1 1/4 in.	1
11	352776	Cover	1
12		Not used	1
13	#	Screw, cap	5
14	#	Screw, cap	1
15	223774	Gasket	1

Common hardware; procure locally.

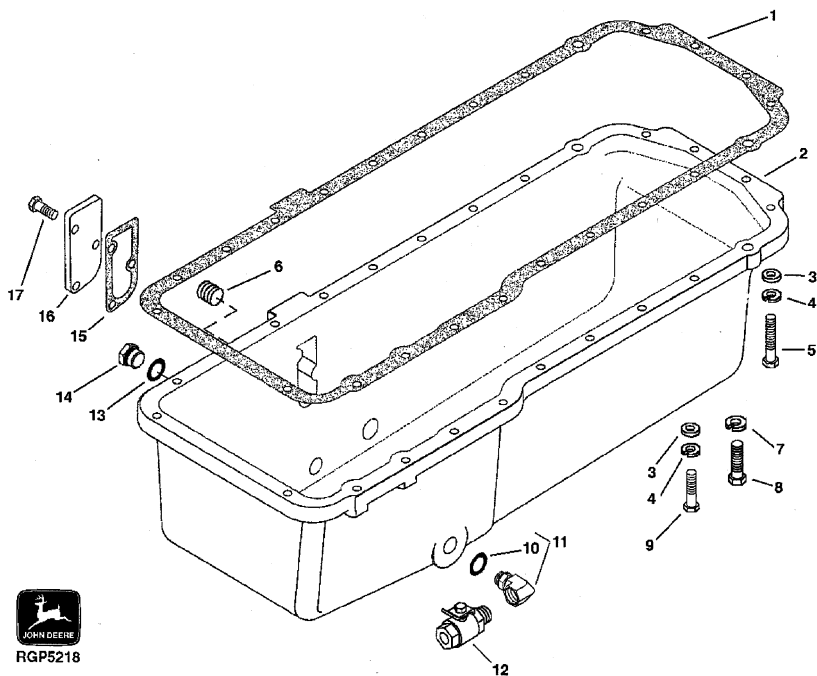
Group 21a: Oil Pan



Item	Part Number	Description	Quantity
			Variation Number 1906
1	223767	Gasket	1
2	352785	Pan	1
3	#	Washer, 13/32 in. x 13/16 in. x 0.065 in.	1
4	#	Washer, 3/8 in.	22
5	#	Screw, 3/8 in. x 2 in.	2
6	#	Washer, 1/2 in. x 1 in. x 0.060 in.	2
7	#	Washer, 1/2 in.	2
8	#	Screw, 1/2 in. x 1 3/4 in.	2
9	#	Screw, 3/8 in. x 1 5/8 in.	18
10	#	Washer, 25.4 mm x 31.75 mm x 1.626 mm	1
11	223744	Plug, drain	1
12	224011	O-ring	1
13	223458	Plug, drain	1
14	#	Screw, 3/8 in. x 2 in.	2
15	223732	O-ring	2
16	223748	Plug, drain	2
17	#	Plug, pipe, 3/4 in.	2
18	352875	Gasket	1
19	352790	Cover	1
20	#	Screw, 3/8 in. x 1 in.	3

Common hardware; procure locally.

Group 21a: Oil Pan

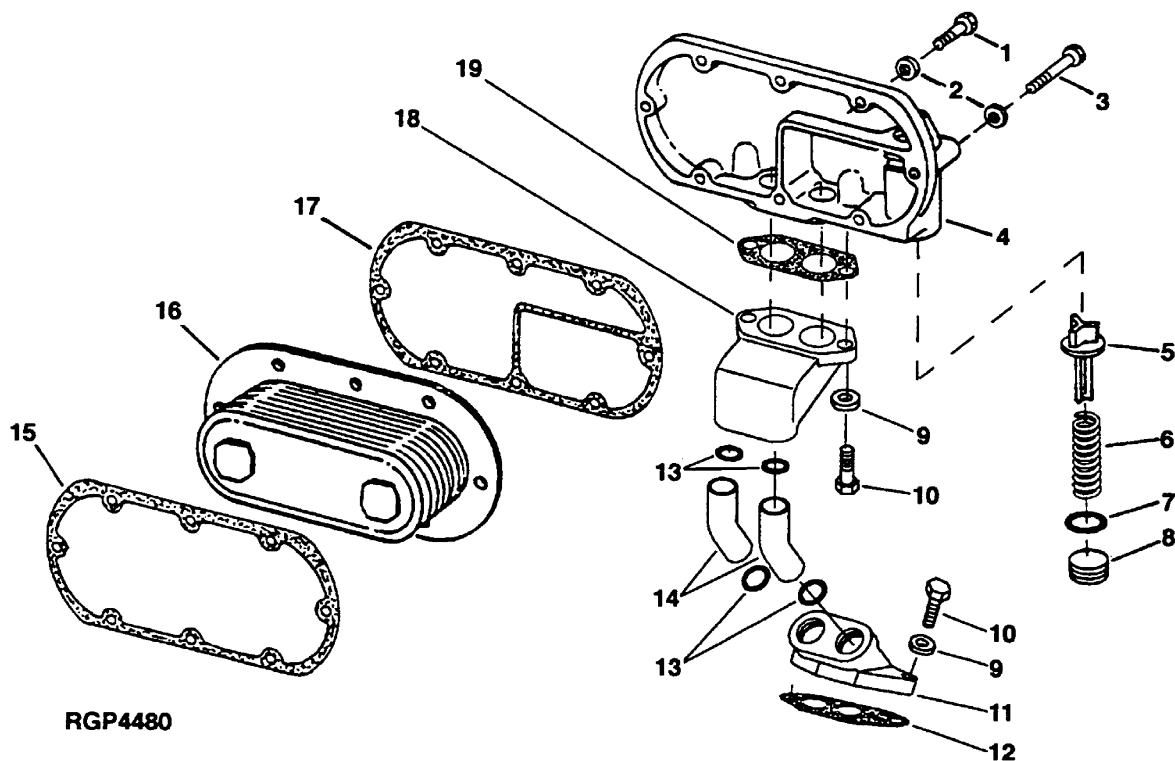


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Item	Part Number	Description	Quantity
			Variation Number 1913
1	GM18838	Gasket	1
2	GM18725	Pan (also order item 18)	1
3	GM18662	Washer	22
4	#	Washer, 3/8 in.	22
5	#	Screw, 3/8 in. x 2 in.	4
6	#	Plug, pipe, 3/4 in.	1
7	GM18708	Washer	2
8	#	Screw, 1/2 in. x 1 3/4 in.	2
9	#	Screw, 3/8 in. x 1 1/2 in.	18
10	224011	O-ring	1
11	#	Fitting, elbow	1
12	GM22377	Valve	1
13	223466	O-ring	1
14	223458	Plug, drain	1
15	352875	Gasket	1
16	352790	Cover	1
17	#	Screw, 3/8 in. x 1 in.	3

Common hardware; procure locally.

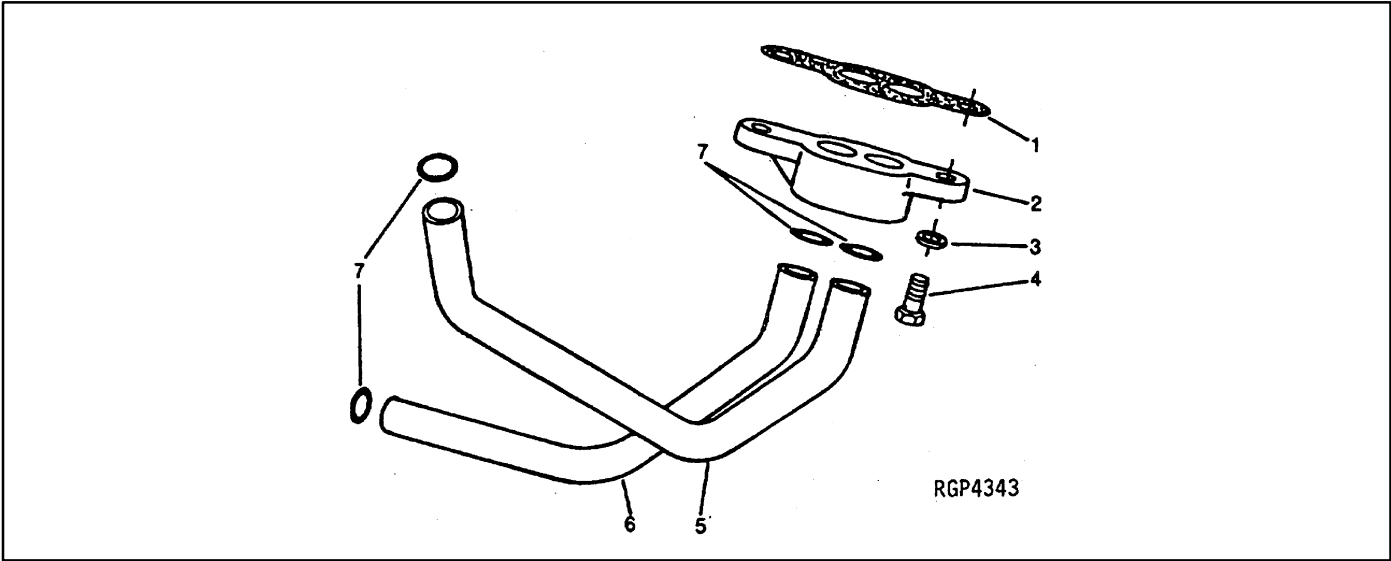
Group 21c: Engine Oil Cooler



Item	Part Number	Description	Quantity
			Variation Number 5901
1	#	Screw, 5/16 in. x 1 3/8 in.	5
2	#	Washer, 8.4 mm x 16 mm x 1.6 mm	8
3	#	Screw, 5/16 x 2 1/2 in.	3
4	352762	Cover	1
5	352722	Valve	1
6	352811	Spring	1
7	223989	O-ring	1
8	352749	Fitting, plug	1
9	#	Washer, 13/32 in. x 11/16 in. x 0.035 in.	4
10	#	Screw, 3/8 in. x 1 1/8 in.	4
11	352763	Adapter	1
12	223783	Gasket	2
13	223763	O-ring	4
14	352766	Tube, oil	2
15	223682	Gasket	1
16	223680	Cooler, oil	1
17	352733	Gasket	1
18	352764	Adapter	2
19	352765	Gasket	1

Common hardware; procure locally.

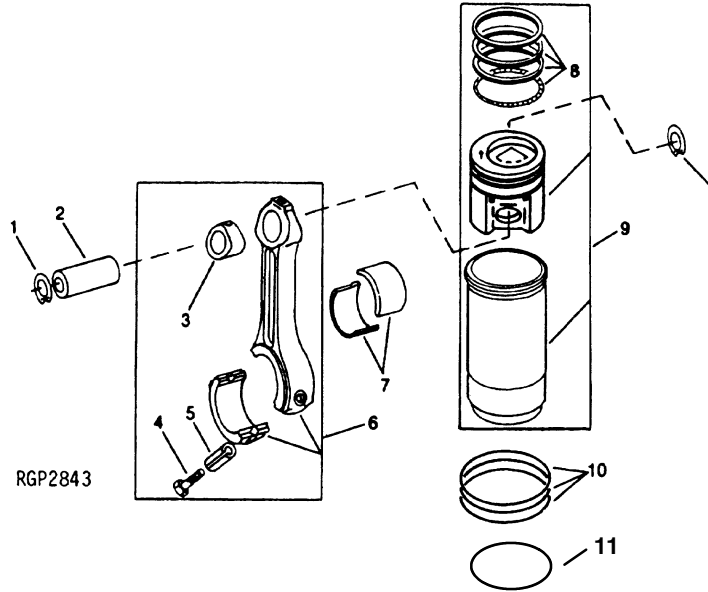
Group 21d: Oil Cooler Bypass Tubes



Item	Part Number	Description	Quantity
			Variation Number 5901
1	352723	Gasket	1
2	352730	Adapter	1
3	#	Washer, 13/32 in. x 11/16 in. x 0.065 in.	2
4	#	Screw, 3/8 in. x 1 1/8 in.	2
5	352784	Tube, oil	1
6	352732	Tube, oil	1
7	223850	O-ring	4

Common hardware; procure locally.

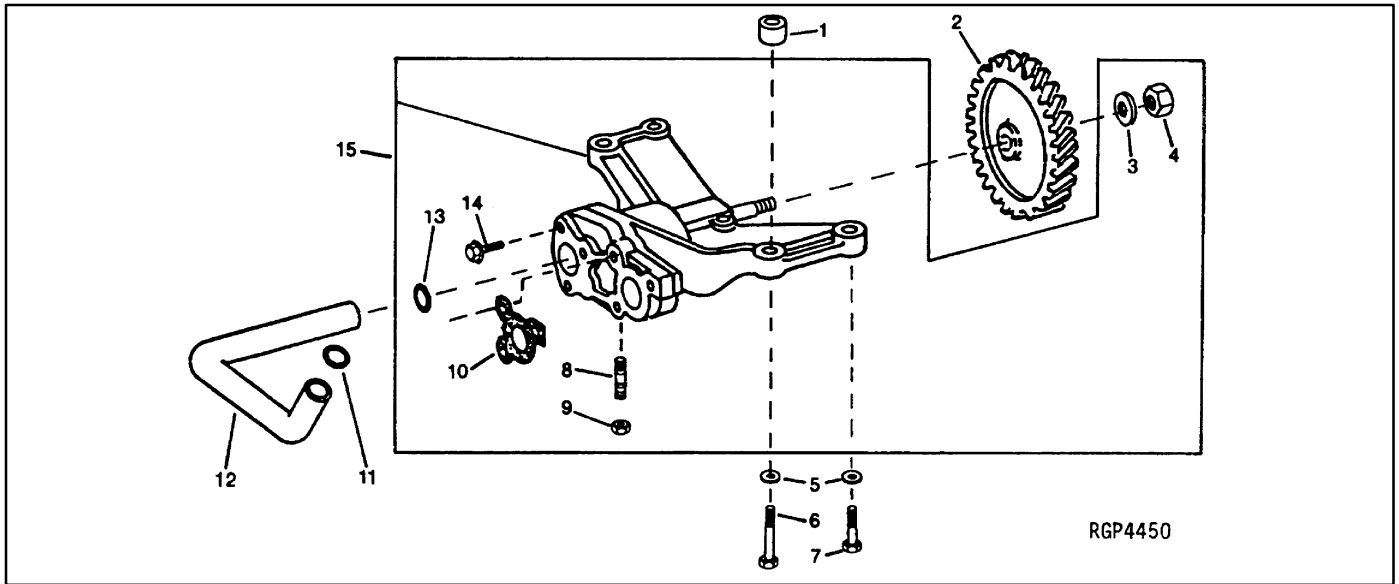
Group 22: Piston and Connecting Rod



Item	Part Number	Description	Quantity	
			Variation Number 4802	4803
1	223730	Ring, snap	12	12
2	223806	Pin, piston	6	6
3	223853	Bushing	6	6
4	223834	Screw (engine serial number before 086536)	12	12
4	GM18728	Screw (engine serial #086536 and after)	12	12
5	223792	Sleeve	12	12
6	352837	Connecting rod (engine serial number before 086536)	6	6
6	GM18804	Connecting rod (engine serial #086536 and after)	6	6
7	GM18682	Bearing	AR	
7	352852	Bearing		AR
8	352857	Ring, piston	6	6
9	352871	Piston and ring kit	6	6
10	223716	Kit, ring	6	6
11	352810	Shim, 0.05 mm	2	2

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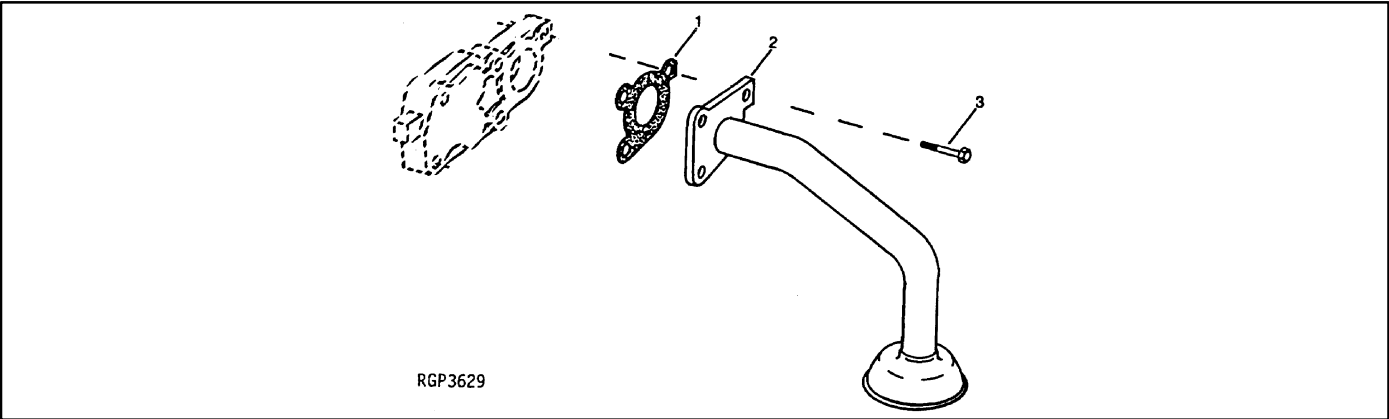
Group 25a: Oil Pump



Item	Part Number	Description	Quantity
			Variation Number 5002
1	223816	Bushing	2
2	223817	Gear	1
3	223982	Washer	1
4	#	Nut, 1/2 in.	1
5	#	Washer	4
6	#	Screw, 3/8 in. x 1 7/8 in.	2
7	#	Screw, 3/8 in. x 1 3/8 in.	2
8	#	Screw, set, 5/16 in. x 1 1/4 in.	1
9	#	Nut, 5/16 in.	1
10	352709	Gasket	1
11	223850	O-ring	1
12	352732	Tube, oil	1
13	223850	O-ring	1
14	352719	Screw	2
14	352719	Screw, intake cover to housing	3
15	352863	Pump, oil	1

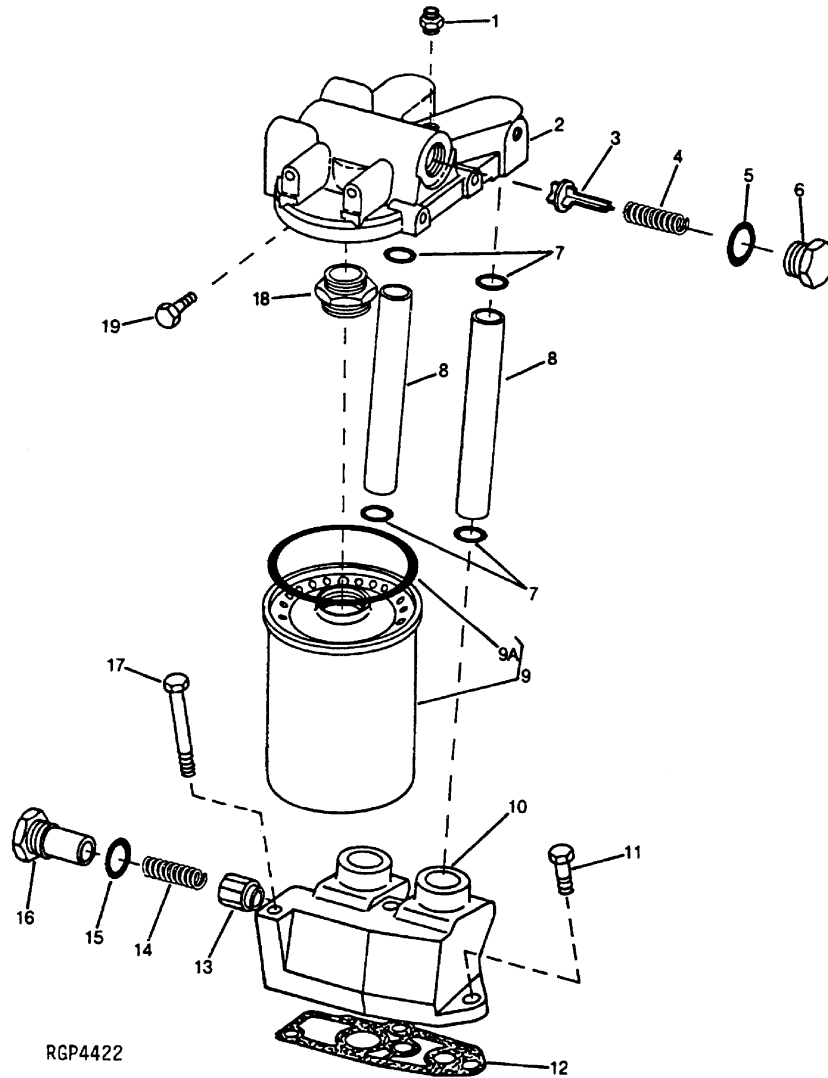
Common hardware; procure locally.

Group 25b: Oil Pump Intake



Item	Part Number	Description	Quantity	
			Variation Number 1906	1913
1	352709	Gasket	1	1
2	352868	Intake, oil pump	1	
2	GM18863	Intake, oil pump		1
3	352719	Screw	3	3

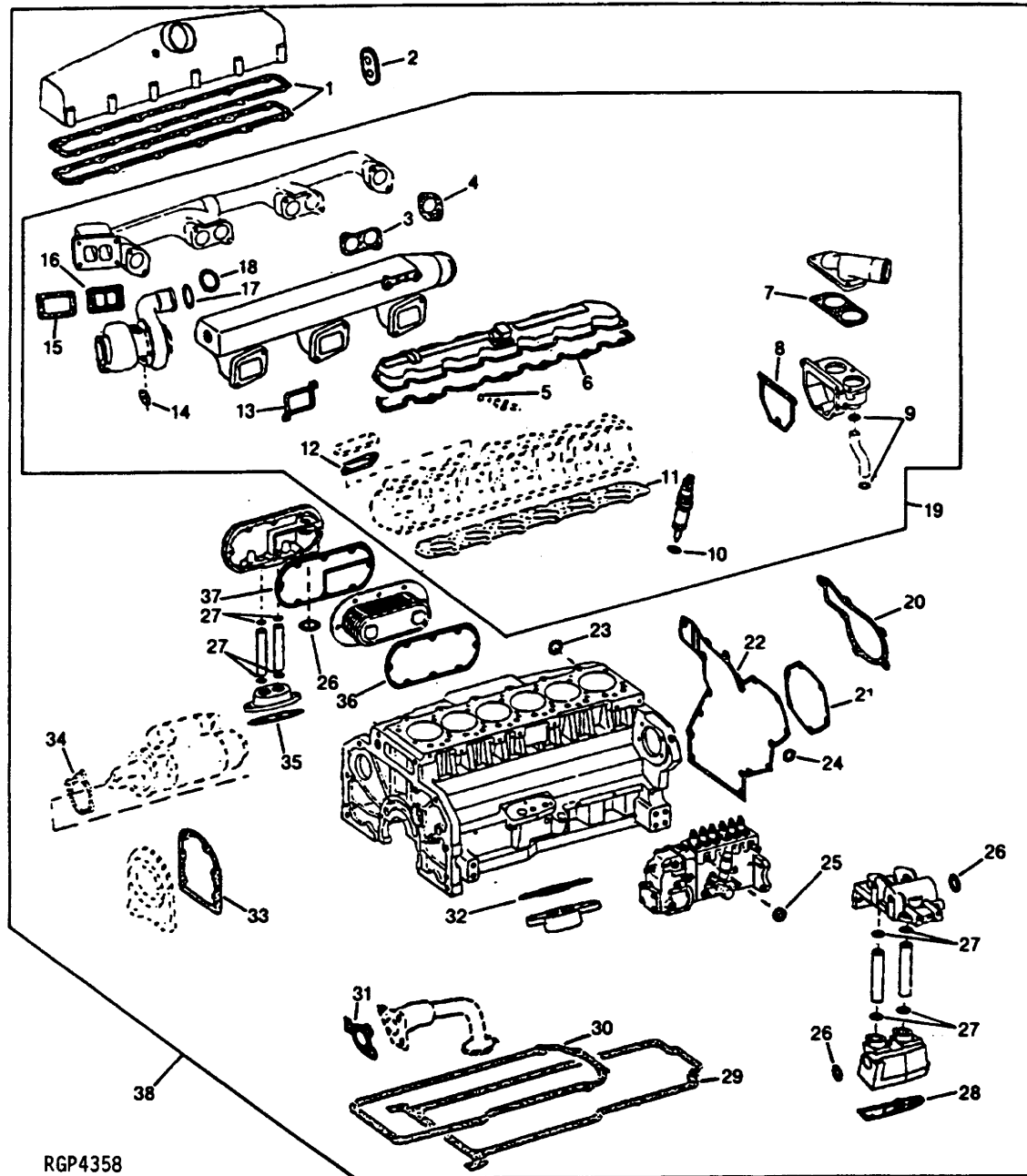
Group 25c: Oil Filter



Item	Part Number	Description	Quantity
			Variation Number 5901
1	352861	Connector	1
2	352786	Base	1
3	352722	Valve	1
4	352811	Spring	1
5	223989	O-ring	1
6	352734	Plug, fitting	1
7	352797	O-ring	4
8	352807	Tube	2
9	223673	Filter, oil	1
9A	223759	Packing	1
10	352782	Housing	1
11	#	Screw, 3/8 in. x 1 1/4 in.	1
12	352739	Gasket	1
13	352767	Valve, relief	1
14	352713	Spring	1
15	223989	O-ring	1
16	352783	Plug, fitting	1
17	#	Screw, 3/8 in. x 3 3/4 in.	2
18	352718	Adapter	1
19	#	Screw, 7/16 in. x 1 1/4 in.	2

Common hardware; procure locally.

Group 39: Gasket Kits



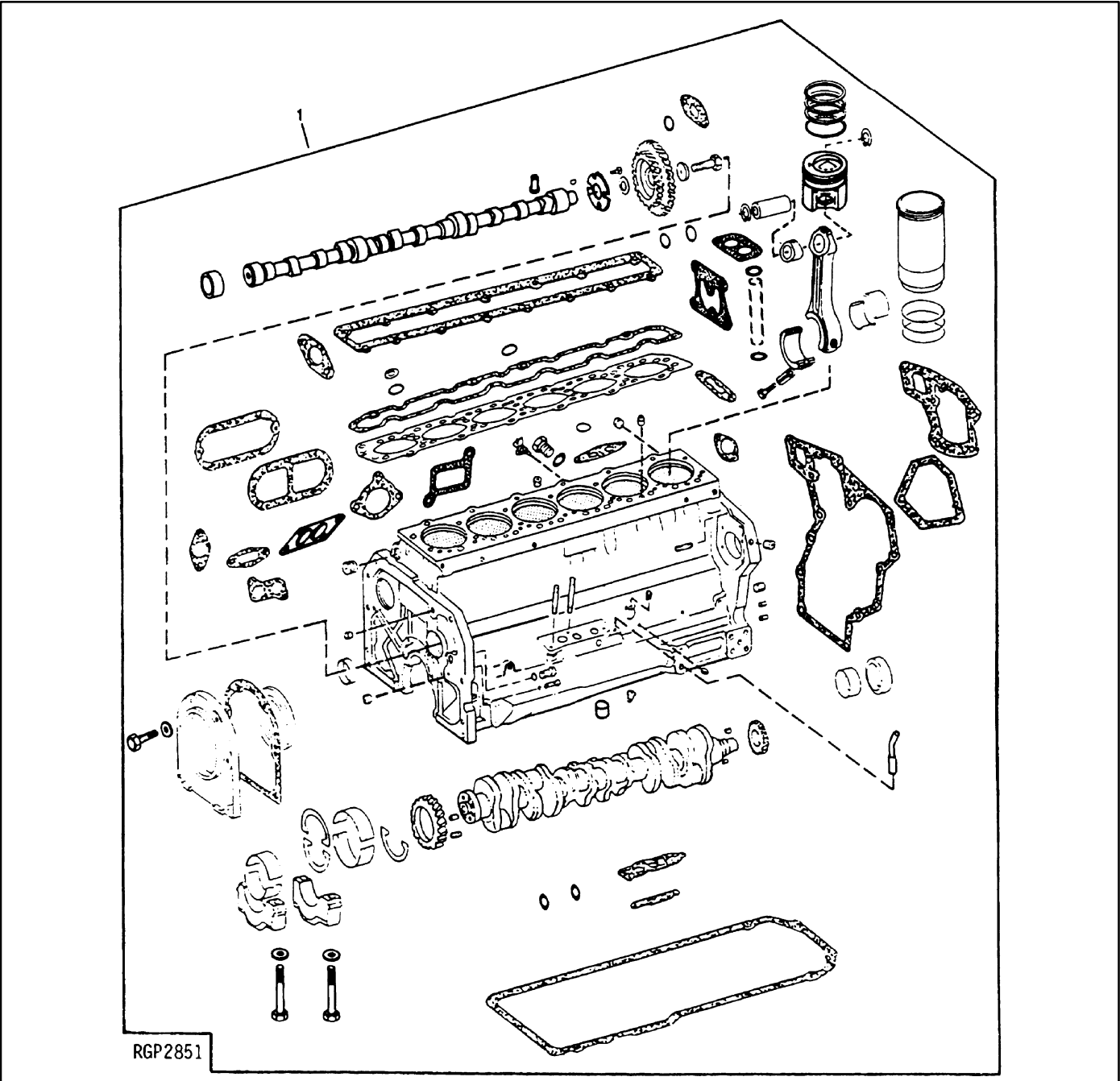
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Group 39: Gasket Kits

Item	Part Number	Description	Quantity
			Variation Number 1
1	223893	Gasket	N/A
2	223736	Seal	N/A
3	352869	Gasket	2
4	352870	Gasket	2
5	223858	O-ring	6
6	223771	Gasket	1
7	352769	Gasket	1
8	352768	Gasket	1
9	223851	O-ring	1
10	X	Washer	6
11	352840	Gasket	1
12	223892	Gasket	2
13	352745	Gasket	3
14	223757	Gasket	1
15	352809	Gasket	N/A
16	223898	Gasket	1
17	223885	O-ring	1
18	223780	O-ring	N/A
19	352855	Gasket kit, cylinder head	1
20	352737	Gasket	N/A
21	223774	Gasket	1
22	352738	Gasket	1
23	223988	O-ring	1
24	352802	O-ring	1
25	352800	Washer	1
26	223989	Gasket	3
27	223763	Gasket	4
28	352739	Gasket	1
29	Not used	Gasket	N/A
30	Not used	Gasket	N/A
31	352709	Gasket	1
32	352723	Gasket	1
33	223738	Gasket	1
34	223791	Gasket	1
35	223783	Gasket	1
36	223682	Gasket	1
37	352733	Gasket	1
38	352856	Gasket kit	1

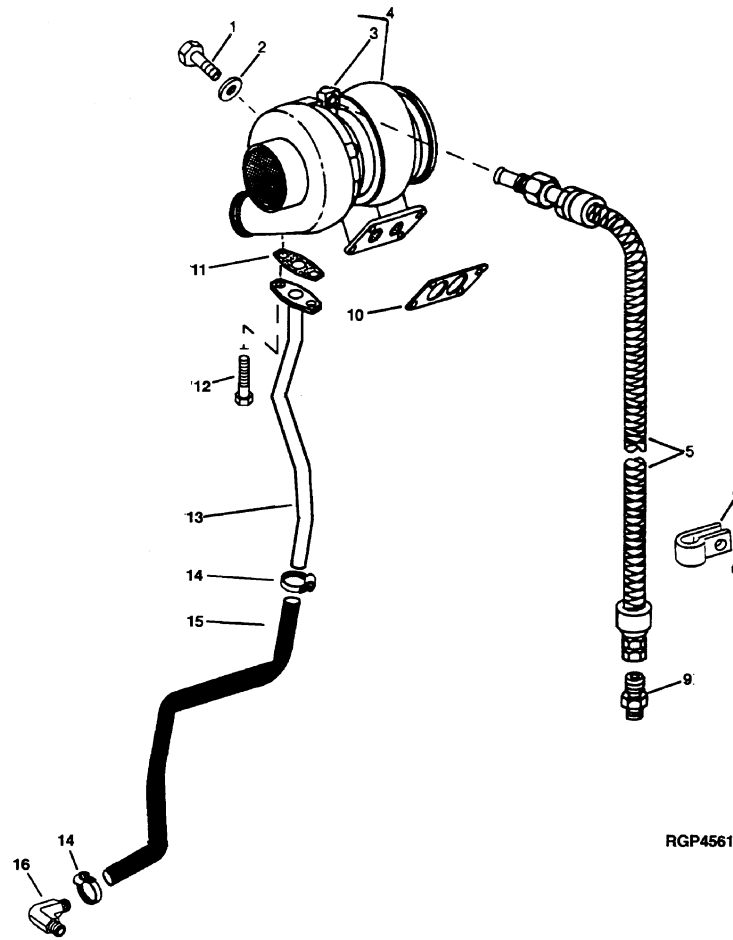
X Not sold separately.

Group 42: Short Block



Item	Part Number	Description	Quantity	
			Variation Number 1	Variation Number 2
1	352889	Short block assembly	1	
1	352890	Short block assembly		1

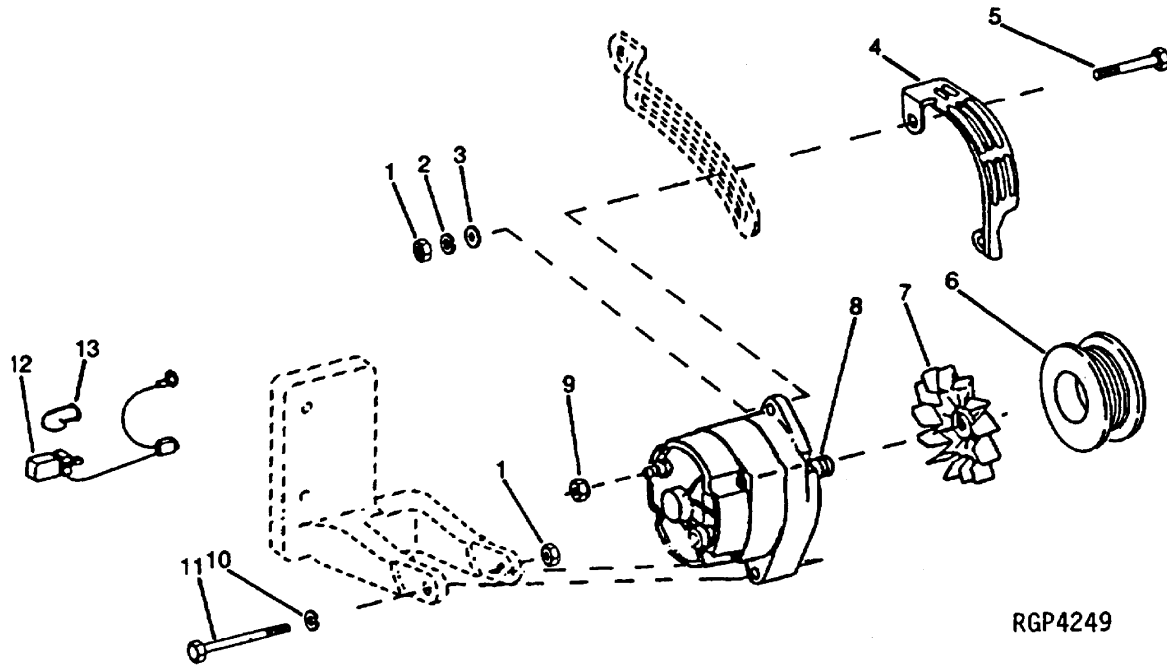
Group 50a: Turbocharger and Lines



Item	Part Number	Description	Quantity					
			Variation Number					
			6501	6506	6511	6530	6532	6535
1	#	Screw, 3/8 in. x 1 in.	4	4	4	4	4	4
2	#	Washer, 13/32 in. x 13/16 in. x 0.065 in.	4	4	4	4	4	4
3	223602	Fitting, elbow	1	1	1	1	1	1
4	352891	Turbocharger	1					
4	352872	Turbocharger		1				
4	352395	Turbocharger			1			
4	352867	Turbocharger				1		
4	GM19316	Turbocharger					1	
4	GM19317	Turbocharger						1
5	352818	Hose	1	1	1		1	
5	352814	Line, oil				1		1
6	223666	Clip	1	1	1	1	1	1
7	#	Washer, 9/32 in. x 5/8 in. x 0.049 in.	1	1	1	1	1	1
8	#	Nut, 1/4 in.	1	1	1	1	1	1
9	352859	Connector	1	1	1	1	1	1
9	352799	O-ring					1	1
10	223898	Gasket	1	1	1	1		
10	223483	Gasket					1	1
11	223757	Gasket	1	1	1	1	1	1
12	#	Screw	2	2	2	2	2	2
13	352879	Line, oil	1	1	1		1	
13	352874	Line, oil				1		
13	GM19318	Line, oil						1
14	336705	Clamp	2	2	2	2	2	2
15	352791	Hose	1	1	1			
15	352788	Hose				1		
15	GM19319	Hose					1	1
15	GM19320	Clamp					1	
16	352778	Fitting, elbow	1	1	1	1	1	1

Common hardware; procure locally.

Group 51a: Alternator

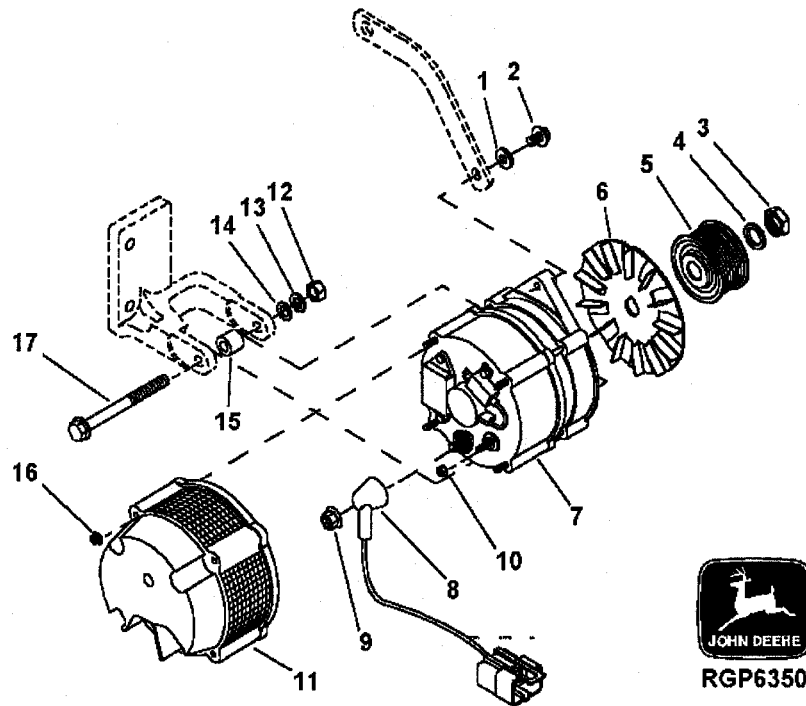


Item	Part Number	Description	Quantity	
			Variation Number	
			3140	3142
1	#	Nut, M10 (alternator shield and alternator to alternator bracket screw)	2	1
1	#	Nut, M8 (alternator adjustment strap and alternator shield to alternator)	1	1
2	#	Washer, lock 8.1 mm	1	1
3	#	Washer	1	1
4	223485	Shield	1	1
5	#	Screw, M8 x 45	1	1
5	352780	Spacer	1	1
6	352792	Pulley	1	1
7	✖ 352068	Fan, alternator	1	1
8	224244	Alternator, 12 volt	1	
8	336915	Alternator, 24 volt		1
9	#	Nut, M6	1	1
10	#	Washer, 10.2 mm	1	1
11	#	Screw, M10 x 110	1	1
12	224235	Wiring harness	1	1
13	X	Cover	1	1

Common hardware; procure locally.

X Not sold separately.

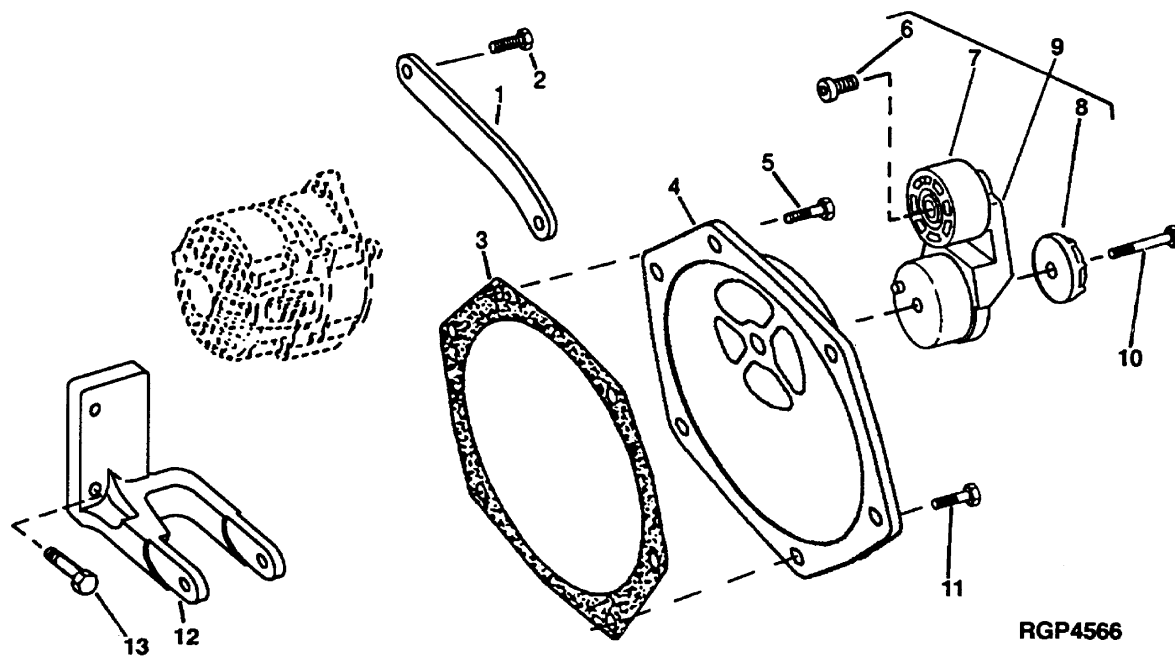
Group 51a: Alternator



Item	Part Number	Description	Quantity
			Variation Number 3107
1	#	Washer, 11/32 x 3/4 x 0.120 in.	1
2	#	Screw, M8 x 25	1
3	#	Nut, M16	1
4	224331	Washer	1
5	352792	Pulley	1
6	360588	Fan	1
7	GM17442	Alternator, 65 A, 12 V	1
8	360046	Harness, wiring	1
9	#	Nut, lock M5	1
10	#	Nut, flange	1
11	GM22378	Cover	1
12	#	Nut, M10	1
13	#	Washer, lock, 10 mm	1
14	#	Washer, 13/32 x 11/16 x 0.065 in.	1
15	352780	Spacer	1
16	#	Nut, flange, M5	4
17	#	Screw, cap, M10 x 110	1

Common hardware; procure locally.

Group 51b: Alternator Brackets



Item	Part Number	Description	Quantity	
			Variation Number 6203	6202
1	352794	Strap, adjusting	1	
1	GM19321	Strap, adjusting		1
2	#	Screw, 3/8 in. x 7/8 in.	1	1
3	223774	Gasket	1	1
4	352776	Cover	1	1
5	#	Screw	5	5
6	#	Bolt	1	1
7	352836	Pulley	1	1
8	352729	Shield, dust	1	1
9	352815	Tightener	1	1
10	#	Screw, M10 x 80	1	1
11	#	Screw	1	1
12	352775	Support	1	1
13	#	Screw, 3/8 in. x 1 in.	2	2

Common hardware; procure locally.

