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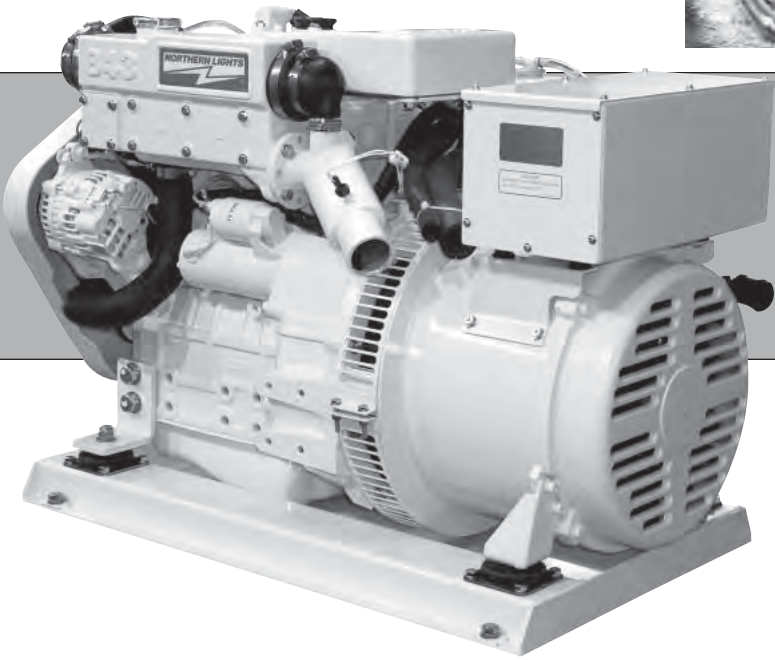
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P843K

For Models: M843NK, NL843NK,
M843JK, and NL843JK

PARTS CATALOG

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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PART NO.: P843K 12/03



PARTS CATALOG

for Models

M843NK, NL843NK, M843JK, and NL843JK

Please read thoroughly before attempting to use this manual:

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MODEL DESIGNATION

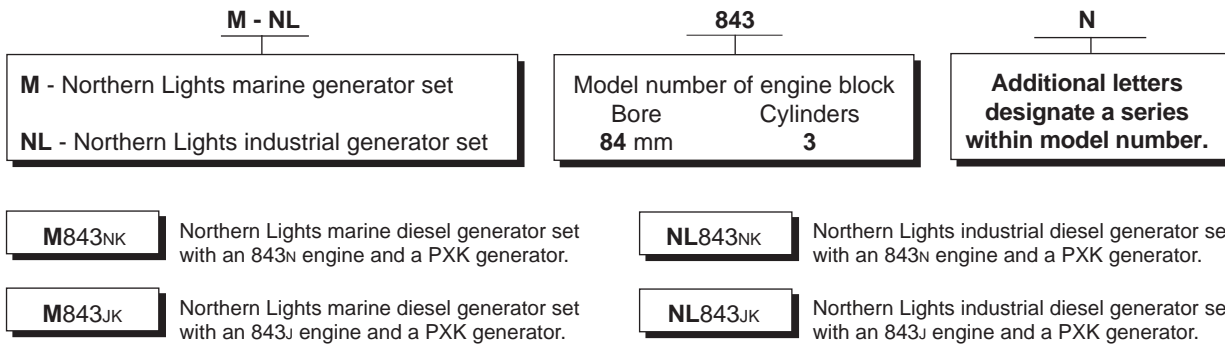
MODELS INCLUDED

This manual covers the operating instructions for:

M843NK and NL843NK, which both use the 843N engine;
and **M843JK and NL843JK**, which both use the 843J engine.

MODEL NUMBERS

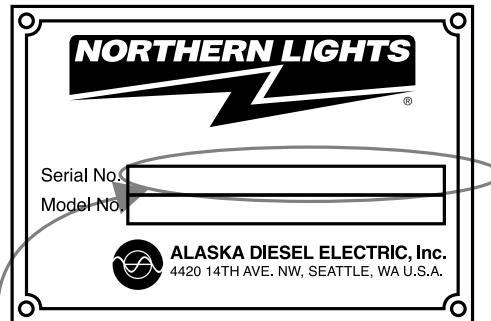
Model numbers give the unit's application, block model, aspiration, and RPM:



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 the drawing below.



*Generator Set Serial Number
for units with PXX
generators*

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 - NL844K

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	-

P844K 06/96

5-2

REFERENCES:

- | | |
|--|--|
| <ol style="list-style-type: none"> 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. | <ol style="list-style-type: none"> 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 Assembly M843JK

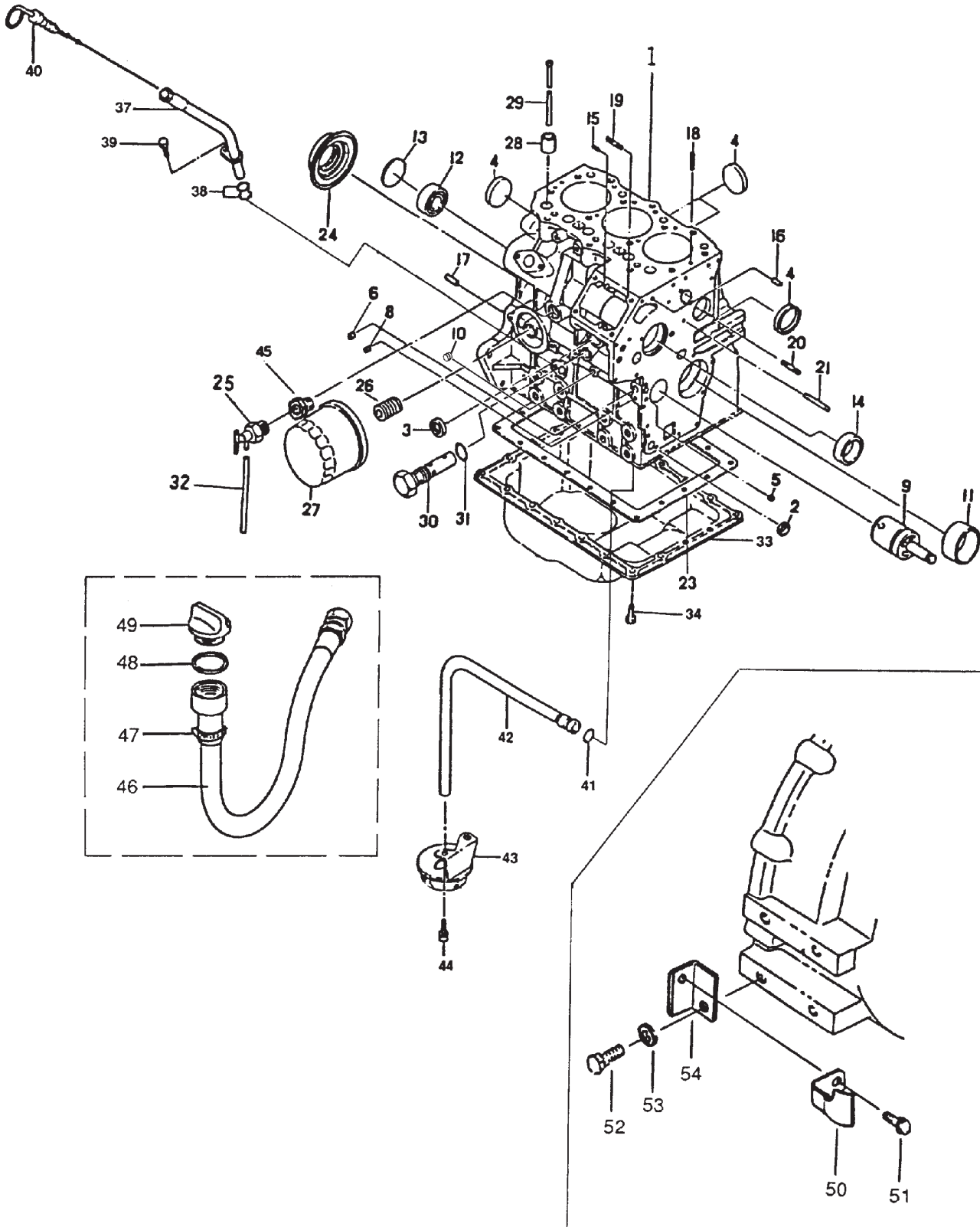


Fig. 01-00

Cylinder Block Assembly M843JK

KEY	PART NUMBER	QTY	DESCRIPTION	S/N
1	110103172	1	Cylinder Block Assembly (Includes keys #2 - #21, formerly #110103170 & 3171)	-
2	064200015	1	Expansion Plug 15 mm	-
3	064200025	1	Expansion Plug 25 mm	-
4	064200040	4	Expansion Plug 40 mm	-
5	198466010	2	Blank Plug	-
6	198466020	3	Blank Plug	-
8	198466070	4	Blank Plug	-
9	165296131	1	Idle Gear Shaft Assembly	-
10	064410010	1	Plug	-
11	198517191	1	Bush; S.T.D. (formerly #198517190)	-
	198517195	1	Bush; U.S. 0.25 (formerly #198517194)	-
	198517198	1	Bush; U.S. 0.50 (formerly #198517197)	-
12	040106203	1	Bearing	-
13	064100045	1	Expansion Plug	-
14	042309013	1	Bearing	-
15	030500612	2	Dowel Pin	-
16	030500616	2	Dowel Pin	-
17	030501025	2	Dowel Pin	-
18	030309005	2	Spring Pin	-
19	010109441	2	Stud Bolt	-
20	012110635	1	Stud Bolt	-
21	012110660	1	Stud Bolt	-
23	110996820	1	Gasket	-
24	198636170	1	Oil seal	-
25	198736120	1	Drain Cock, brass	-
26	140546020	1	Joint	-
27	24-03100	1	Oil Filter	-
28	120116160	6	Tappet	-
29	120456222	6	Push Rod	-
30	140036220	1	Relief Valve Assembly (formerly #140036120)	-
31	052109078	1	O-ring	-
32	068115250	1	Tube	-
33	110707450	1	Oil Pan	-
34	010109235	26	Bolt	-
37	110756140	1	Dipstick Tube	-
38	052100100	2	O-ring	-
39	011300612	1	Bolt	-
40	198416320	1	Dipstick	-
41	052109076	1	O-ring	-
42	140986530	1	Oil Pipe	-
43	140406310	1	Suction Filter	-
44	011310612	2	Bolt	-
45	198486770	1	Bushing	-
46	140606710	1	Oil Drain Hose	-
47	198756200	1	Hose Clamp	-
48	052100280	1	O-ring (formerly #054109013)	-
49	398430560	1	Cap	-
50	140976040	1	Bracket	-
51	011500812	1	Bolt	-
52	199436350	1	Bolt	-
53	027100010	1	Spring Washer	-
54	130976310	1	Bracket	-

Cylinder Block Assembly M - NL843NK

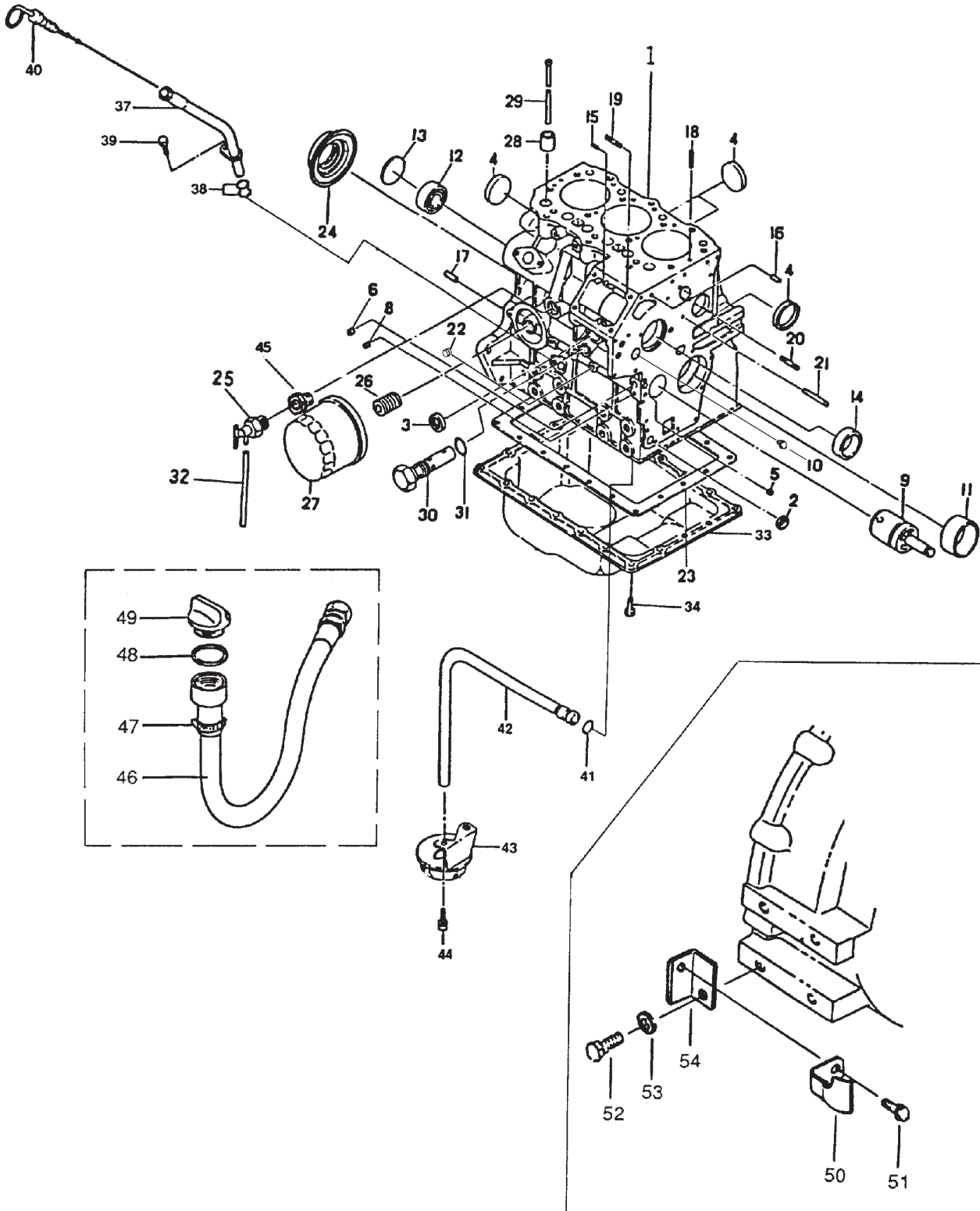


Fig. 01-02

Cylinder Block Assembly M - NL843NK

KEY	PART #	QTY	DESCRIPTION	SERIAL #
1	110107645	1	Cylinder Block Complete - Marine (white, formerly #110107643 & 44) } (Includes Cylinder Block Complete - Industrial (blue, formerly 110107602 & 03) } keys #2- #21)	-
	110107604	1		-
2	064200015	1	Expansion Plug 15 mm	-
3	064200025	1	Expansion Plug 25 mm	-
4	064200040	4	Expansion Plug 40 mm	-
5	198466010	2	Blank Plug	-
6	198466020	3	Blank Plug	-
7	010109238	1	Plug, Hex Head M16 x 1.5 (use with Pan #110707391)	-
8	198466070	4	Blank Plug	-
9	165296130	1	Idle Gear Shaft Complete	-
10	198466060	**	Bush	-
11	198517221	1	Bush; S.T.D. (formerly #198517220)	-
	198517225	1	Bush; U.S. 0.25 (formerly #198517224)	-
	198517228	1	Bush; U.S. 0.50 (formerly #198517227)	-
12	040106203	1	Bearing	-
13	064100045	1	Expansion Plug	-
14	042309013	1	Bearing	-
15	030500612	2	Dowel Pin	-
16	030500616	2	Dowel Pin	-
17	030501025	2	Dowel Pin	-
18	030309005	2	Spring Pin	-
19	012100820	2	Stud Bolt	-
20	012100635	1	Stud Bolt	-
21	012100660	1	Stud Bolt	-
22	064410010	**	Plug	-
23	110996820	1	Gasket (formerly #110996560)	-
24	198636170	1	Oil seal	-
25	198736120	1	Drain Cock, brass - Marine	-
	198736052	1	Drain Cock, zinc - Industrial	-
26	140546020	1	Joint	-
27	24-03100	1	Oil Filter	-
28	120116160	6	Tappet	-
29	120456231	6	Push Rod	-
30	140036220	1	Relief Valve Assembly (formerly #140036120)	-
31	052100150	1	O-Ring	-
32	068115250	1	Tube	-
33	110707450	1	Oil Pan - Marine (white)	-
	110707391	1	Oil Pan - Industrial (blue)	-
34	010109235	26	Bolt	-
35	010401212	**	Plug, Hex Head M12 x 1.25	-
36	025100012	**	Seal Washer - Industrial	-
	025100016	1	Seal Washer - Industrial (use with pan #11070391)	-
37	110756140	1	Dipstick Tube	-
38	052100100	2	O-Ring	-
39	011300612	1	Bolt	-
40	198416320	1	Dipstick	-
41	052109076	1	O-Ring	-
42	140986530	1	Oil Pipe	-
43	140406310	1	Suction Filter	-
44	011310612	2	Bolt	-
45	198486770	1	Bushing	-
46	140606710	1	Oil Drain Hose*	-
47	198756200	1	Hose Clamp*	-
48	054109013	1	O-Ring*	-
49	398430560	1	Cap*	-
50	140976040	1	Stay*	-
51	011300812	1	Bolt*	-
52	199436350	1	Bolt*	-
53	027100010	1	Spring Washer*	-
54	130976310	1	Bracket*	-

*Items #46 through #54: Marine only.
**As required.

Crankshaft Assembly M843JK

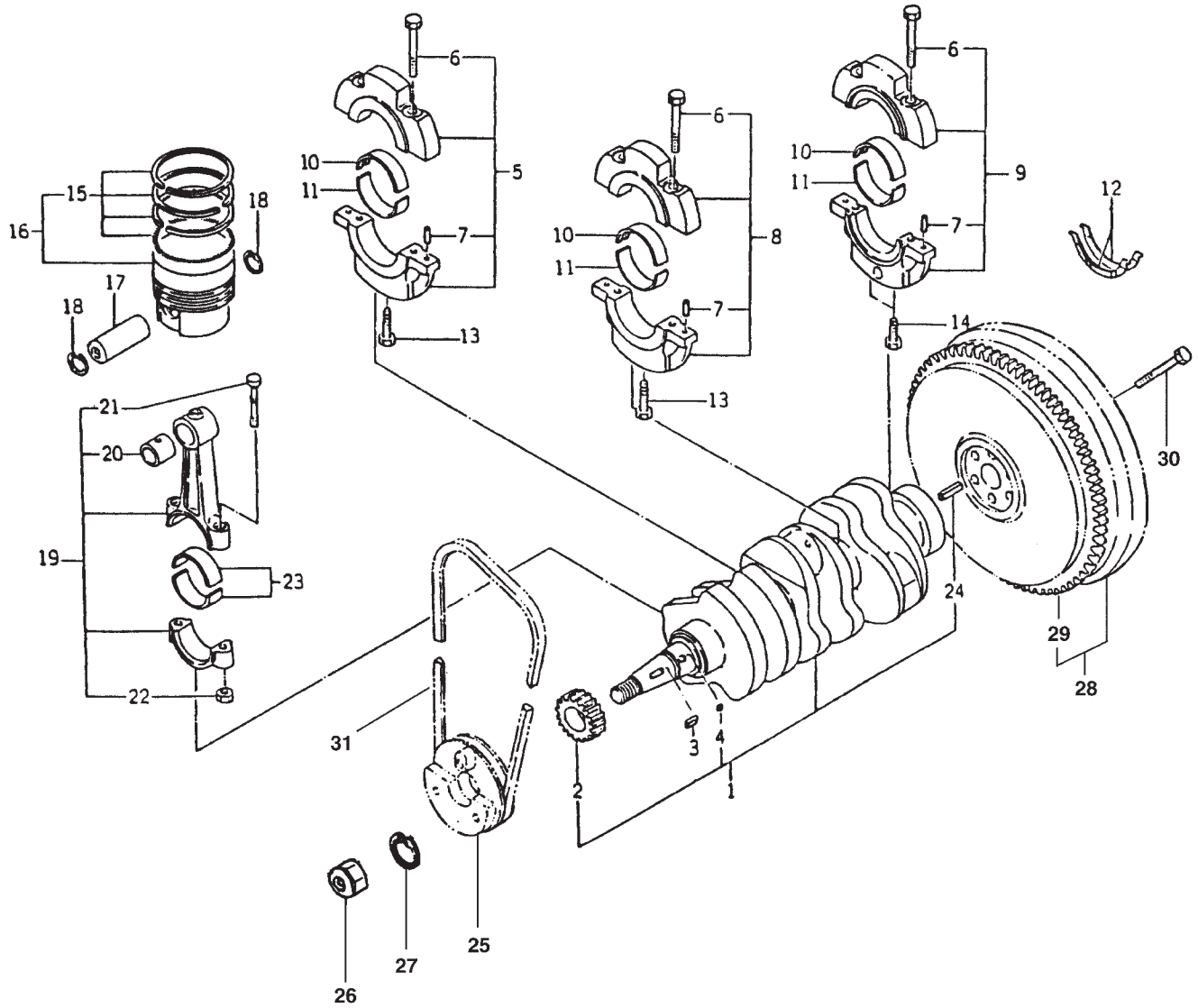


Fig. 1-4

Crankshaft Assembly M843JK

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	115256590	1	Crankshaft Assembly (includes keys #2, #4 & #24)	-
2	115276200	1	Crankshaft Gear	-
3	034100508	1	Key	-
4	030509020	1	Dowel Pin	-
5	110156161	1	Bearing Holder Assembly (includes keys #6 & #7)	-
6	010109406	6	Bolt	-
7	030500612	6	Dowel Pin	-
8	110156141	1	Bearing Holder Assembly (includes keys #6 & #7)	-
9	110156151	1	Bearing Holder Assembly (includes keys #6 & #7)	-
10	198517211	3	Bearing; S.T.D. (formerly #198517210)	-
	198517215	3	Bearing; U.S. 0.25 mm (formerly #198517214)	-
	198517218	3	Bearing; U.S. 0.50 mm (formerly #198517217)	-
11	198517201	3	Bearing; S.T.D. (formerly #198517200)	-
	198517205	3	Bearing; U.S. 0.25 mm (formerly #198517204)	-
	198517208	3	Bearing; U.S. 0.50 mm (formerly #198517207)	-
12	199266190	2	Thrust Washer	-
13	011311070	2	Bolt	-
14	010700865	2	Bolt	-
15	115107840	3	Ring Kit; S.T.D.	-
	115107293	3	Ring Kit; O.S. 0.50 mm	-
	115107295	3	Ring Kit; O.S. 1.00 mm	-
16	115017360	3	Piston Kit; S.T.D.	-
	115016714	3	Piston Kit; O.S. 0.50 mm	-
	115016717	3	Piston Kit; O.S. 1.00 mm	-
17	115326030	3	Piston Pin	-
18	036500025	6	Snap Ring	-
19	115026212	3	Connecting Rod Assembly (includes keys #20 - #22)	-
20	198517060	3	Bush	-
21	115176140	6	Connecting Rod Bolt	-
22	020109120	6	Nut	-
23	198517181	6	Bearing; S.T.D. (formerly #198517180)	-
	198517185	6	Bearing; U.S. 0.25 (formerly #198517184)	-
	198517188	6	Bearing; U.S. 0.50 (formerly #198517187)	-
24	030300816	1	Spring Pin	-
25	115397900	1	Crankshaft Pulley	-
26	020109086	1	Nut	-
28	115357730	1	Flywheel Assembly SAE #7-1/2 (includes key #29)	-
29	115376040	1	Ring Gear (109 teeth)	-
30	010109341	6	Bolt	-
31		1	Drive Belt (see Alternator & Mtg.)	-

Crankshaft Assembly M - NL843NK

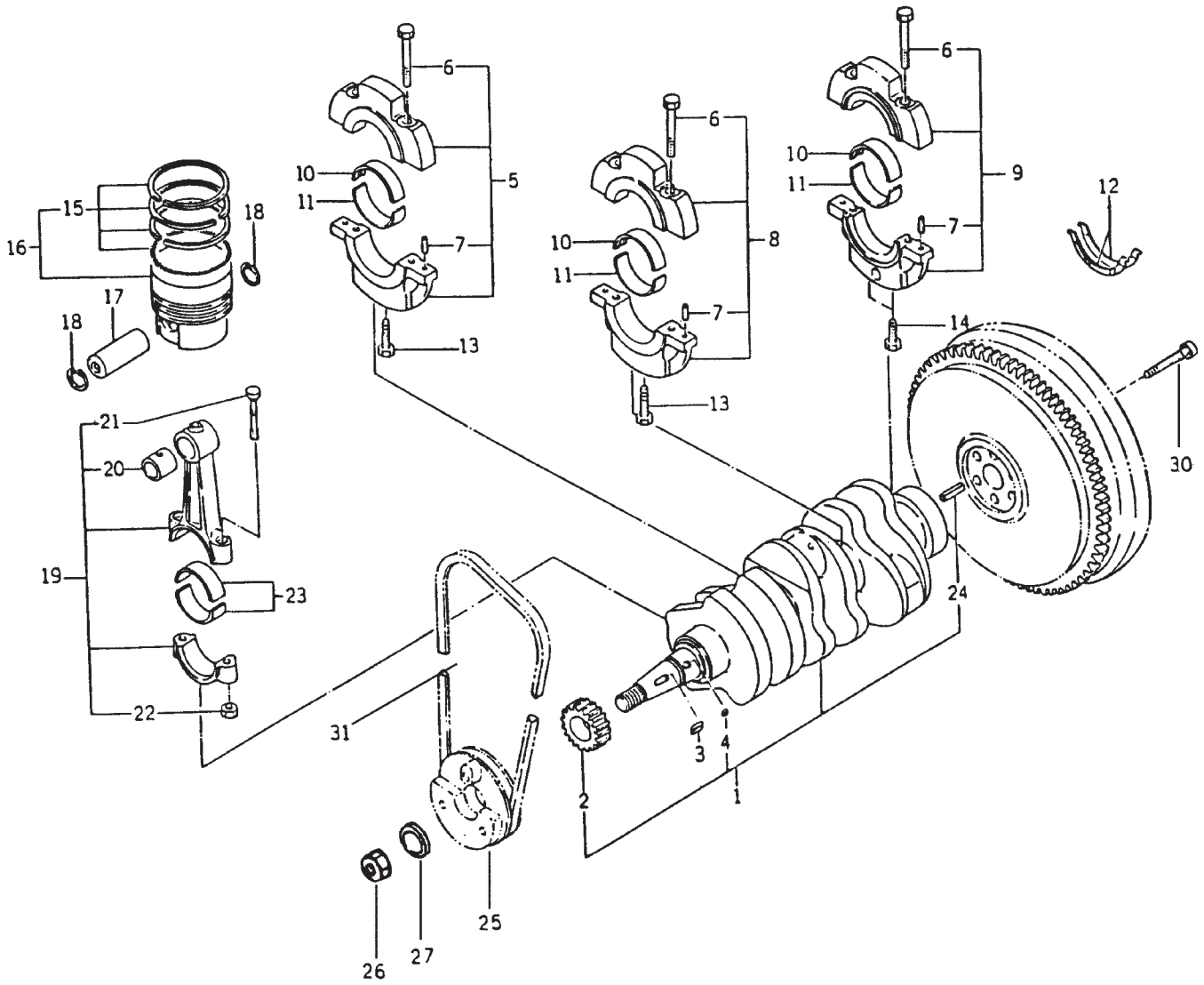


Fig. 1-6

Crankshaft Assembly M - NL843NK

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	115256580	1	Crankshaft Assembly (includes keys #2, #4 & #24)	-
2	115276200	1	Crankshaft Gear	-
3	034100508	1	Key	-
4	030509020	1	Dowel Pin	-
5	110156171	1	Bearing Holder Assembly (includes keys #6 & #7)	-
6	010111055	6	Bolt	-
7	030500612	6	Dowel Pin	-
8	110156181	1	Bearing Holder Assembly (includes keys #6 & #7)	-
9	110156191	1	Bearing Holder Assembly (includes keys #6 & #7)	-
10	198517231	3	Bearing; Std. (formerly #198517230)	-
	198517235	3	Bearing; U.S. 0.25 mm (formerly #198517234)	-
	198517238	3	Bearing; U.S. 0.50 mm (formerly #198517237)	-
11	198517241	3	Bearing; S.T.D. (formerly #198517240)	-
	198517245	3	Bearing; U.S. 0.25 mm (formerly #198517244)	-
	198517248	3	Bearing; U.S. 0.50 mm (formerly #198517247)	-
12	199266200	2	Thrust Washer	-
13	011311070	2	Bolt	-
14	010700865	2	Bolt	-
15	115107840	3	Ring Kit; Std. (formerly #115107290)	-
	115104084	3	Ring Kit; O.S. 0.50 mm (formerly #115107293)	-
	115104087	3	Ring Kit; O.S. 1.00 mm (formerly #115107295)	-
16	115017370	3	Piston Kit; Std. (formerly #115016810)	-
	115016814	3	Piston Kit; O.S. 0.50 mm	-
	115016817	3	Piston Kit; O.S. 1.00 mm	-
17	115326220	3	Piston Pin	-
18	036500028	6	Snap Ring	-
19	115026251	3	Connecting Rod Assembly (includes keys #20 - #22)	-
20	198517265	3	Bush	-
21	115176140	6	Connecting Rod Bolt	-
22	020109087	6	Nut	-
23	198517251	6	Bearing; Std. (formerly #198517250)	-
	198517255	6	Bearing; U.S. 0.25 mm (formerly #198517254)	-
	198517258	6	Bearing; U.S. 0.50 mm (formerly #198517257)	-
24	030300816	1	Spring Pin	-
25	115397390	1	Crankshaft Pulley - Marine (white)	-
	115396810	1	Crankshaft Pulley - Industrial (blue)	-
26	020109086	1	Nut	-
27	026100024	1	Washer (no longer required)	-
28	115357040	1	Flywheel Assembly SAE #7-1/2 (includes key #29)	-
29	115376040	1	Ring Gear (109 teeth)	-
30	010109341	6	Bolt	-
31		1	Drive Belt (see Alternator & Mtg.)	-

Camshaft and Oil Pump

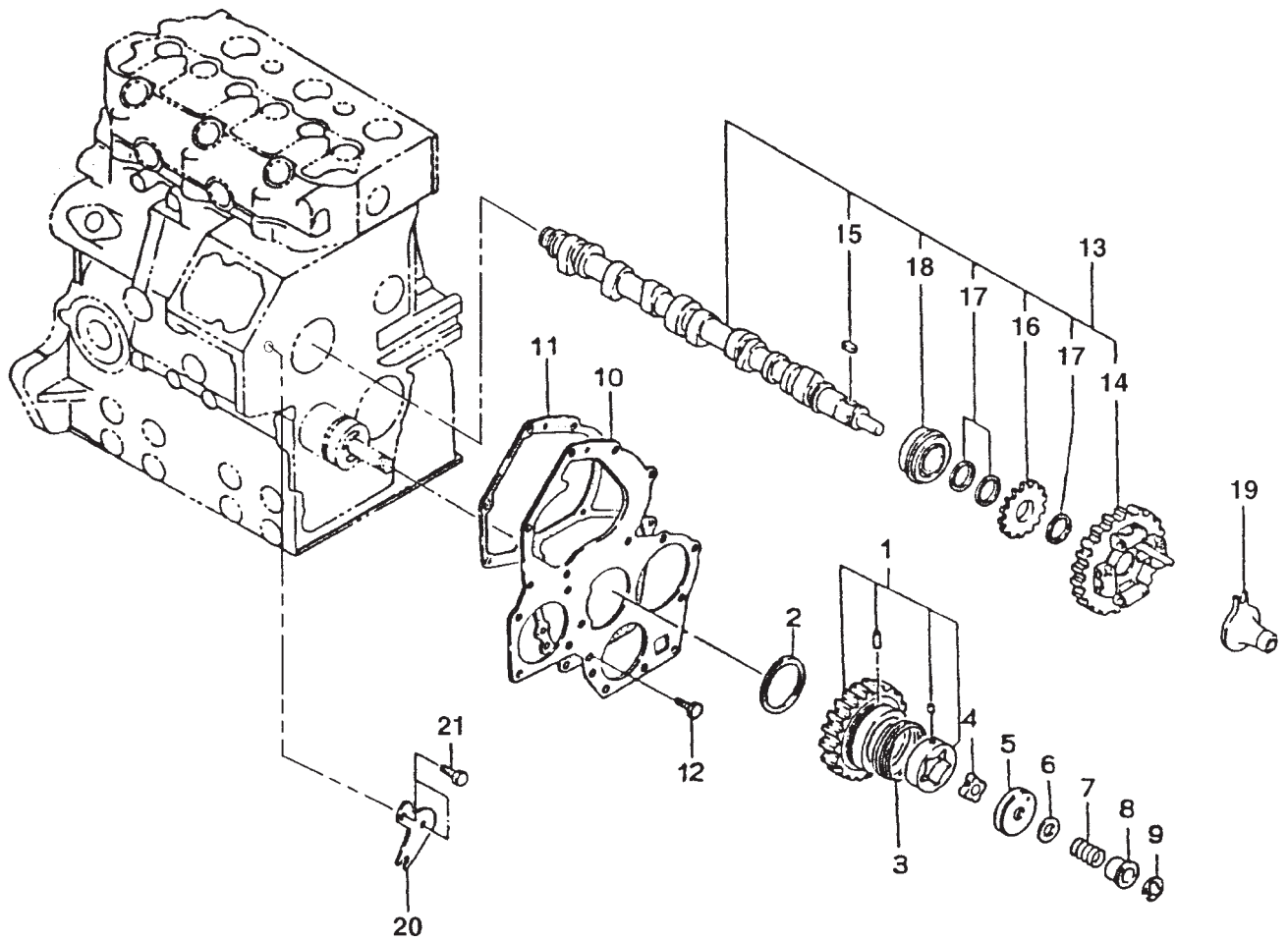


Fig. 1-8

Camshaft and Oil Pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165026120	1	Idle Gear Assembly (includes keys #14 - 18)	-
2	199266180	1	Thrust Washer	-
3	198216821	1	Spring	-
4	140166140	1	Rotor	-
5	140116140	1	Oil Pump Cover	-
6	199286150	1	Shim; t = 0.10	-
	199286160	1	Shim; t = 0.15	-
	199286170	1	Shim; t = 0.20	-
	199286180	1	Shim; t = 0.50	-
7	198216720	1	Spring	-
8	199236540	1	Collar	-
9	036800010	1	Snap Ring	-
10	165166450	1	Front Plate - Marine (white)	-
	165166290	1	Front Plate - Industrial (blue)	-
11	165996361	1	Gasket (843NK)	-
	165996540	1	Gasket (843JK)	-
12	011300612	2	Bolt	-
13	120026350	1	Camshaft Assembly	-
14	120016050	1	Cam Gear	-
15	034100508	1	Key	-
16	120736081	1	Gear	-
17	199216230	3	Spacer	-
18	040156304	1	Bearing	-
19	125256120	1	Slider	-
20	199566651	1	Plate	-
21	011310612	2	Bolt	-

Cylinder Head

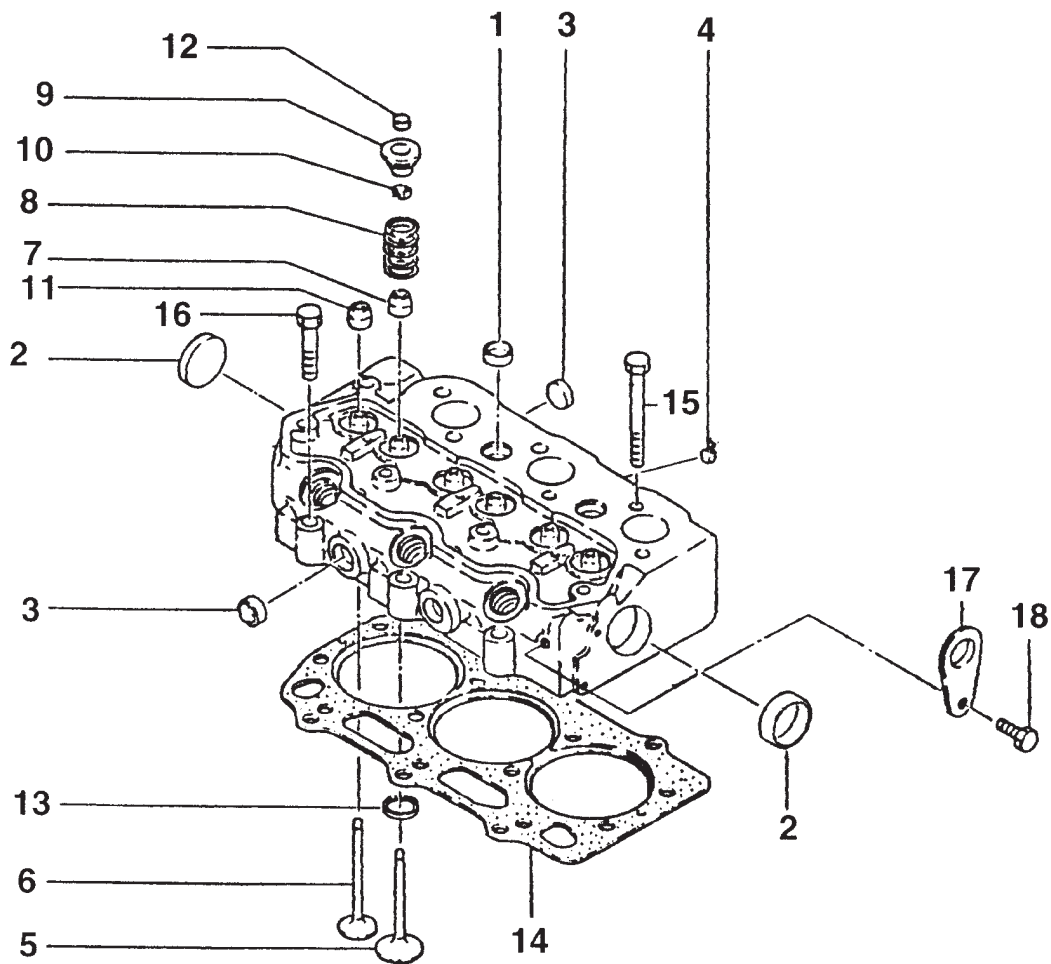


Fig. 1-9

Cylinder Head

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	111017721	1	Cylinder Head Assembly - (843JK) (Includes keys #1 - 13, formerly #111017720)	-
••	111017301	1	Cylinder Head Assembly - (843NK) (Includes keys #1 - 13, formerly 111017300 & 111017310)	-
1	064210020	**	Expansion Plug 20 mm (formerly #064200020)	-
	064210018	**	Expansion Plug 18 mm	-
2	064200030	2	Expansion Plug 30 mm	-
3	064200025	4	Expansion Plug 25 mm	-
4	064200010	2	Expansion Plug 10 mm	-
5	120166270	3	Intake Valve	-
6	120176280	3	Exhaust Valve	-
7	120406070	3	Valve Guide Seal - Intake	-
8	198216700	6	Spring	-
9	120186080	6	Retainer	-
10	120226070	12	Keeper	-
11	120406050	3	Valve Guide Seal - Exhaust	-
12	120216040	6	Cap	-
13	110136251	3	Valve Seat; Intake	-
14	111147491	1	Head Gasket; t = 1.3 mm (formerly #111147490)	-
	111147501	1	Head Gasket; t = 1.4 mm (formerly #111147500)	-
15	111136480	11	Head Bolt (14 mm Hex)	-
16	111136490	3	Head Bolt (14 mm Hex)	-
17	195816340	1	Lifting Eye - Marine (843JK) (white)	-
	195816400	1	Lifting Eye - Marine (843NK) (white)	-
	195816410	1	Lifting Eye - Industrial (843NK) (blue)	-
18	011310816	2	Bolt	-

Rocker Arm Assembly

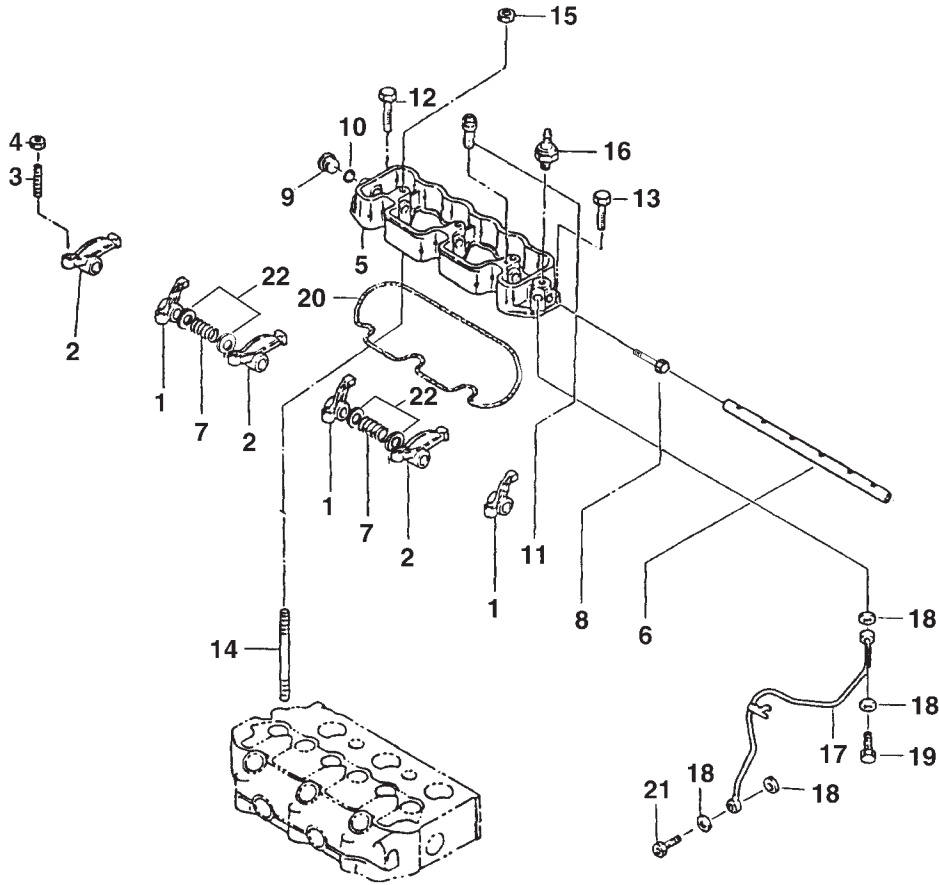


Fig. 1-10

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	120036622	1	Rocker Arm Assembly - Marine	-
••	120036510	1	Rocker Arm Assembly - Industrial	-
1	120356200	3	Intake Rocker Arm	-
2	120356210	3	Exhaust Rocker Arm	-
3	199486220	6	Screw	-
4	020109076	6	Nut	-
5	120346241	1	Rocker Arm Bracket	-
6	120316210	1	Rocker Arm Shaft	-
7	198216780	2	Spring	-
8	199486320	1	Screw	-
9	198436150	1	Plug	-
10	052100120	1	O-ring	-
11	015100412	1	Screw	-
12	011300635	1	Bolt	-
13	011300625	1	Bolt	-
14	012109177	3	Stud	-
15	023100008	3	Nut	-
16		1	Oil Pressure Switch (see Electrical System)	-
17	140606691	1	Oil Pipe (843JK)	-
	140606701	1	Oil Pipe (843NK)	-
18	140996260	4	Sealing Washer	-
19	198486780	1	Banjo Bolt	-
20	052109065	1	Gasket	-
21	198487590	1	Banjo Bolt	-
22	199280280	4	Shim	-

Rocker Arm Cover

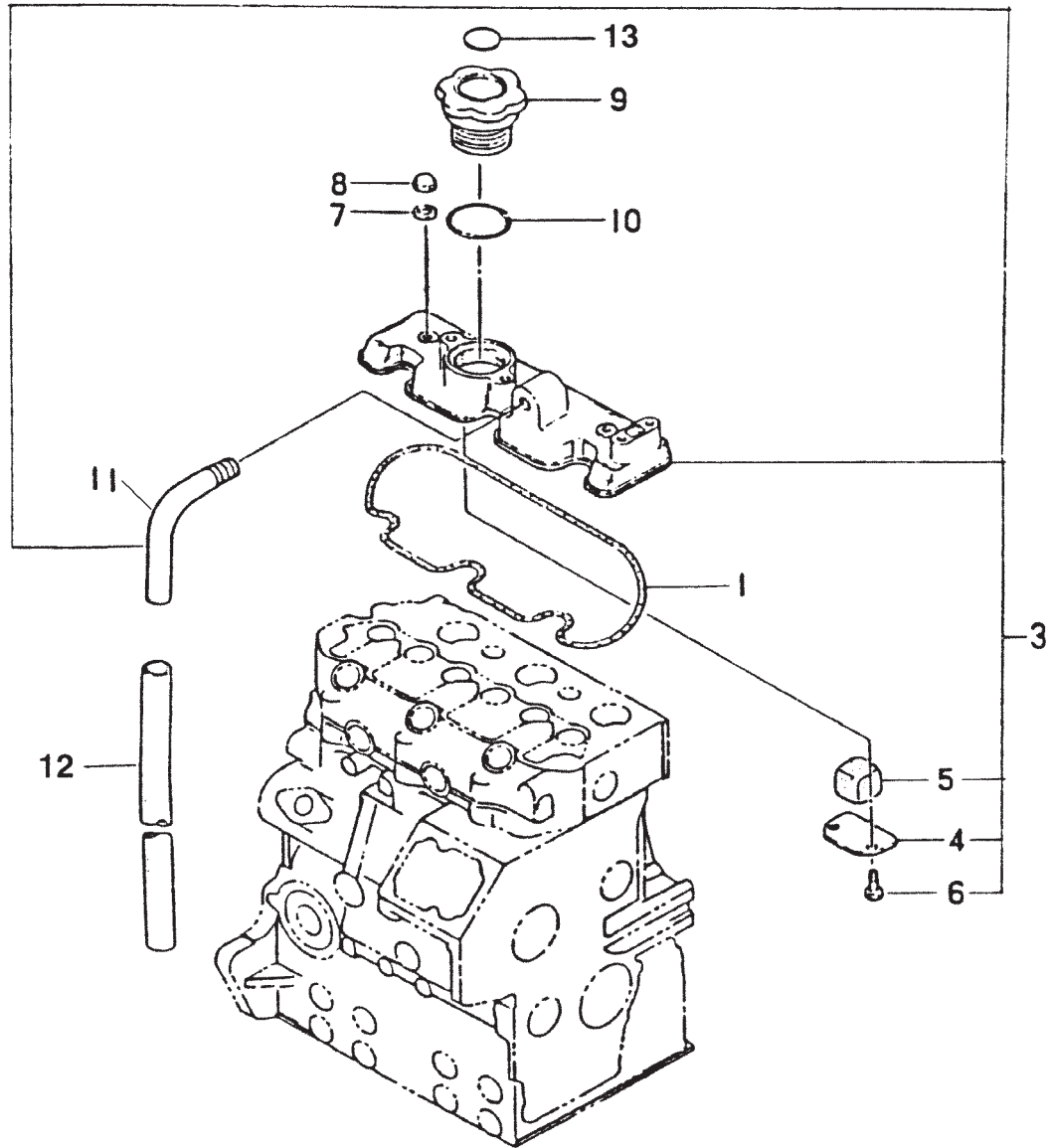
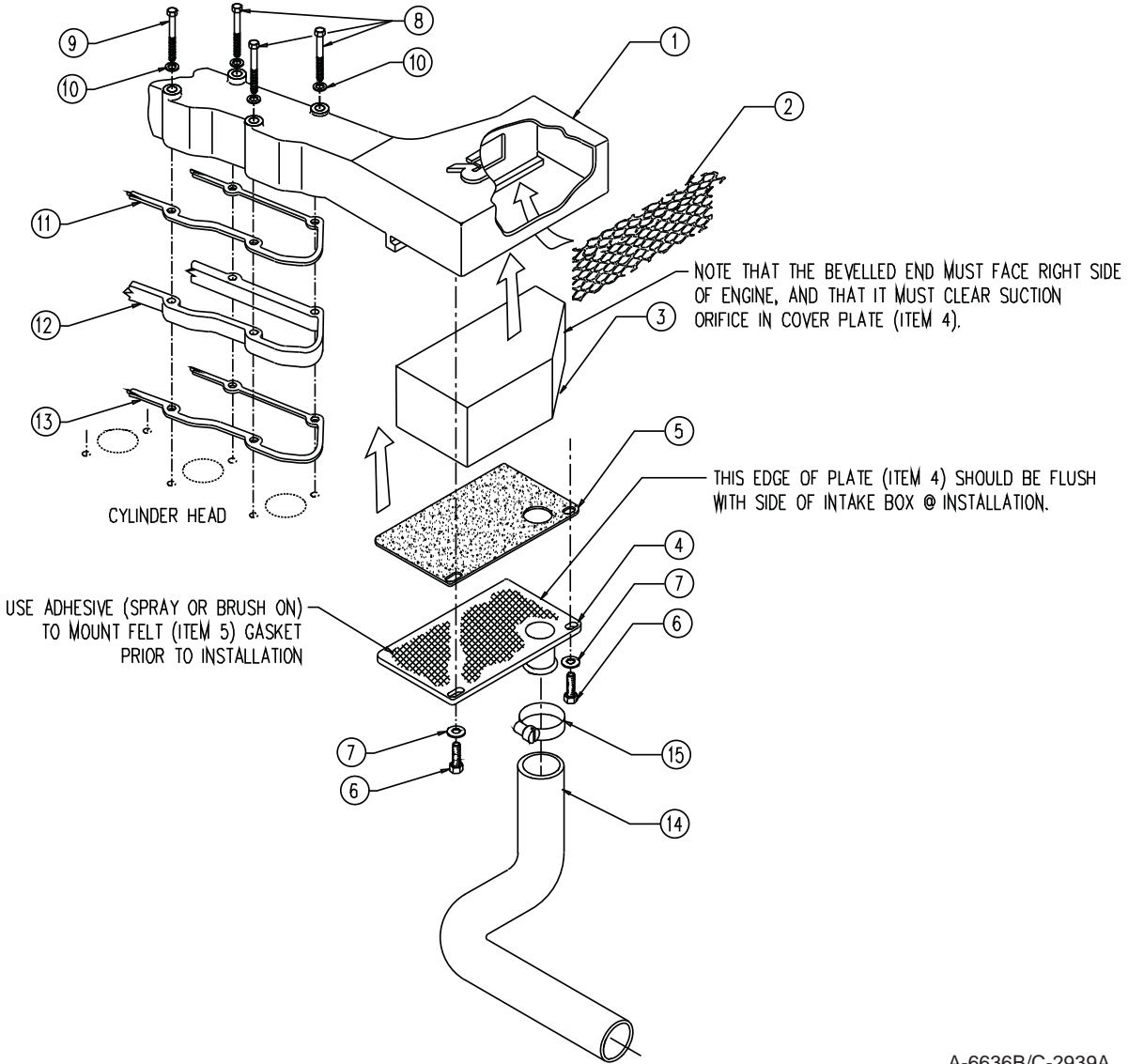


Fig. 1-11a

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	052109064	1	Gasket	-
3	111026821	1	Rocker Arm Cover - Marine (white - includes keys #4 - #6 & #11)	-
	111026810	1	Rocker Arm Cover - Industrial (blue - includes keys #4 - #6 & #11)	-
4	110666050	1	Oil Stopper	-
5	110666060	1	Filter	-
6	011100610	2	Bolt	-
7	140996260	3	Gasket	-
8	024500008	3	Cap Nut	-
9	198436010	1	Cap	-
10	052100400	1	O-ring	-
11	140986581	1	Pipe	-
12	068209156	1	Vent Hose	-
13	190196630	1	Caution Label	-

Air Intake and Filter

Marine Application with ENMAA Noise Reduction

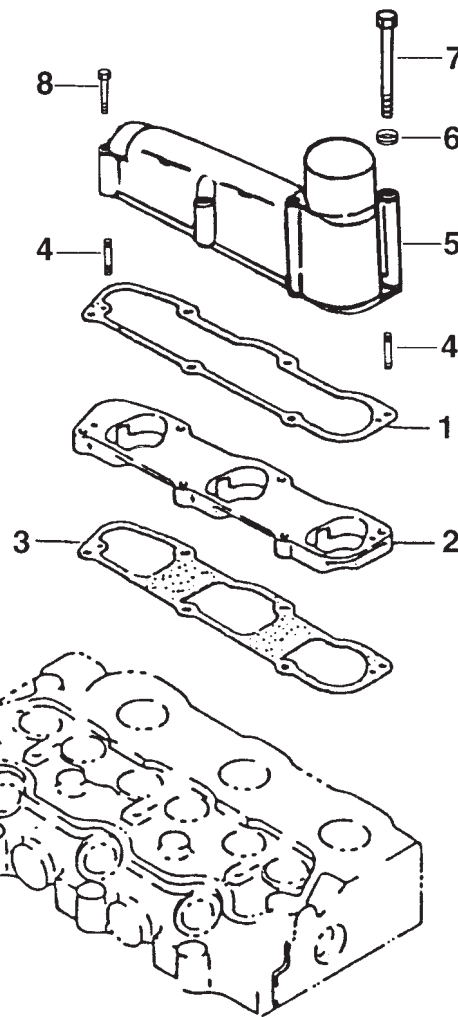


A-6636B/C-2939A

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-23111	1	Air Intake Manifold	-
2	24-23103	1	Screen	-
3	24-23102	1	Air Filter Element	-
4	28-28101	1	Intake Cover Plate	-
5	11-28101	1	Gasket	-
6	12-00751	2	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
7	15-00701	2	Flat Washer M8	-
8	12-01134	3	Capscrew, Hex Head M6 x 1.0 x 100 mm	-
9	12-01136	3	Capscrew, Hex Head M6 x 1.0 x 90 mm	-
10	15-00008	6	Flat Washer M6	-
11	135996451	1	Gasket	-
12	135597200	1	Spacer	-
13	135996680	1	Gasket	-
14	18-23102	1	Air Intake Hose	-
15	19-00020	1	Hose Clamp #20	-

Intake Manifold

Industrial Application

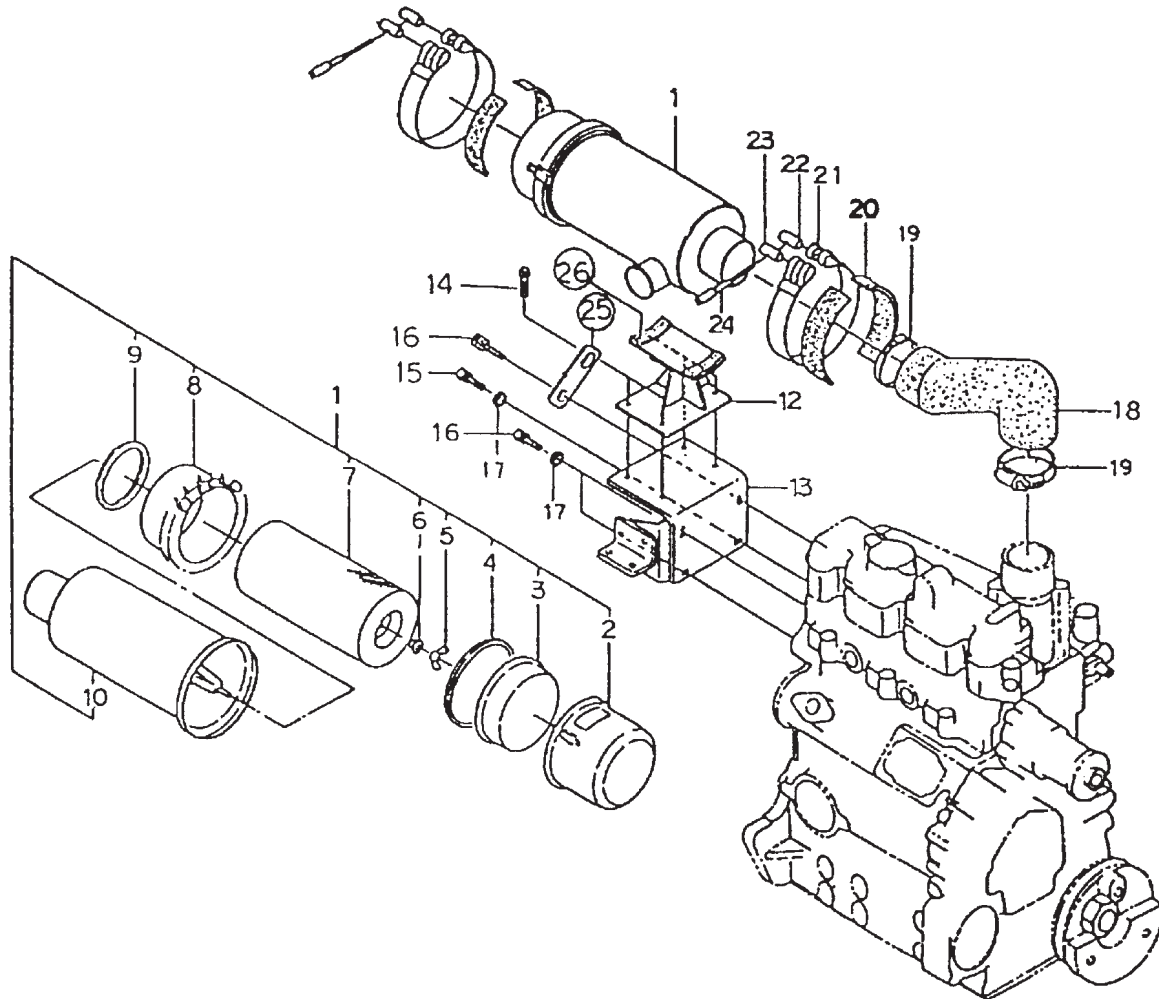


P843intakemanifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135996451	1	Gasket	-
2	135597050	1	Spacer - Industrial (Blue)	-
3	135996680	1	Gasket	-
4	030300414		Spring Pin*	-
5	135597140	1	Intake Manifold	-
6	027100006	2	Spring Washer	-
7	010109119	2	Bolt	-
8	011300660	4	Bolt	-
			*No longer required	

Air Filter and Mounting 843NK

Industrial Application



843Kairfilter

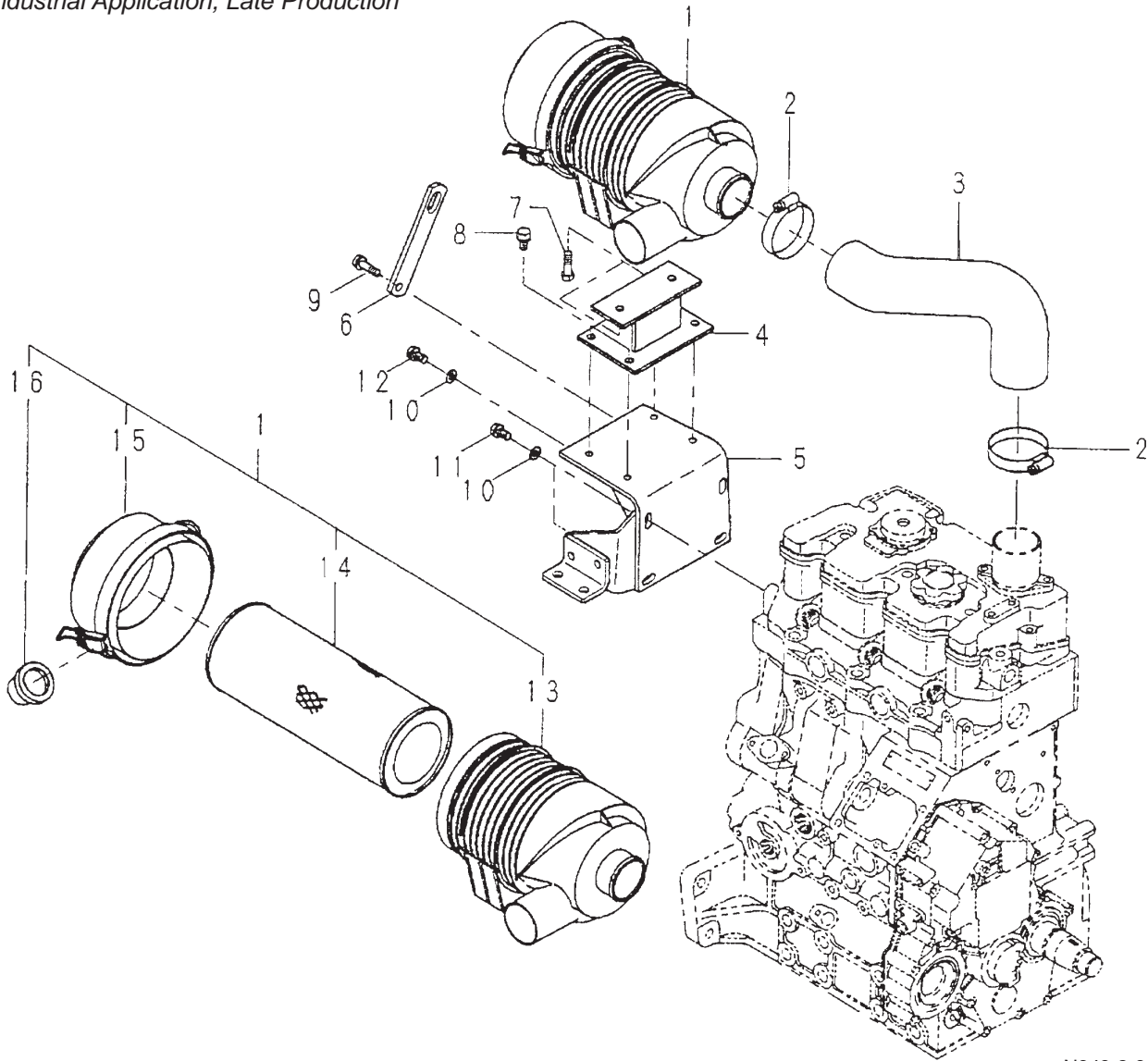
Air Filter and Mounting 843NK

Industrial Application

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	314500371	1	Air Filter Assembly (includes keys #2 - #10)	-
2	314531104	1	Casing Assembly	-
3	314531062	1	Dust Cap	-
4	314531061	1	Gasket	-
5	024100008	1	Wing Nut	-
6	314531125	1	Seal Washer	-
7	314531127	1	Element (marked #314531065)	-
8	314531058	1	Wing	-
9	314531057	1	Gasket	-
10	314531105	1	Cap Assembly	-
12	135976430	1	Bracket	-
13	135976420	1	Bracket	-
14	011310816	4	Bolt	-
15	011310820	1	Bolt	-
16	011310825	3	Bolt	-
17	026100008	3	Washer	-
18	135597150	1	Hose	-
19	198756220	2	Band	-
20	398113190	4	Rubber Cushion	-
21	314630020	2	Band	-
22	399610110	2	Pin	-
23	399610100	2	Pin	-
24	399480070	2	Screw	-
25	195816100	1	Hanger	-
26	398117800	2	Rubber Cushion	-

Air Filter and Mounting

Industrial Application, Late Production

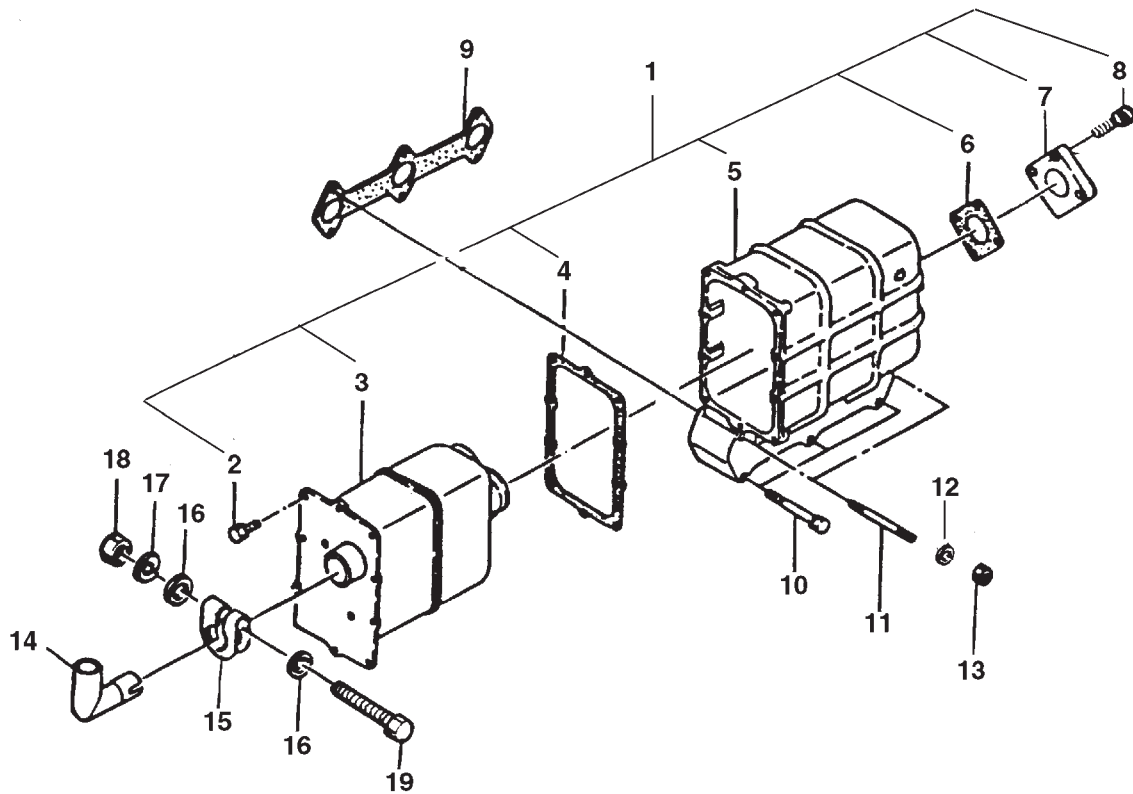


N843-2-8601

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135016300	1	Air Cleaner Assembly (13 ~ 16)	-
2	198756220	2	Hose Band	-
3	135597720	1	Hose	-
4	135976600	1	Stay	-
5	135976420	1	Stay	-
6	195816100	1	Hanger	-
7	011510816	2	Bolt	-
8	011510816	4	Bolt	-
9	011510825	1	Bolt	-
10	026100008	3	Washer	-
11	011510825	2	Bolt	-
12	011510820	1	Bolt	-
13	135326197	1	Housing	-
14	24-27302	1	Element	-
15	135326199	1	Cover Assembly	-
16	135326196	1	Valve	-

Exhaust Manifold and Muffler

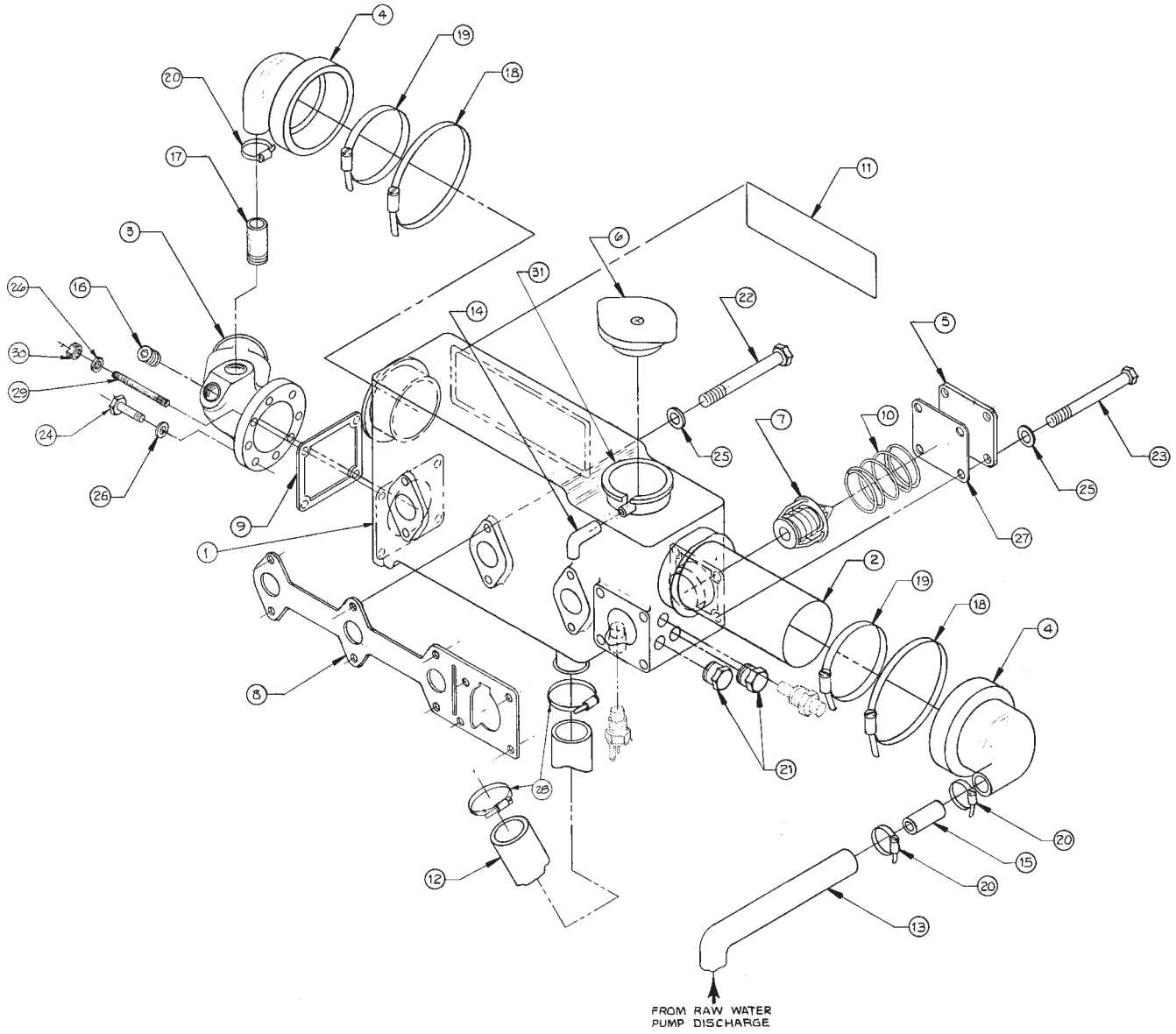
Industrial Application



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	314011660	1	Muffler Assembly (includes keys #2 - #8)	-
2	011140612	10	Bolt	-
3	135406230	1	Muffler Element	-
4	135996530	1	Gasket	-
5	135616700	1	Exhaust Manifold	-
6	135996550	1	Gasket	-
7	314120300	1	Flange	-
8	011300612	4	Bolt	-
9	135996590	1	Gasket	-
10	011310670	4	Bolt	-
11	012110670	2	Stud Bolt	-
12	027110006	2	Spring Washer	-
13	020100006	2	Nut	-
14	135606340	1	Exhaust Elbow (can use #27-33102)	-
	27-33103	1	Dry Exhaust Elbow 1-1/2 NPT	-
15	314410020	1	Clamp	-
16	026100008	2	Washer	-
17	027110008	1	Spring Washer	-
18	020100008	1	Nut	-
19	010100860	1	Bolt	-

Exhaust Manifold and Heat Exchanger

Marine Application



A-4760B/ D-2106C

Exhaust Manifold and Heat Exchanger

Marine Application

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-33110	1	Exhaust Manifold / Expansion Tank	-
2	20-12002	1	Heat Exchanger Element	-
3	27-32004	1	Wet Exhaust Elbow	-
4	145536370	2	Heat Exchanger End Cap	-
5	28-13101	1	Thermostat Housing Cover Plate	-
6	21-12013	1	Pressure Cap (formerly #21-12007)	-
7	145206022	1	Thermostat	-
8	11-33101	1	Exhaust Manifold Gasket	-
9	314990030	1	Wet Exhaust Elbow Gasket	-
10	00-13101	1	Spring	-
11	00-08301	1	"Northern Lights" Decal	-
12	18-13107	1	Formed Hose	-
13	18-13108	1	Hose 3/4" ID x 18-1/2"	-
14	18-13109	1	Overflow Hose 5/16" ID x 25"	-
15	21-13102	1	Union 3/4 HB x 3/4 HB	-
16	21-13101	1	Socket Head Plug 1/2 NPT	-
17	145986150	1	Connector 1/2 NPT x 3/4 HB	-
18	19-00048	2	Hose Clamp #48	-
19	19-00040	2	Hose Clamp #40	-
20	19-00012	3	Hose Clamp #12	-
21	21-31002	2	Hex Head Plug, Brass 3/8 NPT	-
22	12-09137	6	Capscrew, Hex Head M6 x 1.0 x 105 mm S/S	-
23	12-09138	4	Capscrew, Hex Head M6 x 1.0 x 110 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	11-13101	1	Thermostat Gasket	-
28	19-00024	2	Hose Clamp #24	-
29	13-09710	1	Stud M8 x 1.25 x 20 x 10 S/S (35 mm OAL)	-
30	14-09711	1	Hex Nut, M8 x 1.25 S/S	-
31	20-12207	1	Filler Neck	-
32	22-42014	1	Switch, High Exhaust Temperature	up to xxxx - 31919C
	22-42070	1	Switch, High Exhaust Temperature	from xxxx - 31920C
33	22-40482	1	Harness, Exhaust Temperature Switch	from xxxx - 31920C

} not shown

Coolant Pump

Marine Application

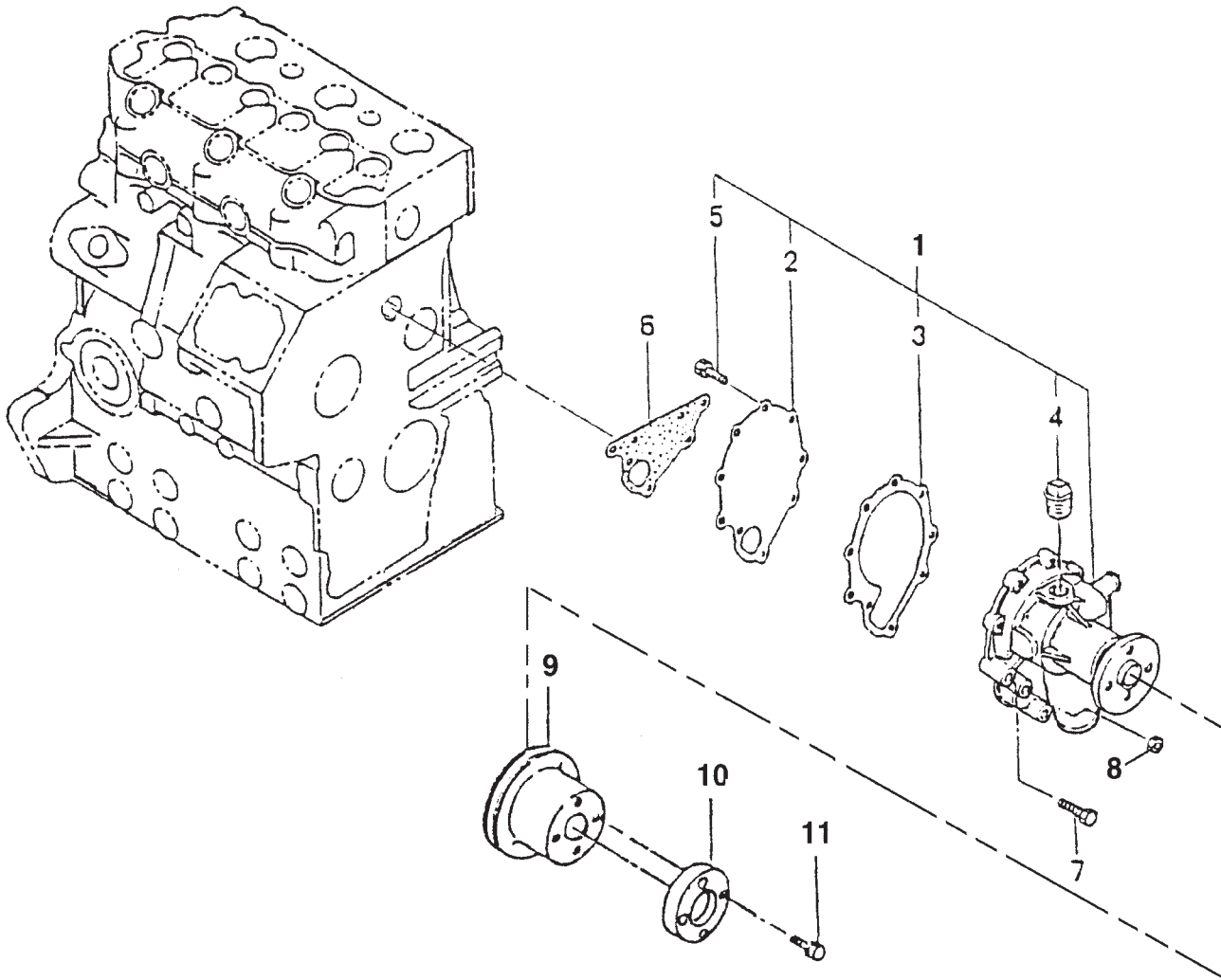
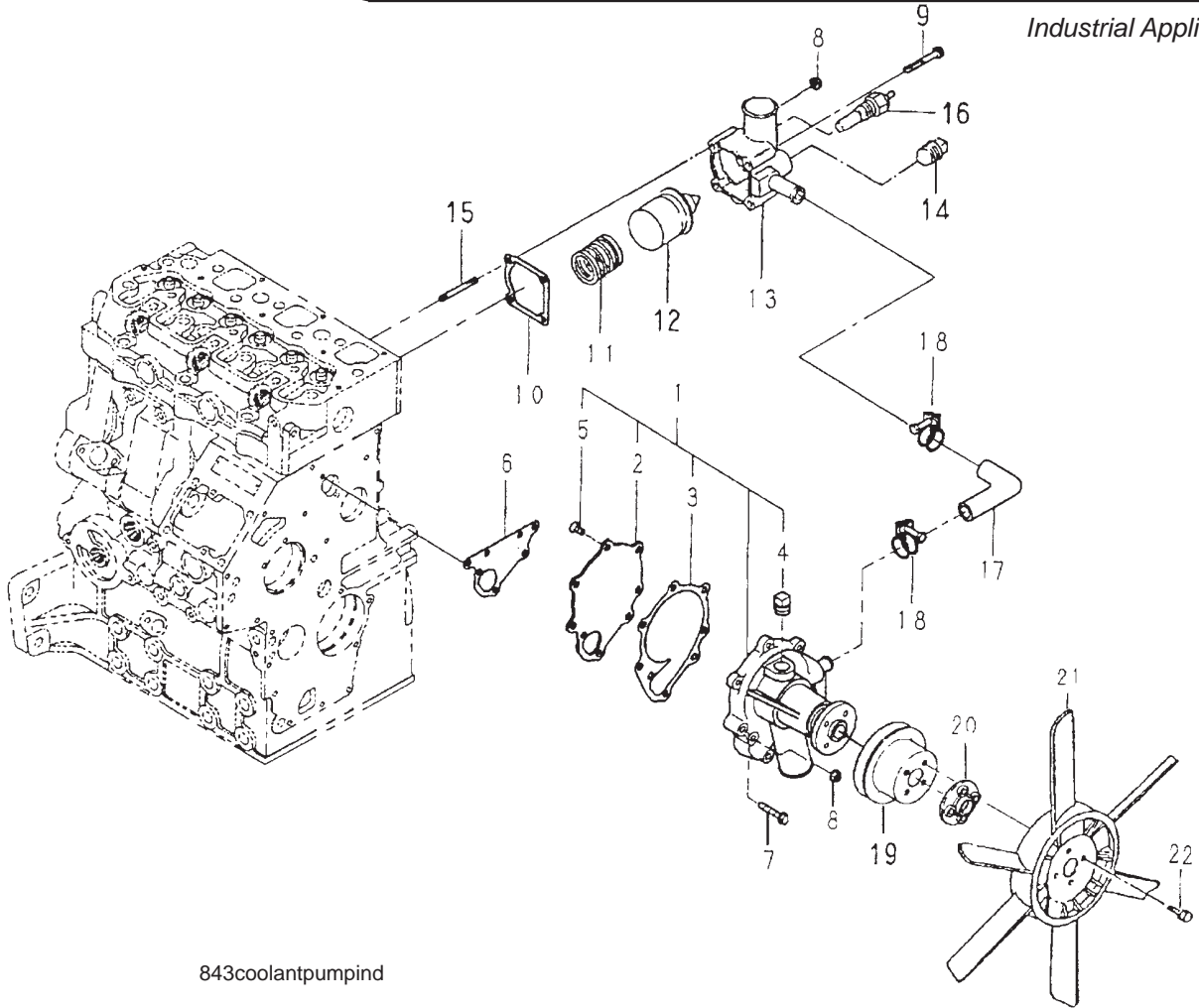


Fig. 3-2

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017350	1	Coolant Pump Assembly (includes Keys #2 - #5)	-
2	145146320	1	Backing Plate	-
3	145996680	1	Gasket	-
4	064500030	1	Plug	-
5	015300614	5	Screw	-
6	145996670	1	Gasket	-
7	011300635	4	Bolt	-
8	023100006	1	Nut	-
9	145336620	1	Pulley	-
10	145386390	1	Spacer	-
11	011310620	4	Bolt	-

Coolant Pump and Thermostat Housing

Industrial Application

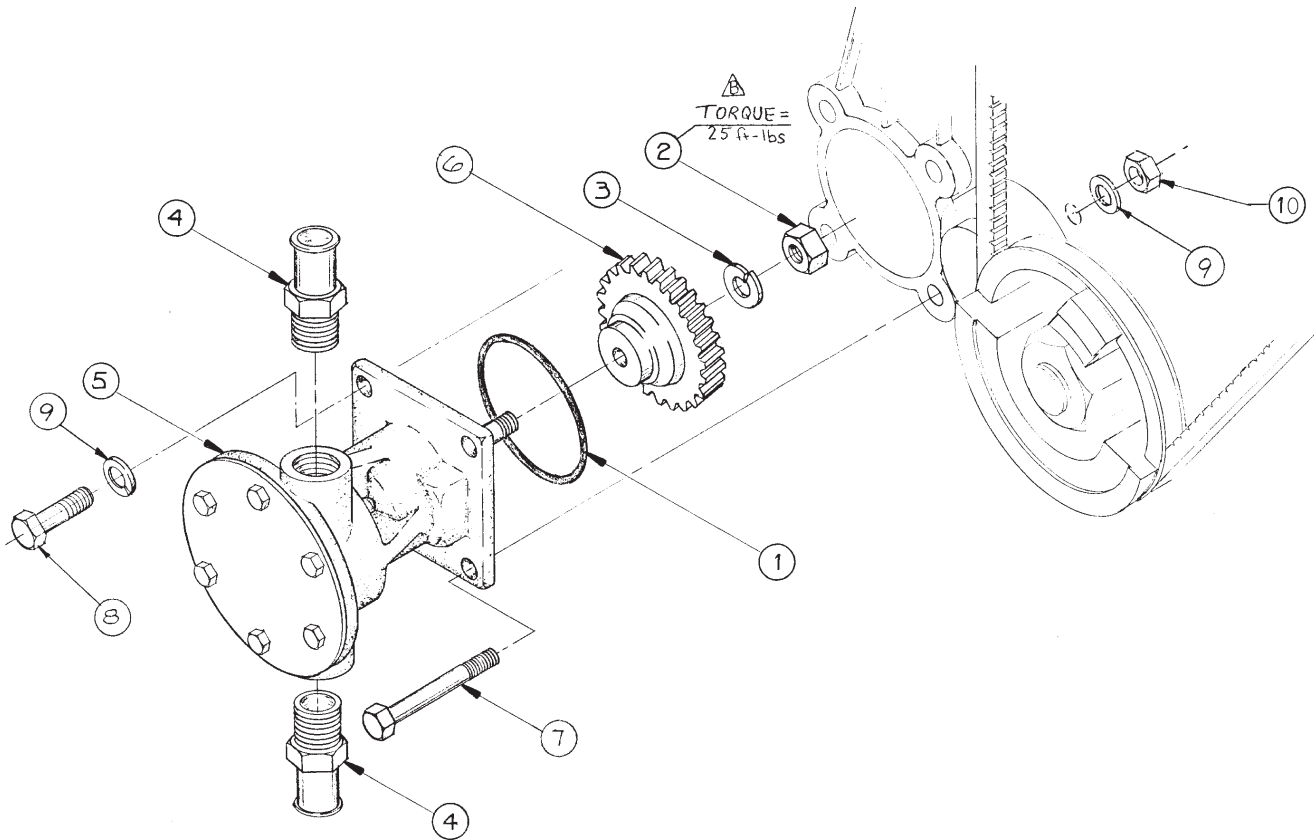


843coolantpumpind

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017780	1	Coolant Pump Assembly (includes keys #2 - #5, formerly #145016891)	-
2	145146320	1	Backing Plate	-
3	145996460	1	Gasket	-
4	064500030	1	Plug	-
5	015300614	5	Screw	-
6	145996370	1	Gasket	-
7	011300635	4	Bolt	-
8	023100006	3	Nut	-
9	011300645	2	Bolt	-
10	145996360	1	Gasket	-
11	198217400	1	Spring	-
12	145206022	1	Thermostat	-
13	145216190	1	Thermostat Case	-
14	064500030	1	Plug	-
15	012100645	2	Stud	-
16	385720230	1	Temperature Switch 100°C/212°F	-
17	145536051	1	Rubber Hose	-
18	19-00006	2	Hose Clamp #6	-
19	145336620	1	Pulley	-
20	145386920	1	Spacer	-
21	145306520	1	Cooling Fan	-
22	011310635	4	Bolt	-

Raw Water Pump and Mounting

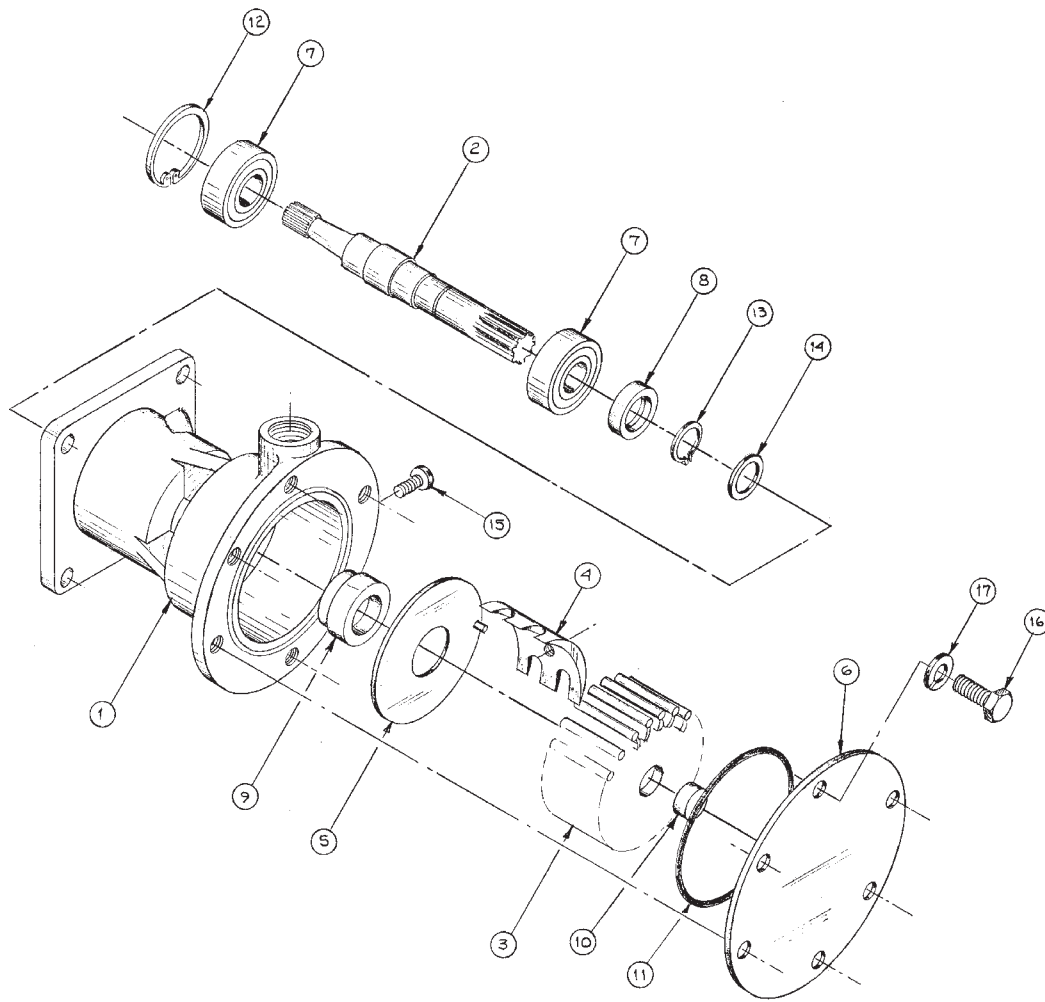
Marine Application



A-4779/ B-3842

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	16-13101	1	O-Ring 2-1/2 x 2-3/4 x 1/8	-
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 HB	-
5	25-12057	1	Raw Water Pump (see parts detail)	-
6	340460141	1	Drive Gear	-
7	12-00710	3	Capscrew, Hex Head M8 x 1.25 x 90 mm	-
8	12-00754	1	Capscrew, Hex Head M8 x 1.25 x 85 mm	-
9	15-00702	4	Lock Washer, Helical M8	-
10	14-00711	3	Hex Nut M8 x 1.25	-

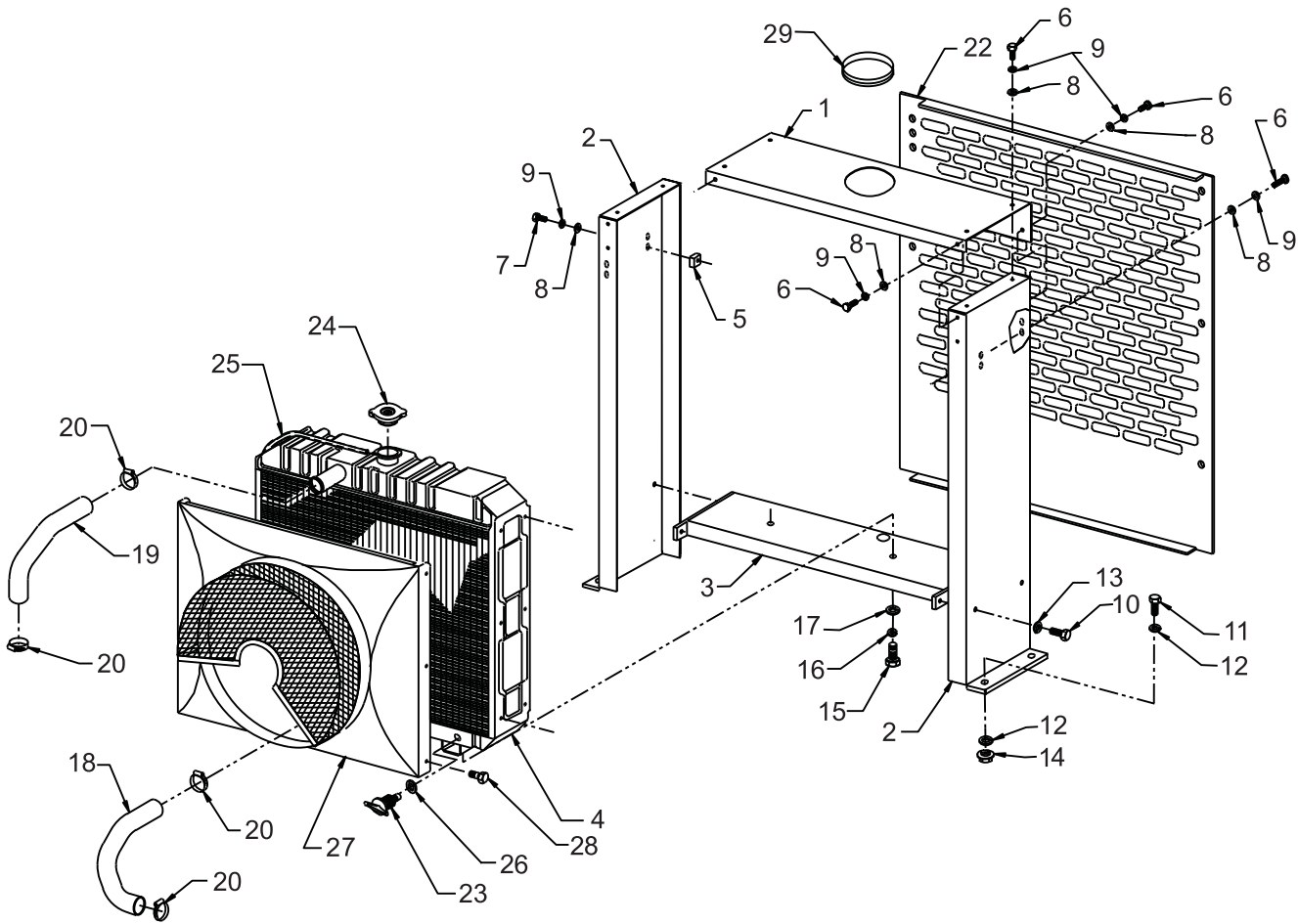
Raw Water Pump Detail



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	-

Radiator and Guard



A-6501/ B-9154z

Radiator and Guard

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-13113	1	Top Panel	-
2	39-13112	2	Side Panel	-
3	39-13114	1	Radiator Support	-
4	145506310	1	Radiator Assembly, Copper (includes keys 23 -28)	-
5	21-18101	2	Spacer, Radiator Support	-
6	12-00097	14	Capscrew, Hex Head M6 x 1.0 x 12 mm	-
7	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
8	15-00008	16	Flat Washer M6	-
9	15-01132	16	Lock Washer, Helical M6	-
10	12-00751	4	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
11	12-00711	4	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
12	15-00701	8	Flat Washer M8	-
13	15-00702	4	Lock Washer, Helical M8	-
14	14-04802	4	Hex Nut, Nylock M8 x 1.25	-
15	12-04400	2	Capscrew, Hex Head M10 x 1.5 x 16 mm	-
16	15-00802	2	Lock Washer, Helical M10	-
17	15-00805	2	Flat Washer M10	-
18	145536600	1	Hose, Radiator Inlet	-
19	145536630	1	Hose, Radiator Outlet	-
20	19-00020	4	Hose Clamp #20	-
21	00-70079	1	Label "Northern Lights" (not shown)	-
22	39-13101	1	Grille	-
23	145546480	1	Drain Cock	-
24	21-12013	1	Filler Cap	-
25	18-00130	1	Overflow Tube 1/4"	-
26	145546490	1	Gasket	-
27	145546500	1	Shroud w/ fan guard	-
28	011150610	6	Bolt	-
29	00-41077	1	Continuous Grommet	-

General Arrangement - M843JK

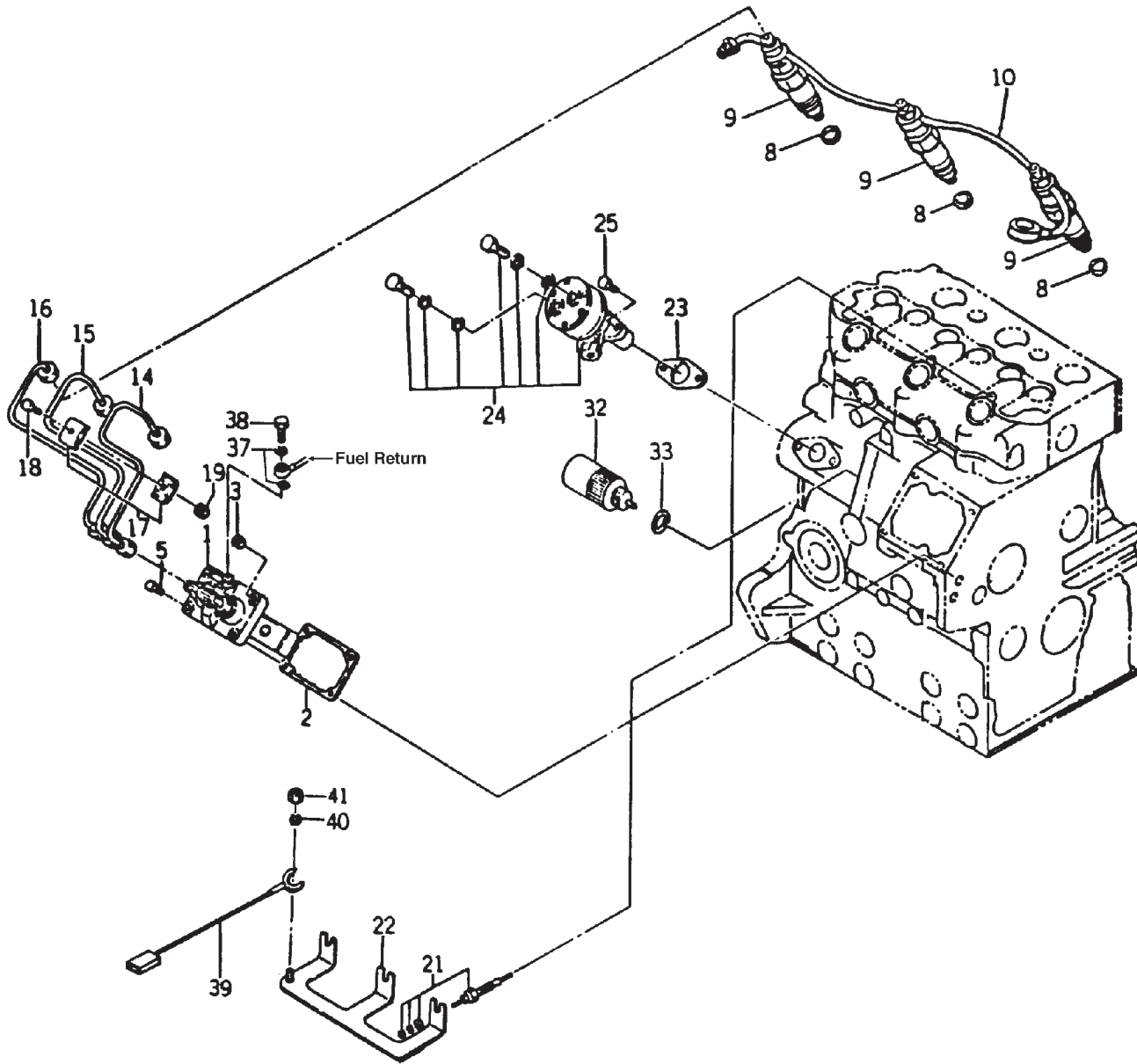


Fig. 4-00

General Arrangement - M843JK

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017590	1	Injection Pump Assembly	-
2	131426310	1	Shim Set	-
3	023100008	2	Nut	-
5	011300820	2	Bolt	-
8	131426200	3	Gasket	-
9	131406360	3	Injector Assembly	-
10	131606700	1	Return Line	-
14	131507100	1	Injection Line #1	-
15	131507110	1	Injection Pipe #2	-
16	131507120	1	Injection Pipe #3	-
17	199106020	4	Clamp	-
18	010100625	2	Bolt	-
19	023100006	2	Nut	-
21	185366060	3	Glow Plug, 12 Volt	-
	185366100	3	Glow Plug, 24 Volt	-
22	185376140	1	Connector	-
23	130996130	1	Gasket	-
24	130506140	1	Feed Pump Assembly	-
25	011140614	2	Bolt	-
26	131046160	1	Smoke Set (not shown)	-
32	185206083	1	Solenoid, 12 Volt	-
	185206200	1	Solenoid, 24 volt	-
33	025100016	1	Seal Washer	-
37	025100008	2	Seal Washer	-
38	198487450	1	Screw	-
39	185606170	1	Wire Harness	-
40	027100004	1	Spring Washer	-
41	020100004	1	Nut	-

General Arrangement M - NL843NK

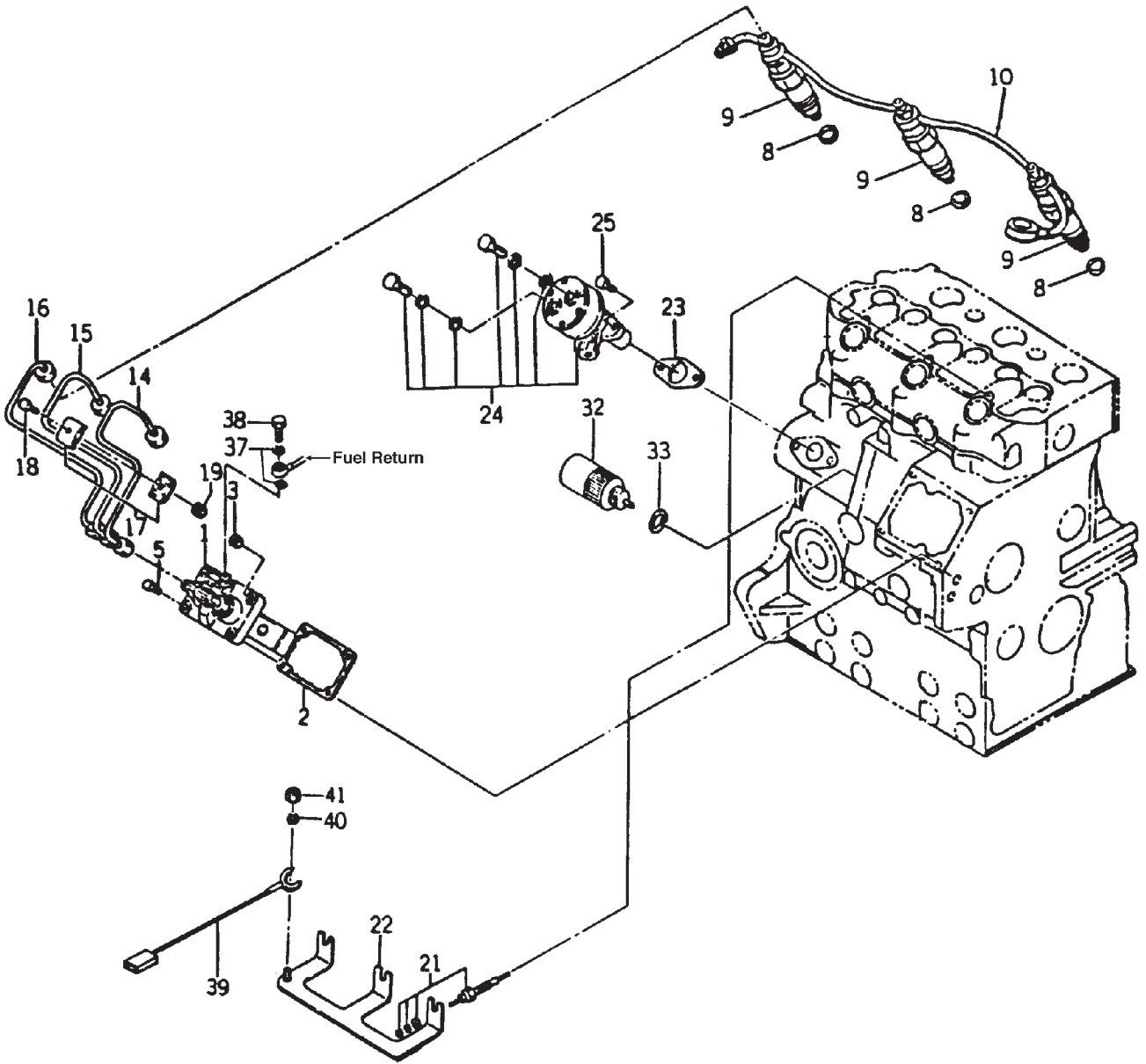


Fig. 4-0

General Arrangement M - NL843NK

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017591	1	Injection Pump Assembly (formerly #131017590)	-
2	131426310	1	Shim Set	-
3	023100008	2	Nut	-
5	011300820	2	Bolt	-
8	131426200	3	Gasket	-
9	131406360	3	Injector Assembly	-
10	131606451	1	Return Line	-
14	131507160	1	Injection Line #1	-
15	131507170	1	Injection Pipe #2	-
16	131507180	1	Injection Pipe #3	-
17	199106020	4	Clamp	-
18	010100625	2	Bolt	-
19	023100006	2	Nut	-
21	185366060	3	Glow Plug, 12 Volt	-
	185366100	3	Glow Plug, 24 Volt	-
22	185376140	1	Connector	-
23	130996070	1	Gasket	-
24	130506140	1	Feed Pump Assembly	-
25	011300616	2	Bolt	-
32	185206083	1	Solenoid, 12 Volt	-
	185206200	1	Solenoid, 24 volt	-
33	025100016	1	Seal Washer	-
37	025100008	2	Seal Washer	-
38	198487450	1	Screw	-
39	185606170	1	Wire Harness	-
40	027100004	1	Spring Washer	-
41	020100004	1	Nut	-

Governor and Timing Gear Case

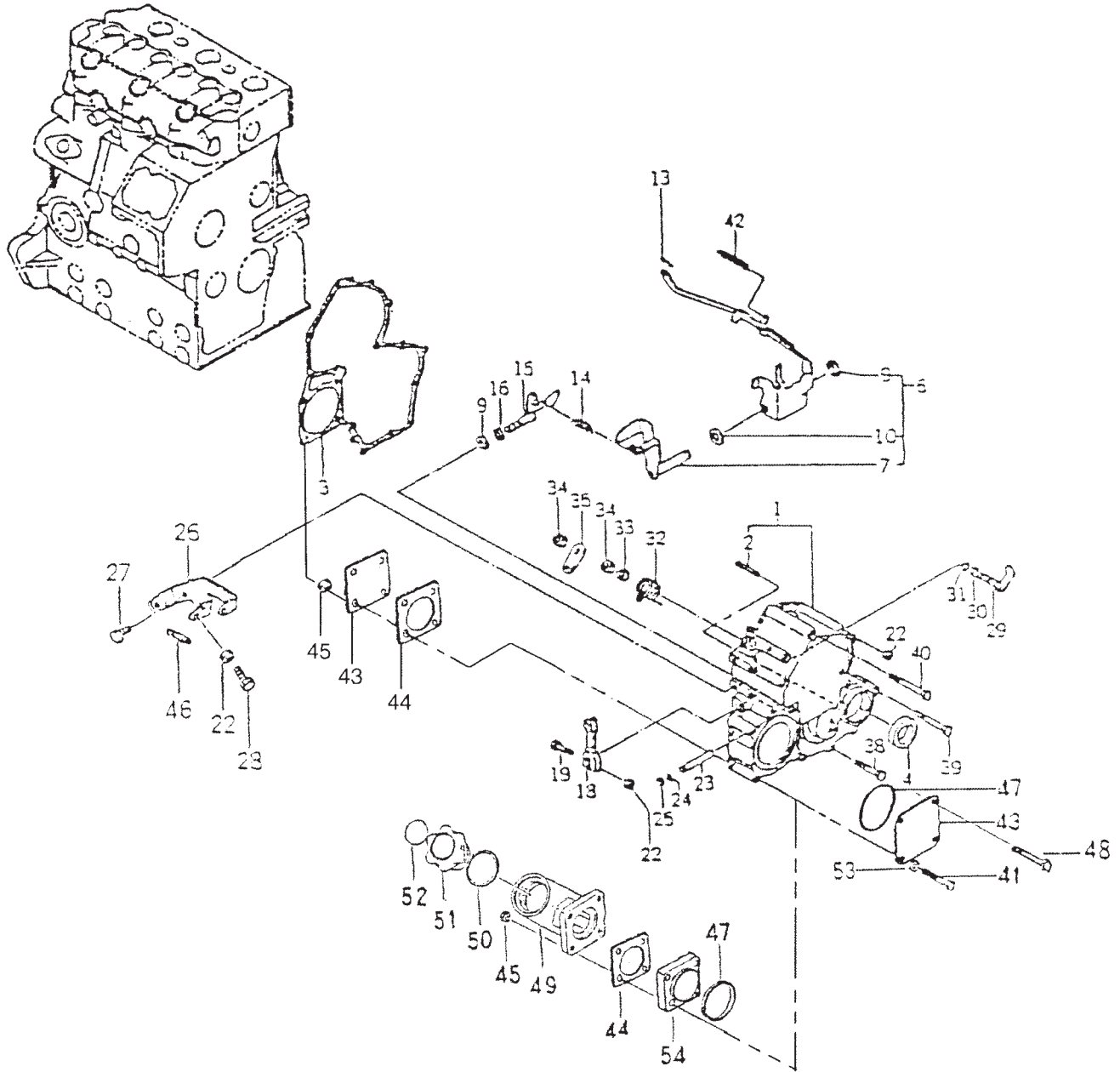
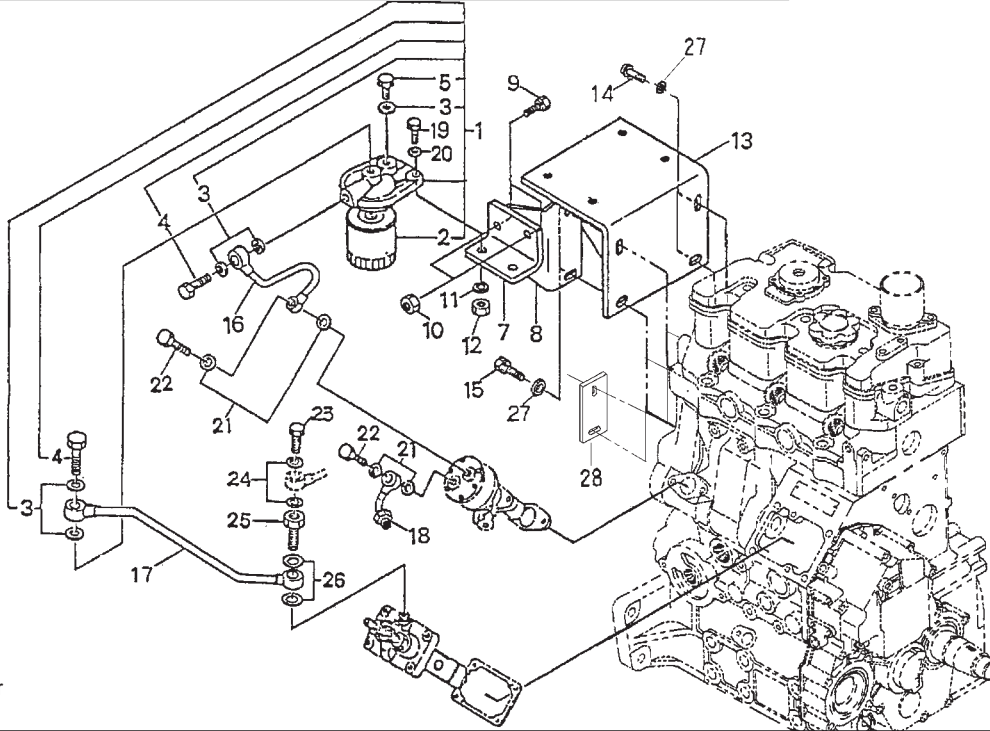


Fig. 4-4

Governor and Timing Gear Case

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165106400	1	Timing Gear Case - Marine (white)	-
	165106380	1	Timing Gear Case - Industrial (blue) } (includes key #2)	-
2	030300414	1	Spring Pin	-
3	165996351	1	Gasket (843NK)	-
	165996550	1	Gasket (843JK)	-
4	198636160	1	Oil Seal	-
6	125046150	1	Governor Lever Assembly (includes keys #7 - #10)	-
7	125406080	1	Tension Lever	-
9	036800008	2	Snap Ring	-
10	026200010	1	Washer	-
13	031100004	1	Snap Pin	-
14	198217040	1	Spring	-
15	125156250	1	Arm	-
16	052100070	1	O-ring	-
18	125416020	1	Governor Lever	-
19	010110630	1	Bolt	-
22	023100006	3	Nut	-
23	125116141	1	Shaft (formerly #125116140 - single O-ring)	-
24	052100030	**	O-ring (**As required)	-
25	036800005	1	Snap Ring	-
26	125976120	1	Stay	-
27	011300616	2	Bolt	-
28	010109264	1	Bolt (843NK)	-
	012810640	1	Bolt (843JK)	-
29	125156180	1	Arm	-
30	036800006	1	Snap Ring	-
31	052100050	1	O-ring	-
32	198216760	1	Spring	-
33	026200008	1	Washer	-
34	020300008	2	Nut (843NK)	-
	020700008	2	Nut (843JK)	-
35	125176180	1	Stop Lever (formerly #125176080)	-
38	011300645	6	Bolt	-
39	011300660	5	Bolt	-
40	011300680	2	Bolt	-
41	12-00717	1	Capscrew, Hex Head M8 x 1.25 x 60 mm	-
	12-00718	3	Capscrew, Hex Head M8 x 1.25 x 65 mm } with spacer #54 removed	-
42	198216731	1	Start Spring	-
43	165206320	1	Cover (Keel Cooled - Marine only)	-
	165206150	2	Cover (Industrial only)	-
44	165996110	1	Gasket	-
45	14-00711	3	Hex Nut M8 x 1.25 (Marine)	-
	14-00711	4	Hex Nut M8 x 1.25 (Industrial)	-
46	398210070	1	Spring	-
47		1	O-ring (no longer required)	-
48	12-00717	1	Capscrew, Hex Head M8 x 1.25 x 60 mm (with spacer #54 removed)	-
49	110766200	1	Oil Fill Elbow	-
50	052300400	1	O-ring	-
51	198436010	1	Cap	-
52	190196630	1	Caution Label	-
53	027100008	3	Washer	-
54		1	Spacer (no longer required)	-

Fuel Filter and Piping

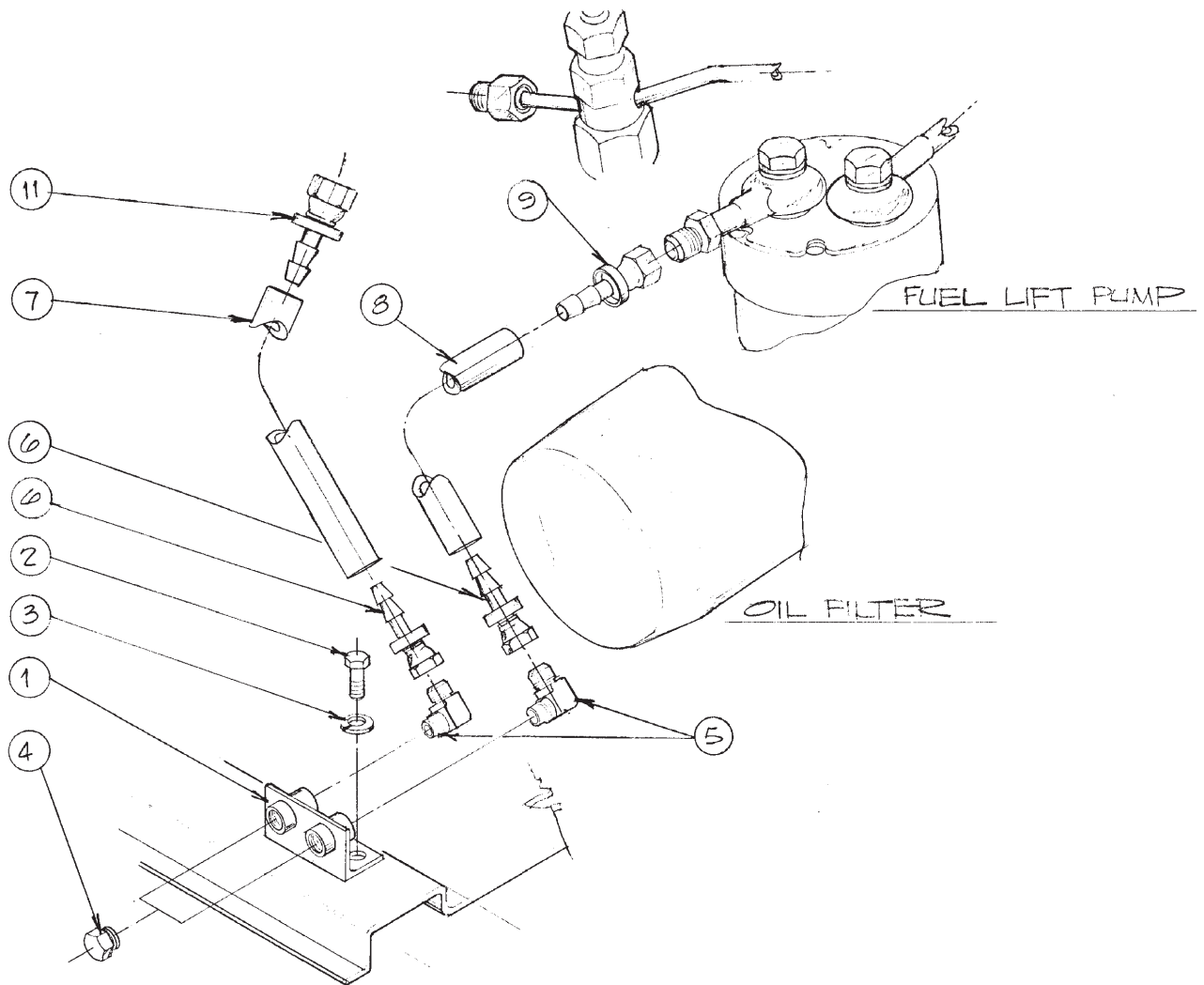


843fuelfilter

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	130306190	1	Fuel Filter Assembly (includes keys #1 - 6 & 19 - 20)	-
2	24-52020	1	Fuel Filter	-
3	130326051	5	Gasket	-
4	130436011	2	Joint Bolt	-
5	130396030	1	Plug	-
7	130976470	1	Bracket - Marine (white)	-
	130976450	1	Bracket - Industrial (blue)	-
8	130976460	1	Bracket - Marine (white)	-
	130976440	1	Bracket - Industrial (blue)	-
9	011300820	2	Bolt	-
10	023100008	2	Nut	-
11	027100010	2	Spring Washer	-
12	020900010	2	Nut	-
13	135976420	1	Bracket - Industrial only	-
14	011310820	2	Bolt - Industrial only	-
15	011310825	2	Bolt	-
16	130556690	1	Pipe (843NK)	-
	130556890	1	Pipe (843JK)	-
17	130556701	1	Pipe (843NK)	-
	130556900	1	Pipe (843JK)	-
18	130556681	1	Connector, Fuel Inlet (formerly #130556680)	-
19	011301035	2	Bolt	-
20	026200010	2	Washer	-
21	130516069	4	Gasket	-
22	130516092	2	Joint Bolt	-
23	198487450	1	Joint Bolt	-
24	025100008	2	Gasket	-
25	131246170	1	Joint Bolt	-
26	131296255	2	Gasket	-
27	026100008	4	Washer	-
28	199216310	1	Spacer - Marine only	-

Fuel Line Connection

Marine and Industrial Applications

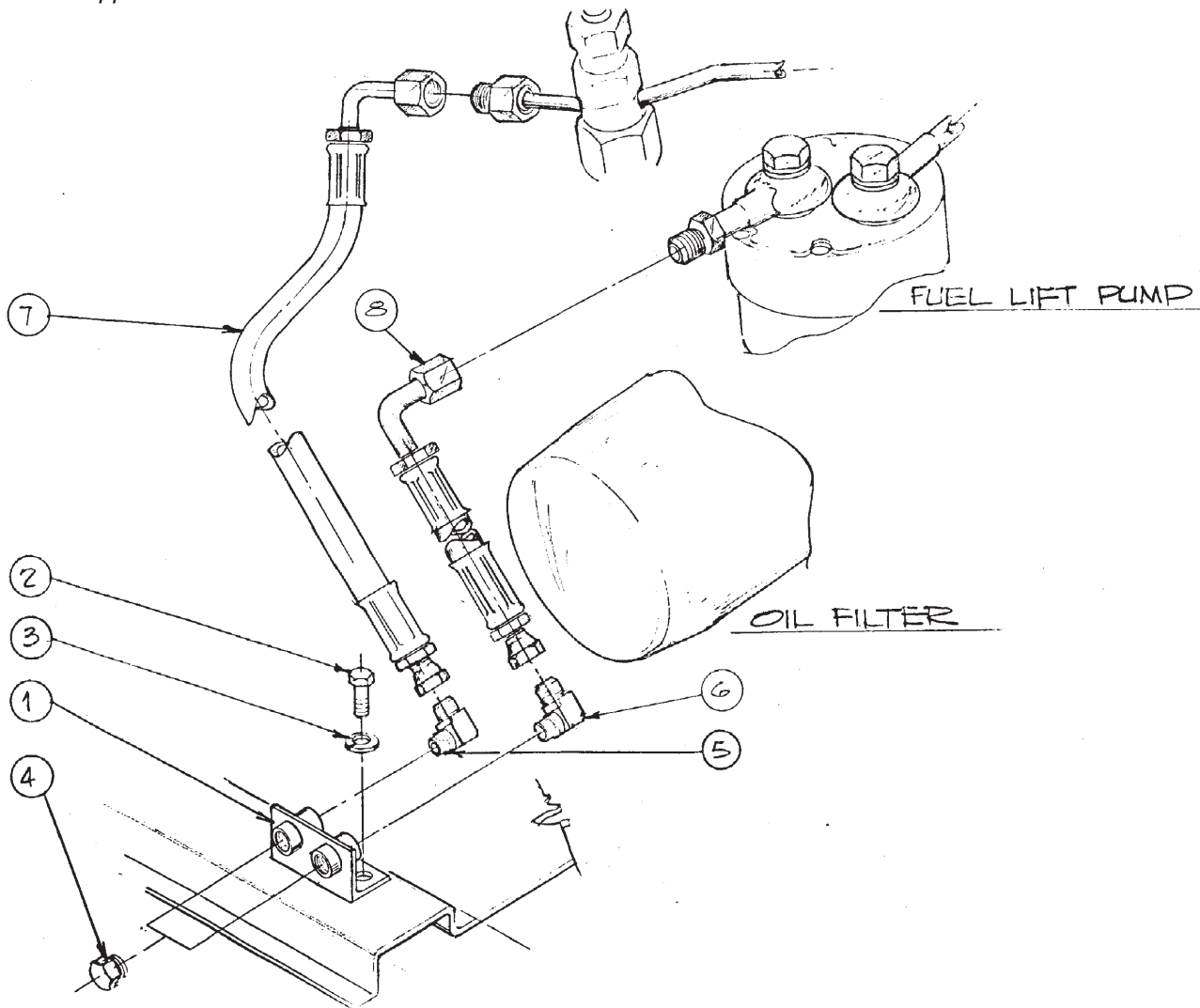


A-4922/ B-3987

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	-
3	15-01132	2	Lock Washer M6	-
4	21-31624	2	Plug, Hex Head, brass 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	18-52207	1	Hose 1/4" ID x 24" push-on	-
8	18-51902	1	Hose 1/4" ID x 15" 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	-

Coast Guard Fuel Line Connection

Marine Application



A-4925/ B-3988

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	-
3	15-01132	2	Lock Washer M6	-
4	21-31624	2	Hex Head plug, brass 1/4 NPT (for shipping)	-
5	21-71049	1	Male Elbow 90°, steel 1/4 NPT x 1/4-37T	-
6	21-74411	1	Male Elbow 90°, steel 1/4 NPT x 5/16-37T	-
7	18-65008	1	Hose Assembly 1/4" ID x 24" with 90°, 1/4 JIC x 1/4 JIC	-
8	18-53109	**	Hose Assembly 1/4" ID x 15" with 90°, 5/16 JIC x 5/16 JIC *	-
	18-53112	**	Hose Assembly 1/4" ID x 15" 5/16 JIC Both Ends *	-
9	19-43201	1	Adelle Clamp (not shown)	-
10	15-00111	1	Flat Washer (not shown)	-
<p>*See Fuel Filter & Piping key #18 - Hose 18-53109 used with Connector 130556680. Hose 18-53112 used with Connector 130556681.</p> <p>**As required.</p>				

Injection Pump

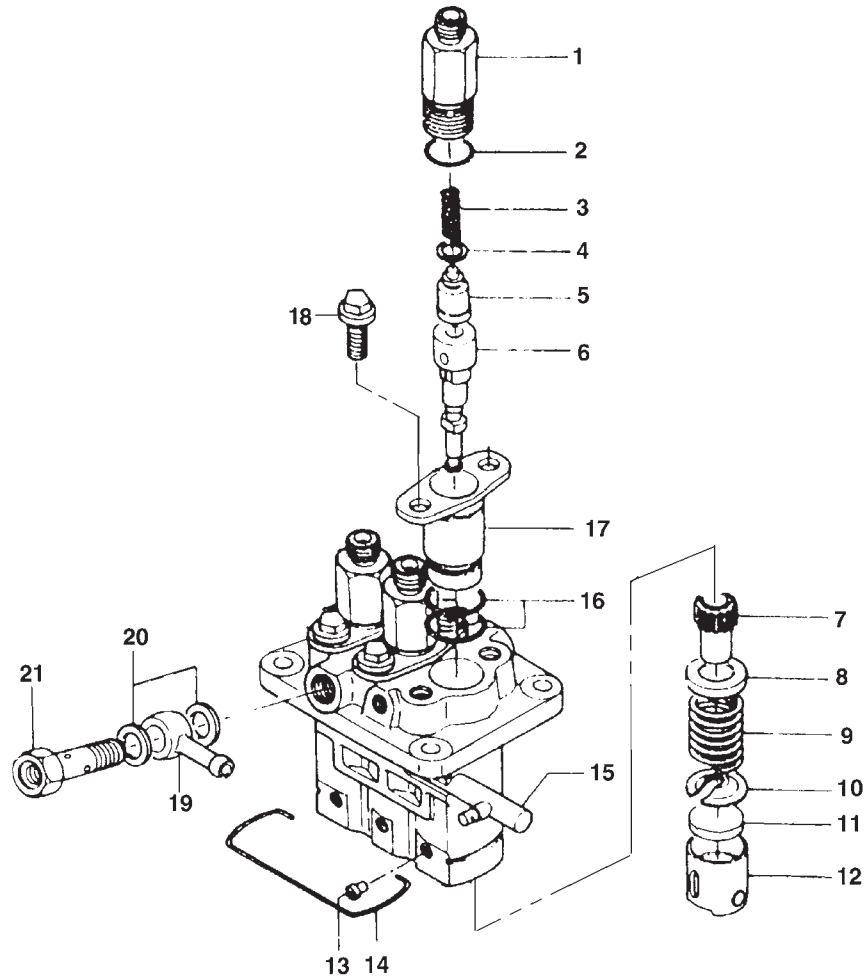
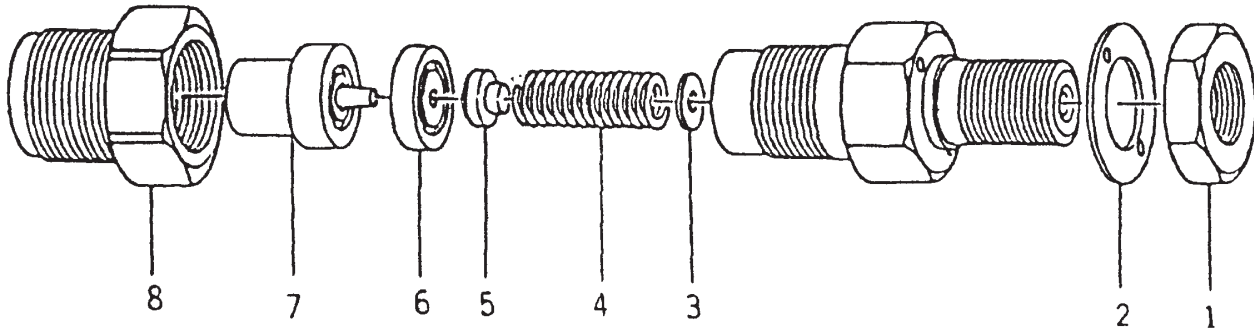


Fig. 4-12

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	131017590	1	Injection Pump Assembly (includes keys #1 - #21)	-
1	131196200	3	Delivery Valve Holder	-
2	131226130	3	O-Ring	-
3	131176510	3	Delivery Valve Spring	-
4	131186110	3	Gasket	-
5	131156260	3	Valve Sub Assembly	-
6	131116550	3	Element Sub Assembly	-
7	131296647	3	Sleeve Sub Assembly	-
8	131296532	3	Upper Spring Seat	-
9	131176320	3	Plunger Spring	-
10	131296531	3	Lower Spring Seat	-
11	131296530	3	Plate	-
12	131256110	3	Tappet Sub Assembly	-
13	131296645	3	Pin	-
14	131296954	1	Wire	-
15	131296955	1	Control Rack	-
16	131227240	6	O-Ring	-
17	131296953	3	Sleeve Flange	-
18	131136430	6	Bolt	-
19	131246010	1	Eye	-
20	131296255	2	Gasket	-
21	131246170	1	Eye Bolt	-

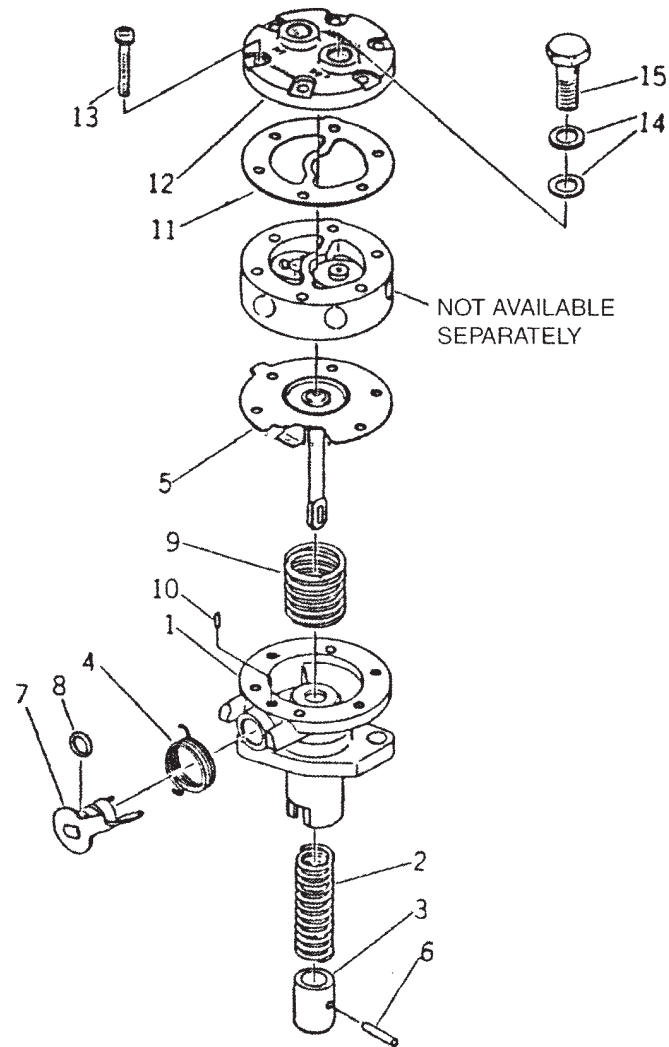
Fuel Injector



843injector

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	131406360	1	Injector Assembly (includes keys #1 - #8)	-
1	131446006	1	Nut	-
2	131426230	1	Gasket	-
3	131437360	3	Shim	-
4	131446074	1	Spring	-
5	131446075	1	Spring seat	-
6	131446076	1	Spacer	-
7	131416170	1	Nozzle	-
8	131446077	1	Nut	-

Fuel Feed Pump

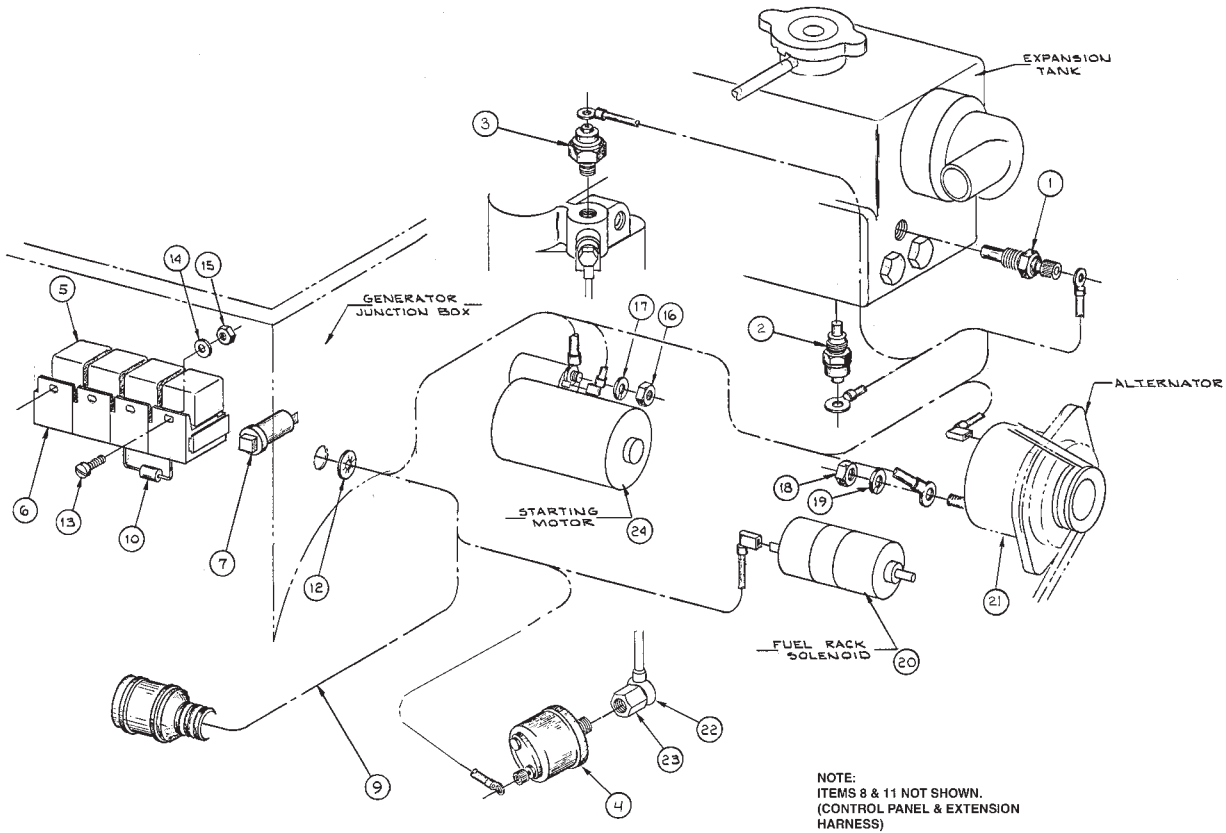


843fuelfeedpump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	130506140	1	Feed Pump Assembly (includes keys #1 - #15)	-
1	130516080	1	Housing	-
2	130516081	1	Spring	-
3	130516082	1	Piston	-
4	130516083	1	Spring	-
5	130516084	1	Diaphragm	-
6	130516085	1	Pin	-
7	130516086	1	Lever	-
8	131226180	1	O-Ring	-
9	130516087	1	Spring	-
10	130516088	1	Guide	-
11	130516089	1	Gasket	-
12	130516090	1	Cap	-
13	130516091	6	Screw	-
14	130516069	4	Gasket	-
15	130516092	2	Joint Bolt	-

Engine Electrical - 12 Volt Standard Ground

Marine Application



A-4786/ C-2490

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-42055	1	Engine Temperature Sender	-
2	385720110	1	Engine Temperature Switch 95°C	-
3	185246011	1	Oil Pressure Switch	-
4	22-41016	1	Oil Pressure Sender	-
5	22-42047	4	Relay, 12 Volt SPDT	-
6	22-41032	4	Relay Base	-
7	22-42043	1	Circuit Breaker, DC 15 Amp	-
8	22-90006	1	Control Panel, S1-B (see detail)	-
9	22-43121	1	Engine Wire Harness (includes Key #10)	-
10	22-41060	2	Diode, 6 Amp 50 Volt PIV	-
11	22-40930	1	Wire Harness Extension 20'	-
12	00-41015	1	Universal Bushing, Plastic	-
13	12-00094	2	Machine Screw #10-32 x 3/4" Stainless Steel	-
14	15-00032	2	Flat Washer #10	-
15	14-00006	2	Hex Nut, Nylock #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	185206082	1	Stop Solenoid 12 Volt (see also Fuel System)	-
21	185046201	1	Alternator 12 Volt (see parts detail)	-
	185046320	1	Alternator 12 Volt - Standard Ground (see parts detail)	-
22	198487590	1	Banjo Bolt	-
23	140606701	1	Oil Line	-
24	185086551	1	Starter 12 Volt (marked #M001T66081) (see parts detail)	-

Alternator and Starter

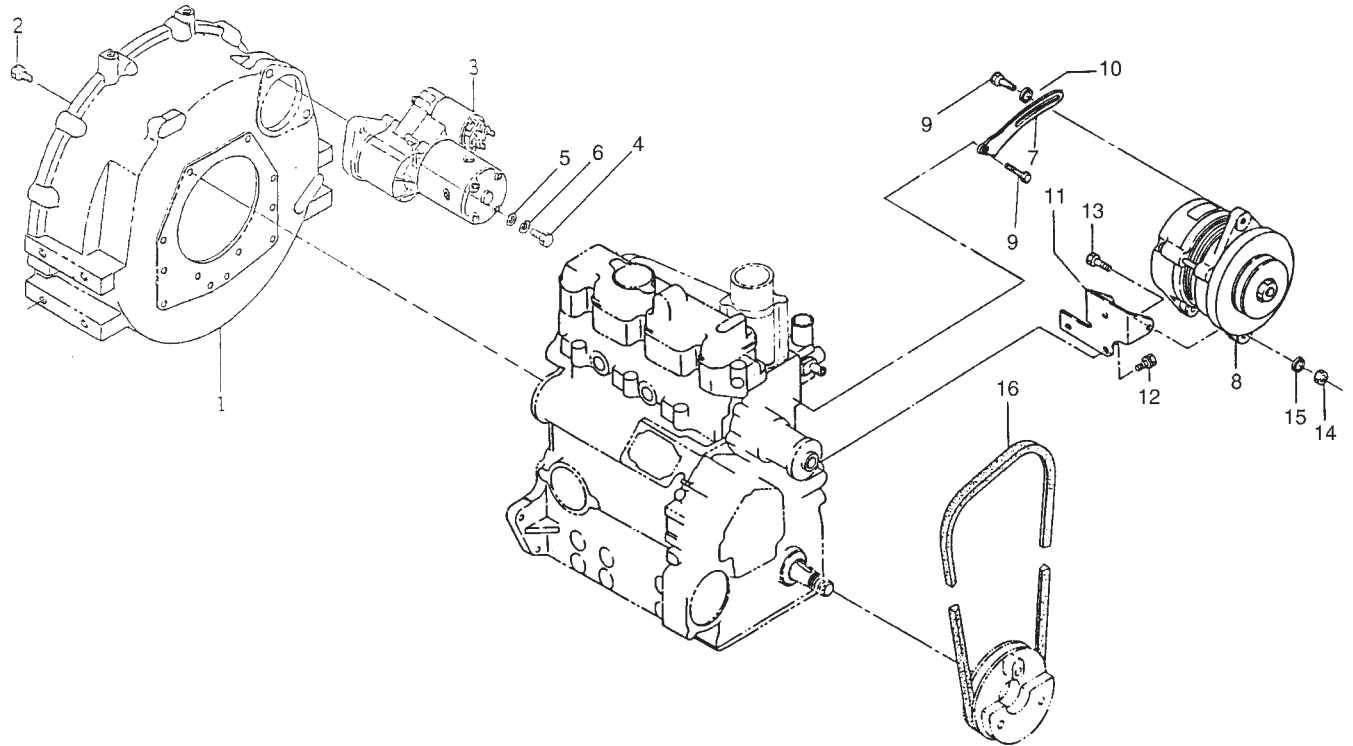


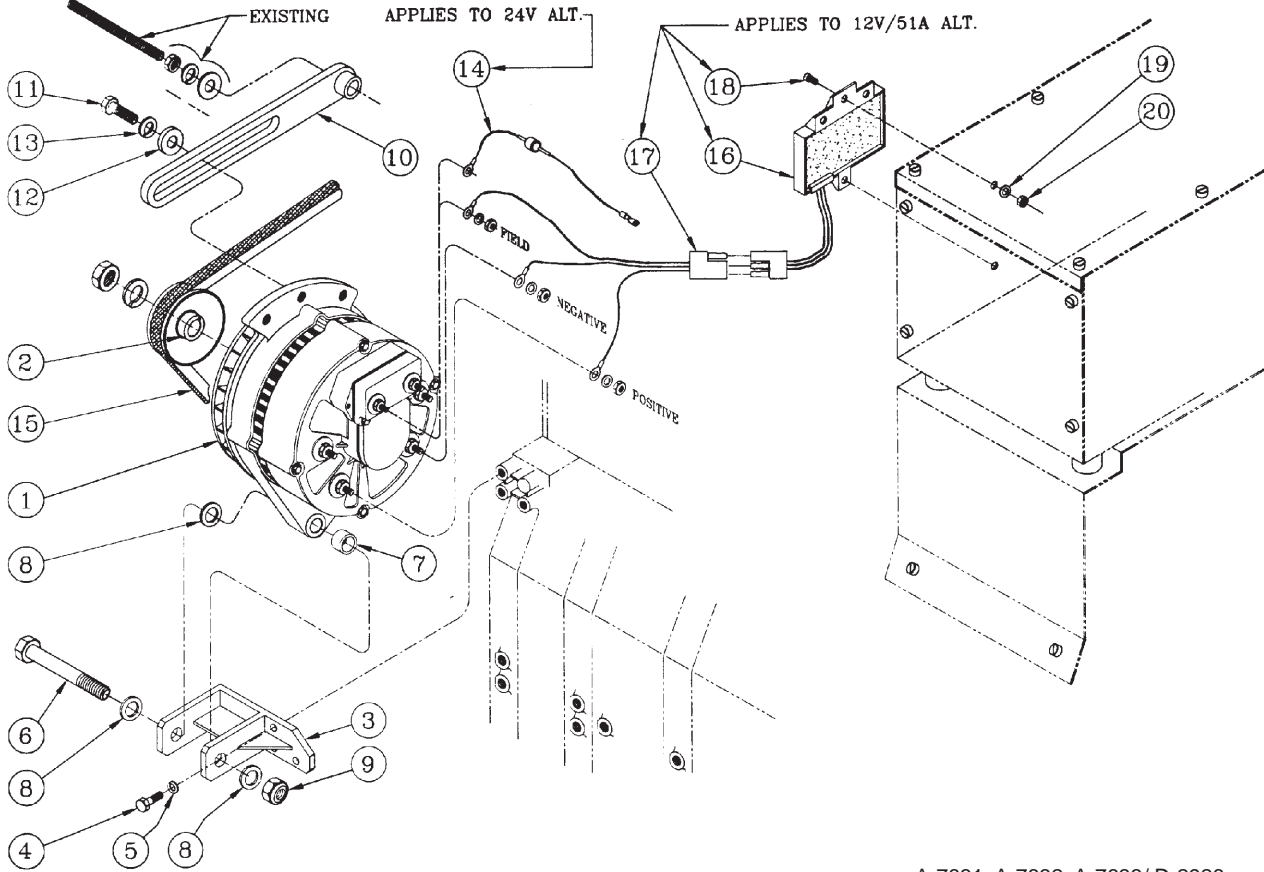
Fig. 5-1

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110446890	1	Flywheel Cover - Marine (white)	-
	110446880	1	Flywheel Cover - Industrial (blue)	-
2	011510820	10	Bolt	-
3	185086551	1	Starting Motor 12 Volt (see Parts Detail)	-
4	010301030	2	Bolt	-
5	026100010	2	Washer	-
6	027100010	2	Spring Washer	-
7	185727000	1	Tensioning Arm (843NK)	-
	185727160	1	Tensioning Arm (843JK)	-
8	185046320	1	Alternator 12 Volt 40 Amp	-
9	011510825	1	Bolt	-
10	026109017	1	Washer	-
11	185976510	1	Mounting Bracket	-
12	011510816	3	Bolt	-
13	010301035	2	Bolt	-
14	020900010	2	Nut	-
15	027100010	2	Spring Washer	-
16	40-02003	1	Drive Belt (M843NK)	-
	080109067	1	Drive Belt (M843JK)	-

GROUP 5 – ELECTRICAL SYSTEM

Alternator

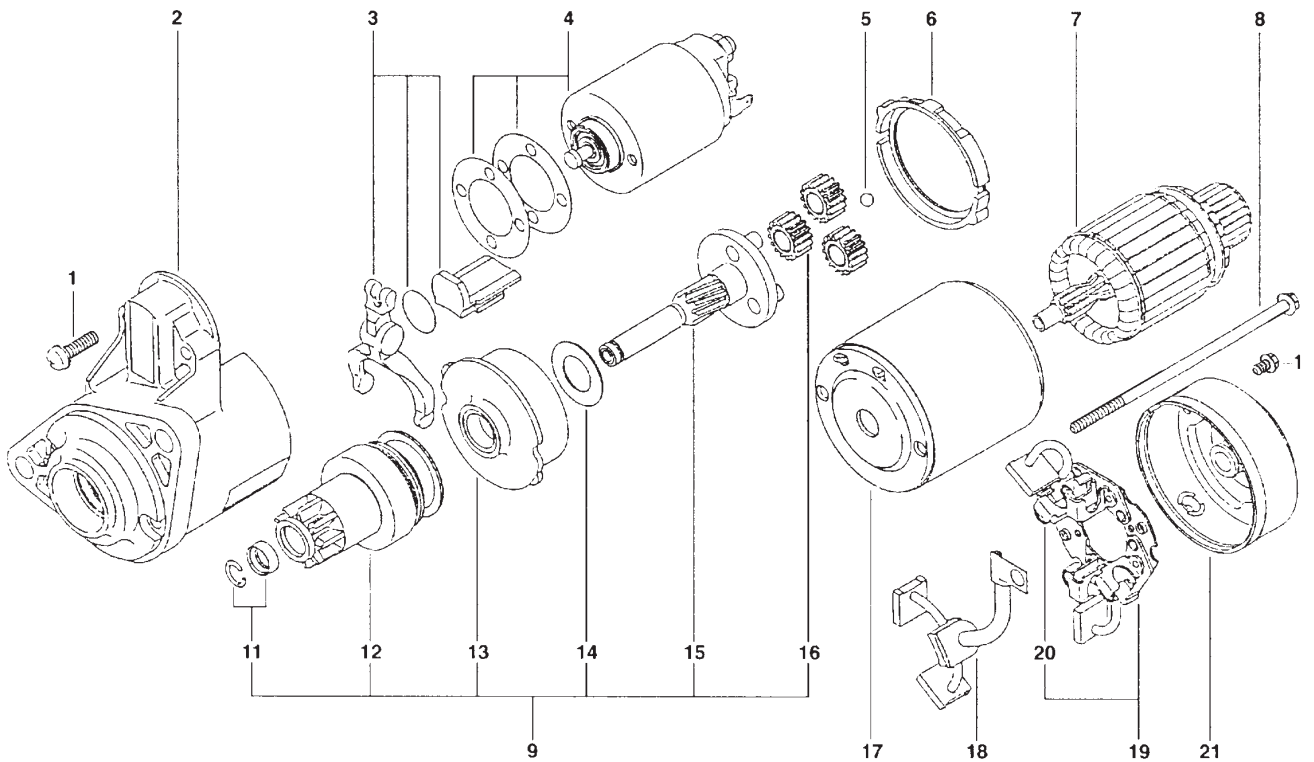
Isolated and Standard Ground - M843JK & NK



A-7631, A-7632, A-7633/ D-2926

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-40333	1	Alternator (12V/51A ISO Ground)	-
	22-40278	1	Alternator (24V/40A Standard Ground)	-
	22-71052	1	Alternator (24V/35A ISO Ground)	-
2	23-43108	1	Pulley, 1-A x 2-1/2" x 5/8" ID	-
3	23-43108	1	Alternator Mounting Bracket (M843JK)	-
	23-43107	1	Alternator Mounting Bracket (M843NK)	-
4	12-00711	3	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
5	15-00702	3	Lock Washer, Helical M8	-
6	12-00519	1	Capscrew, Hex Head 1/2-13 x 2-3/4"	-
7	21-42206	1	Spacer, BP 1/2 SCH 80 x 3/8"	-
8	15-00504	2	Flat Washer 1/2 SAE	-
9	14-00512	1	Hex Nut, Nylock 1/2-13	-
10	23-42007	1	Tensioning Arm (M843JK)	-
	23-42005	1	Tensioning Arm (M843NK)	-
11	12-00212	1	Capscrew, Hex Head 5/16-18 x 1"	-
12	15-00201	1	Stud Washer 5/16	-
13	15-00202	1	Lock Washer, Helical 5/16	-
14	22-70048	1	Diode Harness Addition	-
15	080109067	1	Drive Belt (M843JK)	-
	40-02005	1	Drive Belt (M843NK)	-
16	22-40334	1	D.C. Voltage Regulator 12 Volt	-
17	16-1	1	Wire Harness, 36"	-
18	12-00001	2	Machine Screw, BH Slotted #10-32 x 3/4" S/S	-
19	15-70002	2	Flat Washer #10 S/S	-
20	14-00032	2	Hex Nut, Nylock #10-32 S/S	-

12 Volt Starter Assembly

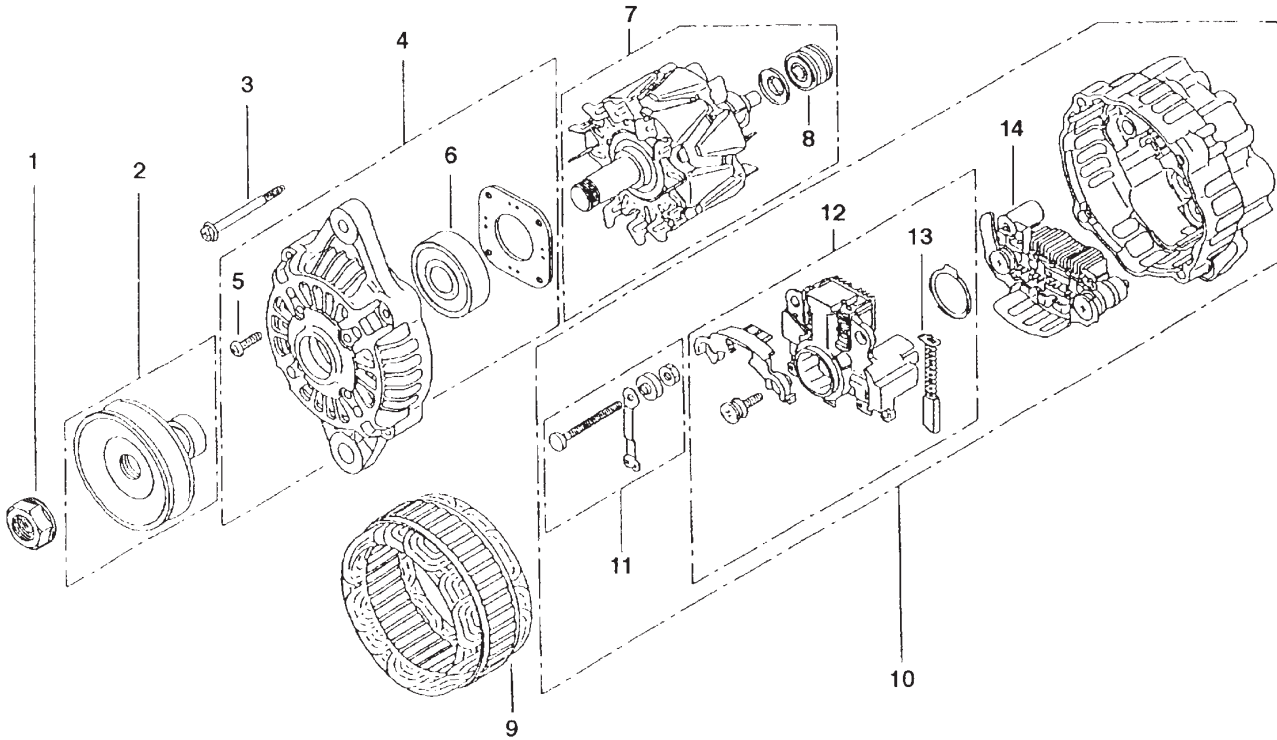


843starter

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185086551	1	Starter (includes all keys)	-
1	185846468	1	Screw Set	-
2	185846610	1	Front Housing	-
3	185846615	1	Lever Assembly	-
4	185816340	1	Solenoid	-
5	185846616	1	Ball	-
6	185846617	1	Packing Ring	-
7	185846618	1	Armature	-
8	185846621	1	Bolt Set	-
9	185866391	1	Drive Assembly (includes keys #11 - 16)	-
11	185846614	1	Stopper Set	-
12	185866411	1	Pinion Assembly	-
13	185846612	1	Internal Gear Assembly	-
14	185846611	1	Washer	-
15	185866400	1	Shaft Assembly	-
16	185846613	3	Gear Assembly	-
17	185846619	1	Housing and Field Coil Assembly	-
18	185416490	1	Brush Assembly	-
19	185416500	1	Brush Holder Assembly	-
20	185886070	1	Spring	-
21	185846620	1	Rear Housing	-

Alternator Assembly

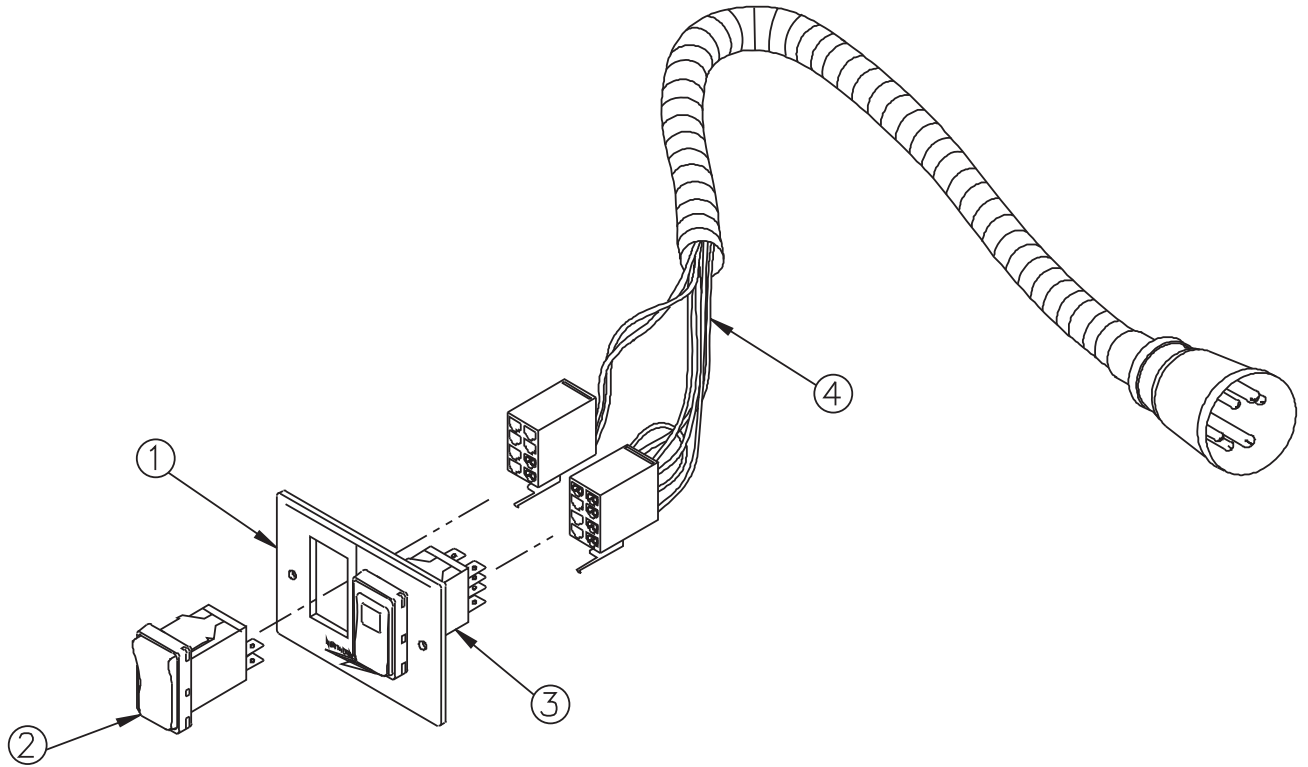
12 Volt / 40 Amp Standard Ground



843altassembly

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185046320	1	Alternator Assembly (includes keys #1 - 14)	-
1	185446269	1	Nut	-
2	185436180	1	Pulley Assembly	-
3	185446270	1	Screw Set	-
4	185426210	1	Front Cover Assembly	-
5	185446271	1	Screw Set	-
6	185446272	1	Bearing	-
7	185446273	1	Rotor Assembly	-
8	185446274	1	Bearing	-
9	185446275	1	Stator Assembly	-
10	185426220	1	Rear Cover Assembly	-
11	185446278	1	Terminal Set	-
12	185446277	1	Regulator Assembly	-
13	185416480	2	Brush	-
14	185446276	1	Rectifier Assembly	-

S-1 Control Panel 12 & 24 Volt

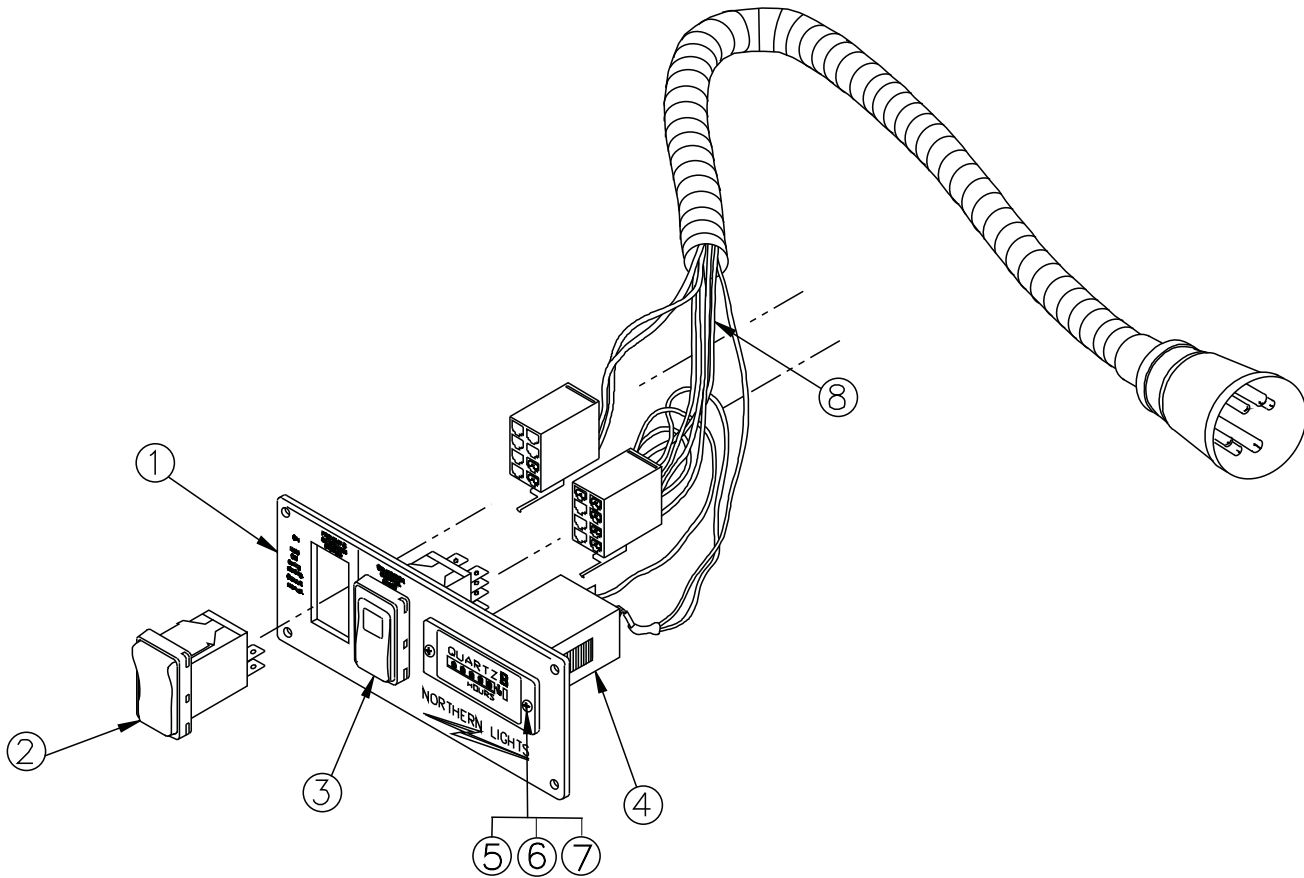


A-8551, A-8552/ B-5970

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

12 and 24 Volts, Late Production

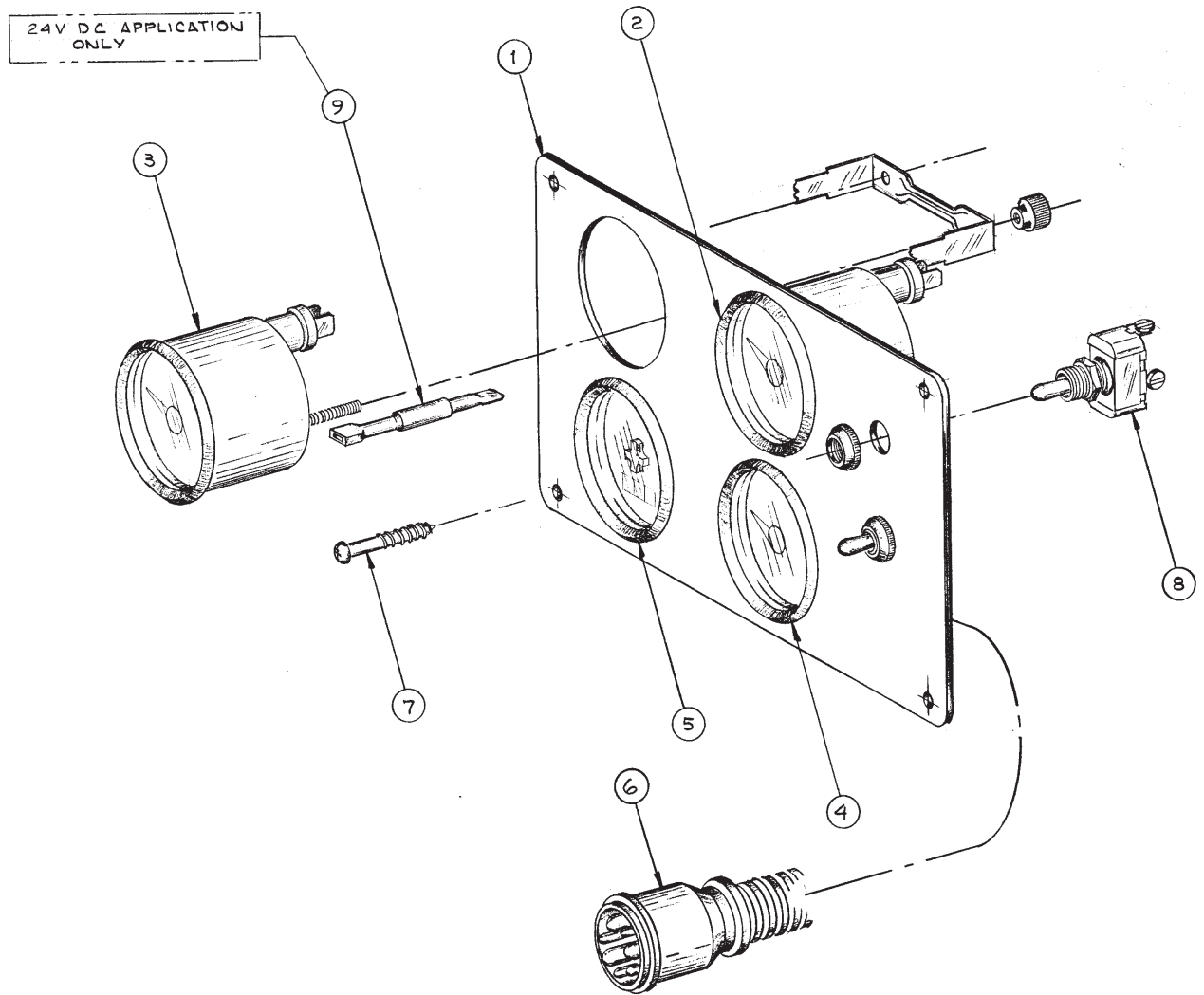


A-8553/ B-5971

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92120	1	S 1-B Start/ Stop Control Panel - 12 Volt (includes all keys, formerly #22-90006)	-
••	22-92125	1	S 1-B Start/ Stop Control Panel - 24 Volt (includes all keys, formerly #22-95430)	-
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

Marine Application - VDO Standard Line Black Bezel Gauges

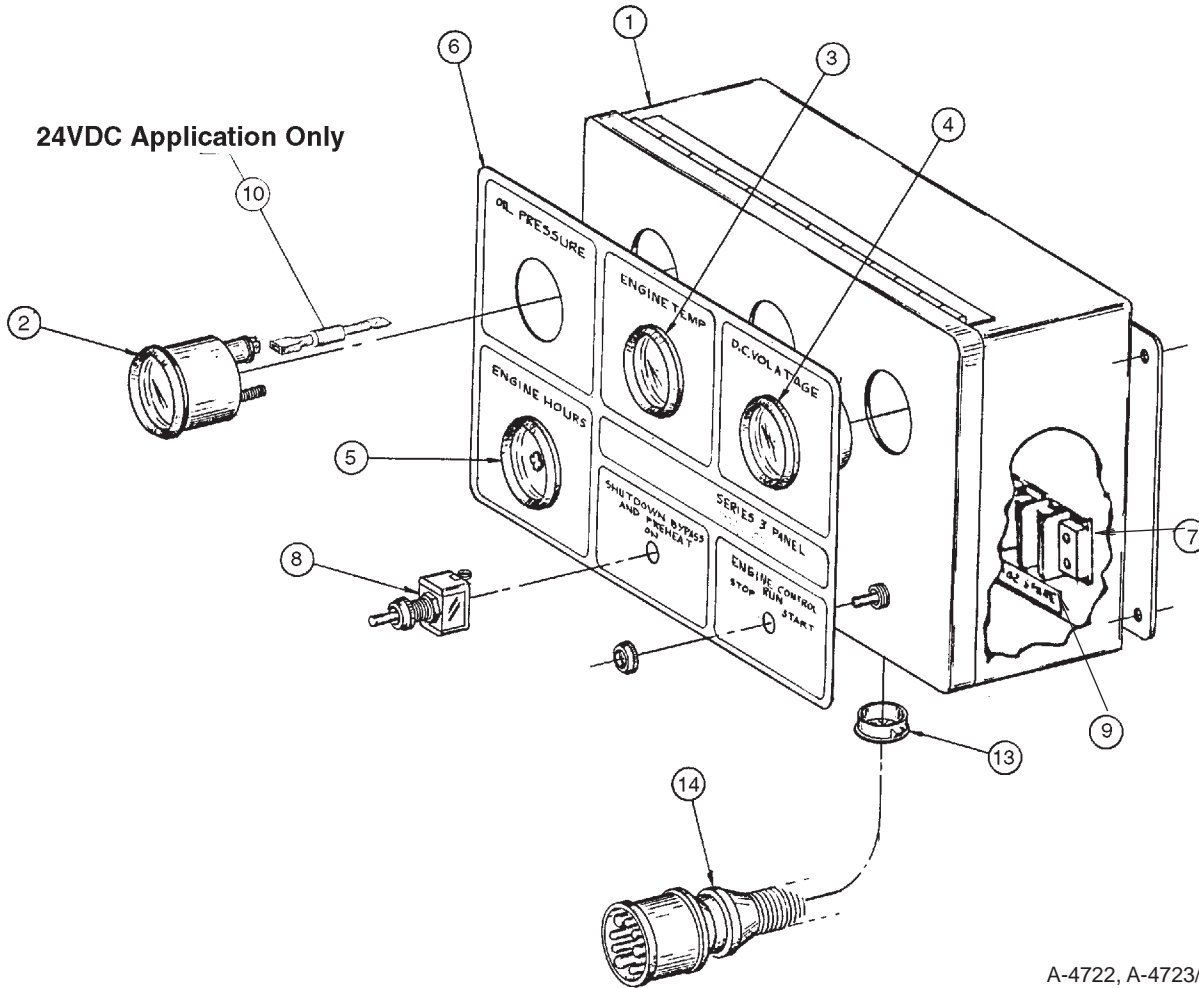


A-4732, A-4597/ C-2441

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

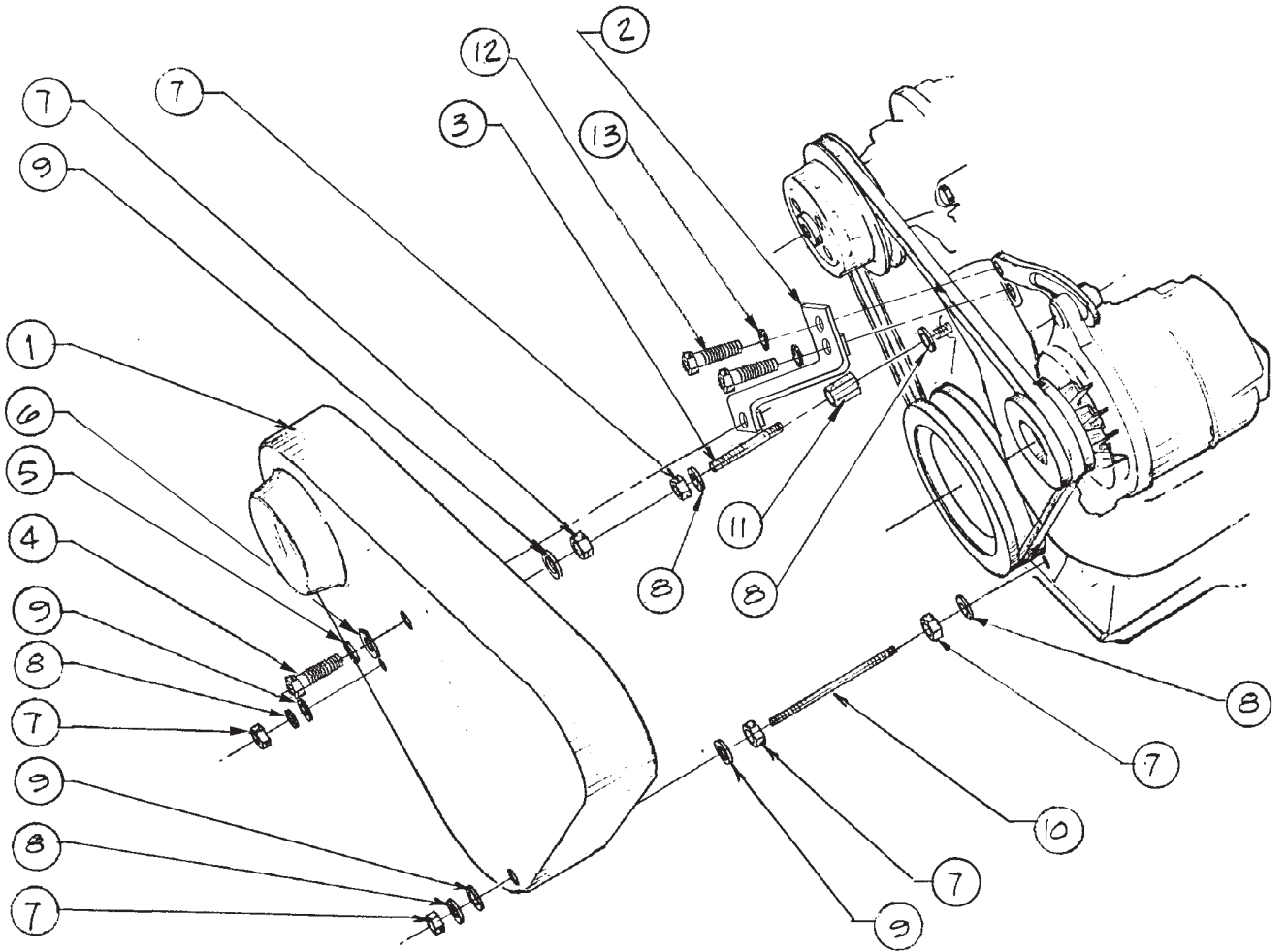
Marine and Industrial Applications



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	

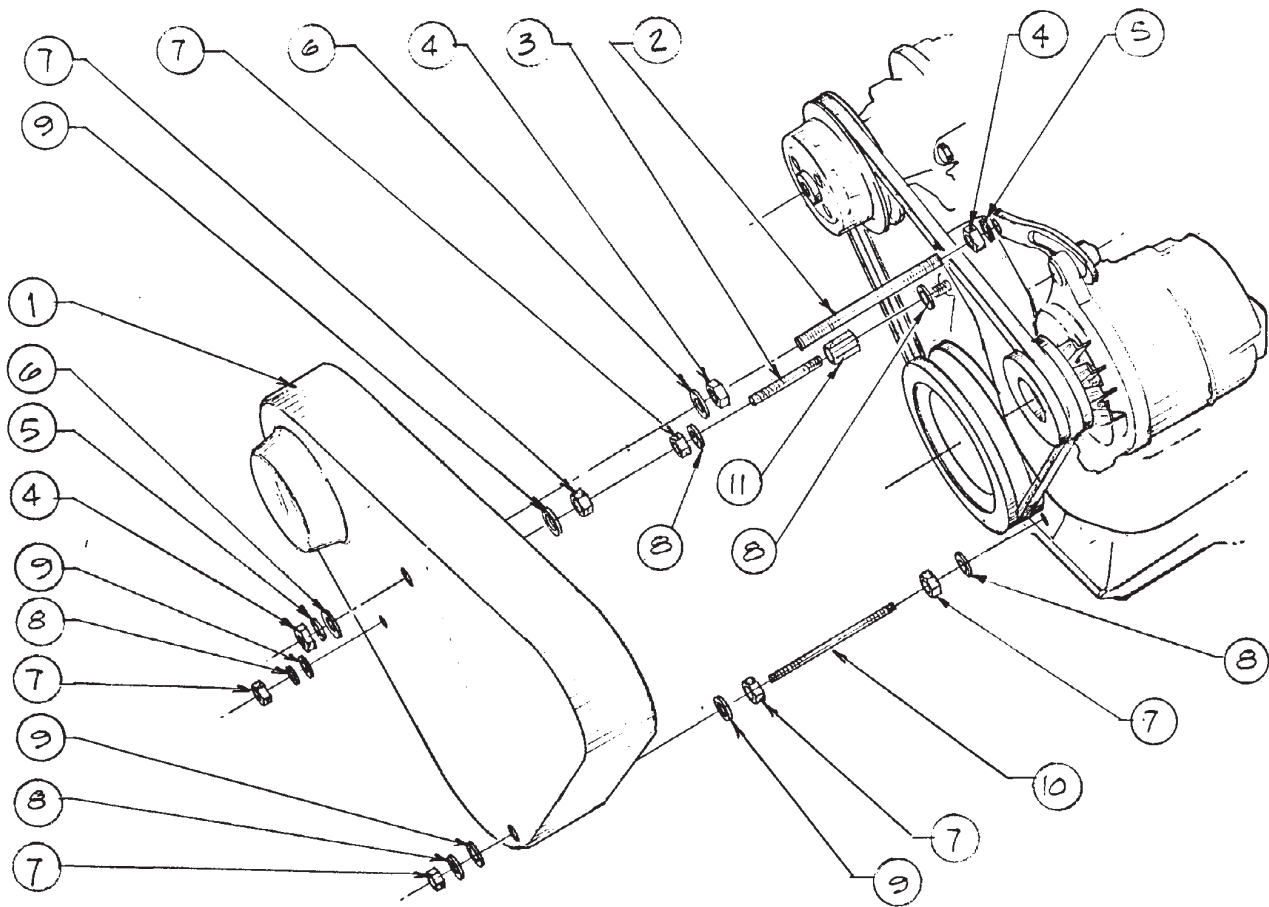
Belt Guard Assembly - M843JK



A-8024/ B-6385

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-03106	1	Belt Guard (843JK)	-
2	13-63105	1	Belt Guard Mounting Bracket	-
3	13-03102	1	Stud, All Thread M6 x 1.0 x 140 mm S/S	-
4	14-00776	3	Capscrew, Hex Head M8 x 1.25 x 20 mm S/S	-
5	15-00705	1	Lock Washer M8 S/S	-
6	15-00706	1	Flat Washer M8 S/S	-
7	14-01132	6	Hex Nut M6 x 1.0 S/S	-
8	15-00610	5	Lock Washer M6 S/S	-
9	15-01134	4	Flat Washer M6 S/S	-
10	13-03103	1	Stud, All Thread M6 x 1.0 x 70 mm S/S	-
11	14-73100	1	Hex Nut M6 x 1.0 x 18 mm	-
12	12-00753	2	Capscrew, Hex Head M8 x 1.25 x 30 mm	-
13	15-00702	2	Lock Washer M8	-

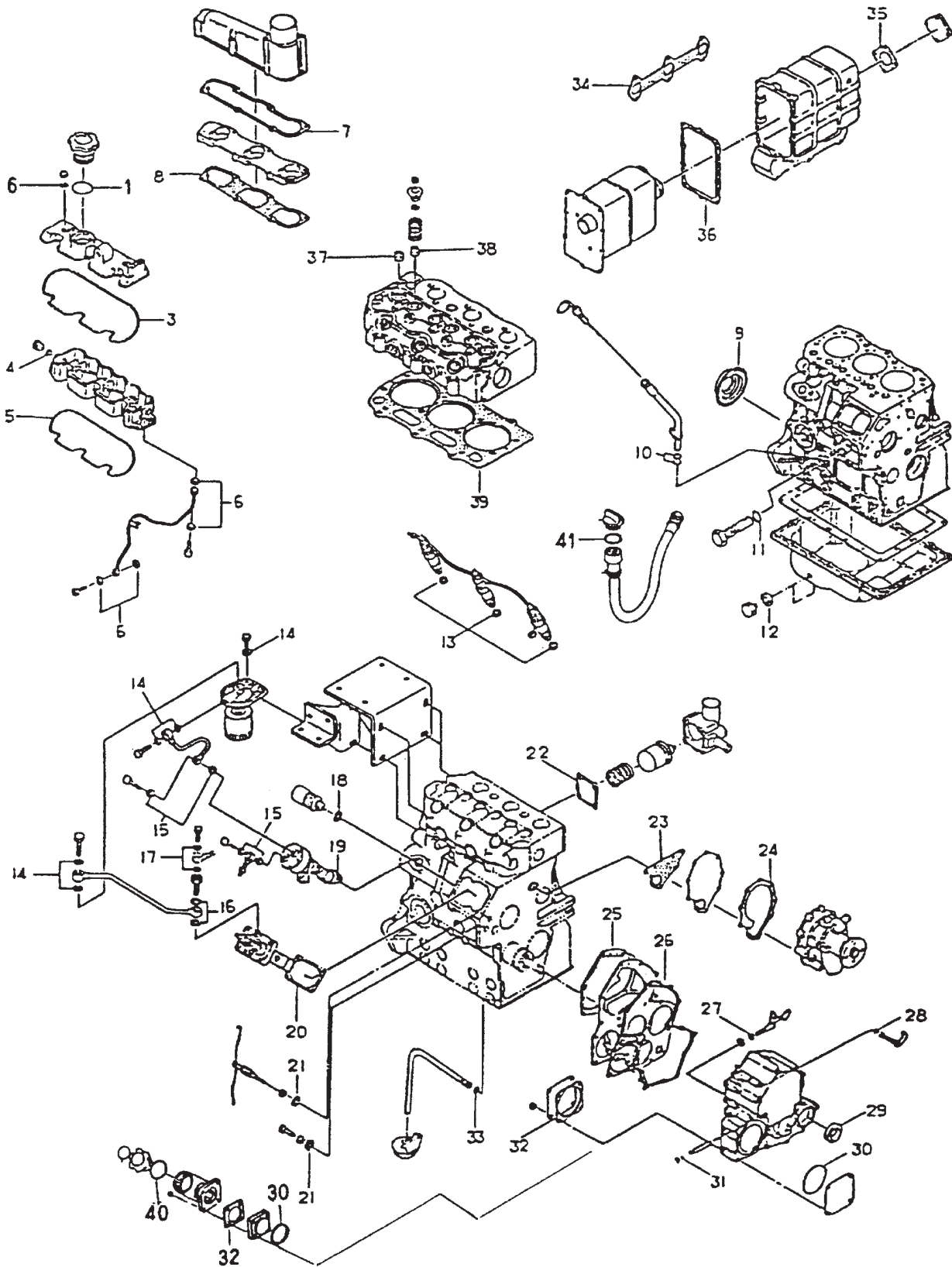
Belt Guard Assembly - M843NK



A-5004, A-5020/ B-3986

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	00-73143	1	Belt Guard, Small Frame Alternators (without PTO)	-
	00-73148	1	Belt Guard, Small Frame Alternators (with PTO)	-
	00-08402	1	Belt Guard, Medium Frame Alternators (without PTO)	-
	00-08401	1	Belt Guard, Medium Frame Alternators (with PTO)	-
2	13-03101	1	Stud, All Thread M8 x 1.25 x 110 mm	-
3	13-03102	1	Stud, All Thread M6 x 1.0 x 140 mm	-
4	14-00711	3	Hex Nut M8 x 1.25	-
5	15-00702	2	Lock Washer M8	-
6	15-00701	2	Flat Washer M8	-
7	14-01131	6	Hex Nut M6 x 1.0	-
8	15-01132	5	Lock Washer M6	-
9	15-00008	4	Flat Washer M6	-
10	13-03103	1	Stud, All Thread M6 x 1.0 x 70 mm	-
11	14-73100	1	Hex Nut, X-L M6 x 1.0 x 19 mm	-
12	23-78403	**	Bracket (used with 00-73148 only, not shown)	-
	23-78402	**	Bracket (used with 00-08401 and 00-08402 only, not shown)	-
13	00-73147	1	PTO Guard (not shown)	-
			**As required	

Gasket Kit

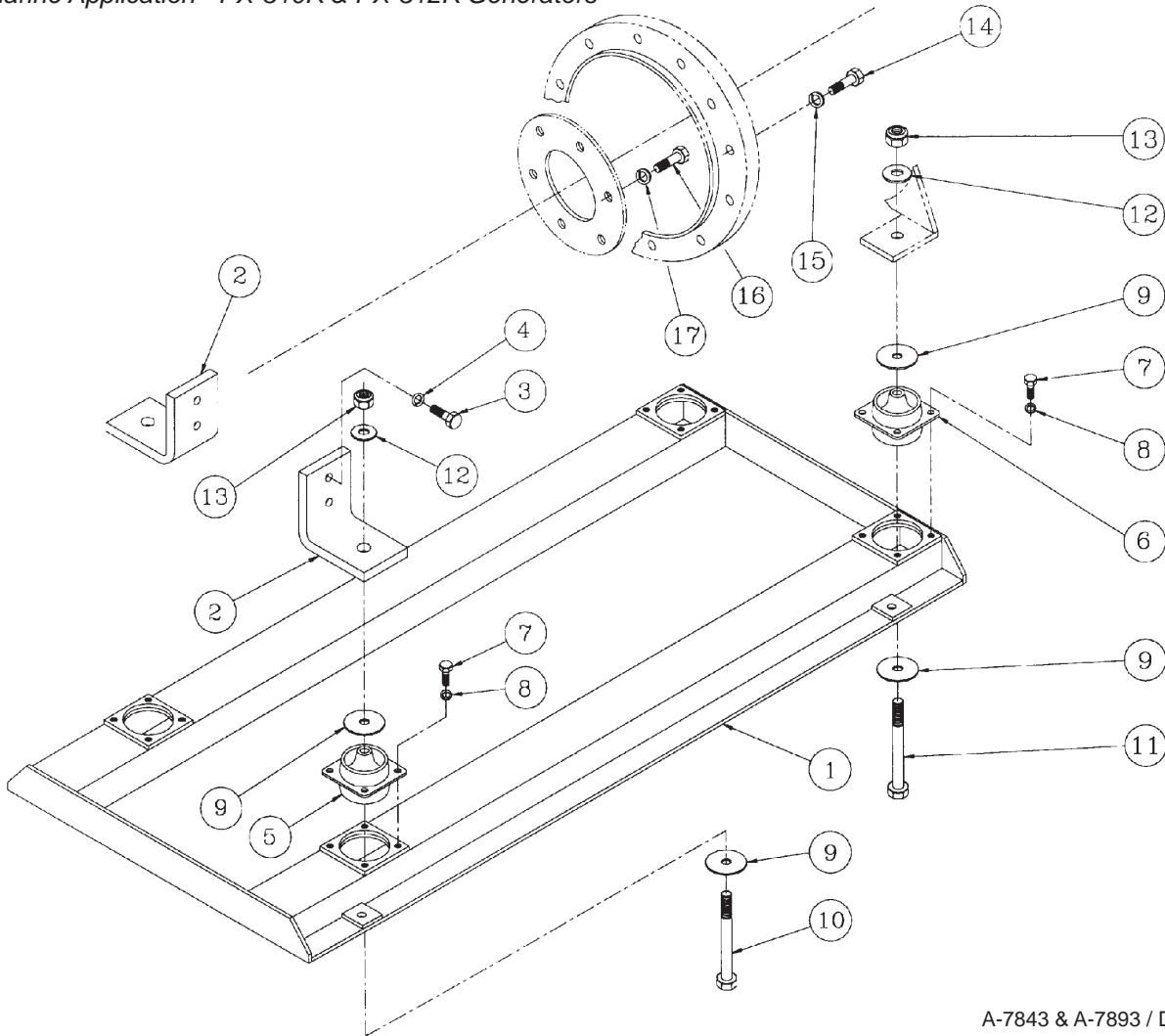


Gasket Kit

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	195906831	1	Gasket Kit - NL only (includes keys #1 - 41)	-
	29-03100	1	Gasket Kit - Marine (includes all keys)	-
1	052100400	1	O-Ring	-
3	052109064	1	Gasket	-
4	052100120	1	O-Ring	-
5	052109065	1	Gasket	-
6	198996060	4	Gasket	-
7	135996451	1	Gasket	-
8	135996680	1	Gasket	-
9	198636170	1	Oil Seal	-
10	052100100	2	O-Ring	-
11	052100150	1	O-Ring	-
12	025100012	2	Seal Washer	-
13	131426200	3	Gasket	-
14	130326051	5	Gasket	-
15	130516069	4	Gasket	-
16	131296255	2	Gasket	-
17	025100008	2	Gasket	-
18	025100016	1	Seal Washer	-
19	130996070	1	Gasket	-
20	131426310	1	Shim Set	-
21	025100010	2	Seal Washer	-
22	145996360	1	Gasket	-
23	145996370	1	Gasket	-
24	145996460	1	Gasket	-
25	165996361	1	Gasket	-
26	165996351	1	Gasket	-
27	052100070	1	O-Ring	-
28	052100050	1	O-Ring	-
29	198636160	1	Oil Seal	-
30	052300700	1	O-Ring	-
31	052100030	1	O-Ring	-
32	165996110	1	Gasket	-
33	052109076	1	O-Ring	-
34	135996590	1	Gasket	-
35	135996550	1	Gasket	-
36	135996530	1	Gasket	-
37	120406050	3	Valve Guide Seal (ex)	-
38	120406070	3	Valve Guide Seal (in)	-
39	111147991	1	Head Gasket t = 1.5	-
40	054109013	1	Gasket	-
41	052300400	1	O-Ring	-
42	11-28101	1	Gasket, Intake Cover	-
43	11-33101	1	Gasket, Exhaust Manifold/Expansion Tank	-
44	11-13101	1	Gasket, Thermostat Cover	-
45	16-13101	1	O-Ring, Raw Water Pump Mtg.	-

Base Frame Assembly

Marine Application - PX-310K & PX-312K Generators



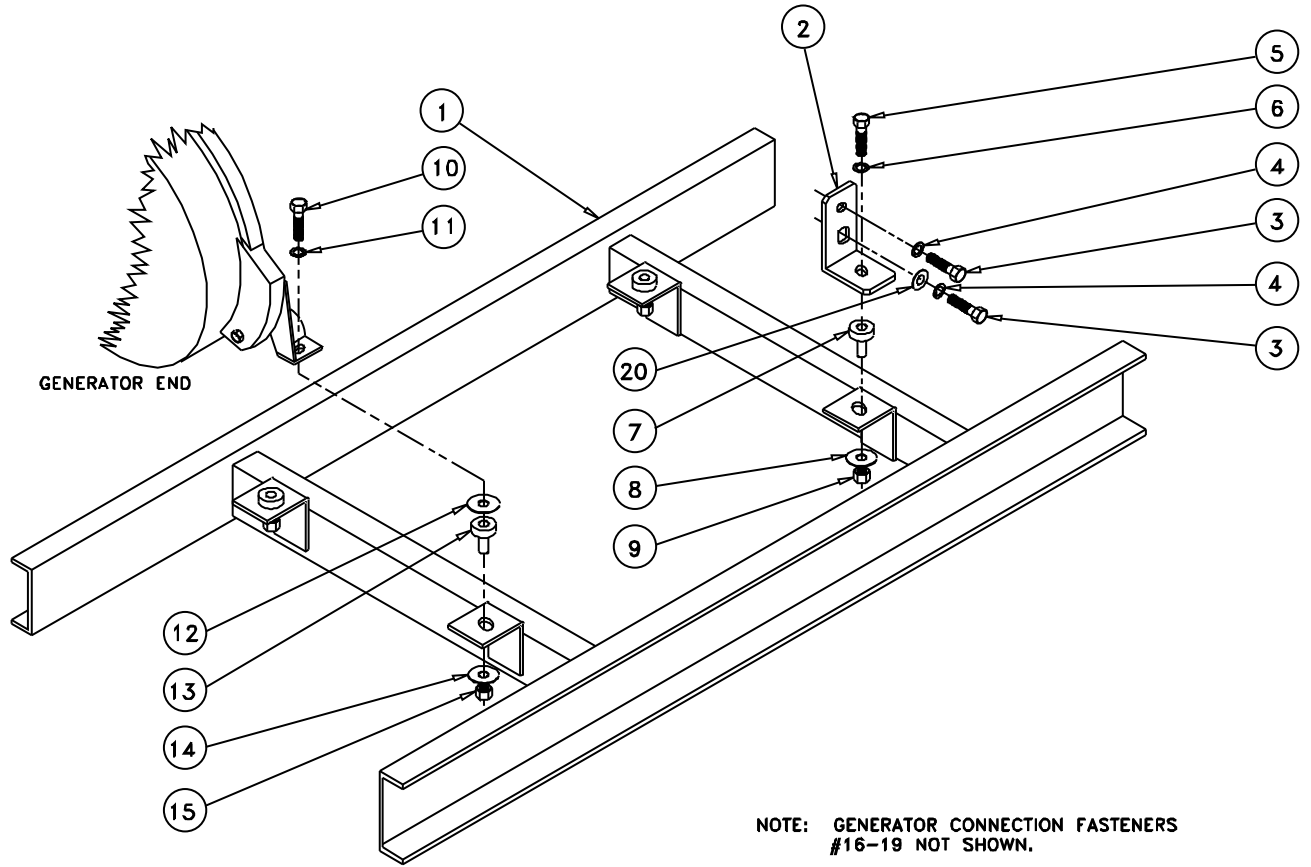
A-7843 & A-7893 / D-3012

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-83124	1	Base Frame, Steel	-
	39-83123	1	Base Frame, Aluminum	-
2	23-83123	2	Bracket	-
3	12-01100	4	Capscrew, Hex Head M14 x 1.5 x 30 mm	-
4	15-01402	4	Lock Washer, Helical M14	-
5	33-85402	2	Platform Mount, 220 lb. Standard	-
	33-82205	2	Platform Mount, 250 lb. (with PTO)	-
6	33-85402	2	Platform Mount, 220 lb.	-
7	12-00776	16	Capscrew, Hex Head M8 x 1.25 x 20 mm, Stainless Steel	-
8	12-00705	16	Lock Washer, Helical M8, Stainless Steel	-
9	15-00020	**	Snubbing Washer	-
10	12-00501	2	Capscrew, Hex Head 1/2-13 x 3" Stainless Steel	-
11	12-00502	2	Capscrew, Hex Head 1/2-13 x 3-1/2" Stainless Steel	-
12	15-00505	4	Flat Washer 1/2 Stainless Steel	-
13	14-00501	4	Hex Nut, Nylock 1/2-13 Stainless Steel	-
14	12-00313	12	Capscrew, Hex Head 3/8-16 x 1-1/4"	-
15	15-00302	12	Lock Washer, Helical 3/8	-
16	12-00214	8	Capscrew, Hex Head 5/16-18 x 1-1/2"	-
17	15-00202	8	Lock Washer, Helical 5/16	-

(**As required)

Base Frame Assembly

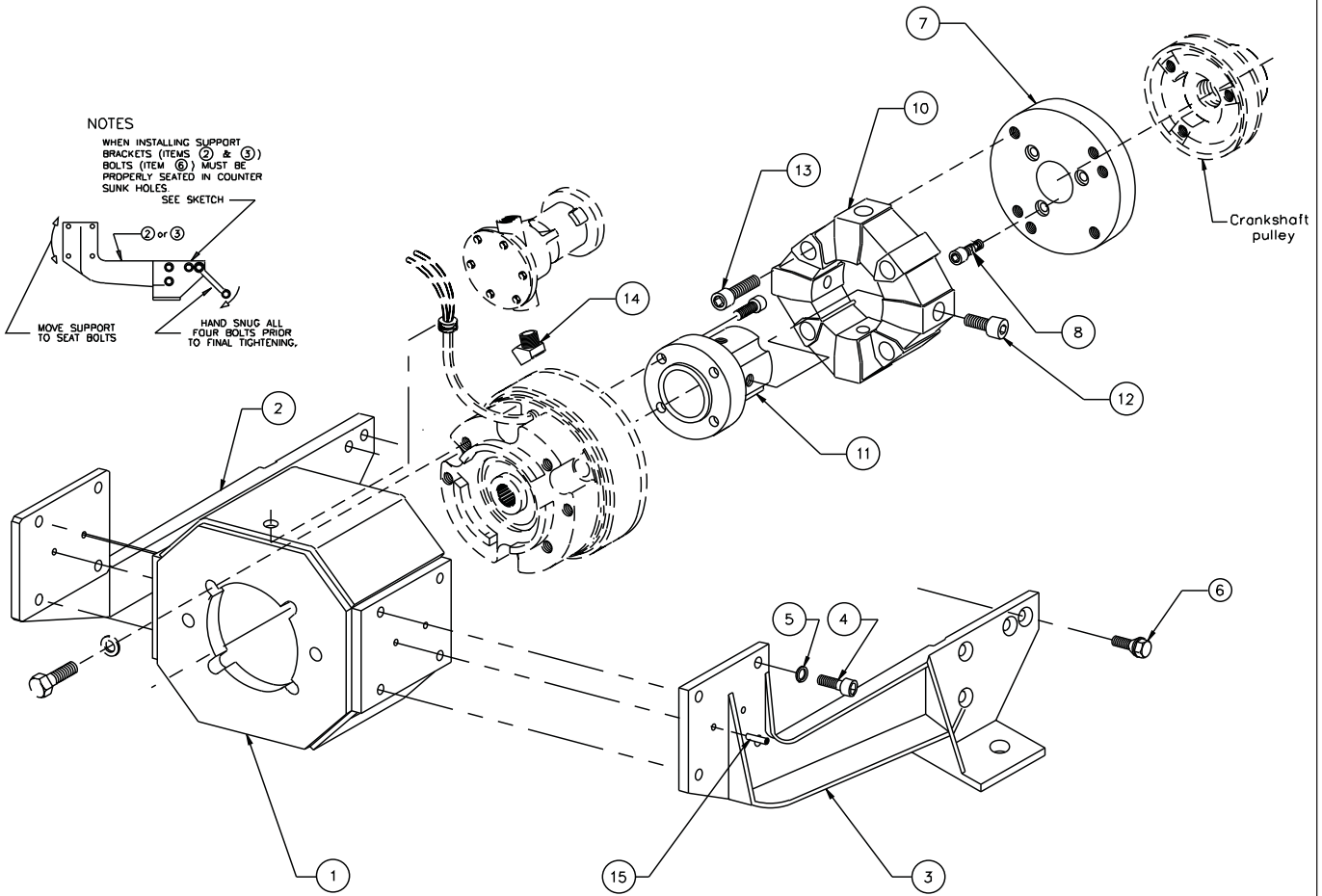
Industrial Application



A-7930/ B-6380

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-83126	1	Base Frame	-
2	23-88103	2	Bracket	-
3	12-01100	4	Capscrew, Hex Head M14 x 1.5 x 30 mm	-
4	15-01402	4	Lock Washer, Helical M14	-
5	12-00817	2	Capscrew, Hex Head M10 x 1.5 x 55 mm	-
6	15-00805	2	Flat Washer M10	-
7	33-83151	2	Mount, Centerbonded 200 lb.	-
8	15-00014	2	Head/Tail Washer 1.5 x 0.42 x 0.120	-
9	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
10	12-00048	2	Capscrew, Hex Head M10 x 1.5 x 60 mm	-
11	15-00805	2	Flat Washer M10	-
12	15-00015	2	Head Washer 2.75 x 0.64 x 0.125	-
13	33-83151	2	Mount, Centerbonded 200 lb.	-
14	15-00014	2	Head/Tail Washer 1.5 x 0.42 x 0.120	-
15	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
16	12-00313	12	Capscrew, Hex Head 3/8-16 x 1-1/4"	-
17	15-00302	12	Lock Washer, Helical 3/8	-
18	12-00213	8	Capscrew, Hex Head 5/16-18 x 1-1/4"	-
19	15-00202	8	Lock Washer, Helical 5/16	-
20	15-01401	2	Flat Washer M14	-

PTO Adapter Parts, M843NK

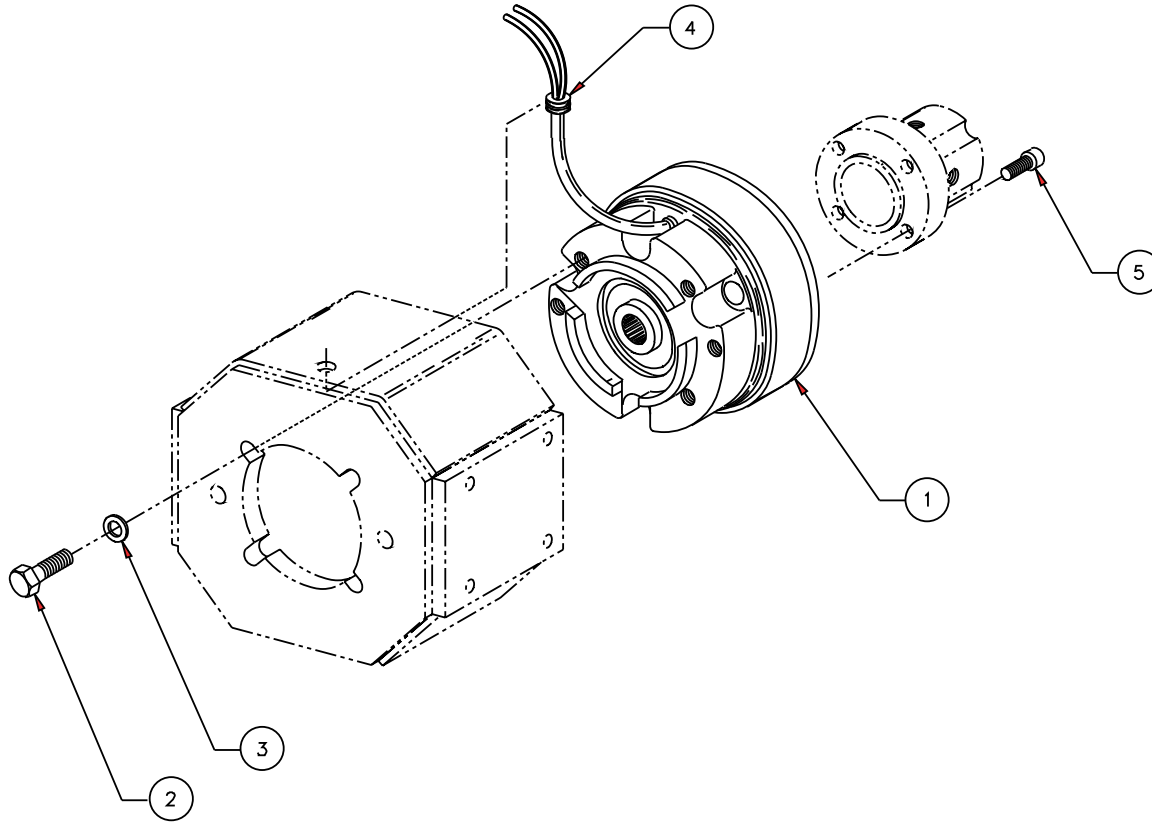


A-8091/ D-3154

PTO Adapter Parts, M843NK

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	31-63105	1	PTO Adapter (includes all keys)	-
1	10-65401	1	PTO Clutch Housing, H-28 B-Pad	-
2	23-63103	1	Engine/ PTO Support Bracket, Right Hand	-
3	23-63104	1	Engine/ PTO Support Bracket, Left Hand	-
4	12-34803	8	Capscrew, Socket Head M10 x 1.5 x 25 mm	-
5	15-00803	4	Lock Washer, High Collar M10	-
6	12-68101	6	Capscrew, Hex Head with Tapered Seat, M14 x 1.5 x 30 mm	-
7	31-68101	1	PTO Drive Adapter	-
8	12-20912	3	Capscrew, Socket Head M12 x 1.75 x 25 mm	-
10	34-65406	1	Coupling Assembly (with hardware, size 22 model)	-
11	34-65407	1	Hub	-
12	12-20920	4	Capscrew, Socket Head M12 x 1.75 x 40 mm	-
13	12-20914	4	Capscrew, Socket Head M12 x 1.75 x 35 mm	-
14	21-00128	1	Steel Elbow, 45 degrees, Brass 1/2 NPT x 1/2 NPT	-
15	32-60001	4	Taper Pin #4 x 1"	-

Electric Clutch

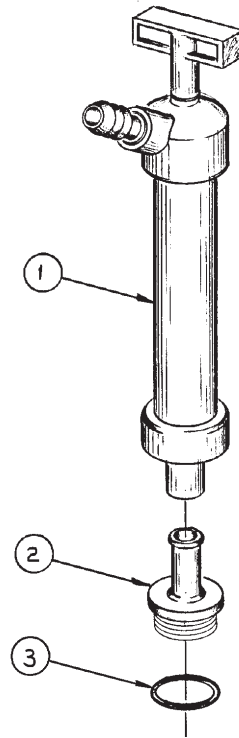


A-6291 & A-6346/ C-3020

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	34-60031	1	Electric Clutch Assembly (12 volt)	-
	34-60032	1	Electric Clutch Assembly (24 volt)	-
2	12-00513	4	Capscrew, Hex Head 1/2-13 x 1-1/4	-
3	15-00007	4	Flat Washer M12	-
4	00-61003	1	Grommet	-
5	12-63800	4	Capscrew, Socket Head 3/8-24 x 3/4	-

Oil Drain Kit

Marine Application

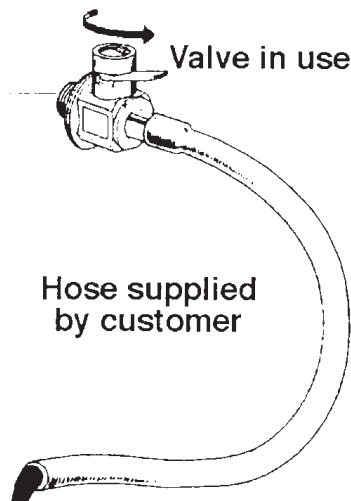


A-5024/ B-3990

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	34-70010		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	-

Oil Drain

Industrial Application

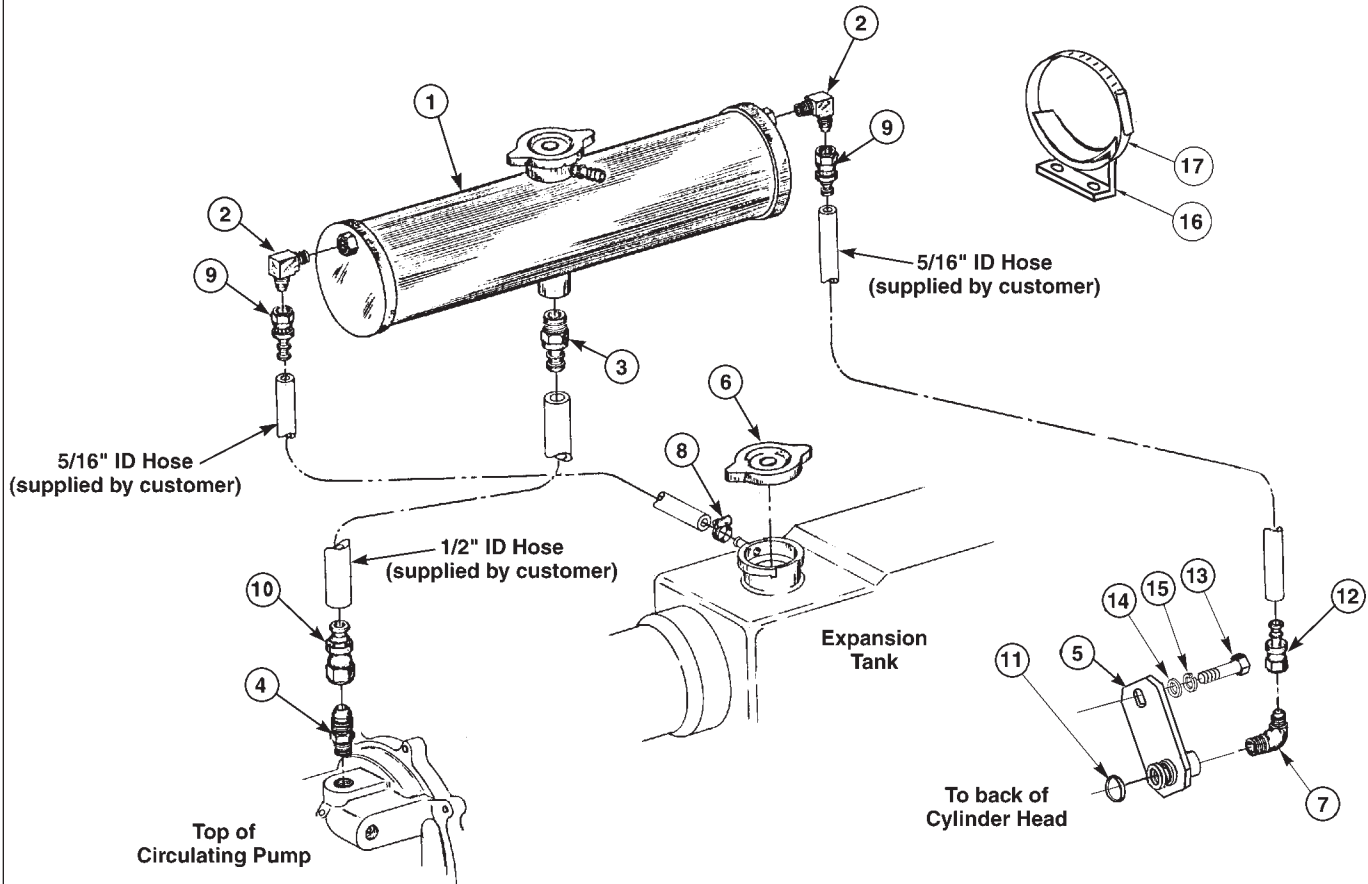


A-6480

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	36-72003	1	Drain Valve	-

Remote Expansion Tank

Marine Application

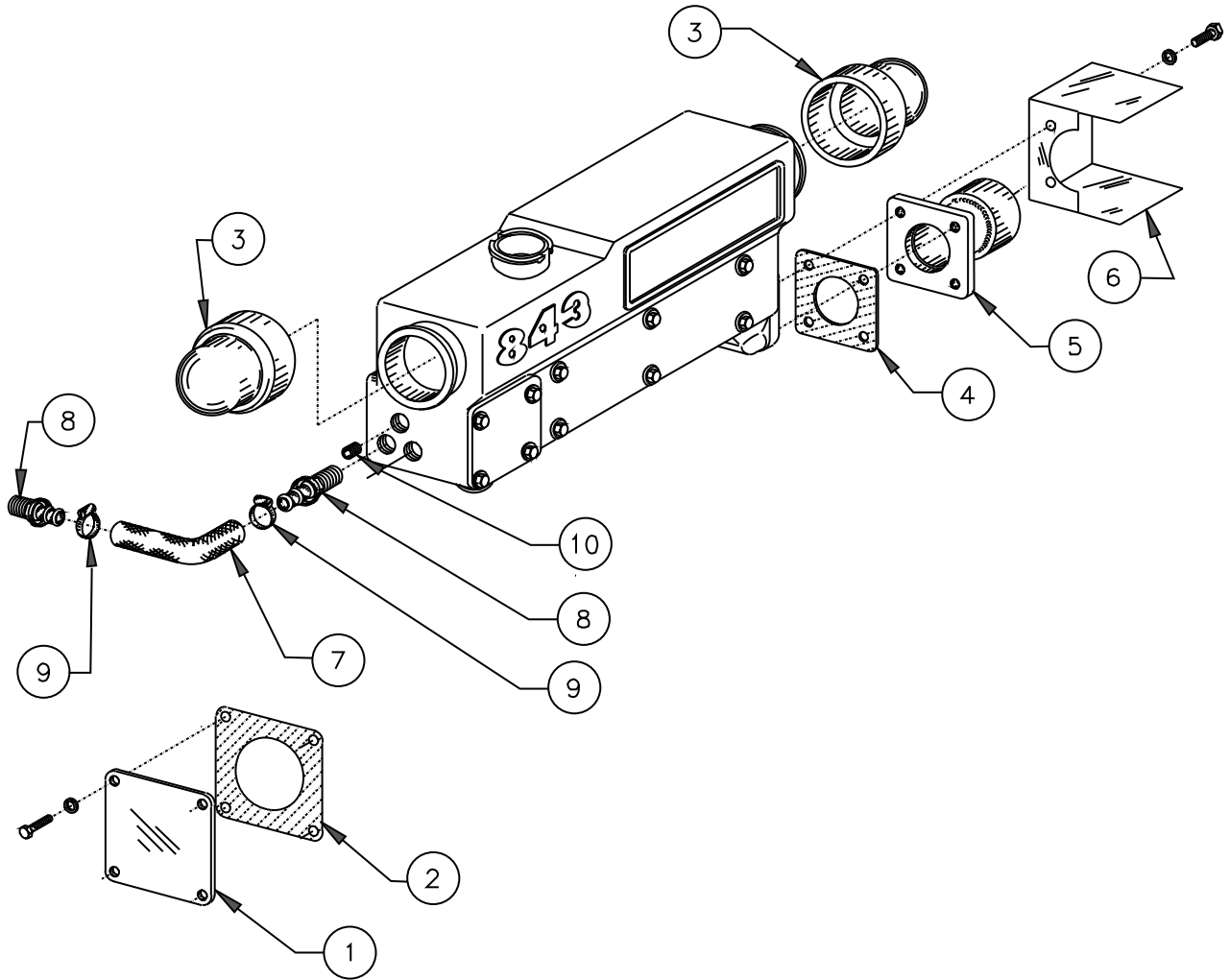


A-5931A/ D-2345

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-12002	1	Tank Assembly (includes keys #2 & #16 - #17)	-
2	21-52245	2	Male Elbow, Brass 1/4 NPT x 5/16-45T	-
3	21-51093	1	Male Connector, Brass 1/2 NPT x 1/2 HB	-
4	21-71093	1	Male Connector, Brass 3/8 NPT x 1/2 HB	-
5	31-12001	1	Port Adapter (requires key #11)	-
6	21-12008	1	Filler Cap	-
7	21-10030	1	Male Elbow, Steel 3/8 Port x 5/16-37T	-
8	19-00004	1	Hose Clamp	-
9	21-71056	2	Female Swivel, Brass 5/16 HB x 5/16-45T	-
10	21-71042	1	Female Swivel, Brass 1/2 HB x 1/2-45T	-
11	16-90001	1	O-ring (for Port Adapter)	-
12	21-70007	1	Female Swivel, Brass 5/16 HB x 5/16-37T	-
13	12-00751	1	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
14	15-00701	1	Flat Washer M8	-
15	15-00702	1	Lock Washer M8	-
16	23-75404	2	Mounting Foot	-
17	19-00064	2	Hose Clamp #64 (for tank mounting)	-

Keel Cooling Conversion

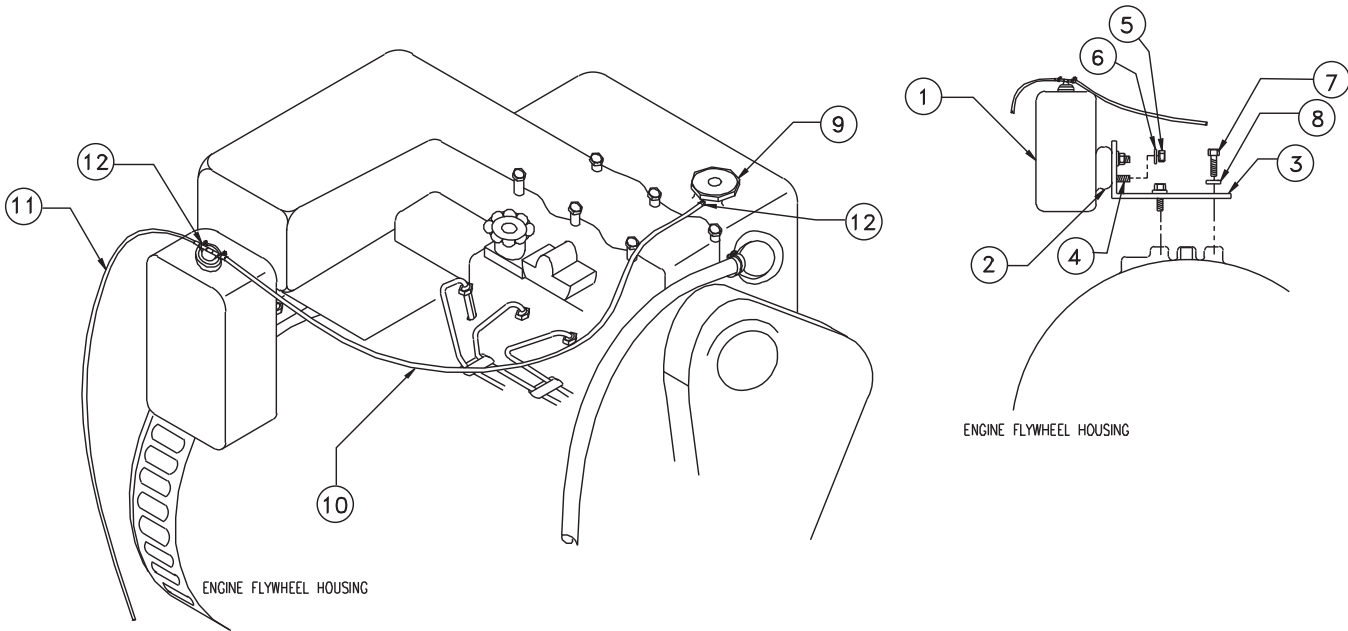
Marine Application - with Dry Exhaust



A-5109/ C-3252

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165206320	1	Cover (see Governor & Timing Gear Case)	-
2	11-12005	1	Gasket (see Governor & Timing Gear Case)	-
3	20-11904	2	End Cap	-
4	11-31902	1	Gasket	-
5	27-31921	1	Adapter, Dry Exhaust Straight 1-1/2 NPT	-
6	00-12000	1	Heat Shield	-
7	18-12003	1	Hose	-
8	21-12014	2	Male Connector, Brass, 3/8 NPT x 1/2 HB *	-
9	19-00008	2	Hose Clamp #8 *	-
10	21-51900	1	Plug, Socket Head, Steel, 1/8 NPT *	-
<p>* Note: Former part numbers are as follows: #8: 145536050 #9: 21-12205 #10: 19-00006 Replace all items together.</p>				

Coolant Recovery Tank



A-9148/ B-6396

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	310550130	1	Coolant Recovery Tank	-
2	222300090	1	Coolant Recovery Tank Mounting Bracket	-
3	23-12003	1	Coolant Recovery Tank Mounting Bracket	-
4	12-00097	2	Capscrew, Hex Head, M6 x 1.0 x 12 mm	-
5	14-04803	2	Hex Nut, Nylock, M6 x 1.0	-
6	15-00008	2	Flat Washer, M6	-
7	12-00711	2	Capscrew, Hex Head, M8 x 1.25 x 20 mm	-
8	15-00702	2	Lock Washer, Helical M8	-
9	21-12013	1	Filler Cap, 7 PSI, Double Seal Coolant Recovery Type	-
10	41-01013	25	Hose, 5/16" I.D. Polyvinyl	-
11	41-01013	11	Hose, 5/16" I.D. Polyvinyl	-
12	19-00002	3	Hose Clamp #2	-



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