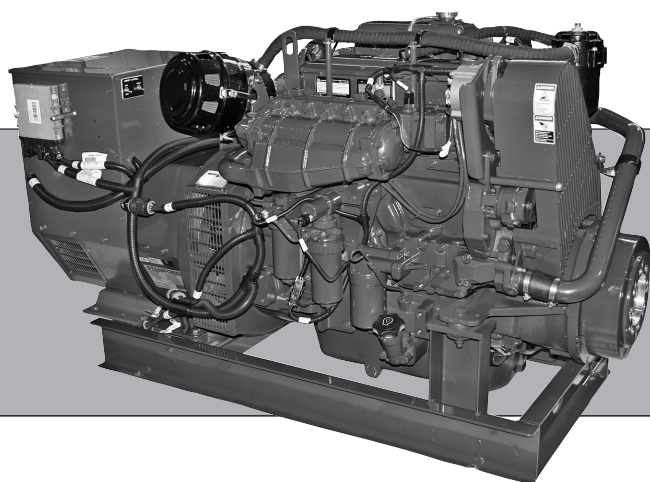




PARTS MANUAL

P99C13

For Model: M99C13



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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Printed in U.S.A.
PART NO.: P99C13 11/21



PARTS CATALOG

for Model
M99C13

Please read thoroughly before attempting to use this manual:

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Model Designation & Serial Numbers	II

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Proprietary Information

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MODEL DESIGNATION

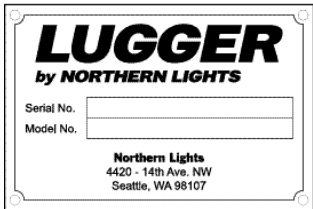
M 99 C13 = Northern Lights Tier III turbocharged marine diesel generator set with a John Deere 4045 engine, 99 kW.

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

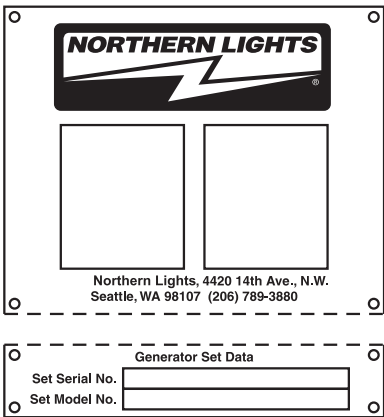
Your set has three serial numbers: ① an engine number stamped on the block, ② a generator plate, and ③ a generator set plate. Use the serial number on the **generator set plate** when ordering parts or in correspondence. The generator set plate is found on the service side of the generator and resembles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



1 - Engine Data Plate



2 - Generator End Data Plate



3 - Generator Set Data Plate

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	-

P673 06/96

5-2

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.

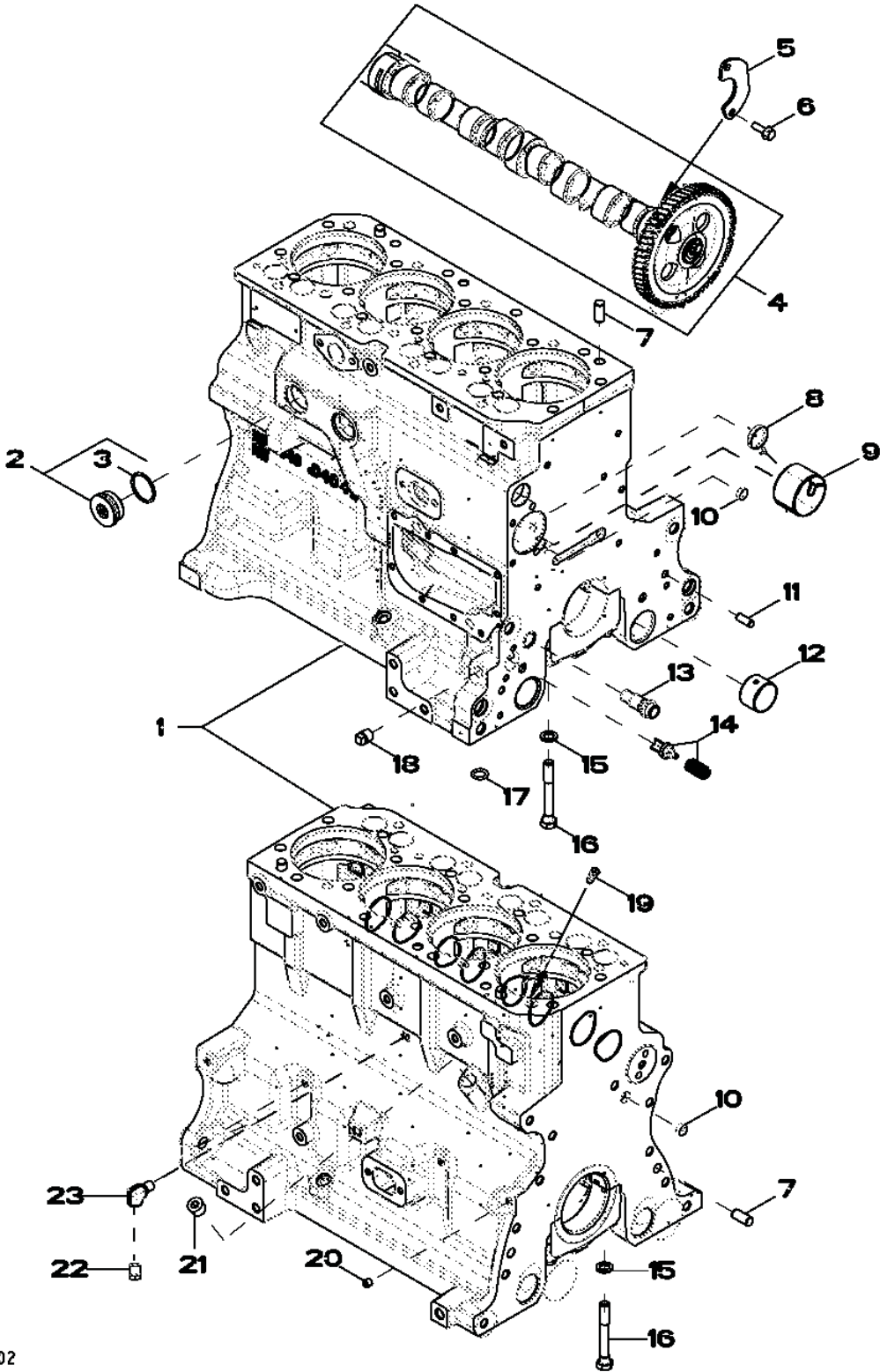
12. Page number within the grouping index.

13. Manual title.

14. Page publication date.

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

Cylinder Block

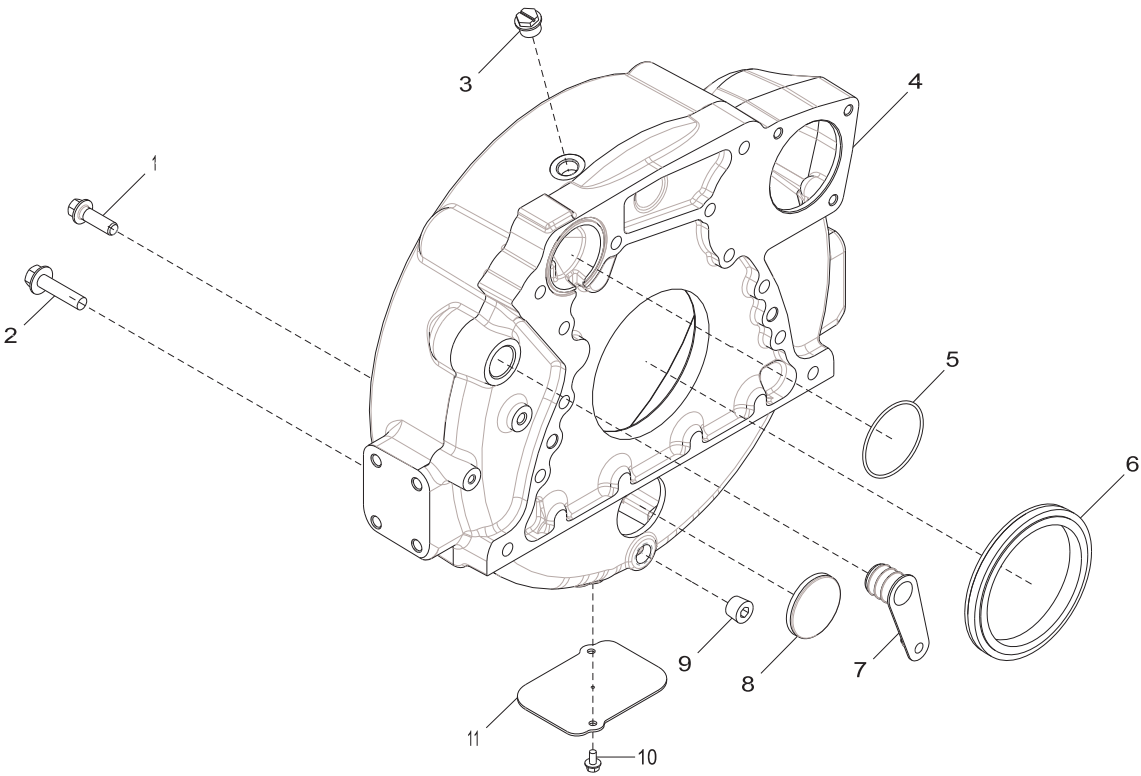


RE 522905PCDB02

Cylinder Block

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1		1	Cylinder block	
2	RE508185	2	Fitting	
3	U13639	1	O-ring	
4	RE537237	1	Camshaft	
5	R132518	1	Plate	
6	19M8999	2	Screw, M8 x 25	
7	R48685	4	Dowel pin	
8	R116466	1	Plug	
9	R119874	1	Bushing	
10	T18891	1	Plug	
11	R26650	1	Dowel pin	
12	R115299	6	Bushing	
13	RE505501	1	Bleed valve	
14	RE63674	1	Valve (kit)	
15	T20168	10	Washer	
16	T23474	10	Cap screw	
17	R97185	1	O-ring	
18	15H695	1	Pipe plug (3/8" x 3/8"-18 NPT)	
19	R131182	4	Orifice	
20	RE71255	1	Pipe plug (1/8" - 27 NPT)	
21	15H584	1	Pipe plug (1/2" - 14 NPT)	
22	RE507807	1	Pipe plug (1/4" - 18 NPT)	
23	RE537834	1	Elbow fitting	

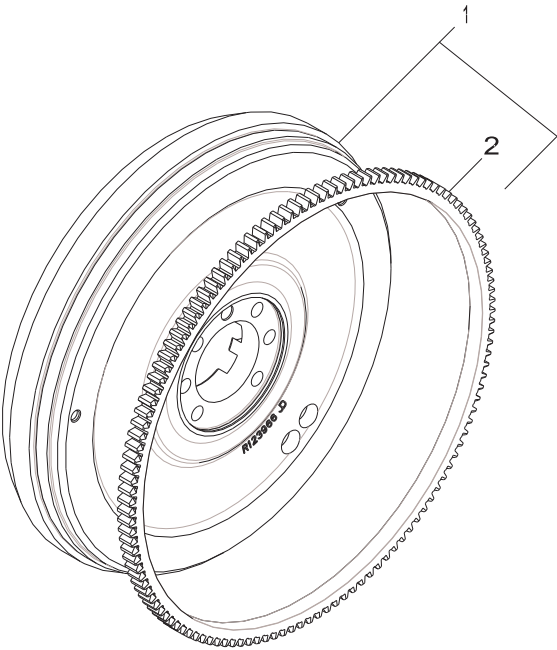
Flywheel Housing



1406_RE59299_PCD

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	-

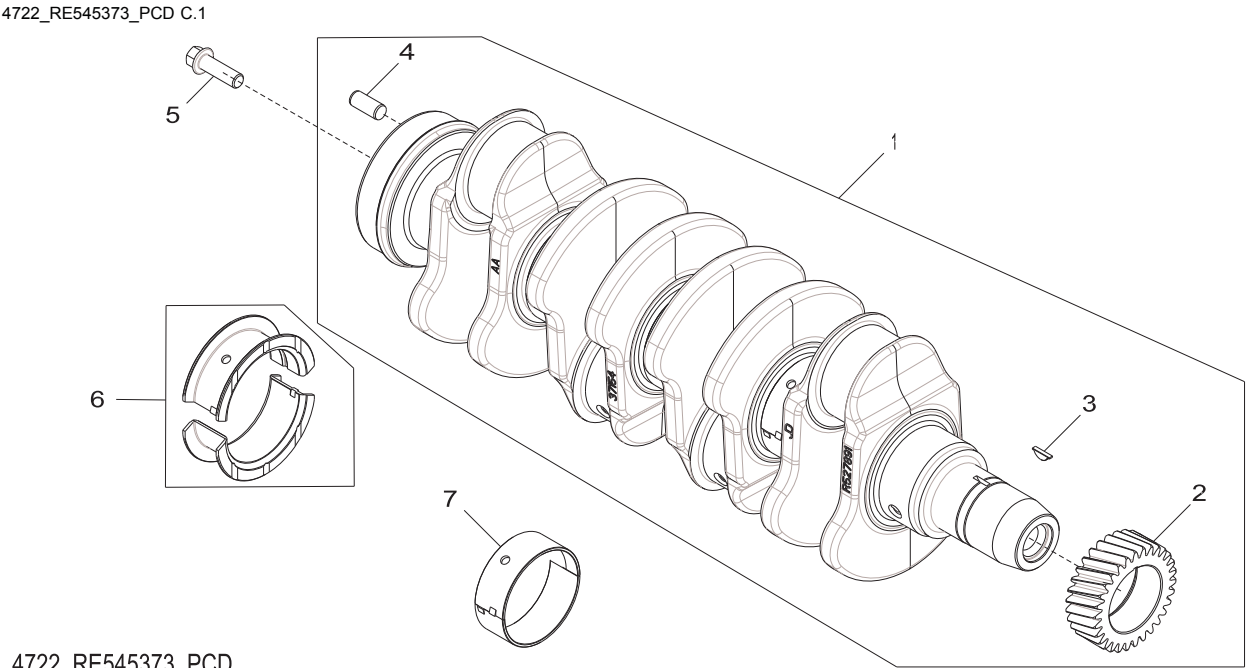
Flywheel



1509_RE59289_PCD

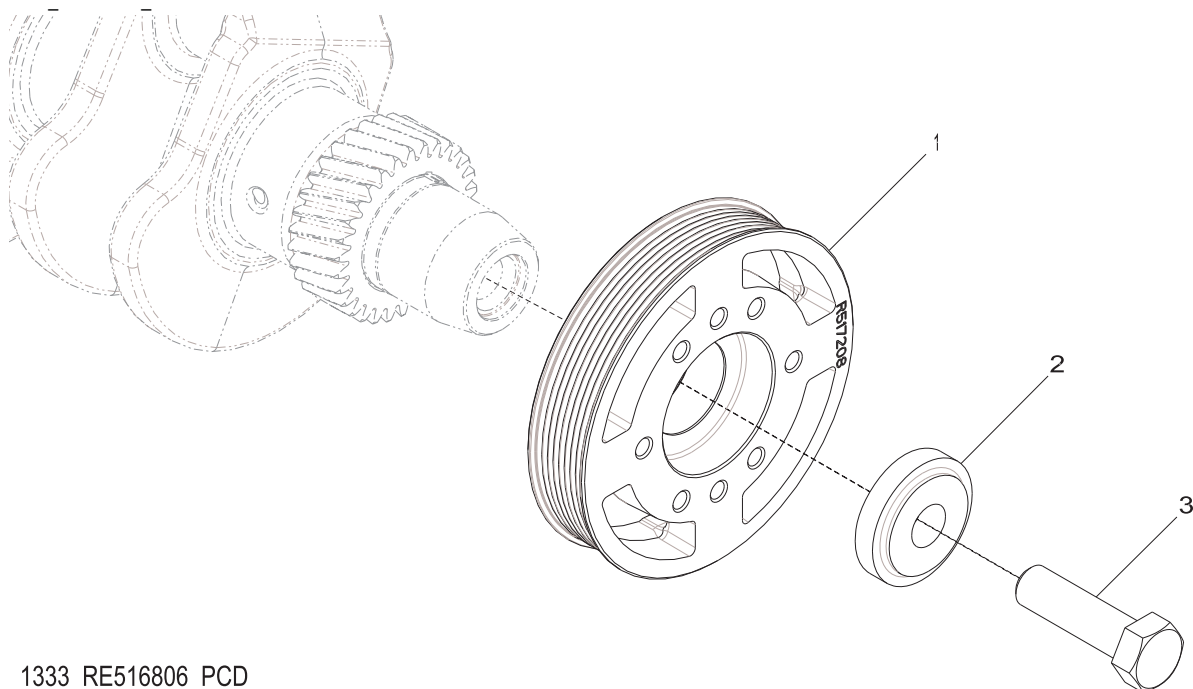
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE500516	1	Flywheel	-
2	R28811	1	Ring Gear	-

Crankshaft



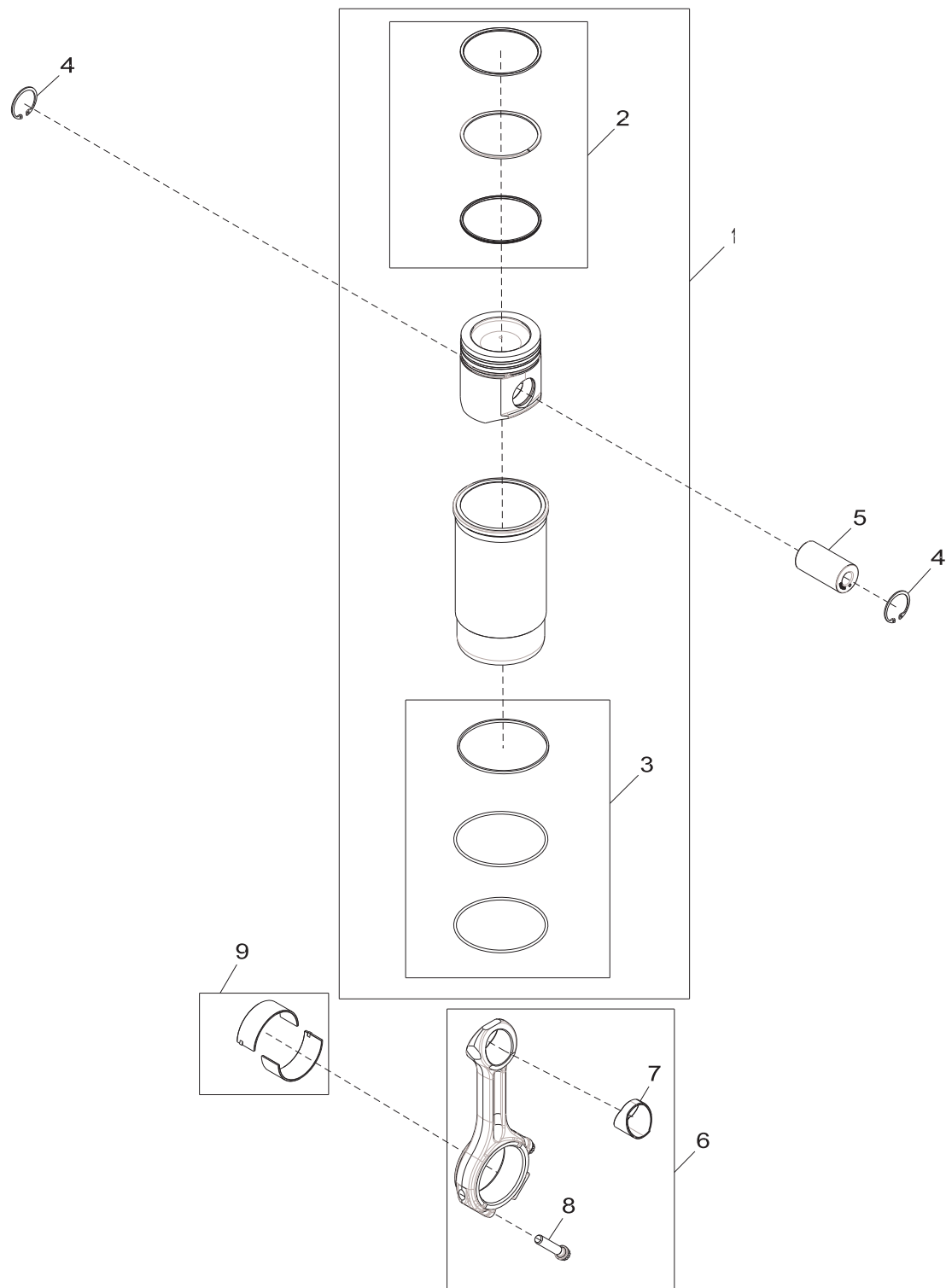
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE538081	1	Crankshaft	-
2	R120631	1	Gear	-
3	R505609	1	Shaft key	-
4	R48685	1	Dowel pin	-
5	R531927	6	Cap screw	-
6	RE65168	1	Bearing kit	-
7	RE65165	4	Bearing kit	-

Crankshaft Pulley



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R517208	1	Pulley	-
2	R517237	1	Bushing	-
3	R516648	1	Cap screw	-

Connection Rod, Piston and Liner

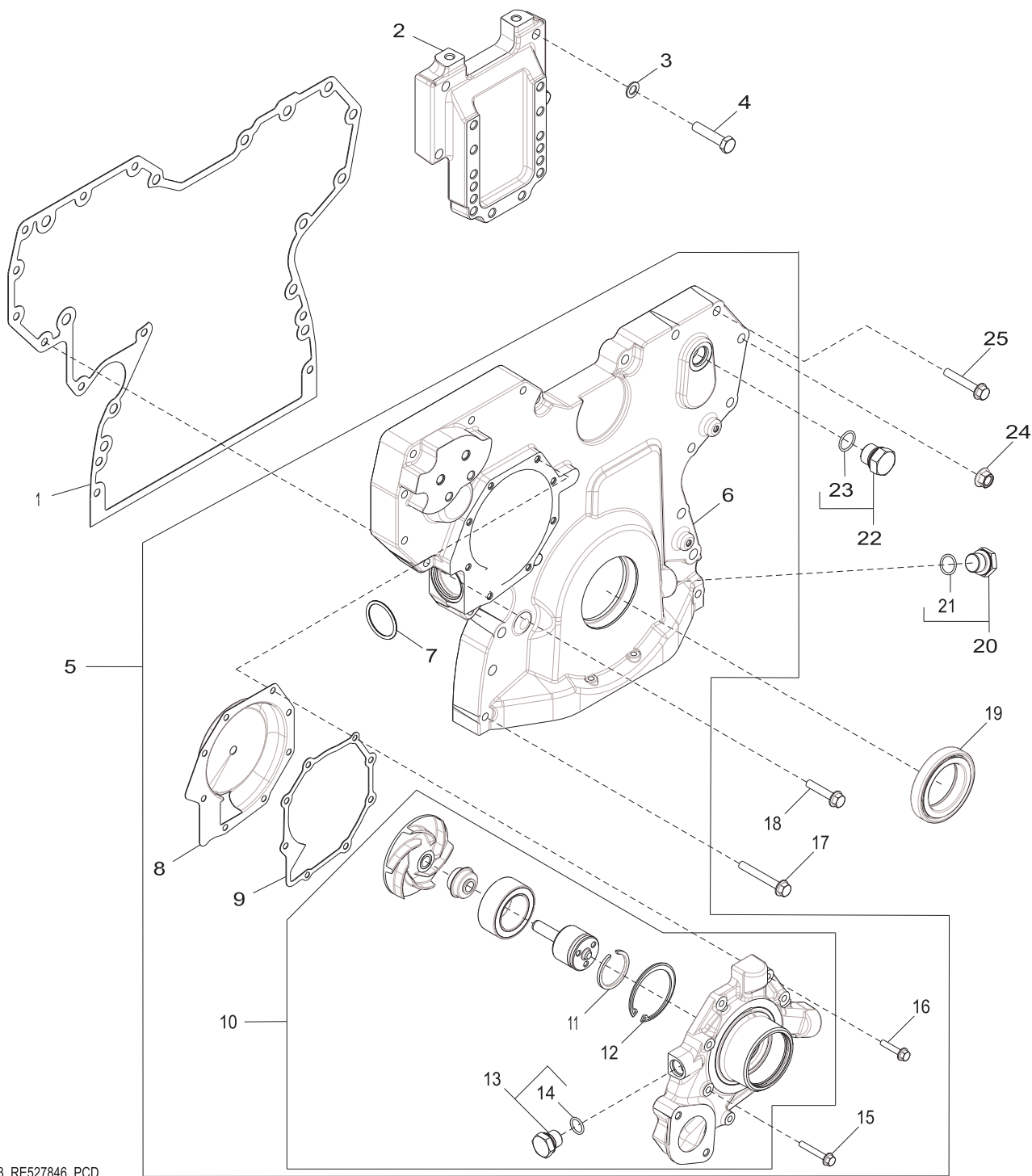


4866_RE554216_PCD

Connection Rod, Piston and Lner

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	-
7	R114082	1	Bushing	-
8	R501124	2	Screw	-
9	RE65908	4	Bearing	-

Timing Gear Cover

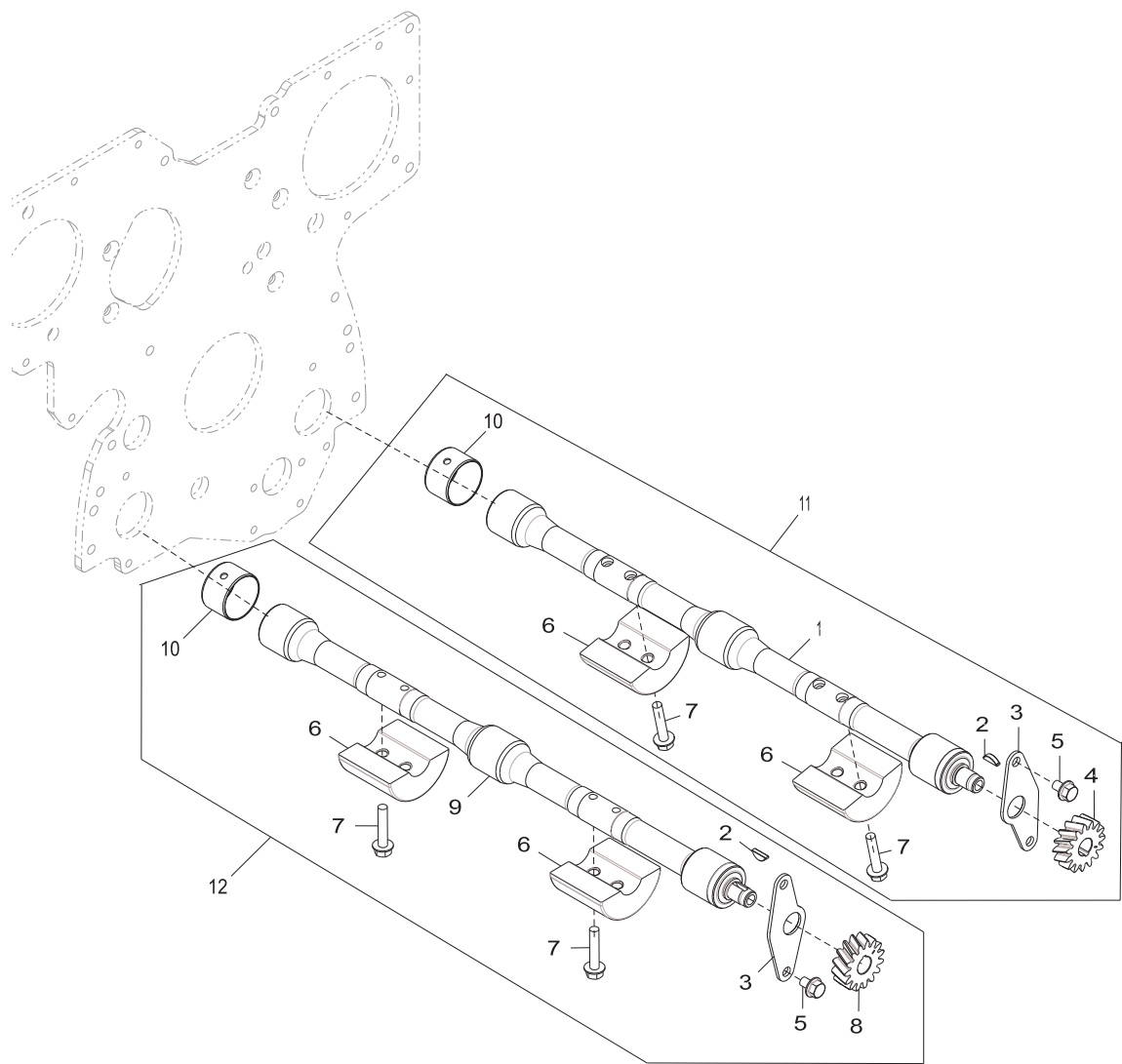


4443_RE527846_PCD

Timing Gear Cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R526944	1	Gasket	-
2	R522907	1	Support	-
3	24M7096	4	Washer (10.5 x 18.0 x 1.6 mm)	-
4	19M8488	4	Cap screw (M10 x 45)	-
5	RE527847	1	Cover	-
6	RE509865	1	Cover	-
7	R504734	1	O-ring	-
8	RE508566	1	Insert	-
9	R123417	1	Gasket	-
10	RE527848	1	Water pump	-
11	A364R	1	Snap ring	-
12	R71228	1	Ring	-
13	RE46685	1	Fitting Ring	-
14	51M7043	1	O-ring	-
15	19M7797	3	Screw (M6 x 40)	-
16	19M7796	5	Screw (M6 x 30)	-
17	19M7801	3	Screw (M8 x 60)	-
18	19M8317	1	Screw (M8 x 40)	-
19	RE538097	1	Seal	-
20	RE517370	1	Fitting	-
21	51M7044	1	O-ring	-
22	RE46687	1	Drain plug	-
23	51M7045	1	O-ring	-
24	14M7296	9	Flange nut (M10)	-
25	19M7800	1	Screw (M8 x 50)	-

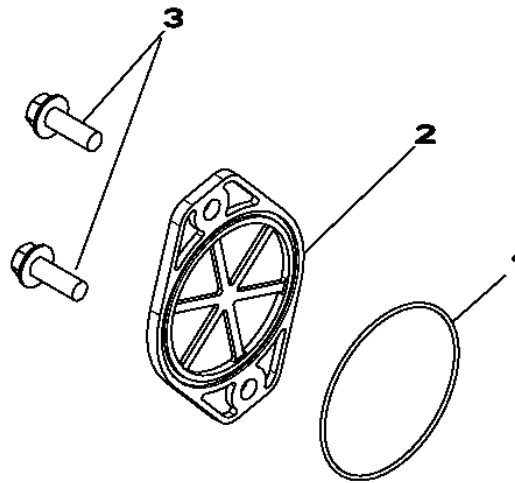
Balance Shaft



4501_RE501264_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1		1	Balancer Shaft	-
2	R133303	1	Shaft key	-
3	R116078	1	Plate	-
4	R120639	1	Gear (Z = 15, LH)	-
5	19M8998	4	Screw (M8 x 12)	-
6	R500650	4	Weight	-
7	19M8882	8	Screw (M8 x 40)	-
8	R120637	1	Gear (Z = 15, RH)	-
9		1	Balancer Shaft	-
10	R115299	1	Bushing	-
11	RE502446	2	Balancer Shaft, LH	-
12	RE502447	1	Balancer Shaft, RH	-

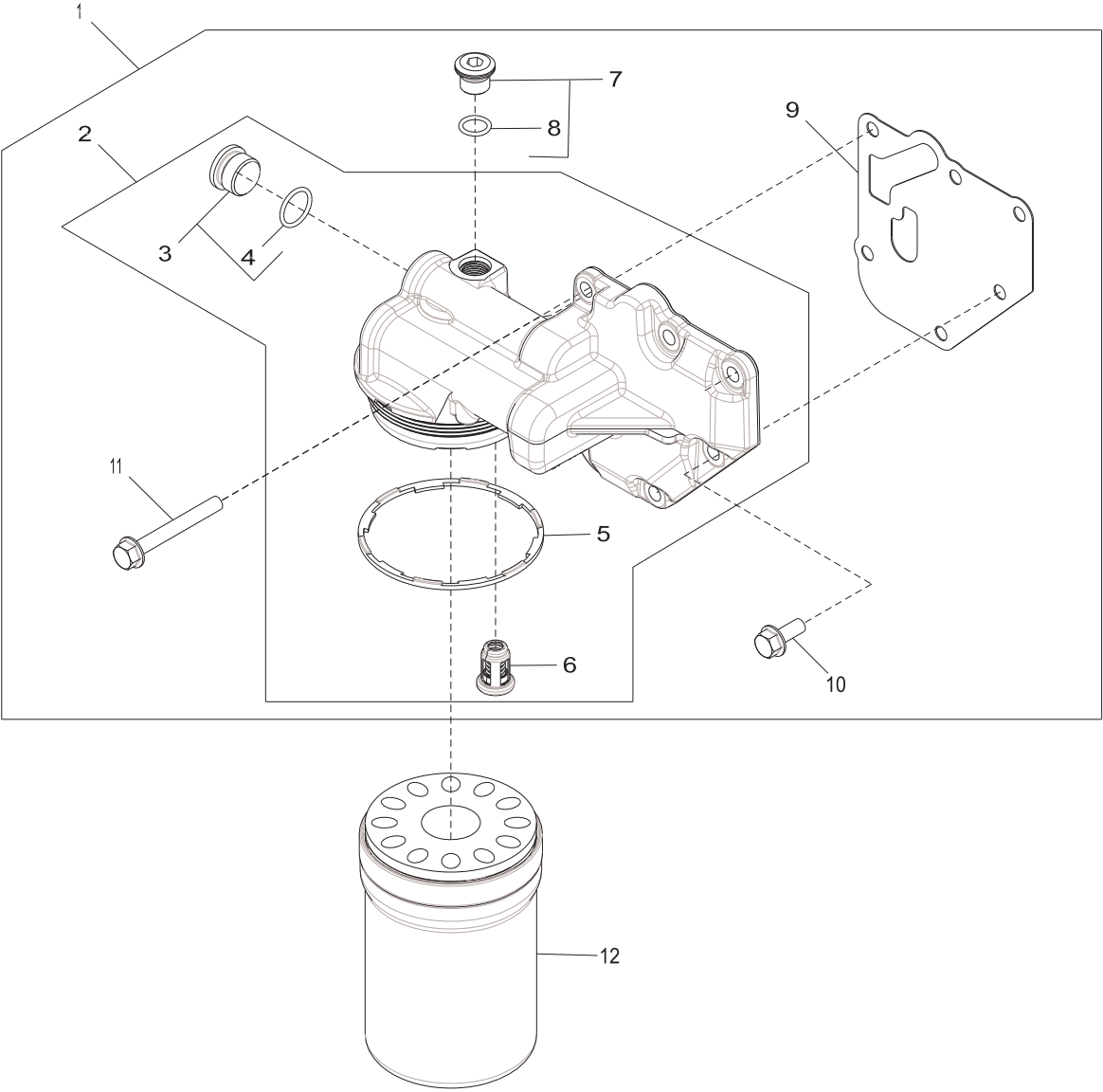
Auxiliary Drive Cover



RE58284PCDD01

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	T20758	1	O-ring	-
2	R135757	1	Cover	-
3	9M7790	2	Screw (M12 x 35)	-

Oil Filter

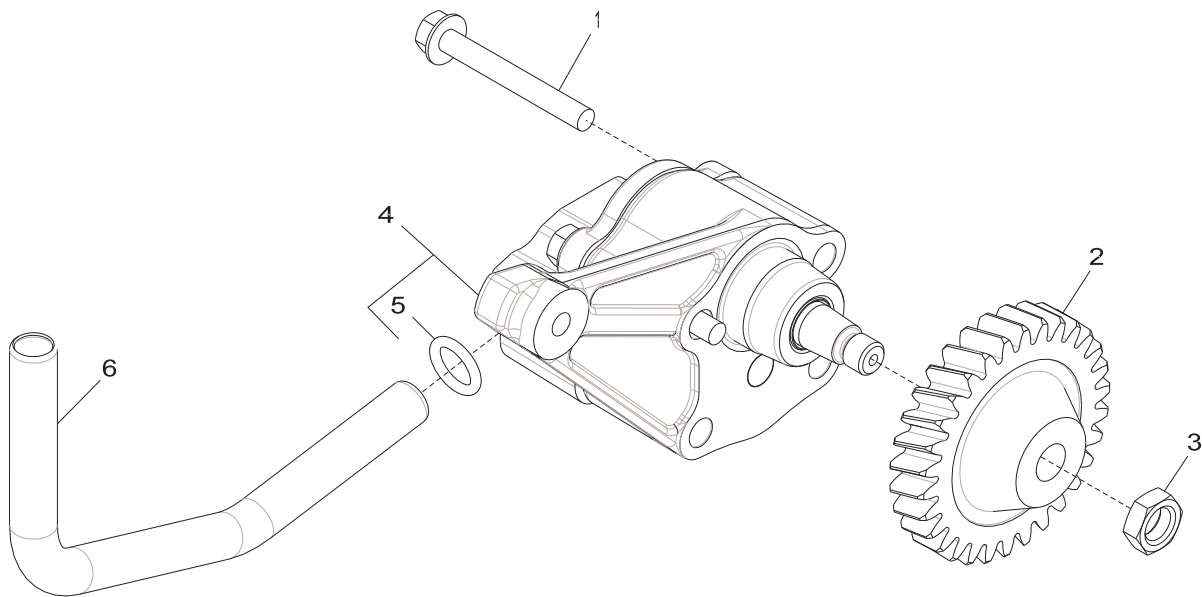


8843_RE508950_PCD

Oil Filter

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE508987	1	Filter head	-
2	RE504564	1	Filter head	-
3	RE505232	2	Fitting plug	-
4	51M7045	1	O-ring	-
5	R502513	1	Seal	-
6	RE504543	1	Valve	-
7	RE52242	1	Drain plug	-
8	51M7042	1	O-ring	-
9	R500374	1	Gasket	-
10	RE67238	1	Screw	-
11	19M7802	5	Screw (M8 x 65)	-
12	RE504836	1	Oil Filter	-

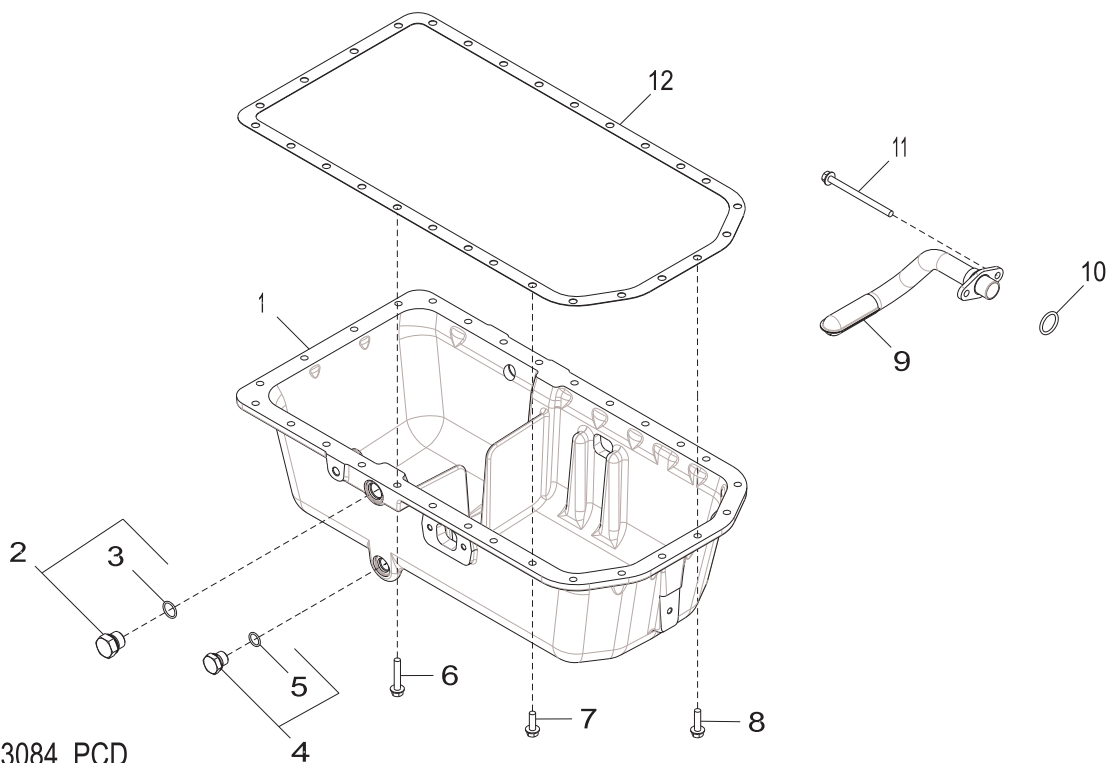
Oil Pump



5001_RE57763_PCD

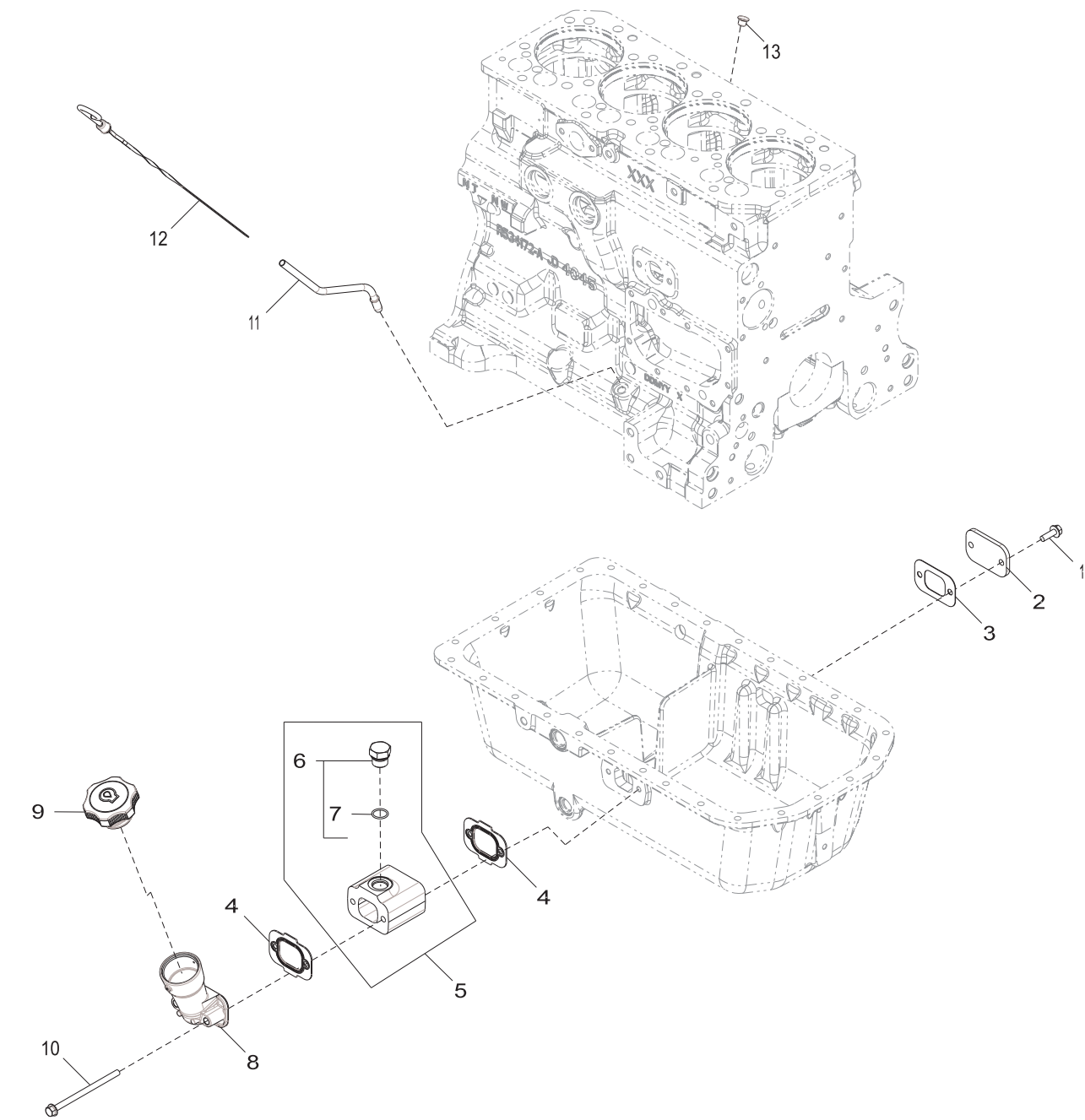
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7802	2	Screw M8 x 65)	-
2	R120638	1	Gear (Z = 30)	-
3	14M7066	1	Nut (M12)	-
4	RE504914	1	Oil Pump	-
5	R97185	1	O-ring	-
6	R121376	1	Tube	-

Oil Pan



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R536016	1	Oil pan	-
2	RE46687	1	Drain plug	-
3	51M7045	1	O-ring	-
4	RE46685	2	Fitting plug	-
5	51M7043	1	O-ring	-
6	19M7799	4	Screw (M8 x 45)	-
7	19M7867	18	Screw (M8 x 25)	-
8	19M7868	6	Screw (M8 x 30)	-
9	RE68491	1	Oil pump intake	-
10	R61871	1	O-ring	-
11	19M10075	2	Screw (M8 x 110)	-
12	R123353	1	Gasket	-

Oil Dipstick Tube

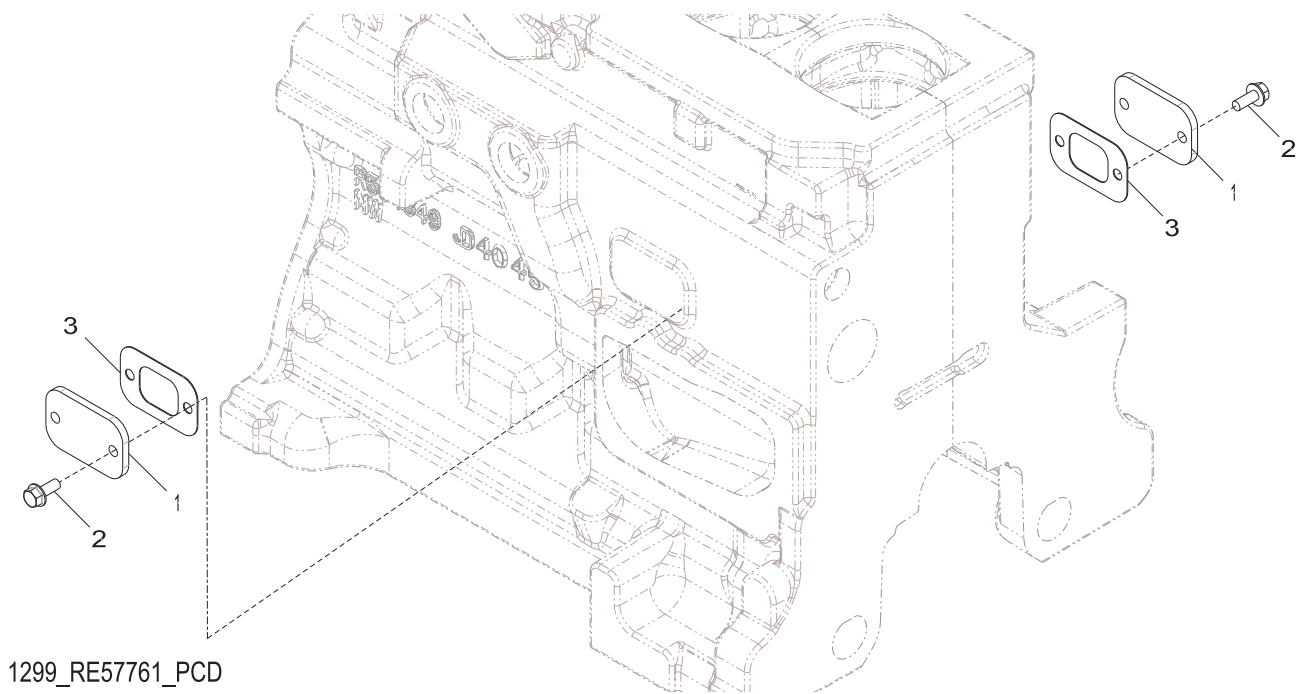


40AL_RE553148_PCD

Oil Dipstick Tube

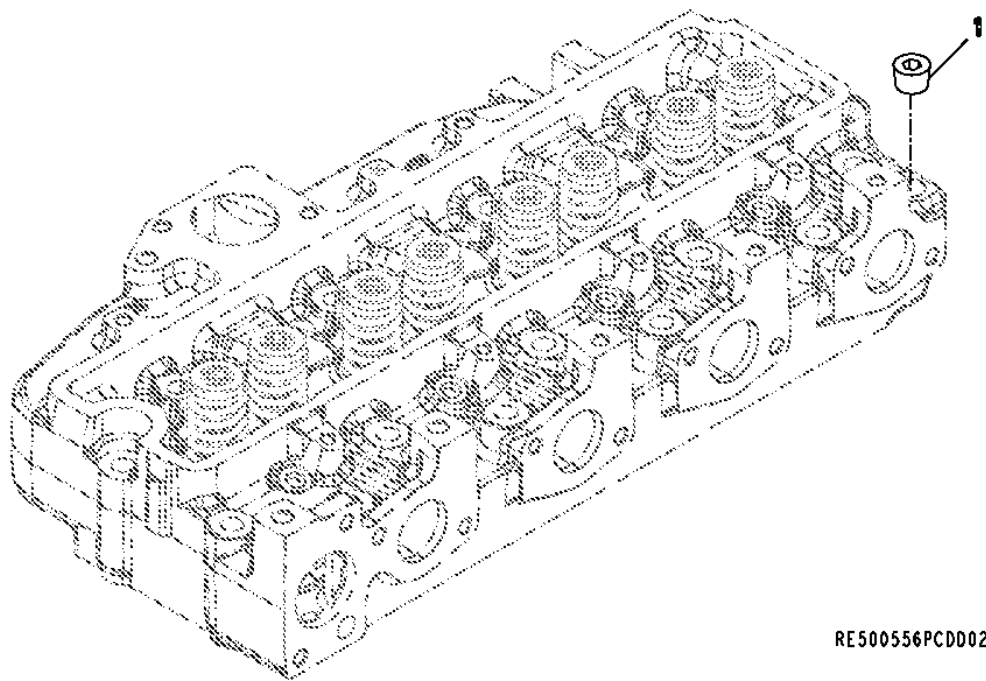
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7867	2	Screw (M8 x 25)	-
2	R116296	1	Cover	-
3	R136495	1	Gasket	-
4	R528039	2	Gasket	-
5	RE558121	1	Adapter	-
6	RE46687	1	Drain plug	-
7	581M7045	1	O-ring	-
8	RE501377	1	Filler neck	-
9	RE535560	1	Filler cap	-
10	19M9915	2	Screw (M8 x 130)	-
11	R536058	1	Dipstick tube	-
12	RE509922	1	Dipstick	-
13	R502725	1	Plug	-

Oil Fill



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R116296	2	Cover	-
2	RE67238	4	Screw	-
3	R136495	2	Gasket	

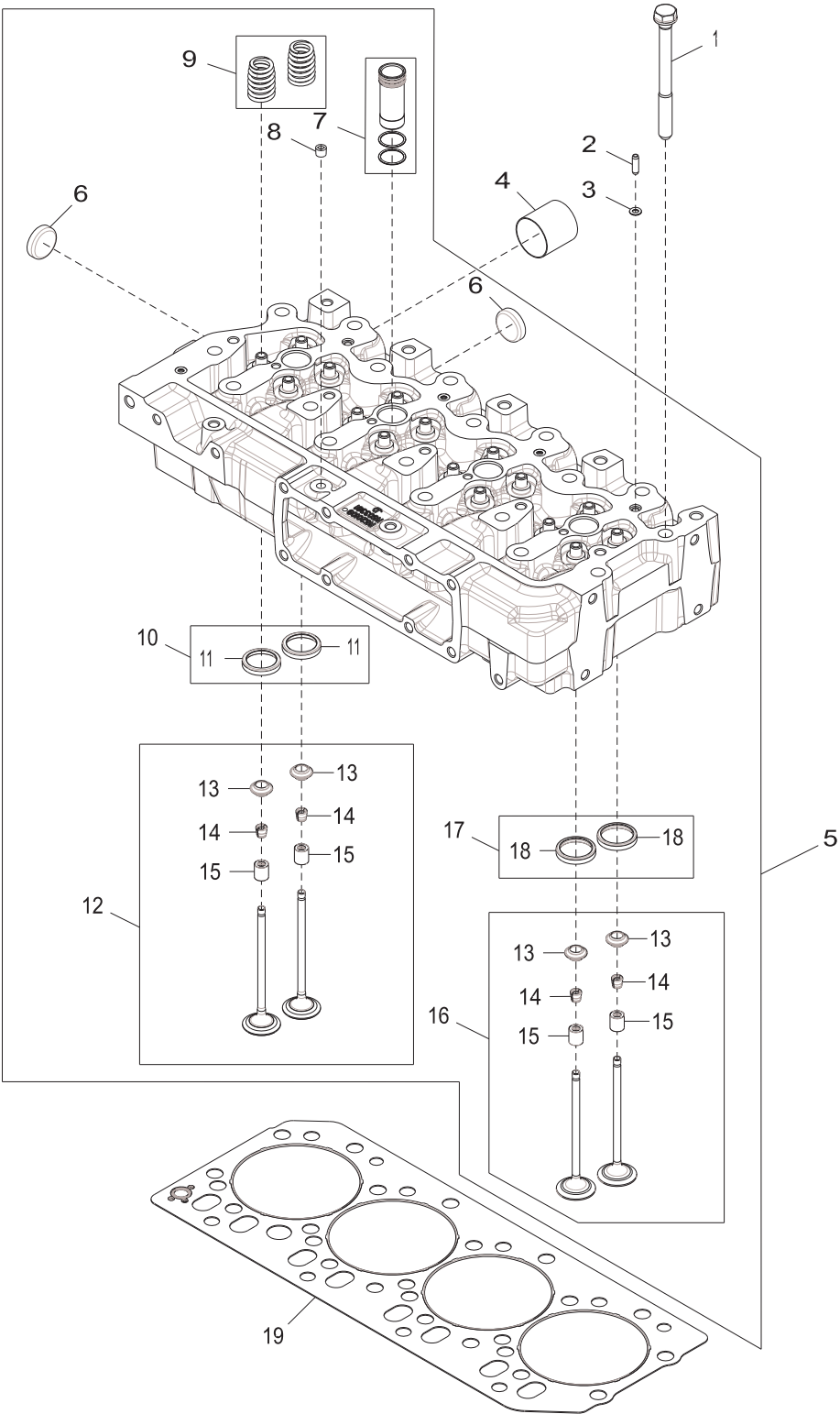
Temperature Switch Plug



RE500556PCDD02

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	15H584	1	Pipe plug	-

Cylinder Head with Valves

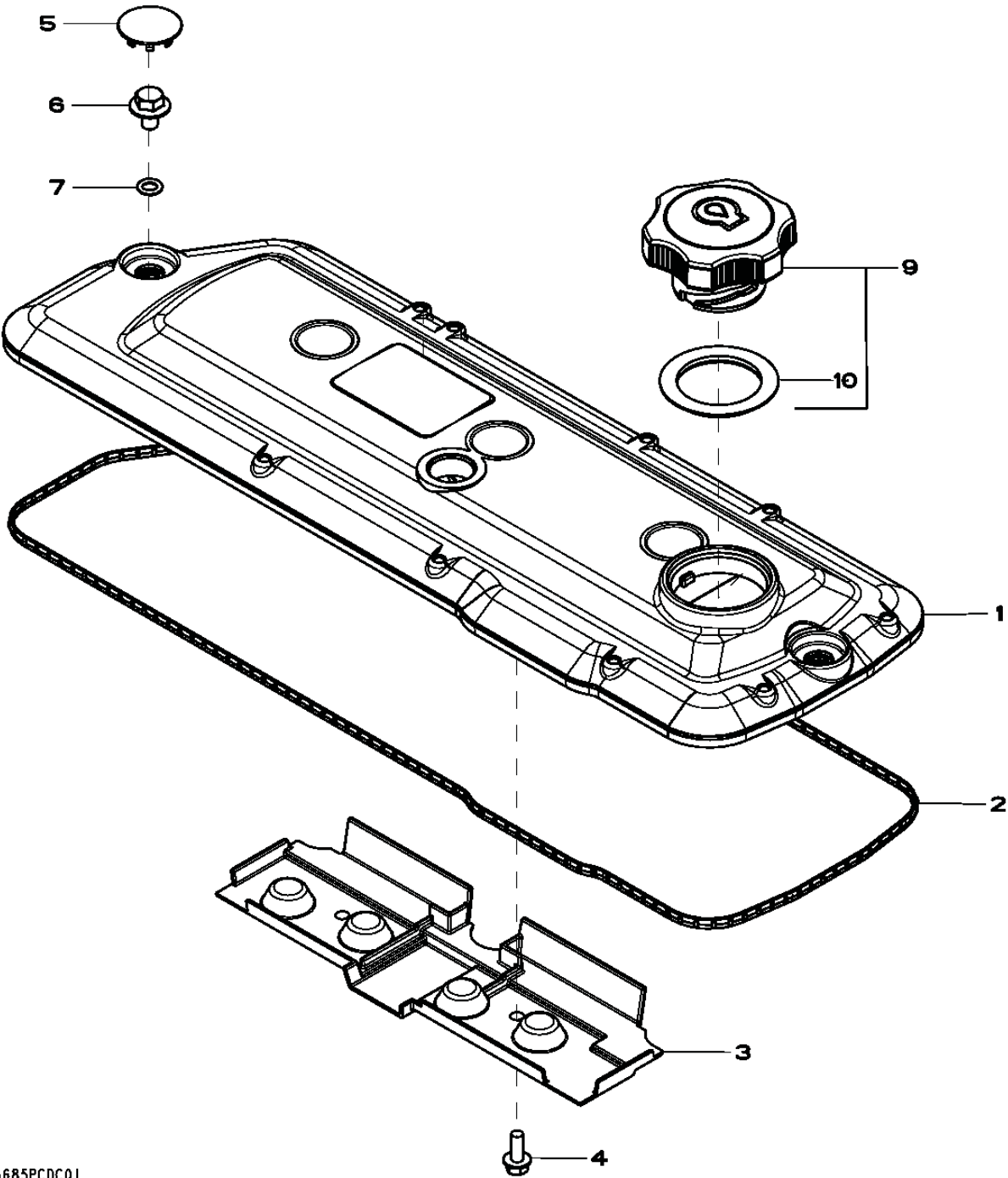


5158_RE553949_PCD

Cylinder Head with Valves

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R534091	18	Cap screw	-
2	R521544	2	Bushing	-
3	R520867	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 (includes 2x RE519115)	-
13	R502367	16	Cap	-
14	R534978	32	Retainer	-
15	RE526519	16	Seal	-
16	RE557890	4	Valve kit (includes 2x RE519115)	-
17	RE518082	4	Valve seat insert	-
18	R515034	8	Valve seat insert	-
19	R116515	1	Engine cylinder head gasket	-
20	RE519115	4	Seal (NOT SHOWN)	-

Rocker Arm Cover

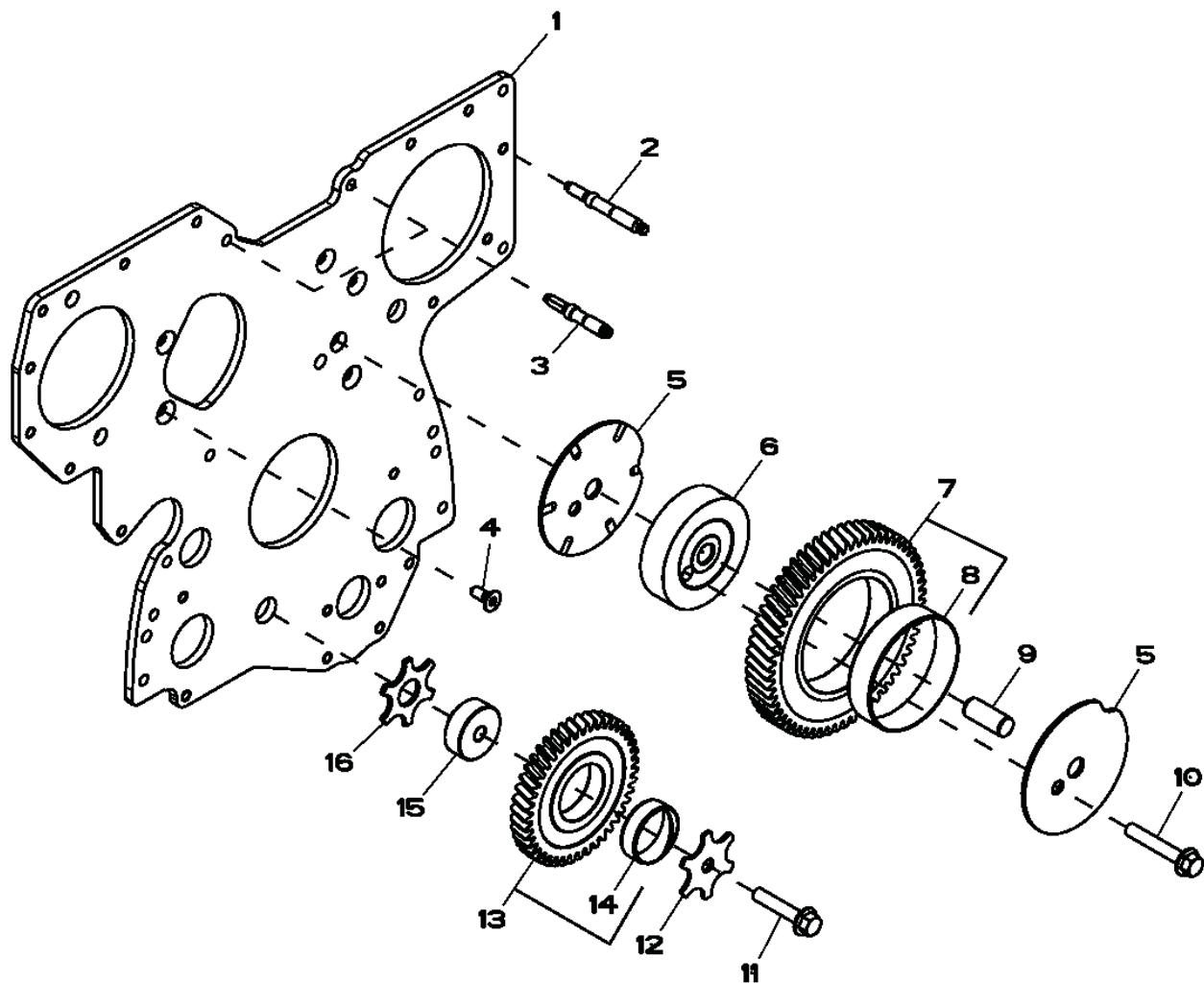


RE526685PCDC01

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 (M8 x 12)	-
5	H23125	5	Plug	-
6	R521390	5	Screw (M8 x 12)	-
7	R123575	5	O-ring	-
9	RE535560	1	Filler cap	-
10	R502902	1	Packing (ID = 44 mm)	-

Front Plate

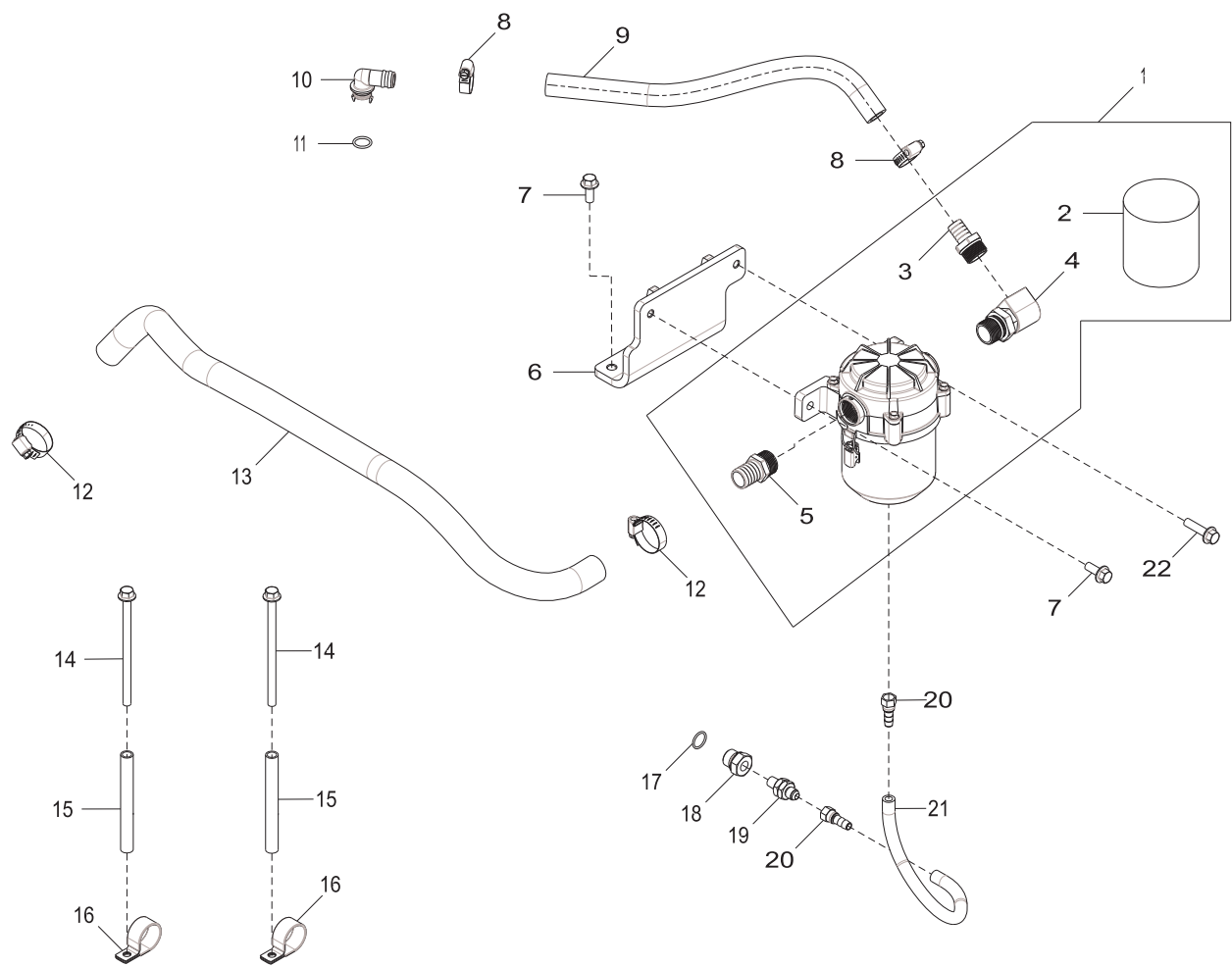


RE506566PCDD03

Front Plate

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R504282	1	Plate	-
2	R123584	7	Stud	-
3	R134518	2	Stud	-
4	R136745	5	Screw	-
5	R515494	2	Thrust washer	-
6	R504843	1	Shaft	-
7	RE508489	1	Gear	-
8	--	1	Bushing	-
9	R515408	1	Dowel pin	-
10	19M8844	1	Screw (M10 x 60)	-
11	19M8966	1	Screw (M10 x 50)	-
12	R131283	1	Thrust washer	-
13	RE56369	1	Gear	-
14	R114193	1	Bushing	-
15	R114194	1	Shaft	-
16	R101225	1	Thrust washer	-

Ventilation System

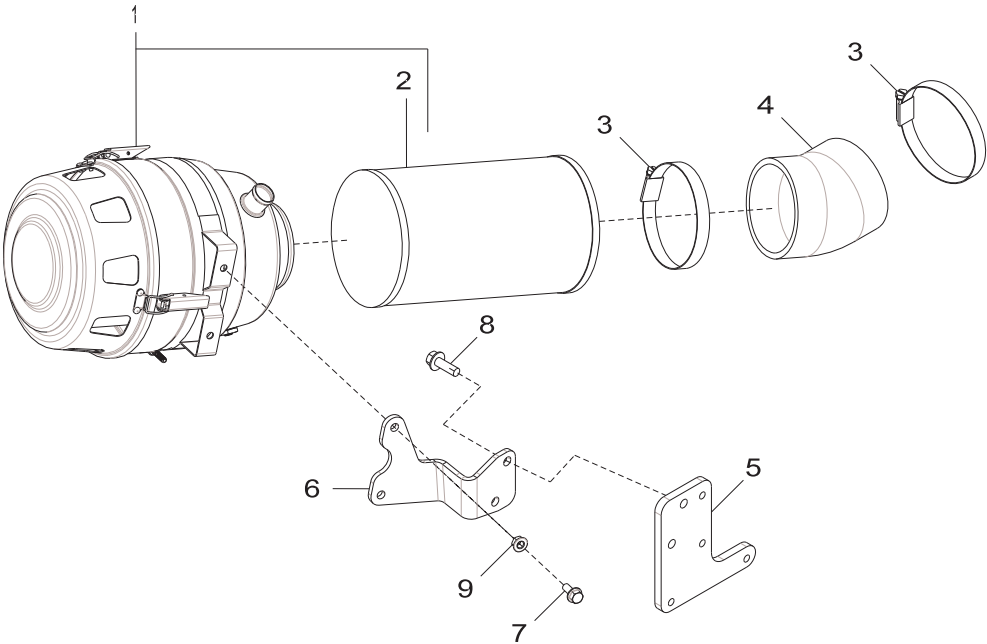


29BC_RE554087_PCD

Ventilation System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE554150	1	Crankcase vent filter	-
2	RE502284	1	Filter element	-
3	RE536786	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	R120467	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	-
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)	-

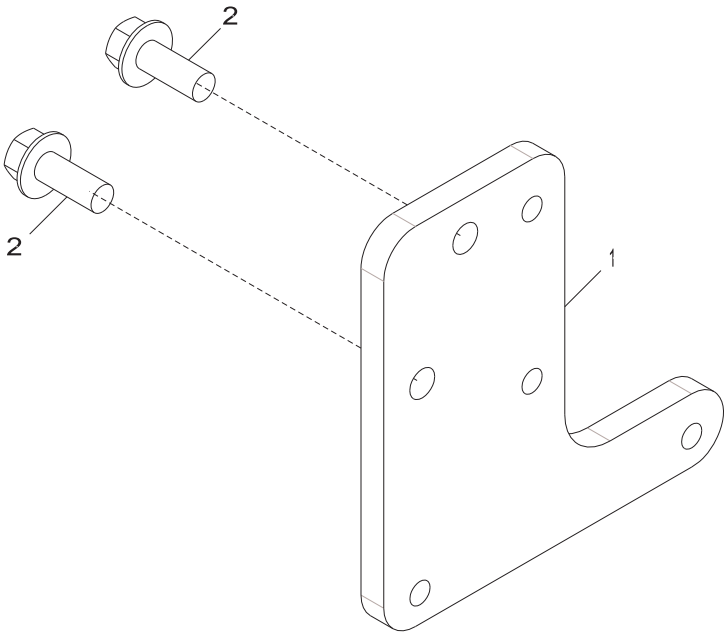
Air Cleaner



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 x 20)	-
8	19M7786	2	Screw (M10 x 30)	-
9	14M7298	2	Flange nut (M8)	-

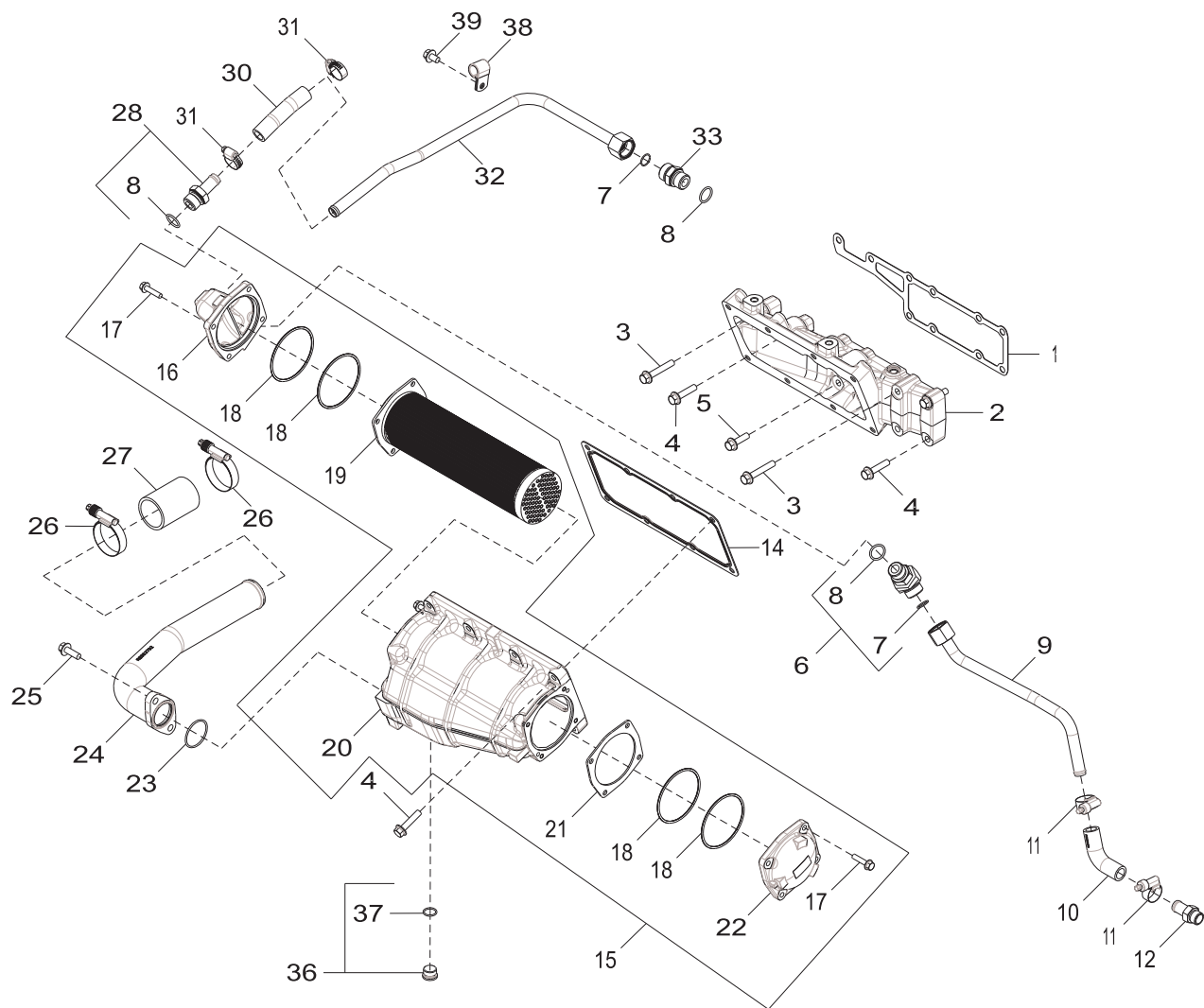
Air Cleaner Bracket



1858_RE564112_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R536278	1	Bracket	-
2	19M7785	2	Screw (M10 x 25)	-

Air Intake System

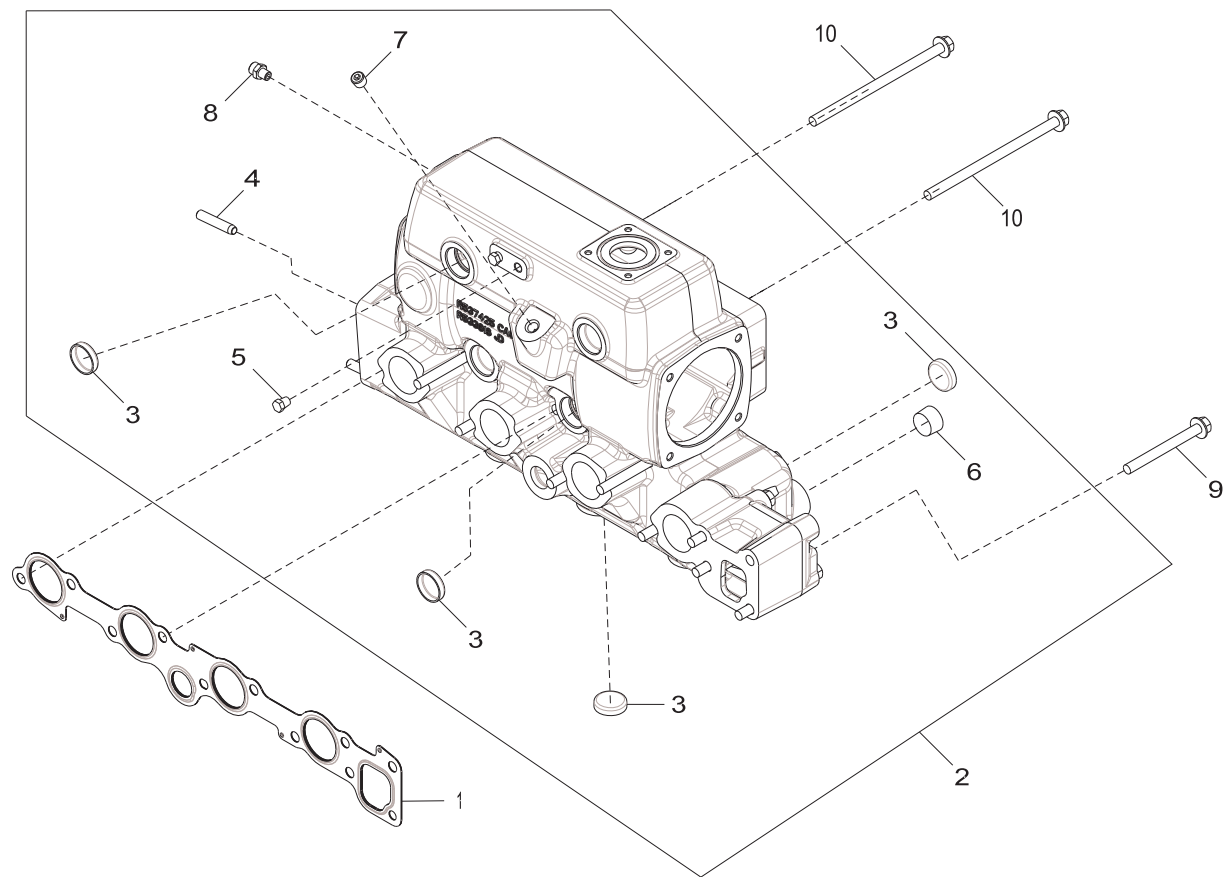


17EM_RE551853_PCD

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	19M8320	13	Screw (M10 x 45)	-
5	19M7835	2	Screw (M10 x 35)	-
6	61M5129	1	Elbow fitting	-
7	T77858	2	O-ring	-
8	51M7047	3	O-ring	-
9	RE553328	1	Line	-
10	R536109	1	Hose	-
11	R524513	2	Hose clamp	-
12	RE223627	1	Hose fitting (includes 51M7045)	-
	51M7045	1	O-ring	-
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	RE553329	1	Line	-
33	38H5005	1	Adapter fitting	-
36	RE505232	1	Fitting plug	-
37	51M7045	1	O-ring	-
38	R73291	1	Clamp	-
39	19M7783	1	Screw (M10 x 16)	-

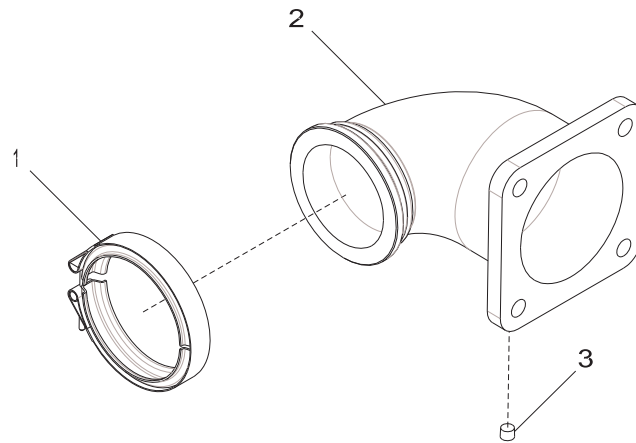
Exhaust Manifold



28BV_RE548246_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE5515765	1	Gasket	-
2	RE548245	1	Exhaust manifold	-
3	CD1624	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)	-

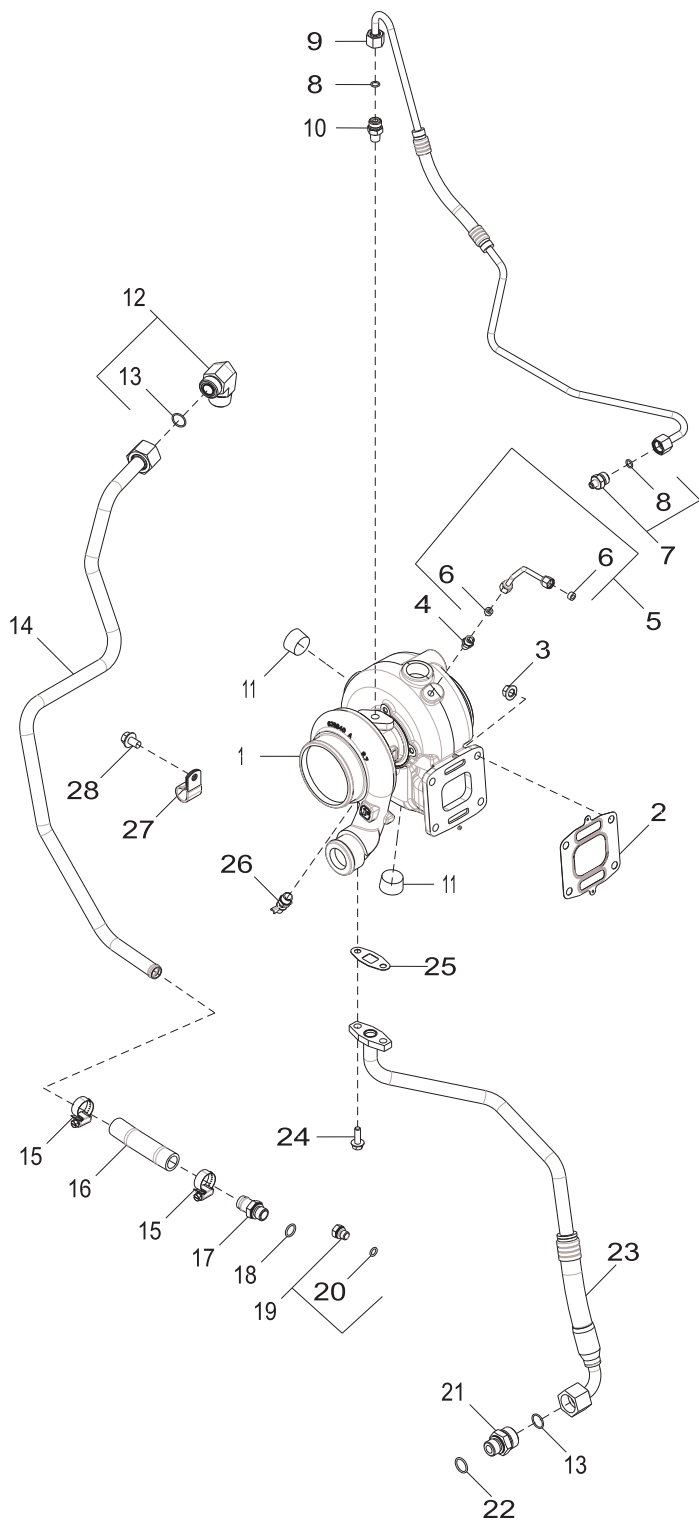
Exhaust Elbow



6402_RE49958_PCD

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

Turbocharger

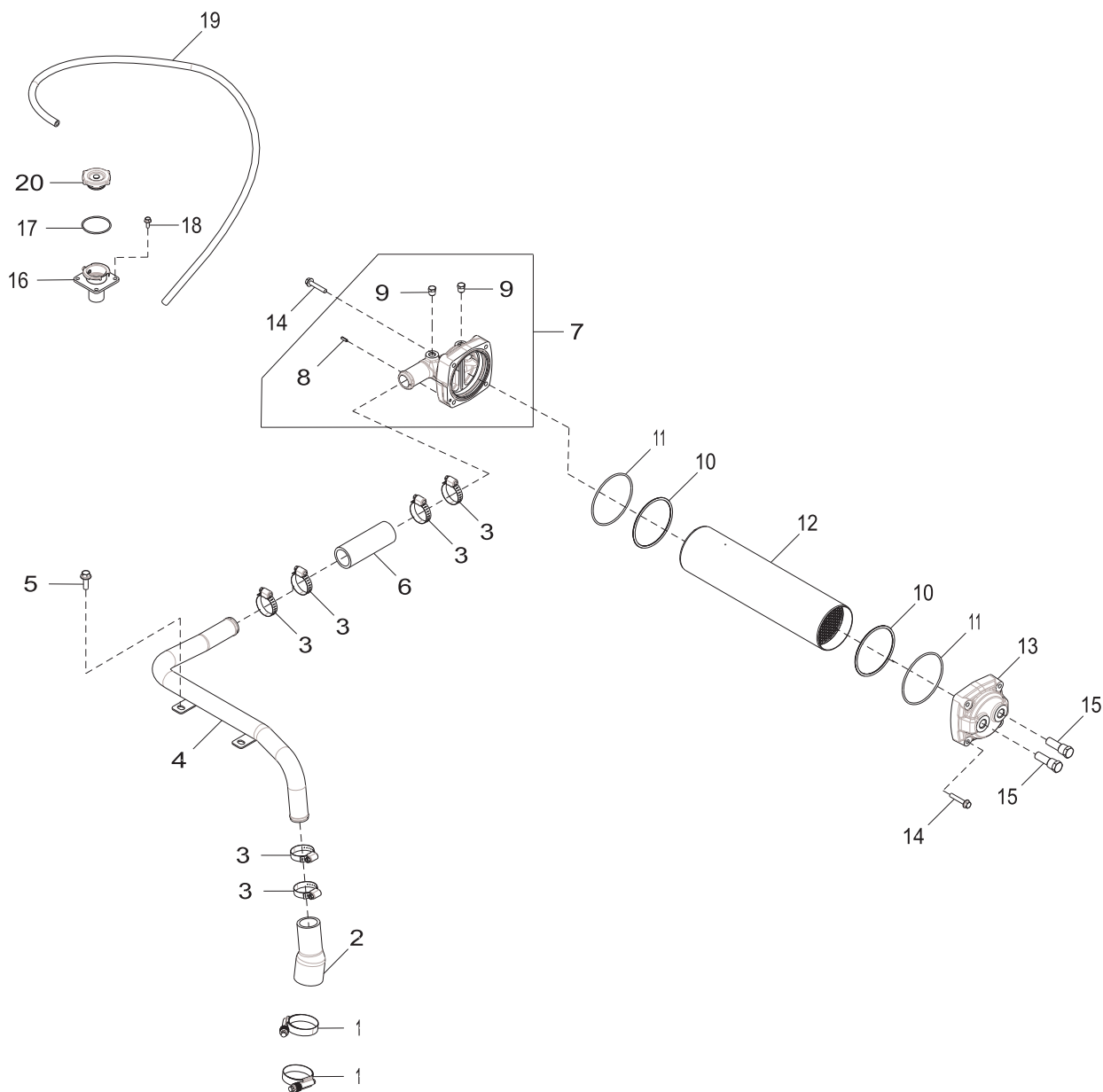


65J3_RE554417_PCD

Turbocharger

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE55798	1	Turbocharger	-
2	RE549173	1	Gasket	-
3	14M7296	4	Flange nut (M10)	-
4	RE502650	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	M87733	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	51M7043	1	O-ring	-
19	RE46686	1	Fitting plug	-
20	51M7040	1	O-ring	-
21	38H5121	1	Adapter fitting	-
22	51M7045	1	O-ring	-
23	RE561519	1	Oil line	-
24	19M8063	2	Screw (M8 x 25)	-
25	R123570	1	Gasket	-
26	AT13740	1	Drain valve	-
27	R73291	1	Clamp	-
28	19M7783	1	Screw (M10 x 16)	-

Heat Exchanger

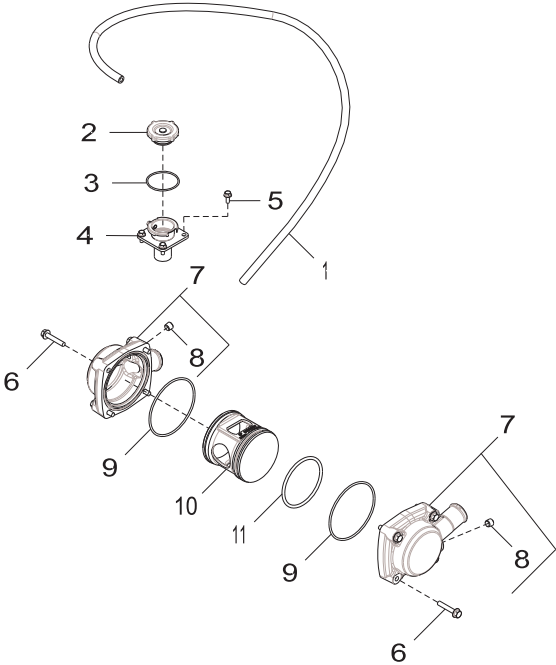


2765_RE553465_PCD

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 plug	-
10	T45902	2	O-ring	-
11	R241873	2	O-ring	-
12	RE552052	1	Core	-
13	R533893	1	Cover	-
14	19M8318	6	Screw (M8 x 45)	-
15	RE54993	2	Fitting plug	-
16	RE46165	1	Filler neck	-
17	H63262	1	O-ring	-
18	19M7775	4	Screw (M6 x 16)	-
19	R82454	1	Hose	-
20	AT183451	1	Filler cap	-

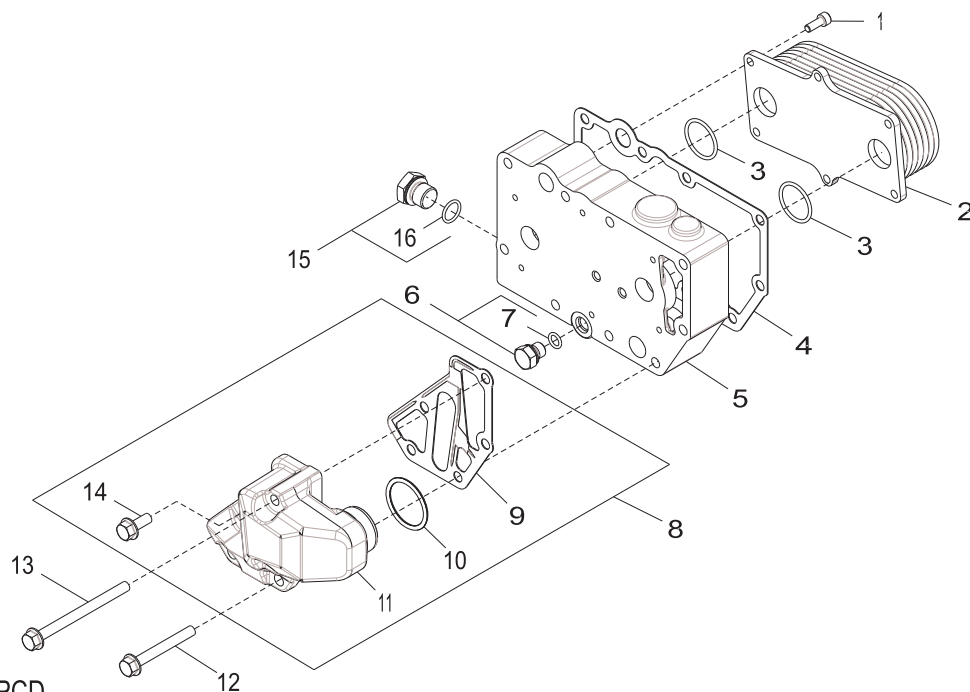
Heat Exchanger Cover



2766_RE553812_PCD

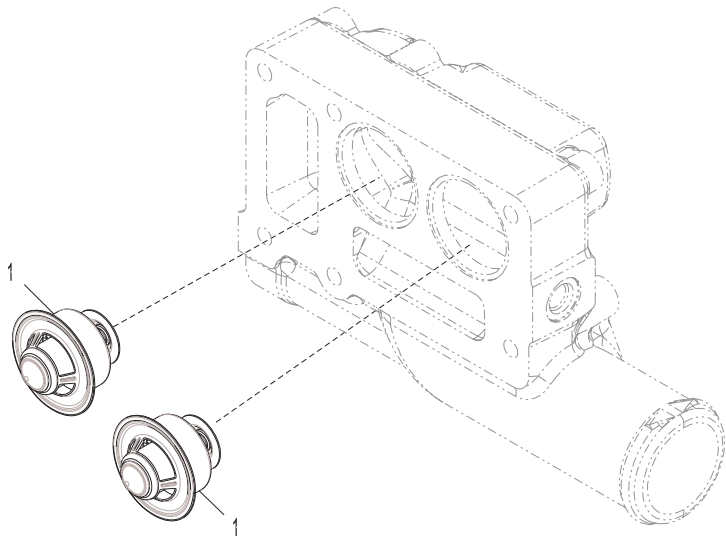
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R82454	1	Hose	-
2	AT183451	1	Filler cap	-
3	H63232	1	O-ring	-
4	RE46165	1	Filler neck	-
5	19M7775	4	Screw (M6 x 16)	-
6	19M8318	8	Screw (M8 x 45)	-
7	RE557011	2	Cover	-
8	15H685	2	Pipe	-
9	R241873	2	O-ring	-
10	R536315	1	Adapter	-
11	R76030	1	O-ring	-

Oil Cooler



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE67231	6	Screw	-
2	RE56690	1	Oil cooler (seven plates)	-
3	T122075	2	O-ring	-
4	R123501	1	Gasket	-
5	R520983	1	Housing	-
6	RE46686	1	Fitting plug	-
7	51M7040	1	O-ring	-
8	RE508599	1	Adapter fitting	-
9	R501428	1	Gasket	-
10	R504734	1	O-ring	-
11	RE508599	1	Adapter fitting	-
12	19M7802	2	Screw (M8 x 65)	-
13	19M7970	2	Screw (M8 x 100)	-
14	RE67238	1	Screw	-
15	RE46685	1	Fitting plug	-
16	51M7043	1	O-ring	-

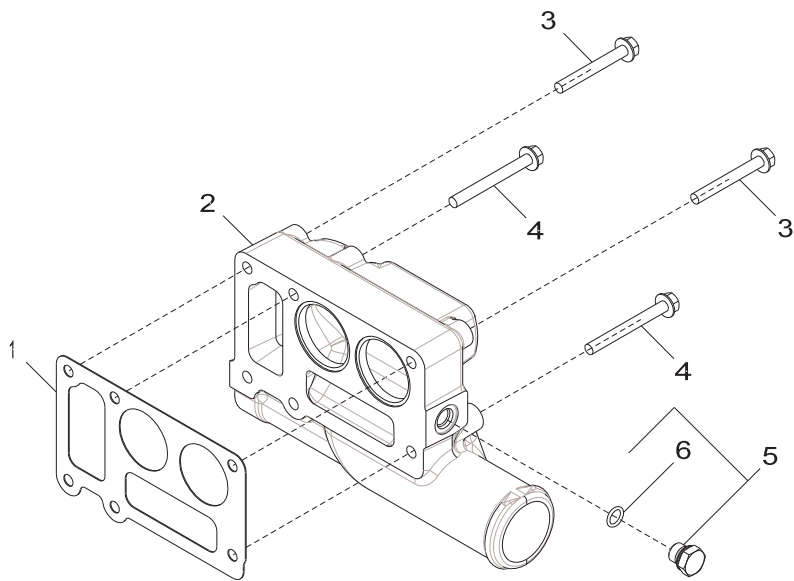
Thermostat



2229_RE557213_PCD

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

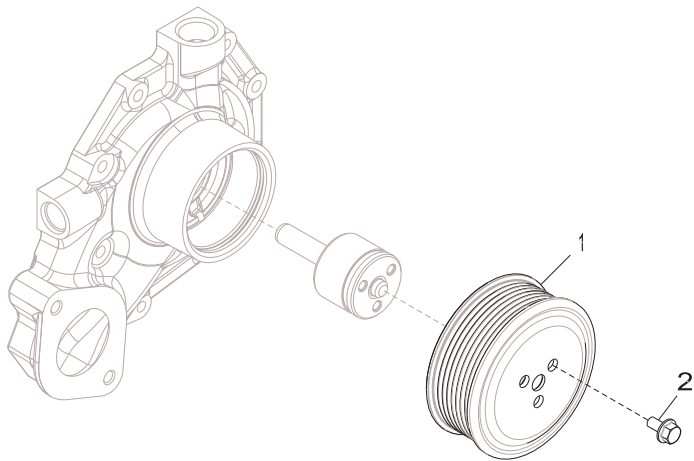
Thermostat Cover



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	-

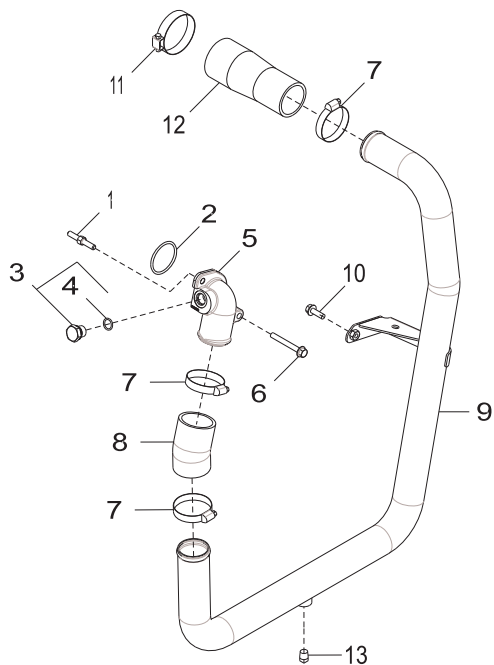
Water Pump



2001_RE58175_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R115250	1	Pulley	-
2	19M7774	3	Screw (M6 x 12)	-

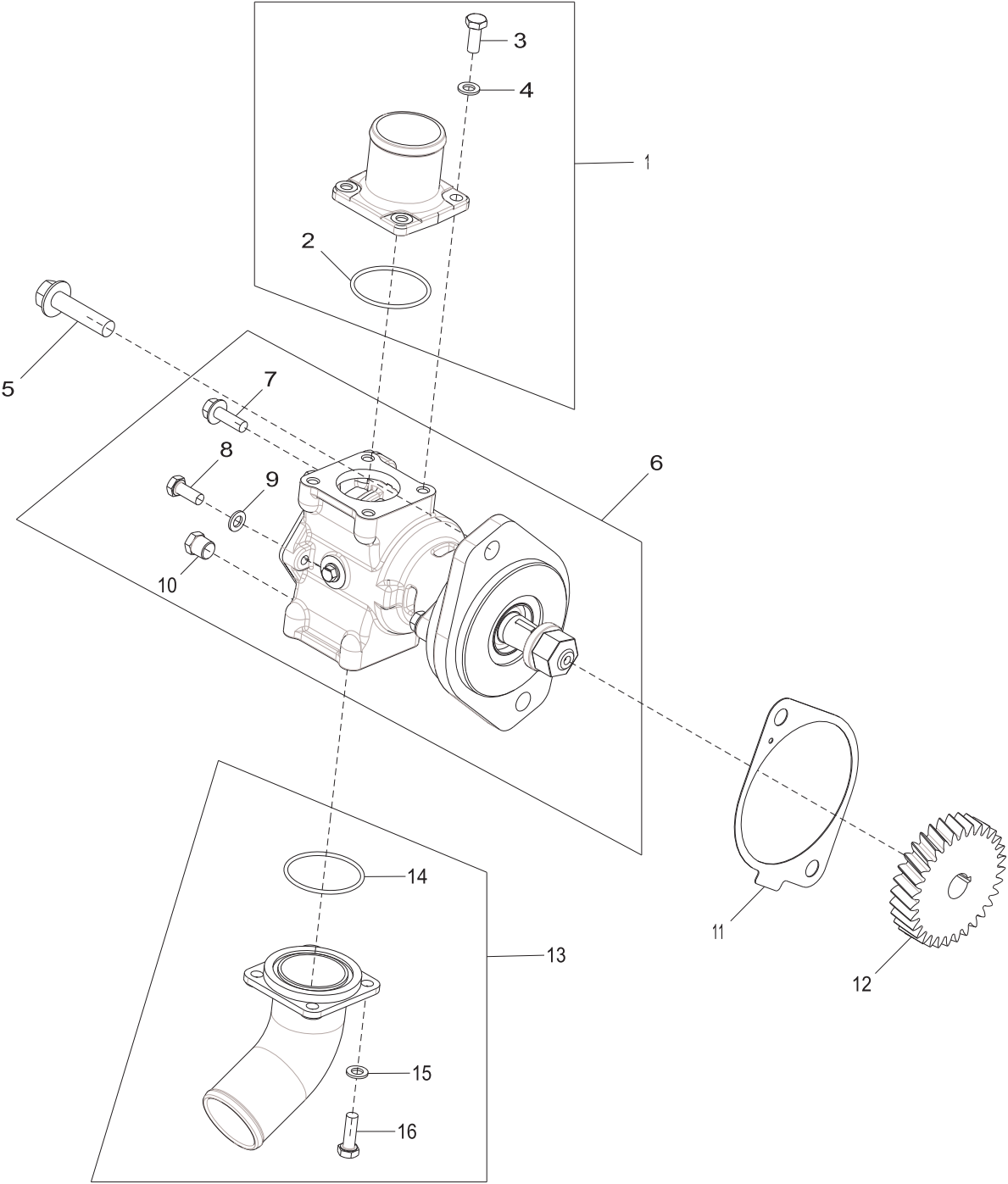
Water Pump Inlet



5740_RE550377_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R501462	1	Stud	-
2	R8944	1	O-ring	-
3	RE46685	1	Fitting plug	-
4	51M7043	1	O-ring	-
5	R502983	1	Water connection	-
6	19M7802	1	Screw (M8 x 65)	-
7	AR56291	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	15H604	1	Pipe plug	-

Sea Water Pump

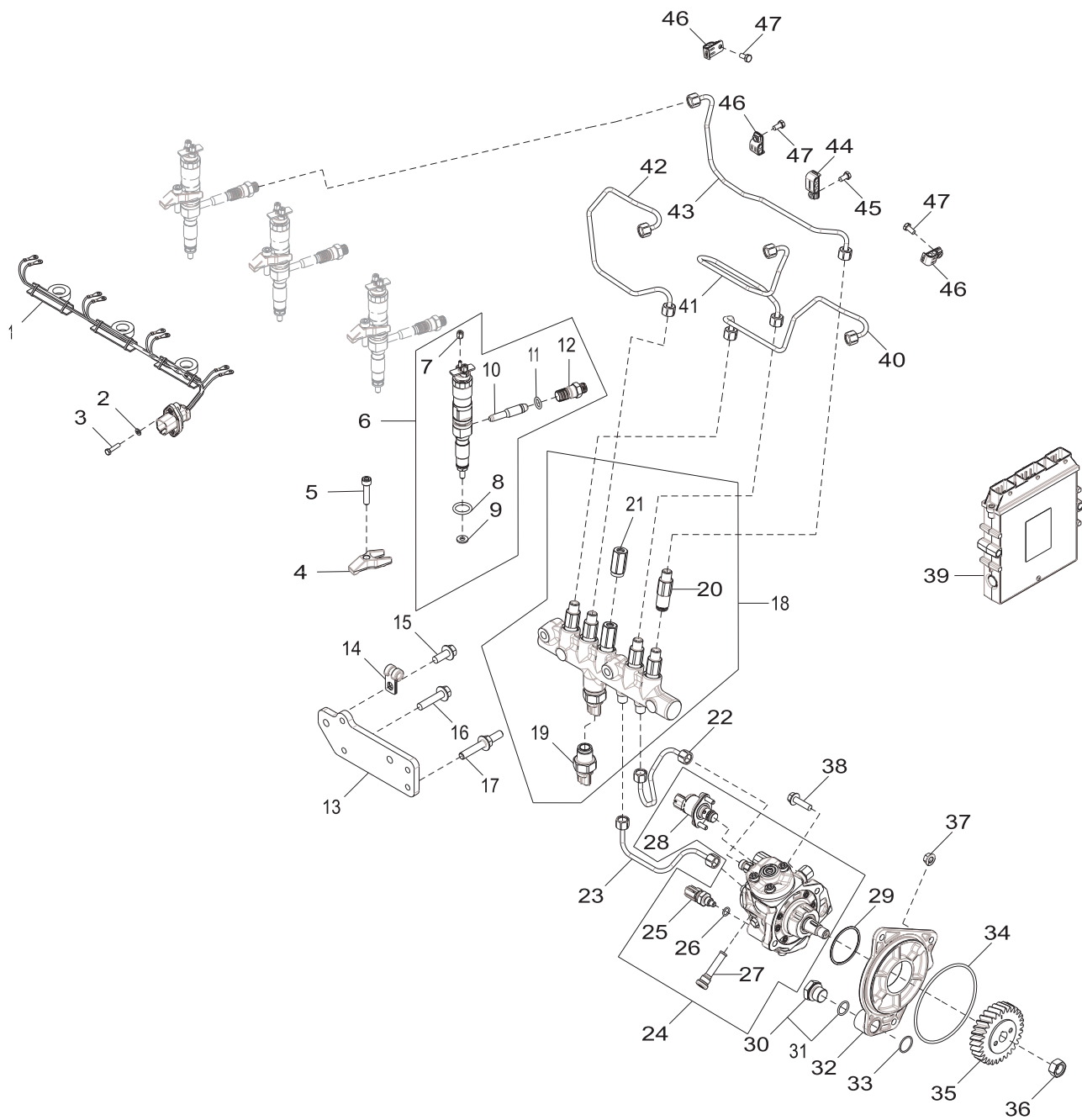


8024_RE535914_PCD

Sea Water Pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE538665	1	Adapter	-
2	U42111	1	O-ring	-
3	19M9962	4	Screw (M8 x 20)	-
4	24M7537	4	Washer	-
5	19M8306	2	Screw (M12 x 50)	-
6	RE538663	1	Water pump	-
7	19M7867	4	Screw (M8 x 25)	-
8	19M9962	3	Screw (M8 x 20)	-
9	24M7537	3	Washer	-
10	H26732	2	Drain plug	-
11	R522690	1	Gasket	-
12	R135101	1	Gear	-
13	RE538664	1	Adapter	-
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 (not shown)	-

Fuel Injection Pump

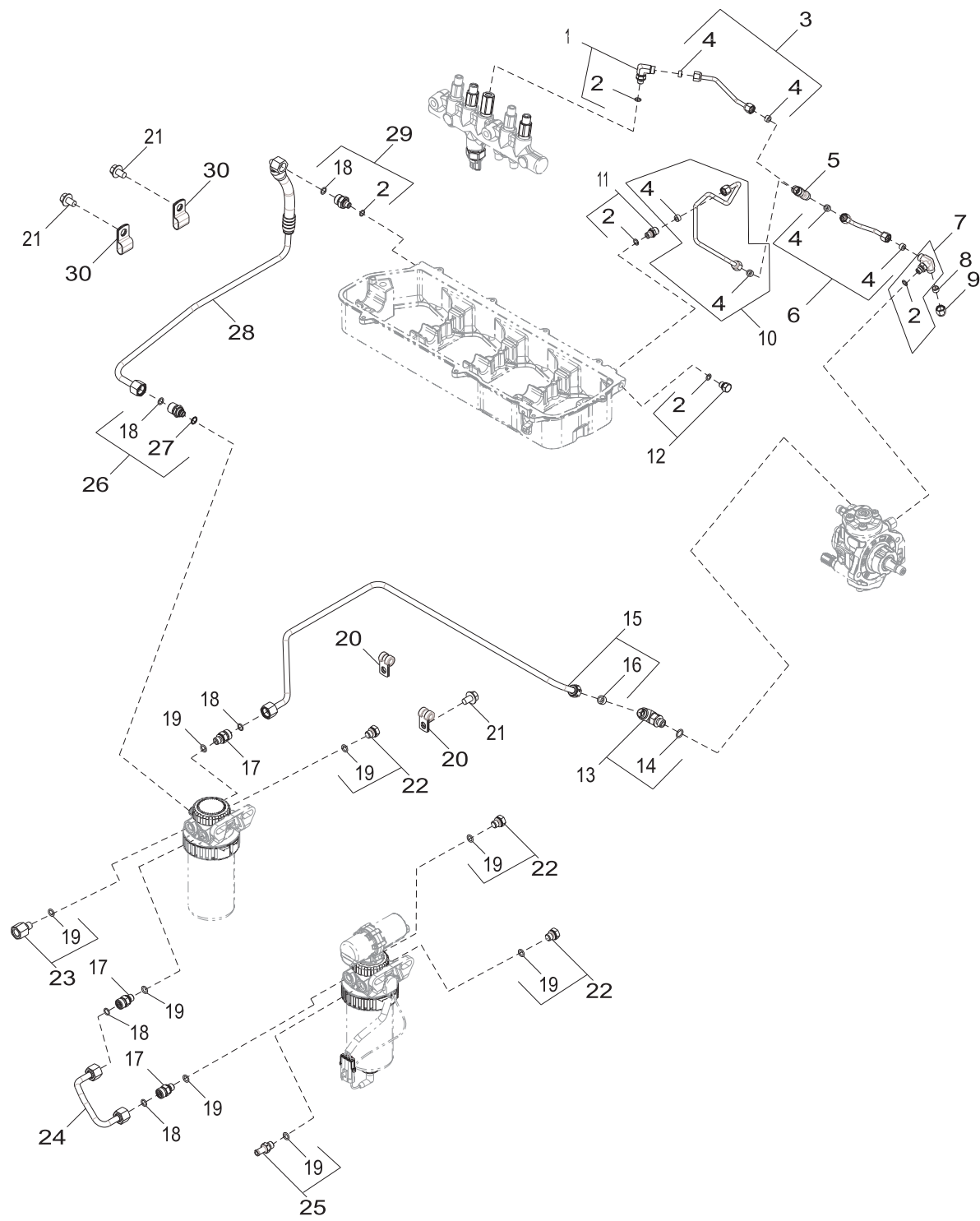


16GX_RE550720_PCD

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	Nozzle kit	-
7	R134920	8	Nut	-
8	R505452	4	O-ring	-
9	R515535	4	Washer	-
10	RE522594	4	Tube (R65397 required)	-
11	R65397	4	O-ring	-
12	R515044	4	Fitting (R65397 required)	-
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	Fuel rail pressure sensor	-
20	RE515636	4	Restrictor	-
21	RE516335	1	Pressure relief valve (includes R515454)	-
	R515454	1	Shim (not illustrated)	-
22	RE544262	1	Fuel line	-
23	RE544263	1	Fuel line	-
24	RE527528	1	Fuel injection pump	-
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	Electronic control unit	Provide serial number when ordering
40	RE550619	1	Fuel line	-
41	RE550620	1	Fuel line	-
42	RE550621	1	Fuel line	-
43	RE550622	1	Fuel line	-
44	RE20901	1	Clamp	-
45	19M8560	1	Cap screw (M6 x 12)	-
46	RE19797	3	Clamp	-
47	19M6614	3	Cap screw (M6 x 12)	-

Low Pressure Fuel Lines

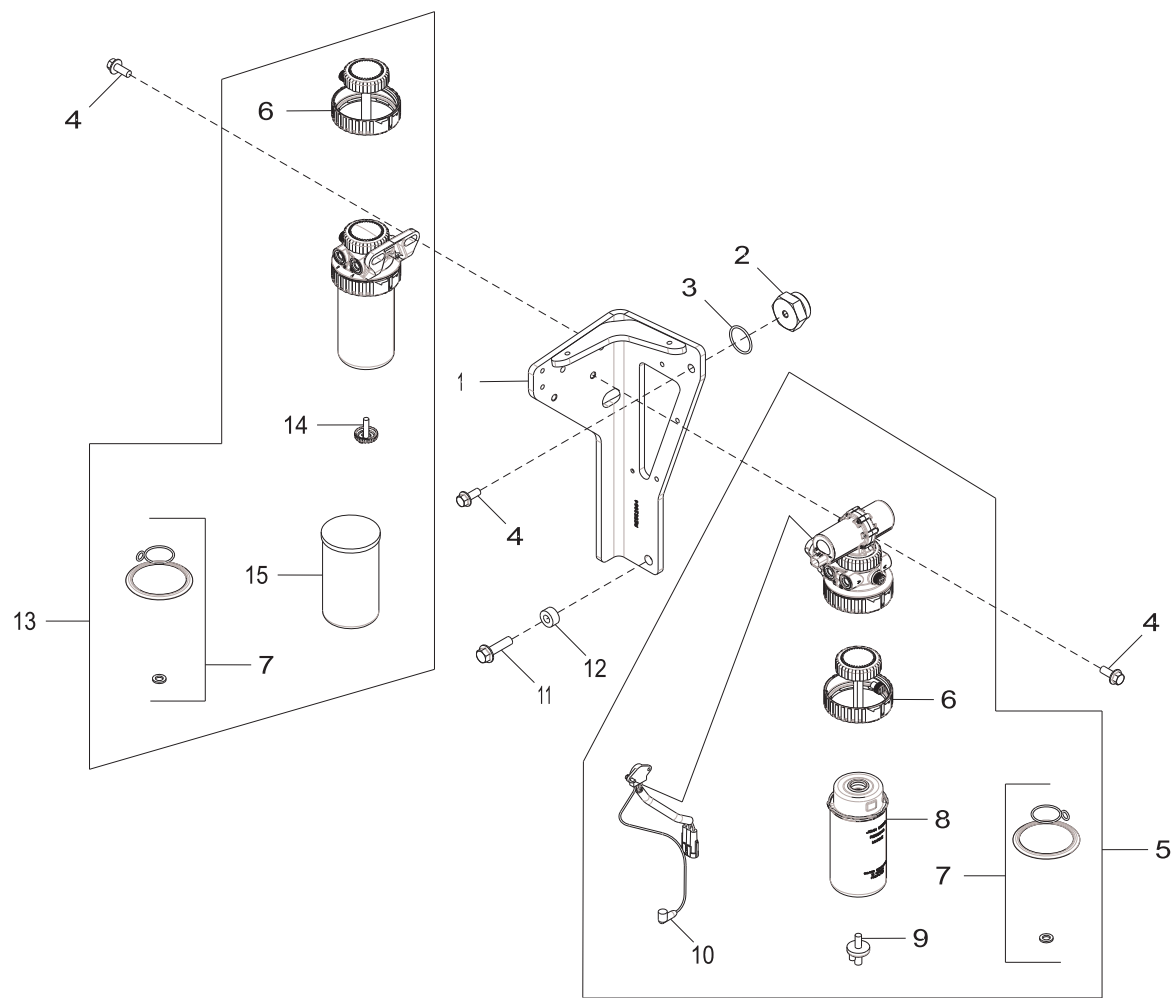


63ES_RE550766_PCD

Low Pressure Fuel Lines

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE502173	1	Fitting	-
2	51M7039	5	O-ring	-
3	RE550723	1	Fuel line	-
4	R51936	6	Sealing washer	-
5	R97061	1	Tee fitting	-
6	RE550743	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	1	Fitting	-
13	RE502174	1	Elbow fitting	-
14	51M7041	1	O-ring	-
15	RE553047	1	Fuel line	-
16	R67092	1	Sealing washer	-
17	38H5008	1	Adapter fitting	-
18	T77613	5	O-ring	-
19	51M7040	8	O-ring	-
20	T78974	2	Clamp	-
21	19M7783	3	Screw (M10 x 16)	-
22	RE46686	3	Fitting plug	-
23	RE523854	1	Adapter fitting	-
24	RE553028	1	Fuel line	-
25	RE500576	1	Fitting	-
26	RE507247	1	Hose fitting (R500271 required)	-
27	R500271	1	O-ring	-
28	RE553230	1	Fuel line	-
29	RE524399	1	Adapter fitting	-
30	T30785	2	Clamp	-

Water Separator

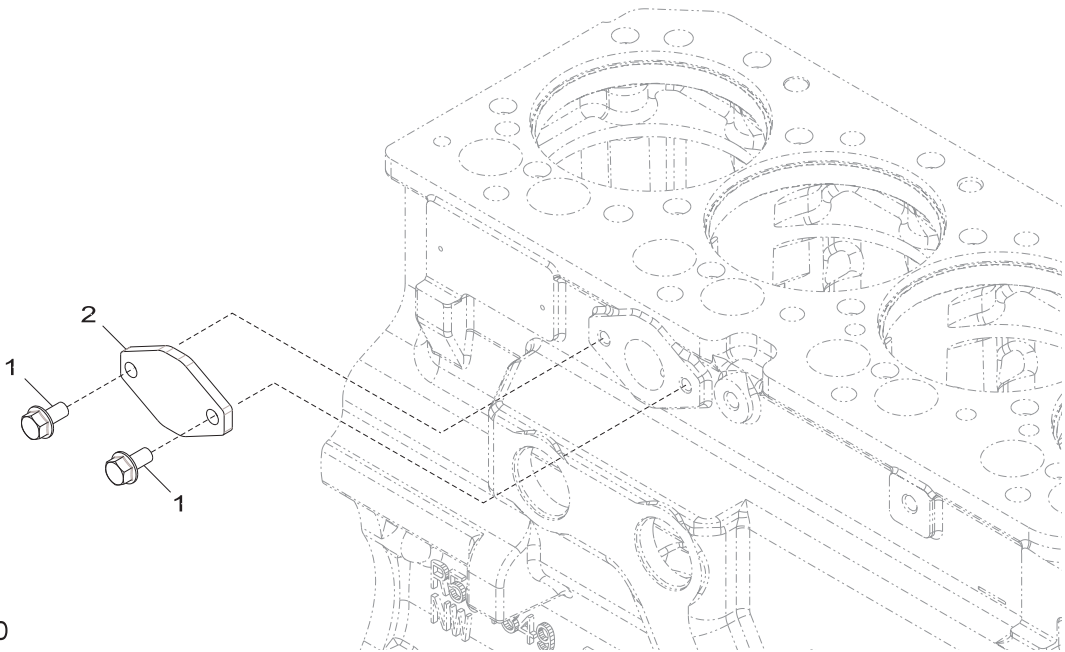


81BN_RE552965_PCD

Water Separator

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552964	1	Bracket	-
2	R515068	2	Pipe plug	-
3	U13639	2	O-ring	-
4	19M7785	6	Screw (M10 x 25)	-
5	RE553366	1	Filter head	-
6	RE526834	2	Filter kit	-
7	RE558208	2	Seal kit	-
8	RE521540	1	Fuel filter (10 micron)	-
9	RE54723	1	Drain vale	-
10	RE509677	1	Wiring harness, 12V	-
11	19M7813	1	Screw (M12 x 45)	-
12	R114358	1	Spacer	-
13	RE553367	1	Filter head	-
14	R120250	1	Drain valve	-
15	RE527538	1	Filter element (2 micron)	-

Fuel Transfer Pump



3799_RE59619_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE66334	2	Cap screw	-
2	R123396	1	Cover	-

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GROUP 5 – ELECTRICAL SYSTEM**Basic Engine Electrical 12V Iso**

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-99401	1	Label "Genset Control - Run/ Stop / Crank"	-
2	22-41049	1	Toggle Switch, SPST On-Off 10A 250 VAC Chrome	-
3	22-41133	1	Toggle Switch, SPST (On) - Off 10A 250 VAC Chrome	-
4	22-49409	1	Harness Assembly	-
5	00-78215	1	Grommet 1-1/8"ID x 1-7/8"OD 1/16"GW x 1-1/2GD	-
6	22-49579	1	Starter 12V 4.2kW Isolated Ground L.H. 3-Bolt SAE Type	-
7	22-49587	1	Alternator 12V/75A Isolated Ground	-
8	12-80832	3	Cap Screw, Hex Head M10 x 1.5 x 30mm	-
9	22-41080	1	Solenoid 12VDC 85A N.O. Isolated Ground	-
10	23-40009	1	Bracket, Solenoid Mtg	-
11	14-00101	2	Lock Nut, Serrated Flange 1/4-20	-
12	19-00060	1	Hose Clamp #60 S/S	-
13	19M7979	2	Cap Screw, Hex Head Flanged, M8 x 1.25 x 55mm	-
14	15-70004	2	Snubbing Washer S/S (304)	-
15	15-49502	6	Shoulder Washer, White Nylon	-
16	15-49503	2	Flat Washer, Grey PVC	-
17	14-09712	2	Hex Nut, Nylock M8 x 1.25 S/S (316)	-
18	RE52665	1	Relay 12VDC w/Mounting Tab	-

Basic Engine Electrical 24V Std

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-99401	1	Label "Genset Control - Run/ Stop / Crank"	-
2	22-41049	1	Toggle Switch, SPST On/Off 10A 250 VAC Chrome	-
3	22-41133	1	Toggle Switch, SPST On/Off 10A 250 VAC Chrome	-
4	22-49409	1	Harness Assembly	-
5	00-78215	1	Grommet 1-1/8"ID x 1-7/8"OD 1/16"GW x 1-1/2GD	-
6	RE501150	1	Starter 24V 7.5kW Standard Ground L.H. 3-bolt SAE	-
7	22-49586	1	Alternator 28V/50A Standard Ground Medium Frame	-
8	12-80832	1	Cap Screw, Hex Head M10 x 1.5 x 30mm	-
9	22-41079	1	Solenoid 24VDC 85A N.O. Isolated Ground	-
10	23-40009	1	Bracket, Solenoid Mtg	-
11	14-00101	2	Lock Nut, Serrated Flange 1/4-20	-
12	19-00060	1	Hose Clamp #60 S/S	-
13	12-00715	2	Cap Screw, Head Head, M8 x 1.25 x 50 mm	-
14	15-00701	2	Flat Washer M8	-
15	14-09712	2	Hex Nut, Nylock M8 x 1.25 S/S (316)	-
16	RE505214	1	Relay 24VDC w/Mounting Tab	-

GROUP 5 – ELECTRICAL SYSTEM

Basic Engine Electrical 24V Iso

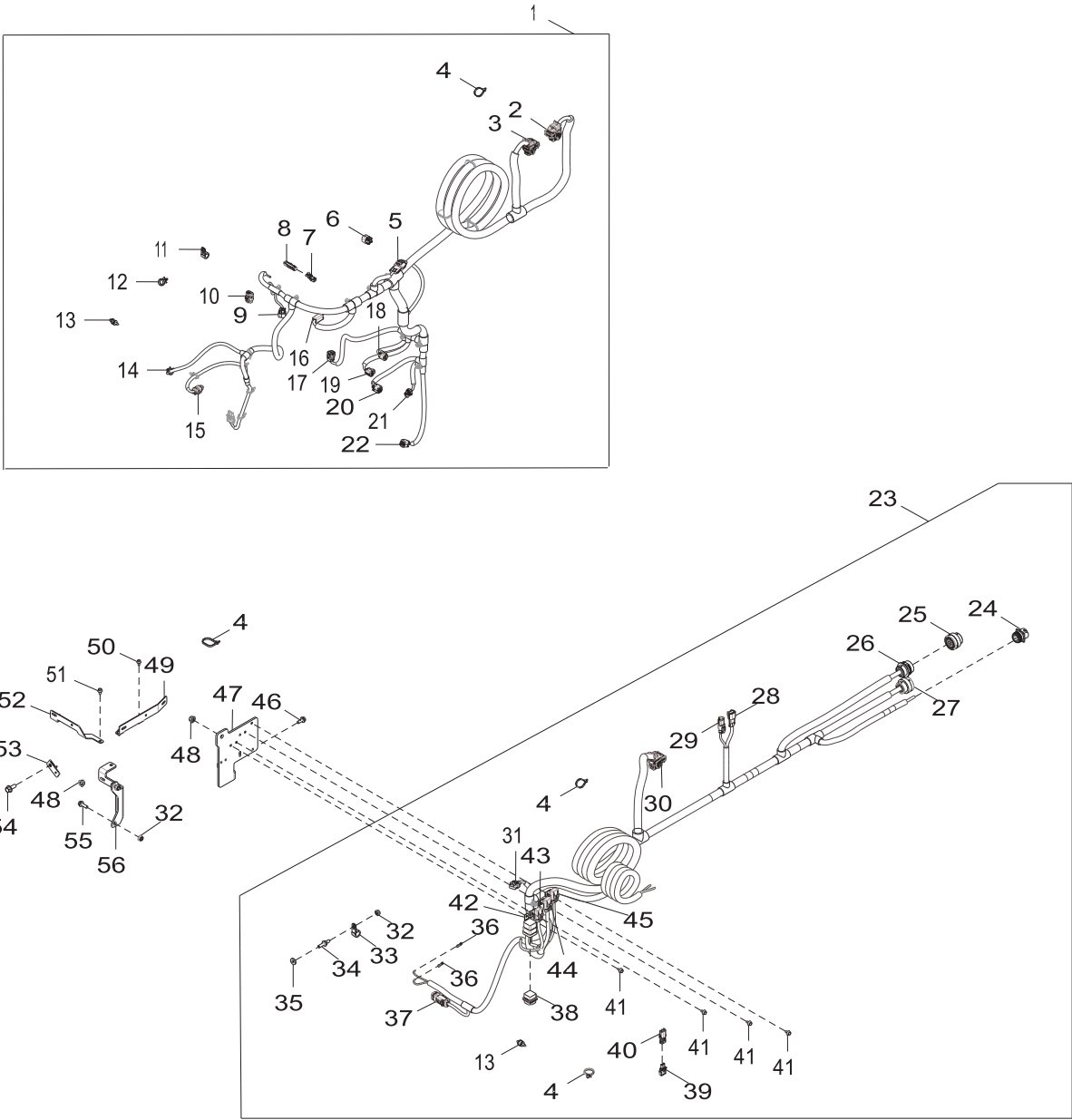
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-99401	1	Label "Genset Control - Run/ Stop / Crank"	-
2	22-41049	1	Toggle Switch, SPST On/Off 10A 250 VAC Chrome	-
3	22-41133	1	Toggle Switch, SPST On/Off 10A 250 VAC Chrome	-
4	22-49409	1	Harness Assembly	-
5	00-78215	1	Grommet 1-1/8"ID x 1-7/8"OD 1/16"GW x 1-1/2GD	-
6	22-49577	1	Alternator 28V/50A Isolated Ground, Medium Frame	-
7	RE540413	1	Starter 24V 4kW Isolated Ground L.H. 3-bolt SAE	-
8	12-80832	1	Cap Screw, Hex Head M10 x 1.5 x 30mm	-
9	22-41079	1	Solenoid 24VDC 85A N.O. Isolated Ground	-
10	23-40009	1	Bracket, Solenoid Mtg	-
11	14-00101	2	Lock Nut, Serrated Flange 1/4-20	-
12	19-00060	1	Hose Clamp #60 S/S	-
13	19M7979	2	Cap Screw, Head Head Flanged, M8 x 1.25 x 55 mm	-
14	15-70004	2	Snubbing Washer S/S (304)	-
15	15-49502	6	Shoulder Washer, White Nylon	-
16	15-49503	2	Flat Washer, Grey PVC	-
17	14-09712	2	Hex Nut, Nylock M8 x 1.25 S/S (316)	-
18	RE505214	1	Relay 24VDC w/Mounting Tab	-

Oil Pressure Manifold

Drawing not available at time of publication.
Please consult factory.

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-85401	1	Manifold	-
2	21-75703	2	Spacer	-
3	12-04802	2	Cap screw (M12 x 1.75)	-
4	15-00912	2	Lock washer (M12)	-
5	15-00007	2	Flat washer (M12)	-
6	21-52205	1	Connector	-
7	21-00113	1	Elbow 45°	-
8	18-55405	1	Hose assembly	-
9	21-71053	1	Male Elbow 90°	-
10	21-00132	1	Bushing	-
11	21-00012	4	Plug	-

Engine Wiring Harness



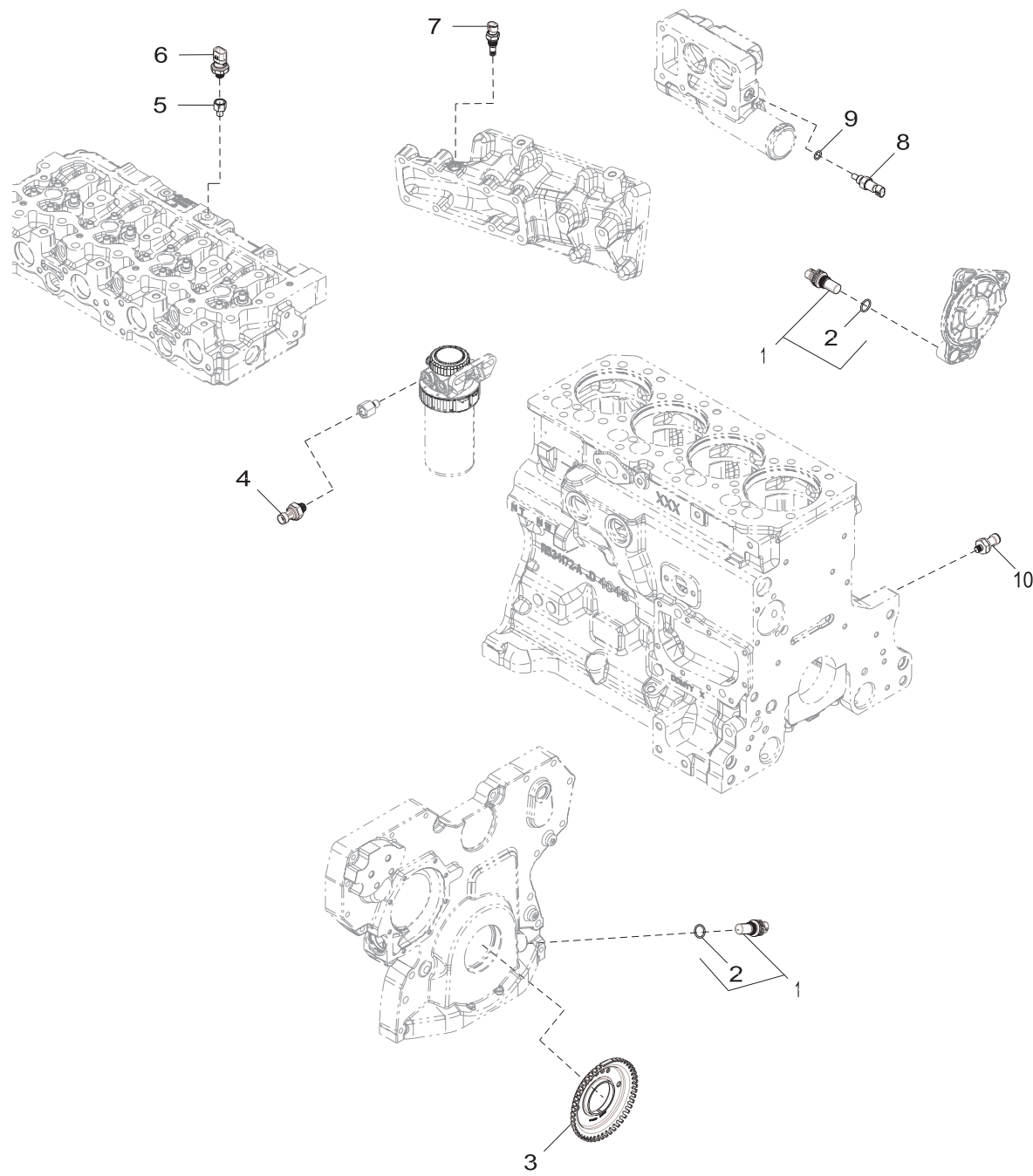
84DX_RE552458_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE552459	1	Wiring harness	-
2	57M10605	1	Electrical connector housing	-
	57M10604	1	Electrical connector housing	-
3	57M10606	1	Electrical connector housing	-
	57M10604	1	Electrical connector housing	-
4	R44302	10	Tie band	-
5	57M7305	1	Electrical connector housing	-
	57M7280	1	Electrical connector housing	-

Engine Wiring Harness

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
6	57M8601	1	Electrical connector housing	-
7	RE12362	1	Electrical connector assembly	-
8	R78052	1	Electrical connector assembly	-
9	57M8601	1	Electrical connector housing	-
10	57M9781	1	Electrical connector housing	-
11	57M10829	1	Half clamp	-
12	57M9244	1	Clip	-
13	RE258807	7	Tie band	-
14	57M8625	1	Electrical connector housing	-
15	57M9775	1	Electrical connector housing	-
16	57M8634	1	Electrical connector housing	-
17	57M8407	1	Electrical connector housing	-
18	57M8403	1	Electrical connector housing	-
19	57M8400	1	Electrical connector housing	-
20	57M8601	1	Electrical connector housing	-
21	57M8625	1	Electrical connector housing	-
22	57M8601	1	Electrical connector housing	-
23	RE559572	1	Harness kit	-
24	57M7919	1	Electrical connector housing	-
25	57M7749	1	Electrical connector assembly	-
26	57M7750	1	Electrical connector housing	-
27	57M8112	1	Electrical connector housing	-
28	57M7304	1	Electrical connector housing	-
29	57M8131	1	Electronic terminator	-
30	57M10615	1	Electrical connector housing	-
	57M10613	1	Electrical connector housing	-
31	57M7280	1	Electrical connector housing	-
32	14M7298	3	Flange nut (M8)	-
33	57M10837	1	Half clamp	-
34	R529573	1	Stud	-
35	24M7476	1	Washer	-
36	57M7547	2	Electrical connector terminal	-
37	57M9786	1	Electrical connector housing	-
38	87M7555	1	Electrical connector housing	-
39	RE12363	1	Electrical connector assembly	-
40	R78053	1	Electrical connector assembly	-
41	19M7861	4	Screw (M6)	-
42	RE52665	1	Relay	-
43	87M8487	3	Electrical connector cap	-
44	57M8600	1	Electrical connector housing	-
45	57M8267	1	Electrical connector housing	-
46	19M7866	1	Screw (M8)	-
47	R537523	1	Bracket	-
48	14M796	2	Flange nut (M10)	-
49	R537520	1	Bracket	-
50	37M7089	2	Screw (M6)	-
51	19M7774	2	Screw (M6)	-
52	R537521	1	Bracket	-
53	R522924	1	Bracket	-
54	19M7785	1	Screw (M10)	-
55	19M7867	2	Screw (M8)	-
56	R537522	1	Bracket	-

Engine Sensors

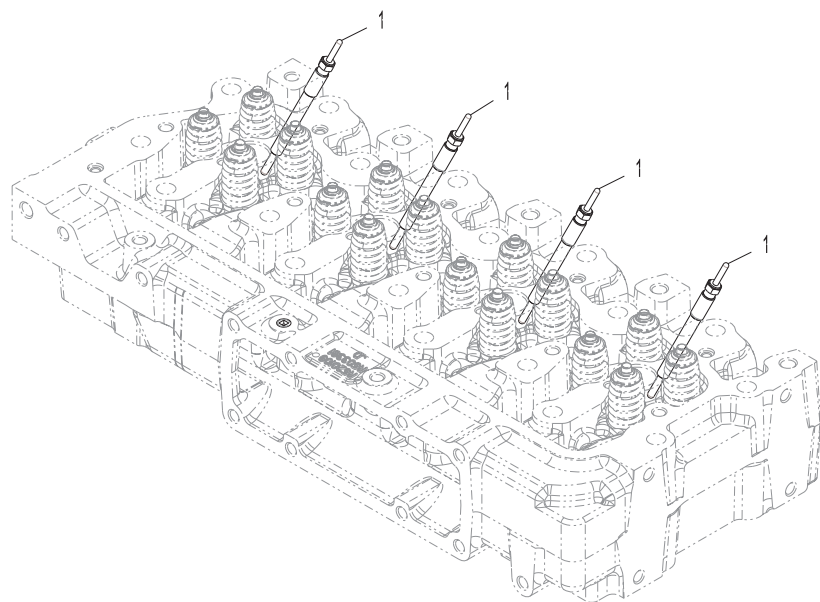


6775_RE554096_PCD

Engine Sensors

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE519144	2	Crankshaft position sensor	-
2	51M7044	2	O-ring	-
3	R517471	1	Crankshaft timing wheel	-
4	RE522794	1	Fuel pressure 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	-
10	RE167207	1	Engine oil pressure sensor	-

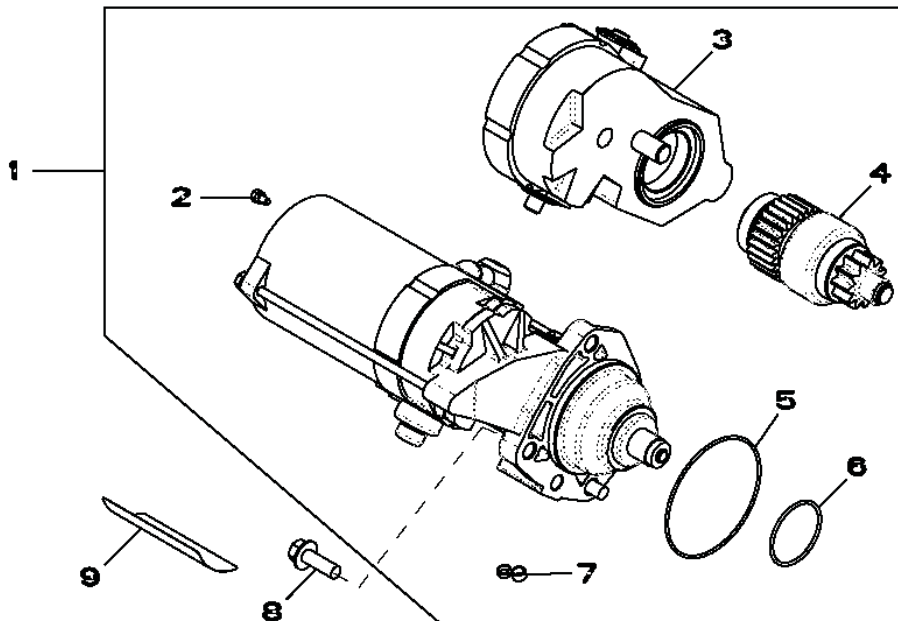
Starting Aid



4357_RE554418_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE504580	4	Glow plug	-

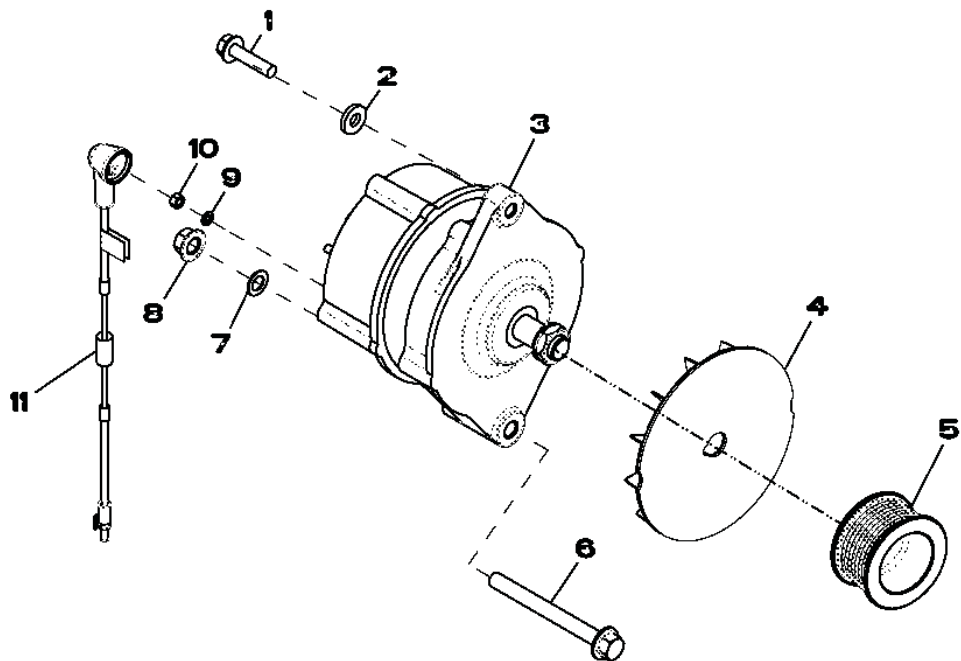
Starter Motor



RE70964PCDE02

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	RE70957	1	Motor	-
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	1146102	1	Label	-

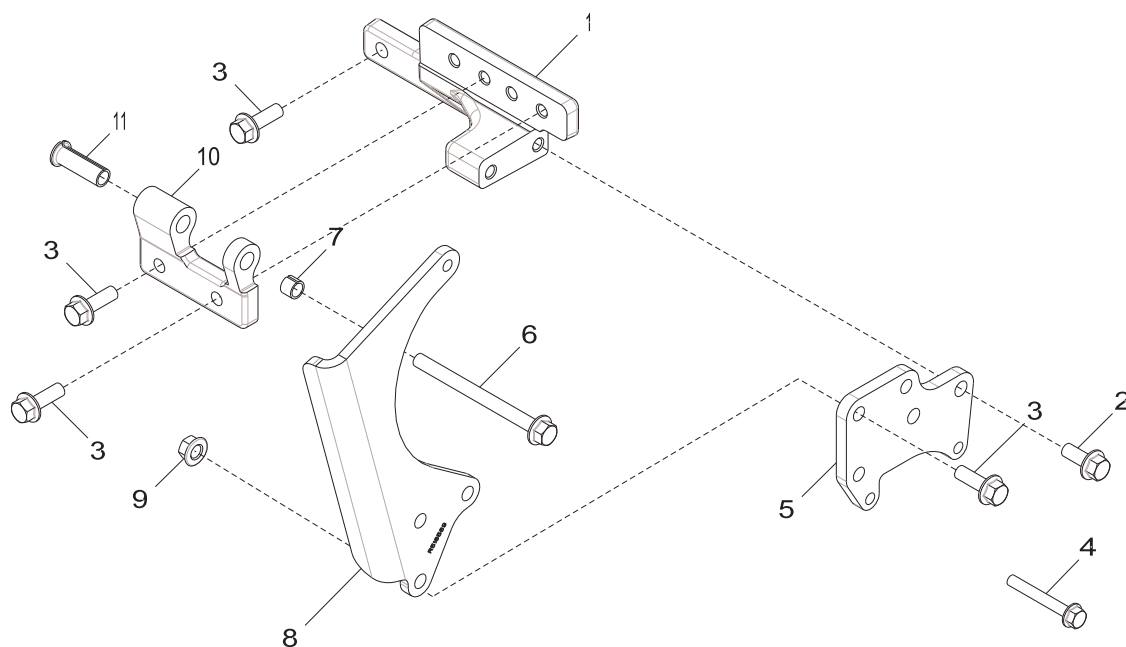
Alternator



RE 509779PCDE03

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M8291	1	Screw (M8 x 35)	-
2	R501065	1	Washer	-
3	AT173624	1	Alternator (12V - 65 Amp)	-
	RE533516	1	Alternator (12V - 75 Amp)	-
4	T158584	1	Fan	use with AT173624
	R505711	1	Fan	use with RE533516
5	RE501486	1	Pulley	use with AT173624
	R501486	1	Pulley	use with RE533516
6	19M7812	1	Screw (M10 x 100)	-
7	R64525	1	Thrust washer	-
8	14M7296	1	Flange nut (M10)	-
9	12M7011	1	Lock washer	-
10	14M7297	1	Nut (M5)	-
11	RE505489	1	Wiring harness	-
	H144095	1	Capacitor (not pictured)	use with AT173624
	RE533941	1	Capacitor (not pictured)	use with RE533516
	H144094	1	Voltage regulator	use with AT173624
	RE567824	1	Voltage regulator	use with RE533516

Alternator Brackets

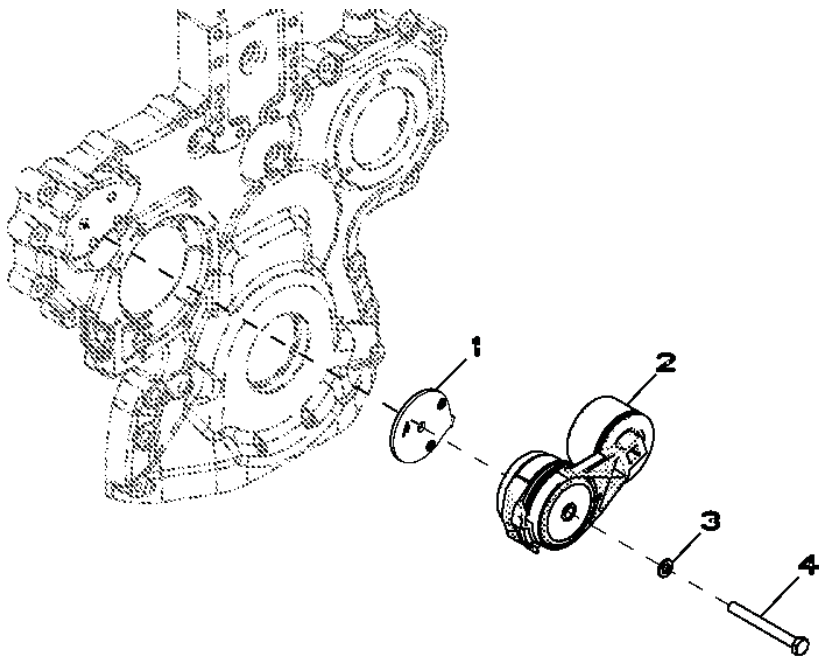


6257_RE517275_PCD

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

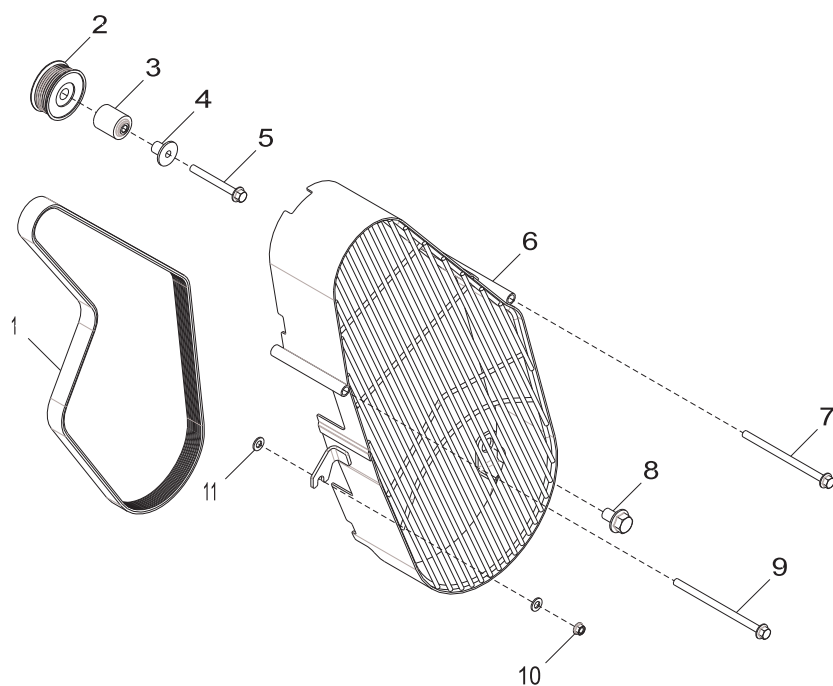
RE59701PCDD03 A.1



RE59701PCDD03

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	R518210	1	Spacer	--
2	RE518097	1	Belt tensioner	--
3	24M7106	1	Washer (M10)	--
4	19M8183	1	Cap screw (M10)	--

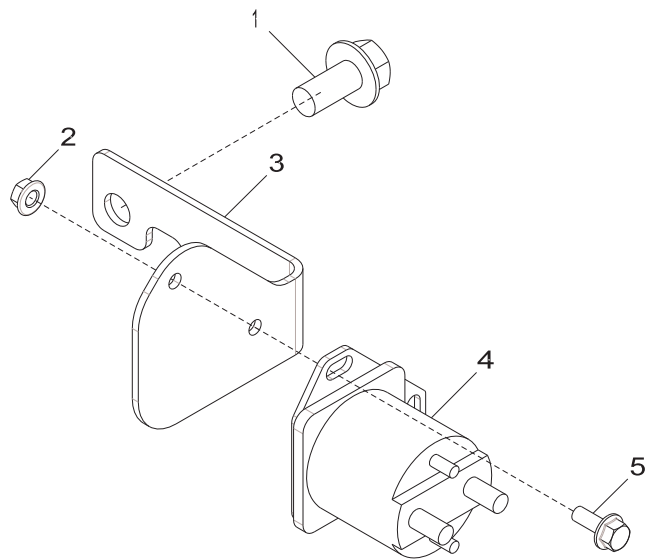
Fan Belt



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	RE556260	1	Guard	--
7	19M8952	1	Screw (M10 x 160)	--
8	19M8468	1	Screw (M10 x 25)	--
9	19M8598	1	Screw (M10 x 170)	--
10	14M7298	1	Flange nut (M8)	--
11	24M7028	2	Washer	--

Starter Relay



917W_RE541570_PCD

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	19M7786	2	Screw (M12 x 25)	--
2	14M7303	2	Flange nut (M6)	--
3	R532134	1	Bracket	--
4	AL153172	1	Relay	--
5	19M7775	2	Screw (M6 x 16)	--

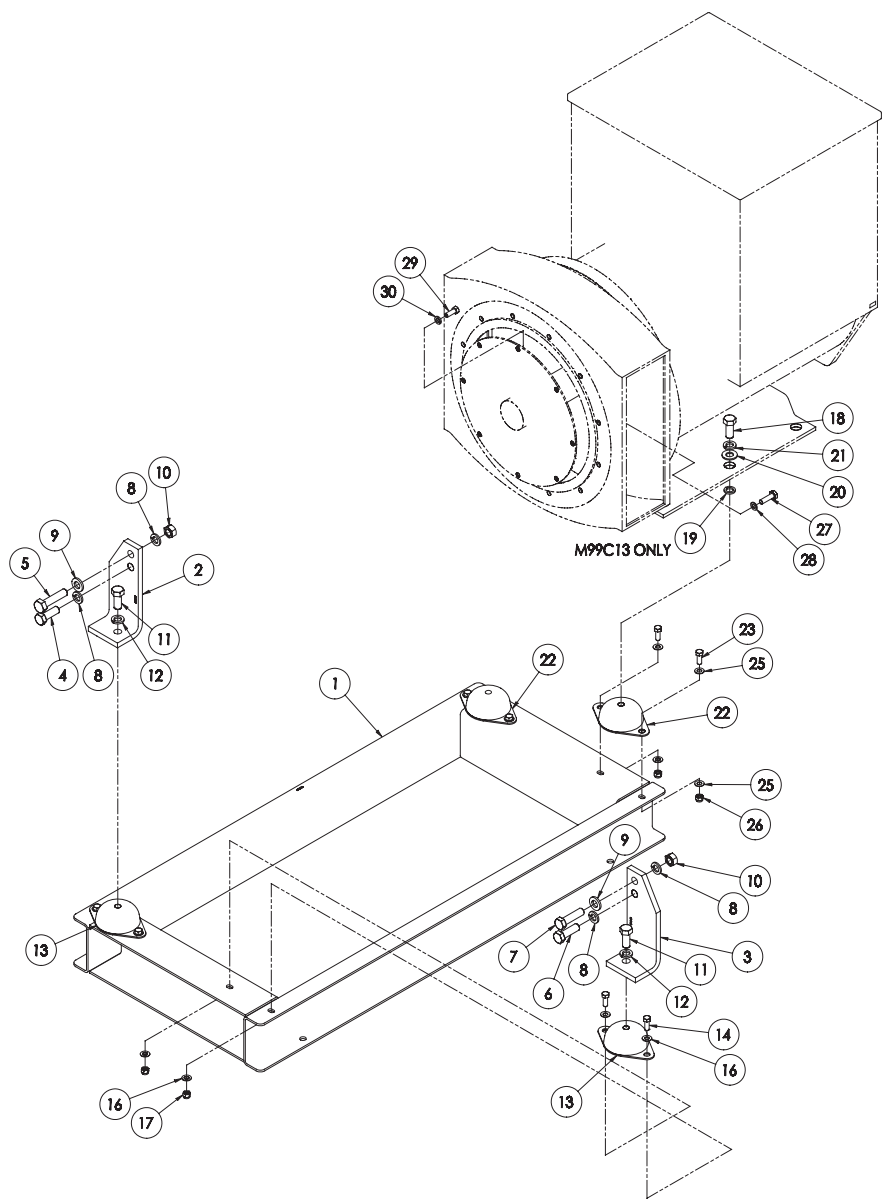
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GROUP 6 – GASKETS
Engine Overhaul Gasket Set (Includes all keys)

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	-

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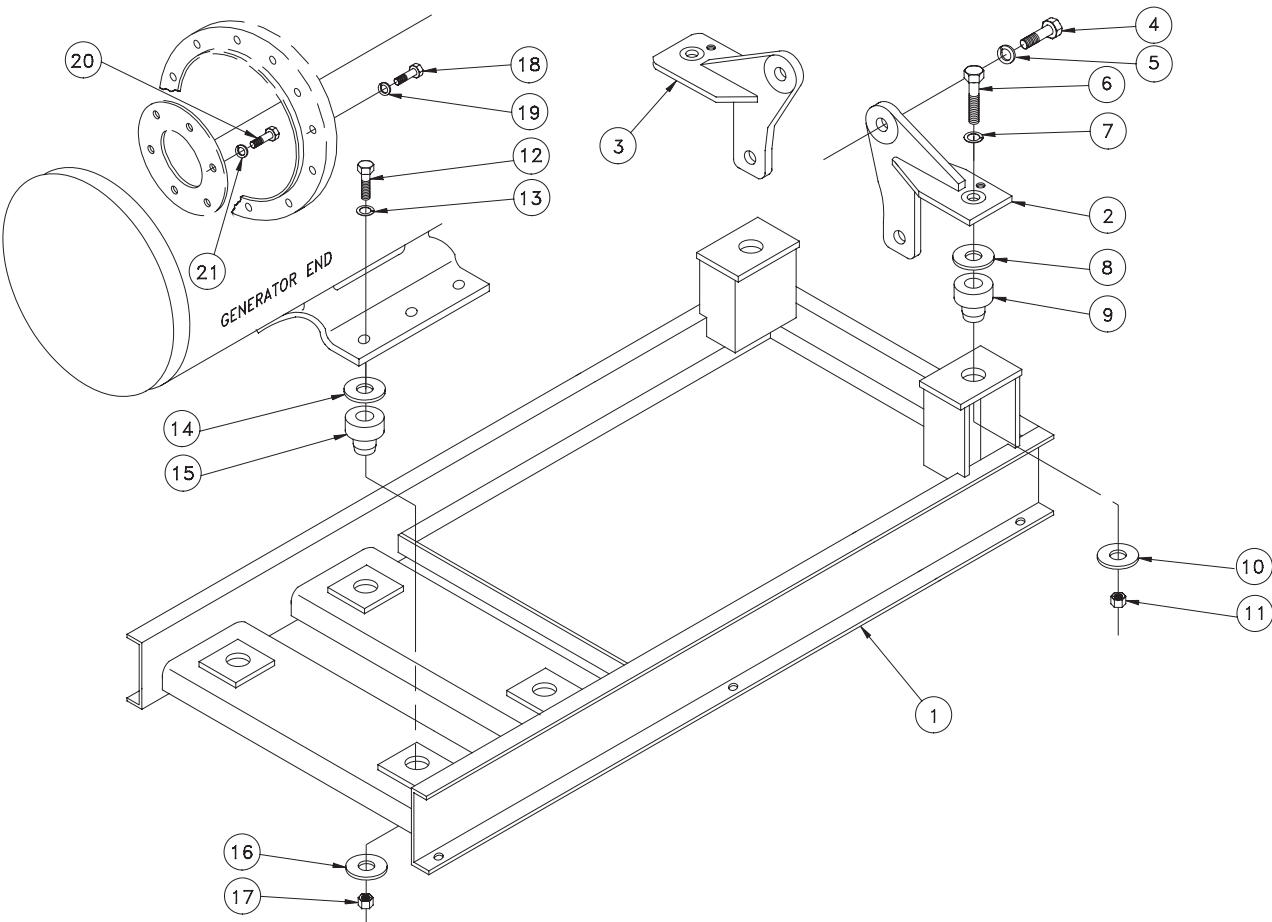
Steel Base Frame Assembly - Standard Units



Steel Base Frame Assembly - Standard Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-89427	1	Base Frame, Steel TTG Style Mounts	-
2	23-89417	1	Bracket, Front Engine Mtg, R.H.	-
3	23-89418	1	Bracket, Front Engine Mtg, L.H.	-
4	12-01508	1	Cap Screw, Hex Head M16 x 2.0 x 45mm	-
5	12-01512	1	Cap Screw, Hex Head M16 x 2.0 x 70mm Grade 8.8	-
6	12-01503	1	Cap Screw, Hex Head M16 x 2.0 x 60mm	-
7	12-01504	1	Cap Screw, 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	Cap Screw, 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	Cap Screw, Hex Had 3/8-16 x 1"	-
16	15-00321	8	Flat Washer 3/8" SAE Zinc Plated ANSI Type A Narrow	-
17	14-00312	4	Hex Nut, Nylock 3/8-16	-
18	12-00913	2	Cap Screw, 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	Cap Screw, Hex Head 3/8-16 x 1"	-
25	15-00321	8	Flat Washer 3/8" SAE Zinc Plated ANSI Type A Narrow	-
26	14-00312	4	Hex Nut, Nylock 3/8"-16	-
27	12-00802	12	Cap Screw, Hex Head M10 x 1.5 x 35mm	-
28	15-00802	12	Lock Washer, Helical M10	-
29	12-00332	8	Cap Screw, Hex Head 3/8-16 x a" Grade 8 Plated	-
30	15-00307	8	Flat Washer 3/8" / M10 Hardened	-

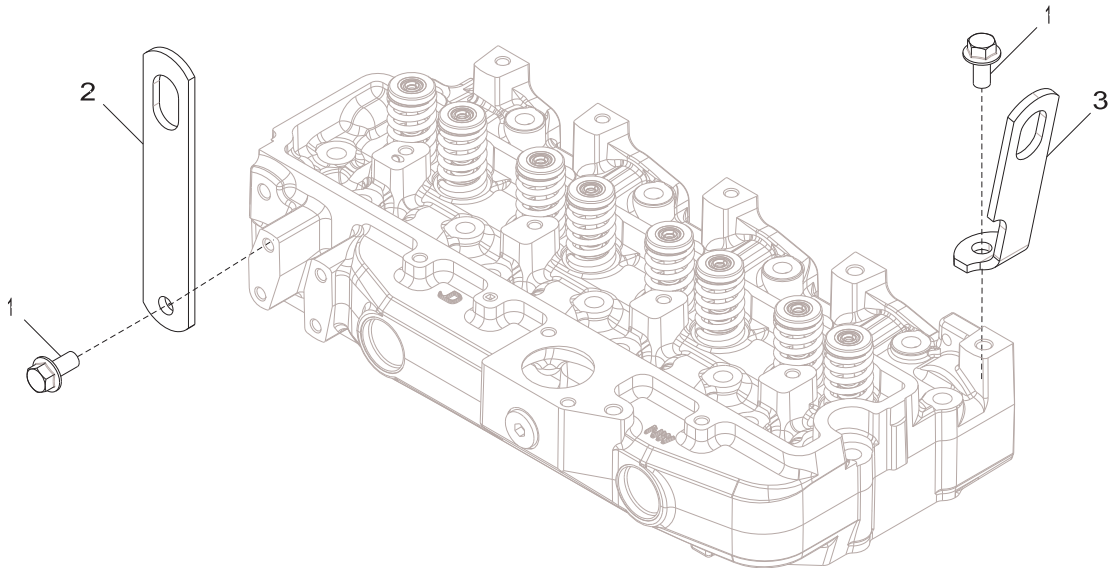
Steel Base Frame Assembly - Units with PTO



Steel Base Frame Assembly - Units with PTO

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-89424	1	Base Frame, Steel Centerbonded MTG	-
2	23-81001	1	Bracket, Front Engine Mtg, R.H.	-
3	23-81002	1	Bracket, Front Engine Mtg, L.H.	-
4	12-04803	4	Cap Screw, Hex Head M16 x 2.0 x 40mm	-
5	15-01000	4	Lock Washer, Helitical M16	-
6	12-00034	2	Cap Screw, Hex Head 5/8-11 x 3-1/2"	-
7	15-00903	2	Flat Washer 5/8" SAE Hardened	-
8	15-00015	2	Head Washer 2.75" x 0.64" x 0.125"	-
9	33-81008	2	Mount, Centerbonded 650 lbs	-
10	15-00025	2	Tail Washer 2.50" x 0.64" x 0.125"	-
11	14-00912	2	Hex Nut, Nylock 5/8-11	-
12	12-00034	4	Cap Screw, Hex Head 5/8-11 x 3-1/2"	-
13	15-01330	4	Flat Washer 5/8" SAE Zinc Plated ANSI Type A Narrow	-
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 2.50" x 0.64" x 0.125"	-
17	14-00912	4	Hex Nut, Nylock 5/8-11	-
18	12-00814	12	Cap Screw, Hex Head M10 x 1.5 x 35 mm	-
19	15-00802	12	Lock Washer, Helitical M10	-
20	12-00332	8	Cap Screw, Hex Head 3/8-16 x 1" Grade 8 Plated	-
21	15-00307	8	Flat washer 3/8" / M10 Hardened	-

Lifting Eyes



9801_RE53353_PCD

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

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ABS Fuel Lines

Drawing not available at time of publication.
Please consult factory.

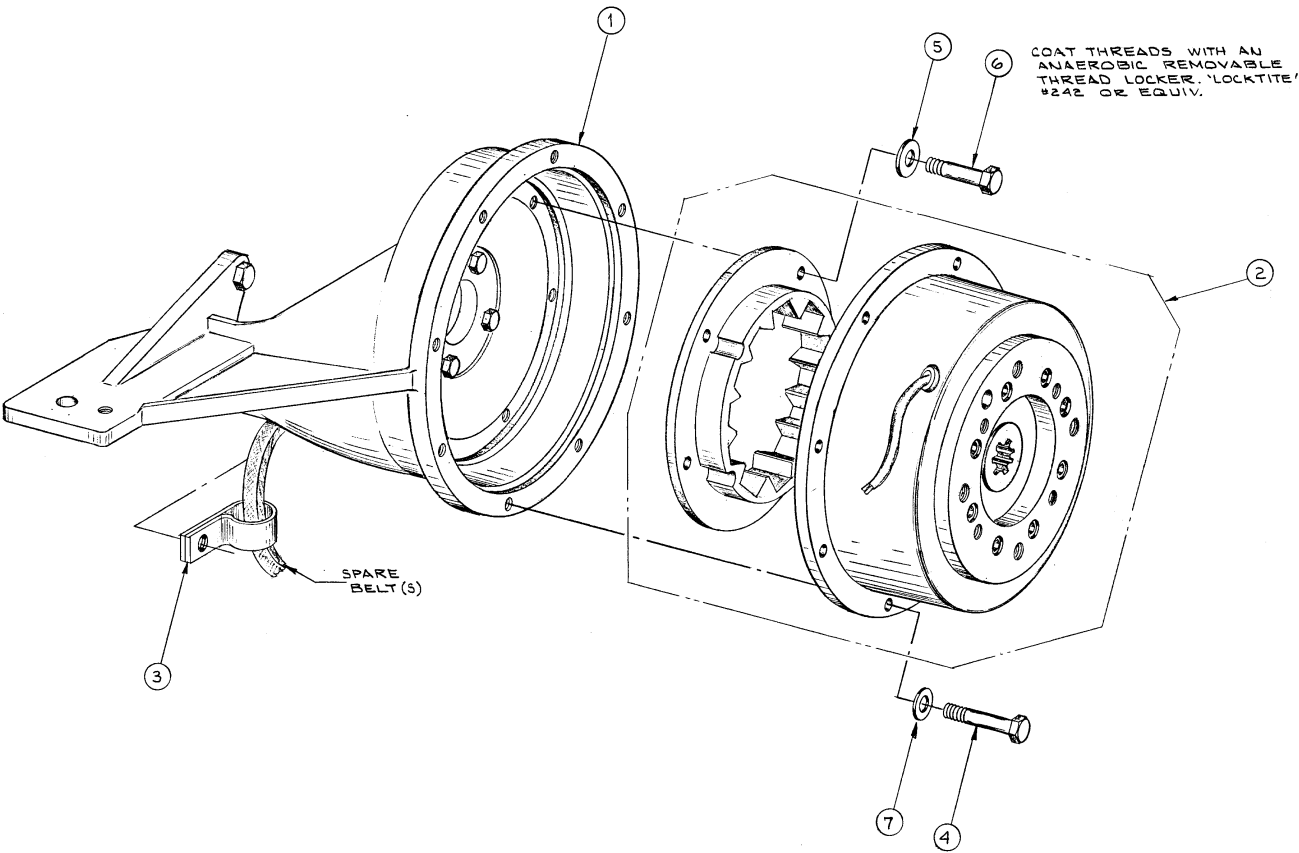
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51098	1	Manifold, Fuel Line Connection 3/8 NPT	-
2	12-01131	2	Cap Screw, Hex Head M6 x 1.0 x 20 mm	-
3	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
4	21-00606	1	M. Elbow 90, Steel 3/8NPT x 3/8-37T	-
5	18-59405	1	Hose Assembly 5/16"ID x 24" 3/8FMS x 3/8FMS	-
6	21-59508	1	M. Connector, Steel 3/8-37T x M12 x 1/5	-
7	21-52213	1	Elbow 90, Swivel, Steel 3/8-37T	-
8	21-51601	1	M Elbow 90, Steel 3/8NPT x 1/4-37T	-
9	18-59412	1	Hose Assembly 3/16"ID x 43" 1/4FMS x 1/4FMS	-
10	21-59507	1	M. Elbow 90, Steel M10 x 1.0 x 1/4-37T	-
11	21-45401	1	Spacer, BP. 3/8 SCHD 80 x 48 mm	-
12	12-80049	1	Cap Screw, Hex Head, Flanged M10 x 1.5 x 80mm	-
13	19-43201	1	Adelle Clamp 1/2"ID x 3/8"STUD	-
14	14-80811	1	Hex Nut, Flanged M10 x 1.5	-
15	21-31003	2	Plug, Hex Head, Brass 3/8 NPT	-

Oil Pressue Manifold

Drawing not available at time of publication.
Please consult factory.

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	-

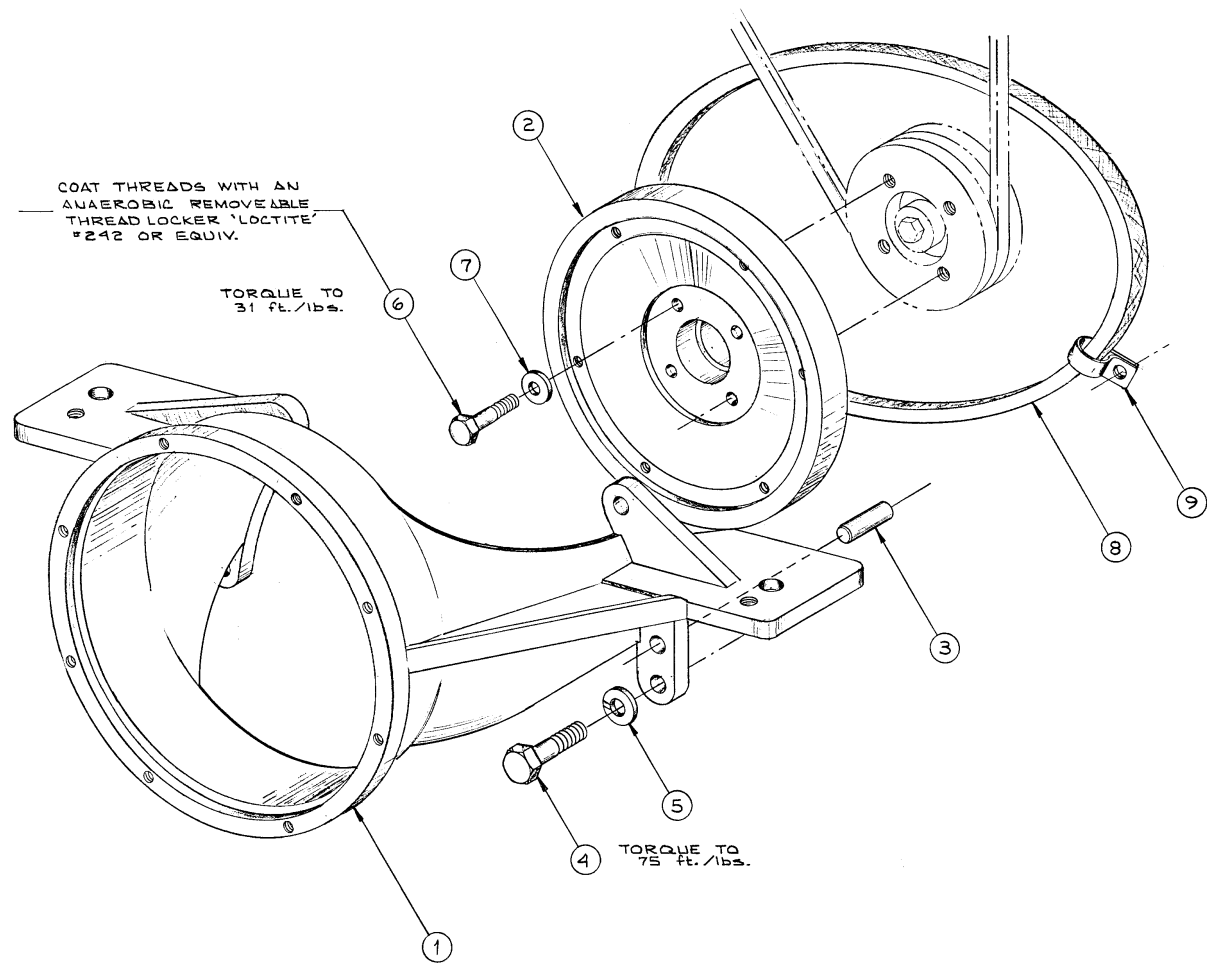
990 PTO/Electric Clutch 700 Lbs FT MMC C-Spline 24V



990 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	Cap Screw, 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	Cap Screw, Hex Head 3/8-16 x 1"	-
7	15-00307	8	Flat Washer, 3/8" / M10 Hardened	-

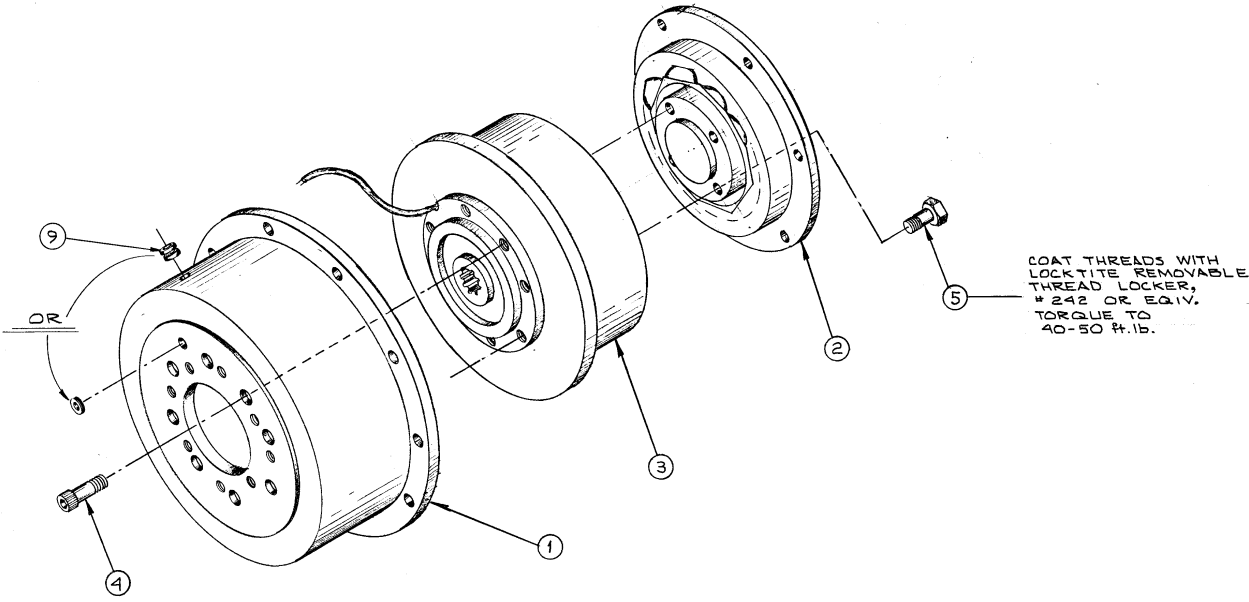
990 PTO Adapter Parts SAE#5/#8



990 PTO Adapter Parts SAE#5/#8

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	23-71001	1	Bracket, Front PTO MTG SAE#5	-
2	34-69401	1	PTO Carrier SAE#8	-
3	32-81001	2	Dowel Pin 5/8"OD x 1-1/2"	-
4	12-04803	4	Cap Screw, Hex Head M16 x 2.0 x 40mm	-
5	15-01000	4	Lock Washer, Helical M16	-
6	19M8162	6	Cap Screw, Hex Head Flanged M10 x 1.5 x 40mm	-

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



990 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	Cap Screw, Hex Head 3/8-16 x 3/4"	-
5	12-50412	4	Cap Screw, 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	-



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