

# Service Parts

Engine

Engine Models:

**John Deere**

**6090HF484**

**6090HF485**

**6090HFG86**

Generator Models:

230-275REOZJD

230-275REOZJE

300REOZJ

TP-6438 1/11c

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# Introduction

This manual lists service replacement parts for John Deere engine models 6090HF484/485 and 6090HFG86.

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

## 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 Model 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 Model 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

<b>Group Title</b>		<i>Air Intake</i>	<i>Water Pump</i>	<i>Water Pump Inlet</i>	<i>Thermostat</i>	<i>Fan Belt</i>	<i>Fan Drive</i>	<i>Vent Tube</i>	<i>Camshaft</i>	<i>Valve Train</i>	<i>Rocker Arm Cover</i>	<i>Fuel Injection System</i>	<i>Fuel Filter</i>	<i>Crankshaft</i>	<i>Crankshaft Pulley</i>
<b>Group No.</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>18</b>	<b>19</b>	<b>20</b>	
	<b>Variation Number</b>														

<b>Spec No.</b>														
<b>230 kW (6090HF485)</b>														
GM46340-GA1	1701	2001	5701	3908	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>230 kW (6090HF484)</b>														
GM46340-GA5	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA1	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA4	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>250 kW (6090HF485)</b>														
GM46340-GA2	1701	2001	5701	3908	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>250 kW (6090HF484)</b>														
GM46340-GA6	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA2	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA5	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>275 kW (6090HF485)</b>														
GM46340-GA3	1701	2001	5701	3908	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>275 kW (6090HF484)</b>														
GM46340-GA7	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA3	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
GM66100-GA6	1707	2001	5708	3913	2437	234A	2901	4601	4901	1101	1601	3511	4701	1319
<b>300 kW (6090HFG86)</b>														
GM66100-GA7	1707	2001	5708	3913	2437	234A	2901B	4609	4901B	1101B	1601B	3511	4705	1354

**Thanks very much for your reading,  
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manual**

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click on it.**

**Have any questions please write to me:  
[admin@servicemanualperfect.com](mailto:admin@servicemanualperfect.com)**

# Specification Number Index

Group Title		<i>Piston &amp; Connecting Rod</i>	<i>Flywheel</i>	<i>Flywheel Housing</i>	<i>Cylinder Head</i>	<i>Exhaust Manifold</i>	<i>Exhaust Elbow</i>	<i>Dipstick</i>	<i>Oil Pan</i>	<i>Oil Cooler</i>	<i>Oil Pump</i>	<i>Cylinder Block</i>	<i>Timing Gear Cover</i>	<i>Turbocharger &amp; Oil Lines</i>
Group No.	21	22	23	24	25	26	28	29	30	31	32	34	35	
<b>Variation Number</b>														

<b>Spec. No.</b>														
<b>230 kW (6090HF485)</b>														
GM46340-GA1	4801	1506	1426	5101	2805	6402	4003	1916	5921	5001	4601	7701	6519	
<b>230 kW (6090HF484)</b>														
GM46340-GA5	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA1	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA4	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
<b>250 kW (6090HF485)</b>														
GM46340-GA2	4801	1506	1426	5101	2805	6402	4003	1916	5921	5001	4601	7701	6519	
<b>250 kW (6090HF484)</b>														
GM46340-GA6	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA2	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA5	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
<b>275 kW (6090HF485)</b>														
GM46340-GA3	4801	1506	1426	5101	2805	6402	4003	1916	5921	5001	4601	7701	6519	
<b>275 kW (6090HF484)</b>														
GM46340-GA7	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA3	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
GM66100-GA6	4801	1506	1426	5101	2811	6402	4003	1916	5925	5001	4601	7701	6535	
<b>300 kW (6090HFG86)</b>														
GM66100-GA7	4804	1550	1435	5101B	2811B	6402	4003	1916B	5925	5003	4609	7706	6535	

# Specification Number Index

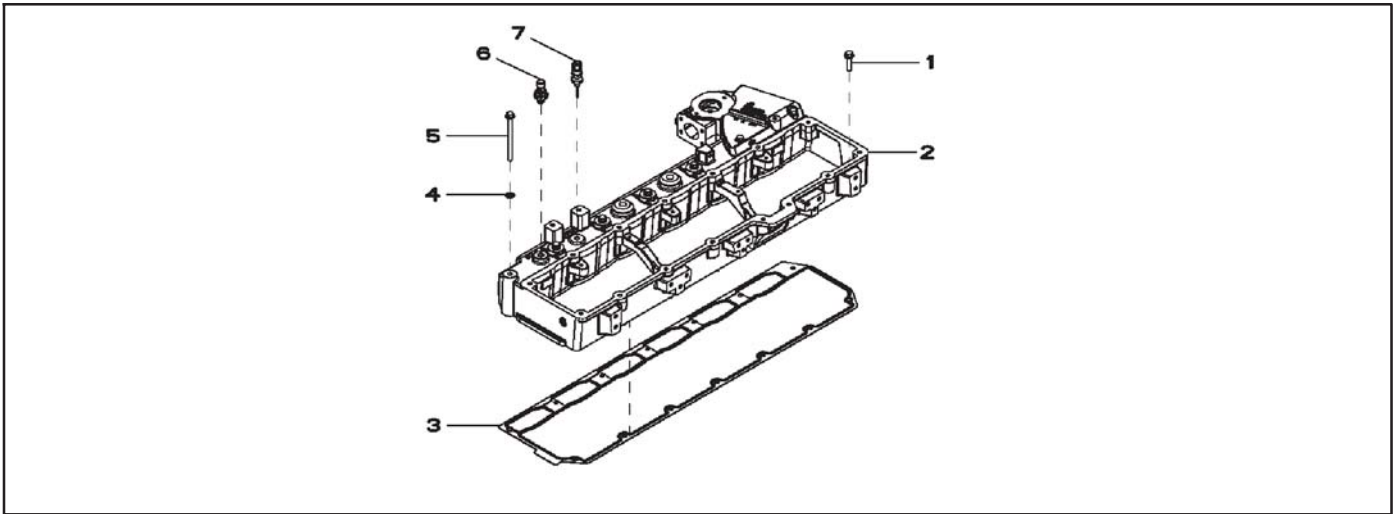
<b>Group Title</b>		<i>Starter Motor</i>	<i>Alternator</i>	<i>Alternator Brackets</i>	<i>Cylinder Head Gasket Set</i>	<i>Overhaul Gasket Set</i>	<i>Wiring Harness</i>	<i>Turbo Air Inlet</i>	<i>Engine Gas Recirculation</i>		
<b>Group No.</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>40</b>	<b>41</b>	<b>43</b>	<b>45</b>	<b>47</b>	<b>50</b>		
	<b>Variation Number</b>										

<b>Spec No.</b>											
<b>230 kW (6090HF485)</b>											
GM46340-GA1	3005	3119	6202	9902	9902	8401	5405	8902			
<b>230 kW (6090HF484)</b>											
GM46340-GA5	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA1	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA4	3005	3118	6217	9902	9902	8498	-	-			
<b>250 kW (6090HF485)</b>											
GM46340-GA2	3005	3119	6202	9902	9902	8401	5405	8902			
<b>250 kW (6090HF484)</b>											
GM46340-GA6	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA2	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA5	3005	3118	6217	9902	9902	8498	-	-			
<b>275 kW (6090HF485)</b>											
GM46340-GA3	3005	3118	6202	9902	9902	8401	5405	8902			
<b>275 kW (6090HF484)</b>											
GM46340-GA7	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA3	3005	3118	6217	9902	9902	8414	-	-			
GM66100-GA6	3005	3118	6217	9902	9902	8498	-	-			
<b>300 kW (6090HFG86)</b>											
GM66100-GA7	3005	3118	6217			8498	-	8997	9804		

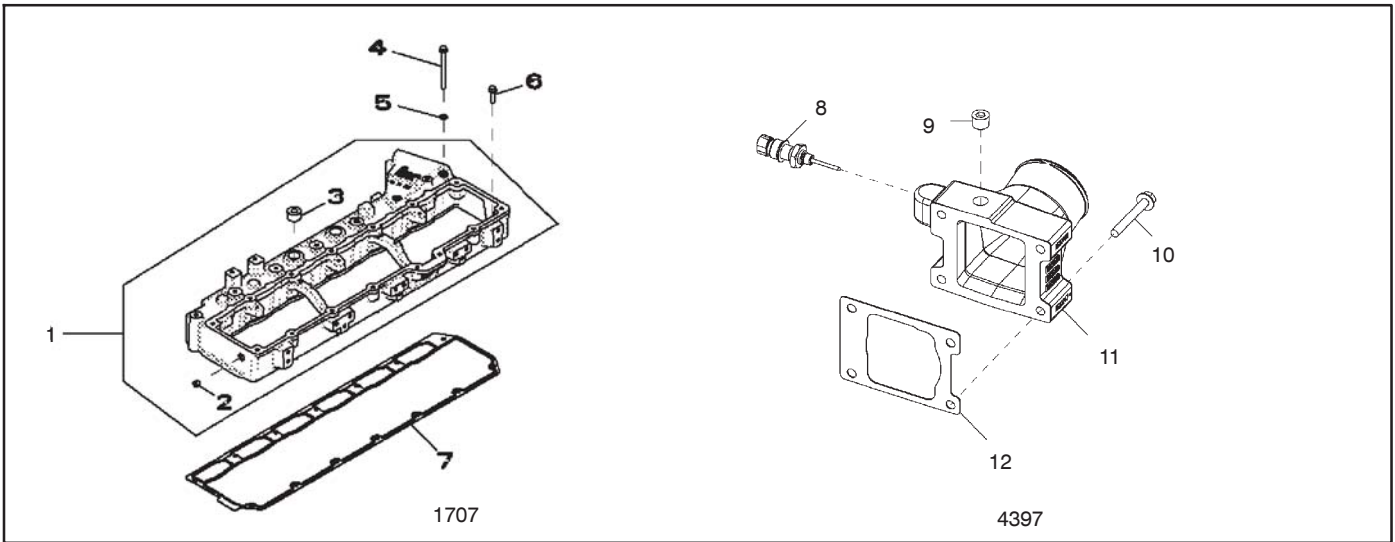
# Notes



# Group 1: Air Intake



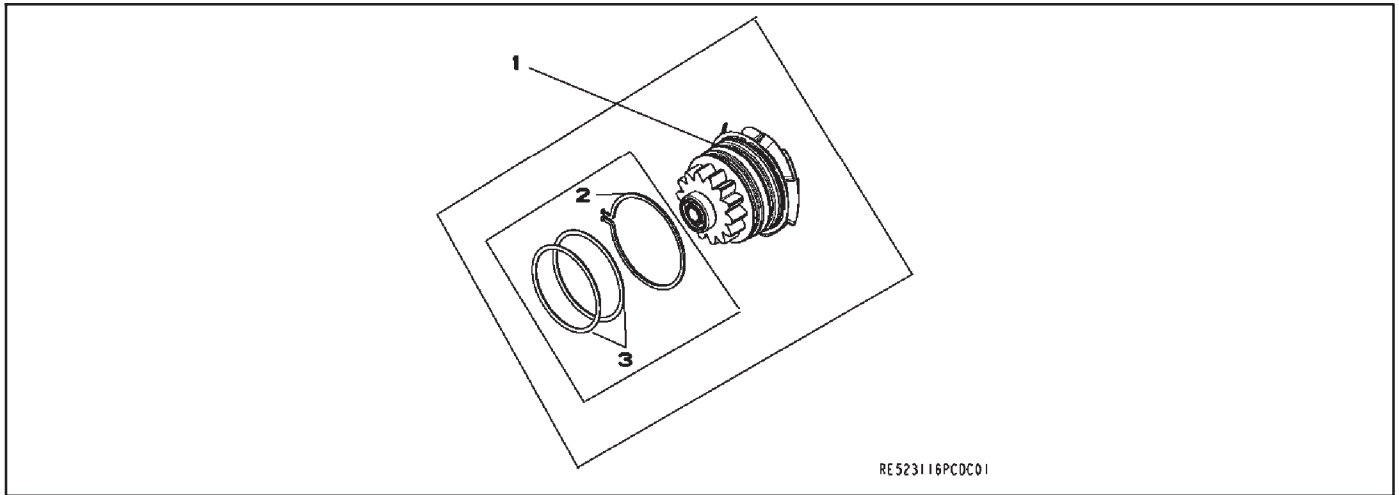
Item	Part Number	Description	Qty.	
			Variation	1701
1	#	Screw, M8 x 35		7
2	GM50218	Intake manifold		1
3	GM50142	Gasket		1
4	GM50168	Washer, sealing		7
5	#	Screw, M8 x 110		7
6	GM49999	Sensor, manifold air press		1
7	GM50003	Sensor, temperature		1



Item	Part Number	Description	Qty.	
			1707	4397
1	GM67302	Intake manifold	1	
2	#	Plug	1	
3	#	Plug	2	
4	#	Screw, M8 x 110	7	
5	GM50168	Washer, sealing	7	
6	GM67288	Screw	7	
7	GM50142	Gasket	1	
8	GM50003	Sensor, temperature		1
9	#	Pipe plug		1
10	#	Screw, M8 x 60		4
11	GM79826	Air intake		1
12	GM79827	Gasket		1

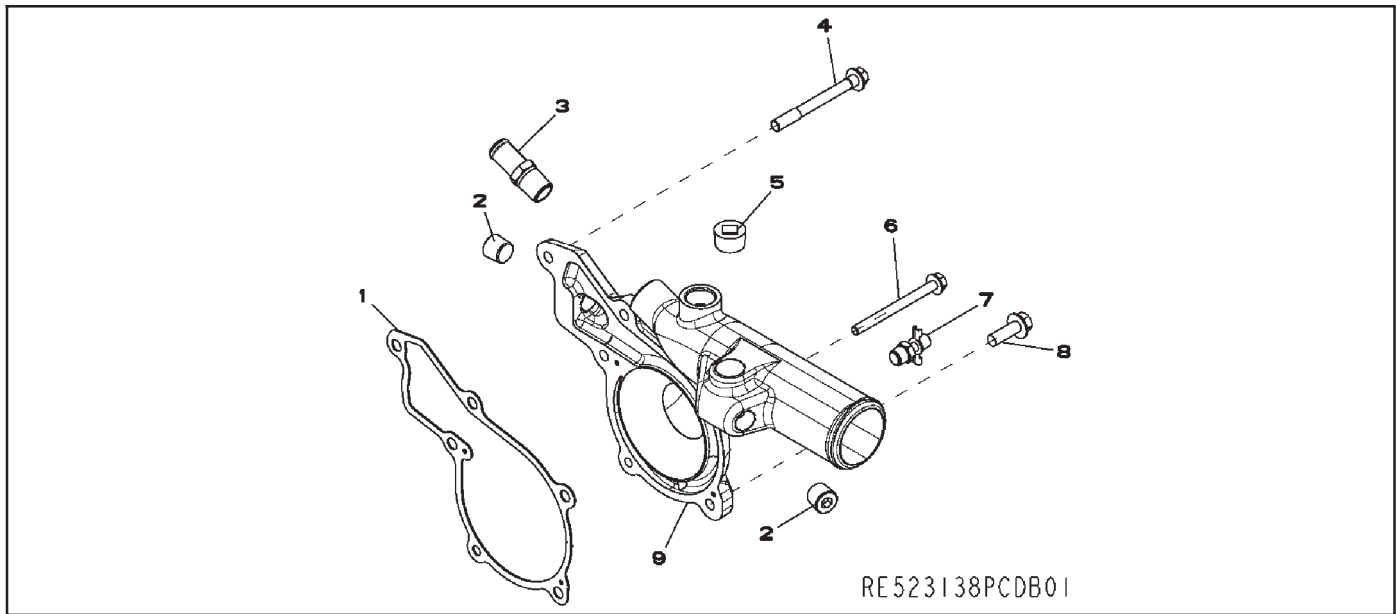
# Common hardware; procure locally.

## Group 2: Water Pump

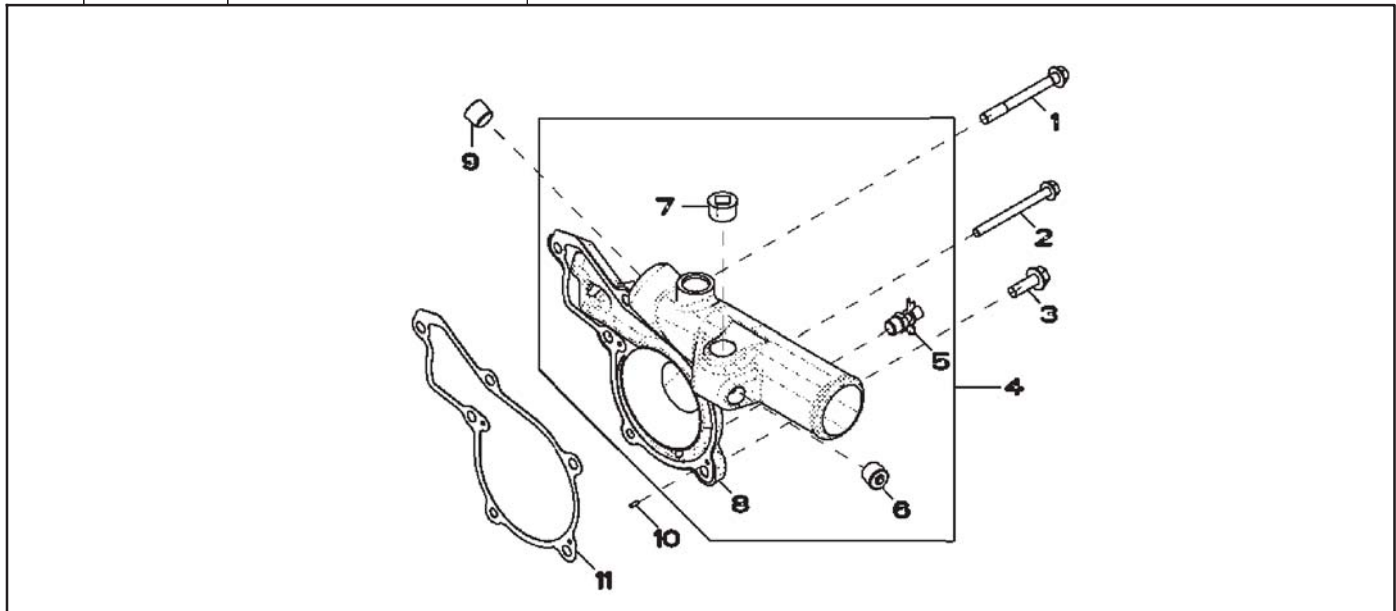


Item	Part Number	Description	Qty.
			Variation 2001
1	GM50245	Kit, water pump	1
2	GM50172	Snap ring	1
3	GM50205	O-ring Kit	1

## Group 4: Water Pump Inlet



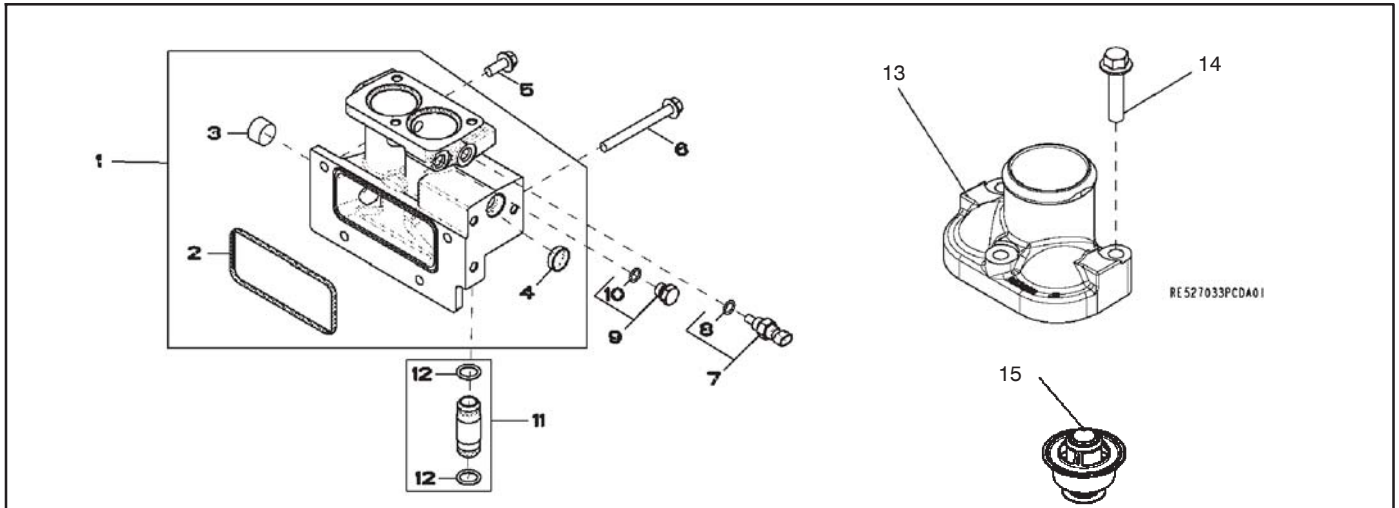
Item	Part Number	Description	Qty.		Item	Part Number	Description	Qty.	
			Variation	5701				Variation	5701
1	352737	Gasket		1	6	#	Screw		1
2	GM18862	Pipe plug, 1/2 in.		2	7	223435	Drain valve		1
3	223461	Fitting, hose		1	8	#	Screw, M10 x 30		1
4	#	Screw		3	9	GM50233	Connection, water pump		1
5	GM50197	Hose		1					



Item	Part Number	Description	Qty.		Item	Part Number	Description	Qty.	
			Variation	5708				Variation	5708
1	GM67274	Screw		3	6	GM18862	Pipe plug		2
2	GM67275	Screw		1	7	GM53024	Pipe plug		1
3	#	Screw, M10 x 30		2	8	GM67276	Cover		1
4	GM50233	Connection, water pump		1	9	GM18862	Pipe plug		1
5	223435	Drain valve		1	10	352726	Dowel pin		2
					11	352737	Gasket		1

# Common hardware; procure locally.

# Group 5: Thermostat

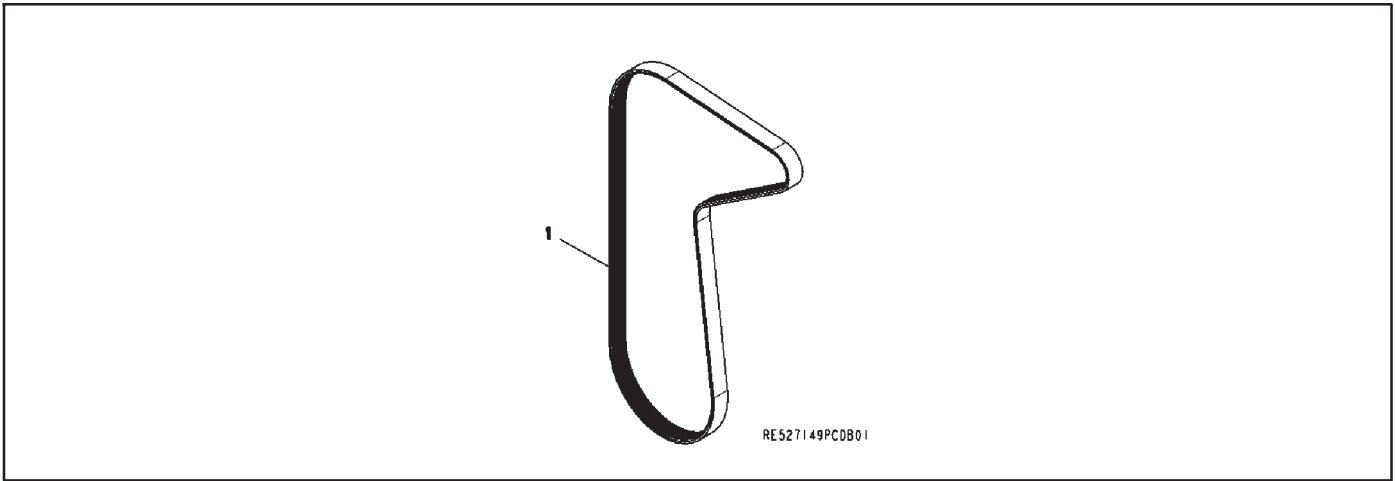


Item	Part Number	Description	Qty.	
			3908	3913
1	GM50244	Housing	1	1
2	GM50134	Gasket	1	1
3	GM53024	Pipe plug	1	1
4	223409	Plug	1	1
5	#	Screw, M10 x 25	3	3
6	#	Screw, M10 x 100	1	1
7	GM18785	Sensor, coolant temp.	1	
7	GM50195	Sensor, coolant temp.		1
8	GM21508	O-ring	1	1
8	GM50114	O-ring	1	

Item	Part Number	Description	Qty.	
			3908	3913
9	360013	Fitting plug		1
10	GM21508	O-ring		1
11	GM50203	Tube	1	1
12	GM50131	O-ring	1	2
13	GM50185	Housing	1	1
14	#	Screw, M10 x 45	3	3
15	GM50047	Thermostat	2	
15	GM49907	Seal	2	
15	GM67301	Thermostat		2

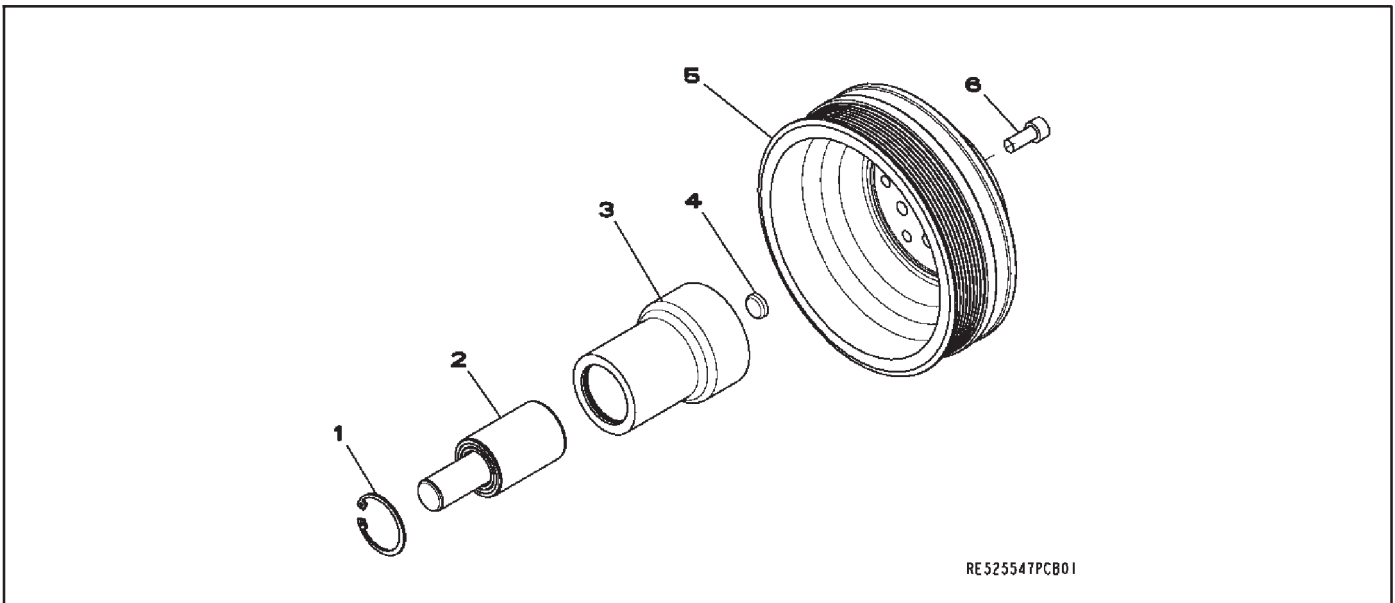
# Common hardware; procure locally.

## Group 6: Fan Belt



Item	Part Number	Description	Qty.
			Variation 2437
1	352793	V-belt	1

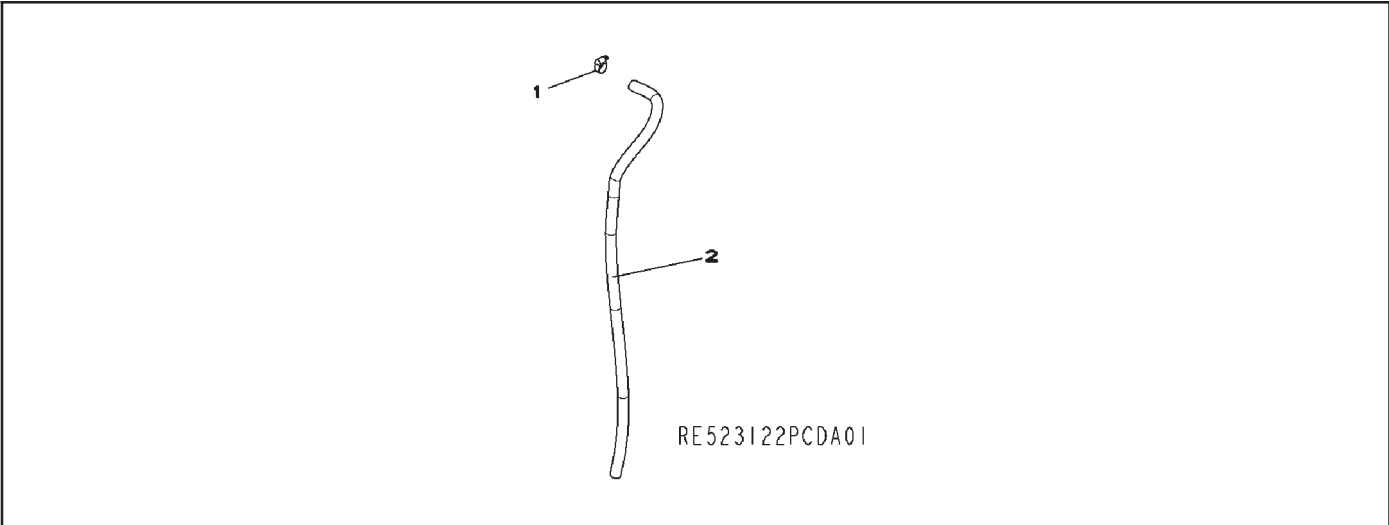
## Group 7: Fan Drive



Item	Part Number	Description	Qty.
			Variation 234A
1	GM50110	Snap ring	1
2	352708	Bearing	1
3	GM50189	Hub	1
4	#	Plug	1
5	GM50188	Pulley	1
6	#	Screw	6

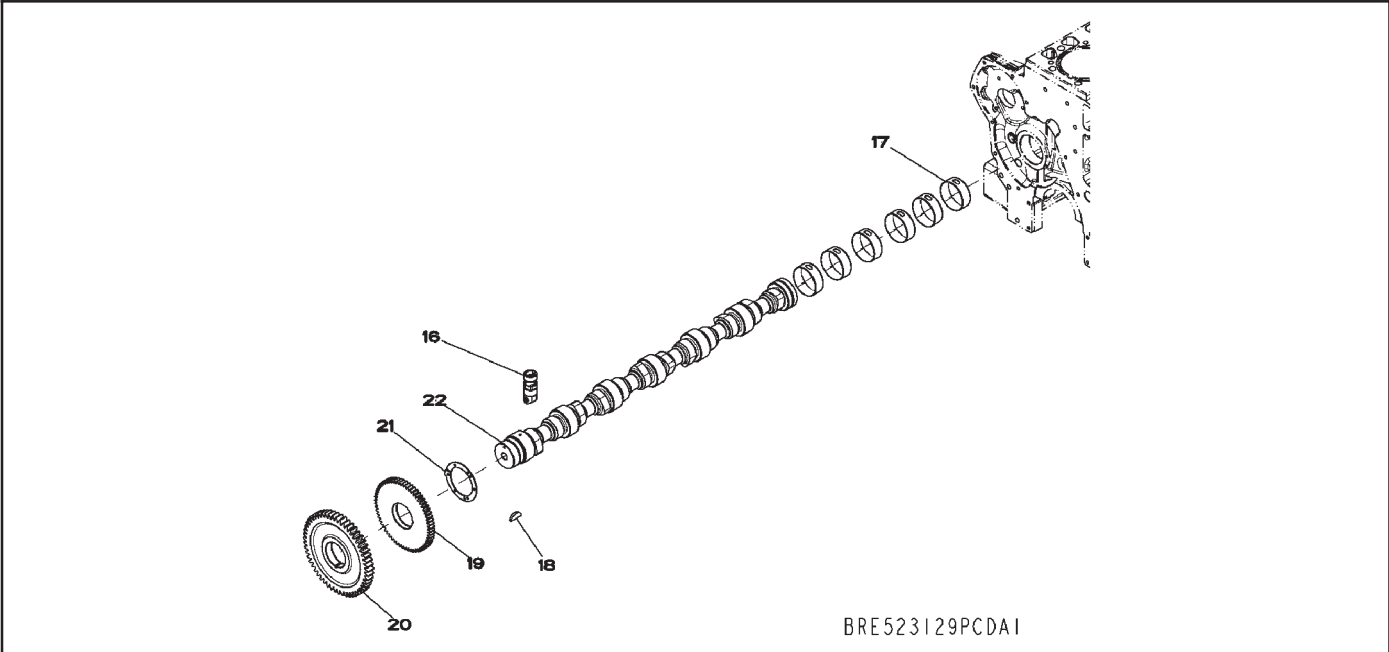
# Common hardware; procure locally.

# Group 10: Vent Tube



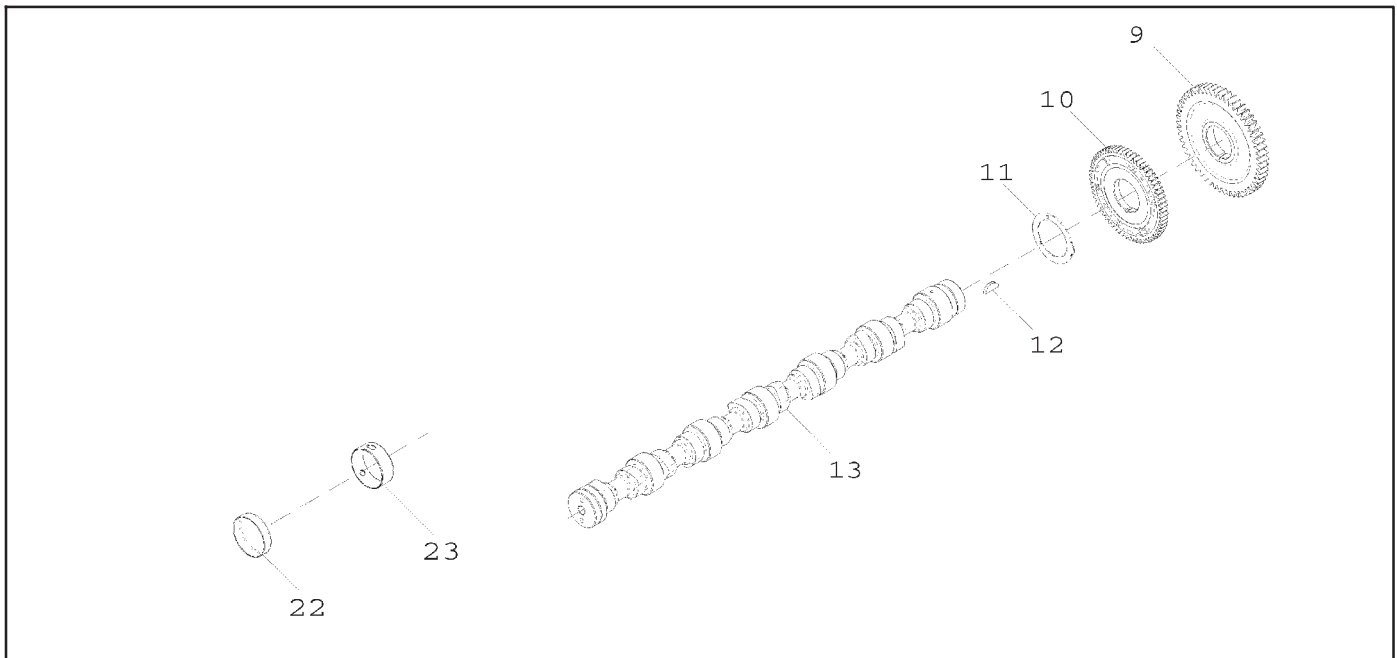
Item	Part Number	Description	Qty.	
			Variation	
			2901	2901B
1	336705	Clamp, hose	1	
1	GM79815	Clamp		1
2	GM50118	Tube	1	
2	GM79814	Hose		1

# Group 11: Camshaft



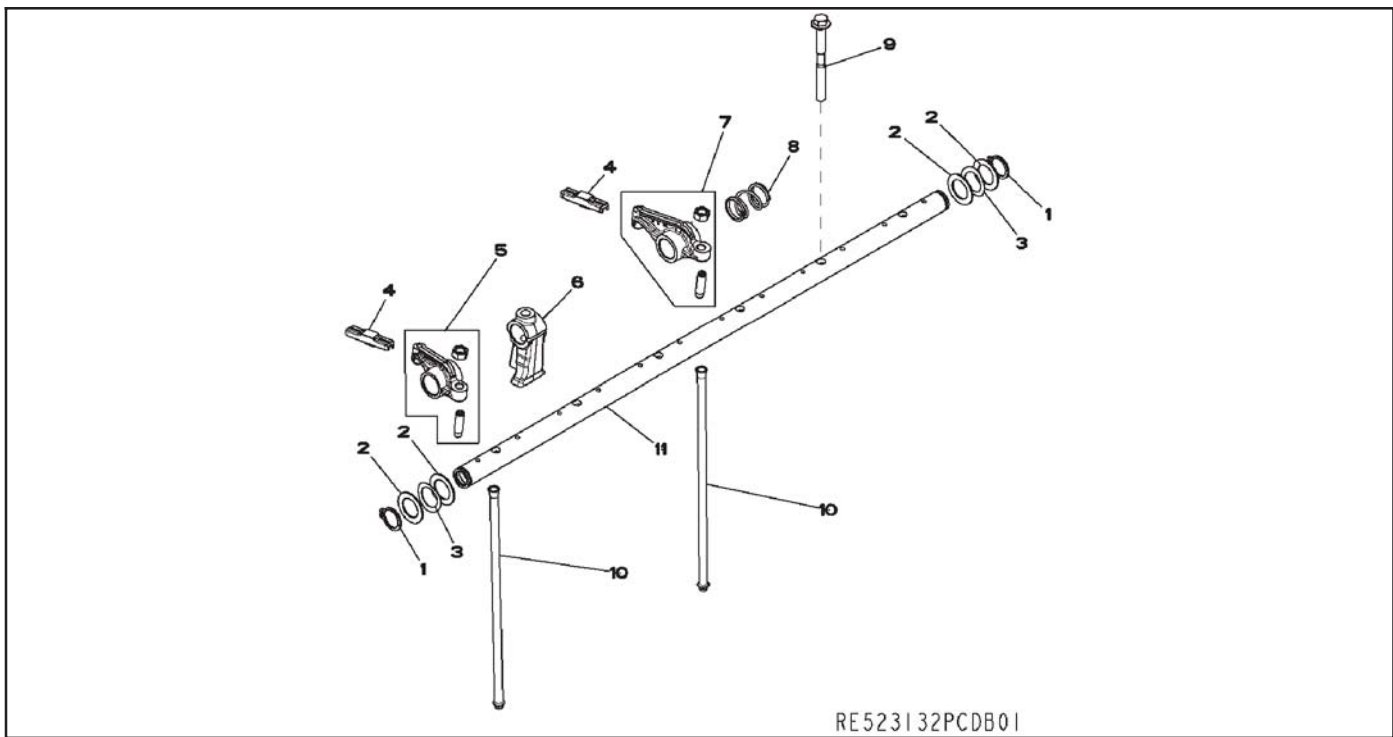
Item	Part Number	Description	Qty.	
			Variation	
			4601	
16	GM50214	Cam follower roller		12
17	223889	Bushing		6
18	352700	Shaft key		1
19	GM50141	Gear		1
20	GM50138	Gear		1
21	GM50132	Washer		1
22	GM50167	Camshaft		1

## Group 11: Camshaft, continued



Item	Part Number	Description	Qty.
			Variation 4609
9	GM79820	Gear	1
10	GM50141	Gear	1
11	GM50132	Washer	1
12	352700	Shaft Key	1
13	GM79821	Camshaft	1
22	223866	Plug	1
23	GM79823	Bushing	6

# Group 12: Valve Train



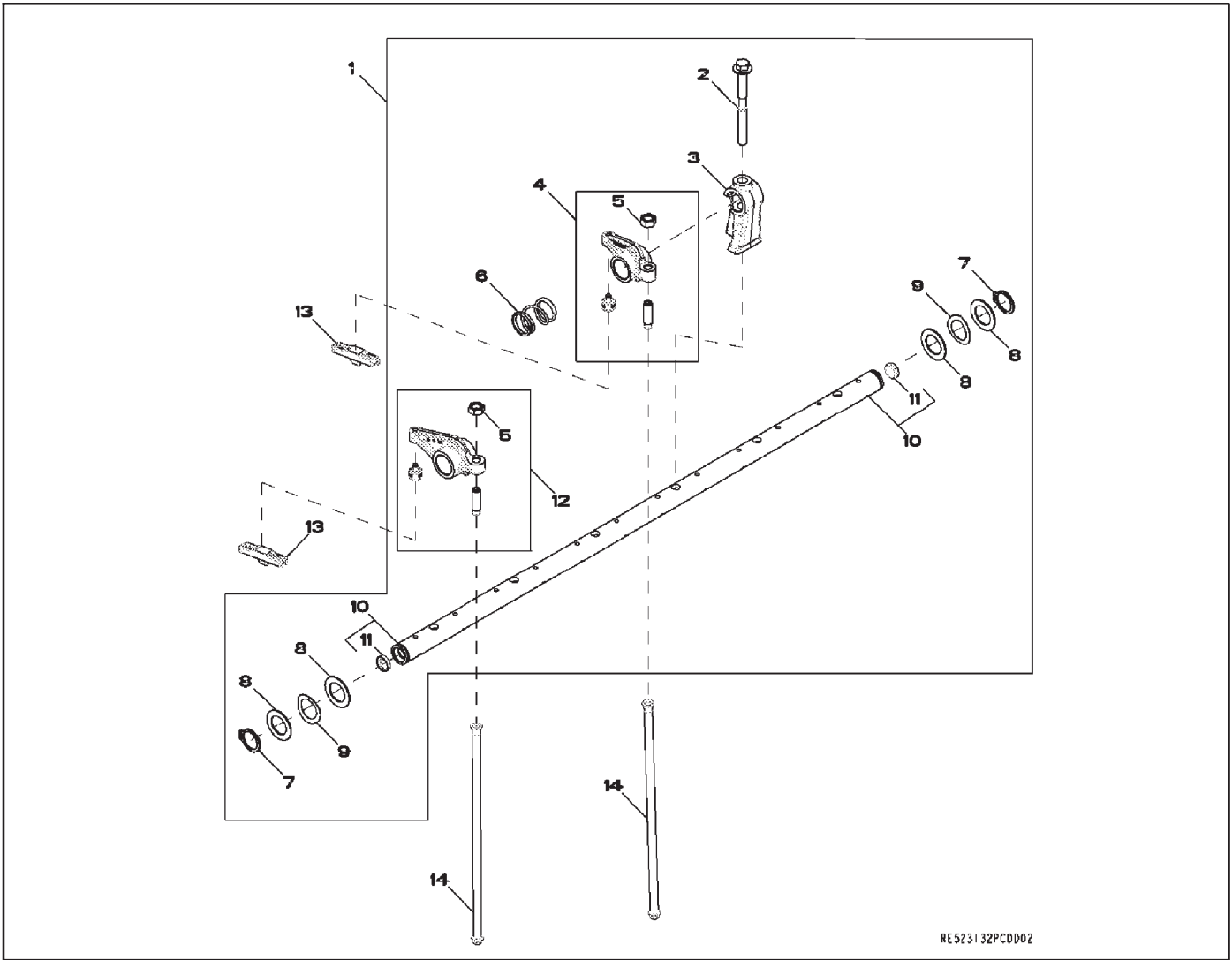
RE523132PCDB01

Item	Part Number	Description	Qty.
			Variation 4901
1	GM50111	Snap ring	2
2	GM50182	Washer	4
3	GM50123	Washer	2
4	GM50154	Guide	12
5	GM50212	Rocker arm	6
6	GM50137	Pedestal	6

Item	Part Number	Description	Qty.
			Variation 4901
7	GM50211	Rocker arm	6
8	GM50136	Spring	5
9	#	Cap screw	6
10	223877	Push rod	12
11	GM50213	Rocker arm shaft	1



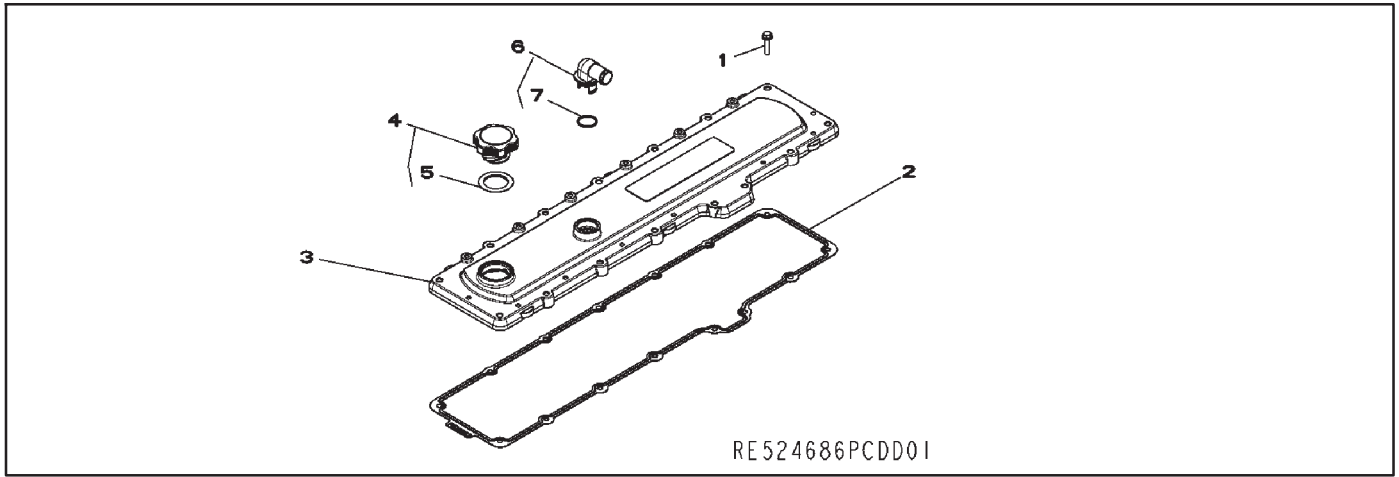
# Group 12: Valve Train, continued



RE523132PCDD02

Item	Part Number	Description	Qty.
			Variation 4901B
1	GM79835	Rocker Arm	1
2	GM79836	Cap Screw	6
3	GM79837	Pedestal	6
4	GM79838	Rocker Arm	6
5	GM79839	Nut	1
6	GM50136	Spring	5
7	GM50111	Snap Ring	2
8	GM50182	Washer	4
9	GM50123	Washer	2
10	GM79840	Rocker Arm Shaft	1
11	GM79841	Plug	2
12	GM79842	Rocker Arm	6
13	GM79843	Guide	12
14	223877	Push Rod	12

## Group 13: Rocker Arm Cover



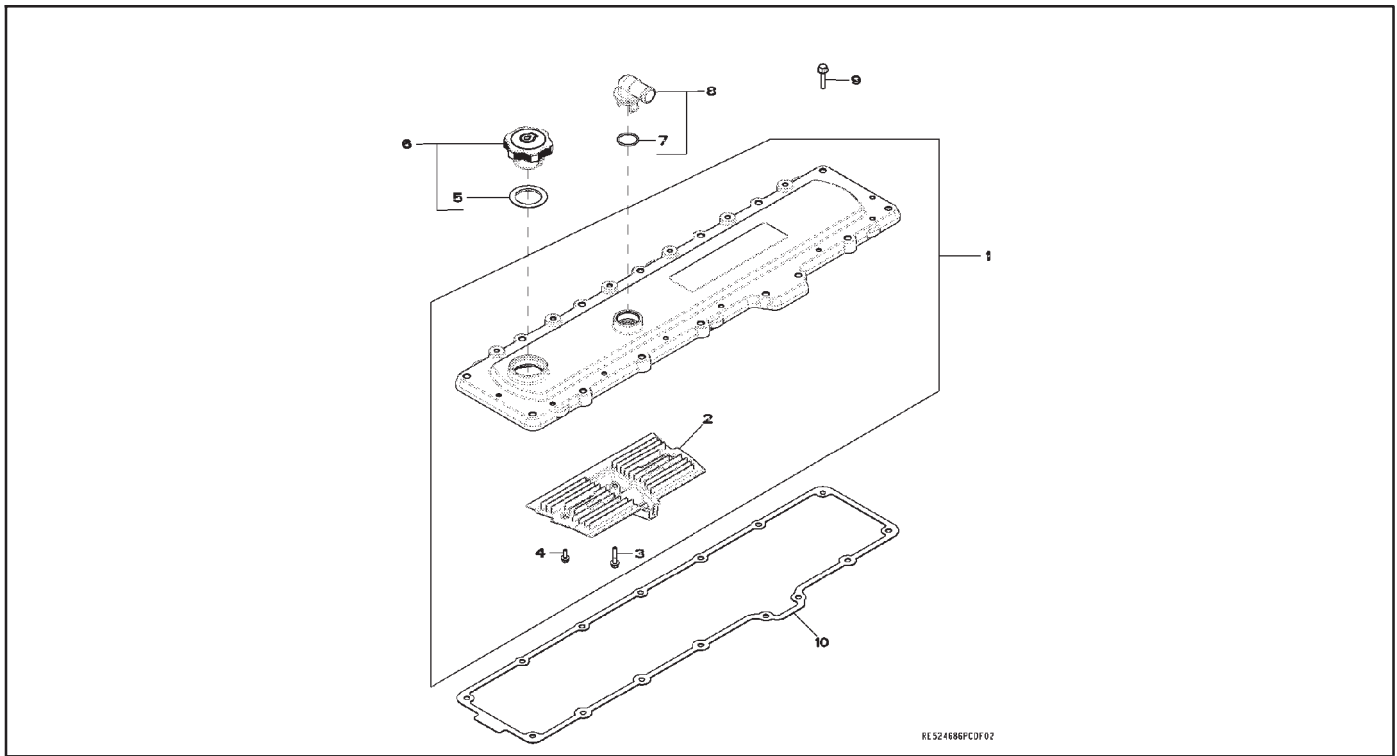
RE524686PCDD01

Item	Part Number	Description	Qty.
			Variation 1101
1	#	Screw, M8 x 35	15
2	GM50143	Gasket	1
3	GM50287	Cover	1
4	GM50275	Filler cap	1

Item	Part Number	Description	Qty.
			Variation 1101
5	GM50190	O-ring	1
6	GM50285	Fitting, elbow	1
7	360170	O-ring	1

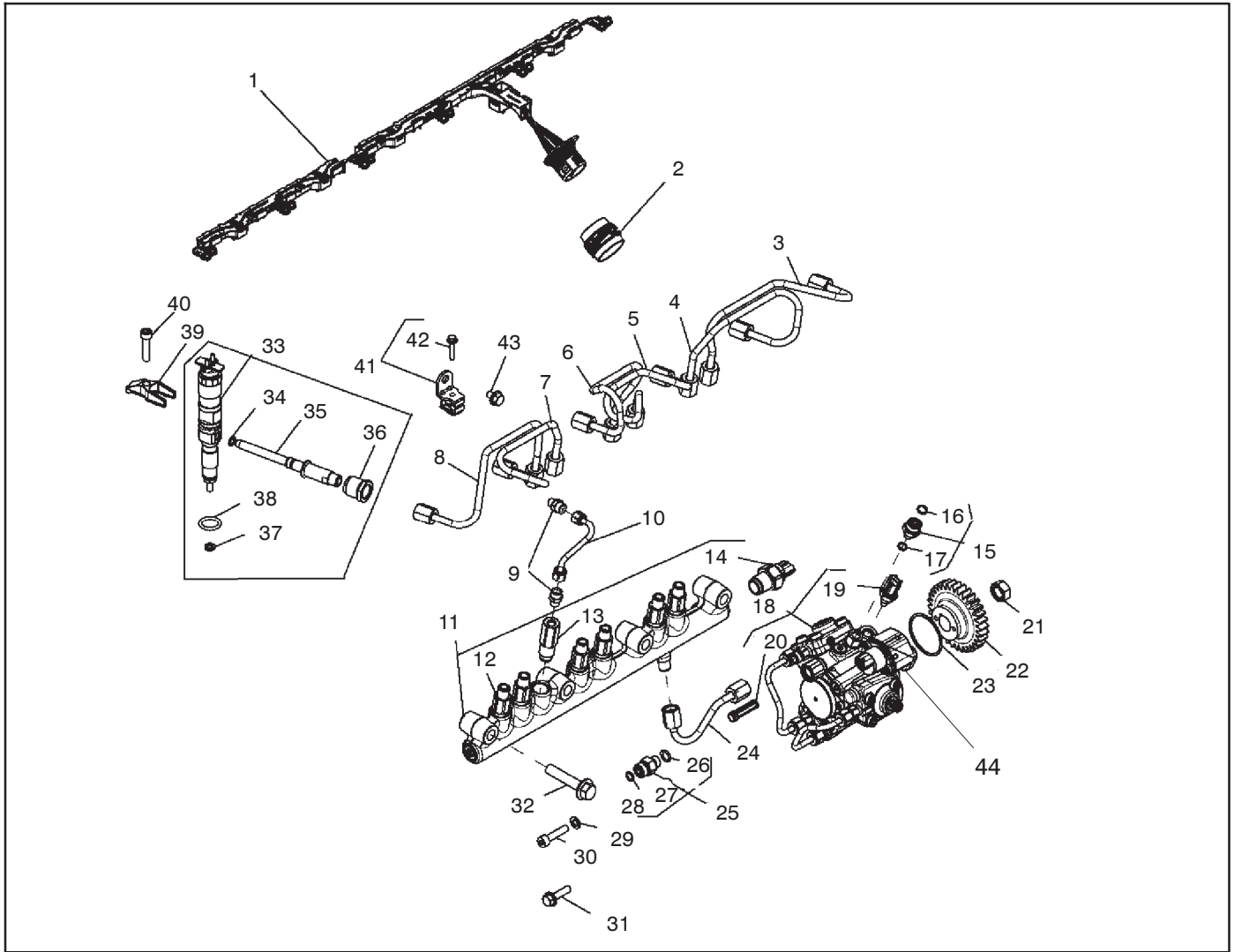
# Common hardware; procure locally.

# Group 13: Rocker Arm Cover, continued



Item	Part Number	Description	Qty.
			Variation 1101B
1	GM79794	Cover	1
2	GM79795	Breather	1
3	#	Screw, M6 x 30	1
4	#	Screw, M6 x 16	2
5	GM50190	O-Ring	1
6	GM50275	Filler Cap	1
7	360170	O-Ring	1
8	GM50285	Elbow Fitting	1
9	#	Screw, M8 x 35	15
10	GM79796	Gasket	1

# Group 14: Fuel Injection System



Item	Part Number	Description	Qty.		Item	Part Number	Description	Qty.	
			Variation	1601				Variation	1601
1	GM50229	Wiring harness		1	24	GM50215	Fuel line		1
2	GM50170	Connector		1	25	GM50116	Fitting, adapter		1
3	GM50256	Fuel line		1	26	GM21508	O-ring		1
4	GM50257	Fuel line		1	27	GM50106	Fitting, adapter		1
5	GM50258	Fuel line		1	28	360555	O-ring		1
6	GM50259	Fuel line		1	29	#	Washer, 8.400 x 15 x 1.600 mm		1
7	GM50260	Fuel line		1	30	#	Screw, M8 x 35		1
8	GM50261	Fuel line		1	31	#	Screw, M8 x 30		2
9	GM50202	Fitting, adapter		2	32	#	Screw		4
10	GM50216	Line		1	33	GM50279	Kit, nozzle		1
11	GM50224	Fuel line		1	34	360165	O-ring		6
12	GM46637	Restrictor		6	35	GM50225	Fitting		6
13	GM50252	Pressure relief valve		1	36	GM50153	Tube nut		6
14	GM50243	Sensor		1	37	GM50119	Washer		6
15	GM50250	Fitting, adapter		1	38	GM46635	O-ring		6
16	360555	O-ring		1	39	GM49839	Clamp		6
17	GM32896	O-ring, 8.100 x 1.600 mm		1	40	GM46623	Cap screw		6
18	GM50210	Fuel pump		1	41	GM50262	Clamp		3
19	GM46641	Sensor, fuel temperature		1	42	GM50274	Screw with washer		1
20	GM50251	Kit		1	43	GM50033	Cap screw		3
21	224161	Nut		1	44	GM77150	Control Valve		1
22	GM50140	Gear		1					
23	GM50177	O-ring		1					

# Common hardware; procure locally.