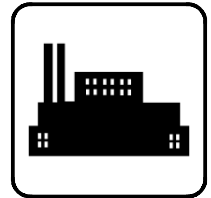


Service Parts

Engine



Engine Model:

**Doosan 14.6L: 250R(E)ZX(B) and
300REZXC**

18.3L: 300/350R(E)ZX(B)(D)

21.9L: 400/500R(E)ZX(B)(D)

Generator Models:

250- 400REZX
250- 450REZXB
250- 400RZX
250- 400RZXB
300REZXC
300- 500REZXD
300- 450RZXD

KOHLER®

TP-6706 2/21d

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Introduction

This manual lists service replacement parts for Doosan 14.6 L, 18 L, and 22 L engines.

Information in this publication represents data available at the time of print. Kohler Co. 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.

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

Numbering System Significance

This manual uses the following numbering systems:

Group Number. A unique number representing a parts group needed to assemble a generator set function. For example, Group 1 is the Cylinder Head group.

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 substitute illustrations for assembly or disassembly.

How to Find Part Numbers

Use the following steps to locate a service replacement part.

1. **Identify the group** most likely to include the service part number.
2. **Page forward to locate the group** identified in step 1 or find the appropriate page in the Table of Contents.
3. **Find the part on the illustration** and note the item number of the part or **find the part description in the parts list**.

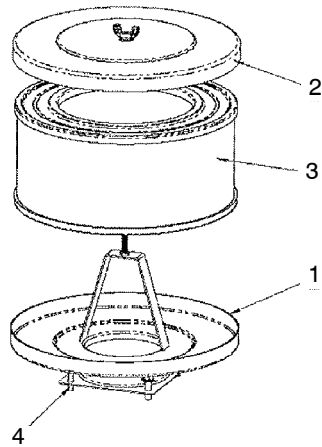
Recommend Stocking List

Part Number	Description	Section
GM73530	Filter element, UL (14.6L)	1-1: Air Filter
GM72308	Filter element, UL (18.3L and 21.9L)	1-1: Air Filter
GM72280	Sensor, magnetic M16 x 1.5	1-4: Electrical
GM72292	Sensor, O2	1-4: Electrical
GM29608	Sensor, coolant	1-4: Electrical
GM72302	Sensor, T map 3-bar	1-4: Electrical
GM72303	Sender, oil pressure	1-4: Electrical
GM73542	Sensor, knock	1-4: Electrical
GM73531	Valve, lock-off 1 1/4 in. (14.6L)	1-8: Fuel Shutoff Valve
GM69614-1	Valve, lock-off 2 in. (18.3L and 21.9L)	1-8: Fuel Shutoff Valve
GM72291	Sensor, speed, timing whl	1-9: Front Drive
GM75444	Belt, alternator/water pump	1-9: Front Drive
GM75443	Belt Set, Fan (1 set = 4 belts)	1-9: Front Drive (Before May 2016)
GM101110	Fan Belt	1-9: Front Drive (As of May 2016)
GM109949	Coolant, 50/50 Blend EG Gal.	1-12: Cooling System
GM29586	Valve, throttle, 60 mm	1-14: Intake
GM29592	Gasket (manifold adapter)	1-14: Intake
GM73546	Ignition coil	1-18: Ignition Coil Assembly
GM73548	Boot	1-18: Ignition Coil Assembly
GM72204	Spark plug	2-5: Cylinder Head
GM73726	Oil filter	2-9: Oil Filter
GM103170	Oil, Synth Gal 15W40 Gaseous	2-9: Oil Filter
GM73856	Alternator	2-18: Alternator
GM73864	Starter	2-19: Starter

Notes

1-1: Air Filter

14.6L

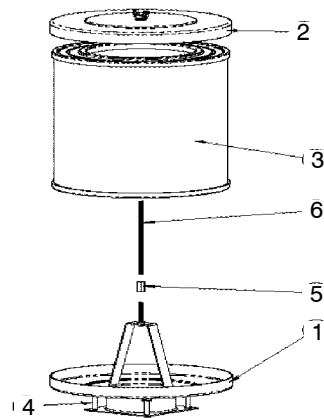


6706_1-1

Item	Part No.	Description	Qty.
1	GM73529	Air filter base	2
2	GM72307	Top, open filter	2
3	GM73530	Filter element (UL)	2
4	GM72318	Bolt, M6-1.0 x 25 flange head	8

1-1: Air Filter

18.3L and 21.9L

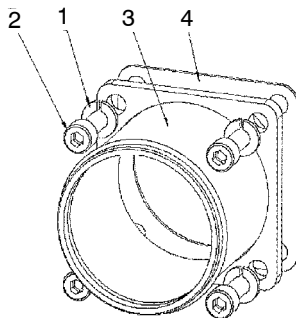


6706_1-1_2

Item	Part No.	Description	Qty.
1	GM73529	Air filter base	2
2	GM72307	Top, open filter	2
3	GM72308	Filter element, UL 10 in. x 10 in.	2
4	GM72318	Bolt, M6-1.0 x 25 flange head	8
5	GM72376	Extender, threaded rod M6-1.0	2
6	GM72377	Rod, threaded M6-1.0 x 130mm	2

1-2: Inlet

14.6L, 18.3L and 21.9L

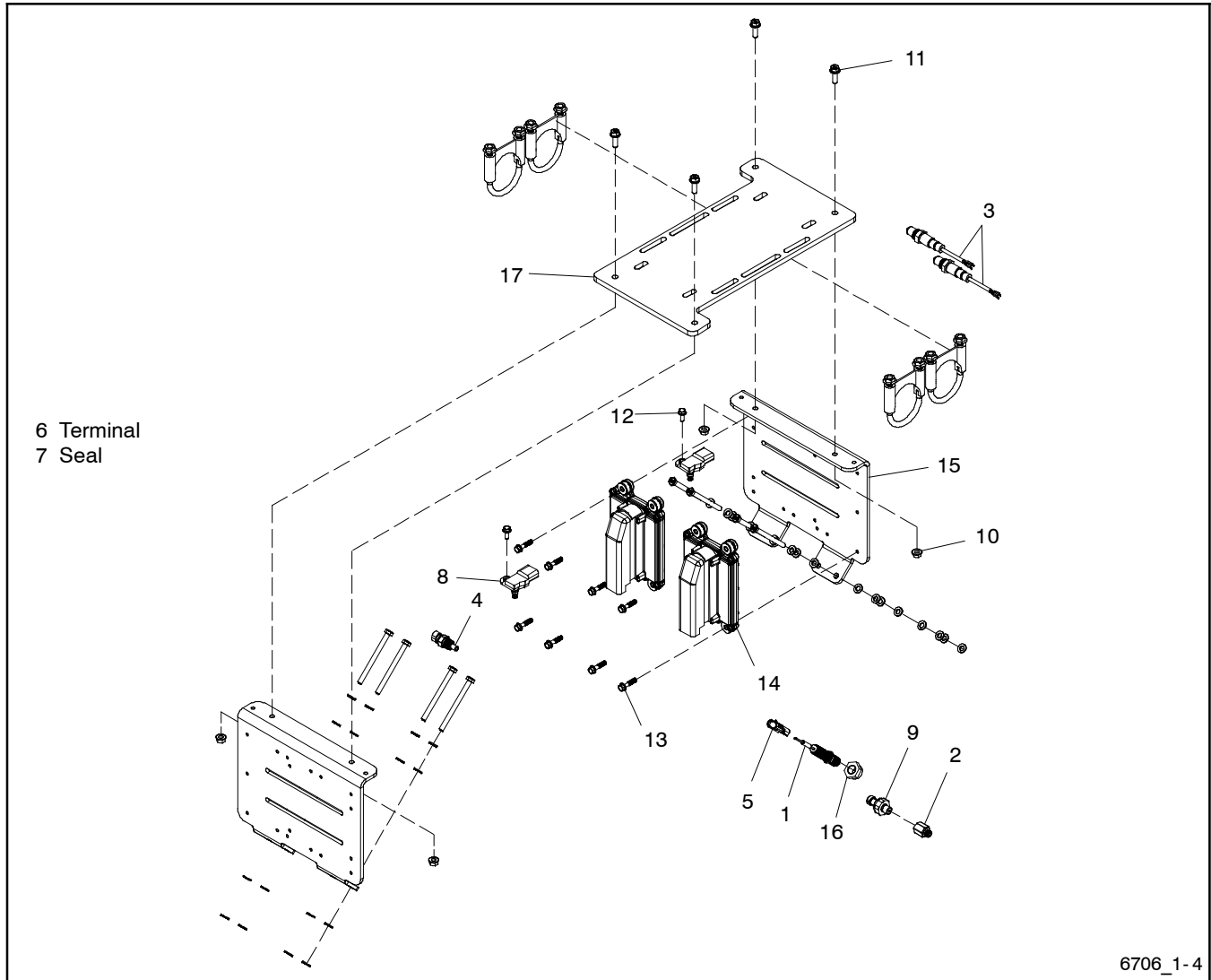


6706_1-2

Item	Part No.	Description	Qty.
1	GM69521	Washer, M8	4
2	GM69522	Bolt, M8 x 1.25 x 25 hex head	4
3	GM73556	Connection	1
4	GM73557	Gasket	1

1-4: Electrical

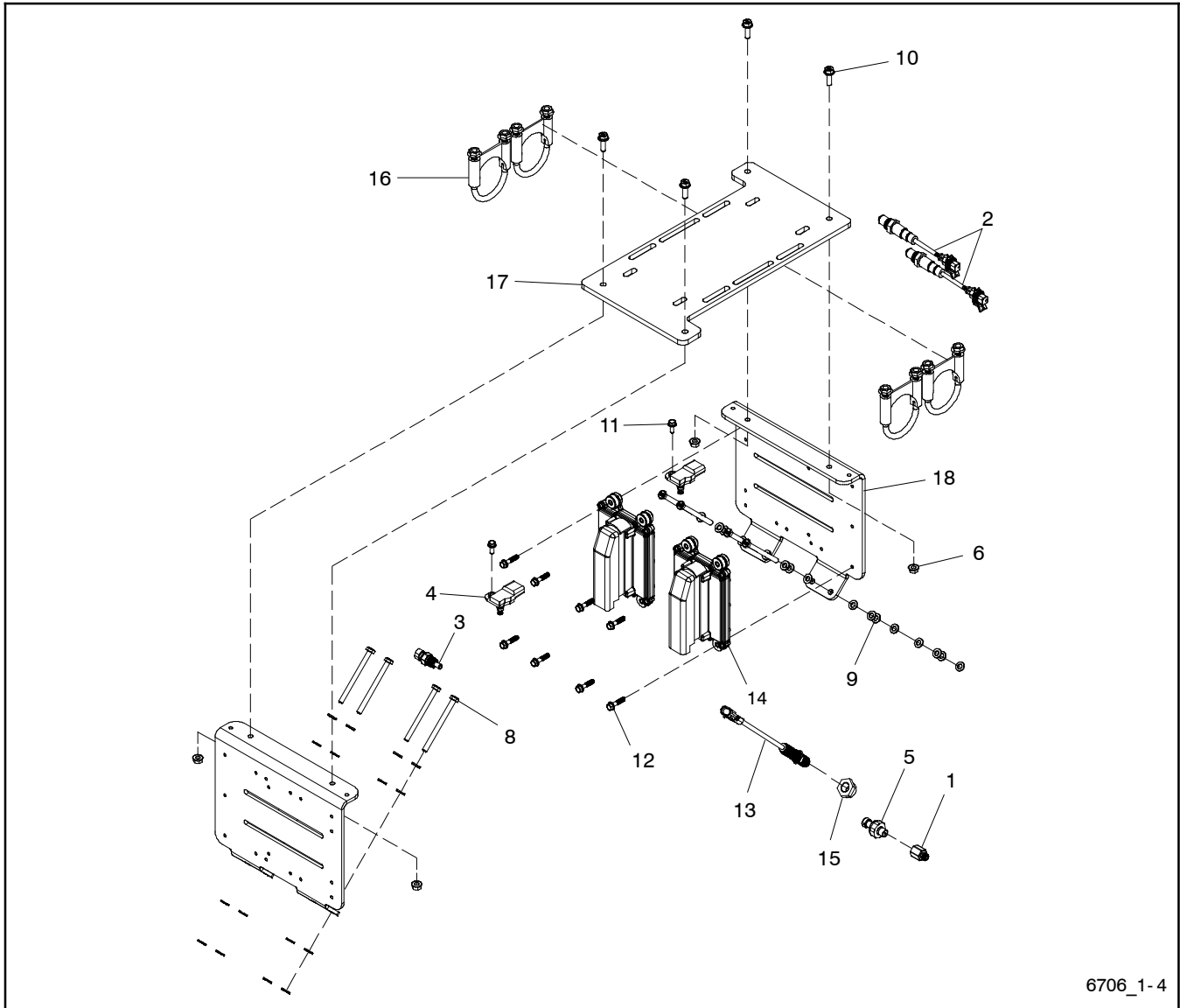
14.6L



Item	Part No.	Description	Qty.
1	GM72280	Cam sensor	1
2	GM73532	Fitting	1
3	GM72292	Sensor, O2	4
3	GM107233	Sensor, O2 (4G)	1
4	GM29608	Sensor, coolant	1
5	GM39452	Connector	1
6	GM39453	Terminal	2
7	GM39454	Seal	2
8	GM72302	Sensor, T map	4
9	GM72303	Sender, oil pressure	1
10	GM72312	Nut, M8-1.25 flange serrated	4
11	GM73533	Bolt	4
12	GM72319	Bolt, M6-1.0 x 15 flange head	4
13	GM72320	Bolt, M6-1.0 x 35 flange head	8
14	GM107433	Programmed ECU master (4G) (Standby)	1
14	GM107434	Programmed ECU slave (4G) (Standby)	1
14	GM107435	Programmed ECU master (4G) (Prime)	1
14	GM107436	Programmed ECU slave (4G) (Prime)	1
14	GM73534	Programmed ECU master (Standby)	1
14	GM75309	Programmed ECU slave (Standby)	1
14	GM107437	Programmed ECU master (Prime)	1
14	GM107438	Programmed ECU slave (Prime)	1
15	GM107439	Mount	2
16	GM73536	Fitting	1
17	GM73537	Bracket	1

1-4: Electrical, continued

18.3L

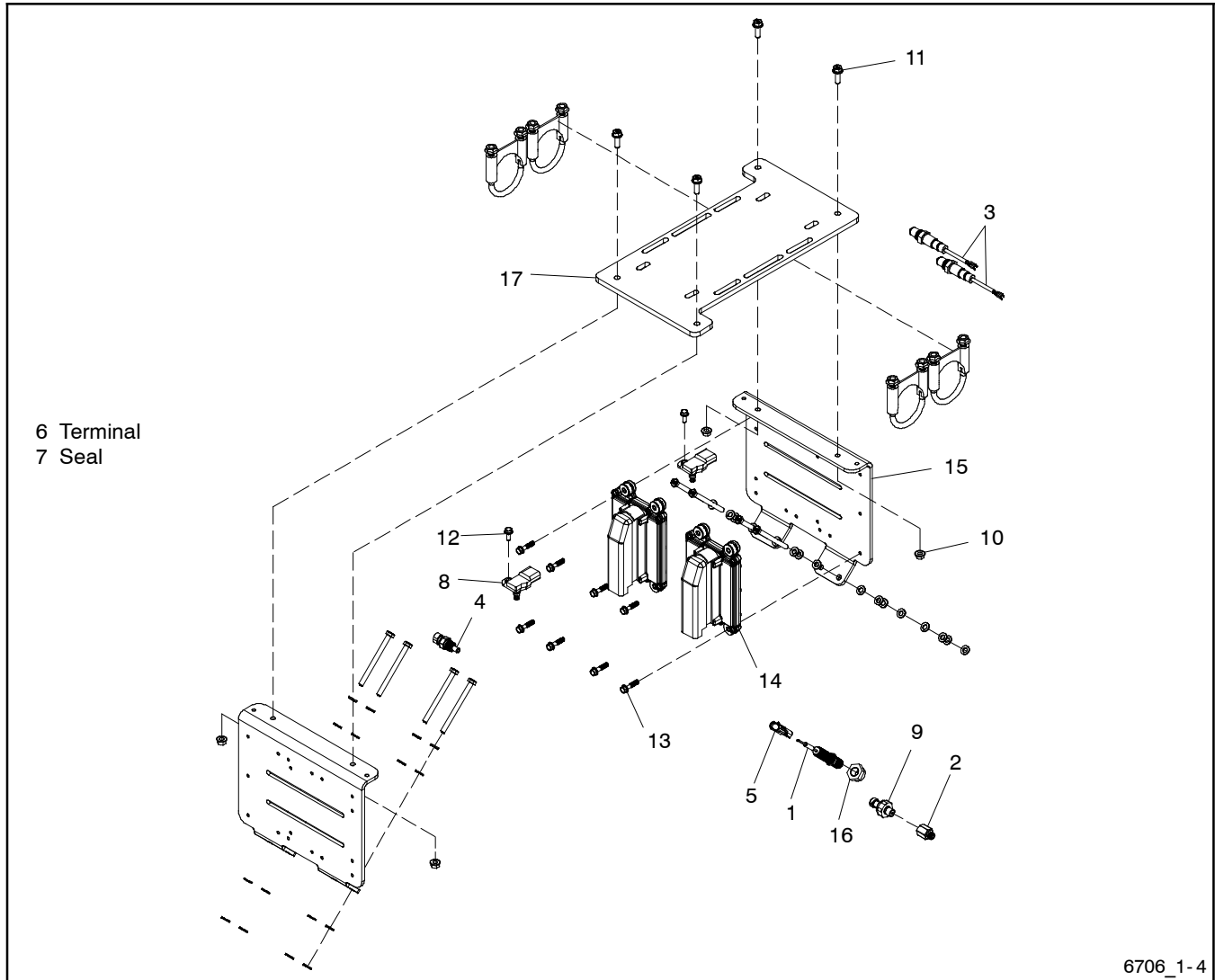


6706_1-4

Item	Part No.	Description	Qty.
1	GM73532	Adapter, pipe	1
2	GM107233	Sensor, O2	1
3	GM29608	Sensor, coolant	4
4	GM72302	Sensor, T map	1
5	GM72303	Sender, oil pressure	1
6	GM72312	Nut, flange	2
7	GM107441	Washer, lock	2
8	GM107442	Bolt	4
9	GM107216	Washer, flat	1
10	GM73533	Bolt	4
11	GM107443	Bolt	4
12	GM107444	Bolt	4
13	GM107445	Mag pick up kit	8
14	GM107446	ECU, Programmed master 4G (Standby)	1
14	GM107447	ECU, Programmed slave 4G (Standby)	1
14	GM107448	ECU, Programmed master 4G (Prime)	1
14	GM107449	ECU, Programmed slave 4G (Prime)	1
15	GM73536	Fitting	2
16	GM107450	Clamp, U bolt	1
17	GM73537	Bracket	1
18	GM107451	Bracket, ECM (not shown)	24

1-4: Electrical, continued

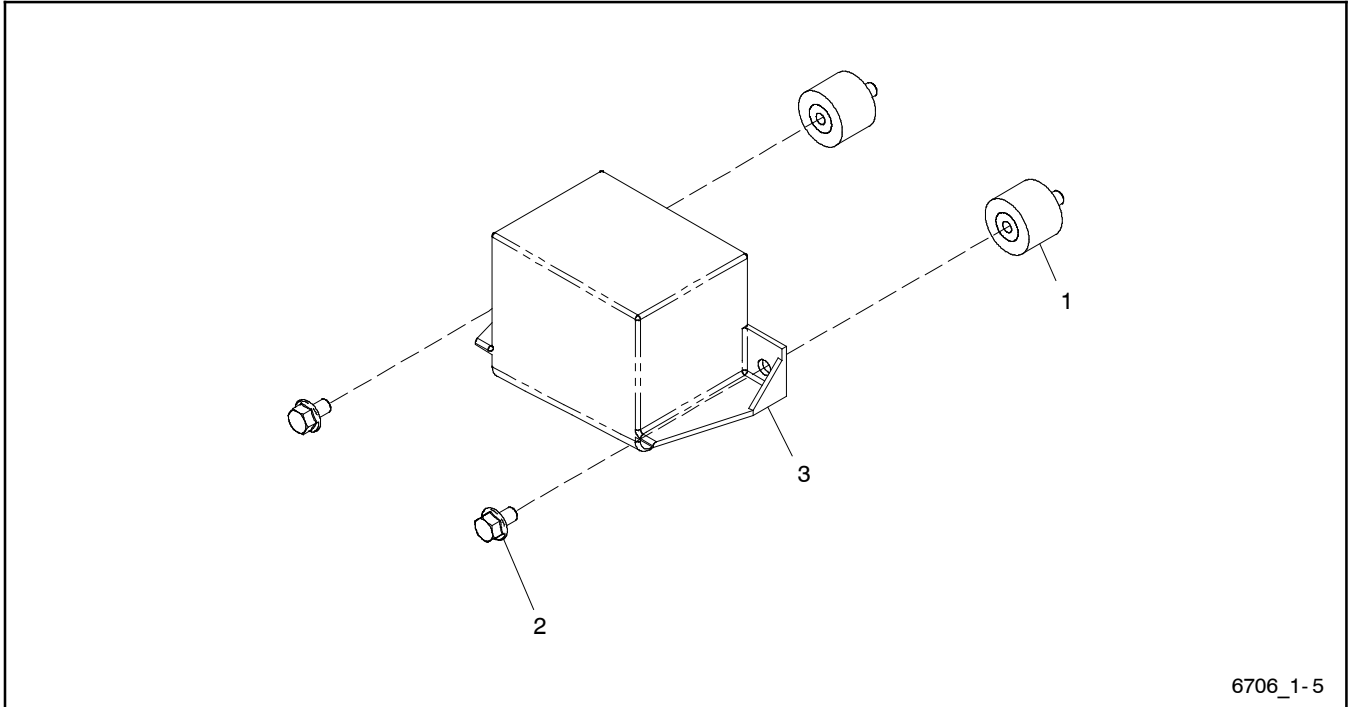
21.9L



Item	Part No.	Description	Qty.
1	GM72280	Cam sensor	1
2	GM73532	Fitting	1
3	GM72292	Sensor, O2	4
3	GM107233	Sensor, O2 (4G)	1
4	GM29608	Sensor, coolant	1
5	GM39452	Connector	1
6	GM39453	Terminal	2
7	GM39454	Seal	2
8	GM72302	Sensor, T map	4
9	GM72303	Sender, oil pressure	1
10	GM72312	Nut, M8-1.25 flange serrated	4
11	GM73533	Bolt	4
12	GM72319	Bolt, M6-1.0 x 15 flange head	4
13	GM72320	Bolt, M6-1.0 x 35 flange head	8
14	GM107452	Programmed ECU master (4G) (Standby)	1
14	GM107453	Programmed ECU slave (4G) (Standby)	1
14	GM107454	Programmed ECU master (4G) (Prime)	1
14	GM107455	Programmed ECU slave (4G) (Prime)	1
14	GM73534	Programmed ECU master (Standby)	1
14	GM75309	Programmed ECU slave (Standby)	1
14	GM107437	Programmed ECU master (Prime)	1
14	GM107438	Programmed ECU slave (Prime)	1
15	GM107439	Mount	2
16	GM73536	Fitting	1
17	GM73537	Bracket	1

1-5: Harness

14.6L, 18.3L and 21.9L

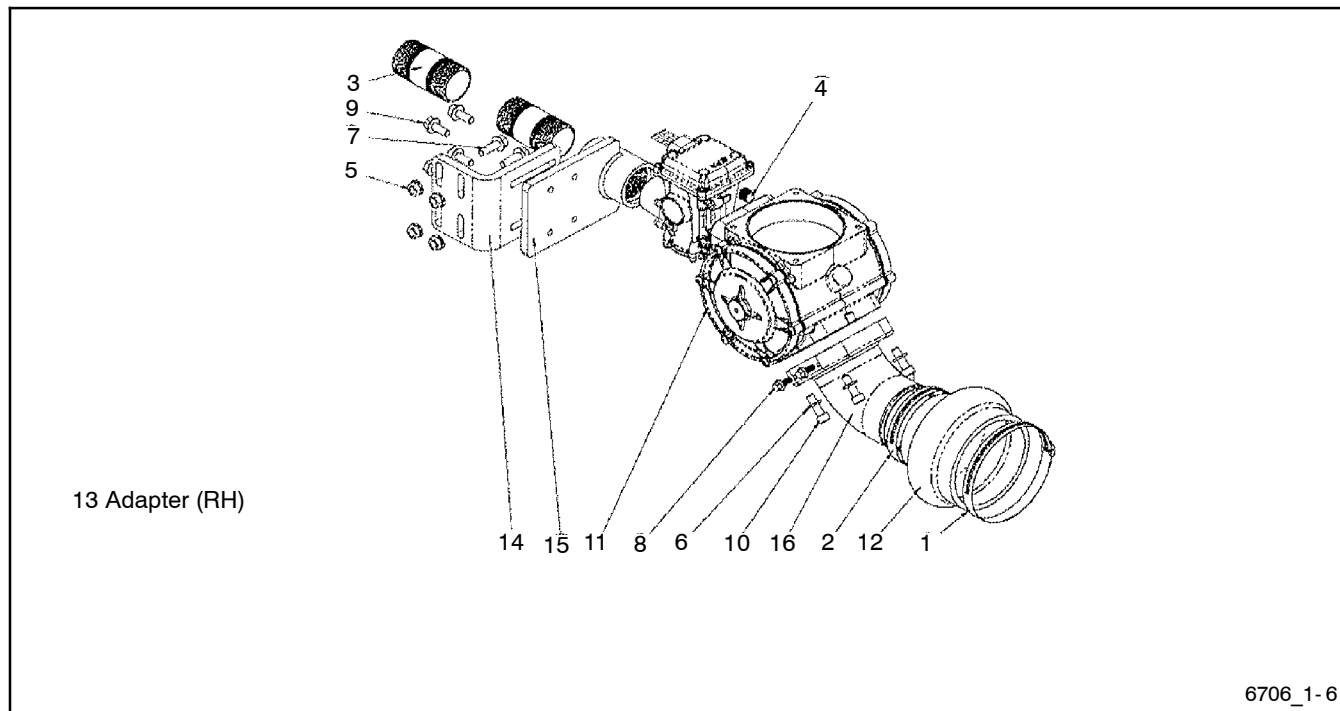


6706_1-5

Item	Part No.	Description	Qty.
1	GM72290	Isolator	2
2	GM107217	Bolt	2
3	GM107229	Master harness	1
3	GM107236	Master harness (4G)	1
4	GM107230	Slave harness	1
4	GM107237	Slave harness (4G)	1
-	GM107225	RH ignition harness,14L (not shown)	1
-	Contact Factory	RH ignition harness, 18.3/21.9L (not shown)	1
-	GM107227	LH ignition harness, 14L (not shown)	1
-	Contact Factory	LH ignition harness, 18.3/21.9L (not shown)	1

1-6: Fuel System

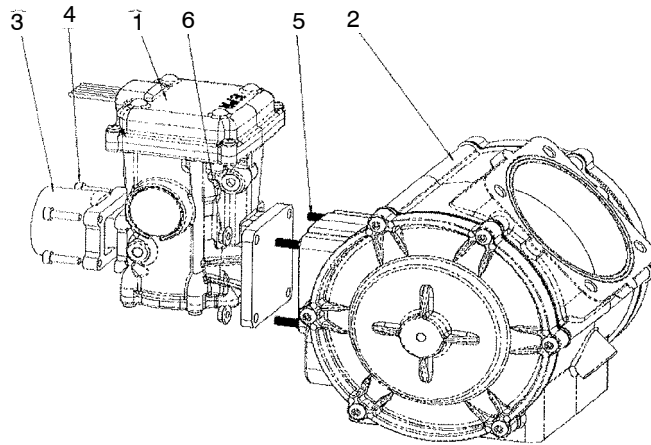
14.6L, 18.3L and 21.9L



Item	Part No.	Description	Qty.
1	GM29581	Clamp, hose, S-64 4 1/4 in.	2
2	GM28915	Clamp, hose, 5 in.	2
3	GM72295	Nipple, pipe 1 1/4 in. x 3 in. long	4
4	GM73550	Plug	2
5	GM72312	Nut, M8-1.25 flange serrated	8
6	GM69521	Washer, M8	8
7	GM73533	Bolt	8
8	GM72319	Bolt, M6-1.0 x 15 flange head	4
9	GM72321	Bolt, M8-1.25 x 20 flange head	8
10	GM69522	Bolt, M8 x 1.25 x 25 hex head	8
11	GM72329	E480 EPR kit	2
12	GM73551	Hose	2
13	GM73552	Adapter (LH)	1
14	GM73553	Bracket, base	2
15	GM73554	Bracket, top	2
16	GM73555	Adapter (RH)	1

1-7: E480 EPR

14.6L, 18.3L and 21.9L

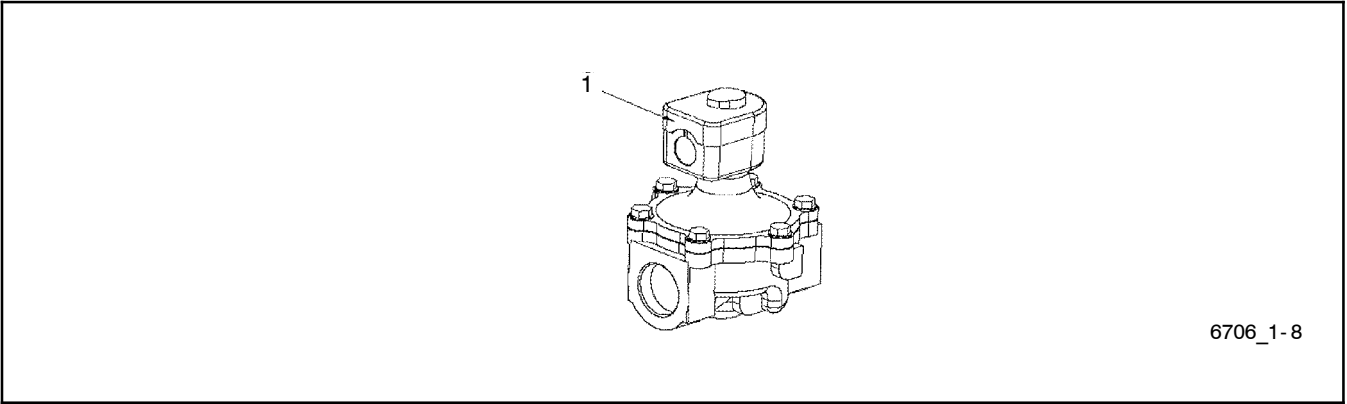


6705_1-7

Item	Part No.	Description	Qty.
1	GM69493	EPR assembly	1
2	GM69497	Mixer	1
3	GM69509	Adapter, EPR, 1 1/4 NPT	1
4	GM69524	Bolt, M4 x .70 x 16 sht hd	4
5	GM72323	Stud, M5-.80 x 25	4
6	GM72324	Nut, M5-.80 flange	4

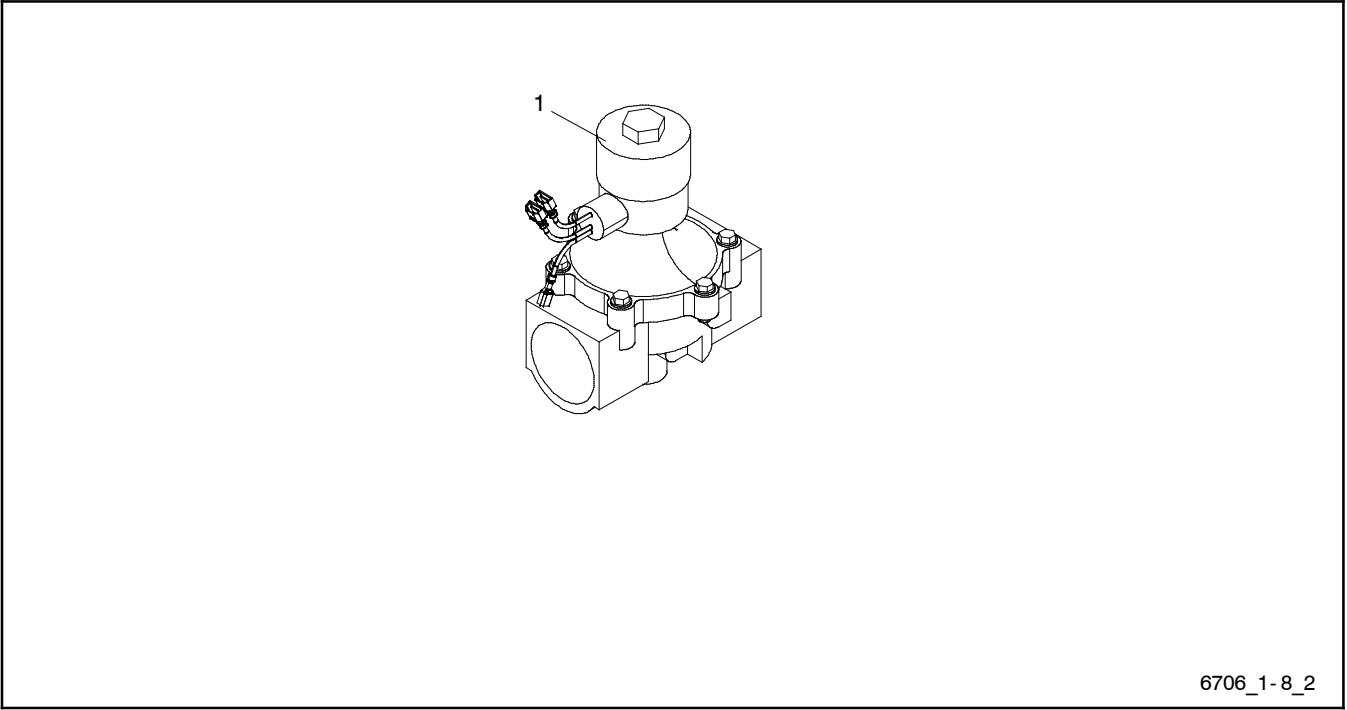
1-8: Fuel Shutoff Valve

14.6L



Item	Part No.	Description	Qty.
1	GM73531	Lock off (UL)	1

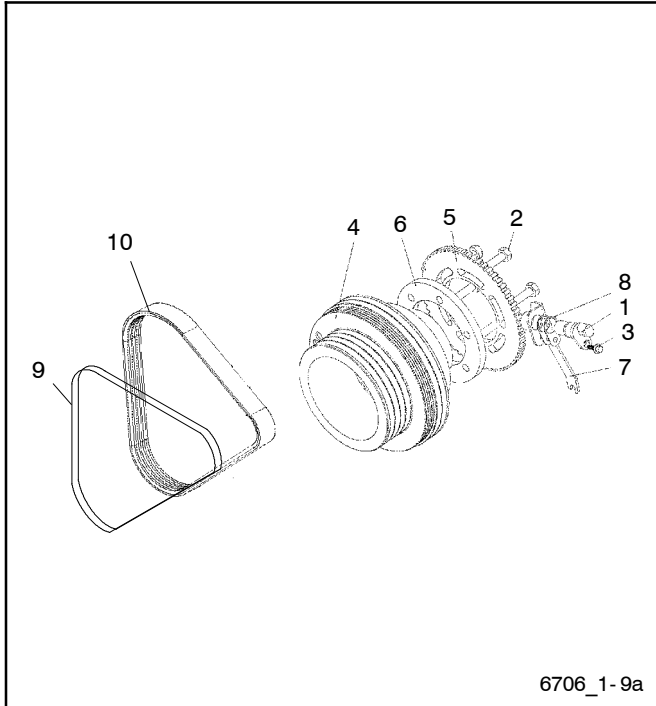
18.3L and 21.9L



Item	Part No.	Description	Qty.
1	GM69614-1	Valve, lock-off 2 in.	1

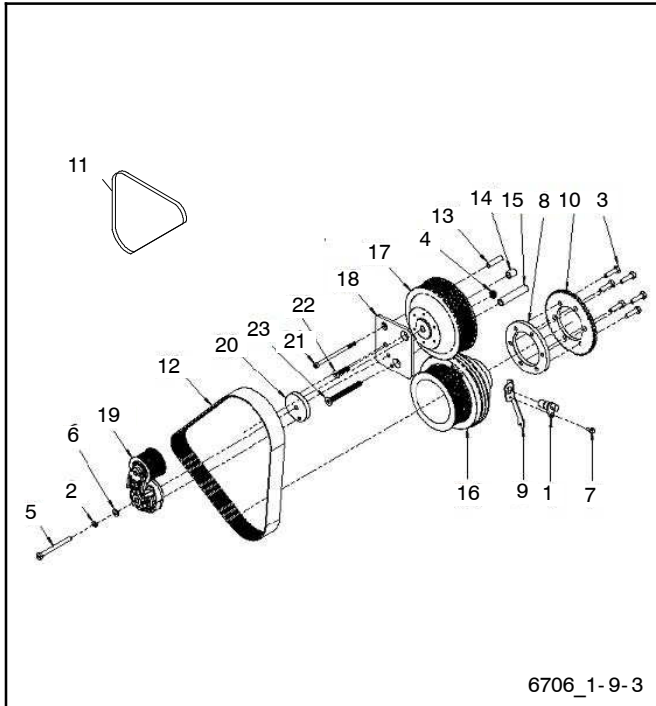
1-9: Front Drive

14.6L (Before May 2016)



Item	Part No.	Description	Qty.
1	GM72291	Sensor, speed, timing whl	1
2	GM73559	Bolt	6
3	GM72319	Bolt, M6-1.0 x 15 flange head	1
4	GM73560	Crankshaft pulley	1
5	GM73561	Crank speed wheel indicator	1
6	GM73562	Spacer	1
7	GM73563	Bracket	1
8	GM73564	Shim	2
9	GM75444	Belt, alternator/water pump	1
10	GM75443	Belt Set, Fan (1 set = 4 belts)	1

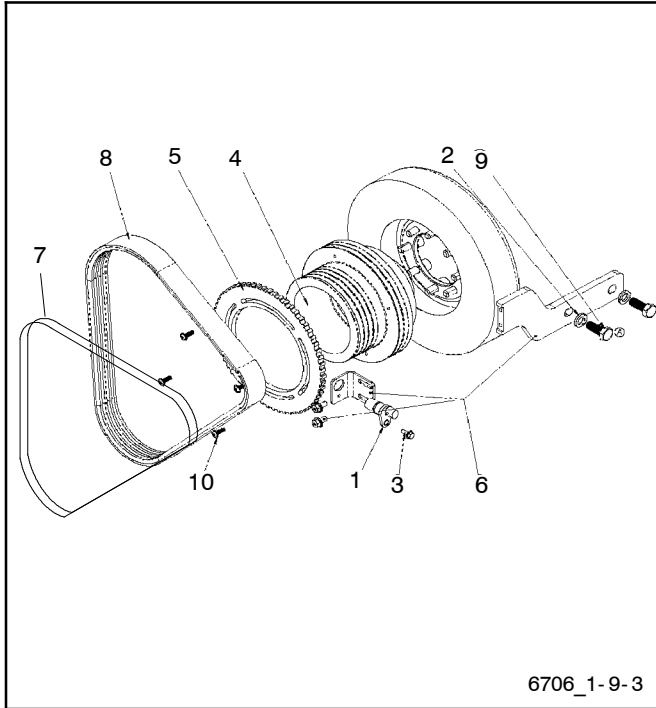
Serpentine Belt System (As of may 2016)



Item	Part No.	Description	Qty.
1	GM72291	Speed Sensor	1
2	GM72313	Washer	1
3	GM73559	Bolt	6
4	GM23739	Nut	1
5	GM101102	Bolt	1
6	GM72317	Washer	1
7	GM87613	Bolt	1
8	GM73562	Spacer	1
9	GM73563	Bracket	1
10	GM101108	Timing Wheel	1
11	GM75444	Alternator Belt	1
12	GM101110	Fan Belt	1
13	GM101111	Spacer	1
14	GM101112	Spacer	1
15	GM101113	Spacer	1
16	GM101114	Crank Pulley	1
17	GM101115	Fan Pulley	1
18	GM101116	Bracket	1
19	GM101117	Tensioner	1
20	GM101118	Spacer	1
21	GM101103	Bolt	1
22	GM101104	Bolt	1
23	GM101105	Bolt	1

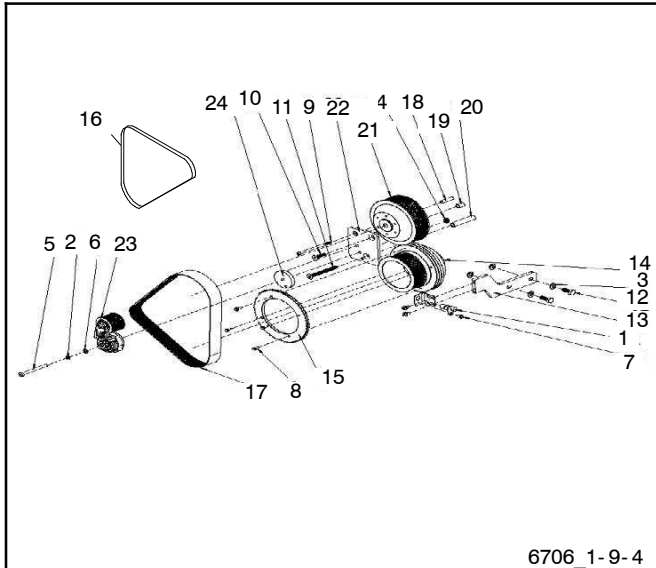
1-9: Front Drive

18.3L (Before May 2016)



Item	Part No.	Description	Qty.
1	GM72291	Sensor, speed, timing whl	1
2	GM75311	Washer	2
3	GM72319	Bolt, M6-1.0 x 15 flange head	1
4	GM75312	Crankshaft pulley	1
5	GM75313	Crankshaft timing wheel	1
6	GM75314	Bracket	1
7	GM75444	Belt, alternator/water pump	1
8	GM75443	Belt Set, Fan (1 Set = 4 Belts)	1
9	GM75315	Bolt	2
10	GM75316	Bolt	4

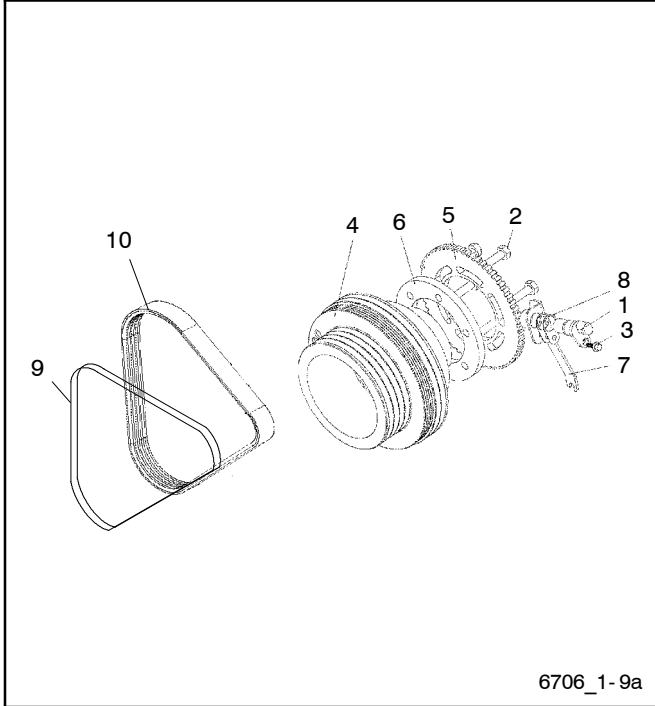
Serpentine Belt System (As of May 2016)



Item	Part No.	Description	Qty.
1	GM72291	Speed Sensor	1
2	GM72313	Washer	1
3	GM75311	Washer	4
4	GM23739	Nut	1
5	GM101102	Bolt	1
6	GM72317	Washer	1
7	GM87613	Bolt	1
8	GM72327	Bolt	4
9	GM101103	Bolt	1
10	GM101104	Bolt	1
11	GM101105	Bolt	1
12	GM101106	Bolt	2
13	GM75314	Bracket	1
14	GM101107	Crankshaft Pulley	1
15	GM101109	Timing Wheel	1
16	GM75444	Alternator Belt	1
17	GM101110	Fan Belt	1
18	GM101111	Spacer	1
19	GM101112	Spacer	1
20	GM101113	Spacer	1
21	GM101115	Fan Pulley	1
22	GM101116	Tensioner Bracket	1
23	GM101117	Tensioner	1
24	GM101118	Spacer	1

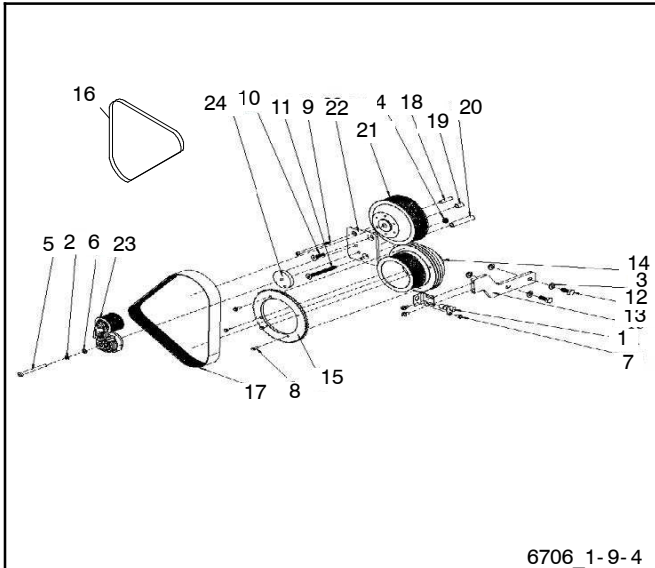
1-9: Front Drive

21.9L (Before May 2016)



Item	Part No.	Description	Qty.
1	GM72291	Sensor, speed, timing whl	1
2	GM73559	Bolt	6
3	GM72319	Bolt, M6-1.0 x 15 flange head	1
4	GM73560	Crankshaft pulley	1
5	GM73561	Crank speed wheel indicator	1
6	GM73562	Spacer	1
7	GM73563	Bracket	1
8	GM73564	Shim	2
9	GM75444	Belt, alternator/water pump	1
10	GM75443	Belt Set, Fan (1 set = 4 Belts)	1

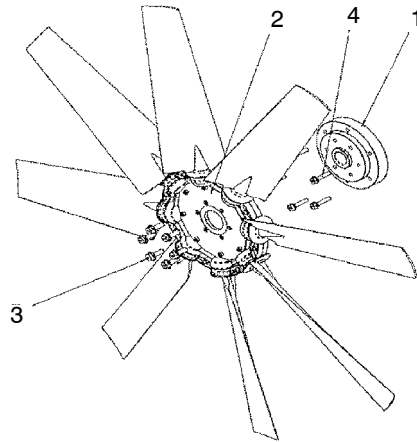
Serpentine Belt System (As of May 2016)



Item	Part No.	Description	Qty.
1	GM72291	Speed Sensor	1
2	GM72313	Washer	1
3	GM75311	Washer	4
4	GM23739	Nut	1
5	GM101102	Bolt	1
6	GM72317	Washer	1
7	GM87613	Bolt	1
8	GM72327	Bolt	4
9	GM101103	Bolt	1
10	GM101104	Bolt	1
11	GM101105	Bolt	1
12	GM101106	Bolt	2
13	GM75314	Bracket	1
14	GM101107	Crankshaft Pulley	1
15	GM101109	Timing Wheel	1
16	GM75444	Alternator Belt	1
17	GM101110	Fan Belt	1
18	GM101111	Spacer	1
19	GM101112	Spacer	1
20	GM101113	Spacer	1
21	GM101115	Fan Pulley	1
22	GM101116	Tensioner Bracket	1
23	GM101117	Tensioner	1
24	GM101118	Spacer	1

1-10: Fan

14.6L

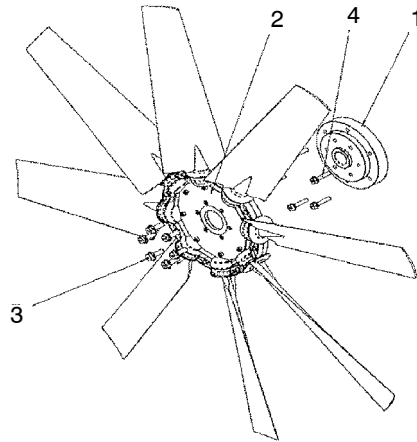


6706_1-10

Item	Part No.	Description	Qty.
1	GM72333	Spacer, fan	1
2	GM73558	Fan	1
3	GM72382	Bolt	6
4	GM72383	Bolt M8-1.25 x 40 flange gr8.8	6

1-10: Fan

18.3L

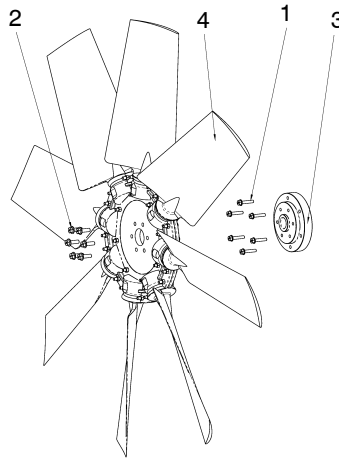


6706_1-10

Item	Part No.	Description	Qty.
1	GM72333	Spacer, fan	1
2	GM75339	Fan	1
3	GM72382	Bolt	6
4	GM75338	Bolt	6

1-10: Fan

21.9L



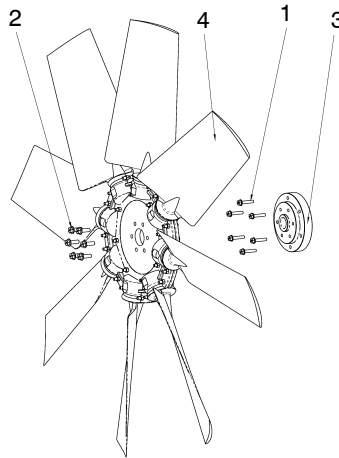
Items not shown: 5, 6

6706_1-10

Item	Part No.	Description	Qty.
1	GM110025	Bolt	6
2	GM75338	Bolt	6
3	GM72333	Spacer	1
4	GM81375	Fan	1
5	GM116558	Fan pusher (Prime Power)	1
6	GM116559	Fan puller (Prime Power)	1

1-10: Fan

21.9L (500 kW)

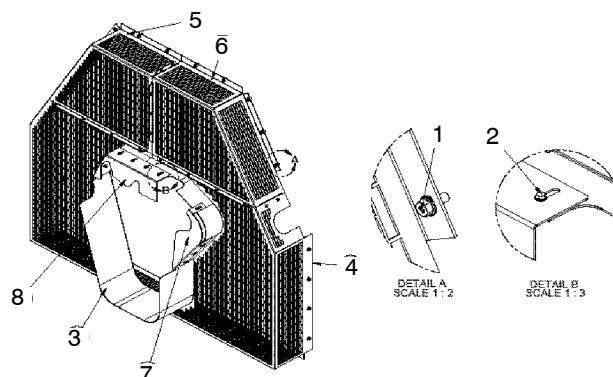


6706_1-10

Item	Part No.	Description	Qty.
1	GM110025	Bolt	6
2	GM75338	Bolt	6
3	GM72333	Spacer	1
4	GM116560	Fan	1

1-11: Belt Guard

18.3L

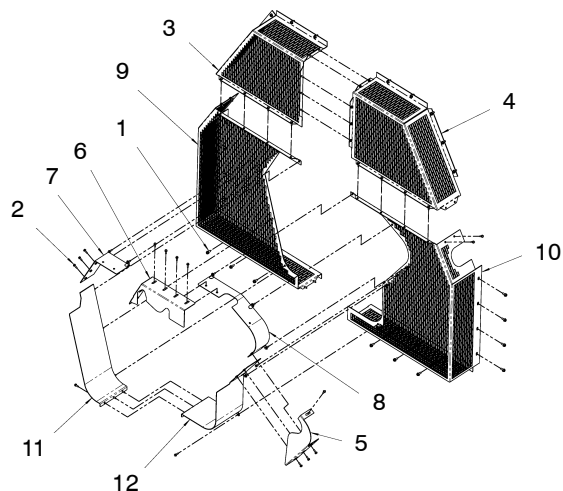


6706_1-11-2

Item	Part No.	Description	Qty.
1	GM72321	Bolt, M8-1.25 x 20 flange head	20
2	GM72327	Bolt, M6-1.0 x 20 flange head	28
3	GM75319	LH bottom guard	1
4	GM75320	RH bottom guard	1
5	GM75321	Top left fan guard	1
6	GM75322	Top right fan guard	1
7	GM74359	Crank/water pump belt guard	1
8	GM74360	Fan belt guard	1

1-11: Belt Guard

21.9L

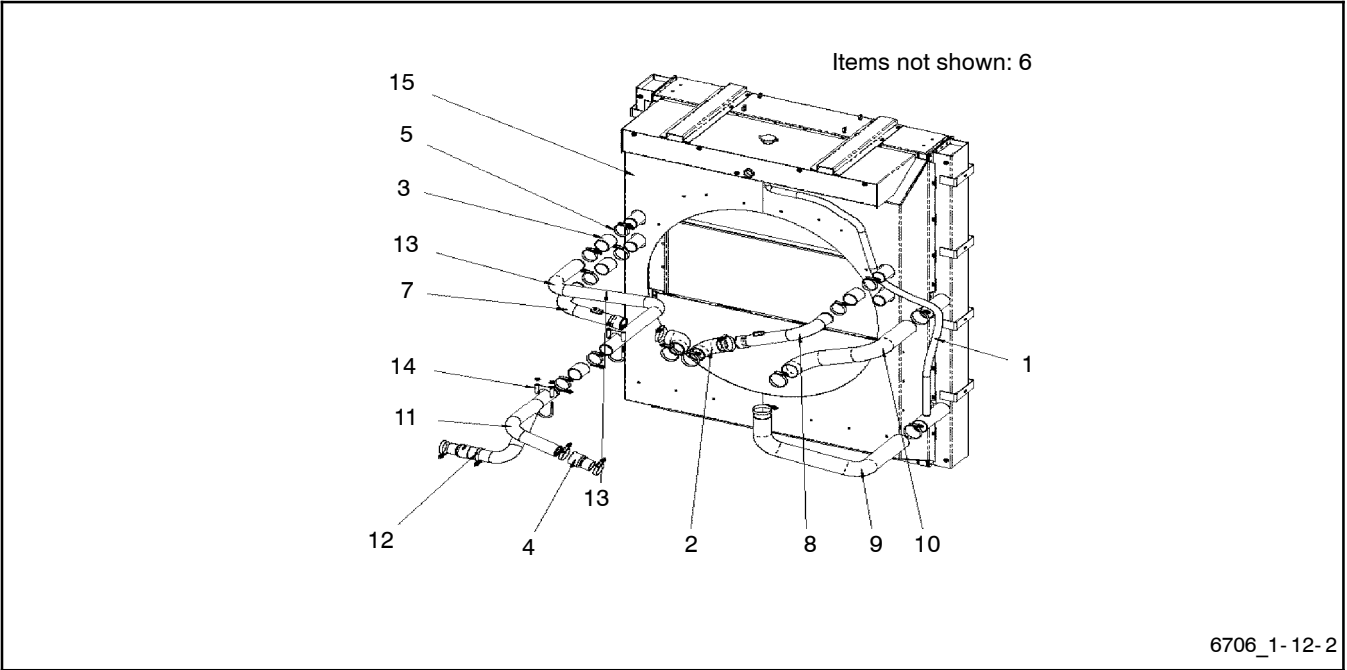


6706_1-11

Item	Part No.	Description	Qty.
1	GM72321	Bolt, M8-1.25 x 20 flange head	24
2	GM72327	Bolt, M6-1.0 x 20 flange head	45
3	GM74357	Top left belt guard	1
4	GM74358	Top right belt guard	1
5	GM74359	Crankshaft pulley guard	1
6	GM74360	Fan pulley guard	1
7	GM116561	Belt guard	1
8	GM116562	Belt guard	1
9	GM116563	Fan guard	1
10	GM116564	Fan guard	1
11	GM116565	Belt guard	1
12	GM116566	Belt guard	1

1-12: Cooling System

18.3L



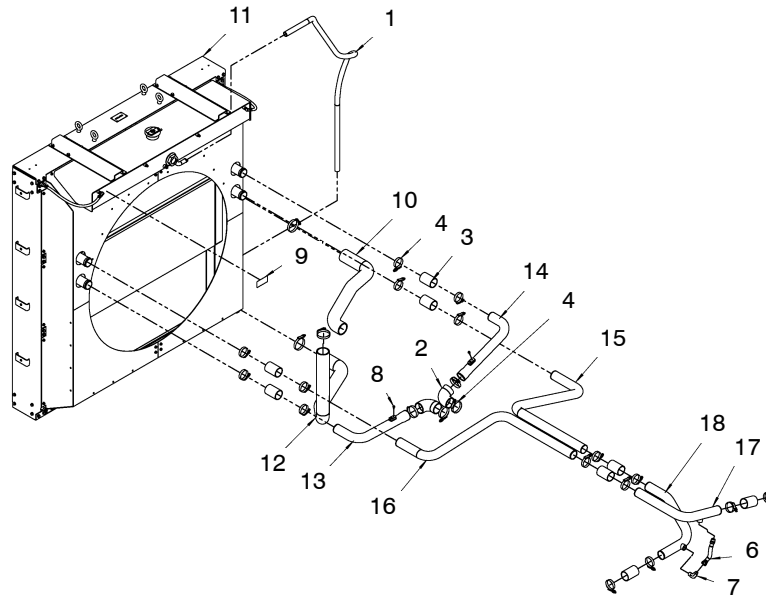
Item	Part No.	Description	Qty.
1	GM72286	Hose, heater 1 in. ID	1
2	GM74361	Silicone hose	2
3	GM72287	Hose, sil 2.5 ID x 3 lined (black)	6
4	GM28914	Hose	2
5	GM29601	Clamp, 2 3/4-3 5/8 in.	24
6	GM72319	Bolt, M6-1.0 x 15 flange head	2
7	GM75323	CAC to intake left bank tube	1
8	GM75324	CAC to intake right bank tube	1
9	GM75325	Outlet hose	1
10	GM75326	Inlet hose	1
11	GM75327	CAC rear right tube	1
12	GM75328	CAC rear left tube	1
13	GM75329	CAC front tube	2
14	GM72349	Clamp, U-bolt 2.5 in. 3/8-16	4
15	GM75330	Radiator	1

Recommended Kohler Genuine Coolant

GM109949	Coolant, 50/50 blend EG Gal.
GM109951	Coolant, 50/50 blend EG 55 gal. Drum
GM109952	Coolant, 50/50 blend EG 264 gal. Tote

1-12: Cooling System

21.9L



Items not shown: 5

6706_1-12

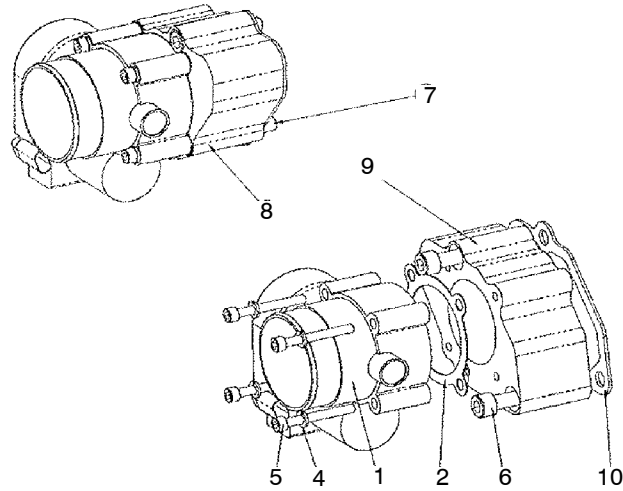
Item	Part No.	Description	Qty.
1	GM72286	Hose	1
2	GM74361	Hose	2
3	GM72287	Hose	8
4	GM29601	Clamp	28
5	GM72279	Silicone hose	4
6	GM116567	Fuel hose	1
7	GM116568	Orifice	1
8	GM87613	Bolt	2
9	-	Sticker	1
10	GM116569	Inlet tube	1
11	GM116570	Radiator	1
12	GM116571	Outlet tube	1
13	GM74364	Tube, CAC to Int left	1
14	GM74365	Tube, CAC to Int right	1
15	GM74367	Tube, Comp to CAC LF	1
16	GM74366	Tube, Comp to CAC RF	1
17	GM116572	Tube, CAC- Comp RR	1
18	GM74371	Tube, CAC- Comp LR	1
-	GM116573	Radiator cap (not shown)	1
-	GM116574	Sight gauge (not shown)	1
-	GM116575	Tank (not shown)	1
-	GM116576	Inter cooler (not shown)	1
-	GM116577	Air bleed fitting (not shown)	1

Recommended Kohler Genuine Coolant

GM109949	Coolant, 50/50 blend EG Gal.
GM109951	Coolant, 50/50 blend EG 55 gal. Drum
GM109952	Coolant, 50/50 blend EG 264 gal. Tote

1-14: Intake

14.6L, 18.3L and 21.9L



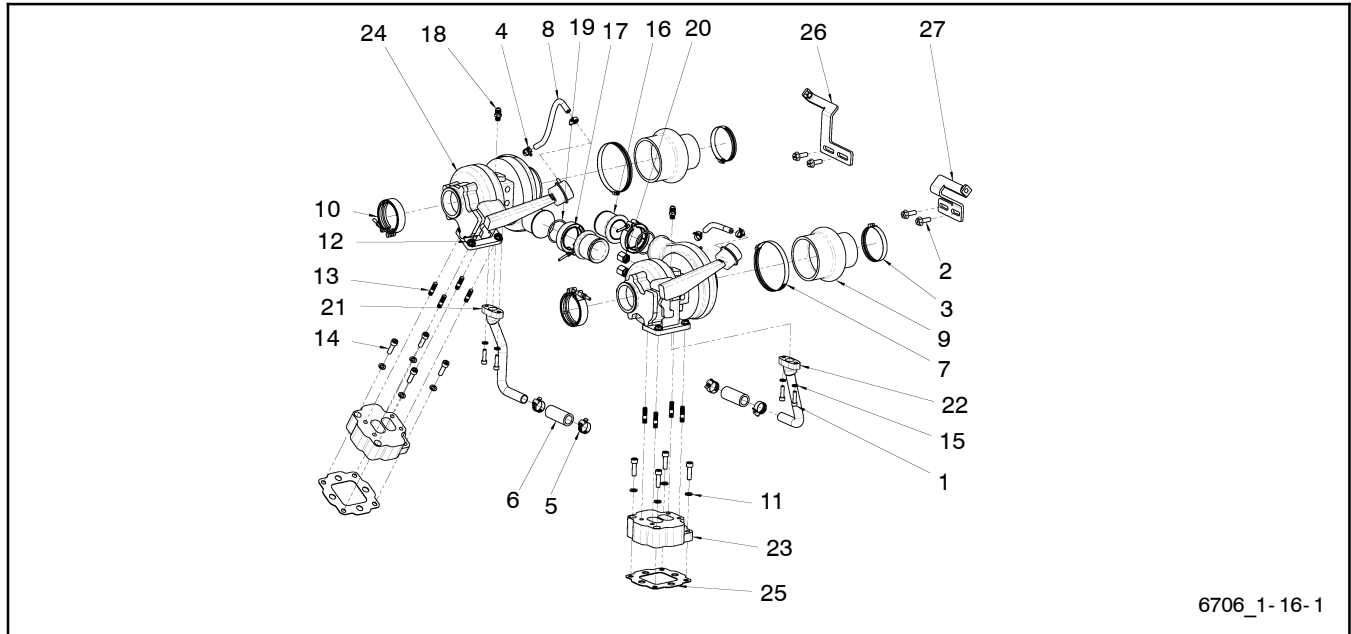
Item not shown: 3

6706_1-14

Item	Part No.	Description	Qty.
1	GM29586	Valve, throttle, 60 mm	2
2	GM29592	Gasket (manifold adapter)	2
3	GM72313	Washer, lock M10	6
4	GM28963	Washer, lock M6	8
5	GM72316	Bolt, M6-1.0 x 50 skt hd	8
6	GM73567	Bolt	4
7	GM73568	Bolt	2
8	GM73569	Throttle plate (LH)	1
9	GM73570	Throttle plate (RH)	1
10	GM73571	Gasket	2

1-16: Turbocharger

14.6L

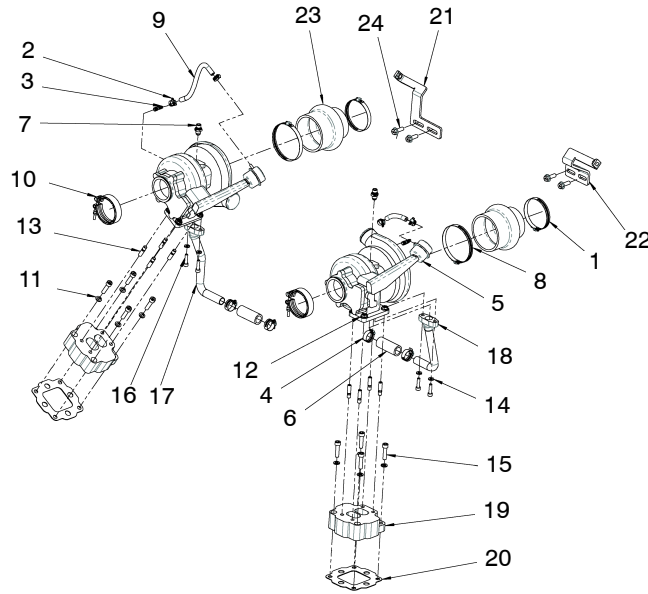


6706_1-16-1

Item	Part No.	Description	Qty.
1	GM110024	Bolt	4
2	GM110025	Bolt	4
3	GM28887	Clamp, Hose, 3 1/2 in.	2
4	GM28892	Clamp, 3/8 in. (M4)	4
5	GM28893	Clamp, Hose, 1 1/4 in.	4
6	GM28901	Hose, Oil Drain, 7/8 in. ID Qty.1 = 4 in.	1
7	GM28915	Clamp, hose, 5 in.	2
8	GM28916	Hose, Pushlock Qty..1 = 18 in. section	1
9	GM28926	Hose, Hump Reducer	2
10	GM28930	Clamp, V- Band, 2 3/4 in.	2
11	GM72313	Washer, lock M10	8
12	GM23739	Nut, M10 x 1.5	8
13	GM72315	Stud, M10- 1.50 x 40, grade 8.8	8
14	GM73568	Bolt	8
15	GM69521	Washer, M8	4
16	GM110026	Tube	2
17	GM110027	Clamp	2
18	GM75332	Fitting	2
19	GM110028	O- Ring	2
20	GM110029	Cap	4
21	GM75335	LH oil drain tube	1
22	GM75336	RH oil drain tube	1
23	GM75337	Adaptor	2
24	GM110030	Right Turbocharger	1
24	GM110031	Left Turbocharger	1
25	GM74377	Gasket	2
26	GM110017	Bracket, Adapter Mnt- L	1
27	GM110018	Bracket, Adapter Mnt- R	1
	GM110032	Turbo Gasket (Kit)	1
	GM110033	Waste Gate, Turbo	2

1- 16: Turbocharger, continued

18.3L

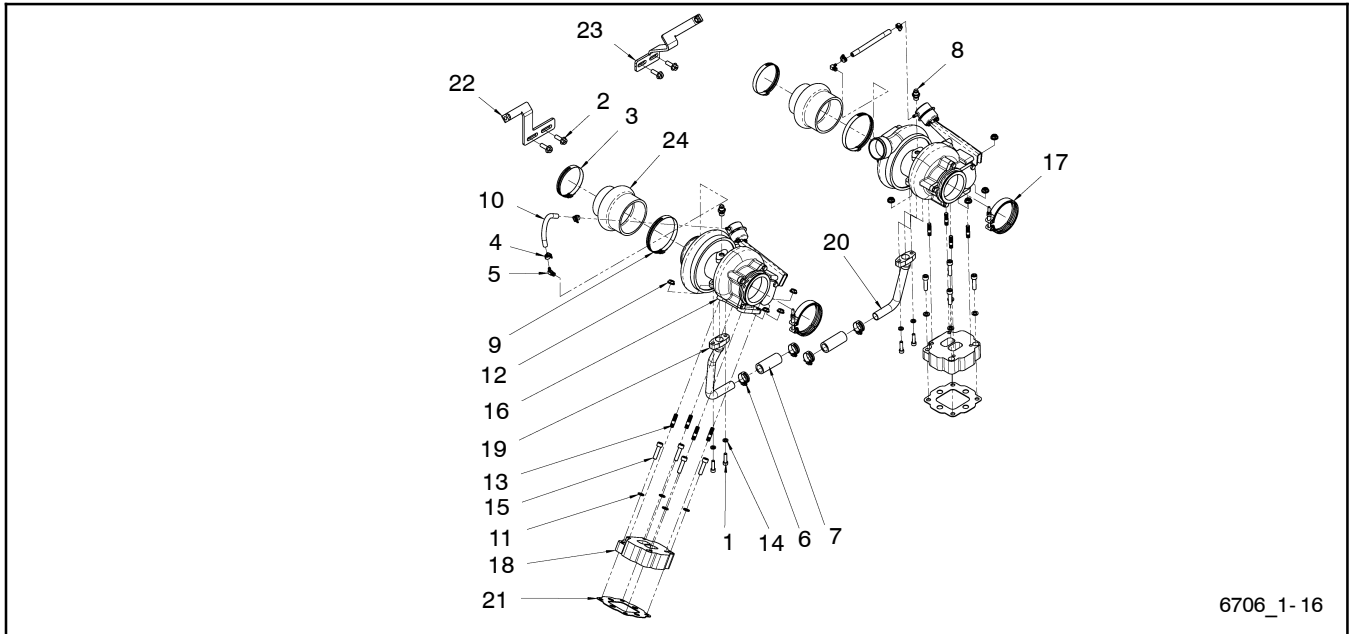


6706_1- 16- 2

Item	Part No.	Description	Qty.
1	GM28887	Clamp, Hose, 3 1/2 in.	2
2	GM28892	Clamp, 3/8 in. (M4)	4
3	GM29583	Fitting, 1/8 MPT x 1/4 Hosebarb 90 deg. Elbow	2
4	GM28893	Clamp, Hose, 1 1/4 in.	4
5	GM110022	Turbocharger, Right Master	1
5	GM110023	Turbocharger, Left Slave	1
6	GM28901	Hose, Oil Drain, 7/8 in. ID Qty.1 = 4 in	2
7	GM28903	Fitting, Oil Supply Turbo	2
8	GM28915	Clamp, hose, 5 in.	2
9	GM28916	Hose, Pushlock Qty..1 = 18 inch section	1
10	GM28930	Clamp, V- Band, 2 3/4 in.	2
11	GM72313	Washer, lock M10	8
12	GM23739	Nut, M10 x 1.5	8
13	GM72315	Stud, M10- 1.50 x 40, grade 8.8	1
14	GM69521	Washer, M8	1
15	GM110013	Bolt	1
16	GM110012	Bolt	1
17	GM75335	LH oil drain tube	1
18	GM75336	RH oil drain tube	1
19	GM75337	Adaptor	2
20	GM74377	Gasket	2
21	GM110017	Bracket, Adapter Mnt- L	1
22	GM110018	Bracket, Adapter Mnt- R	1
23	GM110019	Hose, Hump Reducer	2
24	GM72382	Bolt	4
25	GM28929	Gasket, Oil Drain (not shown)	1
26	GM28928	Gasket, Turbocharger (not shown)	1

1- 16: Turbocharger, continued

21.9L

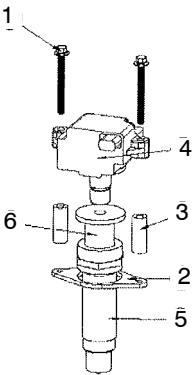


6706_1- 16

Item	Part No.	Description	Qty.
1	GM110012	Bolt	4
2	GM110025	Bolt	4
3	GM28887	Clamp, Hose, 3 1/2 in.	2
4	GM28892	Clamp, 3/8" (M4)	4
5	GM29583	Fitting, 1/8 MPT x 1/4 Hosebarb 90 deg. Elbow	2
6	GM28893	Clamp, Hose, 1 1/4 in.	4
7	GM28901	Hose, Oil Drain, 7/8 in. ID Qty.1 = 4 in	1
8	GM28903	Fitting, Oil Supply Turbo	2
9	GM28915	Clamp, hose, 5 in.	2
10	GM28916	Hose, Pushlock Qty..1 = 18 inch section	1
11	GM72313	Washer, lock M10	8
12	GM23739	Nut, M10 x 1.5	8
13	GM72315	Stud, M10- 1.50 x 40, grade 8.8	8
14	GM69521	Washer, M8	4
15	GM110013	Bolt	8
16	GM110014	Master Turbocharger	1
16	GM110015	Slave Turbocharger	1
17	GM110016	Clamp	2
18	GM74372	Adaptor	2
19	GM74373	Oil drain tube (left)	1
20	GM74374	Oil drain tube (right)	1
21	GM74377	Gasket	2
22	GM110017	Bracket, Adapter Mnt- L	1
23	GM110018	Bracket, Adapter Mnt- R	1
24	GM110019	Hose, Hump Reducer	2
25	GM110020	Oil Drain Gasket (not shown)	1
26	GM110021	Turbo Gasket (not shown)	1

1- 18: Ignition Coil Assembly

14.6L/21.9L

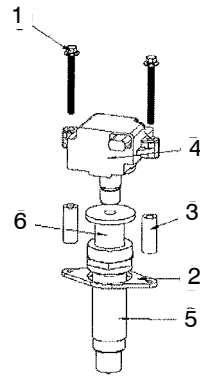


6706_1-18

Item	Part No.	Description	Qty.
1	GM73543	Bolt	2
2	GM73544	Flange	1
3	GM73545	Spacer	2
4	GM73546	Ignition coil	1
5	GM73547	Mount	1
6	GM73548	Boot	1

1- 18: Ignition Coil Assembly, continued

18.3L

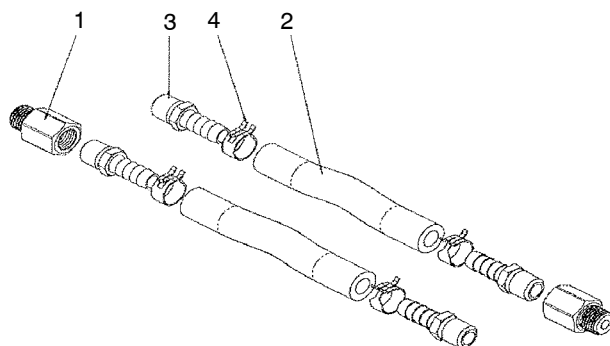


6706_1-18

Item	Part No.	Description	Qty.
1	GM73543	Bolt	2
2	GM73544	Flange	1
3	GM73545	Spacer	2
4	GM73546	Ignition coil	1
5	GM73547	Mount	1
6	GM73548	Boot	1
7	GM75317	RH Ignition harness	1
8	GM75318	LH Ignition harness	1

1-19: Air Bleed

14.6L, 18.3L and 21.9L

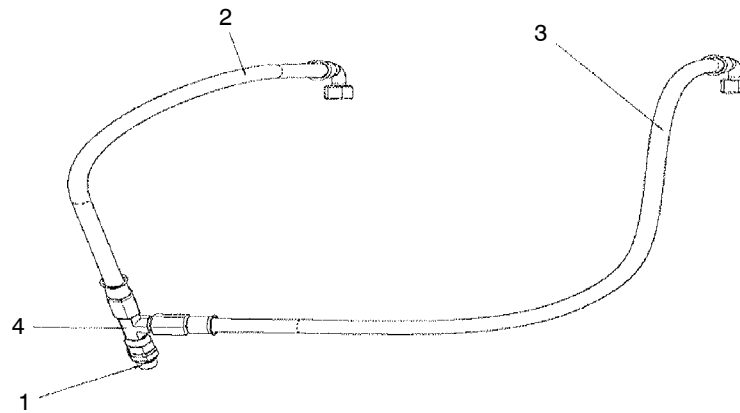


6706_1-19

Item	Part No.	Description	Qty.
1	GM73566	Fitting	2
2	GM39417	Hose, heater 3/8 in. ID, 19 in.	1
3	GM72289	Ftg, 3/8 in. hse brb x 1/4 in. mpt	4
4	GM69488	Clamp, hose 3/8 (spring type)	4

1-20: Oil Supply

14.6L, 18.3L and 21.9L

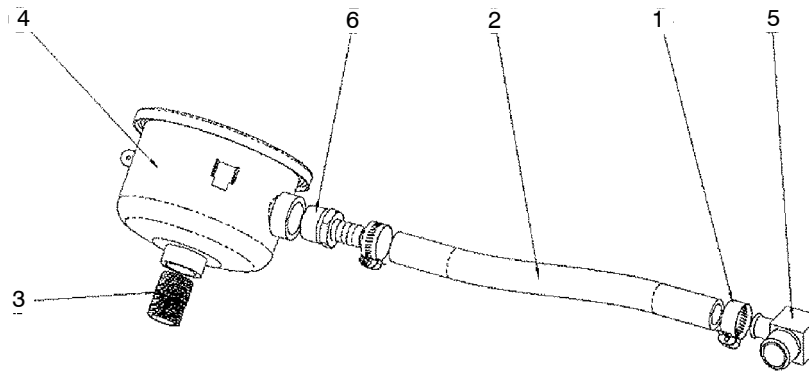


6706_1-20

Item	Part No.	Description	Qty.
1	GM28903	Fitting, oil supply turbo	1
2	GM73572	Hose	1
3	GM73573	Hose	1
4	GM73574	Fitting	1

1-21: PCV

14.6L, 18.3L and 21.9L

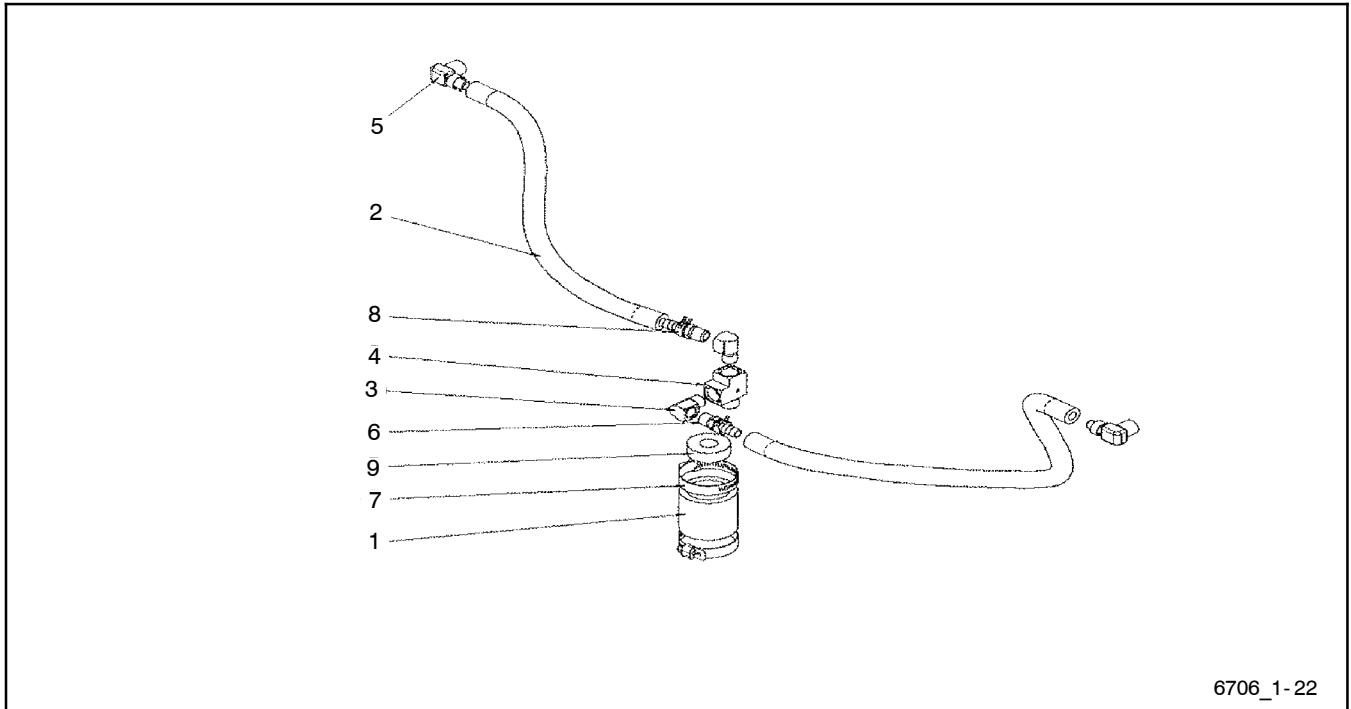


6706_1-21

Item	Part No.	Description	Qty.
1	GM16144	Clamp, hose 1"	4
2	GM69492	Tube, 0.625 ID x 3 in.	2
3	GM16206	Pipe, closed nipple, 3/4"	2
4	GM73575	Separator filter (includes element GM70877)	2
5	GM73576	Fitting	2
6	GM73577	Fitting	2

1-22: CCV

14.6L, 18.3L and 21.9L



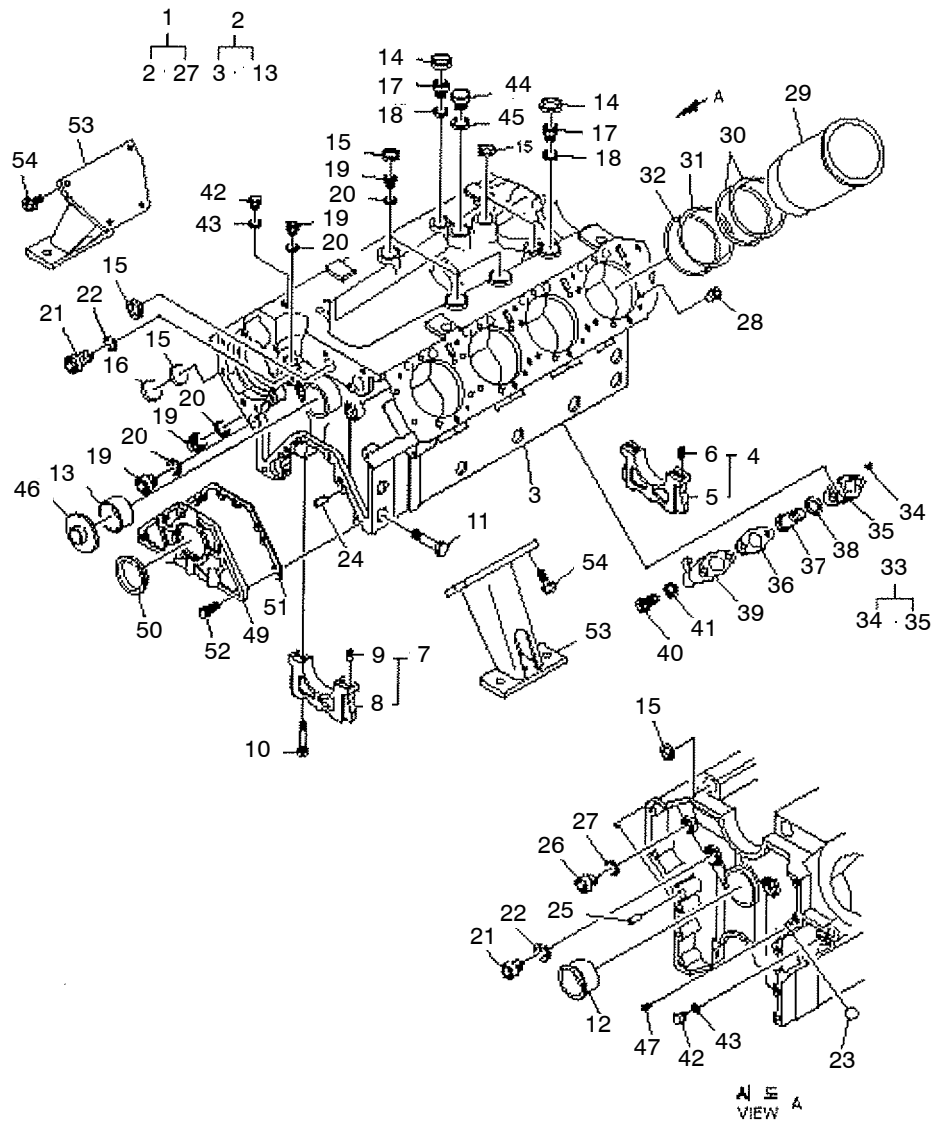
6706_1-22

Item	Part No.	Description	Qty.
1	GM73578	Hose	1
2	GM16158	Hose, PCV, 3/8"	2
3	GM73579	Elbow	2
4	GM73580	Tee	1
5	GM66208	Fitting, 3/8MPT x 3/8 90 deg.	2
6	GM72289	Ftg, 3/8 in. hse brb x 1/4 in. mpt	2
7	GM28915	Clamp, hose, 5 in.	2
8	GM69488	Clamp, hose 3/8 (spring type)	4
9	GM73581	Breather adapter	1

Notes

2-1: Cylinder Block

14.6L



6705_2-1

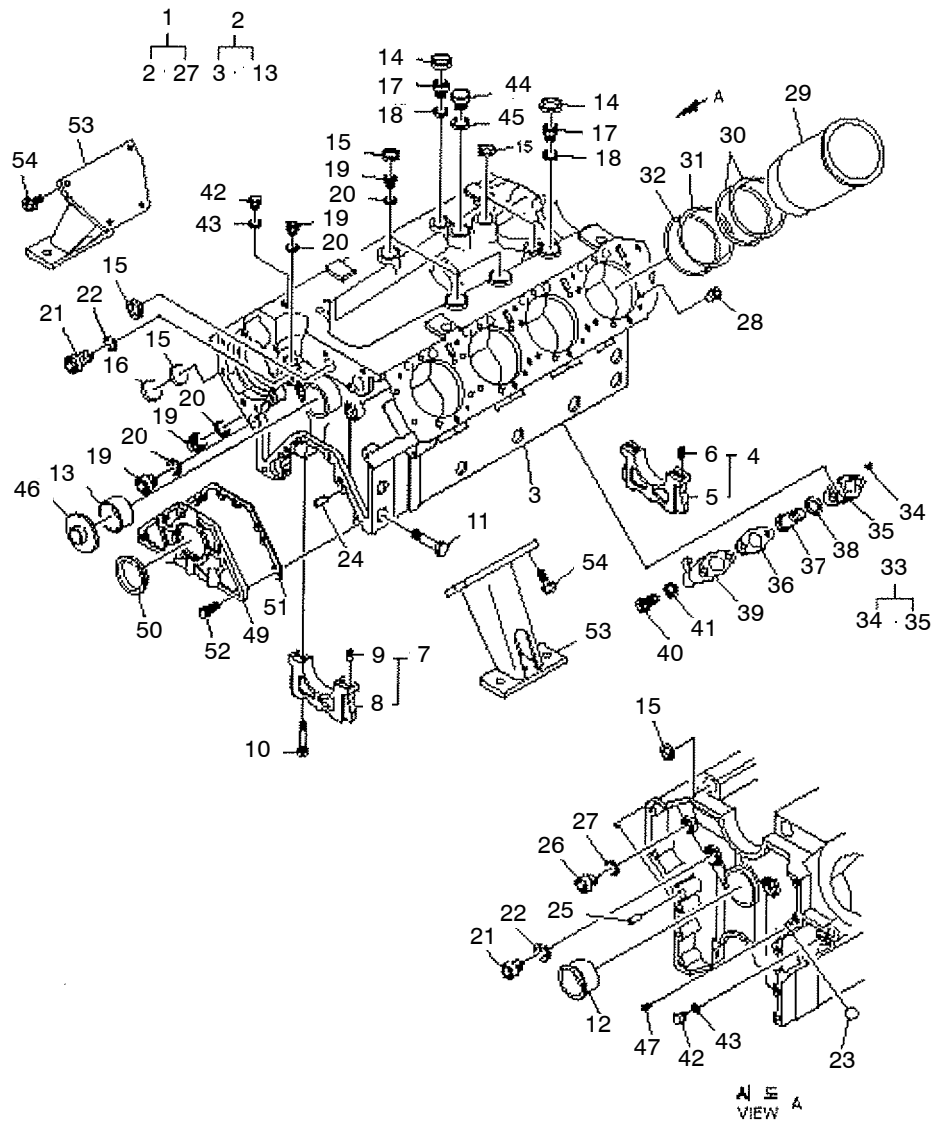
2-1: Cylinder Block

14.6L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73582	Cylinder block assy.	1	28	GM73602	Spacer	16
2	GM73583	Cylinder block assy.	1	29	GM73603	Cylinder liner	8
3	GM73584	Cylinder block	1	30	GM73604	O-ring	16
4	GM73585	Bearing cap assy.	1	31	GM73605	O-ring	8
5	GM73586	Bearing cap	1	32	GM73606	O-ring	8
6	GM73587	Dowel pin	2	33	GM73607	Flange assy.	8
7	GM73588	Bearing cap assy.	4	34	GM73608	Spiral pin	1
8	GM73589	Bearing cap	1	35	GM73609	Oil spray nozzle flange	1
9	GM73590	Dowel pin	2	36	GM73610	Gasket	8
10	GM73591	Bearing cap bolt	10	37	GM73611	Hollow screw	8
11	GM73592	Hex bolt	10	38	GM72066	Seal ring	8
12	GM73593	Camshaft bush	1	39	GM73612	Oil spray nozzle assy.	8
13	GM73594	Camshaft bush	1	40	GM73613	Hex bolt	16
14	GM73595	Core plug	2	41	GM72041	Spring washer	16
15	GM73596	Core plug	10	42	GM73614	Plug screw	2
16	GM72253	Core plug	2	43	GM72066	Seal ring	2
17	GM72240	Plug screw	2	44	GM73615	Plug screw	1
18	GM72071	Seal ring	2	45	GM73616	Seal ring	1
19	GM72242	Plug screw	6	46	GM73617	Cover	1
20	GM72073	Seal ring	6	47	GM73618	Core plug	1
21	GM73597	Plug screw	4	49	GM73619	Oil seal holder	1
22	GM73598	Seal ring	4	50	GM73620	Oil seal	1
23	GM73599	Steel ball	1	51	GM73621	Seal holder gasket	1
24	GM73600	Dowel pin	2	52	GM73622	Bolt assy.	6
25	GM73601	Dowel pin	2	53	GM73623	Engine mounting bracket	2
26	GM72239	Plug screw	1	53	GM73624	Engine mounting bracket	2
27	GM72070	Seal ring	1	54	GM73625	Bolt assy.	8

2-1: Cylinder Block, continued

18.3L



6705_2-1

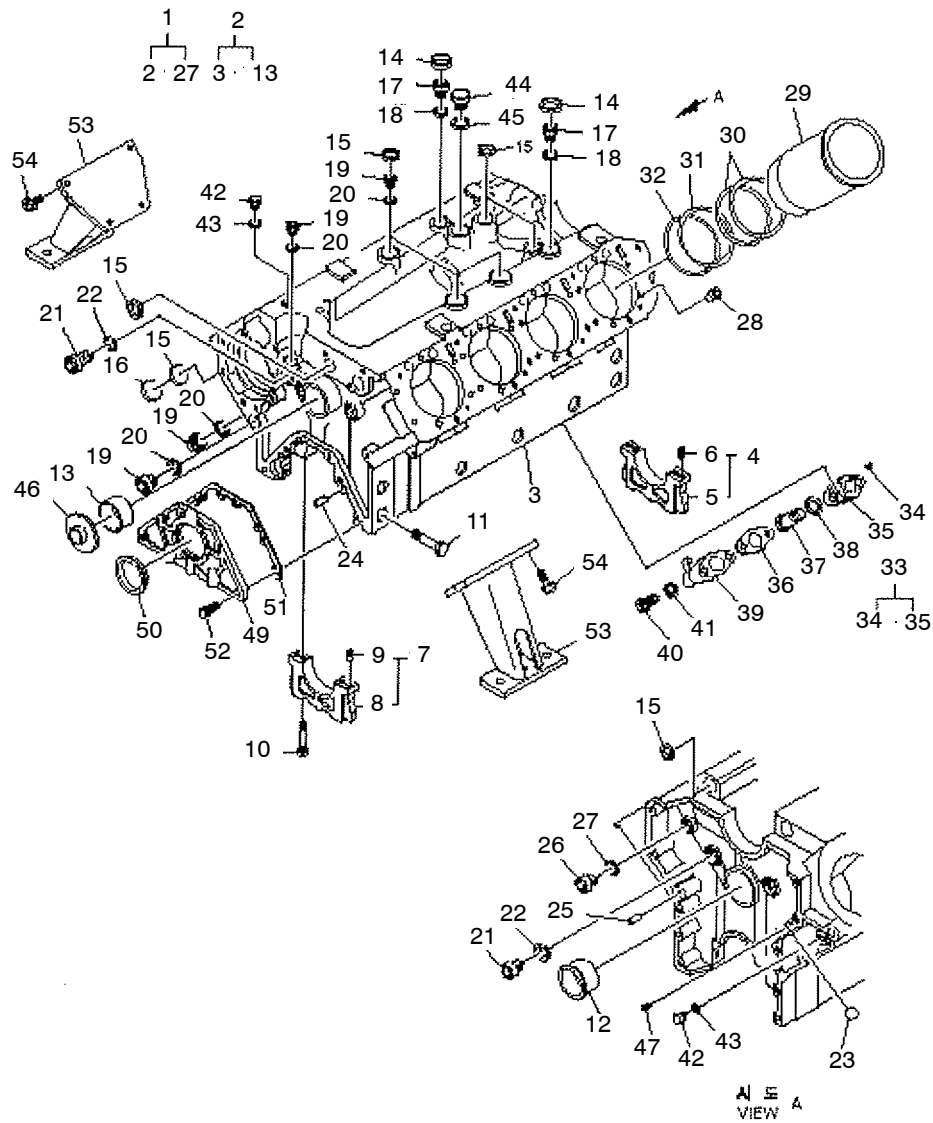
2-1: Cylinder Block, continued

18.3L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM75340	Cylinder block assy.	1	28	GM73602	Spacer	20
2	GM75341	Cylinder block assy.	1	29	GM73603	Cylinder liner	10
3	GM75342	Cylinder block	1	30	GM73604	O-ring	20
4	GM74381	Bearing cap assy.	1	31	GM73605	O-ring	10
5	GM73586	Bearing cap	1	32	GM73606	O-ring	10
6	GM73587	Dowel pin	2	33	GM73607	Flange assy.	10
7	GM73588	Bearing cap assy.	5	34	GM73608	Spiral pin	1
8	GM73589	Bearing cap	1	35	GM73609	Oil spray nozzle flange	1
9	GM73590	Dowel pin	2	36	GM73610	Gasket	10
10	GM73591	Bearing cap bolt	12	37	GM73611	Hollow screw	10
11	GM73592	Hex bolt	12	38	GM72066	Seal ring	10
12	GM73593	Camshaft bush	1	39	GM73612	Oil spray nozzle assy.	10
13	GM73594	Camshaft bush	5	40	GM73613	Hex bolt	20
14	GM73595	Core plug	2	41	GM72041	Spring washer	20
15	GM73596	Core plug	11	42	GM73770	Plug screw	2
16	GM72253	Core plug	3	43	GM72066	Seal ring	2
17	GM72240	Plug screw	2	44	GM73615	Plug screw	1
18	GM72071	Seal ring	2	45	GM73616	Seal ring	1
19	GM72242	Plug screw	6	46	GM73614	Screw plug	1
20	GM72073	Seal ring	6	47	GM73617	Cover	1
21	GM73597	Plug screw	4	49	GM73619	Oil seal holder	1
22	GM73598	Seal ring	4	50	GM73620	Oil seal	1
23	GM73599	Steel ball	1	51	GM73621	Seal holder gasket	1
24	GM73600	Dowel pin	2	52	GM73622	Bolt assy.	6
25	GM73601	Dowel pin	2	53	GM73623	Engine mounting bracket	2
26	GM72239	Plug screw	1	53	GM73624	Engine mounting bracket	2
27	GM72070	Seal ring	1	54	GM73625	Bolt assy.	8

2-1: Cylinder Block, continued

21.9L



6705_2-1

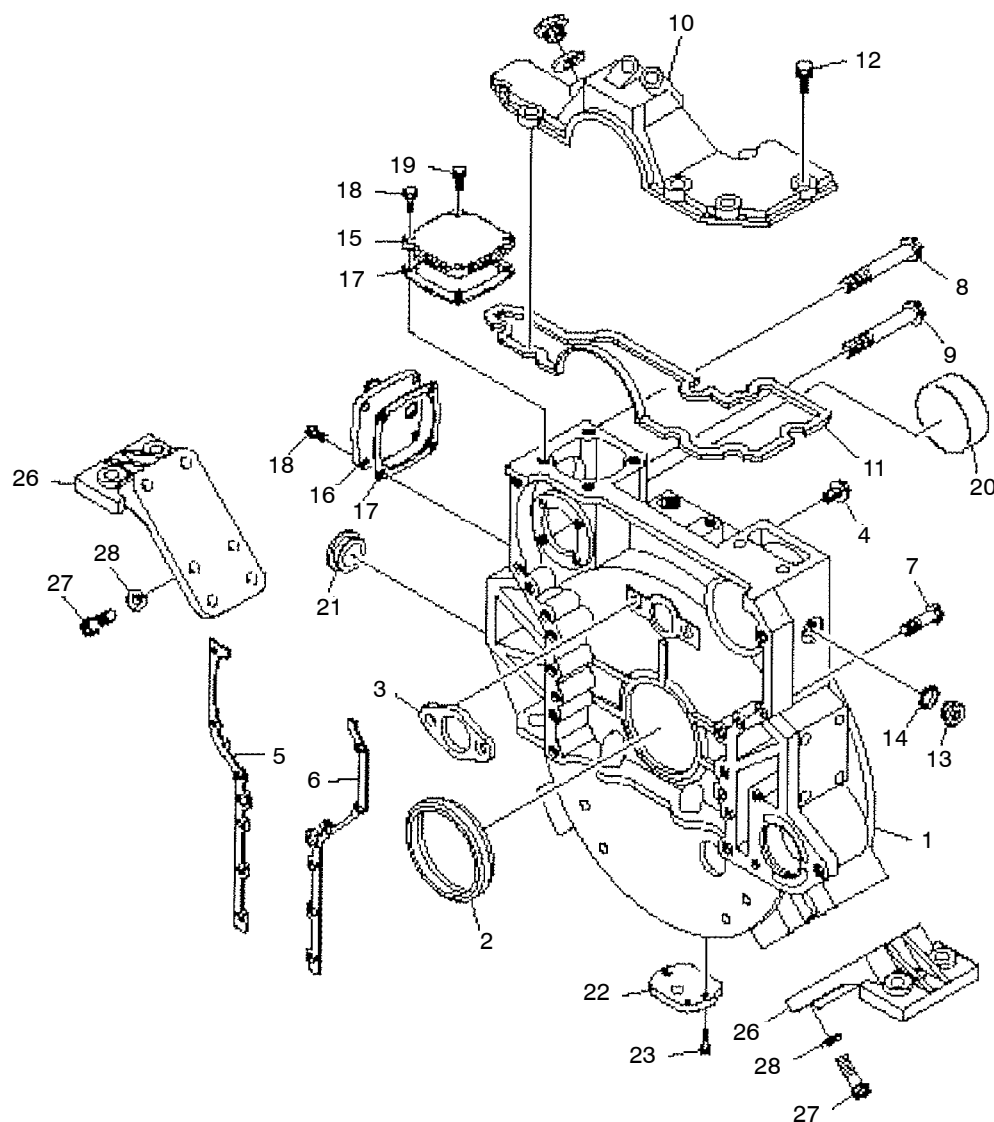
2-1: Cylinder Block, continued

21.9L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74378	Cylinder block assy.	1	28	GM73602	Spacer	24
2	GM74379	Cylinder block assy.	1	29	GM73603	Cylinder liner	12
3	GM74380	Cylinder block	1	30	GM73604	O-ring	24
4	GM74381	Bearing cap assy.	1	31	GM73605	O-ring	12
5	GM73586	Bearing cap	1	32	GM73606	O-ring	12
6	GM73587	Dowel pin	2	33	GM73607	Flange assy.	12
7	GM73588	Bearing cap assy.	6	34	GM73608	Spiral pin	1
8	GM73589	Bearing cap	1	35	GM73609	Oil spray nozzle flange	1
9	GM73590	Dowel pin	2	36	GM73610	Gasket	12
10	GM73591	Bearing cap bolt	14	37	GM73611	Hollow screw	12
11	GM73592	Hex bolt	14	38	GM72066	Seal ring	12
12	GM73593	Camshaft bush	1	39	GM73612	Oil spray nozzle assy.	12
13	GM73594	Camshaft bush	6	40	GM73613	Hex bolt	24
14	GM73595	Core plug	2	41	GM72041	Spring washer	24
15	GM73596	Core plug	16	42	GM73614	Plug screw	2
16	GM72253	Core plug	4	43	GM73799	Seal ring	2
17	GM72240	Plug screw	2	44	GM73615	Plug screw	1
18	GM72071	Seal ring	2	45	GM73616	Seal ring	1
19	GM72242	Plug screw	10	46	GM72066	Seal ring	1
20	GM72073	Seal ring	10	47	GM73617	Cover	1
21	GM73597	Plug screw	4	49	GM73619	Oil seal holder	1
22	GM73598	Seal ring	4	50	GM73620	Oil seal	1
23	GM73599	Steel ball	1	51	GM73621	Seal holder gasket	1
24	GM73600	Dowel pin	2	52	GM73622	Bolt assy.	6
25	GM73601	Dowel pin	2	53	GM73623	Engine mounting bracket	2
26	GM72239	Plug screw	1	53	GM73624	Engine mounting bracket	2
27	GM72070	Seal ring	1	54	GM73625	Bolt assy.	8

2-3: Flywheel Housing

14.6L, 18.3L and 21.9L



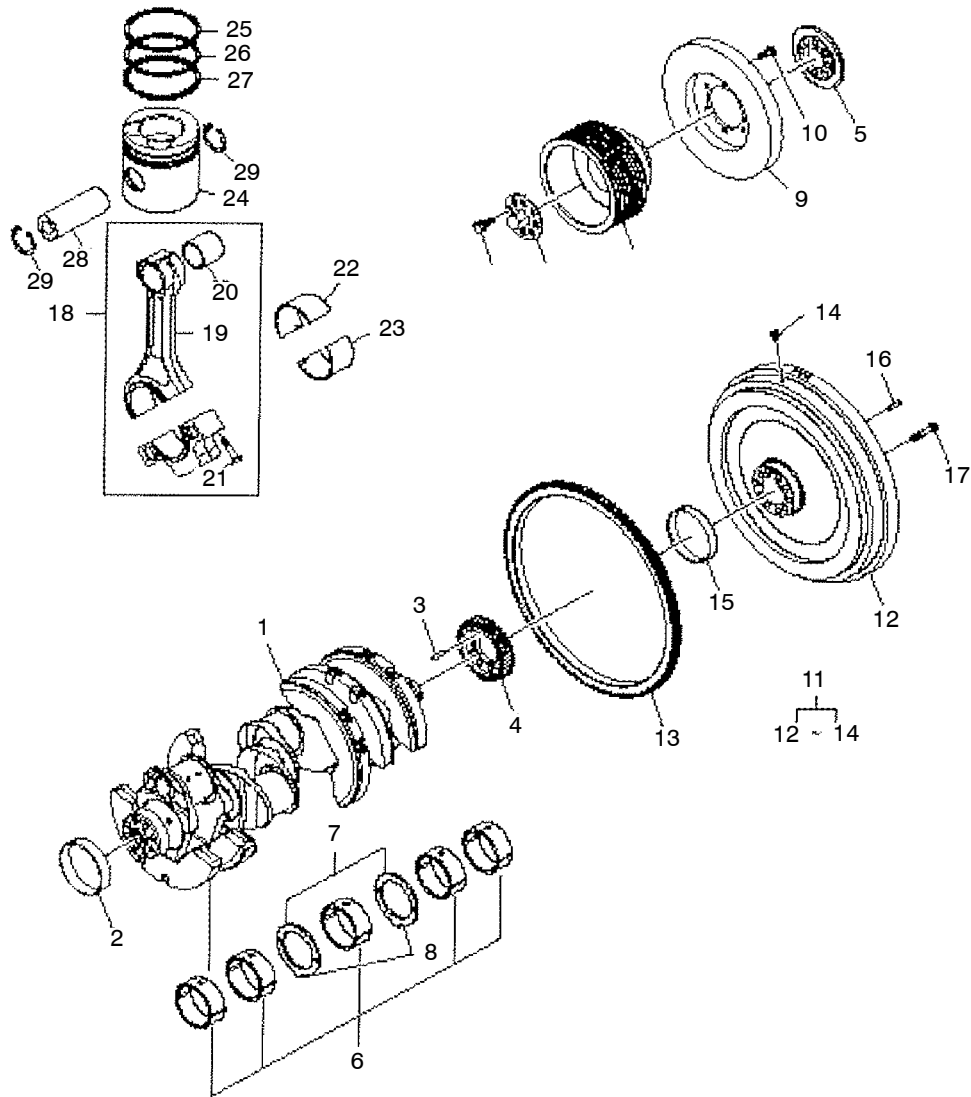
6705_2-3

Item	Part No.	Description	Qty.
1	GM73626	Flywheel housing	1
2	GM73627	Oil seal	1
3	GM73628	Thrust washer	1
4	GM73629	Hex bolt	2
5	GM73630	Gasket	1
6	GM73631	Gasket	1
7	GM73632	Bolt	10
8	GM73633	Bolt	1
9	GM73634	Bolt	1
10	GM73635	Cover	1
11	GM73636	Gasket	1
12	GM73637	Bolt assy.	8
13	GM73638	Plug screw	1

Item	Part No.	Description	Qty.
14	GM73639	Seal ring	1
15	GM73640	Cover	1
16	GM73641	Cover	1
17	GM73642	Gasket	2
18	GM73637	Bolt assy.	7
19	GM72007	Bolt assy	1
20	GM73643	Core plug	1
21	GM73644	Rubber cap	1
22	GM73645	Adapter	1
23	GM72007	Bolt assy	2
26	GM73646	Front mounting bracket	2
27	GM73647	Bolt	12
28	GM73648	Spring washer	12

2-4: Drive Train System

14.6L

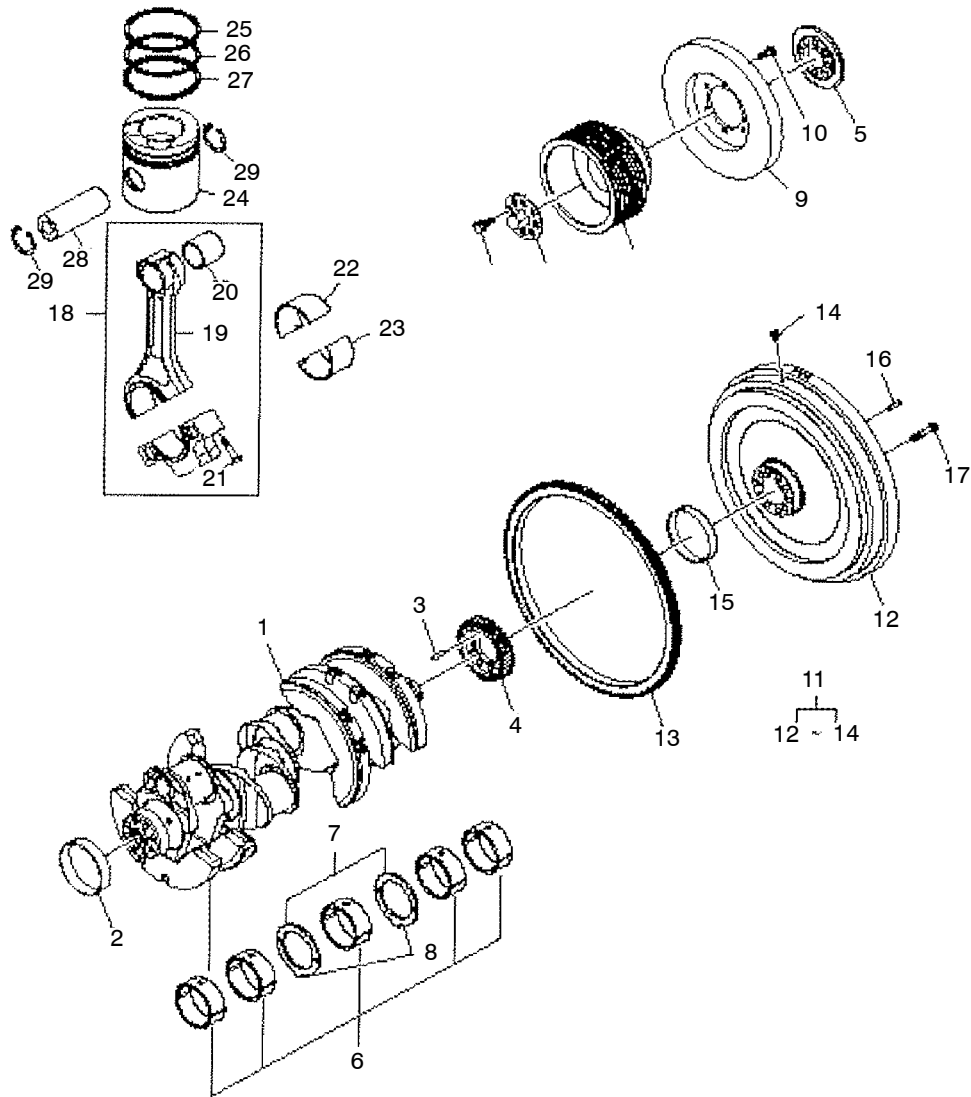


6705_2-4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73649	Crank shaft assy.	1	16	GM73664	Taper pin	1
2	GM73650	Wear front ring	1	17	GM73665	Bolt	10
3	GM73651	Pin	1	18	GM73666	Connecting rod assy.	8
4	GM73652	Gear	1	19	GM73667	Connecting rod	1
5	GM73653	Oil thrower ring	1	20	GM73668	Connecting rod bush	1
6	GM73654	Main bearing	5	21	GM73669	Connecting rod bolt	2
7	GM73655	Thrust washer	2	22	GM73670	Connecting rod bearing (std)	8
8	GM73656	Thrust washer	2	23	GM73671	Connecting rod bearings (std)	8
9	GM73657	Damper	1	24	GM73672	Piston	8
10	GM73658	Bolt	6	25	GM73673	Piston ring (upper)	8
11	GM73659	Flywheel assy.	1	26	GM73674	Piston ring (2nd)	8
12	GM73660	Flywheel	1	27	GM73675	Piston ring (oil)	8
13	GM73661	Ring gear	1	28	GM73676	Piston ring	8
14	GM73662	Timing pointer	1	29	GM73677	Snap ring	16
15	GM73663	Wear ring	1				

2-4: Drive Train System, continued

18.3L

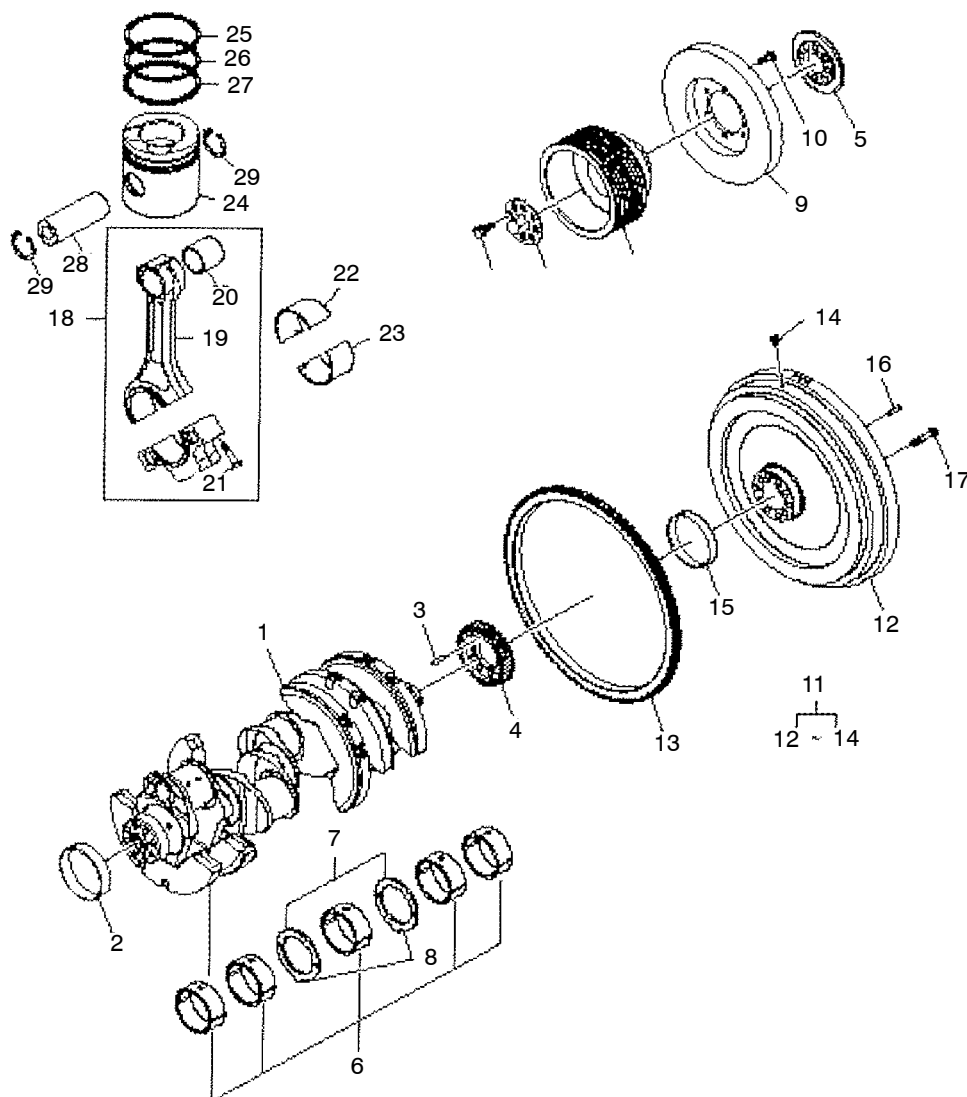


6705_2-4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM75343	Crank shaft assy.	1	15	GM73663	Wear ring	1
2	GM73650	Wear front ring	1	16	GM73664	Taper pin	1
3	GM73651	Pin	1	17	GM73665	Bolt	10
4	GM73652	Gear	1	18	GM73666	Connecting rod assy.	10
5	GM73653	Oil thrower ring	1	19	GM73667	Connecting rod	1
6	GM73654	Main bearing	6	20	GM73668	Connecting rod bush	1
7	GM73655	Thrust washer	2	21	GM73669	Connecting rod bolt	2
8	GM73656	Thrust washer	2	23	GM73671	Connecting rod bearings (std)	10
9	GM75344	Damper	1	24	GM73672	Piston	10
10	GM75345	Bolt	8	25	GM73673	Piston ring (upper)	10
11	GM73659	Flywheel assy.	1	26	GM73674	Piston ring (2nd)	10
12	GM73660	Flywheel	1	27	GM73675	Piston ring (oil)	10
13	GM73661	Ring gear	1	28	GM73676	Piston ring	10
14	GM73662	Timing pointer	1	29	GM73677	Snap ring	20

2-4: Drive Train System, continued

21.9L

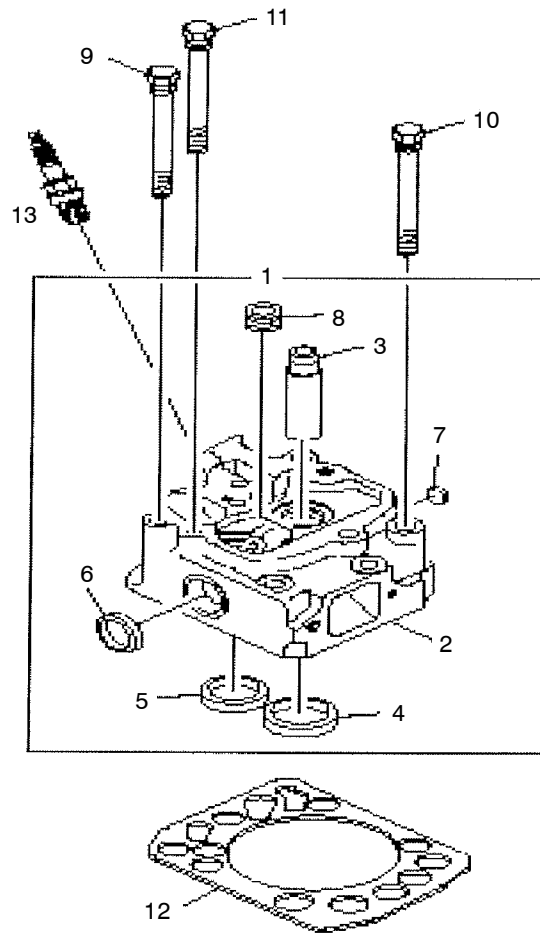


6705_2-4

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74382	Crank shaft assy.	1	15	GM73663	Wear ring	1
2	GM73650	Wear front ring	1	16	GM73664	Taper pin	1
3	GM73651	Pin	1	17	GM73665	Bolt	10
4	GM73652	Gear	1	18	GM73666	Connecting rod assy.	12
5	GM73653	Oil thrower ring	1	19	GM73667	Connecting rod	1
6	GM73654	Main bearing	7	20	GM73668	Connecting rod bush	1
7	GM73655	Thrust washer	2	21	GM73669	Connecting rod bolt	2
8	GM73656	Thrust washer	2	23	GM73671	Connecting rod bearings (std)	12
9	GM73657	Damper	1	24	GM73672	Piston	12
10	GM73658	Bolt	6	25	GM73673	Piston ring (upper)	12
11	GM73659	Flywheel assy.	1	26	GM73674	Piston ring (2nd)	12
12	GM73660	Flywheel	1	27	GM73675	Piston ring (oil)	12
13	GM73661	Ring gear	1	28	GM73676	Piston ring	12
14	GM73662	Timing pointer	1	29	GM73677	Snap ring	24

2-5: Cylinder Head

14.6L

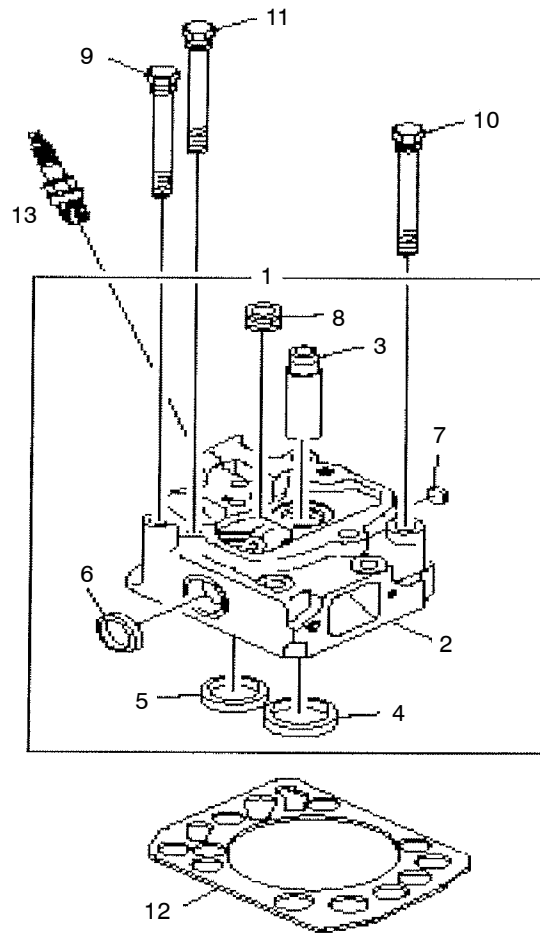


6705_2-5

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73678	Cylinder head assy.	8	8	GM73683	Plug screw	1
2	GM73679	Cylinder head	1	9	GM73684	Cylinder head bolt	16
3	GM73680	Valve guide	2	10	GM73685	Cylinder head bolt	24
4	GM73681	Valve seat	1	11	GM73686	Cylinder head bolt	8
5	GM73682	Valve seat	1	12	GM73687	Cylinder head gasket	8
6	GM72253	Core plug	1	13	GM72204	Spark plug	8
7	GM72254	Core plug	1				

2-5: Cylinder Head

18.3L

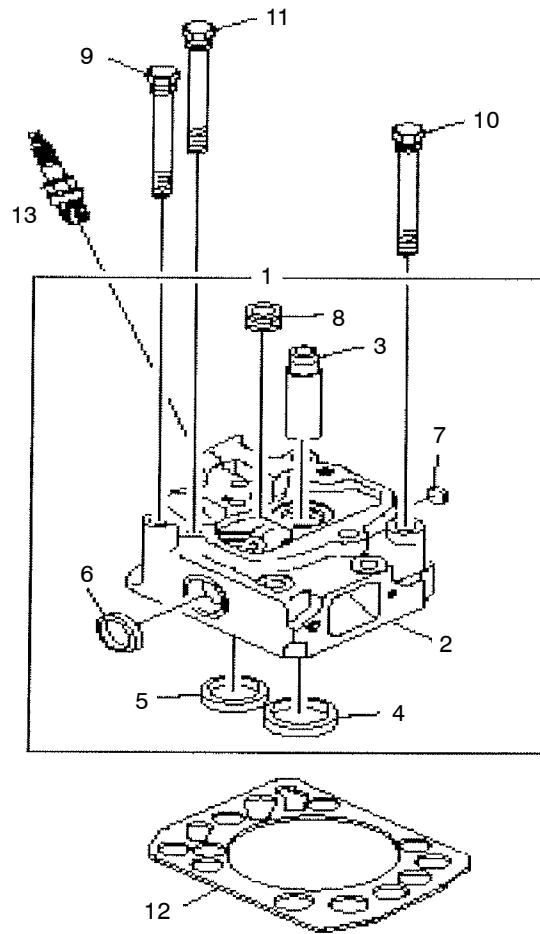


6705_2-5

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73678	Cylinder head assy.	10	8	GM73683	Plug screw	1
2	GM73679	Cylinder head	1	9	GM73684	Cylinder head bolt	20
3	GM73680	Valve guide	2	10	GM73685	Cylinder head bolt	30
4	GM73681	Valve seat	1	11	GM73686	Cylinder head bolt	10
5	GM73682	Valve seat	1	12	GM73687	Cylinder head gasket	10
6	GM72253	Core plug	1	13	GM72204	Spark plug	10
7	GM72254	Core plug	1				

2-5: Cylinder Head, continued

21.9L

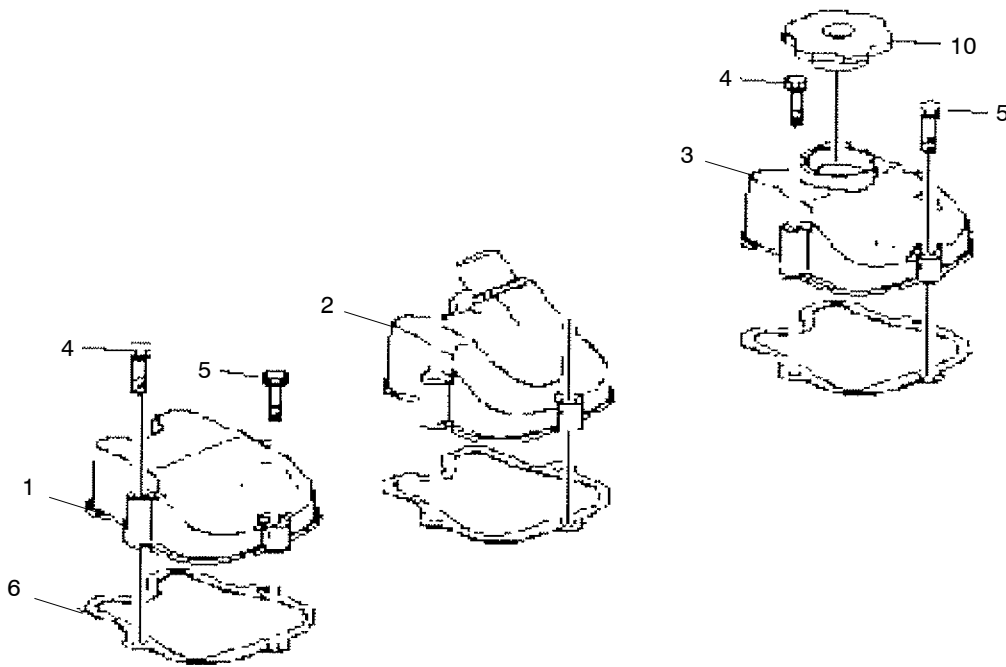


6705_2-5

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73678	Cylinder head assy.	12	8	GM73683	Plug screw	1
2	GM73679	Cylinder head	1	9	GM73684	Cylinder head bolt	24
3	GM73680	Valve guide	2	10	GM73685	Cylinder head bolt	36
4	GM73681	Valve seat	1	11	GM73686	Cylinder head bolt	12
5	GM73682	Valve seat	1	12	GM73687	Cylinder head gasket	12
6	GM72253	Core plug	1	13	GM72204	Spark plug	12
7	GM72254	Core plug	1				

2-6: Cylinder Head Cover

14.6L

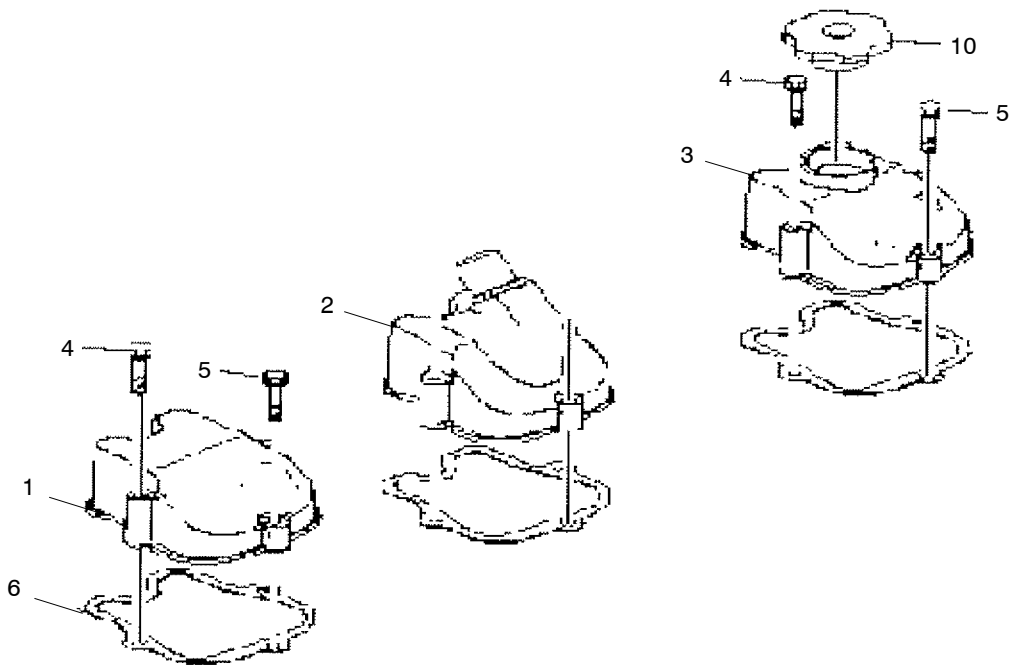


6705_2-6

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74131	Valve cover	6	5	GM73689	Bolt assy.	6
2	GM74133	PCV valve cover	1	6	GM74130	Gasket, valve cover	8
3	GM74132	Oil fill valve cover	1	10	GM72104	Oil filler cap assy	1
4	GM73688	Bolt assy.	12				

2-6: Cylinder Head Cover, continued

18.3L

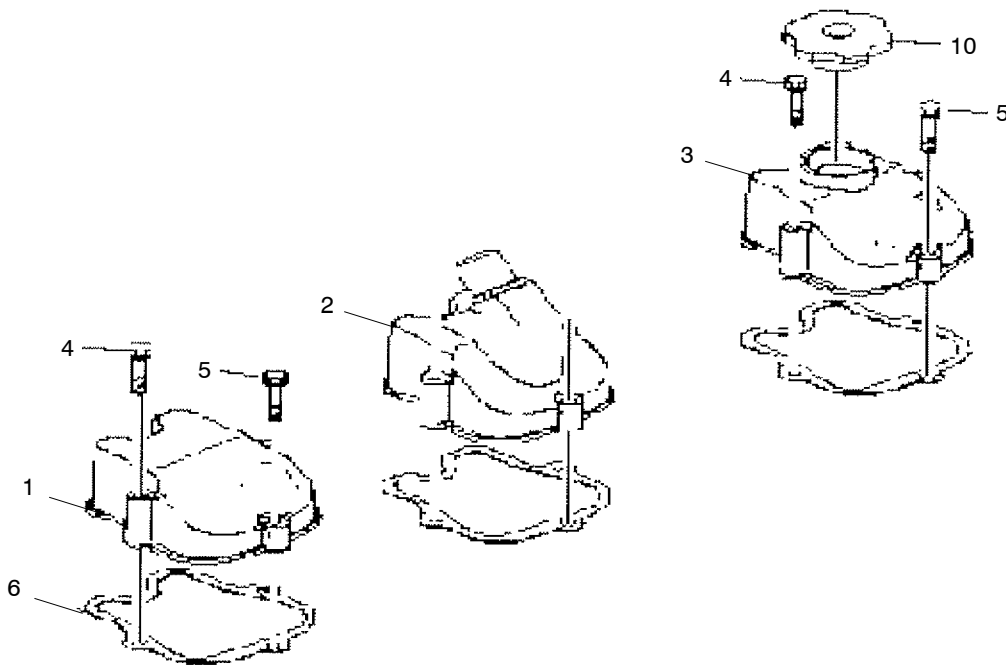


6705_2-6

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74131	Valve cover	8	5	GM73689	Bolt assy.	8
2	GM74133	PCV valve cover	1	6	GM74130	Gasket, valve cover	10
3	GM74132	Oil fill valve cover	1	10	GM72104	Oil filler cap assy	1
4	GM73688	Bolt assy.	12				

2-6: Cylinder Head Cover, continued

21.9L

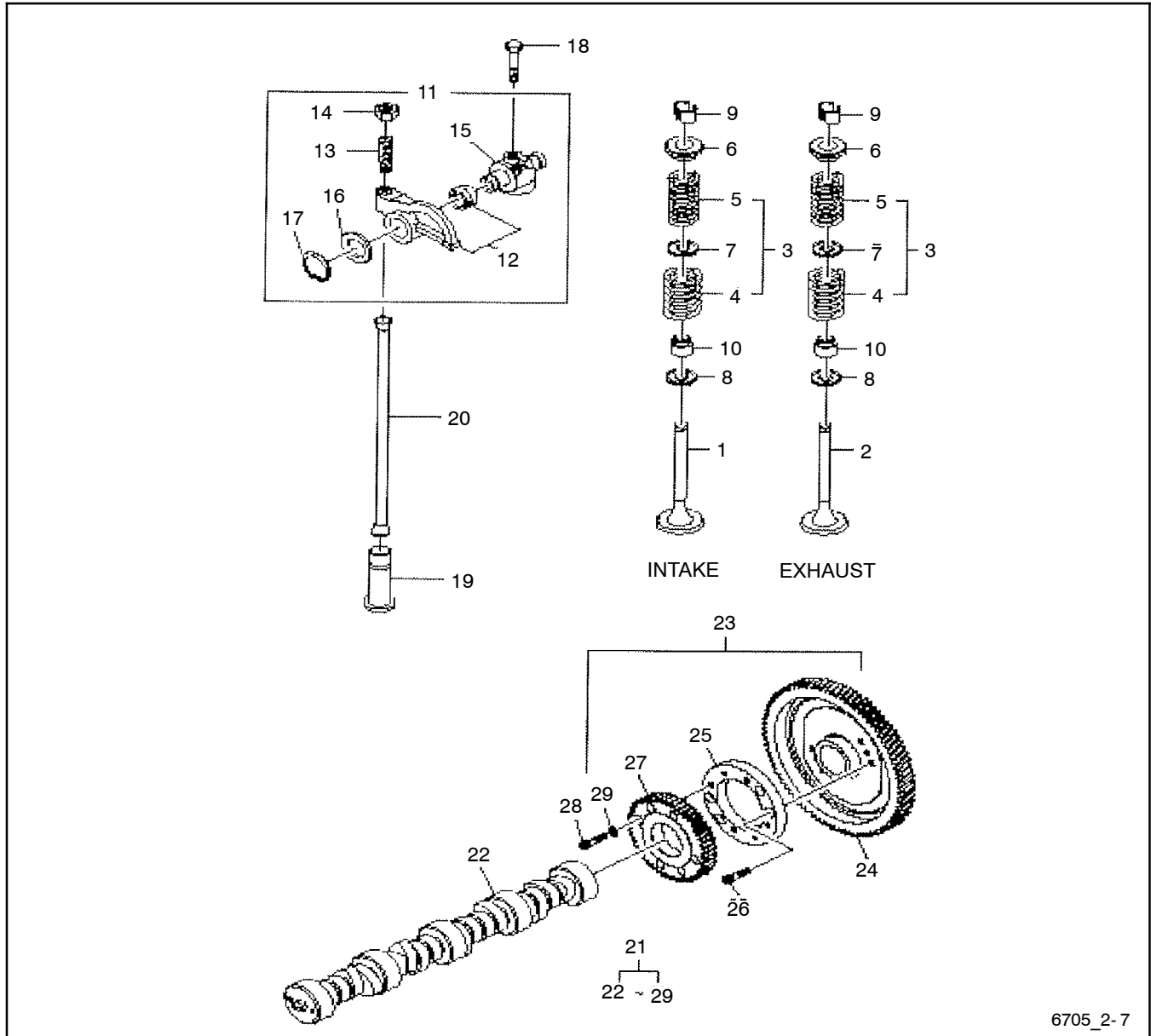


6705_2-6

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74131	Valve cover	10	5	GM73689	Bolt assy.	10
2	GM74133	PCV valve cover	1	6	GM74130	Gasket, valve cover	10
3	GM74132	Oil fill valve cover	1	10	GM72104	Oil filler cap assy	1
4	GM73688	Bolt assy.	20				

2-7: Timing System

14.6L

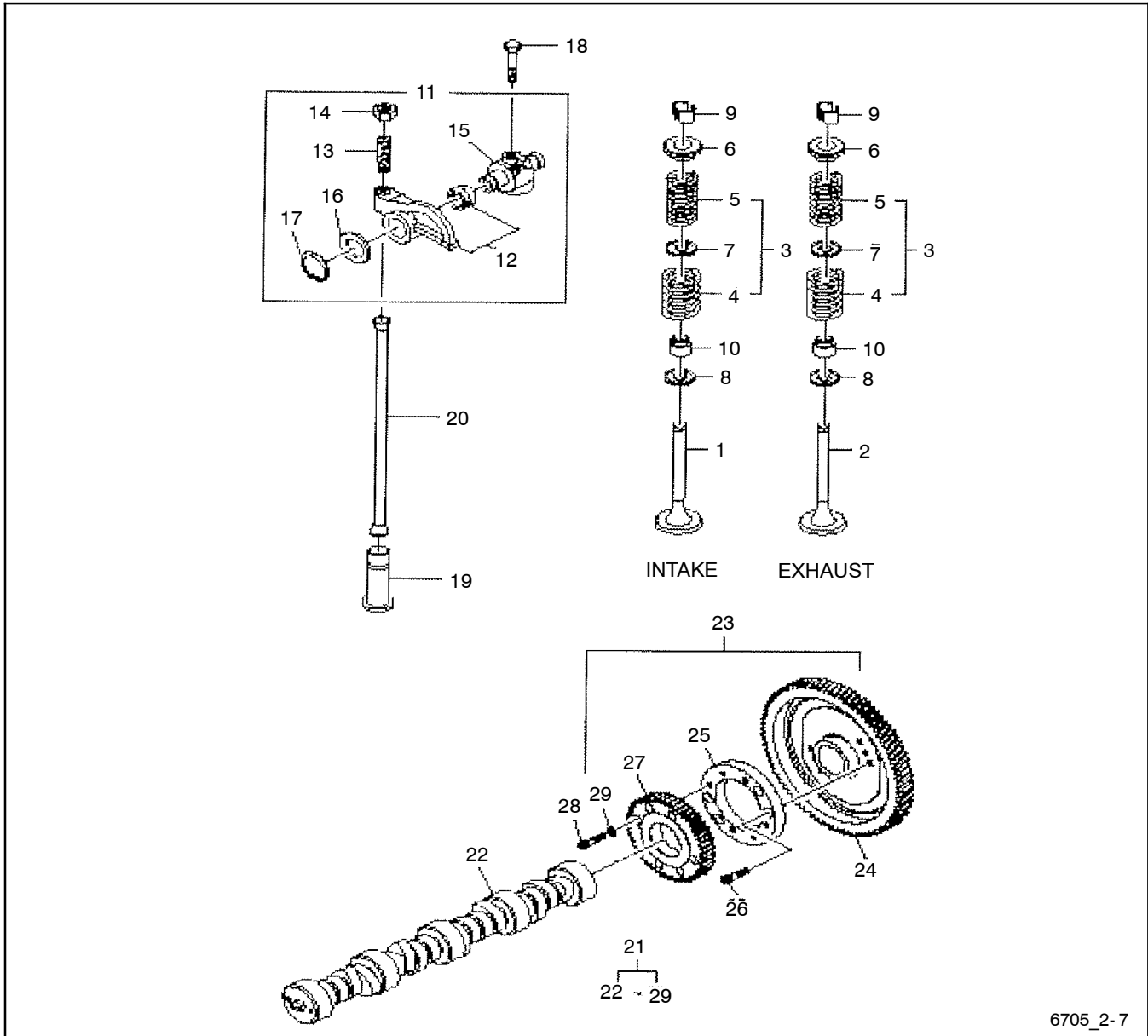


6705_2-7

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73690	Valve	8	16	GM73705	Washer	2
2	GM73691	Valve	8	17	GM73706	Snap ring	2
3	GM73692	Valve spring assy.	16	18	GM73707	Hex bolt	16
4	GM73693	Valve spring (outer)	1	19	GM73708	Valve tappet	16
5	GM73694	Valve spring (inner)	1	20	GM73709	Push rod	16
6	GM73695	Valve spring plate	16	21	GM73710	Cam shaft assy.	1
7	GM73696	Washer	16	22	GM73711	Cam shaft	1
8	GM73697	Washer	16	23	GM73712	Injection pump drive assy.	1
9	GM73698	Valve cotter	32	24	GM73713	Camshaft gear	1
10	GM73699	Valve stem seal	16	25	GM73714	Spacer	1
11	GM73700	Rocker arm assy.	8	26	GM73715	Head bolt	4
12	GM73701	Rocker arm assy.	2	27	GM73716	Injection pump drive gear	1
13	GM73702	Adjust screw	2	28	GM73717	Socket head bolt	6
14	GM73703	Hex nut	2	29	GM73718	Spring washer	6
15	GM73704	Rocker arm bracket	1				

2-7: Timing System

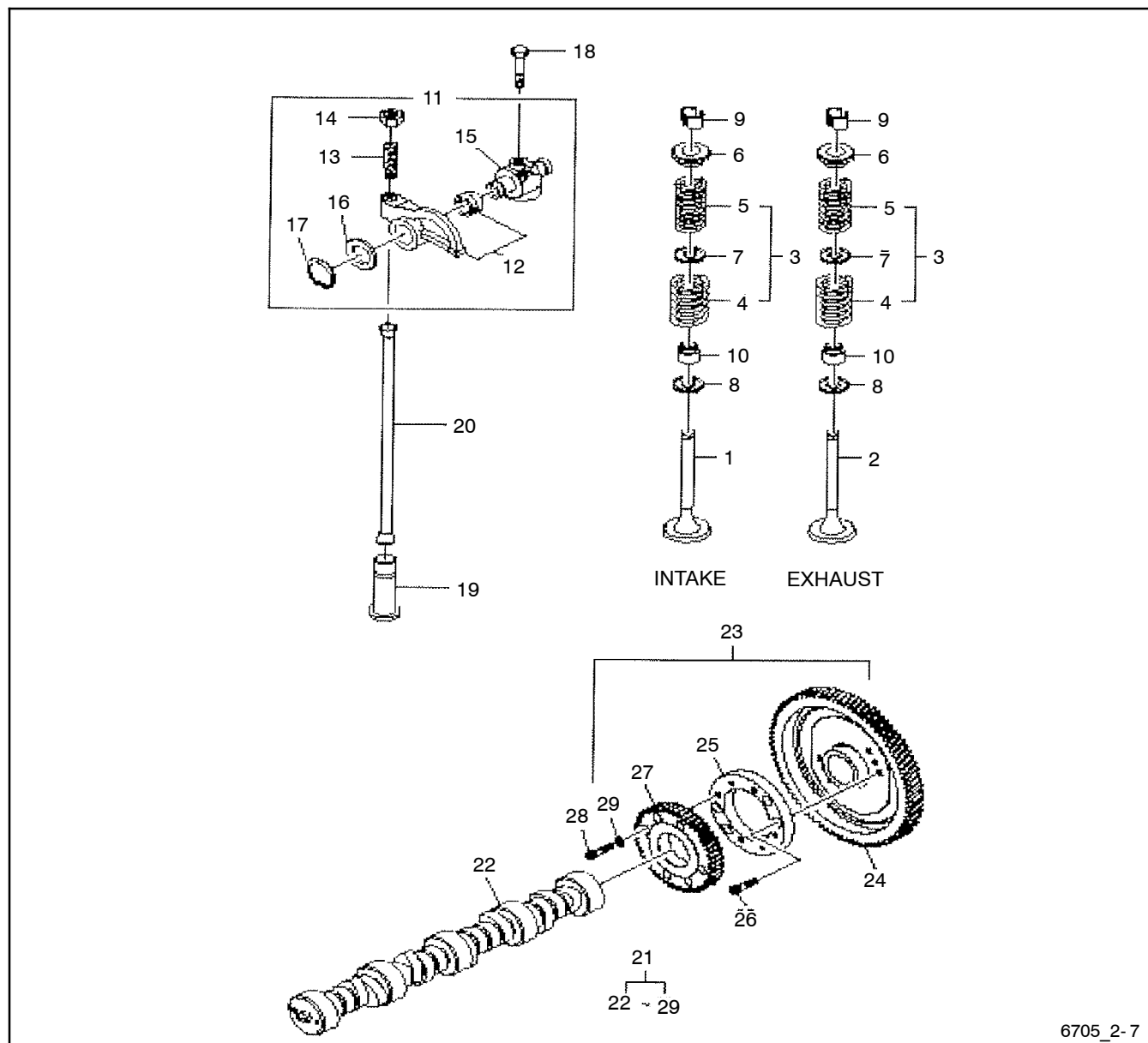
18.3L



Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73690	Valve	10	16	GM73705	Washer	2
2	GM73691	Valve	10	17	GM73706	Snap ring	2
3	GM73692	Valve spring assy.	20	18	GM73707	Hex bolt	20
4	GM73693	Valve spring (outer)	1	19	GM73708	Valve tappet	20
5	GM73694	Valve spring (inner)	1	20	GM73709	Push rod	20
6	GM73695	Valve spring plate	20	21	GM75346	Camshaft assy.	1
7	GM73696	Washer	20	22	GM75347	Camshaft	1
8	GM73697	Washer	20	23	GM73712	Injection pump drive assy.	1
9	GM73698	Valve cotter	40	24	GM73713	Camshaft gear	1
10	GM73699	Valve stem seal	20	25	GM73714	Spacer	1
11	GM73700	Rocker arm assy.	10	26	GM73715	Head bolt	4
12	GM73701	Rocker arm assy.	2	27	GM73716	Injection pump drive gear	1
13	GM73702	Adjust screw	2	28	GM73717	Socket head bolt	6
14	GM73703	Hex nut	2	29	GM74385	Spring washer	6
15	GM73704	Rocker arm bracket	1				

2-7: Timing System, continued

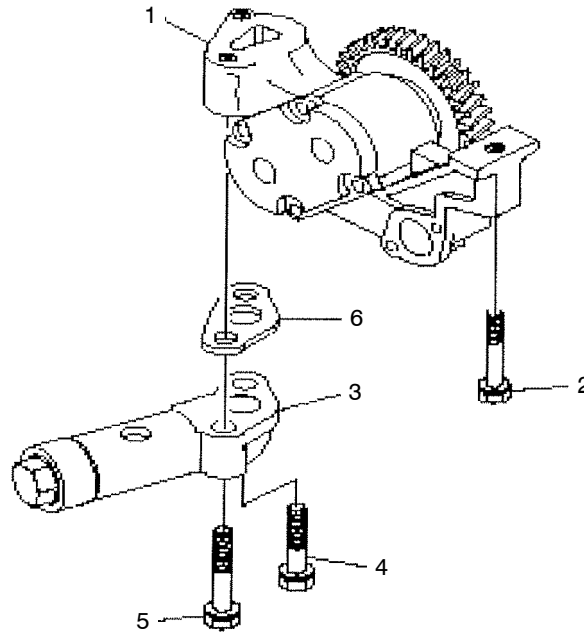
21.9L



Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73690	Valve	12	16	GM73705	Washer	2
2	GM73691	Valve	12	17	GM73706	Snap ring	2
3	GM73692	Valve spring assy.	24	18	GM73707	Hex bolt	24
4	GM73693	Valve spring (outer)	1	19	GM73708	Valve tappet	24
5	GM73694	Valve spring (inner)	1	20	GM73709	Push rod	24
6	GM73695	Valve spring plate	24	21	GM74383	Cam shaft assy.	1
7	GM73696	Washer	24	22	GM74384	Cam shaft	1
8	GM73697	Washer	24	23	GM73712	Injection pump drive assy.	1
9	GM73698	Valve cotter	48	24	GM73713	Camshaft gear	1
10	GM73699	Valve stem seal	24	25	GM73714	Spacer	1
11	GM73700	Rocker arm assy.	12	26	GM73715	Head bolt	4
12	GM73701	Rocker arm assy.	2	27	GM73716	Injection pump drive gear	1
13	GM73702	Adjust screw	2	28	GM73717	Socket head bolt	6
14	GM73703	Hex nut	2	29	GM74385	Spring washer	6
15	GM73704	Rocker arm bracket	1				

2-8: Oil Pump

14.6L

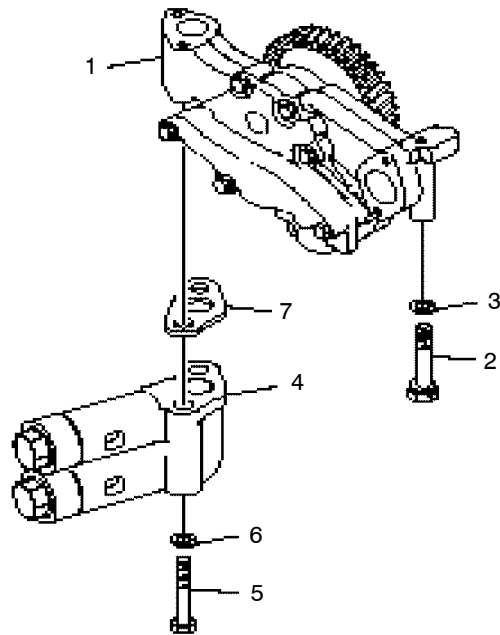


6705_2-

Item	Part No.	Description	Qty.
1	GM73719	Oil pump assy.	1
2	GM73720	Bolt assy.	1
3	GM73721	Relief valve assy.	1
4	GM73722	Bolt assy.	1
5	GM73723	Bolt assy.	1
6	GM73724	Relief valve gasket	1

2-8: Oil Pump, continued

18.3L and 21.9L

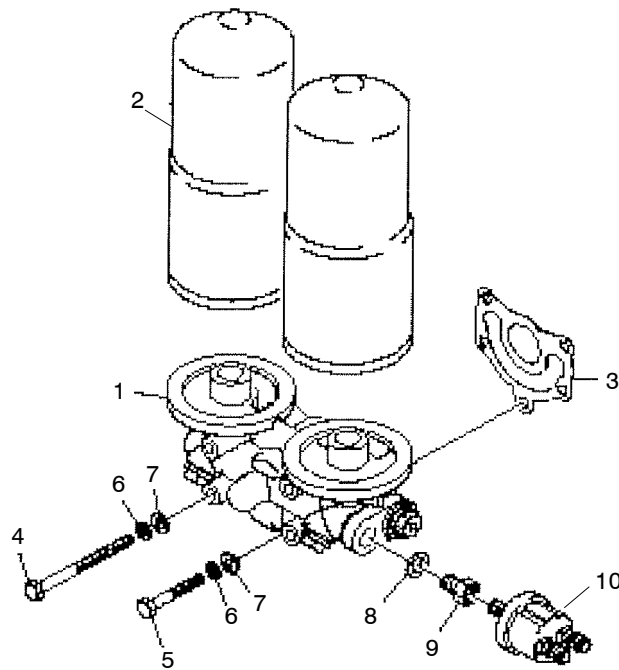


6705_2-8

Item	Part No.	Description	Qty.
1	GM74386	Oil pump assy.	1
2	GM74387	Bolt assy.	1
3	GM72043	Spring washer	1
4	GM74388	Relief valve assy.	1
5	GM74389	Hex bolt	2
6	GM72043	Spring washer	2
7	GM74390	Relief valve gasket	1

2-9: Oil Filter

14.6L, 18.3L and 21.9L



6705_2-9

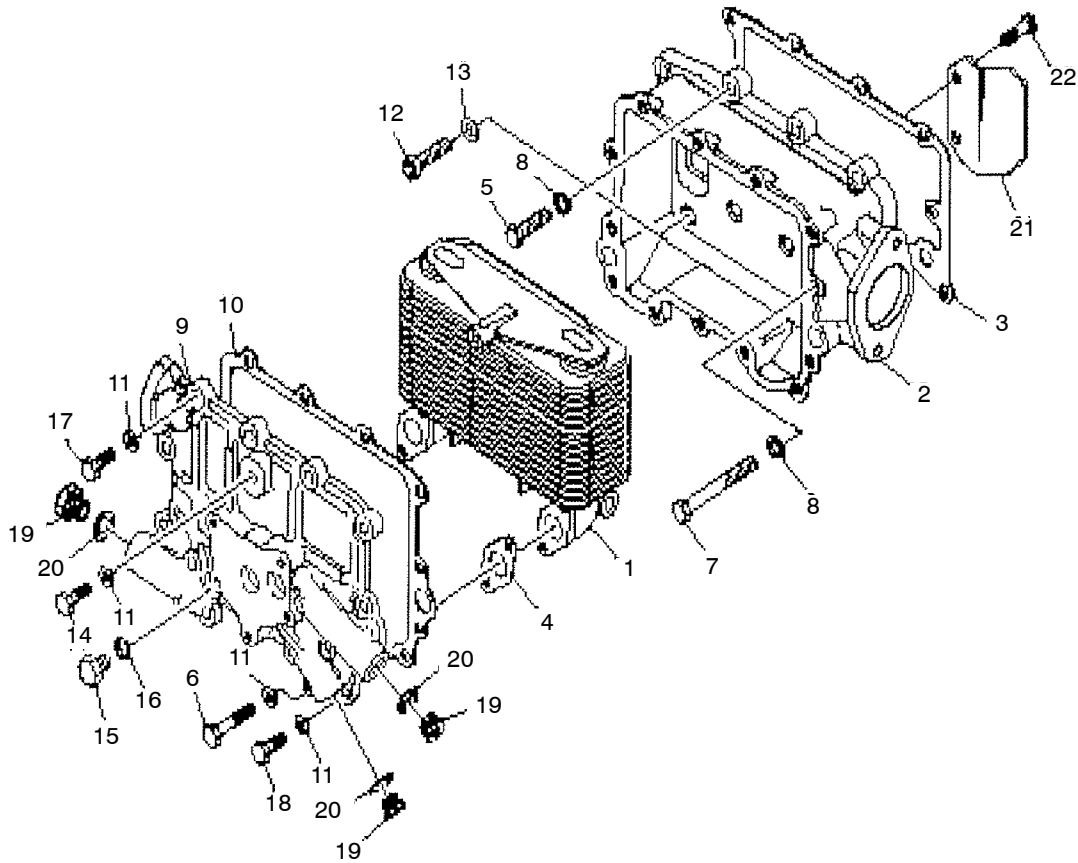
Item	Part No.	Description	Qty.
1	GM73725	Oil filter assy.	1
2	GM73726	Oil filter	2
3	GM73727	Oil filter gasket	1
4	GM73728	Hex bolt	4
5	GM73729	Hex bolt	1
6	GM72044	Spring washer	5
7	GM72039	Plain washer	5
8	GM73730	Seal ring	1
9	GM73731	Adapter	1
10	GM73732	Oil pressure unit	1

Recommended Kohler Genuine Oil

GM103170	Oil, Synth Gal 15W40 Gaseous
GM103171	Oil, Synthetic 5 Gal Pail 15W40 Gaseous
GM103172	Oil, Synthetic 55 Gal Drum 15W40 Gaseous
GM103173	Oil, Synthetic 275Gal Tote 15W40 Gaseous

2-10: Oil Cooler

14.6L and 18.3L

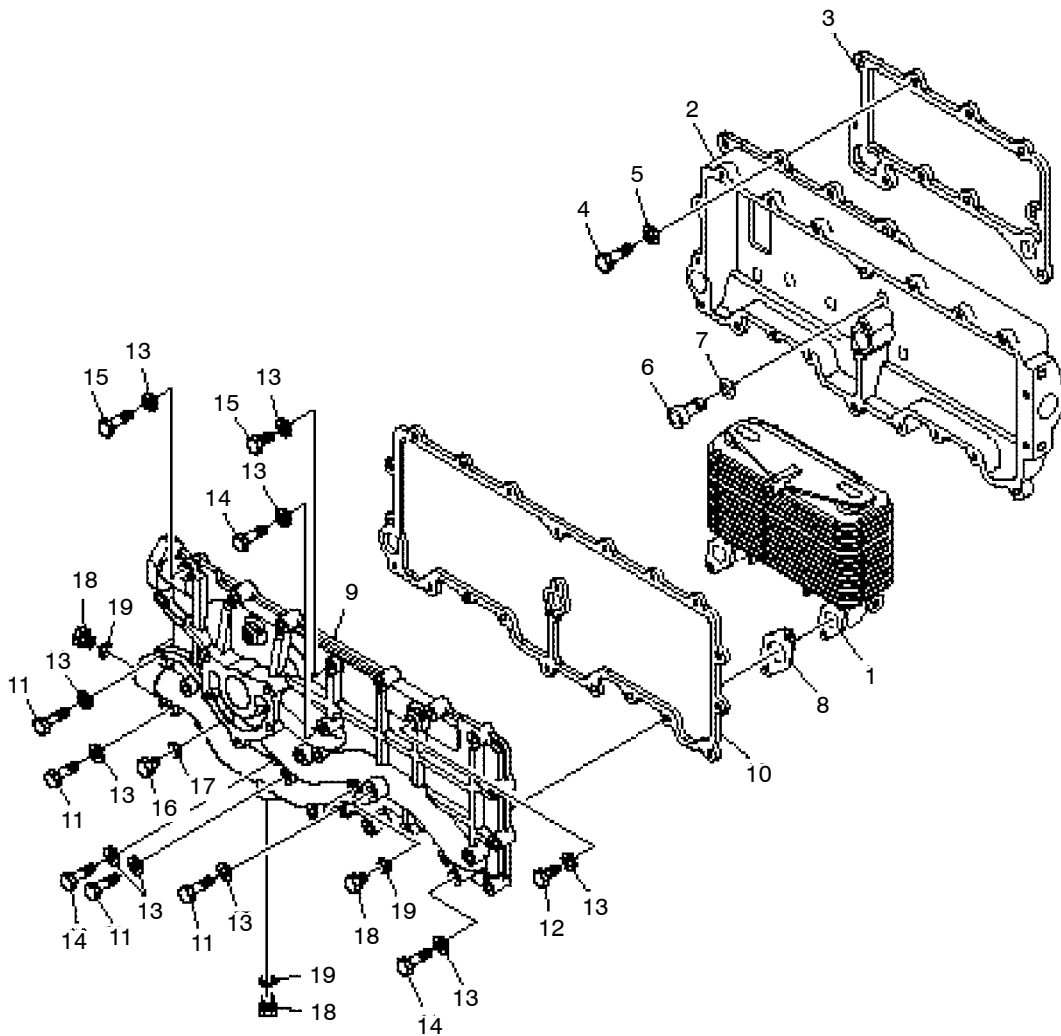


6705_2-10

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73733	Oil cooler assy.	1	12	GM73743	Socket head bolt	3
2	GM73734	Oil cooler housing	1	13	GM73744	Plain washer	3
3	GM73735	Oil cooler gasket	1	14	GM73745	Hex bolt	1
4	GM73736	Flange gasket	2	15	GM73614	Plug screw	1
5	GM73737	Hex bolt	6	16	GM72066	Seal ring	1
6	GM73738	Hex bolt	4	17	GM73746	Hex bolt	12
7	GM73739	Hex bolt	1	18	GM73747	Hex bolt	1
8	GM72044	Spring washer	7	19	GM73638	Plug screw	3
9	GM73740	Oil cooler head	1	20	GM72073	Seal ring	3
10	GM73741	Oil cooler gasket	1	21	GM73748	Oil cooler plate	1
11	GM73742	Spring washer	18	22	GM73749	Hex bolt	2

2-10: Oil Cooler

21.9L

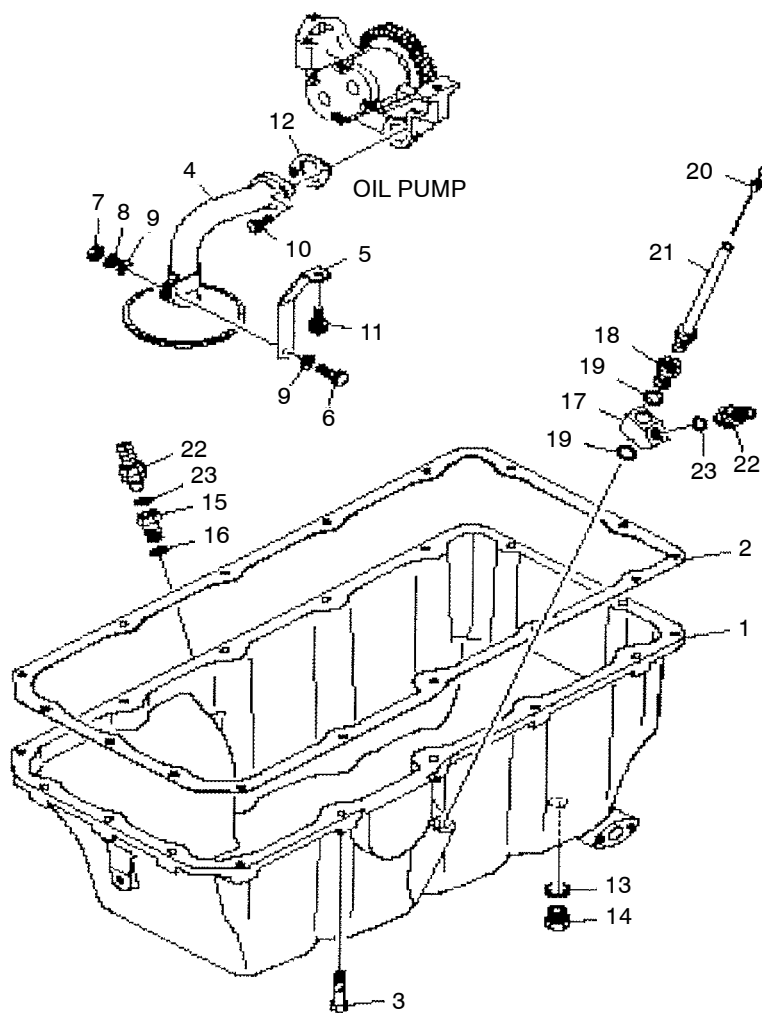


6705_2-10

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73733	Oil cooler assy.	2	11	GM73738	Hex bolt	8
2	GM74391	Oil cooler housing	1	12	GM73745	Hex bolt	2
3	GM73735	Oil cooler gasket	1	13	GM73742	Spring washer	32
4	GM73737	Hex bolt	5	14	GM74418	Hex bolt	5
5	GM74392	Spring washer	5	14	GM74395	Hex bolt	5
6	GM73743	Socket head bolt	5	15	GM74396	Hex bolt	17
7	GM73744	Plain washer	5	16	GM73770	Plug screw	1
8	GM73736	Flange gasket	4	17	GM72066	Seal ring	1
9	GM74393	Oil cooler head	1	18	GM73638	Plug screw	3
10	GM74394	Oil cooler gasket	1	19	GM72073	Seal ring	3

2-11: Oil Pan

14.6L

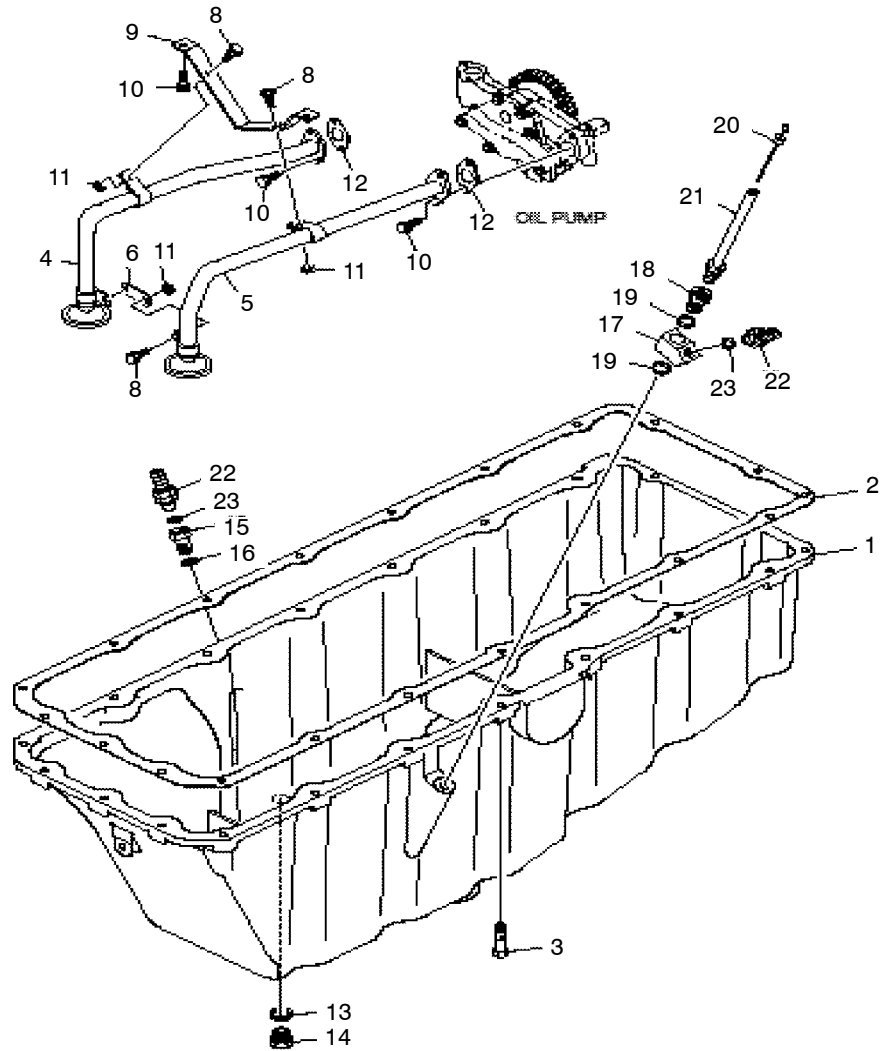


6705_2-11

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73750	Oil pan	1	13	GM73598	Seal ring	1
2	GM73751	Oil pan gasket	1	14	GM73758	Plug screw	1
3	GM73752	Bolt assy.	16	15	GM73759	Adapter	1
4	GM73753	Oil suction pipe	1	16	GM72069	Seal ring	1
5	GM73754	Oil suction pipe bracket	1	17	GM73760	Adapter	1
6	GM73755	Hex bolt	1	18	GM73761	Hollow screw	1
7	GM72033	Hex nut	1	19	GM72069	Seal ring	2
8	GM72043	Spring washer	1	20	GM73762	Oil level gauge	1
9	GM72038	Washer	2	21	GM73763	Guide tube assy.	1
10	GM73756	Hex bolt assy.	2	22	GM73764	Check valve	2
11	GM71992	Bolt assy	1	23	GM72066	Seal ring	2
12	GM73757	Gasket	1				

2-11: Oil Pan

18.3L

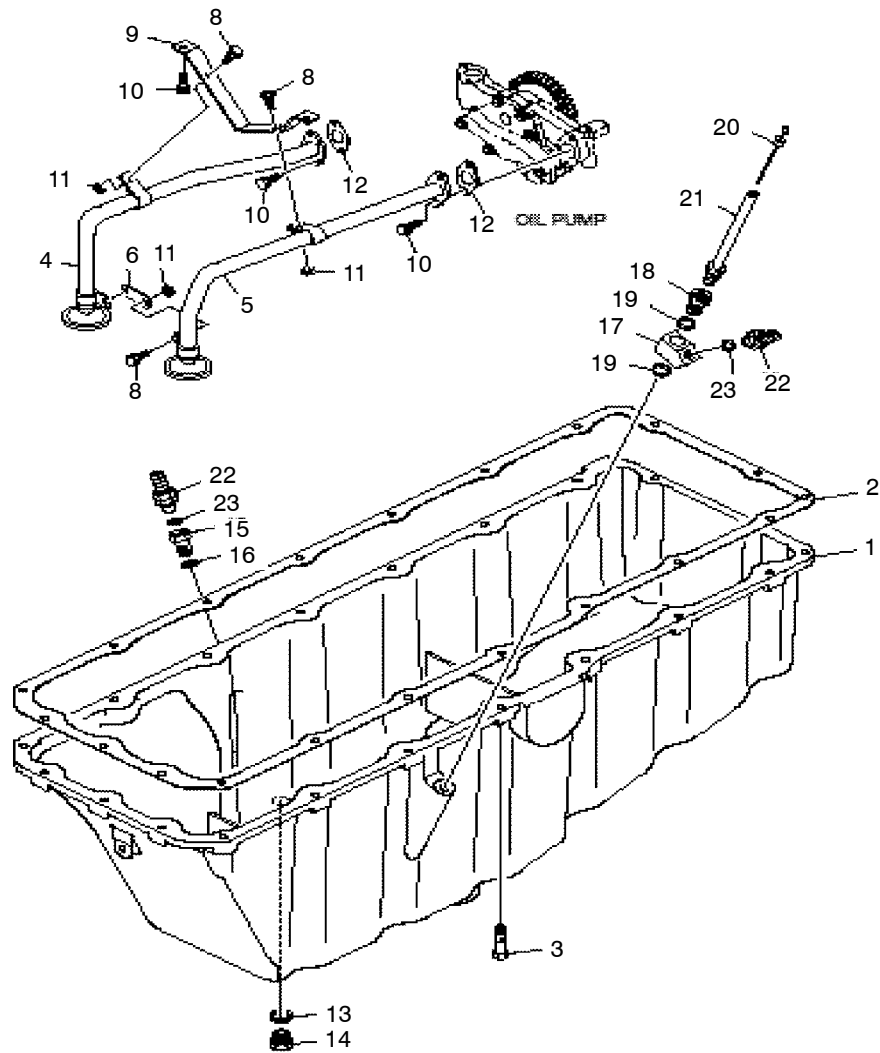


6705_2-11

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM75348	Oil pan	1	13	GM72075	Seal ring	1
2	GM75349	Oil pan gasket	1	14	GM72242	Plug screw	1
3	GM74399	Bolt assy.	18	15	GM73759	Adapter	1
4	GM75350	Oil pipe	1	16	GM72069	Seal ring	1
5	GM75351	Oil pipe	1	17	GM73760	Adapter	1
6	GM74402	Holder	1	18	GM73761	Hollow screw	1
8	GM71993	Bolt assy	4	19	GM72069	Seal ring	2
9	GM74403	Oil suction pipe bracket	1	20	GM74405	Oil level gauge	1
10	GM71992	Bolt assy	6	21	GM73763	Guide tube assy.	1
11	GM72033	Hex nut	4	22	GM73764	Check valve	2
12	GM73757	Gasket	2	23	GM72066	Seal ring	2

2-11: Oil Pan, continued

21.9L



6705_2-11

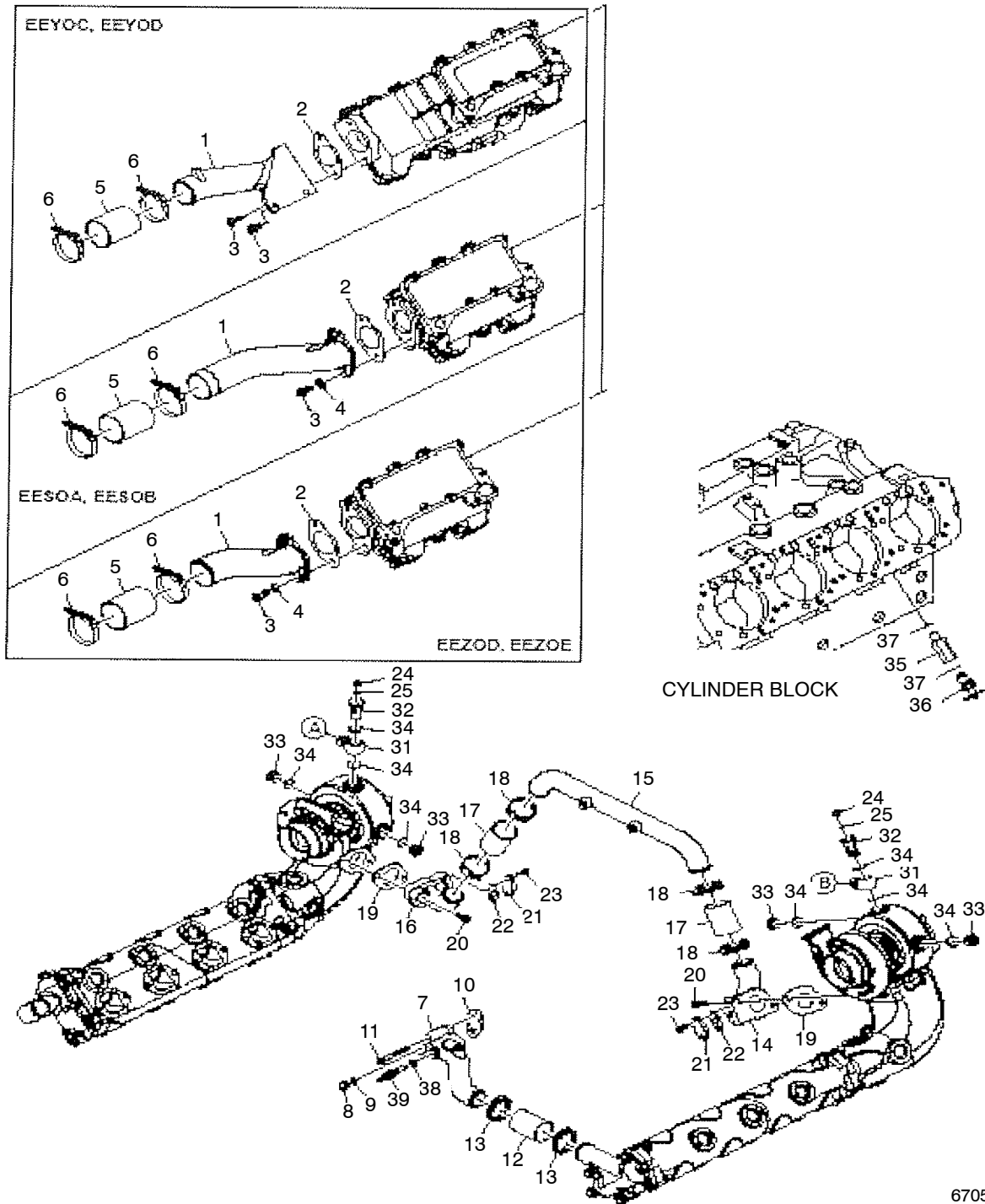
2- 11: Oil Pan, continued

21.9L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74397	Oil pan	1	13	GM72075	Seal ring	1
2	GM74398	Oil pan gasket	1	14	GM74404	Plug screw	1
3	GM74399	Bolt assy.	20	15	GM73759	Adapter	1
4	GM74400	Oil pipe	1	16	GM72069	Seal ring	1
5	GM74401	Oil suction pipe assy.	1	17	GM73760	Adapter	1
6	GM74402	Holder	1	18	GM73761	Hollow screw	1
8	GM71993	Bolt assy	4	19	GM72069	Seal ring	2
9	GM74403	Oil suction pipe bracket	1	20	GM74405	Oil level gauge	1
10	GM71992	Bolt assy	6	21	GM73763	Guide tube assy.	1
11	GM72033	Hex nut	4	22	GM73764	Check valve	2
12	GM73757	Gasket	2	23	GM72066	Seal ring	2

2- 12: Cooling Water Pipe

14.6L



6705_2-12

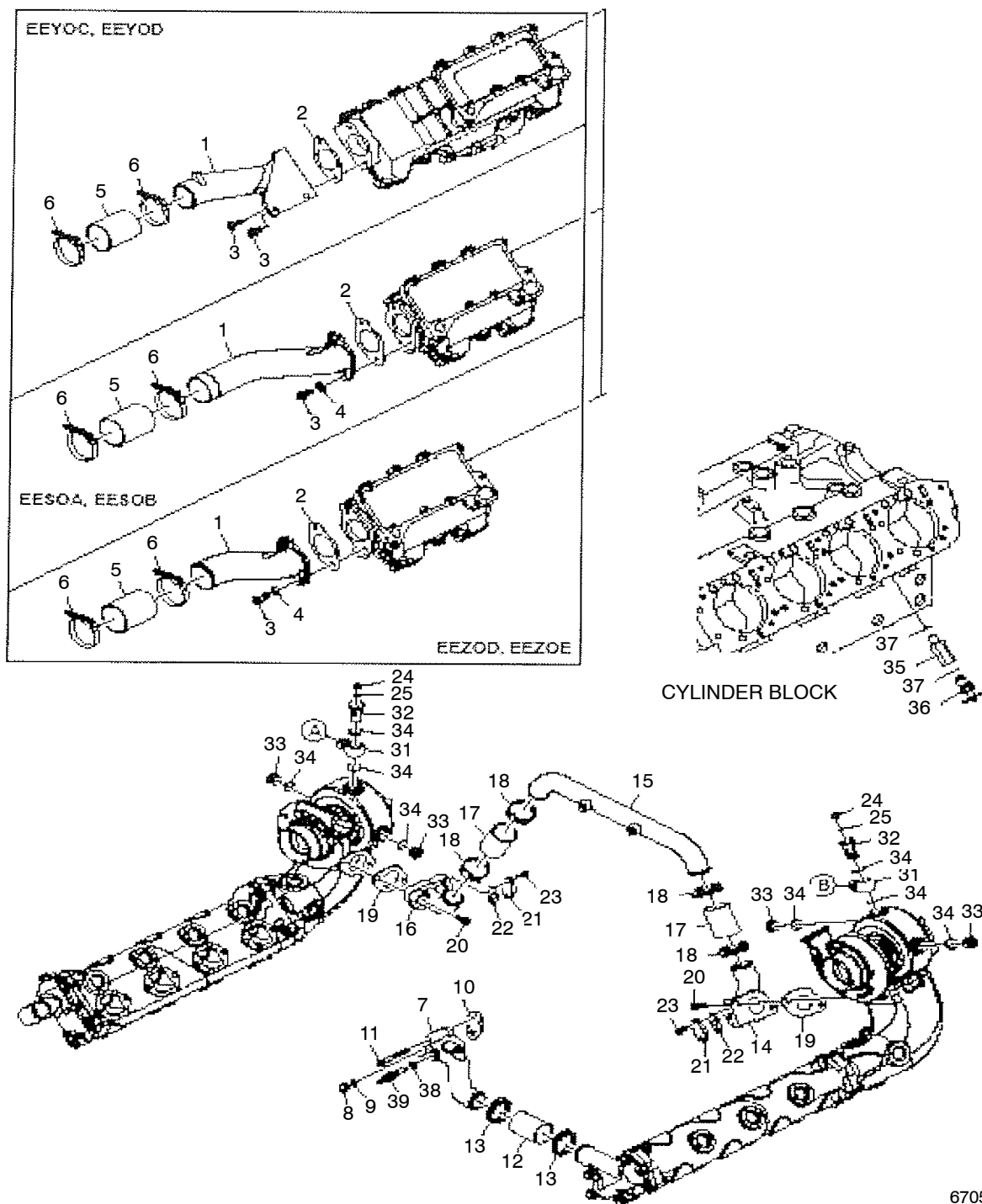
2- 12: Cooling Water Pipe

14.6L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73765	Cooling water pipe	1	18	GM73774	Hose clamp	4
2	GM73766	Gasket	1	19	GM73778	Gasket	2
3	GM73625	Bolt assy.	2	20	GM73779	Bolt assy.	4
4	GM72040	Plain washer	2	21	GM73780	End cover	2
5	GM73767	Rubber hose	1	22	GM72175	Gasket	2
6	GM73768	Hose clamp	2	23	GM73781	Bolt assy.	4
7	GM73769	Cooling water pipe	1	24	GM73770	Plug screw	2
8	GM73770	Plug screw	1	25	GM72066	Seal ring	2
9	GM72066	Seal ring	1	31	GM73782	Banjo union	2
10	GM73771	Gasket	1	32	GM73783	Screw	2
11	GM73772	Bolt assy.	2	33	GM73784	Screw	4
12	GM73773	Hose	1	34	GM73785	Seal ring	8
13	GM73774	Hose clamp	2	35	GM73786	Adapter	1
14	GM73775	Cooling water pipe	1	36	GM73787	Drain valve	1
15	GM73776	Cooling water pipe	1	37	GM72067	Seal ring	2
16	GM73777	Cooling water pipe	1	38	GM72066	Seal ring	1
17	GM73773	Hose	2	39	GM73788	Water temp sender	1

2- 12: Cooling Water Pipe, continued

18.3L



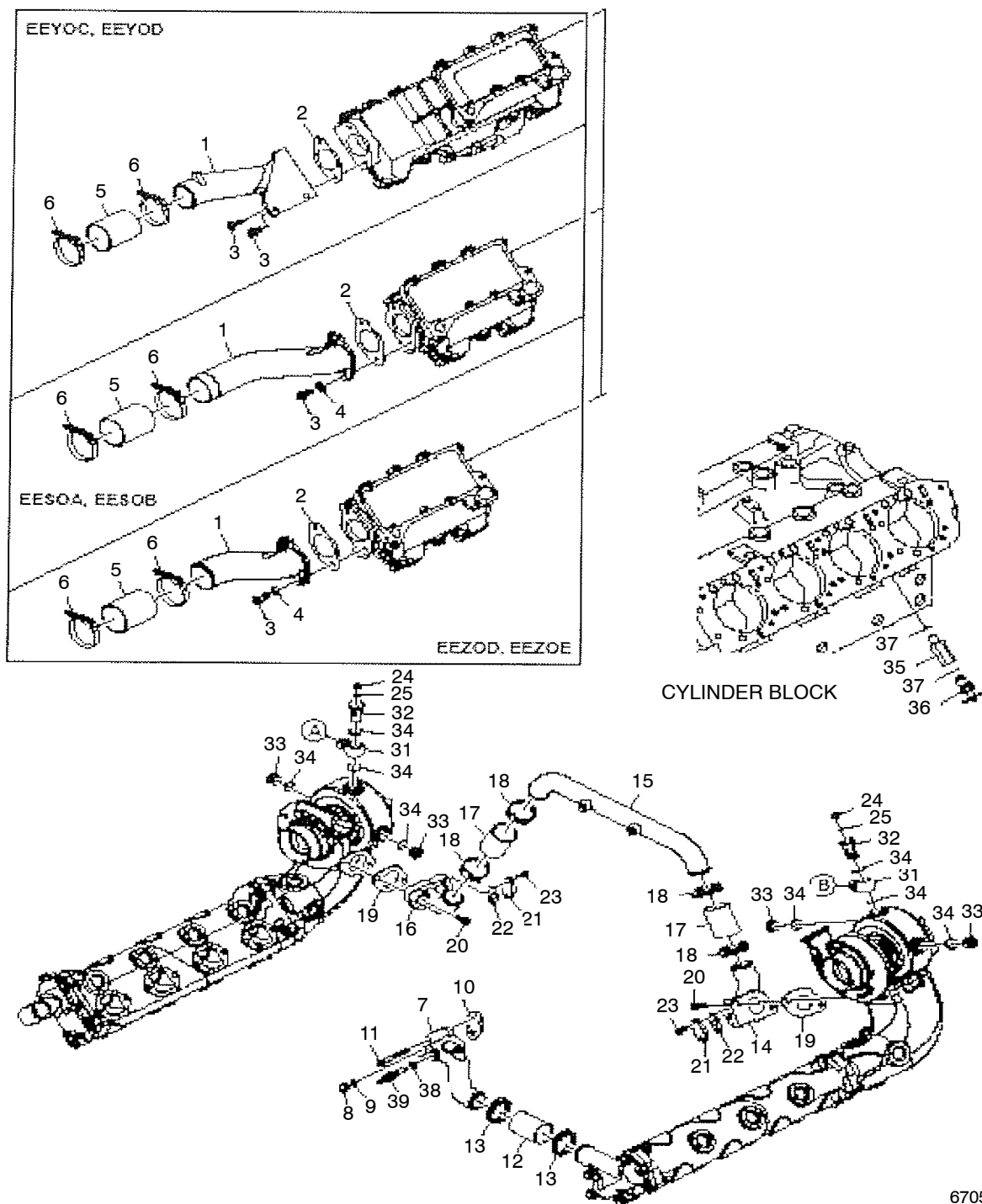
2- 12: Cooling Water Pipe, continued

18.3L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM75352	Cooling water pipe	1	18	GM73774	Hose clamp	4
2	GM73766	Gasket	1	19	GM73778	Gasket	2
3	GM73625	Bolt assy.	2	20	GM73779	Bolt assy.	4
4	GM72040	Plain washer	2	21	GM73780	End cover	2
5	GM73767	Rubber hose	1	22	GM72175	Gasket	2
6	GM73768	Hose clamp	2	23	GM73781	Bolt assy.	4
7	GM73769	Cooling water pipe	1	24	GM73770	Plug screw	2
8	GM73770	Plug screw	1	25	GM72066	Seal ring	2
9	GM72066	Seal ring	1	31	GM73782	Banjo union	2
10	GM73771	Gasket	1	32	GM73783	Screw	2
11	GM73772	Bolt assy.	2	33	GM73784	Screw	4
12	GM73773	Hose	1	34	GM73785	Seal ring	8
13	GM73774	Hose clamp	2	35	GM73786	Adapter	1
14	GM73775	Cooling water pipe	1	36	GM73787	Drain valve	1
15	GM73776	Cooling water pipe	1	37	GM72067	Seal ring	2
16	GM73777	Cooling water pipe	1	38	GM72066	Seal ring	1
17	GM73773	Hose	2	39	GM73788	Water temp sender	1

2- 12: Cooling Water Pipe, continued

21.9L



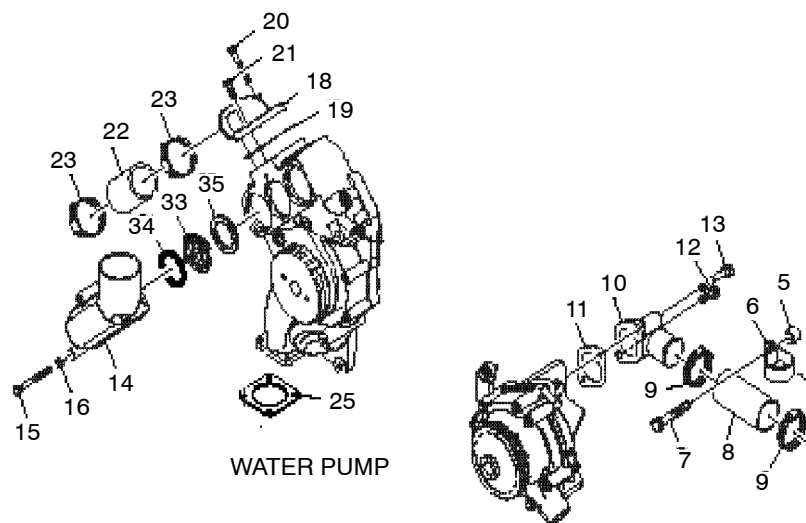
2- 12: Cooling Water Pipe, continued

21.9L

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74406	Cooling water pipe	1	18	GM73774	Hose clamp	4
2	GM73766	Gasket	1	19	GM73778	Gasket	2
3	GM73625	Bolt assy.	4	20	GM73779	Bolt assy.	4
4	GM72040	Plain washer	2	21	GM73780	End cover	2
5	GM73767	Rubber hose	1	22	GM72175	Gasket	2
6	GM73768	Hose clamp	2	23	GM73781	Bolt assy.	4
7	GM73769	Cooling water pipe	1	24	GM73770	Plug screw	2
8	GM73770	Plug screw	1	25	GM72066	Seal ring	2
9	GM72066	Seal ring	1	31	GM73782	Banjo union	2
10	GM73771	Gasket	1	32	GM73783	Screw	2
11	GM73772	Bolt assy.	2	33	GM73784	Screw	4
12	GM73773	Hose	1	34	GM73785	Seal ring	8
13	GM73774	Hose clamp	2	35	GM73786	Adapter	1
14	GM73775	Cooling water pipe	1	36	GM73787	Drain valve	1
15	GM73776	Cooling water pipe	1	37	GM72067	Seal ring	2
16	GM73777	Cooling water pipe	1	38	GM72066	Seal ring	1
17	GM73773	Hose	2	39	GM73788	Water temp sender	1

2- 12B: Cooling Water Pipe, continued

18.3L and 21.9L



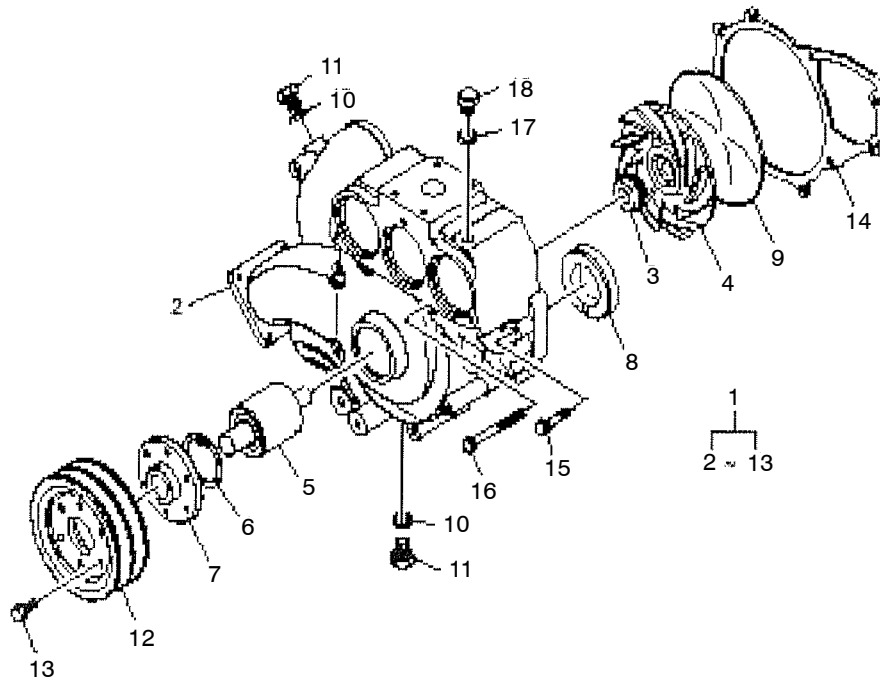
6705_2- 12B

Item	Part No.	Description	Qty.
5	GM74407	Spacer	1
6	GM74408	Pipe clip	1
7	GM74409	Hex bolt	1
8	GM74410	Rubber hose	1
9	GM73774	Hose clamp	2
10	GM74411	Cooling water pipe	1
11	GM74412	Gasket	1
12	GM74413	Bolt assy.	1
13	GM74414	Bolt assy.	1
14	GM74415	Cooling water pipe	1
15	GM73798	Hex bolt	3
16	GM72038	Washer	3

Item	Part No.	Description	Qty.
18	GM74416	Cooling water pipe	1
19	GM74417	Gasket	1
20	GM74418	Hex bolt	2
21	GM74395	Hex bolt	2
22	GM71993	Bolt assy	2
23	GM73773	Hose	1
24	GM73774	Hose clamp	2
25	GM74419	Gasket	1
33	GM74420	Thermostat	3
34	GM72076	O-ring	3
35	GM72193	Thermostat gasket	3

2- 13: Water Pump

14.6L, 18.3L and 21.9L

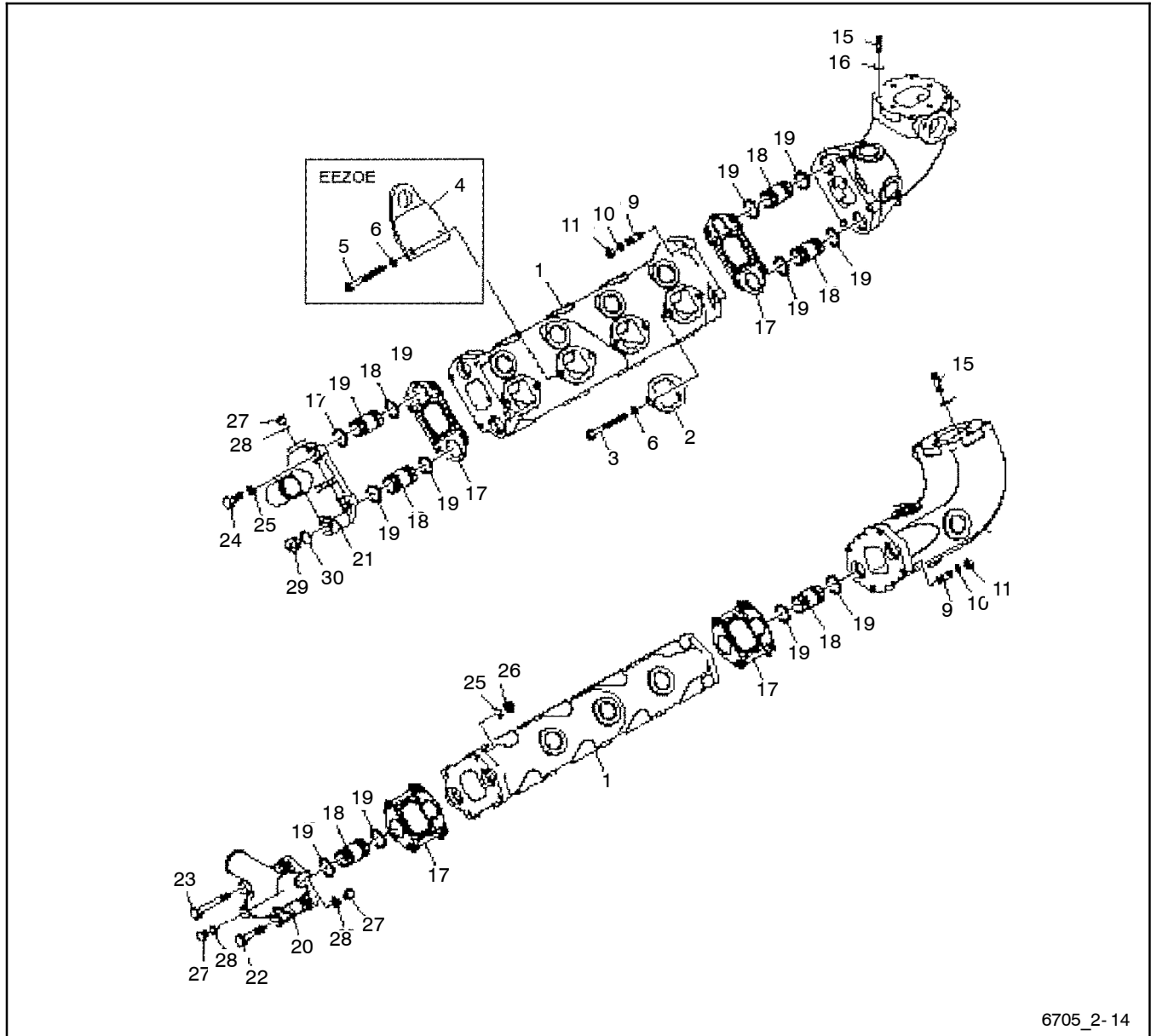


6705_2- 13

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73789	Water pump assy.	1	10	GM72068	Seal ring	2
2	GM73790	Water pump housing	1	11	GM72030	Plug screw	2
3	GM72191	Seal	1	12	GM73796	V-belt pulley	1
4	GM73791	Impeller assy.	1	13	GM73781	Bolt assy.	6
5	GM73792	Bearing unit	1	14	GM73797	Water pump gasket	1
6	GM72056	Snap ring	1	15	GM72009	Bolt assy	3
7	GM73793	Fan drive hub	1	16	GM73798	Hex bolt	3
8	GM73794	Manipulator	1	17	GM73799	Seal ring	1
9	GM73795	Water pump cover	1	18	GM73614	Plug screw	1

2-14: Exhaust Manifold

14.6L

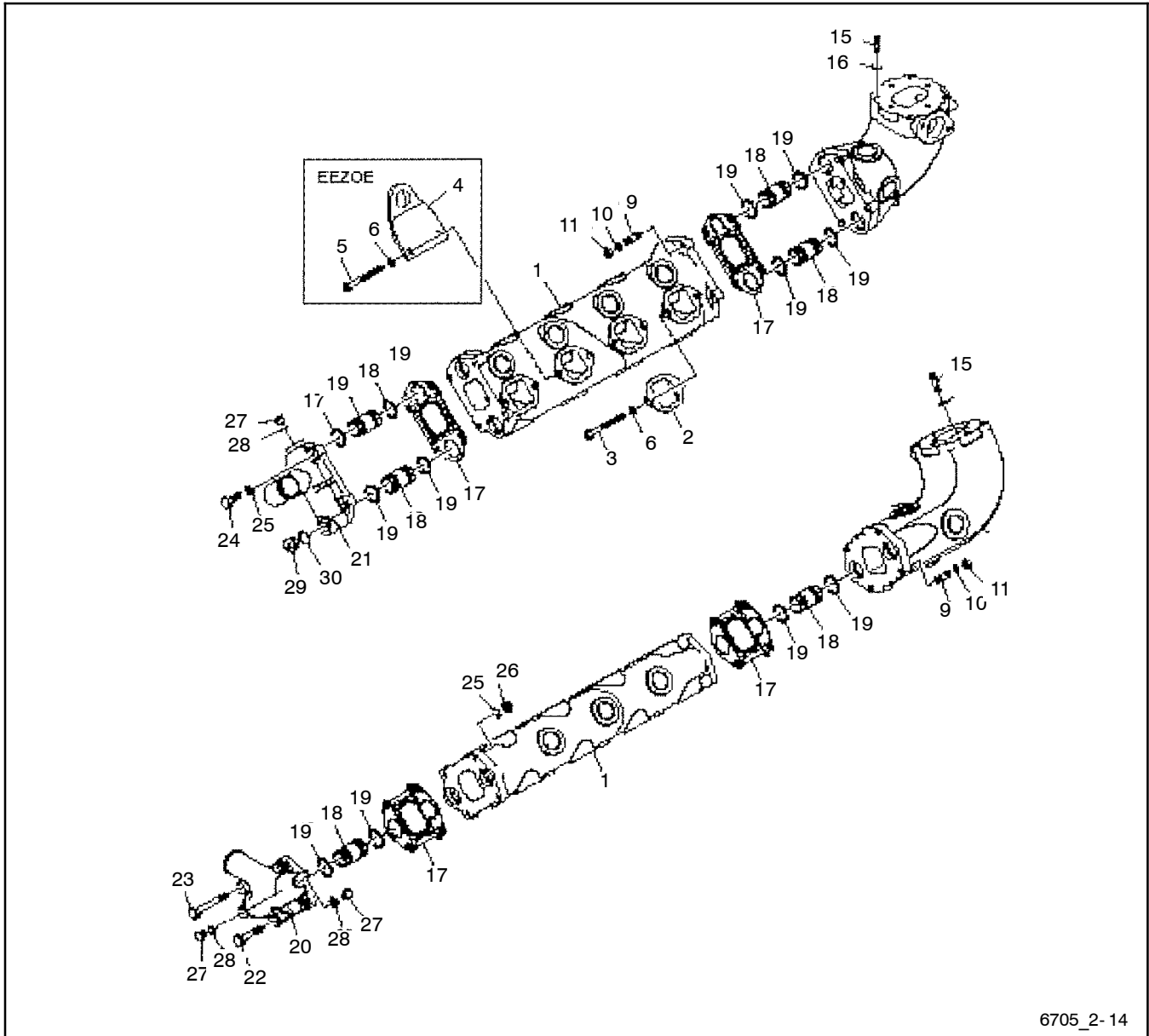


6705_2-14

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73814	Exhaust manifold	2	19	GM73823	O-ring	16
2	GM73815	Exhaust manifold gasket	8	20	GM73824	Exhaust manifold cover	1
3	GM73816	Hex bolt	12	21	GM73825	Exhaust manifold cover	1
4	GM73817	Lifting hook	2	22	GM73826	Hex bolt	3
5	GM73818	Hex bolt	4	23	GM73827	Bolt	1
6	GM72044	Spring washer	16	24	GM73828	Hex bolt	4
9	GM73819	Stud bolt	8	25	GM72045	Spring washer	8
10	GM72045	Spring washer	8	26	GM72036	Hex nut	4
11	GM72036	Hex nut	8	27	GM73770	Plug screw	3
15	GM73820	Washer	8	28	GM72066	Seal ring	3
16	GM72044	Spring washer	8	29	GM72242	Plug screw	1
17	GM73821	Exhaust manifold gasket	4	30	GM72073	Seal ring	1
18	GM73822	Cooling water pipe	8				

2-14: Exhaust Manifold

18.3L

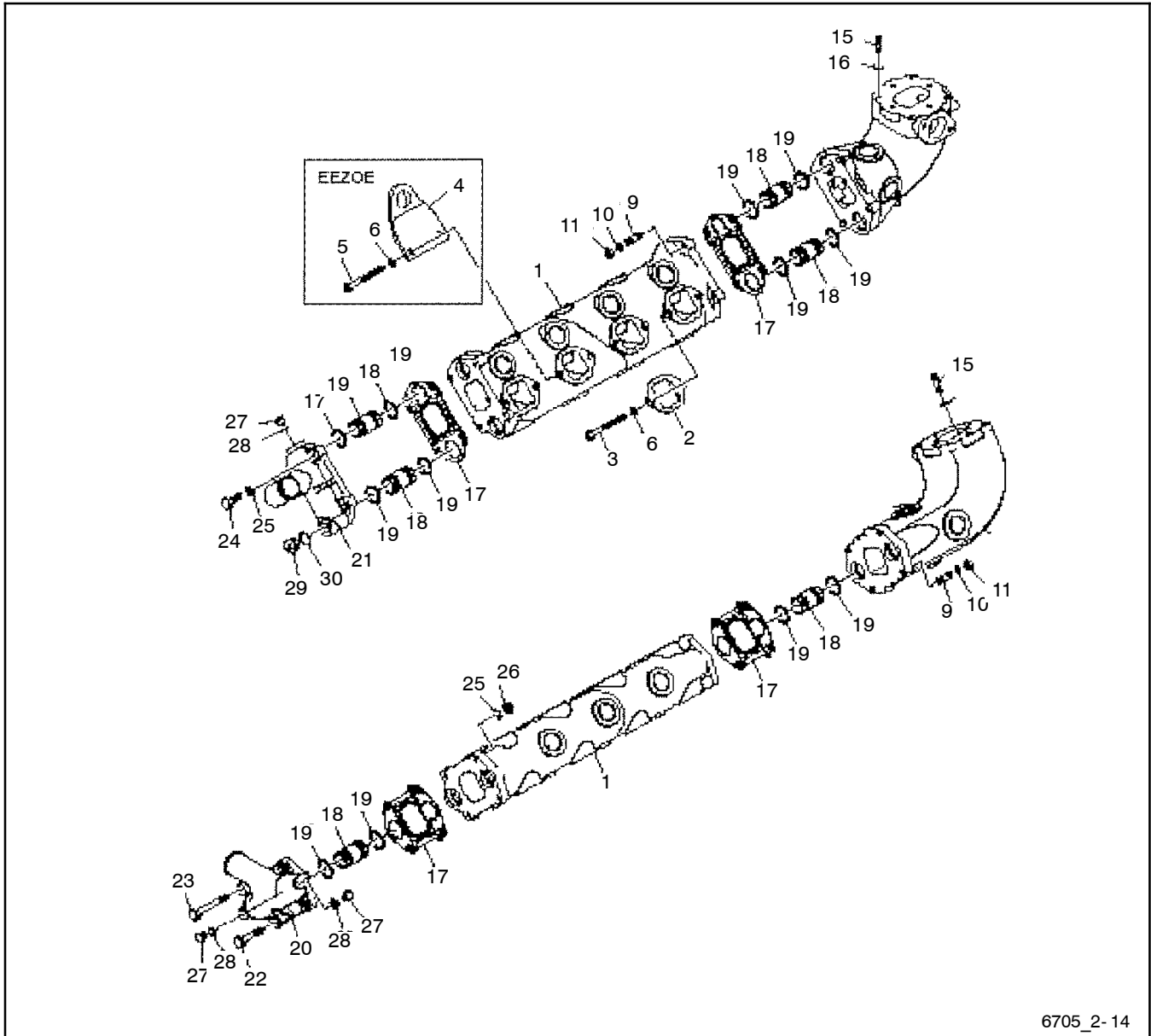


6705_2-14

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM75353	Exhaust manifold	2	19	GM73823	O-ring	16
2	GM73815	Exhaust manifold gasket	10	20	GM73824	Exhaust manifold cover	1
3	GM73816	Hex bolt	16	21	GM73825	Exhaust manifold cover	1
4	GM73817	Lifting hook	2	22	GM73826	Hex bolt	3
5	GM73818	Hex bolt	4	23	GM73827	Bolt	1
6	GM72044	Spring washer	20	24	GM73828	Hex bolt	4
9	GM73819	Stud bolt	8	25	GM72045	Spring washer	8
10	GM72045	Spring washer	8	26	GM72036	Hex nut	4
11	GM72036	Hex nut	8	27	GM73770	Plug screw	3
15	GM73820	Washer	8	28	GM72066	Seal ring	3
16	GM72044	Spring washer	8	29	GM72242	Plug screw	1
17	GM73821	Exhaust manifold gasket	4	30	GM72073	Seal ring	1
18	GM73822	Cooling water pipe	8				

2- 14: Exhaust Manifold, continued

21.9L

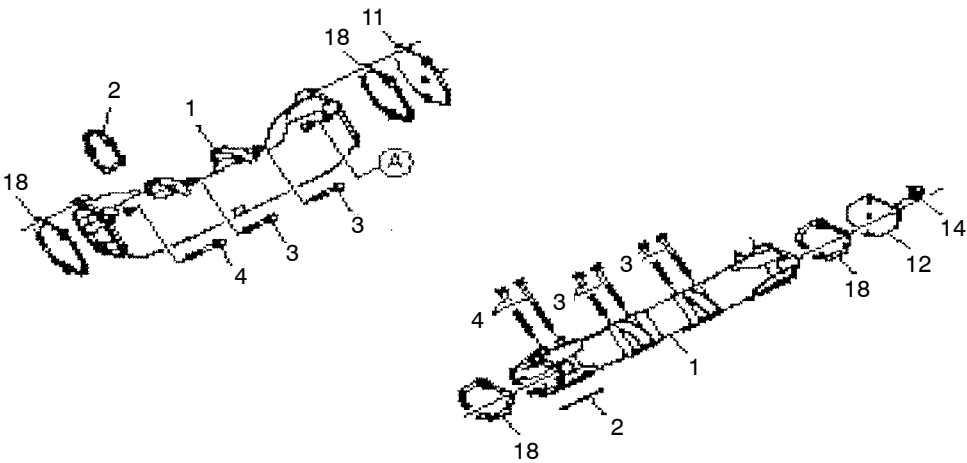


6705_2- 14

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74421	Exhaust manifold	2	19	GM73823	O-ring	16
2	GM73815	Exhaust manifold gasket	12	20	GM73824	Exhaust manifold cover	1
3	GM73816	Hex bolt	20	21	GM73825	Exhaust manifold cover	1
4	GM73817	Lifting hook	2	22	GM73826	Hex bolt	3
5	GM73818	Hex bolt	4	23	GM73827	Bolt	1
6	GM72044	Spring washer	24	24	GM73828	Hex bolt	4
9	GM73819	Stud bolt	8	25	GM72045	Spring washer	8
10	GM72045	Spring washer	8	26	GM72036	Hex nut	4
11	GM72036	Hex nut	8	27	GM73770	Plug screw	3
15	GM73820	Washer	8	28	GM72066	Seal ring	3
16	GM72044	Spring washer	8	29	GM72242	Plug screw	1
17	GM73821	Exhaust manifold gasket	4	30	GM72073	Seal ring	1
18	GM73822	Cooling water pipe	8				

2- 15: Intake Manifold

14.6L

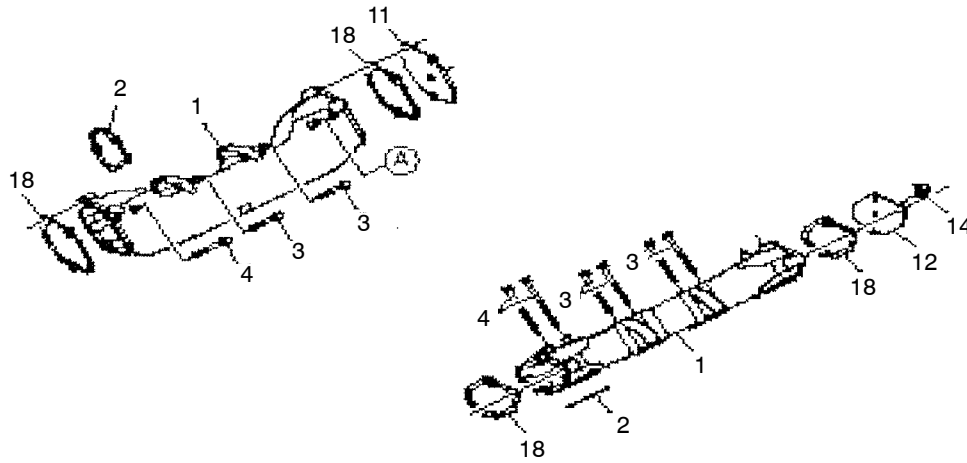


6705_2- 15

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73829	Intake manifold	2	11	GM73832	Cover	1
2	GM73830	Intake manifold gasket	8	12	GM73833	Cover	1
3	GM72012	Bolt assy	8	14	GM73834	Elbow nipple	2
4	GM73831	Bolt assy.	8	18	GM73835	Gasket	4

2- 15: Intake Manifold, continued

18.3L



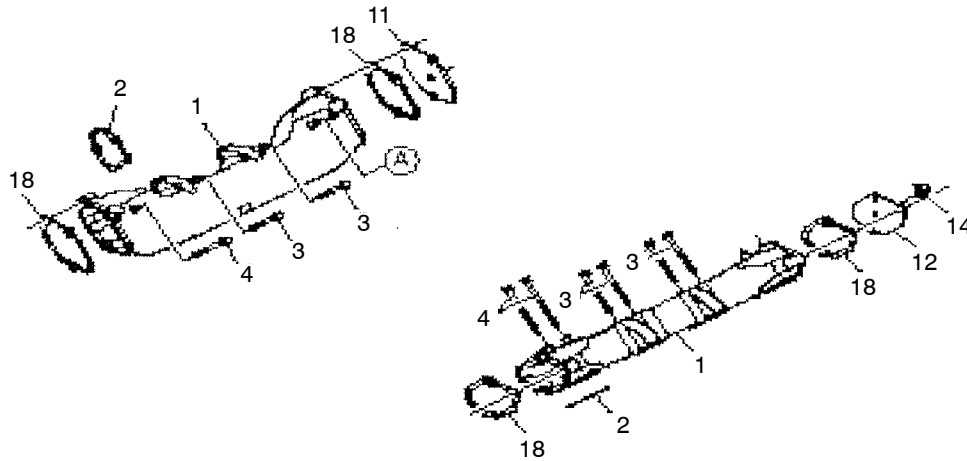
6705_2- 15

Item	Part No.	Description	Qty.
1	GM75354	Intake manifold	2
2	GM74423	Intake manifold gasket	10
3	GM72012	Bolt assy	8
4	GM73831	Bolt assy.	12

Item	Part No.	Description	Qty.
11	GM73832	Cover	1
12	GM73833	Cover	1
14	GM73834	Elbow nipple	2
18	GM73835	Gasket	4

2- 15: Intake Manifold, continued

21.9L



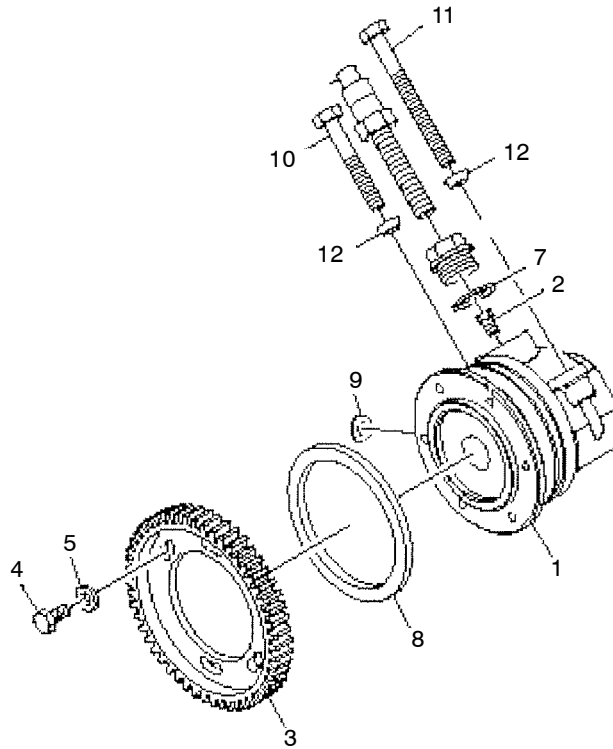
6705_2- 15

Item	Part No.	Description	Qty.
1	GM74422	Intake manifold	2
2	GM74423	Intake manifold gasket	12
3	GM72012	Bolt assy	12
4	GM73831	Bolt assy.	12

Item	Part No.	Description	Qty.
11	GM73832	Cover	1
12	GM73833	Cover	1
14	GM73834	Elbow nipple	2
18	GM73835	Gasket	4

2- 17: Injection Pump Drive Gear

14.6L, 18.3L and 21.9L

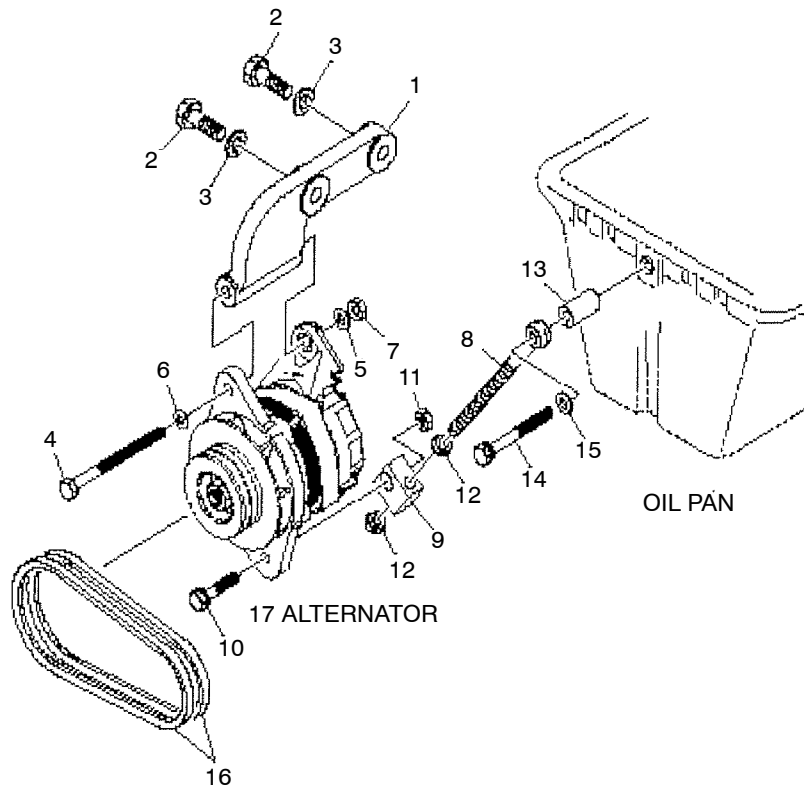


6705_2- 17

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73836	Injection pump drive gear	1	8	GM73841	O-ring	1
2	GM73837	Sensor	1	9	GM73842	O-ring	1
3	GM73838	Injection pump drive gear	1	10	GM73707	Hex bolt	1
4	GM73839	Hex bolt	4	11	GM73843	Hex bolt	1
5	GM73840	Spacer	4	12	GM73844	Ball washer	2
7	GM72075	Seal ring	1				

2- 18: Alternator

14.6L, 18.3L and 21.9L

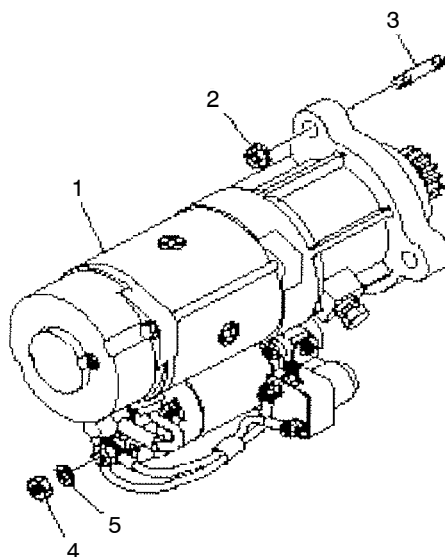


6705_2- 18

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73845	Alternator mounting bracket	1	10	GM73851	Bolt assy.	1
2	GM73846	Hex bolt	2	11	GM72034	Hex nut	1
3	GM73847	Spring washer	2	12	GM73852	Hex nut	2
4	GM73848	Hex bolt	1	13	GM73853	Spacer	1
5	GM72040	Plain washer	1	14	GM73854	Bolt assy.	1
6	GM72045	Spring washer	1	15	GM72039	Plain washer	1
7	GM72036	Hex nut	1	16	-	V-belt (See Front Drive group)	1
8	GM73849	Eye bolt	1	17	GM73856	Alternator	1
9	GM73850	Guide piece	1				

2- 19: Starter

14.6L, 18.3L and 21.9L

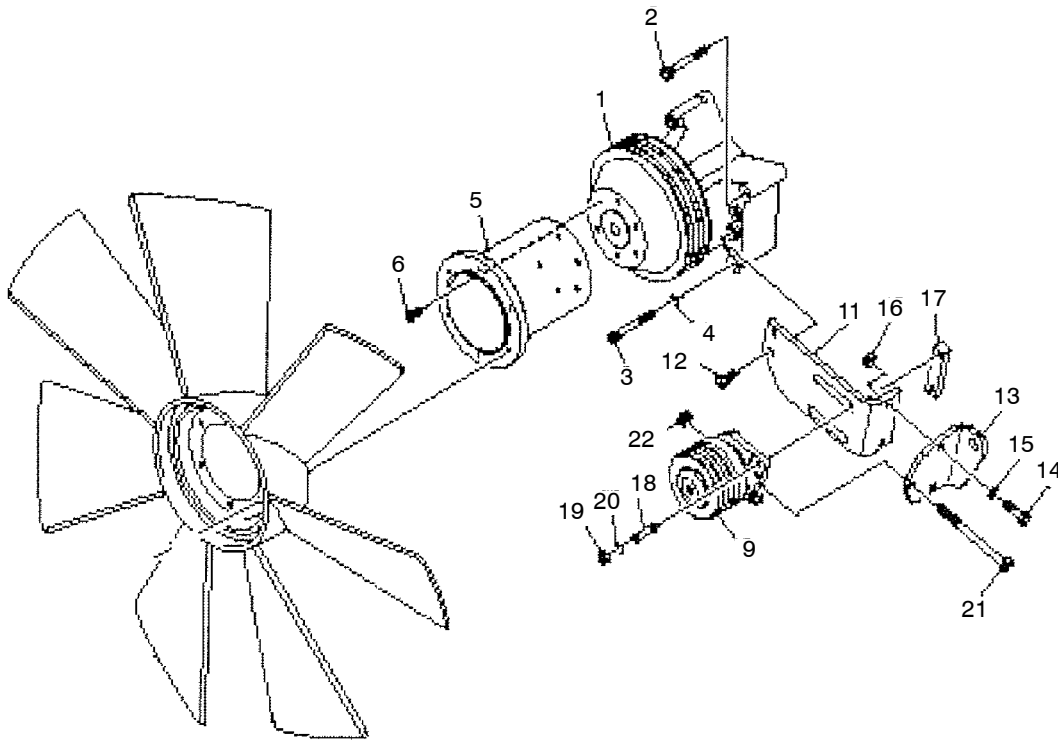


6705_2-

Item	Part No.	Description	Qty.
1	GM73864	Starter	1
2	GM73865	Stud bolt	3
3	GM73866	Hex nut	3
4	GM72034	Hex nut	1
5	GM72044	Spring washer	1

2-21: Fan Mounting

14.6L (Before May 2016)

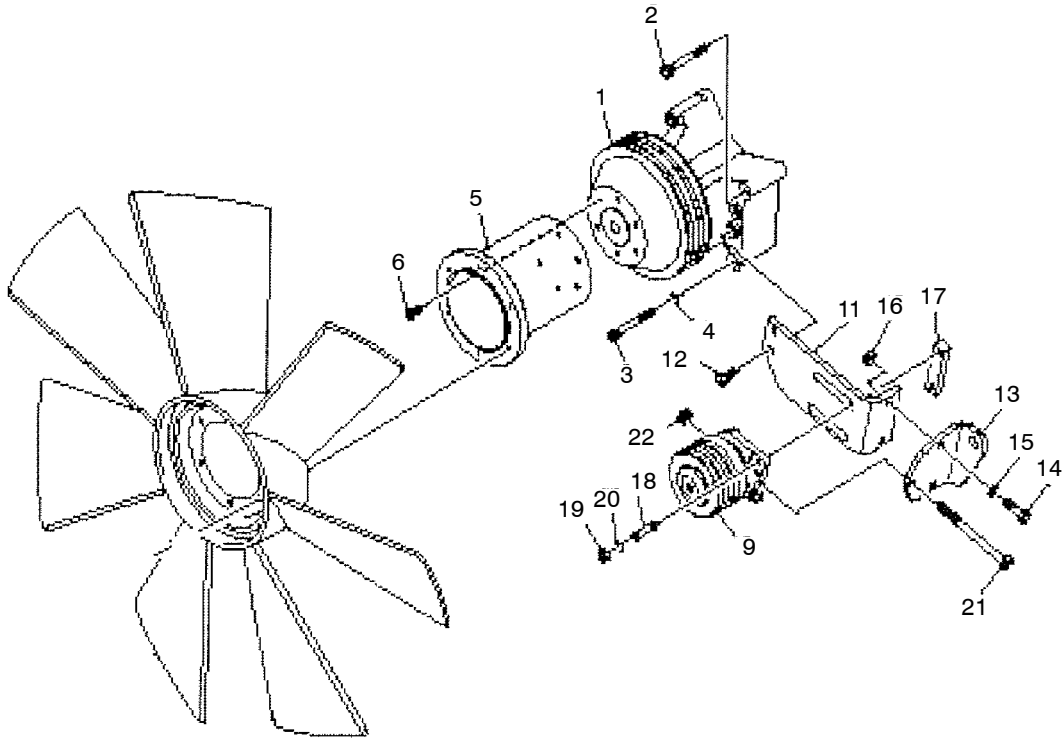


6705_2-21

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73800	Fan mounting	1	14	GM73737	Hex bolt	2
2	GM73801	Bolt assy.	1	15	GM72044	Spring washer	2
3	GM73802	Socket head bolt	1	16	GM72034	Hex nut	2
4	GM73803	Spring washer	1	17	GM73810	Bracket	1
5	GM73804	Fan flange	1	18	GM73811	Stud bolt	2
6	GM73805	Bolt assy.	6	19	GM72034	Hex nut	2
9	GM73806	Idle pulley assy.	1	20	GM72044	Spring washer	2
11	GM73807	Idle pulley bracket	1	21	GM73812	Hex bolt	1
12	GM73808	Bolt assy.	2	22	GM73813	Hex nut	1
13	GM73809	Bracket	1				

2-21: Fan Mounting, continued

18.3L (Before May 2016)

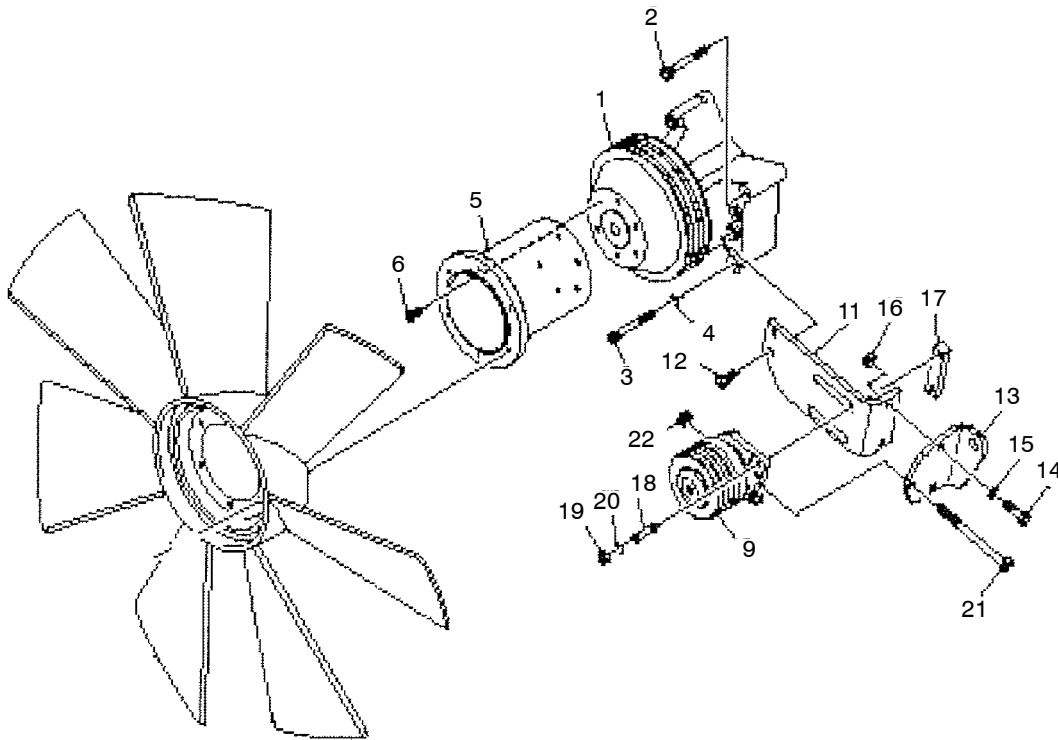


6705_2-21

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM73800	Fan mounting	1	14	GM73737	Hex bolt	2
2	GM73801	Bolt assy.	1	15	GM72044	Spring washer	2
3	GM73802	Socket head bolt	1	16	GM72034	Hex nut	2
4	GM73803	Spring washer	1	17	GM73810	Bracket	1
5	GM73804	Fan flange	1	18	GM73811	Stud bolt	2
6	GM73805	Bolt assy.	6	19	GM72034	Hex nut	2
9	GM73806	Idle pulley assy.	1	20	GM72044	Spring washer	2
11	GM73807	Idle pulley bracket	1	21	GM73812	Hex bolt	1
12	GM73808	Bolt assy.	2	22	GM73813	Hex nut	1
13	GM73809	Bracket	1				

2-21: Fan Mounting, continued

21.9L (Before May 2016)

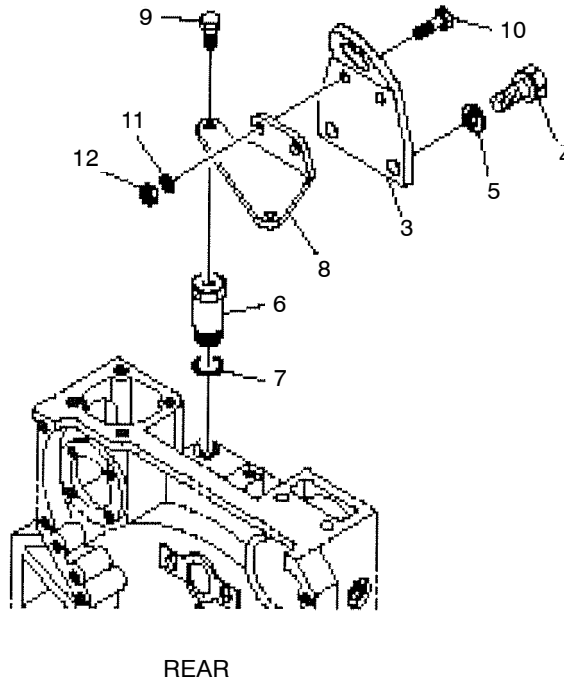


6705_2-21

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	GM74424	Fan mounting	1	14	GM73737	Hex bolt	2
2	GM73801	Bolt assy.	1	15	GM72044	Spring washer	2
3	GM73802	Socket head bolt	1	16	GM72034	Hex nut	2
4	GM73803	Spring washer	1	17	GM73810	Bracket	1
5	GM74425	Fan flange	1	18	GM73811	Stud bolt	2
6	GM73805	Bolt assy.	6	19	GM72034	Hex nut	2
9	GM73806	Idle pulley assy.	1	20	GM72044	Spring washer	2
11	GM73807	Idle pulley bracket	1	21	GM73812	Hex bolt	1
12	GM73808	Bolt assy.	2	22	GM73813	Hex nut	1
13	GM73809	Bracket	1				

2-22: Lifting Hook

14.6L, 18.3L and 21.9L



6705_2-22

Item	Part No.	Description	Qty.
3	GM73857	Lifting hook	1
4	GM73858	Hex bolt	2
5	GM73859	Spring washer	2
6	GM73860	Spacer	1
7	GM72073	Seal ring	1
8	GM73861	Holder	1
9	GM73862	Hex bolt	2
10	GM73863	Hex bolt	2
11	GM72044	Spring washer	2
12	GM72034	Hex nut	2

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