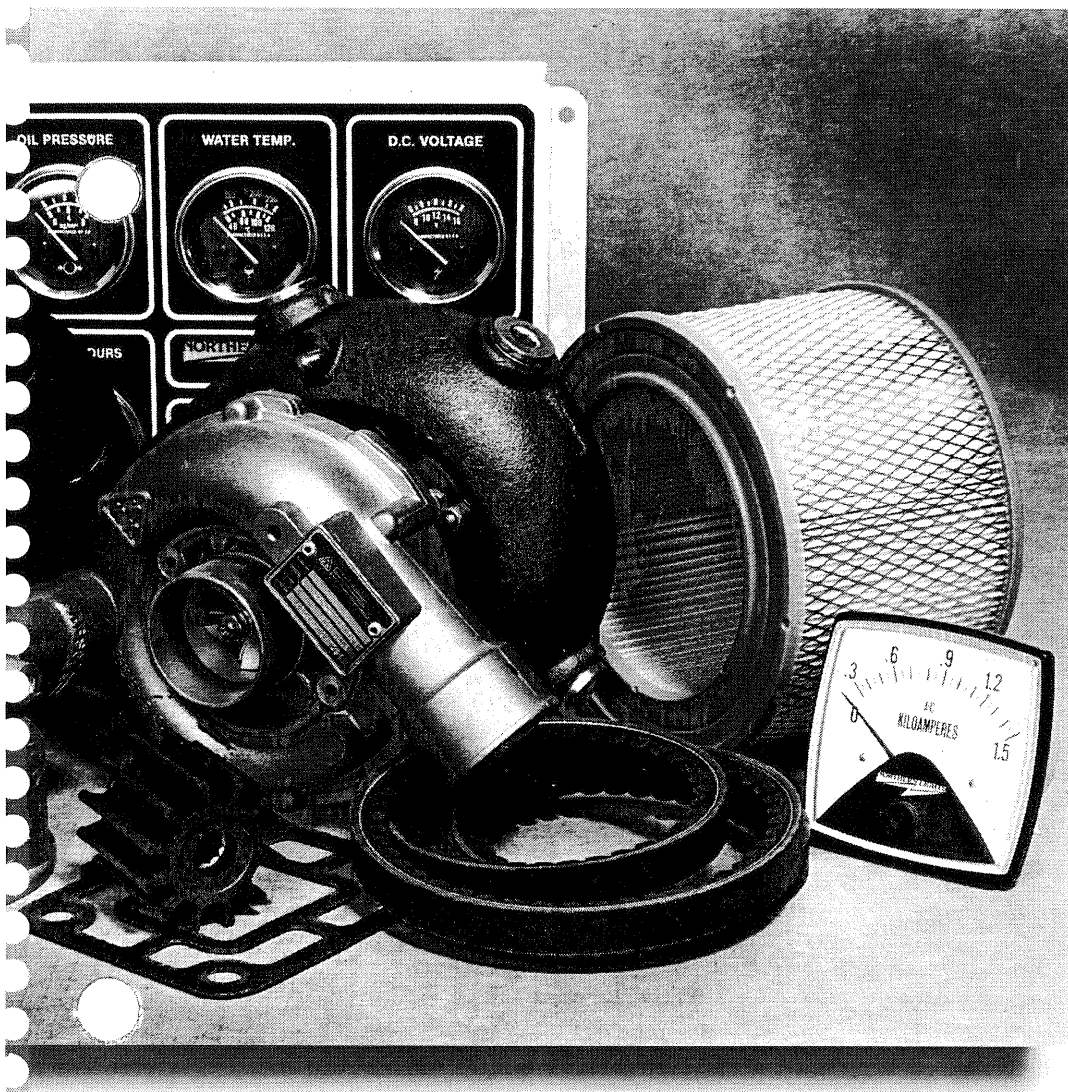


PARTS CATALOG

P378

for Model NL378



PARTS CATALOG

for Model
NL378

Please read thoroughly before attempting to use this manual:

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Model Designation & Serial Numbers	II
Reading a Parts Page	III

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Proprietary Information

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INTRODUCTION

MODEL DESIGNATION

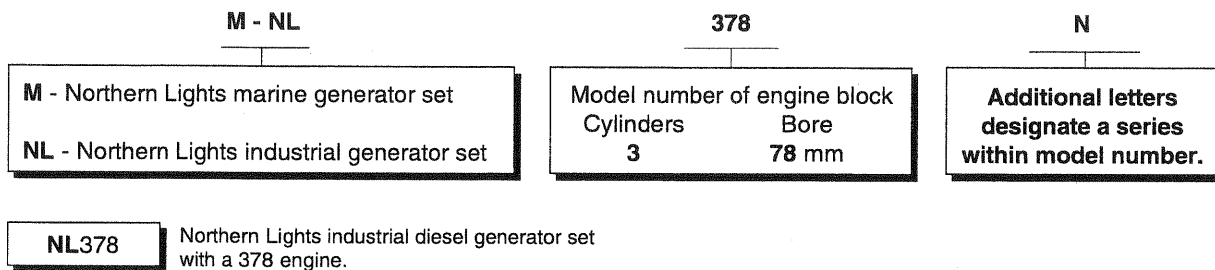
MODELS INCLUDED

This manual covers the operating instructions for:

NL378, which uses the Yanmar model 3TNE78A-ADCL engine.

MODEL NUMBERS

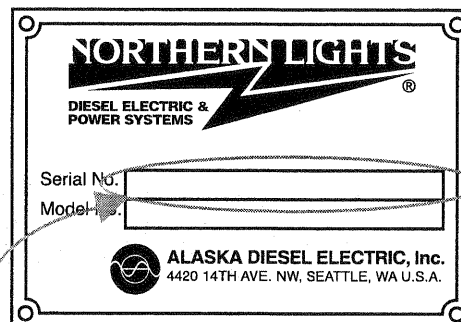
Model numbers give the unit's application, block model, aspiration, and RPM:



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 PXG, PXX, BCI,
and PSL 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 - NL844

KEY	PART NUMBER	QTY.	DESCRIPTION	SERIAL NUMBER
0	185046210	1	Alternator Assembly — 10	-
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	-

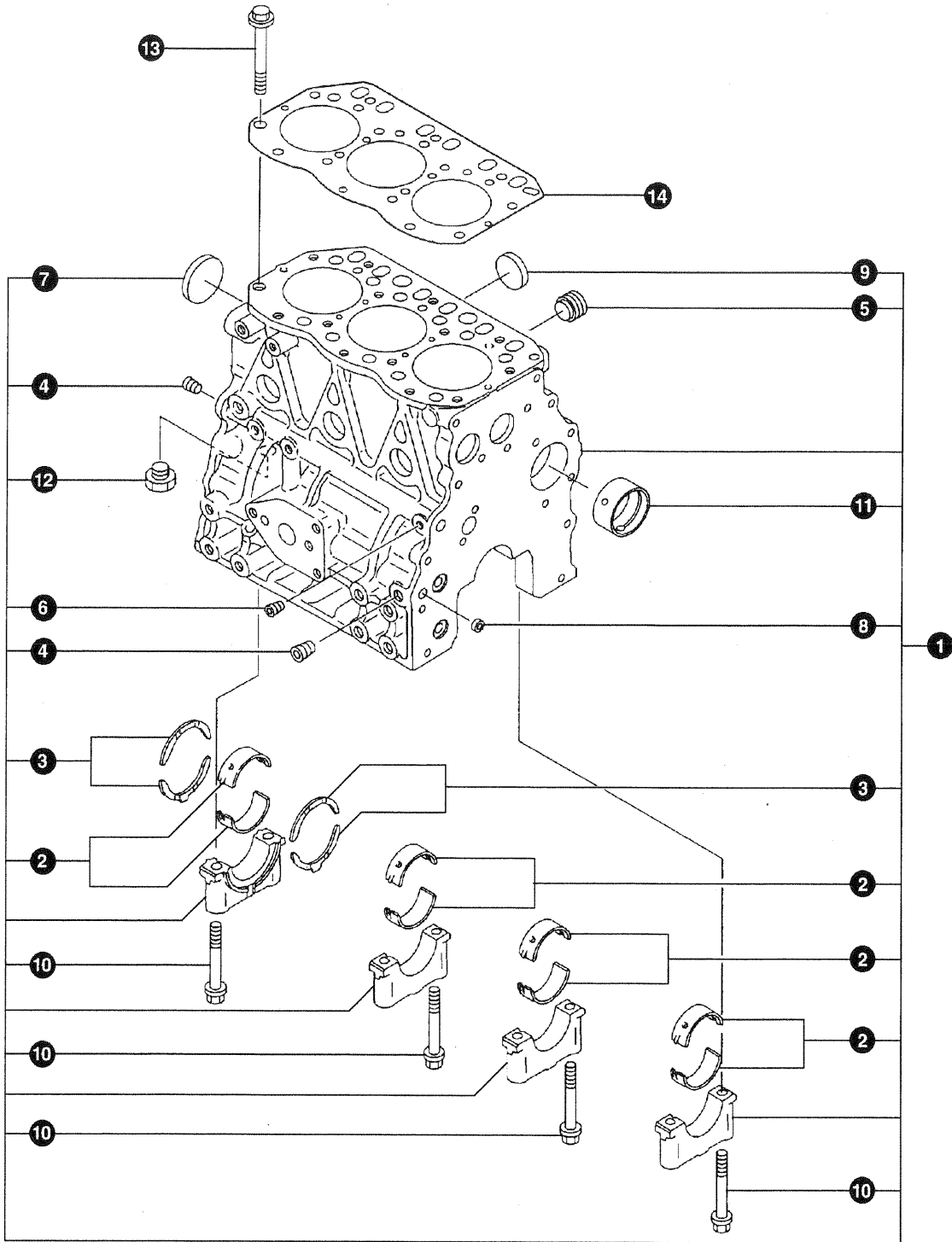
13 — P844 06/96 — 14
11 — 5-2 — 12

REFERENCES:

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

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

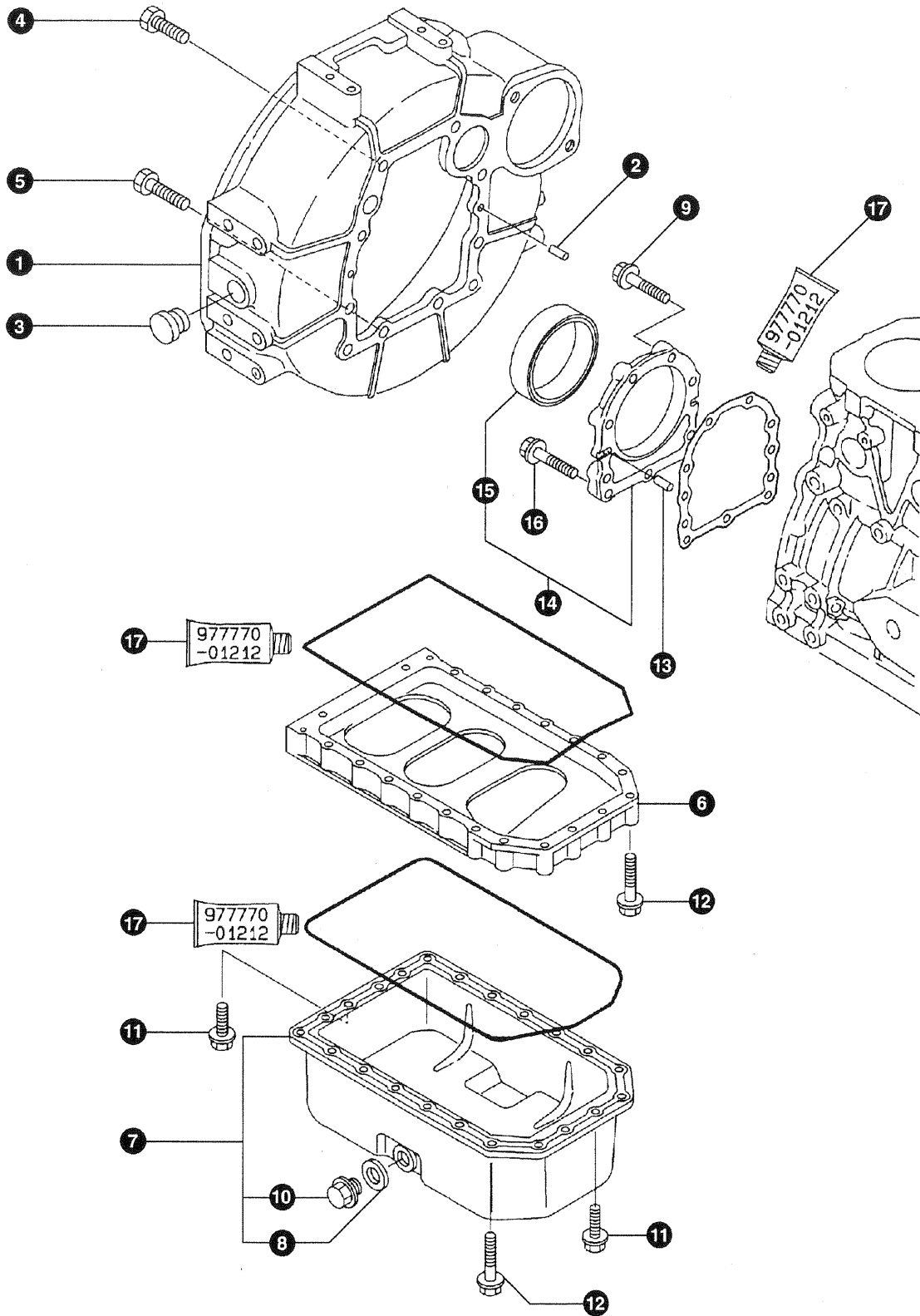
Cylinder Block



Cylinder Block

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	719822-01560	1	Cylinder Block Assembly (Includes Keys #2 - #12)	-
2	119810-02800	4	Main Bearing, Standard	-
	119810-02870	4	Main Bearing, Under-sized (U.S. = 0.25) part	-
3	119810-02930	2	Thrust Bearing, Standard	-
	119810-02940	2	Thrust Bearing, Over-sized (O.S. = 0.25) part	-
4	124160-01910	2	Plug PT 1/4 BSPT	-
5	171051-01921	1	Plug	-
6	23871-010000	1	Plug PT 1/8 BSPT	-
7	27231-500000	1	Expansion Plug, 50 mm	-
8	27241-120000	2	Expansion Plug, 12 mm	-
9	27241-300000	6	Expansion Plug, 30 mm	-
10	119620-02020	8	Bolt	-
11	129795-02411	1	Camshaft Bearing	-
12	23887-120002	1	Plug, 12 mm	-
13	119810-01200	14	Head Bolt	-
14	119818-01330	1	Head Gasket	-

Flywheel Housing and Oil Sump

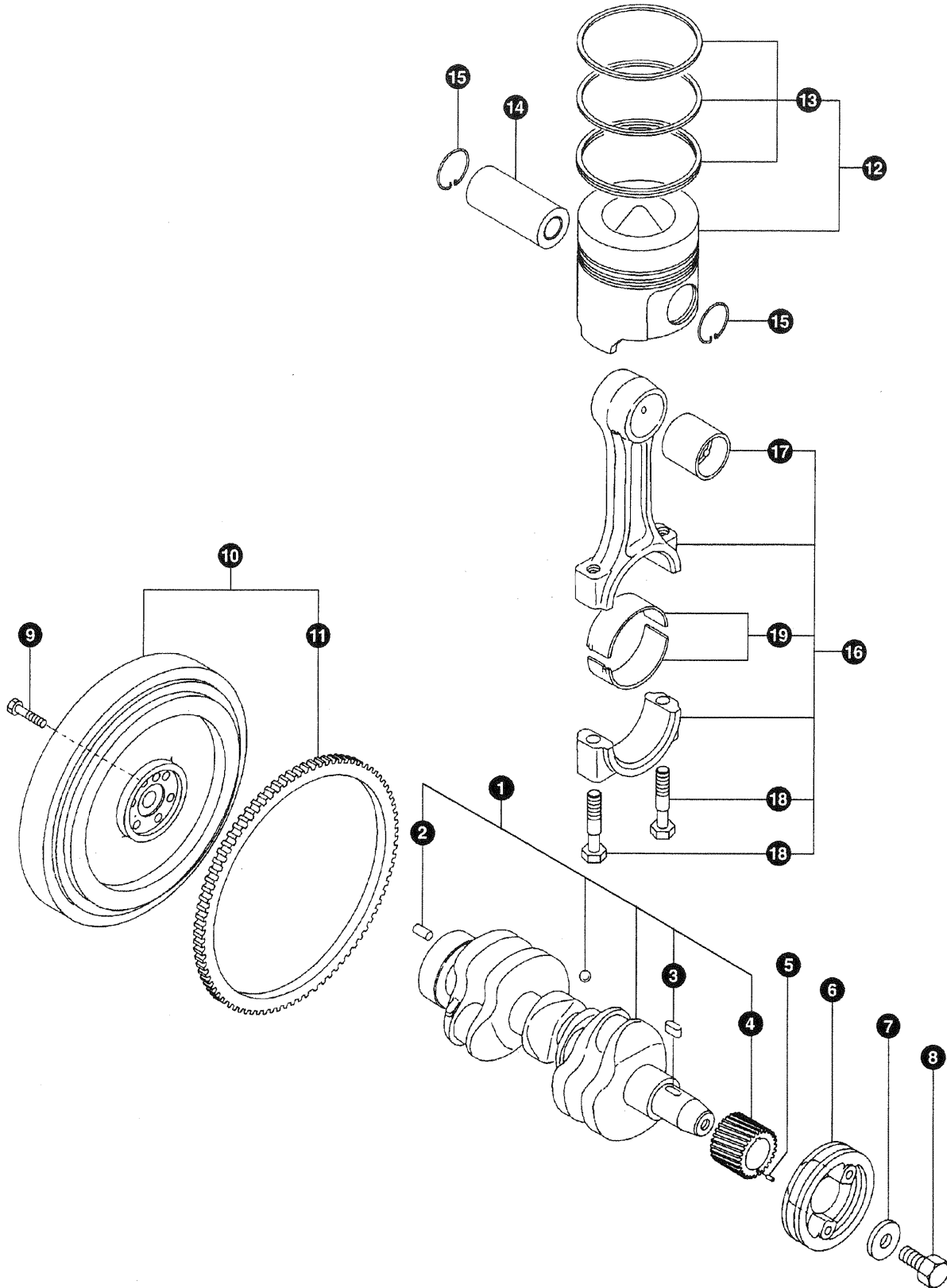


Flywheel Housing and Oil Sump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	171420-01600	1	Flywheel Housing	-
2	129100-01580	2	Parallel Pin 8 x 16	-
3	119620-01750	1	Cap, Flywheel Cover	-
4	26206-100252	6	Bolt, M10 x 25	-
5	26206-100302	4	Bolt, M10 x 30	-
6	119810-01730	1	Spacer	-
7	119810-01770	1	Oil Sump Assembly	-
8	119640-01640	1	Drain Plug M22	-
9	26106-080302	6	Bolt, M8 x 30 Plated	-
10	22190-220002	1	Seal Washer 22S	-
11	26106-080162	6	Bolt, M8 x 16 Plated	-
12	26106-080452	22	Bolt, M8 x 45 Plated	-
13	129100-01580	2	Parallel Pin 8 x 16	-
14	719810-01650	1	Rear Main Seal Assembly (Includes Key #15)	-
15	119810-01780	1	Oil Seal	-
16	26106-080352	3	Bolt, M8 x 35 Plated	-
17	977770-01212	**	Liquid Gasket	-

**As Required.

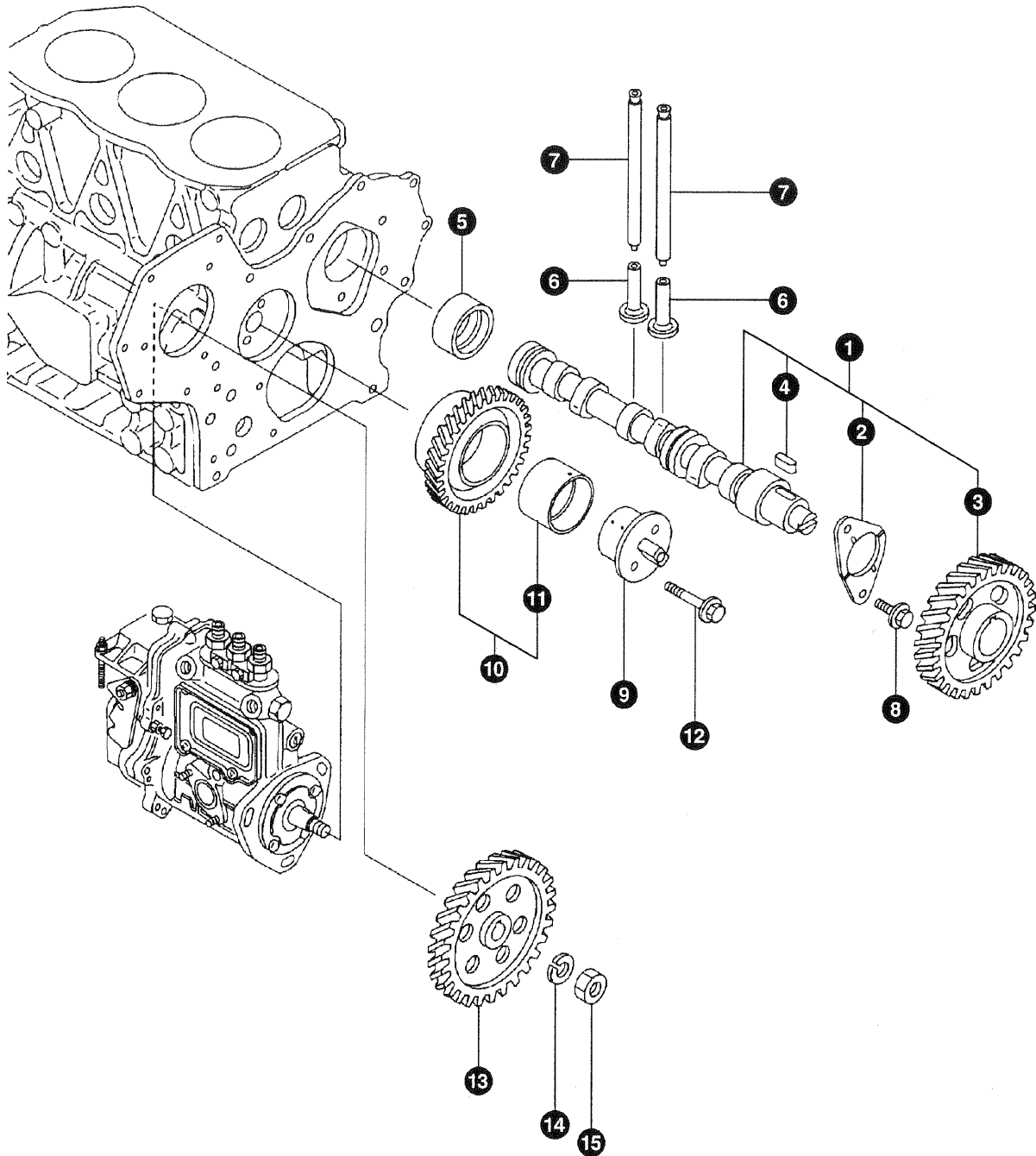
Crankshaft and Piston



Crankshaft and Piston

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119813-21000	1	Crankshaft Assembly (Includes Keys #2 - #4)	-
2	129100-01580	1	Pin 8 x 16	-
3	22512-070140	1	Key 7 x 14	-
4	129150-21200	1	Crankshaft Gear	-
5	22351-040010	1	Spring Pin 4 x 10	-
6	129550-21650	1	Crankshaft Pulley	-
7	129795-21661	1	Washer	-
8	121850-21680	1	Bolt	-
9	121111-21501	6	Flywheel Bolt	-
10	171301-21590	1	Flywheel Assembly (Includes Key #11)	-
11	124550-21600	1	Ring Gear	-
12	119818-22080	3	Piston Assembly, Standard (Includes Key #13)	-
	119818-22900	3	Piston Assembly, Over-sized 0.25 mm (Includes Key #13)	-
13	119818-22500	3	Ring Set, Standard	-
	119818-22950	3	Ring Set, Over-sized 0.25 mm	-
14	119813-22300	3	Piston Pin	-
15	129792-22400	6	Snap Ring	-
16	719810-23100	3	Connecting Rod Assembly	-
17	119810-23910	3	Piston Pin Bush	-
18	119810-23200	6	Connecting Rod Bolt	-
19	119810-23600	3	Bearing, Standard	-
	119810-23610	3	Bearing, Under-sized 0.25 mm	-

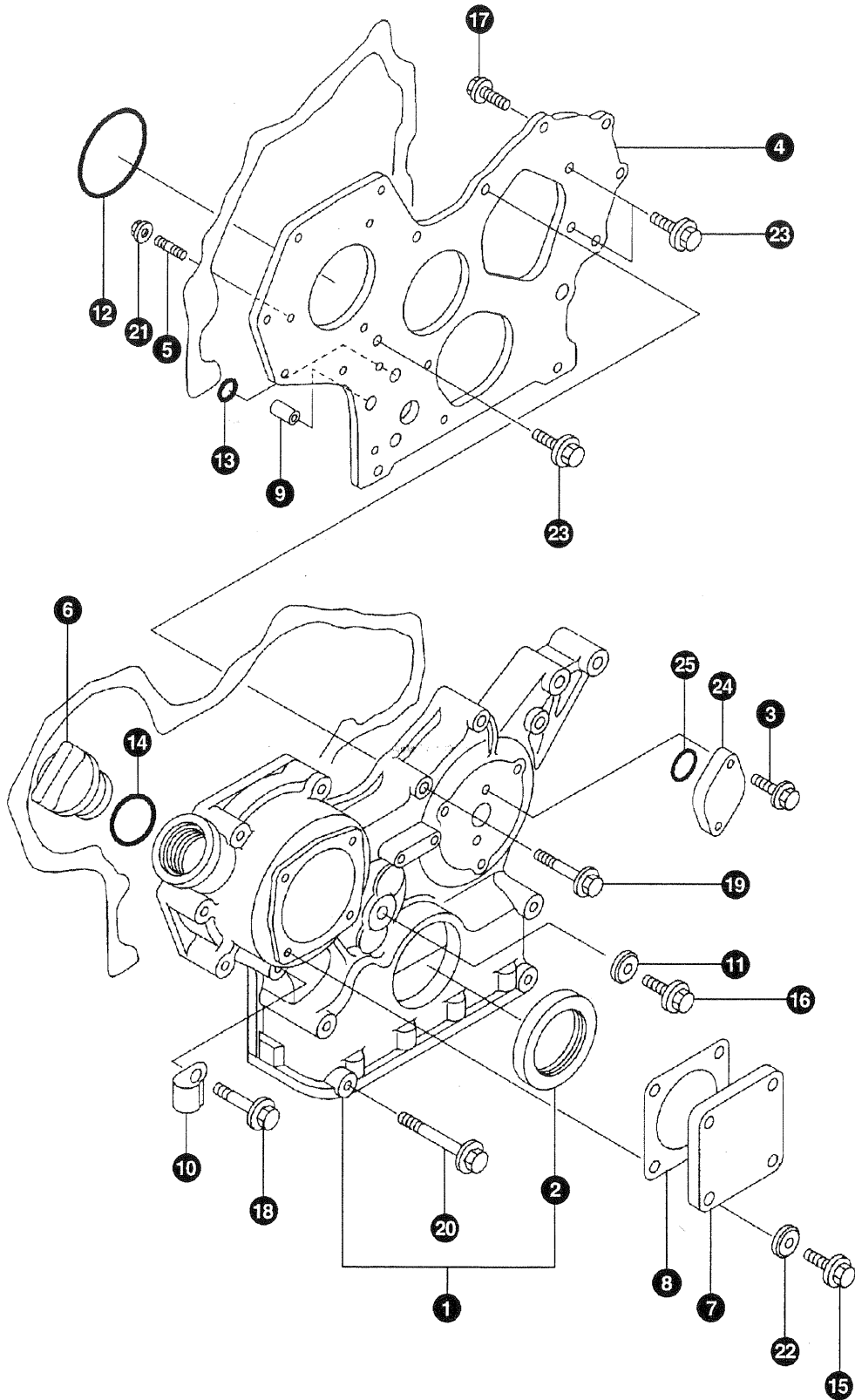
Camshaft and Driving Gear



Camshaft and Driving Gear

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119810-14580	1	Camshaft Assembly (Includes Keys #2 - #4)	-
2	129150-02450	1	Thrust Bearing	-
3	129150-14101	1	Camshaft Gear	-
4	22512-070140	1	Key 7 x 14	-
5	129795-02411	1	Cam Bearing	-
6	129150-14200	6	Tappet	-
7	119810-14400	6	Push Rod	-
8	26106-080162	2	Bolt, M8 x 16 Plated	-
9	129100-25061	1	Idle Gear Shaft	-
10	129150-25101	1	Gear with Bushing	-
11	129150-25920	1	Bushing	-
12	26106-080452	2	Bolt, M8 x 45 Plated	-
13	129150-25900	1	Fuel Injection Pump Gear	-
14	22217-120000	1	Spring Washer 12	-
15	26716-120002	1	Nut, M12	-

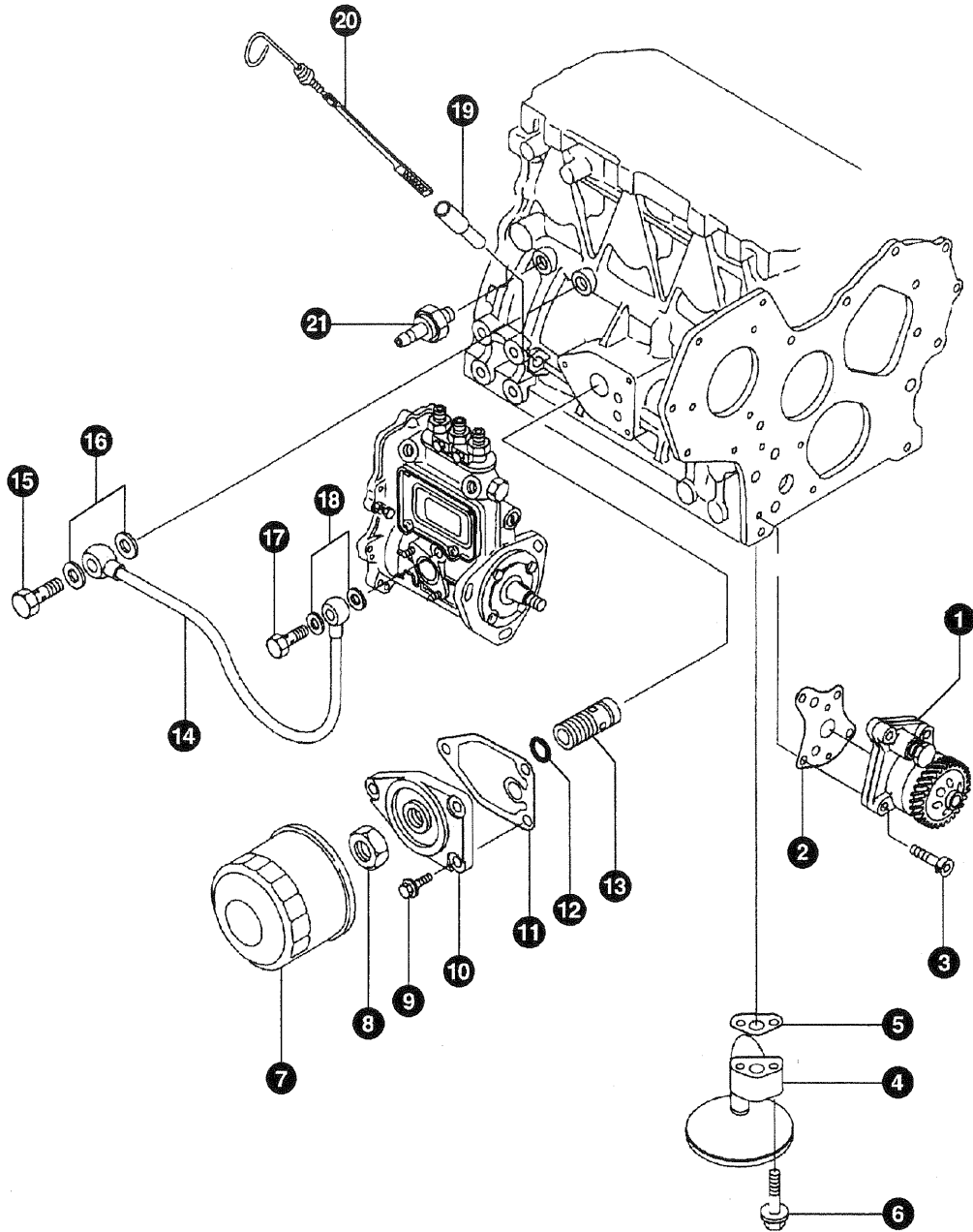
Timing Gear Housing



Timing Gear Housing

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	719810-01500	1	Timing Gear Housing (Includes Key #2)	-
2	129795-01800	1	Oil Seal	-
3	26106-060122	2	Bolt, M6 x 12 Plated	-
4	129400-01520	1	Front Plate	-
5	121450-01560	3	Stud, M8 x 22	-
6	124160-01751	1	Oil Cap	-
7	124240-01871	1	Cover	-
8	124240-01883	1	Gasket	-
9	129795-01950	2	Pipe	-
10	129150-03100	1	Retainer	-
11	22190-080002	1	Seal Washer	-
12	121850-51960	1	O-Ring	-
13	24311-000160	2	O-Ring	-
14	24311-000320	1	O-Ring	-
15	26106-080122	4	Bolt, M8 x 12 Plated	-
16	26106-080162	1	Bolt, M8 x 16 Plated	-
17	26106-080202	2	Bolt, M8 x 20 Plated	-
18	26106-080452	6	Bolt, M8 x 45 Plated	-
19	26106-080552	3	Bolt, M8 x 55 Plated	-
20	26106-080852	4	Bolt, M8 x 85 Plated	-
21	26366-080002	3	Nut, M8	-
22	22190-080002	4	Seal Washer	-
23	26106-080162	3	Bolt, M8 x 16 Plated	-
24	121023-01550	1	Cover	-
25	24341-000240	1	O-Ring	-

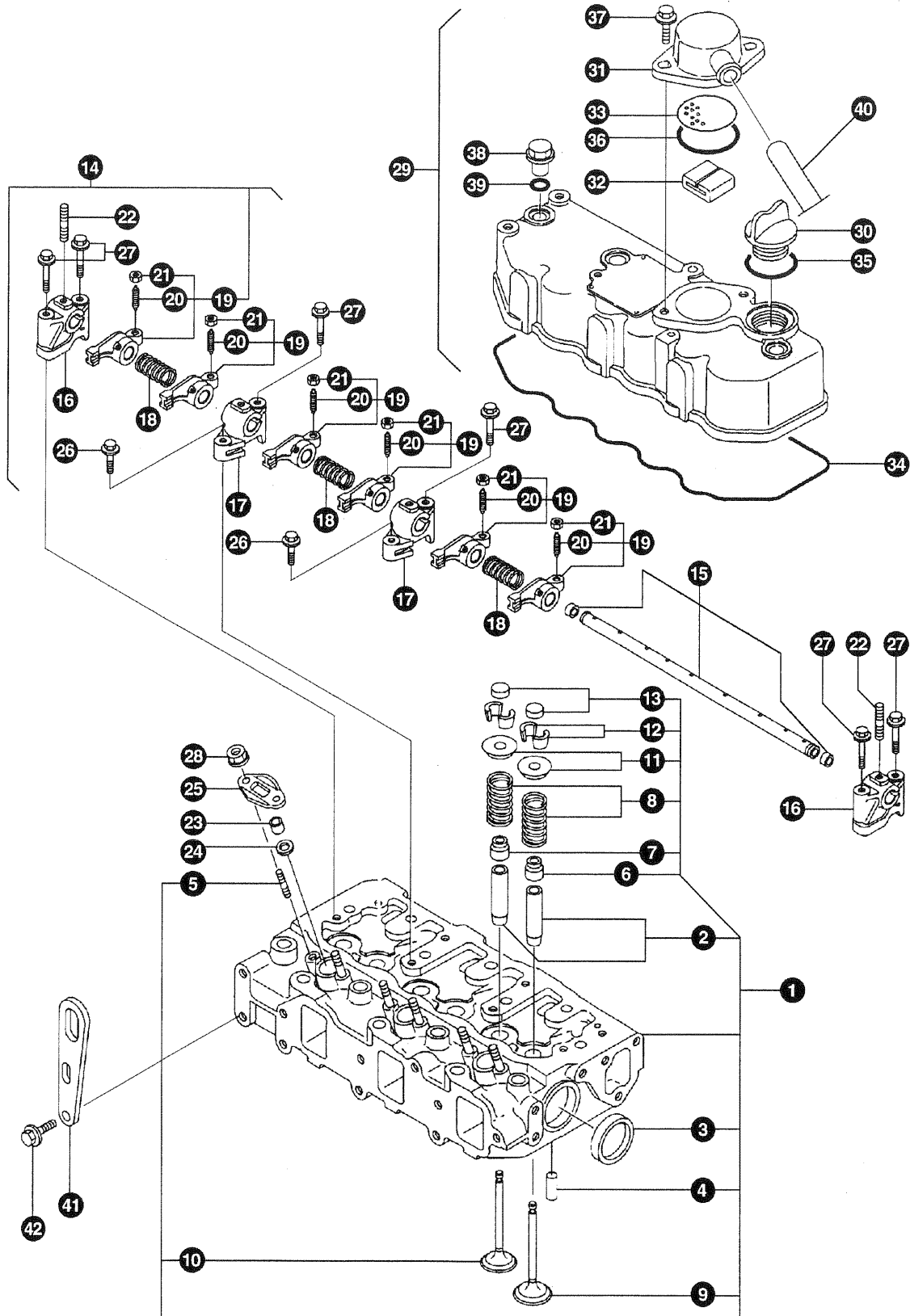
Lubricating System



Lubricating System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129001-32001	1	Oil Pump Assembly (Parts not available separately)	-
2	129150-32020	1	Pump Gasket	-
3	26450-060252	4	Bolt, M6 x 25	-
4	119810-35300	1	Oil Pick-Up	-
5	129150-35041	1	Gasket	-
6	26106-080352	2	Bolt, M8 x 35 Plated	-
7	24-07301	1	Oil Filter	-
8	129150-35350	1	Nut	-
9	26106-080202	3	Bolt, M8 x 20 Plated	-
10	129150-35101	1	Plate, Oil Filter Mounting	-
11	129150-35111	1	Gasket	-
12	24311-000160	1	O-Ring	-
13	129001-35300	1	Bolt	-
14	119810-39200	1	Tube, Injection Pump Oil Supply	-
15	124160-39140	1	Banjo Bolt	-
16	22190-080002	2	Sealing Washer	-
17	124550-59820	1	Banjo Bolt	-
18	23414-100000	2	Sealing Washer	-
19	121520-34810	1	Dipstick Tube	-
20	119600-34800	1	Dipstick	-
21		1	Oil Pressure Switch (See 'Electrical System')	-

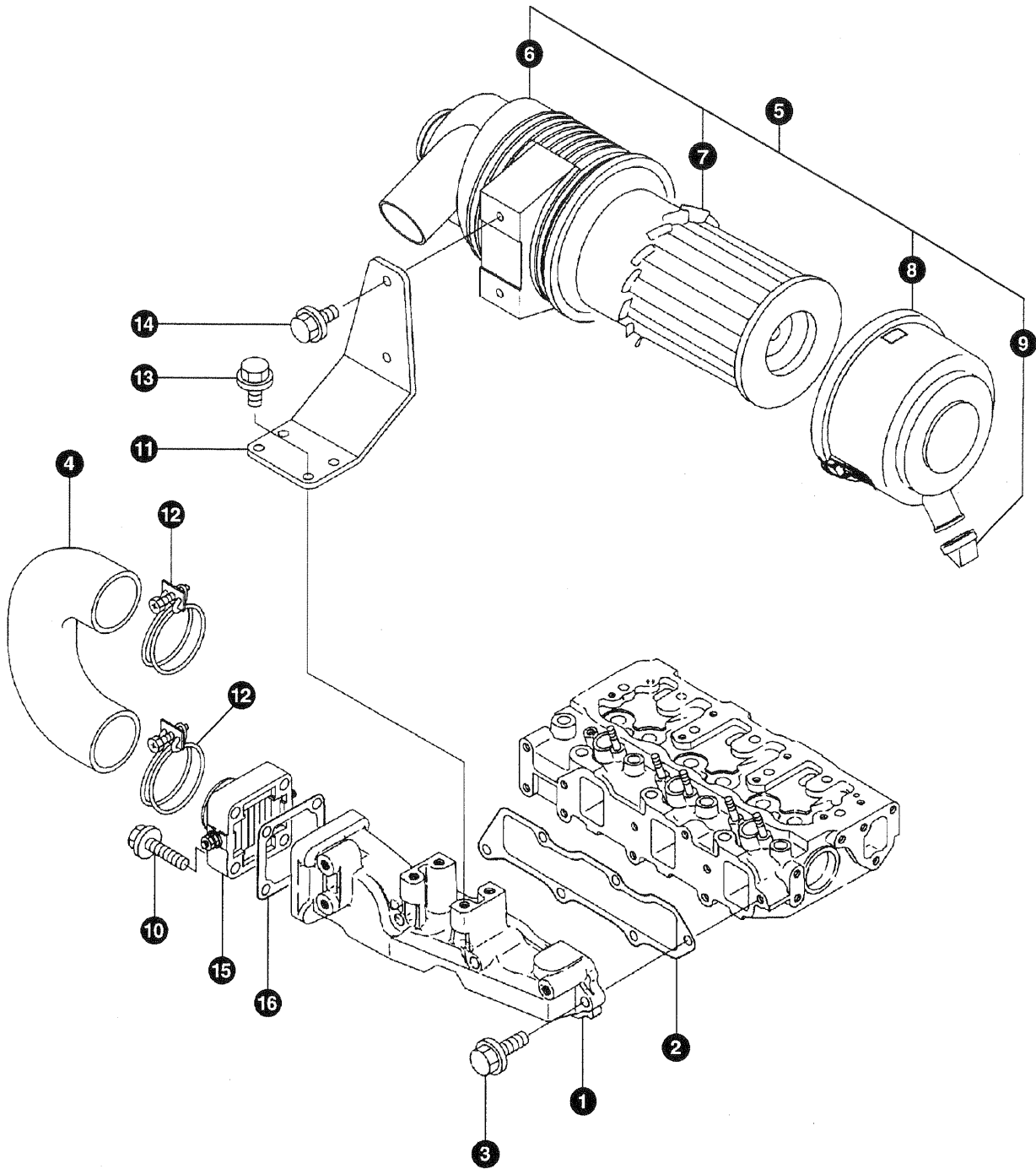
Cylinder Head and Rocker Arm Cover



Cylinder Head and Rocker Arm Cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119812-11700	1	Cylinder Head Assembly (Includes Keys #2 - #13)	-
2	124060-11800	6	Valve Guide	-
3	27241-400000	2	Plug 40	-
4	22351-060012	2	Spring Pin 6 x 12	-
5	26216-060302	6	Stud, M6 x 30 Plated	-
6	124160-11340	3	Valve Stem Seal	-
7	124950-11340	3	Valve Stem Seal	-
8	119810-11120	6	Valve Spring	-
9	119810-11100	3	Intake Valve	-
10	119810-11110	3	Exhaust Valve	-
11	104211-11180	6	Spring Retainer	-
12	27310-070000	6	Cotter	-
13	104211-11370	6	Valve Cap	-
14	119865-11210	1	Rocker Support Assembly (Includes Keys #15 - #21)	-
15	119810-11240	1	Rocker Arm Shaft	-
16	129155-11260	2	Rocker Arm Support	-
17	129155-11270	2	Rocker Arm Support	-
18	129150-11280	3	Spring	-
19	719810-11660	6	Rocker Arm Assembly (Includes Keys #20 - #21)	-
20	129150-11230	6	Valve Screw	-
21	129150-11750	6	Nut, M8 x P1.0	-
22	26226-080182	3	Stud, M8 x 18 Plated	-
23	119625-11871	3	Nozzle Protector	-
24	119625-11880	3	Nozzle Seat	-
25	119625-11900	3	Retainer	-
26	26106-080252	2	Bolt, M8 x 25 Plated	-
27	26106-080502	6	Bolt, M8 x 50 Plated	-
28	26366-060002	6	Nut, M6	-
29	719810-11520	1	Rocker Arm Cover (Includes Keys #30 - #39)	-
30	124160-01751	1	Oil Cap	-
31	129150-03020	1	Breather Cover	-
32	129150-03070	1	Breather Baffle	-
33	129150-03080	1	Shelter Plate	-
34	119865-11310	1	Gasket	-
35	24311-000320	1	O-Ring	-
36	24341-000500	1	O-Ring	-
37	26106-080162	2	Bolt, M8 x 16 Plated	-
38	124160-11360	3	Knob	-
39	24311-000120	3	O-Ring	-
40	129150-03090	1	Pipe	-
41	124736-07900	1	Lifting Eye	-
42	26106-080142	2	Bolt, M8 x 14 Plated	-

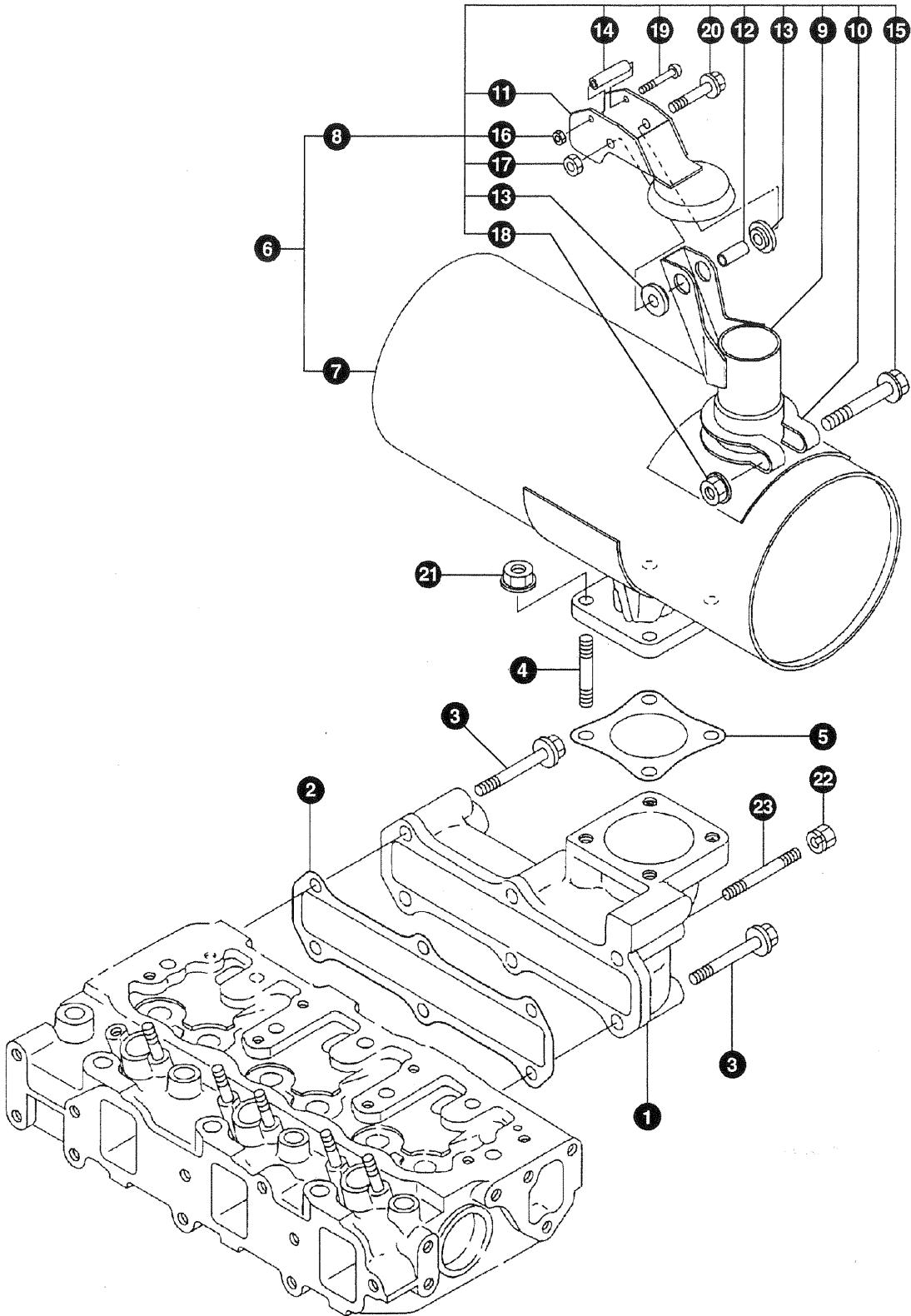
Intake Manifold and Air Cleaner



Intake Manifold and Air Cleaner

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119813-12100	1	Intake Manifold	-
2	119813-12110	1	Gasket	-
3	26106-080252	6	Bolt, M8 x 25 Plated	-
4	129619-12210	1	Hose	-
5	129619-12500	1	Air Cleaner Assembly (Includes Keys #6 - #9)	-
6	129619-12520	1	Body Assembly	-
7	129619-12510	1	Outer Element	-
8	129619-12530	1	Cover Assembly	-
9	129619-12540	1	Valve	-
10	26106-080352	4	Bolt, M8 x 35 Plated	-
11	129619-12560	1	Bracket	-
12	23000-060000	2	Hose Clamp	-
13	26106-080182	4	Bolt, M8 x 18 Plated	-
14	26106-080182	2	Bolt, M8 x 18 Plated	-
15	129120-77501	1	Air Heater	-
16	129150-77511	1	Gasket	-

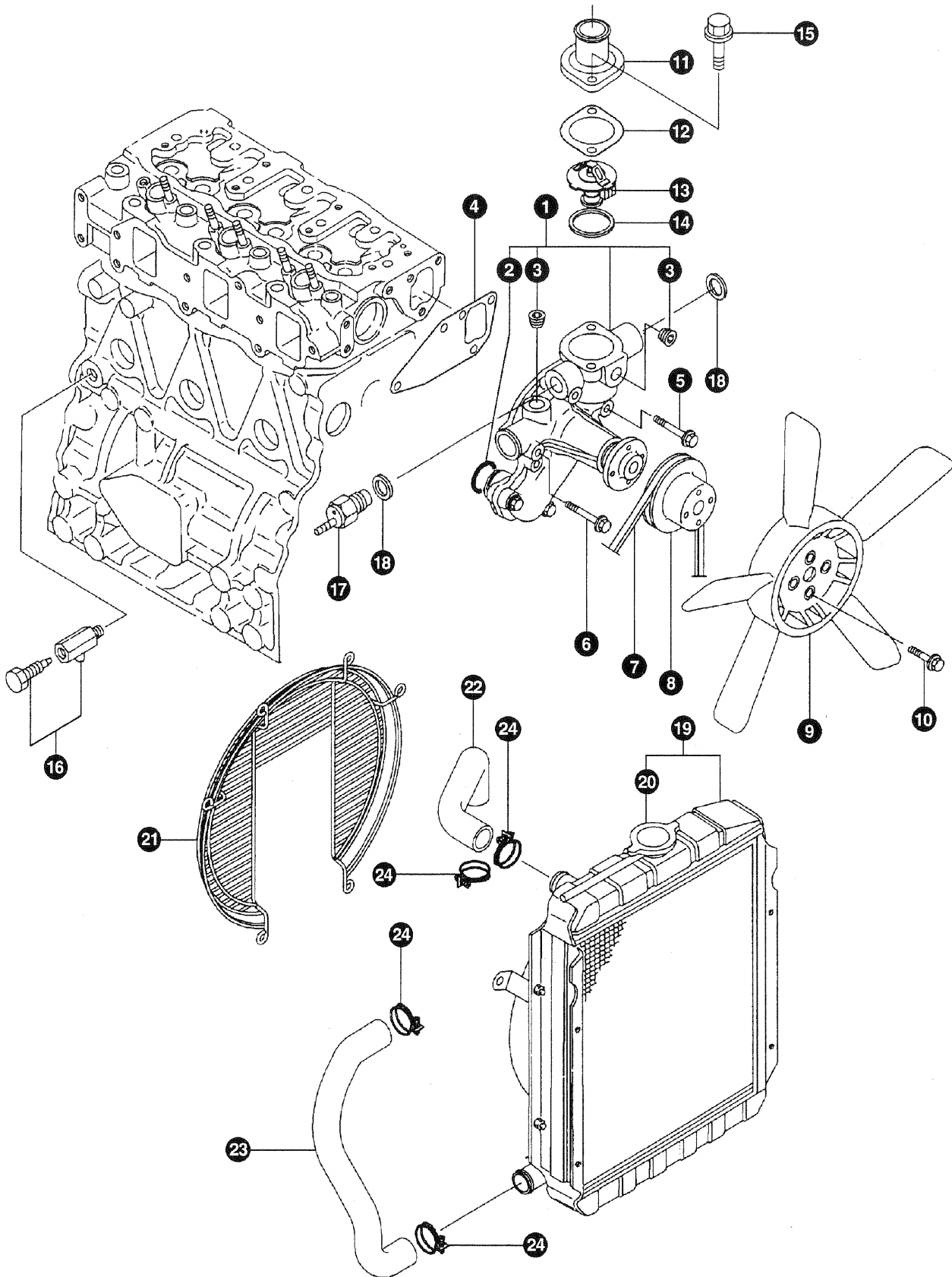
Exhaust Manifold and Muffler



Exhaust Manifold and Muffler

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119813-13100	1	Exhaust Manifold	-
2	119813-13110	1	Gasket	-
3	26106-080602	4	Bolt, M8 x 60 Plated	-
4	26216-080222	4	Stud, M8 x 22 Plated	-
5	121000-13201	1	Silencer Gasket	-
6	119620-13501	1	Muffler Assembly (Includes Keys #7 - #18)	-
7	119620-13510	1	Muffler Body	-
8	119620-13520	1	Exhaust Raincap Assembly (Includes Keys #9 - #18)	-
9	119620-13560	1	Exhaust Outlet	-
10	124664-13580	1	Clamp	-
11	119358-13640	1	Raincap	-
12	121855-13821	1	Spacer (A)	-
13	121855-13830	2	Spacer (B)	-
14	123500-13840	1	Spacer (C)	-
15	26106-080502	1	Bolt, M8 x 50 Plated	-
16	26347-040002	1	U-Nut, M4	-
17	26347-060002	1	U-Nut 6	-
18	26366-080002	1	Nut, M8	-
19	26557-040352	1	Screw, M4 x 35	-
20	26106-060402	1	Bolt, M6 x 40 Plated	-
21	194990-22050	4	Nut with Washer 8	-
22	194990-22050	2	Nut with Washer 8	-
23	26216-080602	2	Stud, M8 x 60 Plated	-

Cooling Water System

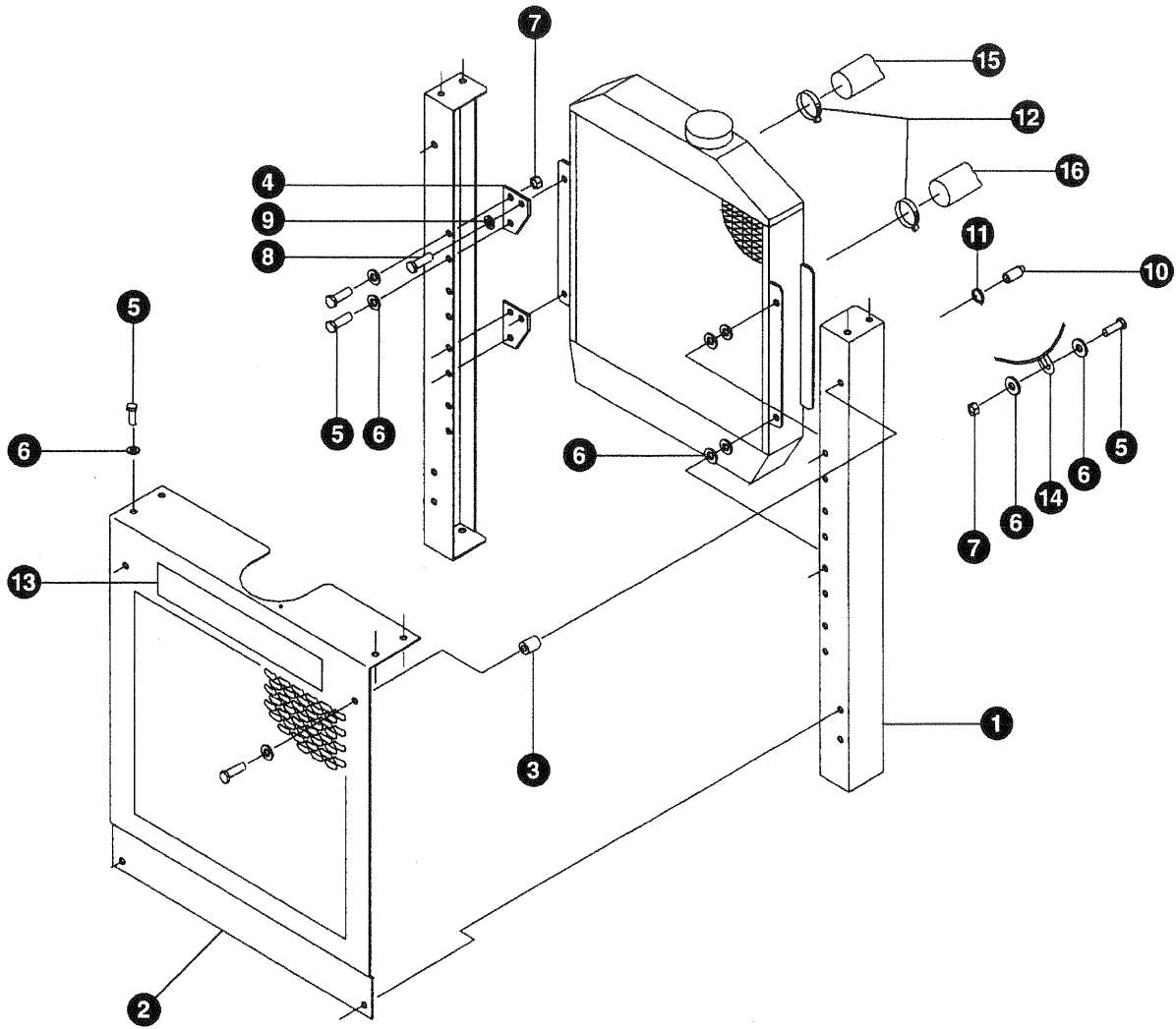


Cooling Water System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	119810-42001	1	Coolant Pump (Parts not available separately)	-
2	129150-42320	1	O-Ring	-
3	23871-030000	**	Plug 3/8 BSPT	-
4	129150-42020	1	Gasket	-
5	26106-080352	1	Bolt, M8 x 35 Plated	-
6	26106-080552	3	Bolt, M8 x 55 Plated	-
7	119831-42290	1	Drive Belt	-
8	129155-42350	1	Pulley	-
9	124700-44740	1	Cooling Fan	-
10	26014-060162	4	Bolt, M6 x 16	-
11	129350-49530	1	Thermostat Cover	-
12	129795-49551	1	Gasket	-
13	129155-49800	1	Thermostat	-
14	129150-49811	1	Gasket	-
15	26106-080202	2	Bolt, M8 x 20 Plated	-
16	119620-49290	1	Drain Cock	-
17		1	Temperature Switch (See 'Electrical System')	-
18	15-01001	2	Sealing Washer	-
19	119820-44500	1	Radiator (Includes Key #20)	-
20	119259-44570	1	Radiator Cap	-
21	119820-44560	1	Fan Guard	-
22	171301-49010	1	Hose, Radiator Inlet	-
23	171301-49020	1	Hose, Radiator Outlet	-
24	19-00016	4	Clamp #16	-

**As Required.

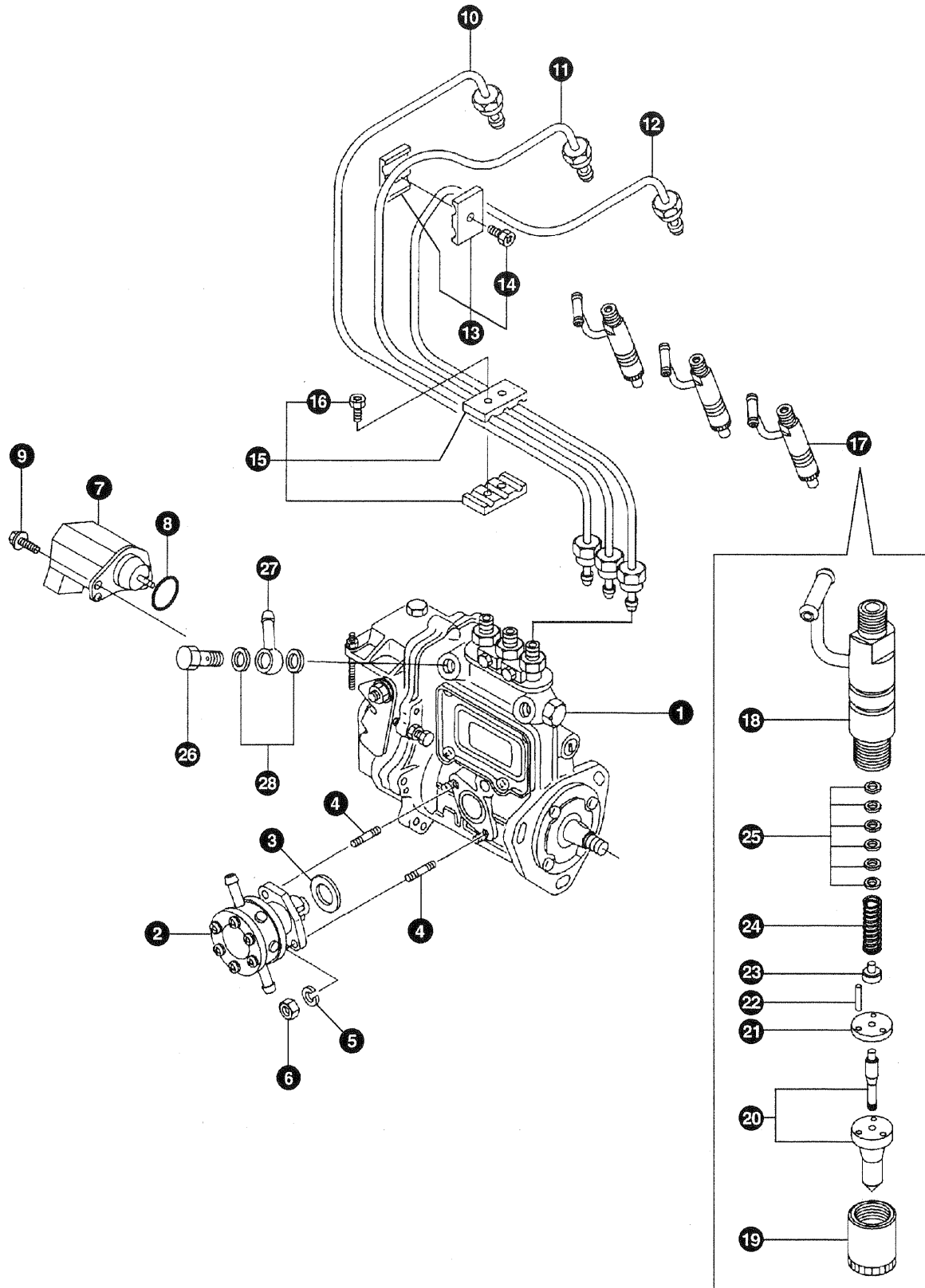
Radiator and Modular Guard



Radiator and Modular Guard

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-17301	2	Side Panel	-
2	39-17313	1	Grille	-
3	21-17302	2	Spacer	-
4	23-17301	2	Bracket	-
5	12-00711	20	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
6	15-00701	40	Flat Washer M8	-
7	14-04802	20	Hex Nut, Nylock M8 x 1.25	-
8	12-00751	4	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
9	15-00702	4	Lock Washer, Helical M8	-
10	20-17301	1	Cap, Radiator Drain 1/4" ID	-
11	19-50001	1	Speedy Clamp Size "C"	-
12	19-00016	4	Hose Clamp #16	-
13	00-70075	1	Label, "Northern Lights Generators"	-
14	119820-44560	1	Fan Guard	-
15	171301-49010	1	Hose, Radiator Inlet	-
16	171301-49020	1	Hose, Radiator Outlet	-

Fuel System - General Arrangement



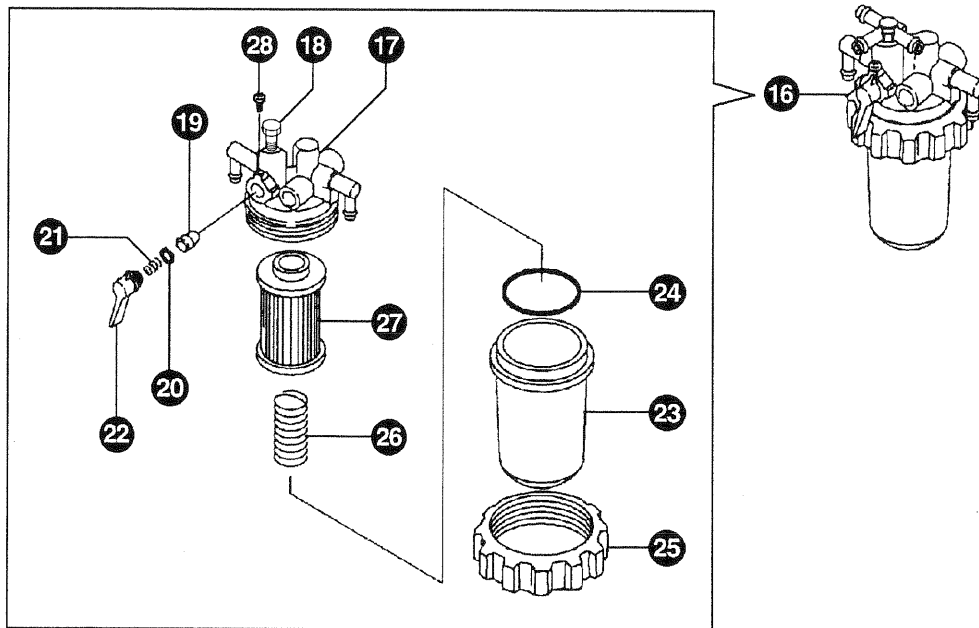
Fuel System - General Arrangement

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	719989-51310	1	Injection Pump	-
2	129100-52100	1	Feed Pump	-
3	129155-52020	1	Gasket	-
4	129155-51020	2	Stud	-
5	15-01132	2	Lock Washer M6	-
6	14-01131	2	Hex Nut, M6 x 1.0	-
7	119285-77950	1	Stop Solenoid (Yanmar with Plug Connector)	-
	119285-77910	1	Harness Connector (For above - not shown)	-
	119653-77950	1	Stop Solenoid (Synchrostart with Pigtail Connector)	-
8	24341-000280	1	O-Ring	-
9	26106-060142	2	Bolt	-
10	119813-59811	1	Fuel Injection Pipe	-
11	119813-59821	1	Fuel Injection Pipe	-
12	119813-59831	1	Fuel Injection Pipe	-
13	119305-59120	1	Retainer	-
14	129150-59131	1	Bolt, M4 x 14 Hex Socket	-
15	129150-59120	1	Tube Clamp Assembly	-
16	129150-59131	2	Bolt, M4 x 14 Hex Socket	-
17	719800-53100	3	Fuel Injector (Includes Keys #18 - #25)	-
18	129100-53100	3	Nozzle Holder Assembly	-
19	114250-53080	3	Nozzle Case Nut	-
20	119818-53000	3	Nozzle Assembly	-
21	114250-53140	3	Stop Plate	-
22	114250-53210	6	Pin	-
23	114250-53130	3	Spring Seat	-
24	114250-53120	3	Spring	-
25	114250-53400	3	Shim Pack	-
26	103854-39140	1	Banjo Bolt	-
27	101304-59020	1	Banjo Fitting, M12 x 5/16 Hose Barb	-
28	104200-59170	2	Sealing Washer	-

THROTTLE ADDITIONS (Not Pictured)

1	23-75703	1	Bracket, Spring Retainer	-
2	131296259	1	Spring, Throttle Return	-
3	12-50063	1	Capscrew, Hex Head M6 x 1.0 x 70 mm	-
4	14-01131	1	Hex Nut M6 x 1.0	-
5	23-57601	1	Lever Extension	-
6	12-00000	1	MSCR, BH Slotted #10-32 x 1/2"	-
7	14-00006	1	Hex Nut, Nylock #10-32	-

Fuel Lines and Filter Mounting



Fuel Lines and Filter Mounting

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51099	1	Manifold, Fuel Line Connection 1/4 NPT	-
2	12-01131	2	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
3	15-00008	2	Flat Washer M6	-
4	14-04803	2	Hex Nut, Nylock M6 x 1.0	-
5	21-51098	2	St. El. 90, Brs. 1/4 NPT x 1/4 NPT	-
6	21-52016	2	M. Conn. Brs. 1/4 NPT x 5/16 NPT	-
7	41-01012	74"	Hose 5/16" ID Push-On	-
11	19-50002	8	Speedy Clamp, Size "D"	-
12	12-00717	1	Capscrew, Hex Head M8 x 1.25 x 60 mm	-
13	15-00701	1	Flat Washer M8	-
14	15-00702	1	Lock Washer, Helical M8	-
15	21-00046	2	Plug, Plastic 1/4" NPT (for shipping)	-
16	24-57600	1	Fuel Filter Assembly	-
17	24-57601	1	Filter Head	-
18	21-50027	1	Plug	-
19	104200-55321	1	Taper Valve	-
20	24311-240100	1	O-Ring	-
21	104200-55330	1	Taper Valve Spring	-
22	119810-55340	1	Lever	-
23	121254-55510	1	Strainer Cup	-
24	102103-55520	1	O-Ring	-
25	110250-55610	1	Retaining Ring	-
26	121250-55620	1	Spring	-
27	119810-55650	1	Element	-
28	104200-55750	1	Screw, M4	-

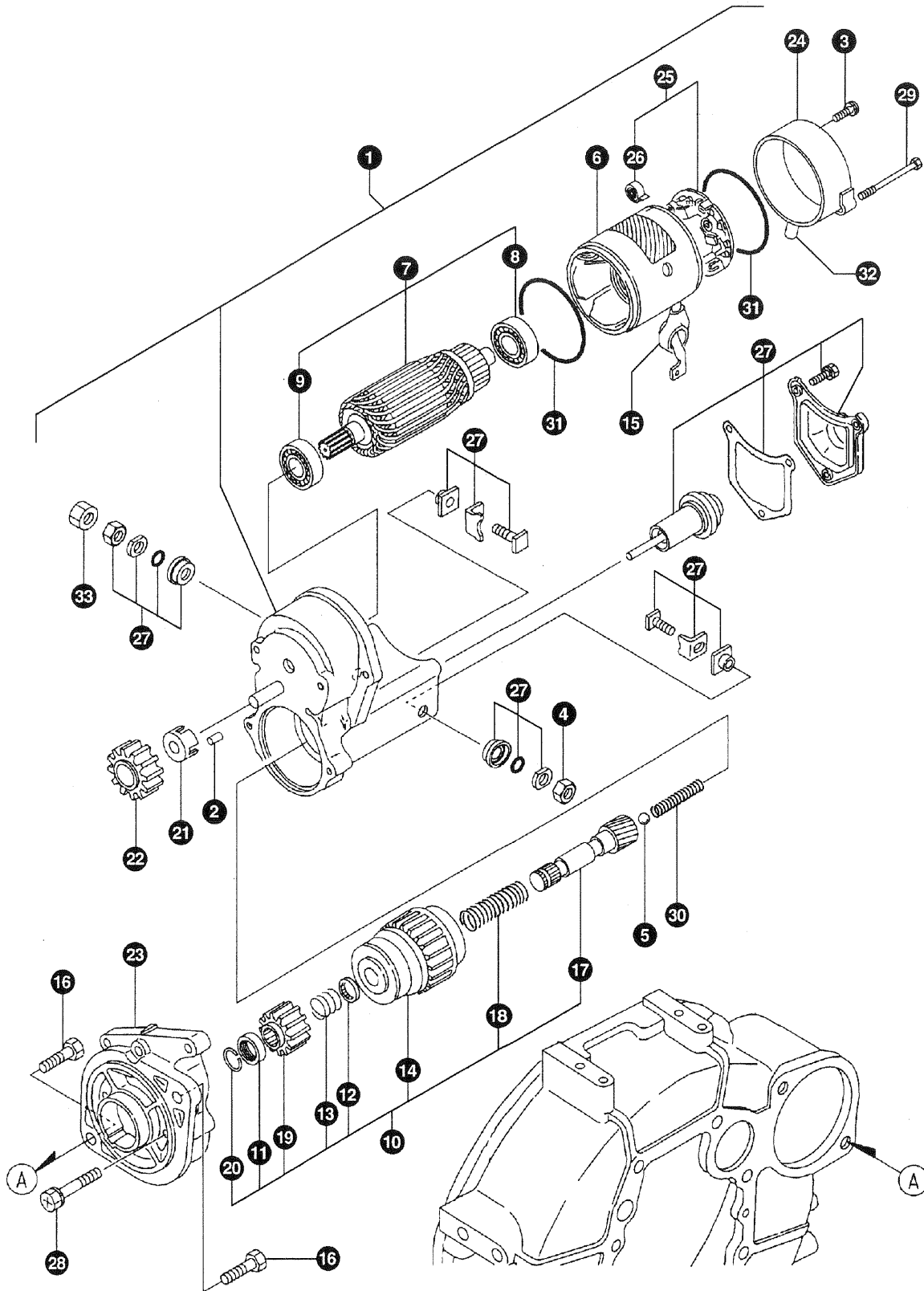
Engine Electrical, 12 Volt

**DRAWING
NOT YET
AVAILABLE**

Engine Electrical, 12 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-47301	1	Wire Harness Assembly (Includes Key #11)	-
2	21-00139	1	Adapter, 1/8 BSPT x 1/8 NPT	-
3	21-05400	1	Street Tee, 1/8 NPT	-
4	22-41016	1	Pressure Sender 0 - 80 PSI Standard Ground	-
5	121460-39450	1	Pressure Switch	-
6	22-45201	1	Temperature Sender 250°F Standard Ground	-
7	121250-44901	1	Temperature Switch 110°C	-
8	15-01001	2	Sealing Washer	-
9	119660-77710	1	Voltage Regulator	-
10	23-47301	1	Bracket, Voltage Regulator Mounting	-
11	171301-77720	1	Connector	-
12	129698-77010	1	Starter (Formerly #129129-77010. See parts detail)	-
13	171301-77201	1	Alternator (See parts detail)	-
14	22-97310	1	Control Panel / Relay Board Assembly (Units with 282-Series Generators - see parts detail)	-
	22-98405	1	Control Panel / Relay Board Assembly (Units with 164-Series Generators - see parts detail)	-

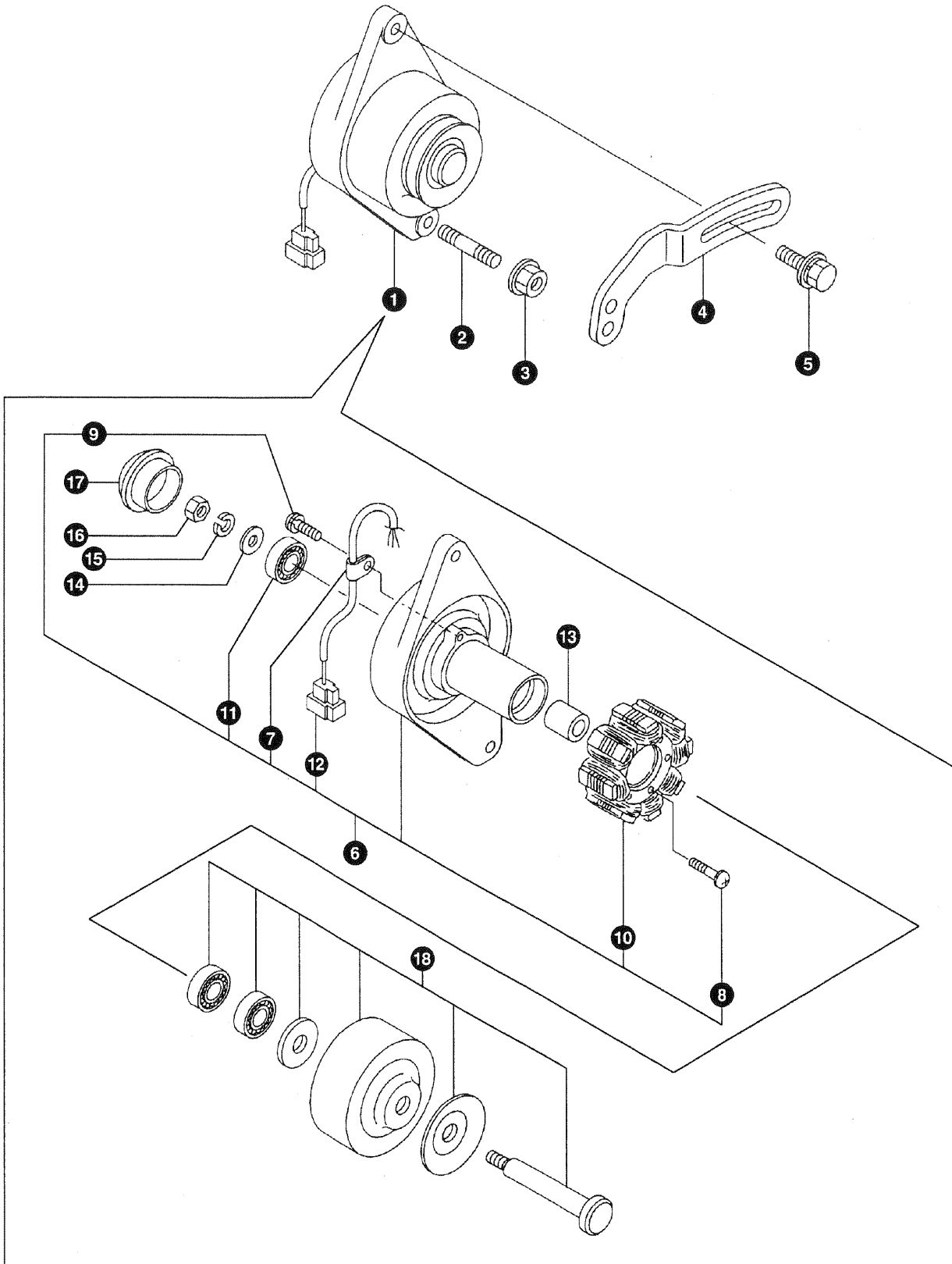
Starting Motor



Starting Motor

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129129-77010	1	Starter Assembly (Includes all Keys)	-
2	X0283060061	5	Roller	-
3	X0289030010	2	Screw	-
4	X9490561370	1	Nut	-
5	X9491200240	1	Ball	-
6	129129-77210	1	Yoke Assembly	-
7	129129-77220	1	Armature Assembly	-
8	129129-77230	1	Bearing	-
9	129129-77240	1	Bearing	-
10	129129-77250	1	Starter Assembly	-
11	X0280210230	1	Nut	-
12	X0283270140	1	Retainer	-
13	X9491703371	1	Coil Spring	-
14	129129-77390	1	Starter Clutch Assembly	-
15	129129-77380	1	Cap	-
16	26116-120252	2	Bolt, M12 x 25 Plated	-
17	129129-77400	1	Shaft	-
18	129129-77410	1	Coil Spring	-
19	129129-77420	1	Pinion	-
20	129129-77430	1	Ring	-
21	129129-77260	1	Retainer	-
22	129129-77270	1	Pinion	-
23	129129-77280	1	Housing	-
24	129129-77290	1	Frame	-
25	129129-77300	1	Holder Assembly	-
26	X9491730461	4	Spring	-
27	129129-77310	1	Switch Assembly	-
28	129129-77320	2	Bolt	-
29	129129-77330	2	Bolt	-
30	129129-77340	1	Spring	-
31	129129-77350	2	O-Ring	-
32	129129-77361	1	Drain Bush	-
33	129129-77370	1	Nut	-

Alternator and Mounting



Alternator and Mounting

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	171301-77201	1	Alternator (Includes Keys #6 - #18)	-
2	121450-01570	1	Stud	-
3	26366-100002	1	Nut, M10	-
4	119810-77330	1	Tensioning Arm	-
5	26014-080252	1	Bolt, M8 x 25	-
6	XM08137	1	Stator and Housing Sub-Assembly (Includes Keys #7 - #17)	-
7	XM36410	1	Clamp	-
8	26022-040252	2	Screw, M4 x 25	-
9	XYSPS4008	1	Screw	-
10	XM08180	1	Stator	-
11	XM27436	1	Ball Bearing	-
12	XM17878	1	Coupler	-
13	106383-44720	1	Spacer	-
14	106383-44730	1	Washer	-
15	22212-100000	1	Spring Washer, M10	-
16	26716-100002	1	Nut, M10	-
17	XM61014	1	Cap	-
18	XM82184	1	Pulley and Rotor Assembly	-

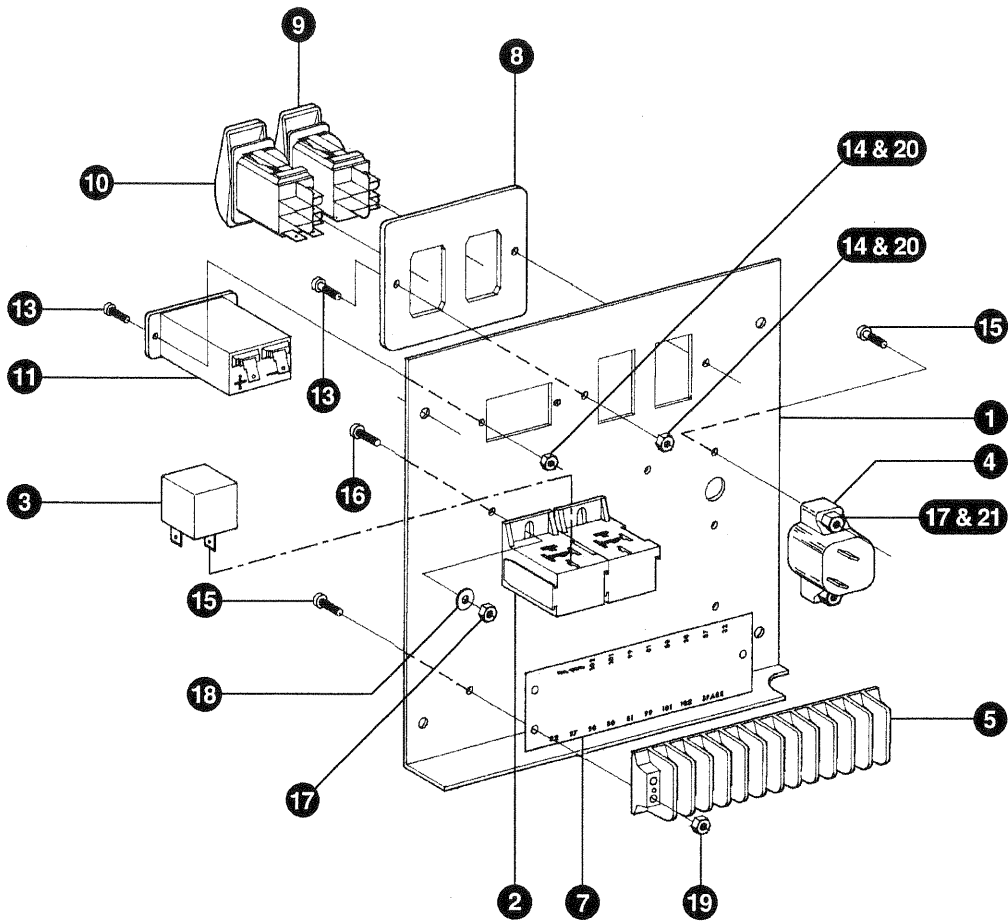
Control Panel / Relay Board Assembly - 12 Volt

**DRAWING
NOT YET
AVAILABLE**

Control Panel / Relay Board Assembly - 12 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-97310	1	Control Panel / Relay Board Assembly, 12 Volt (Includes all Keys)	-
1	28-90007	1	Plate	-
2	00-40013	1	Plate	-
3	22-90007	1	Rocker Switch	-
4	22-90008	1	Rocker Switch	-
5	22-90009	1	Hour Meter	-
6	12-00093	4	Screw, Round Head Phillips #6-32 x 1/2"	-
7	15-00009	4	Lock Washer, Helical #6	-
8	14-00002	4	Hex Nut #6-32	-
9	22-41032	4	Relay Base	-
10	12-00004	4	Screw, BH Slotted #8-32 x 3/8"	-
11	15-00001	2	Flat Washer #8	-
12	14-00000	2	Hex Nut #8-32	-
13	22-42047	4	Relay, SPDT 12 Volt 20/30 Amp	-
14	22-40018	1	Circuit Breaker 10 Amp	-
15	12-00005	2	Screw, BH Slotted #8-32 x 3/4"	-
16	15-00000	2	Lock Washer, Helical #8	-
17	22-40273	1	Wire Harness	-
18	22-41060	2	Diode 6 Amp 50 Volt	-
19	00-41015	1	Bushing	-

Control Panel / Relay Board Assembly - 12 Volt

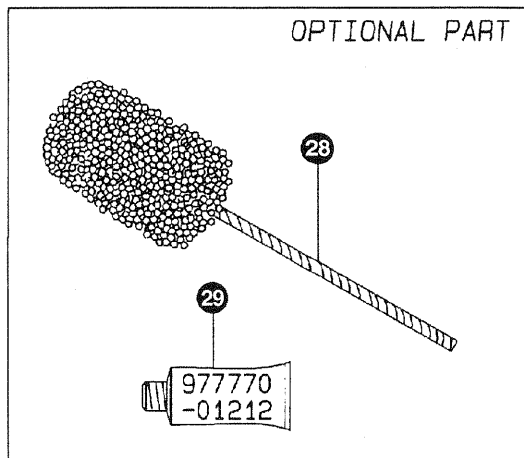
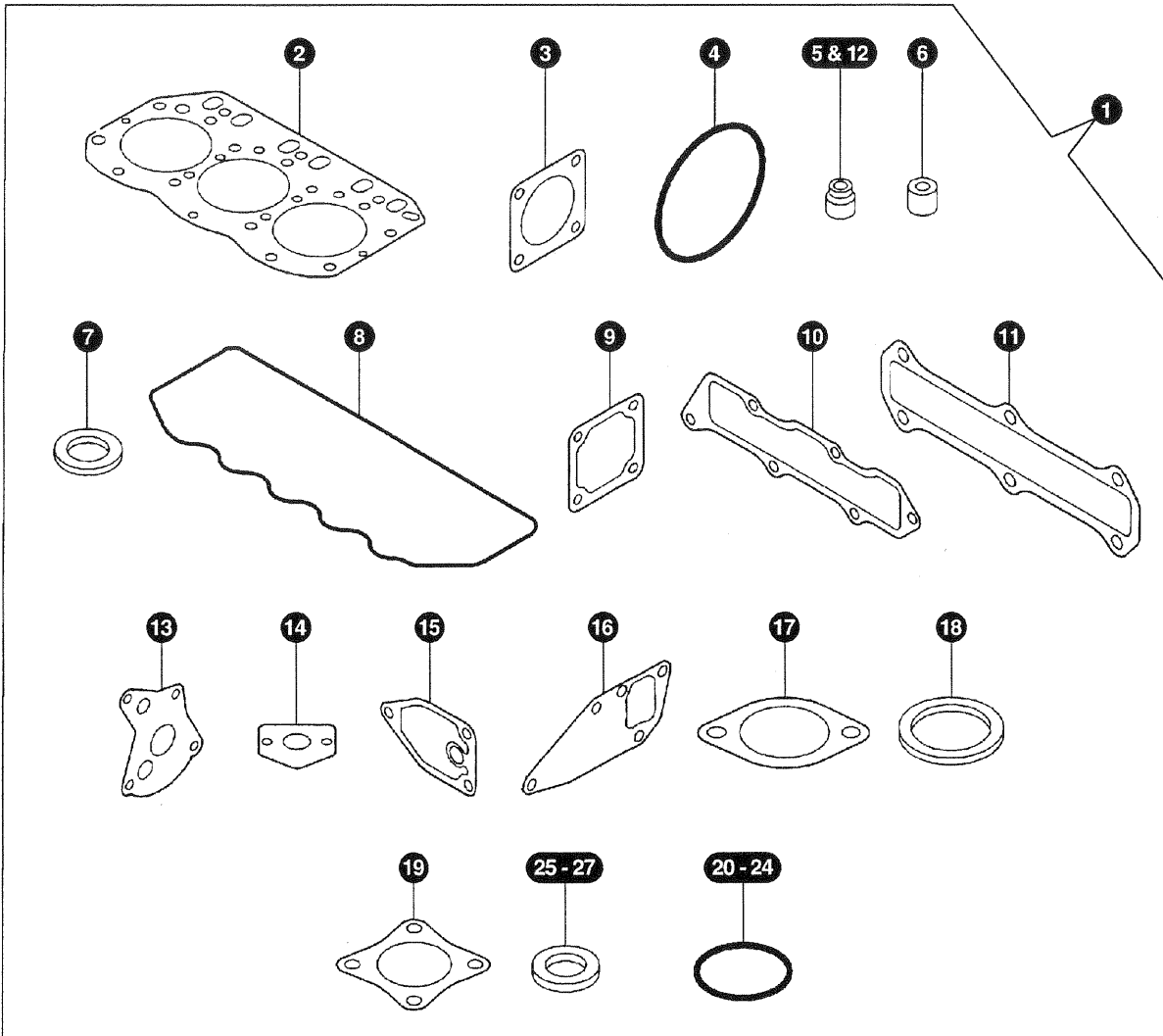


A-6432 / C-2911

Control Panel / Relay Board Assembly - 12 Volt

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	29-98405	1	Control Panel / Relay Board (Includes all Keys)	-
1	28-90004	1	Plate	-
2	22-41032	4	Relay Base	-
3	22-42047	4	Relay, SPDT	-
4	22-40018	1	Circuit Breaker 10 Amp	-
5	22-40193	1	Terminal Board	-
6	28-41060	1	Diode	-
7	22-00063	1	Number Strip	-
8	00-40013	1	Label	-
9	22-90007	1	Preheat / Shutdown - Bypass Switch	-
10	22-90008	1	Engine Control Switch	-
11	22-90009	1	Hour Meter	-
12	22-40019	1	Wire Harness	-
13	12-00093	2	Machine Screw, Round Head, Phillips #6-32 x 1/2"	-
14	14-00002	4	Hex Nut #6-32	-
15	12-00005	4	Machine Screw, Binding Head, Slotted #8-32 x 3/4"	-
16	12-00004	2	Machine Screw, Binding Head, Slotted #8-32 x 3/8"	-
17	14-00000	4	Hex Nut #8-32	-
18	15-00001	2	Flat Washer #8	-
19	14-00003	2	Hex Nut, Nylock #8-32	-
20	15-00009	4	Lock Washer #6	-
21	15-00000	2	Lock Washer #8	-

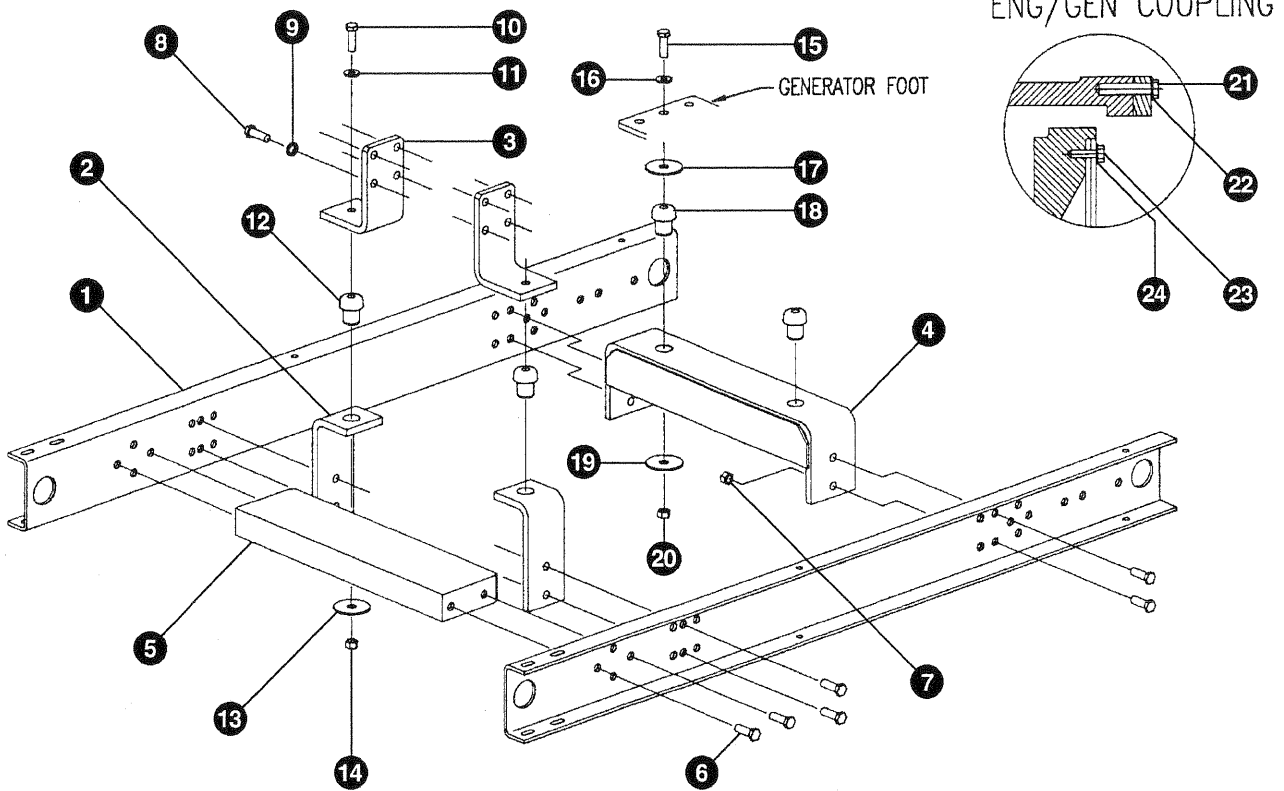
Gasket Set



Gasket Set

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	719989-92600	1	Gasket Set (Includes Keys #2 - #27)	-
2	119818-01330	1	Cylinder Head Gasket	-
3	124240-01883	1	Gasket	-
4	121850-51960	1	Fuel Injection Pump O-Ring	-
5	124160-11340	3	Valve Stem Seal	-
6	119625-11871	3	Nozzle Protector	-
7	119625-11880	3	Nozzle Seat	-
8	119865-11310	2	Bonnet Gasket	-
9	129150-77511	1	Gasket	-
10	119813-12110	1	Intake Manifold Gasket	-
11	119813-13110	1	Exhaust Manifold Gasket	-
12	124950-11340	3	Valve Stem Seal	-
13	129150-32020	1	Lubricating Oil Pump Gasket	-
14	129150-35041	1	Gasket	-
15	129150-35111	1	Gasket	-
16	129150-42020	1	Cooling Water Pump Gasket	-
17	129795-49551	1	Gasket	-
18	129150-49811	1	Gasket	-
19	121000-13201	1	Silencer Gasket	-
20	24311-000120	3	O-Ring	-
21	24311-000160	3	O-Ring	-
22	24311-000320	1	O-Ring	-
23	24341-000500	1	O-Ring	-
24	24341-000240	1	O-Ring	-
25	23414-100000	2	Gasket	-
26	124465-44950	2	Gasket	-
27	104200-59170	2	Gasket	-
28	129400-92420	1	Flex Hone (Optional part)	-
29	977770-01212	1	Liquid Gasket (Optional part)	-

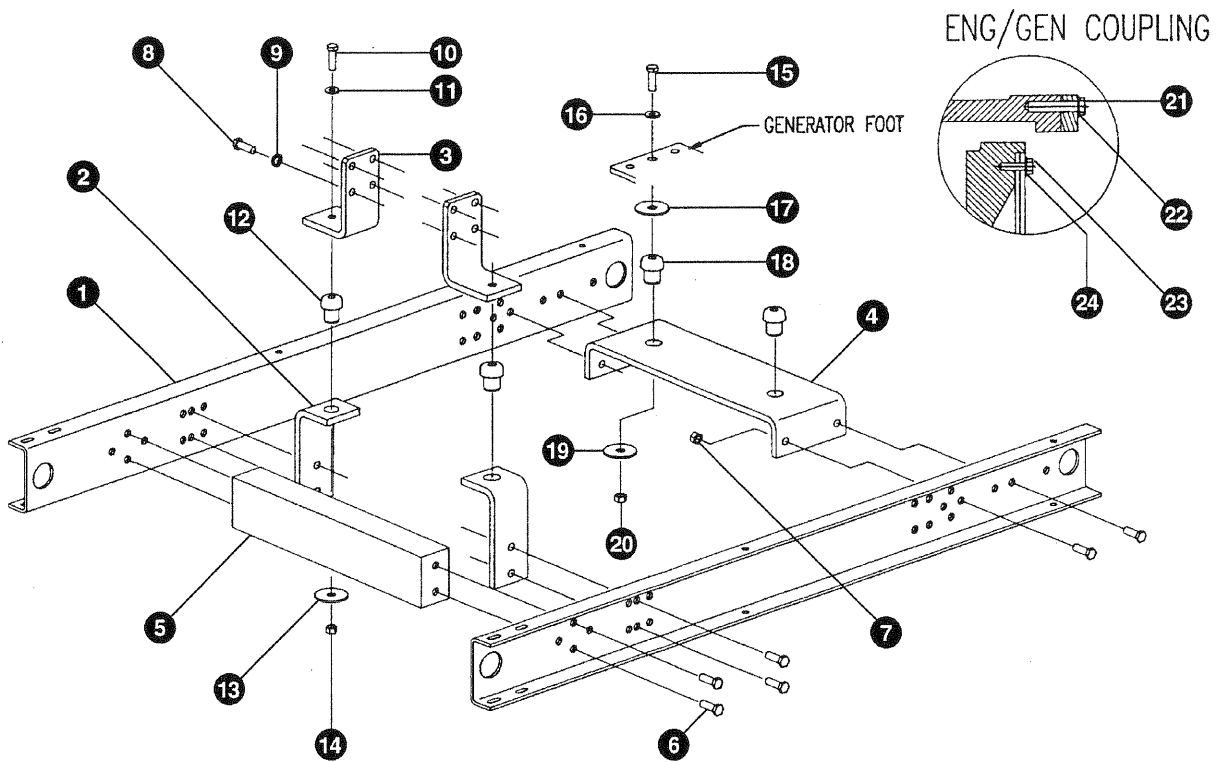
Modular Base Frame - 164 Frame Generators



Modular Base Frame - 164 Frame Generators

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-87301	2	Side Rail	-
2	23-87301	2	Bracket, Lower Engine Support	-
3	23-87303	2	Bracket, Upper Engine Mounting	-
4	39-87303	1	Generator Support	-
5	39-87306	1	Base Frame Support	-
6	12-80313	12	Capscrew, Hex Head Flanged 3/8-16 x 1-14	-
7	14-00302	12	Lock Nut, Flanged 3/8-16 Prevailing Torque	-
8	12-00912	8	Capscrew, Hex Head M12 x 1.75 x 25 mm	-
9	15-00912	8	Lock Washer, Helical M12	-
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	12-00048	2	Capscrew, Hex Head M10 x 1.5 x 60 mm	-
16	15-00301	2	Flat Washer 3/8	-
17	15-00014	2	Head/Tail Washer	-
18	33-83151	2	Mount, Centerbonded 200 lb	-
19	15-00014	2	Head/Tail Washer	-
20	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
21	12-00832	12	Capscrew, Hex Head M10 x 1.5 x 30 mm	-
22	15-00802	12	Lock Washer, Helical M10	-
23	12-00751	8	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
24	15-00702	8	Lock Washer, Helical M8	-

Modular Base Frame - 281 Frame Generators



Modular Base Frame - 281 Frame Generators

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-87301	2	Side Rail	-
2	23-87301	2	Bracket, Lower Engine Support	-
3	23-87303	2	Bracket, Upper Engine Mounting	-
4	39-87311	1	Generator Support	-
5	39-87313	1	Base Frame Support	-
6	12-80313	12	Capscrew, Hex Head Flanged 3/8-16 x 1-14	-
7	14-00302	12	Lock Nut, Flanged 3/8-16 Prevailing Torque	-
8	12-00912	8	Capscrew, Hex Head M12 x 1.75 x 25 mm	-
9	15-00912	8	Lock Washer, Helical M12	-
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	12-00048	2	Capscrew, Hex Head M10 x 1.5 x 60 mm	-
16	15-00301	2	Flat Washer 3/8	-
17	15-00014	2	Head/Tail Washer	-
18	33-83151	2	Mount, Centerbonded 200 lb	-
19	15-00014	2	Head/Tail Washer	-
20	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
21	12-00832	12	Capscrew, Hex Head M10 x 1.5 x 30 mm	-
22	15-00802	12	Lock Washer, Helical M10	-
23	12-00751	8	Capscrew, Hex Head M8 x 1.25 x 16 mm	-
24	15-00702	8	Lock Washer, Helical M8	-

Notes

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