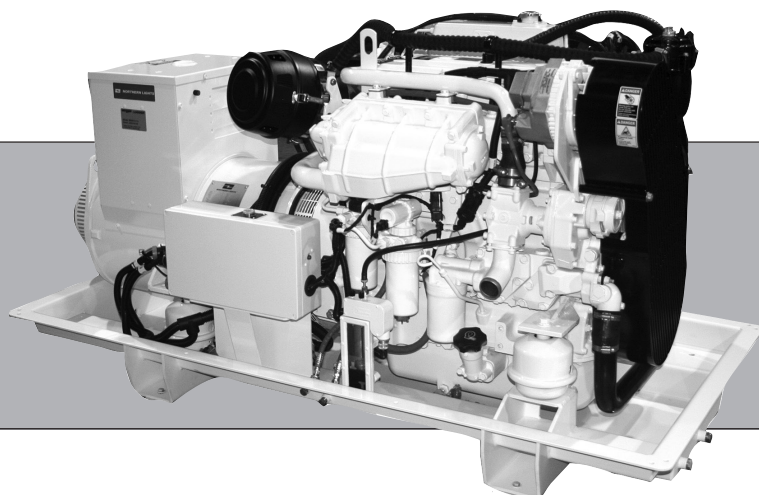




PARTS MANUAL

P99-3

For Models: M80A13S, M80A13, M99A13S & M99A13



www.northern-lights.com



— CALIFORNIA —
Proposition 65 Warning:

Breathing Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

- * Always start and operate the engine in a well-ventilated area.
- * If in an enclosed area, vent the exhaust to the outside.
- * Do not modify or tamper with the exhaust system.
- * Do not idle the engine except as necessary.

For more information, go to www.P65warnings.ca.gov/diesel.

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PART NO.: P99-3 12/21



PARTS MANUAL

for Models M80A13S, M80A13, M99A13S & M99A13

Please read thoroughly before attempting to use this manual:

Table of Content.....	I
Model Designation & Serial Numbers.....	II
Reading a Parts Page.....	III

Table of Contents

GROUP 1 - ENGINE

Cylinder Block	0 - 1
Flywheel Housing & Flywheel	2 - 4
Crankshaft, Main Bearings & Pulley.....	5 - 6
Connection Rod, Pistons & Liners.....	8 - 9
Timing Gear Cover	10 - 11
Timing Gear Backing Plate & Gear	12 - 13
Balance Shafts.....	14 - 15
Spline Drive	16 - 17
Auxiliary Drive Oil Supply Conversion Parts	18
Oil Filter	19
Oil Pump, Pan & Pickup.....	20 - 21
Oil Fill, Dipstick & Tube.....	22 - 23
Oil Filter Neck Cover.....	24
Temperature Switch Plug.....	25
Cylinder Head with Valves	26 - 27
Rocker Arm & Rocker Arm Shaft.....	28 - 29
Rocker Arm Cover.....	30 - 31

GROUP 2 - INTAKE & EXHAUST

Ventilating System & Air Cleaner.....	0 - 1
Air Intake	2 - 3
Ventilation System.....	4 - 5
Exhaust Manifold.....	6 - 7
Turbocharger	8 - 9
Exhaust Elbow	10 - 12

GROUP 3 - COOLING SYSTEM

Heat Exchanger & Cover.....	0 - 2
Thermostat & Thermostat Cover	3 - 4
Water Pump Inlet	5
Coolant Pump.....	6
Cooling System Auxiliary Drive Cover.....	7
Sea Water Pump	8 - 9
Oil Cooler.....	10

GROUP 4 - FUEL SYSTEM

Fuel Injection Pump	0 - 1
Low Pressure Fuel Lines	2 - 3
Water Separator	4 - 7
Fuel Transfer Pump Cover.....	8
ABS Fuel Lines	9

GROUP 5 - ELECTRICAL SYSTEM

Oil Pressure Manifold	0 - 1
Pre-Alarm Switches	2 - 3
AC Voltage Regulator	4
Speed Switch.....	5
Engine Wiring Harness	6 - 9
Engine Sensors.....	10 - 11
Starting Aid	12
Starter Motor.....	14 - 17
Alternator	18 - 24
Alternator Mounting	26 - 27
Belt Tensioner	28
Fan Belt.....	29
Engine Installation Kit.....	30 - 31
Diodes	32 - 33

GROUP 6 - GASKETS

Engine Overhaul	0
-----------------------	---

GROUP 8 - FRAMES & MOUNTING

Lifting Eyes.....	0
Base Frames	1 - 6

GROUP 9 - ACCESSORIES & OPTIONAL EQUIPMENT

PTO Electric Clutch.....	0 - 3
PTO Adapter	4 - 5
SAE A-Pad/Spline Drive.....	6 - 7
Raw Water Flow Switch	8 - 9

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MODEL DESIGNATION

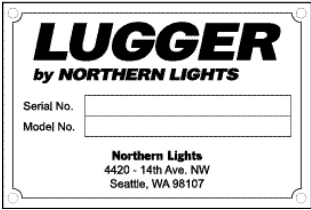
M80A13S	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Stamford generator end, 80 kW at 1800 rpm.	M80A13	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Marathon generator end, 80 kW at 1800 rpm.
M99A13S	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Stamford generator end, 80 kW at 1800 rpm.	M99A13	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Marathon generator end, 80 kW at 1800 rpm.
M150A13S	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Stamford generator end, 150 kW at 1800 rpm.	M150A13	=	Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine and Marathon generator end, 150 kW at 1800 rpm.

All model numbers in parentheses will indicate a John Deere base engine. All variations requiring serial numbers for proper identification will be noted as Northern Lights or John Deere.

SERIAL NUMBERS

NORTHERN LIGHTS

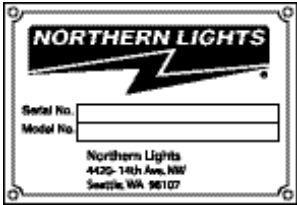
Your set has three serial numbers: ① an engine number stamped on the block, ② a generator plate, and ③ a generator set plate. Use the serial number on the **generator set plate** when ordering parts or in correspondence. The generator set plate is found on the service side of the generator and resembles one of the drawings below.



Lugger Serial Number



Generator Set Serial Number



Generator Set Serial Number

Reading a Parts Page

IMPORTANT:

Before selecting parts, be sure that you are choosing parts from the correct page.
Check the model designation at the page top.
Do not use this illustration for parts purchasing.

1

ELECTRICAL SYSTEM

ALTERNATOR ASSEMBLY: M - NL673

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5-2

KEY	PART NUMBER	QTY.	DESCRIPTION	SERIALNUMBER
0	185046210	1	Alternator Assembly	-
1	185446219	1	Flywheel, complete	-
2	185446217	1	Plate, complete	-
3	185716200	1	Plate	-
4	185446218	1	Stator, complete	-
5	040126210	2	Bearing	-
6	020210010	1	Nut	-
7	027100010	1	Spring washer	-
8	026100010	1	Washer	-
9	185446220	1	Clamp	-
10	015140408	1	Screw	-
11	015140425	2	Screw	-
12	199236510	1	Collar	-

REFERENCES:

1. Grouping section title.

2. Model designation of equipment that uses parts listed on this page.

3. Title and description of assembly.

4. Drawing numbers that correspond to key column numbers for parts identification.

5. Key column for locating parts shown on drawing.

6. Part number.
7. Quantity of parts used.

8. Description of each component part.

9. Serial number of unit the part fits.

10. Assembly or kit designated by Key 0 or •••.

11. Grouping index number.

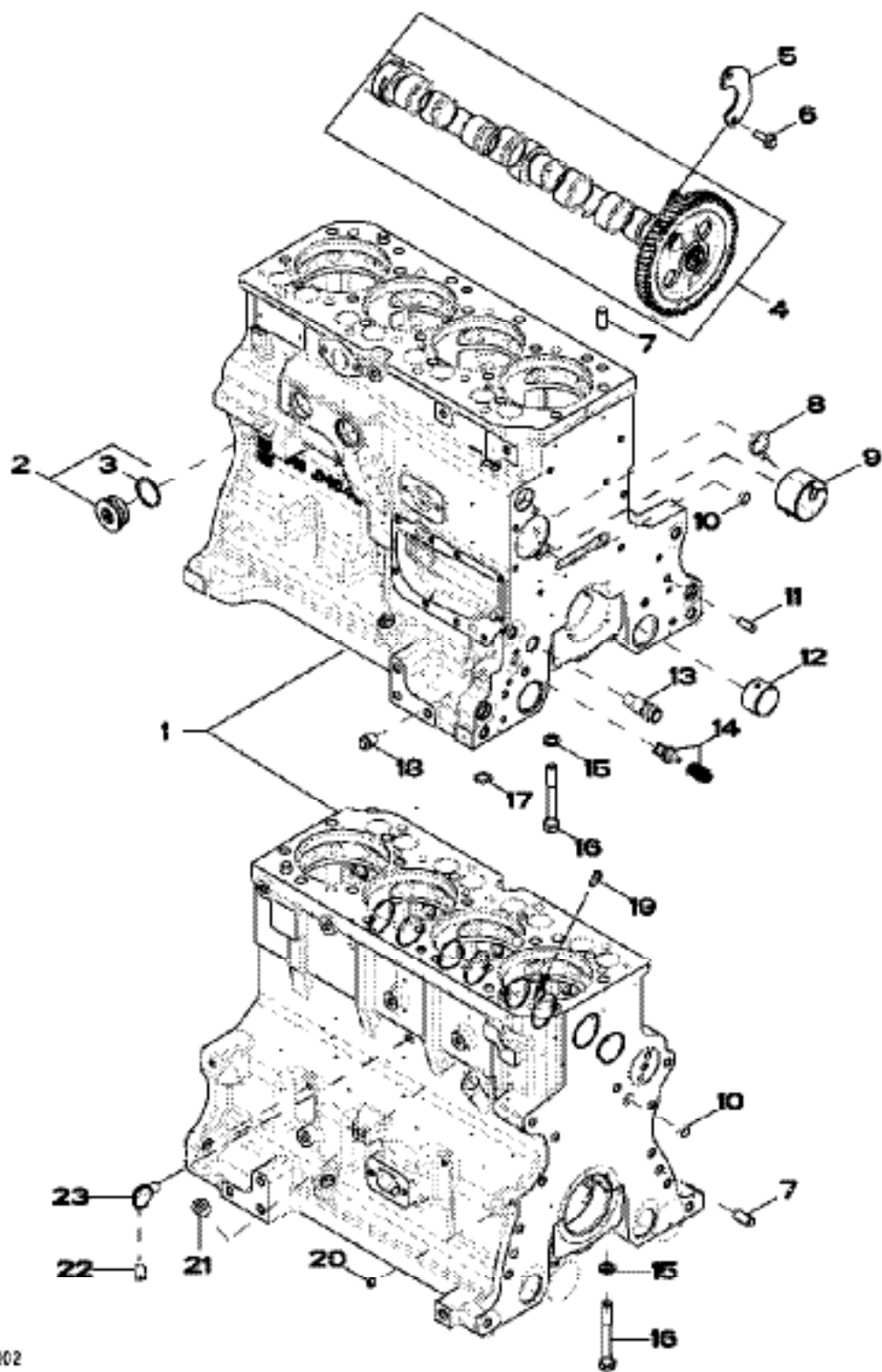
12. Page number within the grouping index.

13. Manual title.

14. Page publication date.

NOTE: ➡ Arrows always point toward the front of the engine.

Cylinder Block

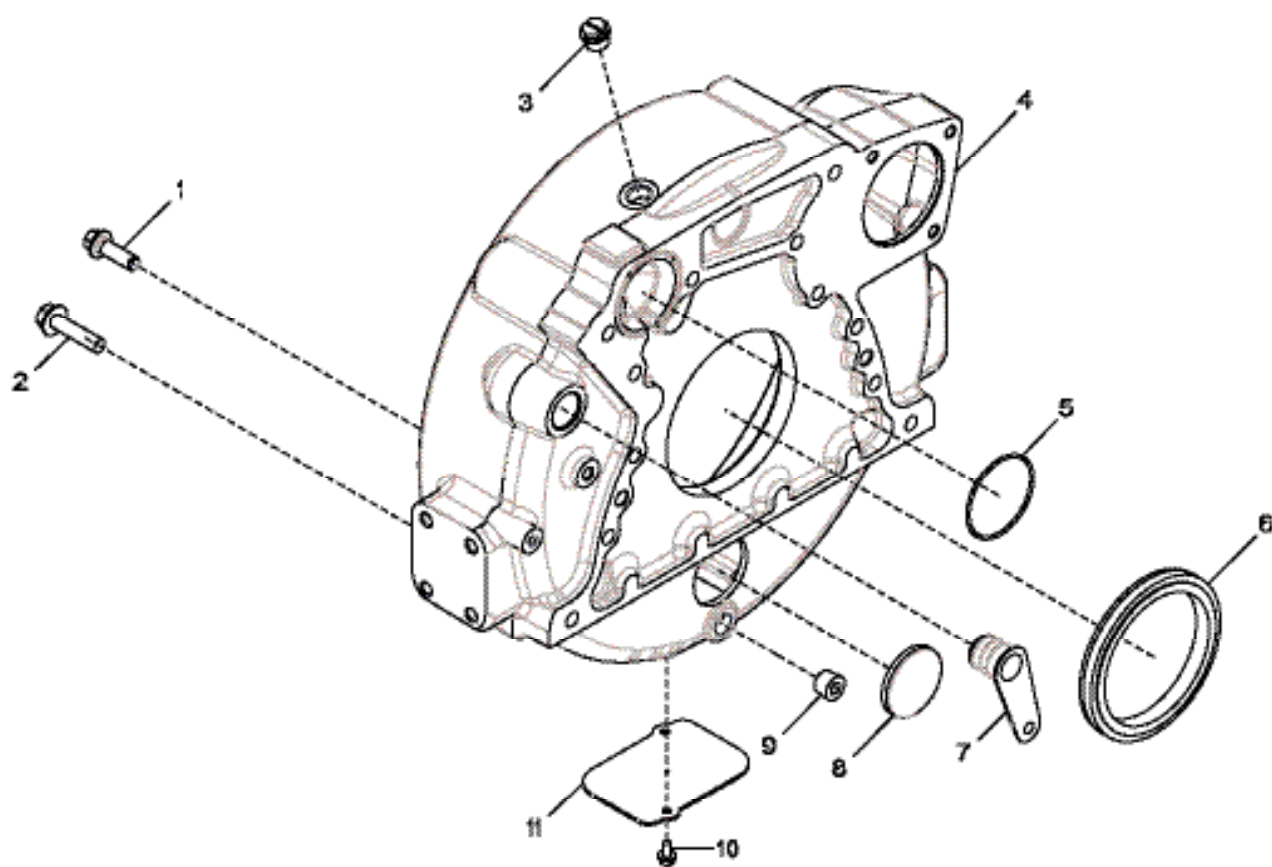


RE522005PCOB02

Cylinder Block

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE536966	1	Cylinder Block (MARKED R504849 OR R534172) *	-
2	RE508185	2	Plugs, Socket Head 2 1-5/8"-12 UNC	-
3	1672020	1	O-Ring	-
4	RE537237	1	Camshaft (MARKED R518734 OR RE522908)	-
	SE501816	1	Camshaft (Remanufactured) (MARKED R518734 OR RE522908; REMAN FOR RE537237)	-
5	R132518	1	Plate	-
6	19M8999	2	Screw M8 X 25	-
7	R48685	4	Dowel Pin	-
8	R116466	1	Plug	-
9	R119874	1	Bushing ALSO ORDER TY6333 Grease	-
10	T18891	1	Plug OD = 16 mm	-
11	R26650	1	Dowel Pin (3/8" X 1")	-
12	R115299	6	Bushing	-
13	RE505501	1	Bleed Valve	-
14	RE63674	1	Valve Kit	-
15	T20168	10	Washer	-
16	R528387	10	Cap Screw 1/2 - 13 x 3 - 3/4	-
17	R97185	1	O-Ring	-
18	15H695	1	Pipe Plug 3/8 NPT	-
19	R131182	4	Orifice	-
20	RE71255	5	Pipe Plug 1/8 NPT (A)	-
21	21-11003	1	Pipe Plug 1 1/2 NPT	-
22	RE507807	1	Pipe Plug 1/4 NPT (A)	-
23	RE537834	1	Elbow Fitting (A)	-
(A) Threads with Pre-Applied Sealant				
* Also Order R534091 x 18 ea. Cylinder Head Bolts				

Flywheel Housing SAE #3

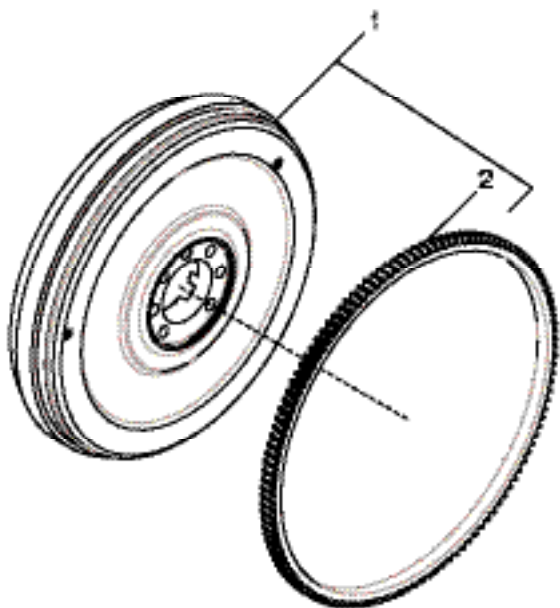


1406_RES0290_PCD

Flywheel Housing SAE #3

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R135918	8	Bolt	-
2	19M8306	4	Screw M12 X 50 mm	-
3	AR106083	1	Plug	-
4	R503451	1	Housing	-
5	R61467	1	O-Ring	-
6	RE44574	1	Seal	-
7	R131769	1	Plug	-
8	T13518	1	Plug	-
9	21-11003	1	Pipe Plug 1/2 NPT	-
10	19M7774	2	Screw M6 X 12 mm	-
11	R121039	1	Plate	-

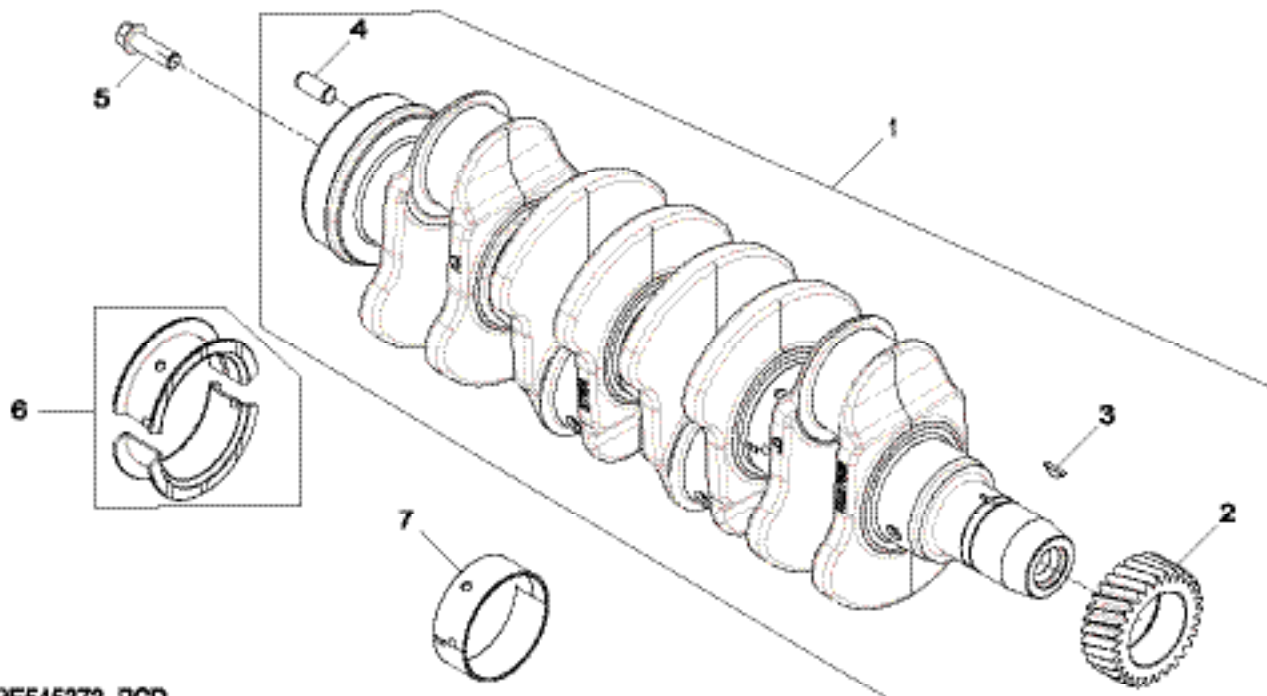
Flywheel



1597_RE529611_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE529610	1	Flywheel (Includes Key #2)	-
2	R28811	1	Ring Gear (129 Teeth)	-

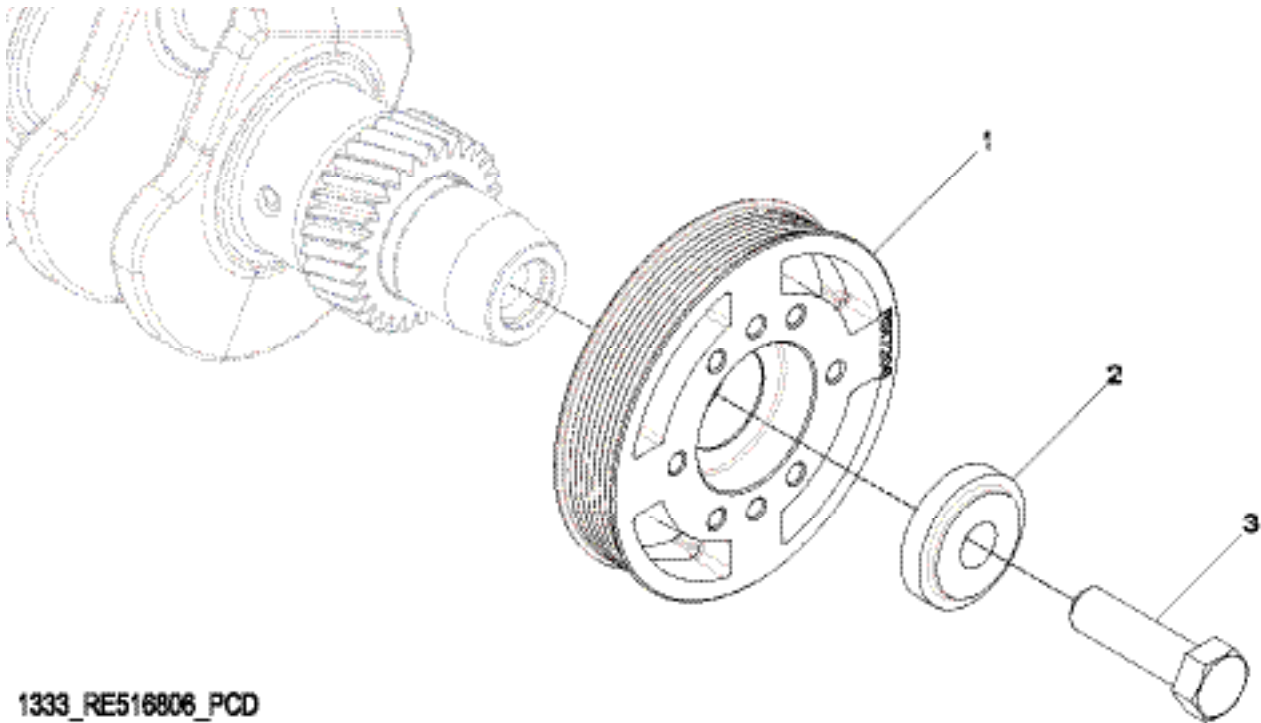
Crankshaft & Bearings



4722_RE545373_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE538081	1	Crankshaft (Includes Keys 2-4) ALSO ORDER RE537070 AND RE538097	-
2	R120631	1	Gear	-
3	R505609	1	Shaft Key	-
4	R48685	1	Dowel Pin	-
5	R531927	6	Cap Screw	-
6	RE65168	1	Thrust Bearing Kit . STD	-
7	RE65165	4	Main Bearing Kit . STD	-

Crankshaft Pulley

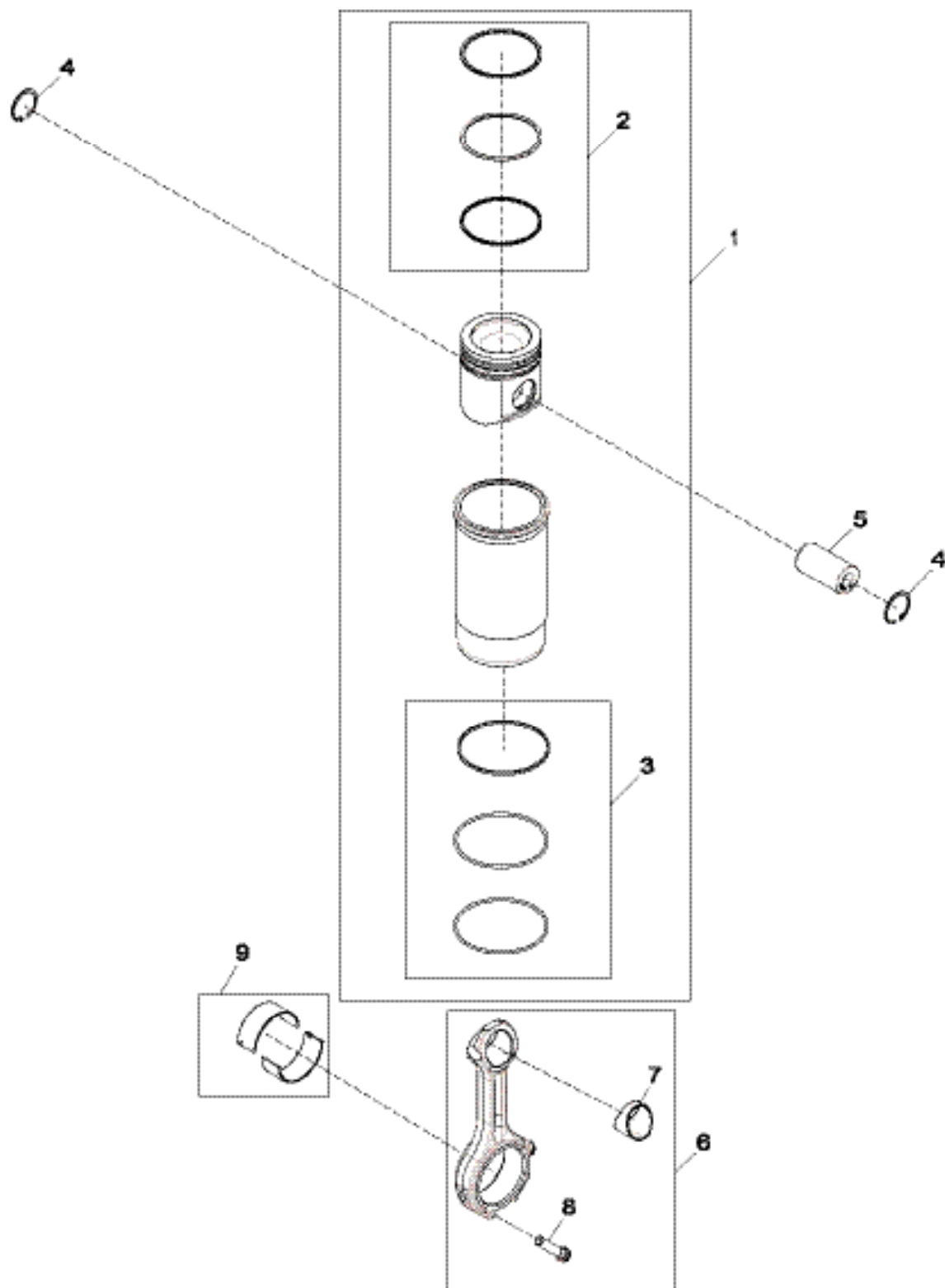


1333_RE516806_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R517208	1	Pulley 168 mm OD	-
2	R517237	1	Washer	-
3	R516648	1	Cap Screw M20 x 2.5 x 70 mm Grade 12.9	-

Notes

Connection Rod, Piston and Liner

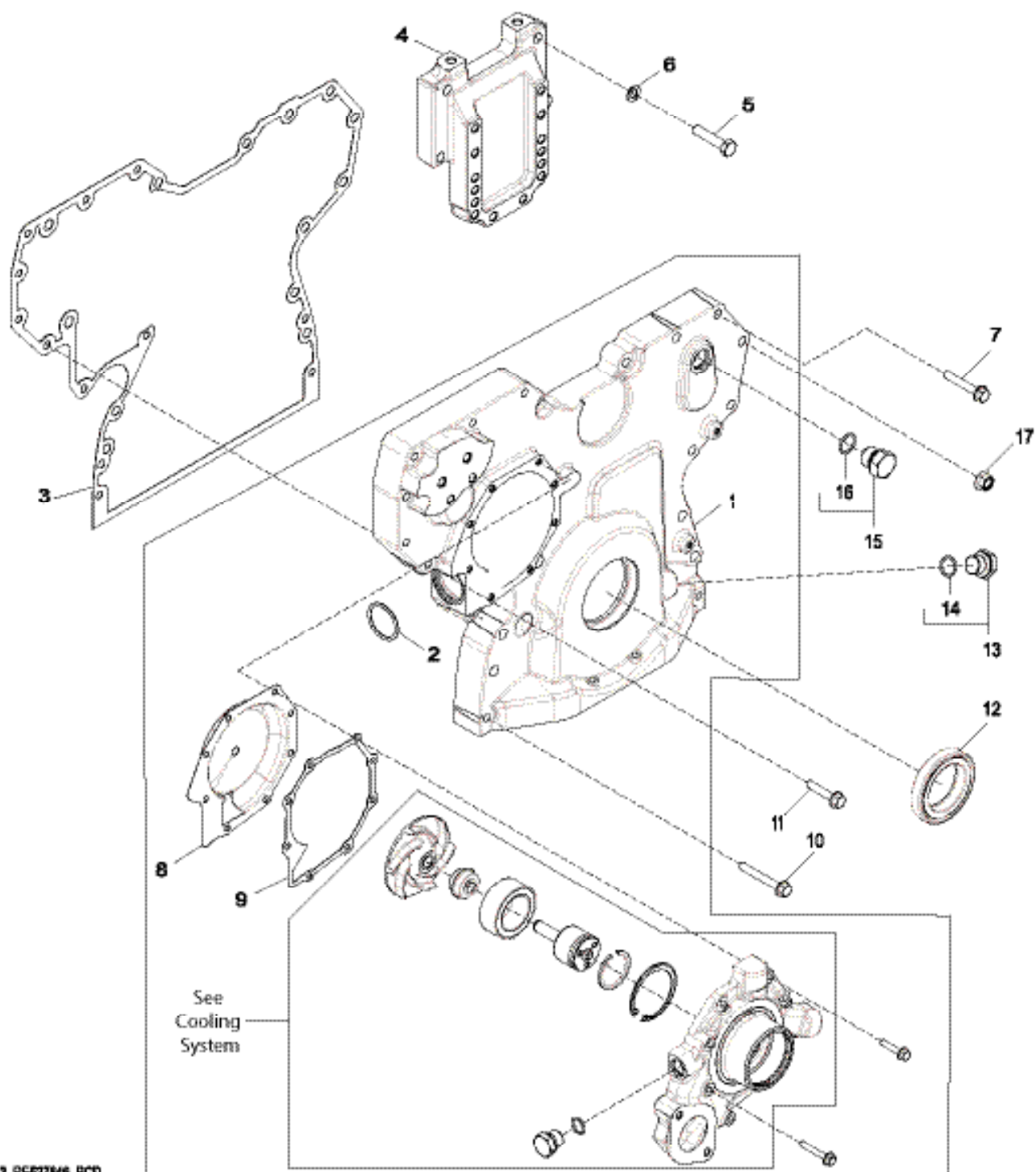


4006_RE554216_PCD

Connection Rod, Piston and Liner

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE540936	4	Cylinder Kit	-
2	RE524453	1	Piston Ring Kit	-
3	AR65507	1	O-Ring Kit	-
4	R54114	8	Snap Ring	-
5	R502755	4	Piston Pin	-
6	RE500608	4	Connecting Rod	-
	SE501094	4	Connecting Rod (Remanufactured)	-
7	R114082	1	Bushing	-
8	R501124	2	Screw	-
9	RE65908	4	Bearing	-

Timing Gear Cover

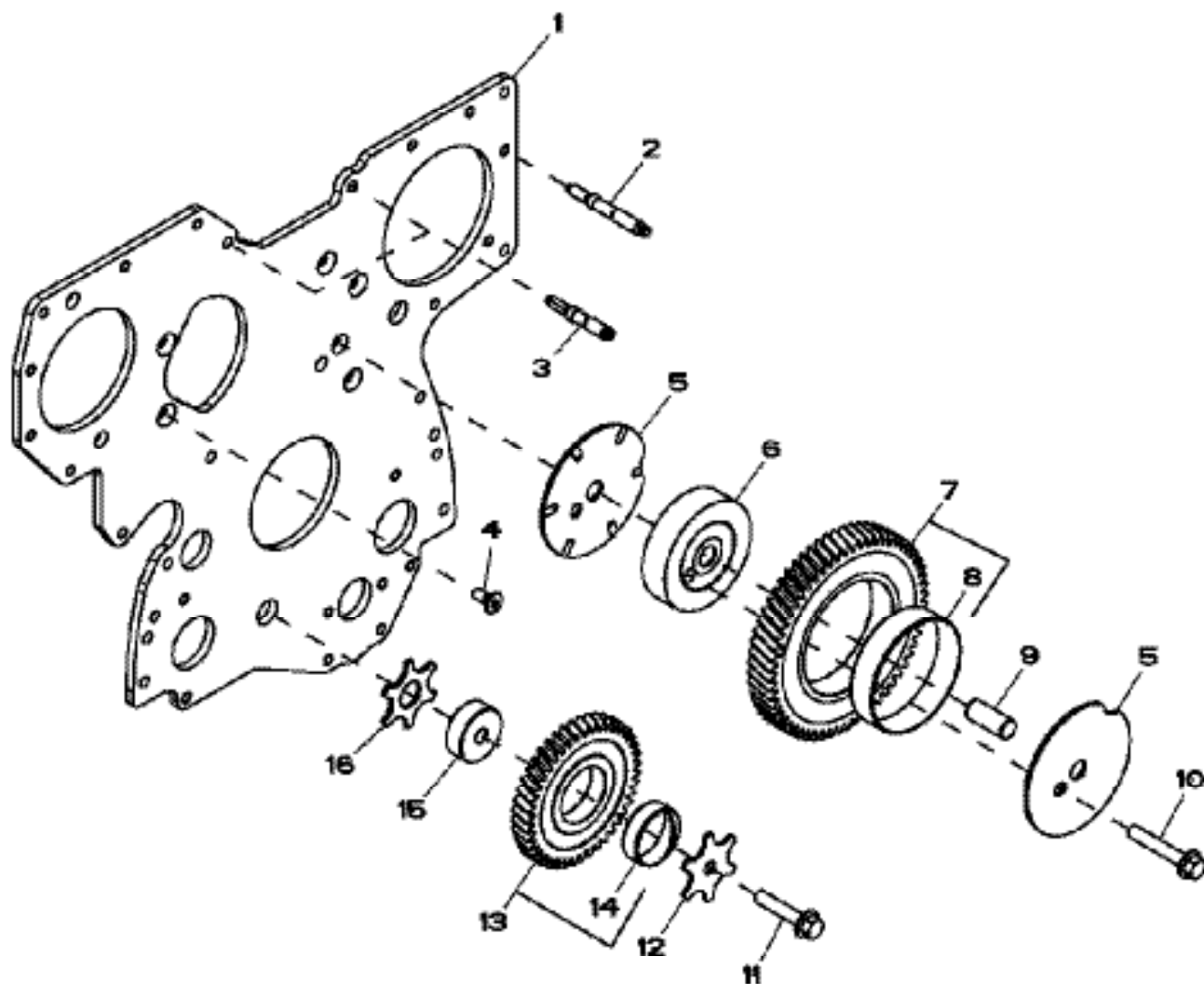


4443_RE527946_PCD

Timing Gear Cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
**	RE509865	1	Timing Cover & Coolant Pump Repair Kit	-
1	RE527847	1	Timing Cover	-
2	R504734	1	O-Ring	-
3	R526944	1	Gasket	-
4	R522907	1	Support	-
5	19M8488	4	Cap Screw M10 X 45	-
6	24M7096	4	Washer	-
7	19M7800	8	Screw M8 X 50	-
8	RE508566	1	Insert	-
9	R123417	1	Gasket	-
10	19M7801	3	Screw M8 X 60	-
11	19M8317	1	Screw M8 X 40	-
12	RE538097	1	Seal	-
13	RE517370	1	Fitting	-
14	51M7044	1	O-Ring 17.300 X 2.200 mm	-
15	RE46687	1	Drain Plug	-
16	16-09501	1	O-Ring 19.300 X 2.200 mm	-
17	14-80811	9	Flange Nut M10	-

Timing Cover Backing Plate & Gears

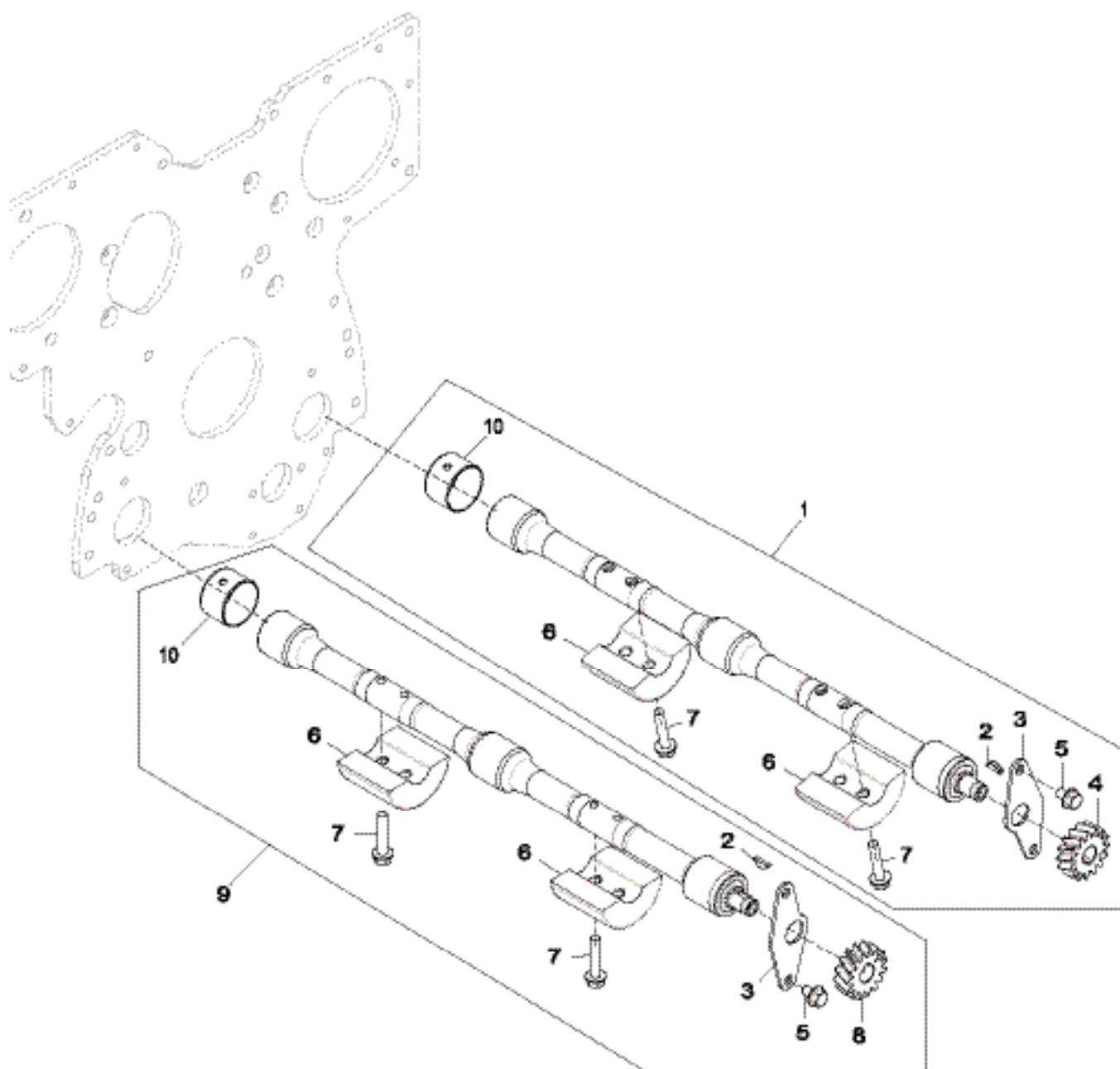


RE506566PCDD03

Timing Cover Backing Plate & Gears

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R504282	1	Plate	-
2	R123584	7	Stud	-
3	R134518	2	Stud	-
4	R136475	5	Screw	-
5	R515494	2	Thrust Washer	-
6	R504843	1	Shaft	-
7	RE508489	1	Gear with Bushing (MARKED R504614)	-
9	R515408	1	Dowel Pin 1	-
10	19M8844	1	Screw M10 X 60 mm	-
11	19M8966	1	Screw M10 X 50 mm	-
12	R131283	1	Thrust Washer	-
13	RE56369	1	Gear	-
14	R114193	1	Bushing	-
15	R114194	1	Shaft	-
16	R101225	1	Thrust Washer	-

Balance Shifts

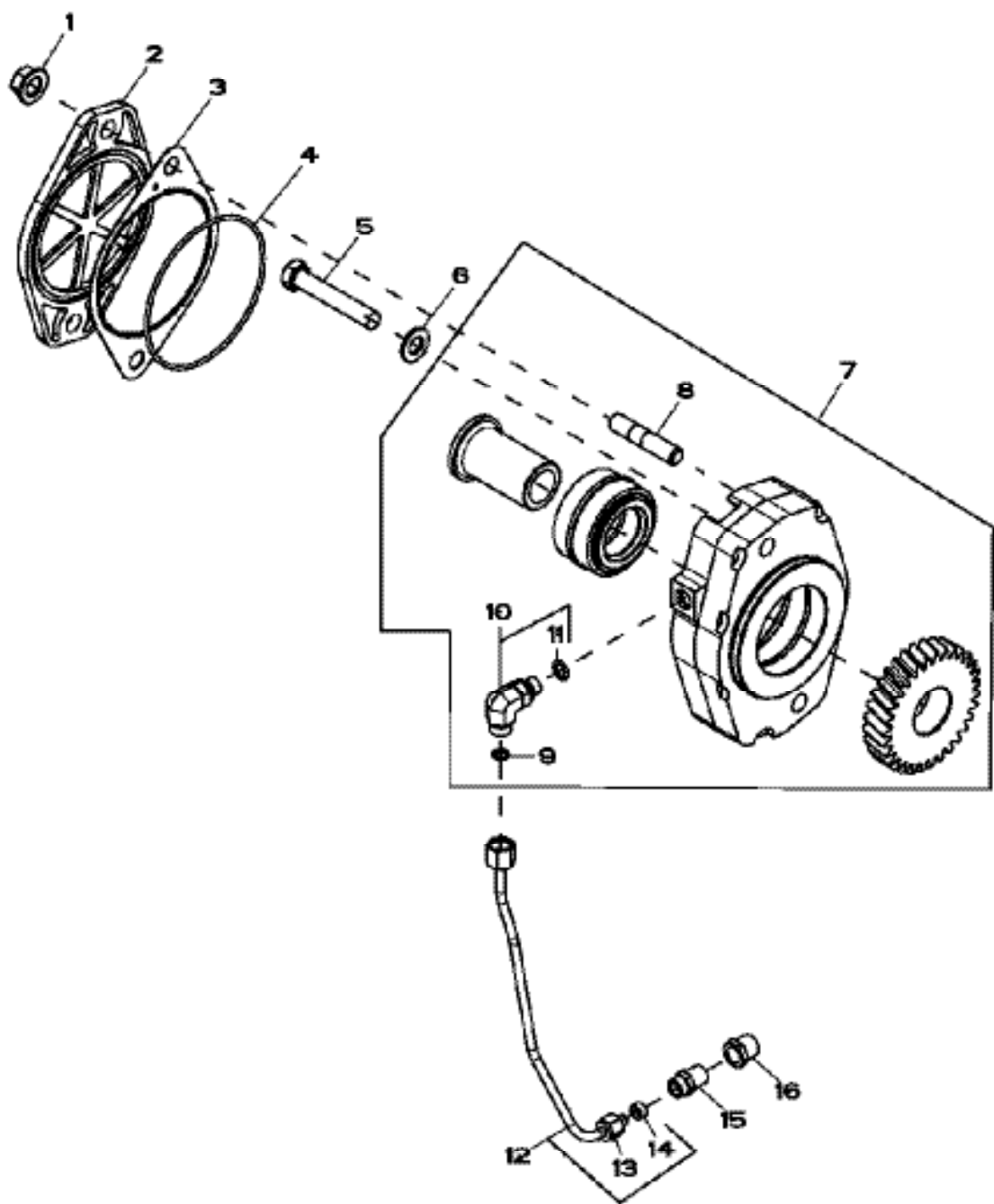


4501_RES01284_PCD

Balance Shafts

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE502446	2	Balancer Shaft Assembly Left Hand (Marked RE500449)	-
2	R133303	1	Shaft Key	-
3	R116078	1	Plate	-
4	R120639	1	Gear, Left Hand	-
5	19M8998	4	Screw M8 X 12 mm	-
6	R500650	4	Weight	-
7	19M8882	8	Screw M8 X 40 mm	-
8	R120637	1	Gear, Right Hand	-
9	RE502447	1	Balancer Shaft Assembly Right Hand (Marked RE500448)	-
10	R115299	1	Bushing	-

SAE B-Pad / Spline Drive



REV 59504PC0003

SAE B-Pad / Spline Drive

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	14M7299	2	Flange Nut M12	-
2	R135757	1	Cover	-
3	R522690	1	Gasket	-
4	16-19503	1	O-Ring	-
5	19M7753	2	Cap Screw M12 X 70	-
6	24M7047	AR	Washer	-
7	RE500824	1	Auxiliary Drive	-
8	42M7071	2	Stud Legnth = 60 mm	-
9	T77814	1	O-Ring	-
10	38H5015	1	Elbow Fitting M12 X 1.5 X 9/19"-18 UNF, ALSO ORDER T77814	-
11	51M7040	1	O-Ring 9.300 X 2.200 mm	-
12	RE506914	1	Oil Line *	-
13	R123593	1	Tube Nut *	-
14	R51936	1	Sealing Washer *	-
15	R110664	1	Coupling 1/4"-18 NPT X 1/2"-24 UNS *	-
16	15H700	1	Pipe Bushing 1/4", 3/8"-18 NPT X 1/4"-18 NPT *	-
* Note: Keys 12 - 16 used only on heat exchanger cooled M99C13 models with base frames with TTB mounts (See base frame parts pages.) All M80A13 & M99C13 with heat exchanger cooling plus M99C13 heat exchanger cooled models equipped with PTO / Electric clutch option use special oil supply line (See parts detail.)				

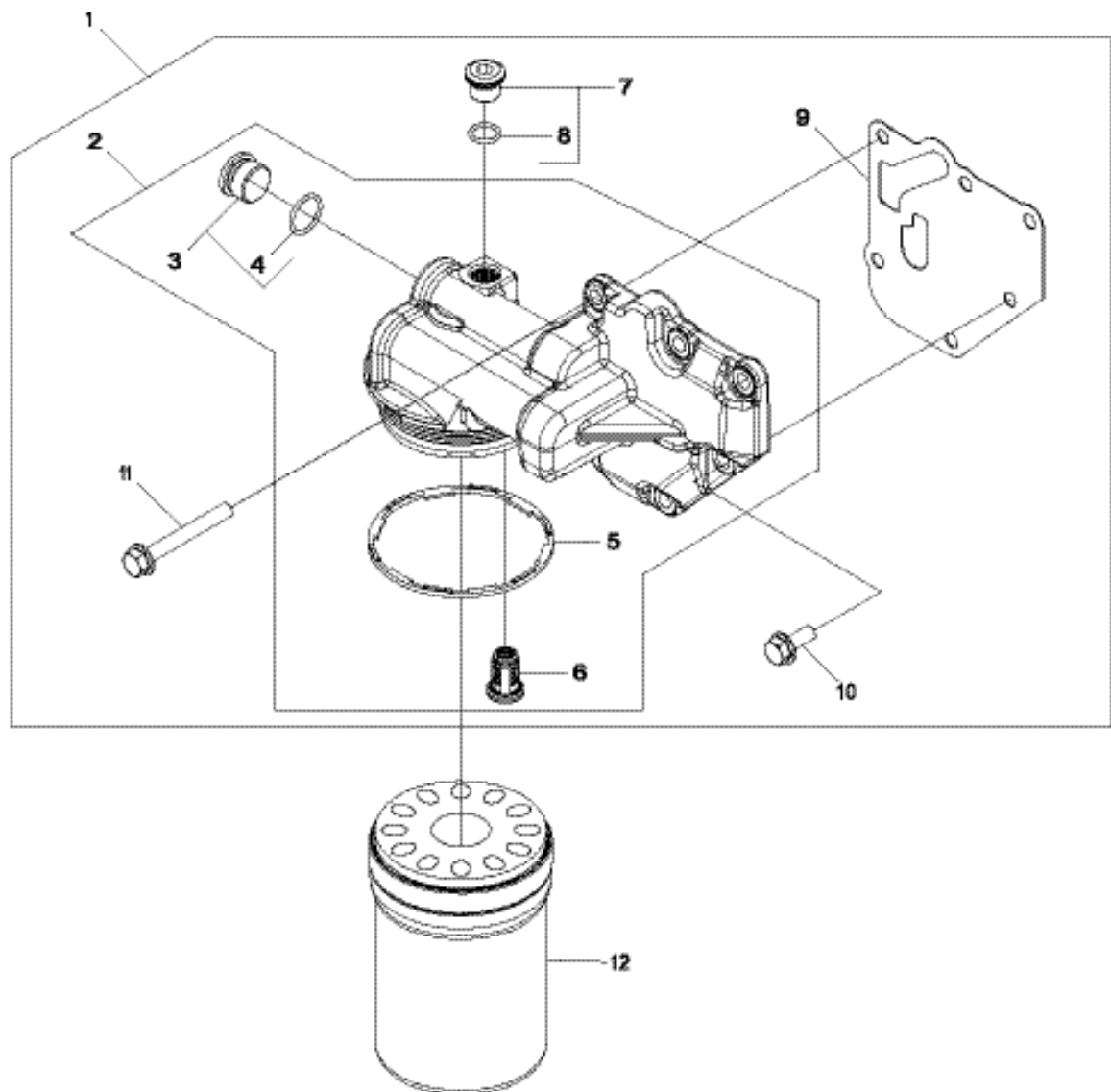
Auxiliary Drive Oil Supply Conversion Parts

Drawing not available at the time of publication.

Please consult factory.

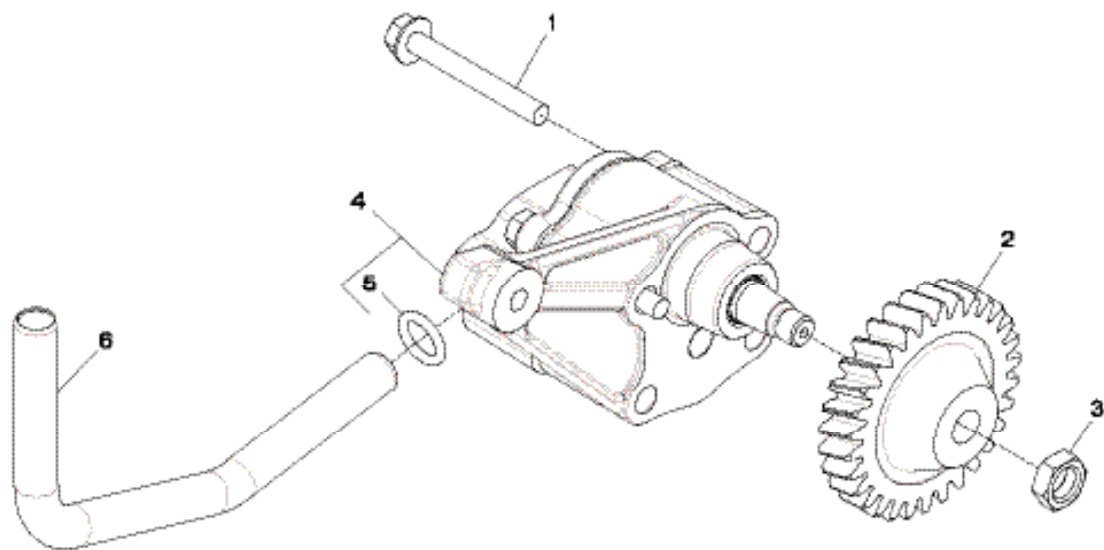
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	18-69502	1	Hose Assembly 1/4 ID x 15" 3.8 FMS x 3/8 O-R Face Seal	-
2	16-69501	2	O-Ring	-
3	N275799	1	Restriction Orifice	-
4	21-52800	1	Male Connector 3/8 NPT x 3/8 - 37T	-
5	21-69501	1	Male Elbow 90° M12 x 1.5 x 3/8 O-Ring Face Seal	-
6	21-59519	1	Swivel Elbow 45° 3/8 - 37T	-

Engine Oil Filter



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE508987	1	Oil Filter Adapter Kit (includes keys 2-11)	-
2	RE504564	1	Oil Filter Adapter Kit (includes keys 3-6)	-
3	RE505232	2	Plug (includes key 4)	-
4	16-09501	1	O-Ring	-
5	R502513	1	Seal	-
6	RE504543	1	Valve	-
7	RE52242	1	Plug (includes key 8)	-
8	16-00016	1	O-Ring	-
9	R500374	1	Gasket	-
10	RE67238	1	Screw M8 x 20 mm (A)	-
11	19M7802	5	Screw M8 X 65 mm	-
12	24-09501	1	Oil Filter	-
(A) Threads With Pre-Applied Sealant				

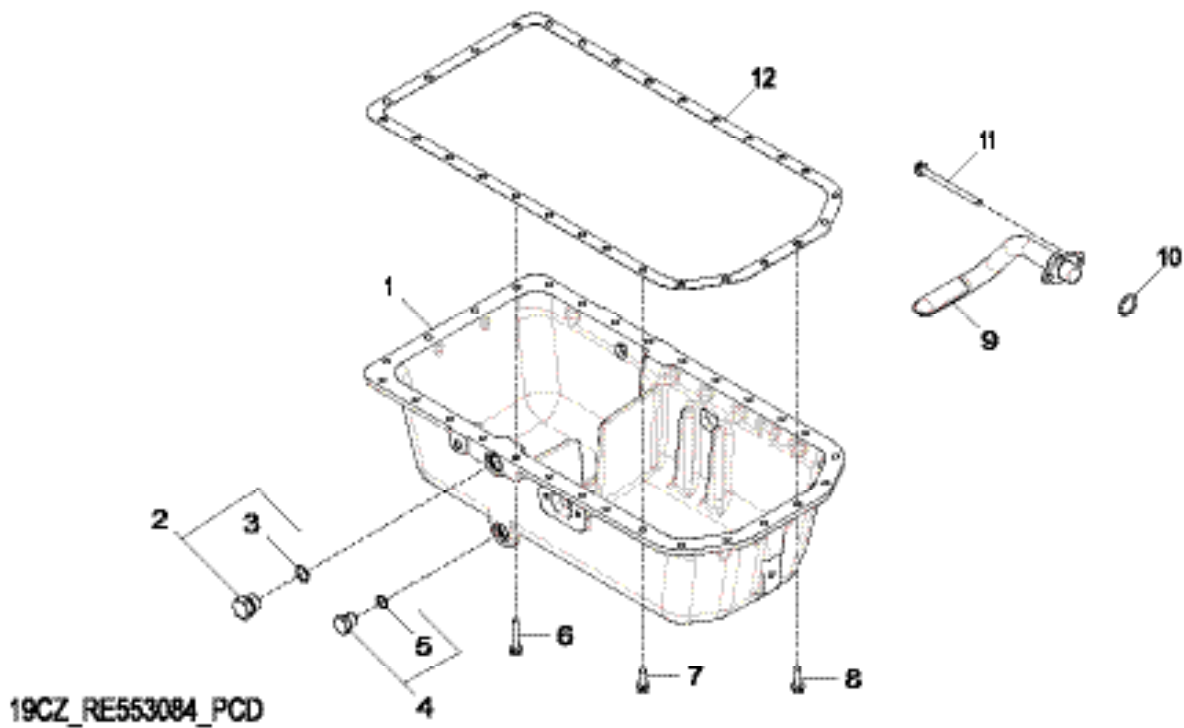
Oil Pump



5001_RE57763_PCD

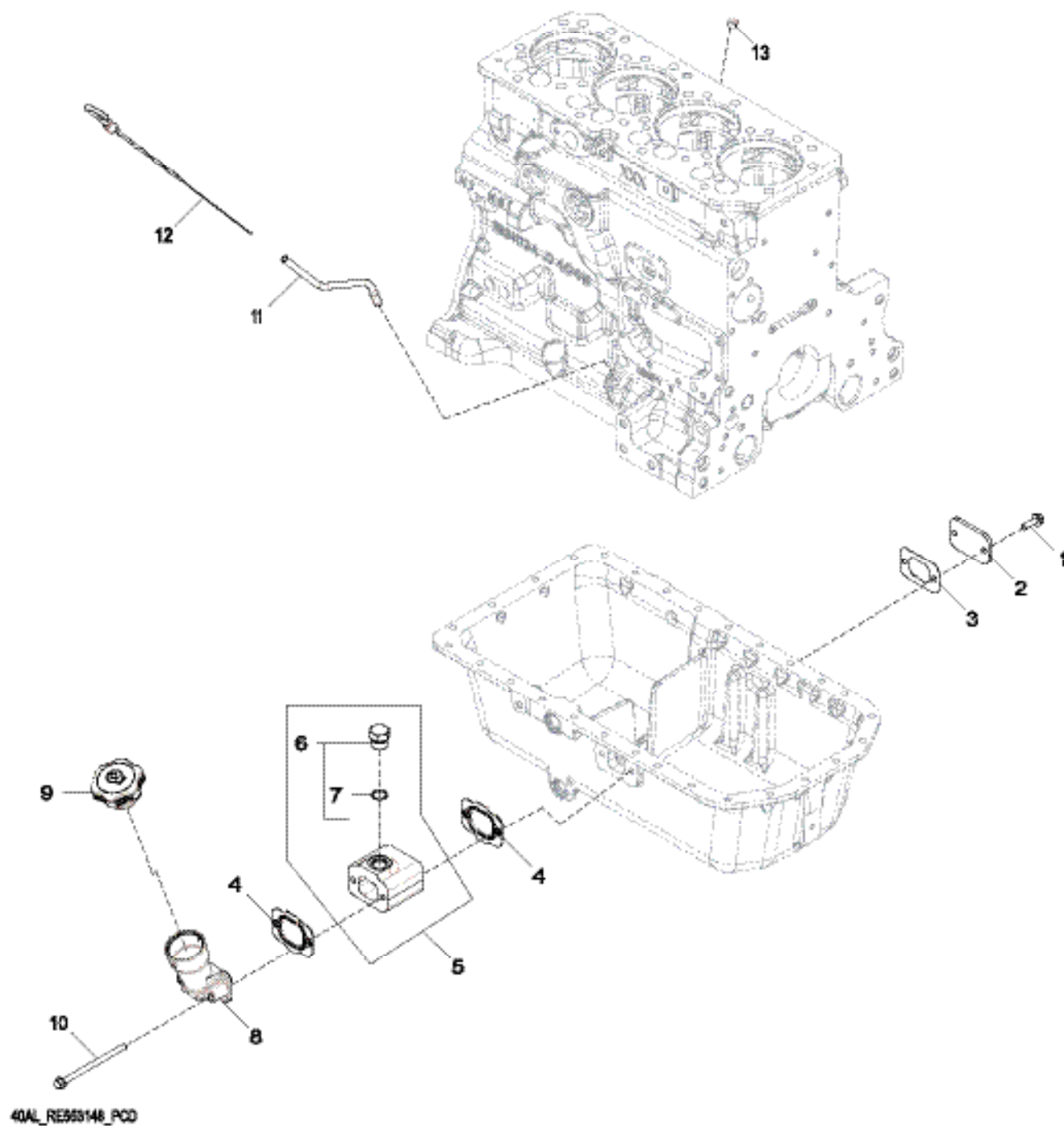
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119M7802	2	Screw M8 X 65mm	-
2	R120638	1	Gear 1 Z = 30	-
3	14M7066	1	Nut M12	-
4	RE504914	1	Oil Pump	-
5	R97185	1	O-Ring	-
6	R121376	1	Tube	-

Oil Pan & Pick-Up



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R536016	1	Oil Pan	-
2	RE46687	1	Drain Plug	-
3	16-09501	1	O-Ring (Includes key 2)	-
4	RE46685	2	Fitting Plug M29 x 1.5	-
5	16-09503	1	O-Ring (includes key 5)	-
6	19M7799	4	Screw M8 X 45 mm	-
7	19M7867	18	Screw M8 X 25 mm	-
8	19M7868	6	Screw M8 X 30 mm	-
9	RE68491	1	Oil Pump Pick-Up	-
10	R61871	1	O-Ring	-
11	19M10075	2	Screw M8 X 110 mm	-
12	R123353	1	Gasket	-

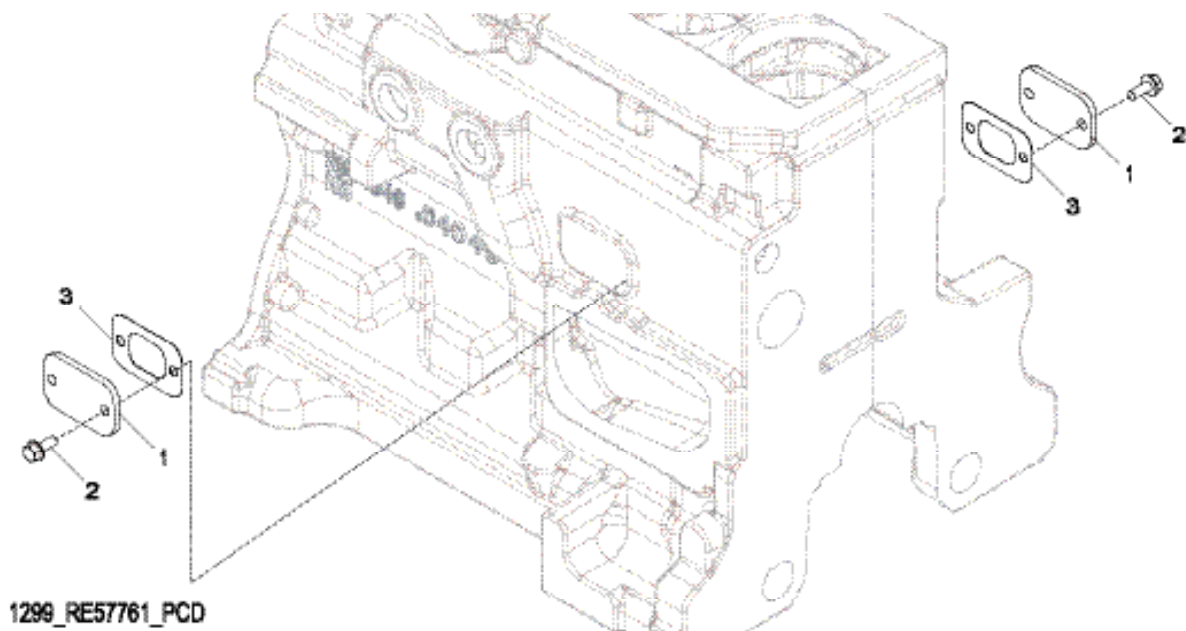
Oil Fill, Dipstick & Tube



Oil Fill, Dipstick & Tube

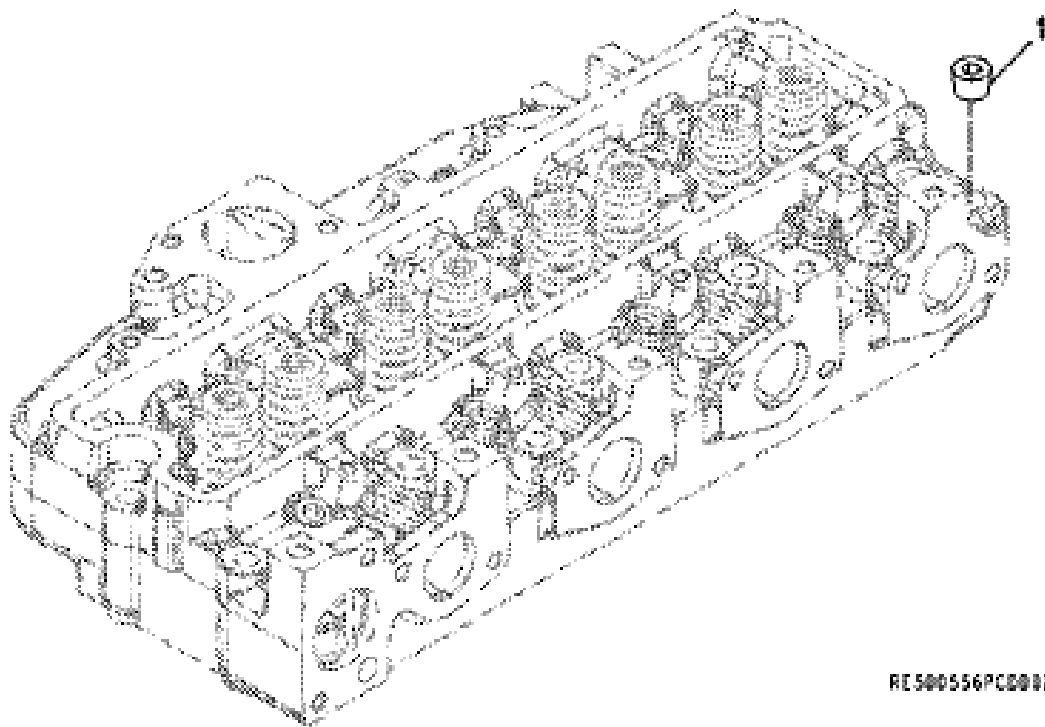
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7867	2	Screw M8 X 25	-
2	R116296	1	Cover	-
3	R136495	1	Gasket	-
4	R528039	2	Gasket	-
5	RE558121	1	Adapter	-
6	RE46687	1	Drain Plug	-
7	16-09501	1	O-Ring	-
8	RE501377	1	Filler Neck	-
9	RE535560	1	Filler Cap	-
10	19M9915	2	Screw M8 X 130	-
11	R536058	1	Dipstick Tube	-
12	RE509922	1	Dipstick	-
13	R502725	1	Plug	-

Oil Filler Neck Cover



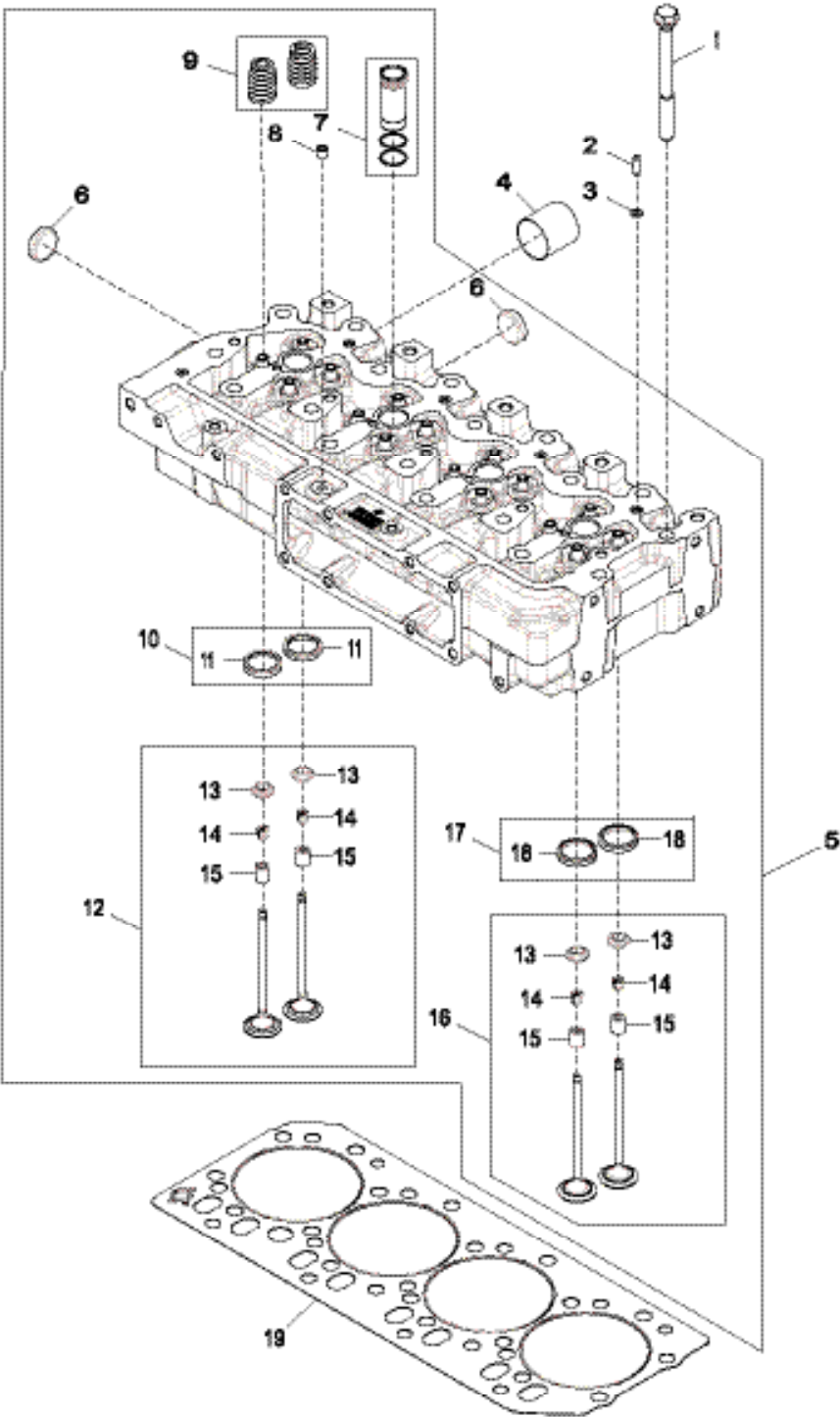
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R116296	2	Cover	-
2	RE67238	4	Screw (A)	-
3	R136495	2	Gasket	-
(A) Threads With Pre-Applied Sealant				

Temperature Switch Plug



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	21-11003	1	Plug, Socket Head 1/2 NPT	-

Cylinder Head With Valves

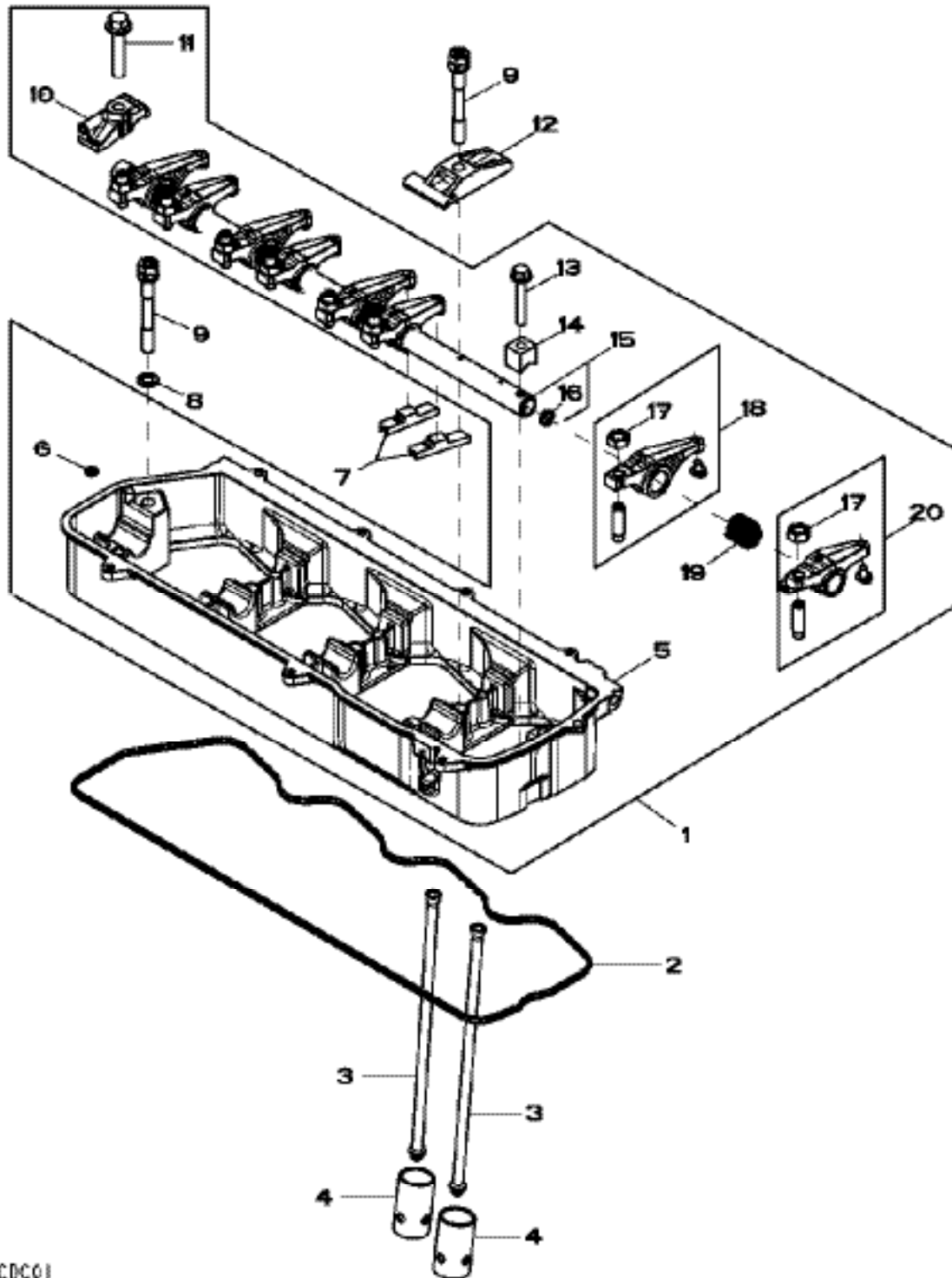


5156_RE553948_PCD

Cylinder Head With Valves

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R534091	18	Cap Screw	-
2	R521544	2	Bushing	-
3	R5270867	5	O-ring	-
4	R502512	4	Sleeve	-
5	RE553422	1	Cylinder Head	-
6	CD16284	3	Plug	-
7	RE543935	4	Sleeve	-
8	RE71255	1	Pipe Plug	-
9	R518872	16	Spring	-
10	RE518083	4	Valve Seat Insert	-
11	R515033	8	Valve Seat Insert	-
12	RE557891	4	Valve Kit	-
13	R502367	16	Cap	-
14	R534978	32	Retainer	-
15	RE526519	16	Seal	-
16	RE557890	4	Valve kit	-
17	RE5188082	4	Valve Seat Insert	-
18	R515034	8	Valve Seat Insert	-
19	R116515	1	Engine Cylinder Head Gasket	-
20	RE519115	4	Seal	-

Rocker Arm & Rocker Arm Shaft

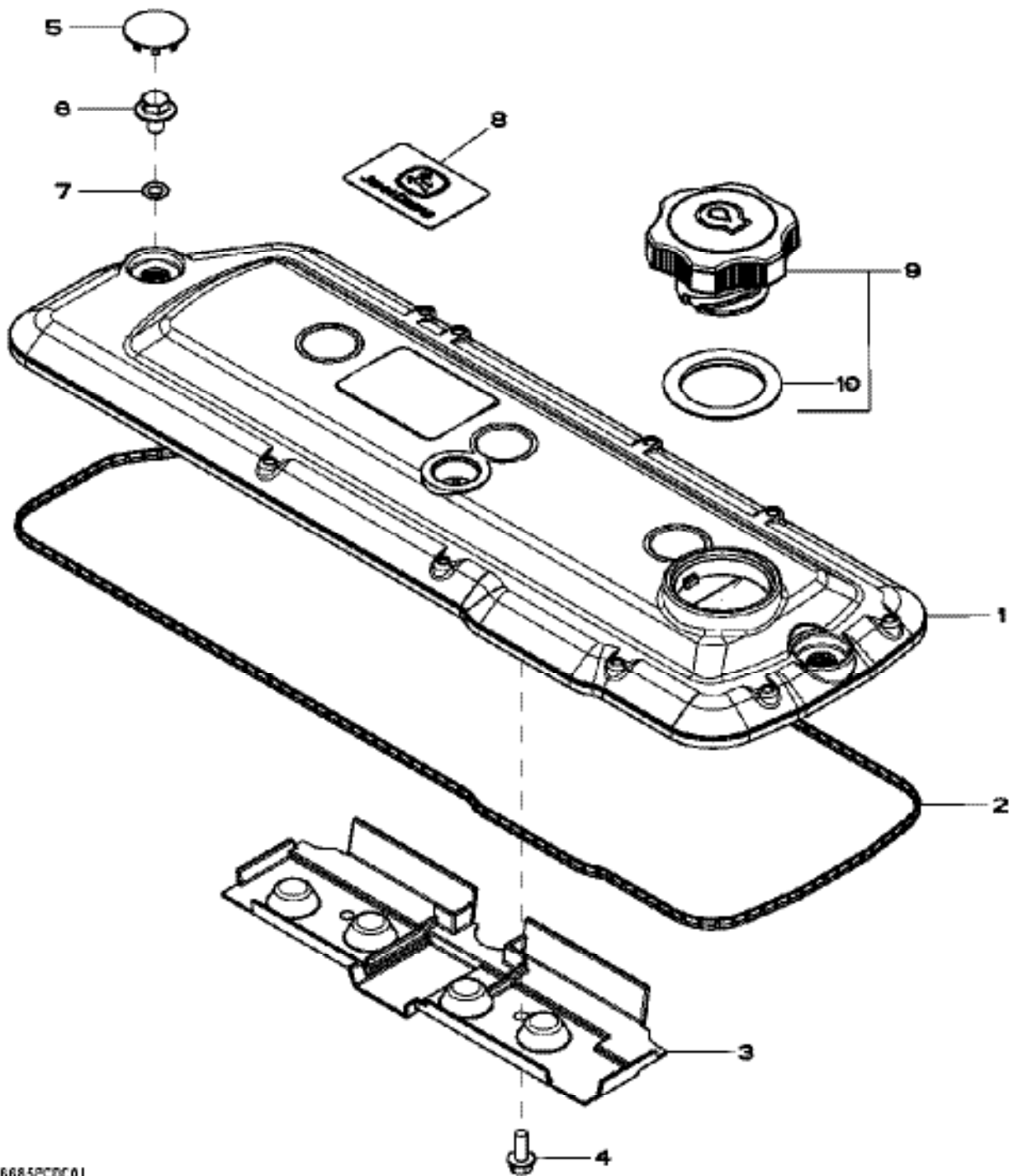


RE523427PCDC01

Rocker Arm & Rocker Arm Shaft

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE533149	1	Rocker Arm Shaft	-
2	R505174	1	Gasket	-
3	R504200	8	Push Rod	-
4	R123565	1	Cam Follower	-
5	RE533149	1	Cradle	-
6	R520867	1	O-ring	-
7	R502341	8	Valve Bridge	-
8	24M7096	2	Washer	-
9	R521455	5	Screw	-
10	RE523032	1	Cap	-
11	19M8966	1	Screw	-
12	R516140	3	Strap	-
13	19M9170	1	Screw	-
14	R504631	1	Clamp	-
15	RE516490	1	Rocker Arm Shaft	-
16	30M7004	2	Plug	-
17	14M7148	8	Nut	-
18	RE504210	4	Rocker Arm	-
19	R505543	4	Spring	-
20	RE523023	4	Rocker Arm	-

Rocker Arm Cover

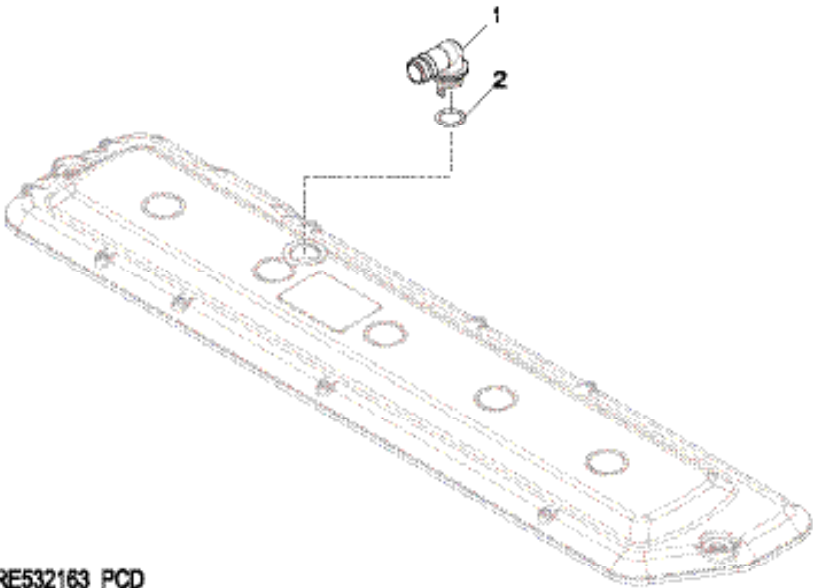


WE526085PCDC01

Rocker Arm Cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R522165	1	Valve Cover	-
2	R524499	1	Gasket	-
3	R515555	1	Deflector	-
4	19M7775	2	Screw	-
5	H23125	5	Plug	-
6	R521390	5	Screw	-
7	R123575	5	O-ring	-
8	R521401	1	Medallion	-
9	RE535560	1	Filter Cap	-
10	R502902	1	Packing	-

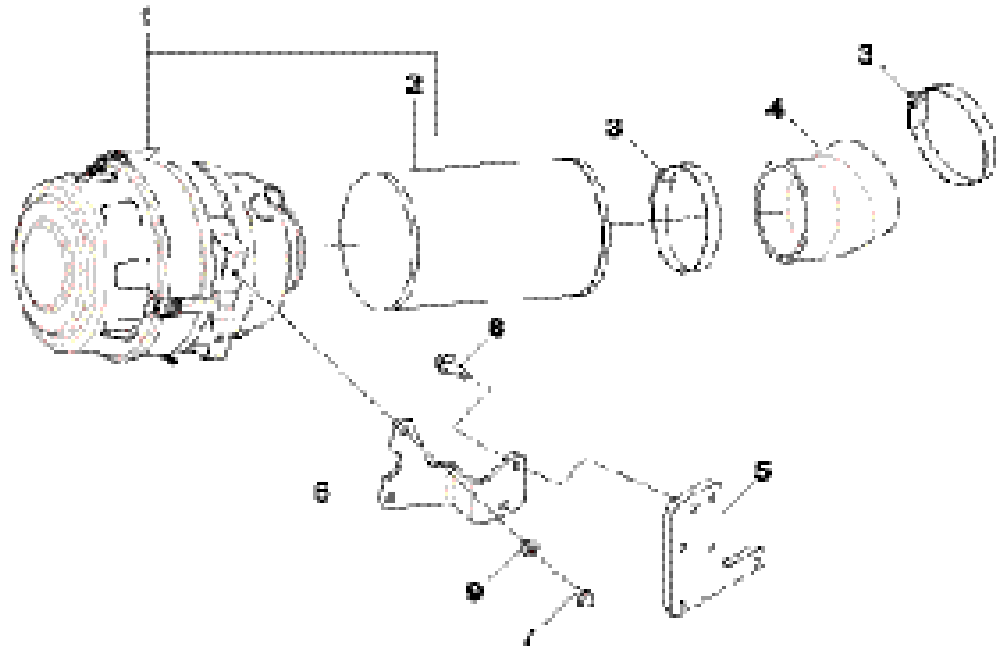
Ventilating System



2997_RE532163_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R120467	1	Elbow fitting	-
2	6-0100	1	O-ring	-

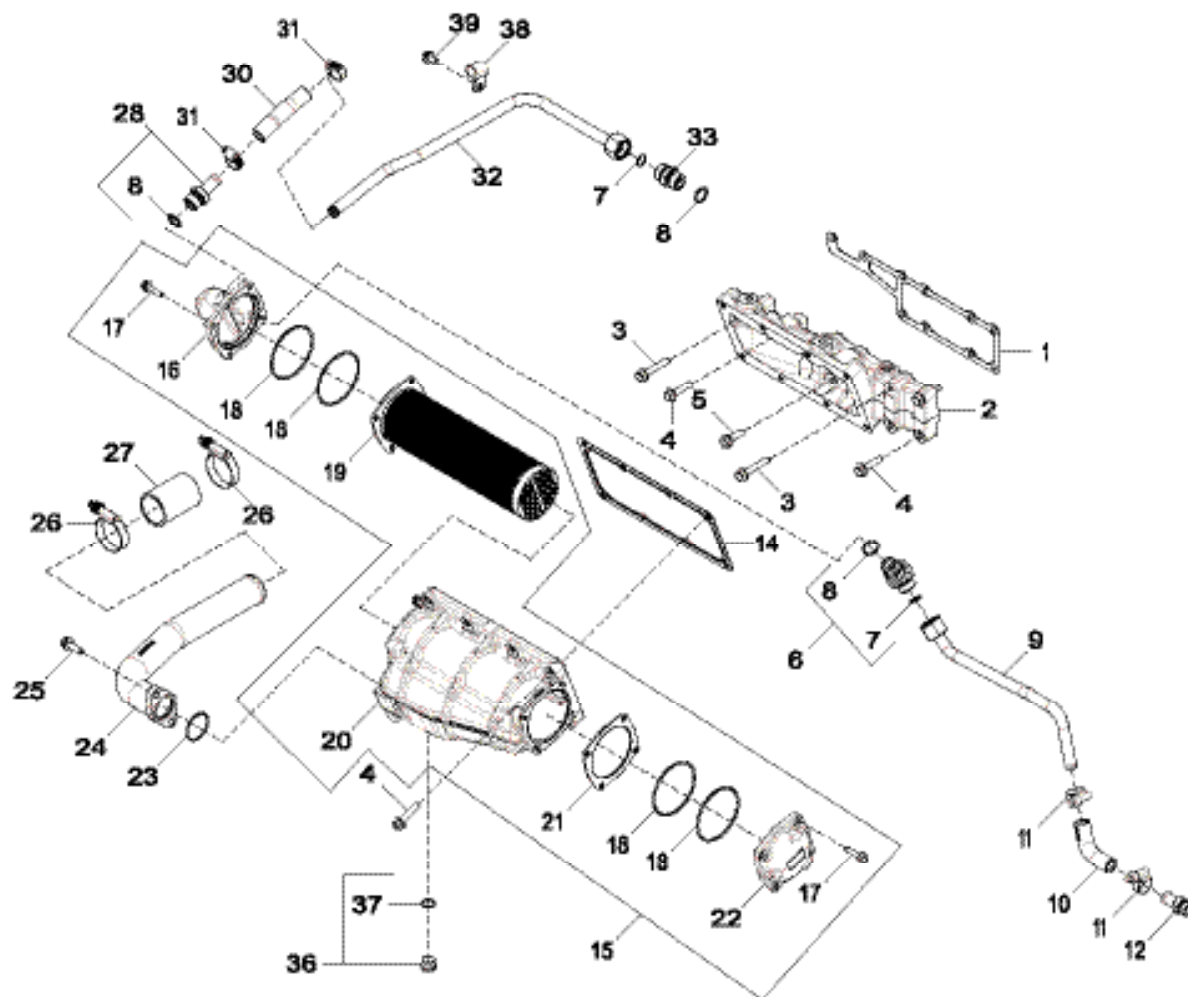
Air Cleaner



1857_RE553416_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE553417	1	Air Cleaner	-
2	RE554812	1	Filter Element	-
3	RE67746	2	Hose Clamp	-
4	R104873	1	Hose	-
5	R536278	1	Bracket	-
6	R536242	1	Bracket	-
7	19M7866	2	Screw M8 x20	-
8	19M7786	2	Screw M10 x 30	-
9	14M7298	2	Flange Nut M8	-

Air Intake System

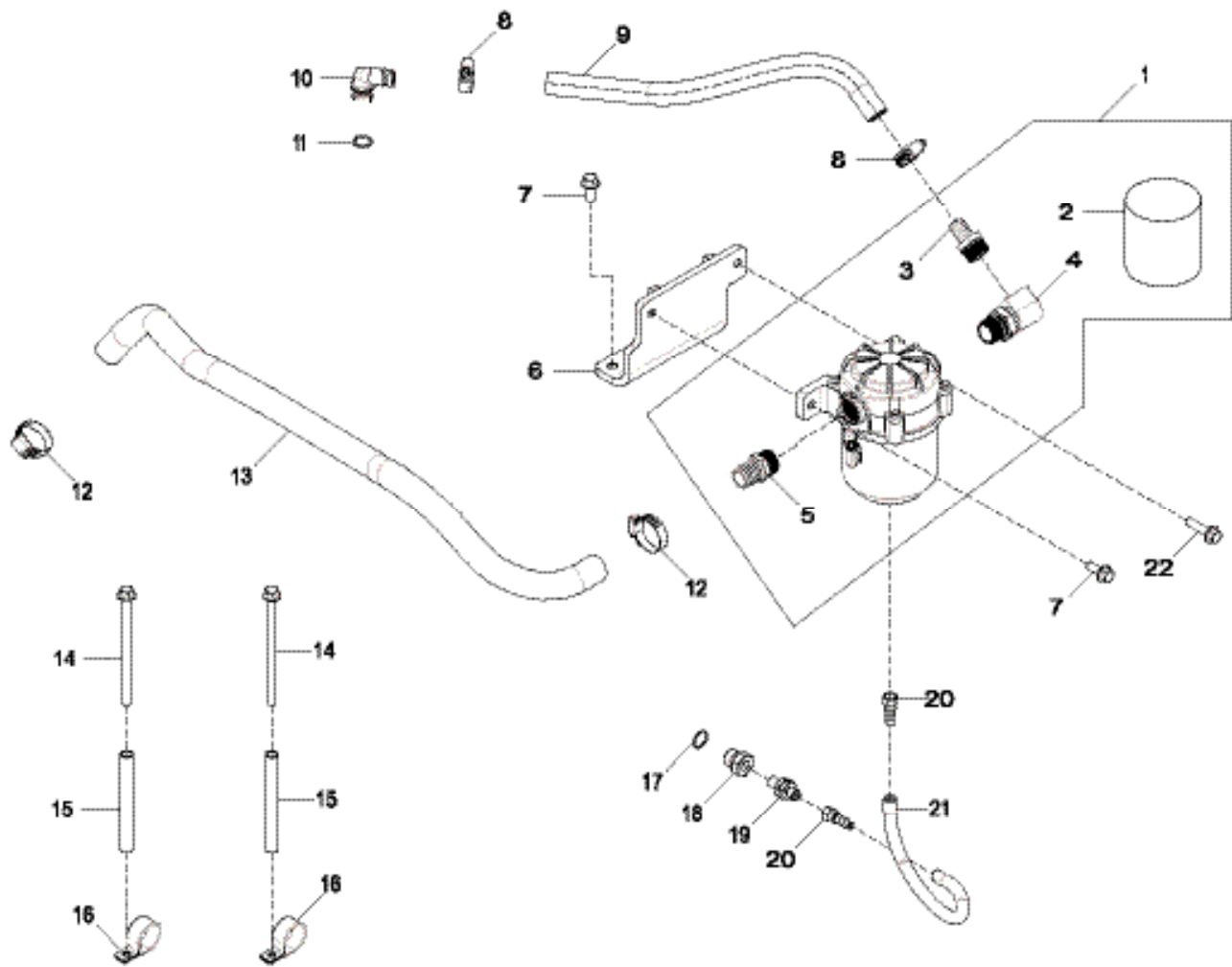


17EM_RE551553_PC0

Air Intake System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R535975	1	Gasket	-
2	R535002	1	Intake Manifold	-
3	19M7807	3	Screw, M10 x 60	-
4	10M8320	13	Screw, M10 x 45	-
5	10M7835	2	Screw, M10 x 35	-
6	61M5129	1	Line	-
7	T77858	2	O-ring	-
8	16-00027	3	O-ring, 23.6 x 2.9 mm	-
9	RE533328	1	Line	-
10	R536109	1	Hose	-
11	R524513	2	Hose Clamp	-
12	RE223627	1	Hose Fitting	-
	16-09501	1	O-ring (not shown)	-
14	R535821	1	Gasket	-
15	RE551476	1	Aftercooler	-
16	R535801	1	Adapter	-
17	19M8291	8	Screw, M8 x 35	-
18	R536313	4	O-ring	-
19	RE552051	1	Core	-
20	R535802	1	Housing	-
21	R535803	1	Plate	-
22	R535800	1	Cover	-
23	YZ81077	1	O-ring	-
24	RE553792	1	Air Flow Tube	-
25	19M7786	2	Screw, M10 x 30	-
26	RE67208	2	Clamp	-
27	R539585	1	Hose	-
28	RE322239	1	Fitting	-
30	R524438	1	Hose	-
31	RE65978	2	Clamp	-
32	RE55329	1	Line	-
33	38H5005	1	Adapter Fitting	-
36	RE505232	1	Fitting Plug	-
37	16-09501	1	O-ring, 9.3 x 2.2 mm	-
38	R73291	1	Clamp	-
39	19M7783	1	Screw, M10 x 16	-

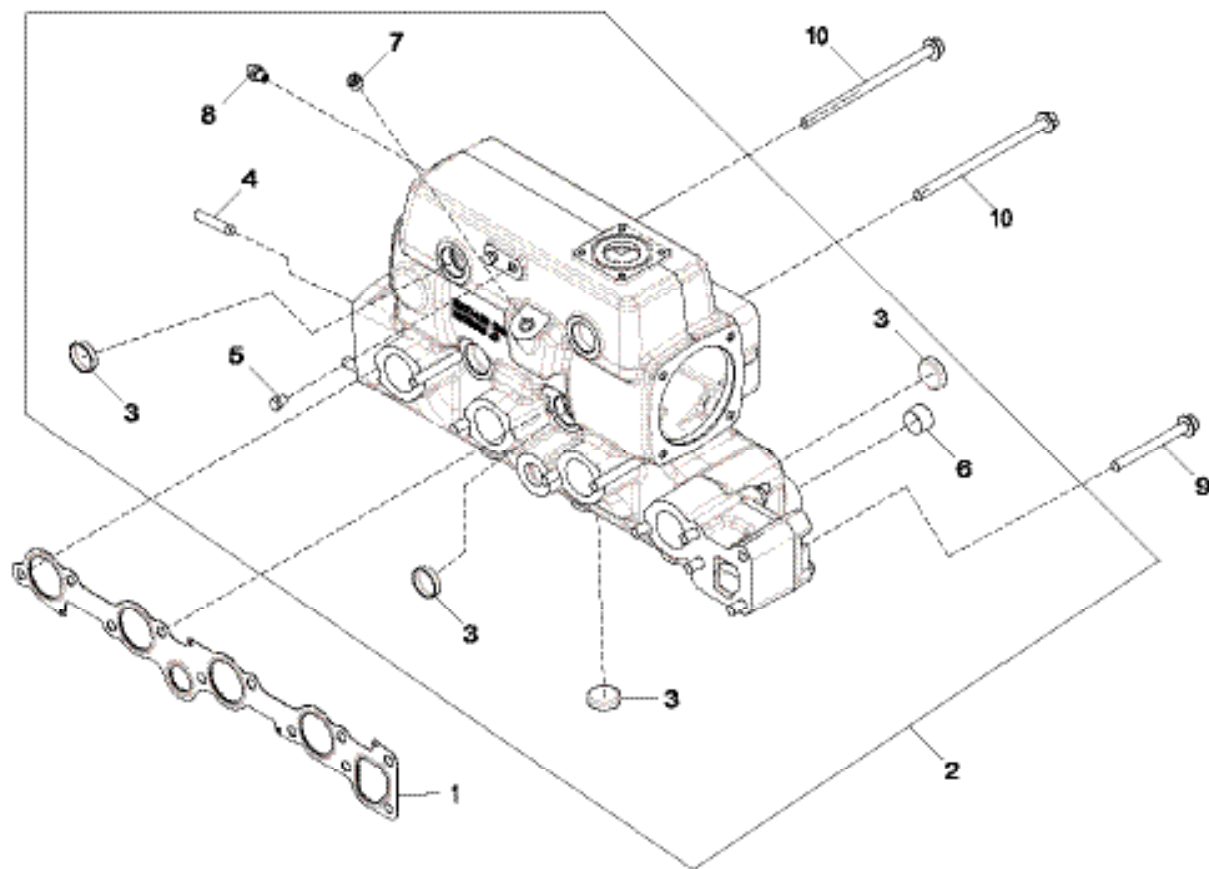
Ventilation System



Ventilation System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE554150	1	Crankcase Vent Filter	-
2	RE502284	1	Filter Element	-
3	RE56766	1	Hose Fitting	-
4	RE557065	1	Hose Fitting	-
5	RE554545	1	Hose Fitting	-
6	RE529828	1	Bracket	-
7	19M7785	3	Screw, M10 x 25	-
8	RE65978	2	Clamp	-
9	R537966	1	Hose	-
10	R120497	1	Elbow Fitting	-
11	R72328	1	O-ring	-
12	TY22467	2	Clamp	-
13	R536356	1	Hose	-
14	19M9017	2	Screw, M10 x 165	-
15	R533312	2	Spacer	-
16	R112693	2	Clamp	-
17	51M7045	1	O-ring, 19.3 x 2.2	-
18	R501363	1	Hose Fitting	-
19	RE504549	1	Check Valve	-
20	RE505200	2	Hose Fitting	-
21	R536399	1	Hose	-
22	19M7804	1	Screw, M10 x 40	-

Exhaust Manifold

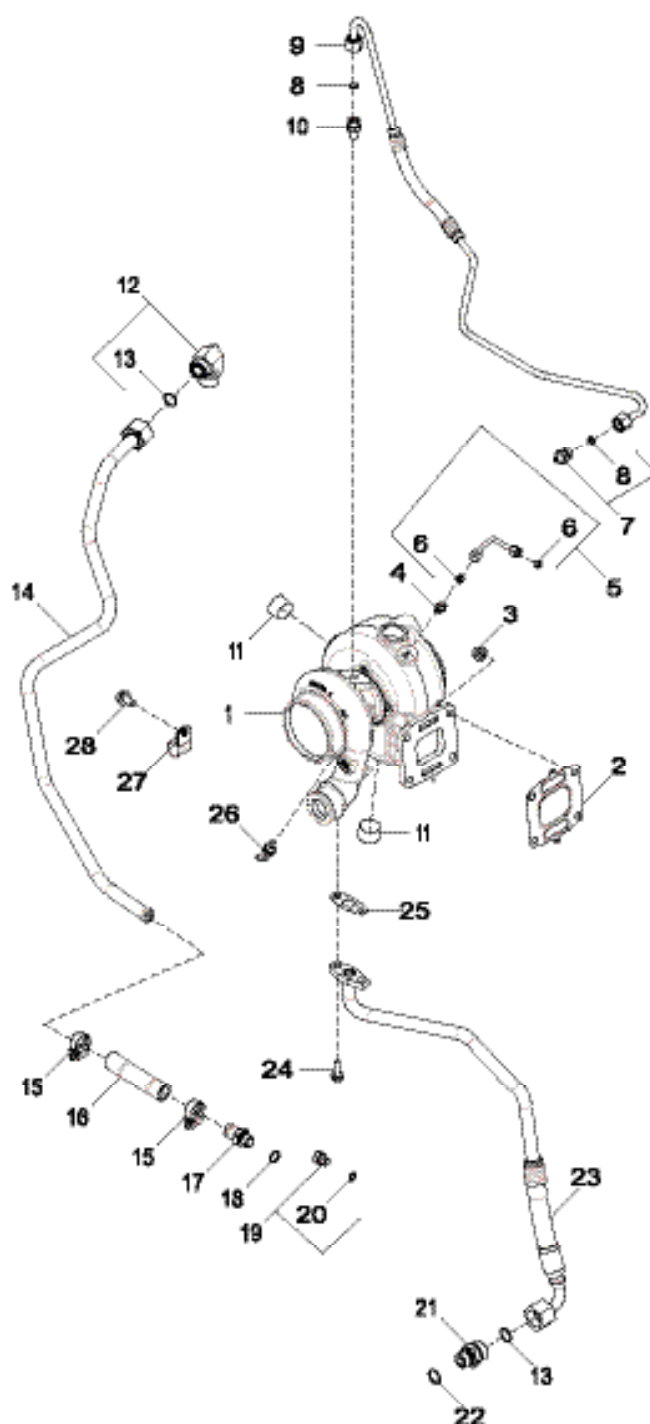


283V_RE548246_PCD

Exhaust Manifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE551765	1	Gasket	-
2	RE548245	1	Exhaust Manifold	-
3	CD16284	10	Plug	-
4	R523331	4	Stud	-
5	15H712	2	Pipe Plug, 1/8"	-
6	15H690	1	Pipe Plug, 3/4"	-
7	15H685	1	Pipe Plug, 1/4"	-
8	RE502650	1	Fitting	-
9	19M7812	4	Screw, M10 x 100	-
10	19M9168	7	Screw, M10 x 180	-

Turbocharger

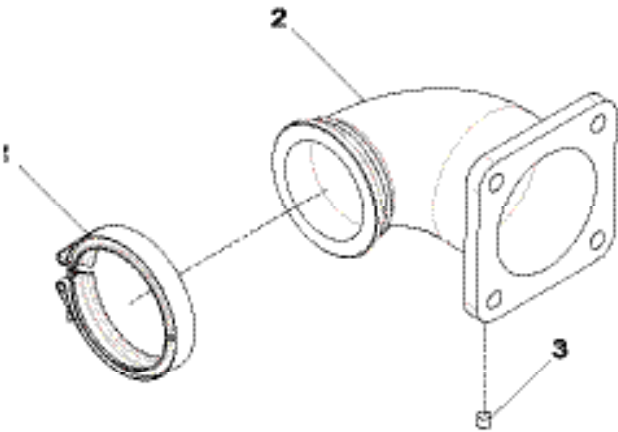


06J3_RE554417_PCD

Turbocharger

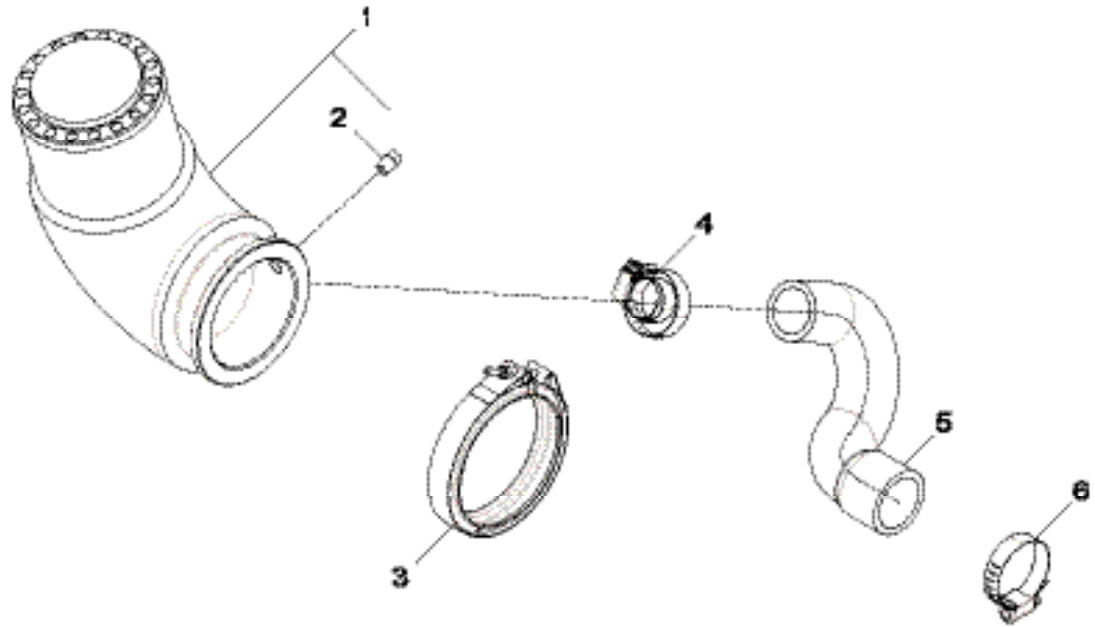
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE557987	1	Turbocharger	-
2	RE549173	1	Gasket	-
3	14M7296	4	Flange Nut, M10	-
4	RE503650	1	Fitting	-
5	RE553333	1	Line	-
6	R51936	2	Sealing Washer	-
7	RE521531	1	Adapter Fitting	-
8	R63548	2	O-ring	-
9	RE561520	1	Oil Line	-
10	21-51905	1	Adapter Fitting	-
11	15H562	2	Pipe Plug, 1"	-
12	RE523561	1	Elbow Fitting	-
13	T77858	2	O-ring	-
14	RE553330	1	Line	-
15	RE65978	2	Clamp	-
16	R524438	1	Hose	-
17	R521324	1	Fitting	-
18	16-09503	1	O-ring	-
19	RE46686	1	Fitting Plug	-
20	16-00012	1	O-ring	-
21	36H5121	1	Adapter Fitting	-
22	16-09501	1	O-ring	-
23	RE561519	1	Oil Line	-
24	19M8063	2	Screw, M8 x 25	-
25	R123570	1	Gasket	-
26	R123570	1	Gasket	-
27	R73291	1	Clamp	-
28	19M7783	1	Screw, M10 x 16	-

Exhaust Elbow



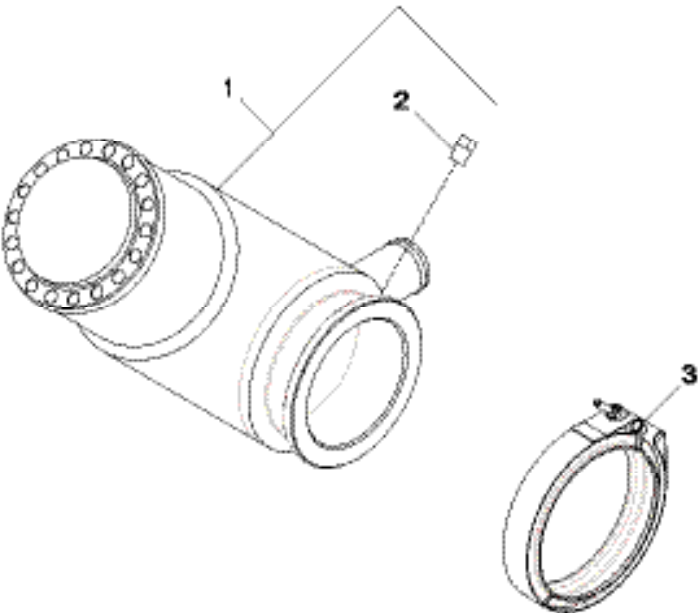
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE47537	1	Clamp	-
2	R110108	1	Elbow Fitting	-
3	RE71255	1	Pipe Plug	-

Exhaust Elbow



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE506716	1	Elbow Fitting	-
2	15H638	1	Pipe Plug, 1/8"	-
3	RE47537	1	Clamp	-
4	TY22467	1	Clamp	-
5	R504046	1	Hose	-
6	TY22470	1	Clamp	-

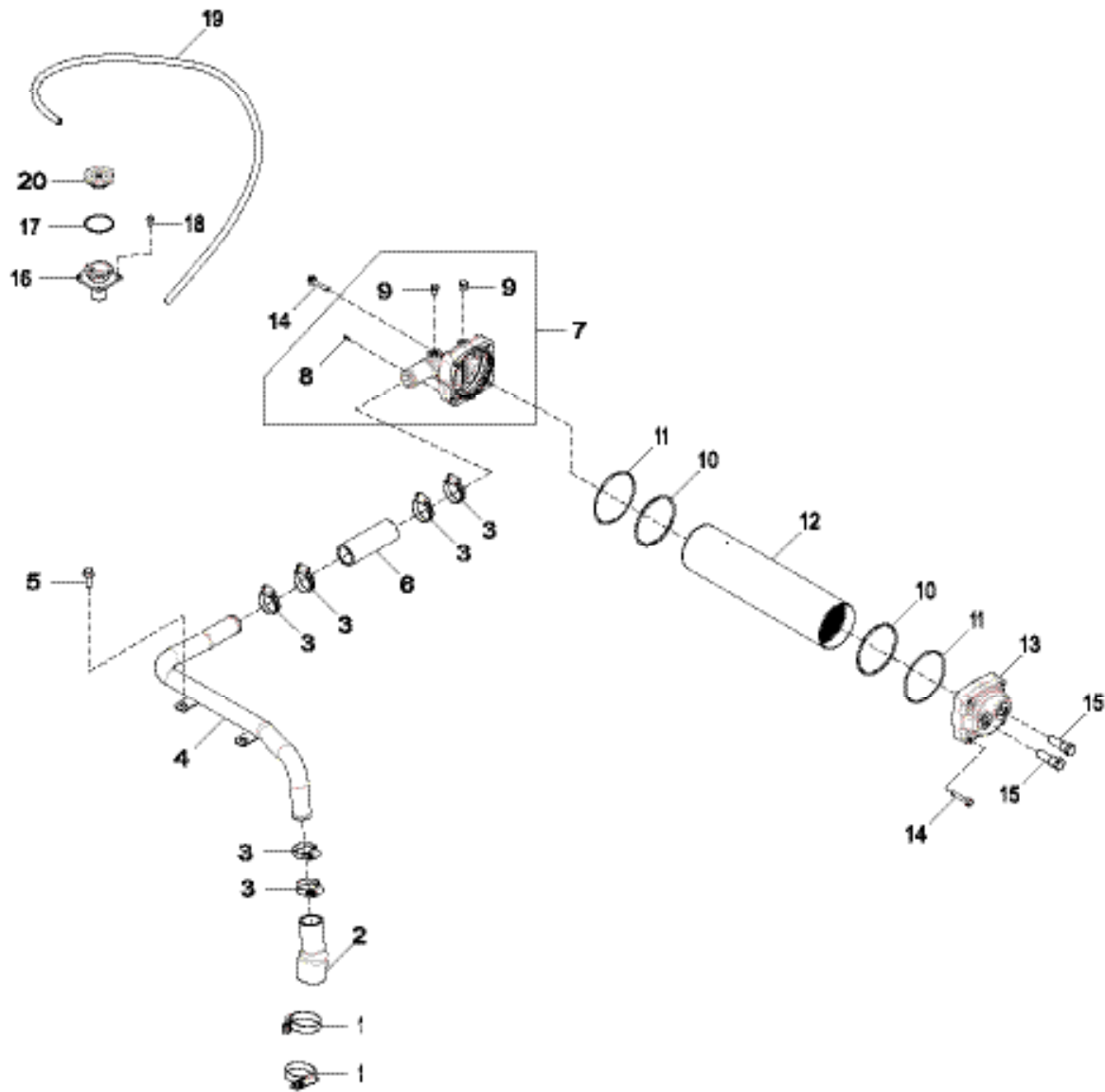
Exhaust Elbow



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE506716	1	Elbow Fitting	-
2	15H638	1	Pipe Plug 1/8"	-
3	RE47537	1	Clamp	-

Notes

Heat Exchanger

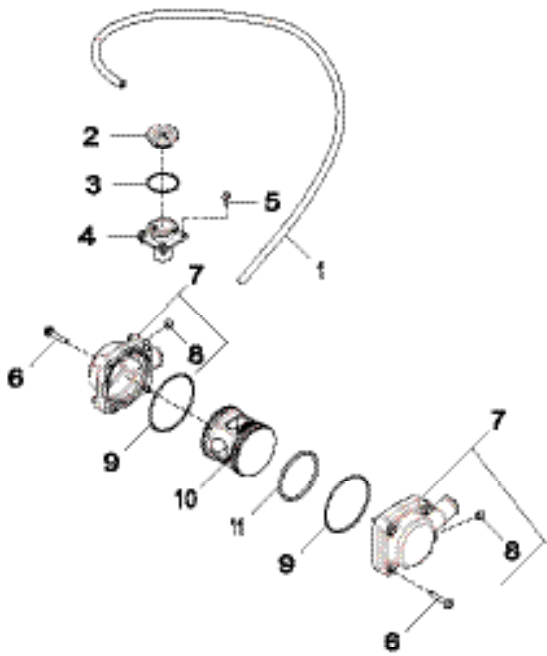


2745_RES53405_PCD

Heat Exchanger

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE67208	2	Clamp	-
2	R535958	1	Hose	-
3	TY22470	6	Clamp	-
4	RE552590	1	Tube	-
5	19M7786	2	Screw, M10 x 30	-
6	R536297	1	Hose	-
7	RE557010	1	Cover	-
8	34H277	1	Spring Pin, 3/16" x 5/8"	-
9	H26723	2	Drain Pin	-
10	T45902	2	O-ring	-
11	R241873	2	O-ring	-
12	RE552052	1	Core	-
13	R533893	1	Cover	-
14	19M8318	8	Screw, M8 x 45	-
15	RE54993	2	Fitting Pin	-
16	RE46165	1	Filler Neck	-
17	H63262	1	O-ring	-
18	19M7775	4	Screw, M6 x 16	-
19	R82454	1	Hose	-
20	AT83451	1	Filler Cap 16 PSI	-

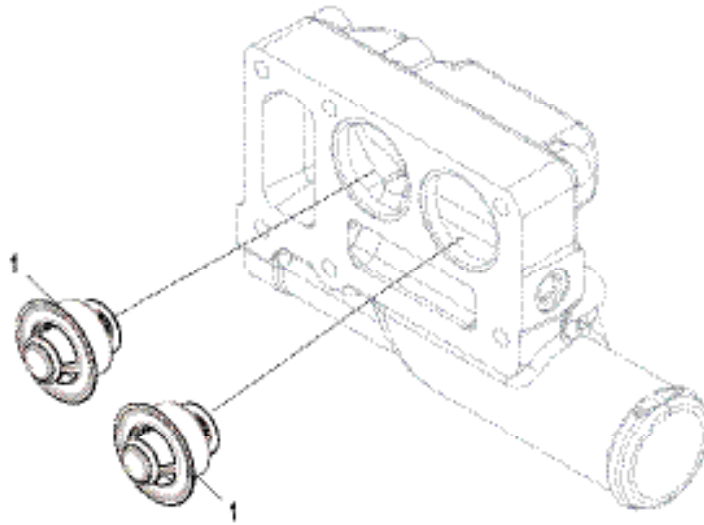
Heat Exchanger Cover



2766 RE553812 PCD

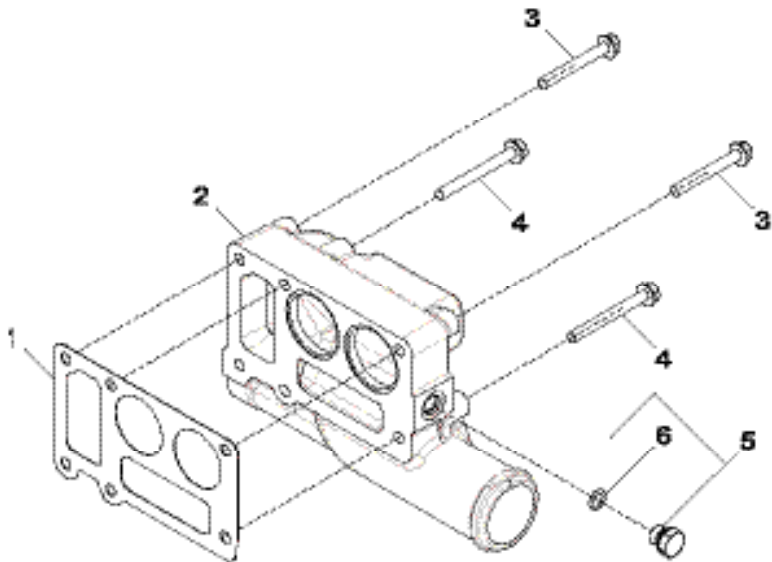
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R52454	1	Hose	-
2	AT183451	1	Filler Cap	-
3	H63262	1	O-ring	-
4	RE46165	1	Filler Neck	-
5	19M7775	4	Screw M6 x 16	-
6	19M8318	8	Screw M8 x 45	-
7	RE557011	2	Cover	-
8	15H685	2	Pipe Plug 1/4"	-
9	R241873	2	O-ring	-
10	R536315	1	Adapter	-
11	R76030	1	O-ring	-

Thermostat



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE557215	2	Thermostat	-

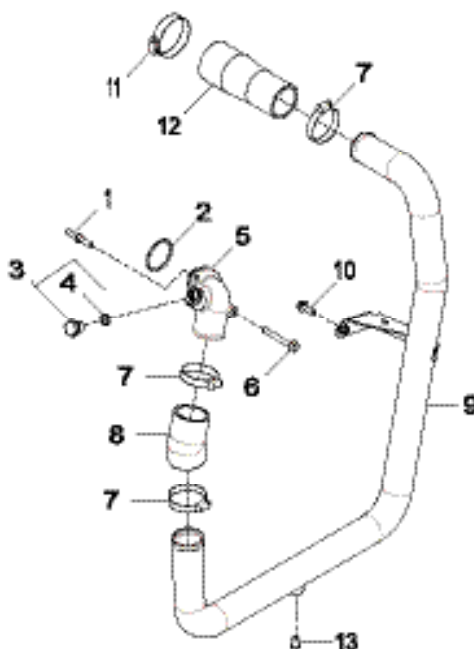
Thermostat Cover



2188_RE553502_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R536206	1	Gasket	-
2	R533787	1	Cover	-
3	19M7802	3	Screw M8 x 65	-
4	19M8874	3	Screw M8 x 75	-
5	RE46684	1	Fitting Plug	-
6	51M7041	1	O-ring 11.3 x 200 mm	-

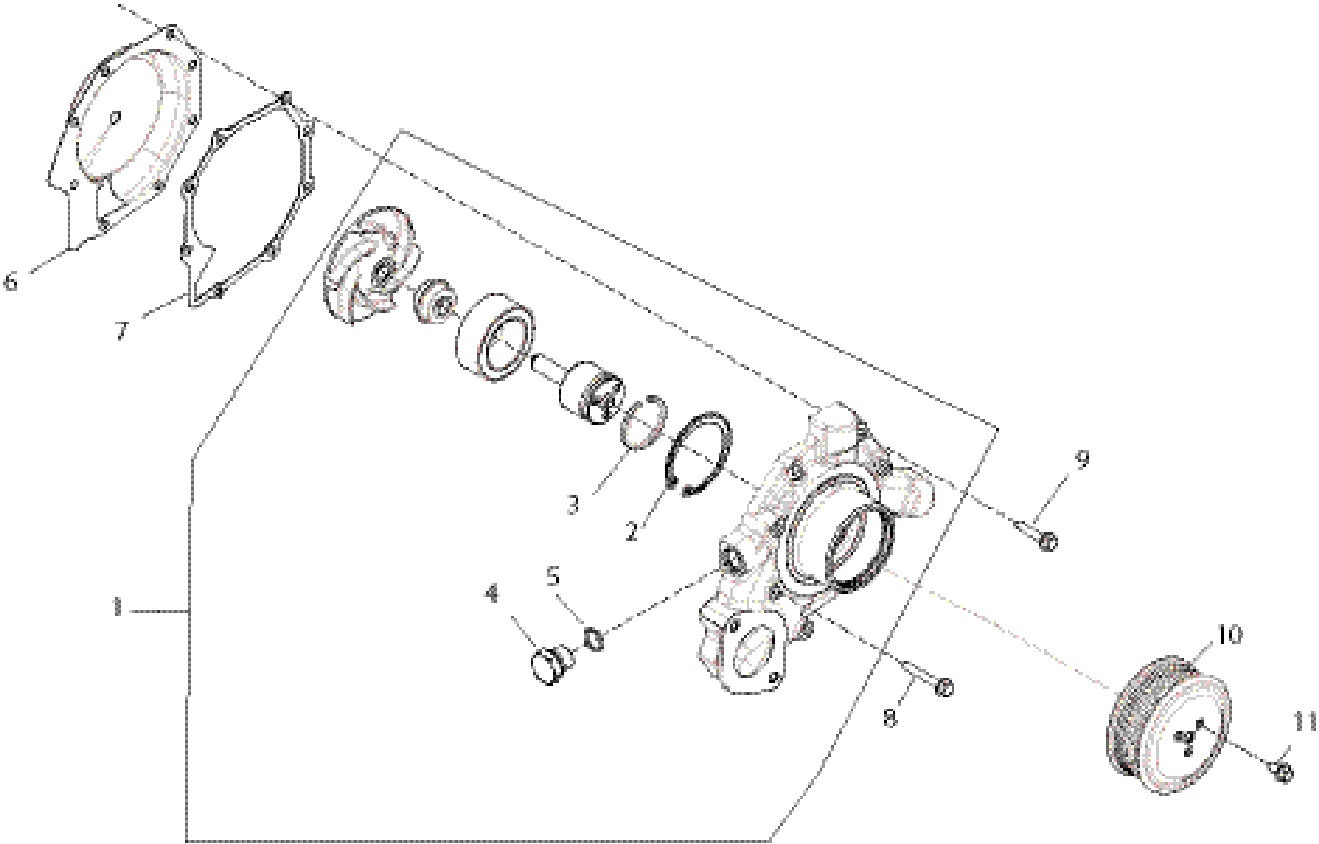
Water Pump Inlet



5740_RE550377_PCD

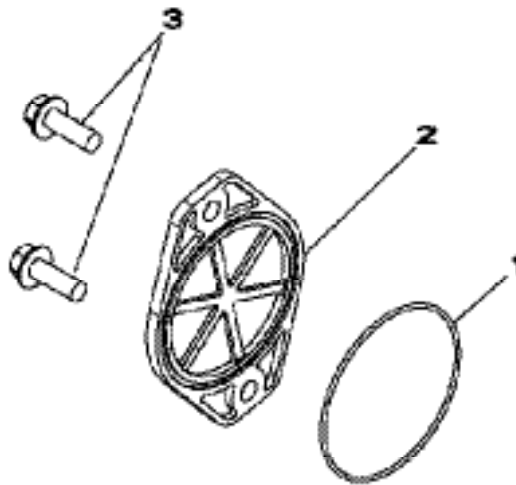
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R501462	1	Stud	-
2	R89944	1	O-ring	-
3	RE46685	1	Fitting Plug	-
4	16-09503	1	O-ring	-
5	R502983	1	Pump Connection	-
6	19M7802	1	Screw M8 x 65	-
7	AR65294	3	Clamp	-
8	R519500	1	Hose	-
9	RE554161	1	Tube	-
10	19M7867	1	Screw M8 x 25	-
11	RE40436	1	Clamp	-
12	T27104	1	Radiator Hose	-
13	21-31624	1	Pipe Plug 1/4" NPT	-

Coolant Pump



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE527848	1	Coolant Pump	-
2	R71228	1	Snap Ring	-
3	A364R	1	Snap Ring	-
4	RE46685	1	Fitting Ring	-
5	16-09503	1	O-Ring	-
6	RE508566	1	Insert	-
7	R123417	1	Gasket	-
8	19M7797	3	Screw M6 x 40	-
9	19M7796	5	Screw M6 x 30	-
10	R115250	1	Pulley	-
11	19M7774	3	Screw M6 x 12	-

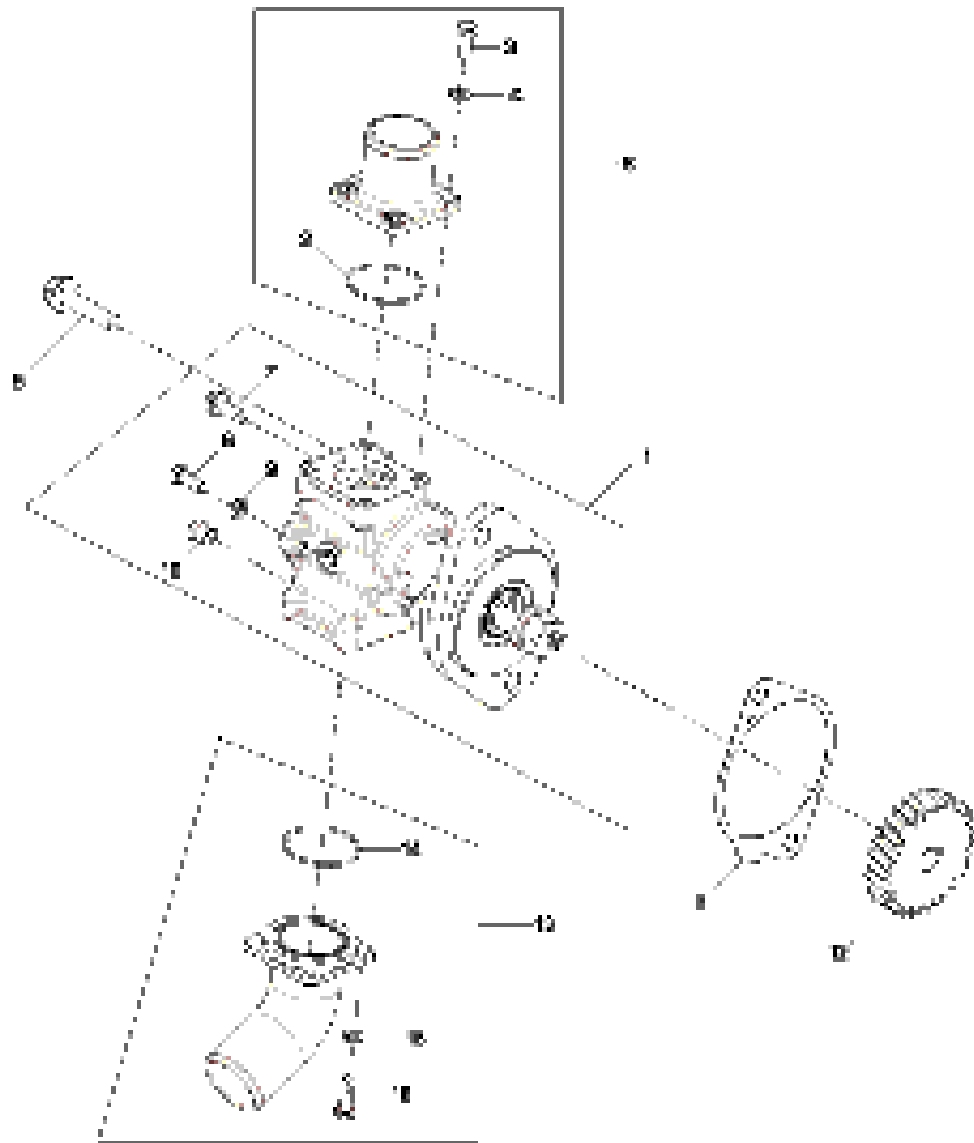
Cooling System Auxiliary Drive Cover, Keel Cooled Units



RE55264PC0001

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	16-19503	1	O-Ring	-
2	R1235757	1	Cover	-
3	19M7790	2	Screw M12 x 35	-

Sea Water Pump

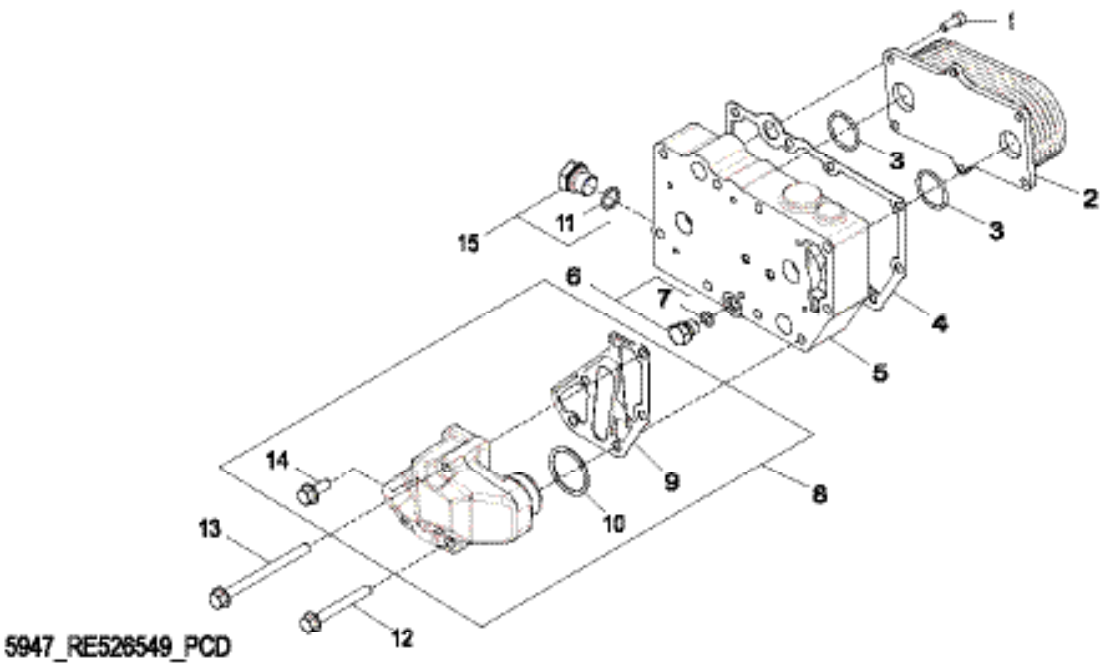


1000 1000 1000

Sea Water Pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE538663	1	Water pump (includes keys 7-10)	-
2	U42111	1	O-ring	-
3	19M9962	4	Screw M8 x 20	-
4	24M7537	4	Washer	-
5	19M8306	2	Screw M12 x 50	-
6	RE538665	1	Adapter assembly (includes keys 2-4)	-
7	19M7867	4	Screw M8 x 25	-
8	19M9962	3	Screw	-
9	24M7537	3	Washer	-
10	H26723	2	Drain Plug	-
11	R522690	1	Gasket	-
12	R135101	1	Gear	-
13	RE538664	1	Adapter assembly (includes keys 14-16)	-
14	U42111	1	O-ring	-
15	24M7537	4	Washer	-
16	19M9963	4	Screw M8 x 25	-
--	RE49896	1	Impeller kit (not shown)	-
--	RE540391	1	Pump repair kit - major service (not shown)	-

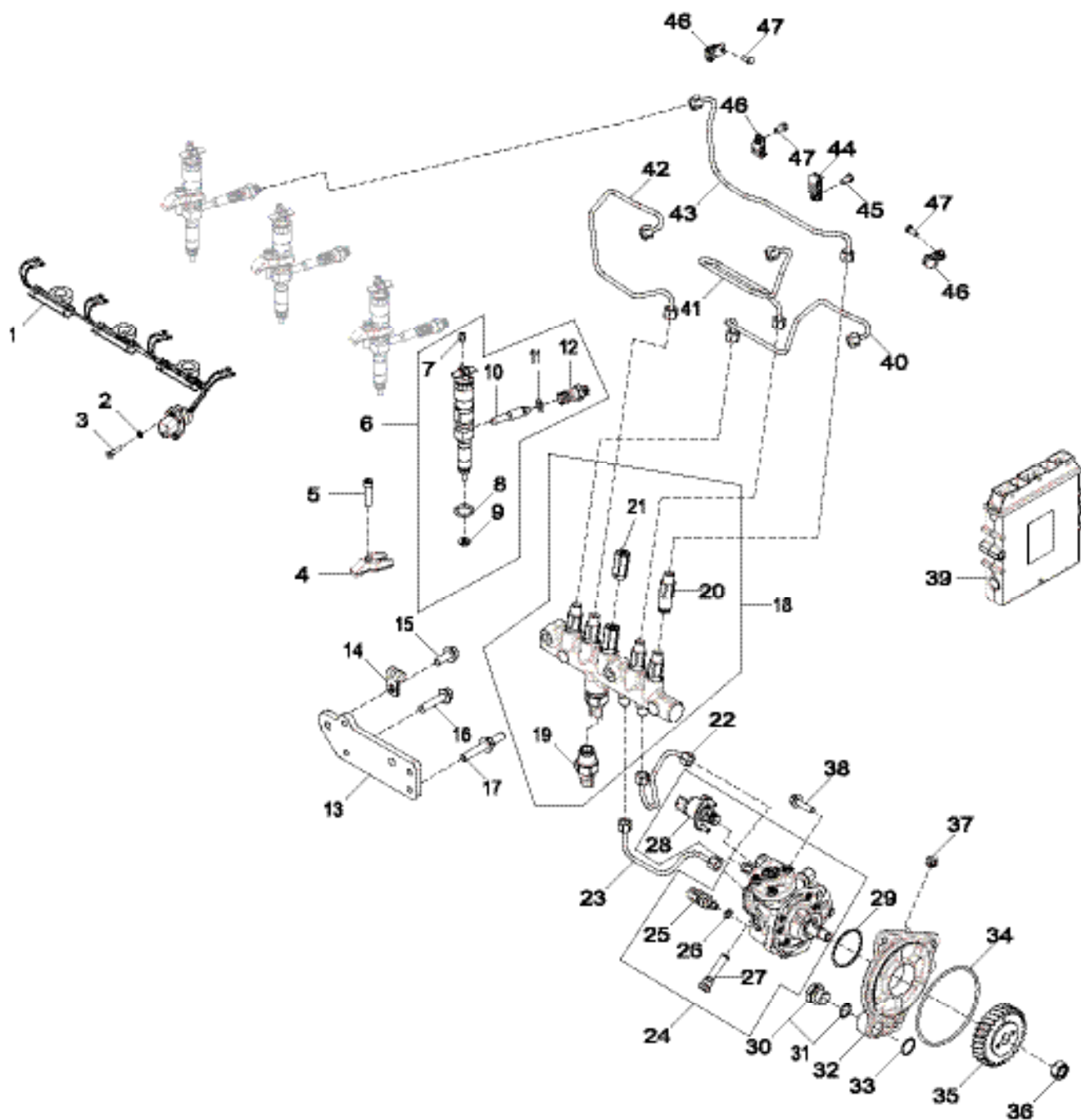
Oil Cooler



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE67231	6	Capscrew, socket head M16 x 16 mm w/pre-applied sealant	-
2	RE56690	1	Oil cooler	-
3	T122075	2	O-ring	-
4	R123501	1	Gasket	-
5	R520983	1	Housing	-
6	RE46686	1	Plug M12 x 1.5	-
7	16-00012	1	O-ring	-
8	RE508599	1	Adapter	-
9	R501428	1	Gasket	-
10	R504734	1	O-ring	-
11	16-09503	1	O-ring	-
12	19M7802	2	Screw M8 x 65 mm	-
13	19M7970	2	Screw M8 x 100 mm	-
14	RE67238	1	Screw M8 x 20 mm	-
15	RE46685	1	Plug M18 x 1.5 mm (includes key 11)	-

Notes

Fuel Injection Pump

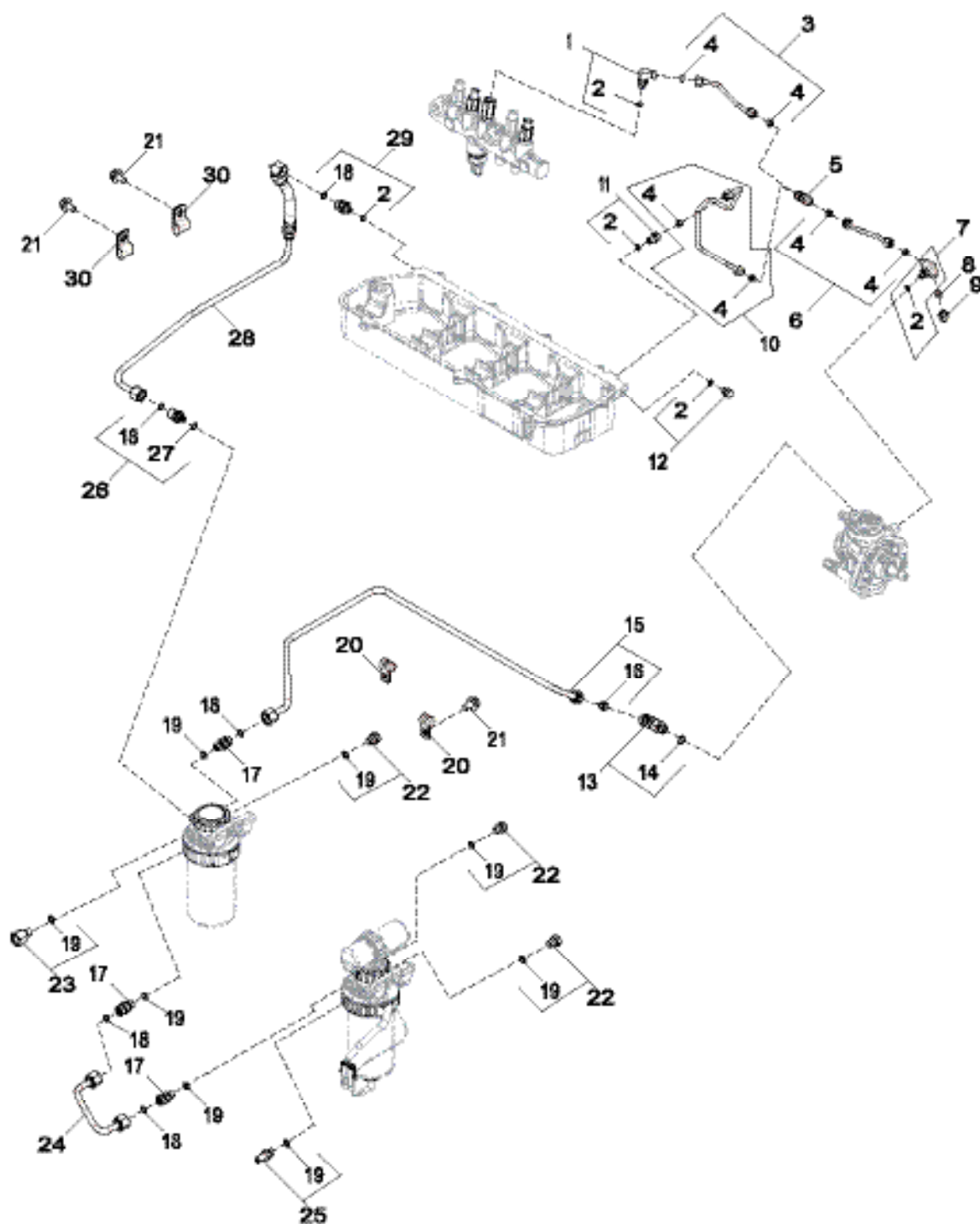


16GX_RE560720_PCD

Fuel Injection Pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE551317	1	Wiring harness	-
2	24M7027	2	Washer	-
3	19M7373	2	Cap screw M5 x 20	-
4	R518345	4	Clamp	-
5	R504781	4	Cap screw	-
6	RE546781	4	Fuel injector	-
	SE501926	4	Fuel injector (Reman for RE546781)	-
7	R134920	8	Nut	-
8	R505452	4	O-ring	-
9	R515535	4	Washer	-
10	RE522594	4	Tube (also order R65397)	-
11	R65397	4	O-ring	-
12	R515044	4	Fitting (also order R65397)	-
13	R522498	1	Bracket	-
14	T78974	1	Clamp	-
15	19M7785	2	Screw M10 x 25	-
16	19M8320	1	Screw M10 x 45	-
17	R525863	1	Stud	-
18	RE520929	1	Rail	-
19	RE520930	1	Sensor, fuel rail pressure	-
20	RE515636	4	Restrictor	-
21	RE516335	1	Pressure Relief Valve	-
	R515454	1	Shim	-
22	RE544262	1	Fuel line	-
23	RE544263	1	Fuel line	-
24	RE527526	1	Fuel injection pump	-
	SE501916	1	Fuel injection pump reman (Reman for RE527528)	-
25	RE516336	1	Fuel temperature sensor	-
26	R524234	1	O-ring	-
27	RE516999	1	Screen	-
28	RE534109	1	Control valve	-
29	R516125	1	O-ring	-
30	RE517370	1	Fitting	-
31	51M7044	1	O-ring	-
32	R504577	1	Adapter fitting	-
33	R116031	1	O-ring	-
34	R55453	1	O-ring	-
35	R502541	1	Gear	-
36	R91360	1	Nut	-
37	14M7298	3	Flange nut M8	-
38	19M7868	2	Screw M8 x 30	-
39	26-9940400699	1	Engine control unit (serial number required)	-
40	RE550619	1	Fuel line	-
41	RE550620	1	Fuel line	-
42	RE550621	1	Fuel line	-
43	RE550622	1	Fuel line	-
44	RE20901	1	Cap screw	-
45	19M8560	1	Cap screw M6 x 12	-
46	RE19797	3	Clamp	-
47	19M6614	3	Cap screw M6 x 12	-

Low Pressure Fuel Lines

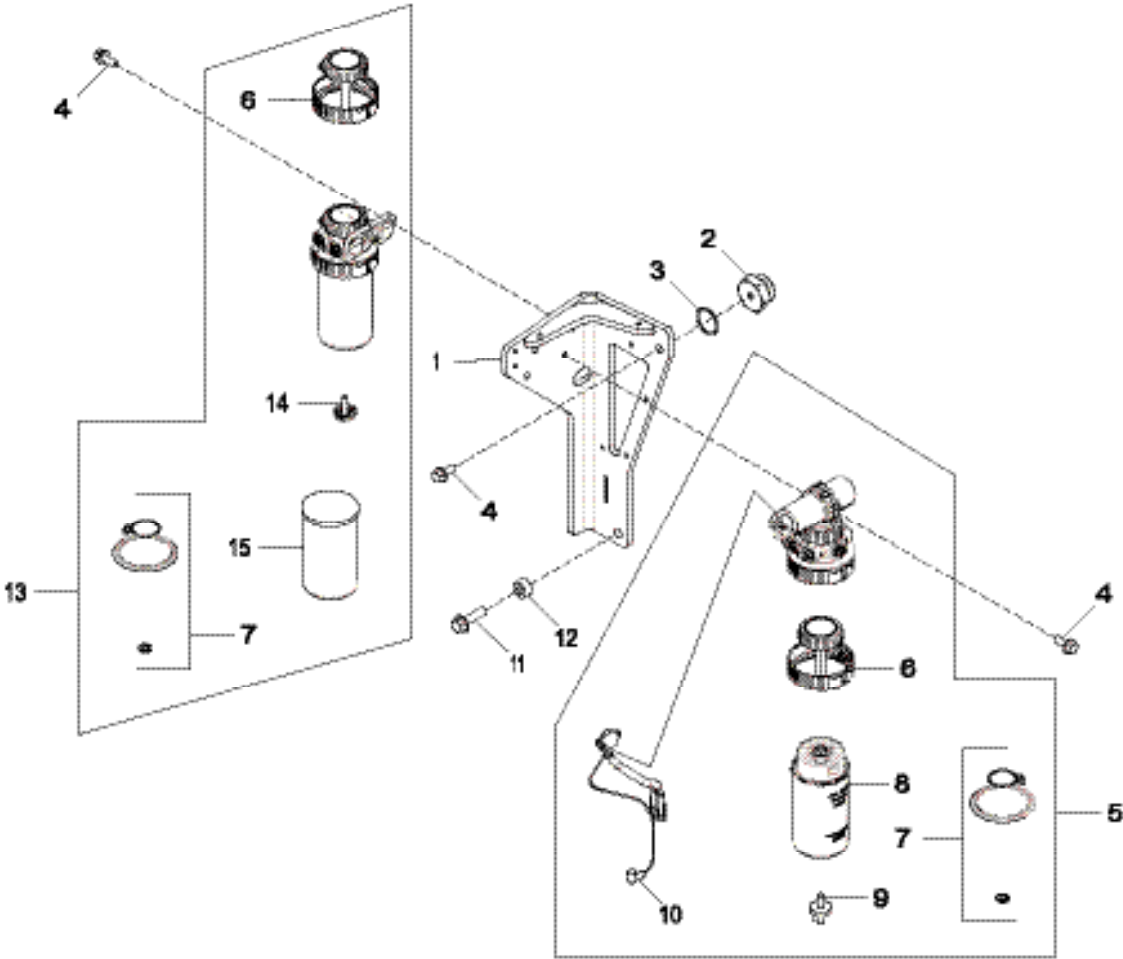


63E6_RE550766_PCD

Low Pressure Fuel Lines

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE502173	1	Fitting	
2	16-00010	5	O-ring	
3	RE550723	1	Fuel Line	
4	R51936	6	Sealing Washer	
5	R97061	1	Tee Fitting	
6	RE550742	1	Fuel Line	
7	RE524220	1	Fitting	
8	AR85519	1	Plug	
9	R123593	1	Tube Nut	
10	RE550731	1	Fuel Line	
11	RE60028	1	Fitting	
12	RE60071	*	Fitting	
13	RE502174	1	Elbow Fitting	
14	16-0005	1	O-ring	
15	RE553047	1	Fuel Line	
16	21-09703	1	Sealing Washer	
17	38H5008	1	Adapter Fitting	
18	16-69501	5	O-ring	
19	16-00012	8	O-ring	
20	T78974	2	Clamp	
21	19M7783	3	Screw M10 x 16	
22	RE46686	3	Plug M12 x 1.5	
23	RE523854	1	Adapter Fitting	
24	RE553028	1	Fuel Line	
25	RE500576	1	Fitting	
26	RE507247	1	Hose fitting (also order R500271 - below)	
27	R500271	1	O-ring	
28	RE553230	1	Fuel Line	
29	RE524399	1	Adapter Fitting	
30	T30785	2	Clamp	
			* - as required	

Water Separator - 12 volt

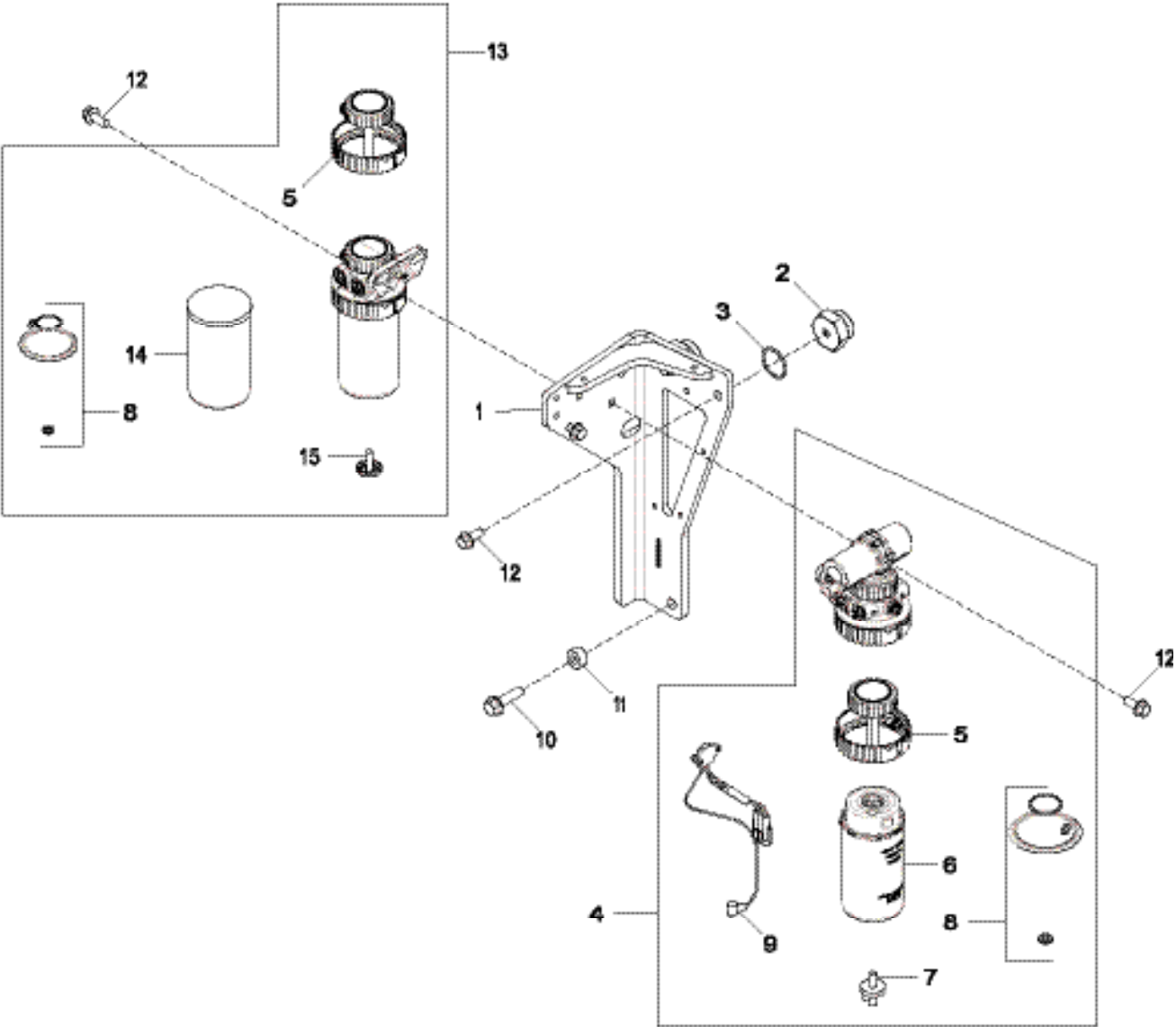


818N_REG52066_PCD

Water Separator - 12 volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552964	1	Bracket	
2	R515068	2	Pipe Plug	
3	16-72070	2	O-ring	
4	19M7785	6	Screw M10 x 25	
5	RE553366	1	Fuel Head & Fuel Lift Pump, 12 volt	
6	RE526834	2	Filter Kit	
7	RE558208	2	Seal Kit	
8	RE521540	1	Fuel Filter, 10 micron	
9	RE54723	1	Drain Valve	
10	RE509677	1	Wiring Harness, 12 volt	
11	19M7813	1	Screw M12 x 45	
12	R114358	1	Spacer	
13	RE553367	1	Filter Head	
14	R120250	1	Drain Valve	
15	RE521538	1	Filer Element, 2 micron	

Water Separator - 24 volt

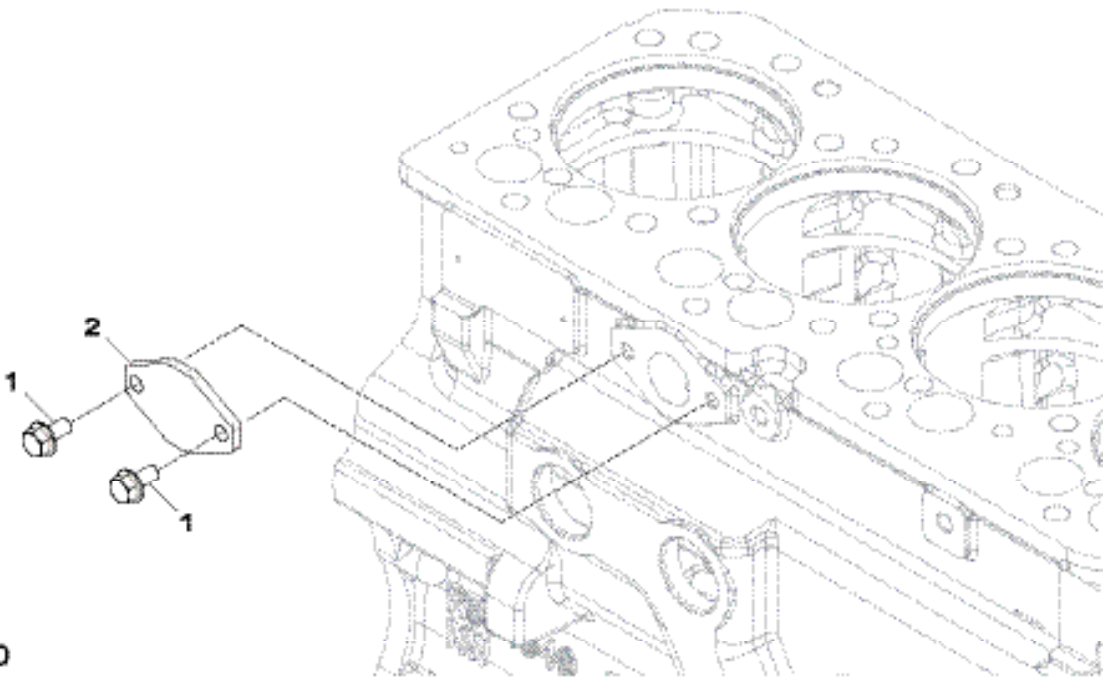


8102_RE554420_PCD

Water Separator - 24 volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552964	1	Bracket	
2	R515068	2	Pipe Plug	
3	16-72070	2	O-ring	
4	RE553368	1	Fuel Head & Fuel Lift Pump, 24 volt	
5	RE526834	2	Filter Kit	
6	RE521540	1	Fuel Filter, 10 micron	
7	RE54723	1	Drain Valve	
8	RE558208	2	Seal Kit	
9	RE509678	1	Wiring Harness, 24 volt	
10	19M7813	1	Screw M12 x 45	
11	R114358	1	Spacer	
12	19M7785	6	Screw M10 x 25	
13	RE553367	1	Filter Head	
14	RE521538	1	Filer Element, 2 micron	
15	R120250	1	Drain Valve	

Fuel Transfer Pump Cover



3799_RE59619_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE66334	2	Cap Screw (threads with pre-applied sealant)	
2	R123396	1	Cover	

ABS Fuel Lines, M150A13

Drawing not available at the time of publication.

Please consult factory.

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51098	1	Manifold, Fuel Line Connection	-
2	12-01131	2	Cap Screw, M6	-
3	14-04803	2	Hex Nut, M6	-
4	18-58509	1	Hose Assembly 5/16" ID x 16"	-
5	18-59423	1	Hose Assembly 1/4" ID x 60"	-
6	21-00606	1	Elbow, 90° Steel 3/8 NPT x 3/8 - 37T	-
7	21-09501	1	Elbow, 90° Steel M16 x 1.5 x 3/8 - 37T	-
8	21-31003	2	Plug	-
9	21-51601	1	Elbow 90° Steel 3/8 NPT x 1/4 37T	-
10	21-59507	1	Elbow 90° Steel M10 x 1.0 x 1/4 - 37T	-

Oil Pressure Manifold

Drawing not available at the time of publication.

Please consult factory.

Oil Pressure Manifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-85401	1	Manifold, Oil Pressure 6 ea 1/8NPT & 1 ea 1/4NPT Ports	-
2	21-75703	2	Spacer, BP, 1/2 SCHD 80 x 21/32"	-
3	12-04802	2	Cap Screw, Hex Head M12 x 1.75 x 40mm	-
4	15-00912	2	Lock Washer, Helical M12	-
5	15-00007	2	Flat Washer M12	-
6	21-52205	1	M. Connector, Steel 1/8NPT x 1/4-37T	-
7	21-00113	1	Elbow 45 Swivel, Steel 1/4-37T	-
8	18-55405	1	Hose Assembly 1/4"ID x 9" (9.5"LOA) 1/4FMS x 1/4FMS S/S-TFE	-
9	21-71053	1	M. Elbow 90, Steel 1/8NPT x 1/4-37T	-
10	21-00132	1	Bushing, Brass 1/4NPT x 1/8NPT	-
11	21-00012	4	Plug, Hex Head, Brass, 1/8NPT	-

Pre-Alarm Switches, High Coolant Temperature / Low Oil Pressure

Drawing not available at the time of publication.

Please consult factory.

Pre-Alarm Switches, High Coolant Temperature / Low Oil Pressure

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-40357	1	Switch, Pressure 25PSI N.O./N.C. 1/8NPT 10A Contacts	-
2	22-40938	1	Switch, Temperature 210F N.O./N.C. ISO Ground 3/8 NPT	-
3	22-41077	1	Terminal Strip 10 Connection 20A 600VAC #12-22 AWG	-
4	12-00005	2	MSCR, PH Phillips #8-32 x 3/4" S/S	-
5	14-00003	2	Hex Nut, Nylock #8-32 S/S (18-8)	-
6	10-19402	1	Thermostat Housing	-
7	R536206	1	Gasket, Thermostat Housing	-

AC Voltage Regulator

Drawing not available at the time of publication.

Please consult factory.

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-40174	1	AC Voltage Regulator, Enclosed AVR44	-
2	22-40440	1	Magnetic Pick-Up 3/4-16 x 2-1/4" & Plug-In Pigtail Harness	-

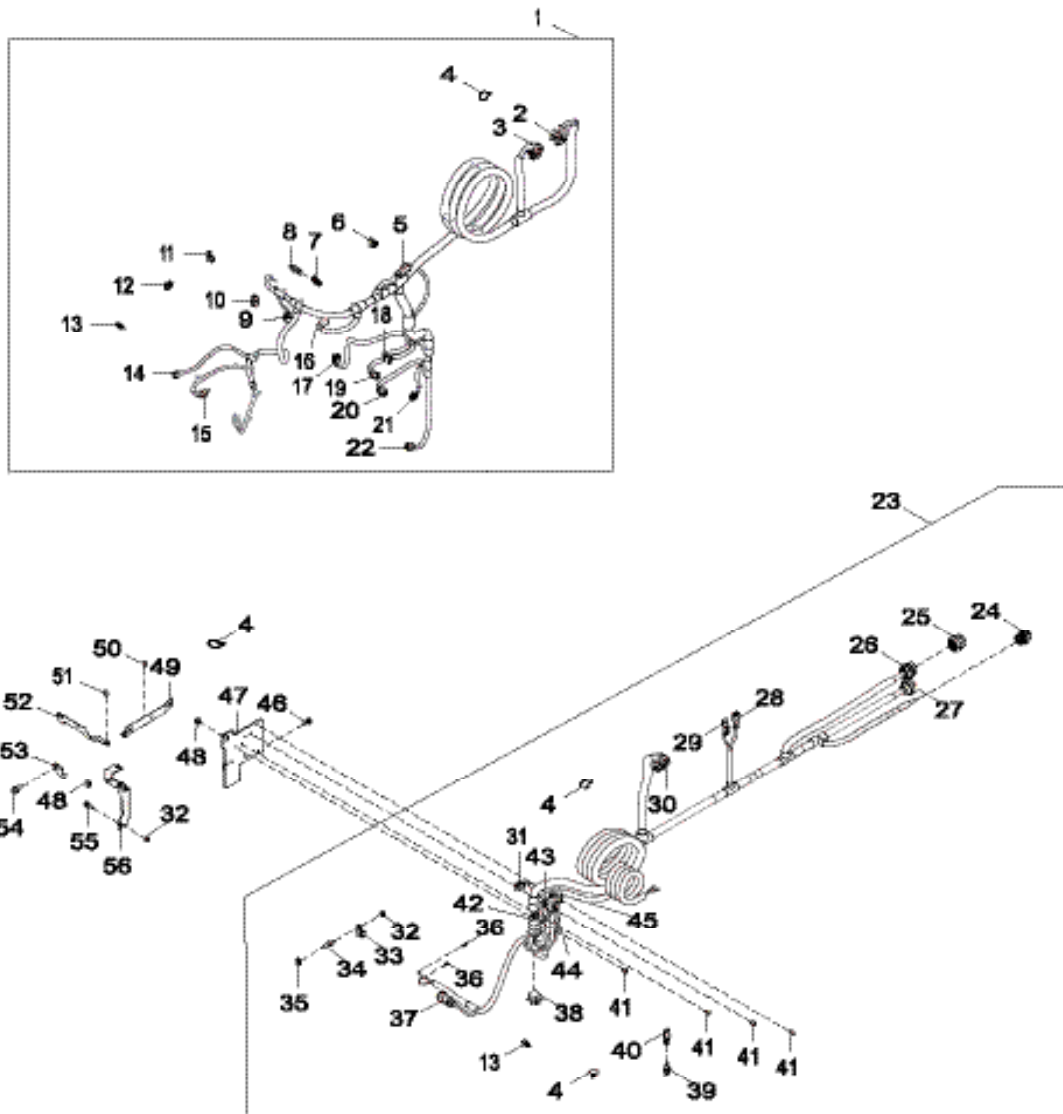
Speed Switch

Drawing not available at the time of publication.

Please consult factory.

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-40438	1	Speed Switch 2 Element Electric SS40A (Programming Required)	-
2	22-40440	1	Magnetic Pick-Up 3/4-16 x 2-1/4" & Plug-In Pigtail Harness	-

Engine Wiring Harness - 12 Volt

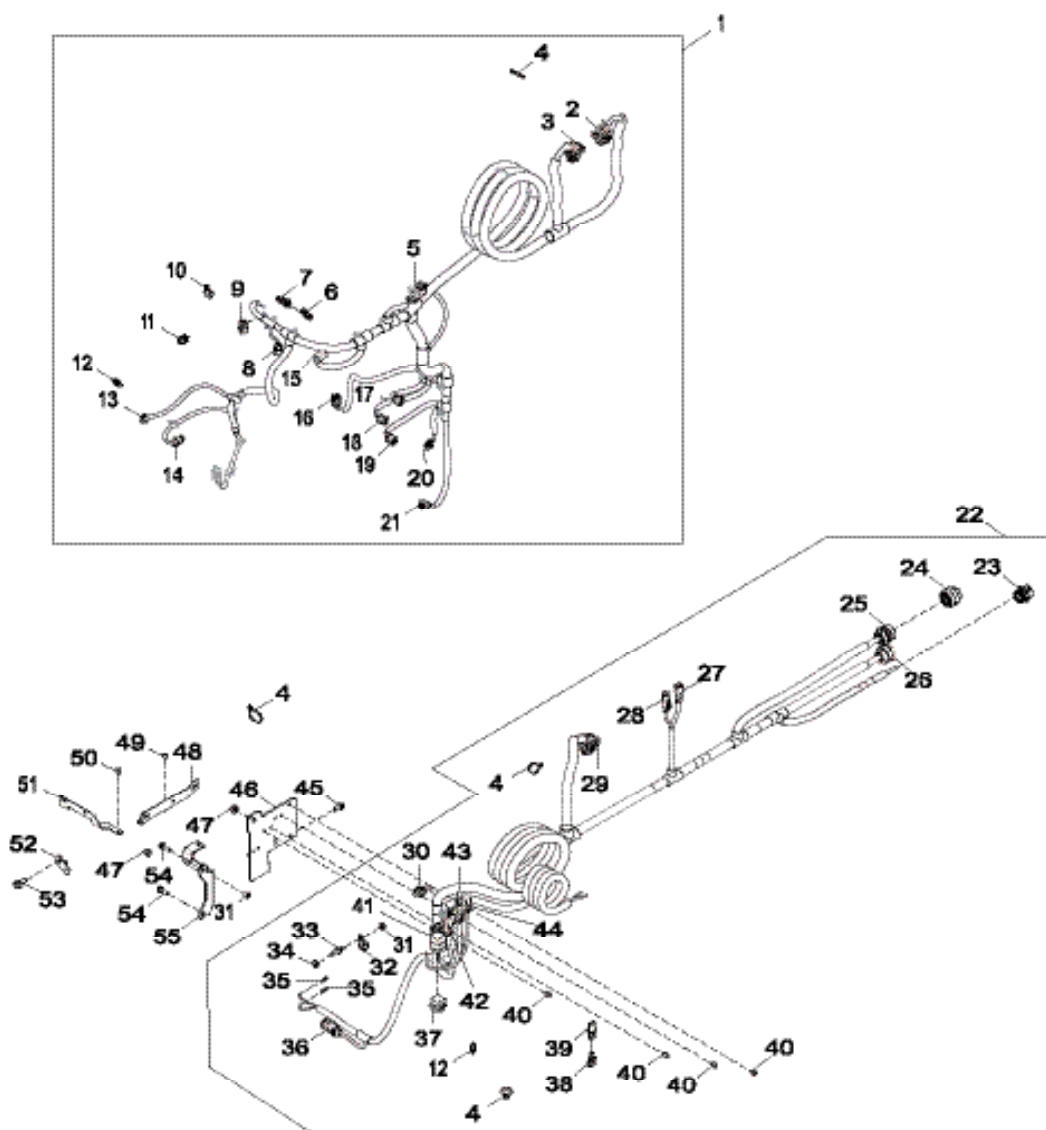


KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552459	1	Wiring Harness	-
2	57M10605	1	Electrical Connection Housing	-
	57M10604	1	Electrical Connection Housing	-
3	57M10606	1	Electrical Connection Housing	-
	57M10604	1	Electrical Connection Housing	-
4	R44302	10	Tie Band	-
5	57M7305	1	Electrical Connection Housing	-
	57M7280	1	Electrical Connection Housing	-
6	57M8601	1	Electrical Connection Housing	-
7	RE12362	1	Electrical Connection Assembly	-
8	R78052	1	Electrical Connection Assembly	-
9	57M8601	1	Electrical Connection Housing	-
10	57M9781	1	Electrical Connection Housing	-
11	57M10829	1	Half Clamp	-
12	57M9244	1	Clip	-

Engine Wiring Harness - 12 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
13	RE258807	7	Tie Band	-
14	57M8625	1	Electrical Connection Housing	-
15	57M9775	1	Electrical Connection Housing	-
16	57M9775	1	Electrical Connection Housing	-
17	57M8407	1	Electrical Connection Housing	-
18	57M8403	1	Electrical Connection Housing	-
19	57M8400	1	Electrical Connection Housing	-
20	57M8625	1	Electrical Connection Housing	-
21	57M8625	1	Electrical Connection Housing	-
22	57M8601	1	Electrical Connection Housing	-
23	RE559572	1	Harness Kit	-
24	57M7919	1	Electrical Connection Housing	-
25	57M7749	1	Electrical Connection Housing	-
26	57M7750	1	Electrical Connection Housing	-
27	57M8112	1	Electrical Connection Housing	-
28	57M7304	1	Electrical Connection Housing	-
29	57M8131	1	Electrical Terminator	-
30	57M10615	1	Electrical Connection Housing	-
	57M10613	1	Electrical Connection Housing	-
31	57M7280	1	Electrical Connection Housing	-
32	14M7298	3	Flange Nut, M8	-
33	57M10837	1	Half Clamp	-
34	R529573	1	Stud	-
35	24M7476	1	Washer, 8.4 x 21 x 4 mm	-
36	57M7547	1	Electrical Connection Terminal	-
37	57M9786	1	Electrical Connection Housing	-
38	57M7555	1	Electrical Connection Housing	-
39	RE12363	1	Electrical Connection Assembly	-
40	R78053	1	Electrical Connection Assembly	-
41	19M7861	4	Screw M6 x 10	-
42	RE52665	1	Relay	-
43	57M8487	3	Electrical Connector Cap	-
44	57M8600	1	Electrical Connector Housing	-
	57M8487	1	Electrical Connector Cap	-
45	57M8267	1	Electrical Connector Housing	-
	57M8487	1	Electrical Connector Cap	-
46	19M7866	1	Screw, M8 x 20	-
47	R537523	1	Bracket	-
48	14M7296	2	Flange Nut, M10	-
49	R537520	1	Bracket	-
50	37M7086	2	Screw, M6 x 12	-
51	19M7774	2	Screw, M6 x 12	-
52	R37521	1	Bracket	-
53	R522924	1	Bracket	-
54	19M7785	1	Screw, M10 x 25	-
55	19M7867	2	Screw, M8 x 25	-
56	R537522	1	Bracket	-

Engine Wiring Harness - 24 Volt

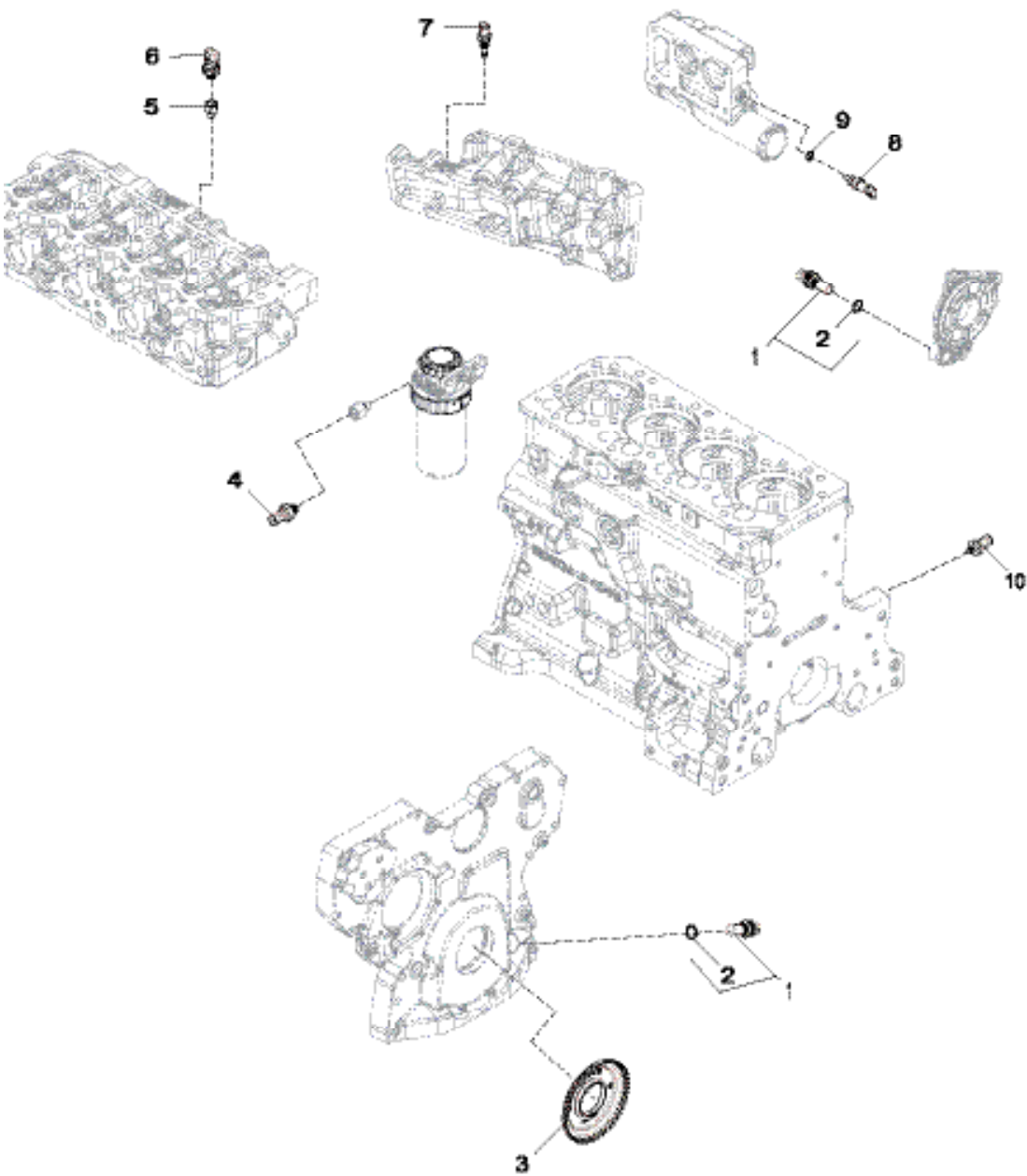


KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552459	1	Wiring Harness	-
2	57M10605	1	Electrical Connection Housing	-
	57M10604	1	Electrical Connection Housing	-
3	57M10606	1	Electrical Connection Housing	-
	57M10604	1	Electrical Connection Housing	-
4	R44302	10	Tie Band	-
5	57M7305	1	Electrical Connection Housing	-
	57M7280	1	Electrical Connection Housing	-
	57M8601	1	Electrical Connection Housing	-
6	RE12362	1	Electrical Connection Assembly	-
7	R78052	1	Electrical Connection Assembly	-
8	57M8601	1	Electrical Connection Housing	-
9	57M9781	1	Electrical Connection Housing	-
10	57M10829	1	Half Clamp	-
11	57M9244	1	Clip	-

Engine Wiring Harness - 24 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
12	RE258807	7	Tie Band	-
13	57M8625	1	Electrical Connection Housing	-
14	57M9775	1	Electrical Connection Housing	-
15	57M8634	1	Electrical Connection Housing	-
16	57M8407	1	Electrical Connection Housing	-
17	57M8403	1	Electrical Connection Housing	-
18	57M8400	1	Electrical Connection Housing	-
19	57M8601	1	Electrical Connection Housing	-
20	57M8625	1	Electrical Connection Housing	-
21	57M8601	1	Electrical Connection Housing	-
22	RE559574	1	Harness Kit	-
23	57M7919	1	Electrical Connection Housing	-
25	57M7750	1	Electrical Connection Housing	-
26	57M8112	1	Electrical Connection Housing	-
27	57M7304	1	Electrical Connection Housing	-
28	57M8131	1	Electrical Terminator	-
	57M8637	1	Electrical Connection Housing	-
29	57M10615	1	Electrical Connection Housing	-
	57M10613	1	Electrical Connection Housing	-
30	57M7280	1	Electrical Connection Housing	-
31	14M7298	3	Flange Nut, M8	-
32	57M10837	1	Half Clamp	-
33	R529573	1	Stud	-
34	24M7476	1	Washer, 8.4 x 21 x 4 mm	-
35	57M7547	1	Electrical Connection Terminal	-
36	57M9786	1	Electrical Connection Housing	-
38	57M7555	1	Electrical Connection Housing	-
	57M9789	1	Electrical Connection Housing	-
39	R78053	1	Electrical Connection Assembly	-
40	19M7861	4	Screw M6 x 10	-
41	RE505214	1	Relay Module	-
42	R104570	1	Electrical Connection Assembly	-
	57M8487	1	Electrical Connector Cap	-
43	57M8600	1	Electrical Connector Housing	-
	57M8487	1	Electrical Connector Cap	-
44	57M8267	1	Electrical Connector Housing	-
	57M8487	1	Electrical Connector Cap	-
45	19M7866	1	Screw, M8 x 20	-
46	R537523	1	Bracket	-
47	14M7296	2	Flange Nut, M10	-
48	R537520	1	Bracket	-
49	37M7086	2	Screw, M6 x 12	-
50	19M7774	2	Screw, M6 x 12	-
51	R37521	1	Bracket	-
52	R522924	1	Bracket	-
54	19M7867	2	Screw, M8 x 25	-
55	R537522	1	Bracket	-

Engine Sensors

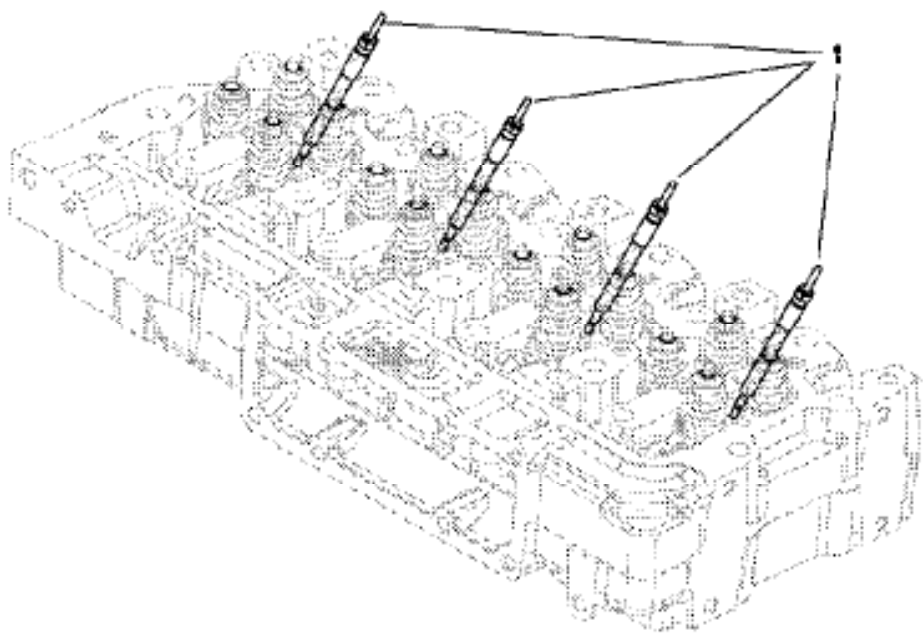


6775_RE354206_PCD

Engine Sensors

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE519144	2	Crankshaft Position Sensor	-
2	51M7044	2	O-ring, 17.3 x 2.2 mm	-
3	R517471	1	Crankshaft Timing Wheel	-
4	RE522794	1	Fuel Pressure Sender Sensor	-
5	T18433	1	Adapter Fitting	-
6	RE537639	1	Manifold Air Pressure Sensor	-
7	RE525016	1	Air Intake Temperature Sensor	-
8	RE52722	1	Coolant Temperature Sensor	-
9	51M7041	1	O-ring 11.3 x 2.2 mm	-
10	RE16707	1	Engine Oil Pressure Sensor	-

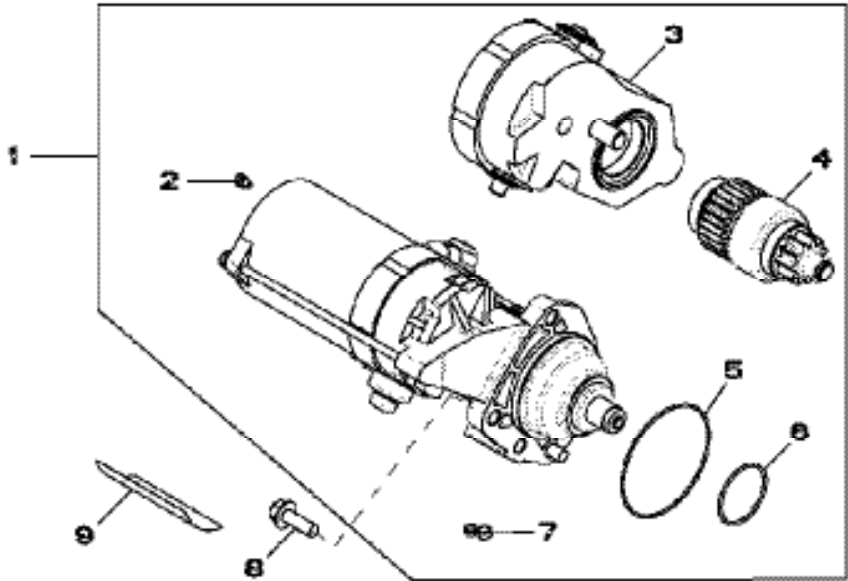
Starting Aid



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE504580	4	Glow Plug 12 volt	-
	RE515622	4	Glow Plug 24 volt	-

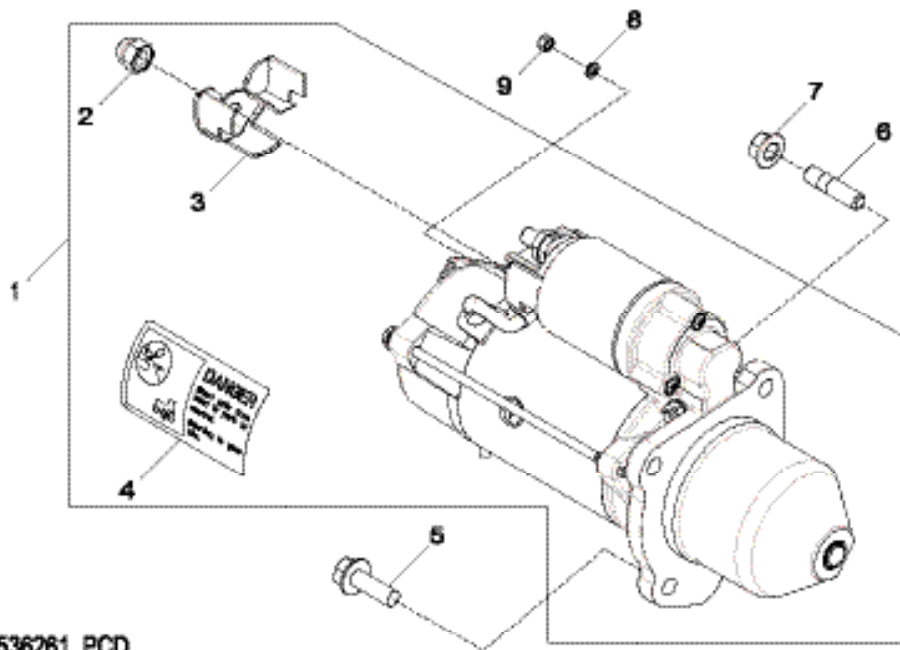
Notes

Starter Motor, 12 Volt Standard Ground



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE70957	1	Starter Motor, 12 Volt Standard Ground	-
	SE501403	1	Starter Motor (Reman for RE70957)	-
2	RE71256	1	Screw w/Washer	-
3	RE70486	1	Switch	-
4	RE70487	1	Clutch	-
5	R135509	1	O-ring	-
6	R135510	1	O-ring	-
7	RE70756	1	Cover	-
8	19M7786	3	Screw M10 x 30	-
9	T146102	1	Label	-

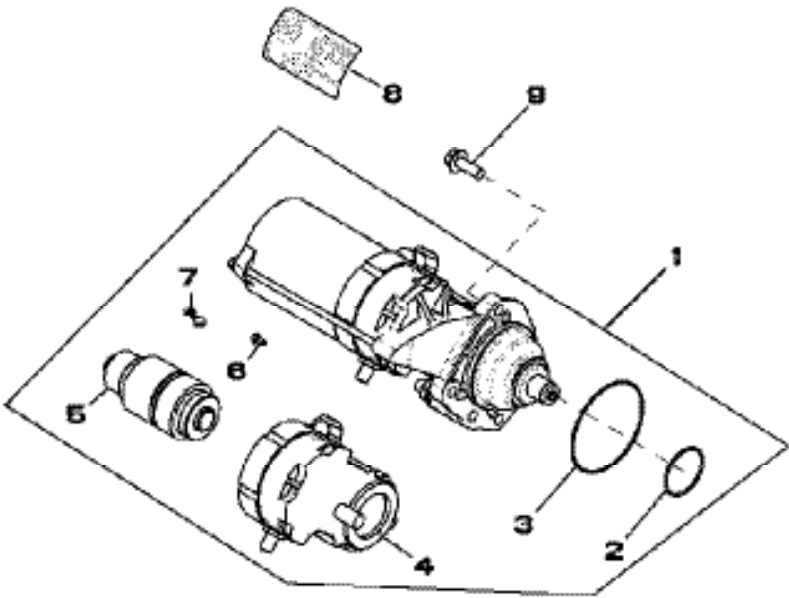
Starter Motor, 12 Volt Isolated Ground



30AG_RE536281_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE536490	1	Starter Motor, 12 Volt Isolated Ground	-
2	R135432	1	Nut	-
3	R517440	1	Cover	-
4	T146102	1	Label	-
5	19M7786	2	Screw, M10 x 30	-
6	42M7058	1	Stud	-
7	14M7296	1	Flange Nut, M10	-
8	12M7064	1	Lock Washer, 5 mm	-
9	14M7297	1	Nut	-

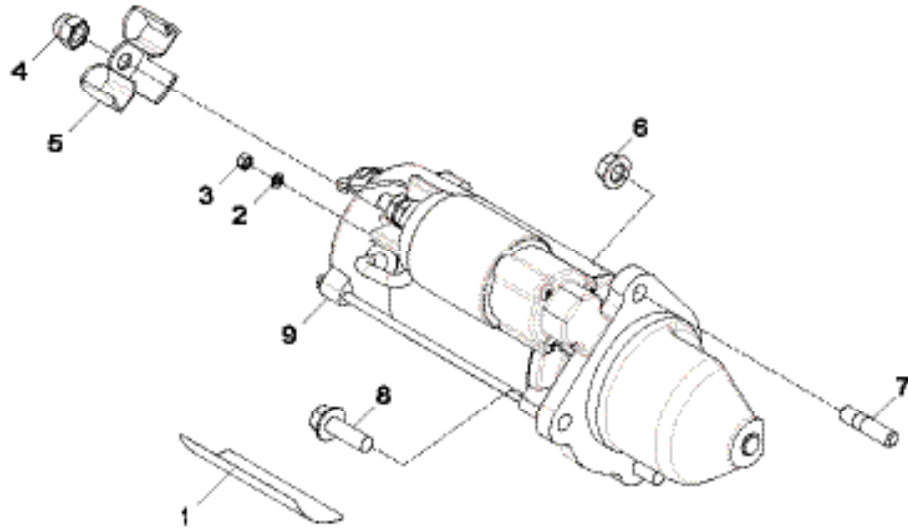
Starter Motor, 24 Volt Standard Ground



RE501149PCDE02

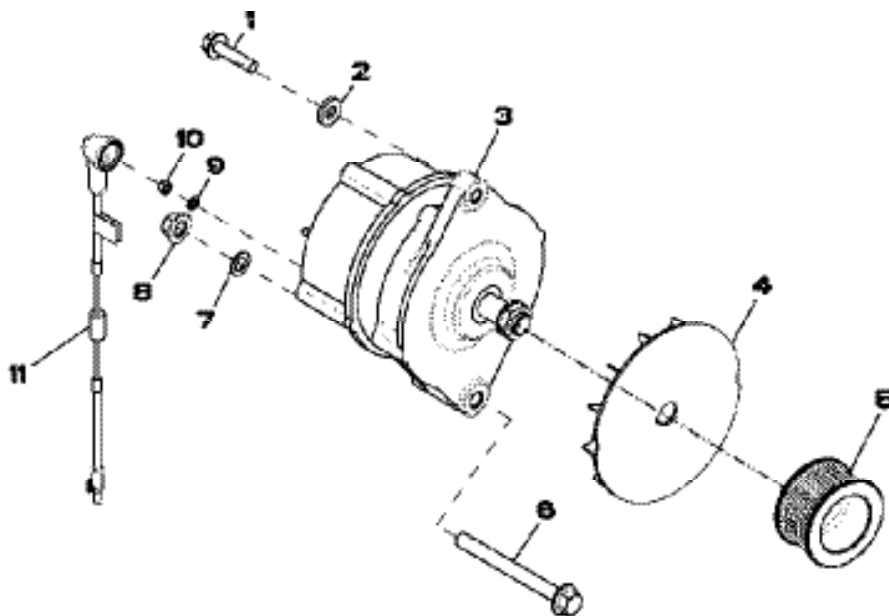
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE501150	1	Starter Motor, 24 Volt Standard Ground	-
	SE501403	1	Starter Motor (Reman for RE501150)	-
2	R135510	1	O-ring	-
3	R135509	1	O-ring	-
4	RE70678	1	Switch	-
5	RE70682	1	Clutch	-
6	RE71256	1	Screw w/Washer	-
7	RE70756	1	Cover	-
8	T146102	1	Label	-
9	19M7786	3	Screw, M10 x 30	

Starter Motor, 24 Volt Isolated Ground



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R116617	1	Label	-
2	12M7064	1	Lock Washer, 5 mm	-
3	14M7297	1	Nut, M5	-
4	R135432	1	Nut	-
5	R517440	1	Cover	-
6	14M7296	1	Flange nut, M10	-
7	42M7058	1	Stud	-
8	19M7786	2	Screw, M10 x 30	-
9	RE522334	1	Starter Motor, 24 Volt Isolated Ground	-
	SE502733	1	Starter Motor (Reman for RE522334)	-

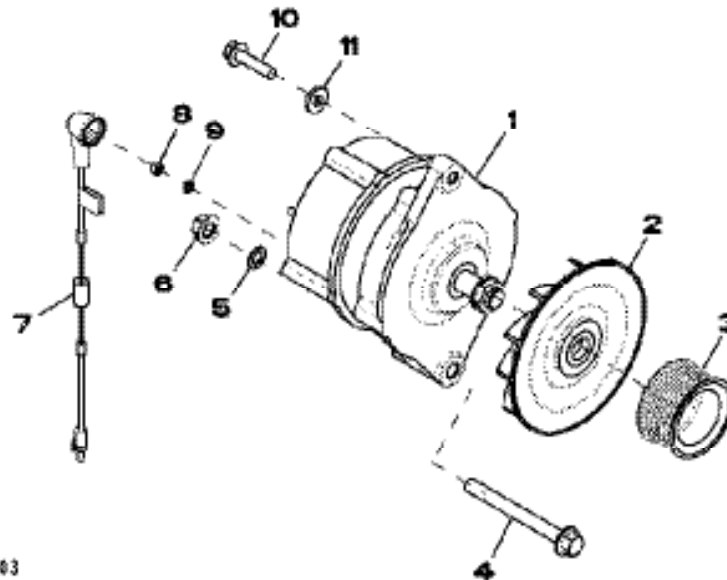
Alternator 12V 65A/75A



RE509779PCDE03

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M8291	1	Screw M8 x 35	-
2	R501085	1	Washer	-
3	AT173624	1	Alternator, 12V 65A	-
	RE533516	1	Alternator, 12V 75A	-
4	T158584	1	Fan, 12V 65A applications	-
	R505711	1	Fan, 12V 75A applications	-
5	R501486	1	Pulley, 12V 65A applications	-
	RE516489	1	Pulley, 12V 75A applications	-
6	19M7812	1	Screw, M10 x 100	-
7	R64525	1	Thrust Washer	-
8	14M7296	1	Flange Nut	-
9	12M7011	1	Lock Washer	-
10	14M7297	1	Nut, M5	-
11	RE505489	1	Wiring Harness	-
--	H144095	1	Capacitor, 12V 65A applications	-
--	RE533941	1	Capacitor, 12V 75A applications	-
--	H144094	1	Voltage Regulator, 12V 65A applications	-
--	RE533942	1	Voltage Regulator, 12V 75A applications	-

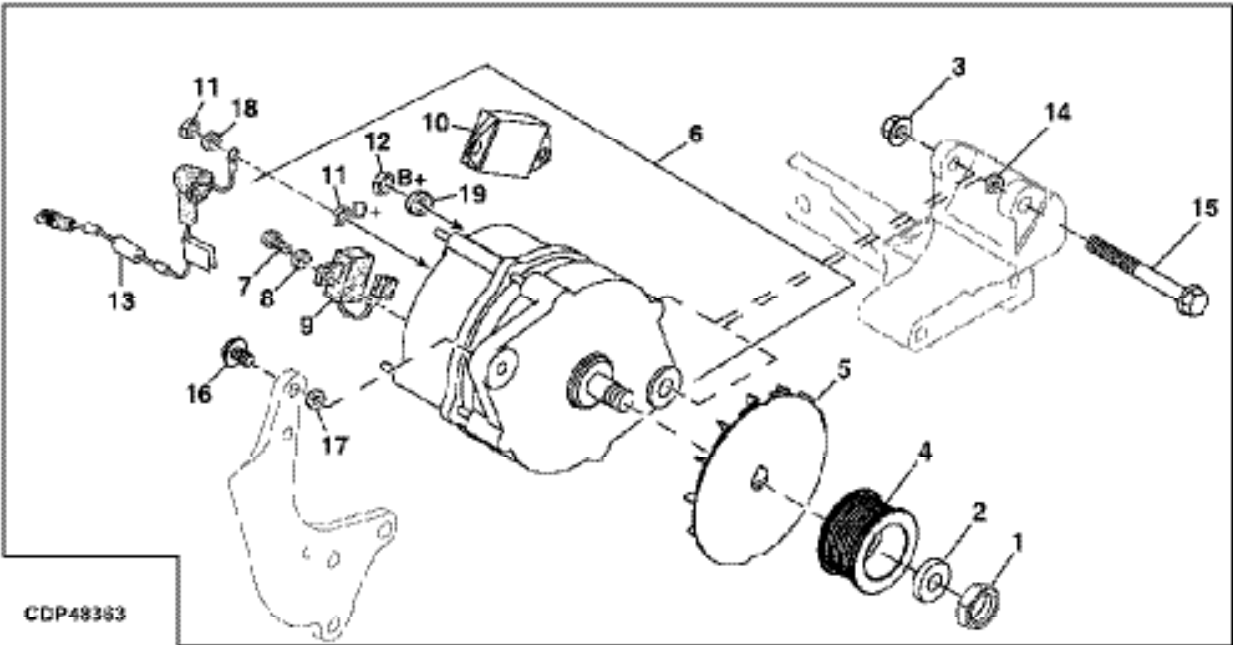
Alternator 12V 95A



RE509761PCDC03

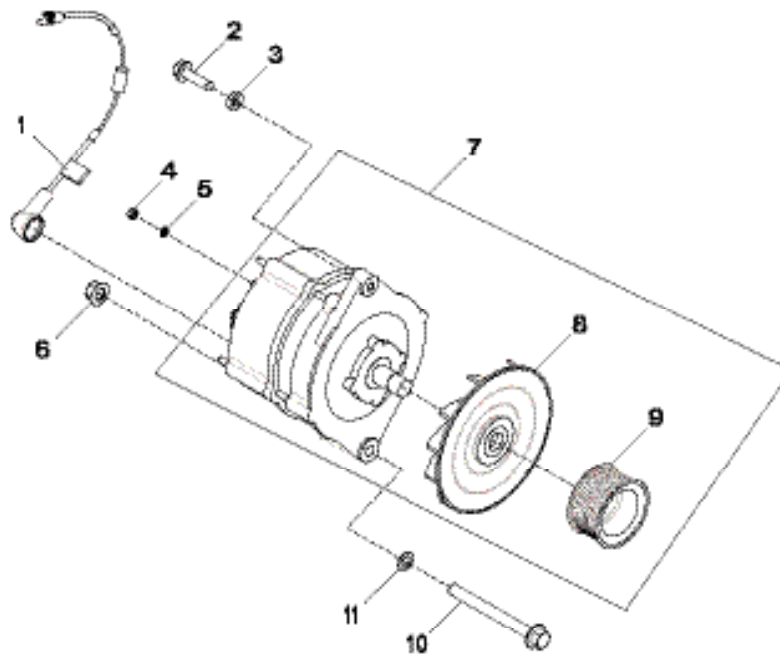
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE533653	1	Alternator Kit 12V 95A (includes R505711 and RE516489)	-
	AH137883	1	Alternator 12V 95A	-
2	R505711	1	Fan	-
3	RE516489	1	Pulley	-
4	19M7812	1	Screw, M10 x 100	-
5	R64525	1	Thrust Washer	-
6	14M7296	1	Flange Nut, M10	-
7	RE505489	1	Wiring Harness	-
8	14M7297	1	Nut, M5	-
9	12M7064	1	Lock Washer, 5mm	-
10	19M8291	1	Screw, M8 x 35	-
11	R501065	1	Washer, M8 x 35	-
--	RE533941	1	Capacitor	-
--	RE533942	1	Voltage Regulator	-

Alternator, 12V 120A



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	14M7158	1	Nut, M16	-
2	12M7132	1	Washer	-
3	14M7296	1	Flange Nut	-
4	R501486	1	Pulley	-
5	T158584	1	Fan	-
6	RE533654	1	Alternator 12V 120A	-
7	21M7198	1	Screw, M5 x 8	-
8	12M7075	1	Washer, 5.3 x 11 x 0.5 mm	-
9	H144095	1	Capacitor	-
10	H144094	1	Voltage Regulator	-
11	14M7297	1	Nut, M5	-
12	14M7273	1	Nut, M8	-
13	RE505489	1	Wiring Harness	-
14	R64525	*	Thrust Washer, 10.3 x 17.48 x 0.91 mm	-
15	19M7812	1	Screw, M10 x 100	-
16	19M7868	1	Screw, M8 x 30	-
17	R48808	1	Washer, 8.128 x 15.748 x 3.937 mm	-
18	12M7064	1	Lock Washer, 5 mm	-
19	12M7065	1	Lock Washer, 8 mm	-
* - as required				

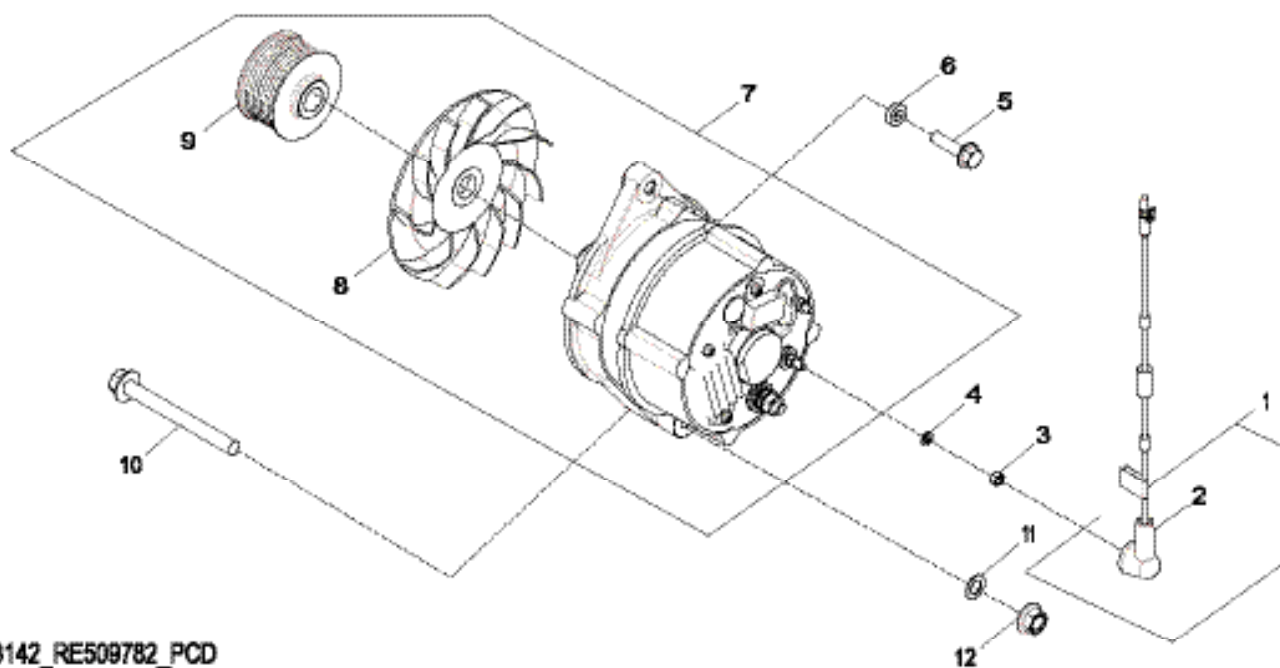
Alternator, 14V 75A



3148_RE527043_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE505489	1	Wiring Harness	-
2	19M7868	1	Screw, M8 x 30	-
3	R501065	1	Washer	-
4	14M7297	2	Nut, M5	-
5	12M7064	2	Lock Washer, 5mm	-
6	14M7296	1	Flange Nut, M10	-
7	RE540412	1	Alternator, 14V 75A	-
8	R505711	1	Fan	-
9	RE516489	1	Pulley	-
10	19M7812	1	Screw, M10 x 110	-
11	R64525	1	Thrust Washer	-

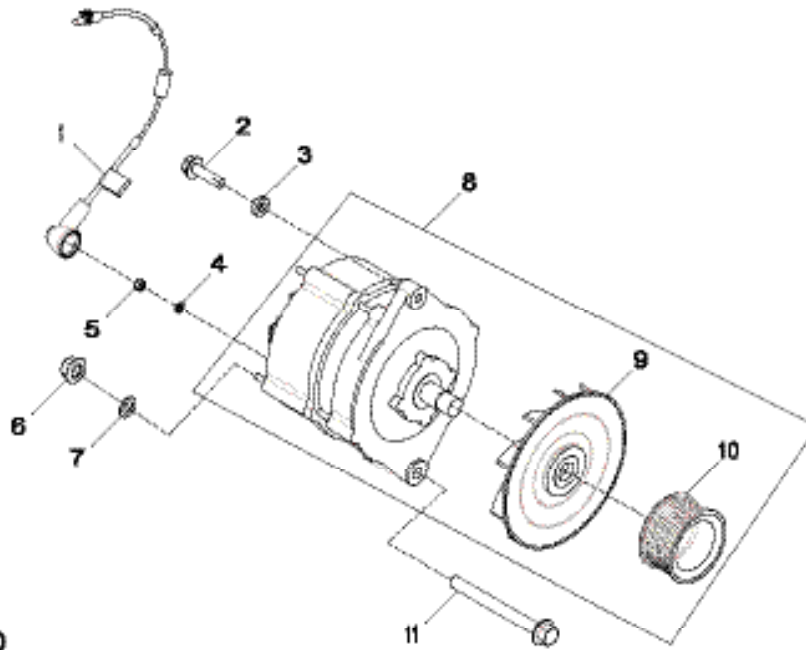
Alternator, 24V 50A



3142_RE509782_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE505489	1	Wiring Harness	-
2	R74993	1	Boot	-
3	14M7297	1	Nut, M5	-
4	12M7011	1	Lock Washer, 5mm	-
5	19M7868	1	Screw, M8 x 30	-
6	R501065	1	Washer	-
7	RE537146	1	Alternator, 24V 50A	-
8	R505711	1	Fan	-
9	RE516489	1	Pulley	-
10	19M7812	1	Screw, M10 x 100	-
11	R64525	1	Thrust Washer	-
12	14M7296	1	Flange Nut, M10	-
--	RE533941	1	Capacitor	-
--	RE533942	1	Voltage Regulator	-

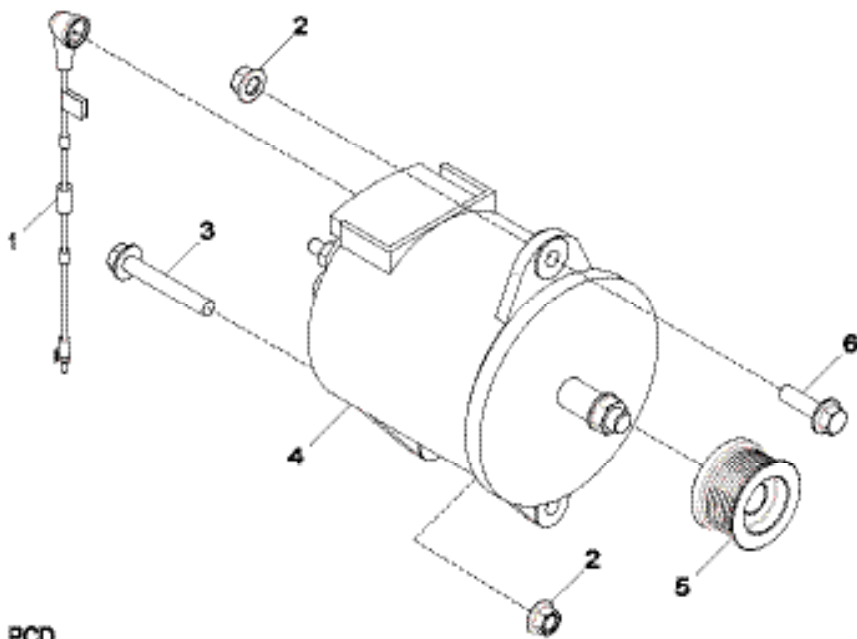
Alternator, 28V 50A



3149_RE527044_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE505489	1	Wiring Harness	-
2	19M7868	1	Screw, M8 x 30	-
3	R501065	1	Washer	-
4	12M7064	2	Lock Washer, 5mm	-
5	14M7297	2	Nut, M5	-
6	14M7296	1	Flange Nut, M10	-
7	R64525	1	Thrust Washer	-
8	RE540413	1	Alternator, 28V 50A	-
9	R505711	1	Fan	-
10	RE516489	1	Pulley	-
11	19M7812	1	Screw, M10 x 100	-

Alternator, 28V 140A

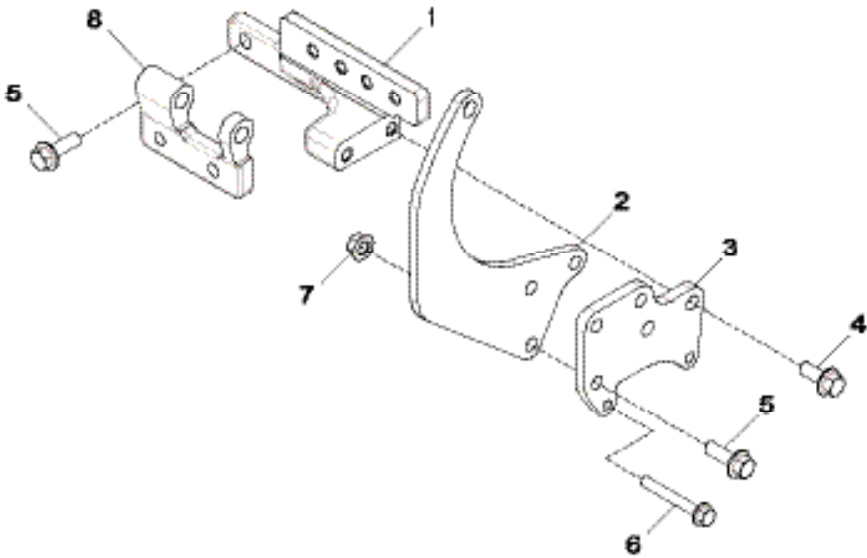


3127_RE517381_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE505489	1	Wiring Harness	-
2	14M7299	3	Flange Nut, M12	-
3	19M7818	1	Screw, M12 x 80	-
4	RE522329	1	Alternator, 28V 140A	-
5	R128859	1	Pulley	-
6	19M7791	2	Bolt, M12 x 40	-

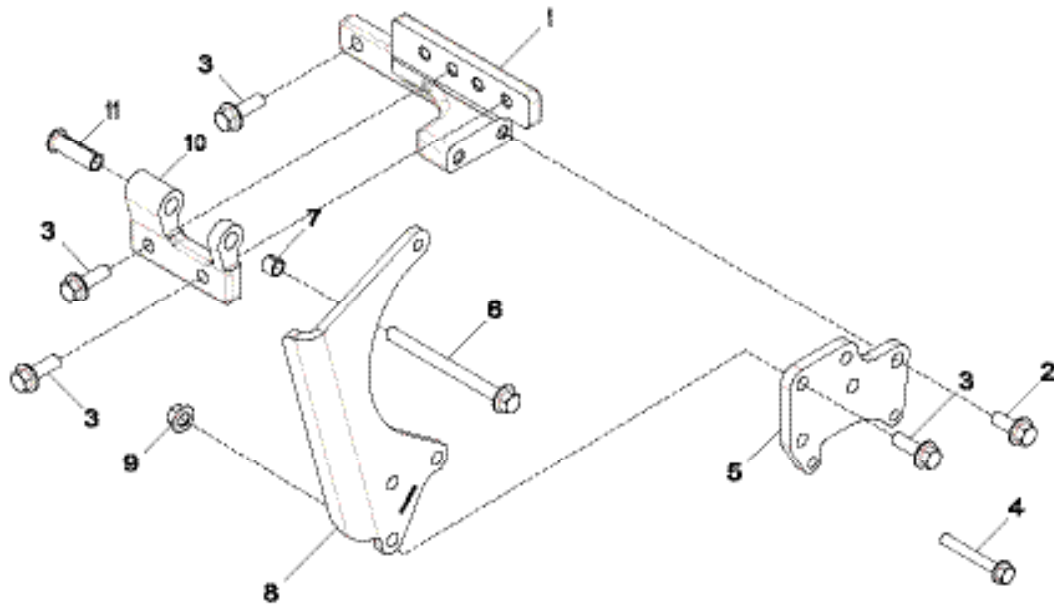
Notes

Alternator Mounting, Medium Frame



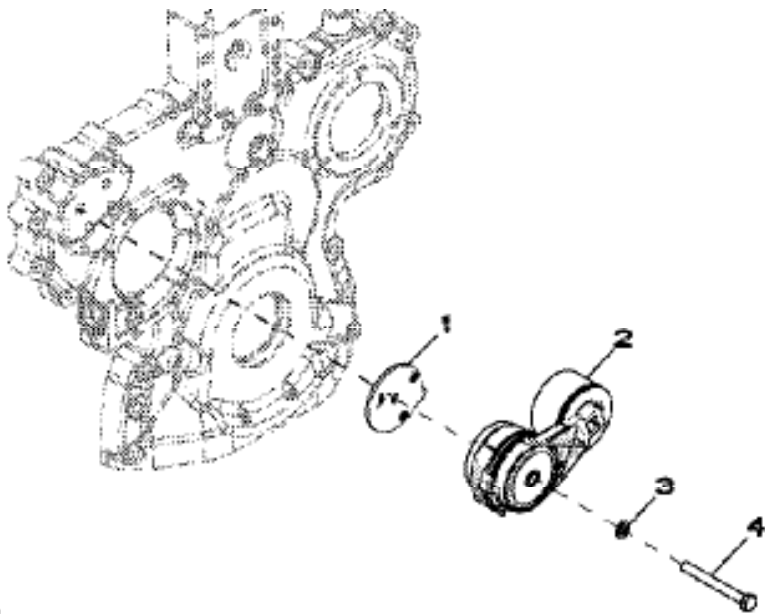
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R529946	1	Bracket	-
2	R515609	1	Strap	-
3	R516510	1	Hose	-
4	19M7785	2	Screw, M10 x 25	-
5	19M7786	7	Screw, M10 x 30	-
6	19M7801	2	Screw, M8 x 60	-
7	14M7296	3	Flange Nut, M10	-
8	R516574	1	Bracket	-

Alternator Mounting, Large Frame



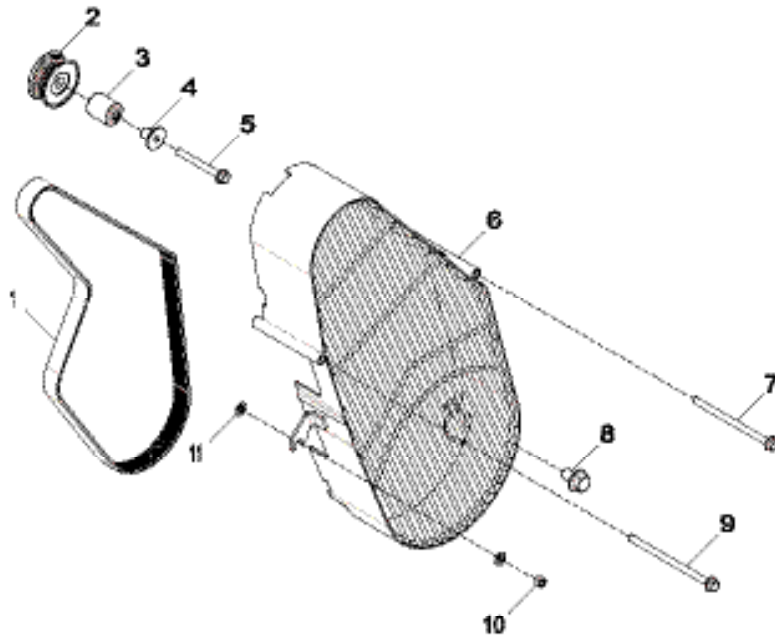
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R529946	1	Bracket	-
2	19M7785	2	Screw, M10 x 25	-
3	19M7786	7	Screw, M10 x 30	-
4	19M7801	2	Screw, M8 x 60	-
5	R516510	1	Hose	-
6	19M7944	1	Screw, M10 x 120	-
7	R135423	1	Bushing	-
8	R516569	1	Strap	-
9	14M7296	3	Flange Nut, M10	-
10	R516574	1	Bracket	-
11	R134010	1	Bushing	-

Belt Tensioner



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R518210	1	Spacer	-
2	RE518097	1	Belt Tensioner	-
3	24M7106	1	Washer, M10 x 18 x 2.5 mm	-
4	19M8183	1	Cap Screw, M10 x 90	-

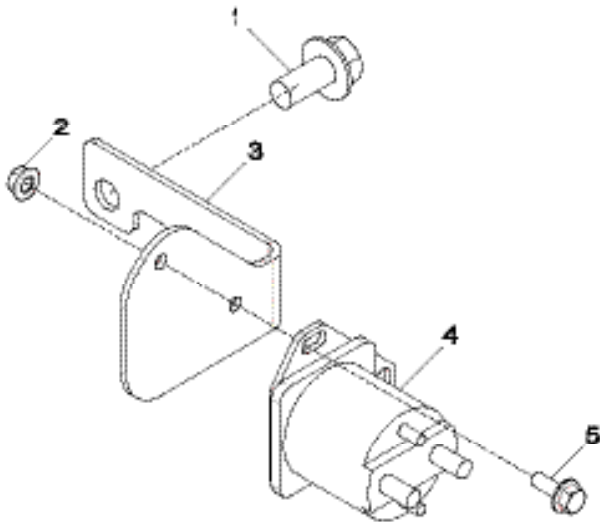
Fan Belt



24KU_RE556262_PCD

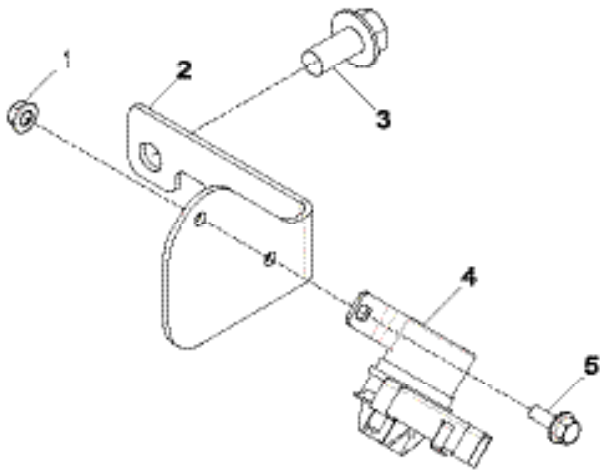
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R524006	1	V-belt	-
2	AT211041	1	Pulley	-
3	R133643	1	Spacer	-
4	R502079	1	Sleeve	-
5	19M7811	1	Screw, M10 x 90	-
6	RE563696	1	Guard	-
7	19M8952	1	Screw, M10 x 160	-
8	19M8468	1	Screw, M16 x 25	-
9	19M8598	1	Screw, M10 x 170	-
10	14M7298	1	Flange Nut, M8	-
11	24M7028	2	Washer, 10.5 x 20.0 x 2.0 mm	-

Engine Installation Kit, 12V



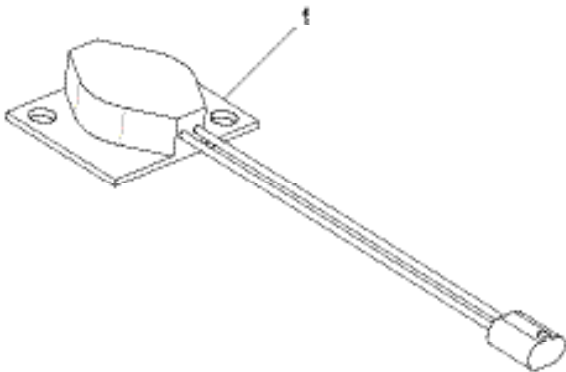
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7788	2	Screw, M12 x 25	-
2	14M7303	2	Flange Nut, M6	-
3	R532134	1	Bracket	-
4	AL153172	1	Relay, 12V	-
5	19M7775	2	M6 x 16	-

Engine Installation Kit, 24V



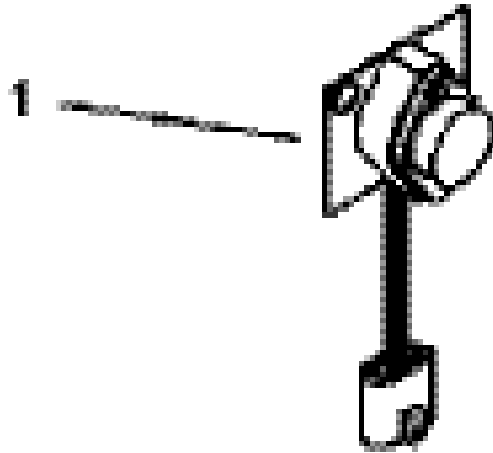
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	14M7303	2	Flange Nut, M6	-
2	R532134	1	Bracket	-
3	19M7788	2	Screw, M12 x 25	-
4	AT145341	1	Relay, 24V	-
5	19M7775	2	Screw, M6 x 16	-

Diode, 12V



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	AT157679	1	Diode, 12V	-

Diode, 24V

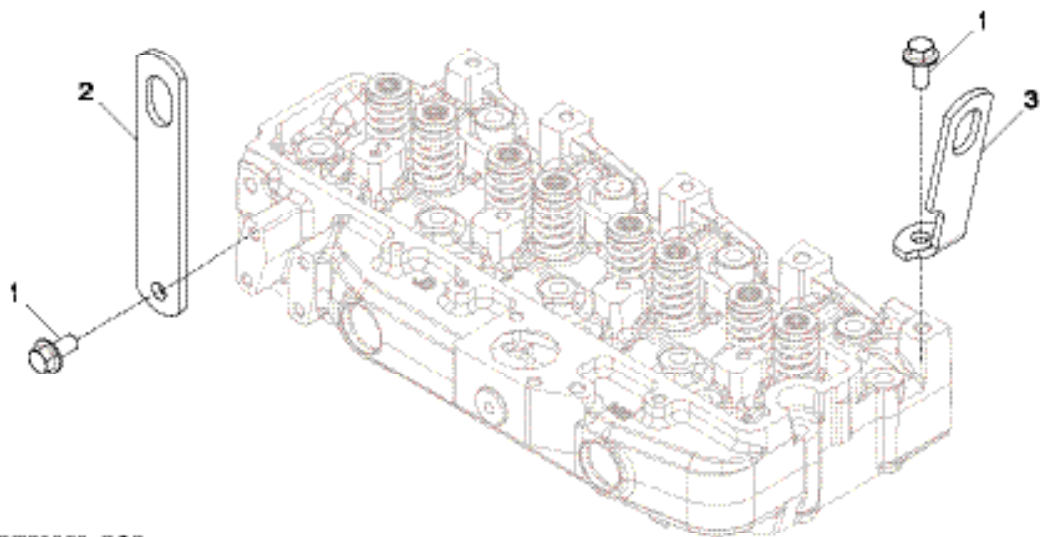
**RGP8263**

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	AT163022	1	Diode, 24V	-

GROUP 6 - GASKETS
Engine Overhaul Gasket Set (Includes all keys)

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R505174	1	Gasket,Rocker Shaft Assy & Rocker Arm Cover Mounting	-
2	R505452	4	O-Ring,Fuel Injector Seal	-
3	R515535	4	Sealing Washer,Fuel Injector	-
4	R516125	1	O-Ring	-
5	R51936	8	Sealing Sleeve	-
6	R520867	1	O-Ring	-
7	R522690	1	Gasket	-
8	R524234	1	O-Ring	-
9	R524499	1	Gasket,Rocker Arm Cover Mounting	-
10	R526944	1	Gasket,Timing Cover	-
11	R528039	2	Gasket,Oil Fill Mounting	-
12	R535821	1	Gasket,Aftercooler Housing Mounting	-
13	R535975	1	Gasket,Intake Manifold	-
14	R536206	1	Gasket,Thermostat Housing	-
15	R536313	4	O-Ring,Aftercooler Element Seal	-
16	R55453	1	O-Ring	-
17	R61467	1	O-Ring	-
18	R61871	1	O-Ring	-
19	R63548	2	O-Ring	-
20	R65397	4	O-Ring	-
21	R89944	1	O-Ring	-
22	Re44574	11	Seal,Rear Crankshaft With Wear Sleeve	-
23	Re519115	4	Valve Guide Seal,Intake & Exhaust	-
24	Re549173	11	Gasket,Turbocharger Mounting	-
25	Re551765	1	Gasket,Exhaust Manifold Mounting	-
26	T122075	2	O-Ring	-
27	T45902	2	O-Ring	-
28	T77858	6	O-Ring	-
29	U42111	2	O-Ring	-
30	Yz81077	1	O-Ring,Aftercooler Air Inlet	-
31	R136495	2	11-79501 Gasket,Oil Filler Neck & Block-Off Plate Mounting	-
32	16-00005	1	O-Ring	-
33	16-00010	5	O-Ring	-
34	16-00012	10	O-Ring	-
35	16-00016	1	O-Ring	-
36	16-00027	3	O-Ring	-
37	16-09501	6	O-Ring	-
38	16-09503	6	O-Ring	-
39	16-19503	1	O-Ring	-
40	16-69501	5	O-Ring	-
41	6-72020	2	O-Ring	-
42	21-09703	1	Sealing Sleeve	-
43	51M7044	1	O-Ring	-
44	H63262	1	O-Ring	-
45	R116031	1	O-Ring	-
46	R116515	1	Head Gasket	-
47	R123353	1	Gasket,Oil Pan Mtg	-
48	R123570	1	Gasket,Turbo Oil Return	-
49	R123575	1	O-Ring	-
50	R241873	2	O-Ring	-
51	R500271	1	O-Ring	-
52	R500374	1	Gasket,Oil Filter Adapter Mtg	-
53	R501428	1	Gasket	-
54	R502902	1	Packing	-
55	R504734	1	O-Ring	-

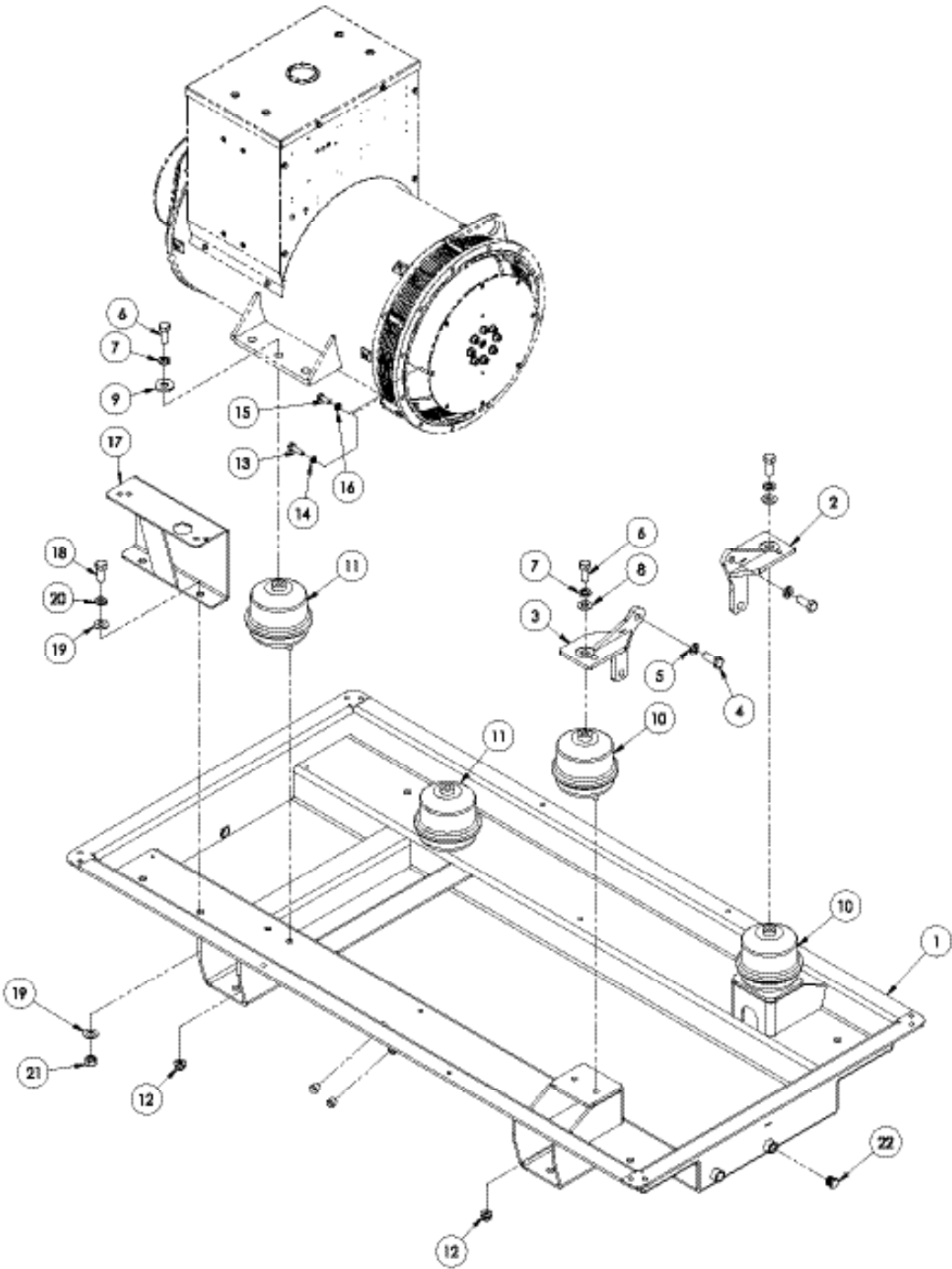
Lifting Eyes



9801_RE53353_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7788	2	Screw, M12 x 25	-
2	R502329	1	Lifting Eye, rear	-
3	R502175	1	Lifting Eye, front	-

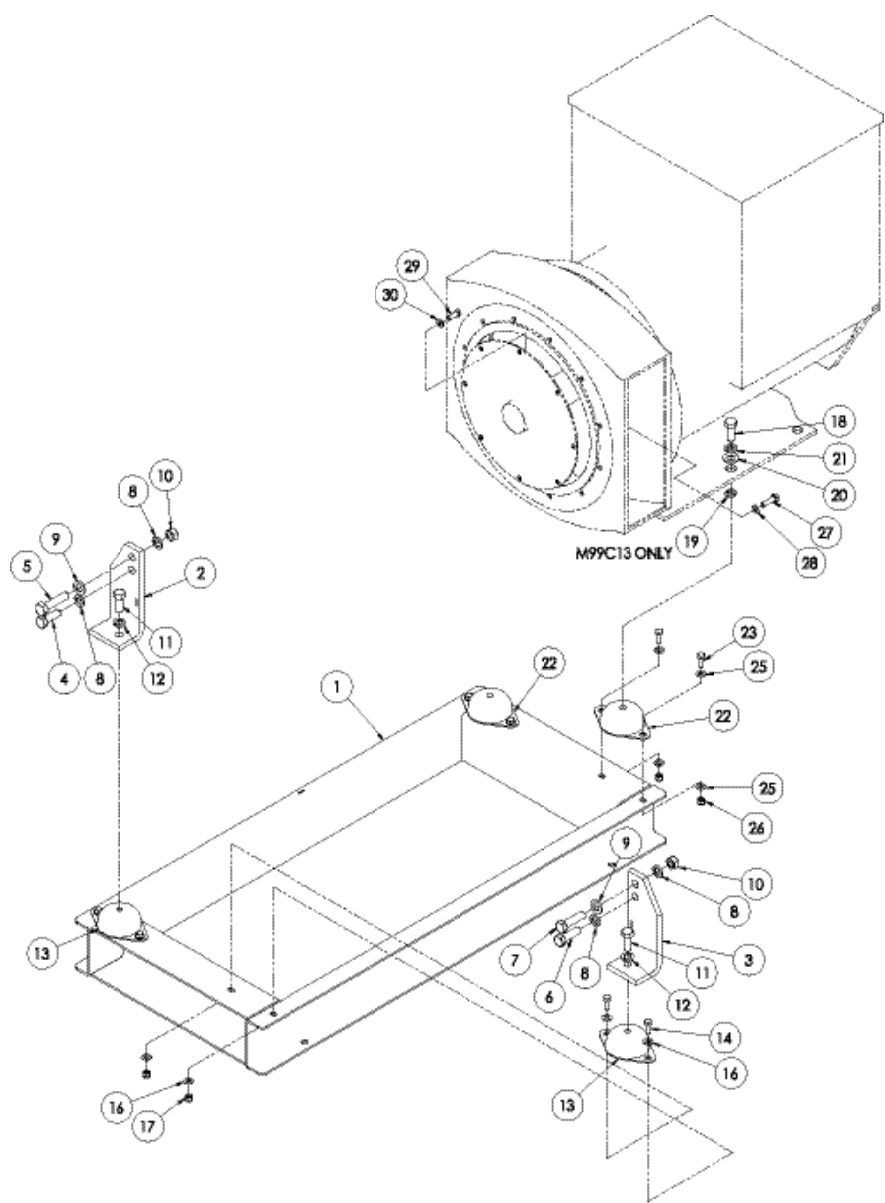
Steel Base Frame with Hydrolastic Mounts - M80A13



Steel Base Frame with Hydrolastic Mounts - M80A13

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-89433	1	Steel Base Pan with Hyd Mounts	-
2	23-81002	1	Bracket,Front Engine Mtg Left Hand	-
3	23-81001	1	Bracket,Front Engine Mtg Right Hand	-
4	12-04803	4	Capscrew,Hex Head M16x2.0 X 40mm	-
5	15-01000	4	Lock Washer,Helical M16 DIN Code 127B	-
6	12-00913	4	Capscrew,Hex Head 5/8-11 X 1-1/2"	-
7	15-00902	4	Lock Washer,Helical 5/8"	-
8	15-01330	2	Flat Washer 5/8" SAE	-
9	5-00901	2	Flat Washer 5/8" USS	-
10	33-81013	2	Hydrolastic Mount 500LBS	-
11	33-81015	2	Hydrolastic Mount 700LBS	-
12	14-00502	8	Lock Nut,Plain Flanged 1/2-13 Grade	-
13	12-00814	12	Capscrew,Hex Head M10x1.5 X 35mm	-
14	15-00802	12	Lock Washer,Helical M10	-
15	12-00332	8	Capscrew,Hex Head 3/8-16 X 1" GRADE 8	-
16	15-00307	8	Flat Washer Hardened	-
17	23-79608	4	Bracket,D.C. J-Box Mtg (M1064 & M1066 Base Pan)	-
18	12-00913	2	Capscrew,Hex Head 5/8-11 X 1-1/2"	-
19	15-01330	4	Flat Washer 5/8" SAE	-
20	15-00902	2	Lock Washer,Helical 5/8"	-
21	14-00911	2	Hex Nut 5/8-11	-
22	21-00530	2	PLUG,Hex Head, Brass 1/2NPT	-

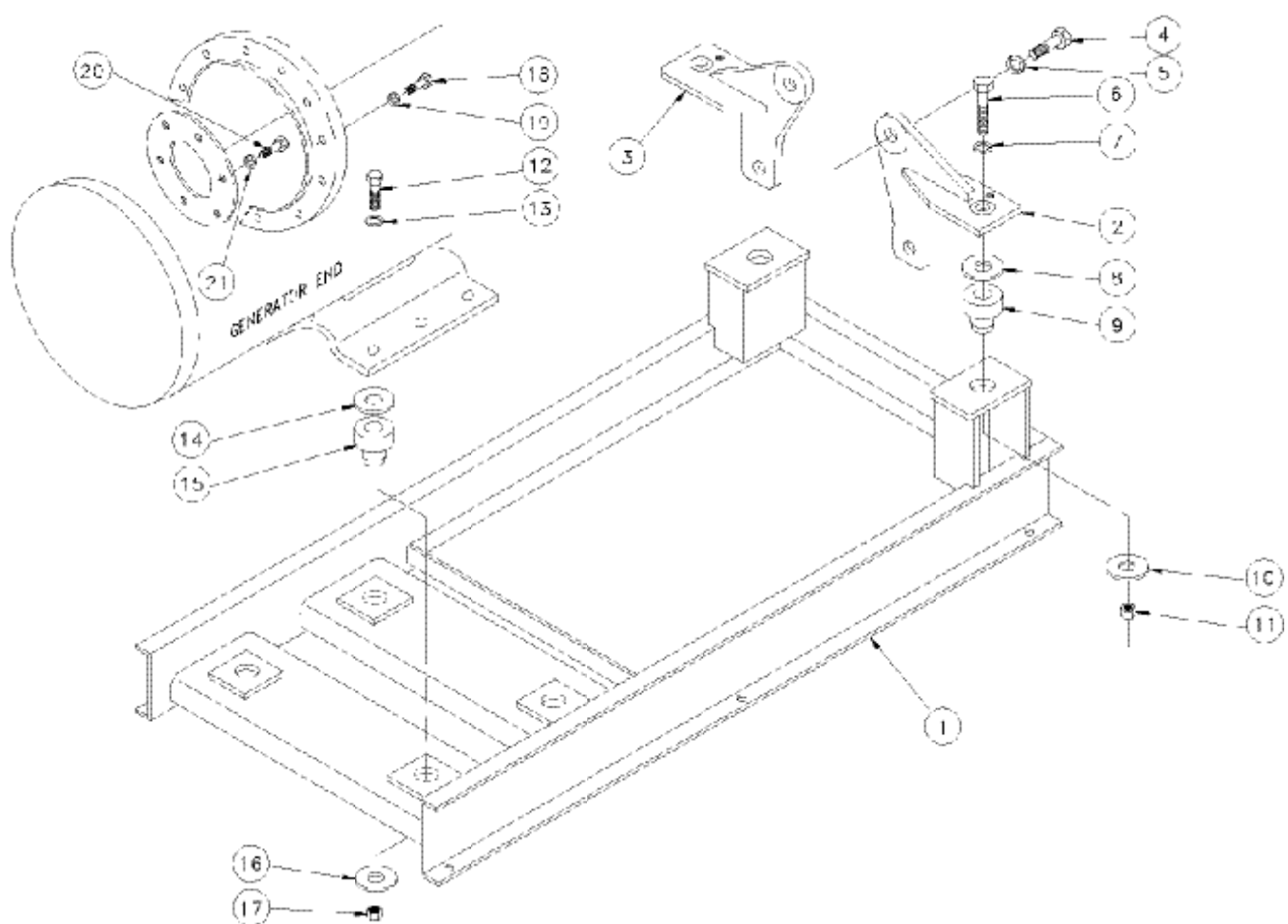
Steel Base Frame with TTB Mounts - M150A13



Steel Base Frame with TTB Mounts - M150A13

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-89427	1	Base Frame, Steel	-
2	23-89417	1	Bracket, Front Engine Mtg, R.H.	-
3	23-89418	1	Bracket, Front Engine Mtg, L.H.	-
4	12-01508	1	Capscrew, Hex Head M16 x 2.0 x 45mm	-
5	12-01512	1	Capscrew, Hex Head M16 x 2.0 x 70mm Grade 8.8	-
6	12-01503	1	Capscrew, Hex Head M16 x 2.0 x 60mm	-
7	12-01504	1	Capscrew, Hex Head M16 x 2.0 x 60mm	-
8	15-01000	4	Lock Washer, Helical M16	-
9	01643-31645	2	Flat Washer M16 x 31.5mmOD x 4.2mm Hardened	-
10	14-01432	2	Hex Nut M16 x 2.0	-
11	12-00913	2	Capscrew, Hex Head 5/8-11 x 1-1/2:	-
12	15-00902	2	Lock Washer, Helical 5/8"	-
13	33-81021	2	Flex Mount, Captive Neoprene 500 - 700 Lbs	-
14	12-00312	4	Capscrew, Hex Had 3/8-16 x 1"	-
16	15-00321	8	Flat Washer 3/8" SAE	-
17	14-00312	4	Hex Nut, Nylock 3/8-16	-
18	12-00913	2	Capscrew, Hex Head 5/8-11 x 1-1/2"	-
19	15-04803	2	Lock Washer, Hi-Collar M16	-
20	15-00903	2	Flat Washer 5/8" SAE Hardened	-
21	15-00902	2	Lock Washer, Helical 5/8"	-
22	33-81021	2	Flex Mount, Captive Neoprene 500 - 750 Lbs	-
23	12-00213	4	Capscrew, Hex Head 3/8-16 x 1"	-
25	15-00321	8	Flat Washer 3/8" SAE Zinc	-
26	14-00312	4	Hex Nut, Nylock 3/8"-16	-
27	12-00802	12	Capscrew, Hex Head M10 x 1.5 x 35mm	-
28	15-00802	12	Lock Washer, Helical M10	-
29	12-00332	8	Capscrew, Hex Head 3/8-16 x a" Grade 8	-
30	15-00307	8	Flat Washer 3/8" / M10 Hardened	-

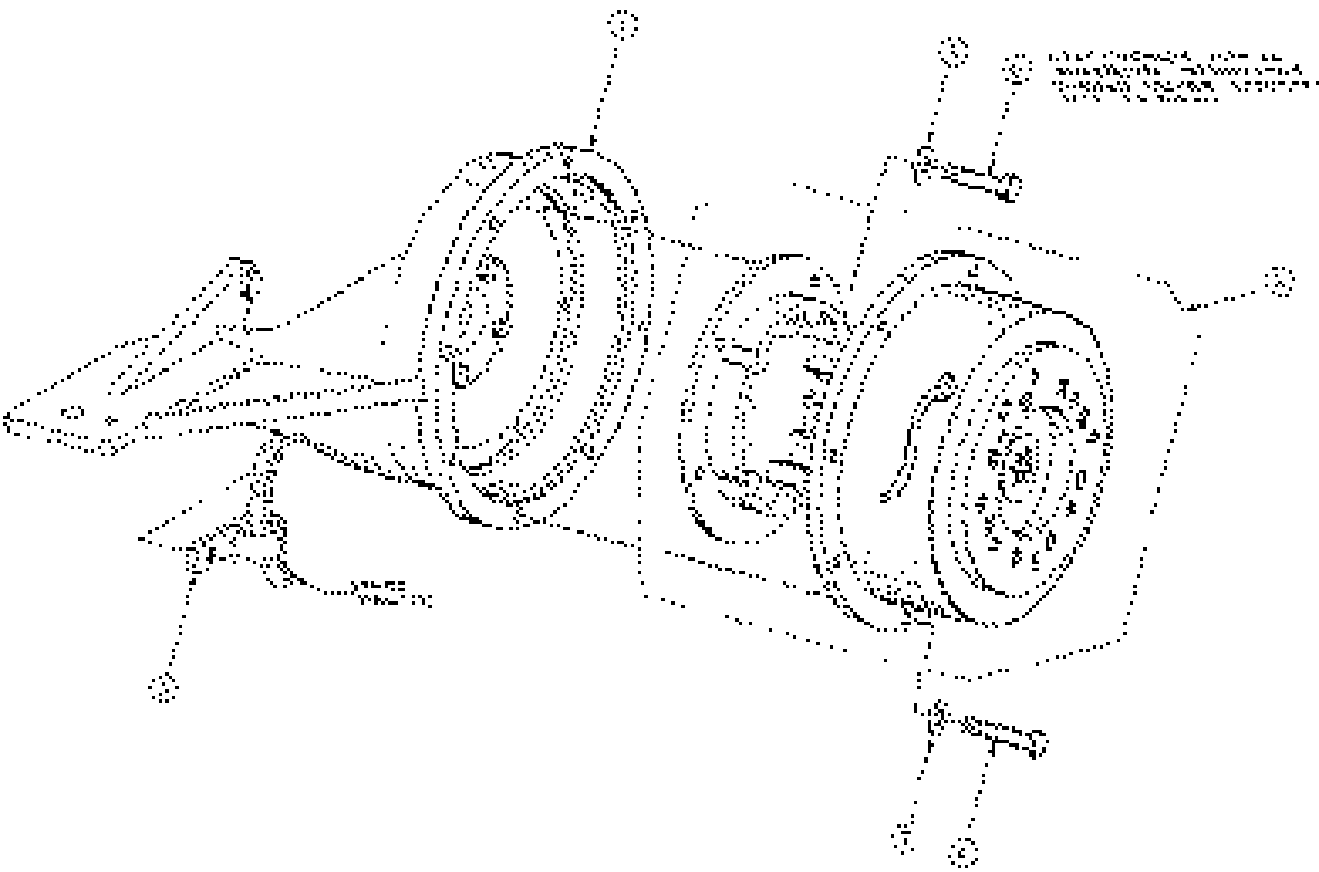
Steel Base Frame with Centerbonded Mounts - Units with PTO



Steel Base Frame with Centerbonded Mounts - Units with PTO

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-89424	1	Base Frame, Steel	-
2	23-81001	1	Bracket, Front Engine Mtg, R.H.	-
3	23-81002	1	Bracket, Front Engine Mtg, L.H.	-
4	12-04803	4	Capscrew, Hex Head M16 x 2.0 x 40mm	-
5	15-01000	4	Lock Washer, Helitical M16	-
6	12-00034	2	Capscrew, Hex Head 5/8-11 x 3-1/2"	-
7	15-00903	2	Flat Washer 5/58" SAE Hardened	-
8	15-00015	2	Head Washer	-
9	33-81008	2	Mount, Centerbonded 650 lbs	-
10	15-00025	2	Tail Washer	-
11	14-00912	2	Hex Nut, Nylock 5/8-11	-
12	12-00034	4	Capscrew, Hex Head 5/8-11 x 3-1/2"	-
13	15-01330	4	Flat Washer 5/8" SAE	-
14	15-00015	4	Head Washer 2.75" x 0.64" x 0.125"	-
15	33-81002	4	Mount, Centerbonded 500 Lbs	-
16	15-00025	4	Tail Washer	-
17	14-00912	4	Hex Nut, Nylock 5/8-11	-
18	12-00814	12	Capscrew, Hex Head M10 x 1.5 x 35 mm	-
19	15-00802	12	Lock Washer, Helitical M10	-
20	12-00332	8	Capscrew, Hex Head 3/8-16 x 1" Grade 8	-
21	15-00307	8	Flat washer 3/8" / M10 Hardened	-

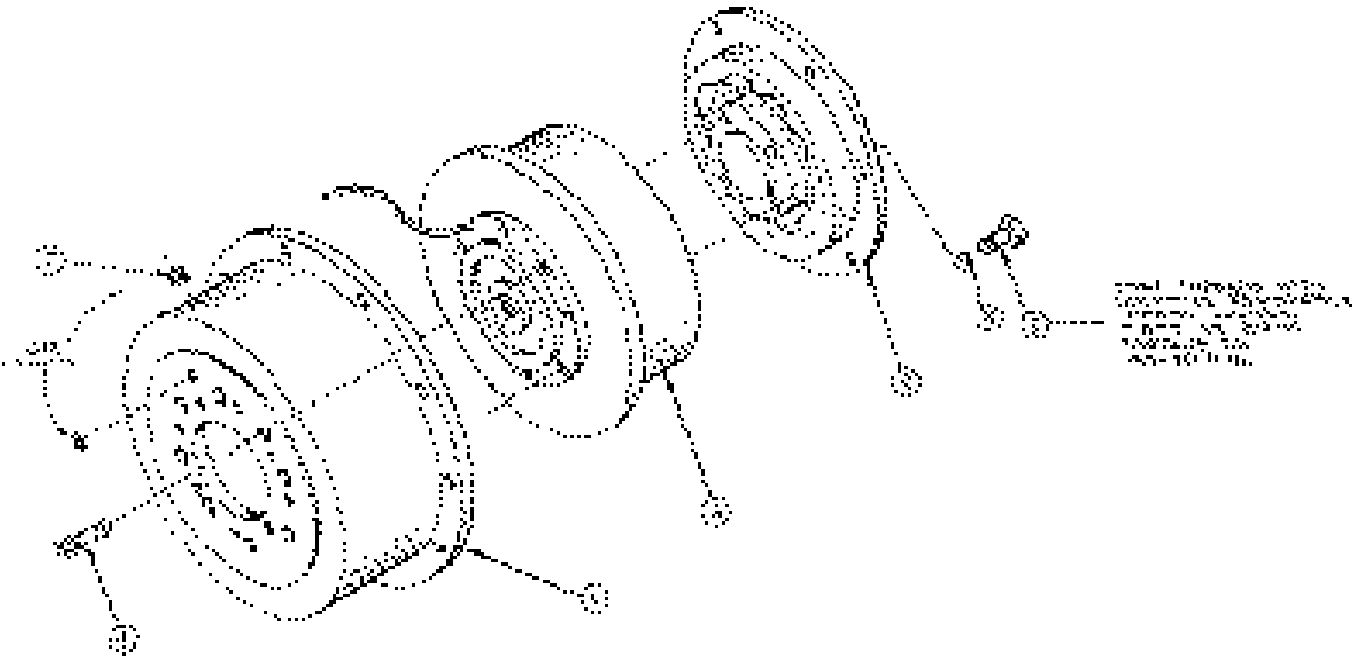
PTO/Electric Clutch 700 Lbs FT MMC C-Spline 24V



PTO/Electric Clutch 700 Lbs FT MMC C-Spline 24V

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	31-69405	1	PTO Adapter Parts SAE #5/#8	-
2	34-69545	1	Kit, Electric Clutch 700 Lbs FT MMC-100 C-Spline 24V	-
4	12-20313	8	Capscrew, Skt Hd 3/8-16 x 1-1/4" Zinc Plated ASTM A574	-
5	15-00321	6	Flat WAsher 3/8" SAE Zinc Plated ANSI Type A (Narrow)	-
6	12-00312	6	Capscrew, Hex Head 3/8-16 x 1"	-
7	15-00307	8	Flat Washer, 3/8" / M10 Hardened	-

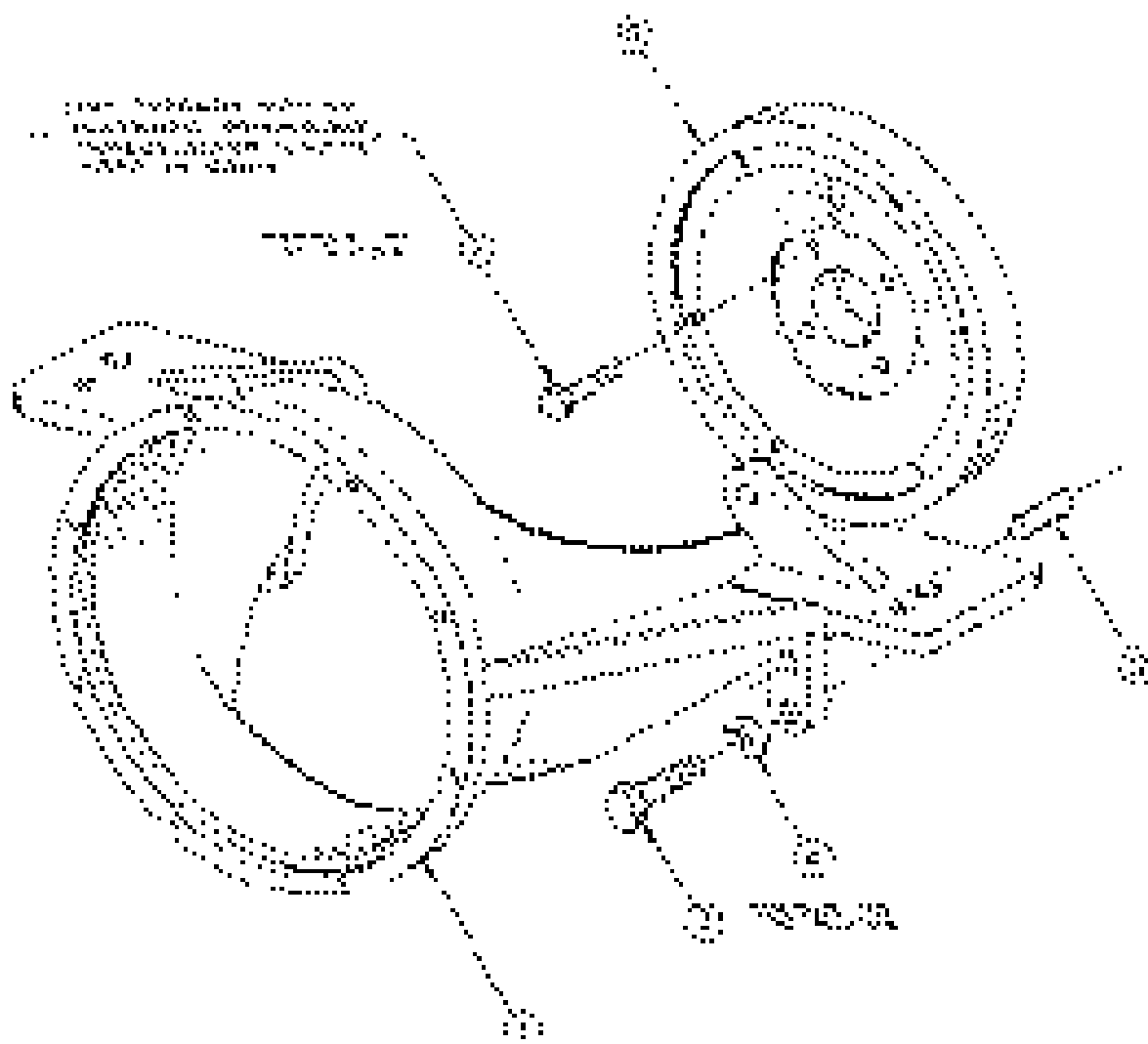
Electric Clutch 700 Lbs MMC-100 C-spline 24 Volt



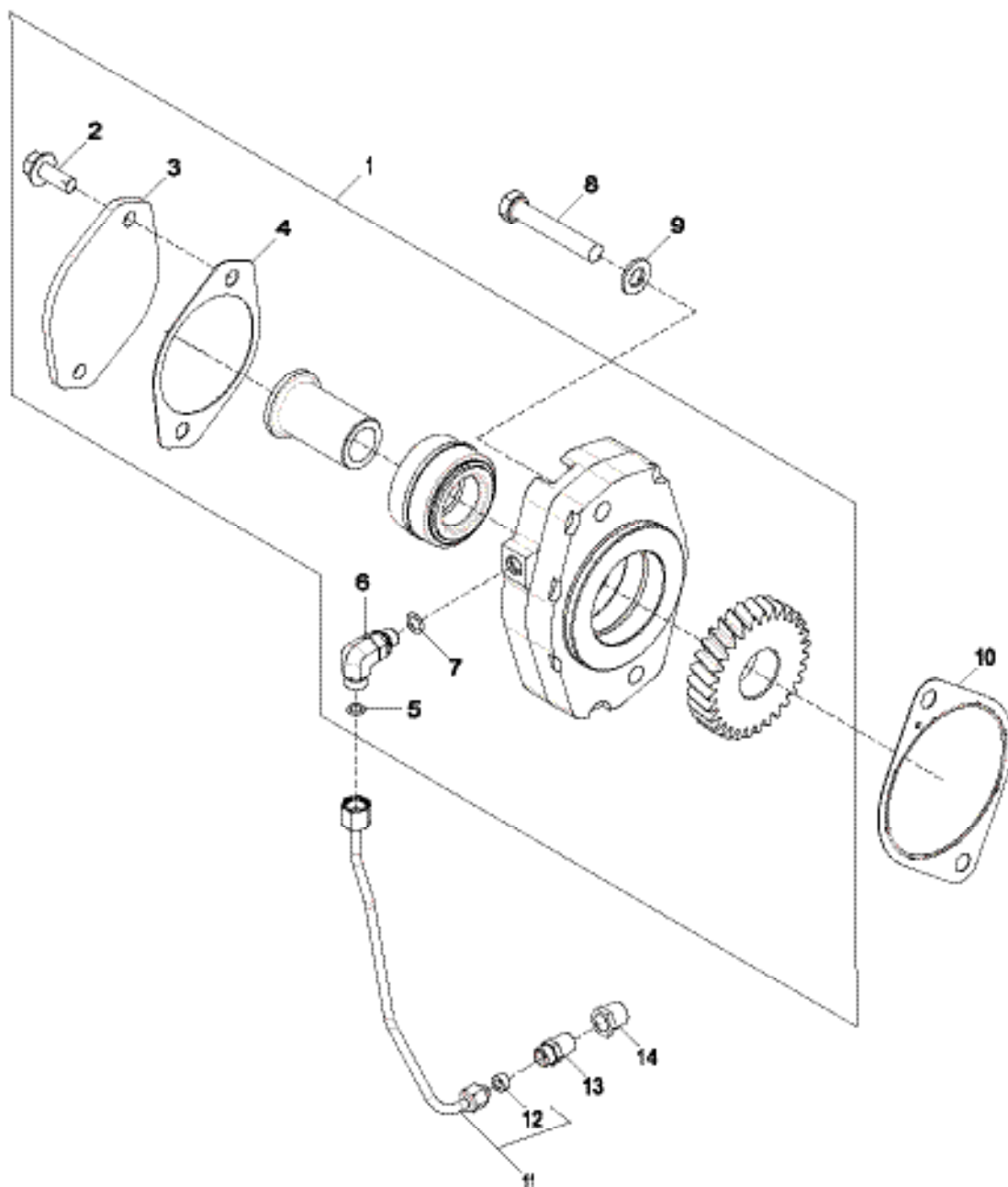
Electric Clutch 700 Lbs MMC-100 C-spline 24 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-60016	1	Housing, Electric Clutch	-
2	34-69517	1	Rubber Clock Assembly MMC-100	-
3	34-60098	1	Electric Clutch Assembly 700 Lbs FT MMC-100G C-Spline 24V	-
4	12-00035	8	Capscrew, Hex Head 3/8-16 x 3/4"	-
5	12-50412	4	Capscrew, Hex Head 7/16-20 x 1" Grade 8 Zinc Plated SAE	-
6	15-00404	4	Flat Washer 7/16" SAE	-
7	00-61003	1	Grommet 3/8"ID x 3/4"OD 1/4"GW x 1/2"GD	-
	00040025	1	Plug	-

PTO Adapter Parts SAE #5/#8



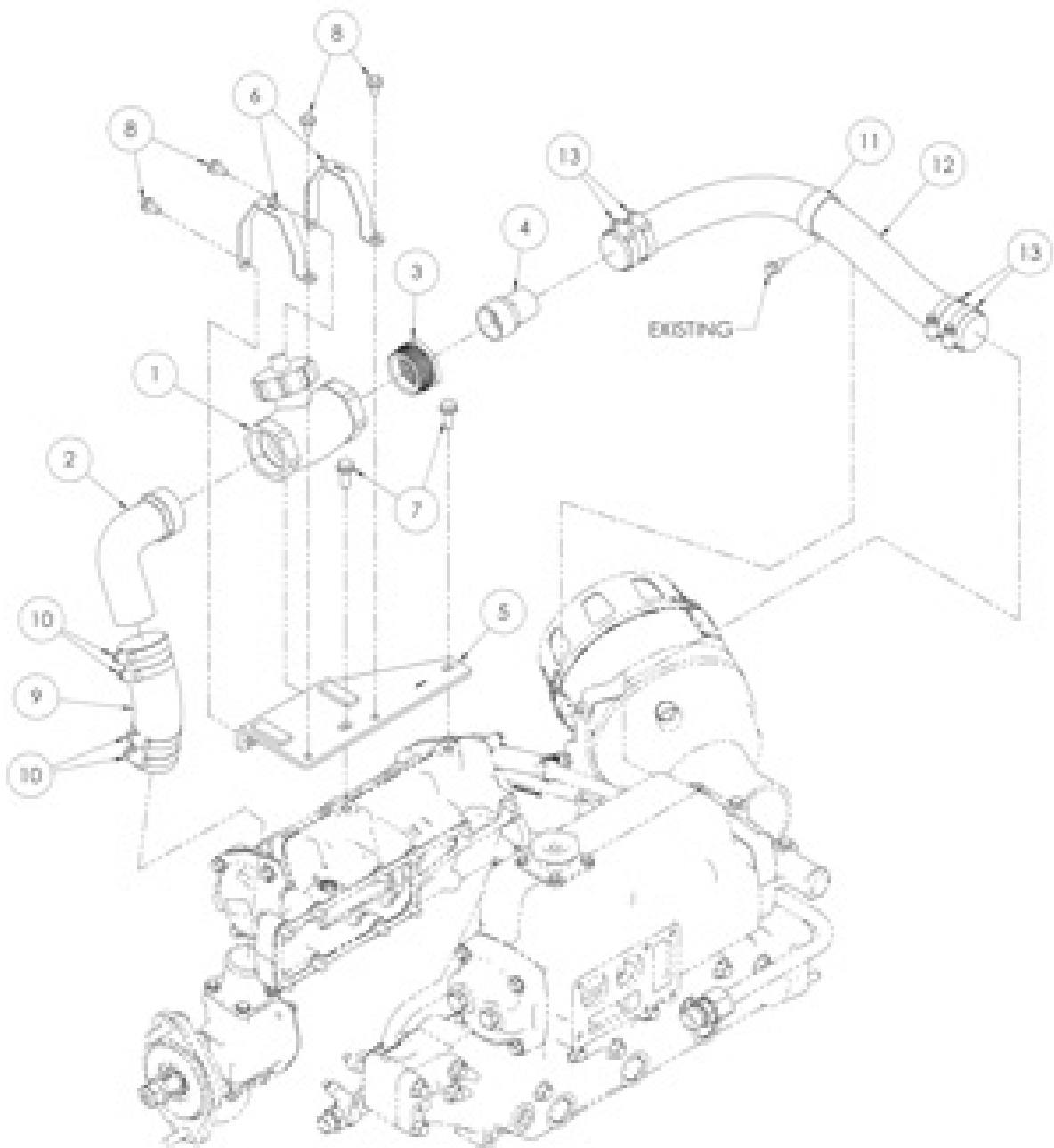
SAE A-Pad / Spline Drive



SAE A-Pad / Spline Drive

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE500825	1	Adapter Fitting	-
2	19M7785	2	Screw, M10 x 25	-
3	R85145	1	Cover	-
4	R96935	1	Gasket	-
5	T77814	1	O-ring	-
6	38H5015	1	Elbow Fitting, M12 x 1.5 x 9/16" - 18 UNF	-
7	51M7040	1	O-ring, 9.3 x 2.2 mm	-
8	19M7753	2	Cap Screw, M12 x 70	-
9	24M7047	2	Washer, 13.0 x 24.0 x 2.5 mm	-
10	R134465	1	Gasket	-
11	RE506914	1	Oil Line	-
12	R51936	1	Sealing Washer	-
13	R110664	1	Coupling, 1/4" - 18 NPT x 1/2" - 24 UNS	-
14	15H700	1	Pipe Bushing, 1/4", 3/8" - 18 NPT x 1/4" - 18 NPT	-

Raw Water Flow Switch H. E.



Raw Water Flow Switch H. E.

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	37-16803	1	Flow Switch, Bronze 35 GPM 2"NPT	-
2	21-15034	1	M. Elbow 90, Bronze 2"NPT x 2"HB	-
3	21-00076	1	Bushing, Brass 2"NPT x 1-1/2"NPT	-
4	21-15035	1	M. Connector, Bronze 1-1/2"NPT x 1-1/2"HB	-
5	23-19409	1	Bracket, 2" Flow Switch Mounting	-
6	23-19411	2	Clamp, 2" Flow Switch Mounting	-
7	12-80832	2	Capscrew, Hex Head M10 x 1.5 x 30 mm	-
8	19M7865	4	Capscrew, Hex Head Flanged M8 x 1.25 x 16mm	-
9	41-01109	8	Hose 2"ID Wire Inforced	-
10	19-04032	4	Hose Clamp #32 Embossed Band S/S	-
11	19-60000	1	Adelle Clamp 2-1/16"ID x 1/2" STUD	-
12	41-01102	23	Hose 1-1/2"ID Wire Inforced	-
13	19-04028	4	Hose Clamp #28 Embossed Band S/S	-



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