

P753-2

For Models: M753W2 and NL753W2

PARTS MANUAL

Marine Generators | Marine Diesel Engines | Land-Based Generators



LUGGER





— CALIFORNIA —
Proposition 65 Warning:

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



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PARTS CATALOG

for Models

M753w2 and NL753w2

Please read thoroughly before attempting to use this manual:

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Proprietary Information

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Model Designation

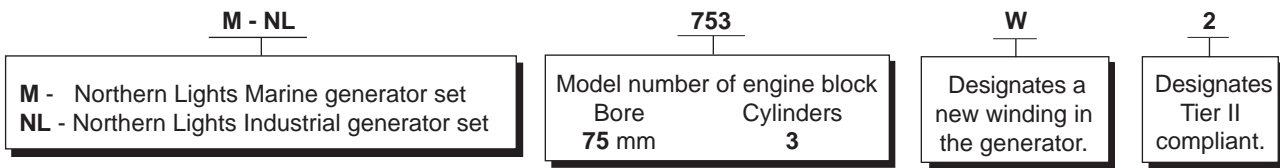
MODELS INCLUDED

This manual covers the operating instructions for:

M753W2 and NL753W2.

Model Numbers

Model numbers give the unit's application, block model, aspiration, and RPM:



M753W2 = Northern Lights marine diesel generator set with an 753 engine and a PX-308K2 generator with a new winding, Tier II.

NL753W2 = Northern Lights industrial diesel generator set with an 753 engine and a PX-308K2 generator with a new winding, Tier II.

Serial Numbers

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 the drawings below.



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.

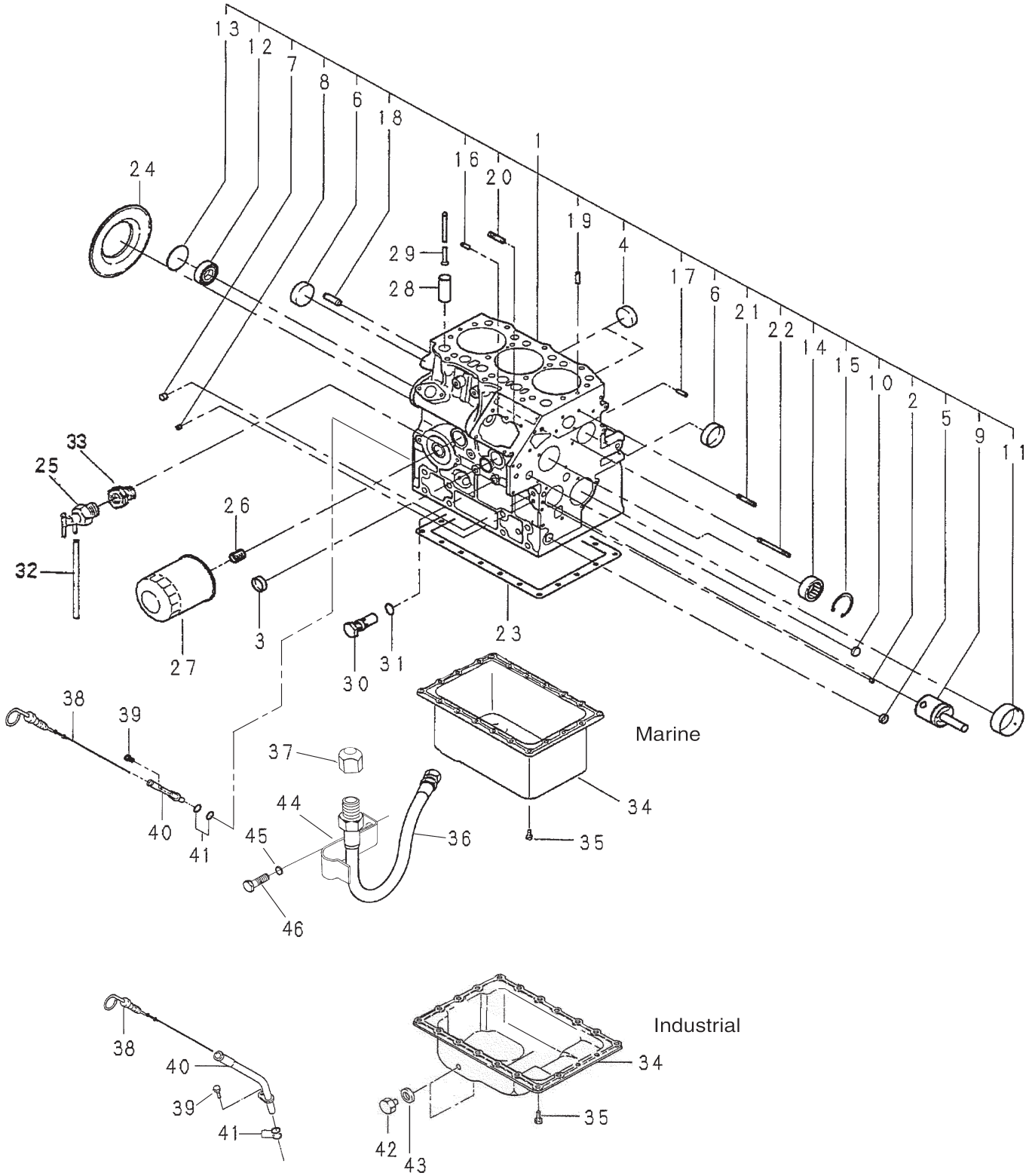
KEY	PART NUMBER	QTY.	DESCRIPTION	SERIALNUMBER
0	185046210	1	Alternator Assembly	-
1	185446219	1	Flywheel, complete	-
2	185446217	1	Plate, complete	-
3	185716200	1	Plate	-
4	185446218	1	Stator, complete	-
5	040126210	2	Bearing	-
6	020210010	1	Nut	-
7	027100010	1	Spring washer	-
8	026100010	1	Washer	-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

REFERENCES:

- Grouping section title.
- Model designation of equipment that uses parts listed on this page.
- Title and description of assembly.
- Drawing numbers that correspond to key column numbers for parts identification.
- Key column for locating parts shown on drawing.
- Part number.
- Quantity of parts used.
- Description of each component part.
- Serial number of unit the part fits.
- Assembly or kit designated by •• or •.
- Grouping index number.
- Page number within the grouping index.
- Manual title.
- Page publication date.

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

Cylinder Block Assembly

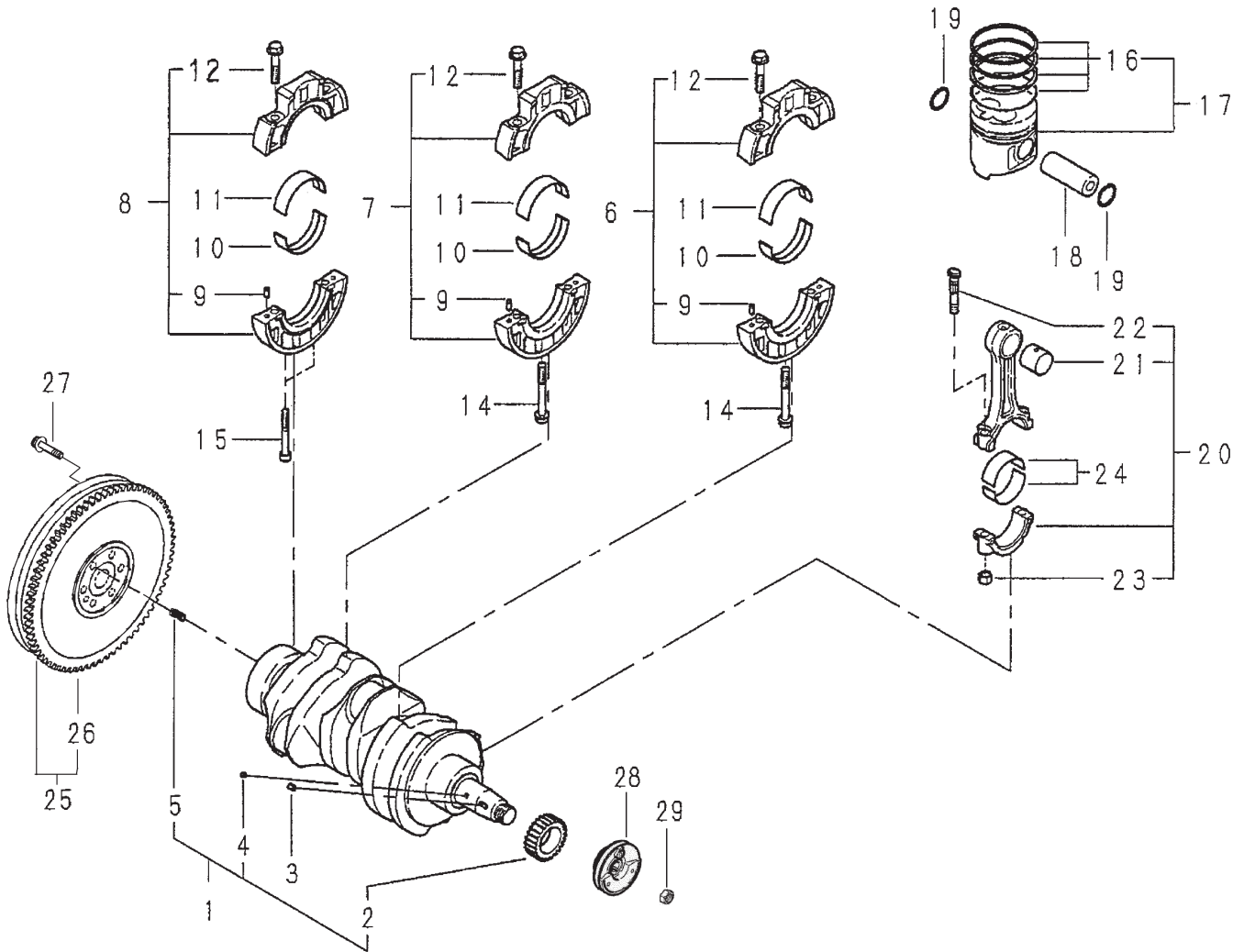


753W2cylblock

Cylinder Block Assembly

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110107461	1	Cylinder Block Assembly - Marine (includes keys #2- 21)	-
	110107451	1	Cylinder Block Assembly - Industrial (includes keys #2- 21)	-
2	198466050	1	Expansion Plug	-
3	064210025	1	Expansion Plug, 25 mm	-
4	064210035	2	Expansion Plug, 35 mm	-
5	064210015	1	Expansion Plug, 15 mm	-
6	064210040	2	Expansion Plug, 40 mm	-
7	198466010	4	Expansion Plug	-
8	198466030	4	Expansion Plug	-
9	165296142	1	Idle Gear Shaft	-
10	198466060	1	Plug	-
11	198517081	1	Bushing, Standard	-
	198517085	1	Bushing, Undersize 0.25 mm	-
	198517088	1	Bushing, Undersize 0.50 mm	-
12	040306203	1	Bearing	-
13	064100045	1	Expansion Plug, 45 mm	-
14	042303015	1	Needle Bearing	-
15	036509005	1	Snap Ring	-
16	030500512	2	Dowel Pin	-
17	030500616	2	Dowel Pin	-
18	030501025	2	Dowel Pin	-
19	030309005	2	Spring Pin	-
20	012110620	2	Stud Bolt	-
21	012110635	1	Stud Bolt	-
22	012110660	1	Stud Bolt	-
23	110996800	1	Gasket	-
24	198636080	1	Oil Seal	-
25	198736050	1	Drain Cock	-
26	140546020	1	Filter Joint	-
27	24-02001	1	Oil Filter	-
28	120116100	6	Tappet	-
29	120456201	6	Push Rod Set	-
30	140036220	1	Relief Valve Assembly	-
31	052109078	1	O-ring	-
32	068115200	1	Tube	-
33	198486770	1	Bushing	-
34	110708620	1	Oil Pan (Marine)	-
	110707820	1	Oil Pan (Industrial)	-
35	010109235	20	Bolt	-
36	18-72004	1	Oil Drain Hose	-
37	21-00003	1	Cap	-
38	198416270	1	Dipstick	-
39	011310612	1	Bolt	-
40	110756490	1	Dipstick Tube (Marine)	-
	110756070	1	Dipstick Tube (Industrial)	-
41	052109113	2	O-ring	-
42	010411212	2	Plug (Industrial only)	-
43	025100012	2	Seal Washer (Industrial only)	-
44	23-78601	1	Bracket	-
45	15-00302	1	Lock Washer 3/8	-
46	12-00311	1	Capscrew, Hex Head 3/8-16 x 3/4"	-

Crankshaft Assembly

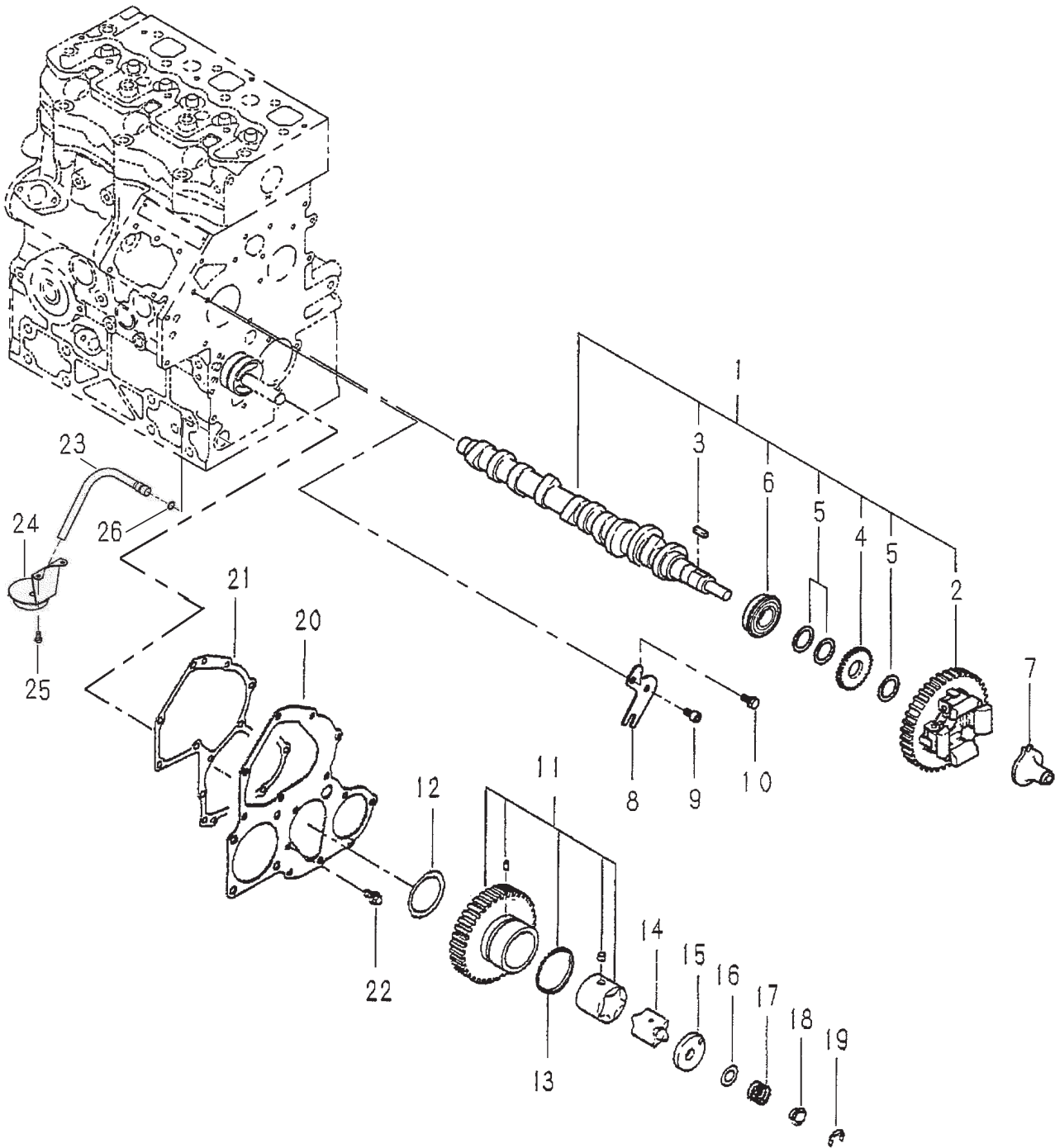


753W2crankshaft

Crankshaft Assembly

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	115256600	1	Crankshaft Assembly (includes keys #2 - 5)	-
2	115276180	1	Gear	-
3	034100508	1	Key	-
4	030509020	1	Dowel Pin	-
5	030300816	1	Spring Pin	-
6	110156111	1	Bearing Holder Assembly (includes keys #9-12)	-
7	110156121	1	Bearing Holder Assembly (includes keys #9-12)	-
8	110156330	1	Bearing Holder Assembly (includes keys #9-12)	-
9	030500612	6	Dowel Pin	-
10	198517112	3	Bearing, Standard Lower	-
	198517116	3	Bearing, Undersize 0.25 mm Lower	-
	198517119	3	Bearing, Undersize 0.50 mm Lower	-
11	198517103	3	Bearing, Standard Upper	-
	198517107	3	Bearing, Undersize 0.25 mm Upper	-
	198517630	3	Bearing, Undersize 0.50 mm Upper	-
12	010810840	6	Bolt	-
14	011510850	2	Bolt	-
15	010700845	2	Bolt	-
16	115107980	3	Piston Ring Kit, Standard	-
17	115017590	3	Piston Kit, Standard (includes key #16)	-
18	115326231	3	Piston Pin	-
19	036500021	6	Snap Ring	-
20	115026191	3	Connecting Rod Assembly (includes keys #21-23)	-
21	198517125	3	Bush	-
22	115176150	6	Connecting Rod Bolt	-
23	020109075	6	Nut	-
24	198517132	6	Rod Bearing, Standard	-
	198517136	6	Rod Bearing, Undersize 0.25	-
	198517139	6	Rod Bearing, Undersize 0.50	-
25	115356720	1	Flywheel Assembly (includes key #26)	-
26	115376130	1	Ring Gear (96 Teeth)	-
27	010109340	6	Bolt	-
28	115396650	1	Pulley (Marine)	-
	115396552	1	Pulley (Industrial)	-
29	020800018	1	Nut	-

Camshaft and Oil Pump

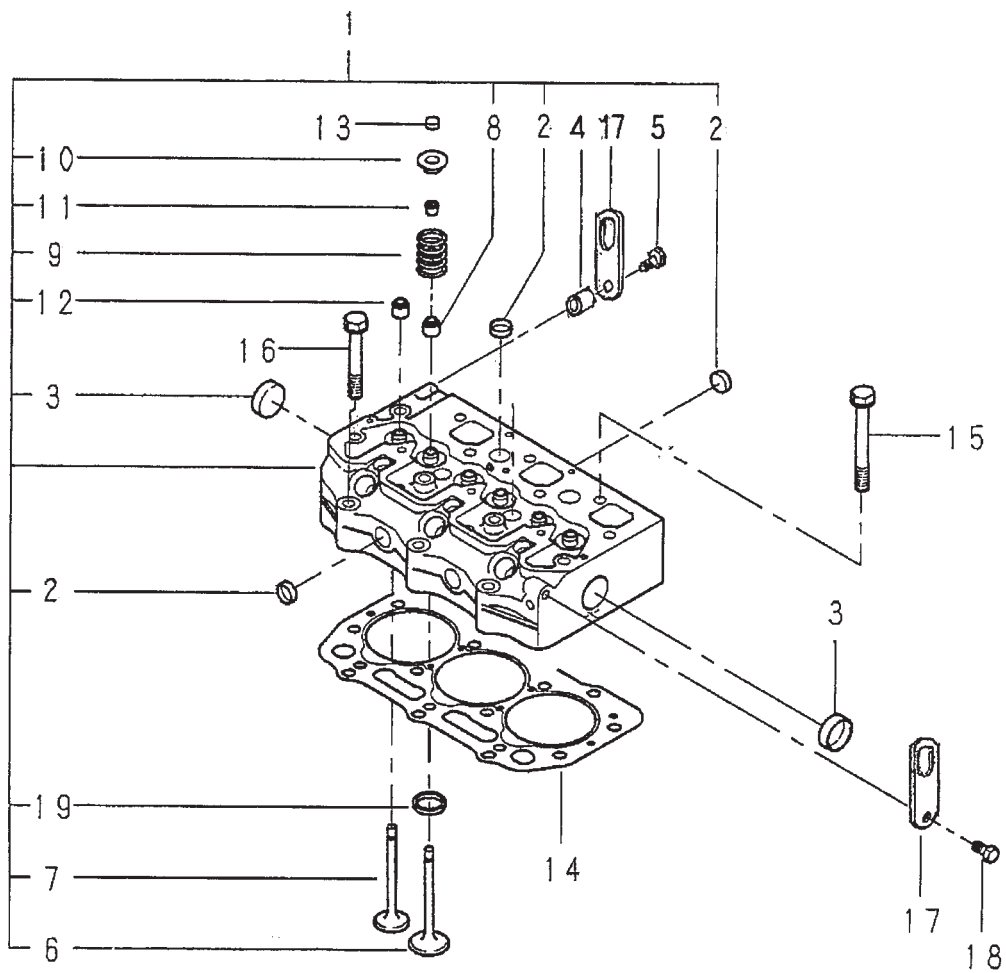


753W2camshaft,oilpump

Camshaft and Oil Pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	120026830	1	Camshaft Assembly (includes keys #2 - 6)	-
2	120016021	1	Cam Gear	-
3	034100508	1	Key	-
4	120736081	1	Gear	-
5	199216230	3	Spacer	-
6	040109059	1	Bearing	-
7	125256120	1	Slider Assembly	-
8	199566651	1	Plate	-
9	010700610	1	Bolt	-
10	011310612	1	Bolt	-
11	165026100	1	Idle Gear Assembly (includes key #13)	-
12	199266180	1	Thrust Washer	-
13	198216821	1	Spring	-
14	140166130	1	Rotor	-
15	140116140	1	Oil Pump Cover	-
16	199286150	1	Shim, t=0.10	-
	199286160	1	Shim, t=0.15	-
	199286170	1	Shim, t=0.20	-
	199286180	1	Shim, t=0.50	-
17	198216720	1	Spring	-
18	199236540	1	Collar	-
19	036800010	1	Snap Ring	-
20	165166240	1	Front Plate (Marine)	-
	165166191	1	Front Plate (Industrial)	-
21	165996520	1	Gasket	-
22	011310612	3	Bolt	-
23	140986830	1	Oil Hose (Marine)	-
	140986480	1	Oil Hose (Industrial)	-
24	140406500	1	Oil Pick-up (Marine)	-
	140406270	1	Oil Pick-up (Industrial)	-
25	011310612	2	Bolt	-
26	052109076	1	O-ring	-

Cylinder Head

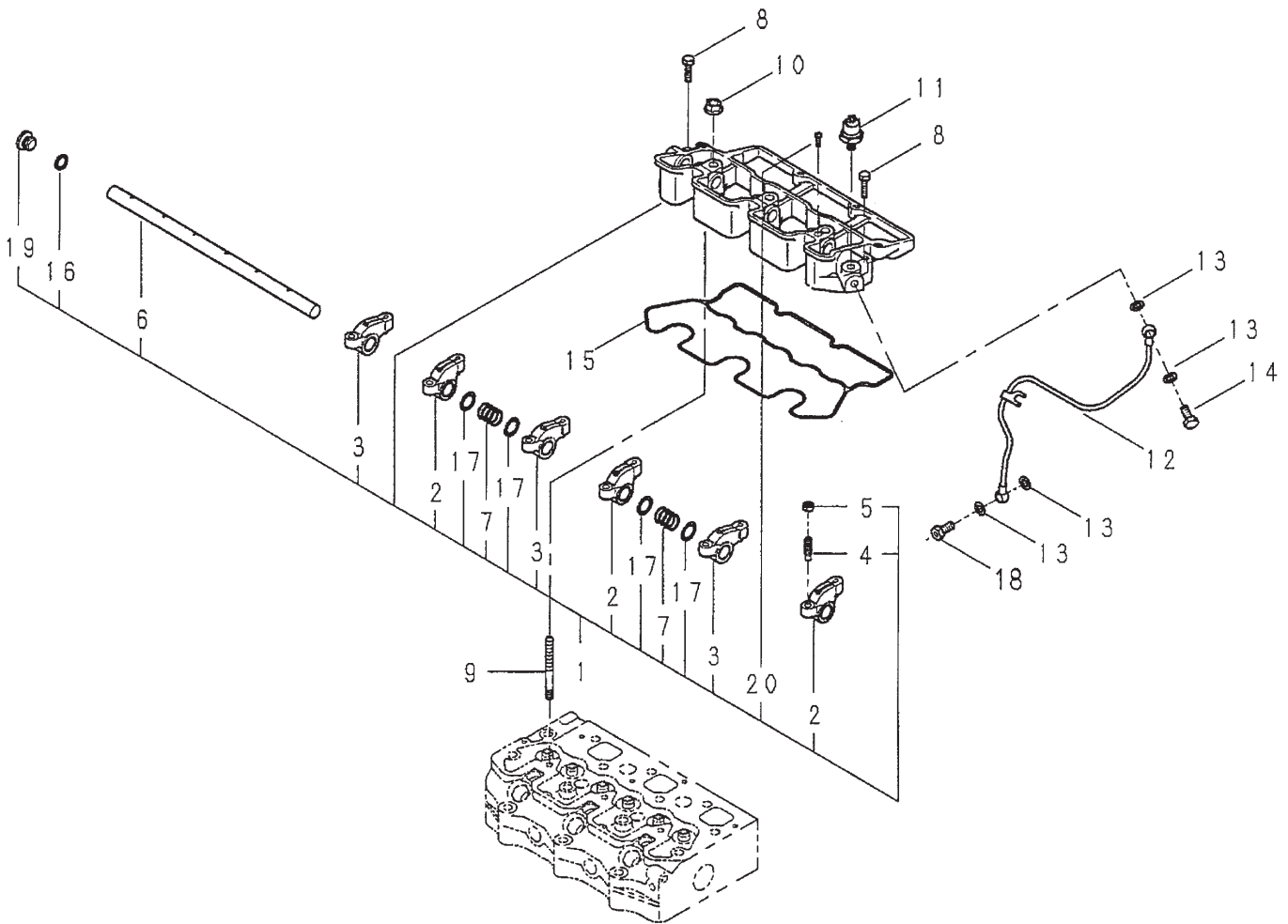


753W2cylhead

Cylinder Head

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	111010690	1	Cylinder Head Assembly (Marine, includes keys #2 -3, 6-13, & 19)	-
	111010730	1	Cylinder Head Assembly (Industrial, includes keys #2 -3, 6-13, & 19)	-
2	064210018	8	Expansion Plug	-
3	064210030	2	Expansion Plug	-
4	199236680	1	Collar (Marine)	-
5	011510830	1	Bolt (Marine)	-
6	120166360	3	Intake Valve	-
7	120176250	3	Exhaust Valve	-
8	120406070	3	Valve Guide Seal - Intake	-
9	198216700	6	Spring	-
10	120186080	6	Retainer	-
11	120226070	12	Cotter	-
12	120406050	3	Valve Guide Seal - Exhaust	-
13	120216040	6	Cap	-
14	111147630	1	Head Gasket, t=1.2 mm	-
	111147640	1	Head Gasket, t=1.3 mm	-
15	111136440	11	Head Bolt	-
16	111136450	3	Head Bolt	-
17	195816650	2	Lifting Eye (Marine)	-
	195816540	1	Lifting Eye (Industrial)	-
18	011510820	1	Bolt (Marine)	-
	011510816	1	Bolt (Industrial)	-
19	110136300	3	Valve Seat	-

Rocker Arm Assembly



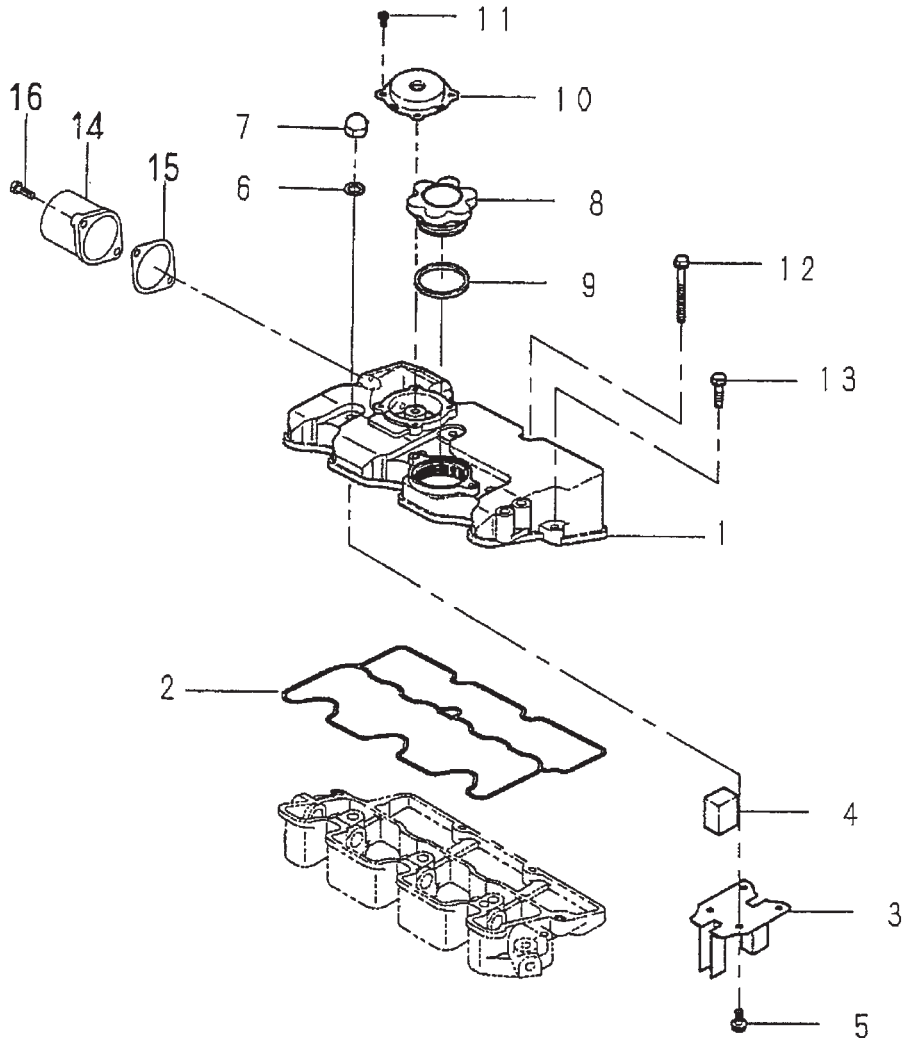
753W2rockerarm

Rocker Arm Assembly

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	120037130	1	Rocker Arm Assembly (Marine, includes keys #2-7, 16, 17, 19, 20)	-
	120037170	1	Rocker Arm Assembly (Marine, includes keys #2-7, 16, 17, 19, 20)	-
2	120356200	3	Rocker Arm - Intake	-
3	120356210	3	Rocker Arm - Exhaust	-
4	199486220	6	Screw	-
5	020109076	6	Nut	-
6	120316300	1	Rocker Arm Shaft	-
7	198216780	2	Spring	-
8	011310625	2	Bolt	-
9	012109177	3	Stud Bolt	-
10	023100008	3	Nut	-
11	185246011	1	Oil Pressure Switch (see Electrical)	-
12	140607400	1	Oil Pipe	-
13	140996260	4	Gasket	-
14	198486780	1	Banjo Bolt	-
15	120996150	1	Gasket	-
16	052100120	1	O-ring	-
17	199280280	4	Shim	-
18	198487590	1	Banjo Bolt (tapped 1/8 NPT)	-
19	198436150	1	Plug	-
20	015100410	1	Screw	-

Rocker Arm Cover

Marine

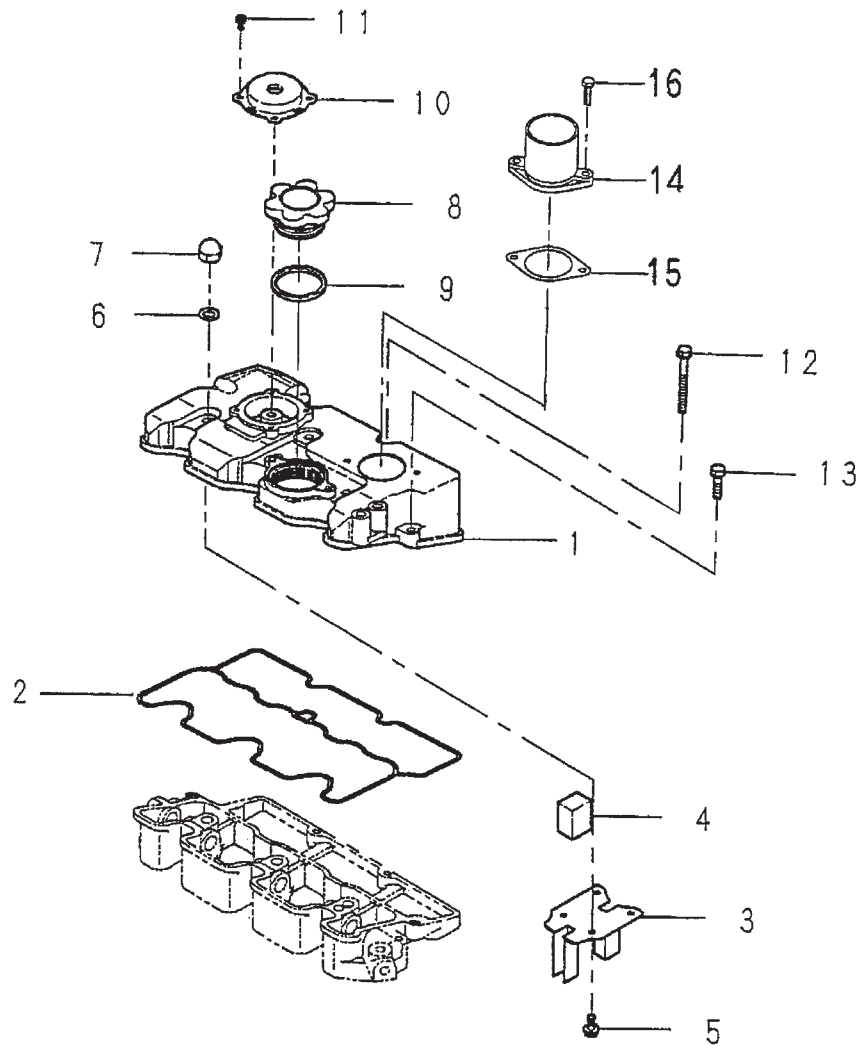


753W2rockerarmcover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	111217960	1	Rocker Arm Cover	-
2	111996420	1	Gasket	-
3	110666220	1	Baffle	-
4	110666060	1	Breather Element	-
5	015600406	4	Screw	-
6	140996260	3	Gasket	-
7	024600008	3	Cap Nut	-
8	198436010	1	Cap	-
9	052100400	1	O-ring	-
10	110566080	1	Valve, Breather	-
11	011100408	4	Bolt	-
12	011310680	3	Bolt	-
13	011310625	2	Bolt	-
14	135566610	1	Air Intake	-
15	135996750	1	Gasket	-
16	011310620	2	Bolt	-

Rocker Arm Cover

Industrial



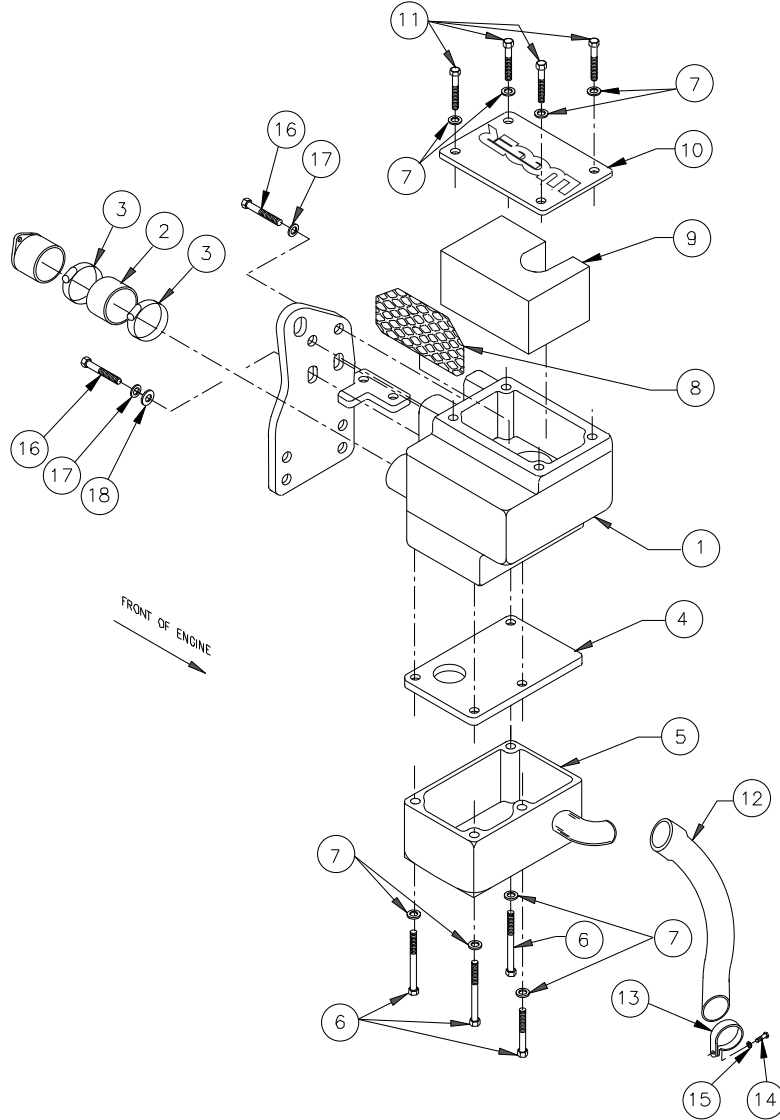
753W2rockerarmcover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	111210140	1	Rocker Arm Cover	-
2	111996420	1	Gasket	-
3	110666220	1	Baffle	-
4	110666060	1	Breather Element	-
5	015600406	4	Screw	-
6	140996260	3	Gasket	-
7	024600008	3	Cap Nut	-
8	198436010	1	Cap	-
9	052100400	1	O-ring	-
10	110566080	1	Valve, Breather	-
11	011100408	4	Bolt	-
12	011310680	3	Bolt	-
13	011310625	2	Bolt	-
14	135566630	1	Air Intake	-
15	135996750	1	Gasket	-
16	011310620	2	Bolt	-

GROUP 2 – INTAKE & EXHAUST SYSTEM

Air Filter and Housing

Marine

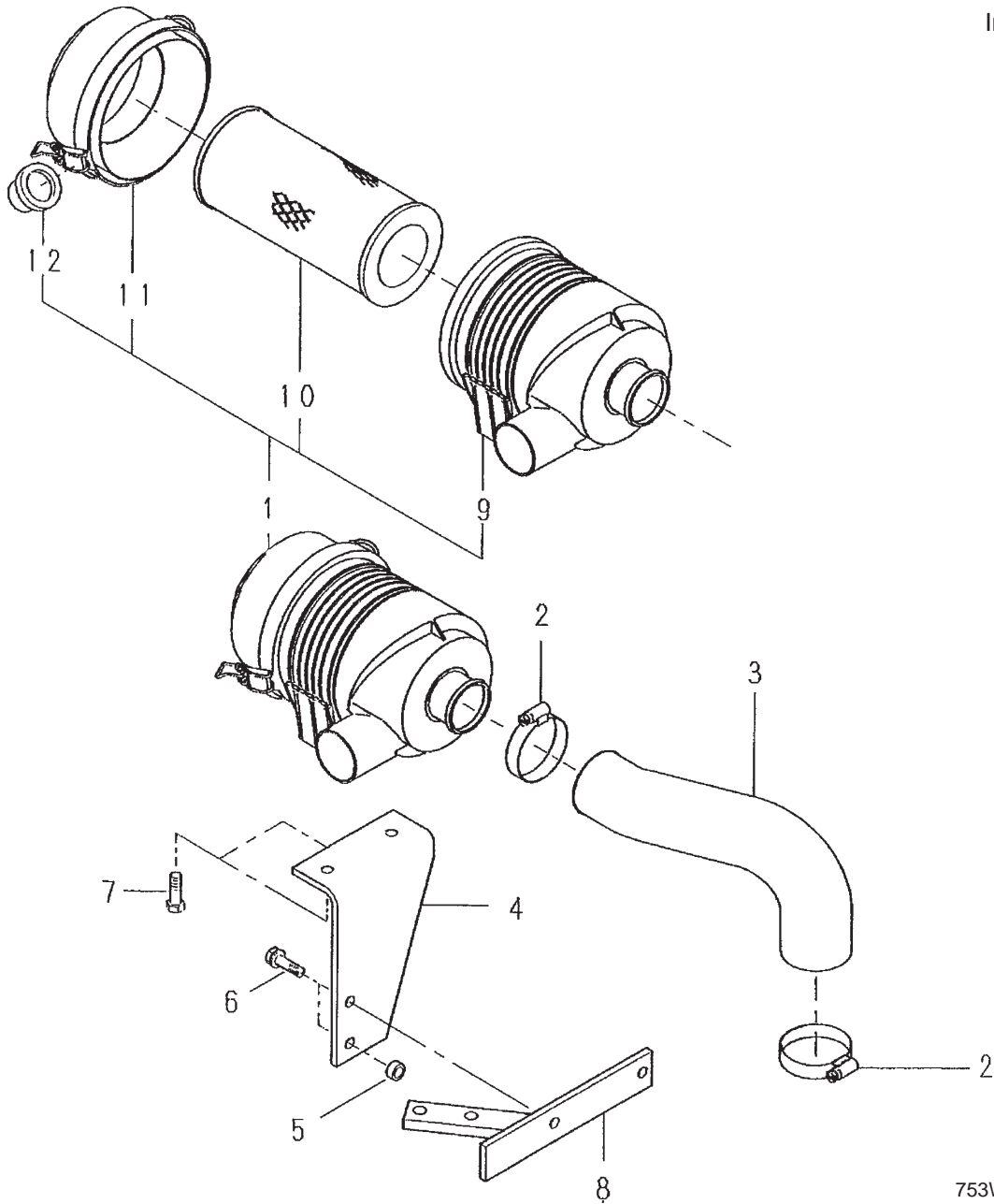


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KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	24-28200	1	Air Filter Assembly (includes keys #1-18)	-
1	10-28202	1	Air Filter Housing	-
2	18-28201	1	Hose 1- 5/8" ID x 1- 3/4" 3 Ply Silicone	-
3	19-00024	2	Hose Clamp #24	-
4	28-28601	1	Intake Silencer Plate	-
5	10-28603	1	Cover, Lower Air Intake	-
6	12-01124	4	Capscrew, Hex Head M6 x 1.0 x 50 mm	-
7	15-00008	8	Flat Washer M6	-
8	24-28601	1	Screen	-
9	24-28602	1	Air Filter Element	-
10	10-28602	1	Cover, Air Filter Housing	-
11	12-01131	4	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
12	18-28601	1	Hose, Air Intake	-
13	19-70022	1	Cushion Clamp #22	-
14	12-09751	1	Capscrew, Hex Head M8 x 1.25 x 16 mm S/S	-
15	15-00706	1	Flat Washer M8 S/S	-
16	12-00712	4	Capscrew, Hex Head M8 x 1.25 x 25 mm	-
17	15-00702	4	Lock Washer, Helical M8	-
18	15-00701	2	Flat Washer M8	-

Air Filter and Housing

Industrial

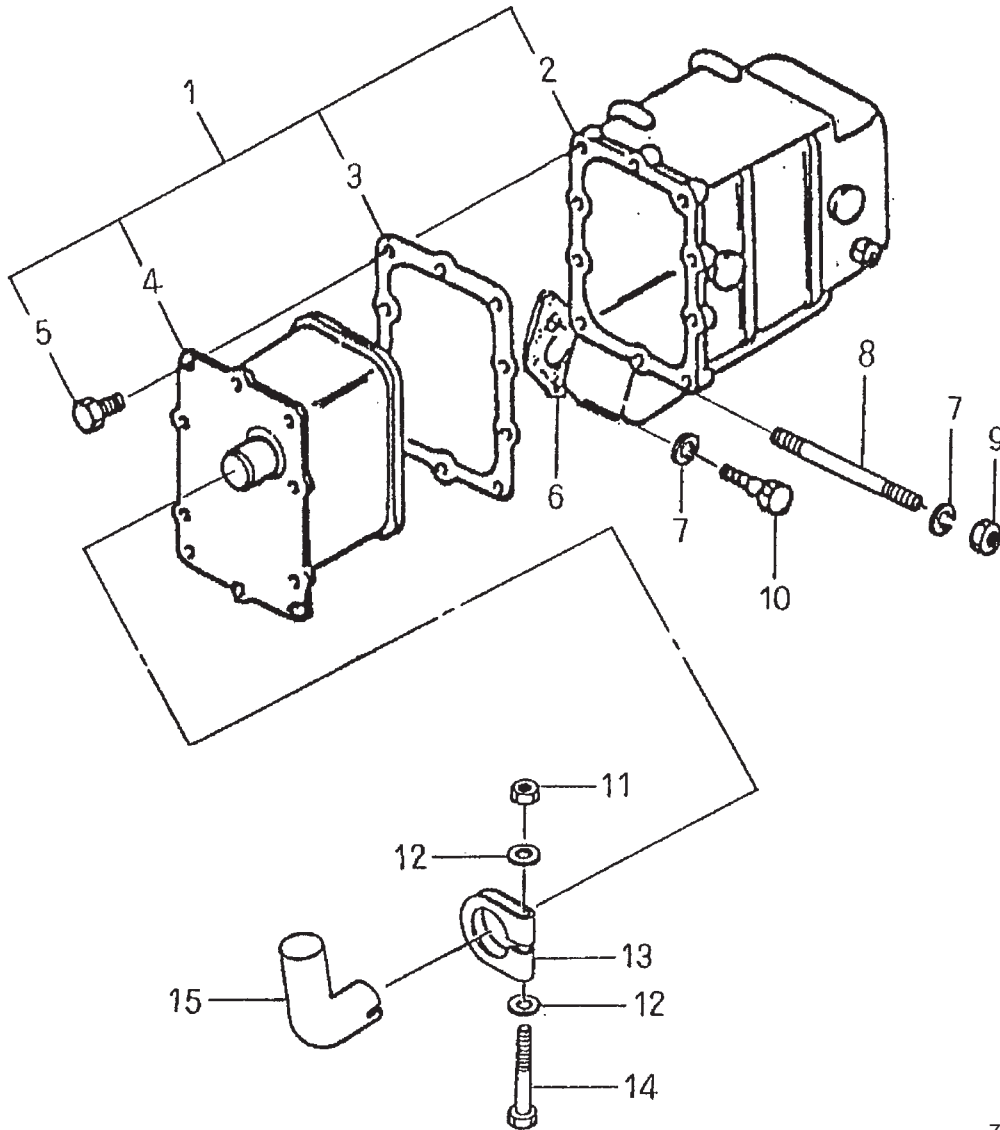


753W2aircleaner

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135016310	1	Air Cleaner Assembly (includes keys #9-12)	-
2	198756130	2	Hose Band	-
3	135597900	1	Hose	-
4	135976610	1	Bracket	-
5	199236730	1	Collar	-
6	011510825	2	Bolt	-
7	011510820	2	Bolt	-
8	131976050	1	Bracket	-
9	135326200	1	Filter Housing	-
10	24-27301	1	Element	-
11	135326201	1	Cover	-
12	314531163	1	Valve	-

Exhaust Manifold & Muffler

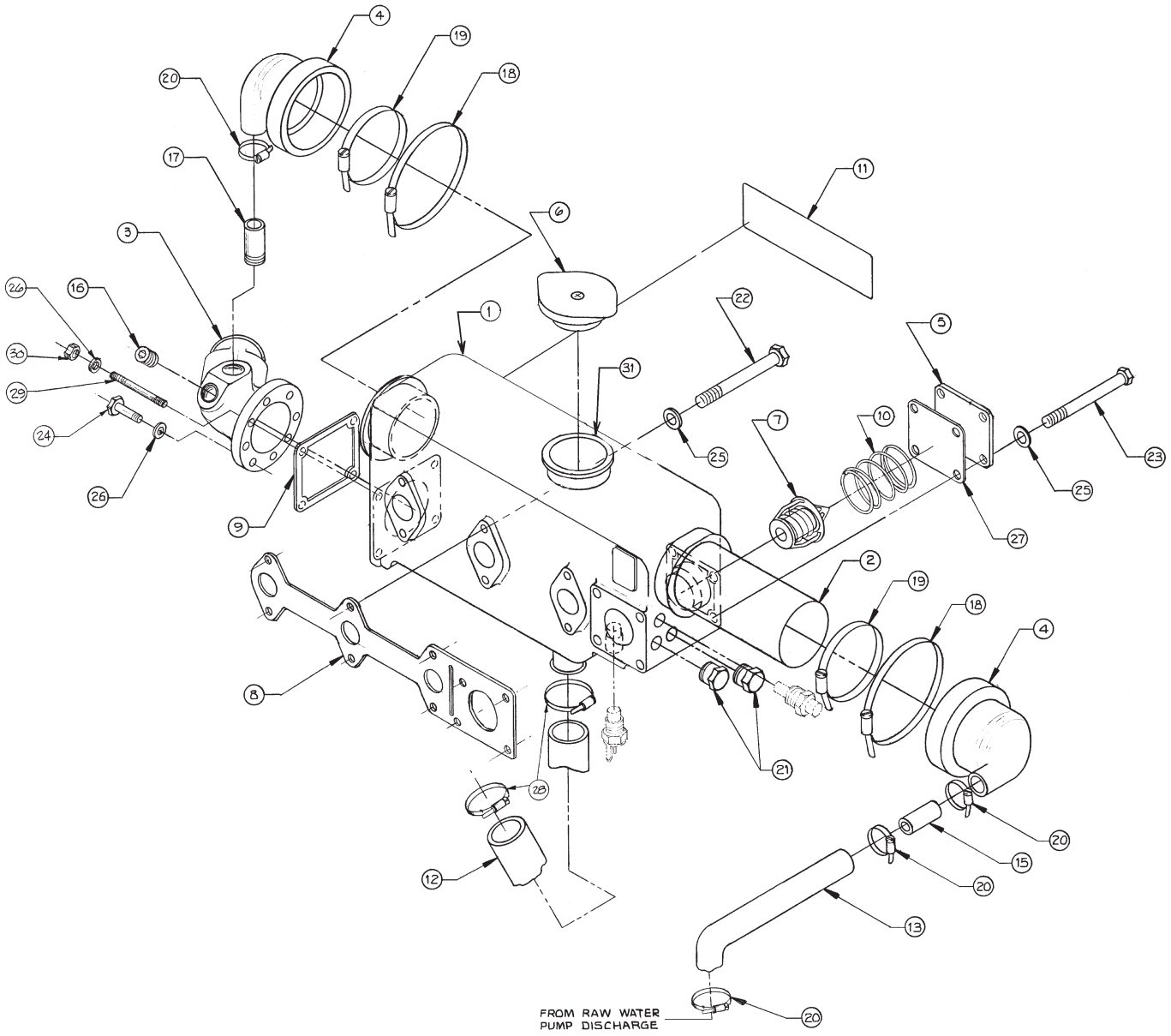
NL753W2



753W2exhmanifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135046212	1	Exhaust Manifold Assembly (includes keys #2- 5)	-
2	135616832	1	Exhaust Manifold	-
3	135996900	1	Gasket	-
4	135406170	1	Housing	-
5	011310612	10	Bolt	-
6	135996541	1	Gasket	-
7	027100006	4	Spring Washer	-
8	012109215	2	Stud	-
9	023100006	2	Nut	-
10	010109381	4	Bolt	-
11	020900008	1	Nut	-
12	026100008	2	Washer	-
13	408330011	1	Band	-
14	010310850	1	Bolt	-
15	135606150	1	Exhaust Elbow	-
	27-38200	1	Exhaust Elbow, 1- 1/4 NPT (optional)	-

Exhaust Manifold and Heat Exchanger



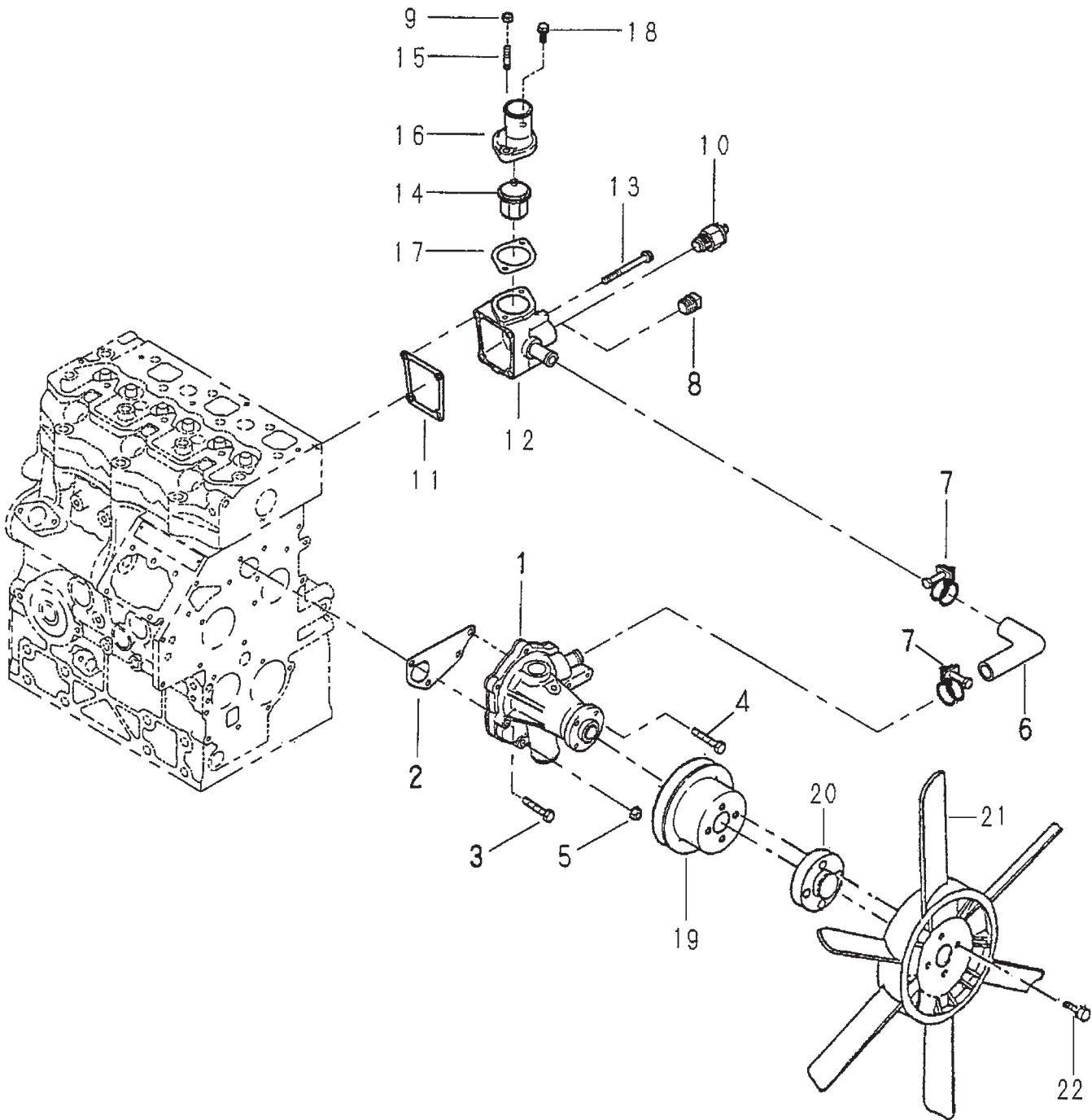
A-9289/ D-3465

Exhaust Manifold and Heat Exchanger

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-02001	1	Exhaust Manifold/ Expansion Tank	-
2	20-12002	1	Heat Exchanger Element	-
3	27-32003	1	Wet Exhaust Elbow (Stainless Steel)	-
	135616234	1	Wet Exhaust Elbow (Cast Iron)	-
4	145536370	2	Heat Exchanger End Cap	-
5	28-18601	1	Thermostat Cover Plate	-
6	21-12013	1	Filler Cap	-
7	145206022	1	Thermostat, 180°F/ 82°C	-
8	11-08601	1	Gasket	-
9	11-31902	1	Gasket	-
10	00-13101	1	Spring	-
11	00-08301	1	"Northern Lights" Decal	-
12	18-18601	1	Coolant Pump Inlet Hose	-
13	41-00004	13"	Hose 3/4" ID x 18-1/2"	-
15	21-13102	1	Union 3/4" Hose Barb	-
16	198436140	1	Socket Head Plug 1/2 BSPT, Steel	-
17	145986150	1	Connector 1/2 BSPT x 3/4 HB, Steel	-
18	19-00048	2	Hose Clamp #48	-
19	19-00040	2	Hose Clamp #40	-
20	19-00012	4	Hose Clamp #12	-
21	21-31003	**	Hex Head Plug, Brass 3/8 NPT	-
22	12-09136	6	Capscrew, Hex Head M6 x 1.0 x 90 mm S/S	-
23	12-09130	4	Capscrew, Hex Head M6 x 1.0 x 95 mm S/S	-
24	12-09712	3	Capscrew, Hex Head M8 x 1.25 x 25 mm S/S	-
25	15-01134	10	Flat Washer M6 S/S	-
26	15-00706	4	Flat Washer M8 S/S	-
27	11-18602	1	Gasket	-
28	19-00016	2	Hose Clamp #16	-
29	13-09710	1	Stud M8 x 1.25 x 25 mm (35 mm LOA) S/S	-
30	14-09711	1	Hex Nut, M8 x 1.25 S/S	-
31	20-12207	1	Filler Neck	-
32	22-42070	1	Switch, High Exhaust Temperature (not shown)	-

**As required

Coolant Pump – Industrial Applications



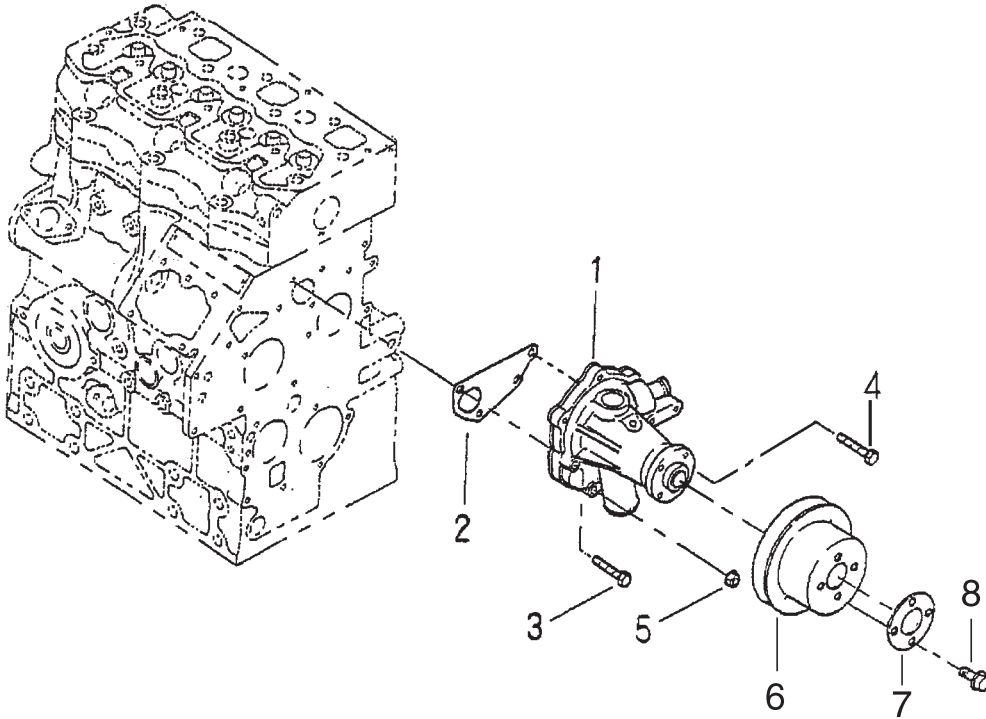
NL753W2coolantpump

Coolant Pump – Industrial Applications

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017990	1	Coolant Pump Assembly	-
2	145996830	1	Gasket	-
3	011310635	1	Bolt	-
4	011310630	2	Bolt	-
5	023100006	1	Nut	-
6	145536051	1	Hose	-
7	067100022	2	Clamp	-
8	064500030	1	Plug	-
9	023100006	1	Nut	-
10	385720030	1	Temperature Switch (see Electrical System)	-
11	145996840	1	Gasket	-
12	145216830	1	Thermostat Housing	-
13	011310660	4	Bolt	-
14	145206061	1	Thermostat	-
15	012100620	1	Stud	-
16	145226530	1	Thermostat Cover	-
17	145996850	1	Gasket	-
18	011310620	1	Bolt	-
19	145336490	1	Fan Pulley	-
20	145386920	1	Fan Holder	-
21	145306380	1	Cooling Fan	-
22	011310635	4	Bolt	-

Coolant Pump

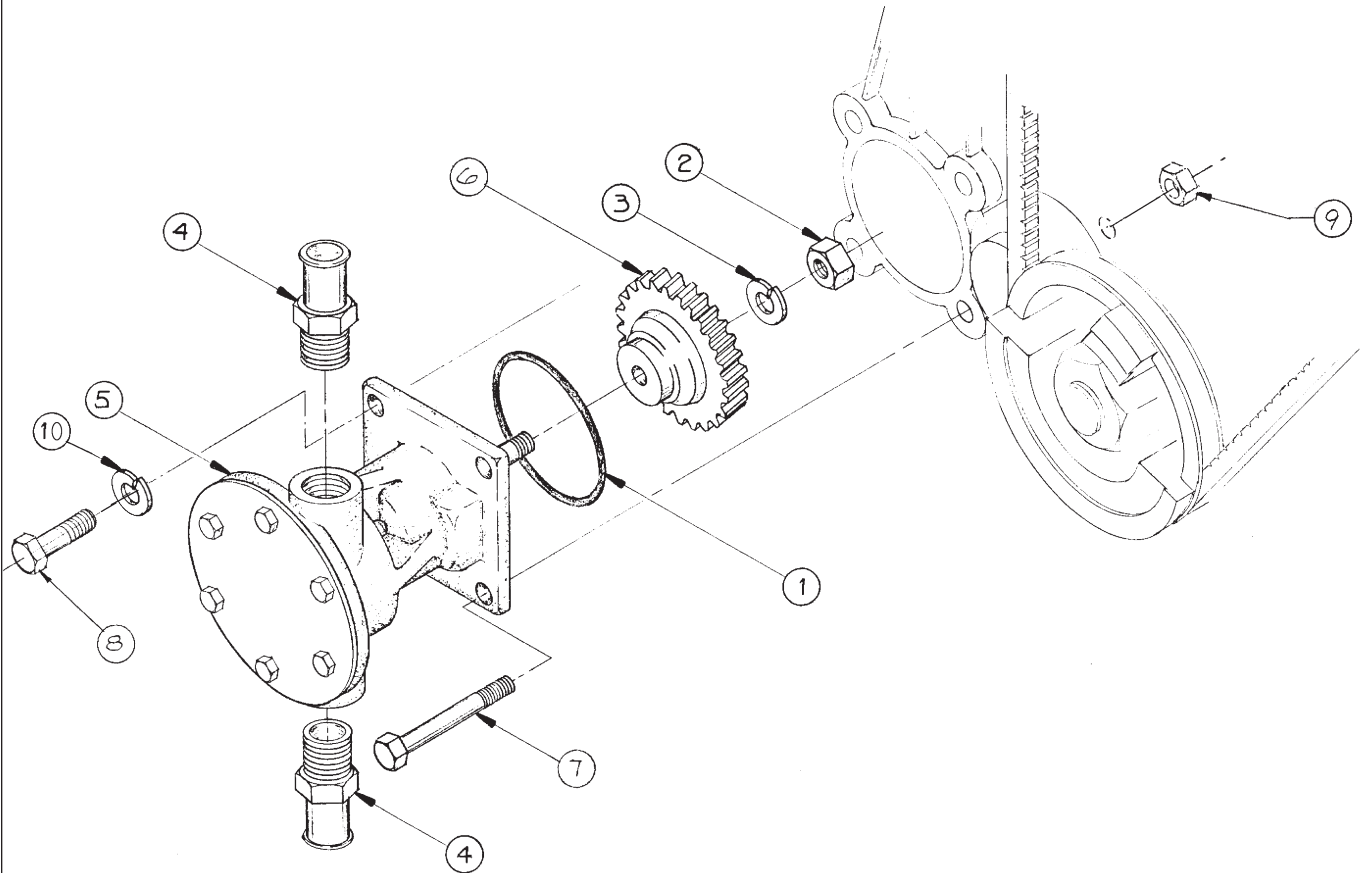
M753W2



753W2coolantpump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017910	1	Coolant Pump Assembly	-
2	145996830	1	Gasket	-
3	011310635	1	Bolt	-
4	011310630	2	Bolt	-
5	023100006	1	Nut	-
6	145336490	1	Pulley	-
7	145386520	1	Plate	-
8	011310614	4	Bolt	-

Raw Water Pump and Mounting

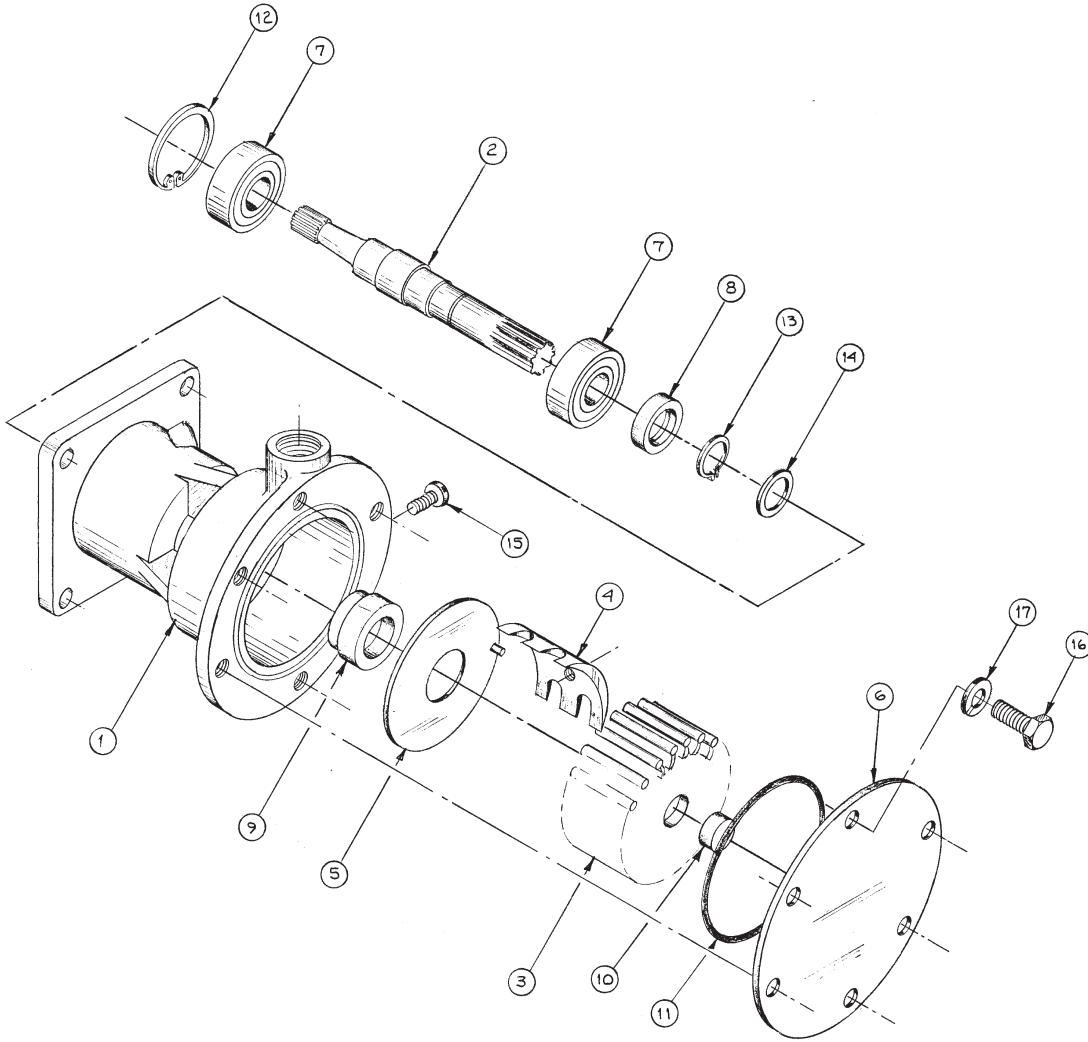


A-4779/ B-3842B

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	16-13101	1	O-ring	-
2	14-00811	1	Nut M10 x 1.5	-
3	15-00802	1	Lock Washer M10	-
4	21-00129	2	Fitting 1/2 NPT x 3/4 Hose Barb	-
5	25-12057	1	Raw Water Pump (see parts detail)	-
6	340460141	1	Drive Gear	-
7	12-34801	3	Capscrew, Hex Head M8 x 1.25 x 70 mm	-
8	12-00718	1	Capscrew, Hex Head M8 x 1.25 x 65 mm	-
9	023100008	3	Hex Nut M8 x 1.25, Flanged	-
10	15-00702	1	Lock Washer M8	-

GROUP 3 – COOLING SYSTEM

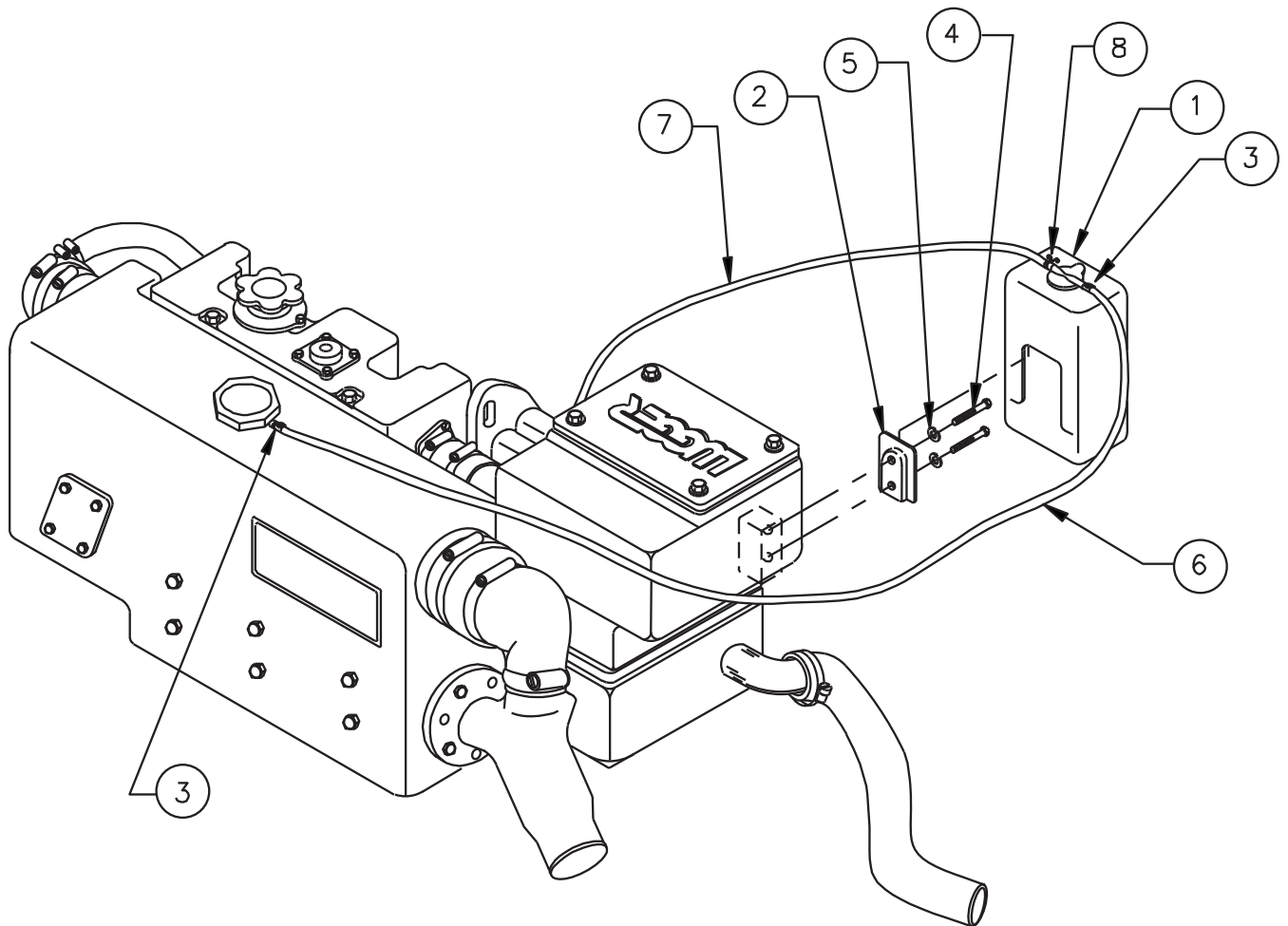
Raw Water Pump Detail



A-3706/ C-2204

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	25-12057	1	Raw Water Pump Assembly (includes keys #1 - #17)	-
•	25-12004	1	Repair Kit (includes keys #3, #4, #5, #6, #7, #8, #9, #11)	-
1	25-12058	1	Raw Water Pump Body	-
2	25-12059	1	Shaft	-
3	25-12060	1	Impeller	-
4	25-12061	1	Cam	-
5	25-12062	1	Wear Plate	-
6	25-12063	1	End Cover	-
7	25-12064	1	Bearing	-
8	25-12065	1	Lip Seal	-
9	25-12066	1	Mechanical Seal	-
10	25-12017	1	Spline Seal	-
11	25-12067	1	O-Ring	-
12	25-12068	1	Retaining Ring	-
13	25-12069	1	Retaining Ring	-
14	25-12070	1	Washer	-
15	25-12071	1	Pan Head Screw #10-32 x 3/8	-
16	25-12072	1	Hex Head Screw #10-32 x 3/8	-
17	25-12073	1	Split Lock Washer #10	-

Coolant Recovery Tank

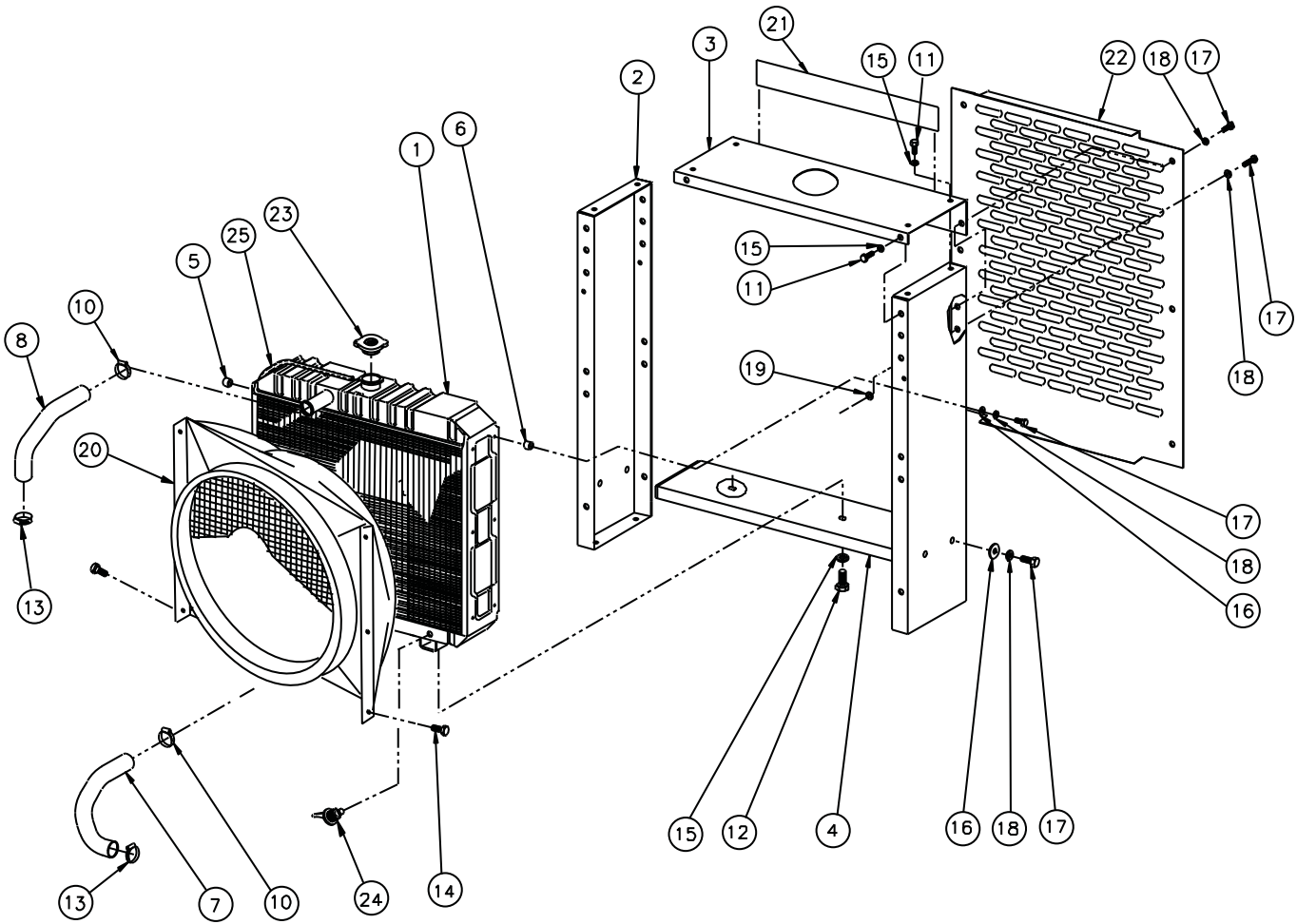


A-9347/ B-8741

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	310550130	1	Coolant Recovery Tank	-
2	222300090	1	Coolant Recovery Tank Mounting Bracket	-
3	19-18602	2	Hose Clamp	-
4	12-00030	2	Capscrew, Hex Head, M6 x 1.0 x 16 mm	-
5	15-01132	2	Lock Washer	-
6	27-18601	1	Tube 5/16" ID x 23" Polyurethane	-
7	18-18602	1	Hose 5/16" ID x 28" Polyvinyl	-
8	19-18602	1	Hose Clamp	-

Radiator and Guard, Aluminum

NL753W2



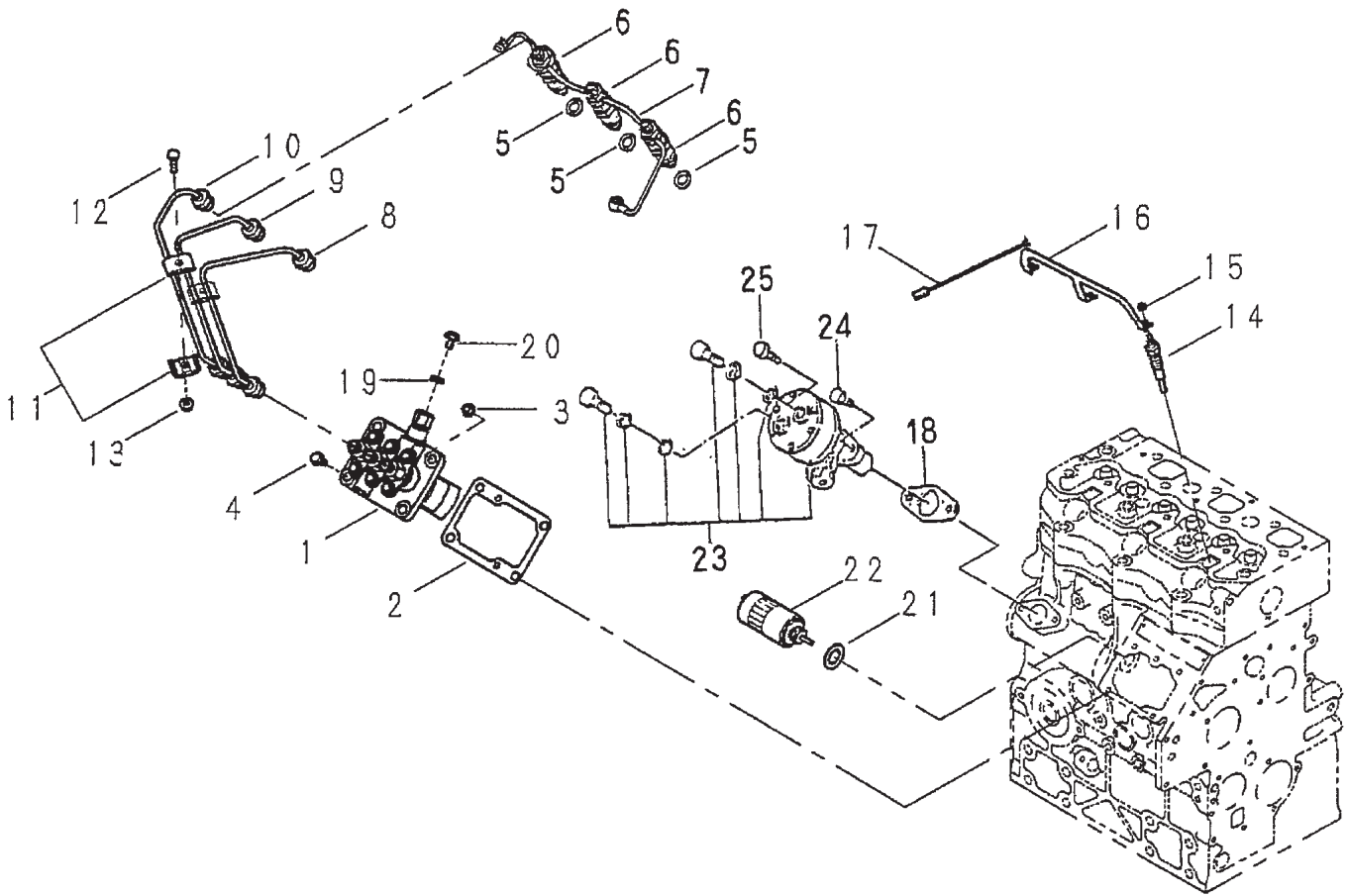
/ D-3494z

Radiator and Guard, Aluminum

NL753W2

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145506610	1	Radiator	-
2	39-18204	2	Side Panel, Radiator Guard	-
3	39-18205	1	Top Panel, Radiator Guard	-
4	39-18206	1	Radiator Support	-
5	21-41103	1	Spacer	-
6	21-74502	1	Spacer	-
7	145537220	1	Hose, Radiator Outlet	-
8	145537230	1	Hose, Radiator Inlet	-
10	067100043	2	Hose Clamp	-
11	12-00751	8	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
12	12-00711	2	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
13	067100038	2	Hose Clamp	-
14	011150610	6	Bolt	-
15	15-00702	10	Lock Washer	-
16	15-00701	12	Flat Washer	-
17	12-00062	12	Capscrew, Hex Head M6 x 1.0 x 10 mm	-
18	15-01132	6	Lock Washer	-
19	15-00008	8	Flat Washer	-
20	145546420	1	Shroud with Fan Guard	-
21	00-70075	1	Label, "Northern Lights Generators"	-
22	39-18209	1	Shroud, Radiator Guard	-
23	310110200	1	Filler Cap	-
24	21-12016	1	Drain Cock	-
25	310120100	1	Overflow Pipe	-
26	310120100	2	Pipe (not shown)	-

Injection Pump and Lines

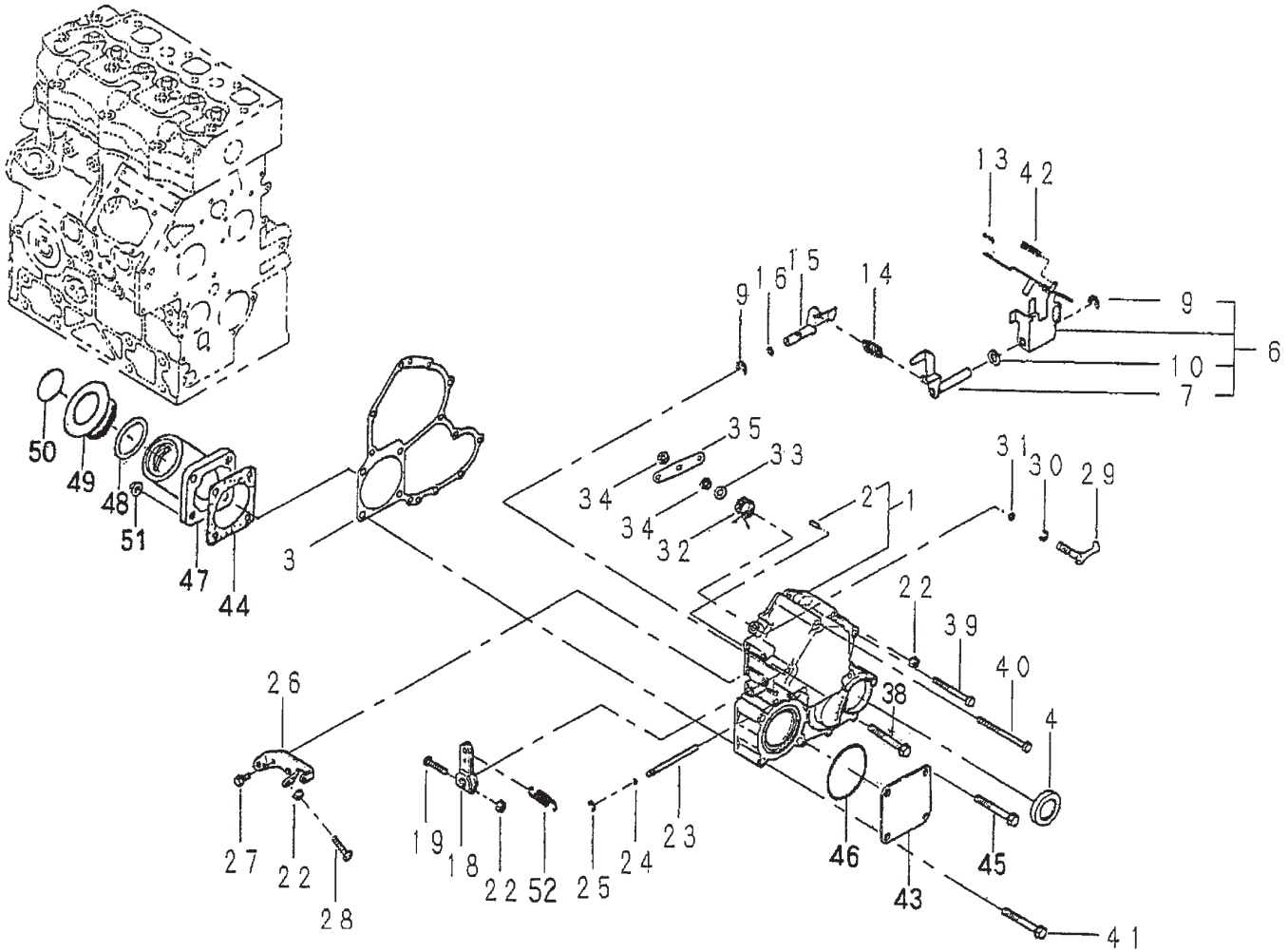


753W2injectionlines

Injection Pump and Lines

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017640	1	Injection Pump Assembly	-
2	131426300	1	Shim Set	-
3	023100006	2	Nut	-
4	011310620	2	Bolt	-
5	131426200	3	Gasket	-
6	131406340	3	Injector Assembly	-
7	131607010	1	Return Pipe Assembly	-
8	131507950	1	Injection Line	-
9	131507960	1	Injection Line	-
10	121507970	1	Injection Line	-
11	199106020	4	Clamp	-
12	010110625	2	Bolt	-
13	023100006	2	Nut	-
14	185366220	3	Glow Plug	-
15	023100004	3	Nut	-
16	185376370	1	Connector	-
17	185606170	1	Wire Harness	-
18	130996130	1	Gasket	-
19	025100006	1	Seal Washer	-
20	131236280	1	Screw	-
21	025100016	1	Seal Washer	-
22	185206084	1	Solenoid, 12 Volt Standard Ground	-
	185206191	1	Solenoid, 12 Volt Isolated Ground	-
	185206200	1	Solenoid, 24 Volt Isolated Ground	-
23	130506140	1	Fuel Pump Assembly	-
24	011140614	1	Bolt	-
25	011140616	1	Bolt	-

Governor Housing and Timing Gear Case

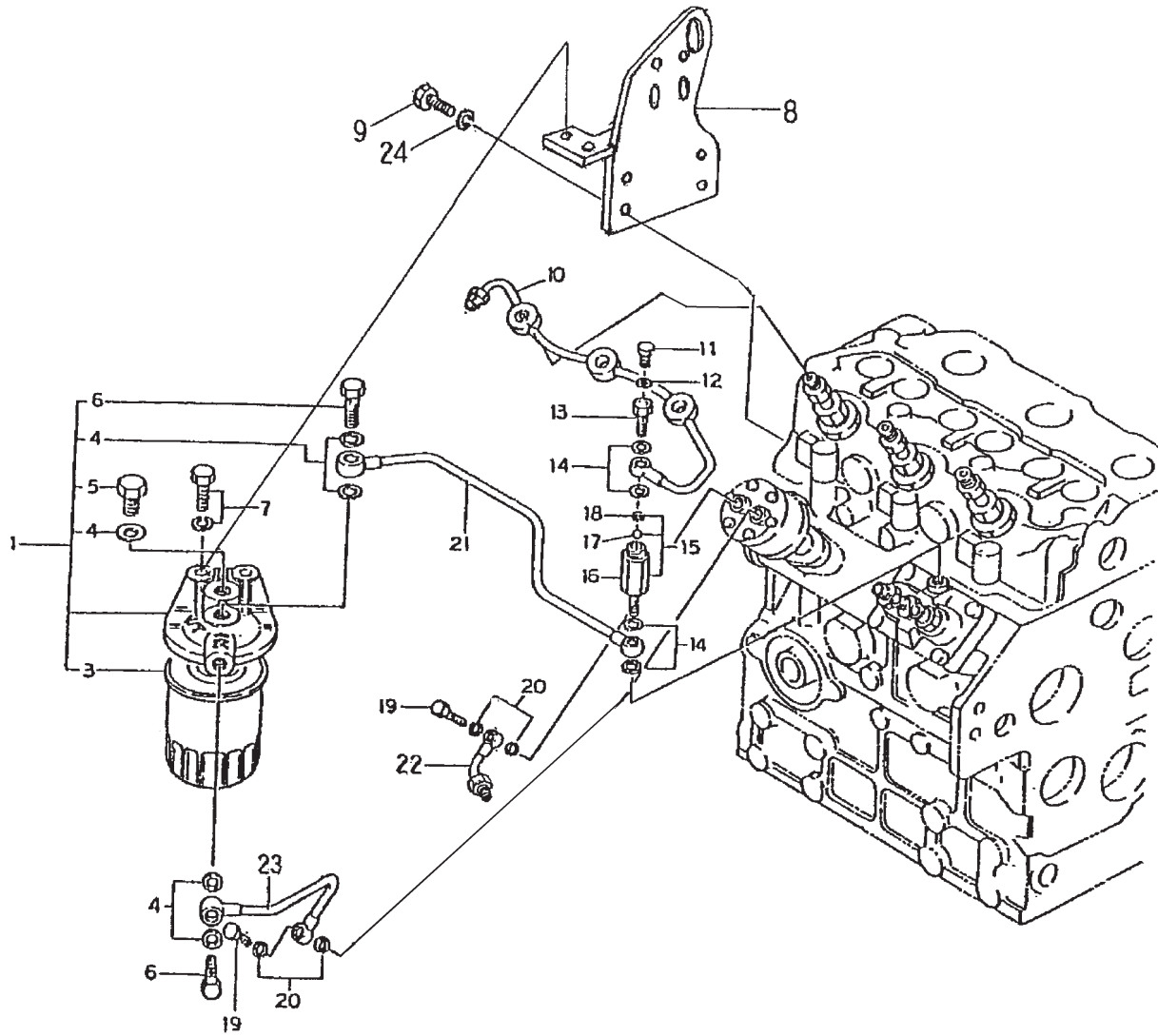


753W2timinggearcase

Governor Housing and Timing Gear Case

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165106111	1	Timing Gear Case (Marine, includes key #2)	-
	165106071	1	Timing Gear Case (Industrial, includes key #2)	-
2	030300414	1	Spring Pin	-
3	165996530	1	Gasket	-
4	198636090	1	Oil Seal	-
6	125046260	1	Governor Lever Assembly (includes keys #7, 9, 10)	-
7	125406071	1	Tension Lever	-
9	036800008	2	Snap Ring	-
10	026200010	1	Washer	-
13	031100004	1	Snap Pin	-
14	198217390	1	Spring	-
15	125156170	1	Armature	-
16	052109110	1	O-ring	-
18	125416020	1	Governor Lever	-
19	010110630	1	Bolt	-
22	023100006	3	Nut	-
23	125116131	1	Shaft	-
24	052109108	2	O-ring	-
25	036800005	1	Snap Ring	-
26	125976120	1	Bracket	-
27	011310616	2	Bolt	-
28	010109264	1	Bolt	-
29	125156180	1	Armature	-
30	036800006	1	Snap Ring	-
31	052109109	1	O-ring	-
32	198216760	1	Spring	-
33	026200008	1	Washer	-
34	020700008	2	Nut	-
35	125176080	1	Stop Lever	-
38	011310640	5	Bolt	-
39	011310660	3	Bolt	-
40	011310680	2	Bolt	-
41	010310865	3	Bolt	-
42	198216731	1	Start Spring	-
43	165206320	1	Cover (Marine - Keel Cooled units)	-
	165206150	1	Cover (Industrial)	-
44	340990011	1	Gasket	-
45	011510860	1	Bolt (Marine)	-
46	052300700	1	O-ring	-
47	110766200	1	Oil Fill (Marine)	-
48	052100400	1	O-ring (Marine)	-
49	198436010	1	Cap (Marine)	-
50	390190460	1	Caution Plate (Marine)	-
51	023100008	3	Nut	-
52	398210070	1	Spring	-

Fuel Filter and Piping

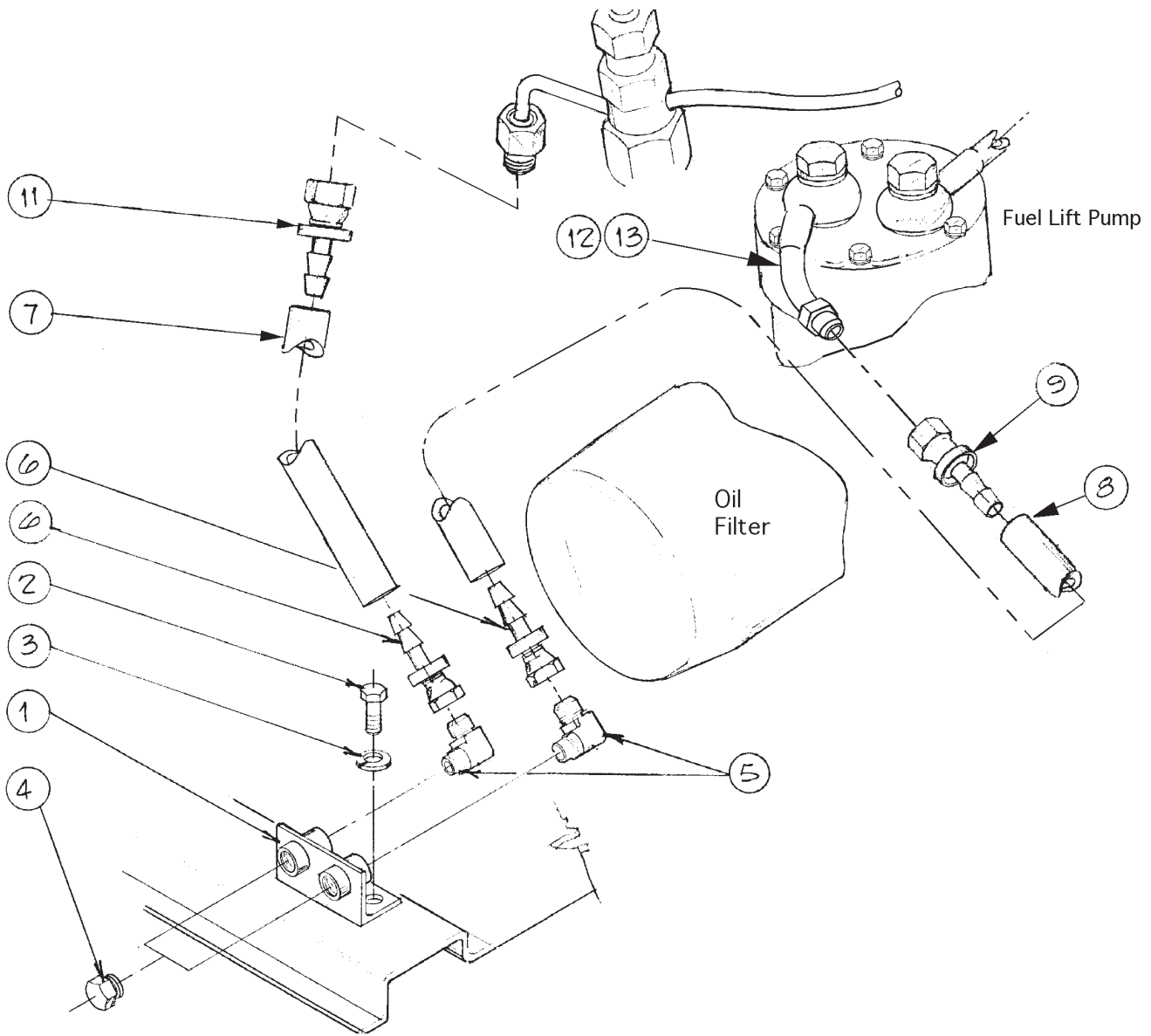


753W2fuelfilter

Fuel Filter and Piping

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	130306190	1	Fuel Filter Assembly (includes keys #3- 6)	-
3	24-52020	1	Filter	-
4	130326051	5	Gasket	-
5	130396030	1	Plug	-
6	130436011	2	Joint Bolt	-
7	011511025	2	Bolt	-
8	131976320	1	Bracket (Marine)	-
	131976050	1	Bracket (Industrial)	-
9	010700820	4	Bolt (Marine)	-
10	131607010	1	Return Pipe	-
11	131236280	1	Screw	-
12	025100006	1	Seal Washer	-
13	131236190	1	Bolt	-
14	140996270	4	Gasket	-
15	140036141	1	Valve (includes keys #16- 18)	-
16	198487002	1	Connector	-
17	048100010	1	Steel Ball	-
18	198116230	1	Rubber	-
19	130516092	2	Joint Bolt	-
20	198996060	4	Gasket	-
21	130556921	1	Pipe (Marine)	-
	130556500	1	Pipe (Industrial)	-
22	130556681	1	Pipe	-
23	130556931	1	Pipe (Marine)	-
	130556480	1	Pipe (Industrial)	-
24	027100008	4	Spring Washer (Marine)	-

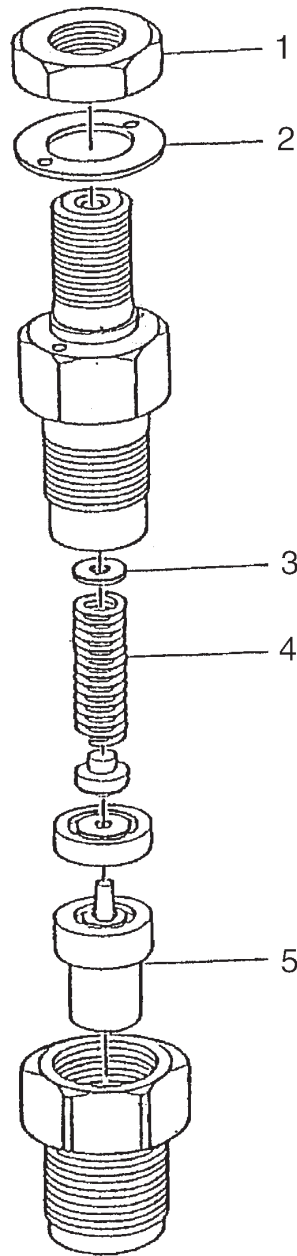
Fuel Line Connection



A-9317/ B-7019

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51099	1	Fuel Manifold 1/4 NPT	-
2	12-00031	2	Capscrew, Hex Head M6 x 1.0 x 20 mm S/S	-
3	15-01132	2	Lock Washer M6	-
4	21-00046	2	Plug, Plastic, 1/4 NPT (for shipping)	-
5	21-71044	2	Male Elbow 90°, brass 1/4 NPT x 1/4-45T	-
6	21-71045	2	Female Swivel, brass 1/4 HB x 1/4-45T	-
7	41-01011	12"	Hose 1/4" ID Push-on	-
8	41-01011	18"	Hose 1/4" ID Push-on	-
9	21-71048	1	Female Swivel, brass 1/4 HB x 5/16-45T	-
11	21-80002	1	Female Swivel, steel 1/4 HB x 1/4-37T	-
12	130556681	1	Fitting, Fuel Inlet M8 Banjo x 5/16-37T	-
13	130516069	2	Sealing Washer (not shown)	-

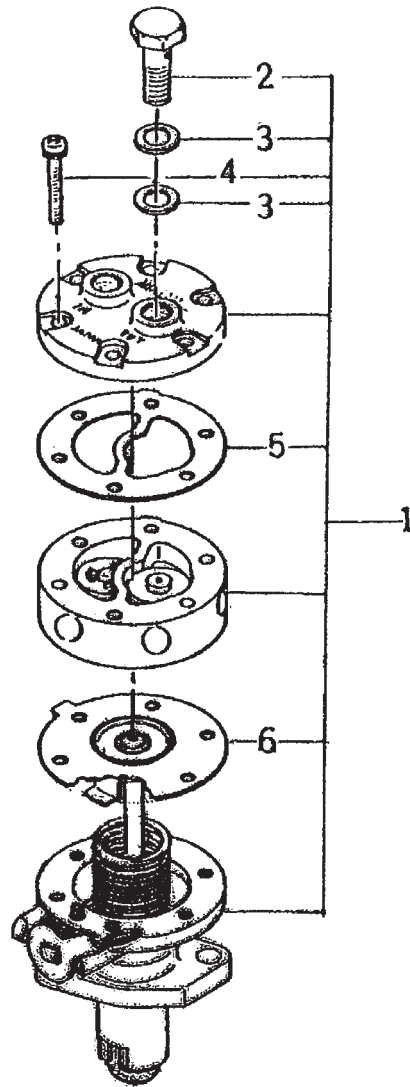
Fuel Injector



753W2fuelinjector

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	131406340	1	Fuel Injector (includes keys #1- 5)	-
1	131446069	1	Nut	-
2	131426210	1	Gasket	-
3	131437640	1	Shim Kit	-
4	131446066	1	Spring	-
5	131416150	1	Nozzle	-

Fuel Pump

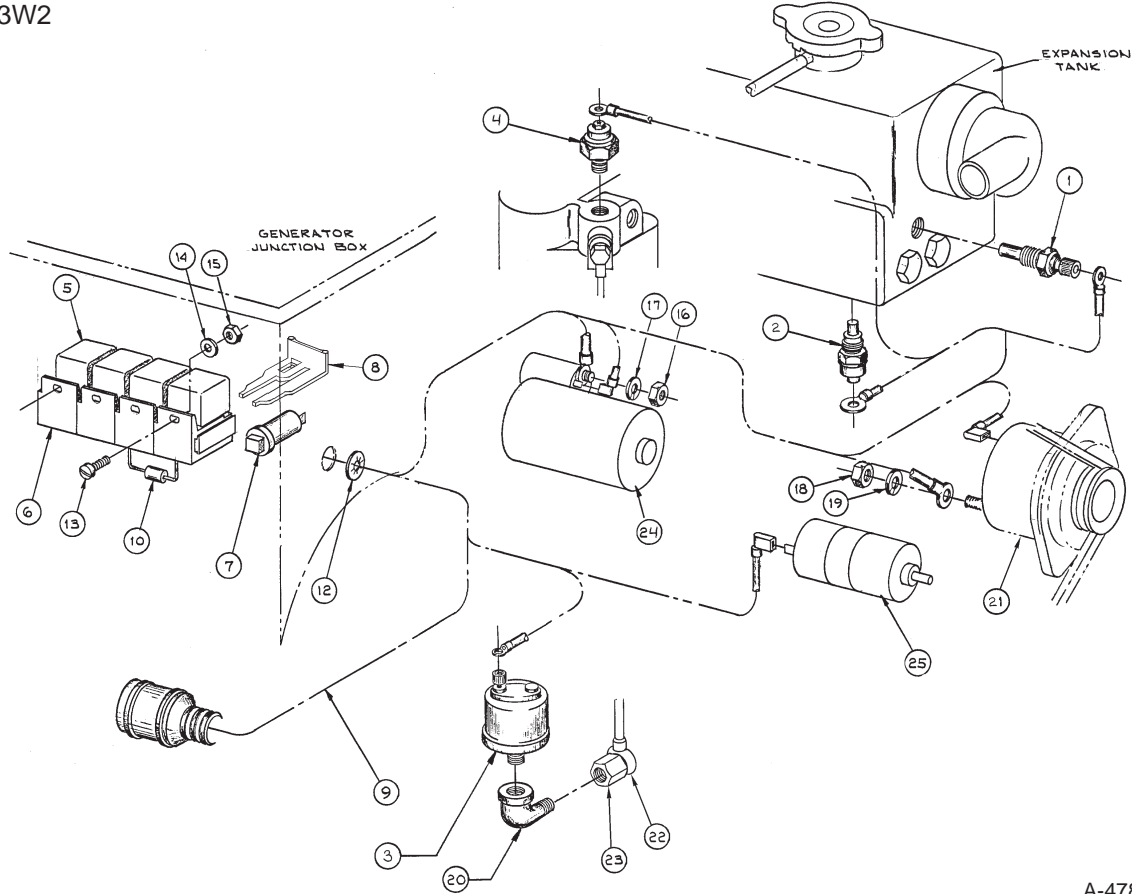


753W2fuelpump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	130506140	1	Fuel Pump (includes keys# 2- 6)	-
2	130516092	2	Joint Bolt	-
3	130516069	4	Gasket	-
4	130516091	6	Screw	-
5	130516101	1	Gasket	-
6	130516084	1	Diaphragm	-

Engine Electrical - 12 Volt Standard Ground

M753W2

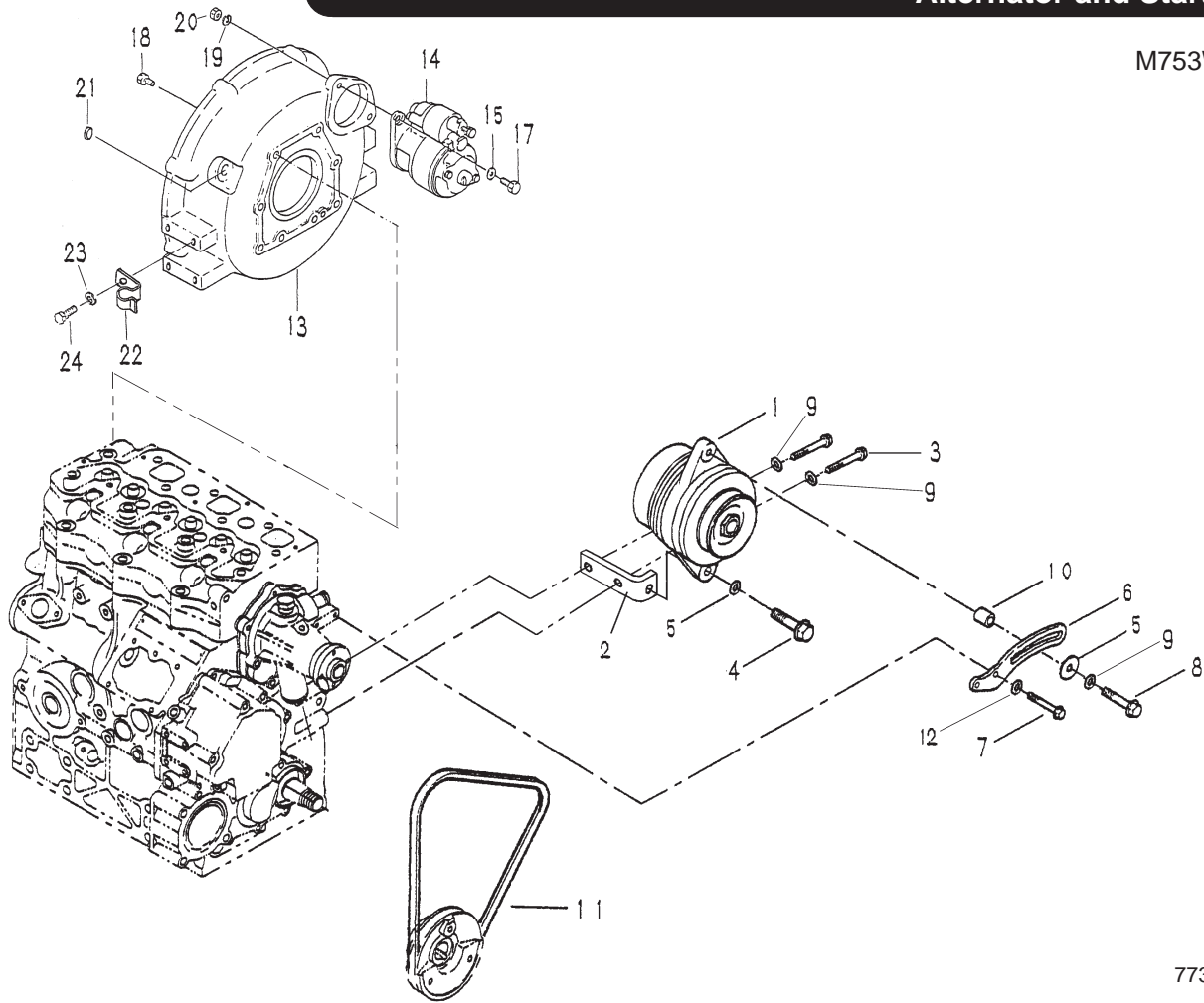


A-4786/ C-2490B

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-42055	1	Temperature Sender, 0-250°F Single Station 3/8 NPT	-
2	385720110	1	Temperature Switch 95°C	-
3	22-41016	1	Oil Pressure Sender 0-80 PSI, Single Station 1/8 NPT	-
4	185246011	1	Oil Pressure Switch	-
5	22-42047	4	Relay, 12 Volt SPDT	-
6	22-40391	4	Relay Base	-
7	22-42043	1	Circuit Breaker	-
8	22-40393	4	Terminal Retainer	-
9	22-48601	1	Engine Wire Harness (includes key #10)	-
10	22-41060	2	Diode, 6 Amp 50 Volt	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-40028	1	Grommet	-
13	12-00094	2	Machine Screw #10-32 x 3/8" Stainless Steel	-
14	15-00032	2	Flat Washer #10	-
15	14-00001	2	Hex Nut, #10-32	-
16	14-00711	1	Hex Nut, M8 x 1.25	-
17	15-00702	1	Lock Washer M8	-
18	14-04401	1	Hex Nut, M5 x 0.8	-
19	15-04400	1	Lock Washer M5	-
20	21-04801	1	Street Elbow 90°, 1/8 NPT Steel	-
21	185046220	1	Alternator 12 Volt (see parts detail)	-
22	140607270	1	Oil Line	-
23	198487590	1	Banjo Bolt (Tapped 1/8 NPT Female)	-
24	185086551	1	Starter 12 Volt (marked #M001T66081, see parts detail)	-
25	185206083	1	Fuel Solenoid	-

Alternator and Starter

M753W2



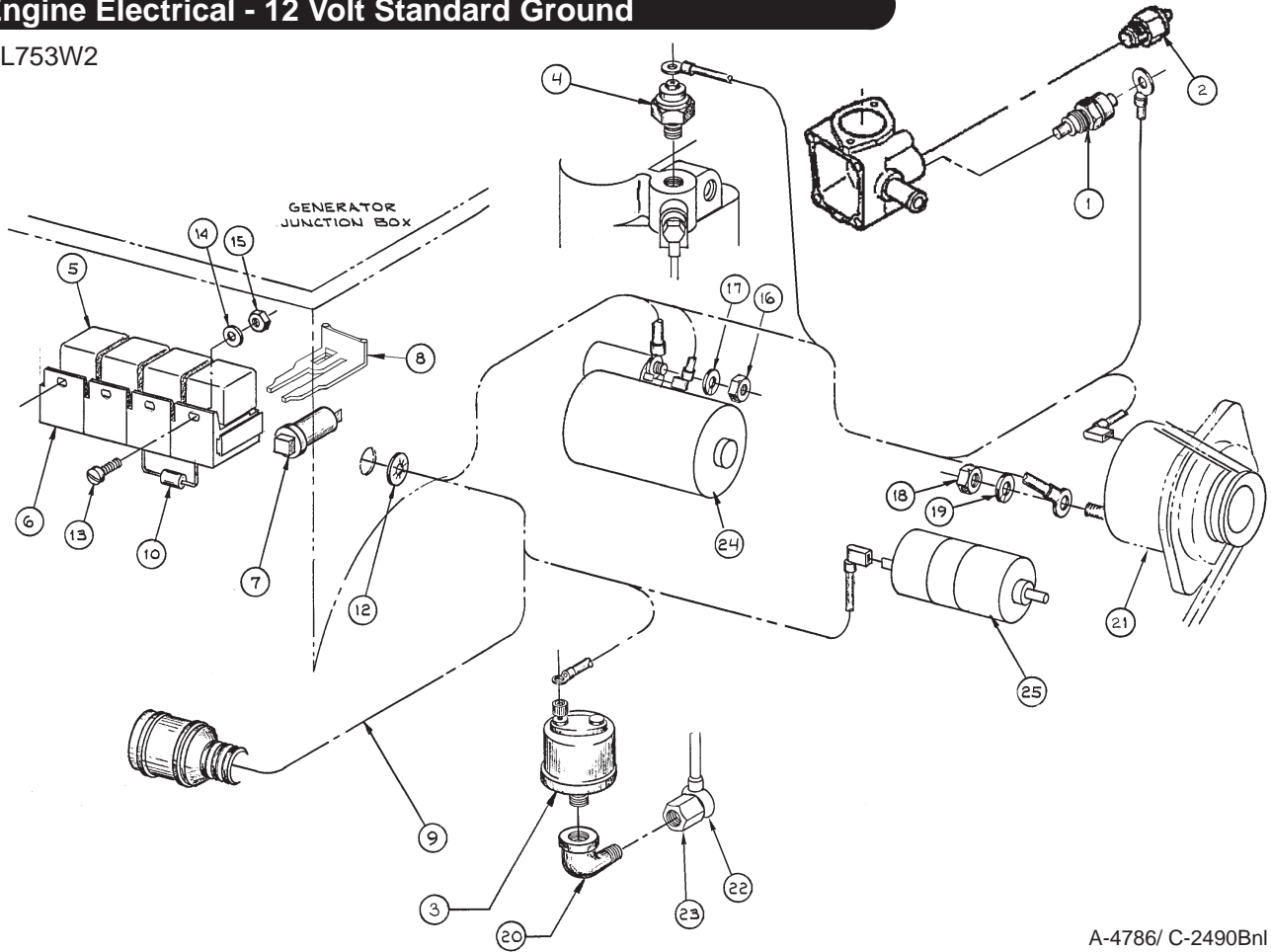
773 5-1

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	185046220	1	Alternator 12 Volt, 40 Amp (see parts detail)	-
2	23-48601	1	Bracket, Alternator Mounting	-
3	12-09712	2	Capscrew, Hex Head M8 x 1.25 x 25 mm S/S	-
4	12-09814	1	Capscrew, Hex Head M10 x 1.5 x 35 mm S/S	-
5	15-09805	2	Flat Washer M10 S/S	-
6	23-48602	1	Tensioning Arm	-
7	12-01102	2	Capscrew, Hex Head M6 x 1.0 x 16 mm S/S	-
8	12-09714	1	Capscrew, Hex Head M8 x 1.25 x 40 mm S/S	-
9	15-00705	2	Lock Washer M8 S/S	-
10	199236680	1	Spacer	-
11	40-08601	1	Drive Belt	-
12	15-00610	2	Lock Washer M6 S/S	-
13	110446421	1	Flywheel Housing	-
14	185086551	1	Starter, 12 Volt (see parts detail)	-
15	026100010	2	Washer	-
17	010311045	2	Bolt	-
18	010311020	8	Bolt	-
19	027100010	2	Spring Washer	-
20	020900010	2	Nut	-
21	398460091	1	Plug	-
22	140976080	1	Bracket	-
23	027100010	1	Spring Washer	-
24	199436350	1	Bolt	-

GROUP 5 – ELECTRICAL SYSTEM

Engine Electrical - 12 Volt Standard Ground

NL753W2

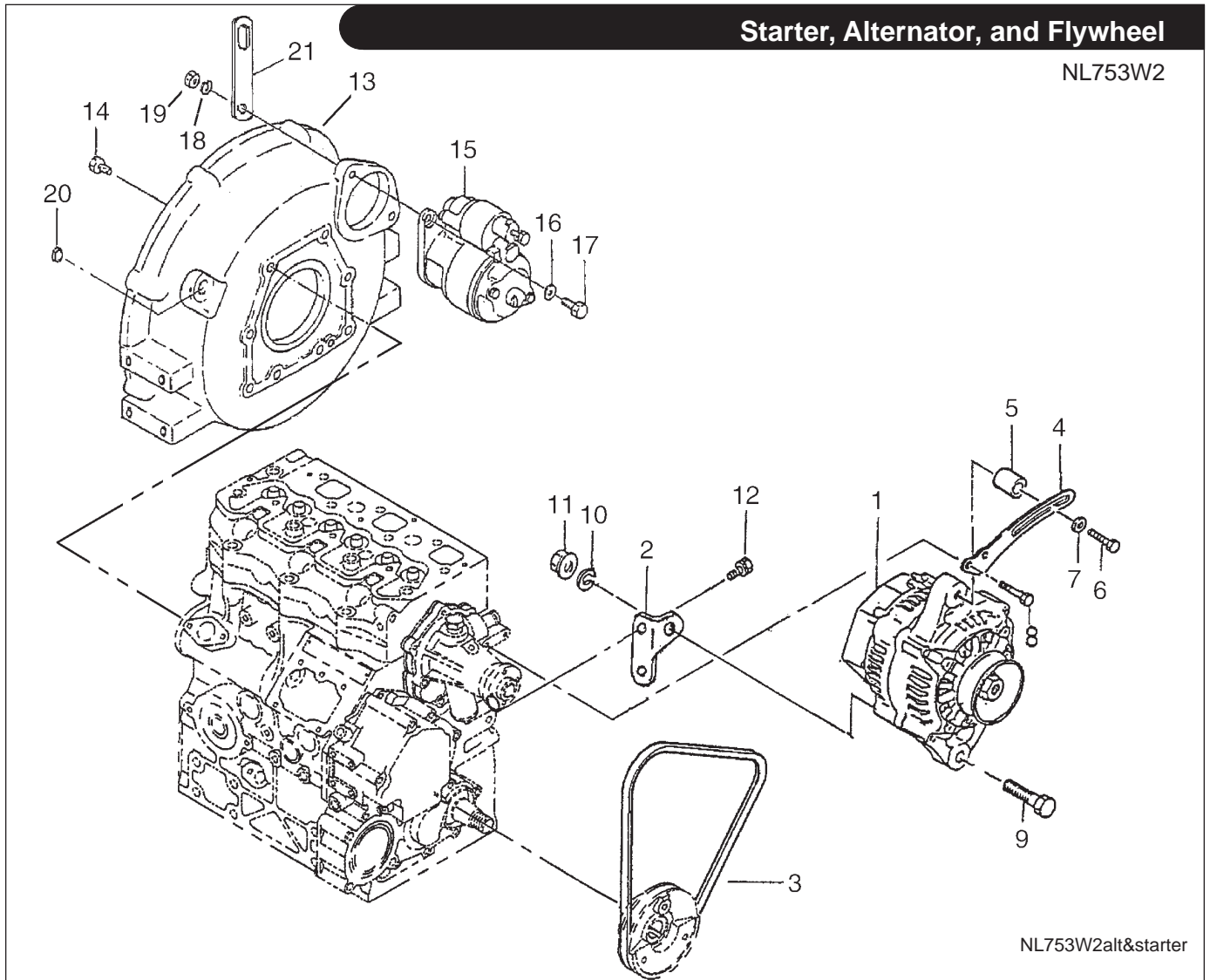


A-4786/ C-2490Bnl

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-42055	1	Temperature Sender, 0-250°F Single Station 3/8 NPT	-
2	385720030	1	Temperature Switch 230°F/ 110°C	-
3	22-41016	1	Oil Pressure Sender 0-80 PSI, Single Station 1/8 NPT	-
4	185246011	1	Oil Pressure Switch	-
5	22-42047	4	Relay, 12 Volt SPDT	-
6	22-40391	4	Relay Base	-
7	22-42043	1	Circuit Breaker	-
8	22-40393	4	Terminal Retainer	-
9	22-48601	1	Engine Wire Harness (includes key #10)	-
10	22-41060	2	Diode, 6 Amp 50 Volt	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-40028	1	Grommet	-
13	12-00094	2	Machine Screw #10-32 x 3/8" Stainless Steel	-
14	15-00032	2	Flat Washer #10	-
15	14-00001	2	Hex Nut, #10-32	-
16	14-00711	1	Hex Nut, M8 x 1.25	-
17	15-00702	1	Lock Washer M8	-
18	14-04401	1	Hex Nut, M5 x 0.8	-
19	15-04400	1	Lock Washer M5	-
20	21-04801	1	Street Elbow 90°, 1/8 NPT Steel	-
21	185046220	1	Alternator 12 Volt (see parts detail)	-
22	140607400	1	Oil Line	-
23	198487590	1	Banjo Bolt (Tapped 1/8 NPT Female)	-
24	185086321	1	Starter 12 Volt (see parts detail)	-
25	185206083	1	Fuel Solenoid	-

Starter, Alternator, and Flywheel

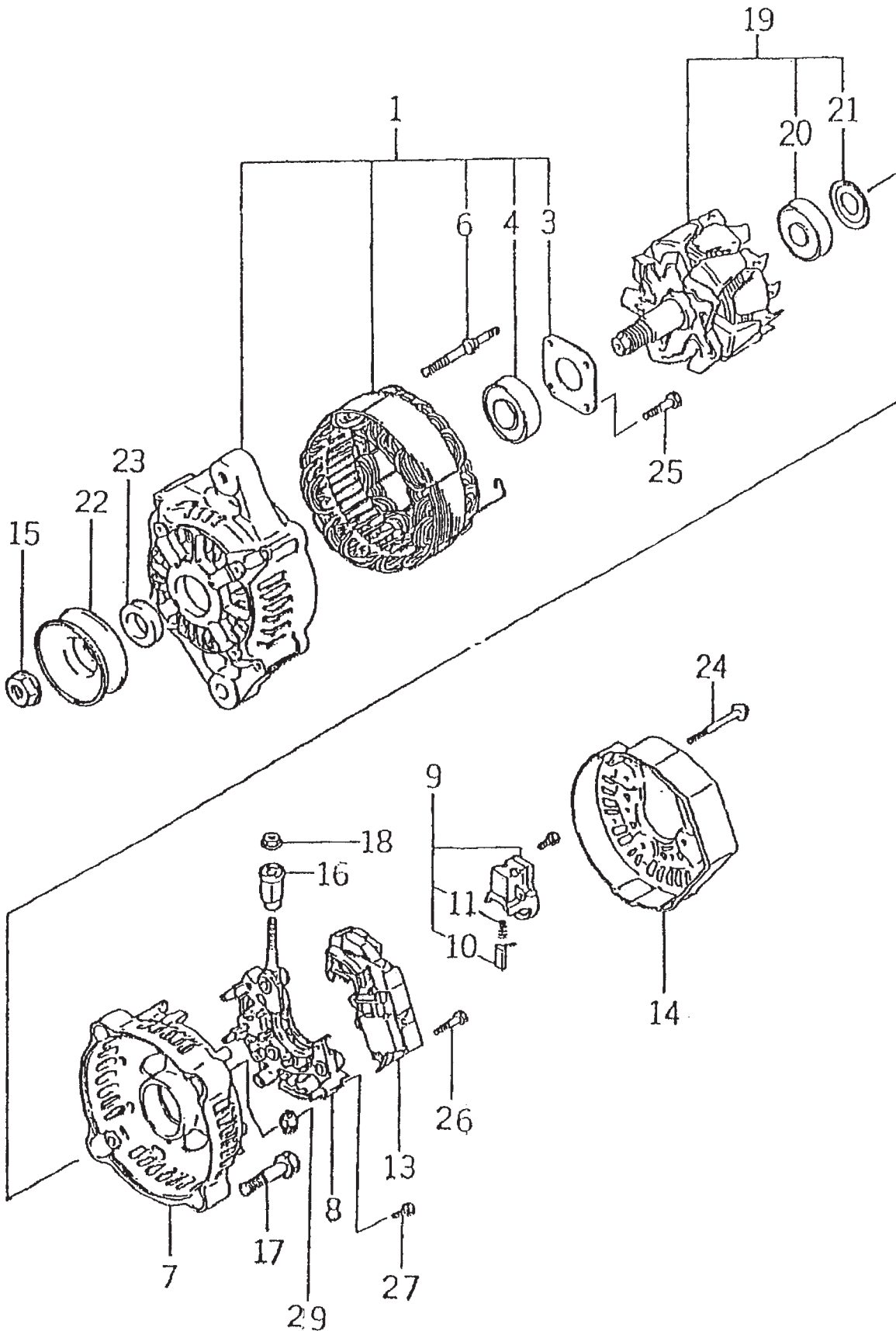
NL753W2



NL753W2alt&starter

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	185046220	1	Alternator, 12 Volt 40 Amp	-
2	185976220	1	Bracket	-
3	080109049	1	V-belt	-
4	185726451	1	Adjusting Plate	-
5	199236680	1	Collar	-
6	011510840	1	Bolt	-
7	026109017	1	Washer	-
8	011310650	2	Bolt	-
9	010311045	1	Bolt	-
10	027100010	1	Spring Washer	-
11	020900010	1	Nut	-
12	011310820	2	Bolt	-
13	110446363	1	Flywheel Housing	-
14	010311020	8	Bolt	-
15	185086321	1	Starting Motor 12 Volt	-
16	026100010	2	Washer	-
17	010311045	2	Bolt	-
18	027100010	2	Spring Washer	-
19	020900010	2	Nut	-
20	398460091	1	Plug	-
21	195816100	1	Lifting Eye	-

Alternator Assembly



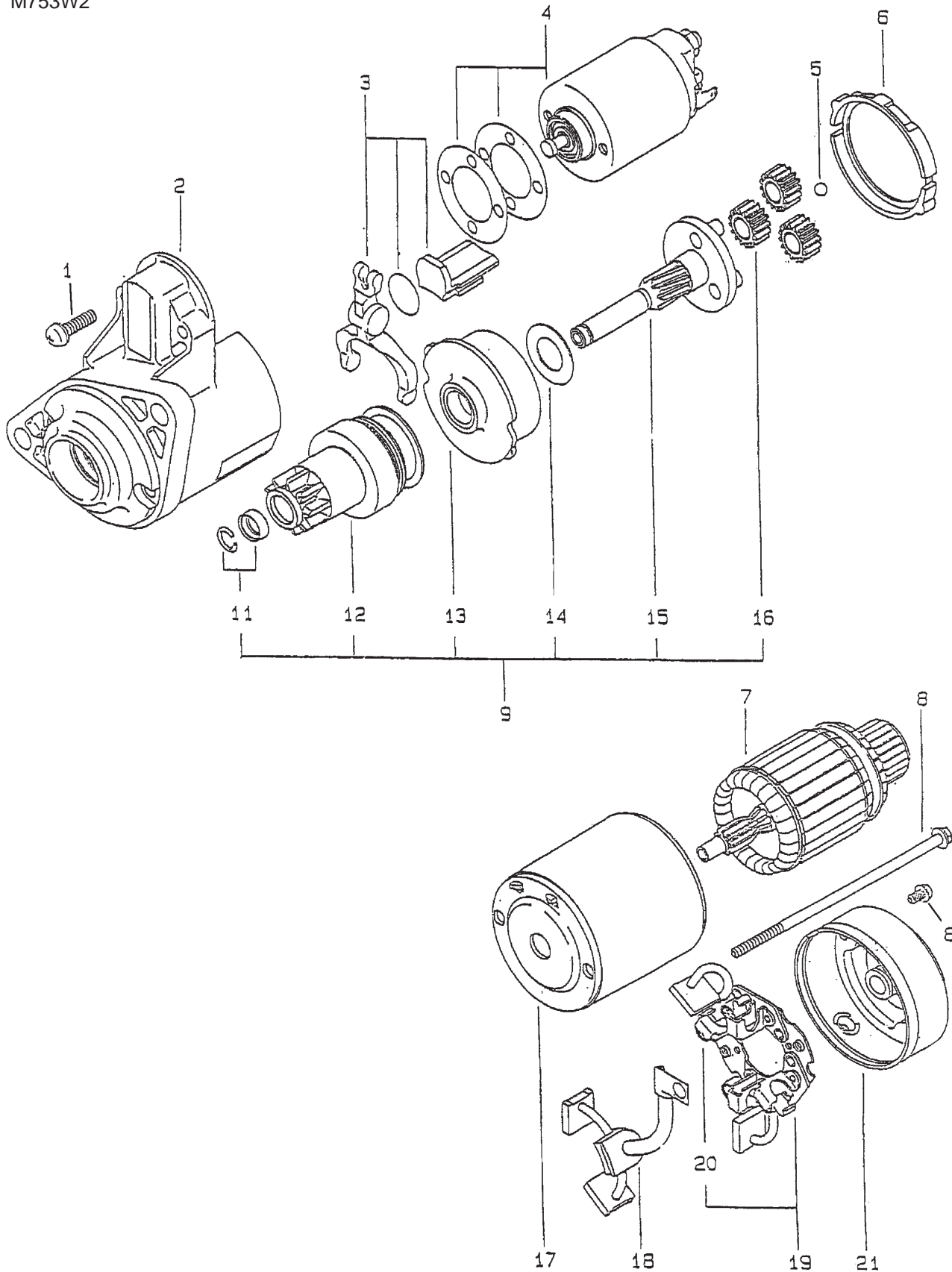
753W2altparts

Alternator Assembly

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185046220	1	Alternator (includes keys #1-29)	-
1	185446221	1	Stator (includes keys #3, 4, 6)	-
3	185446223	1	Gasket	-
4	185446224	1	Ball Bearing	-
6	185446227	2	Stud Bolt	-
7	185446228	1	Rear Housing	-
8	185446229	1	Rectifier Holder	-
9	185446230	1	Brush Holder (includes keys #10-11)	-
10	185446231	2	Brush	-
11	185446232	2	Spring	-
13	185446234	1	Regulator Assembly	-
14	185446235	1	Rear End Cover	-
15	185446236	1	Nut	-
16	185446237	1	Insulation Bush	-
17	185446238	2	Bolt	-
18	185446239	1	Nut	-
19	185446240	1	Rotor Assembly (includes keys #20-21)	-
20	185446241	1	Ball Bearing	-
21	185446242	1	Bearing Cover	-
22	185446243	1	Pulley	-
23	185446244	1	Collar	-
24	185446245	3	Bolt	-
25	185446258	4	Screw	-
26	185446262	2	Screw	-
27	185446260	6	Screw	-
29	185446261	1	Screw	-

Starter Assembly

M753W2



M753W2starter

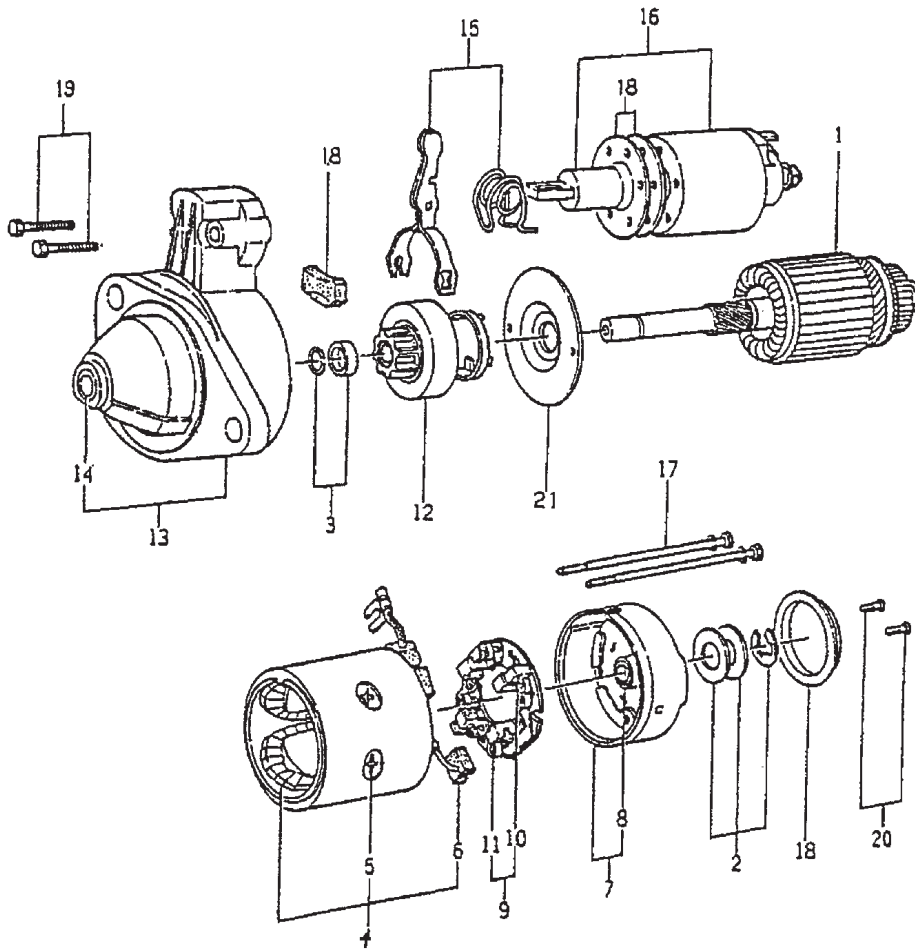
Starter Assembly

M753W2

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185086551	1	Starter (includes keys #1- 21)	-
1	185846468	1	Screw Set	-
2	185846610	1	Housing	-
3	185846615	1	Lever Set	-
4	185816340	1	Starter Switch Assembly	-
5	185846616	1	Spacer	-
6	185846617	1	Packing	-
7	185846618	1	Armature	-
8	185846621	1	Bolt Set	-
9	185866391	1	Shaft Assembly (includes keys #11- 16)	-
11	185846614	1	Plug Set	-
12	185866411	1	Pinion Clutch	-
13	185846612	1	Internal Gear Set	-
14	185846611	1	Washer	-
15	185866400	1	Shaft	-
16	185846613	1	Gear	-
17	185846619	1	Housing	-
18	185416490	1	Brush Assembly	-
19	185416500	1	Brush Holder Assembly (includes key #20)	-
20	185886070	1	Spring	-
21	185846620	1	End Cover	-

Starter Assembly

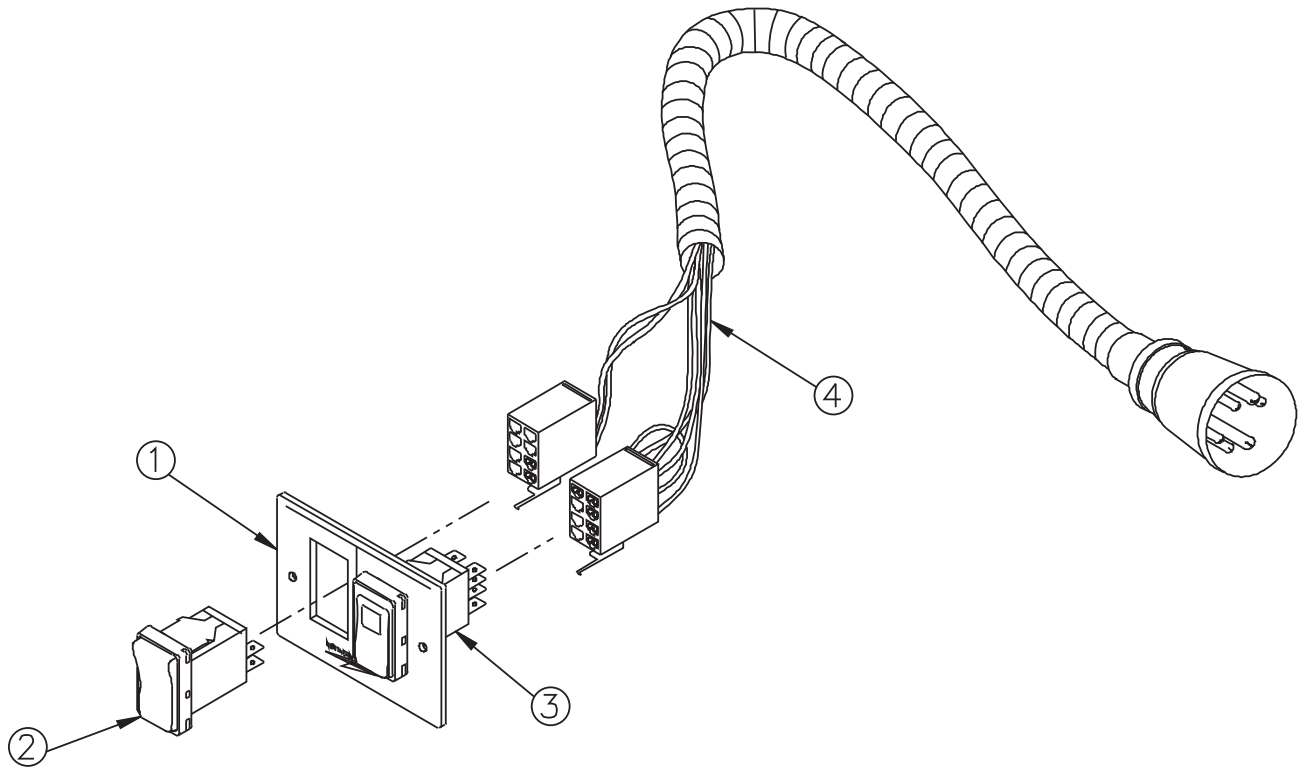
NL753W2



NL753W2starter

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185086321	1	Starter (includes keys #1- 21)	-
1	185846159	1	Armature	-
2	185846126	1	Thrust Washer Set	-
3	185846127	1	Pinion Stopper Set	-
4	185846160	1	Field Coil (includes keys #5- 6)	-
5	185846161	4	Pole Core Set Screw	-
6	185416130	2	Brush	-
7	185846449	1	Rear Cover (includes key #8)	-
8	185846131	1	Rear Cover Spacer	-
9	185416150	1	Brush Holder (includes keys #10- 11)	-
10	185416141	2	Brush	-
11	185846119	4	Brush Spring	-
12	185866050	1	Pinion	-
13	185846454	1	Gear Case (includes key #14)	-
14	185846134	1	Shaft	-
15	185846165	1	Shift Lever	-
16	185846180	1	Switch	-
17	185846166	2	Banjo Bolt	-
18	185846136	1	Dust Cover	-
19	185846300	2	Bolt	-
20	015140412	2	Screw	-
21	185846163	1	Center Plate	-

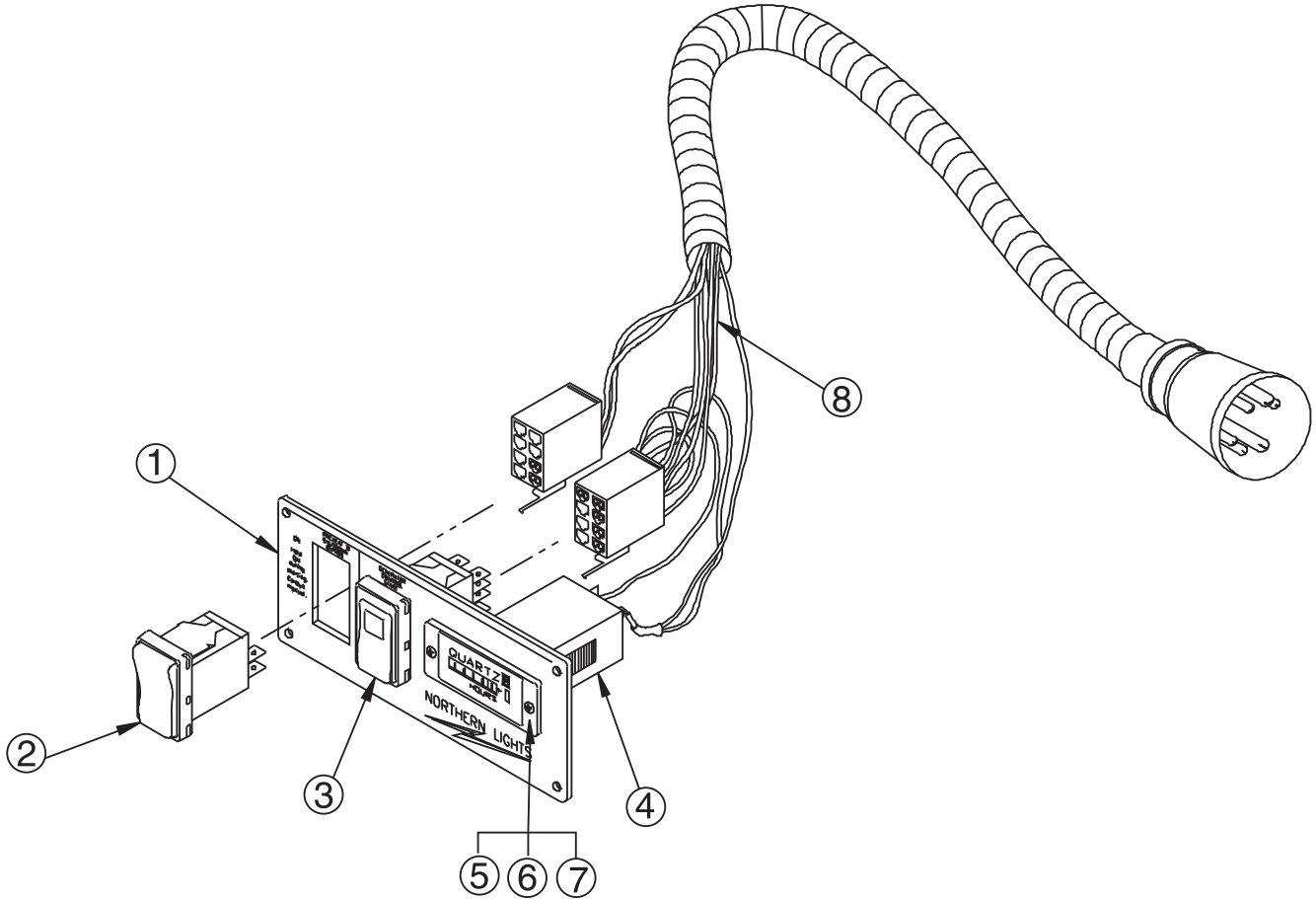
S-1 Control Panel 12 & 24 Volt



A-8551, A-8552/ B-5970

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
●●	22-92110	1	S-1 Start/Stop Control Panel, 12 Volt (includes all keys)	-
●●	22-92115	1	S-1 Start/Stop Control Panel, 24 Volt (includes all keys)	-
1	00-40013	1	Plate, S-1 Control Panel	-
2	22-90167	1	Rocker Switch	-
3	22-90168	1	Rocker Switch	-
4	22-42066	1	Wire Harness, 12 Volt	-
	22-42067	1	Wire Harness, 24 Volt	-
5	00-00013	1	Label "12 Volt" *	-
	00-00014	1	Label "24 Volt" *	-
6	22-40012	1	Resistor, 200 Ohm, 3 Watt (24 Volt Panel only) *	-
			*Not shown	

Series 1-B Start-Stop Control Panel

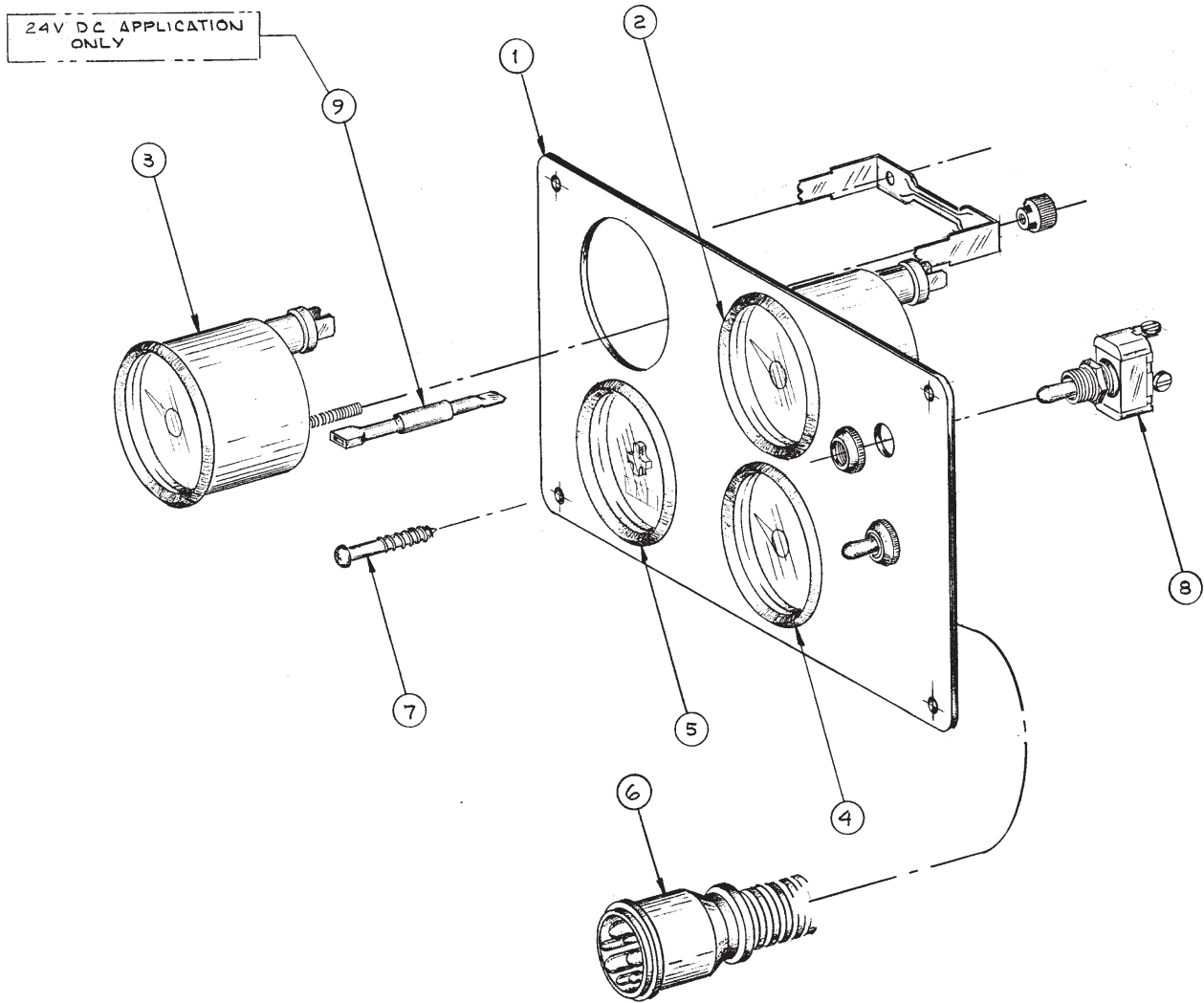


A-8553/ B-5971

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92120	1	S 1-B Start/Stop Control Panel - 12 Volt (includes all keys)	-
••	22-92125	1	S 1-B Start/Stop Control Panel - 24 Volt (includes all keys)	-
1	28-90003	1	Plate	-
2	22-90167	1	Rocker Switch	-
3	22-90168	1	Rocker Switch	-
4	22-90009	1	Hour Meter	-
5	12-00093	2	Machine Screw, Round Head Philips #6 - 32 x 1/2"	-
6	15-00030	2	Star Washer, Internal #6, Stainless Steel	-
7	14-00015	2	Hex Nut #6 - 32, Stainless Steel	-
8	22-42063	1	Wire Harness - 12 Volt Panels	-
	22-42064	1	Wire Harness - 24 Volt Panels	-

Flush Mount Dual Station Control Panel 12 & 24 Volt

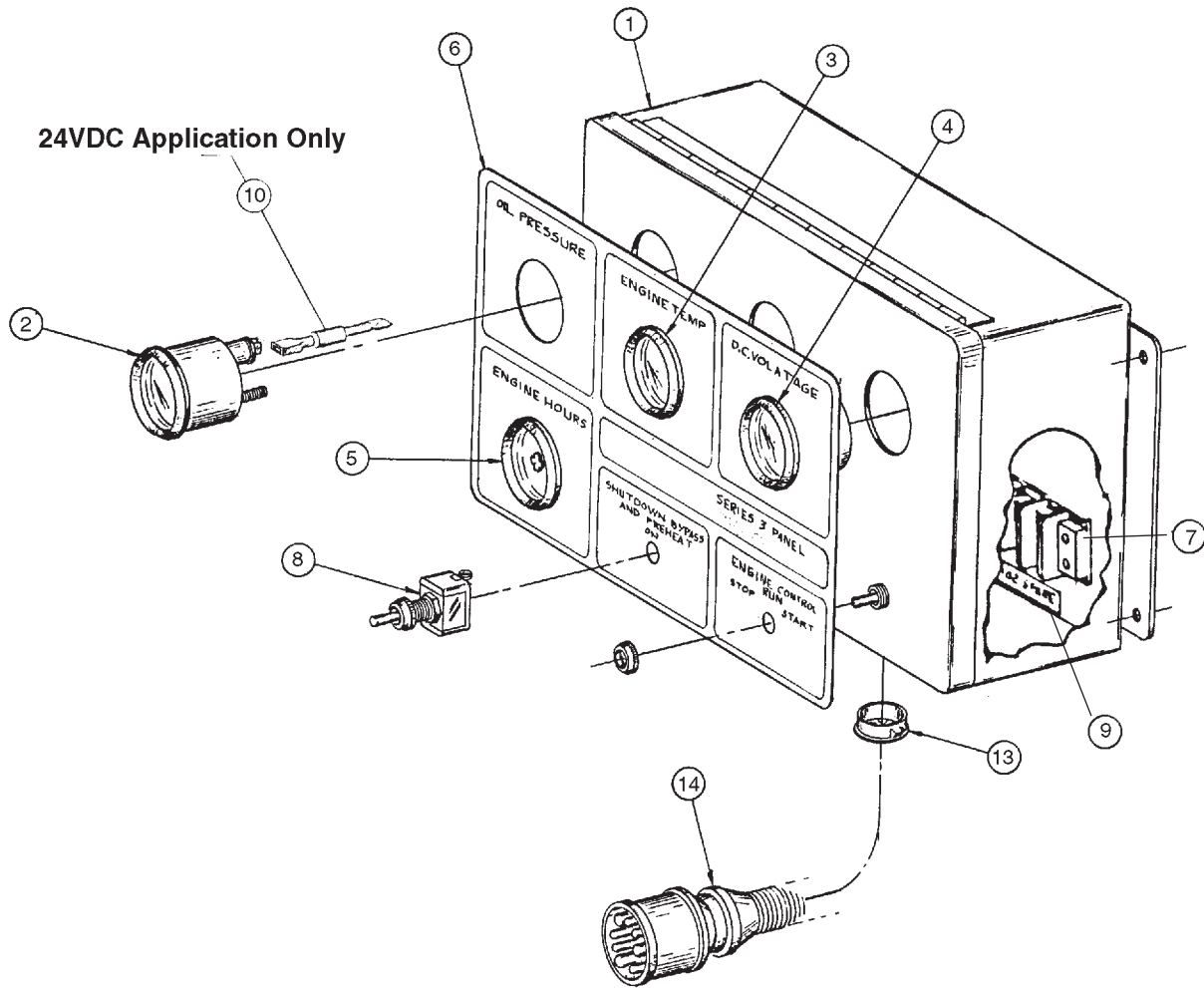
VDO Standard Line Black Bezel Gauges



A-4732, A-4597/ C-2441

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92015	1	S-3C Control Panel, 12 Volt (includes all keys)	-
••	22-92014	1	S-3C Control Panel, 24 Volt (includes all keys)	-
1	28-90010	1	Panel Plate	-
2	37-40010	1	Oil Pressure Gauge, 0-80 PSI	-
3	37-40011	1	Engine Temperature Gauge, 0-250° F	-
4	37-40012	1	DC Voltmeter, 12 Volt	-
	37-40014	1	DC Voltmeter, 24 Volt	-
5	37-40013	1	Hourmeter	-
6	22-42024	1	Panel Wire Harness (not shown)	-
7	12-90007	**	Self Tapping Screw, Oval Head Phillips #6 x 3/4"	-
8	22-41051	2	Toggle Switch	-
9	22-40004	2	Resistor Kit (24 volt panel only)	-
10	22-44852	**	12 Volt Bulb (not shown)	-
	22-44853	**	24 Volt Bulb (not shown)	-
			**As required	

S-3B Control Panel 12 & 24 Volt

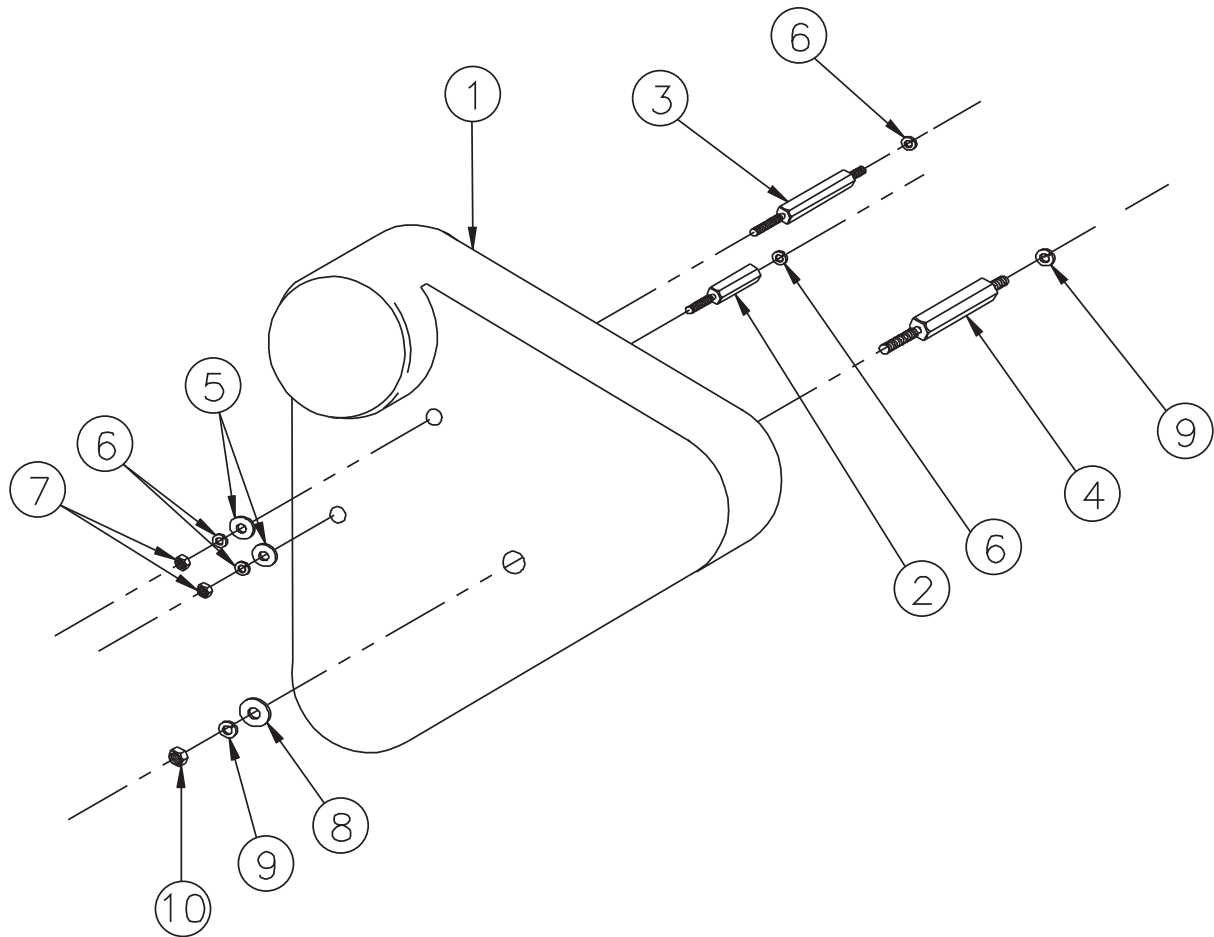


A-4722, A-4723/ C-2470

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92031	1	S-3B Control Panel, 12 Volt (includes all keys)	-
••	22-95420	1	S-3B Control Panel, 24 Volt (includes all keys)	-
1	39-40008	1	Enclosure	-
2	37-40010	1	Oil Pressure Gauge, 0-80 PSI	-
3	37-40011	1	Engine Temperature Gauge, 0-250° F	-
4	37-40012	1	DC Voltmeter, 12 Volt	-
	37-40014	1	DC Voltmeter, 24 Volt	-
5	37-40013	1	Hourmeter	-
6	00-91018	1	Panel Decal	-
7	22-41077	1	Terminal Board	-
8	22-41051	2	Toggle Switch	-
9	22-00052	1	Number Strip	-
10	22-40004	2	Resistor Kit (24 volt panel only)	-
11	22-44852	**	12 Volt Bulb (not shown)	-
	22-44853	**	24 Volt Bulb (not shown)	-
12	22-40257	1	Wire Harness (not shown)	-
13	00-41015	1	Plastic Bushing	-
14	22-40062	1	Connection Harness	-
			**As required	

Belt Guard Assembly

Standard Small Frame Alternators



A-9314/ B-6972

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-08601	1	Belt Guard	-
2	12-90049	1	Capscrew, Hex Head M6 x 1.0 x 15 mm (Head tapped M6 x 1.0 x 10 mm Special)	-
3	13-91132	1	Stud, M6 x 1.0 x 111.4 mm	-
4	13-90070	1	Stud, M10 x 1.5 x 110.8 mm	-
5	15-01134	2	Flat Washer M6 S/S	-
6	15-00610	4	Lock Washer, Helical M6 S/S	-
7	14-01132	2	Hex Nut M6 x 1.0 S/S	-
8	15-09805	1	Flat Washer M10 S/S	-
9	15-00808	2	Lock Washer, Helical M10 S/S	-
10	14-00817	1	Hex Nut M10 x 1.5 mm S/S	-

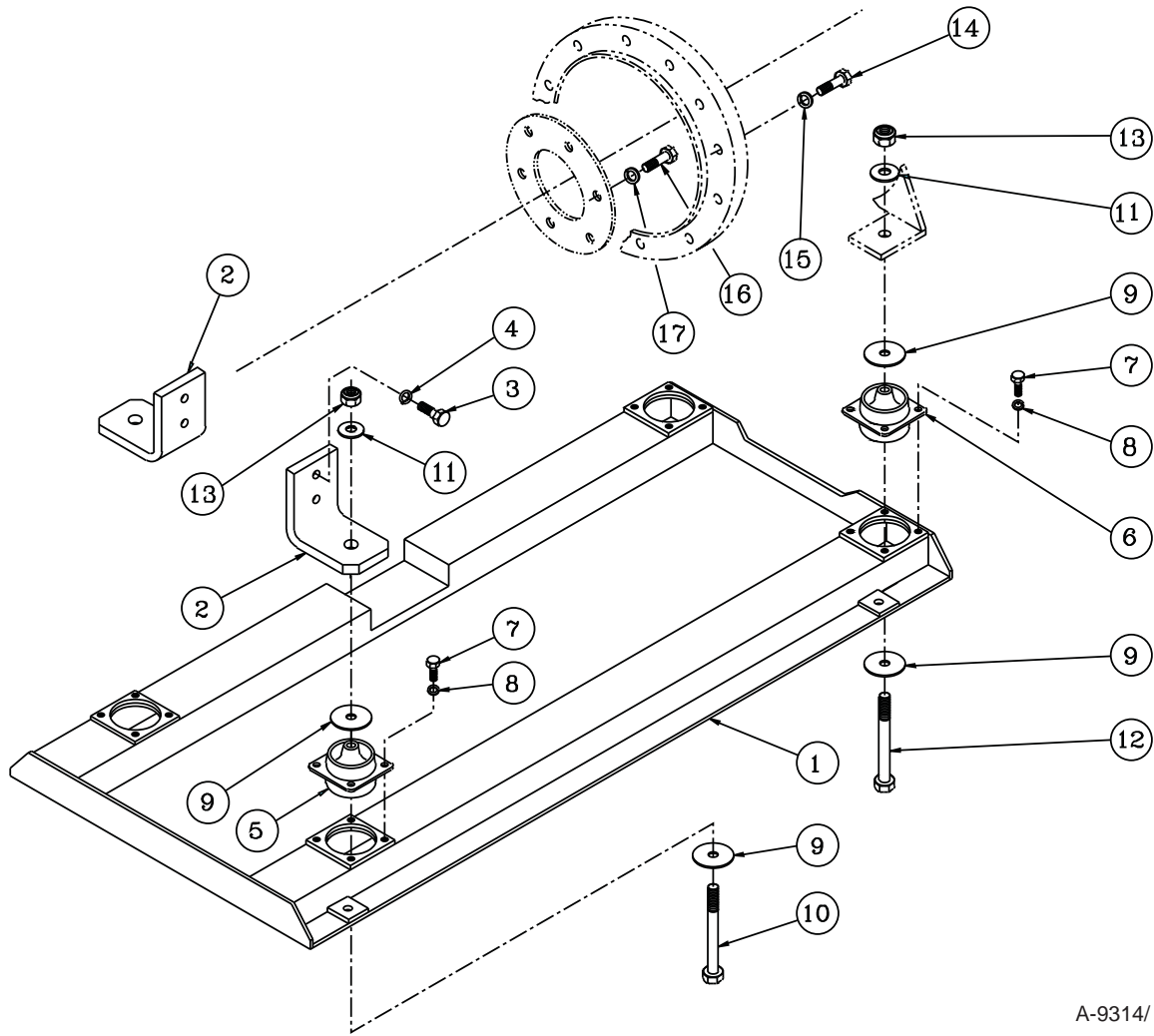
GROUP 6 – GASKET SETS

Gasket Kit

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
•	195907350	1	Gasket Set (Industrial - includes keys #1- 40)	-
••	29-08201	1	Gasket Set (Marine - includes all keys)	-
1	198636080	1	Oil Seal, Rear	-
2	052109076	1	O-ring, Oil Line	-
3	110996800	1	Gasket, Oil Pan	-
4	025100012	2	Seal Washer, Oil Pan Drain	-
5	165996520	1	Gasket, Front Plate	-
6	052109108	2	O-ring, Governor Shaft	-
7	052109110	1	O-ring, Armature	-
8	052109109	1	O-ring, Armature	-
9	165996530	1	Gasket, Timing Gear Case	-
10	198636090	1	Oil Seal, Front	-
11	340990011	1	Gasket, Gear Case Cover	-
12	131426300	1	Adjusting Shim Set	-
13	025100006	1	Seal Washer, Air Bleed Screw	-
14	140996260	4	Gasket, Eye Bolt	-
15	111147640	1	Head Gasket, t=1.3	-
16	120406050	3	Valve Guide Seal, Exhaust	-
17	120406070	3	Valve Guide Seal, Intake	-
18	131426200	3	Gasket, Injector Lower side	-
19	131426210	3	Gasket, Injector Upper side	-
20	052100120	1	O-ring, Rocker Arm Shaft	-
21	120996150	1	Gasket, Rocker Arm Bracket	-
22	111996420	1	Gasket, Head Cover	-
23	140996260	3	Gasket, Head Cover	-
24	052100400	2	O-ring, Oil Filler Cap	-
25	135996750	1	Gasket, Air Intake	-
26	145996830	1	Gasket, Water Pump	-
27	145996840	1	Gasket, Thermostat Case	-
28	145996850	1	Gasket, Thermostat Cover	-
29	130516069	4	Gasket, Joint Bolt	-
30	130996130	1	Gasket, Feed Pump	-
31	052109113	2	O-ring, Gauge Guide	-
32	025100016	1	Seal Washer, Solenoid	-
33	052109078	1	O-ring, Relief Valve	-
34	130326051	5	Gasket, Joint Bolt	-
35	140996270	4	Gasket, Valve Assembly	-
36	135996900	1	Gasket, Muffler Assembly	-
37	135996541	1	Gasket, Exhaust Manifold (Industrial)	-
38	314990013	1	Gasket (Industrial)	-
39	052300700	1	O-ring, Gear Case Cover	-
40	314990030	1	Gasket, Elbow (Marine)	-
41	11-08601	1	Gasket Set, Exhaust	-
42	11-18602	1	Gasket Set, Thermostat Cover	-
43	16-13101	1	O-ring, Raw Water Pump	-

Base Frame Assembly

Marine

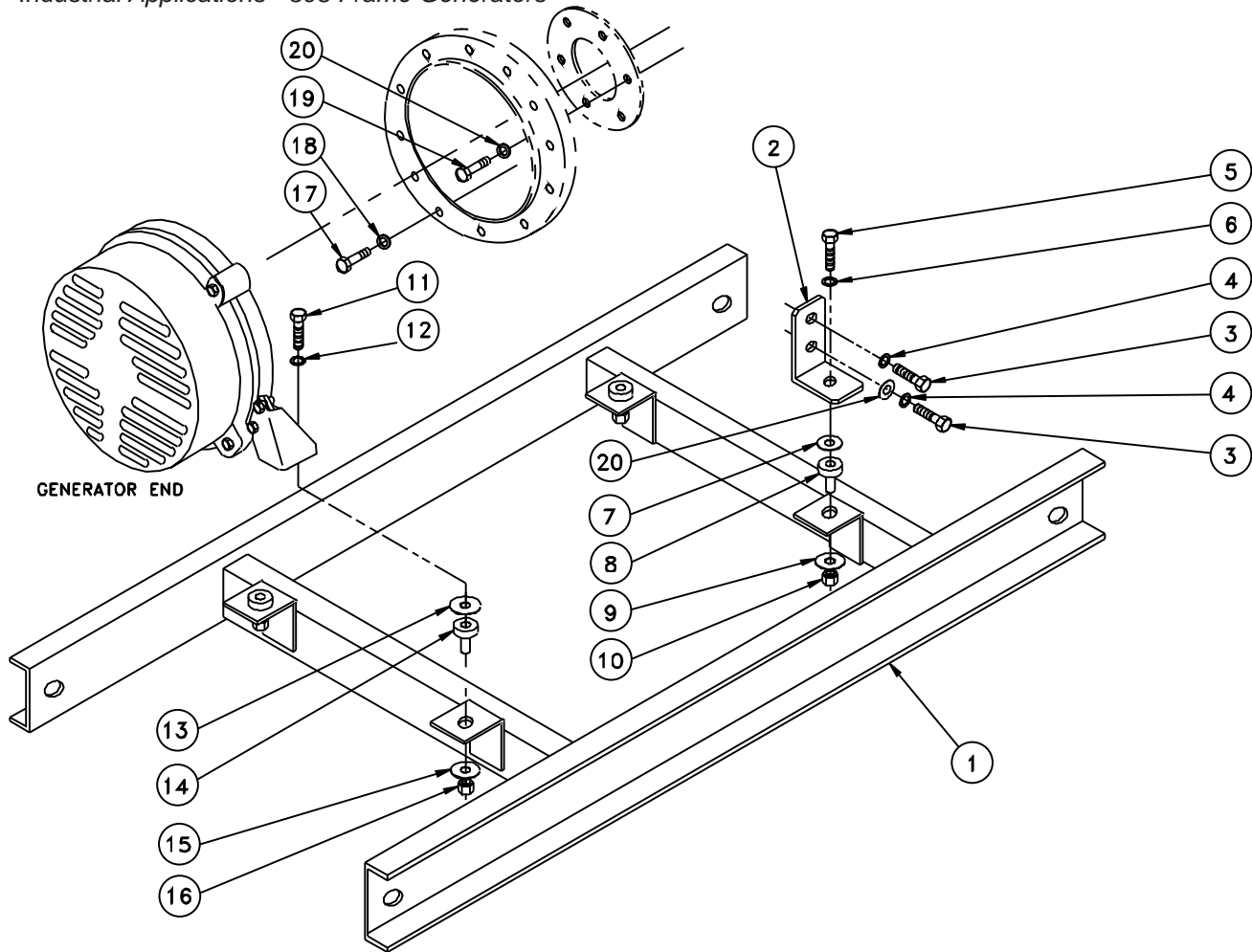


A-9314/ D-3472

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-88601	1	Base Frame, Steel	-
2	23-88211	2	Bracket	-
3	12-00943	4	Capscrew, Hex Head M12 x 1.25 x 30 mm	-
4	15-00912	4	Lock Washer, Helical M12	-
5	33-83108	2	Platform Mount, 155 lb.	-
6	33-83108	2	Platform Mount, 155 lb.	-
7	12-00776	16	Capscrew, Hex Head M8 x 1.25 x 20 mm, Stainless Steel	-
8	15-00705	16	Lock Washer, Helical M8, S/S	-
9	15-00020	8	Snubbing Washer 2.88 x 0.52 x 0.125	-
10	12-09956	2	Capscrew, Hex Head M12 x 1.75 x 65 mm, S/S	-
11	15-09007	4	Flat Washer M12, S/S	-
12	12-09956	2	Capscrew, Hex Head M12 x 1.75 x 65 mm S/S	-
13	14-09830	4	Hex Nut, Nylock M12 x 1.75, S/S	-
14	12-00313	8	Capscrew, Hex Head 3/8-16 x 1-1/4"	-
15	15-00302	8	Lock Washer, Helical 3/8	-
16	12-00753	6	Capscrew, Hex Head M8 x 1.25 x 30 mm	-
17	15-00702	6	Lock Washer, Helical M8	-

Base Frame Assembly

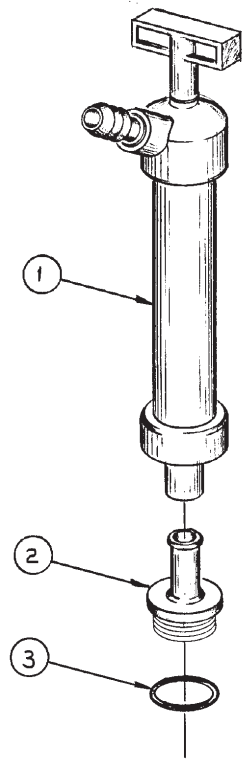
Industrial Applications - 308 Frame Generators



A-7929 / B-7017

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-88217	1	Base Frame	-
2	23-88208	2	Bracket, Front Engine Mount	-
3	12-00943	4	Capscrew, Hex Head M12 x 1.25 x 30 mm	-
4	15-00912	4	Lock Washer	-
5	12-00817	2	Capscrew, Hex Head M10 x 1.5 x 55 mm	-
6	15-00805	2	Flat Washer	-
7	15-00014	2	Head/Tail Washer	-
8	33-83100	2	Centerbonded Mount, 100 lb.	-
9	15-00014	2	Head/Tail Washer	-
10	14-00812	2	Hex Nut, Nylock	-
11	12-00048	2	Capscrew, Hex Head M10 x 1.5 x 60 mm	-
12	15-00805	2	Flat Washer	-
13	15-00014	2	Head/Tail Washer	-
14	33-83100	2	Centerbonded Mount, 100 lb.	-
15	15-00014	2	Head/Tail Washer	-
16	14-00812	2	Hex Nut, Nylock	-
17	12-00312	8	Capscrew, Hex Head 3/8-16 x 1"	-
18	15-00302	8	Lock Washer	-
19	12-00214	6	Capscrew, Hex Head 5/16-18 x 1-1/2"	-
20	15-00202	6	Lock Washer	-

Oil Drain Kit



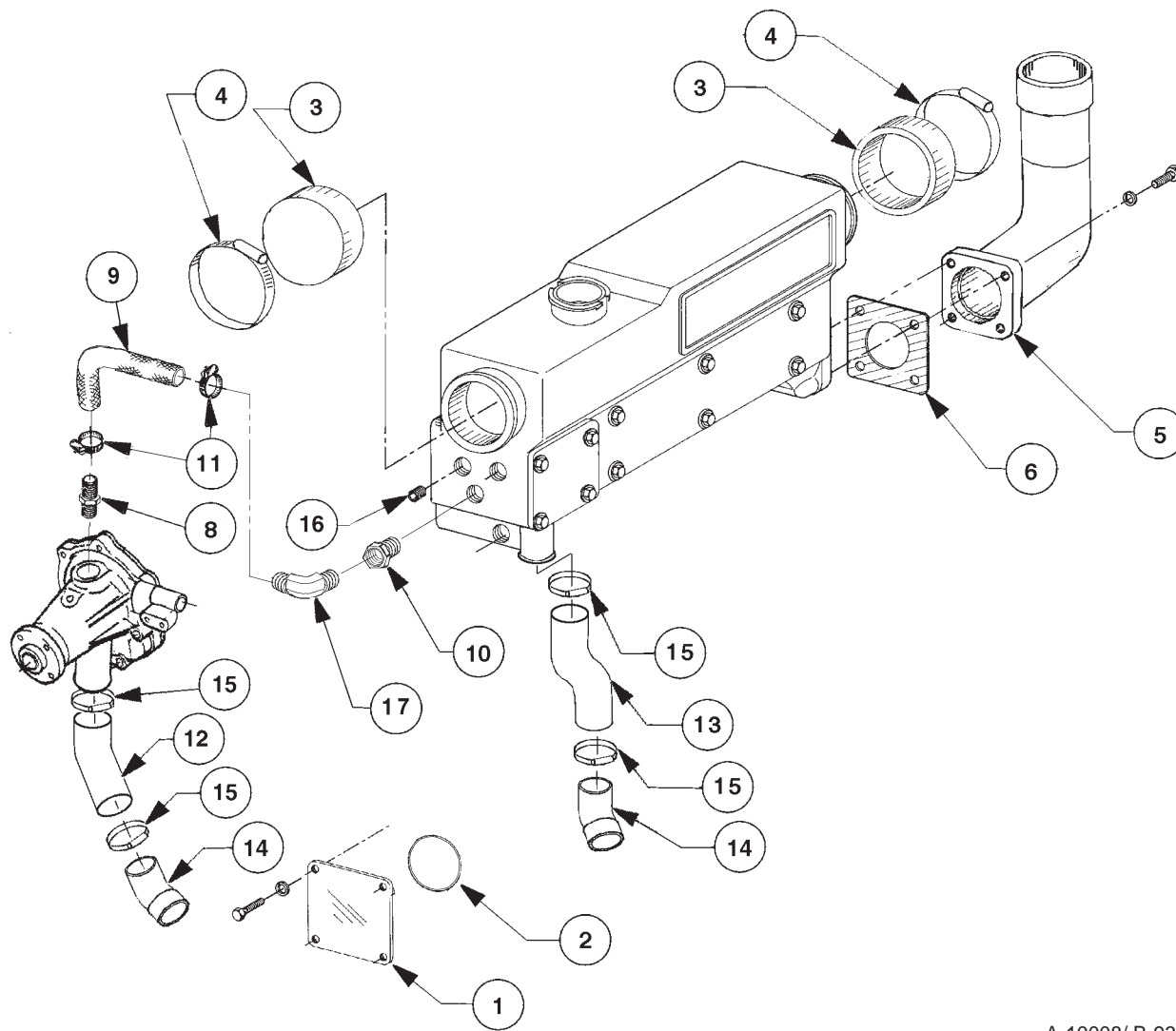
A-5024/ B-3990

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	34-70010	1	Oil Drain Kit Complete (includes all keys)	-
1	36-72002	1	Hand Pump	-
2	31-70001	1	Adapter, Oil Drain	-
3	16-70001	1	O-ring	-

GROUP 9 – ACCESSORIES AND OPTIONAL EQUIPMENT

Keel Cooling Conversion

Marine Application - with Dry Exhaust

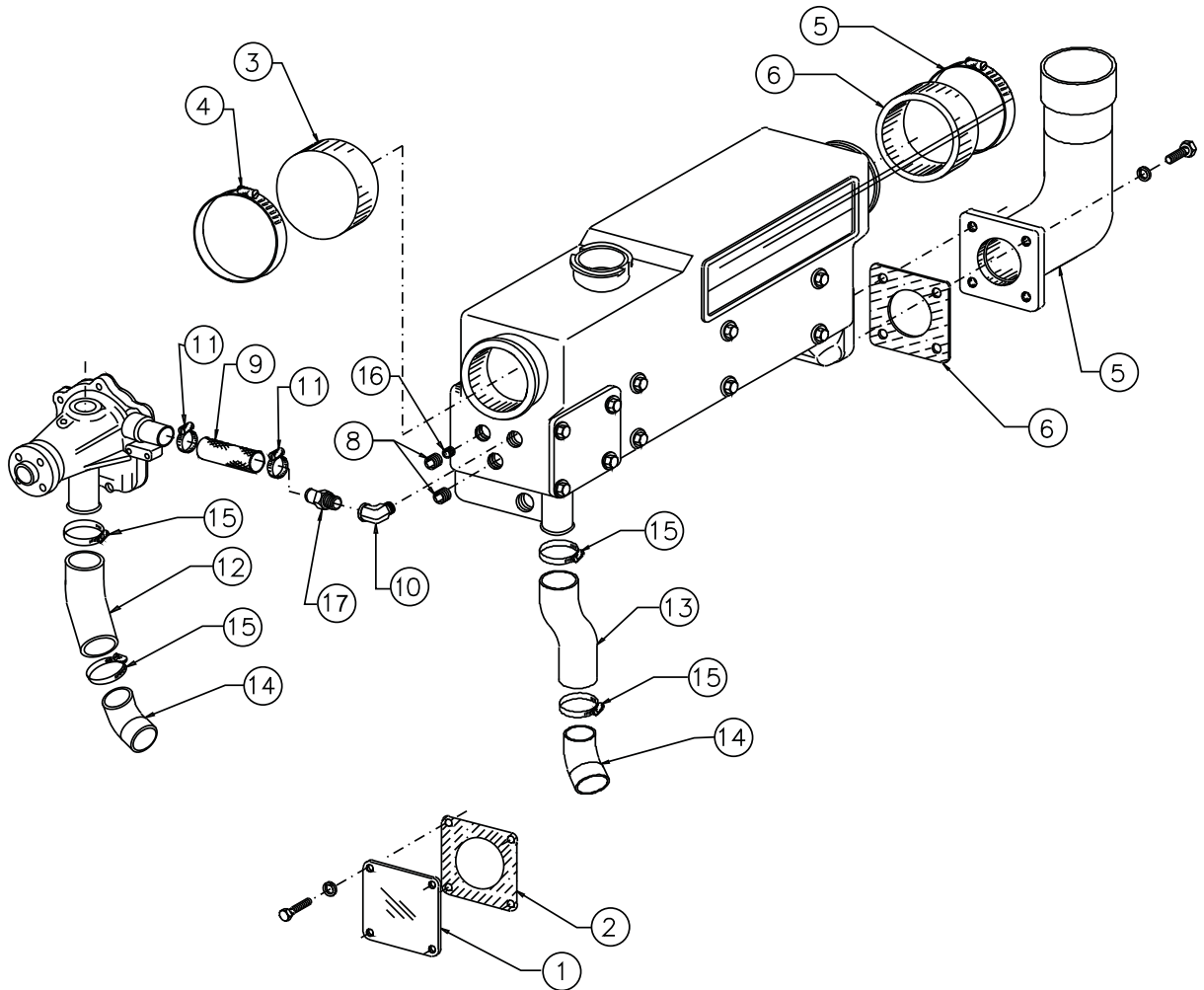


A-10008/ B-9387

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165206320	1	Cover (white)	-
2	052300700	1	O-ring	-
3	20-12019	2	End Cap, Rubber	-
4	19-00048	2	Hose Clamp, #48	-
5	27-32007	1	Elbow, Dry Exhaust 1-1/2" NPT	-
6	11-31902	1	Gasket, Exhaust Outlet Mtg.	-
7	00-32008	1	Exhaust Lagging (not shown)	-
8	21-17304	1	Male Connector, Brass 3/8 NPT x 5/8 HB	-
9	18-18603	1	Hose, Coolant By-pass	-
10	21-10044	1	Adapter, 3/8 NPT x 3/8 NPT	-
11	19-00008	2	Hose Clamp #8	-
12	18-18604	1	Hose, Coolant Pump Inlet	-
13	18-18605	1	Hose, Expansion Tank Outlet	-
14	21-18602	2	Male Elbow, 45° Copper 1-1/8" HB x 1-1/4" HB	-
15	19-00016	4	Hose Clamp #16	-
16	21-51900	1	Plug, Socket Head 1/8 NPT	-
17	21-05409	1	Male Elbow, 3/8 NPT x 5/8 Hose Barb	-

Keel Cooling Conversion

Marine Application - with Dry Exhaust, Late Production



A-12056, A-12057/ B-9389

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165206320	1	Cover (white)	-
2	052300700	1	O-ring	-
3	20-12019	2	End Cap, Rubber	-
4	19-00048	2	Hose Clamp, #48	-
5	27-32007	1	Elbow, Dry Exhaust 1-1/2" NPT	-
6	11-31902	1	Gasket, Exhaust Outlet Mtg.	-
7	00-32008	1	Exhaust Lagging (not shown)	-
8	21-10055	2	Plug, Socket Head 3/8	-
9	18-18606	1	Hose, Coolant By-pass 1/2" ID Silicone x 3.25" Lg.	-
10	21-62506	1	Street Elbow 90° Steel 3/8 NPT	-
11	19-01008	2	Hose Clamp #8 Extended Band	-
12	18-18604	1	Hose, Coolant Pump Inlet	-
13	18-18605	1	Hose, Expansion Tank Outlet	-
14	21-18602	2	Male Elbow, 45° Copper 1-1/8" HB x 1-1/4" HB	-
15	19-00016	4	Hose Clamp #16	-
16	21-51900	1	Plug, Socket Head 1/8 NPT	-
17	21-12014	1	Male Connector, Brass 3/8 NPT x 1/2 HB Beaded Barb	-



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