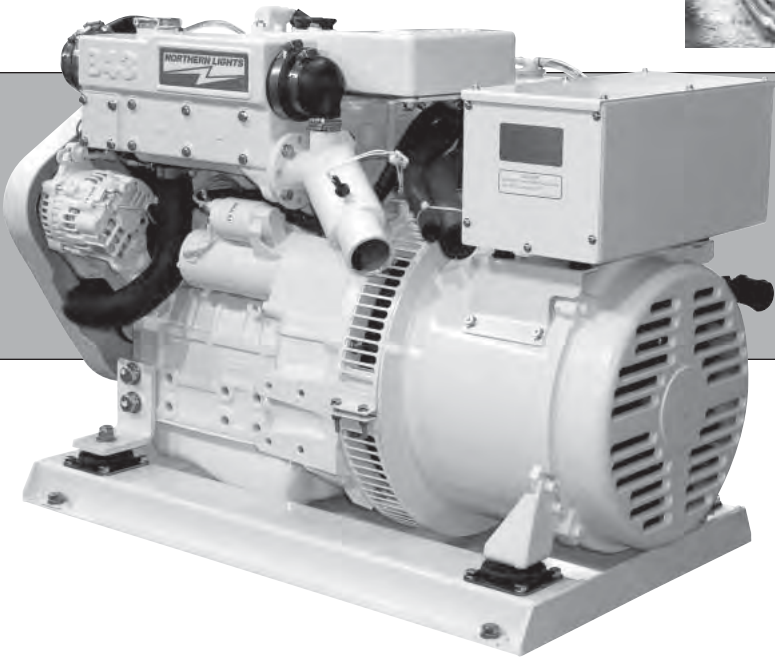


For your convenience, Diesel Specialists is providing access to this Northern Lights Parts Catalog to assist you with purchasing the correct parts for your generator or engine.

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Use the PDF search function to search the catalog: press CTRL + F and the search box will appear.

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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.*

**Northern Lights**  
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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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Not available at this time.

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---------------------------	-------

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## MODEL DESIGNATION

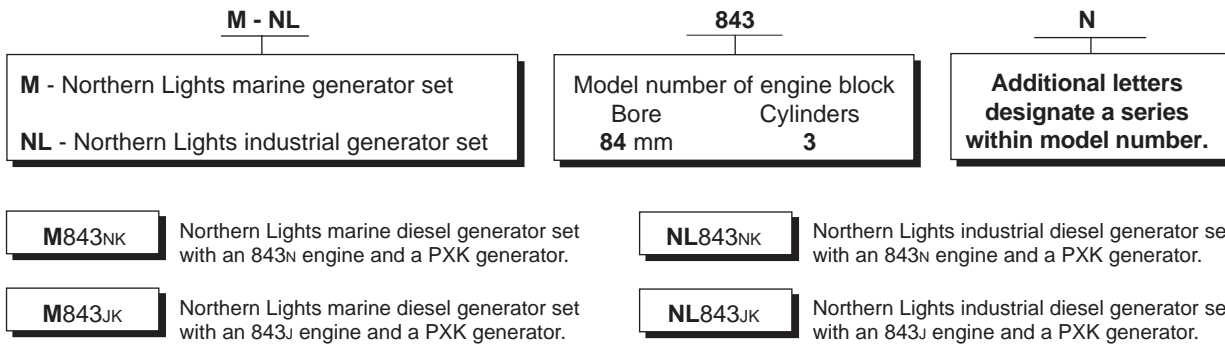
### MODELS INCLUDED

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

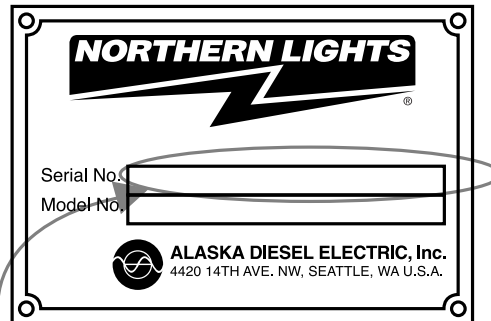
Model numbers give the unit's application, block model, aspiration, and RPM:



## 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"> <li>1. Grouping section title.</li> <li>2. Model designation of equipment that uses parts listed on this page.</li> <li>3. Title and description of assembly.</li> <li>4. Drawing numbers that correspond to key column numbers for parts identification.</li> <li>5. Key column for locating parts shown on drawing.</li> <li>6. Part number.</li> </ol> | <ol style="list-style-type: none"> <li>7. Quantity of parts used.</li> <li>8. Description of each component part.</li> <li>9. Serial number of unit the part fits.</li> <li>10. Assembly or kit designated by Key 0 or ••/•.</li> <li>11. Grouping index number.</li> <li>12. Page number within the grouping index.</li> <li>13. Manual title.</li> <li>14. Page publication date.</li> </ol> |
|--|--|

**NOTE:** ⇨ Arrows always point toward the front of the engine.

# Cylinder Block Assembly M843JK

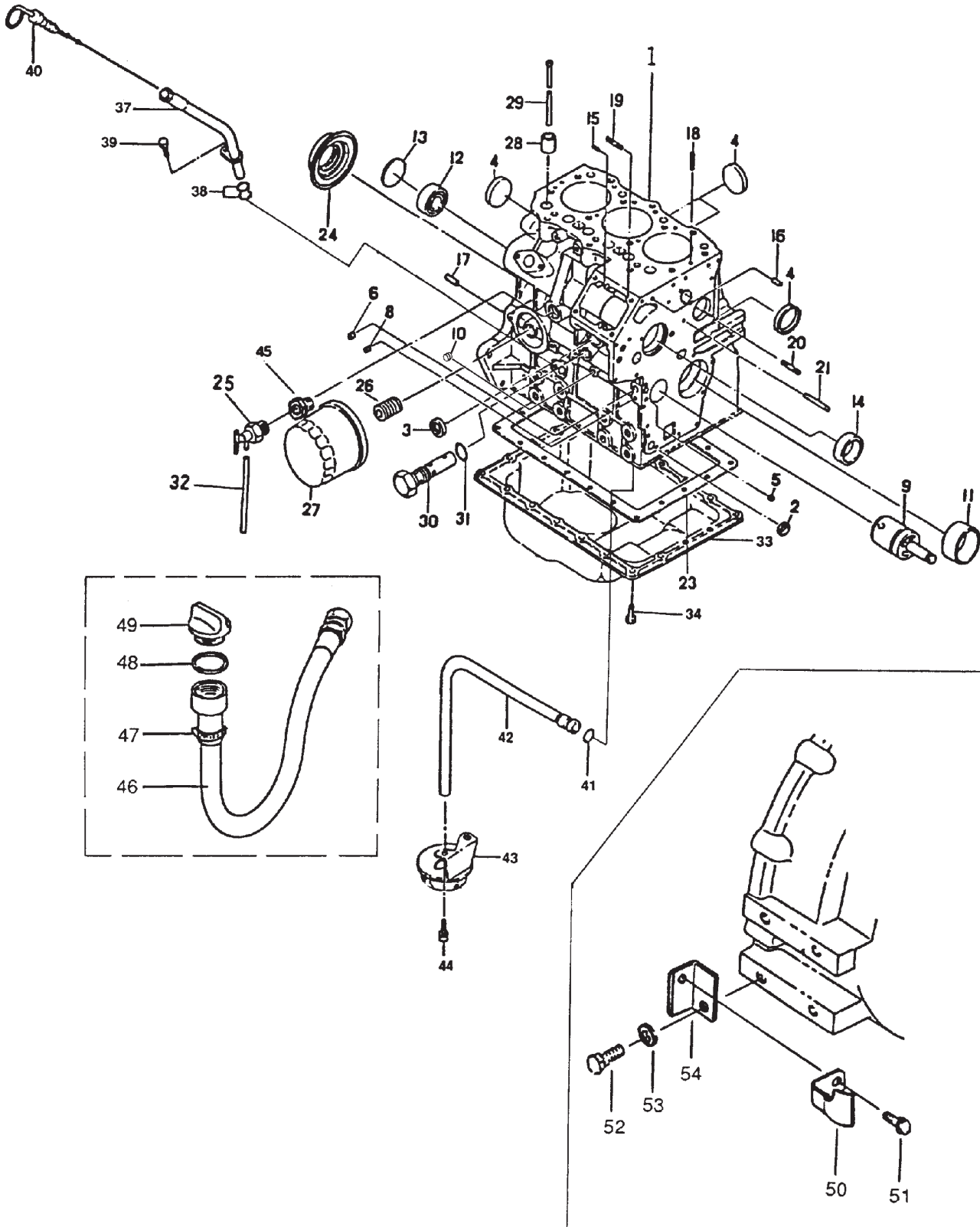


Fig. 01-00

## 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

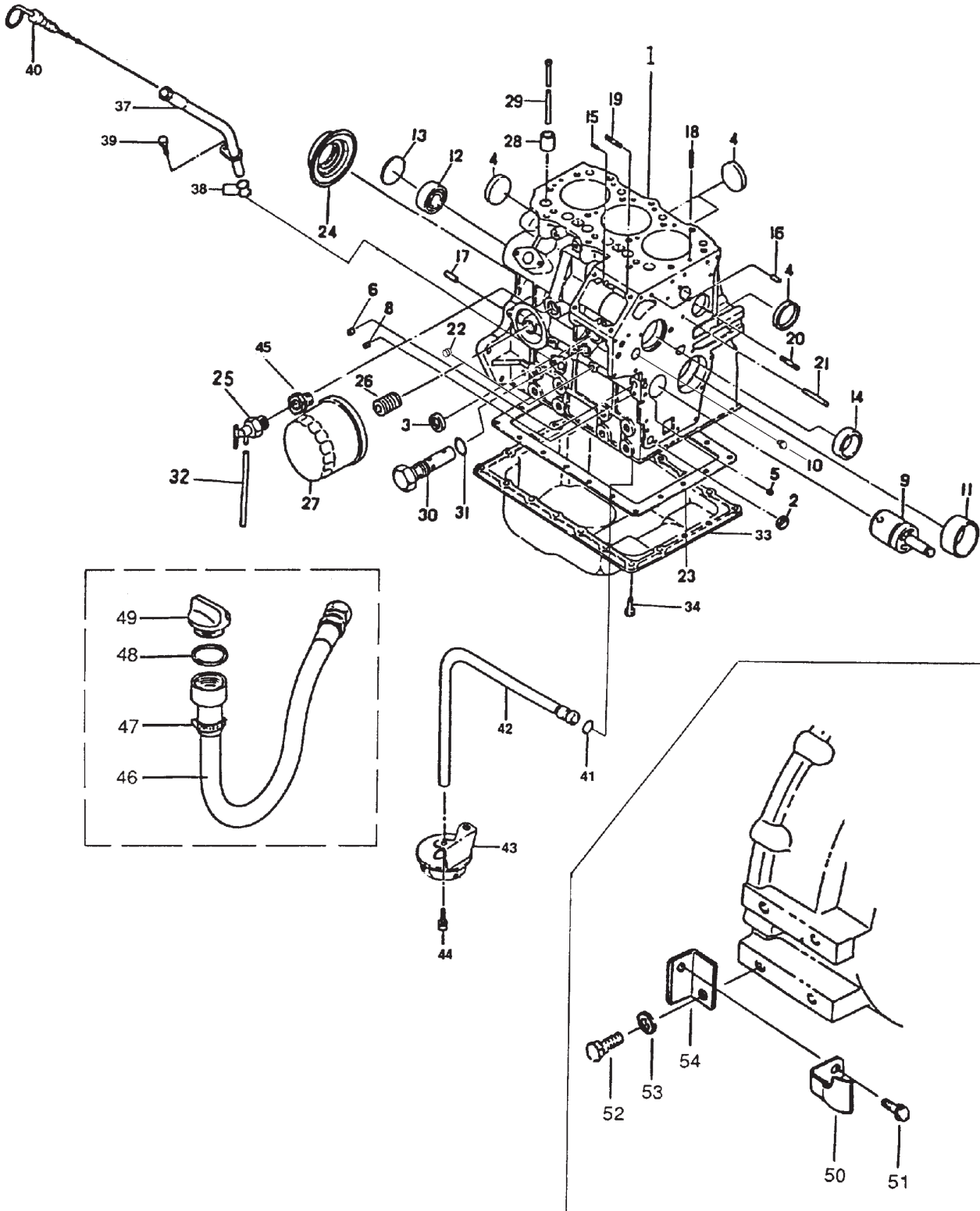


Fig. 01-02

## 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

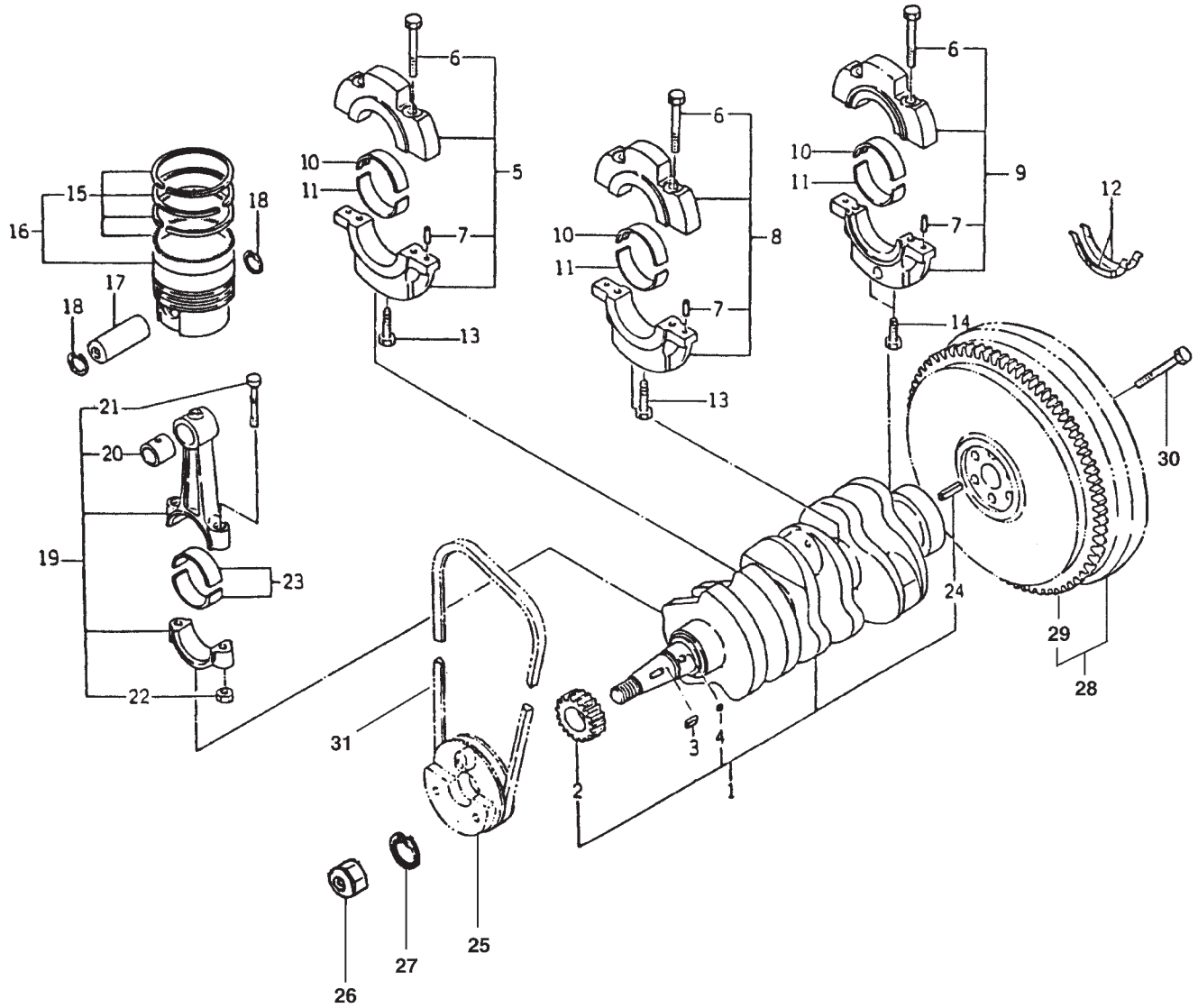


Fig. 1-4

## 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**

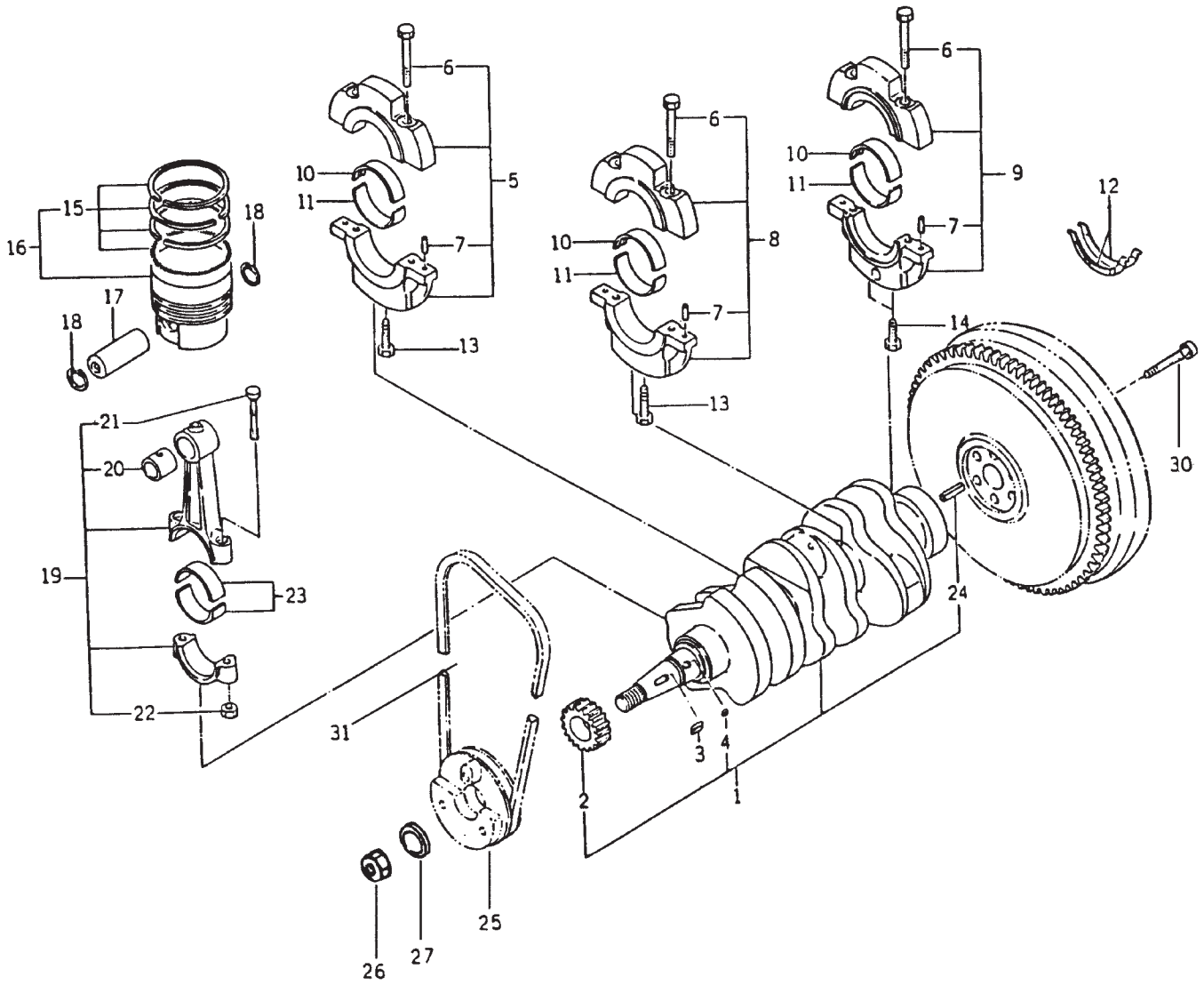


Fig. 1-6

## 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

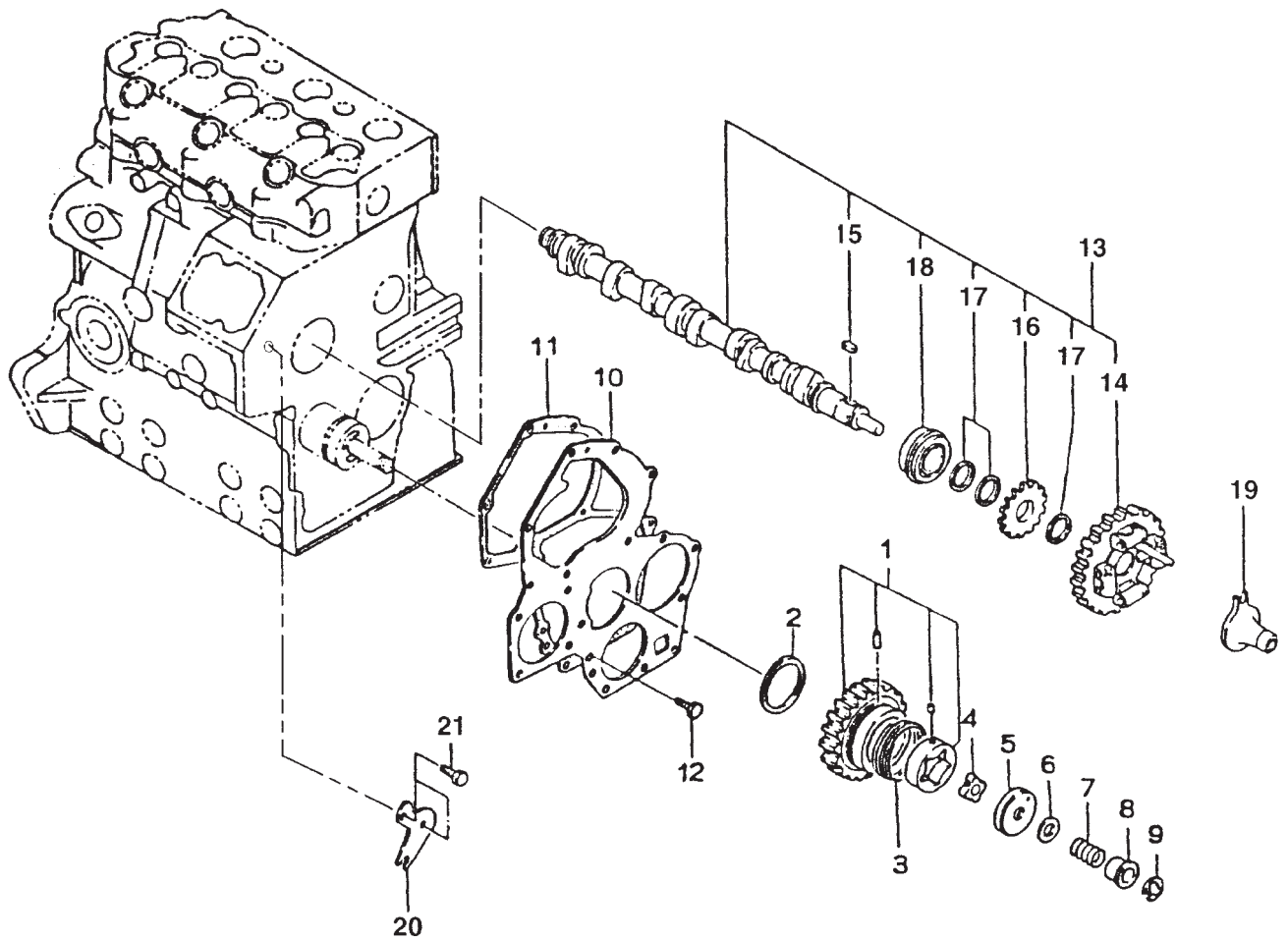


Fig. 1-8

## 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

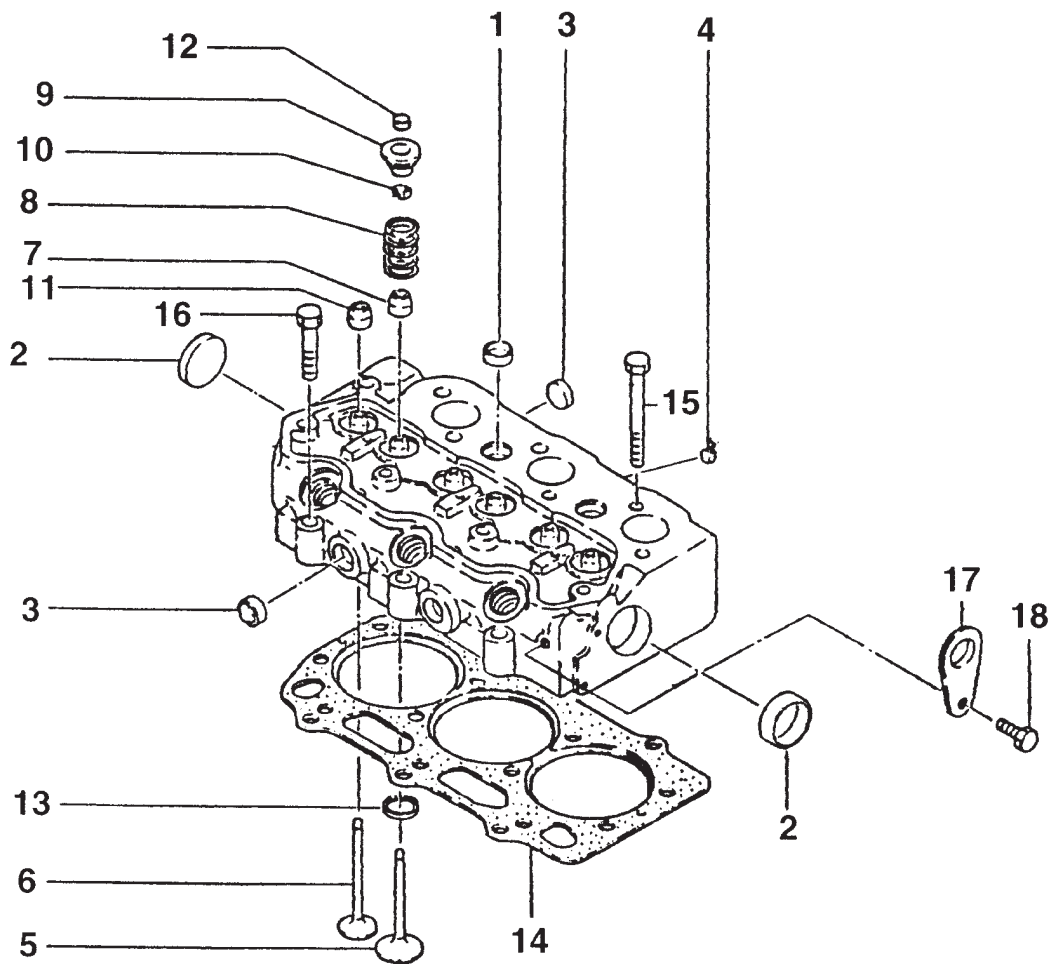


Fig. 1-9

## 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**

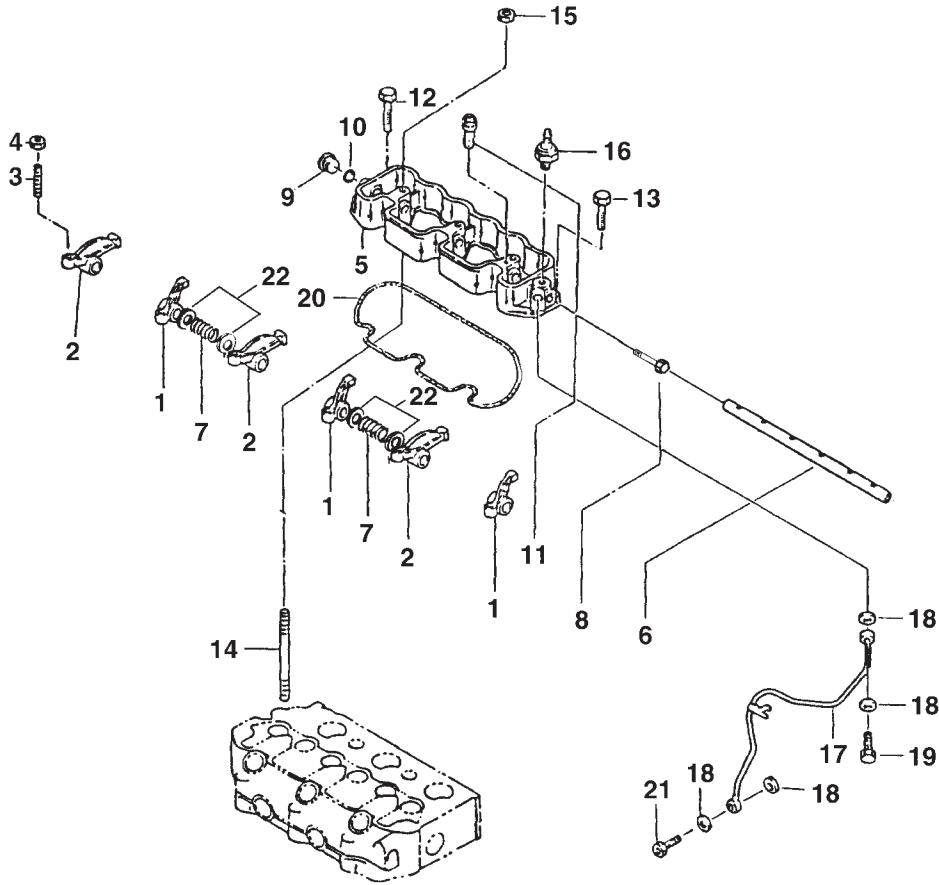


Fig. 1-10

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**

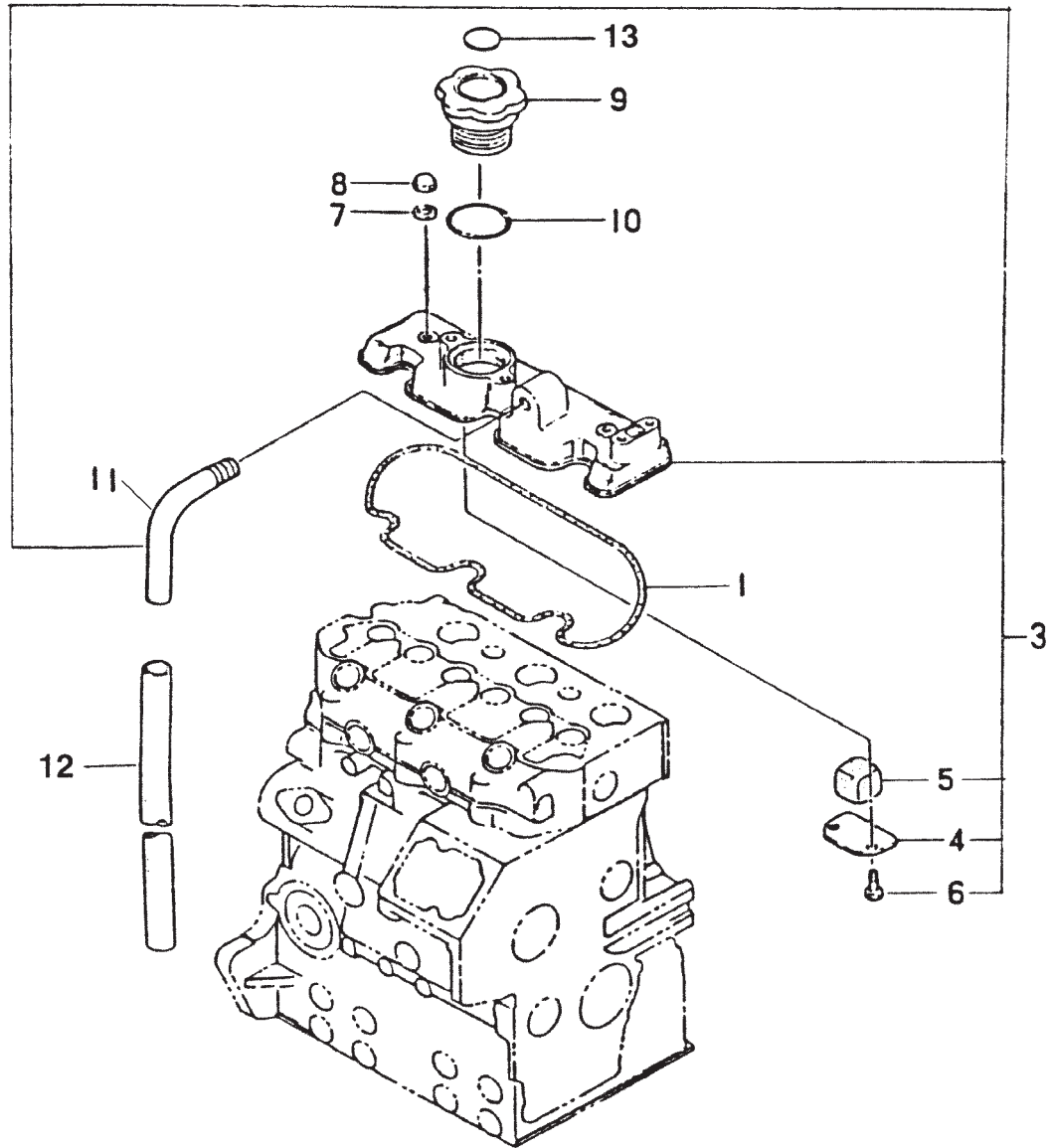
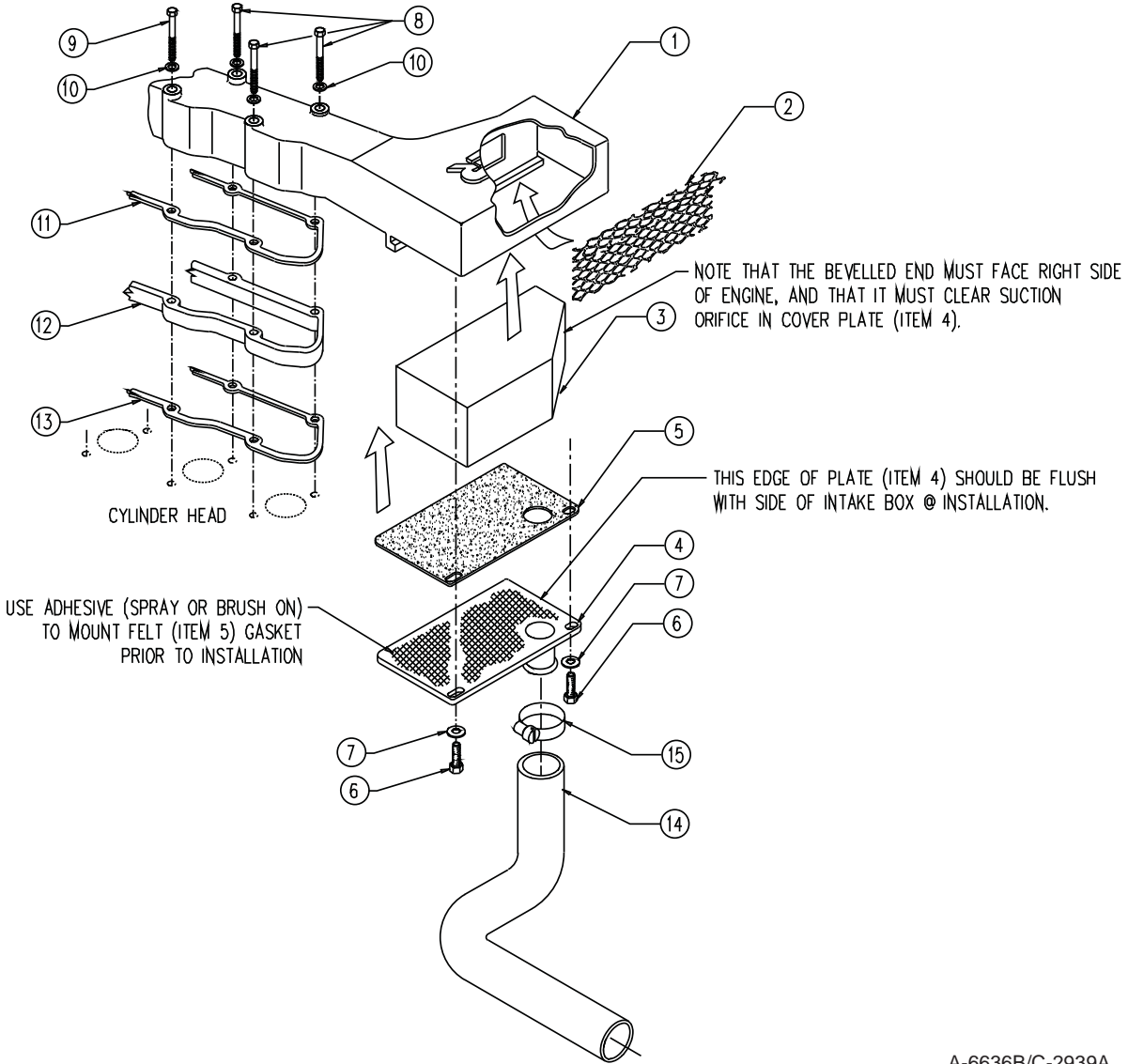


Fig. 1-11a

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

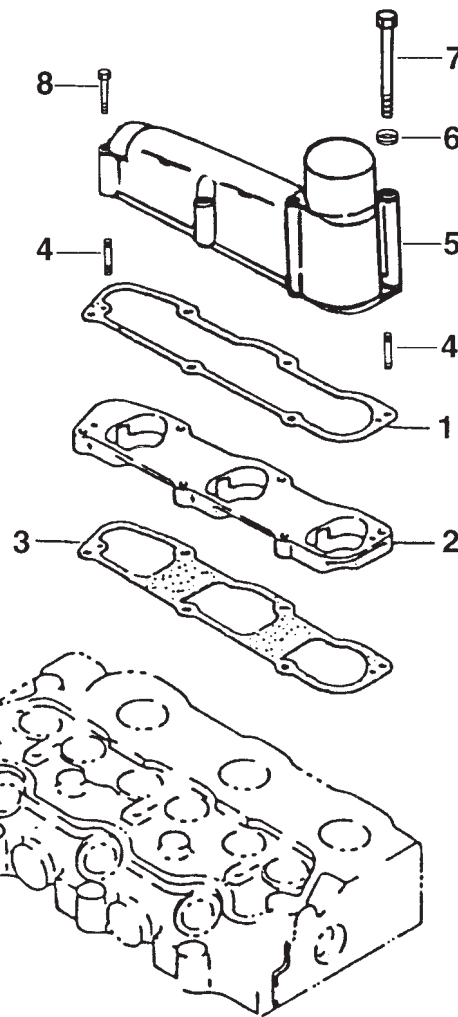


A-6636B/C-2939A

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*

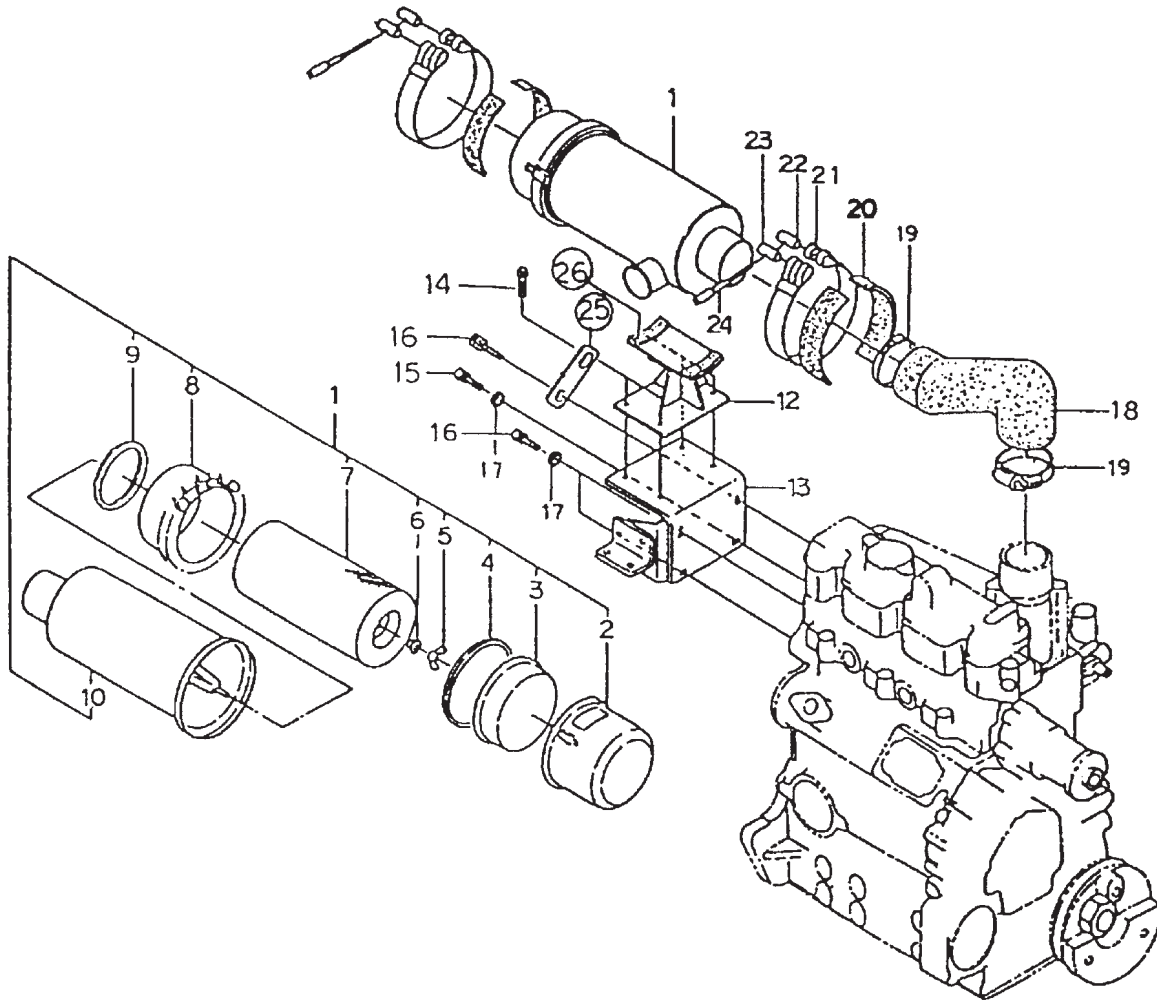


P843intakemanifold

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

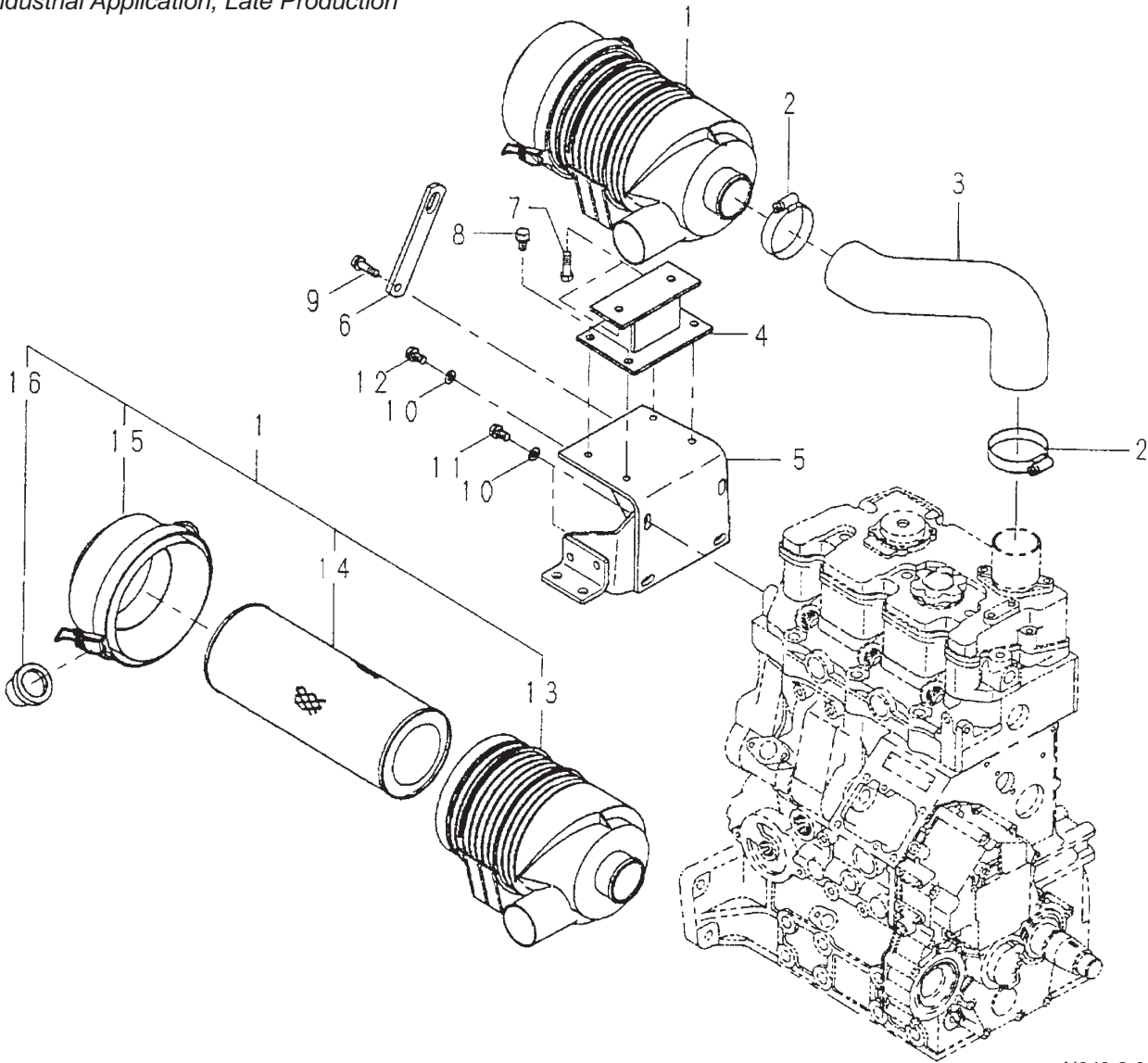
*Industrial Application*

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

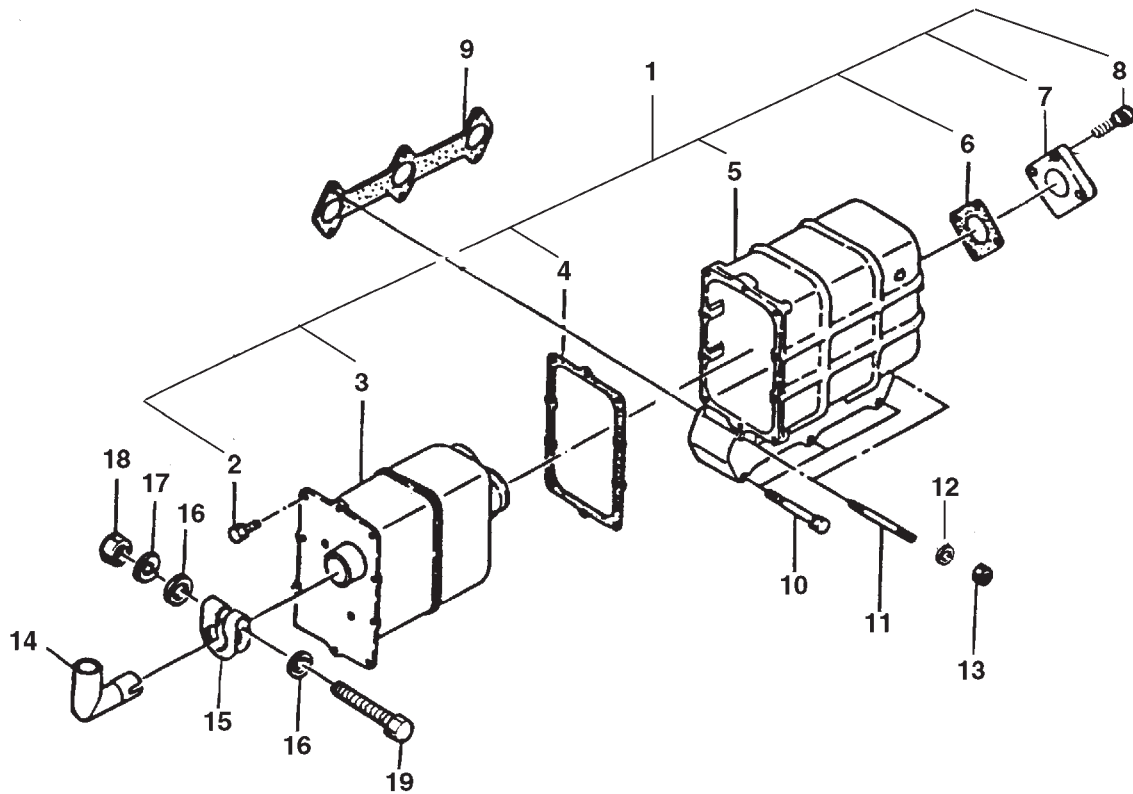


N843-2-8601

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

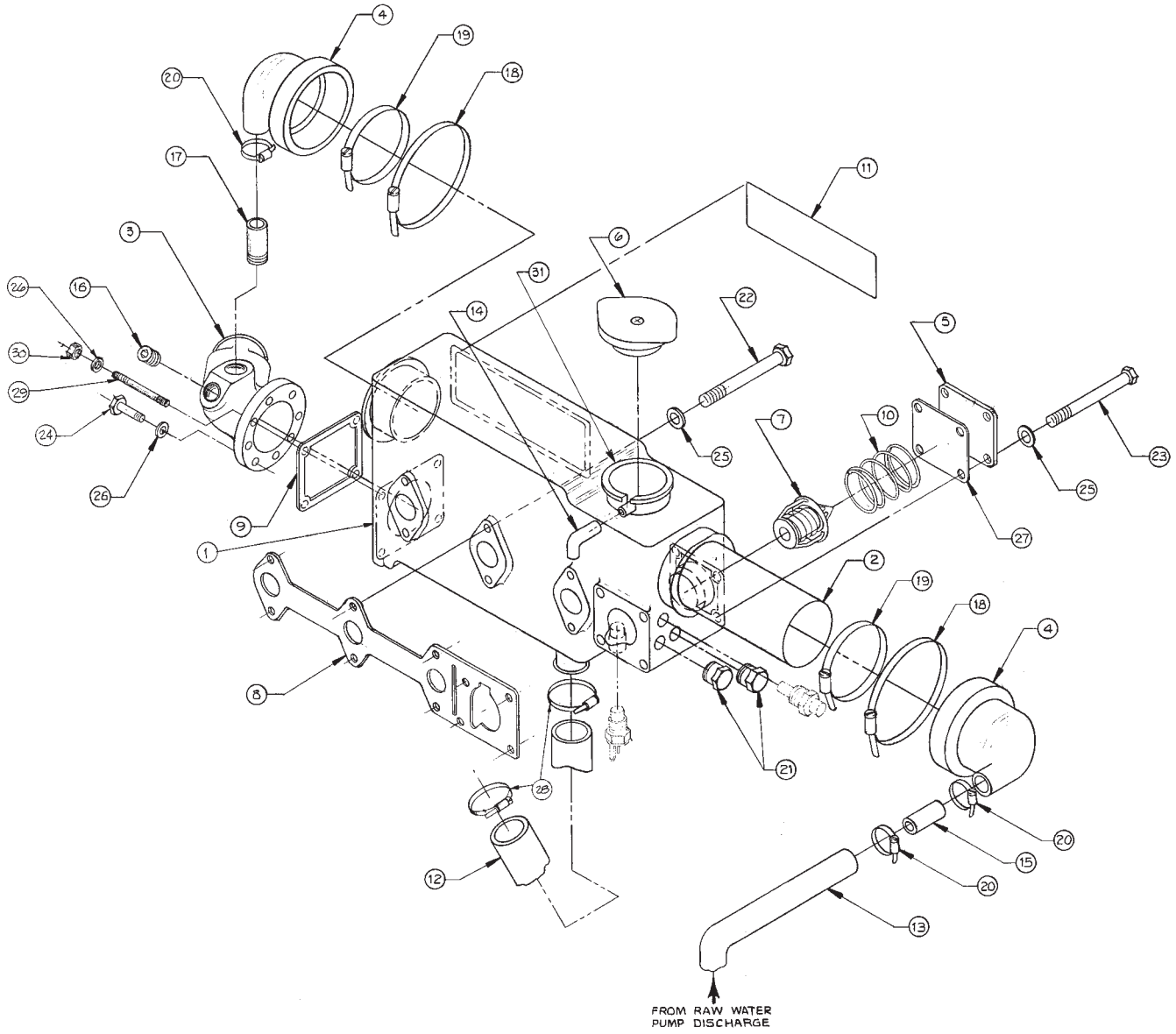
*Industrial Application*



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*

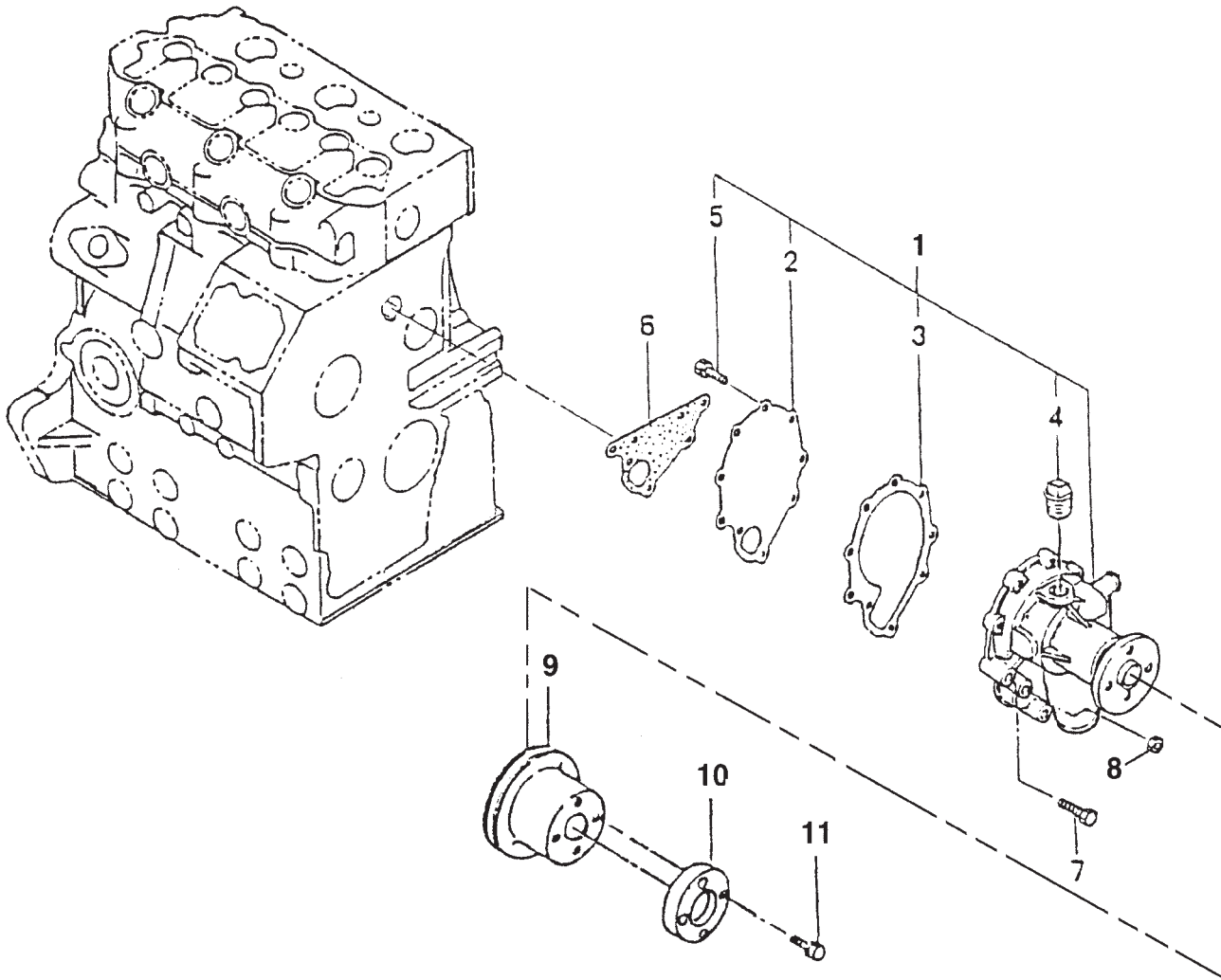
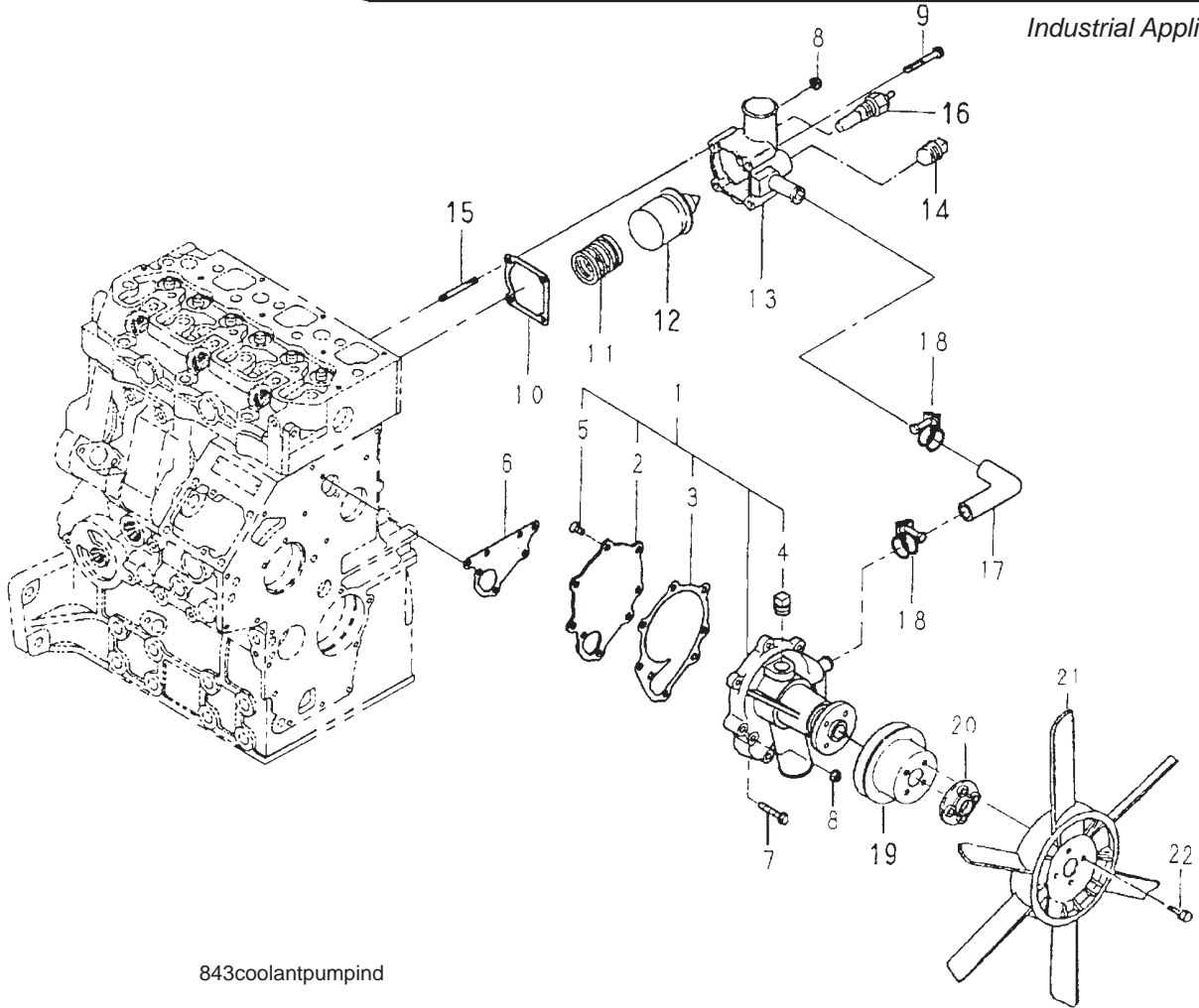


Fig. 3-2

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*

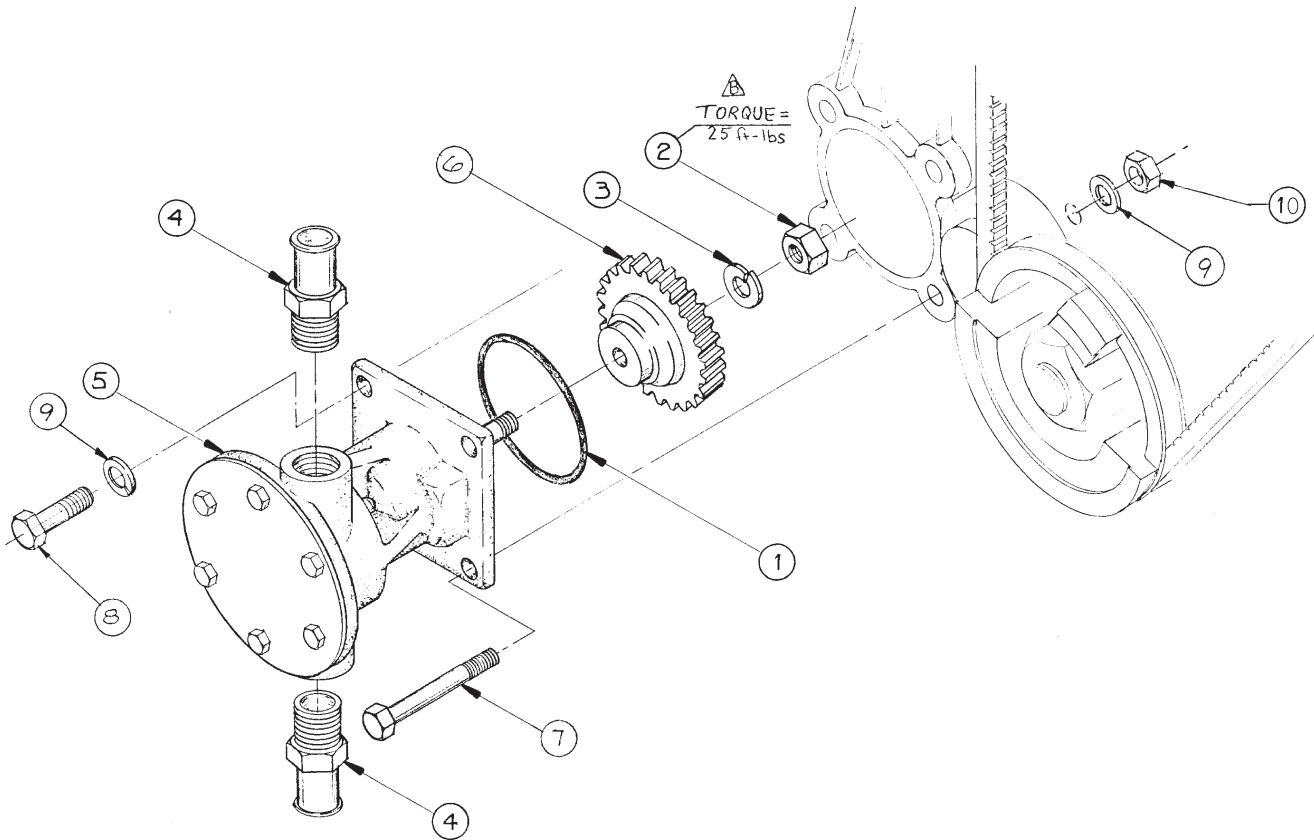


843coolantpumpind

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

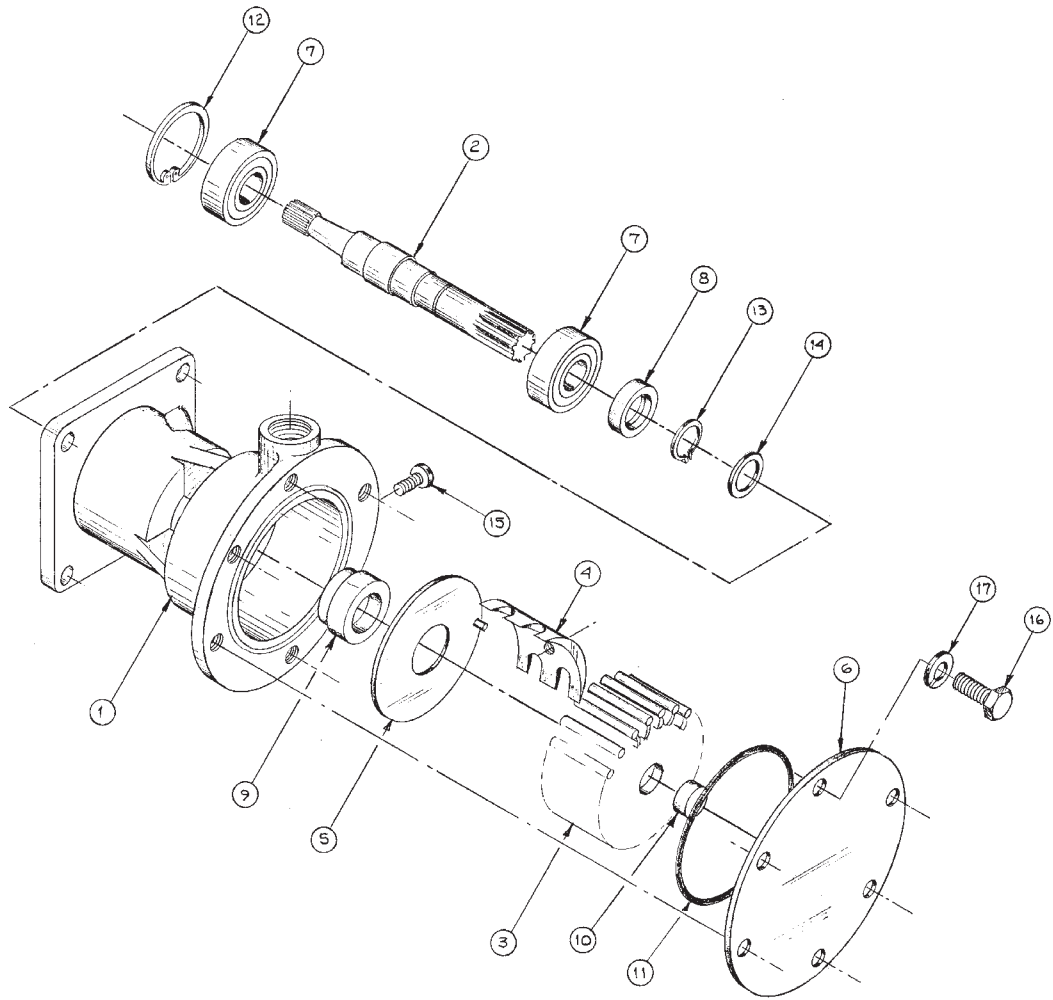
Marine Application



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**

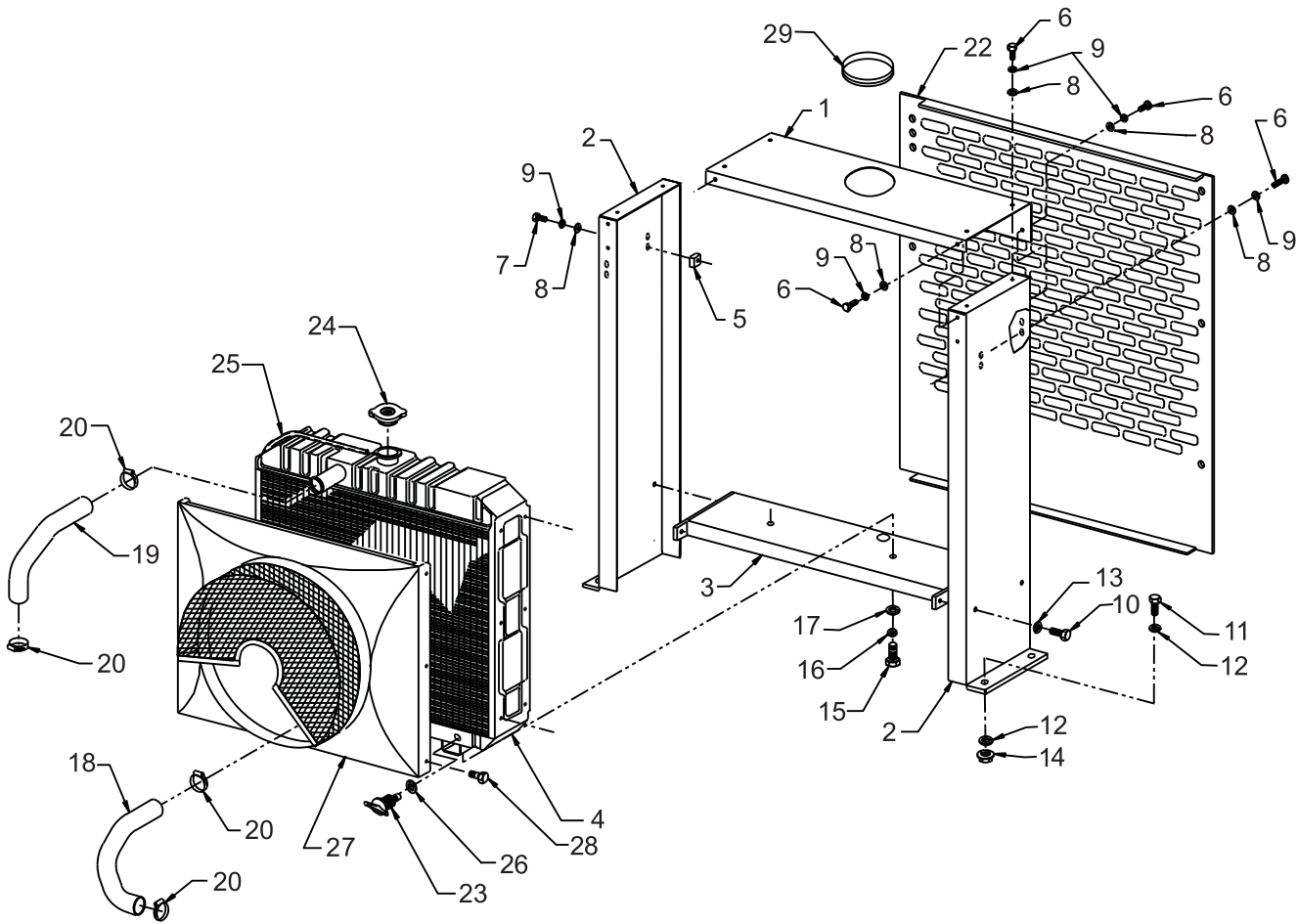


A-3706/ C-2204

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

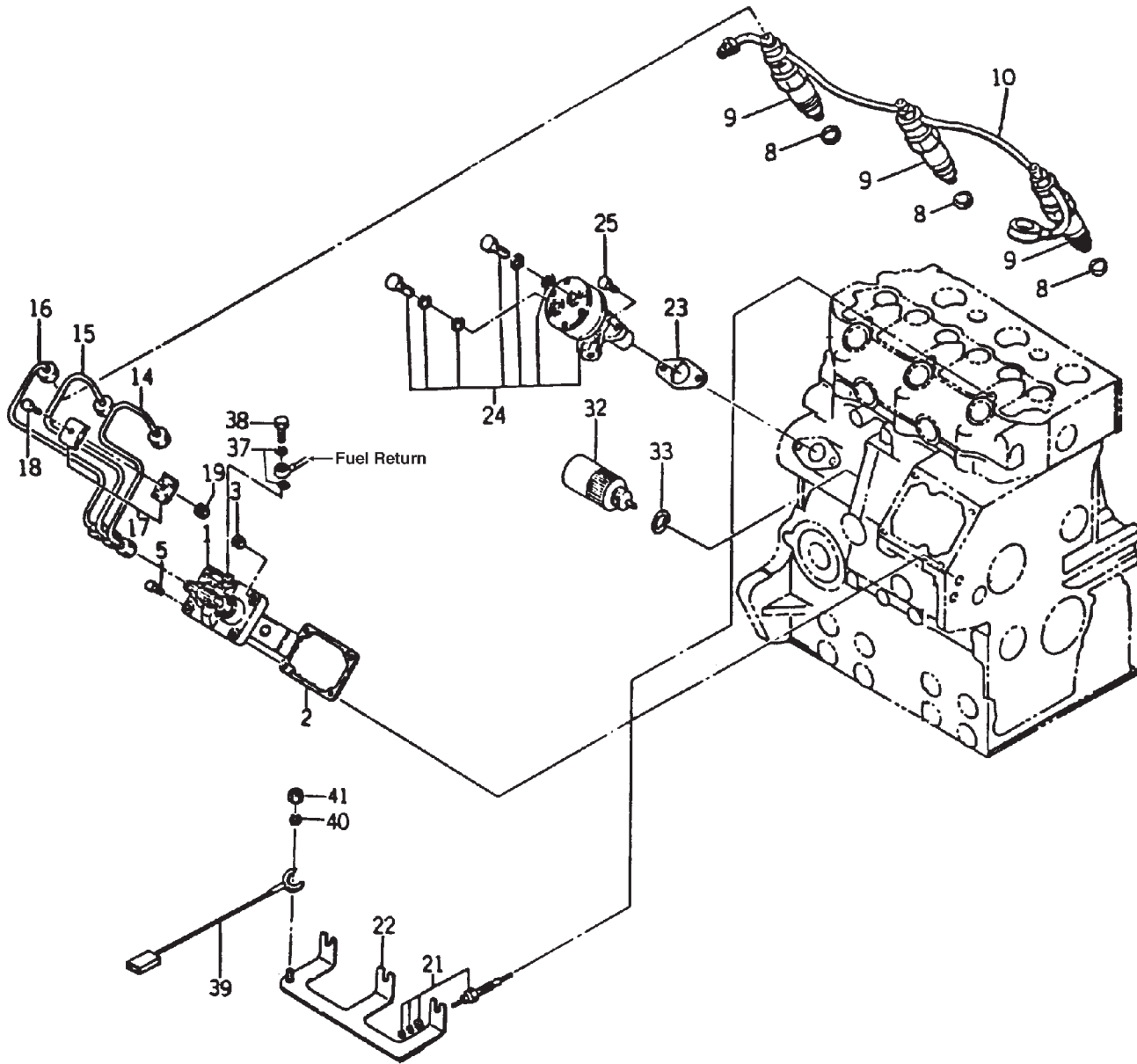


Fig. 4-00

## 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

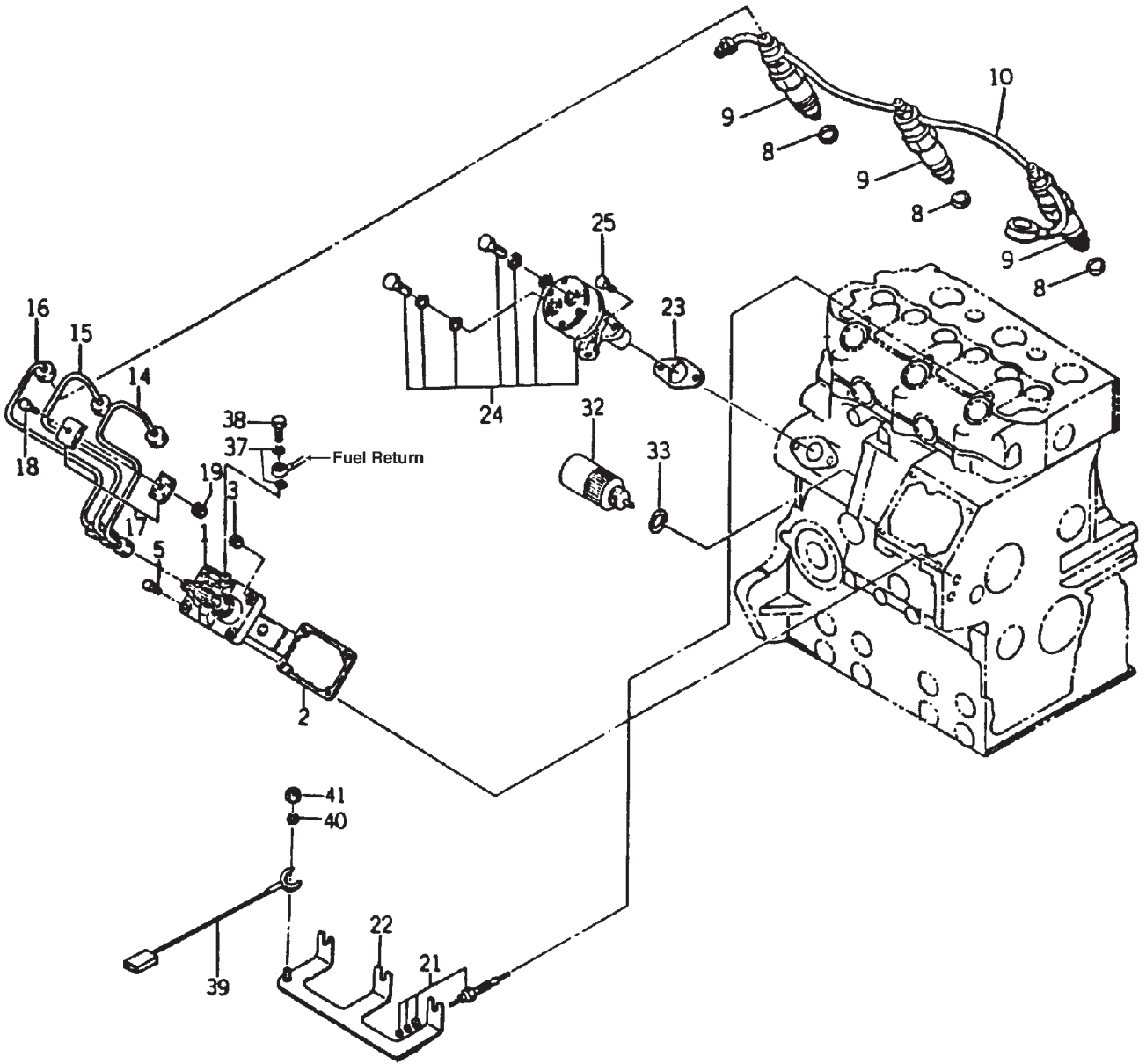


Fig. 4-0

## 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

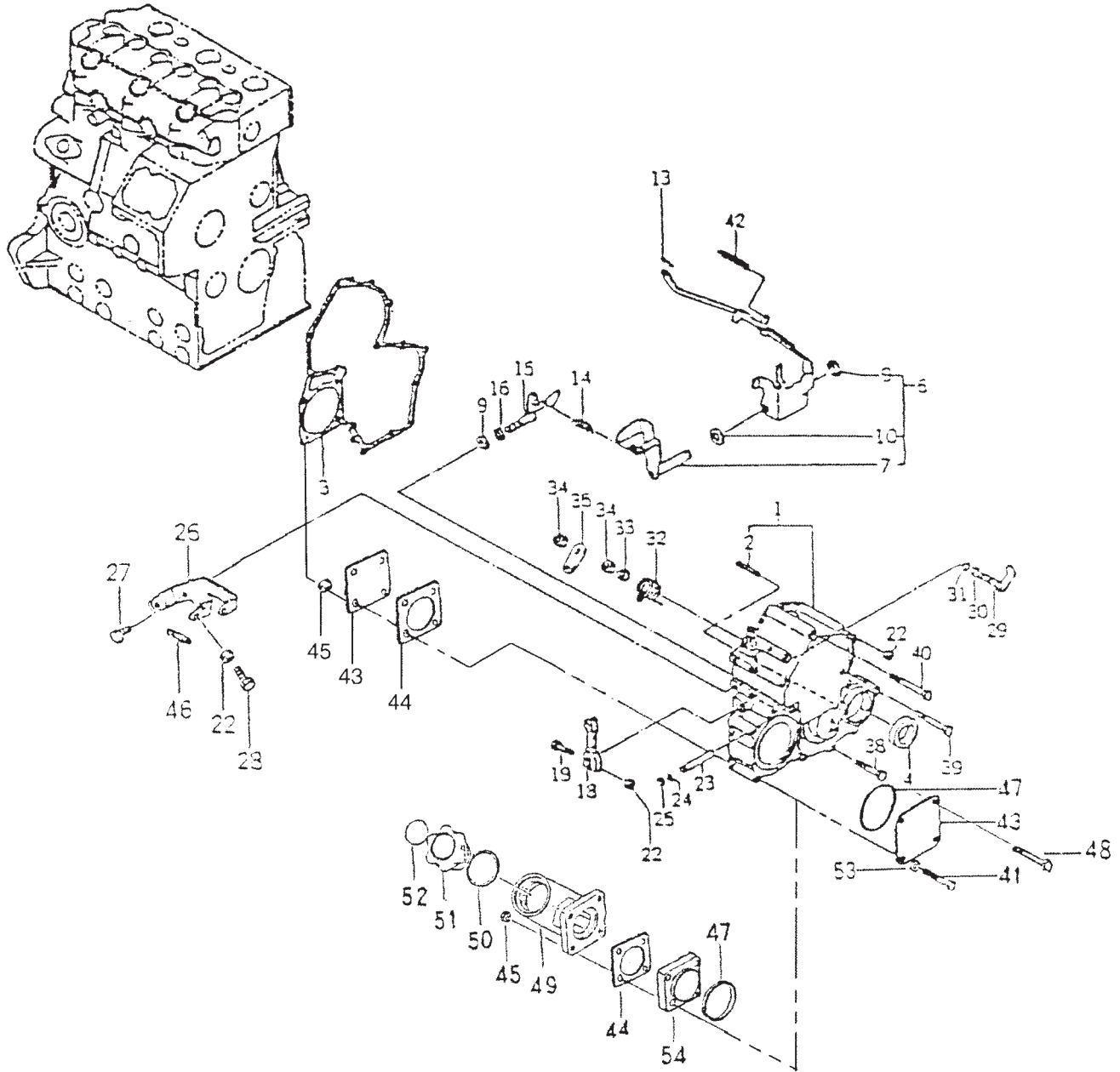


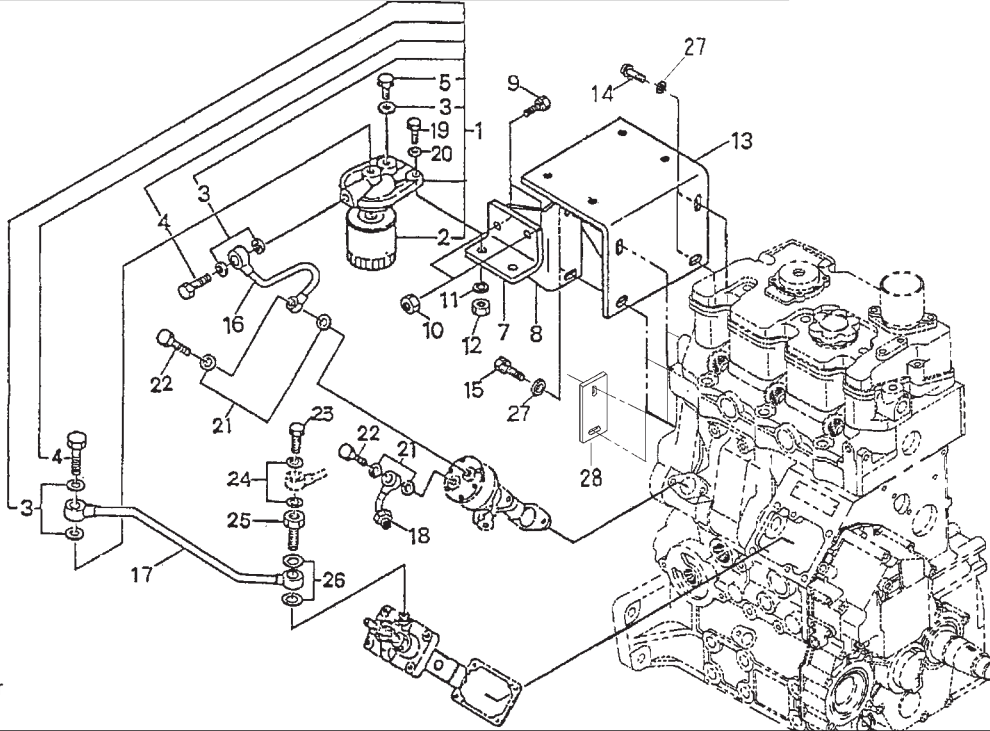
Fig. 4-4

## 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**

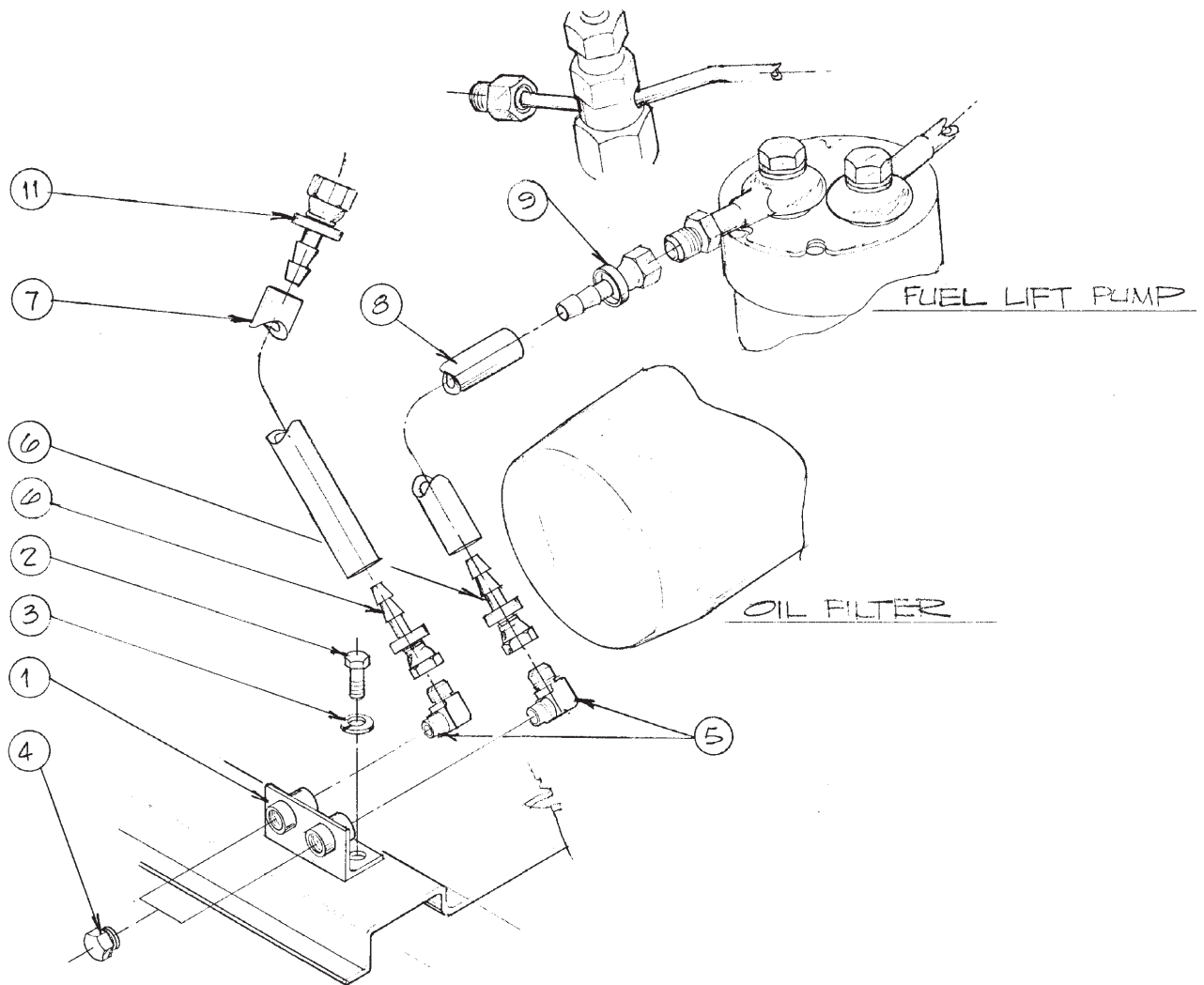


843fuelfilter

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*

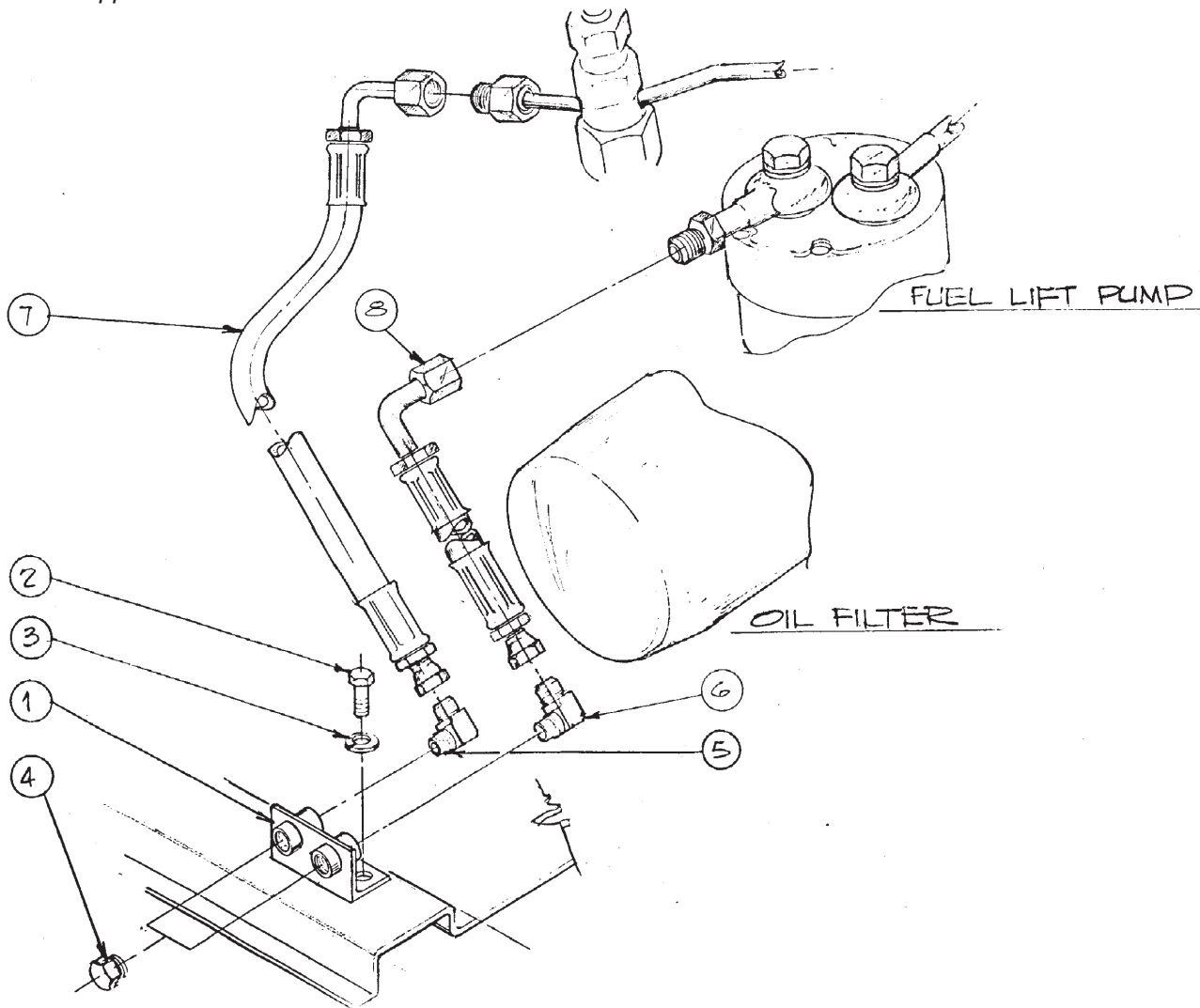


A-4922/ B-3987

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 &amp; Piping key #18 - Hose 18-53109 used with Connector 130556680. Hose 18-53112 used with Connector 130556681.</p> <p>**As required.</p>				

**Injection Pump**

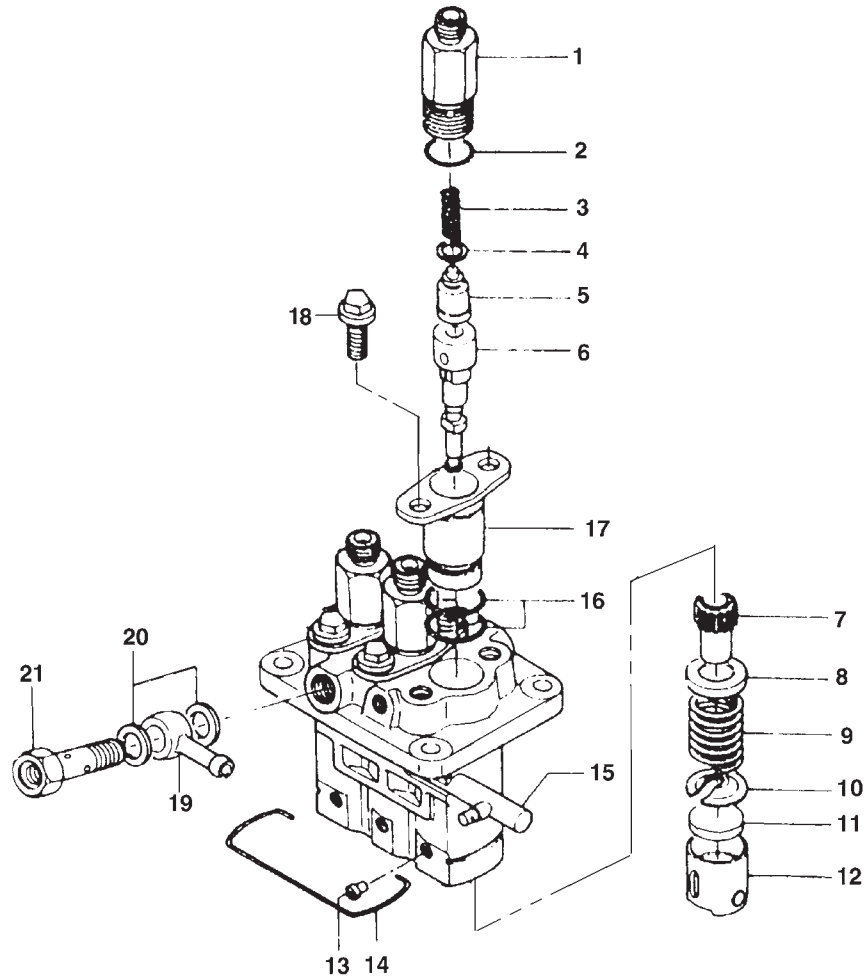
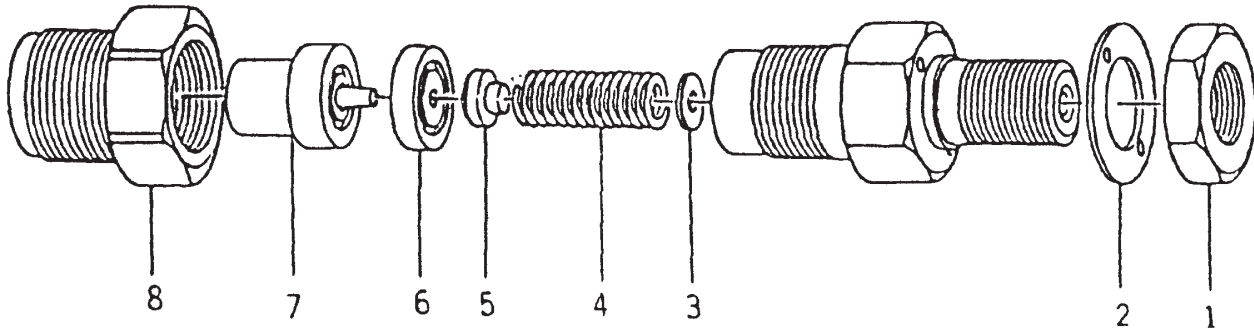


Fig. 4-12

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	-

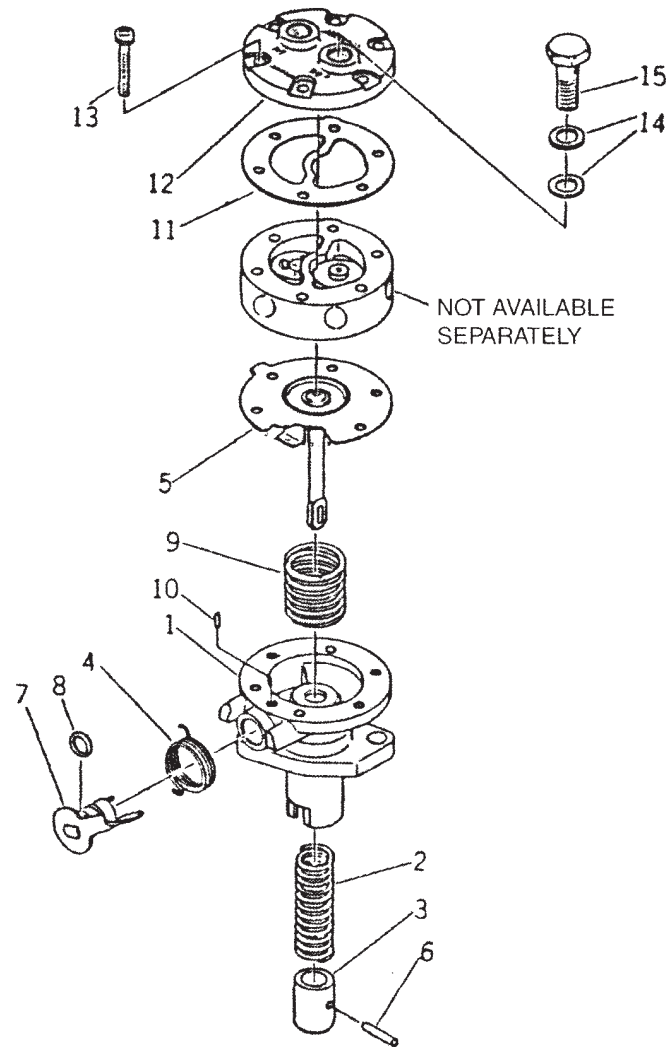
Fuel Injector



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

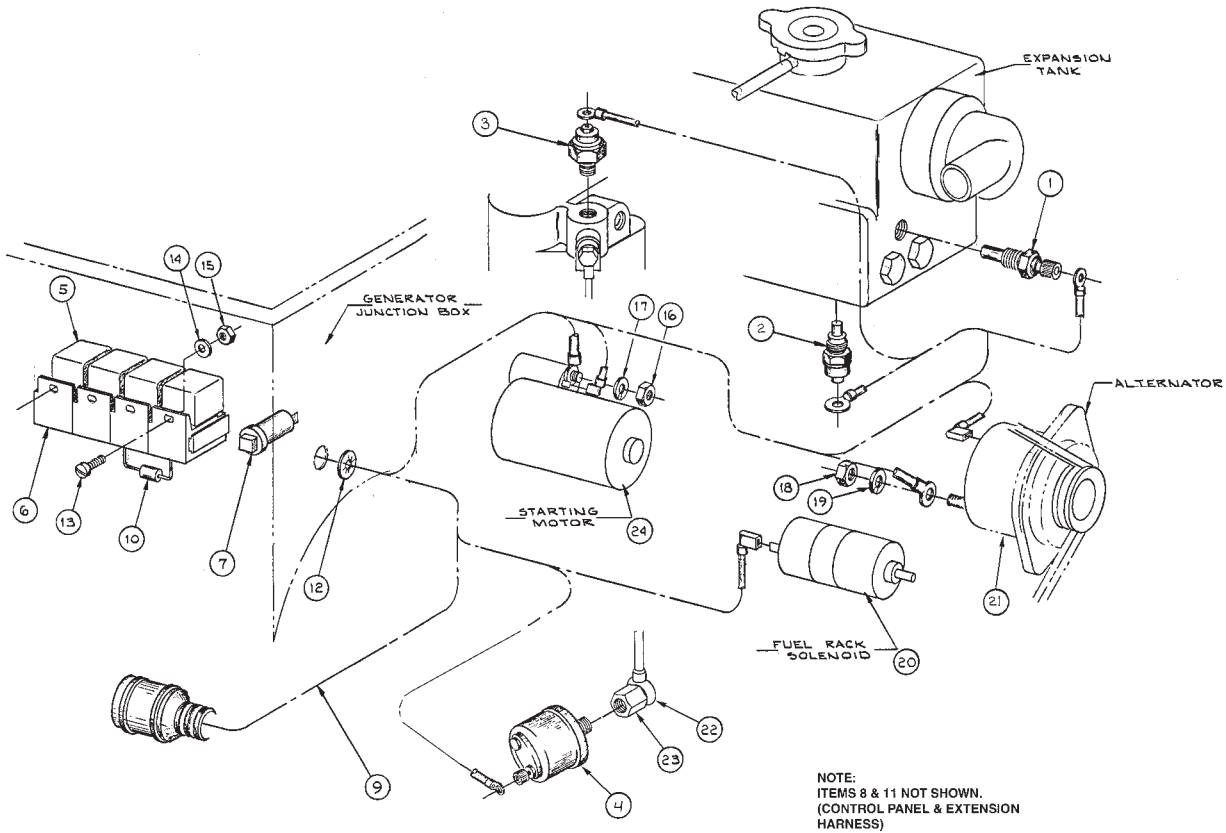


843fuelfeedpump

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

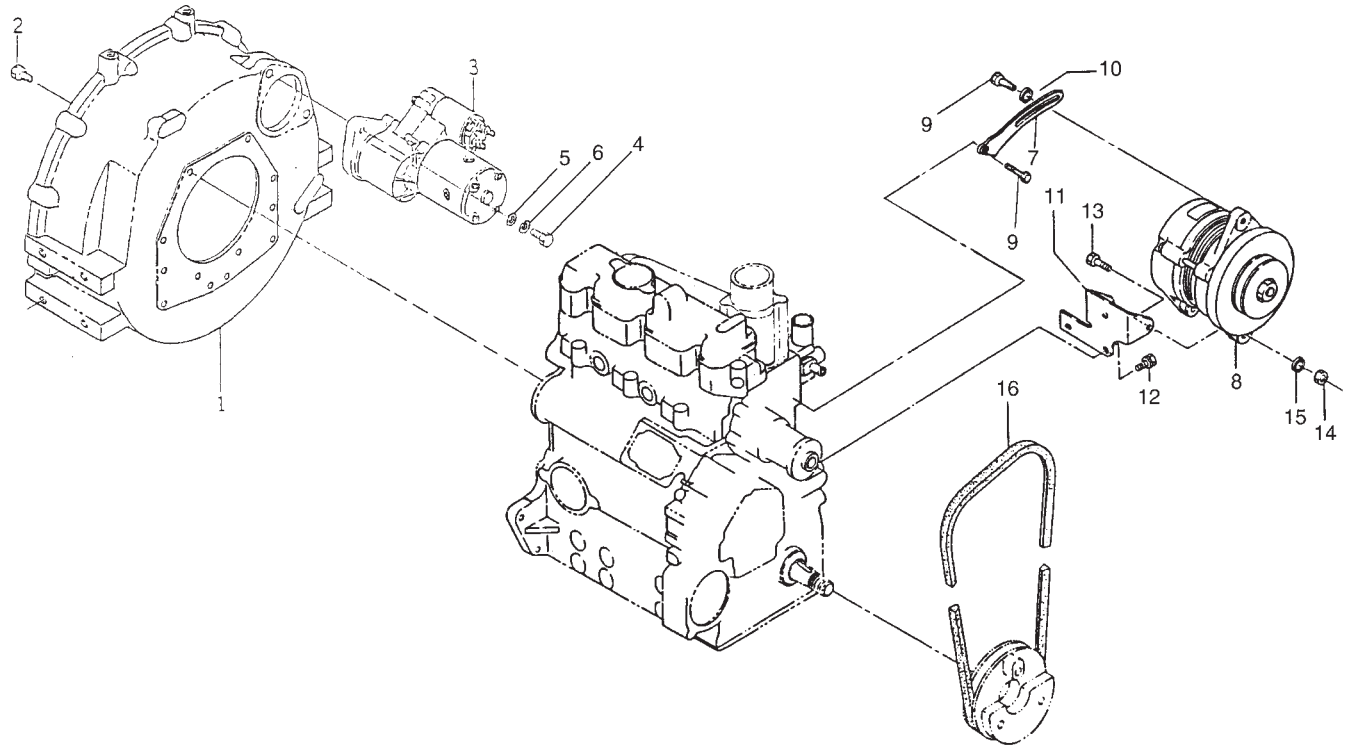


Fig. 5-1

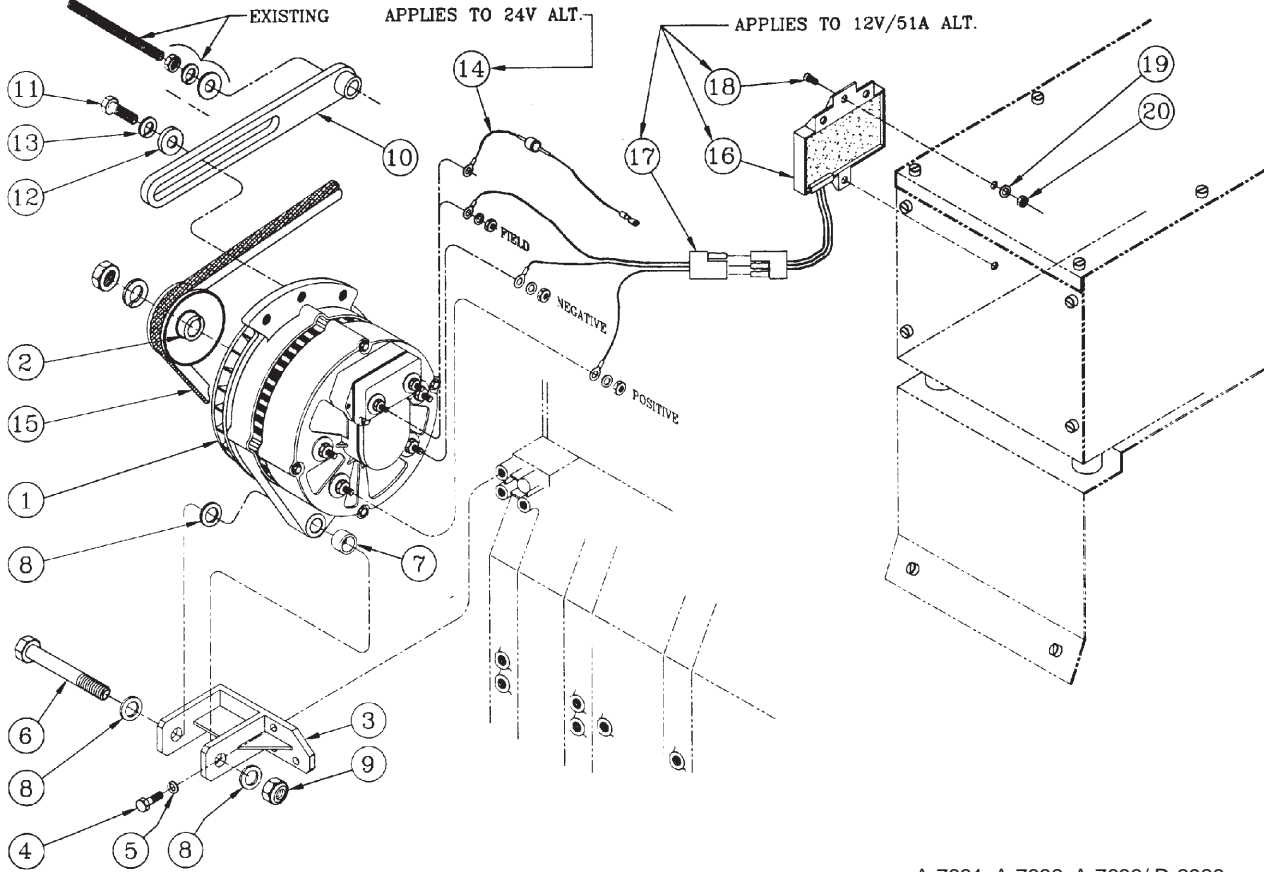
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110446890	1	Flywheel Cover - Marine (white)	-
	110446880	1	Flywheel Cover - Industrial (blue)	-
2	011510820	10	Bolt	-
3	185086551	1	Starting Motor 12 Volt (see Parts Detail)	-
4	010301030	2	Bolt	-
5	026100010	2	Washer	-
6	027100010	2	Spring Washer	-
7	185727000	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**

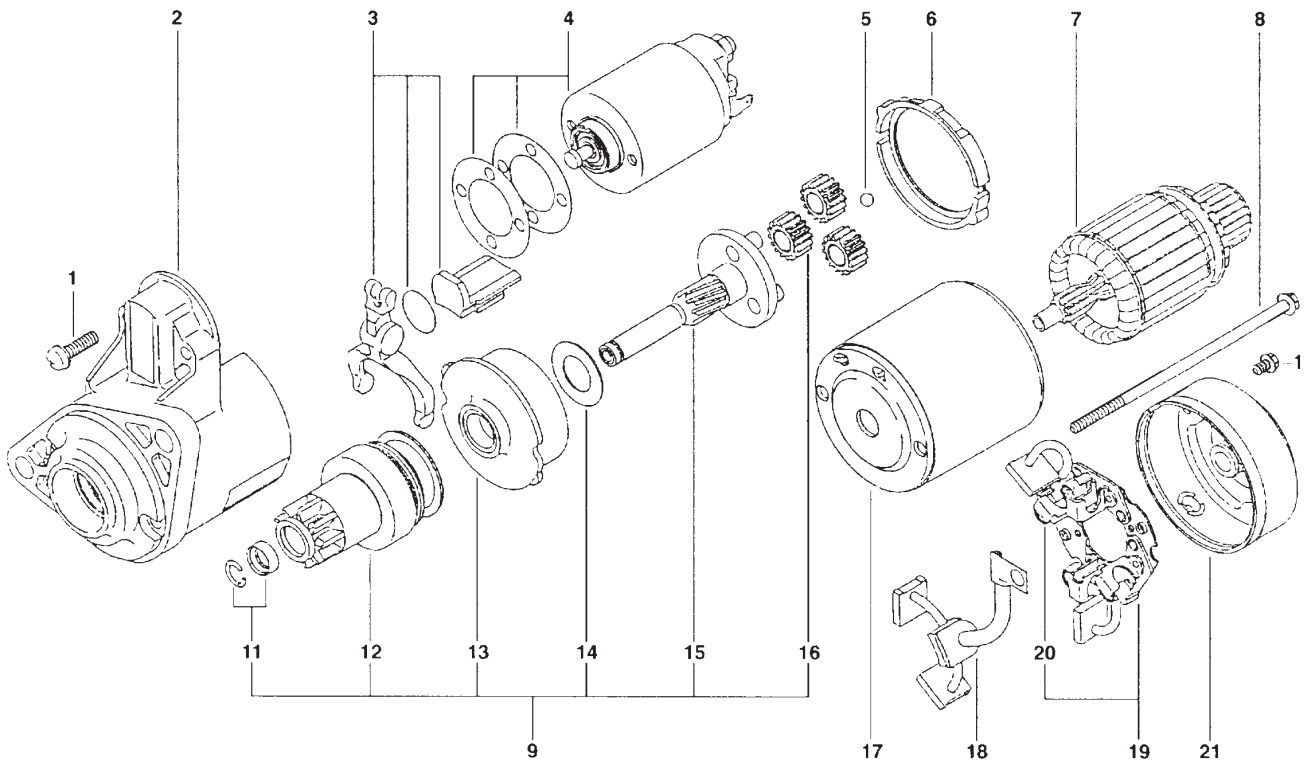
*Isolated and Standard Ground - M843JK & NK*



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

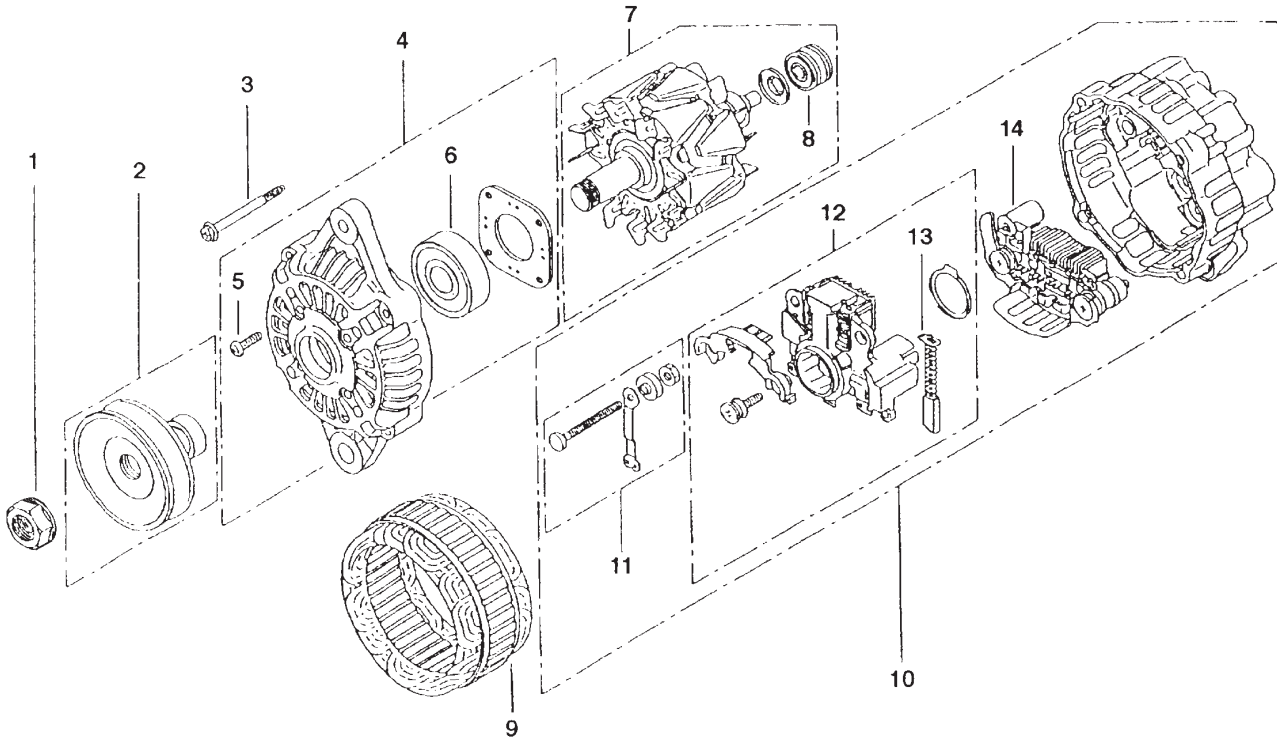


843starter

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

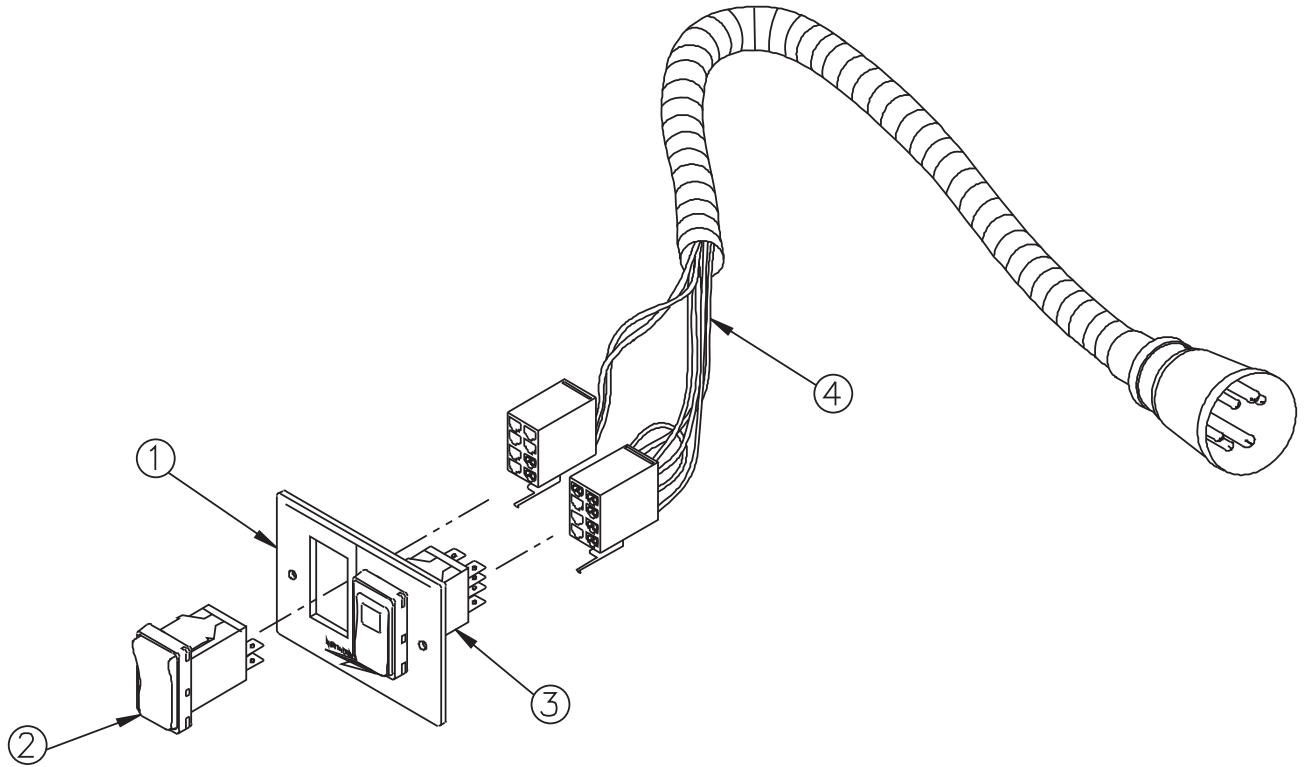
12 Volt / 40 Amp Standard Ground



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**

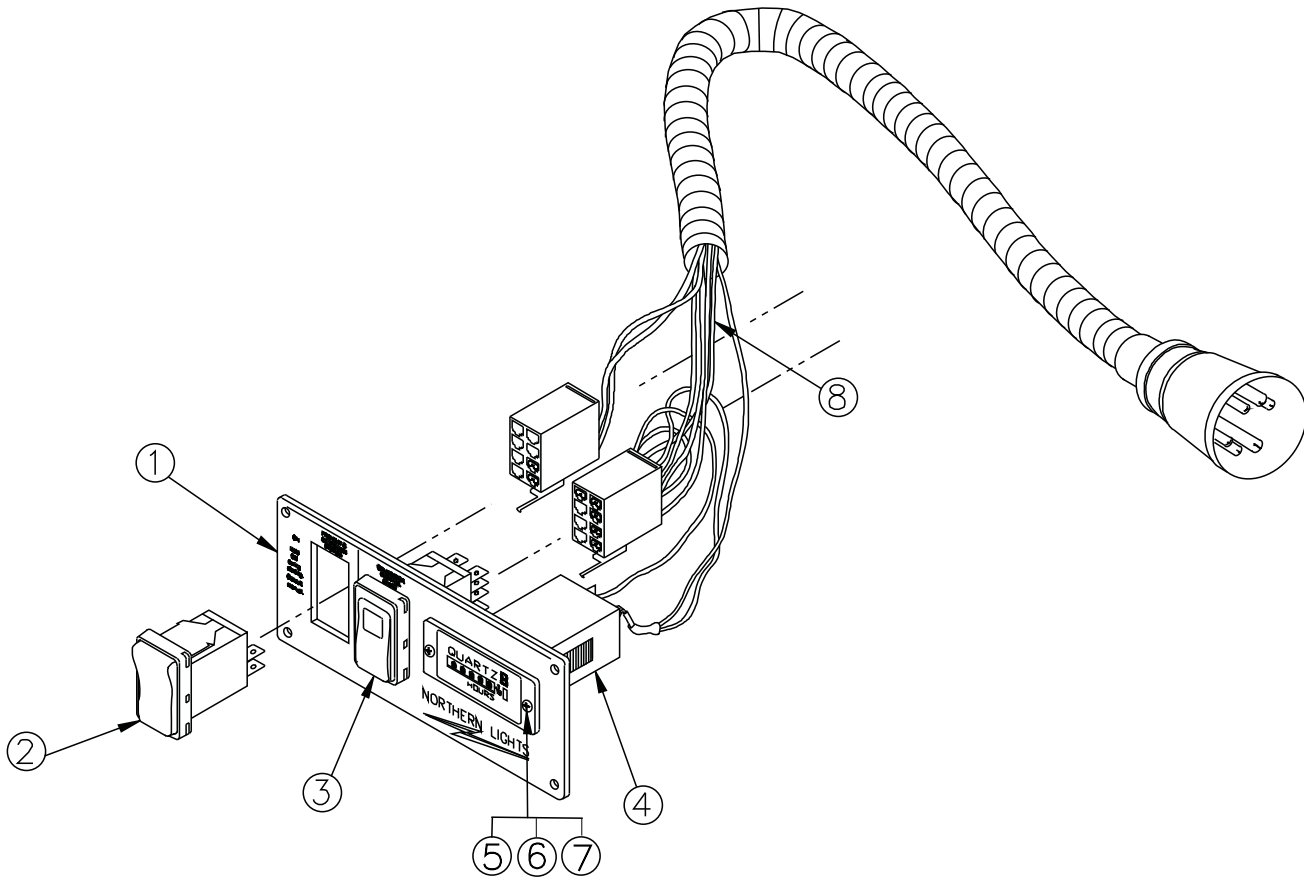


A-8551, A-8552/ B-5970

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

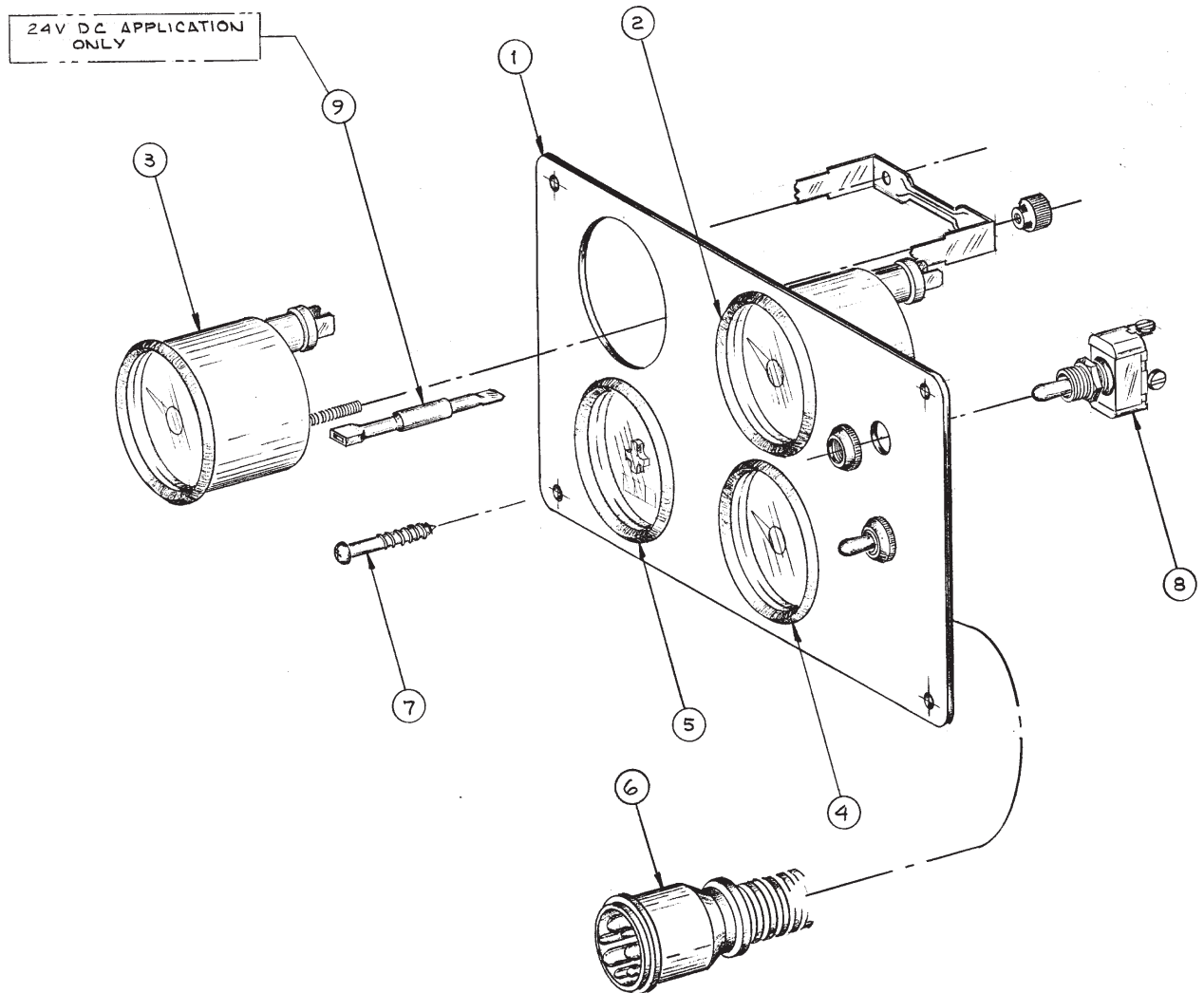


A-8553/ B-5971

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

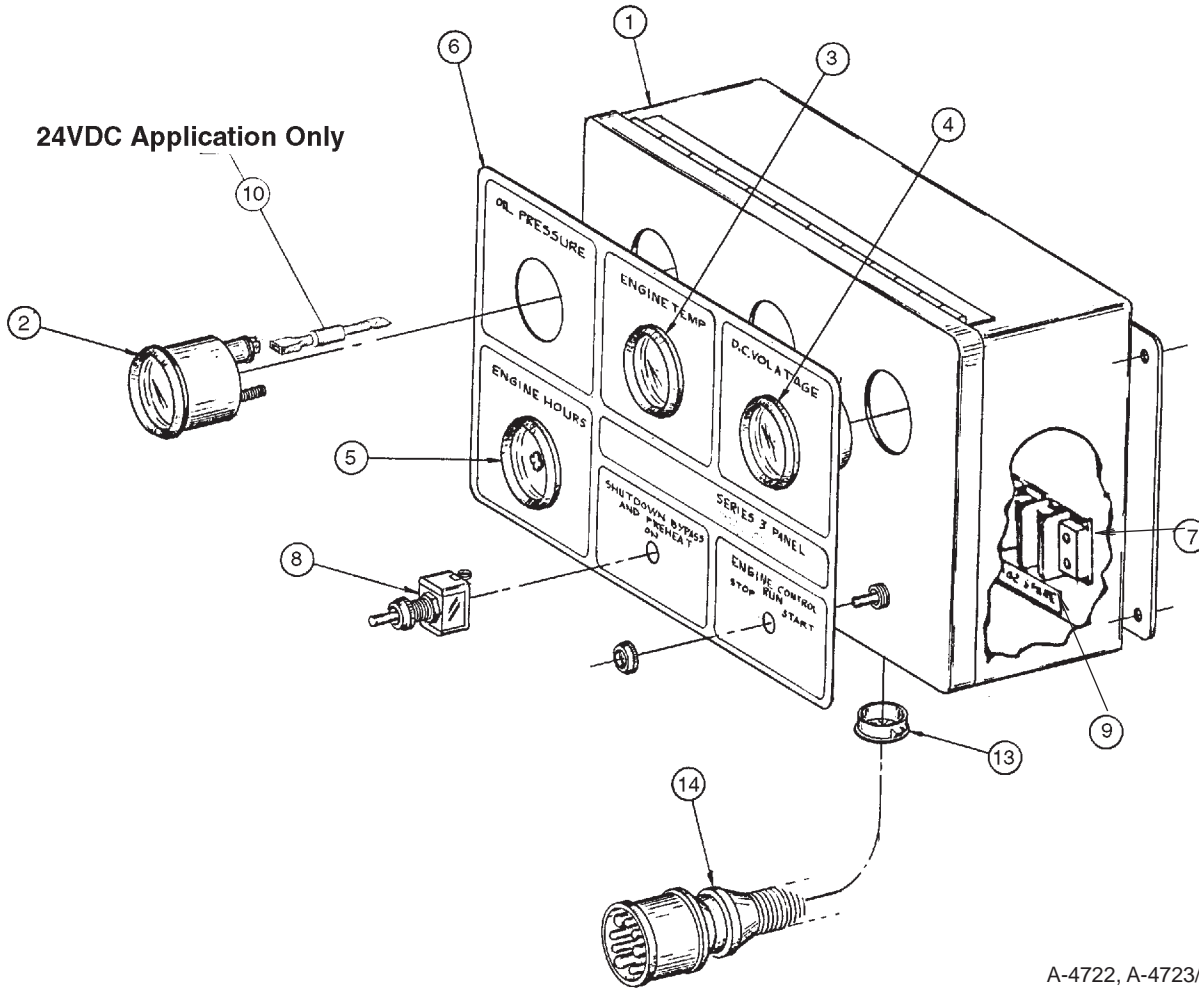


A-4732, A-4597/ C-2441

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**

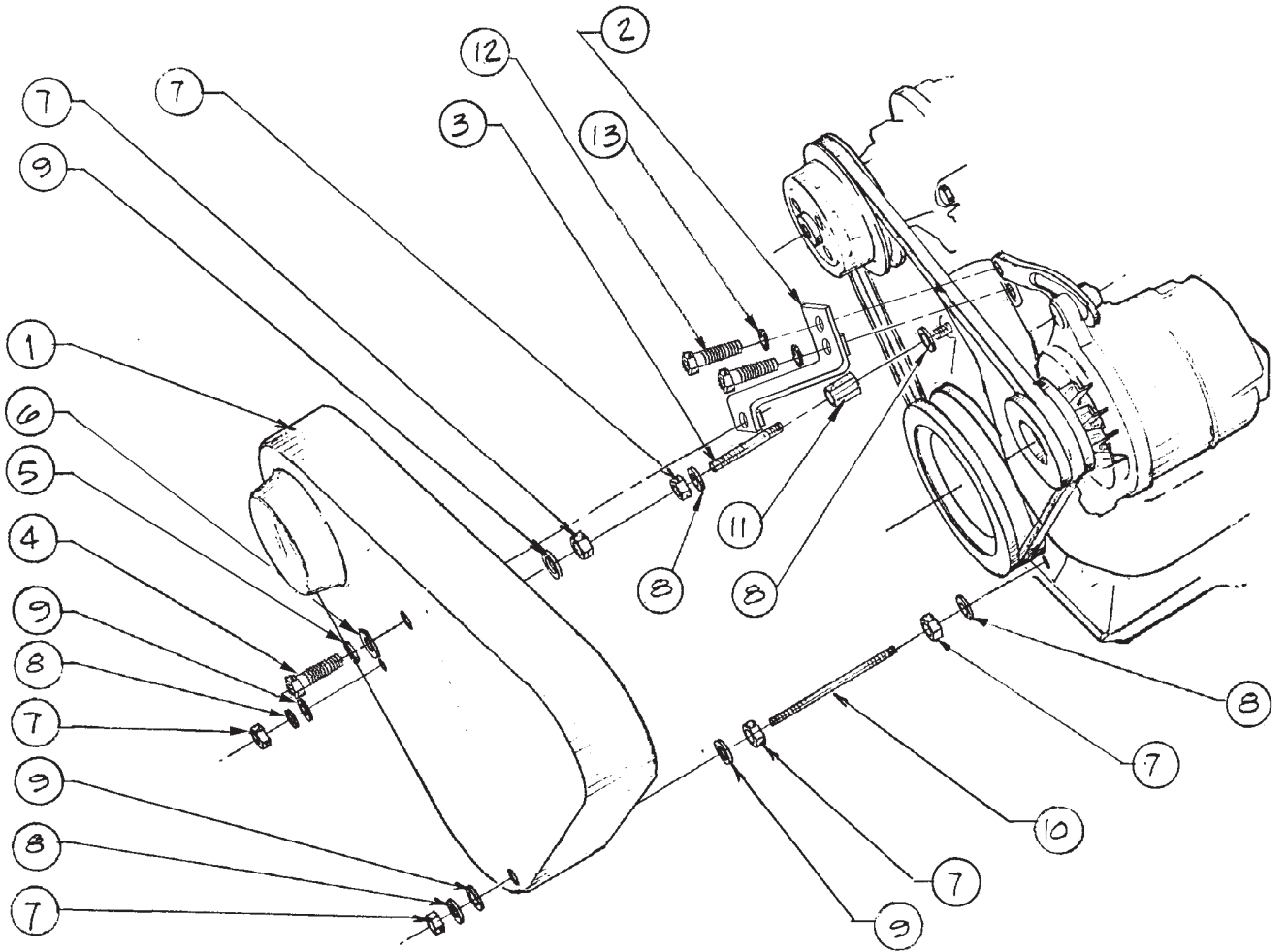
*Marine and Industrial Applications*



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**

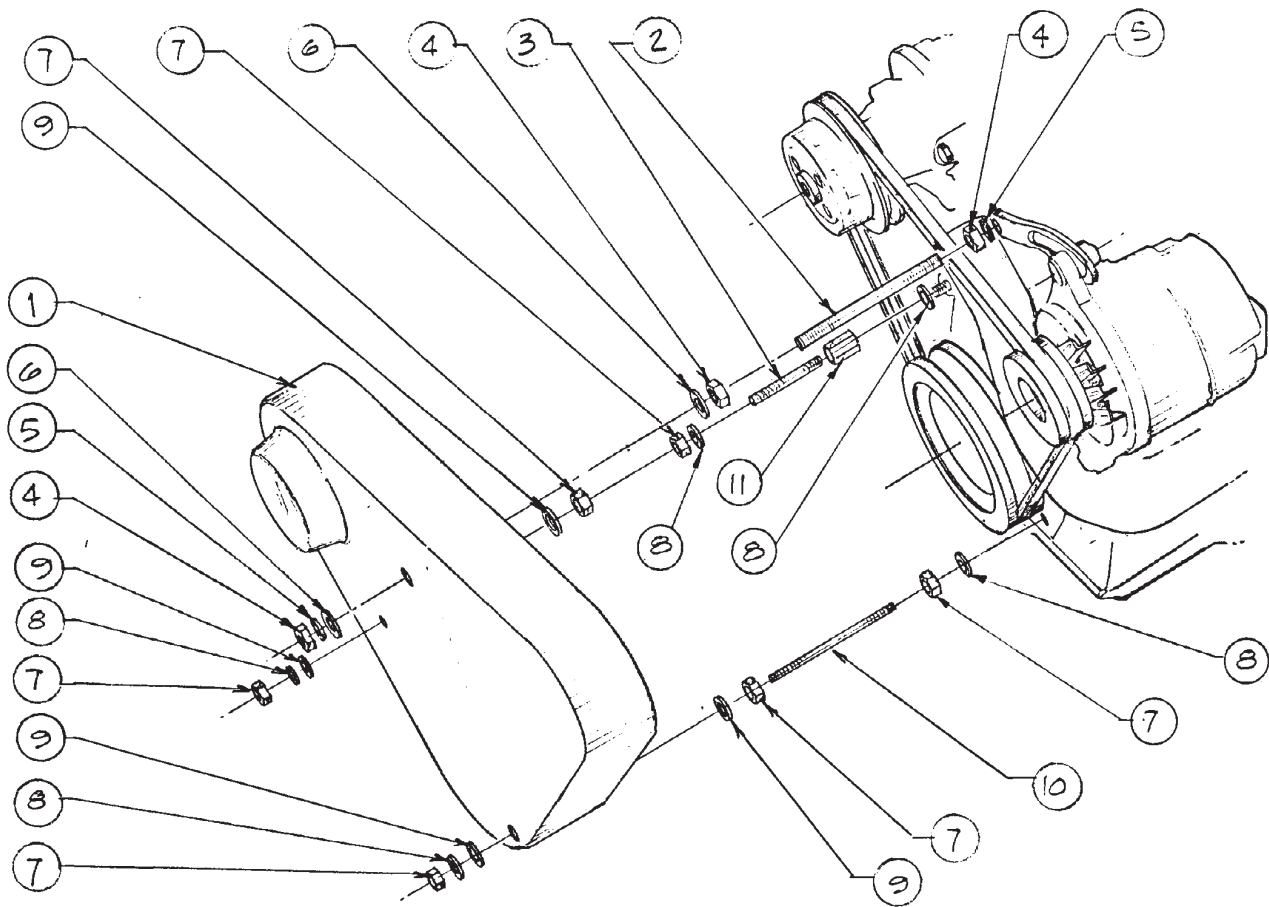


A-8024/ B-6385

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**

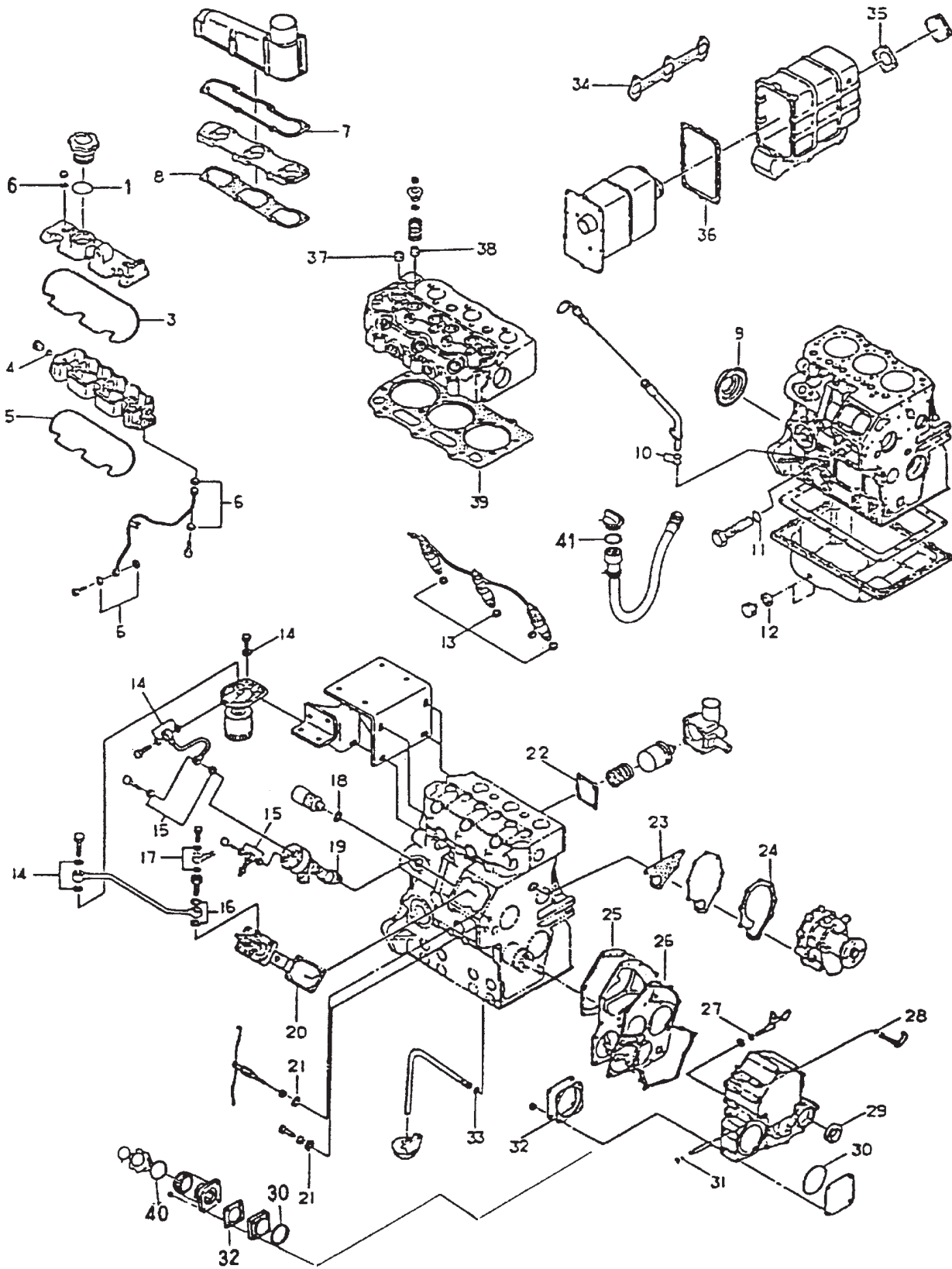


A-5004, A-5020/ B-3986

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

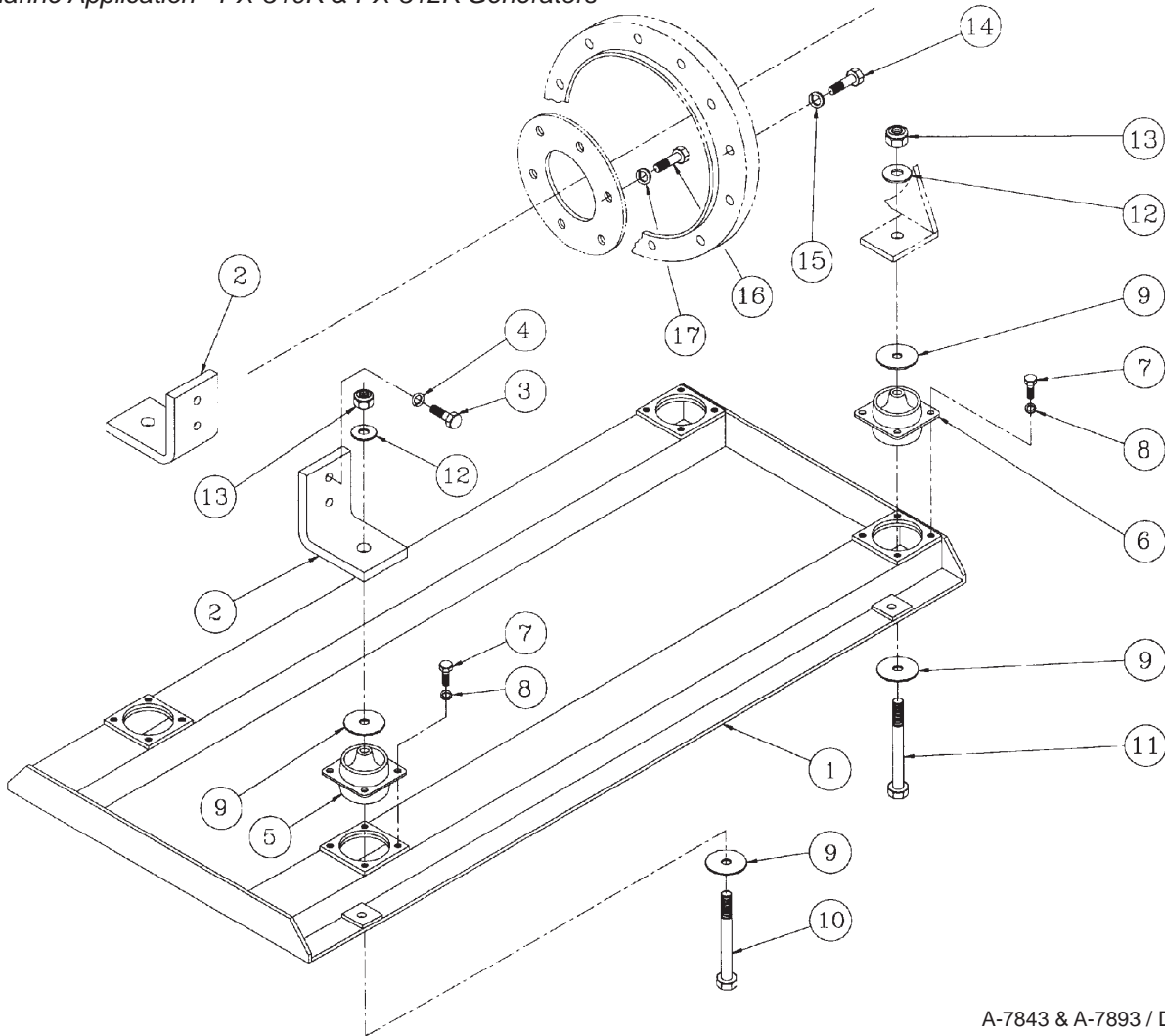


## Gasket Kit

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



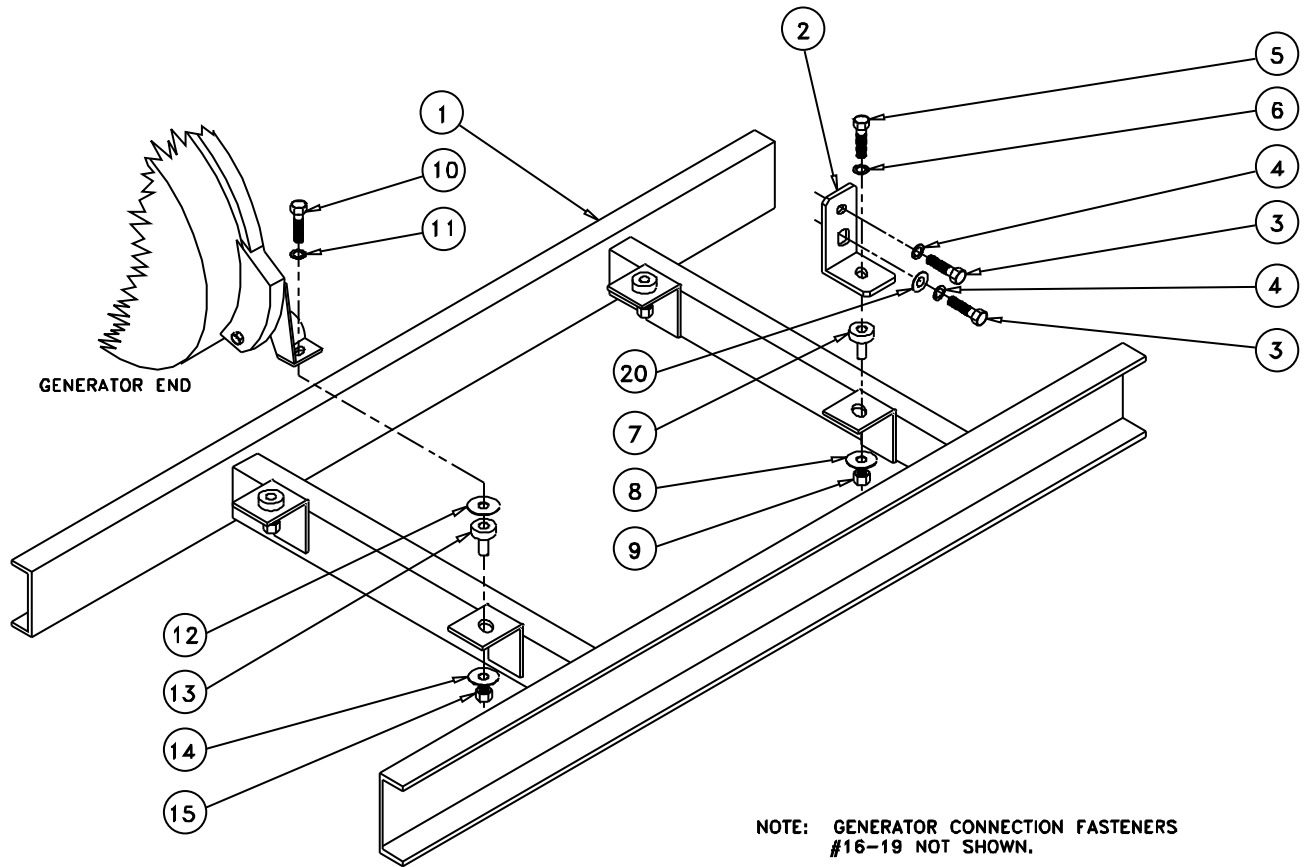
A-7843 & A-7893 / D-3012

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**

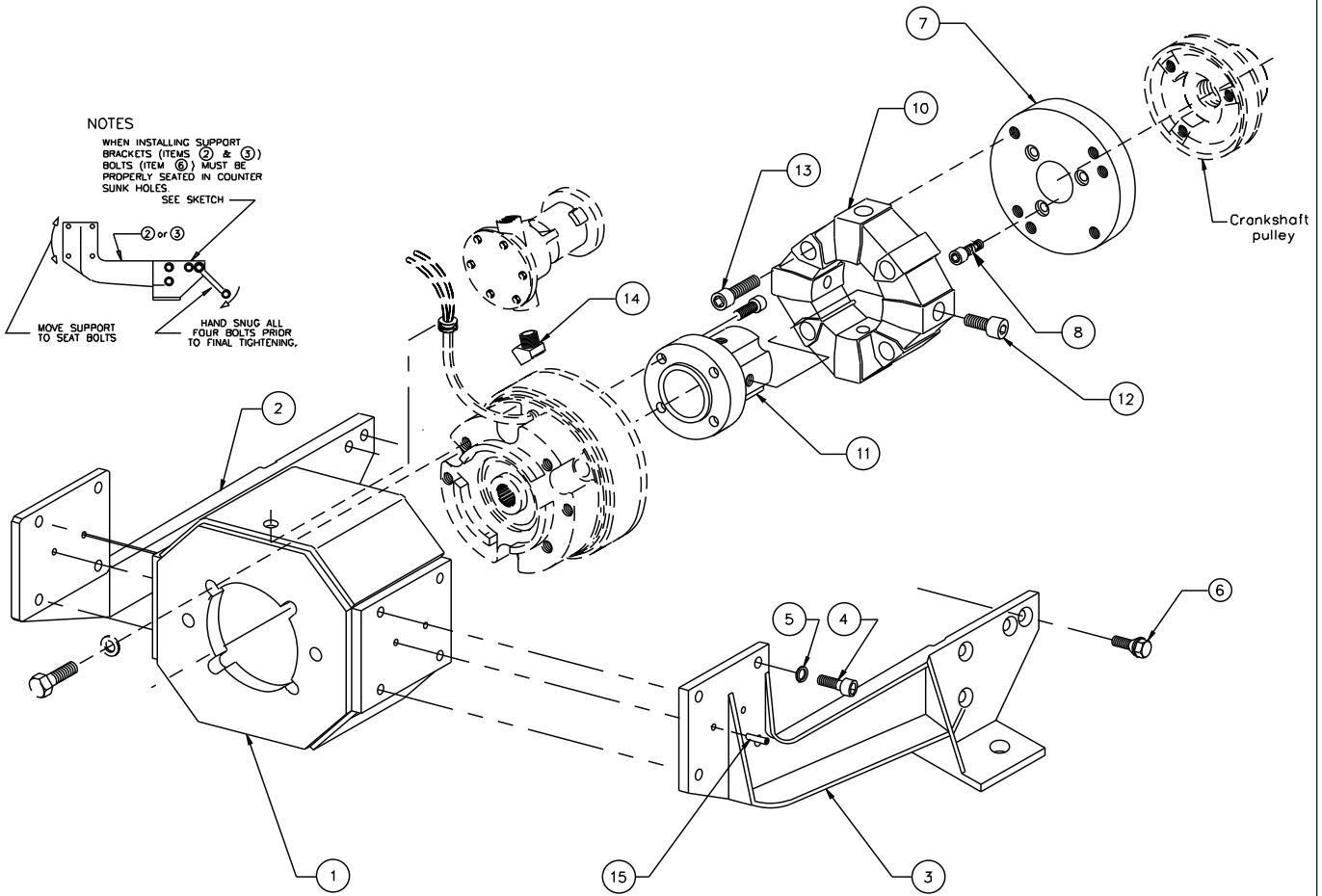
*Industrial Application*



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



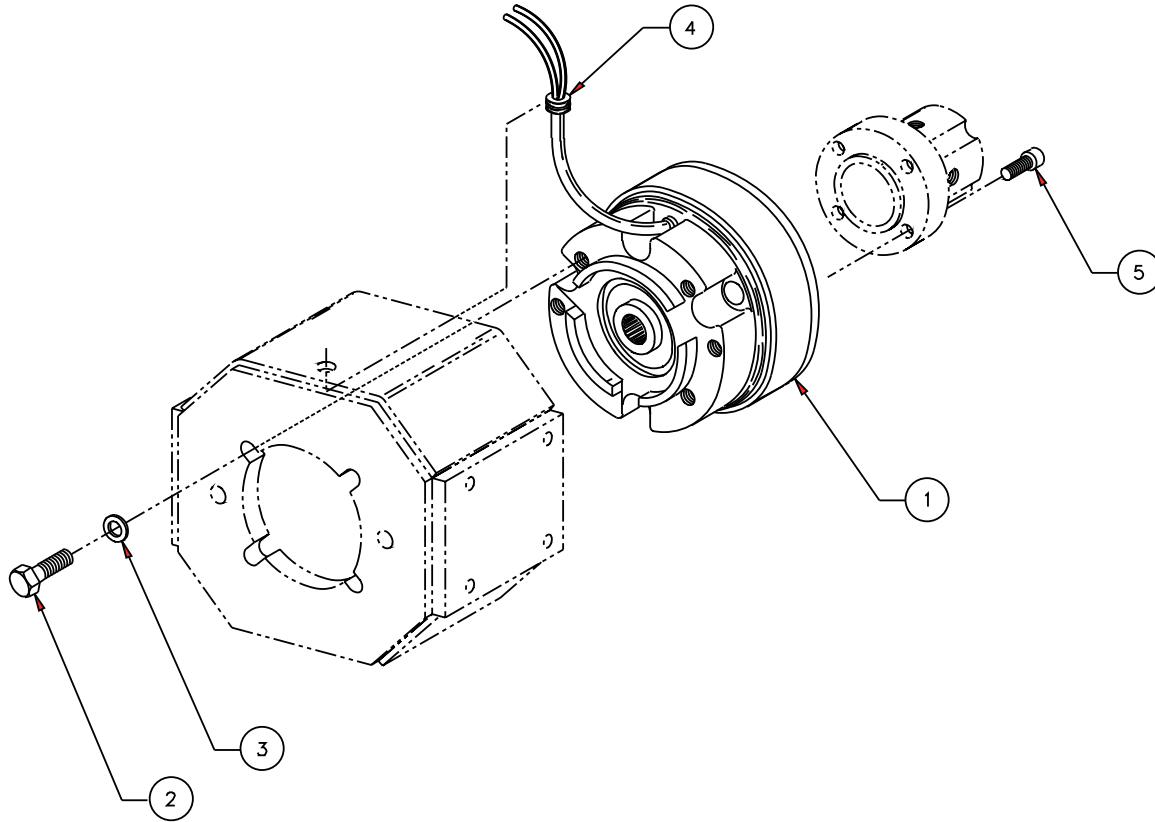
A-8091/ D-3154

## 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**

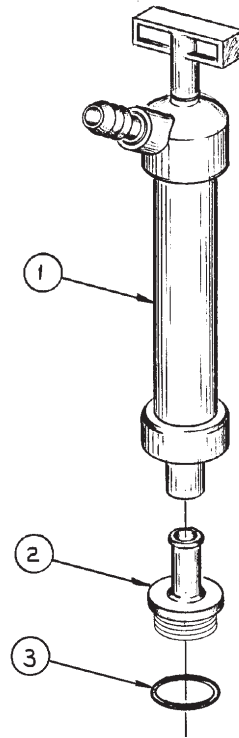


A-6291 & A-6346/ C-3020

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*

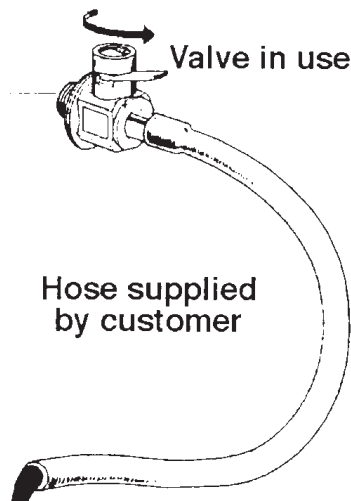


A-5024/ B-3990

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*

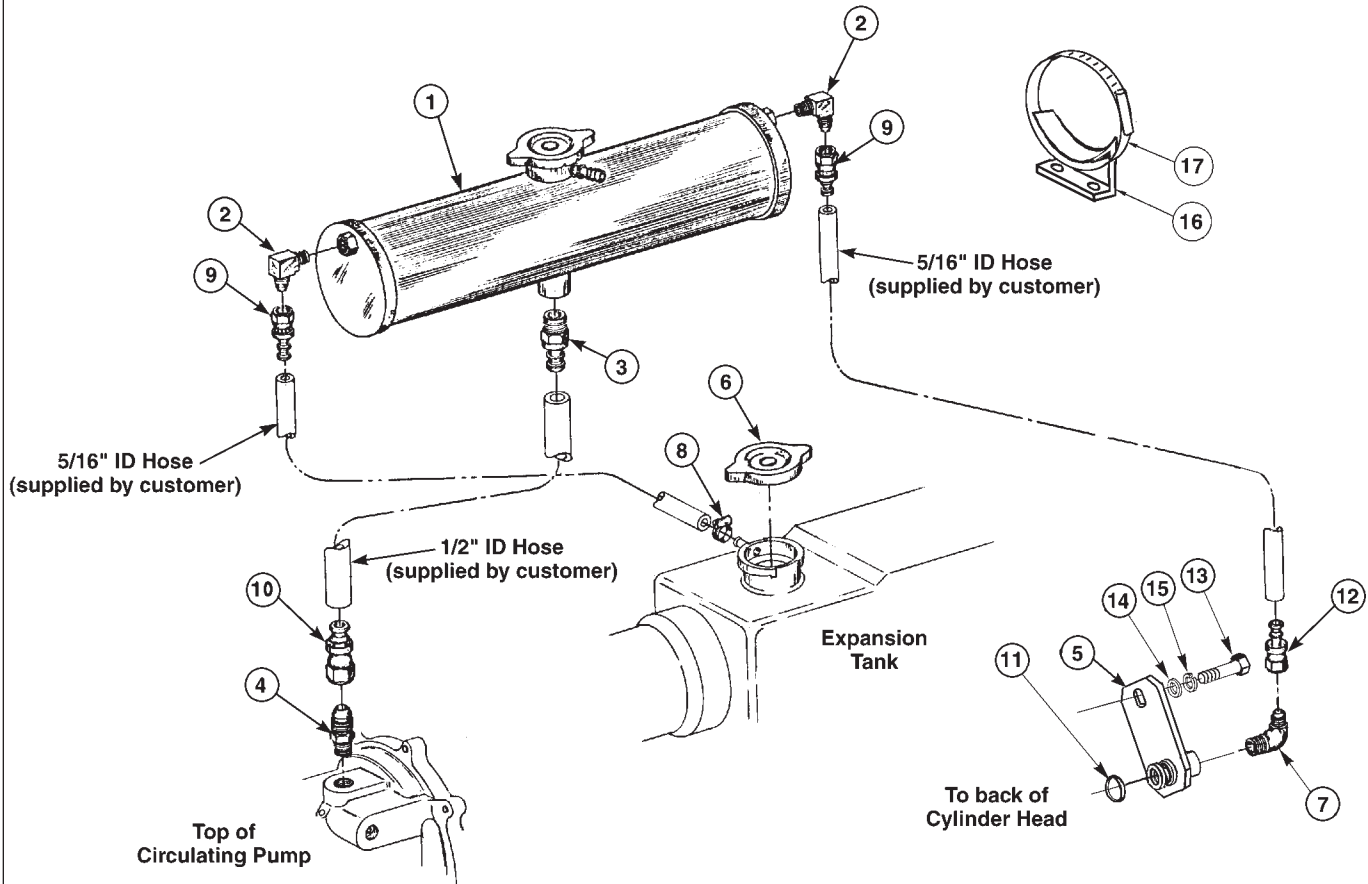


A-6480

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

## Remote Expansion Tank

Marine Application

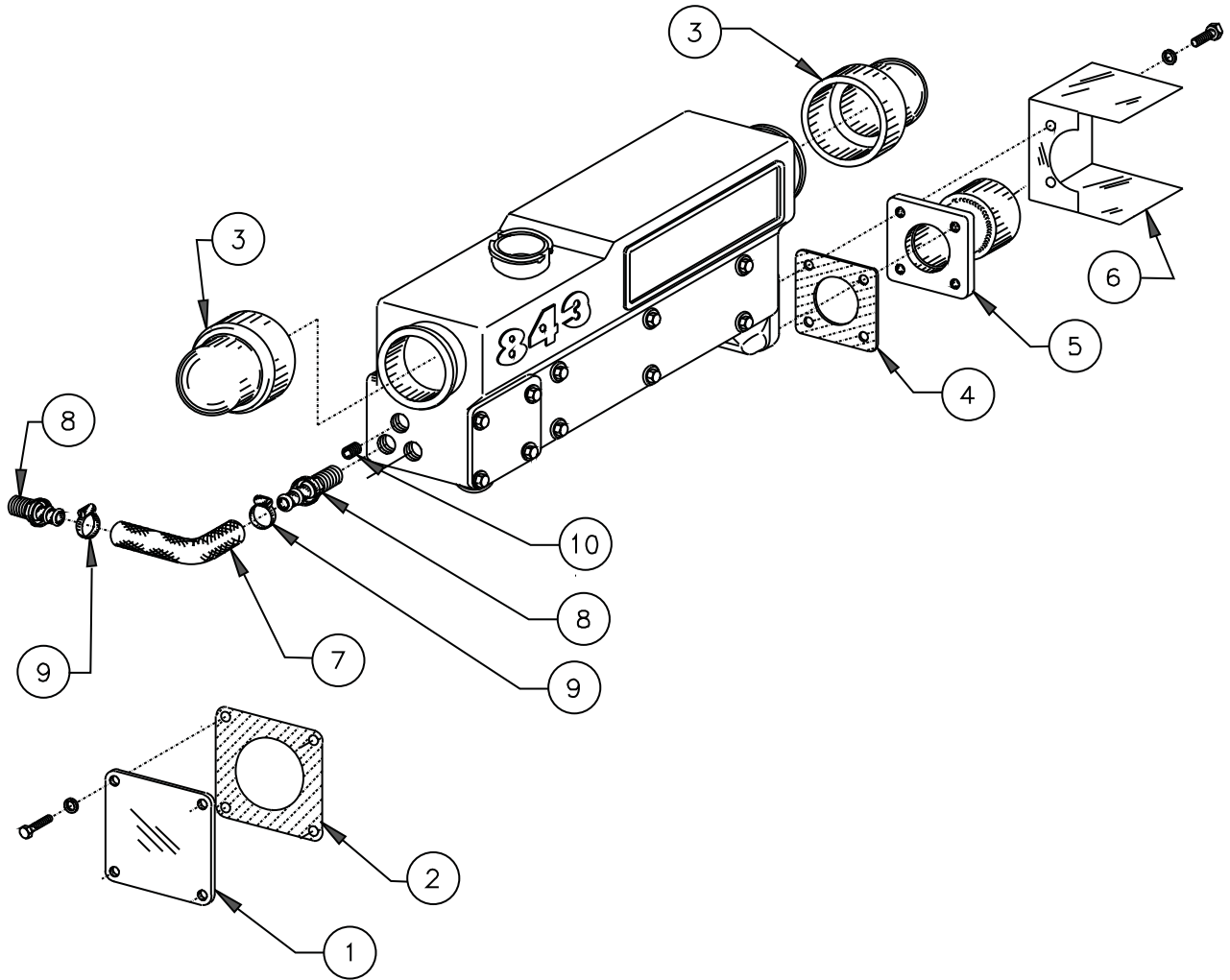


A-5931A/ D-2345

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**

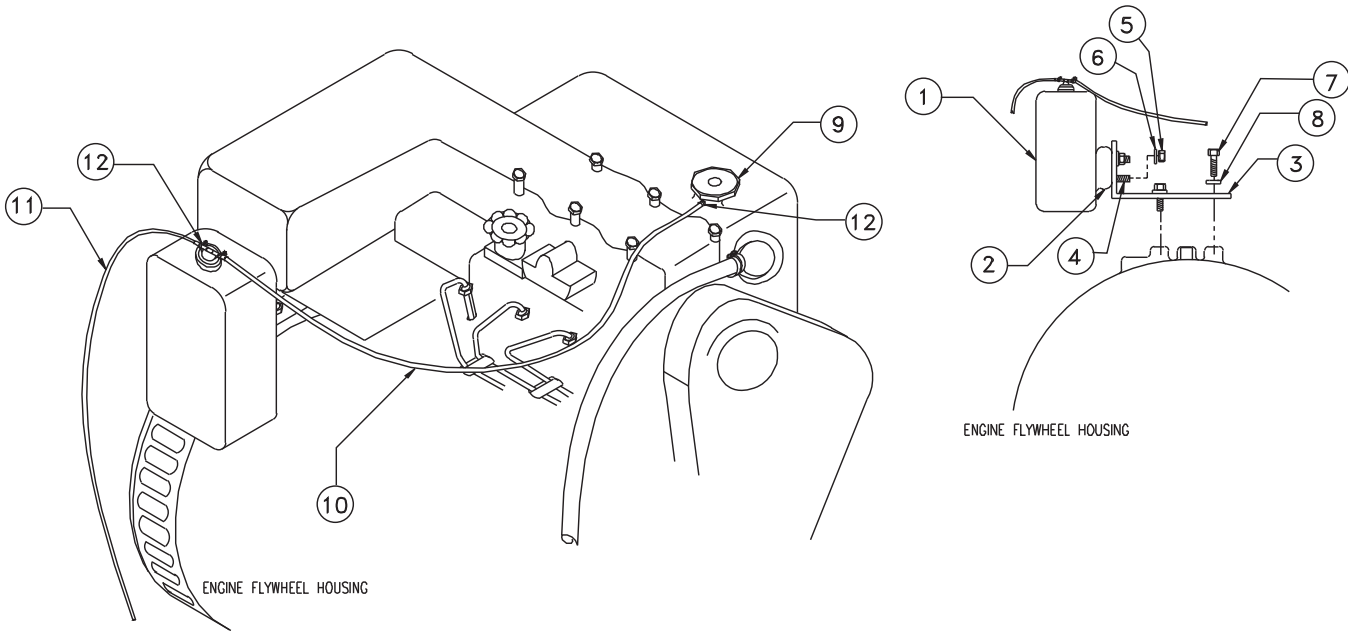
*Marine Application - with Dry Exhaust*



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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