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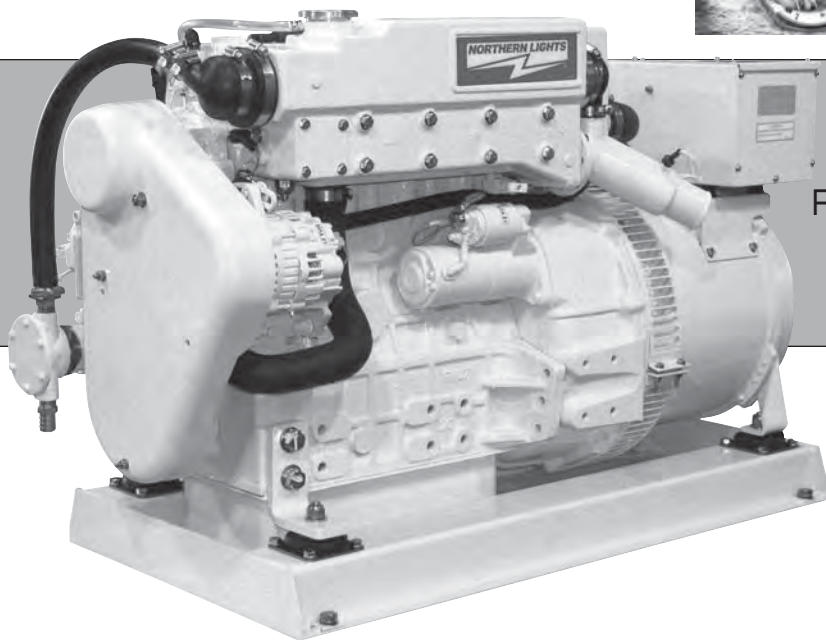
How To Use This Parts Catalog

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.

Any of the parts listed in this catalog are available for purchase from the Northern Lights Generator Parts website.

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

Once you have located the part number in the catalog, return to the Northern Lights Generator Parts website and type the part number in the Store Search Box. Then, add the item to your shopping cart to complete your purchase.



P844-2

For Models: L844D, M844K2, M844W2, M844LK2,
M844LW2, NL844K2, NL844LK2, NL844W2,
NL844LW2, M20CR2, and M20CRW2

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
4420 14th Avenue N.W.
Seattle, WA 98107
Tel: (206) 789-3880
Fax: (206) 782-5455

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PART NO.: P844-2 04/07



PARTS CATALOG

for Models L844D, M844K2, M844W2, M844LK2, M844LW2,
NL844K2, NL844LK2, NL844W2, NL844LW2, M20CR2, & M20CRW2

Please read thoroughly before attempting to use this manual:

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Model Designation

MODELS INCLUDED

This manual covers the operating instructions for:

**L844D, M844K2, M844W2, M844LK2, M844LW2, M20CR2,
M20CRW2, NL844K2, NL844LK2, NL844W2, and NL844LW2.**

Model Numbers

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

L - M - NL	844	L	W
L - Lugger Propulsion engine M - Northern Lights Marine generator set NL - Northern Lights Industrial generator set	Model number of engine block Bore Cylinders 84 mm 4	Designates a Long Stroke engine.	Designates a new winding in the generator.

M 844K2 = Northern Lights marine diesel generator set with an 844 engine and a PXK generator, Tier II.	M 20CRW2 = Northern Lights 20 kW commercial grade marine diesel generator with a generator with a different winding, Tier II.
M 844LK2 = Northern Lights marine diesel generator set with an 844L engine and a PXK generator, Tier II.	NL 844K2 = Northern Lights industrial diesel generator set with an 844 engine and a radiator, Tier II.
M 844W2 = Northern Lights marine diesel generator set with an 844 engine and a generator with a different winding, Tier II.	NL 844LK2 = Northern Lights industrial diesel generator set with an 844L engine and a radiator, Tier II.
M 20CR2 = Northern Lights 20 kW commercial grade marine diesel generator with a special generator, Tier II.	NL 844LW2 = Northern Lights industrial diesel generator set with an 844L engine with a different winding in the generator, and a radiator, Tier II.

Serial Numbers

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



Reading a Parts Page

IMPORTANT:

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

1 ELECTRICAL SYSTEM

ALTERNATOR ASSEMBLY: M - NL844

2

3

4

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7

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9

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	-

10

11

12

13

14

P844 06/96

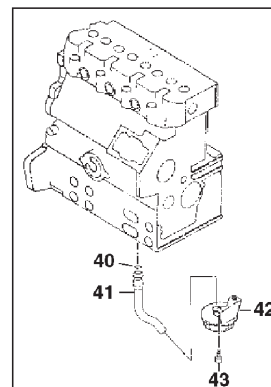
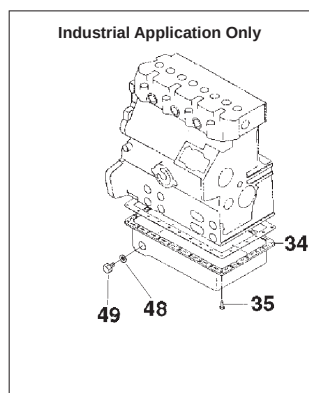
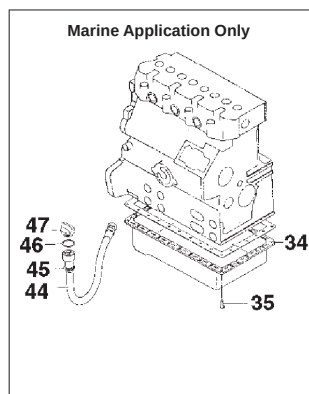
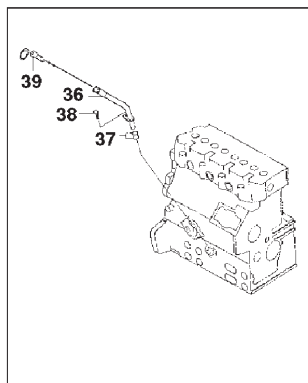
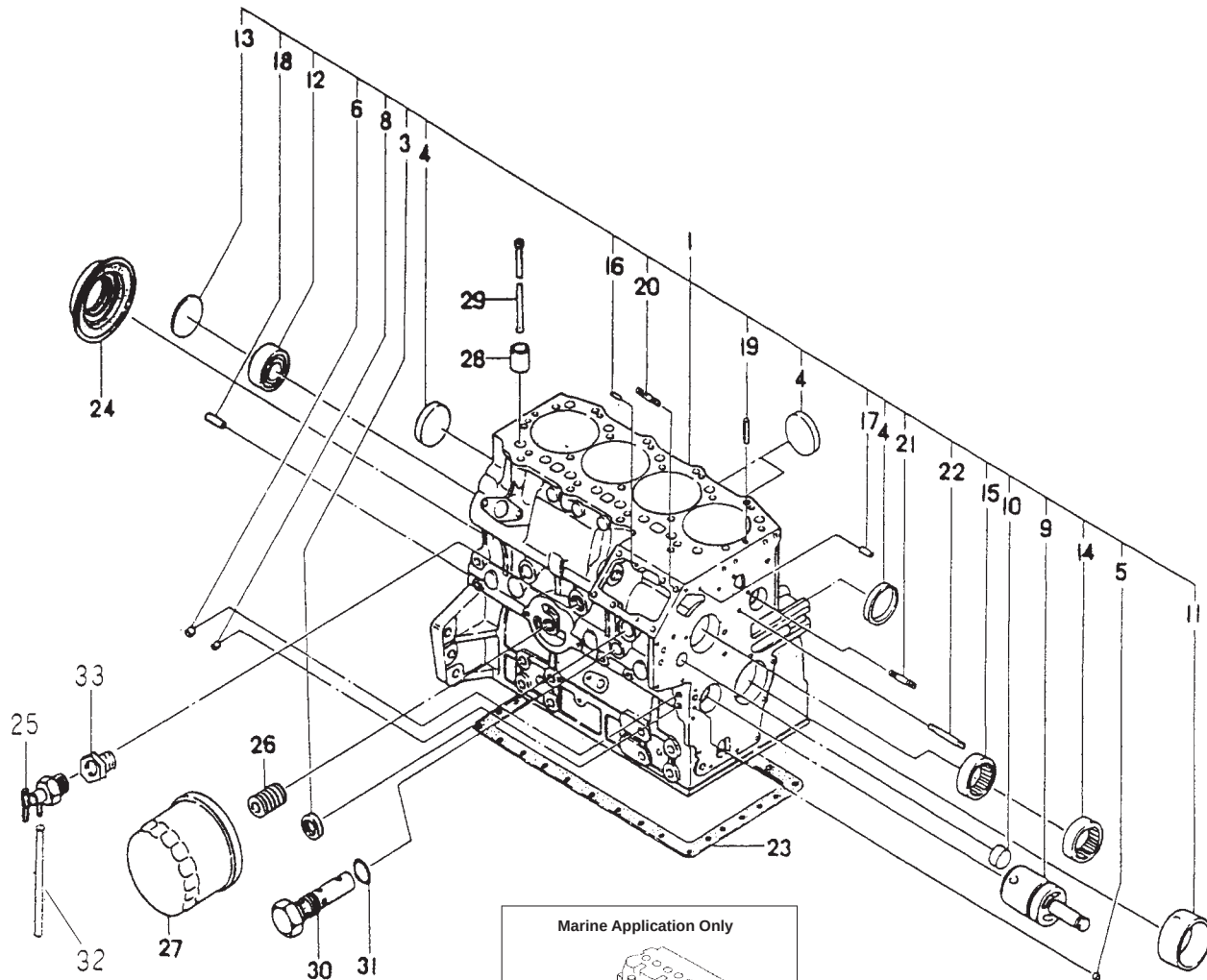
5-2

REFERENCES:

1. Grouping section title.
2. Model designation of equipment that uses parts listed on this page.
3. Title and description of assembly.
4. Drawing numbers that correspond to key column numbers for parts identification.
5. Key column for locating parts shown on drawing.
6. Part number.
7. Quantity of parts used.
8. Description of each component part.
9. Serial number of unit the part fits.
10. Assembly or kit designated by Key 0 or •/•.
11. Grouping index number.
12. Page number within the grouping index.
13. Manual title.
14. Page publication date.

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

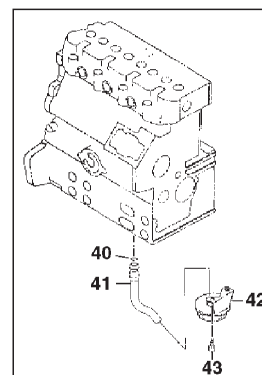
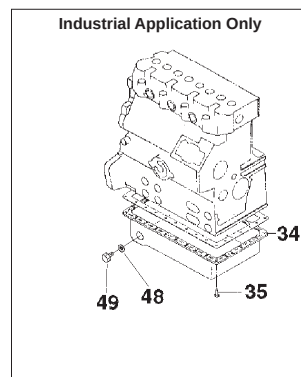
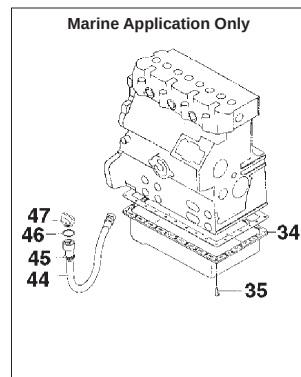
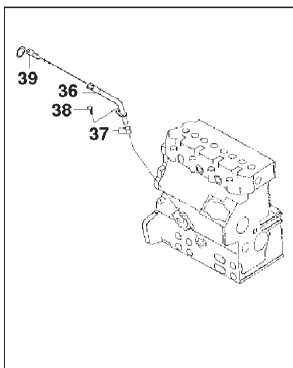
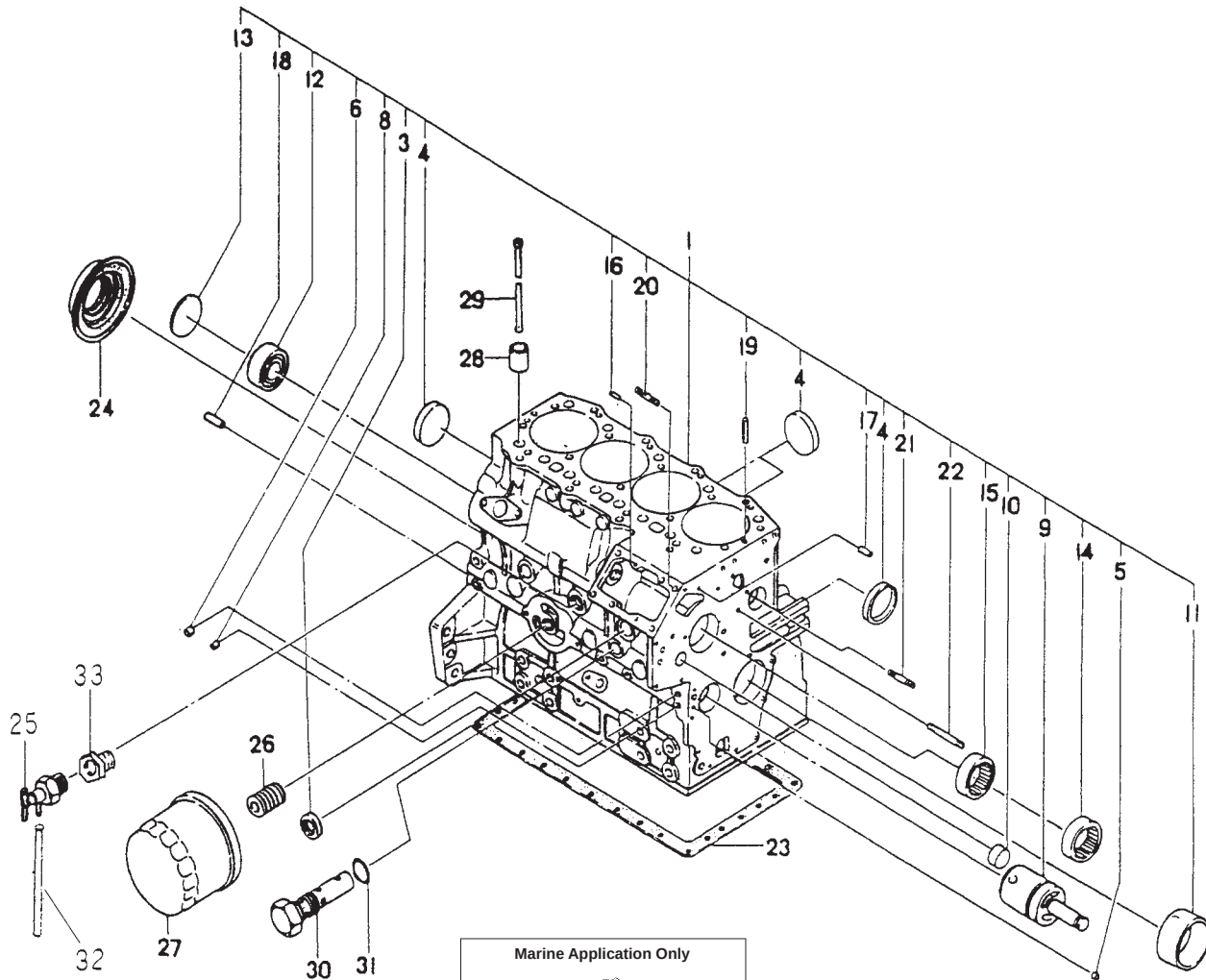
Cylinder Block Assembly 844



Cylinder Block Assembly 844

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110107863	1	Cylinder Block Assembly - Marine (includes keys #2-21)	-
	110107923	1	Cylinder Block Assembly - Industrial (includes keys #2-21)	-
3	064210025	2	Expansion Plug 25 mm	-
4	064210040	5	Expansion Plug 40 mm	-
5	198466010	3	Plug	-
6	198466020	2	Plug	-
8	198466030	4	Plug	-
9	165296132	1	Idle Gear Shaft Assembly	-
10	198466920	2	Plug	-
11	198517221	1	Bush; Standard	-
	198517225	1	Bush; Undersize 0.25 mm	-
	198517228	1	Bush; Undersize 0.50 mm	-
12	040106203	1	Bearing	-
13	064100045	1	Expansion Plug	-
14	042309018	1	Needle Bearing	-
15	042309017	1	Needle Bearing	-
16	030500612	2	Dowel Pin	-
17	030500616	2	Dowel Pin	-
18	030501025	2	Dowel Pin	-
19	030309005	2	Spring Pin	-
20	012110820	3	Stud M8 x 1.25 x 20 mm	-
21	012110635	1	Stud M6 x 1.0 x 35 mm	-
22	012110660	1	Stud M6 x 1.0 x 60 mm	-
23	110996860	1	Gasket	-
24	198636170	1	Oil Seal	-
	00-02004	**	Wear Sleeve; Repair Type	-
25	198736050	1	Drain Cock	-
26	140546020	1	Filter Joint	-
27	24-03100	1	Oil Filter	-
28	120116160	8	Tappet	-
29	120456250	8	Push Rod	-
30	140036220	1	Relief Valve Assembly	-
31	052109078	1	O-ring	-
32	068105250	1	Tube	-
33	198486770	1	Bushing	-
34	110707731	1	Oil Pan - Marine	-
	110707751	1	Oil Pan - Industrial	-
35	010109235	30	Bolt	-
36	110756070	1	Dipstick Tube	-
37	052100100	2	O-ring	-
38	011300612	1	Bolt	-
39	198416320	1	Dipstick	-
40	052109076	1	O-ring	-
41	140986630	1	Oil Pipe	-
42	140406360	1	Suction Filter	-
43	011310612	2	Bolt	-
44	140606710	1	Drain Hose*	-
45	198756200	1	Hose Clamp*	-
46	052100280	1	Gasket*	-
47	398430560	1	Cap*	-
48	025100012	2	Seal Washer - Industrial	-
49	010401212	2	Plug M12 x 1.25 - Industrial	-
			*Marine Application Only	
			**As required	

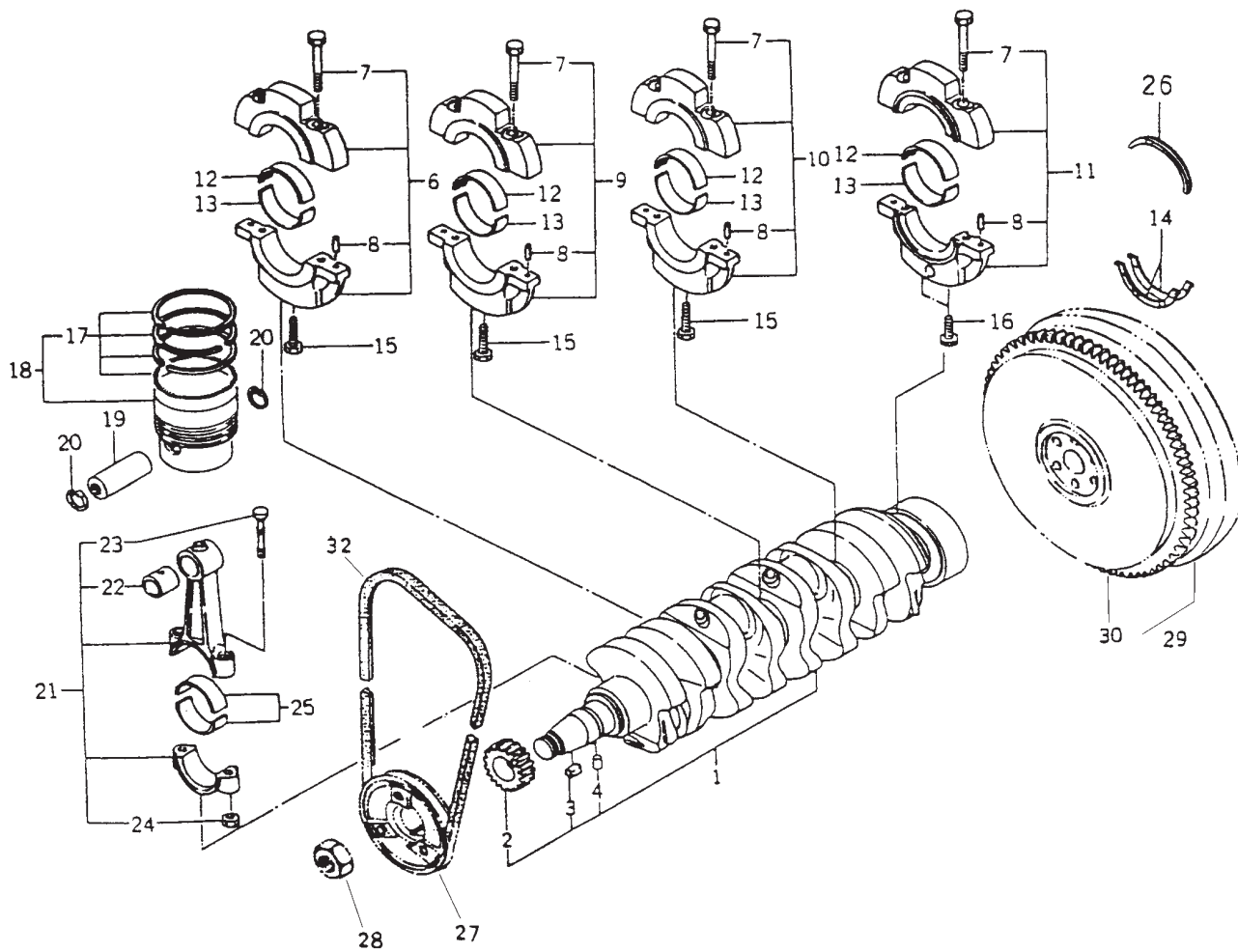
Cylinder Block Assembly 844L & M20CR



Cylinder Block Assembly 844L & M20CR

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110107813	1	Cylinder Block Assembly - Marine (includes keys #2-21)	-
	110107843	1	Cylinder Block Assembly - Industrial (includes keys #2-21)	-
3	064210025	2	Expansion Plug 25 mm	-
4	064210040	5	Expansion Plug 40 mm	-
5	198466010	3	Plug	-
6	198466020	2	Plug	-
8	198466030	4	Plug	-
9	165296132	1	Idle Gear Shaft Assembly	-
10	198466920	2	Plug	-
11	198517221	1	Bush; Standard	-
	198517225	1	Bush; Undersize 0.25 mm	-
	198517228	1	Bush; Undersize 0.50 mm	-
12	040106203	1	Bearing	-
13	064100045	1	Expansion Plug	-
14	042309018	1	Needle Bearing	-
15	042309017	1	Needle Bearing	-
16	030500612	2	Dowel Pin	-
17	030500616	2	Dowel Pin	-
18	030501025	2	Dowel Pin	-
19	030309005	2	Spring Pin	-
20	012110820	3	Stud M8 x 1.25 x 20 mm	-
21	012110635	1	Stud M6 x 1.0 x 35 mm	-
22	012110660	1	Stud M6 x 1.0 x 60 mm	-
23	110996860	1	Gasket	-
24	050209083	1	Oil Seal	-
	00-02004	**	Wear Sleeve; Repair Type	-
25	198736050	1	Drain Cock	-
26	140546020	1	Filter Joint	-
27	24-03100	1	Oil Filter	-
28	120116160	8	Tappet	-
29	120456310	8	Push Rod	-
30	140036220	1	Relief Valve Assembly	-
31	052109078	1	O-ring	-
32	068105250	1	Tube	-
33	198486770	1	Bushing	-
34	110707731	1	Oil Pan - Marine	-
	110707751	1	Oil Pan - Industrial	-
35	010109235	30	Bolt	-
36	110756070	1	Dipstick Tube	-
37	052100100	2	O-ring	-
38	011300612	1	Bolt	-
39	198416320	1	Dipstick	-
40	052109076	1	O-ring	-
41	140986630	1	Oil Pipe	-
42	140406360	1	Suction Filter	-
43	011310612	2	Bolt	-
44	140606710	1	Drain Hose*	-
45	198756200	1	Hose Clamp*	-
46	052100280	1	Gasket*	-
47	398430560	1	Cap*	-
48	025100012	2	Seal Washer - Industrial	-
49	010401212	2	Plug M12 x 1.25 - Industrial	-
			*Marine Application Only	
			**As required	

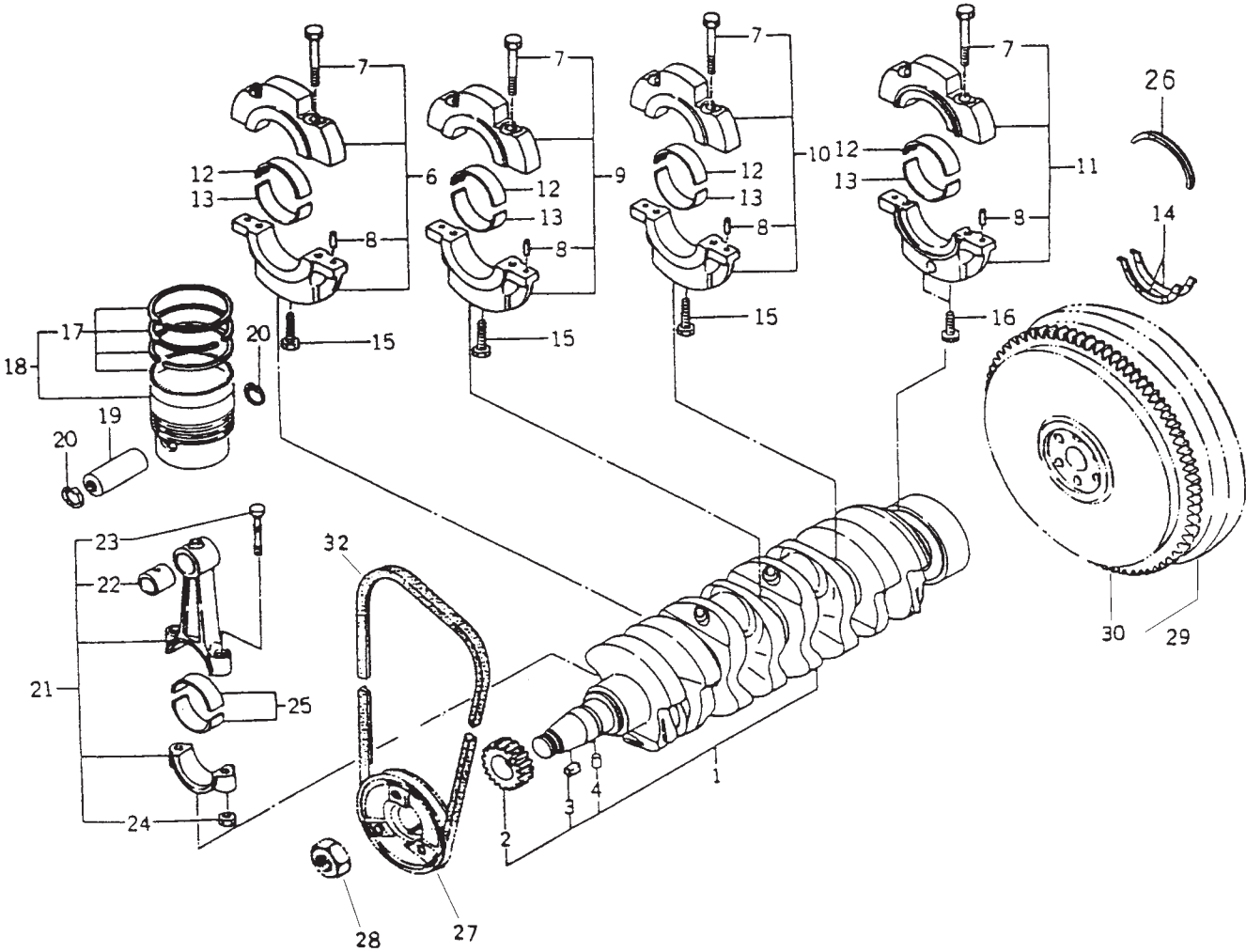
Crankshaft Assembly 844



Crankshaft Assembly 844

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	115256630	1	Crankshaft Assembly (includes keys #2 - 5)	-
2	115276200	1	Gear	-
3	034100508	1	Key	-
4	030509020	1	Dowel Pin	-
6	110156250	1	Bearing Holder Assembly (includes keys #7 - 8)	-
7	010109406	8	Bolt	-
8	030500612	8	Dowel Pin	-
9	110156171	1	Bearing Holder Assembly (includes keys #7 - 8)	-
10	110156181	1	Bearing Holder Assembly (includes keys #7 - 8)	-
11	110156191	1	Bearing Holder Assembly (includes keys #7 - 8)	-
12	198517231	4	Bearing; Standard	-
	198517235	4	Bearing; Undersize 0.25 mm	-
	198517238	4	Bearing; Undersize 0.50 mm	-
13	198517241	4	Bearing; Standard	-
	198517245	4	Bearing; Undersize 0.25 mm	-
	198517248	4	Bearing; Undersize 0.50 mm	-
14	199266200	2	Thrust Washer	-
15	011511075	3	Bolt	-
16	010700865	2	Bolt	-
17	115107970	4	Ring Kit; Standard	-
18	115017541	4	Piston Kit; Standard (formerly #115017540)	-
19	115326220	4	Piston Pin	-
20	036500028	8	Snap Ring	-
21	115026251	4	Connecting Rod Assembly (includes keys #22 - 24)	-
22	198517265	4	Bushing	-
23	115176140	8	Connecting Rod Bolt	-
24	020109120	8	Nut	-
25	198517251	8	Bearing; Standard	-
	198517255	8	Bearing; Undersize 0.25 mm	-
	198517258	8	Bearing; Undersize 0.50 mm	-
26	199266210	1	Thrust Washer	-
27	115397620	1	Pulley (Marine)	-
	115396870	1	Pulley (Industrial)	-
28	020109086	1	Nut	-
29	115357050	1	Flywheel Assembly (includes key #30) SAE #7-1/2	-
30	115376040	1	Ring Gear (109 Teeth)	-
31	010109341	6	Bolt (not shown)	-
32	40-02003	1	Drive Belt (with 12V/ 35A alternator)	-
	40-02005	1	Drive Belt (with 12V/ 51A and 24V/ 35A alternators)	-

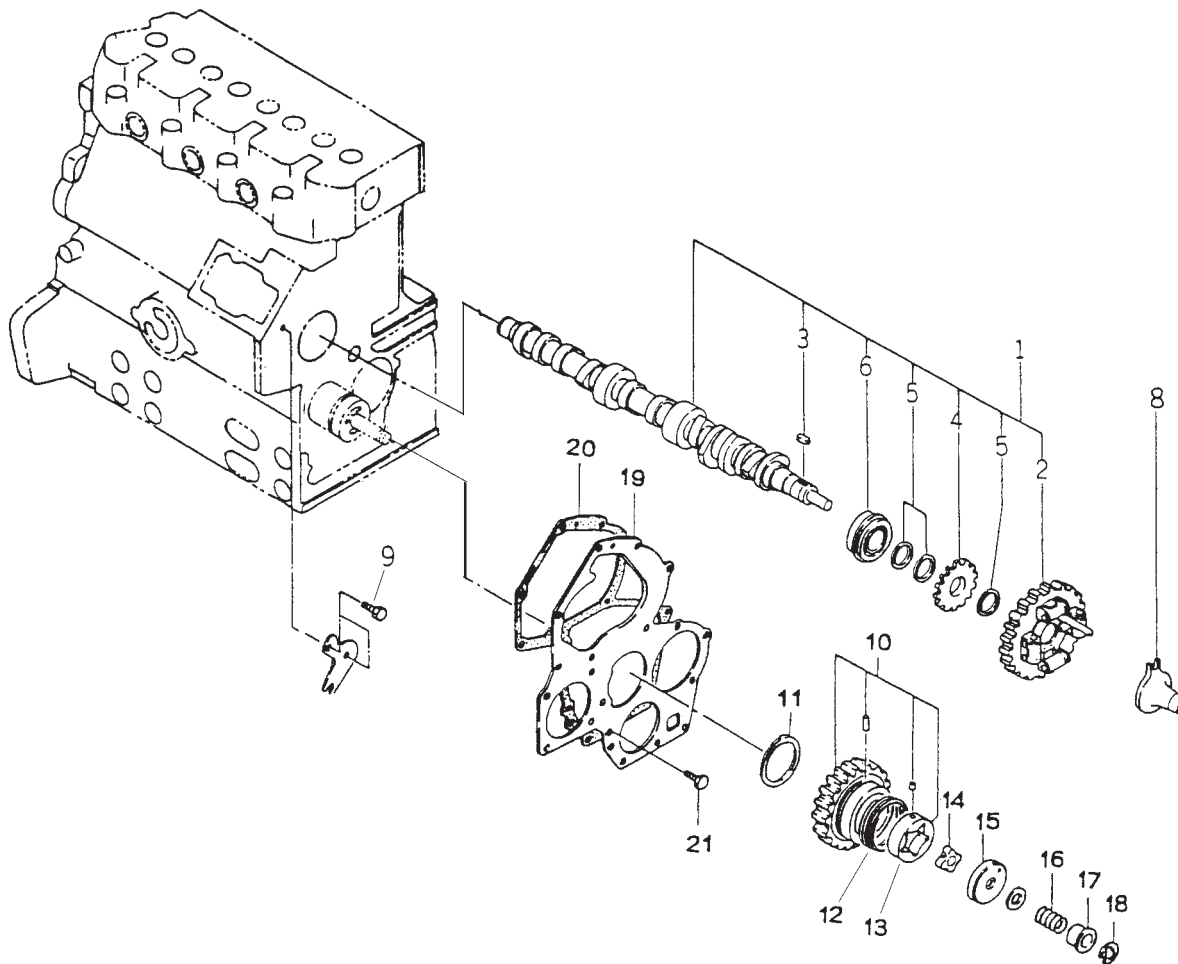
Crankshaft Assembly 844L & M20CR



Crankshaft Assembly 844L & M20CR

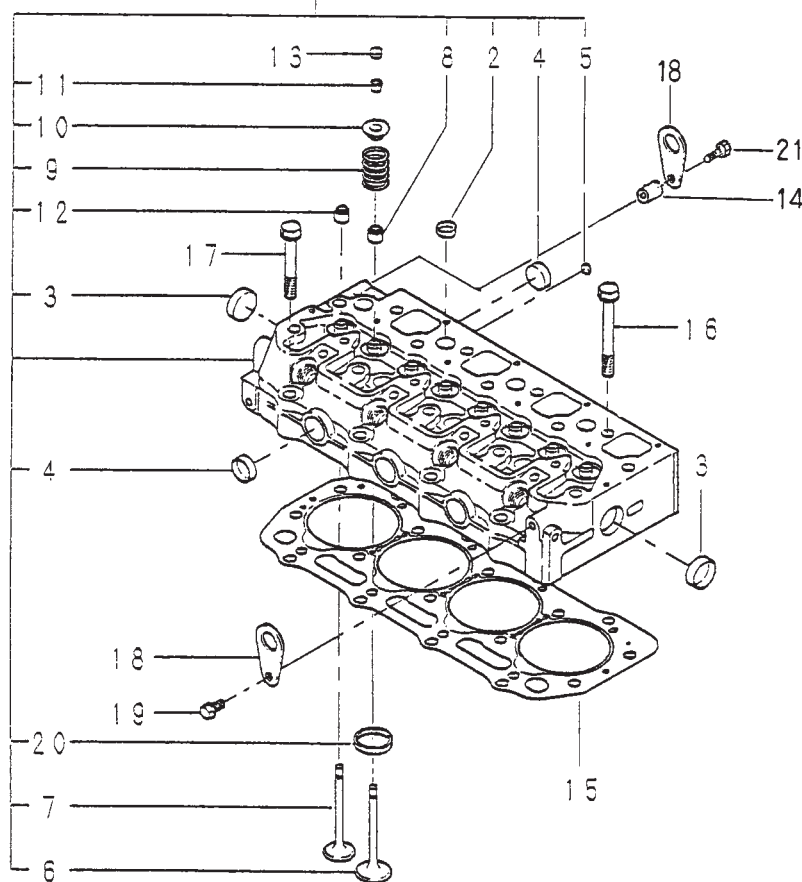
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	115256750	1	Crankshaft Assembly (includes keys #2 - 5)	-
2	115276200	1	Gear	-
3	034100508	1	Key	-
4	030509020	1	Dowel Pin	-
6	110156360	1	Bearing Holder Assembly (includes keys #7 - 8)	-
7	010109406	8	Bolt	-
8	030500612	8	Dowel Pin	-
9	110156370	1	Bearing Holder Assembly (includes keys #7 - 8)	-
10	110156380	1	Bearing Holder Assembly (includes keys #7 - 8)	-
11	110156390	1	Bearing Holder Assembly (includes keys #7 - 8)	-
12	198517231	4	Bearing; Standard	-
	198517235	4	Bearing; Undersize 0.25 mm	-
	198517238	4	Bearing; Undersize 0.50 mm	-
13	198517241	4	Bearing; Standard	-
	198517245	4	Bearing; Undersize 0.25 mm	-
	198517248	4	Bearing; Undersize 0.50 mm	-
14	199266200	2	Thrust Washer	-
15	010109667	3	Bolt (formerly #011511070)	-
16	010700865	2	Bolt	-
17	115107970	4	Ring Kit; Standard	-
18	115017491	4	Piston Kit; Standard (includes key #17, formerly #115017490)	-
19	115326220	4	Piston Pin	-
20	036500028	8	Snap Ring	-
21	115026330	4	Connecting Rod Assembly (includes keys #22 - 24)	-
22	198517265	4	Bushing	-
23	115176140	8	Connecting Rod Bolt	-
24	020109120	8	Nut	-
25	198517251	8	Bearing; Standard	-
	198517255	8	Bearing; Undersize 0.25 mm	-
	198517258	8	Bearing; Undersize 0.50 mm	-
26	199266210	1	Thrust Washer	-
27	115397620	1	Pulley (Marine)	-
	115396870	1	Pulley (Industrial)	-
28	020109086	1	Nut	-
29	115357470	1	Flywheel Assembly (includes key #30) SAE #7-1/2	-
30	115376160	1	Ring Gear (126 Teeth)	-
31	010109341	6	Bolt (not shown)	-
32	40-08401	1	Drive Belt (with 12V/ 35A alternator)	-
	40-08404	1	Drive Belt (with 24V/ 35A alternator)	-
Note: Earlier design pistons may not be substituted for new pattern items.				

Camshaft & Oil Pump



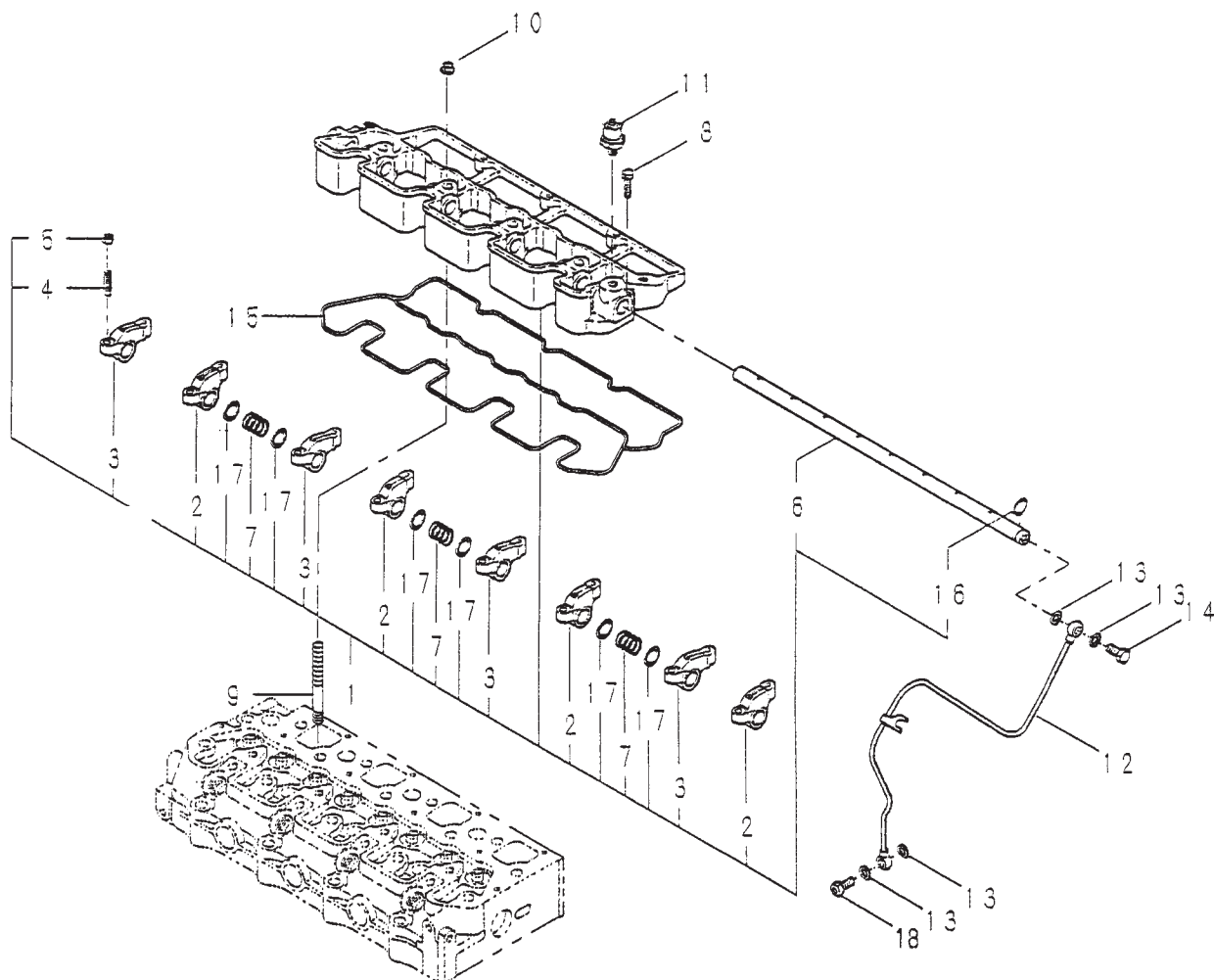
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	120026320	1	Camshaft Assembly (includes keys #2 - 6)	-
2	120016050	1	Cam Gear	-
3	034100508	1	Key	-
4	120736081	1	Gear	-
5	199216230	3	Spacer	-
6	040109057	1	Bearing	-
7	125256120	1	Slider	-
8	199566750	1	Plate	-
9	011310612	2	Bolt	-
10	165026120	1	Idler Gear Assembly (includes key #12)	-
11	199266180	1	Thrust Washer	-
12	198216821	1	Spring	-
13	140166140	1	Rotor	-
14	140116140	1	Oil Pump Cover	-
15	199286150	1	Shim, t=0.10	-
	199286160	1	Shim, t=0.15	-
	199286170	1	Shim, t=0.20	-
	199286180	1	Shim, t=0.50	-
16	198216720	1	Spring	-
17	199236540	1	Collar	-
18	036800010	1	Snap Ring	-
19	165166450	1	Front Plate	-
20	165996540	1	Gasket	-
21	011310612	2	Bolt	-

Cylinder Head



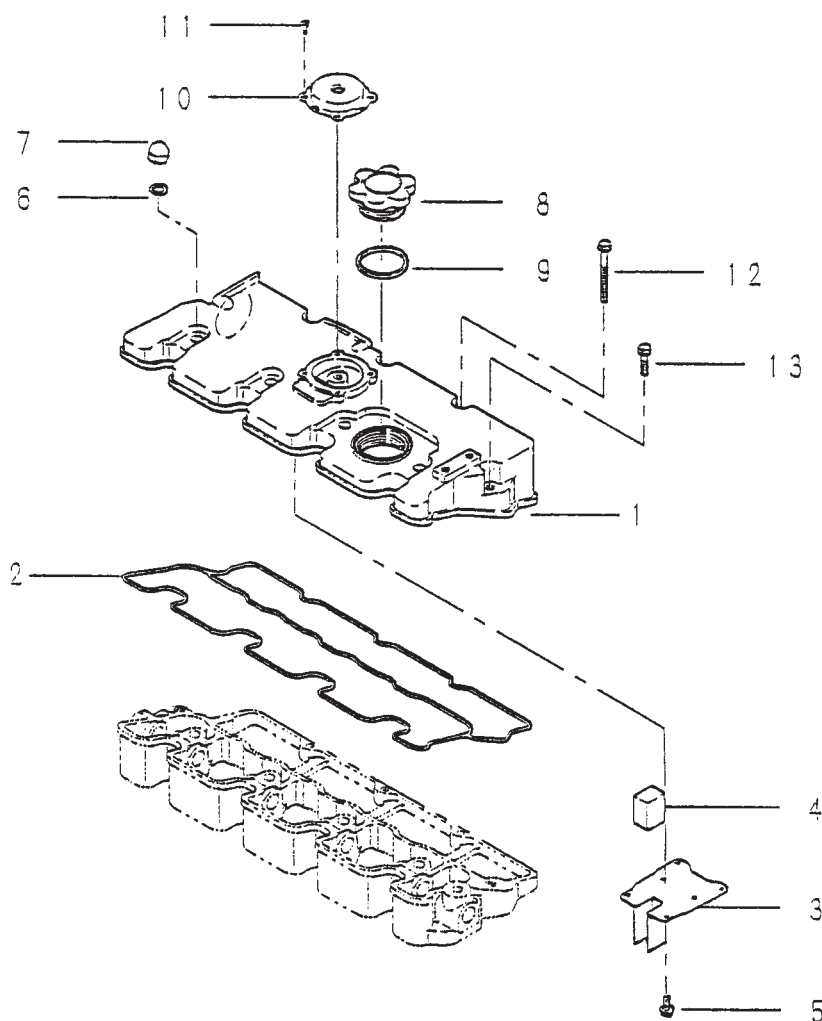
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	111010520	1	Cylinder Head Assembly (Marine, includes keys #2 - 12, & 20)	-
	111010540	1	Cylinder Head Assembly (Industrial, includes keys #2 - 12, & 20)	-
2	064210018	7	Expansion Plug, 18 mm	-
3	064210030	2	Expansion Plug, 30 mm	-
4	064210025	6	Expansion Plug, 25 mm	-
5	064210010	3	Expansion Plug, 10 mm	-
6	120166350	4	Intake Valve	-
7	120176360	4	Exhaust Valve	-
8	120406070	4	Valve Guide Seal - Intake	-
9	198216700	8	Spring	-
10	120186080	8	Retainer	-
11	120226070	16	Keeper	-
12	120406050	4	Valve Guide Seal - Exhaust	-
13	120216040	8	Cap	-
14	199236690	1	Spacer	-
15	111147510	1	Head Gasket; t = 1.2 mm (844)	-
	111147520	1	Head Gasket; t = 1.3 mm (844)	-
	111147581	1	Head Gasket; t = 0.4 mm (844L & M20CR, formerly #111147580)	-
	111147591	1	Head Gasket; t = 0.5 mm (844L & M20CR, formerly #111147590)	-
16	111136480	14	Head Bolt	-
17	111136490	4	Head Bolt	-
18	195816340	2	Hanger	-
19	011510816	1	Bolt	-
20	110136400	4	Valve Seat, Intake	-
21	011510835	1	Bolt	-

Rocker Arm Assembly



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	120036950	1	Rocker Arm Assembly, Marine	-
	120036960	1	Rocker Arm Assembly, Industrial	-
2	120356131	4	Rocker Arm - Intake	-
3	120356141	4	Rocker Arm - Exhaust	-
4	199486220	8	Screw	-
5	020109076	8	Nut	-
6	120316201	1	Rocker Arm Shaft	-
7	198217170	3	Spring	-
8	011310635	2	Bolt	-
9	012109044	4	Stud Bolt	-
10	023100010	4	Nut	-
11		1	Oil Pressure Switch (see Electrical)	-
12	140606720	1	Oil Pipe (844)	-
	140607020	1	Oil Pipe (844L & M20CR)	-
13	140996260	4	Gasket	-
14	198486780	1	Banjo Bolt	-
15	120996130	1	Gasket	-
16	052109076	1	O-ring	-
17	199280300	6	Shim	-
18	198487590	1	Banjo Bolt (tapped 1/8 NPT)	-

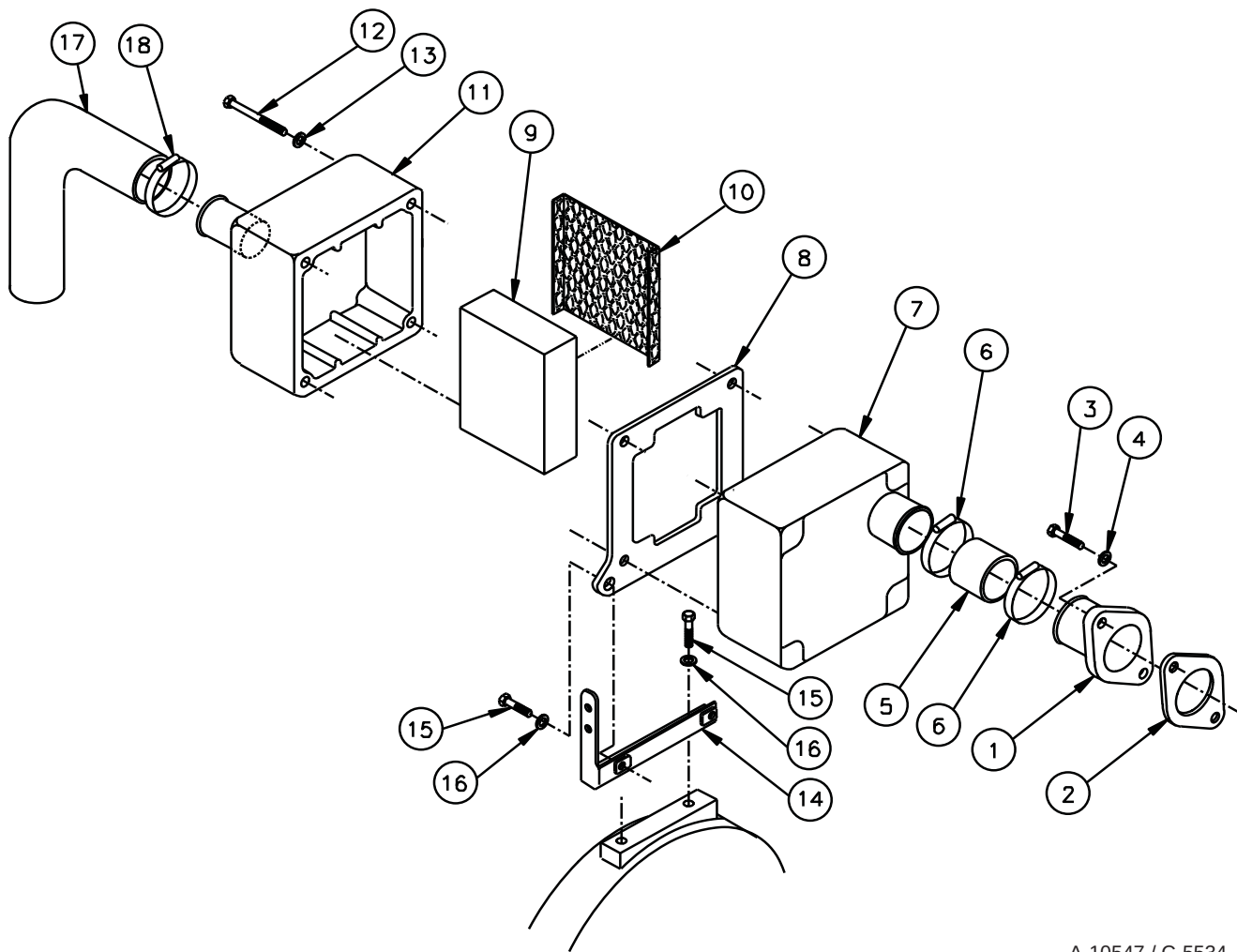
Rocker Arm Cover



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	111217431	1	Rocker Arm Cover (844- 844L Marine, formerly #111217650)	-
	111217710	1	Rocker Arm Cover (844 - 844L Industrial & M20CR)	-
2	111996401	1	Gasket	-
3	110666210	1	Baffle	-
4	110666060	1	Breather Element	-
5	015600406	6	Screw	-
6	140996270	4	Gasket	-
7	024600010	4	Cap Nut	-
8	198436010	1	Cap	-
9	052100400	1	O-ring	-
10	110566080	1	Valve, Breather	-
11	011100408	4	Bolt	-
12	011310660	3	Bolt	-
13	011310640	2	Bolt	-

Air Filter and Housing

L844

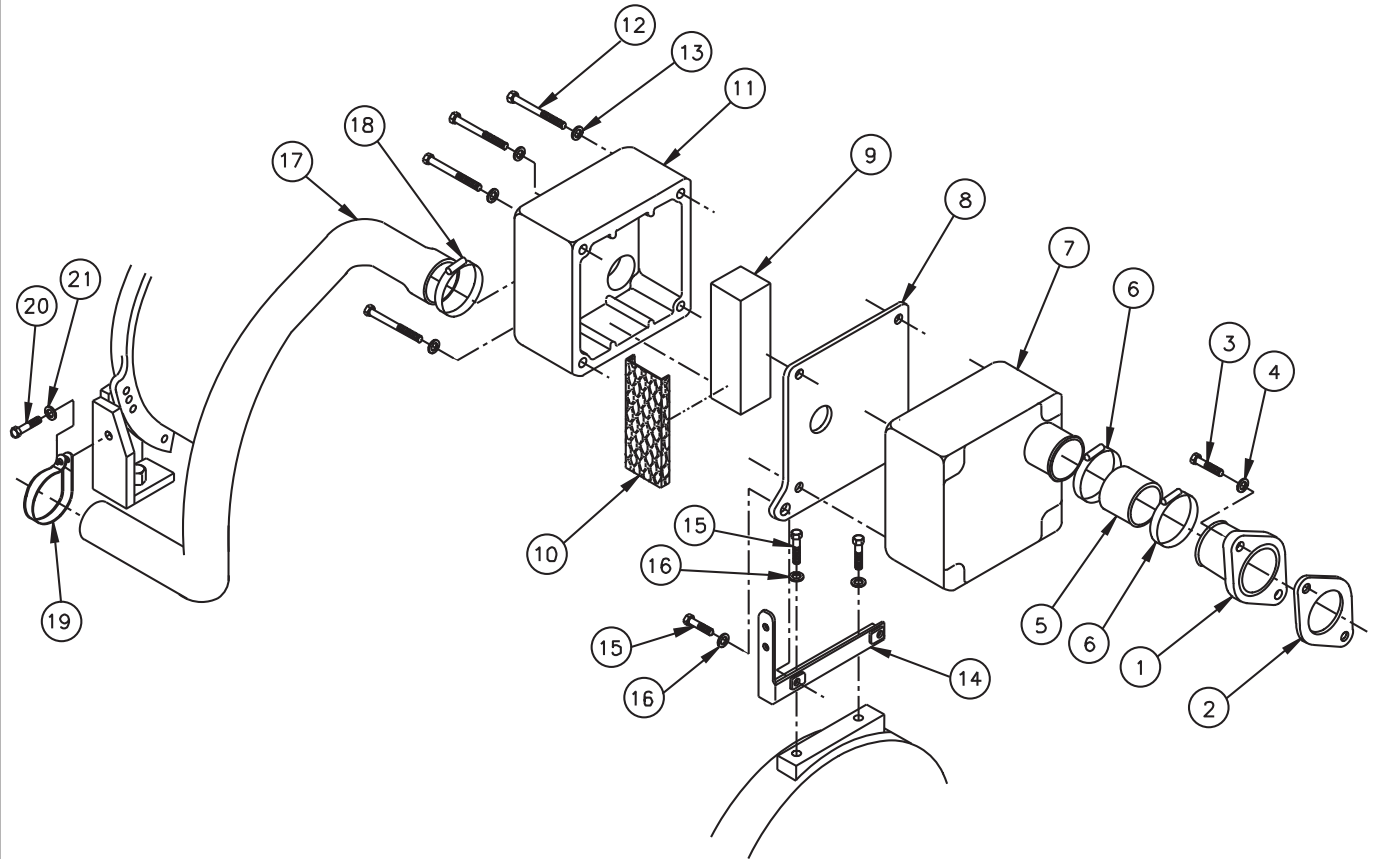


A-10547 / C-5534

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-28104	1	Connector, Air Inlet	-
2	135996950	1	Gasket, Air Intake Mounting	-
3	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
4	15-99131	2	Wave Washer M6 S/S	-
5	18-22002	1	Hose 1-3/4" ID x 2-1/4"	-
6	19-01028	2	Hose Clamp #28	-
7	10-28106	1	Front Cover, Air Filter Housing	-
8	28-28103	1	Plate, Housing Separater	-
9	24-28102	1	Element, Air Filter	-
10	24-28103	1	Screen, Air Filter Retaining	-
11	10-28103	1	Rear Cover, Air Filter Housing	-
12	12-09132	4	Capscrew, Hex Head M6 x 1.0 x 85 mm S/S	-
13	15-99131	4	Wave Washer M6 S/S	-
14	23-22001	1	Bracket, Air Filter Support	-
15	12-09751	4	Capscrew, Hex Head M8 x 1.25 x 16 mm S/S	-
16	15-99707	4	Wave Washer M8 S/S	-
17	18-28103	1	Hose, Air Intake	-
18	19-01028	1	Hose Clamp #28 Extended Band S/S	-

Air Filter and Housing

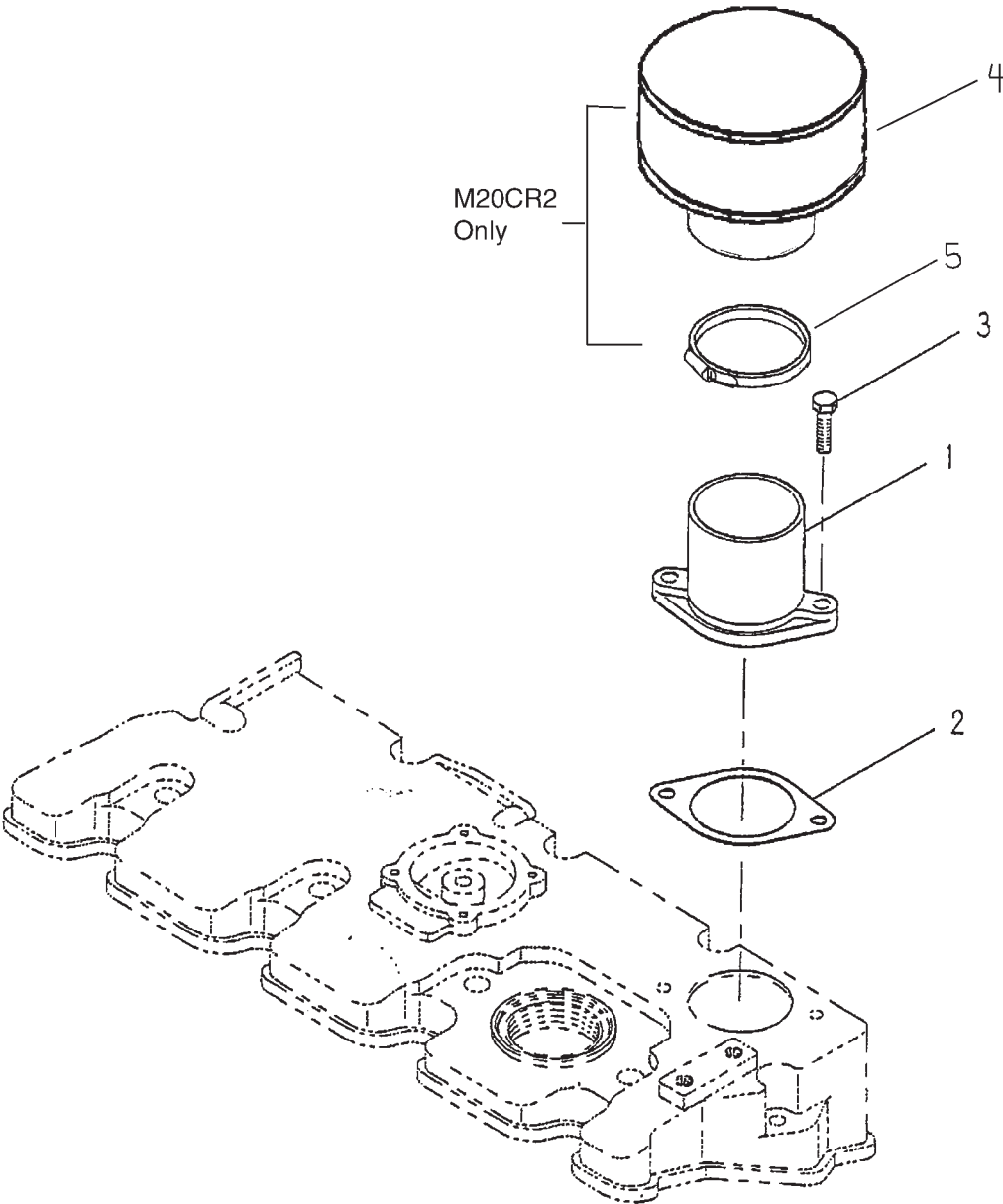
M844 & M844L



A-10262, A-10312 / C-5444

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-22004	1	Connector, Air Inlet	-
2	135996950	1	Gasket, Air Intake Mounting	-
3	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
4	15-99131	2	Wave Washer M6 S/S	-
5	18-22002	1	Hose 1-3/4" ID x 2-1/4"	-
6	19-01028	2	Hose Clamp #28	-
7	10-22006	1	Front Cover, Air Filter Housing	-
8	28-22001	1	Plate, Air Filter Baffle (844)	-
	28-28401	1	Plate, Air Filter Baffle (844L)	-
9	24-22009	1	Element, Air Filter	-
10	24-22011	1	Screen, Air Filter Retaining	-
11	10-22003	1	Rear Cover, Air Filter Housing	-
12	12-09132	4	Capscrew, Hex Head M6 x 1.0 x 85 mm S/S	-
13	15-99131	4	Wave Washer M6 S/S	-
14	23-22001	1	Bracket, Air Filter Support	-
15	12-09751	4	Capscrew, Hex Head M8 x 1.25 x 16 mm S/S	-
16	15-99707	4	Wave Washer M8 S/S	-
17	18-22001	1	Hose, Air Intake (Molded)	-
18	19-01028	1	Hose Clamp #28	-
19	19-70028	1	Cushion Clamp #28	-
20	12-01102	1	Capscrew, Hex Head M6 x 1.0 x 16 mm S/S	-
21	15-01134	1	Flat Washer, M6 S/S	-

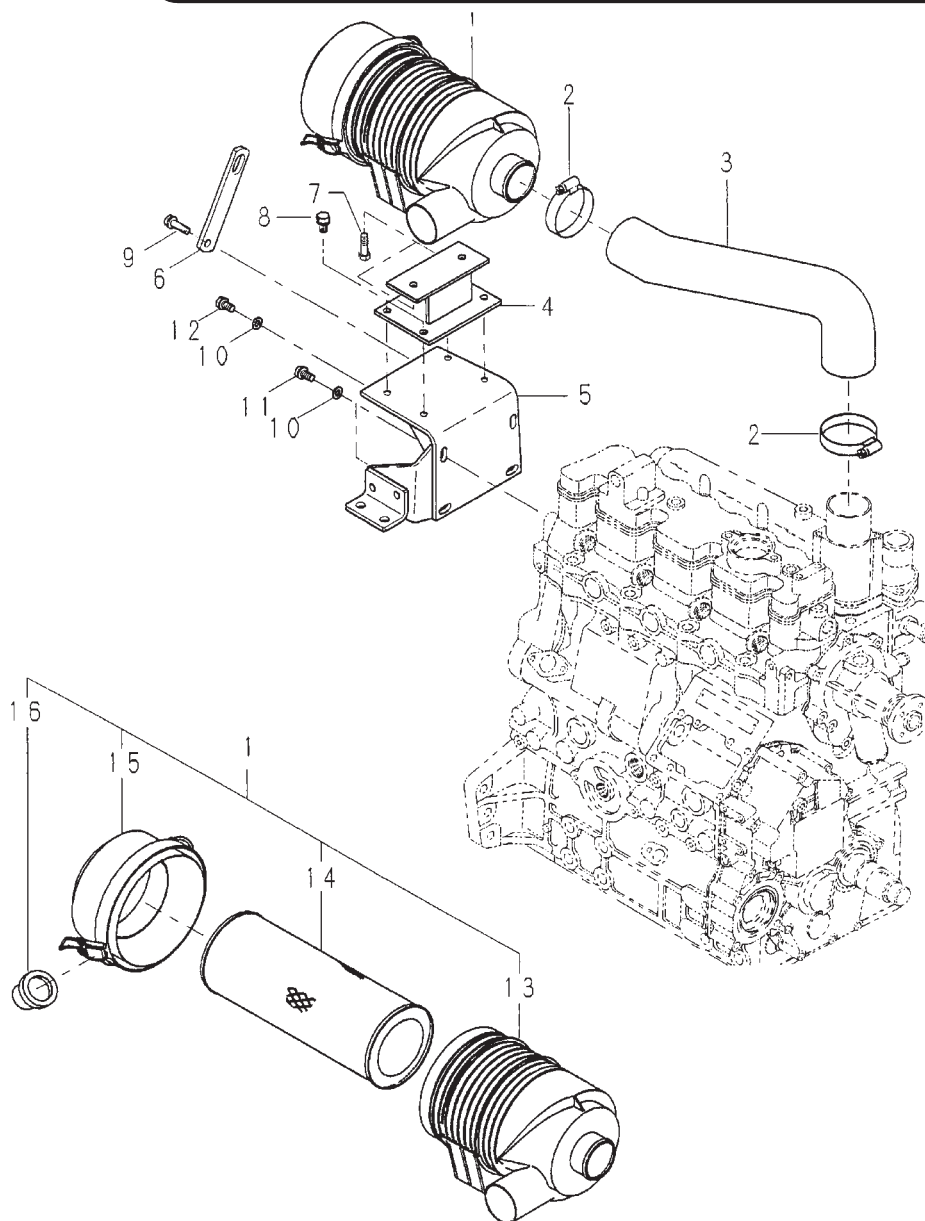
Air Intake & Filter M20CR & NL844



844K2AIRINTAKE

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135566550	1	Intake Manifold	-
2	135996950	1	Gasket	-
3	011310620	2	Bolt	-
4	24-28401	1	Air Filter (M20CR)	-
5	19-00036	1	Hose Clamp	-

Air Filter & Mounting NL844 & 844L

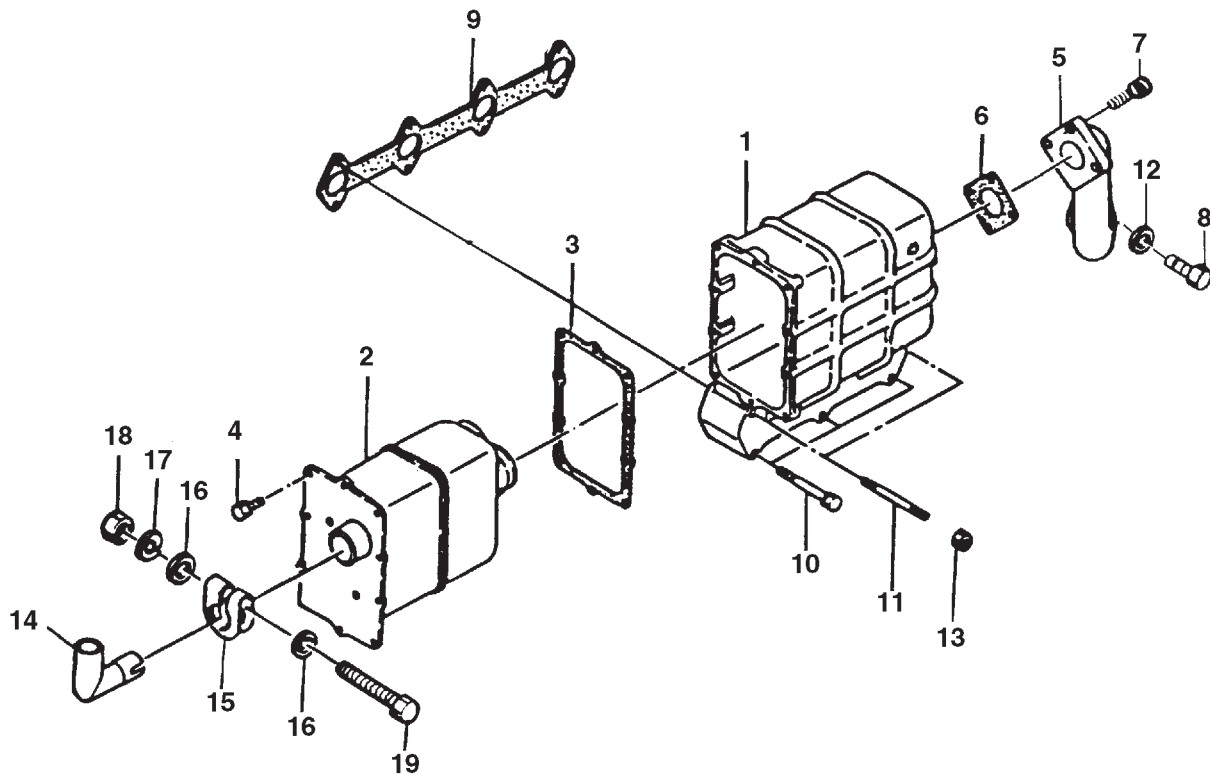


844aircleaner

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	135016300	1	Air Cleaner Assembly (includes keys #13-16)	-
2	19-00036	2	Hose Clamp #36	-
3	135597830	1	Hose	-
4	135976600	1	Bracket	-
5	135976420	1	Bracket	-
6	195816100	1	Lifting Eye	-
7	011510820	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	-

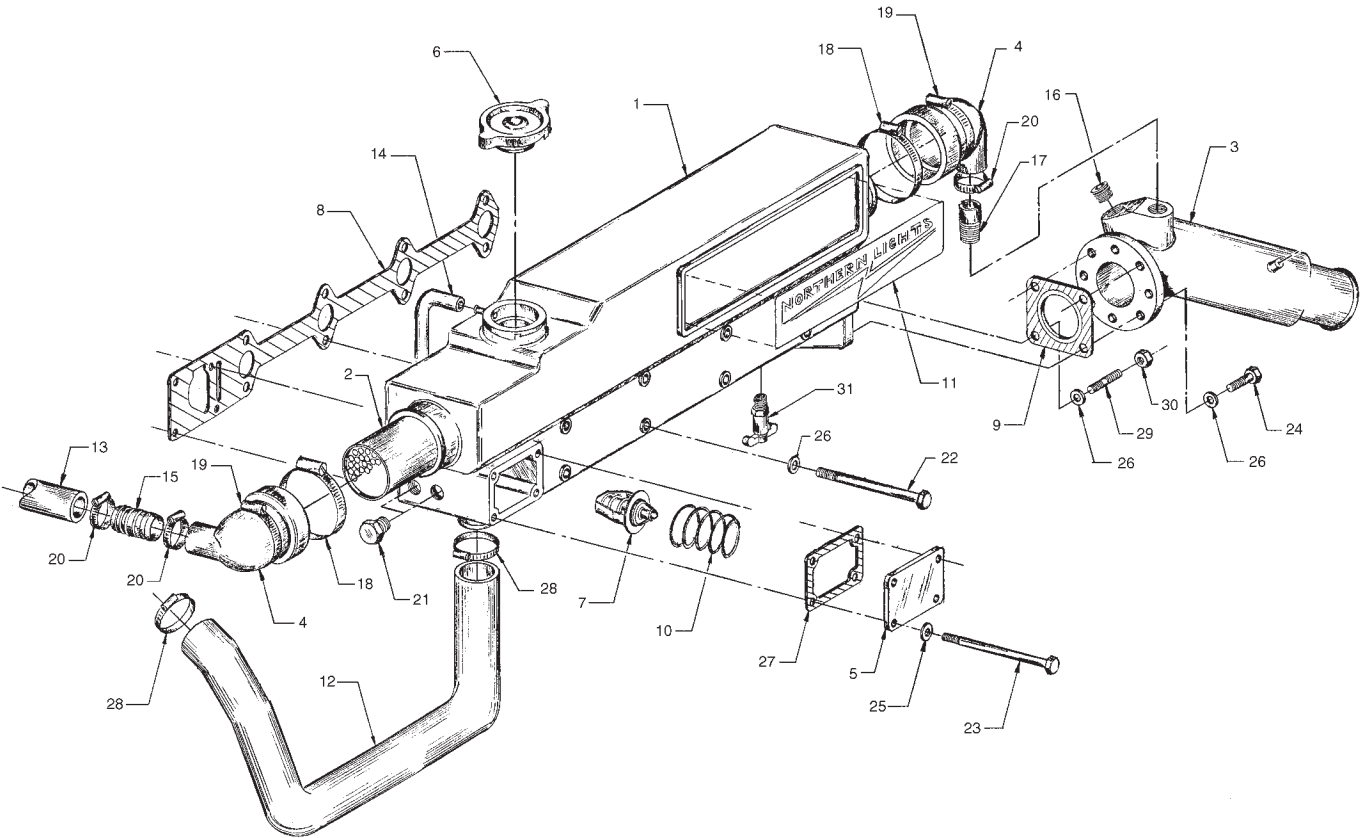
Exhaust Manifold & Muffler

Industrial



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	135046320	1	Muffler Assembly (includes keys #1- 4)	-
1	135617500	1	Exhaust Manifold	-
2	135406230	1	Muffler Element	-
3	135996900	1	Gasket	-
4	011300612	10	Capscrew, Hex Head with Washer M6 x 1.0 x 12 mm	-
5	135656140	1	Exhaust Pipe	-
6	135996550	1	Gasket	-
7	011310625	3	Capscrew, Hex Head with Washer M6 x 1.0 x 25 mm	-
8	12-00056	2	Capscrew, Socket Head M8 x 1.25 x 25	-
9	135996780	1	Gasket	-
10	12-34801	**	Capscrew, Hex Head M8 x 1.25 x 70 mm	-
11	012100875	**	Stud M8 x 1.25 x 75 mm	-
12	15-00704	2	Lock Washer, Hi-Collar M8	-
13	14-00711	**	Hex Nut M8 x 1.25	-
14	27-33103	1	Exhaust Elbow 1-1/2 NPT, Female	-
	135606340	1	Exhaust Elbow, Plain	-
15	314410020	1	Clamp	-
16	15-00701	2	Flat Washer M8	-
17	15-00702	1	Lock Washer M8	-
18	14-00711	1	Hex Nut M8 x 1.25	-
19	12-00718	1	Capscrew, Hex Head M8 x 1.25 x 65 mm	-
**As required				

Heat Exchanger & Exhaust Manifold



A-6256, A-6509 / D-2415

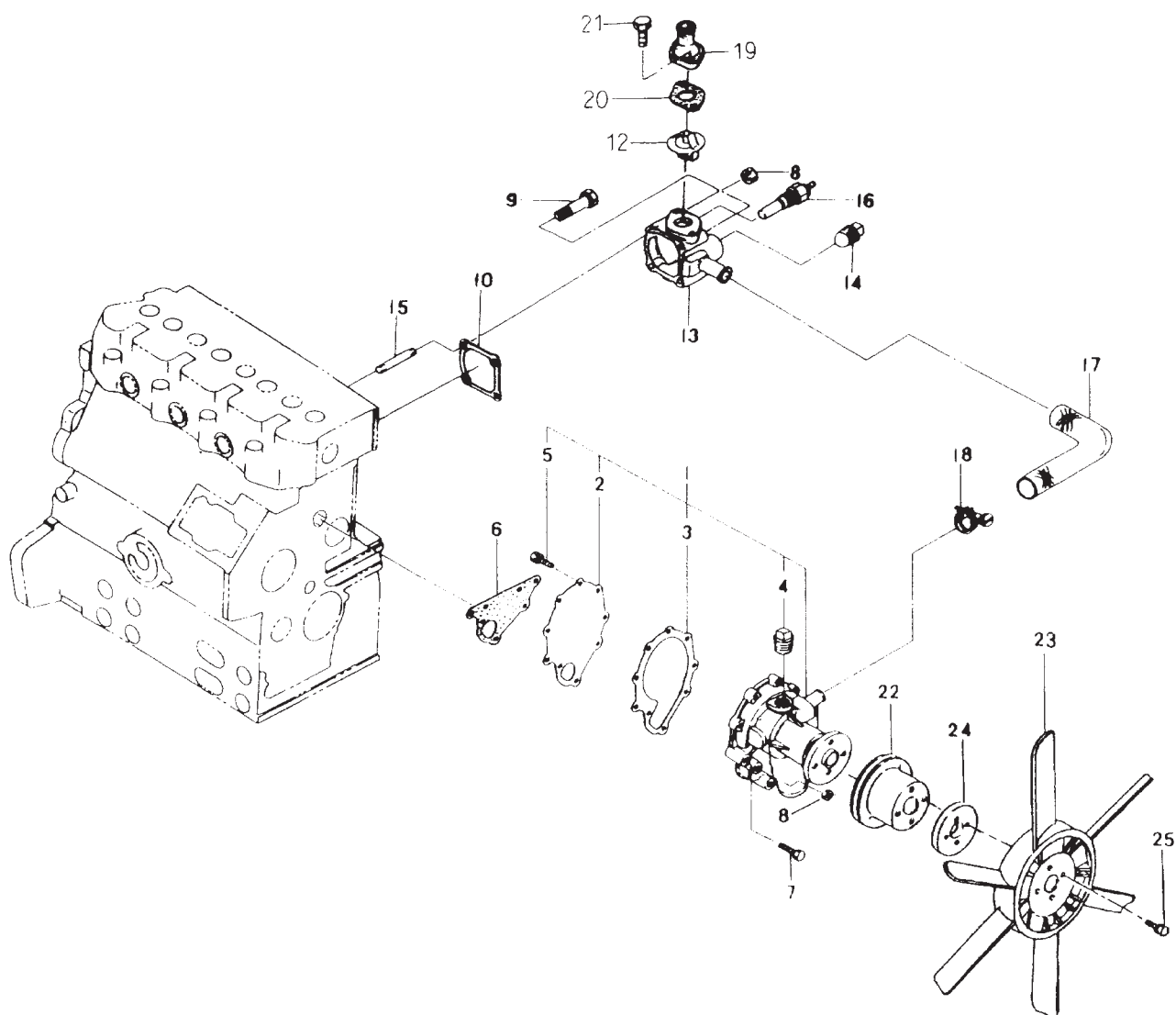
Heat Exchanger & Exhaust Manifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-38101	1	Exhaust Manifold/Expansion Tank	-
2	20-18101	1	Heat Exchanger Element	-
3	27-32003	1	Wet Exhaust Elbow (stainless steel)	-
	135616233	1	Wet Exhaust Elbow (cast iron)	-
4	145536370	2	End Cap	-
5	28-13101	1	Cover Plate	-
6	21-12007	1	Filler Cap (7 PSI)	-
7	145206022	1	Thermostat (82° C)	-
8	11-38101	1	Gasket	-
9	11-31902	1	Gasket (can use #314990030)	-
10	00-13101	1	Spring	-
11	00-71001	1	Nameplate, "Northern Lights"	-
	00-71000	1	Nameplate, "Lugger" (L844 only)	-
12	18-13107	1	Hose	-
13	18-13108	1	Hose 3/4" ID x 18-1/2"	-
14	18-13109	1	Hose 5/16" ID x 25"	-
15	21-13102	1	Union 3/4 Hose Barb x 3/4 Hose Barb	-
16	198436140	1	Plug, Socket Head 1/2 NPT	-
17	145986150	1	Connector, Male 1/2 BSPT x 3/4 Hose Barb	-
18	19-00048	2	Hose Clamp #48	-
19	19-00040	2	Hose Clamp #40	-
20	19-00012	3	Hose Clamp #12	-
21	21-31003	**	Hex Head Plug 3/8 NPT	-
22	12-00701	8	Capscrew, Hex Head M8 x 1.25 x 110 mm	-
23	12-01138	4	Capscrew, Hex Head M6 x 1.0 x 110 mm	-
24	12-00712	3	Capscrew, Hex Head M8 x 1.25 x 25 mm	-
25	15-00008	4	Flat Washer M6	-
26	15-00701	12	Flat Washer M8	-
27	11-13101	1	Gasket	-
28	19-00024	2	Hose Clamp #24	-
29	13-00710	1	Stud M8 x 1.25 x 20 x 25 mm (35 mm OAL)	-
30	14-00711	1	Hex Nut M8 x 1.25	-
31	21-10002	1	Drain Cock 1/4 NPT	-
			**As required	

Expansion Tank & Exhaust Manifold M844 & M844L**Keel Cooled Applications**

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-38101	1	Exhaust Manifold/Expansion Tank	-
2	20-12019	2	End Cap	-
3	28-13101	1	Cover Plate	-
4	21-12007	1	Filler Cap (7 PSI)	-
5	145206022	1	Thermostat (82° C)	-
6	11-38101	1	Gasket	-
7	00-13101	1	Spring	-
8	00-71001	1	Decal, "Northern Lights"	-
9	21-10002	1	Drain Cock 1/4 NPT	-
10	18-13109	1	Hose, Overflow 5/16" ID x 25"	-
11	19-02044	2	Hose Clamp #44	-
12	21-31003	1	Plug, Hex Head 3/8 NPT	-
13	12-00701	8	Capscrew, Hex Head M8 x 1.25 x 110 mm (M-844L & M-20CR)	-
14	12-01138	4	Capscrew, Hex Head M6 x 1.0 x 110 mm (M-844L & M-20CR)	-
15	15-00008	4	Flat Washer M6 (M-844L & M-20CR)	-
16	15-00701	8	Flat Washer M8	-
17	11-13101	1	Gasket	-
18	21-51900	1	Plug, Socket Head 1/8 NPT	-
19	145536050	1	Hose	-
20	21-12205	2	Male Connector 3/8 NPT x 1/2 HB	-
21	19-00006	2	Hose Clamp #6	-
22	11-31902	1	Gasket	-
23	27-31921	1	Adapter, Dry Exhaust Straight 1-1/2 NPT (M20CR only)	-
	27-32007	1	Elbow, Dry Exhaust	-
24	00-12000	1	Heat Shield (used with Straight Adapter - M20CR only)	-
	00-32008	1	Lagging (used with Dry Elbow)	-

Coolant Pump – Industrial Applications NL844 & 844L

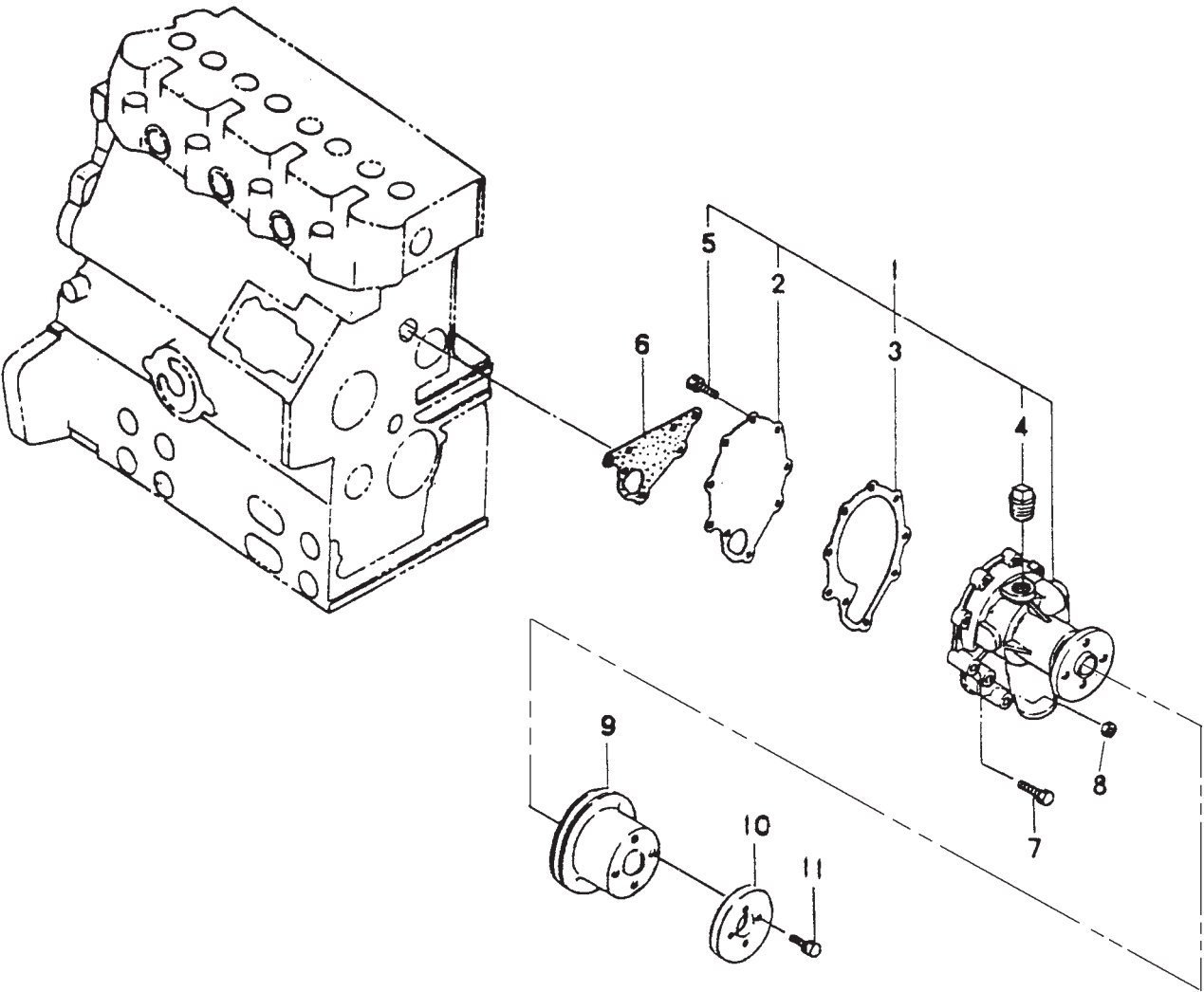


P844waterpump

Coolant Pump – Industrial Applications NL844 & 844L

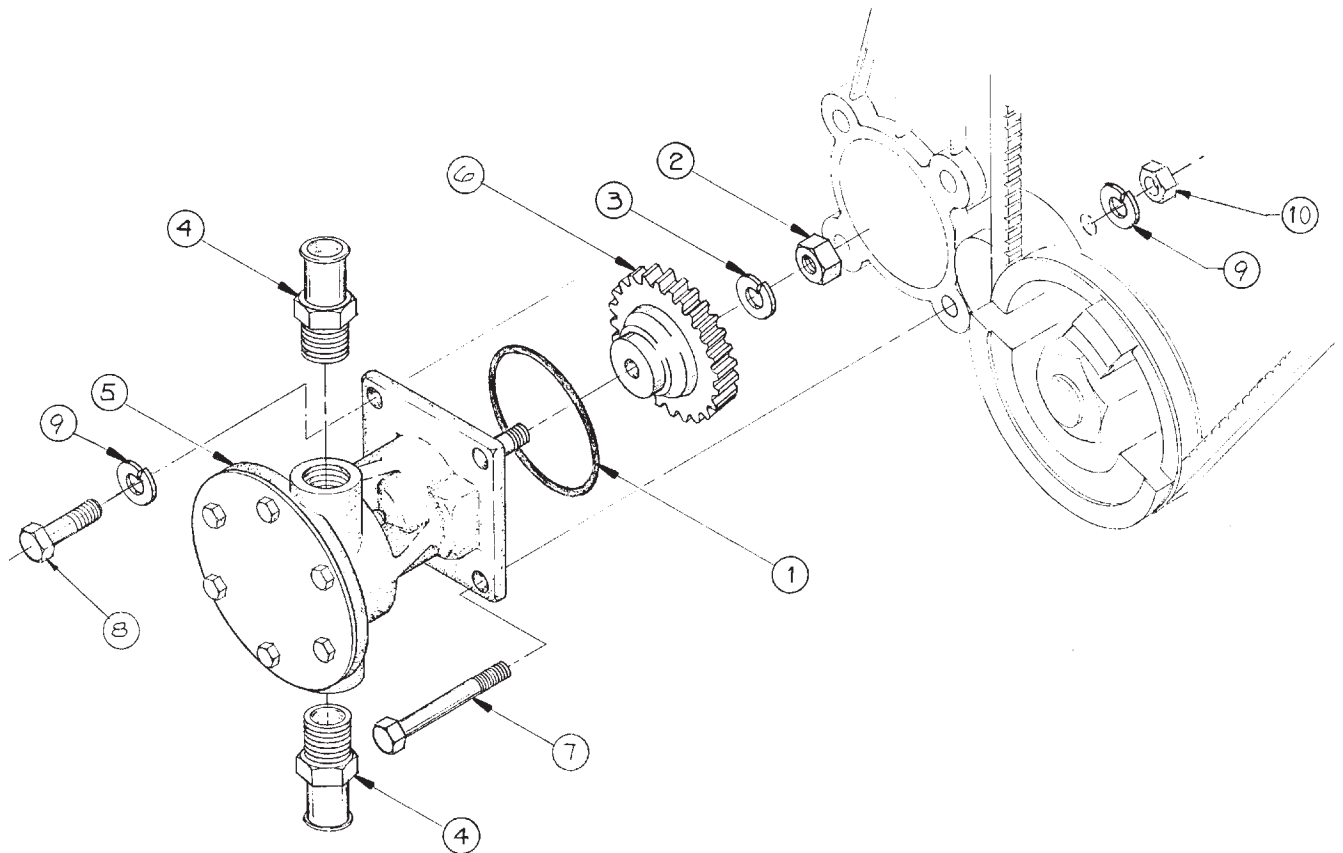
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017780	1	Coolant Pump Assembly (includes keys #2 - 5)	-
2	145146320	1	Backing Plate	-
3	145996680	1	Gasket	-
4	064500030	**	Plug	-
5	015300614	5	Screw	-
6	145996370	1	Gasket	-
7	011300635	4	Bolt	-
8	023100006	3	Nut	-
9	011300645	2	Bolt	-
10	145996360	1	Gasket	-
12	145206182	1	Thermostat 180°F/ 82°C	-
13	145216390	1	Thermostat Housing	-
14	064500030	1	Plug	-
15	012100645	2	Stud M6 x 1.0 x 45 mm	-
16	385720101	1	Temperature Switch (221°F/ 105°C)	-
17	145536050	1	Hose	-
18	19-00006	2	Hose Clamp #6	-
19	145226330	1	Thermostat Cover	-
20	145996051	1	Gasket	-
21	011500820	2	Bolt	-
22	145336620	1	Pulley	-
23	145306550	1	Cooling Fan	-
24	145386920	1	Spacer	-
25	011310635	4	Bolt, M6 x 1.0 x 35 mm	-
**As required				

Coolant Pump, Marine



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	145017800	1	Coolant Pump Assembly	-
2	145146320	1	Backing Plate	-
3	145996680	1	Gasket	-
4	064500030	1	Plug	-
5	015300614	3	Screw	-
6	145996670	1	Gasket	-
7	011310635	4	Bolt	-
8	023100006	1	Nut	-
9	145336620	1	Pulley	-
10	145386390	1	Spacer	-
11	011310620	4	Bolt	-

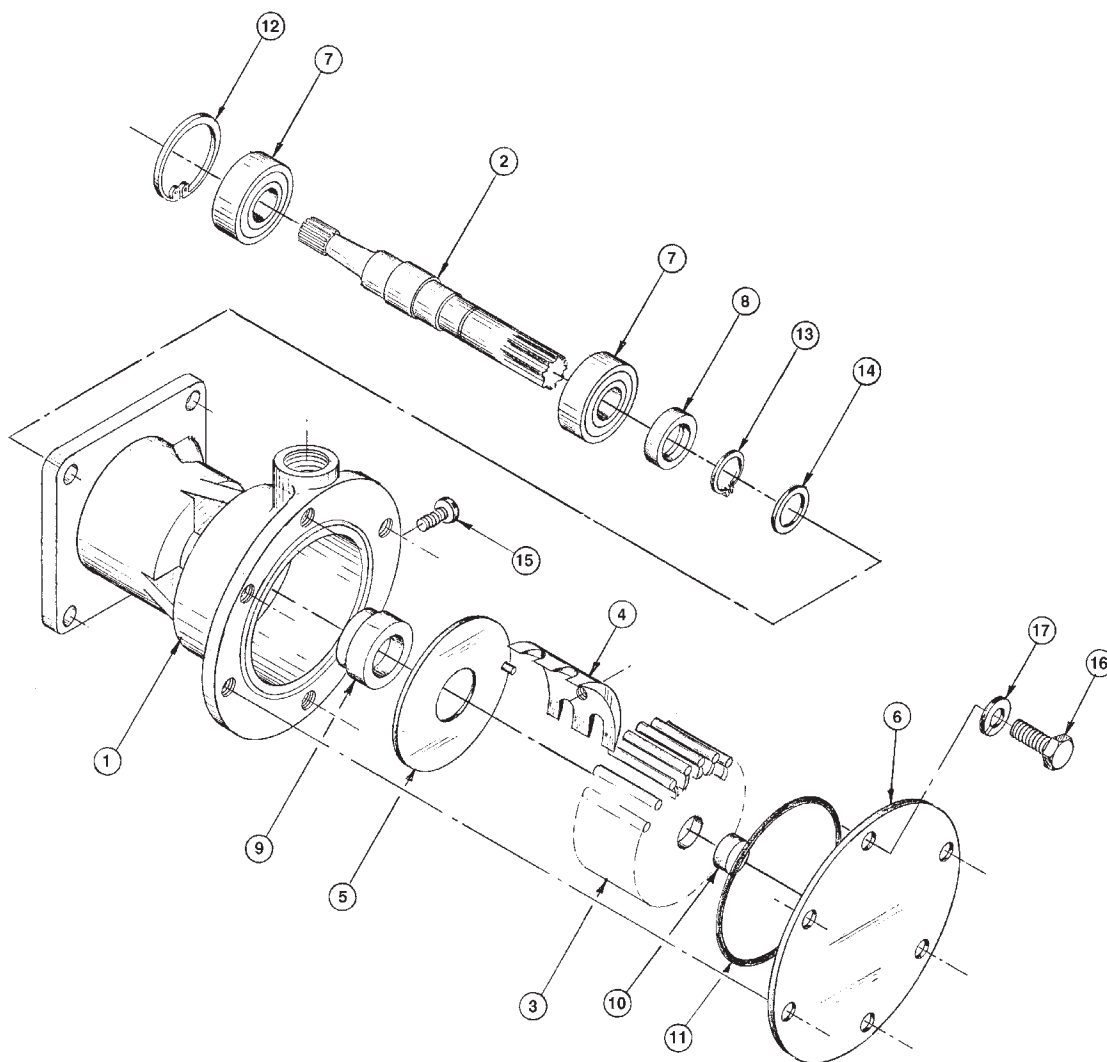
Raw Water Pump & Mounting – All Marine Applications



A-4779 / B-3842

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	16-13101	1	O-ring	-
2	14-00811	1	Nut M10 x 1.5	-
3	15-00802	1	Lock Washer M10	-
4	21-00129	2	Fitting 1/2 NPT x 3/4 HB	-
5	25-12057	1	Raw Water Pump (see parts detail)	-
6	340460141	1	Drive Gear	-
7	12-00718	3	Capscrew, Hex Head M8 x 1.25 x 65 mm	-
8	12-00717	1	Capscrew, Hex Head M8 x 1.25 x 60 mm	-
9	15-00702	4	Lock Washer, Helical M8	-
10	14-00711	3	Hex Nut M8 x 1.25	-

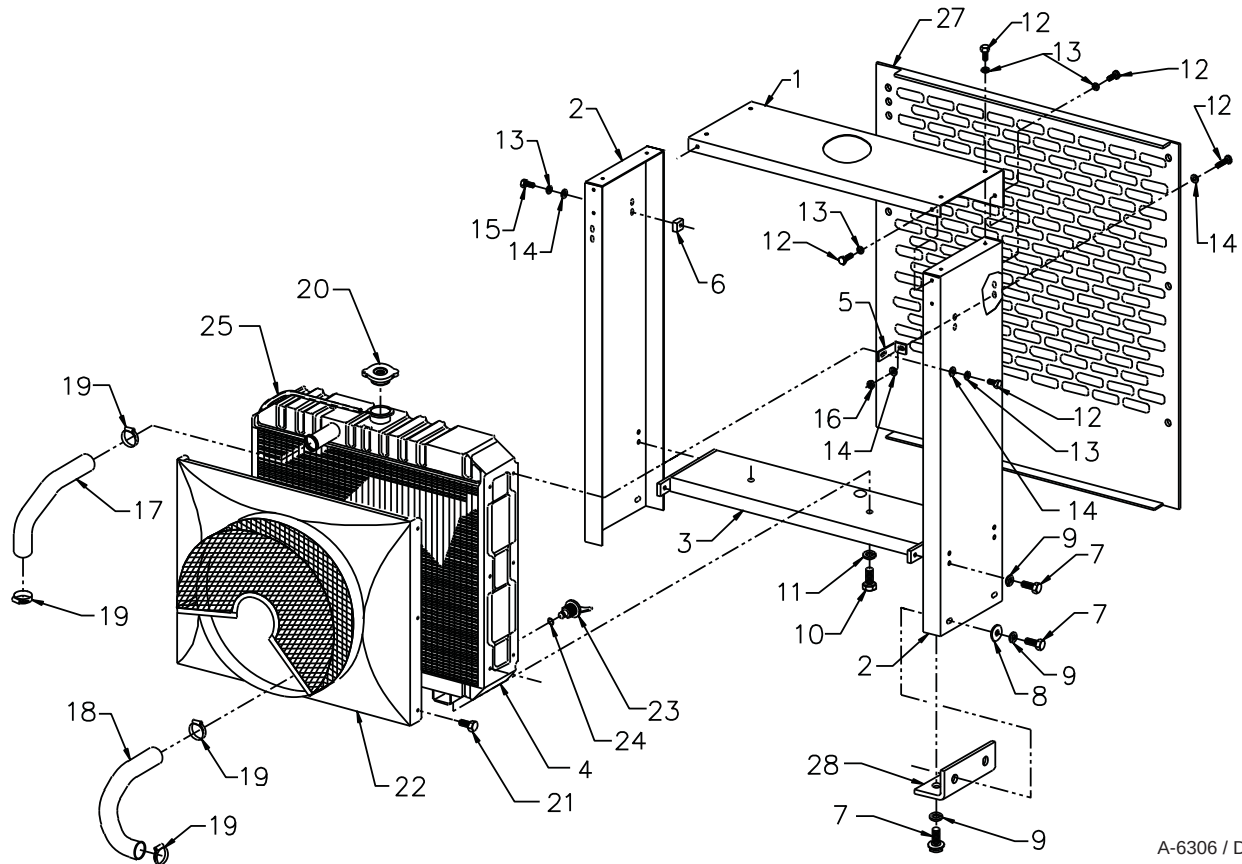
Raw Water Pump Assembly



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 - 9 & 11)	-
1	25-12058	1	Housing	-
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	6	Hex Head Screw #10-32 x 3/8"	-
17	25-12073	6	Lock Washer #10	-

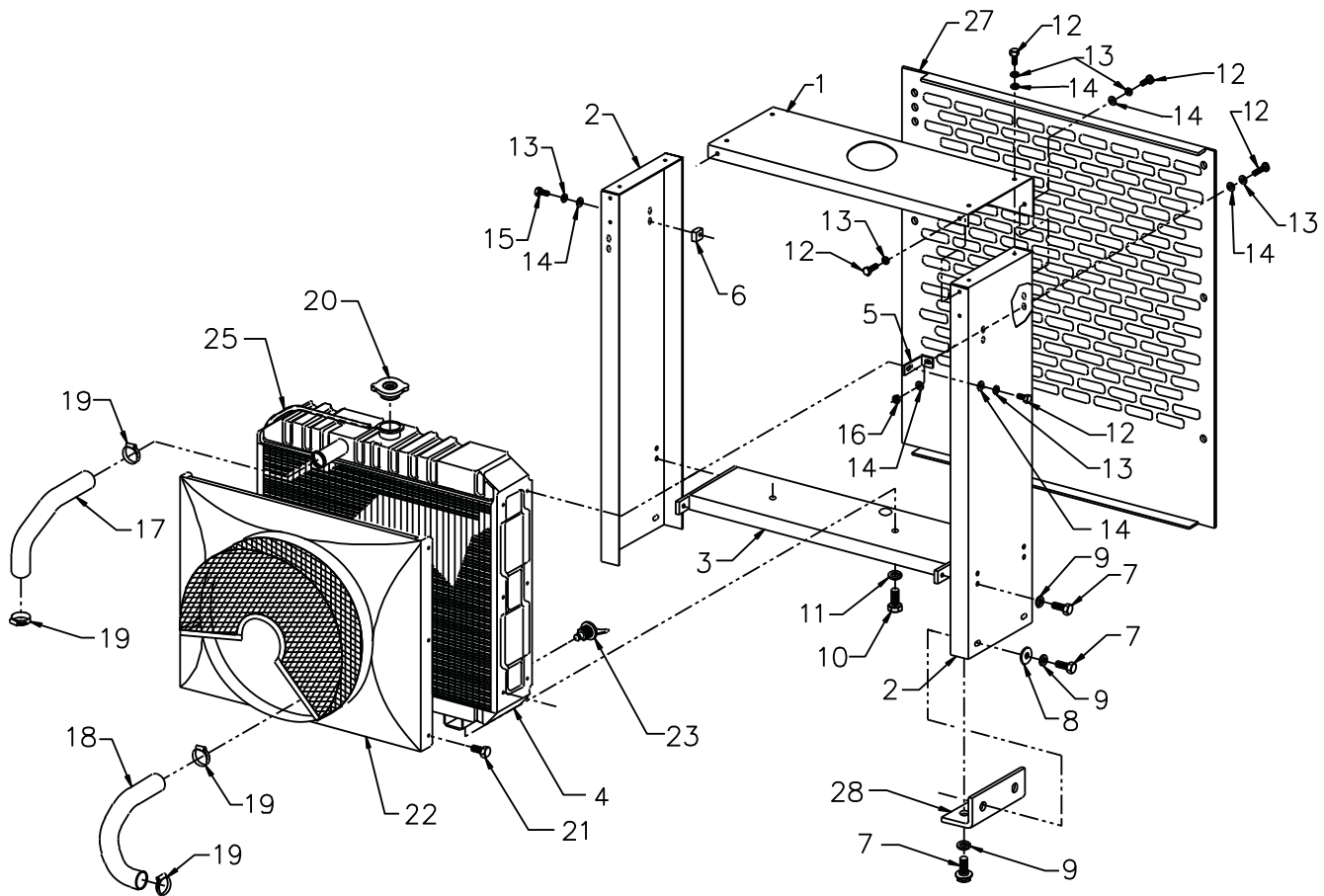
Radiator & Guard –Copper NL844 & 844L



A-6306 / D-2457A

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-18103	1	Top Panel	up to xxxx- 38045C
2	39-18102	2	Side Panel	-
3	39-18104	1	Radiator Support	-
4	145506320	1	Radiator Assembly, Copper (includes keys #20 - 26)	-
5	23-18101	1	Bracket, Upper Radiator Support	-
6	21-18101	2	Spacer, Radiator Support	-
7	12-00711	8	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
8	15-00701	8	Flat Washer M8	-
9	15-00702	8	Lock Washer M8	-
10	12-00805	2	Capscrew, Hex Head M10 x 1.5 x 20 mm	-
11	15-00802	2	Lock Washer M10	-
12	12-00097	9	Capscrew, Hex Head M6 x 1.0 x 12 mm	-
13	15-01132	10	Lockwasher M6	-
14	15-00008	3	Flat Washer M6	-
15	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
16	14-04803	1	Hex Nut M6 x 1.0	-
17	145536870	1	Hose, Radiator Inlet	-
18	145536640	1	Hose, Radiator Outlet	-
19	067100046	4	Hose Clamp	-
20	310110010	1	Radiator Cap	-
21	011150610	6	Bolt	-
22	145546470	1	Shroud with Fan Guard	-
23	406130010	1	Drain Cock	-
24	052100070	1	O-ring	-
25	145546510	1	Hose	-
26	00-70079	1	Decal "Northern Lights" (not shown)	-
27	31-18101	**	Air Duct Adapter (optional - not shown) **as required	-
	39-18106	**	Grille **as required	-
28	23-18402	2	Bracket, Radiator Side Panel Mounting	-

Radiator & Guard –Aluminum NL844 & 844L

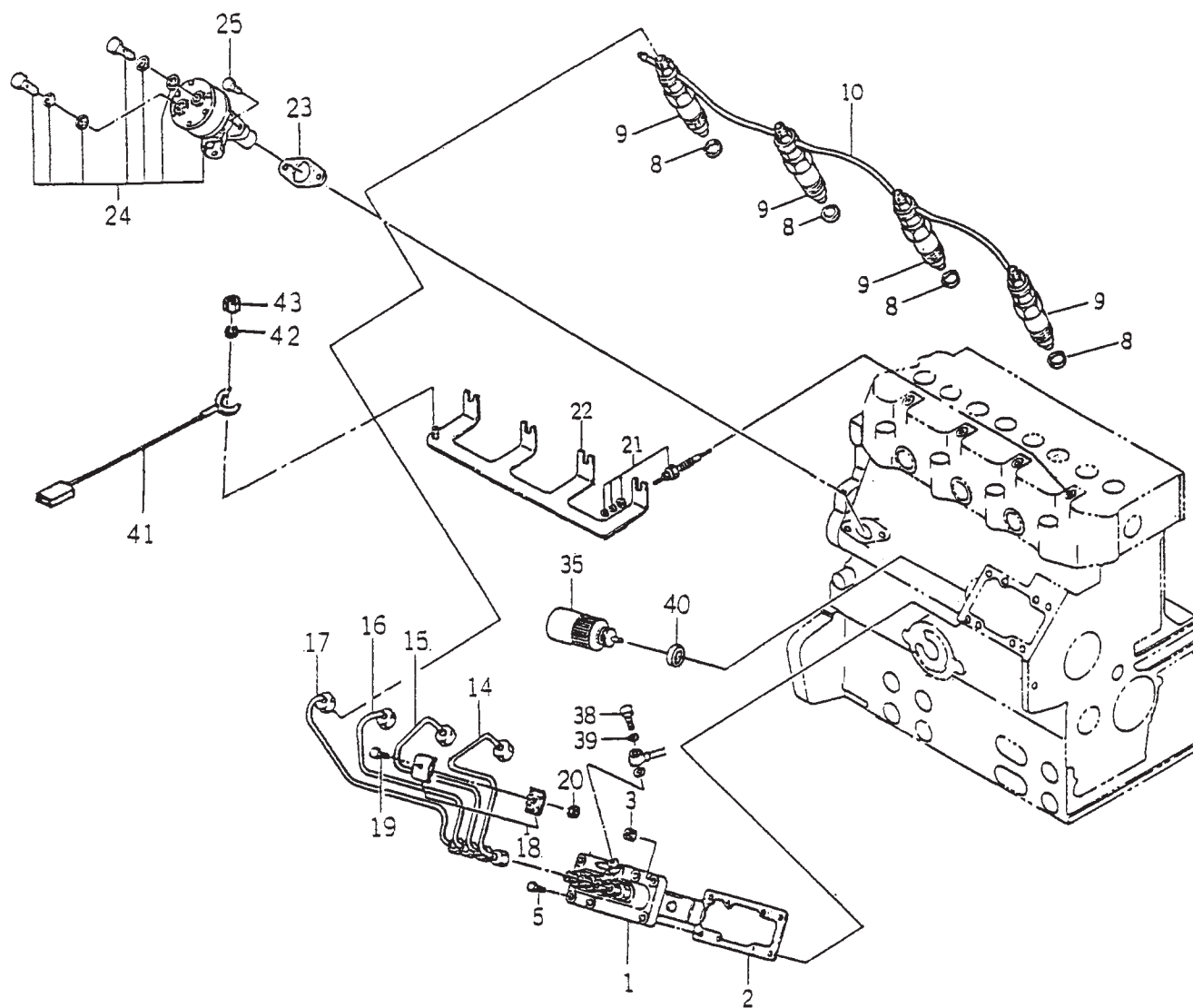


A-6306 / D-2457b

Radiator & Guard –Aluminum NL844 & 844L

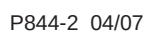
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-18103	1	Top Panel	from s/n xxxx-38046C
2	39-18102	2	Side Panel	-
3	39-18104	1	Radiator Support	-
4	145506630	1	Radiator Assembly, Aluminum (includes keys #20- 26)	-
5	23-18101	1	Bracket, Upper Radiator Support	-
6	21-18101	1	Spacer, Radiator Support	-
7	12-00711	12	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
8	15-00701	8	Flat Washer M8	-
9	15-00702	12	Lock Washer M8	-
10	12-00805	2	Capscrew, Hex Head M10 x 1.5 x 20 mm	-
11	15-00802	2	Lock Washer M10	-
12	12-00030	15	Capscrew, Hex Head M6 x 1.0 x 16 mm	-
13	15-01132	16	Lock Washer M6	-
14	15-00008	15	Flat Washer M6	-
15	12-01131	1	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
16	14-04803	1	Hex Nut M6 x 1.0	-
17	145537260	1	Hose, Radiator Inlet	-
18	145537270	1	Hose, Radiator Outlet	-
19	19-00020	4	Hose Clamp #20	-
20	310110200	1	Radiator Cap	-
21	011150610	6	Bolt	-
22	145546880	1	Shroud with Fan Guard	-
23	21-12016	1	Drain Cock	-
25	18-11906	1	Hose	-
26	00-70079	1	Label "Northern Lights" (not shown)	-
27	39-18106	**	Grille	-
	31-18101	**	Air Duct Adapter (optional - not shown)	-
28	23-18402	2	Bracket, Radiator Mounting	-
			** As required	

General Arrangement L844



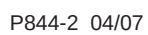
General Arrangement L844

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017800	1	Injection Pump Assembly (see parts detail page)	-
2	131426320	1	Shim	-
3	023100008	3	Nut	-
5	010800820	3	Bolt	-
8	131426200	4	Gasket	-
9	131406360	4	Fuel Injector (see parts detail page)	-
10	131606620	1	Return Line	-
14	131507601	1	Injection Line #1	-
15	131507611	1	Injection Line #2	-
16	131507621	1	Injection Line #3	-
17	131507631	1	Injection Line #4	-
18	199106020	6	Clamp	-
19	010101625	3	Bolt	-
20	023100006	3	Nut	-
21	185366060	4	Glow Plug 12 Volt*	-
	185366100	4	Glow Plug 24 Volt*	-
22	185376150	1	Connector	-
23	130996130	1	Gasket	-
24	130506140	1	Feed Pump Assembly (see parts detail page)	-
25	011140616	2	Bolt	-
35	185206083	1	Stop Solenoid - 12 Volt (Standard Ground)*	-
	185206191	1	Stop Solenoid - 12 Volt (Isolated Ground)*	-
	185206200	1	Stop Solenoid - 24 Volt (Isolated Ground)*	-
38	198487450	1	Screw	-
39	025100008	2	Seal Washer	-
40	025100016	1	Seal Washer	-
41	185606170	1	Wire Harness	-
42	027100004	1	Spring Washer	-
43	020100004	1	Nut	-
*Note: See Electrical System				



General Arrangement M - NL844

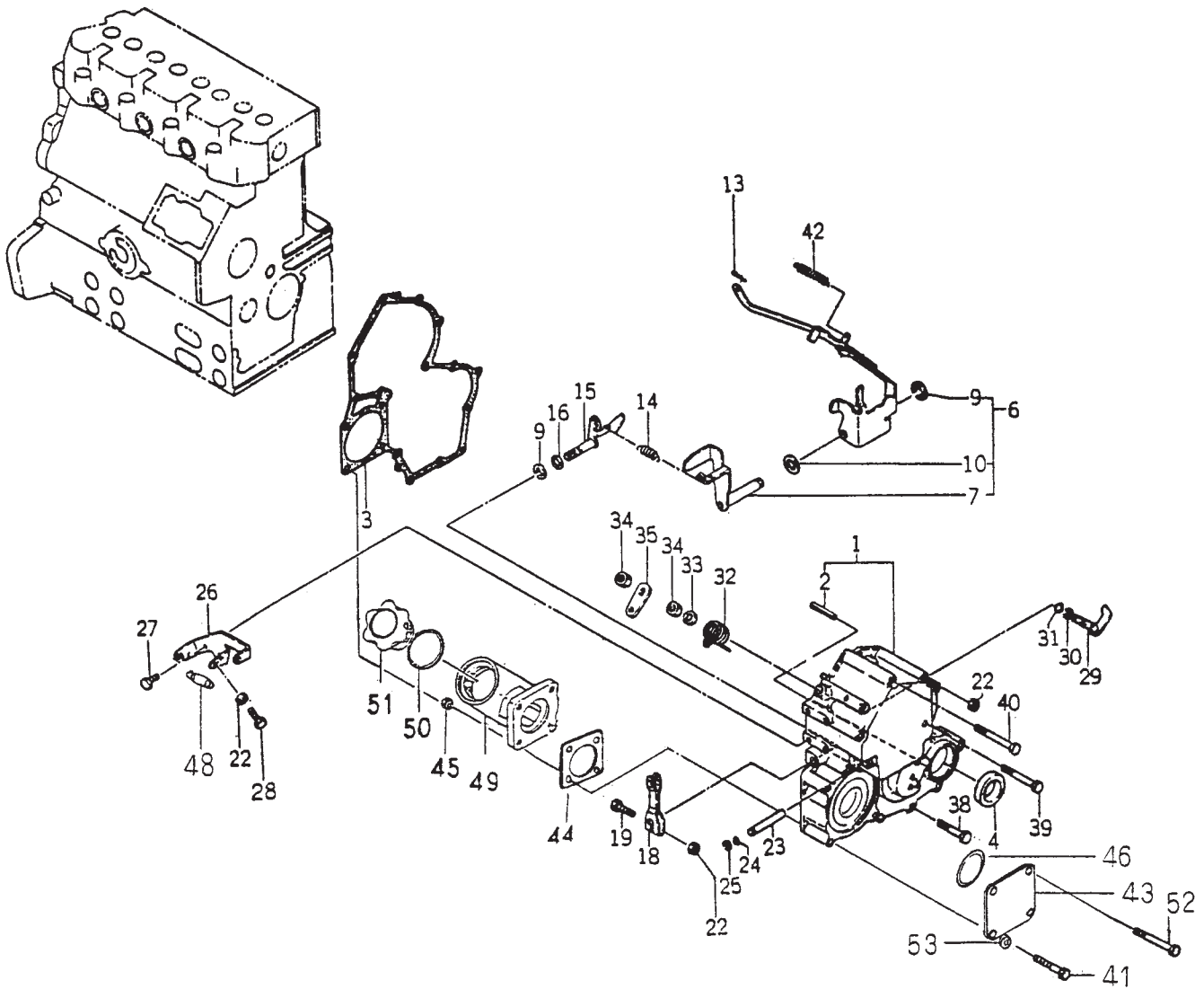
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017601	1	Injection Pump Assembly (see parts detail page)	-
2	131426320	1	Shim	-
3	023100008	3	Nut	-
5	010800820	3	Bolt	-
8	131426200	4	Gasket	-
9	131406360	4	Fuel Injector (see parts detail page)	-
10	131606620	1	Return Line	-
14	131507450	1	Injection Line #1	-
15	131507460	1	Injection Line #2	-
16	131507470	1	Injection Line #3	-
17	131507480	1	Injection Line #4	-
18	199106020	6	Clamp	-
19	010101625	3	Bolt	-
20	023100006	3	Nut	-
21	185366060	4	Glow Plug 12 Volt*	-
	185366100	4	Glow Plug 24 Volt*	-
22	185376150	1	Connector	-
23	130996130	1	Gasket	-
24	130506140	1	Feed Pump Assembly (see parts detail page)	-
25	011140616	2	Bolt	-
35	185206083	1	Stop Solenoid - 12 Volt (Standard Ground)*	-
	185206191	1	Stop Solenoid - 12 Volt (Isolated Ground)*	-
	185206200	1	Stop Solenoid - 24 Volt (Isolated Ground)*	-
38	198487450	1	Screw	-
39	025100008	2	Seal Washer	-
40	025100016	1	Seal Washer	-
41	185606170	1	Wire Harness	-
42	027100004	1	Spring Washer	-
43	020100004	1	Nut	-
*Note: See Electrical System				



General Arrangement M - NL844L & M20CR

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	131017602	1	Injection Pump Assembly (see parts detail page- formerly #131017601)	-
2	131426320	1	Shim	-
3	023100008	3	Nut	-
5	010800820	3	Bolt	-
8	131426200	4	Gasket	-
9	131406360	4	Fuel Injector (see parts detail page)	-
10	131606560	1	Return Line	-
14	131507520	1	Injection Line #1	-
15	131507530	1	Injection Line #2	-
16	131507540	1	Injection Line #3	-
17	131507550	1	Injection Line #4	-
18	199106020	6	Clamp	-
19	010110625	3	Bolt	-
20	023100006	3	Nut	-
21	185366060	4	Glow Plug 12 Volt*	-
	185366100	4	Glow Plug 24 Volt*	-
22	185376150	1	Connector	-
23	130996130	1	Gasket	-
24	130506140	1	Feed Pump Assembly (see parts detail page)	-
25	011140616	2	Bolt	-
35	185206083	1	Stop Solenoid - 12 Volt (Standard Ground)*	-
	185206191	1	Stop Solenoid - 12 Volt (Isolated Ground)*	-
	185206202	1	Stop Solenoid - 24 Volt (Isolated Ground)*	-
38	198487450	1	Screw	-
39	025100008	2	Seal Washer	-
40	025100016	1	Seal Washer	-
41	185606170	1	Wire Harness	-
42	027100004	1	Spring Washer	-
43	020100004	1	Nut	-
*Note: See Electrical System				

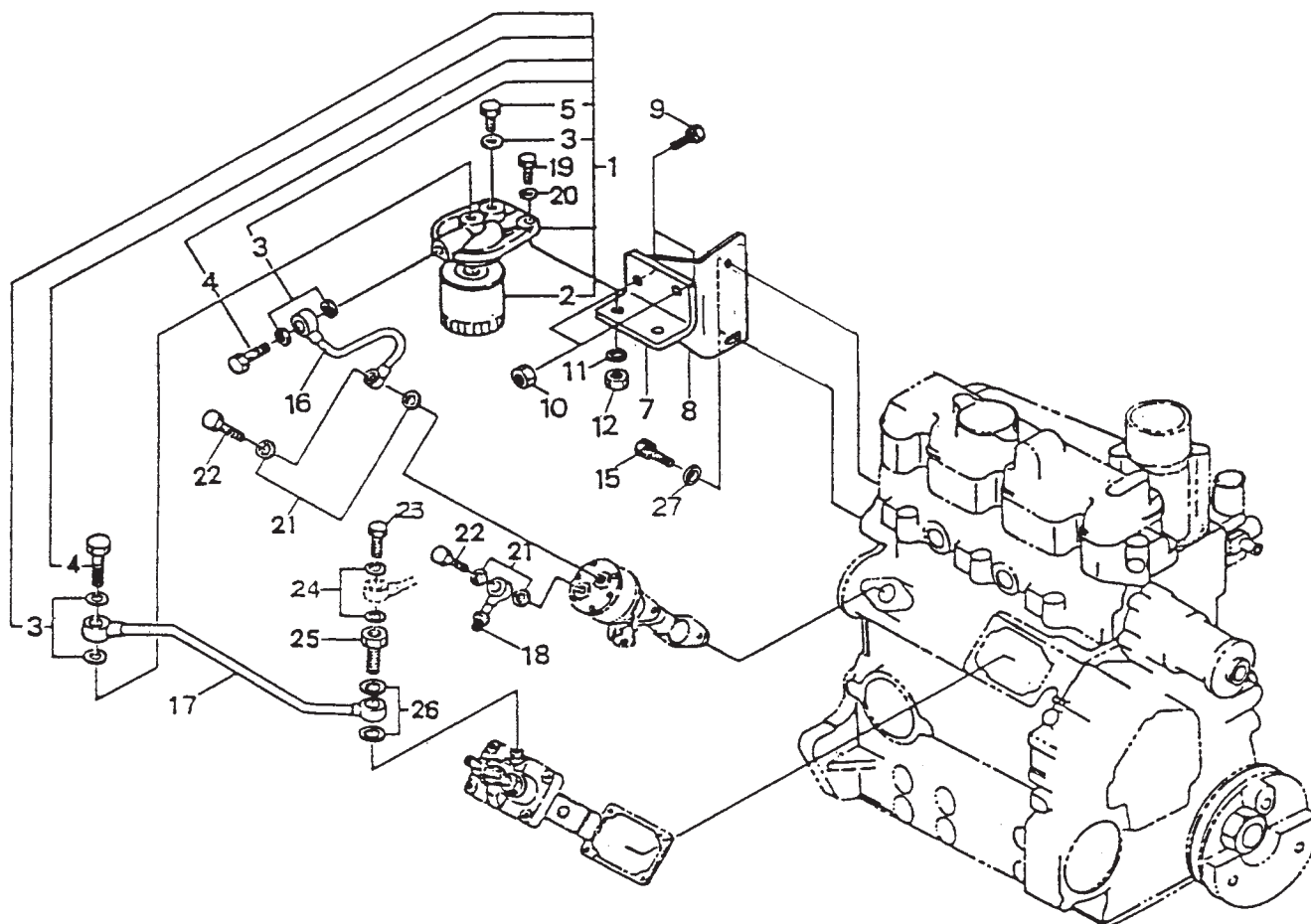
Governor & Timing Gear Case



Governor & Timing Gear Case

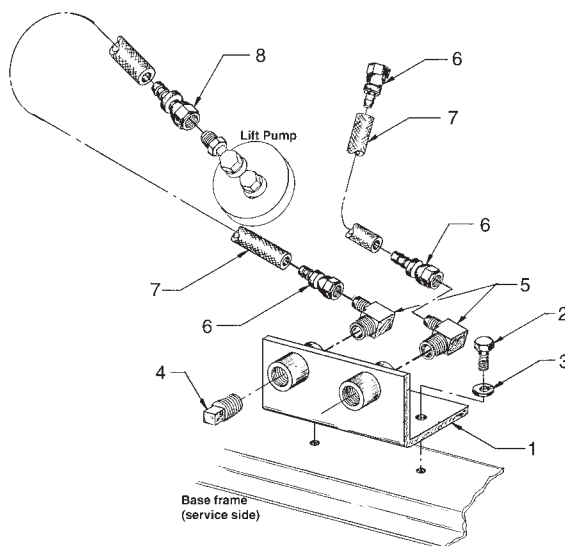
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	165106400	1	Timing Gear Case Complete (includes key #2)	-
2	030300414	1	Spring Pin	-
3	165996550	1	Gasket	-
4	198636160	1	Oil Seal	-
6	125046170	1	Governor Lever Assembly (includes keys #7 - #10)	-
7	125406080	1	Tension Lever	-
9	036800008	2	Snap Ring	-
10	026200010	1	Washer	-
13	031100004	1	Snap Pin	-
14	198417380	1	Governor Spring - L844	-
	198217040	1	Governor Spring - M- NL844 & 844L	-
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	-
24	052100030	1	O-ring	-
25	036800005	1	Snap Ring	-
26	125976120	1	Bracket	-
27	011300616	2	Bolt	-
28	012810640	1	Bolt	-
29	125156180	1	Arm	-
30	036800006	1	Snap Ring	-
31	052100050	1	O-ring	-
32	198216760	1	Spring	-
33	026200008	1	Washer	-
34	020700008	2	Nut	-
35	125176080	1	Stop Lever	-
38	011300645	7	Bolt	-
39	011300660	3	Bolt	-
40	011300680	2	Bolt	-
41	010310865	3	Bolt	-
42	198216731	1	Start Spring	-
43	165206320	1	Cover	-
44	340990011	1	Gasket	-
45	023100008	4	Hex Nut	-
46	052300700	1	O-ring	-
48	398210070	1	Spring	-
49	110766200	1	Oil Fill Elbow	-
50	052300400	1	O-ring	-
51	198436010	1	Cap	-
52	011510860	1	Bolt	-
53	027100008	4	Lock Washer	-

Fuel Filter & Piping



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	130306190	1	Fuel Filter Assembly (includes keys #2 - 5)	-
2	24-52020	1	Fuel Filter Cartridge	-
3	130326051	5	Gasket	-
4	130436011	2	Banjo Bolt	-
5	130396030	1	Plug	-
7	130976470	1	Bracket	-
8	130976460	1	Bracket	-
9	010310820	2	Bolt	-
10	023100008	2	Nut	-
11	027100010	2	Spring Washer	-
12	020900010	2	Nut	-
15	011510816	2	Bolt	-
16	130556760	1	Pipe	-
17	130556750	1	Pipe	-
18	130556681	1	Pipe	-
19	010311035	2	Bolt	-
20	026200010	2	Washer	-
21	130516069	4	Gasket	-
22	130516092	2	Banjo Bolt	-
23	198487450	1	Banjo Bolt	-
24	025100008	2	Gasket	-
25	131246170	1	Banjo Bolt	-
26	131296255	2	Gasket	-
27	026100008	2	Washer	-

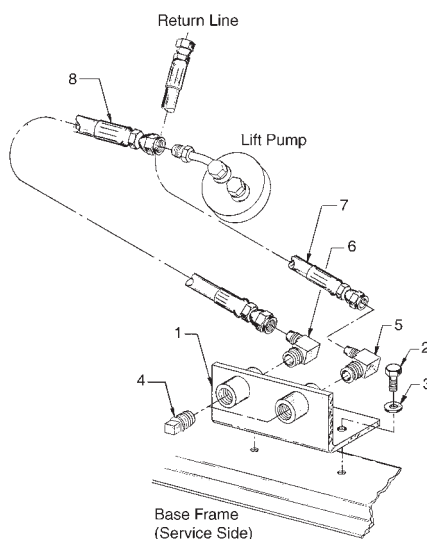
Fuel Line Connection



A-6426 / C-2920

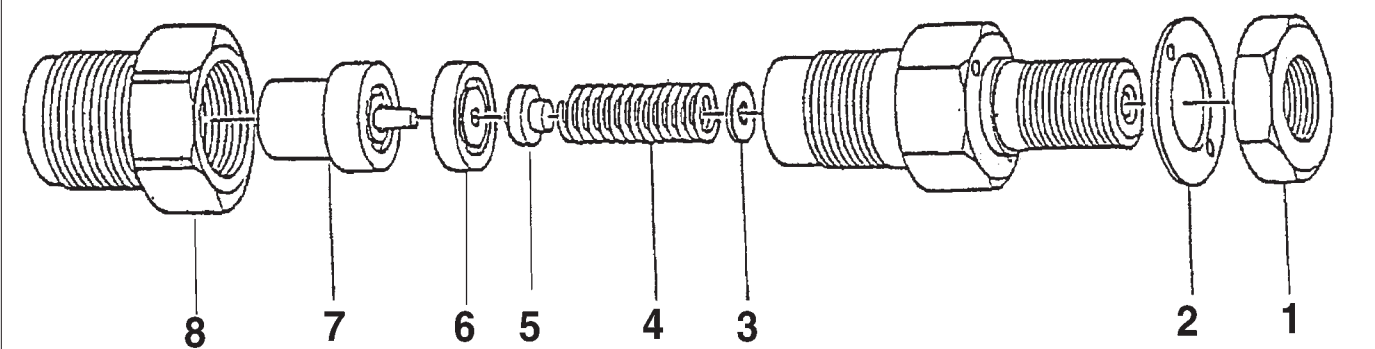
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51099	1	Manifold	-
2	12-00031	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
3	15-01132	2	Lock Washer M6	-
4	21-00046	2	Plug, 1/4 NPT (for shipping)	-
5	21-71044	2	Male Elbow 90°, brass 1/4 NPT x 1/4-45T	-
6	21-71045	3	Female Swivel, brass 1/4 HB x 1/4-45T	-
7	18-52007	2	Hose 1/4" ID x 26"	-
8	21-71048	1	Female Swivel, brass 1/4 HB x 5/16-45T	-

U.S. Coast Guard Approved Fuel Lines

A-6684
A-6495 / C-2936

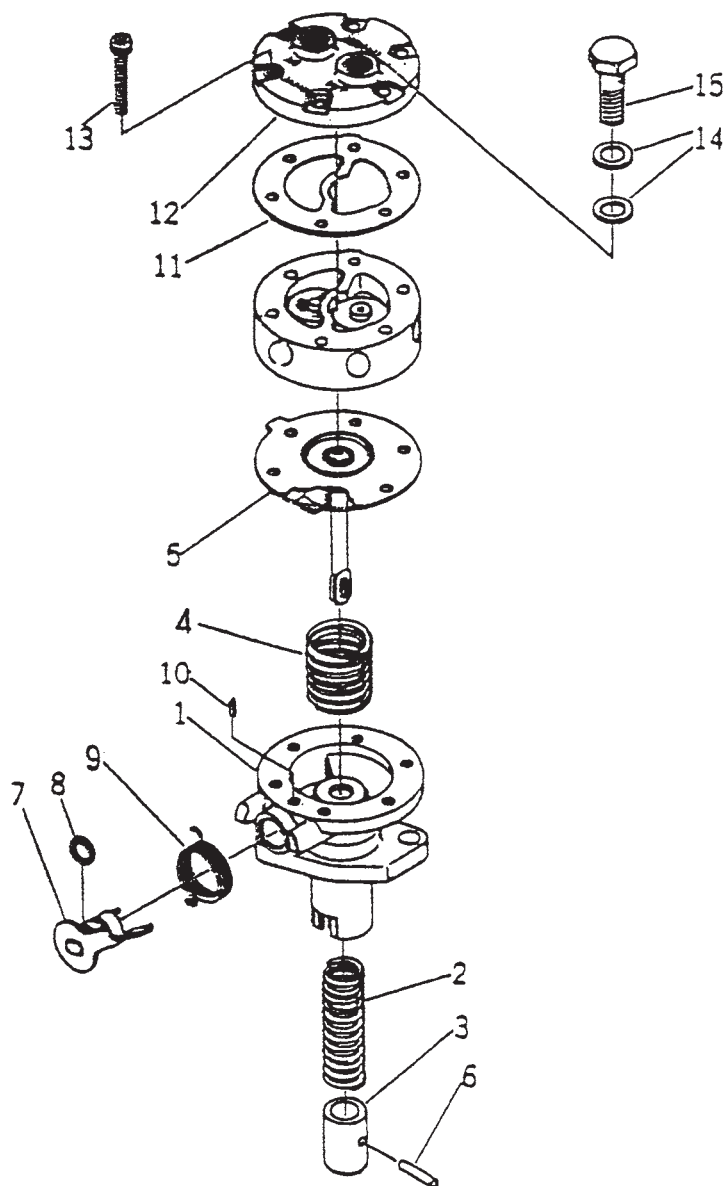
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51099	1	Manifold	-
2	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
3	15-01132	2	Lock Washer M6	-
4	21-31624	2	Plug, Hex Head Brass 1/4 NPT (for shipping)	-
5	21-71049	1	Male Elbow 90°, steel 1/4 NPT x 1/4-37T	-
6	21-74411	1	Male Elbow 90°, steel 1/4 NPT x 5/16-37T	-
7	18-52113	1	Hose Assembly 1/4" ID x 26-1/2"	-
8	18-58401	1	Hose Assembly 1/4" ID x 26" (844L)	-
	18-58101	1	Hose Assembly 1/4" ID x 17" (844)	-

Fuel Injector



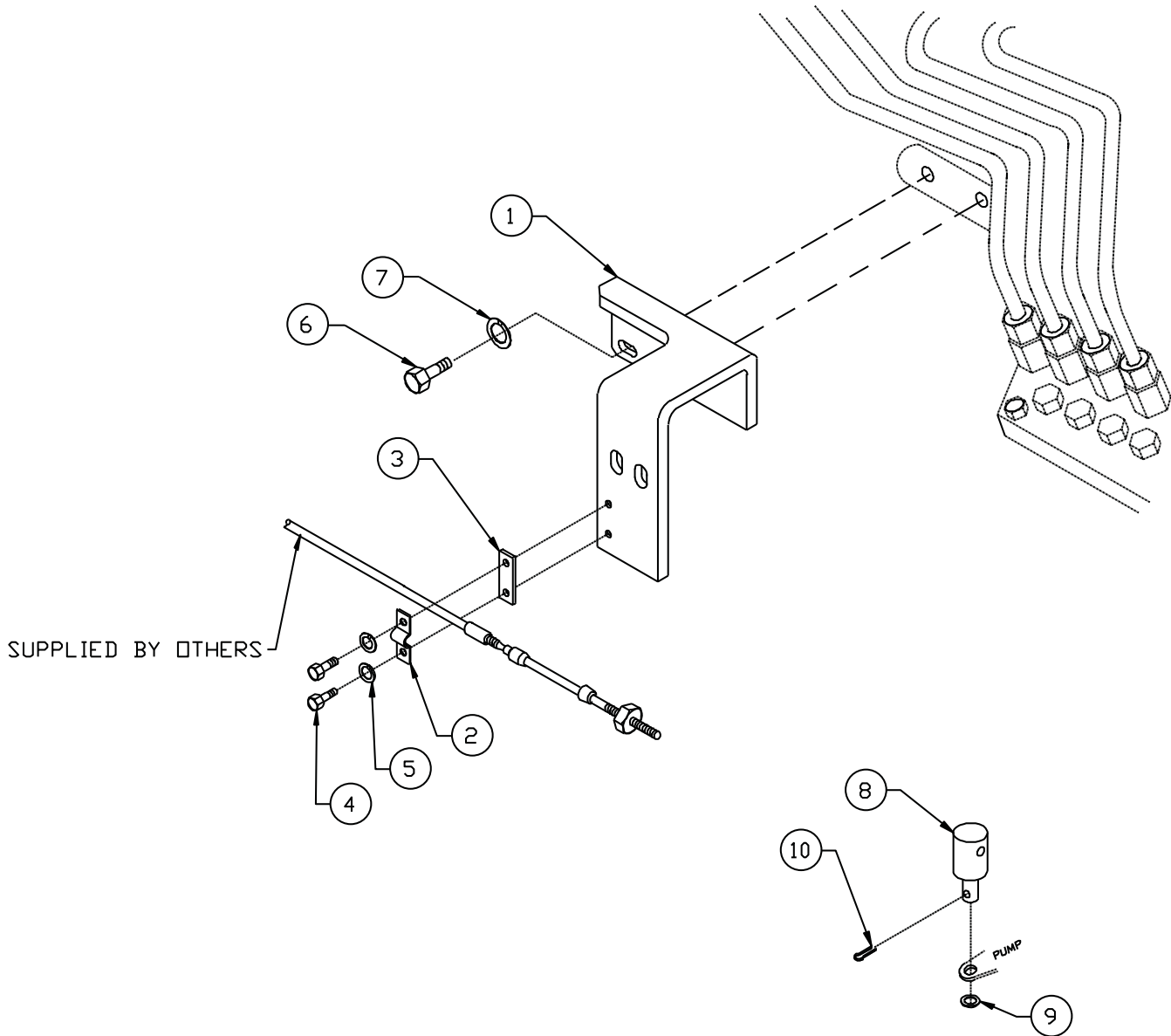
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	131406360	1	Injector Assembly (includes keys #1 - 8)	-
1	131446006	1	Nut	-
2	131426230	1	Gasket	-
3	131437360	3	Shim	-
4	131446074	1	Spring	-
5	131446075	1	Spring seat	-
6	131446976	1	Spacer	-
7	131416170	1	Nozzle	-
8	131446077	1	Nut	-

Fuel Feed Pump



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	130516101	1	Gasket	-
12	130516090	1	Cap	-
13	130516091	6	Screw	-
14	130516069	4	Gasket	-
15	130516092	2	Banjo Bolt	-

Throttle Assembly

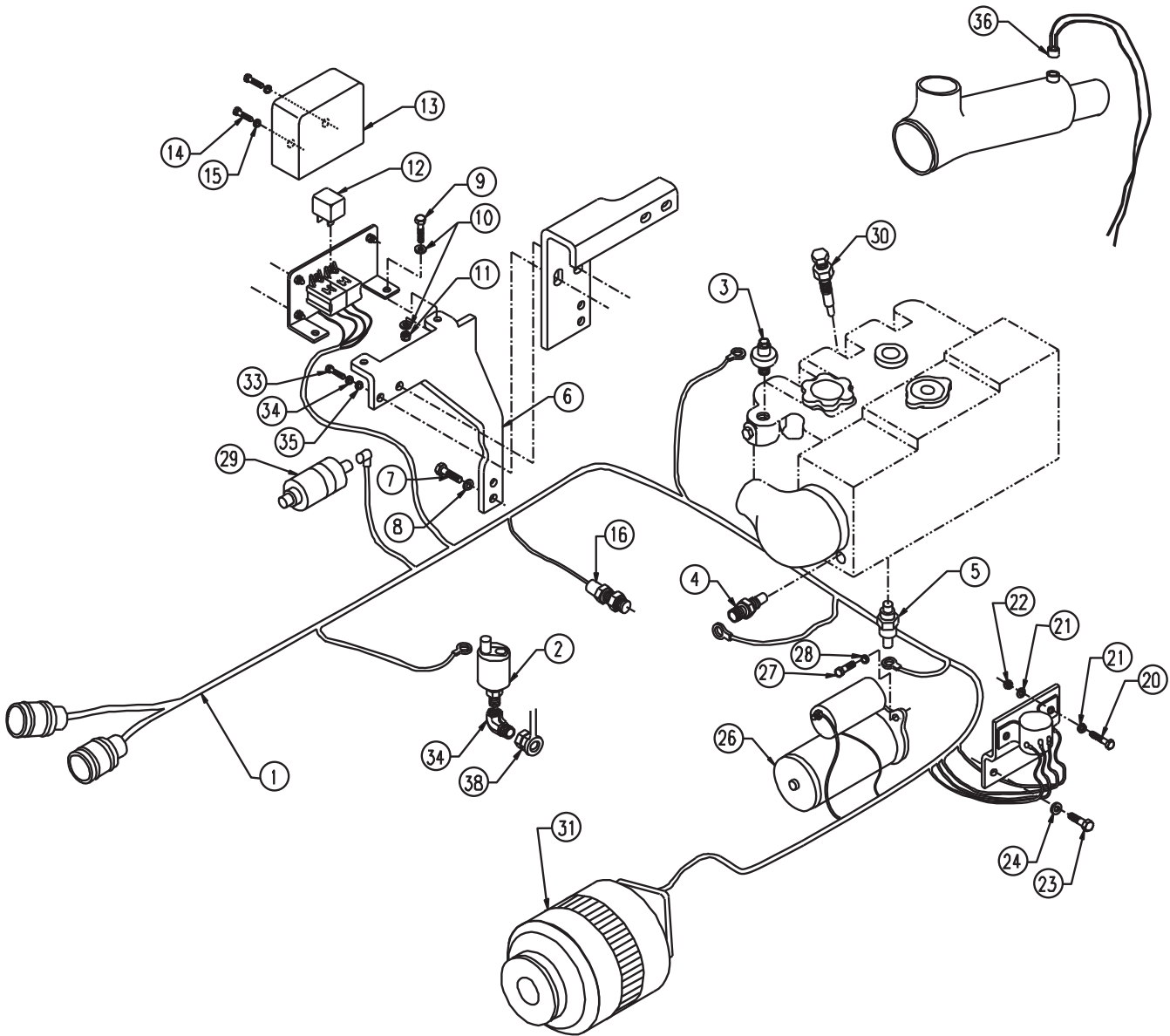


A-10414/ B-8411

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	23-98401	1	Throttle Bracket	-
2	23-91001	1	Cable Clamp	-
3	23-91002	1	Clamp Shim	-
4	12-54800	2	Capscrew, Hex Head M5 x 0.8 x 14 mm	-
5	15-04400	2	Lock Washer, Helical M5	-
6	12-00030	1	Capscrew, Hex Head M6 x 1.0 x 16 mm	-
7	15-01132	1	Lock Washer, Helical M6	-
8	23-91003	1	Throttle Pivot	-
9	15-00101	1	Flat Washer 1/4" USS S/S	-
10	00-54801	1	Cotter Pin, Brass 3/32 x 1/2	-

Engine Electrical 12 Volt Standard Ground Propulsion Units

Propulsion Units



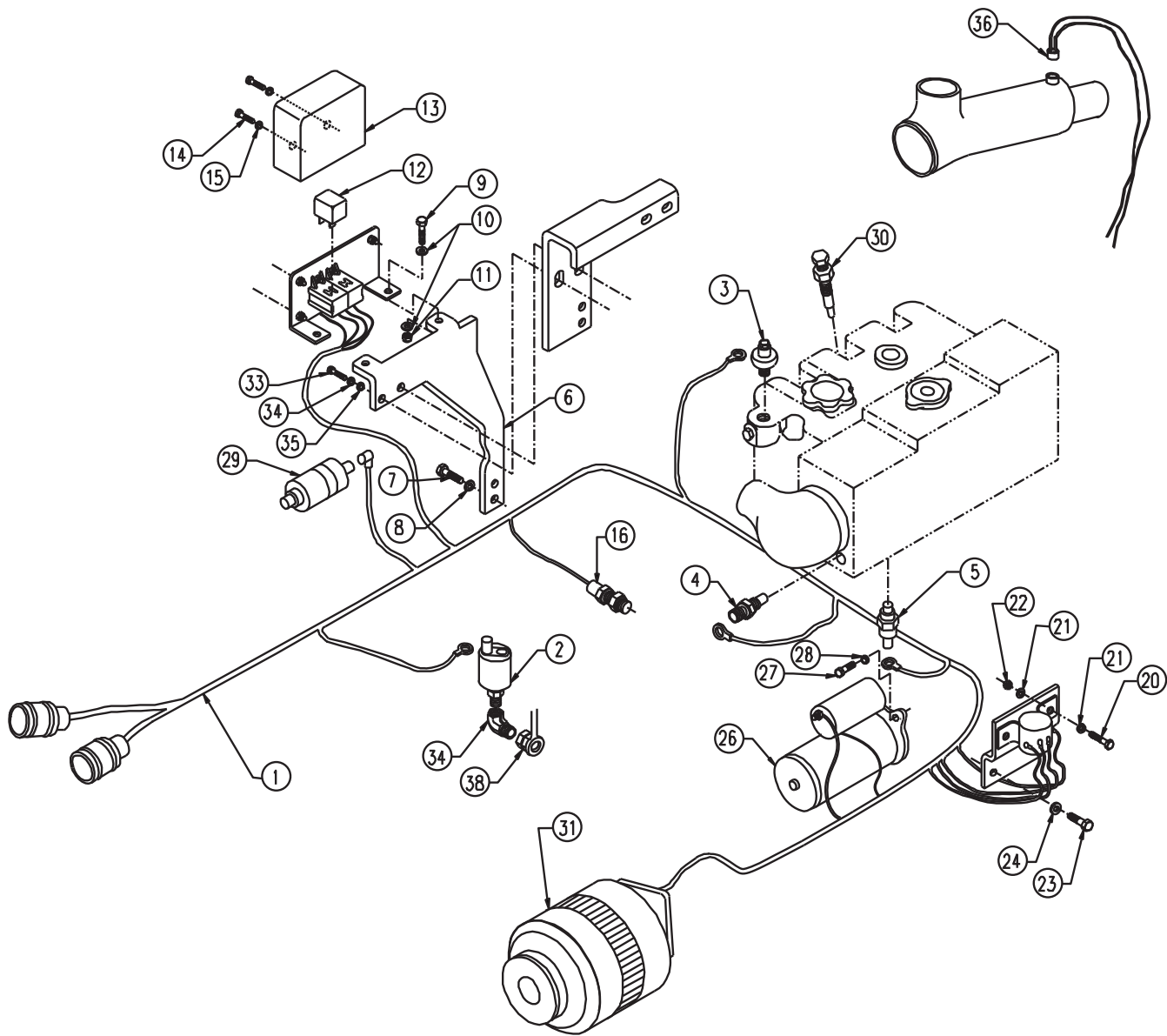
Engine Electrical 12 Volt Standard Ground

Propulsion Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-48404	1	Engine Wire Harness	-
2	22-41016	1	Oil Pressure Sender 0-80 PSI, Standard Ground	-
3	185246011	1	Oil Pressure Switch, Standard Ground	-
4	22-42055	1	Temperature Sender 250°F, Standard Ground	-
5	385720110	1	Temperature Switch 95°C	-
6	23-08401	1	Bracket, Circuit Breaker and Relays	-
7	12-59100	2	Capscrew, M14 x 1.5 x 30 S/S	-
8	15-09401	2	Flat Washer, M14 S/S	-
9	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
10	15-00008	4	Flat Washer M6	-
11	14-01131	2	Hex Nut M6 x 1.0	-
12	22-42047	2	Relay 12 Volt 50 Amp	-
13	00-44801	1	Cover, Circuit Breaker and Relays	-
14	12-00094	2	Machine Screw, BH Slotted #10- 32 x 3/8" S/S	-
15	15-70002	2	Flat Washer #10 S/S	-
16	22-40450	1	Magnetic Pick-up, M18 x 1.5 x 58 mm	-
17	22-41002	1	20' Wire Harness Extension (not shown)	-
18	22-41080	1	Solenoid 12 VDC 65 Amp	-
19	23-48605	1	Bracket, Relay Mounting	-
20	12-00030	2	Capscrew, Hex Head M6 x 1.0 x 16 mm	-
21	15-00008	4	Flat Washer M6	-
22	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
23	12-59100	2	Capscrew, Hex Head M14 x 1.5 x 30 mm S/S	-
24	15-09402	2	Lock Washer, M14 S/S	-
25	22-98100	1	Control Panel 12 Volt (not shown, see parts detail)	-
26	185086551	1	Starter 12 Volt (see parts detail)	-
27	12-00832	2	Capscrew, Hex Head M10 x 1.5 x 30 mm	-
28	15-00804	2	Wave Washer M10	-
29	185206083	1	Stop Solenoid 12 Volt	-
30	185366060	4	Glow Plug 12 Volt	-
31	185046320	1	Alternator 12V/ 40 Amp	-
32	21-04801	1	Street Elbow, 90° 1/8 NPT	-
33	12-01102	2	Capscrew, M6 x 1.0 x 16 mm S/S	-
34	34-00610	2	Lock Washer	-
35	15-01134	2	Flat Washer M6	-
36	22-42070	1	Exhaust Temperature Switch 205°F	-
37	22-40482	**	Harness Assembly, High Exhaust Temperature (not shown)	-
38	198487590	1	Banjo Bolt	-
**As required				

Engine Electrical 24 Volt Standard Ground

Propulsion Units



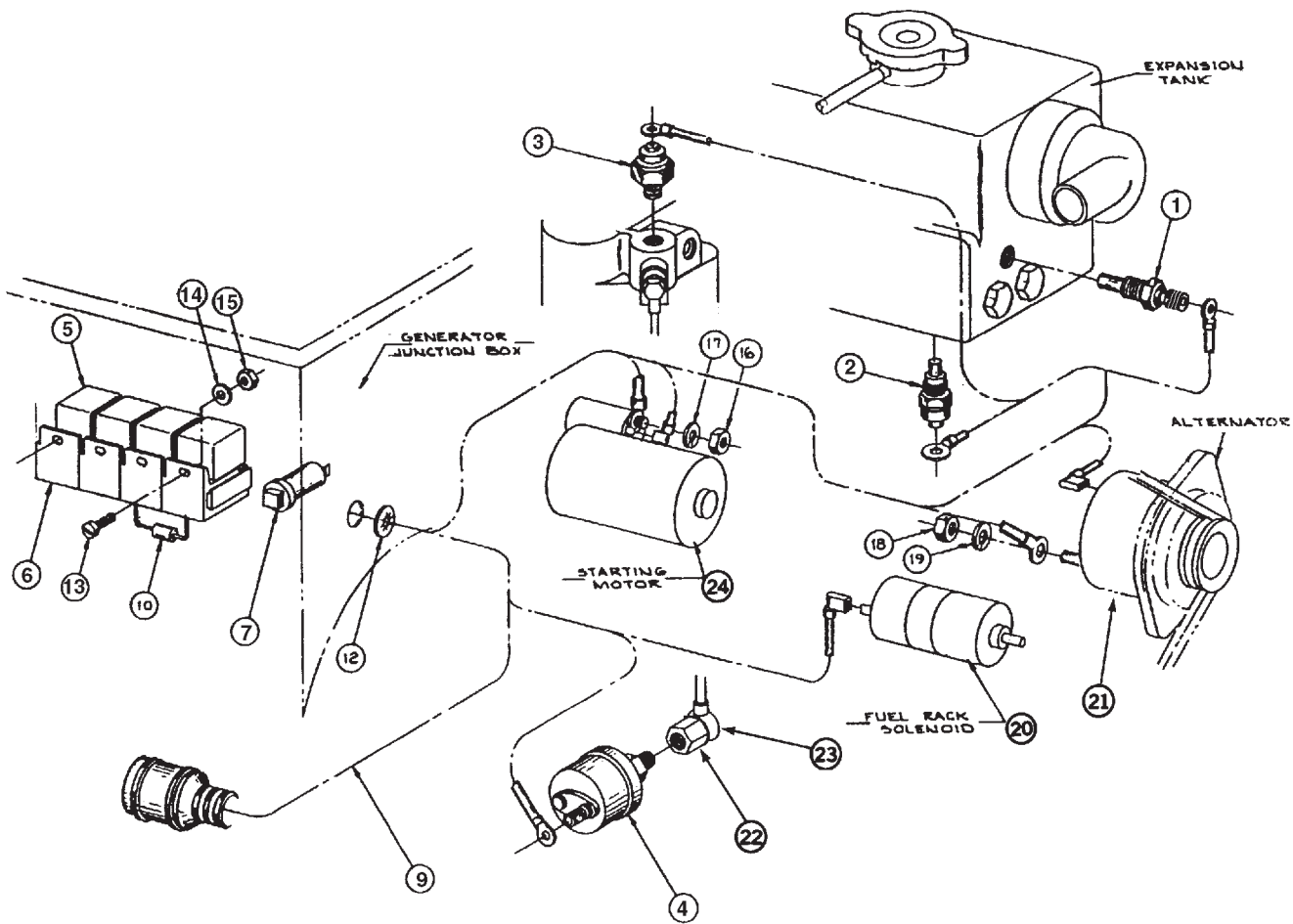
Engine Electrical 24 Volt Standard Ground

Propulsion Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-48404	1	Engine Wire Harness	-
2	22-41016	1	Oil Pressure Sender 0-80 PSI, Standard Ground	-
3	185246011	1	Oil Pressure Switch, Standard Ground	-
4	22-42055	1	Temperature Sender 250°F, Standard Ground	-
5	385720110	1	Temperature Switch 95°C	-
6	23-08401	1	Bracket, Circuit Breaker and Relays	-
7	12-59100	2	Capscrew, M14 x 1.5 x 30 S/S	-
8	15-09401	2	Flat Washer, M14 S/S	-
9	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
10	15-00008	4	Flat Washer M6	-
11	14-01131	2	Hex Nut M6 x 1.0	-
12	22-40085	2	Relay 24 Volt 20 Amp	-
13	00-44801	1	Cover, Circuit Breaker and Relays	-
14	12-00094	2	Machine Screw, BH Slotted #10- 32 x 3/8" S/S	-
15	15-70002	2	Flat Washer #10 S/S	-
16	22-40450	1	Magnetic Pick-up, M18 x 1.5 x 58 mm	-
17	22-41002	1	20' Wire Harness Extension (not shown)	-
18	22-41079	1	Solenoid 24 VDC 65 Amp	-
19	23-48605	1	Bracket, Relay Mounting	-
20	12-00030	2	Capscrew, Hex Head M6 x 1.0 x 16 mm	-
21	15-00008	4	Flat Washer M6	-
22	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
23	12-59100	2	Capscrew, Hex Head M14 x 1.5 x 30 mm S/S	-
24	15-09402	2	Lock Washer, Helical M14 S/S	-
25	22-98105	1	Main Instrument Panel 24 Volt (not shown - see parts detail)	-
26	22-42074	1	Starter 24 Volt (see parts detail)	-
27	12-00832	2	Capscrew, Hex Head M10 x 1.5 x 30 mm	-
28	15-00804	2	Wave Washer M10	-
29	185206200	1	Stop Solenoid 24 Volt	-
30	185366100	4	Glow Plug 24 Volt	-
31	22-72020	1	Alternator 24V/ 40 Amp	-
32	21-04801	1	Street Elbow, 90° 1/8 NPT	-
33	12-01102	2	Capscrew, M6 x 1.0 x 16 mm S/S	-
34	15-00610	2	Lock Washer	-
35	15-01134	2	Flat Washer M6	-
36	22-42070	1	Exhaust Temperature Switch, 205°F	-
37	22-40482	**	Harness Assembly, High Exhaust Temperature (not shown)	-
38	198487590	1	Banjo Bolt	-
			**As required	

Engine Electrical 12 Volt Standard Ground

Generator Units



Engine Electrical 12 Volt Standard Ground

Generator Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-42055	1	Temperature Sender 250°F	-
	22-40352	1	Dual Station Temperature Sender 250°F	-
2	38720110	1	Temperature Switch 95°C	-
3	185246011	1	Oil Pressure Switch	-
4	22-41016	1	Oil Pressure Sender	-
	22-71016	1	Dual Station 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	22-92120	1	Control Panel S-1B (not shown, see detail)	-
9	22-48101	1	Engine Wire Harness	-
10	22-41060	2	Diode, 6 Amp 50 Volt PIV	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-41015	1	Universal Bushing, Plastic	-
13	12-00094	2	Machine Screw #10- 32 x 3/8" S/S	-
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	185046320	1	Alternator 12 Volt (see mounting detail)	-
22	198487590	1	Banjo Bolt - Used with #25 only	-
23	140606701	1	Oil Line	-
24	185086551	1	Starter 12 Volt (see mounting detail)	-
25	21-04801	**	Elbow 90° Steel 1/8 NPT x 1/8 NPT (not shown)	-
**As required				

5 - 6

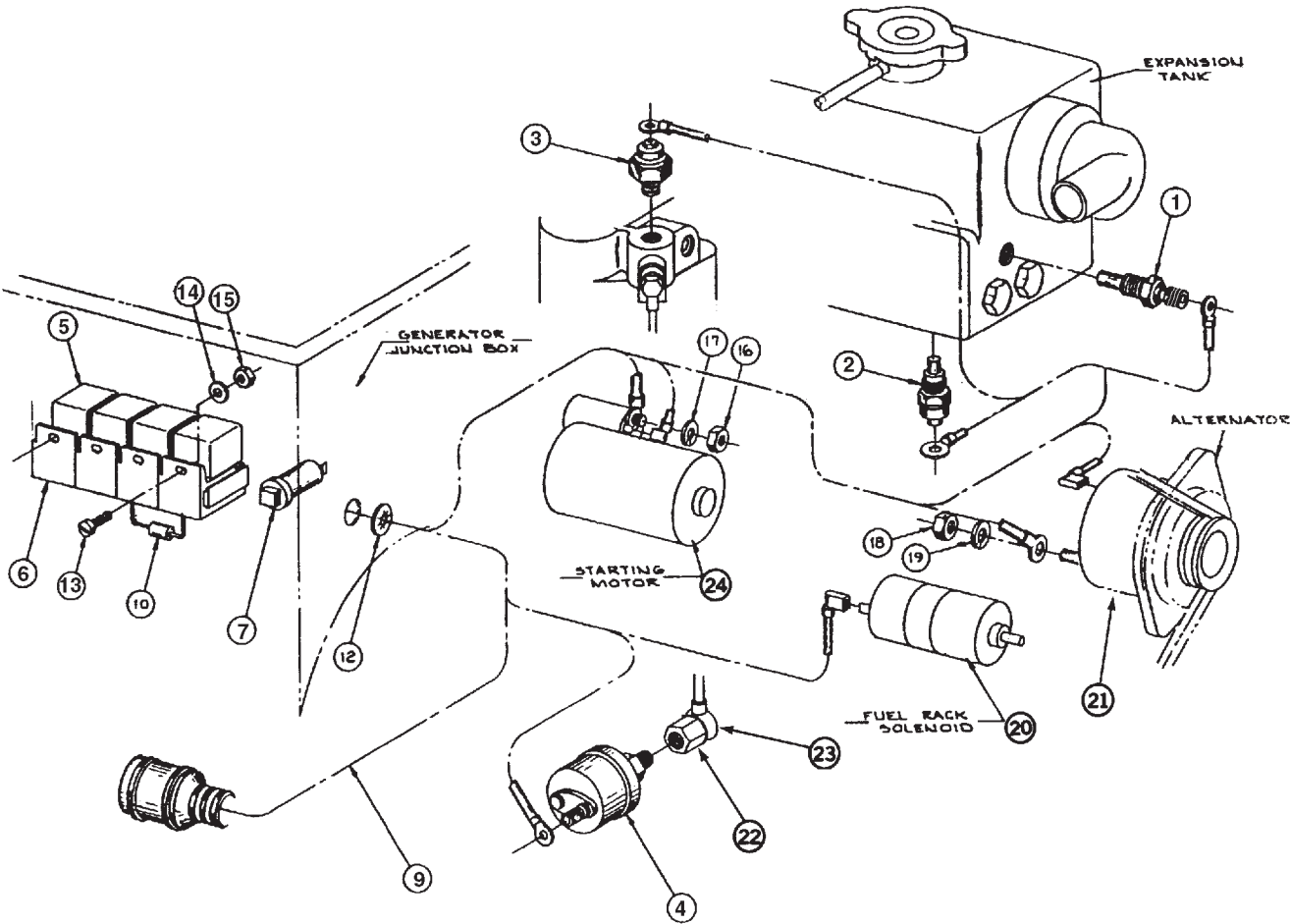
Engine Electrical 12 Volt Isolated Ground

Generator Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-44810	1	Temperature Sender 250°F	-
	22-40353	1	Dual Station Temperature Sender 250°F	-
2	22-40358	1	Temperature Switch 95°C	-
3	22-40236	1	Oil Pressure Switch	-
4	22-42803	1	Oil Pressure Sender	-
	22-74803	1	Dual Station Oil Pressure Sender	-
5	22-42047	4	Relay, 12 Volt SPDT	-
6	22-40393	4	Relay Base	-
7	22-42043	1	Circuit Breaker, DC 15 Amp	-
8	22-92120	1	Control Panel, S1-B (see detail)	-
9	22-48101	1	Engine Wire Harness	-
10	22-41060	2	Diode, 6 Amp 50 Volt PIV	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-41015	1	Universal Bushing, Plastic	-
13	12-00094	2	Machine Screw #10-32 x 3/8" S/S	-
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	185206191	1	Stop Solenoid 12 Volt (see also Fuel System)	-
21	22-42032	1	Alternator 12 Volt (see mounting detail)	-
22	198487590	1	Banjo Bolt	-
23	140606701	1	Oil Line	-
24	22-42059	1	Starter 12 Volt (see mounting detail)	-
25	21-05400	**	Street Tee Steel 1/8 NPT x 1/8 NPT (not shown)	-
**As required				

Engine Electrical 24 Volt Standard Ground

Generator Units



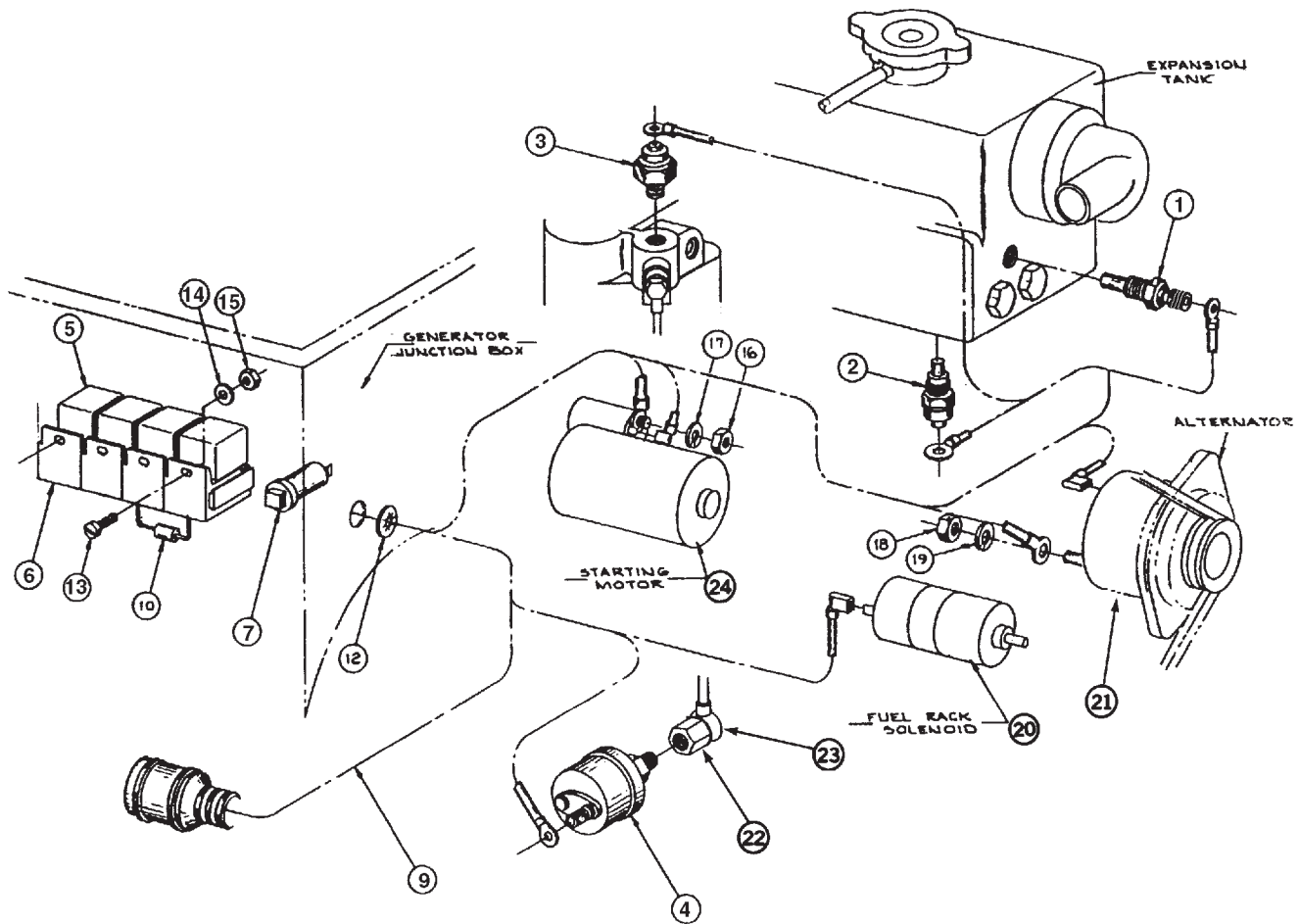
Engine Electrical 24 Volt Standard Ground

Generator Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-42055	1	Temperature Sender 250°F	-
	22-40352	1	Dual Station Temperature Sender 250°F	-
2	385720110	1	Temperature Switch 95°C	-
3	185246011	1	Oil Pressure Switch	-
4	22-41016	1	Oil Pressure Sender	-
	22-71016	1	Dual Station Oil Pressure Sender	-
5	22-40085	4	Relay, 24 Volt SPDT	-
6	22-40393	4	Relay Base	-
7	22-42043	1	Circuit Breaker, DC 15 Amp	-
8	22-92125	1	Control Panel, S1-B (see detail)	-
9	22-48101	1	Engine Wire Harness	-
10	22-41060	2	Diode, 6 Amp 50 Volt PIV	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-41015	1	Universal Bushing, Plastic	-
13	12-00094	2	Machine Screw #10-32 x 3/8" S/S	-
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	185206200	1	Stop Solenoid 24 Volt (see also Fuel System)	-
21	22-40278	1	Alternator 24 Volt (see mounting detail)	-
22	198487590	1	Banjo Bolt	-
23	140606701	1	Oil Line	-
24	22-42074	1	Starter 24 Volt (see mounting detail)	-
25	21-05400	1	Street Tee Steel 1/8 NPT x 1/8 NPT (not shown)	-

Engine Electrical 24 Volt Isolated Ground

Generator Units

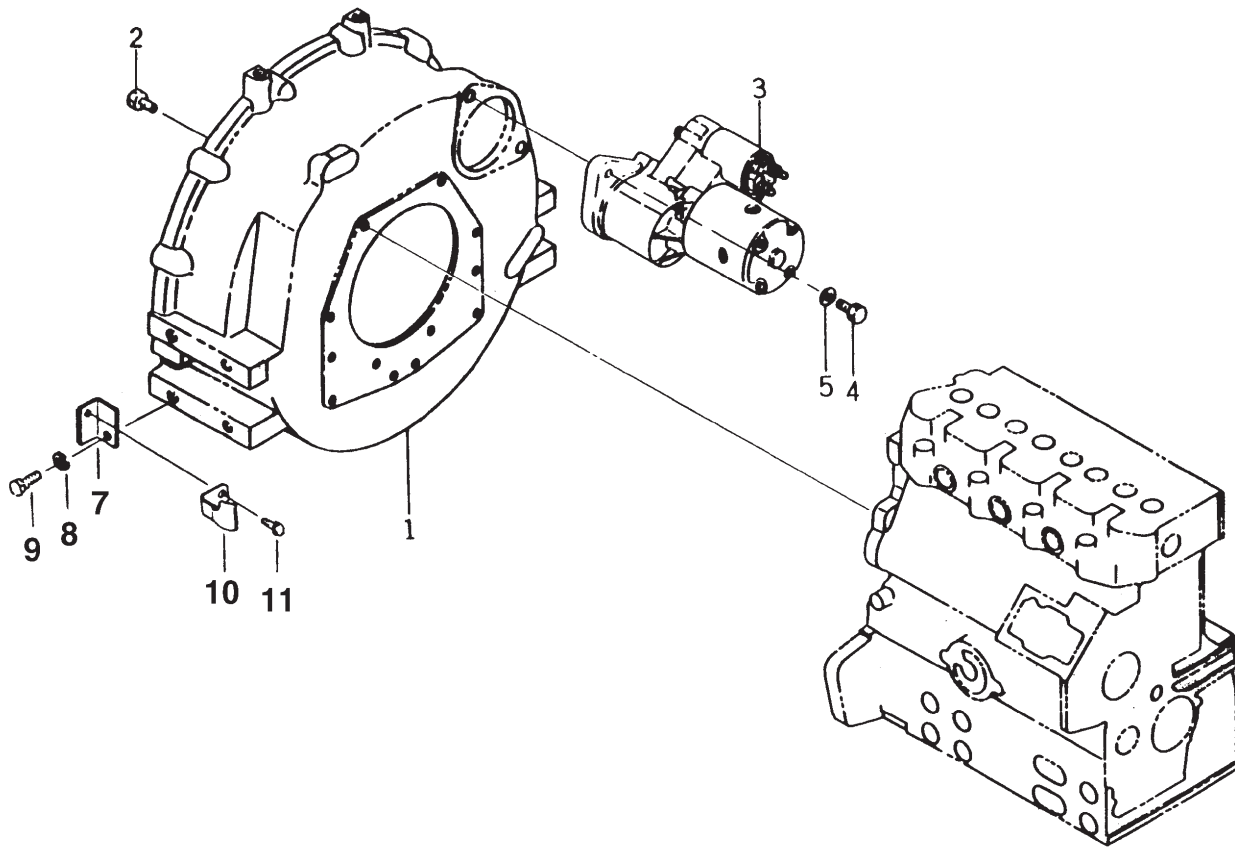


Engine Electrical 24 Volt Isolated Ground

Generator Units

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-44810	1	Temperature Sender 250°F	-
	22-40353	1	Dual Station Temperature Sender 250°F	-
2	22-40358	1	Temperature Switch 95°C	-
3	22-40236	1	Oil Pressure Switch	-
4	22-42803	1	Oil Pressure Sender	-
	22-74803	1	Dual Station Oil Pressure Sender	-
5	22-40085	4	Relay, 24 Volt SPDT	-
6	22-40393	4	Relay Base	-
7	22-42043	1	Circuit Breaker, DC 15 Amp	-
8	22-92125	1	Control Panel, S1-B (see detail)	-
9	22-48101	1	Engine Wire Harness	-
10	22-41060	2	Diode, 6 Amp 50 Volt PIV	-
11	22-40930	1	Wire Harness Extension 20' (not shown)	-
12	00-41015	1	Universal Bushing, Plastic	-
13	12-00094	2	Machine Screw #10- 32 x 3/8" S/S	-
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	185206200	1	Stop Solenoid 24 Volt (see also Fuel System)	-
21	22-71052	1	Alternator 24 Volt (see mounting detail)	-
22	198487590	1	Banjo Bolt	-
23	140606701	1	Oil Line	-
24	22-42076	1	Starter 24 Volt (see mounting detail)	-
25	21-05400	1	Street Tee Steel 1/8 NPT x 1/8 NPT (not shown)	-

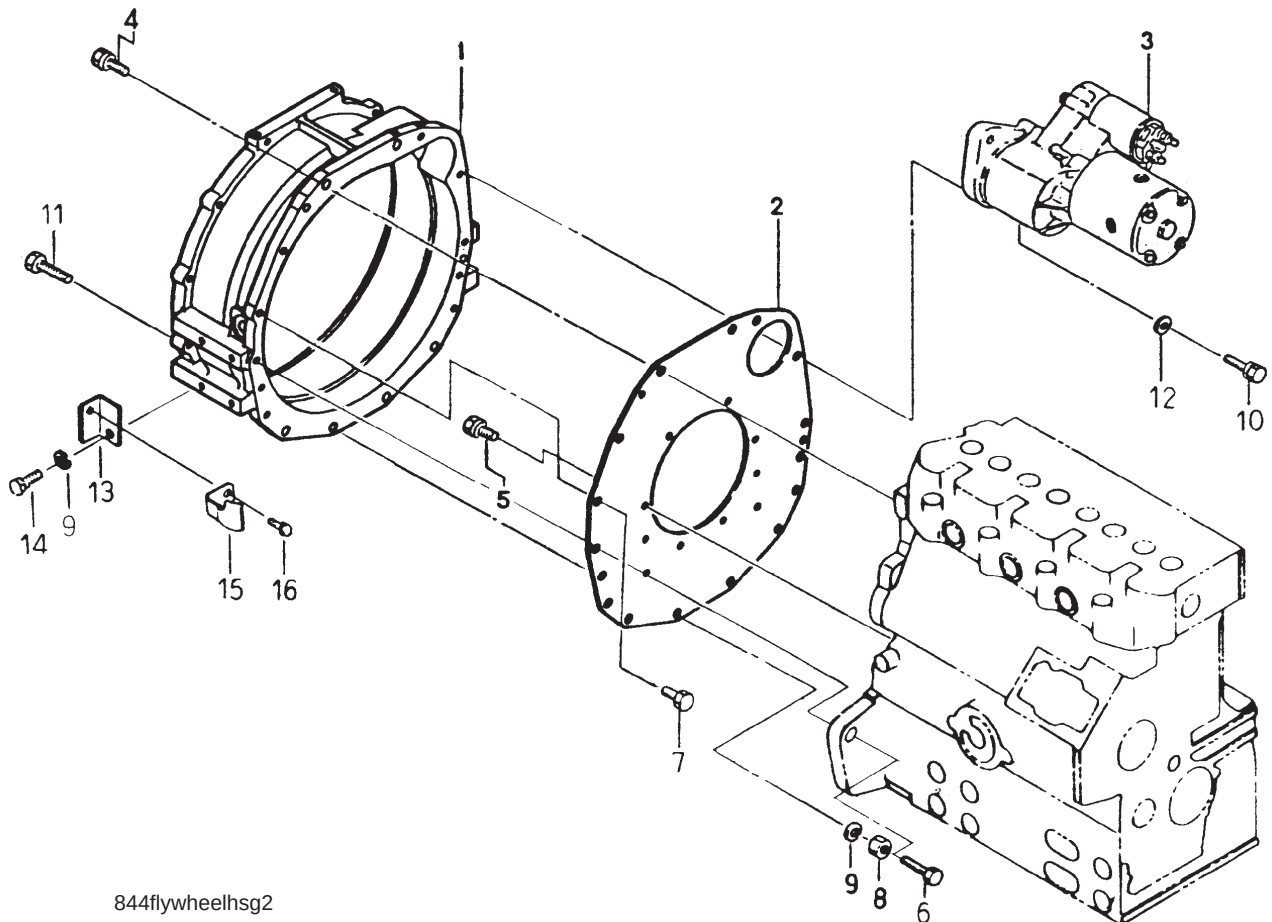
Starter & Flywheel Housing L - M - NL844



844flywheelhsg

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	110446890	1	Flywheel Housing - Marine SAE #4	-
	110446880	1	Flywheel Housing - Industrial SAE #4	-
2	011500820	10	Bolt	-
3	185086551	1	Starter - 12 Volt - Standard Ground (marked M001T66081)*	-
	22-48102	1	Starter - 12 Volt - Isolated Ground	-
	22-42074	1	Starter - 24 Volt - Standard Ground (formerly #22-43108)	-
	22-42076	1	Starter - 24 Volt - Isolated Ground (formerly #22-48103)	-
4	011501030	2	Bolt	-
5	026200010	2	Washer	-
7	130976310	1	Bracket	-
8	027100010	1	Lock Washer	-
9	199436350	2	Bolt	-
10	140976040	1	Bracket, Drain Hose Support	-
11	011500812	1	Bolt	-
12	31-48101	1	Spacer (used with 24 Volt starters #22-43108 & 22-48103 only, not shown)	-
			*See parts detail.	

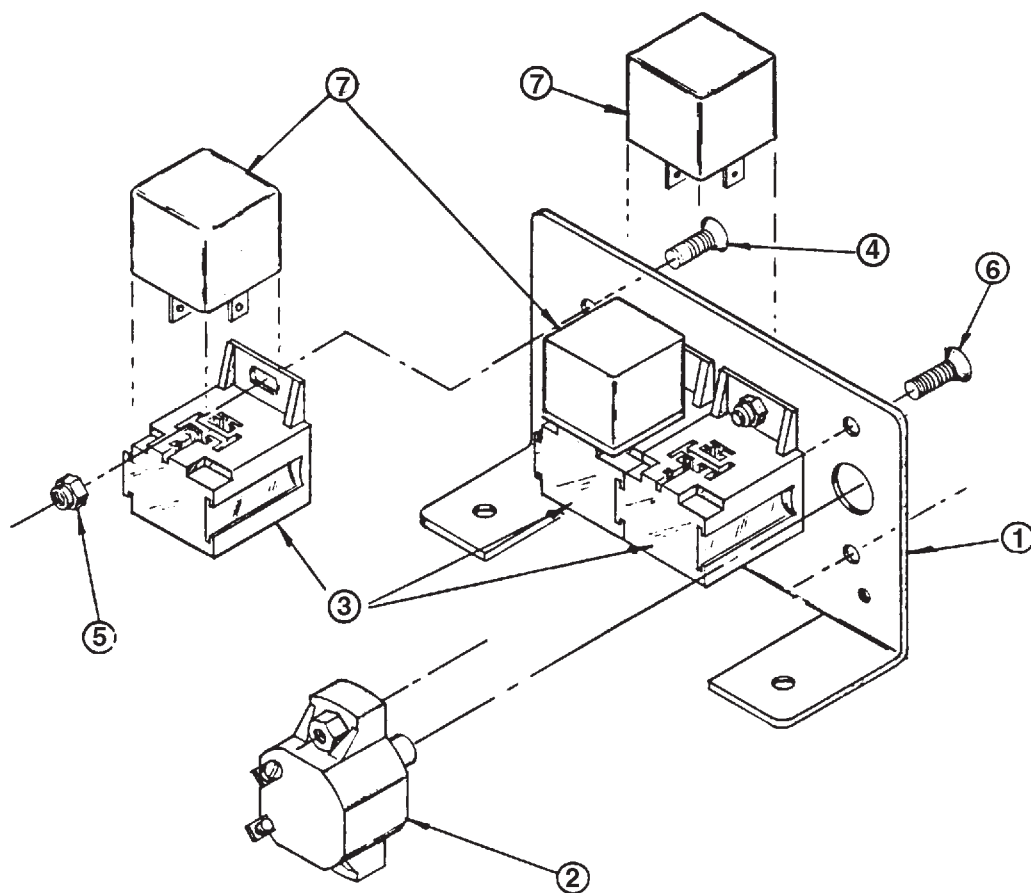
Starter & Flywheel Housing M - NL844 & M20CR



844flywheelhsg2

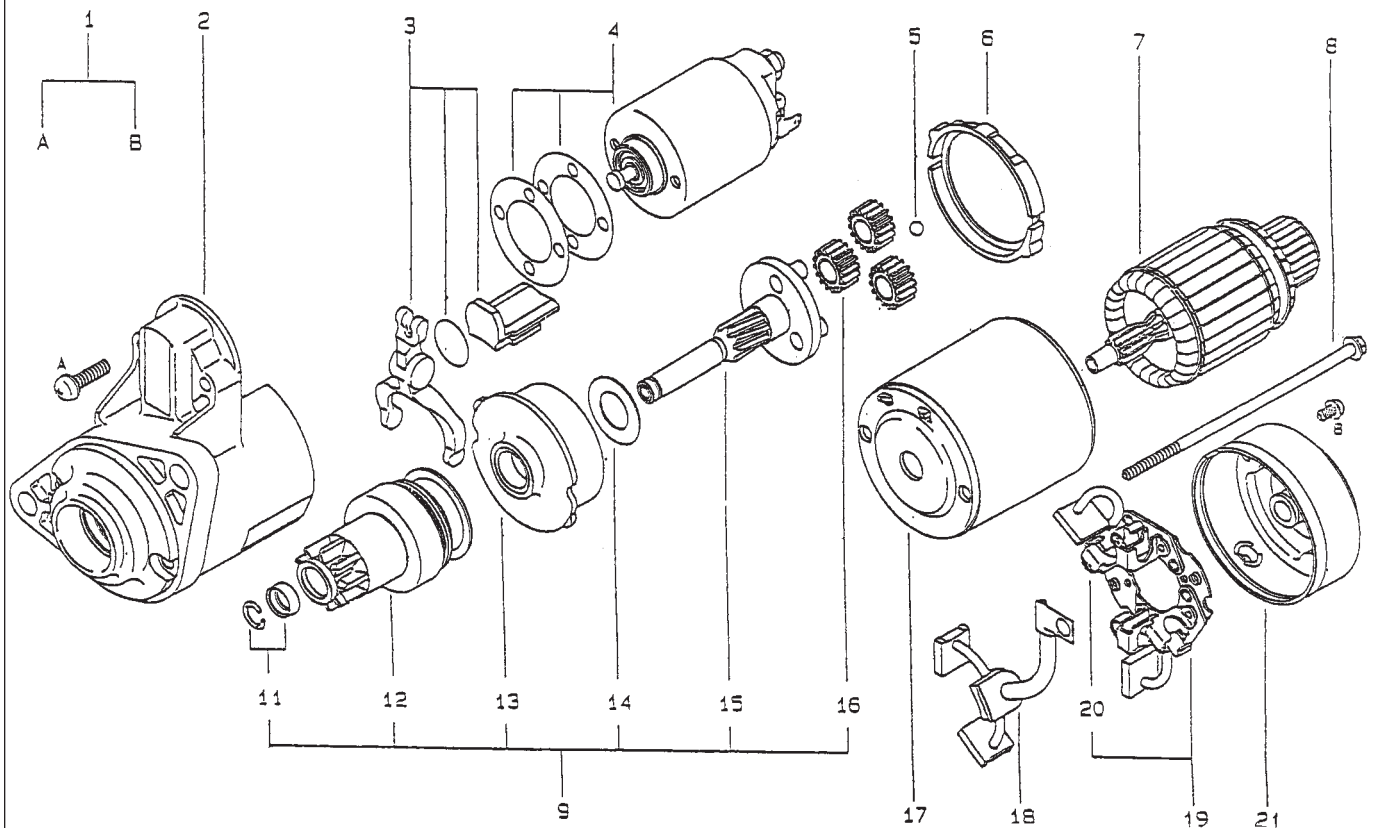
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	31-68401	1	Flywheel Housing - Marine SAE #4 (used with 24 Volt starters only)	-
	110446991	1	Flywheel Housing - Marine SAE #4	-
	110447000	1	Flywheel Housing - Industrial	-
2	110367590	1	Back Plate - Marine	-
	110367610	1	Back Plate - Industrial	-
3	185086551	1	Starter - 12 Volt - Standard Ground (marked M001T66081)**	-
	22-48106	1	Starter - 12 Volt - Isolated Ground	-
	22-42074	1	Starter - 24 Volt - Standard Ground (formerly #22-43108)	-
	22-42076	1	Starter - 24 Volt - Isolated Ground (formerly #22-48103)	-
4	011501235	2	Bolt	-
5	011500816	10	Bolt	-
6	011501050	6	Bolt	-
7	011501020	2	Bolt	-
8	020100010	4	Nut	-
9	027100010	4	Lock Washer	-
10	011501030	2	Bolt	-
11	010301030	4	Bolt	-
12	026200010	2	Washer	-
13	130976310	1	Bracket, Drain Hose Support*	-
14	199436350	1	Bolt*	-
15	140976040	1	Bracket*	-
16	011500812	1	Bolt*	-
17	31-48101	1	Spacer (used with 24 Volt starters #22-43108 & 22-48103 only, not shown)	-
18	00-68401	1	Cover (for 31-68401, not shown)	-
*NOTE: #13-16 Marine application only. **See parts detail				

Wire Harness, Circuit Breaker, & Relay Panel L844



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-48404	1	Wire Harness Assembly (includes keys #1-6)	-
1	23-40010	1	Bracket	-
2	22-41070	1	40 AMP Circuit Breaker	-
3	22-40391	2	Relay Base	-
	22-40393	2	Terminal Retainer (not shown)	-
4	12-03010	3	Machine Screw, Flathead Countersunk #10 - 32 x 3/8"	-
5	14-00001	5	Hex Nut, #10 - 32	-
6	12-03011	2	Machine Screw, Flathead Countersunk #10 - 32 x 1"	-
7	22-44820	2	Relay, 12 Volt SPST	-
	22-44821	2	Relay, 24 Volt SPST	-

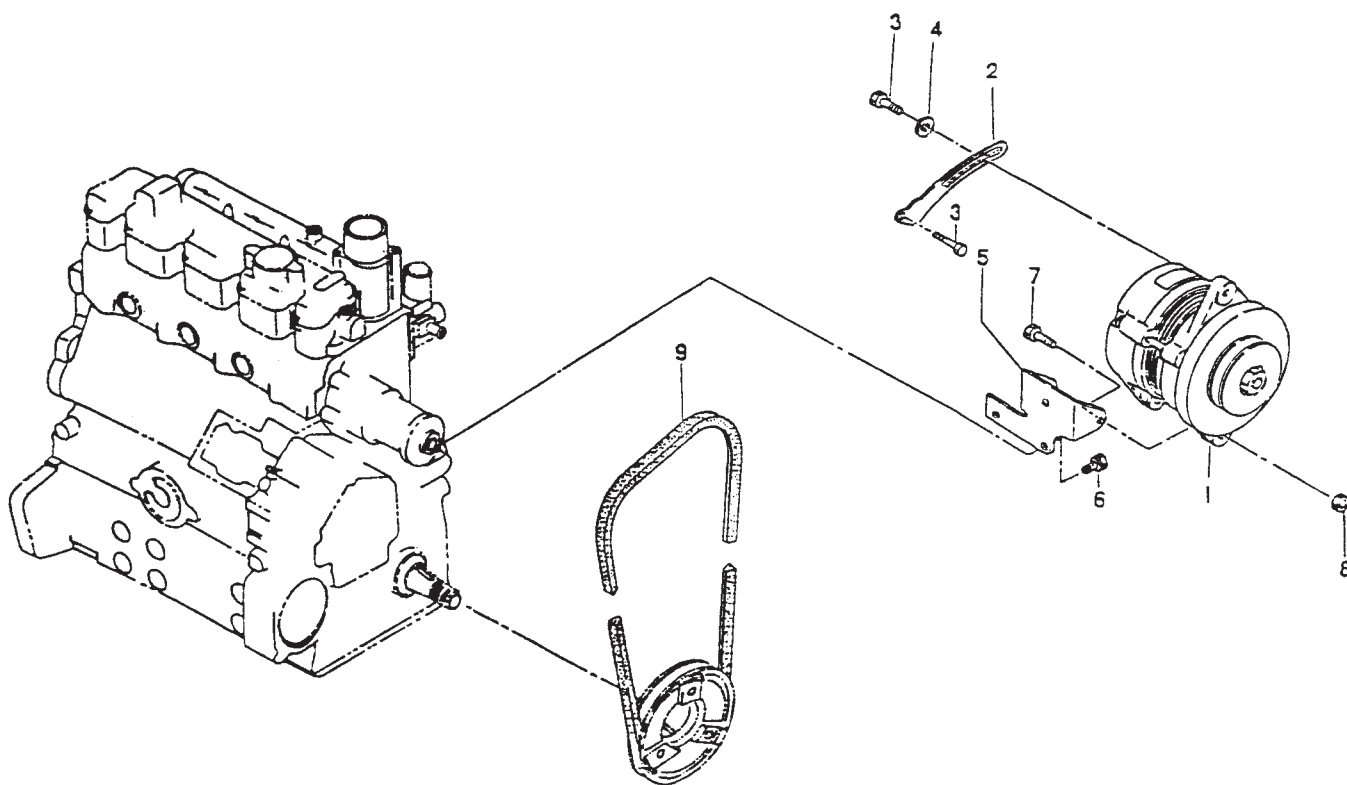
Starter 12 Volt Standard Ground



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

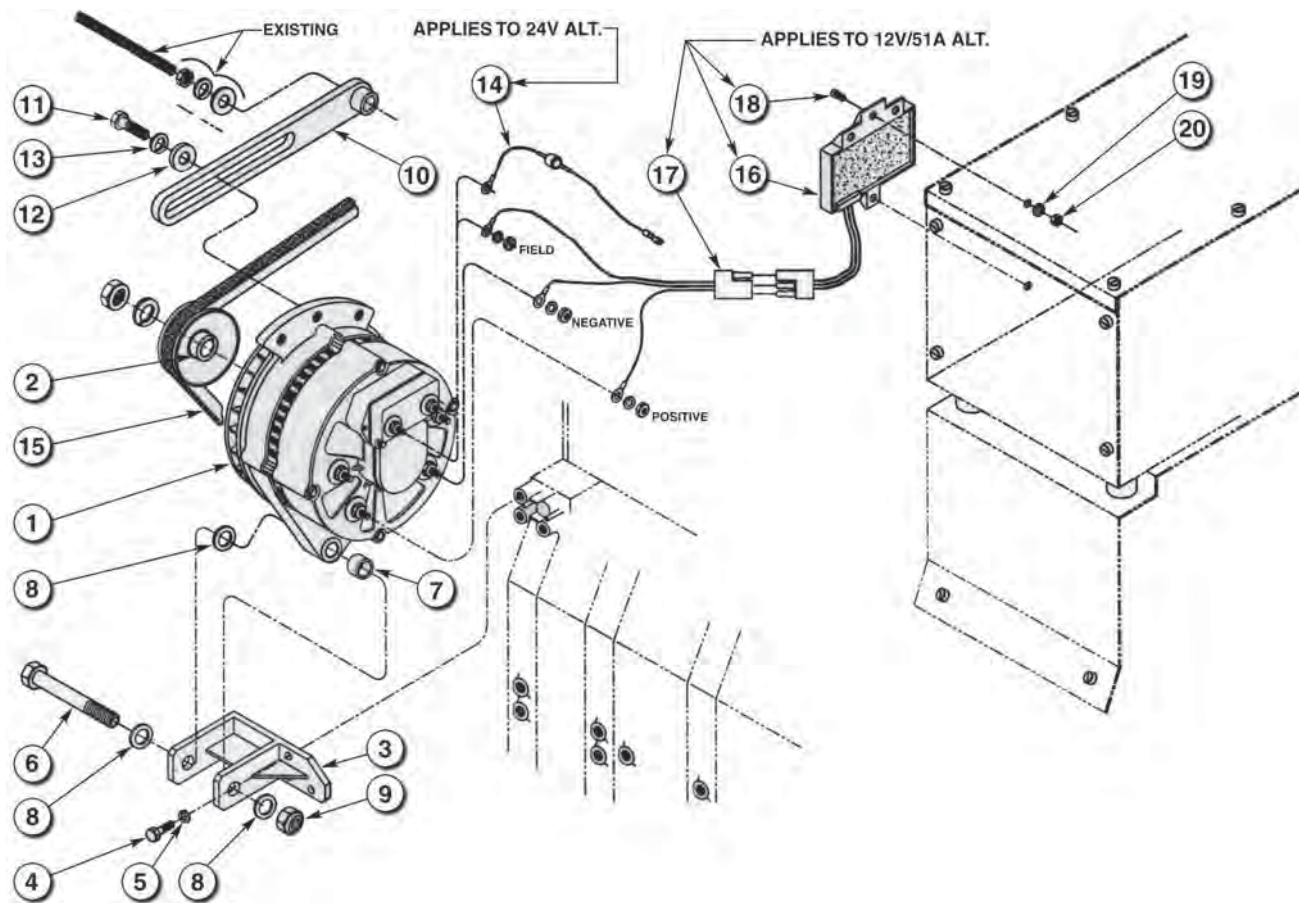
Small Frame Alternators & Mounting 12 Volt / 40 Amp

Standard & Isolated Ground



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	185046320	1	Alternator 12 Volt/ 40 Amp Standard Ground (see parts detail)	-
	22-42032	1	Alternator 12 Volt/ 40 Amp Isolated Ground	-
2	185727000	1	Tensioner	-
3	011500820	2	Bolt	-
4	026109017	1	Washer	-
5	185976510	1	Bracket	-
6	011500816	3	Bolt	-
7	010301035	2	Bolt	-
8	023100010	2	Nut	-
9	40-02003	1	Drive Belt (844)	-
	40-08401	1	Drive Belt (844L & M20CR, formerly #40-08403)	-

Medium Frame Alternator Options 12V/51 Amp & 24V/35 & 40 Amp

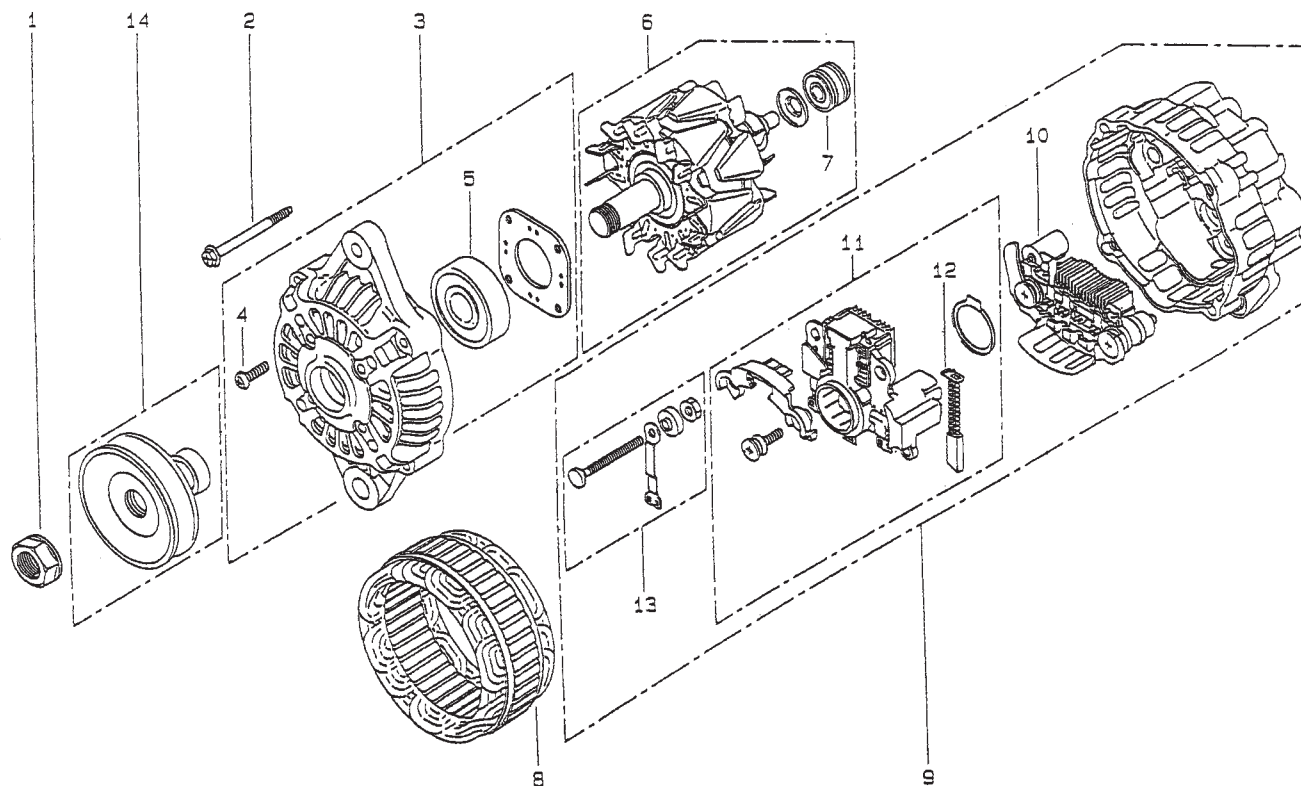


A-7631, A-7632, A-7633, A-7634, A-7635, A-7636 & D-2926

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-40333	1	Alternator 12 Volt/51 Amp Isolated Ground	-
	22-40278	1	Alternator 24 Volt/40 Amp Standard Ground	-
	22-71052	1	Alternator 24 Volt/35 Amp Isolated Ground	-
2	34-42001	1	Pulley 1-A x 2-1/2" x 5/8" ID	-
3	23-43107	1	Bracket, Alternator Mounting	-
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	-
8	15-00504	**	Flat Washer, 1/2 SAE	-
9	14-00512	1	Hex Nut, Nylock 1/2-13	-
10	23-42005	1	Tensioning Arm (used with 24 Volt/35 Amp Alternator)	-
	23-42006	1	Tensioning Arm (used with 12 Volt/51 Amp & 24 Volt/40 Amp Alternators)	-
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	40-02005	1	Drive Belt (844)	-
	40-74501	1	Drive Belt (844L & M20CR, formerly #40-08404)	-
16	22-40334	1	D.C. Voltage Regulator, 12V, Adjustable	-
17	16-1	1	Wire Harness 36"	-
18	12-00001	2	Machine Screw #10-32 x 3/4" S/S	-
19	15-70002	2	Flat Washer #10 S/S	-
20	14-00032	2	Hex Nut, Nylock #10 S/S	-
**As required				-

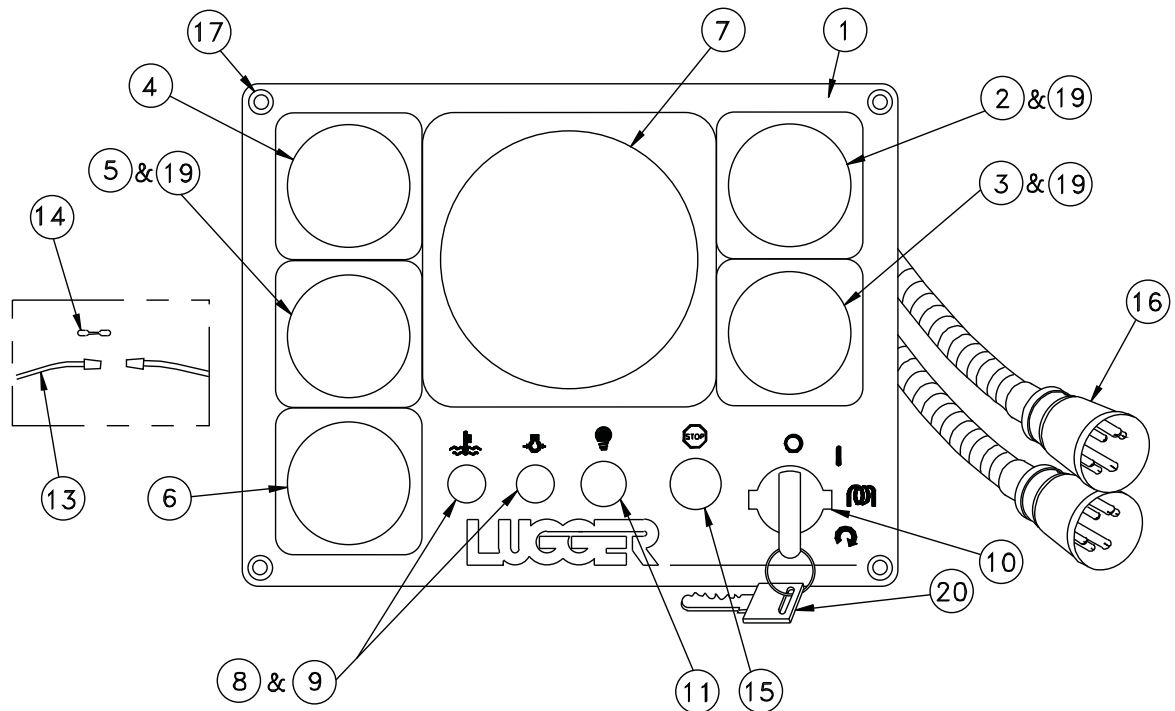
12 Volt / 51 Amp
Alternator Only

Alternator Assembly 12 Volt/35 Amp: Standard Ground



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	185046320	1	Alternator Assembly	-
1	185446269	1	Nut	-
2	185446270	1	Screw Set	-
3	185426210	1	Front Cover Assembly	-
4	185446271	1	Screw Set	-
5	185446272	1	Ball Bearing	-
6	185446273	1	Rotor Assembly	-
7	185466274	1	Ball Bearing	-
8	185446275	1	Stator Assembly	-
9	185426220	1	Rear Cover Assembly	-
10	185446276	1	Rectifier Assembly	-
11	185446277	1	Regulator Assembly	-
12	185416480	2	Brush Set	-
13	185446278	1	Connector	-
14	185436180	1	Pulley Assembly	-

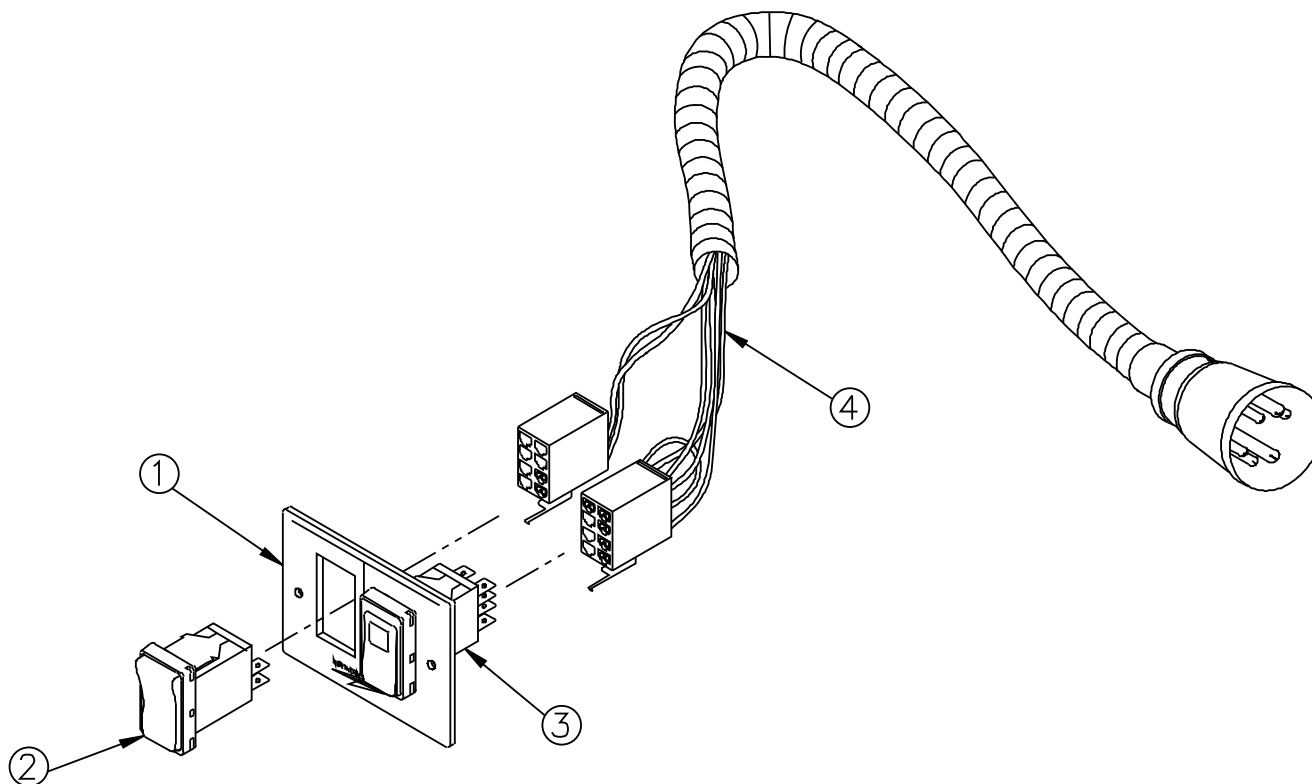
Main Instrument Panel Vanguard Gauges 12 & 24 Volt L844



A-10901/ B-4734-2

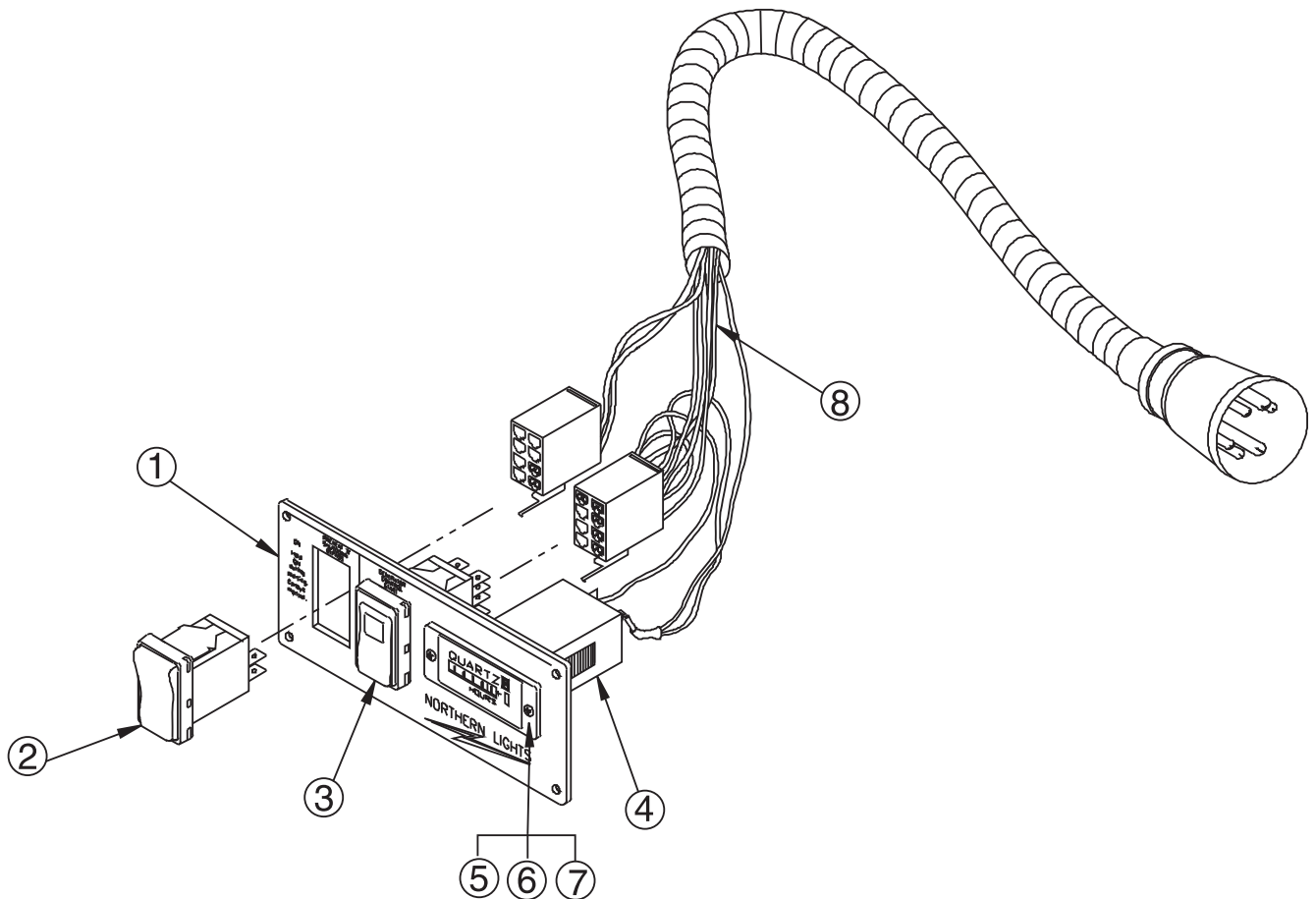
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-98100	1	12 Volt Main Instrument Panel (includes all keys)	-
••	22-98105	1	24 Volt Main Instrument Panel (includes all keys)	-
1	28-96801	1	Panel Plate	-
2	37-90072	1	Voltmeter, 12 Volt	-
	37-90073	1	Voltmeter, 24 Volt	-
3	37-90074	1	Hourmeter	-
4	37-90025	1	Temperature Gauge, 12 Volt	-
	37-90026	1	Temperature Gauge, 24 Volt	-
5	37-90081	1	Oil Pressure Gauge 0- 80 PSI, 12 Volt	-
	37-90082	1	Oil Pressure Gauge 0- 80 PSI, 24 Volt	-
6	22-40263	1	Alarm Horn, 12/24 Volt	-
7	37-98101	1	Tachometer 0-4000 RPM, 12 Volt	-
8	22-44851	2	Fault Lamp Holder, Amber	-
9	22-44852	**	Bulb, Clear 12 Volt	-
	22-44853	**	Bulb, Clear 24 Volt	-
10	37-94803	1	Key Switch	-
11	22-40247	1	Toggle Switch (for Panel Lights)	-
12	22-41060	2	Diode (not shown)	-
13	22-00044	1	Fuse Holder, In-Line	-
14	22-41008	1	Fuse, 7-1/2 Amp	-
15	00-40008	1	Plug	-
16	22-44859	1	Wire Harness	-
17	12-90002	4	Screw, Self Tapping #8 x 1" Type AB Phillips	-
19	37-41004	**	Bulb, Red 12 Volt	-
	37-41003	**	Bulb, Red 24 Volt	-
20	22-40004	1	Resistor Kit (not shown, for Tachometer - 24 Volt only)	-
21	37-94814	**	Key	-
**As required				

S-1 Control Panel 12 & 24 Volt



A-8551, A-8552 / B-5970

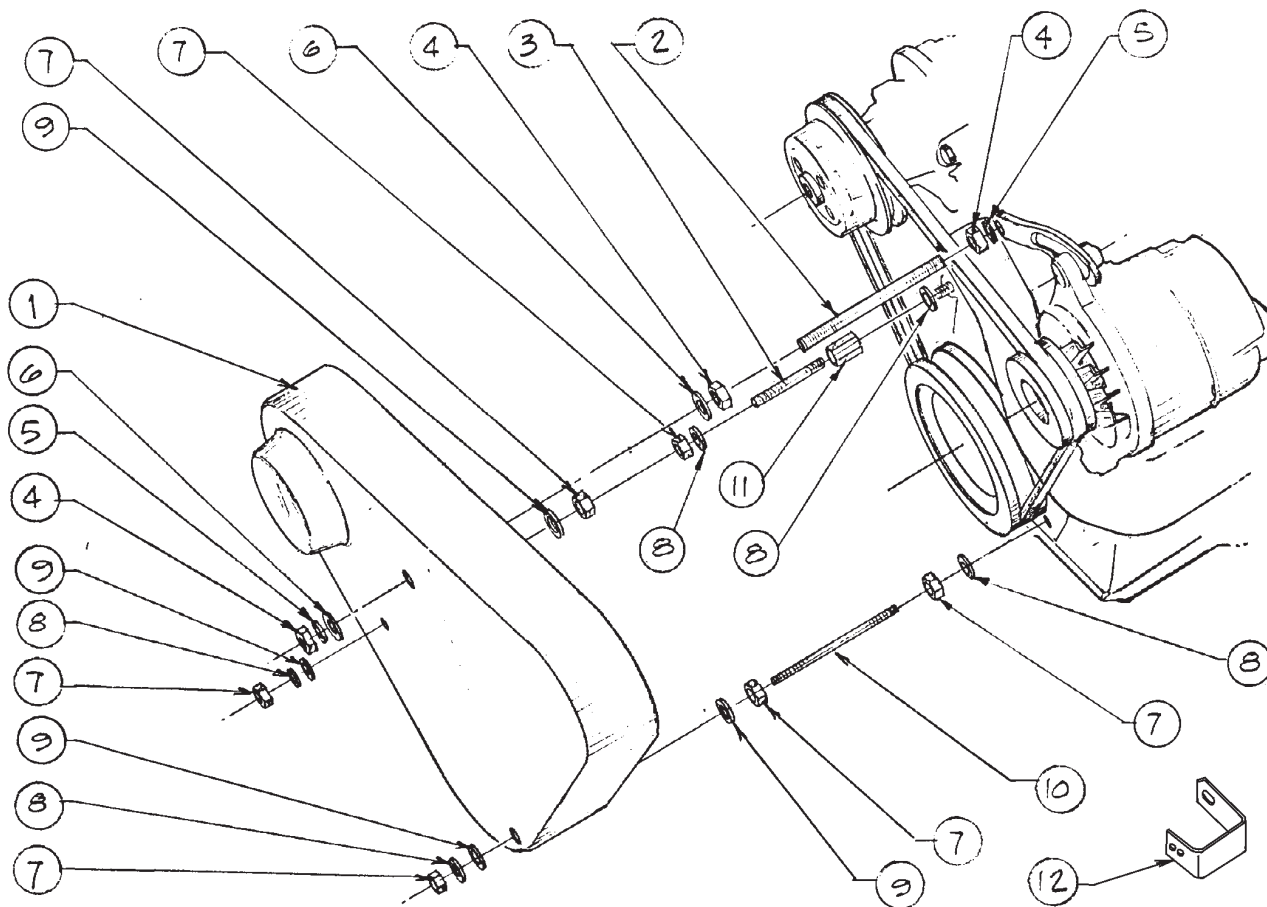
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92110	1	S-1 Start/Stop Control Panel, 12 Volt (includes all keys)	-
••	22-92115	1	S-1 Start/Stop Control Panel, 24 Volt (includes all keys)	-
1	00-40013	1	Plate, S-1 Control Panel	-
2	22-90167	1	Rocker Switch	-
3	22-90168	1	Rocker Switch	-
4	22-42066	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)	-
••	22-92125	1	S 1-B Start/Stop Control Panel - 24 Volt (includes all keys)	-
1	28-90003	1	Plate	-
2	22-90167	1	Rocker Switch	-
3	22-90168	1	Rocker Switch	-
4	22-90009	1	Hour Meter	-
5	12-00093	2	Machine Screw, Round Head Philips #6 - 32 x 1/2"	-
6	15-00030	2	Star Washer, Internal #6, Stainless Steel	-
7	14-00015	2	Hex Nut #6 - 32, Stainless Steel	-
8	22-42063	1	Wire Harness - 12 Volt Panels	-
	22-42064	1	Wire Harness - 24 Volt Panels	-

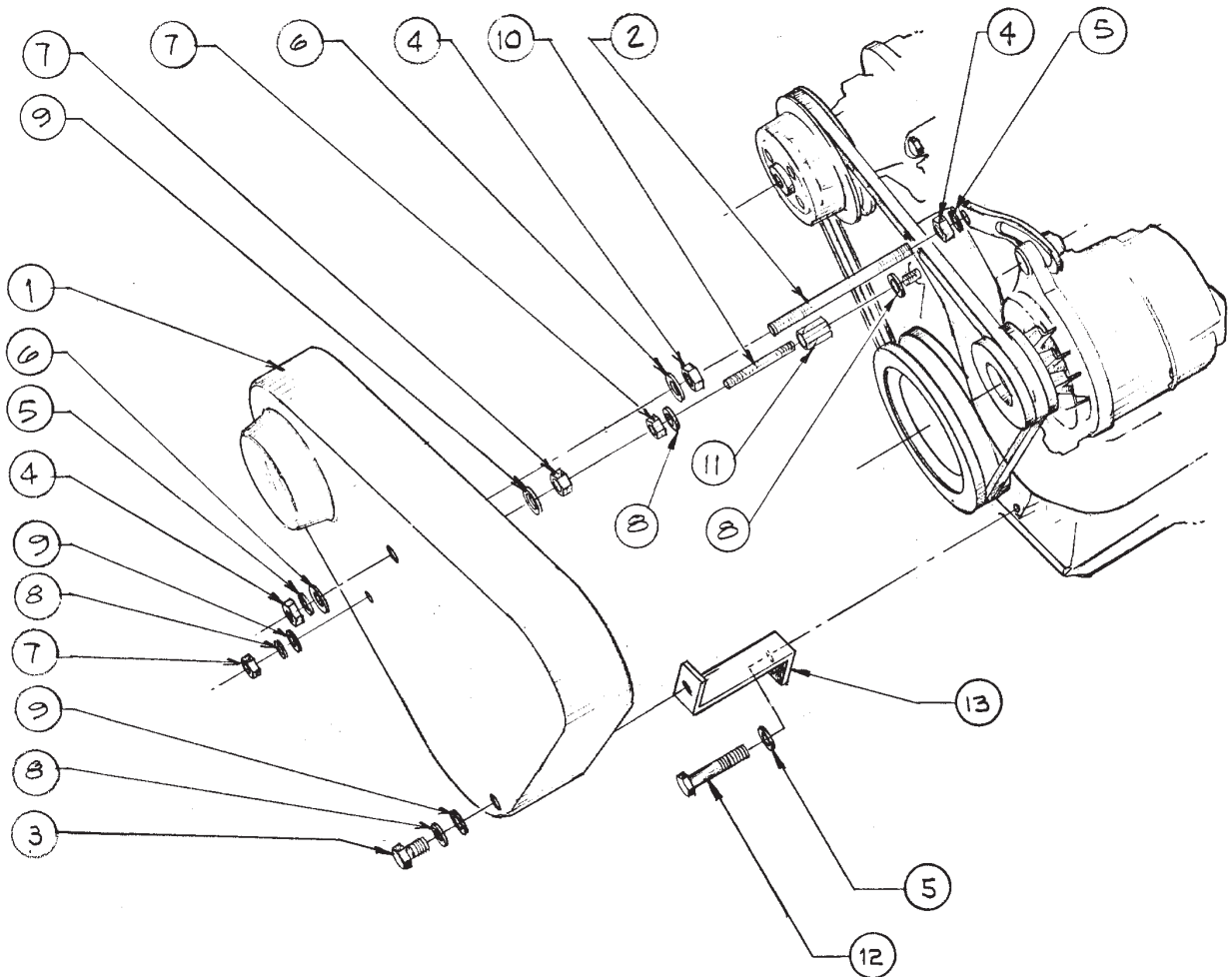
Belt Guard Assembly M844



A-5004 / 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)	-
	23-78402	**	Bracket (used with 00-08401 and 00-08402 only)	-
13	00-73147	1	PTO Guard (not shown)	-
**As required				

Belt Guard Assembly M844L & M20CR



A-6321 / B-4533

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	12-00062	1	Capscrew, Hex Head M8 x 1.25 x 10 mm	-
4	14-00711	2	Hex Nut M8 x 1.25	-
5	15-00702	2	Lock Washer M8	-
6	15-00701	2	Flat Washer M8	-
7	14-01131	3	Hex Nut M6 x 1.0	-
8	15-01132	5	Lock Washer M6	-
9	15-00008	3	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	12-01124	1	Capscrew, Hex Head M6 x 1.0 x 50 mm	-
13	23-78401	1	Bracket (not used with PTO applications)	-
14	23-78403	**	Bracket (used with 00-73148 only – not shown)	-
	23-78402	**	Bracket (used with 00-08401 and 00-08402 only – not shown)	-
15	00-73147	1	PTO Guard (not shown)	-
**As required				

GROUP 6 – GASKET SETS

Gasket Sets 844

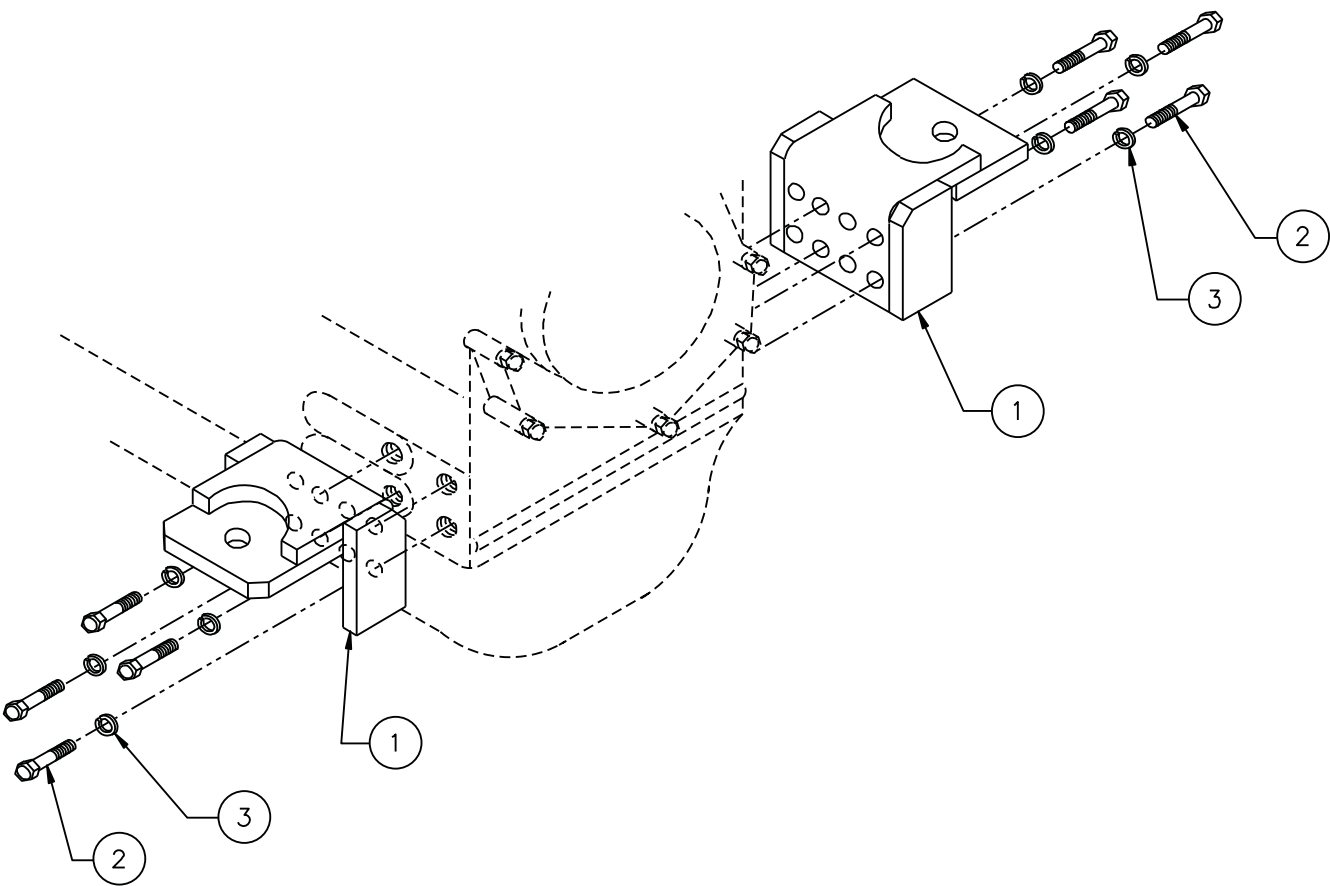
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	29-08101	1	Gasket Set – Marine (includes all keys)	-
••	195907330	1	Gasket Set – Industrial (includes keys #1 - #40)	-
1	198636170	1	Oil Seal, Rear	-
2	052109076	1	O-ring	-
3	110996860	1	Gasket, Oil Pan	-
4	025100012	2	Seal Washer, Oil Pan Drain	-
5	165996540	1	Gasket, Front Plate	-
6	052109108	2	O-ring	-
7	052109110	1	O-ring	-
8	052109109	1	O-ring	-
9	165996550	1	Gasket, Timing Gear Case	-
10	198636160	1	Oil Seal, Front	-
11	340990011	1	Gasket, Gear Case Cover	-
12	131426320	1	Adjusting Shim Set	-
13	025100008	2	Seal Washer	-
14	140996260	4	Gasket	-
15	111147520	1	Head Gasket, t=1.3	-
16	120406050	4	Valve Guide Seal, Exhaust	-
17	120406070	4	Valve Guide Seal, Intake	-
18	131426200	4	Gasket, Injector Lower	-
19	131426230	4	Gasket, Injector Upper	-
20	052109076	1	O-ring	-
21	120996130	1	Gasket	-
22	111996401	1	Gasket, Head Cover	-
23	140996270	4	Gasket, Head Cover	-
24	052100400	2	O-ring, Oil Filler Cap	-
25	135996950	1	Gasket, Air Intake	-
26	145996680	1	Gasket, Water Pump Set Plate	-
27	145996670	1	Gasket, Water Pump	-
28	145996710	1	Gasket, Thermostat Housing	-
29	145996051	1	Gasket, Thermostat Cover	-
30	130516069	4	Gasket	-
31	130996130	1	Gasket, Feed Pump	-
32	052109113	2	O-ring	-
33	025100016	1	Seal Washer	-
34	052109078	1	O-ring, Relief Valve	-
35	130326051	5	Gasket	-
36	135996900	1	Gasket	-
37	135996550	1	Gasket	-
38	135996720	1	Gasket, Ind. Exhaust Manifold	-
39	314990030	1	Gasket, Elbow	-
40	052300700	1	O-ring, Gear Case Cover	-
41	11-38101	1	Gasket, Exhaust Manifold Mtg.	-
42	11-13101	1	Gasket, Thermostat Cover	-
43	16-13101	1	O-ring	-

Gasket Sets 844L

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	29-08401	1	Gasket Set – Marine (includes all keys)	-
••	195907340	1	Gasket Set – Industrial (includes keys #1 - #40)	-
1	050209083	1	Oil Seal, Rear	-
2	052109076	1	O-ring	-
3	110996860	1	Gasket, Oil Pan	-
4	025100012	2	Seal Washer, Oil Pan Drain	-
5	165996540	1	Gasket, Front Plate	-
6	052109108	2	O-ring	-
7	052109110	1	O-ring	-
8	052109109	1	O-ring	-
9	165996550	1	Gasket, Timing Gear Case	-
10	198636160	1	Oil Seal, Front	-
11	340990011	1	Gasket, Gear Case Cover	-
12	131426320	1	Adjusting Shim Set	-
13	025100008	2	Seal Washer	-
14	140996260	4	Gasket	-
15	111147591	1	Head Gasket, t=1.3	-
16	120406050	4	Valve Guide Seal, Exhaust	-
17	120406070	4	Valve Guide Seal, Intake	-
18	131426200	4	Gasket, Injector Lower	-
19	131426230	4	Gasket, Injector Upper	-
20	052109076	1	O-ring	-
21	120996130	1	Gasket	-
22	111996401	1	Gasket, Head Cover	-
23	140996270	4	Gasket, Head Cover	-
24	052100400	2	O-ring, Oil Filler Cap	-
25	135996950	1	Gasket, Air Intake	-
26	145996680	1	Gasket, Water Pump Set Plate	-
27	145996670	1	Gasket, Water Pump	-
28	145996710	1	Gasket, Thermostat Housing	-
29	145996051	1	Gasket, Thermostat Cover	-
30	130516069	4	Gasket	-
31	130996130	1	Gasket, Feed Pump	-
32	052109113	2	O-ring	-
33	025100016	1	Seal Washer, Solenoid	-
34	052109078	1	O-ring	-
35	130326051	5	Gasket	-
36	135996900	1	Gasket	-
37	135996550	1	Gasket	-
38	135996780	1	Gasket, Ind. Exhaust Manifold	-
39	314990030	1	Gasket, Elbow	-
40	052300700	1	O-ring, Gear Case Cover	-
41	11-38101	1	Gasket, Exhaust Manifold Mtg.	-
42	11-13101	1	Gasket, Thermostat Cover	-
43	16-13101	1	O-ring	-

Front Engine Mounting

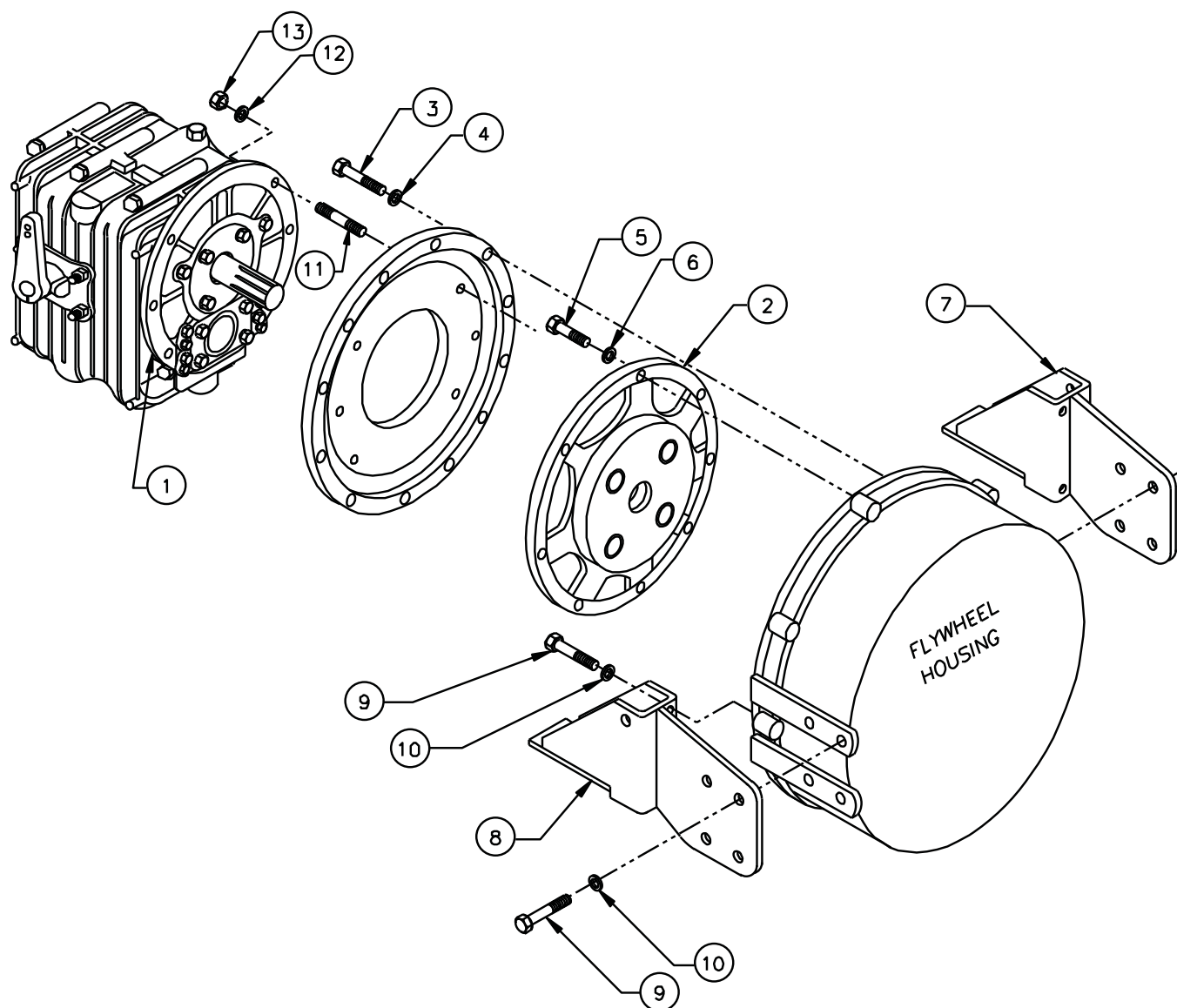
L844



A-10412 / B-8401

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	23-88402	2	Bracket, Front Engine Mounting	-
2	12-01100	8	Capscrew, Hex Head M14 x 1.5 x 30 mm	-
3	15-01402	8	Lock Washer, Helical M14	-

Gear Attaching Parts ZF15MIV

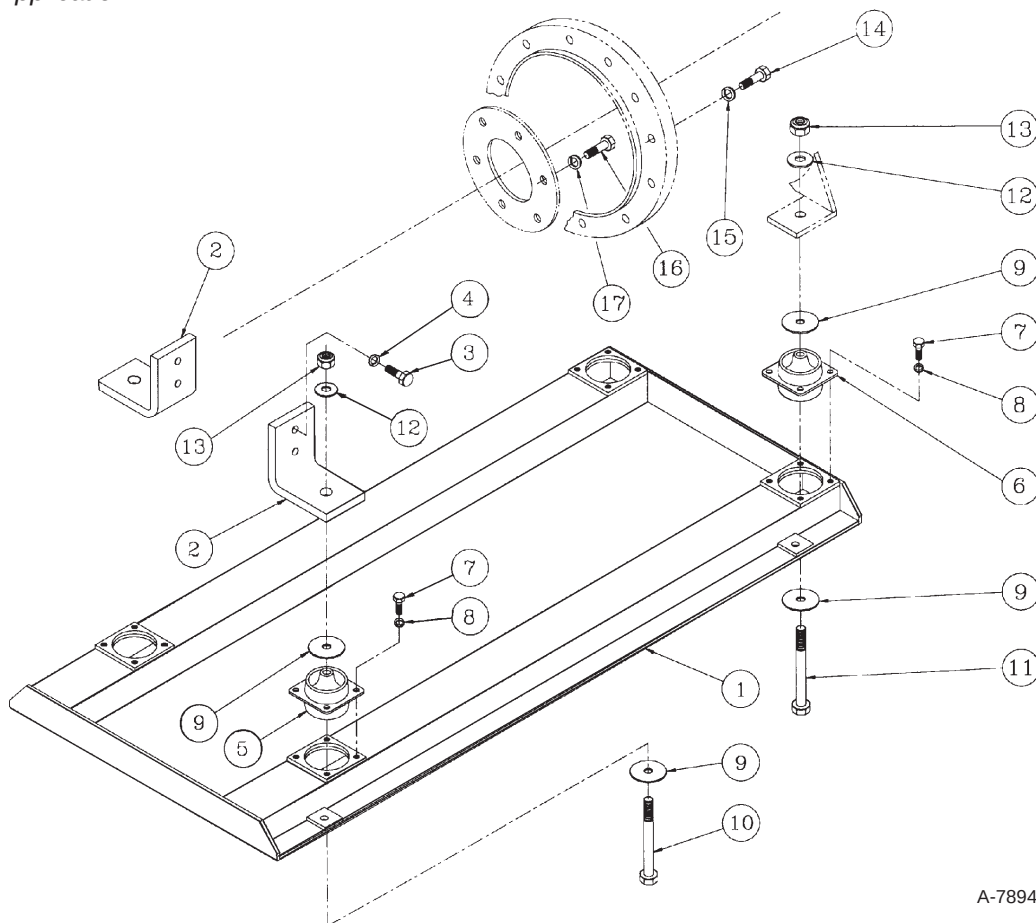


A-10413 / C-5611

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	3306116008	1	Adapter SAE #4	-
2	34-68102	1	Drive Damper, Dual Element	-
3	12-00301	8	Capscrew, Hex Head 3/8- 16 x 1- 3/8"	-
4	15-00321	8	Flat Washer 3/8" SAE	-
5	12-00212	6	Capscrew, Hex Head 5/16- 18 x 1"	-
6	15-00221	6	Flat Washer 5/16" SAE	-
7	23-88403	1	Bracket, Rear Engine Mounting, Left hand	-
8	23-88404	1	Bracket, Rear Engine Mounting, Right hand	-
9	12-00314	12	Capscrew, Hex Head 3/8- 16 x 1- 1/2"	-
10	15-00302	12	Lock Washer, Helical 3/8	-
11	13-05001	6	Stud M10 x 1.5 x 25 mm	-
12	15-00804	6	Wave Washer M10	-
13	14-00811	6	Hex Nut M10 x 1.5	-

Base Frame Assembly

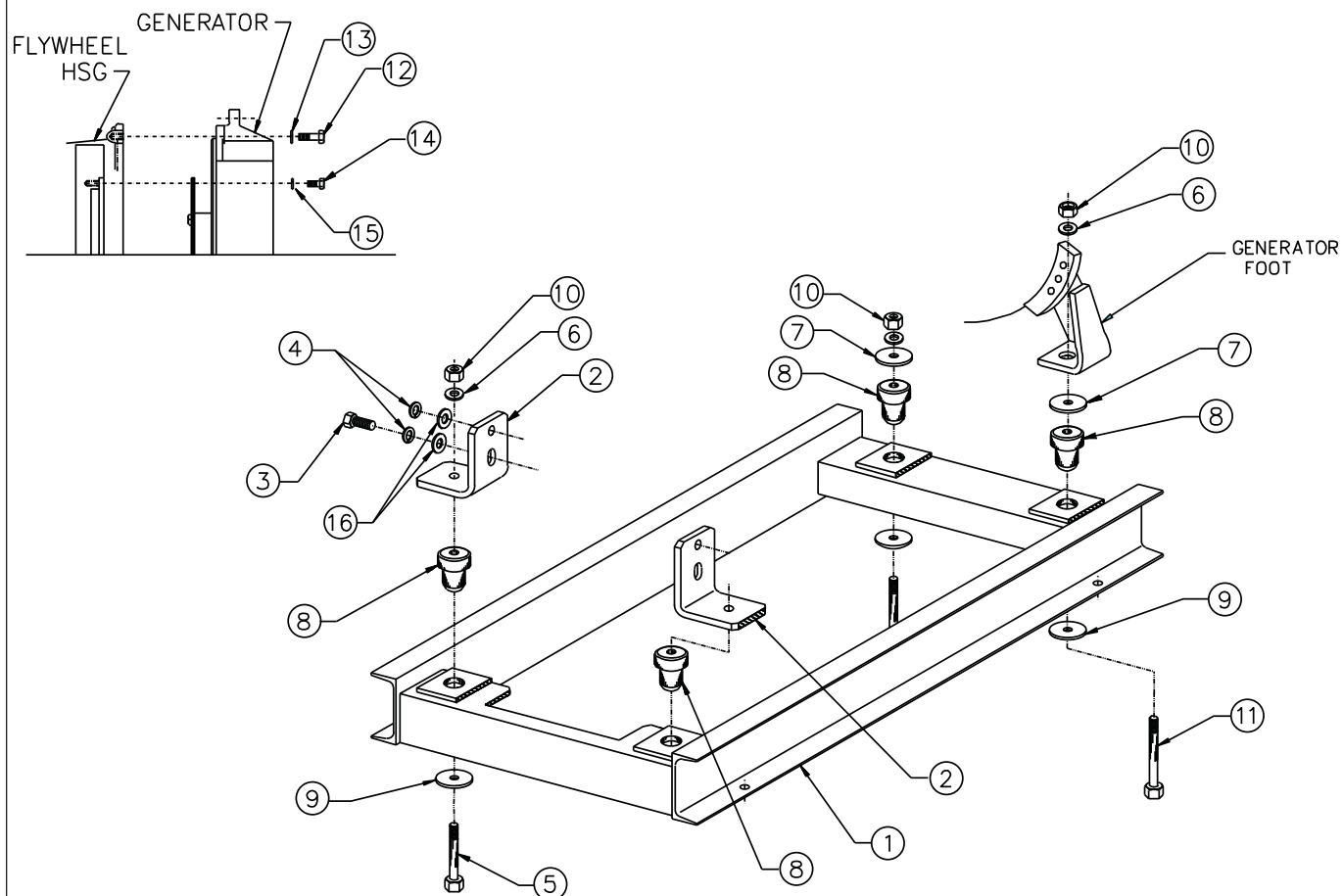
Marine Application



A-7894 & A-7895 / D-3012

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL #
1	39-88108	1	Base Frame, Steel (316 Frame Generators)	-
	39-88113	1	Base Frame, Aluminum (316 Frame Generators)	-
	39-88109	1	Base Frame, Steel (320 Frame Generators)	-
	39-88407	1	Base Frame, Aluminum (320 Frame Generators)	-
2	23-88104	2	Bracket	-
3	12-59100	4	Capscrew, Hex Head M14 x 1.5 x 30 mm Stainless Steel	-
4	15-09402	4	Lock Washer, Helical M14 S/S	-
5	33-85402	2	Platform Mount, 220 lb. (316 Frame Generators)	-
	33-83106	2	Platform Mount, 310 lb. (320 Frame Generators)	-
6	33-85402	2	Platform Mount, 220 lb. (316 Frame Generators)	-
	33-83106	2	Platform Mount, 310 lb. (320 Frame Generators)	-
7	12-00776	16	Capscrew, Hex Head M8 x 1.25 x 20 mm, S/S	-
8	12-00705	16	Lock Washer, Helical M8, S/S	-
9	15-00020	8	Snubbing Washer	-
10	12-95501	2	Capscrew, Hex Head M12 x 1.75 x 75 mm S/S (316 Frame Generators)	-
	12-09922	2	Capscrew, Hex Head M12 x 1.75 x 90 mm S/S (320 Frame Generators)	-
11	12-95501	2	Capscrew, Hex Head M12 x 1.75 x 75 mm S/S (316 Frame Generators)	-
	12-09922	2	Capscrew, Hex Head M12 x 1.75 x 90 mm S/S (320 Frame Generators)	-
12	15-09007	4	Flat Washer M12 S/S	-
13	14-09830	4	Hex Nut, Nylock M12 x 1.75 S/S	-
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	-

Base Frame Assembly M20CR

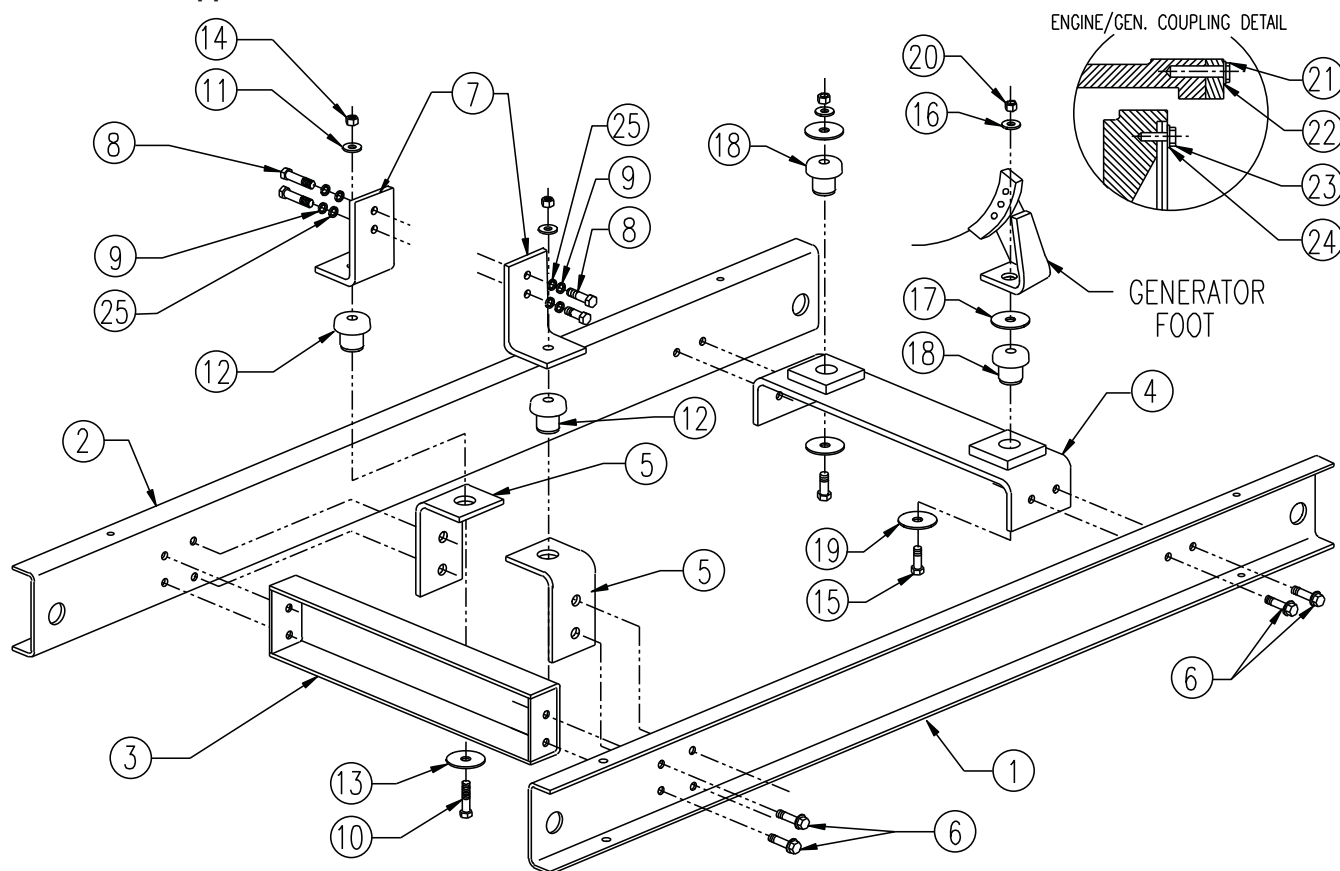


A-9412 / D-3649

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-88408	1	Base Frame	-
2	23-88104	2	Bracket	-
3	12-59100	4	Capscrew, Hex Head M14 x 1.5 x 30 mm S/S	-
4	15-09402	4	Lock Washer M14 S/S	-
5	12-09922	2	Capscrew, Hex Head M12 x 1.75 x 90 mm S/S	-
6	15-09007	4	Flat Washer M12 S/S	-
7	15-00016	2	Head Washer	-
8	33-82254	4	Mount, Centerbonded 300 lbs.	-
9	15-00026	4	Tail Washer	-
10	14-09830	4	Hex Nut, Nylock M12 x 1.75 S/S	-
11	12-95501	2	Capscrew, Hex Head M12 x 1.75 x 75 mm S/S	-
12	12-00313	8	Capscrew, Hex Head 3/8-16 x 1-1/4	-
13	15-00302	8	Lock Washer 3/8	-
14	12-00214	8	Capscrew, Hex Head 5/16-18 x 1-1/2"	-
15	15-00202	8	Lock Washer 5/16	-
16	15-09401	4	Flat Washer M14	-

Base Frame Assembly

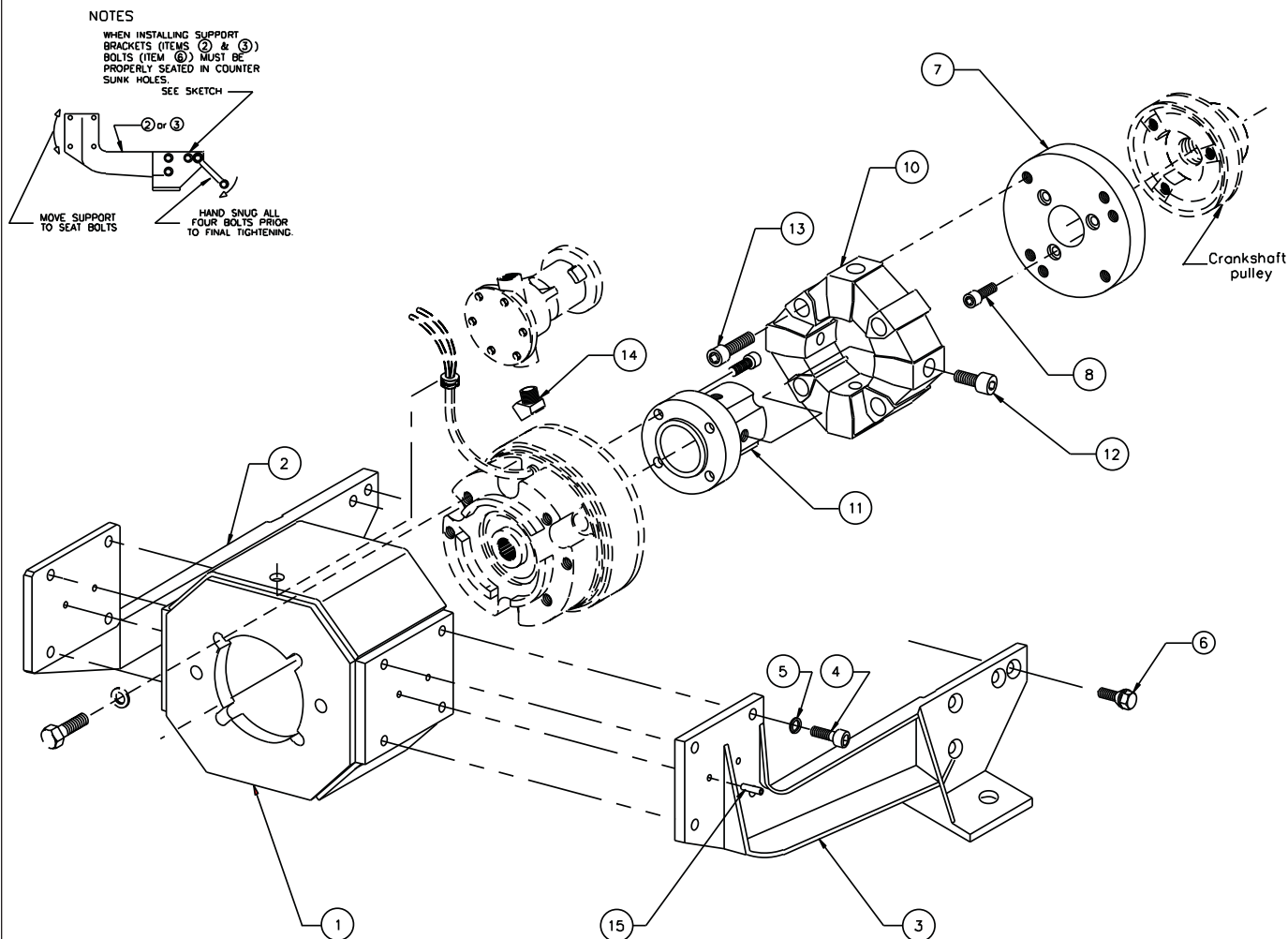
Industrial Application



A-7932A/ D-3653

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-88411	1	Side Rail, Left Hand	-
2	39-88412	1	Side Rail, Right Hand	-
3	39-88413	1	Cross Member Forward	-
4	39-68406	1	Generator Support	-
5	23-88406	2	Bracket, Lower Engine Support	-
6	01435-01020	12	Capscrew, Hex Head Flanged M10 x 1.5 x 20 mm	-
7	23-88104	2	Bracket, Front Engine Mounting	-
8	12-01100	4	Capscrew, Hex Head M14 x 1.5 x 30 mm	-
9	15-01402	4	Lock Washer M14	-
10	12-00817	2	Capscrew, Hex Head M10 x 1.5 x 55 mm	-
11	15-00805	2	Flat Washer M10	-
12	33-83151	2	Mount, Centerbonded 200 lb.	-
13	15-00014	2	Head/ Tail Washer	-
14	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
15	12-00922	2	Capscrew, Hex Head M12 x 1.75 x 90 mm	-
16	15-00007	2	Flat Washer M12	-
17	15-00016	2	Head Washer	-
18	33-82254	2	Mount, Centerbonded 300 lb.	-
19	15-00026	2	Tail Washer	-
20	14-00830	2	Hex Nut, Nylock	-
21	12-00313	12	Capscrew, Hex Head 3/8- 16 x 1- 1/4"	-
22	15-00302	12	Lock Washer	-
23	12-00214	8	Capscrew, Hex Head 5/16- 18 x 1- 1/2"	-
24	15-00202	8	Lock Washer	-
25	15-01401	2	Flat Washer	-

PTO Adapter Parts M844 - 844L

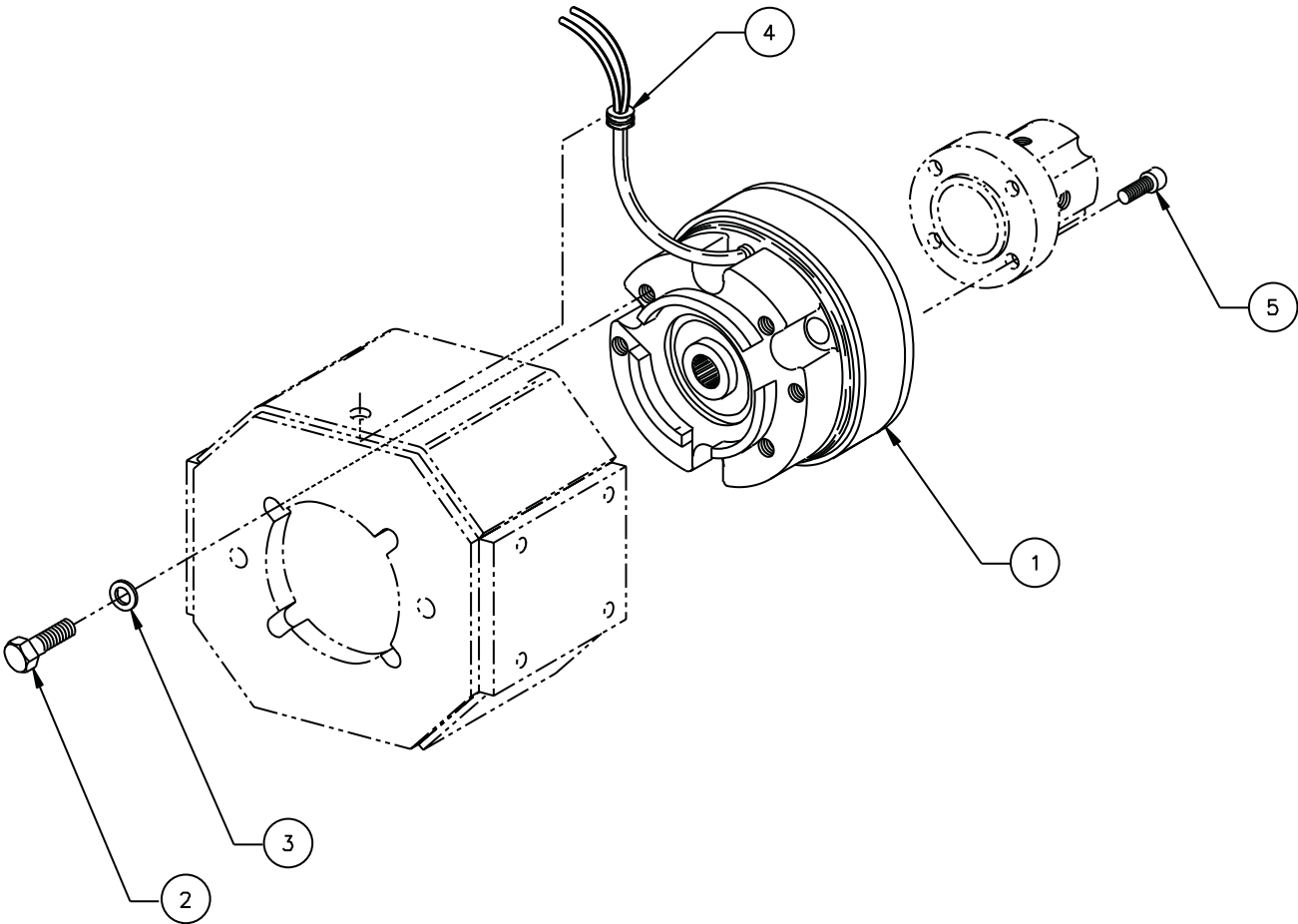


A-6560C / D-3154

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-65401	1	PTO Clutch Housing	-
2	23-68101	1	PTO Support Bracket, Right Hand	-
3	23-68102	1	PTO Support Bracket, Left Hand	-
4	01435-01025	8	Capscrew, Hex Head Flanged M10 x 1.5 x 25 mm	-
5	15-00804	8	Wave Washer 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	-
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	Street Elbow, Brass 1/2 NPT x 1/2 NPT	-
15	32-60001	4	Taper Pin #4 x 1"	-

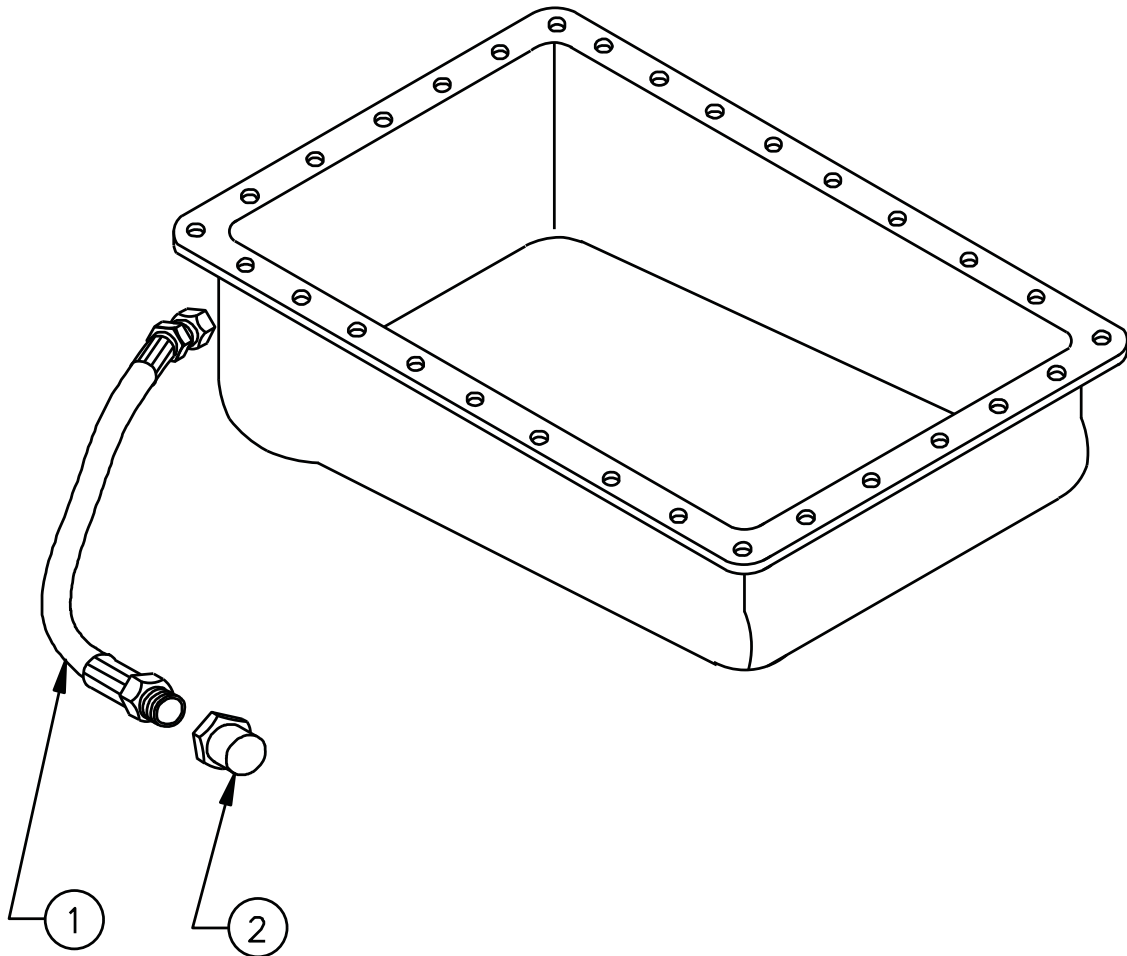
Electric Clutch

H-28 B-Spline 12 & 24 Volt



A-6291, A-6346 / C-3020

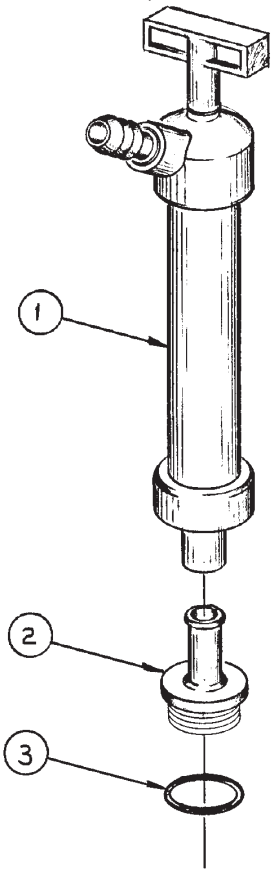
KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	34-60031	1	Electric Clutch Assembly (12 Volt)	-
	34-60032	1	Electric Clutch Assembly (24 Volt)	-
2	12-00513	4	Capscrew, Hex Head 1/2-13 x 1-1/4	-
3	15-00007	4	Flat Washer M12	-
4	00-61003	1	Grommet	-
5	12-63800	4	Capscrew, Socket Head 3/8-24 x 3/4	-

Oil Drain Kit L844

A-10619/ B-8409

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	18-72004	1	Hose Assembly 1/2" ID x 13-1/2"	-
2	21-00003	1	Cap, Hex Head Brass 1/2 NPT	-

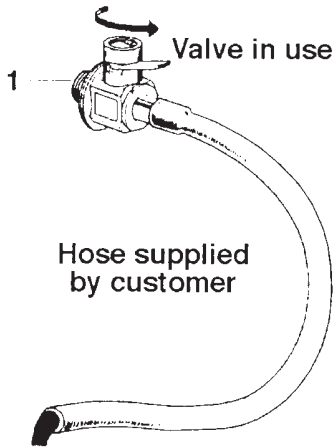
Oil Drain Kit M844, M844L & M20CR



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	-

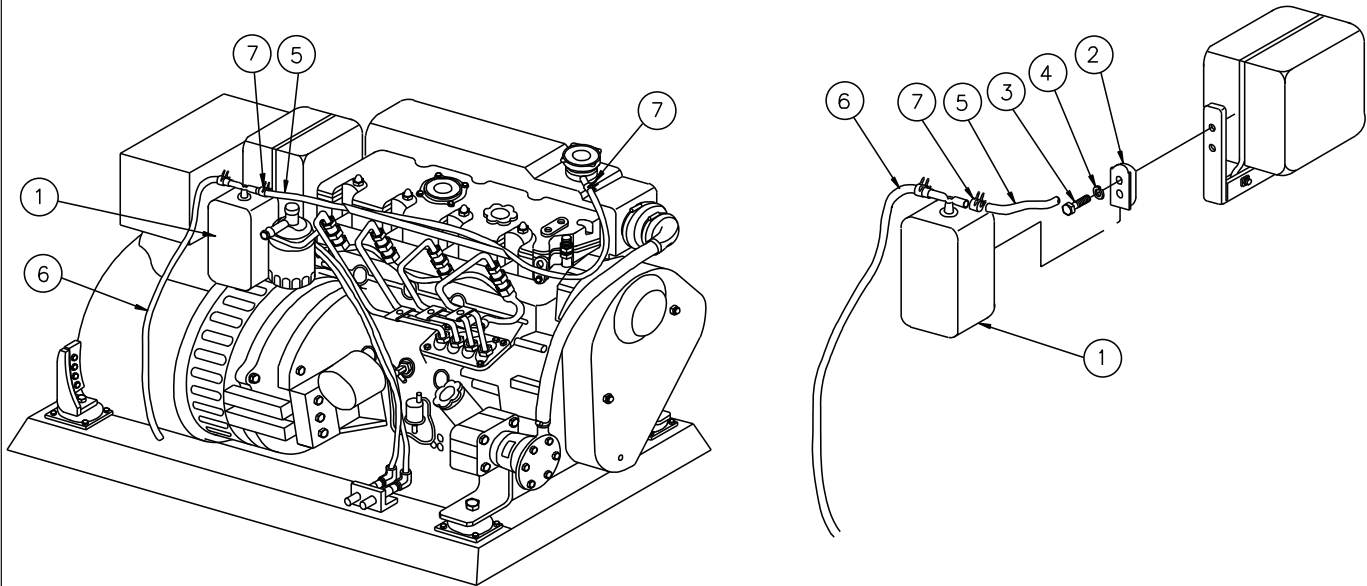
Oil Drain Kit NL844



A-6480

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

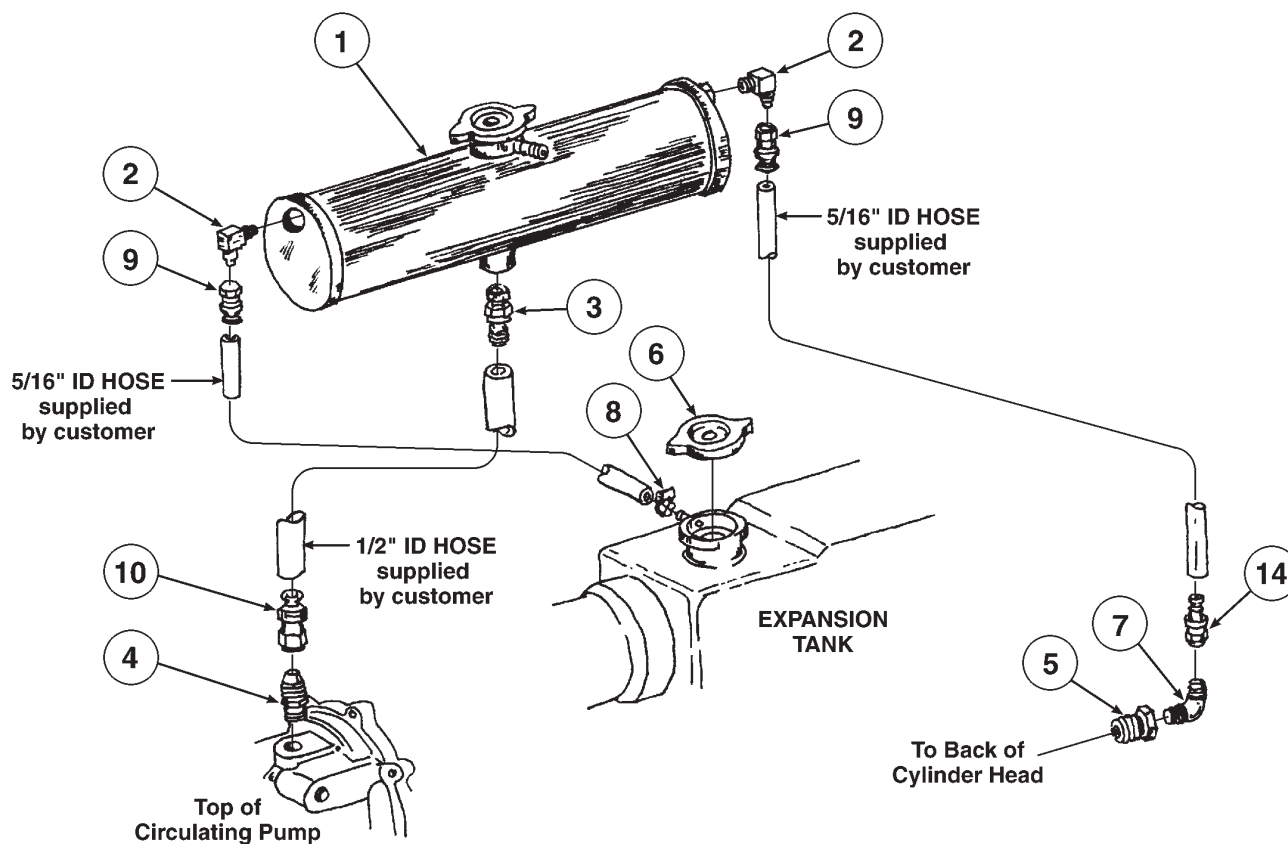
Coolant Recovery Tank



A-10343 / B-8022

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	310550130	1	Tank, Coolant Recovery	-
2	222300090	1	Bracket, Coolant Recovery Tank Mounting	-
3	12-00097	2	Capscrew, Hex Head M6 x 1.0 x 12 mm	-
4	15-00007	2	Flat Washer M12	-
5	27-12004	1	Tube 5/16" ID x 30" Polyurethane	-
6	18-12006	1	Hose 5/16" ID x 26" Polyvinyl	-
7	19-18602	3	Hose Clamp	-

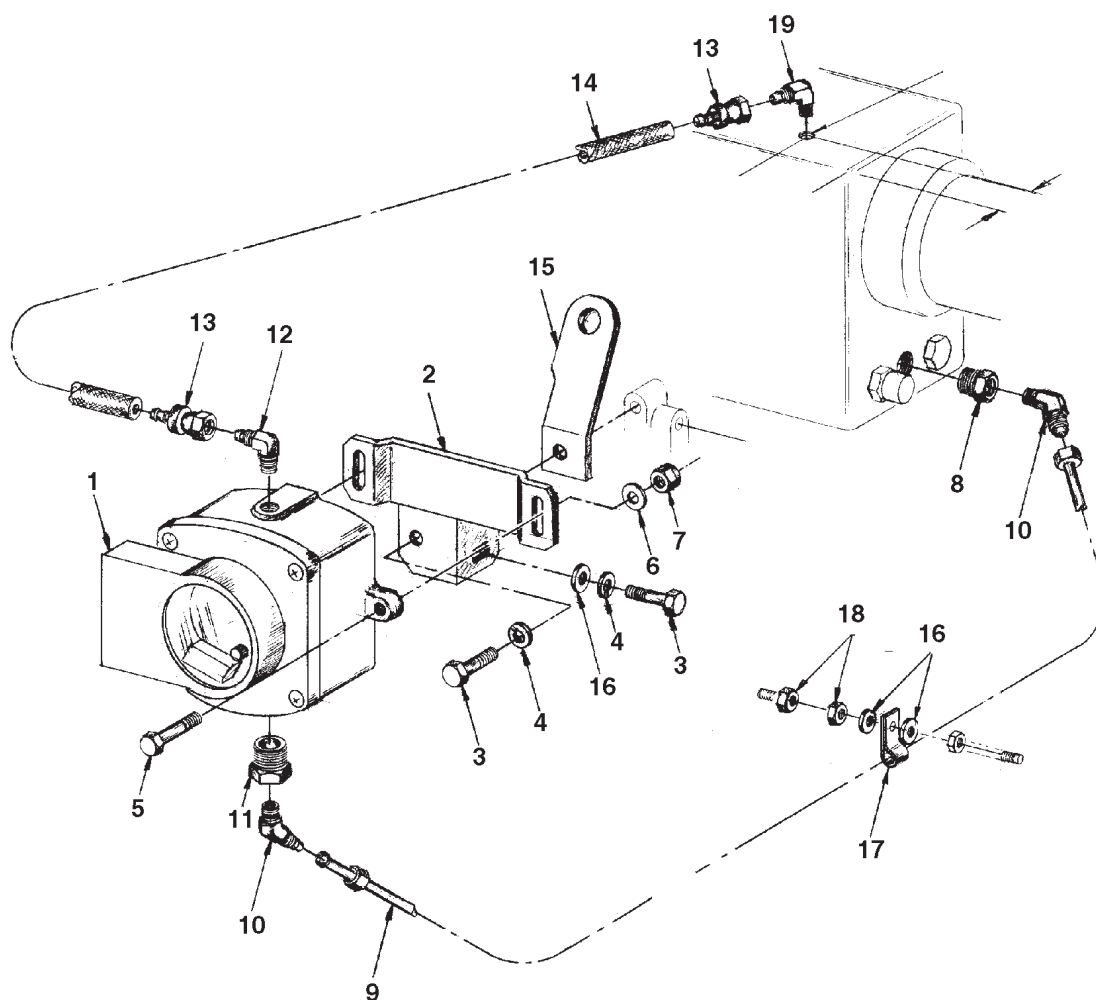
Remote Expansion Tank



A-7463

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-12002	1	Tank Assembly (includes keys #11 - #12)	-
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 #13)	-
6	21-12008	1	Filler Cap	-
7	21-10030	1	Male Elbow, 90° Brass 3/8 Port x 5/16-37T	-
8	19-00004	1	Hose Clamp #4	-
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	23-75404	2	Bracket, Tank Mtg. (not shown)	-
12	19-00064	2	Hose Clamp #64 (not shown)	-
13	16-15010	1	O-ring (not shown)	-
14	21-70007	1	Female Swivel, Brass 5/16 HB x 5/16-37T	-

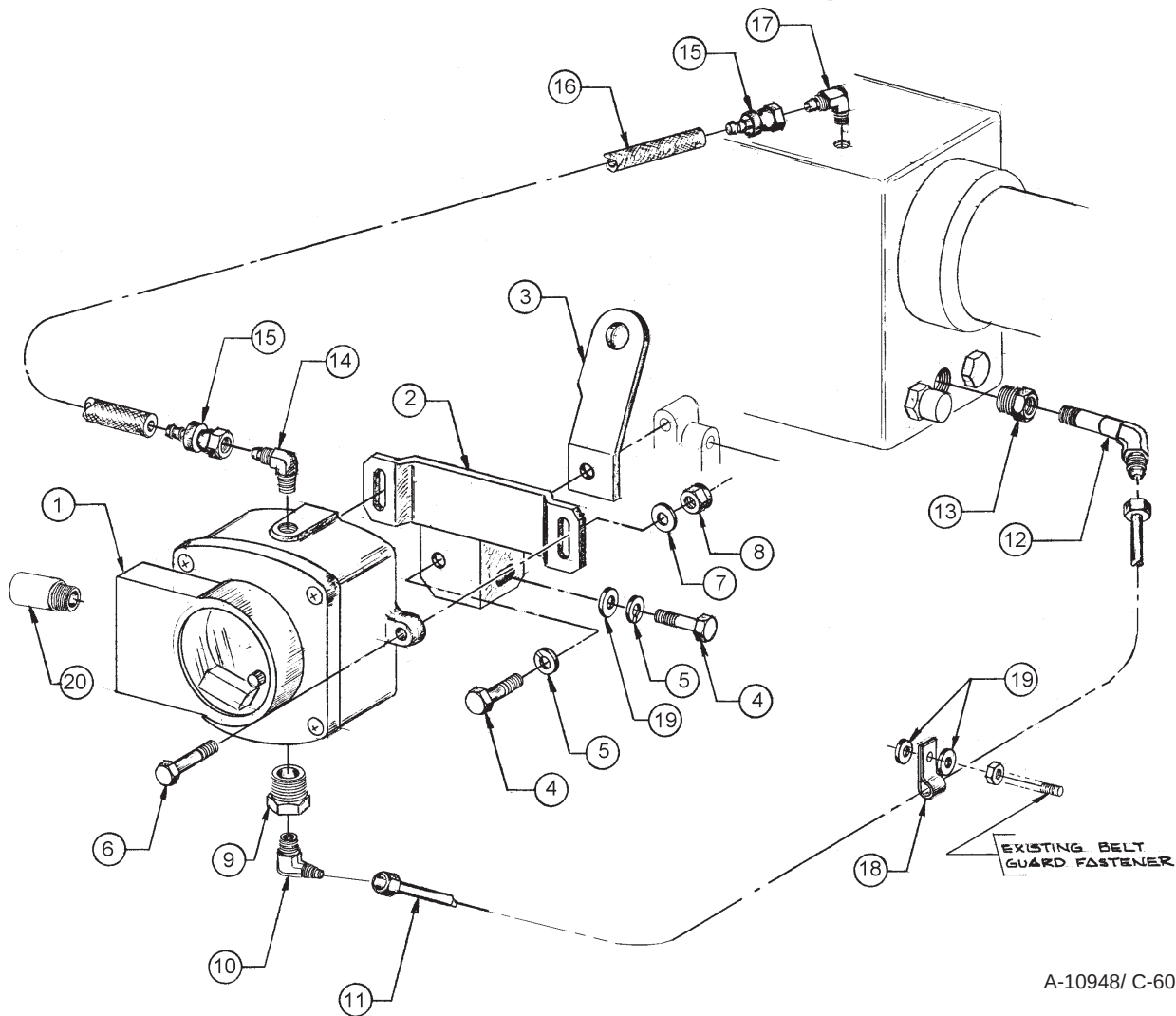
Low Water Level Switch/Gauge



A-5847 / C-2837

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-10003	1	Water Level Switch / Gauge, Isolated Ground	-
2	23-73106	1	Bracket	-
3	12-00712	2	Capscrew, Hex Head M8 x 1.25 x 25 mm	-
4	15-00702	2	Lock Washer, Helical M8	-
5	12-00031	2	Capscrew, Hex Head M6 x 1.0 x 25 mm	-
6	15-00008	2	Flat Washer M6	-
7	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
8	21-00010	1	Bushing, Steel 3/8NPT x 1/4NPT	-
9	27-13101	1	Tube Assembly	-
10	21-05404	1	Male Elbow, 45° Steel 1/4NPT x 1/4-37T	-
11	21-00135	1	Bushing, Brass 1/2NPT x 1/4NPT	-
12	21-71049	1	Male Elbow, 90° Steel 1/4NPT x 1/4-37T	-
13	31-80002	2	Female Swivel, 1/4HB x 1/4-37T	-
14	18-52205	1	Hose 1/4"ID x 13"	-
15	00-73146	1	Lifting Eye	-
16	15-00701	3	Flat Washer M8	-
17	19-72251	1	Adelle Clamp	-
18	14-00711	2	Hex Nut M8 x 1.25	-
19	21-71053	1	Male Elbow 90° Steel 1/8NPT x 1/4-37T	-

Low Coolant Level Switch/ Gauge



A-10948/ C-6066

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-10003	1	Coolant Level Switch/ Gauge	-
2	23-73106	1	Bracket, Coolant Level Switch/ Gauge	-
3	00-73146	1	Lifting Eye, Front	-
4	12-00712	2	Capscrew, Hex Head M8 x 1.25 x 25 mm	-
5	15-00702	2	Lock Washer, Helical M8	-
6	12-00031	2	Capscrew, Hex Head M6 x 1.0 x 25 mm	-
7	15-00008	1	Flat Washer M6	-
8	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
9	21-00135	1	Bushing, Brass 1/2 NPT x 1/4 NPT	-
10	21-71049	1	Male Elbow 90° Steel 1/4 NPT x 1/4- 37T	-
11	18-15408	1	Hose Assembly 1/4" ID x 15"	-
12	21-15710	1	Male Elbow 90° Steel 1/8 NPT x 1/4- 37T	-
13	21-55201	1	Bushing Brass 3/8 NPT x 1/8 NPT	-
14	21-71044	1	Male Elbow 90° Brass 1/4 NPT x 1/4- 45T	-
15	21-71045	2	Female Swivel Brass 1/4 HB x 1/4- 45T	-
16	18-52205	1	Hose 1/4" ID x 13" Push-on	-
17	21-71053	1	Male Elbow 90° Steel 1/8 NPT x 1/4- 37T	-
18	19-72252	1	Adelle Clamp 3/8" ID x 3/8" Stud	-
19	15-00701	3	Flat Washer M8	-
20	00-40016	1	Strain Relief Connection 1/2 NPT	-



4420 14th Ave. NW., Seattle WA 98107

Tel: (206) 789-3880 • 1-800-762-0165 • Fax: (206) 782-5455

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