

P498-2

For Model: NL498D2

PARTS CATALOG

Marine Generators | Marine Diesel Engines | Land-Based Generators



LUGGER





— CALIFORNIA —
Proposition 65 Warning:

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



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PART NO.: P498-2 10/07

PARTS CATALOG

for Model NL498D2

Please read thoroughly before attempting to use this manual:

Table of Contents	I
Model Designation & Serial Numbers.....	II
Reading a Parts Page	III

Table of Contents

GROUP 1 - ENGINE

Cylinder Block	0 - 1
Flywheel Housing and Oil Pan.....	2
Crankshaft and Piston	3
Camshaft and Driving Gear	4 - 5
Timing Gear Housing.....	6 - 7
Lubricating System.....	8 - 9
Cylinder Head and Rocker Arm Cover ..	10 - 11

GROUP 2 - INTAKE & EXHAUST

Intake Manifold and Air Filter	0
Exhaust Manifold and Muffler	1

GROUP 3 - COOLING SYSTEM

General Arrangement	0 - 1
Radiator and Modular Guard	2 - 3

GROUP 4 - FUEL SYSTEM

Fuel Lines & Injectors	0
Injection Pump.....	1
General Arrangement	2 - 3
Fuel Lines, Filters, & Supply Pump Mtg	4

GROUP 5 - ELECTRICAL SYSTEM

Engine Electrical, 12 Volt	1
Starting Motor.....	2 - 3
Alternator and Mounting	4 - 5
Control Panel	6
Relay Board	7

GROUP 6 - GASKETS

Gasket Set.....	0 - 1
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GROUP 8 - FRAME & MOUNTING

UCI224C16 Frame Generator	0 - 1
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Proprietary Information

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MODEL DESIGNATION

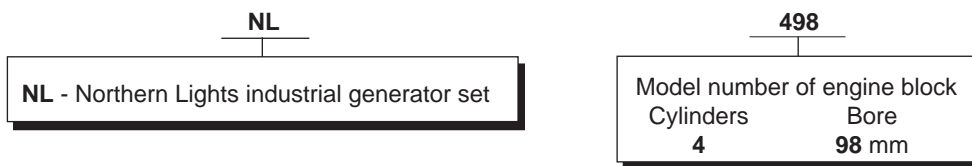
MODELS INCLUDED

This manual covers the operating instructions for:

NL498D2, which uses the Yanmar model 4TNV98-GGE.

MODEL NUMBERS

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

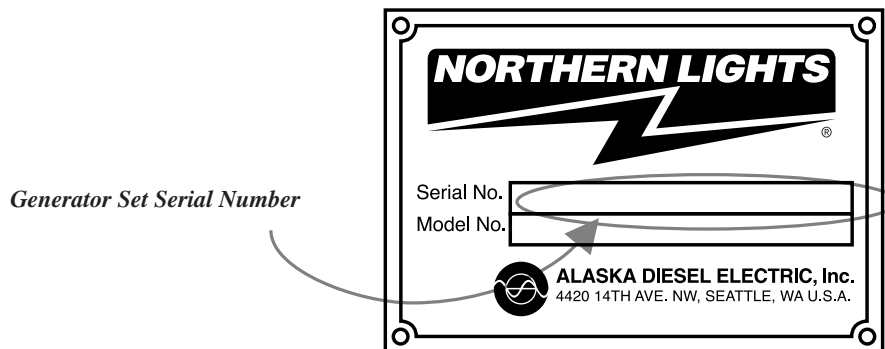


NL498D2 = Northern Lights industrial diesel generator set with a 498 engine, naturally aspirated, Tier II.

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.



READING A PARTS PAGE

IMPORTANT:

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

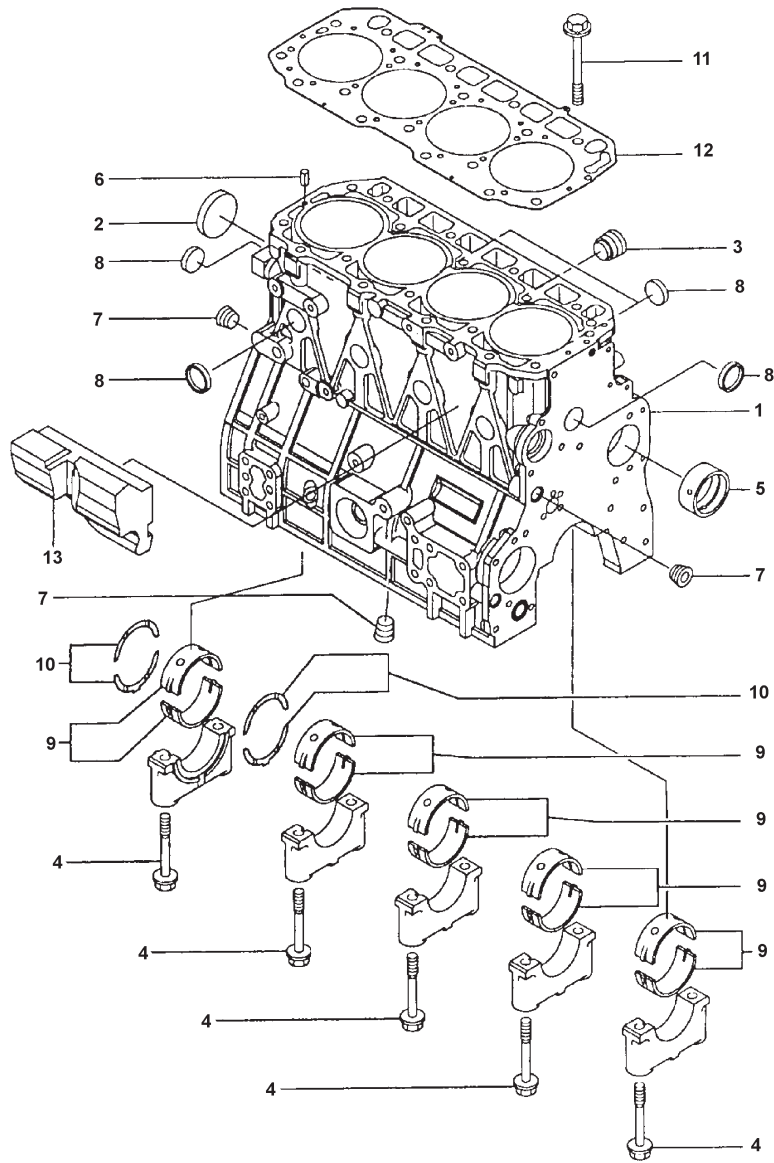
KEY	PART NUMBER	QTY.	DESCRIPTION	SERIALNUMBER
0	185046210	1	Alternator Assembly	-
1	185446219	1	Flywheel, complete	-
2	185446217	1	Plate, complete	-
3	185716200	1	Plate	-
4	185446218	1	Stator, complete	-
5	040126210	2	Bearing	-
6	020210010	1	Nut	-
7	027100010	1	Spring washer	-
8	026100010	1	Washer	-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

REFERENCES:

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

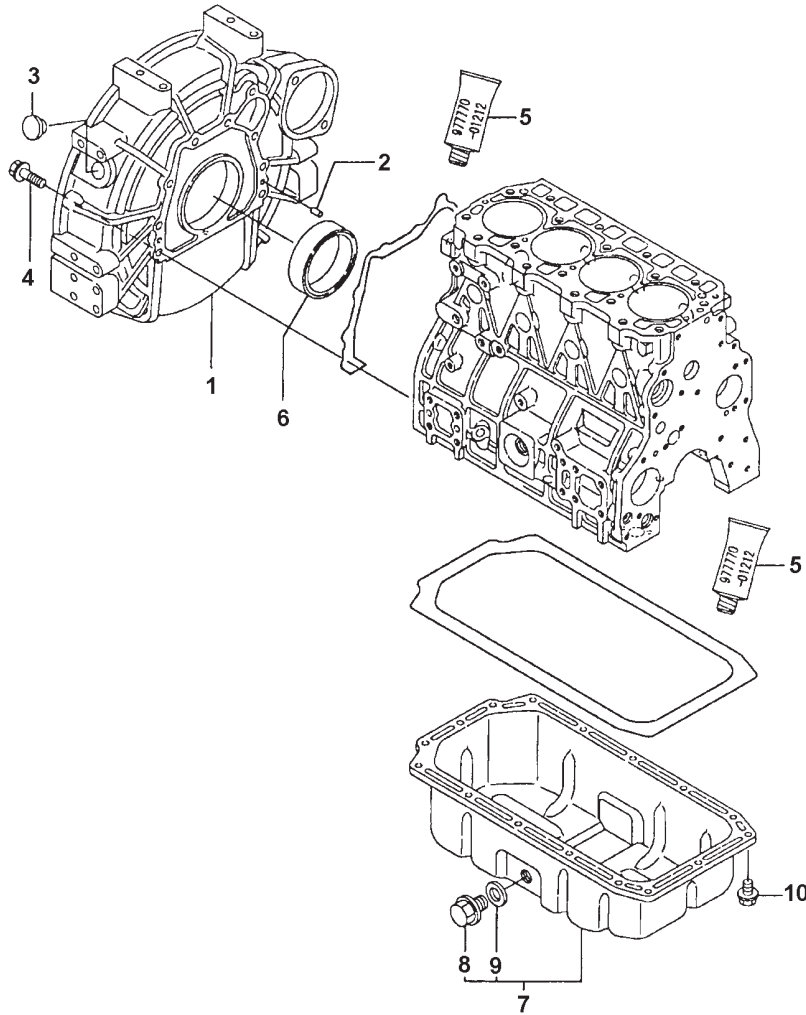


Ycyl.block

Cylinder Block

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	729907-01560	1	Cylinder Block Assembly (includes all keys)	-
2	129900-01250	1	Plug, 55 mm	-
3	171051-01921	1	Plug	-
4	129900-02020	10	Capscrew	-
5	129900-02410	1	Camshaft Bushing	-
6	22351-060012	2	Spring Pin, 6 x 12	-
7	23876-030000	3	Plug, 3/8 BSPT	-
8	27241-300000	8	Plug, 30 mm	-
9	729900-02800	5	Main Bearing, Standard	-
	129900-02340	5	Main Bearing, Undersize 0.25	-
10	129900-02930	2	Thrust Bearing, Standard	-
	129900-02940	2	Thrust Bearing, Oversize 0.25	-
11	129900-01200	18	Head Bolt	-
12	129907-01331	1	Cylinder Head Gasket	-
13	129907-01190	1	Spacer	-

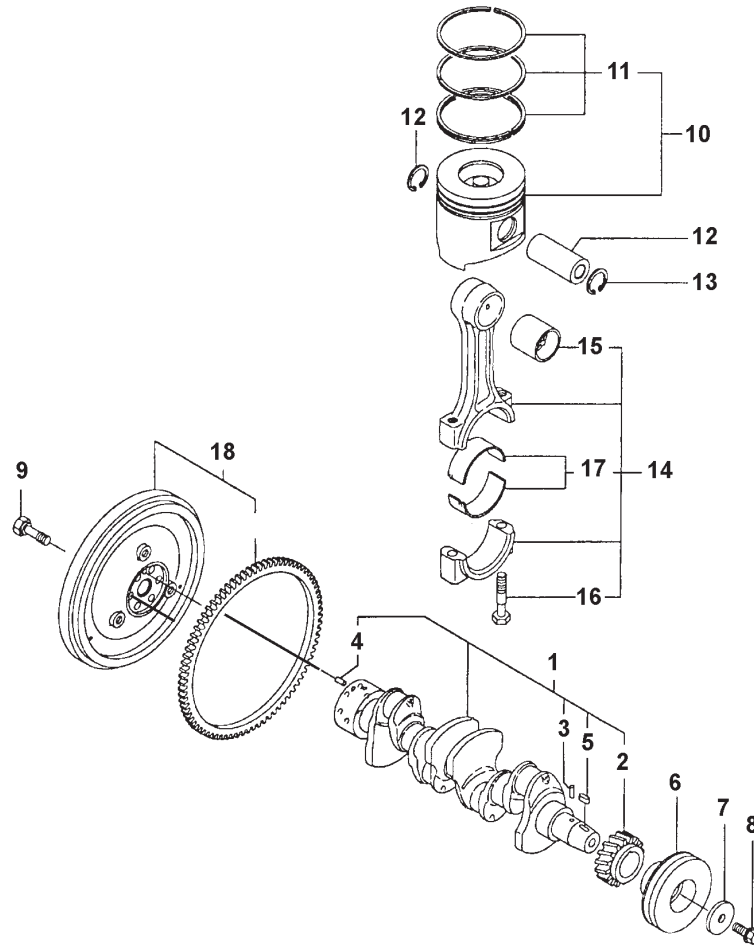
Flywheel Housing and Oil Pan



Yflywheelhsg

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129915-01610	1	Flywheel Housing SAE #3	-
2	129100-01580	2	Pin	-
3	119000-01840	1	Plug	-
4	26206-100352	9	Bolt, M10 x 35 Plated	-
5	977770-01212	1	Liquid Gasket	-
6	124411-01780	1	Rear Main Seal	-
7	129982-01710	1	Pan Assembly (includes keys 8-10)	-
8	119640-01640	1	Drain Plug M22 x 1.5	-
9	22190-220002	1	Seal Washer	-
10	26106-080122	16	Bolt, M8 x 12 Plated	-

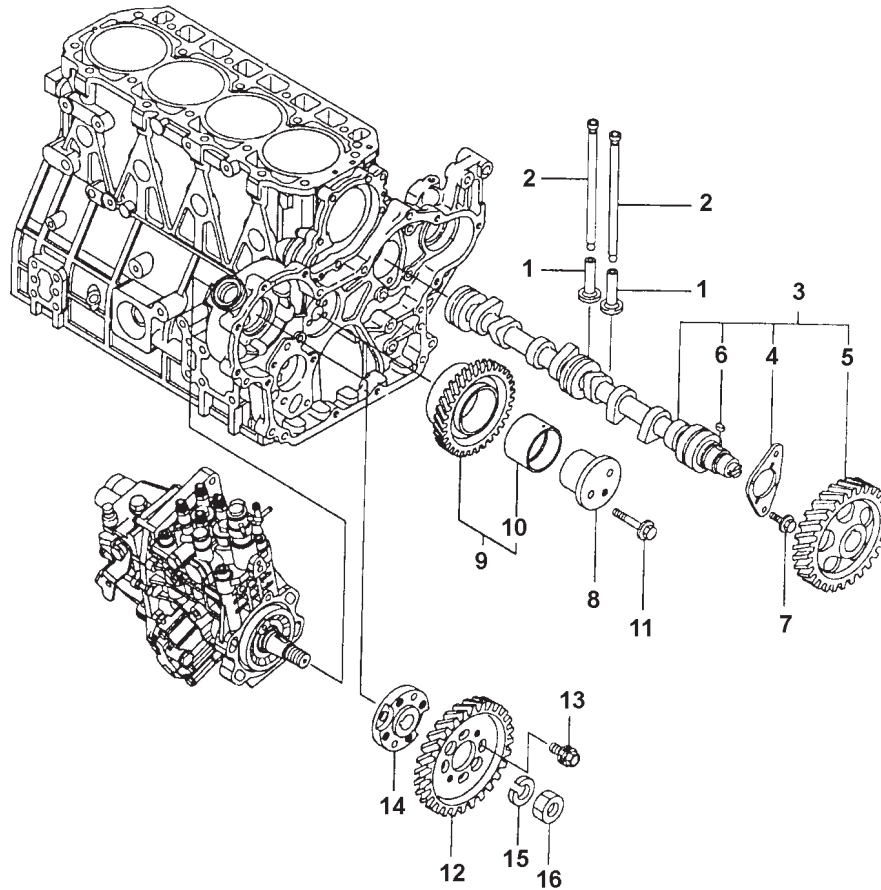
Crankshaft and Piston



Ycrankshaft

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129902-21000	1	Crankshaft (includes keys 2- 5)	-
2	129900-21200	1	Gear	-
3	121850-21290	1	Pin	-
4	121850-21920	1	Pin	-
5	22512-070140	1	Key	-
6	129907-21660	1	Pulley	-
7	129900-21640	1	Washer	-
8	121850-21680	1	Bolt	-
9	121850-21130	6	Bolt	-
10	129907-22090	4	Piston Assembly, Standard (includes key #11)	-
	729907-22910	4	Piston Assembly, Oversize 0.25 (includes key #11)	-
11	129907-22050	4	Piston Ring Set, Standard	-
	729907-22950	4	Ring Set, Oversize 0.25	-
12	120130-22301	4	Piston Pin	-
13	22252-000300	8	Circlip	-
14	129900-23000	4	Connecting Rod Assembly (includes keys 15-17)	-
15	129900-23910	4	Bushing, Standard	-
16	129900-23200	8	Connecting Rod Bolt	-
17	129900-23600	4	Connecting Rod Bearing, Standard	-
	129900-23610	4	Connecting Rod Bearing, Undersize 0.25	-
18	129920-21580	1	Flywheel	-
19	127410-21480	2	Ring Gear, 129 Teeth	-

Camshaft and Drive Gear

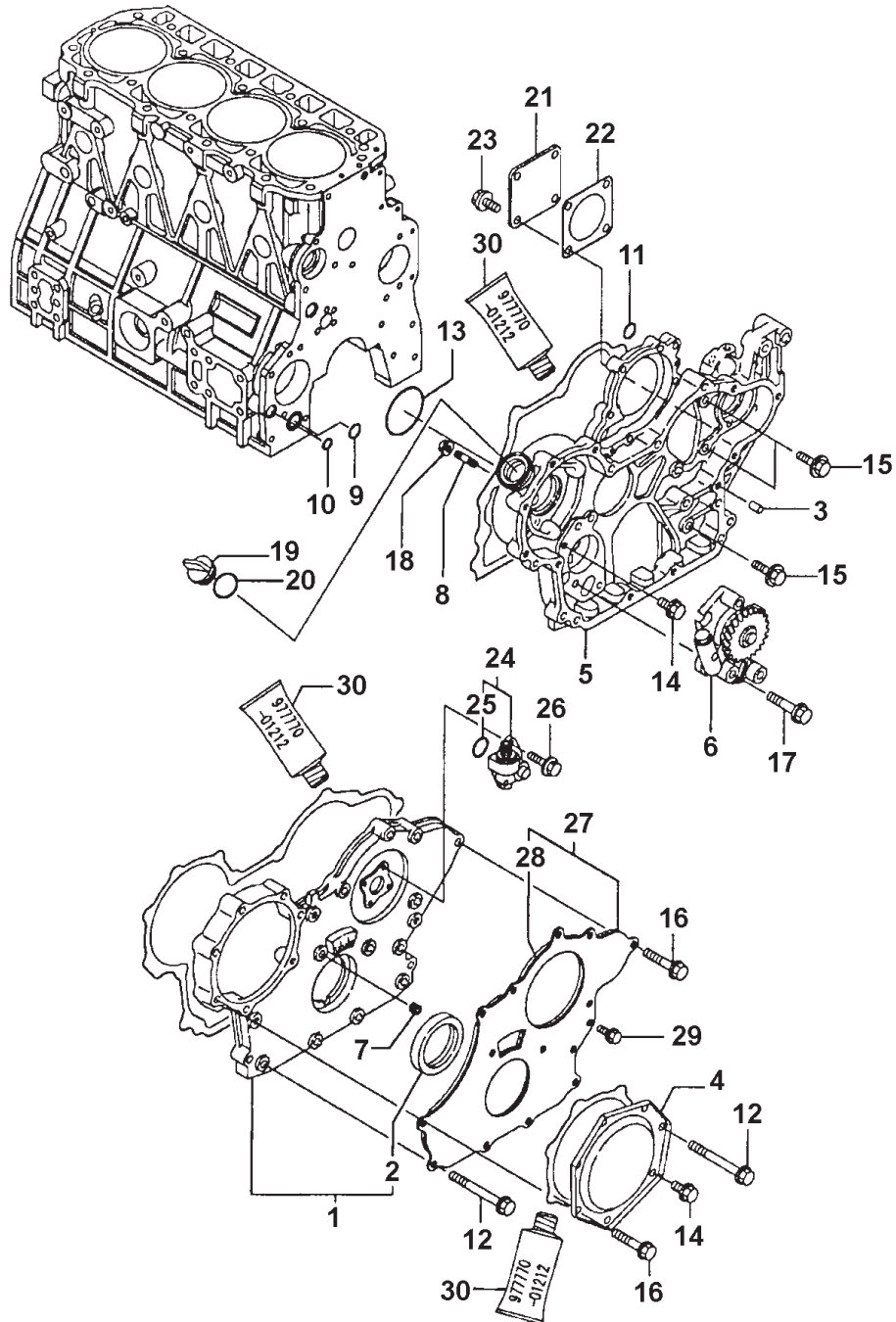


Ycamshaft

Camshaft and Drive Gear

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129150-14200	8	Tappet	-
2	129907-14400	8	Push Rod	-
3	129907-14581	1	Camshaft Assembly (includes keys 4-6)	-
4	129150-02450	1	Thrust Washer	-
5	129900-14100	1	Camshaft Gear	-
6	22512-070140	1	Key	-
7	26106-080162	2	Bolt, M8 x 16 Plated	-
8	123900-25060	1	Idle Gear Shaft	-
9	129900-25100	1	Idle Gear Assembly	-
10	129150-25920	1	Bushing, Idle Gear	-
11	26106-080552	3	Bolt, M8 x 55 Plated	-
12	123907-25909	1	Injection Pump Gear	-
13	129953-25300	4	Bolt	-
14	158563-51150	1	Flange	-
15	22217-180000	1	Spring Washer	-
16	26776-180002	1	Lock Nut, M18	-

Timing Gear Housing

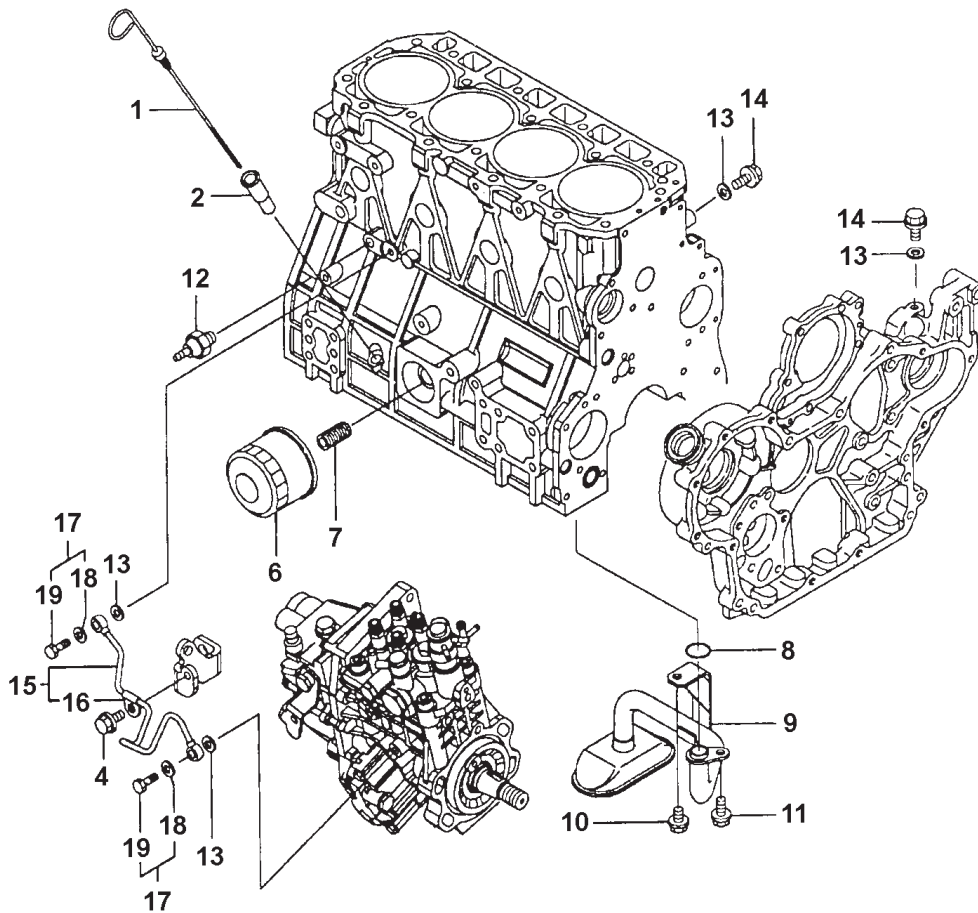


Ytiminggearhsg

Timing Gear Housing

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	729907-01570	1	Timing Gear Housing (includes key #2)	-
2	129900-01780	1	Oil Seal	-
3	129100-01580	4	Dowel Pin	-
4	129900-01740	1	Pump Cover	-
5	129907-01500	1	Gear Housing	-
6	129900-32001	1	Oil Pump Assembly	-
7	23876-010000	1	Plug, 1/8 BSPT	-
8	26216-100302	4	Stud Bolt	-
9	129900-32030	1	O-ring	-
10	129900-32040	1	O-ring	-
11	24311-000070	1	O-ring	-
12	129001-91810	7	Bolt, M8 x 70 Plated	-
13	24351-030750	1	Packing	-
14	26106-080162	2	Bolt, M8 x 16 Plated	-
15	26106-080202	3	Bolt, M8 x 20 Plated	-
16	26106-080402	5	Bolt, M8 x 40 Plated	-
17	26106-080452	3	Bolt, M8 x 45 Plated	-
18	26306-100002	4	Nut	-
19	124160-01751	1	Filler Cover	-
20	24311-000320	1	O-ring	-
21	124240-01871	1	Cover	-
22	124240-01883	1	Gasket	-
23	26106-080162	4	Bolt, M8 x 16 Plated	-
24	129150-91400	1	Tachometer Drive (includes key #25)	-
25	24341-000240	1	O-ring	-
26	26106-060162	2	Bolt, M6 x 16 Plated	-
27	129900-01850	1	Cover Assembly (includes key #28)	-
28	129900-01870	1	Sponge	-
29	26106-080162	3	Bolt, M8 x 16 Plated	-
30	977770-01212	1	Liquid Gasket	-

Lubricating Oil System

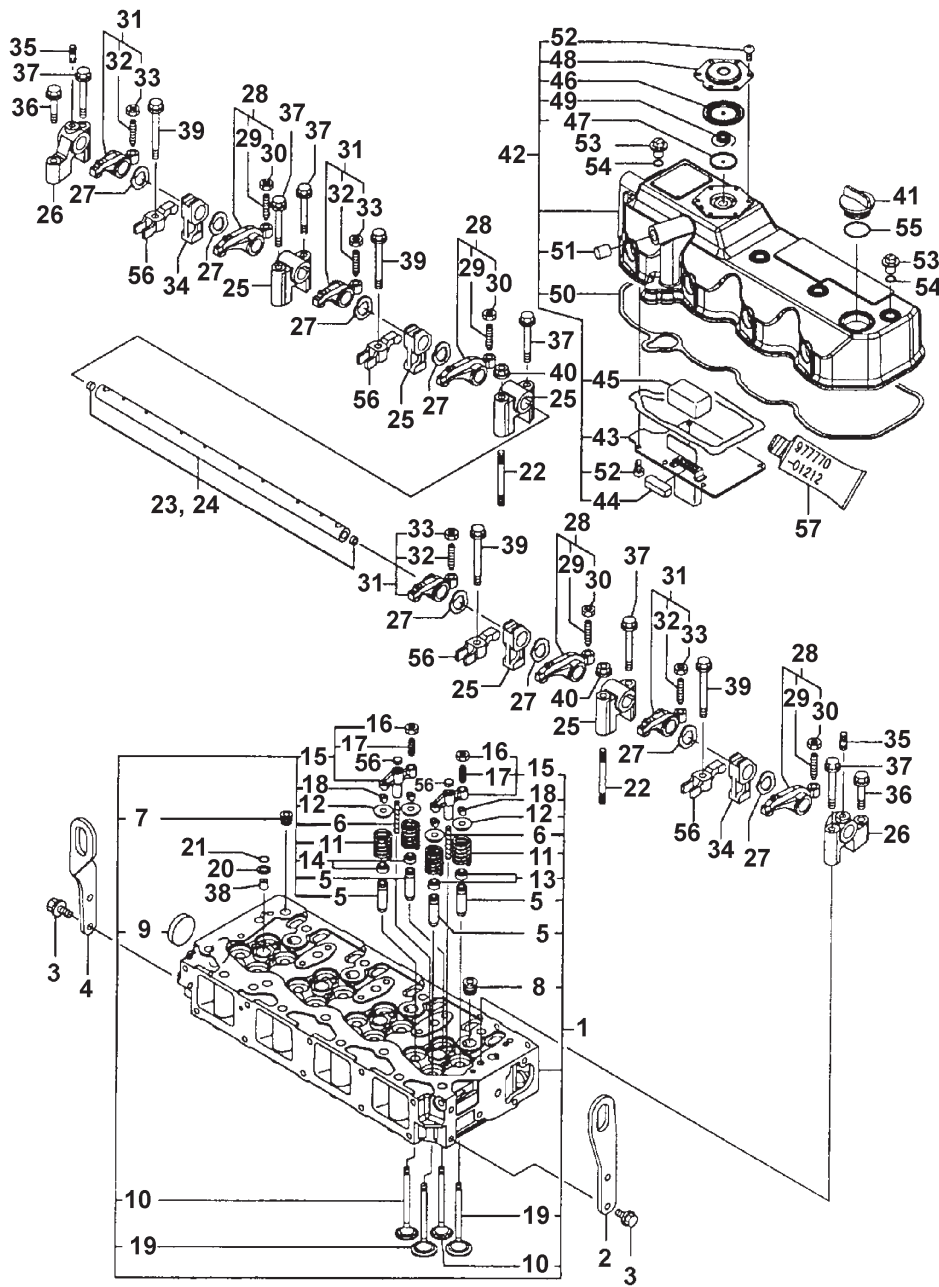


Yoilsystem

Lubricating Oil System

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129953-34830	1	Dipstick	-
2	121520-34810	1	Dipstick Tube	-
4	26106-080122	1	Bolt, M8 x 12 Plated	-
6	24-07301	1	Oil Filter	-
7	119000-35140	1	Adapter	-
8	129900-32030	1	O-ring	-
9	129953-35000	1	Pick-up & Tube Assembly	-
10	26106-080122	1	Bolt, M8 x 12 Plated	-
11	26106-080162	1	Bolt, M8 x 16 Plated	-
12	22-40233	1	Pressure Switch (see Electrical System)	-
13	22190-080002	6	Seal Washer	-
14	26106-080122	2	Bolt, M8 x 12 Plated	-
15	129907-39061	1	Tube Assembly, Injection Pump Oil Supply (includes key #16)	-
16	123907-39500	1	Tube Support	-
17	129005-59830	2	Bolt Assembly	-
18	22190-080002	2	Seal Washer	-
19	23857-030000	2	Joint Bolt	-

Cylinder Head and Rocker Arm Cover



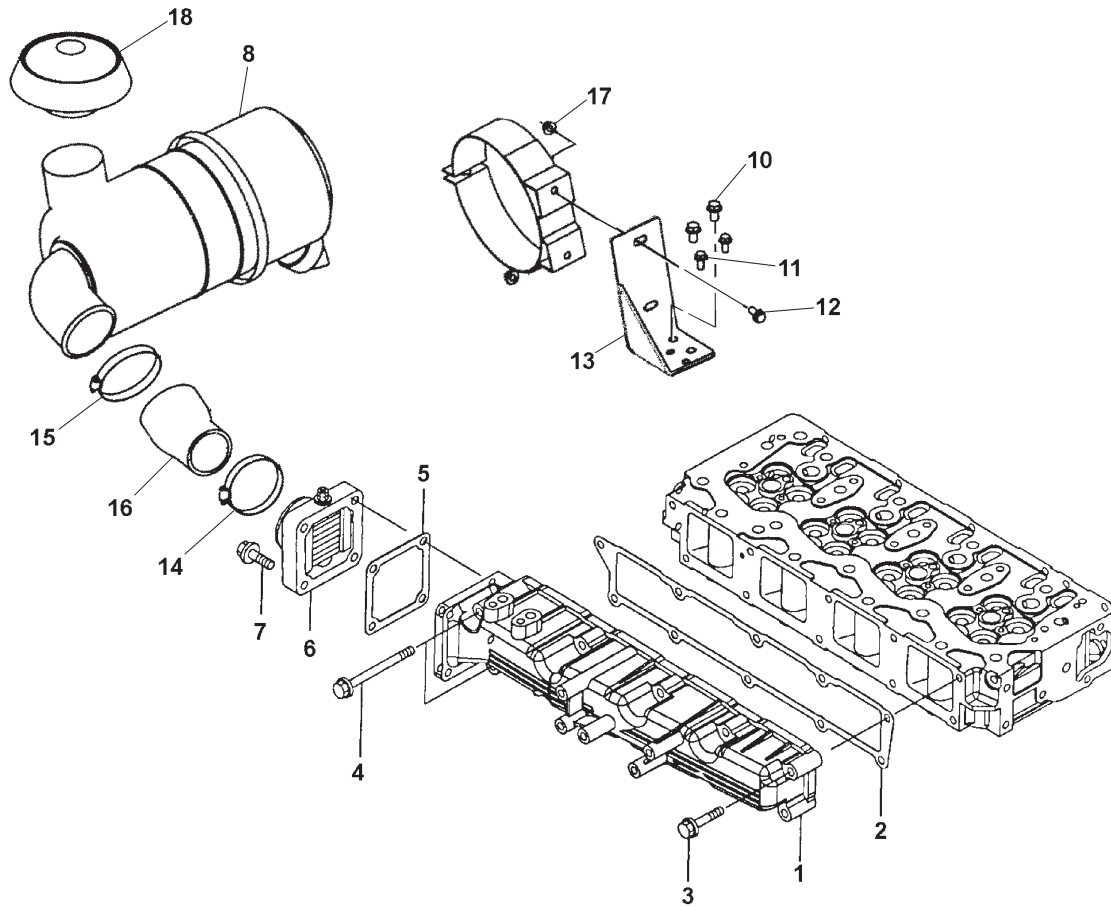
Ycylhead&cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129907-11700	1	Cylinder Head Assembly (includes keys 5- 21, 38)	-
2	129907-07900	1	Lifting Eye	-
3	26106-080162	4	Bolt, M8 x 16 Plated	-
4	129910-07900	1	Lifting Eye	-
5	129907-11800	16	Valve Guide	-
6	123907-11820	8	Valve Bridge Guide	-
7	23876-020000	1	Plug, 1/4	-
8	23876-030000	4	Plug, 3/8	-
9	27241-400000	1	Plug	-

Cylinder Head and Rocker Arm Cover

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
10	129907-11110	8	Valve, Exhaust	-
11	129907-11120	16	Valve Spring	-
12	119620-11180	16	Retainer, Spring	-
13	124160-11340	8	Valve Stem Seal	-
14	124950-11340	8	Valve Stem Seal	-
15	129907-11510	8	Valve Bridge Assembly (includes keys 16-17)	-
16	129150-11750	8	Nut, M8 x 1.0	-
17	123907-11830	8	Screw, Valve Bridge	-
18	27310-070001	16	Cotter Assembly	-
19	129907-11100	8	Valve	-
20	119625-11880	4	Nozzle Seat	-
21	24311-000120	4	O-ring	-
22	119593-11301	2	Bolt, 8 x 80	-
23	129907-11341	1	Rocker Arm Shaft Kit (includes keys 24- 35)	-
24	129907-11250	1	Rocker Arm Shaft	-
25	129907-11260	3	Rocker Arm Shaft Support	-
26	129907-11270	2	Rocker Arm Shaft Support	-
27	123907-11280	8	Wave Washer	-
28	129907-11650	4	Rocker Arm Assembly (includes keys 29- 30)	-
29	129150-11230	4	Valve Screw	-
30	129150-11750	4	Nut, M8 x 1.0	-
31	129907-11660	4	Rocker Arm Assembly (includes keys 32- 33)	-
32	129150-11230	4	Valve Screw	-
33	129150-11750	4	Nut, M8 x 1.0	-
34	129907-11920	4	Retainer Pedestal	-
35	26226-080222	2	Stud, M8 x 22 Plated	-
36	26106-080402	2	Bolt, M8 x 40 Plated	-
37	26106-080602	6	Bolt, M8 x 60 Plated	-
38	119802-11870	4	Nozzle Protector	-
39	129907-11950	4	Flange Bolt, Retainer	-
40	26306-080002	2	Nut	-
41	124160-01751	1	Filler Cover	-
42	129907-11320	1	Rocker Arm Cover Assembly (includes keys 46- 49, 53)	-
43	129907-03010	1	Baffle Plate	-
44	129907-03060	1	Baffle	-
45	129907-03070	1	Baffle	-
46	123907-03100	1	Breather Diaphragm	-
47	123907-03110	1	Center Plate	-
48	123907-03120	1	Breather Plate	-
49	123907-03140	1	Diaphragm Spring	-
50	129907-11310	1	Cover Packing	-
51	119640-61400	1	Plug	-
52	22857-500100	12	Screw, 5 x 10	-
53	124160-11360	4	Knob	-
54	24311-000120	4	O-ring	-
55	24311-000320	1	O-ring	-
56	129907-11910	4	Retainer Valve	-
57	977770-01212	1	Liquid Gasket	-

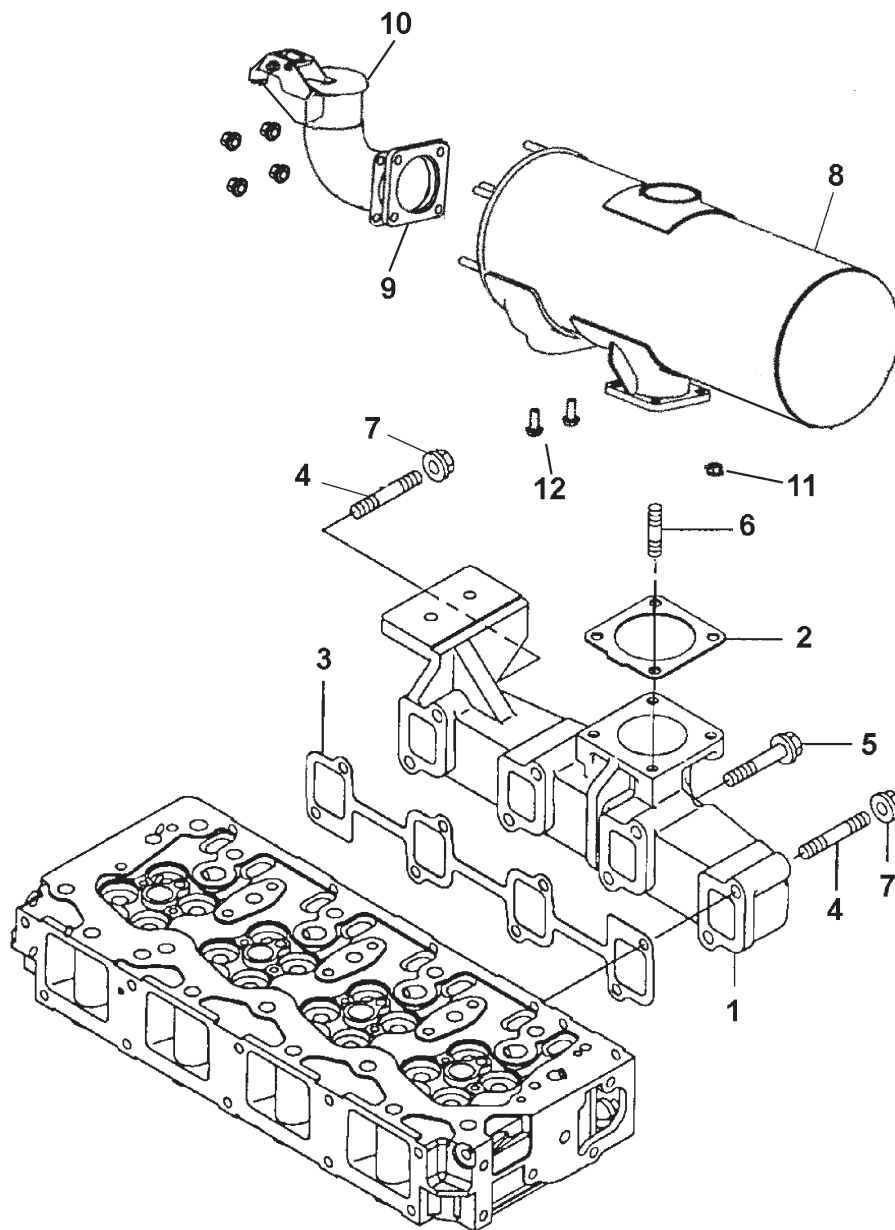
Intake Manifold and Air Filter



Yintakemanifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129944-12110	1	Intake Manifold	-
2	129907-12110	1	Intake Manifold Packing	-
3	26106-080452	8	Bolt, M8 x 45 Plated	-
4	26106-080802	2	Bolt, M8 x 80 Plated	-
5	121850-77021	1	Gasket	-
6	129915-77050	1	Air Heater	-
7	26106-080352	4	Bolt, M8 x 35 Plated	-
8	123987-12650	1	Air Cleaner Assembly 7"	-
9	129087-12570	1	Air Cleaner Clamp	-
10	19M7783	2	Bolt, M10 x 16	-
11	19M7865	2	Bolt, M8 x 16	-
12	19M7866	2	Bolt, M8 x 20	-
13	129989-12560	1	Air Cleaner Bracket	-
14	19-00044	1	Hose Clamp, 80	-
15	19-00060	1	Hose Clamp, 90	-
16	129989-12220	1	Air Cleaner Hose	-
17	14M7298	2	Nut, M8	-
18	123987-12600	1	Rain cap	-
19	123987-12510	1	Air Cleaner Element	-
20	24-28503	1	Air Filter Element, Outer	-
21	24-28504	1	Air Filter Element, Inner	-

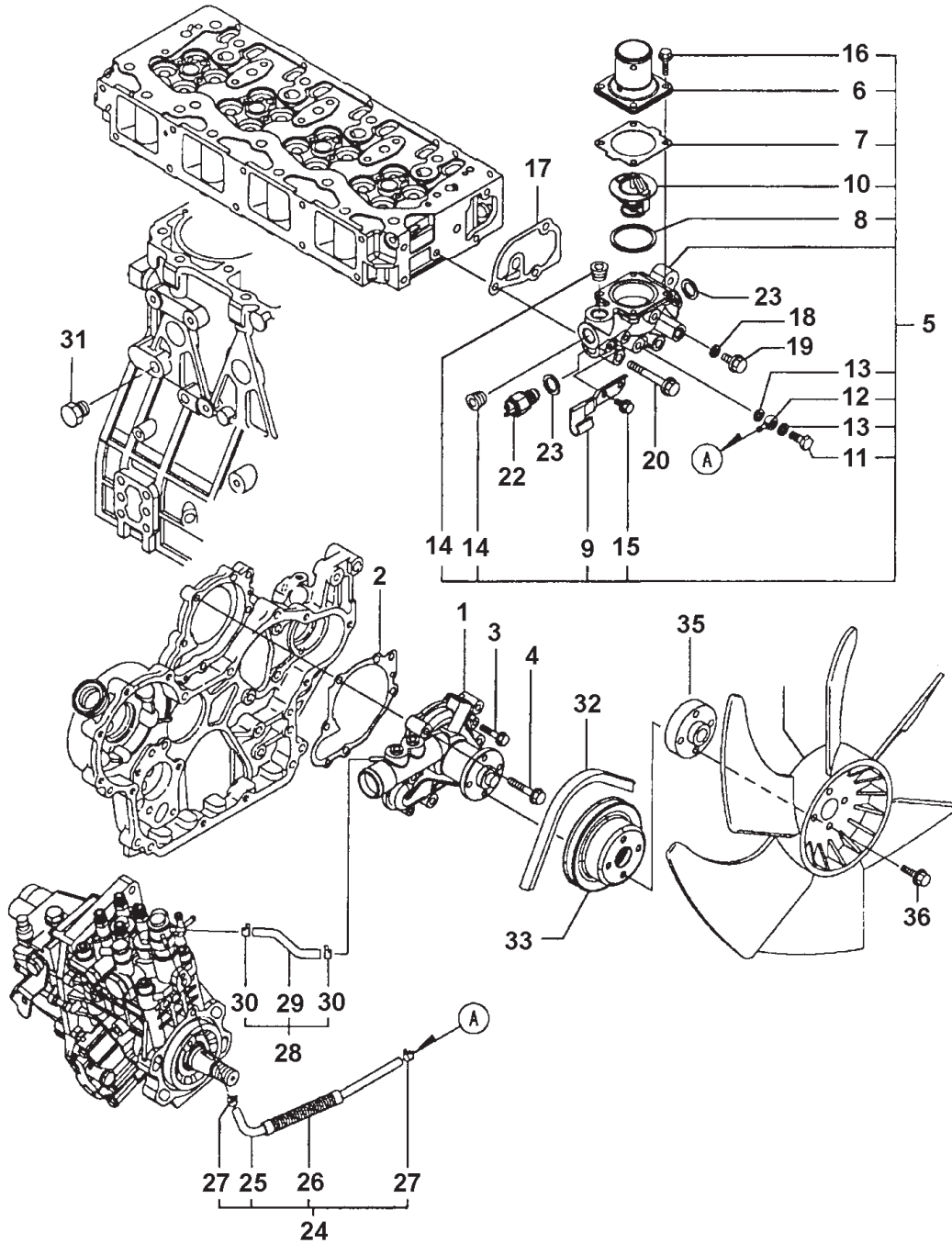
Exhaust Manifold and Muffler



Yexhmanifold

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129907-13200	1	Exhaust Manifold	-
2	129930-13200	1	Gasket	-
3	129900-13251	1	Gasket	-
4	123900-13610	2	Stud Bolt, M8 x 80	-
5	123900-13630	6	Bolt, 8 x 80	-
6	119131-18320	4	Bolt, M8 x 22	-
7	26306-080002	2	Nut	-
8	129944-13520	1	Muffler	-
9	129930-13200	1	Gasket, Muffler	-
10	123925-13600	1	Elbow Pipe	-
11	26306-080002	10	Nut, M8	-
12	26106-080202	6	Bolt, M8 x 20	-

Cooling System- General Arrangement

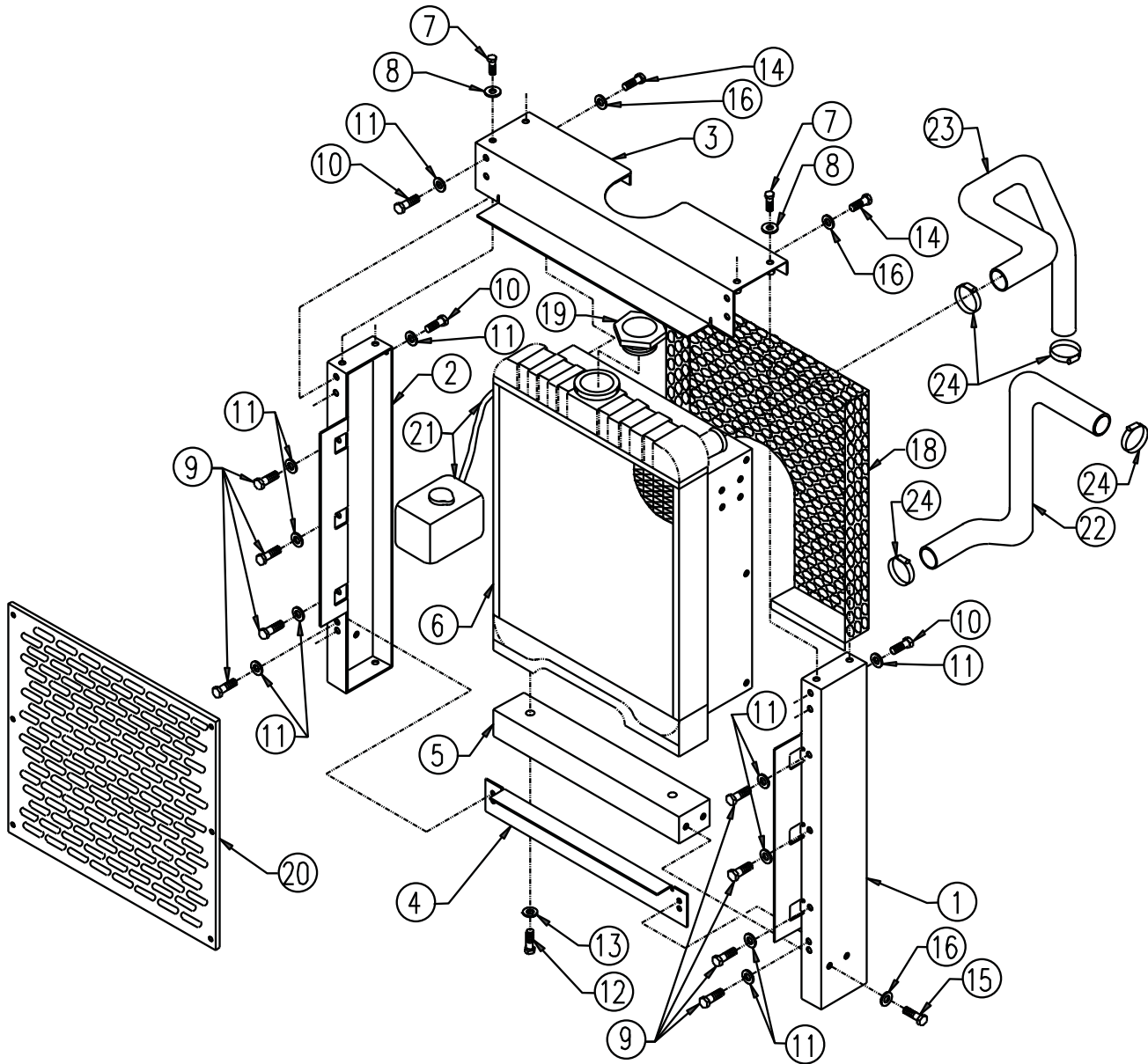


Ycoolingsystem

Cooling System - General Arrangement

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129907-42000	1	Coolant Pump Assembly	-
2	129900-42020	1	Gasket	-
3	26106-060302	2	Bolt, M6 x 30 Plated	-
4	26106-080552	5	Bolt, M8 x 55 Plated	-
5	129908-49800	1	Thermostat Case Assembly (includes keys 6- 25)	-
6	129916-49530	1	Thermostat Cover	-
7	121850-49540	1	Gasket	-
8	121850-49550	1	Gasket	-
9	129907-49730	1	Injection Pipe Assembly	-
10	121850-49810	1	Thermostat	-
11	105582-59150	1	Bolt, Pipe Joint	-
12	23387-040800	1	Joint	-
13	23414-080000	2	Gasket	-
14	23875-030000	2	Plug, Steel 3/8	-
15	26106-060122	2	Bolt, M5 x 12 Plated	-
16	26106-060202	4	Bolt, M5 x 20 Plated	-
17	129900-49870	1	Gasket	-
18	23414-080000	1	Gasket	-
19	26106-080122	1	Bolt, M8 x 12 Plated	-
20	26106-080602	3	Bolt, M8 x 60 Plated	-
22	22-40366	1	Temperature Switch 230°F (110°C)	-
23	15-01001	2	Sealing Washer	-
24	129907-49610	1	Hose Assembly (includes keys 25- 27)	-
25	129907-49710	1	Pipe	-
26	129907-49750	1	Pipe Guard	-
27	124722-59050	2	Clamp	-
28	129907-49620	1	Hose Assembly (includes keys 29- 30)	-
29	129907-49720	1	Pipe	-
30	124722-59050	2	Clamp	-
31	171056-49120	1	Drain Plug	-
32	40-64801	1	Drive Belt	-
33	129900-42461	1	Pulley	-
34	129916-44740	1	Fan	-
35	119130-44760	1	Fan Spacer	-
36	26106-080302	4	Bolt, M8 x 30 Plated	-

Radiator and Modular Guard

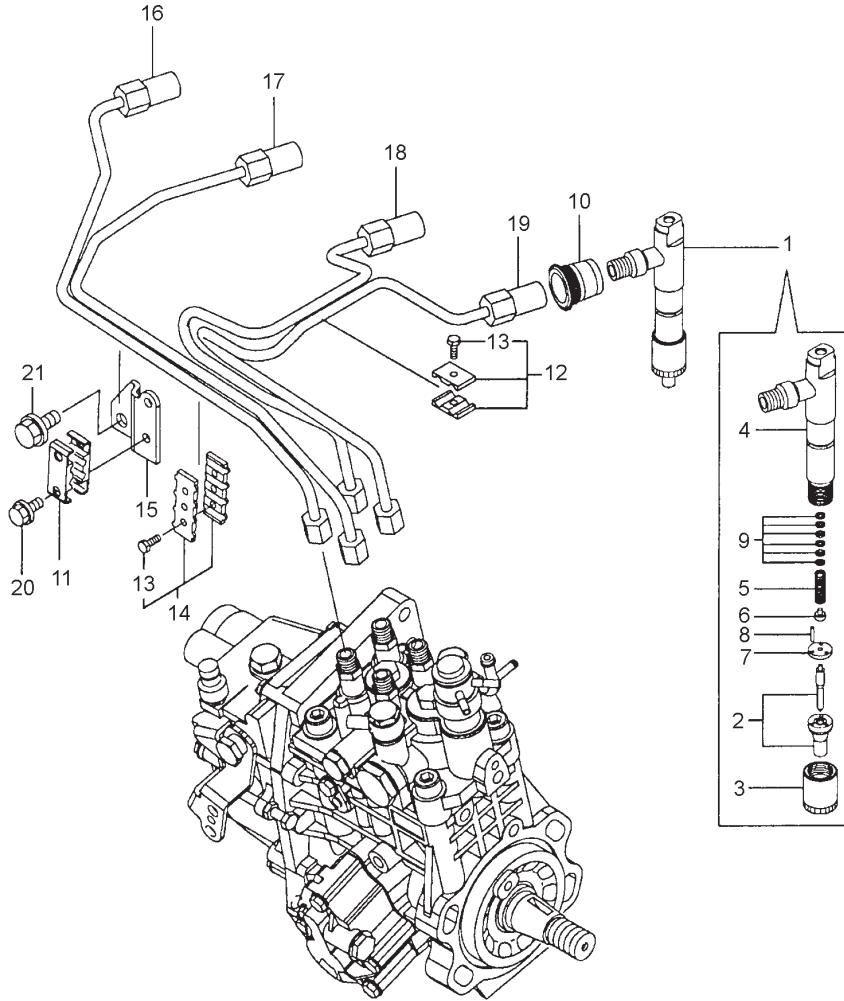


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Radiator and Modular Guard

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-18509	1	Side Panel, Left hand	-
2	39-18511	1	Side Panel, Right hand	-
3	39-18512	1	Top Panel	-
4	39-18513	1	Lower Panel	-
5	39-18514	1	Support Crossmember	-
6	129989-44100	1	Radiator	-
7	12-00030	4	Capscrew, Hex Head M6 x 1.0 x 16 mm	-
8	15-00008	4	Flat Washer M6	-
9	12-01131	10	Capscrew, Hex Head M6 x 1.0 x 20 mm	-
10	12-00111	6	Capscrew, Hex Head 1/4- 20 x 3/4"	-
11	15-00121	16	Flat Washer 1/4" SAE	-
12	12-00511	2	Capscrew, Hex Head 1/2- 13 x 3/4"	-
13	15-00504	2	Flat Washer, 1/2" SAE	-
14	12-00711	4	Capscrew, Hex Head M8 x 1.25 x 20 mm	-
15	12-00712	4	Capscrew, Hex Head M8 x 1.25 x 25 mm	-
16	15-00705	8	Lock Washer, Helical M8 S/S	-
17	00-70079	1	Label "Northern Lights" (not shown)	-
18	129989-44160	1	Fan Guard	-
19	129987-44570	1	Filler Cap 13 PSI	-
20	129989-44170	1	Radiator Screen/ Grille	-
21	129987-44610	1	Overflow Hose and Bottle	-
22	129989-49020	1	Hose, Radiator Outlet	-
23	129989-49010	1	Hose, Radiator Inlet	-
24	19-00032	4	Hose Clamp	-

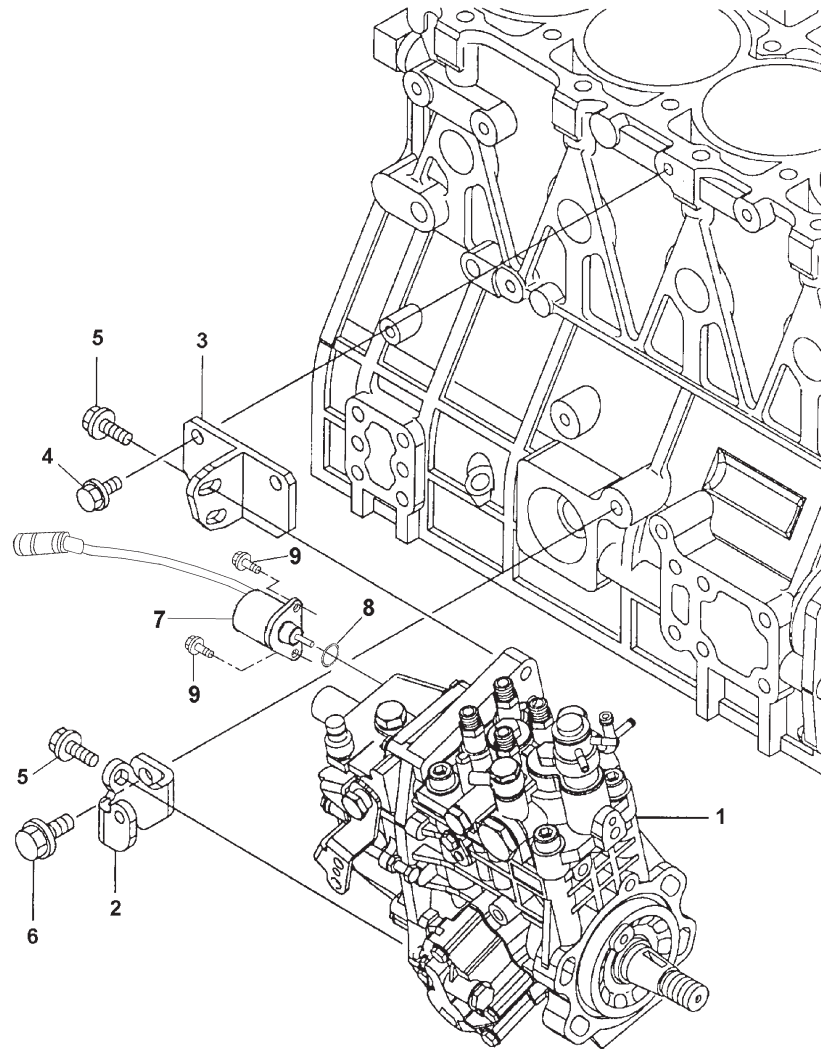
Fuel Lines & Injectors



Yinj pump valve

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	729946-53300	4	Fuel Injector (includes keys 2- 9)	-
2	129937-53000	4	Nozzle Assembly	-
3	114250-53080	4	Nut, Nozzle Case	-
4	129907-53100	4	Nozzle Holder Assembly	-
5	114250-53120	4	Nozzle Spring	-
6	114250-53130	4	Nozzle Spring Seat	-
7	114250-53140	4	Stop Plate	-
8	114250-53210	8	Pin	-
9	114250-53400	4	Shim Pack	-
10	123907-11601	4	Pipe Seal	-
11	122780-59100	2	Retainer	-
12	119305-59120	1	Retainer	-
13	129150-59131	3	Bolt, Hex M4 x 14	-
14	129550-59120	1	Retainer	-
15	129907-59710	1	Injection Line Bracket	-
16	129907-59810	1	Injection Line	-
17	129907-59820	1	Injection Line	-
18	129907-59830	1	Injection Line	-
19	129907-59840	1	Injection Line	-
20	26106-060162	2	Bolt, M6 x 16 Plated	-
21	26106-080182	1	Bolt, M8 x 18 Plated	-

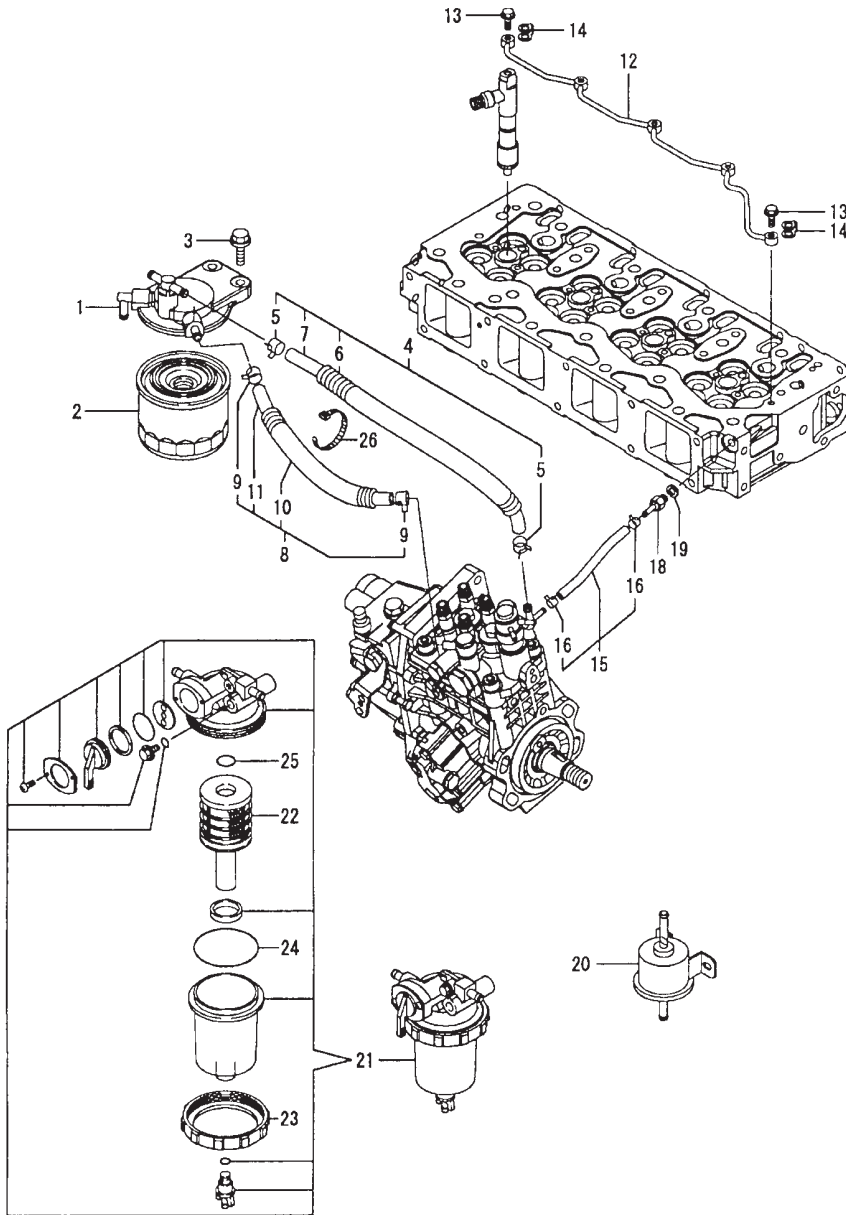
Injection Pump



Yinj pump

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	729946-51390	1	Injection Pump Assembly	-
2	129907-01960	1	Bracket	-
3	129907-01950	1	Bracket	-
4	26106-080162	2	Bolt, M8 x 16 Plated	-
5	26106-080222	3	Bolt, M8 x 22 Plated	-
6	26106-100202	1	Bolt, M10 x 20 Plated	-
7	119653-77950	1	Stop Solenoid	-
8	24341-000280	1	O-ring	-
9	26106-060142	2	Bolt	-

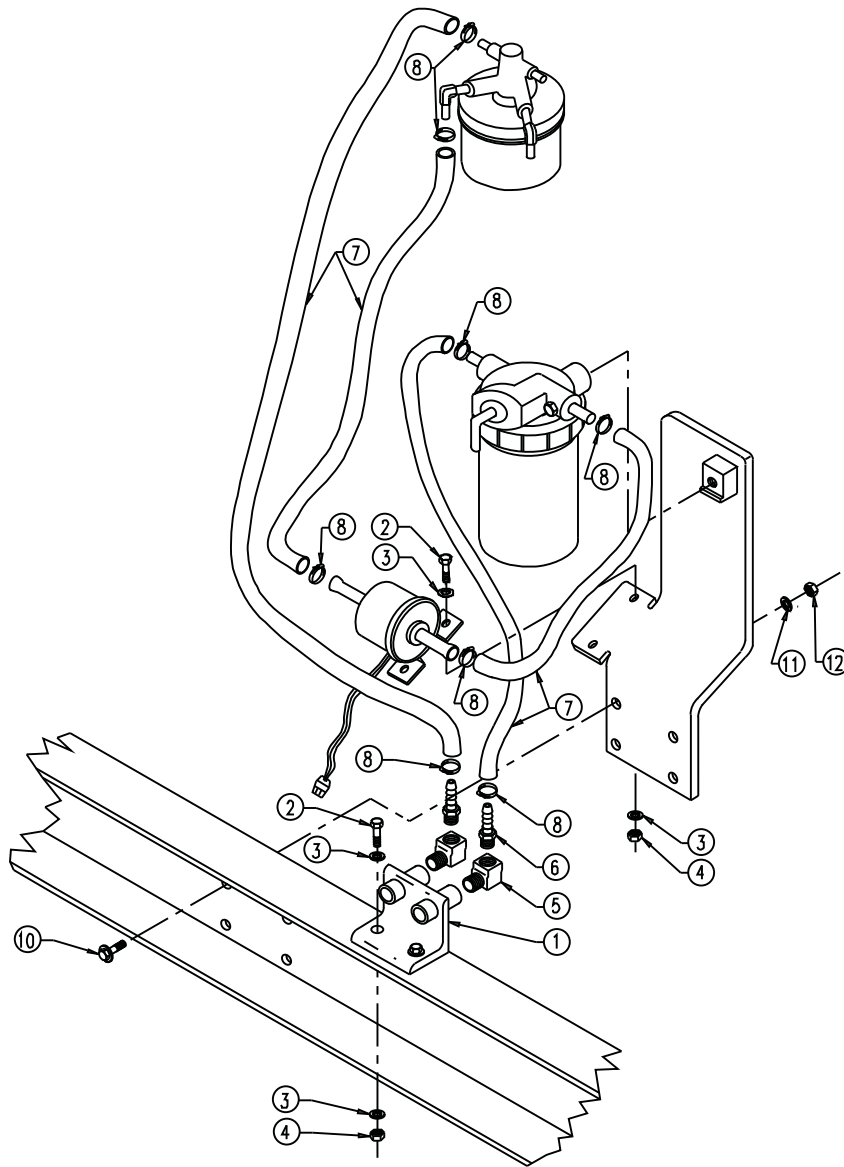
Fuel System - General Arrangement



Fuel System - General Arrangement

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129004-55610	1	Filter Bracket	-
2	24-57304	1	Fuel Filter	-
3	26106-080302	2	Bolt, M8 x 30 Plated	-
4	129457-59010	1	Fuel Line Assembly (includes keys 5- 7)	-
5	124766-59050	2	Clamp	-
6	129957-59120	1	Fuel Line Protector	-
7	105025-59750	1	Fuel Line	-
8	129981-59010	1	Fuel Line Assembly (includes keys 9- 11)	-
9	124766-59050	2	Clamp	-
10	129950-59221	1	Tube	-
11	129980-59510	1	Fuel Line	-
12	129907-59140	1	Fuel Return Line	-
13	123907-59540	5	Joint Bolt M6	-
14	123907-59550	5	Fuel Return Line Packing	-
15	129486-59551	1	Fuel Return Tube	-
16	124722-59050	2	Clamp	-
18	123907-59560	1	Hose Swivel	-
19	22190-080002	1	Seal Washer	-
20	119225-52102	1	Fuel Pump 12 Volt	-
	129535-52100	1	Fuel Pump 24 Volt	-
21	119802-55700	1	Gas/ Water Separator Assembly (includes keys 22- 25)	-
22	119802-55710	1	Element	-
23	129100-55690	1	Retaining Ring	-
24	24321-000650	1	O-ring	-
25	24311-000160	1	O-ring	-
26	121750-59890	1	Clamp	-

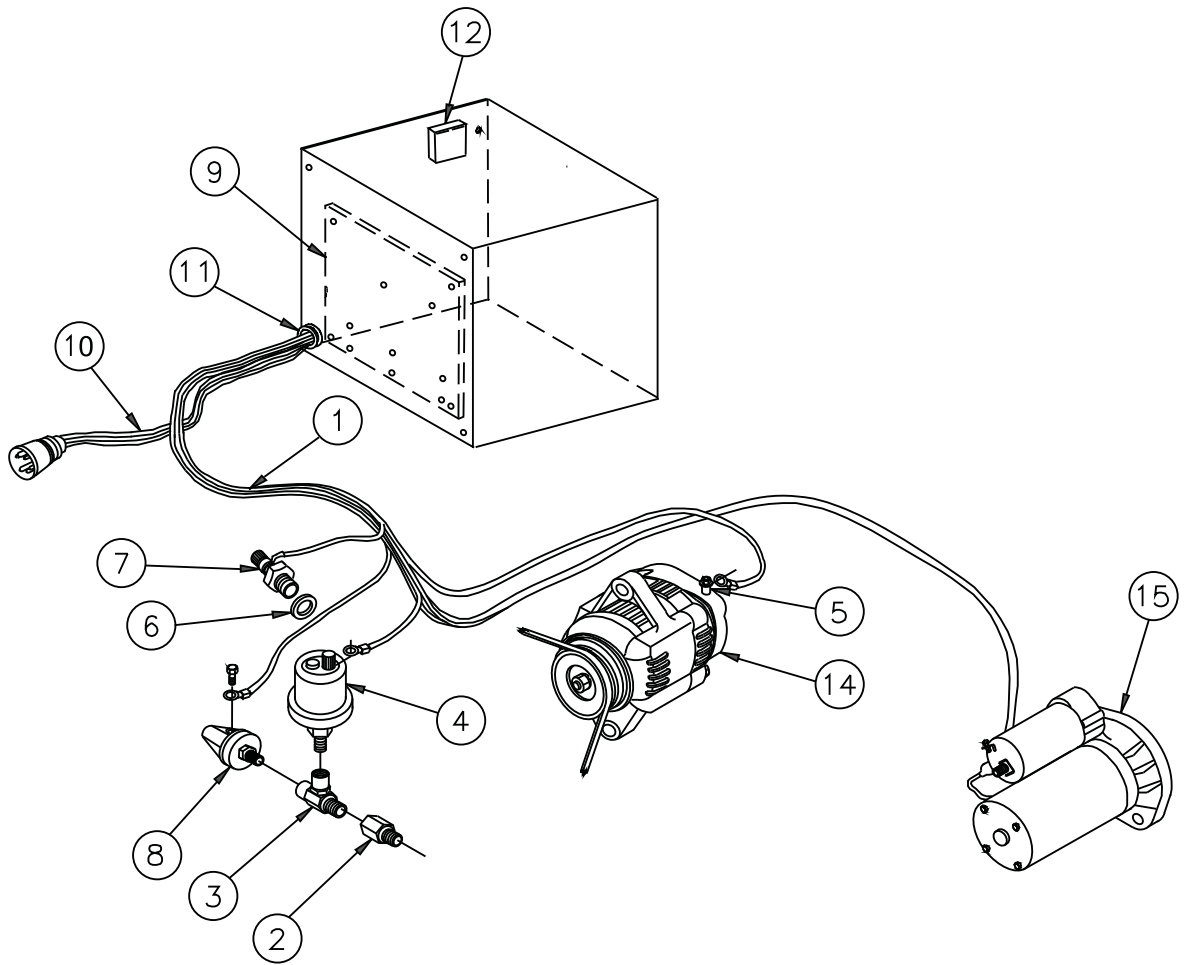
Fuel Lines, Filters, and Supply Pump Mounting



A-11034/ B-9232

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	10-51099	1	Fuel Line Connection Manifold	-
2	12-00031	4	Capscrew, Hex Head M6 x 1.0 x 25 mm	-
3	15-00008	8	Flat Washer M6	-
4	14-04803	4	Hex Nut, Nylock M6 x 1.0	-
5	21-51098	2	Street Elbow 90° Brass, 1/4 NPT	-
6	21-52016	2	Male Connector, Brass 1/4 NPT x 5/16 HB	-
7	41-01012	90	Hose 5/16" I.D. Push-on (sold per inch)	-
8	19-00004	8	Hose Clamp #4	-
9	23-58501	1	Bracket	-
10	12-80753	4	Capscrew, Hex Head Flanged M8 x 1.25 x 30 mm	-
11	15-00701	4	Flat Washer M8	-
12	14-04802	4	Hex Nut, Nylock M8 x 1.25	-

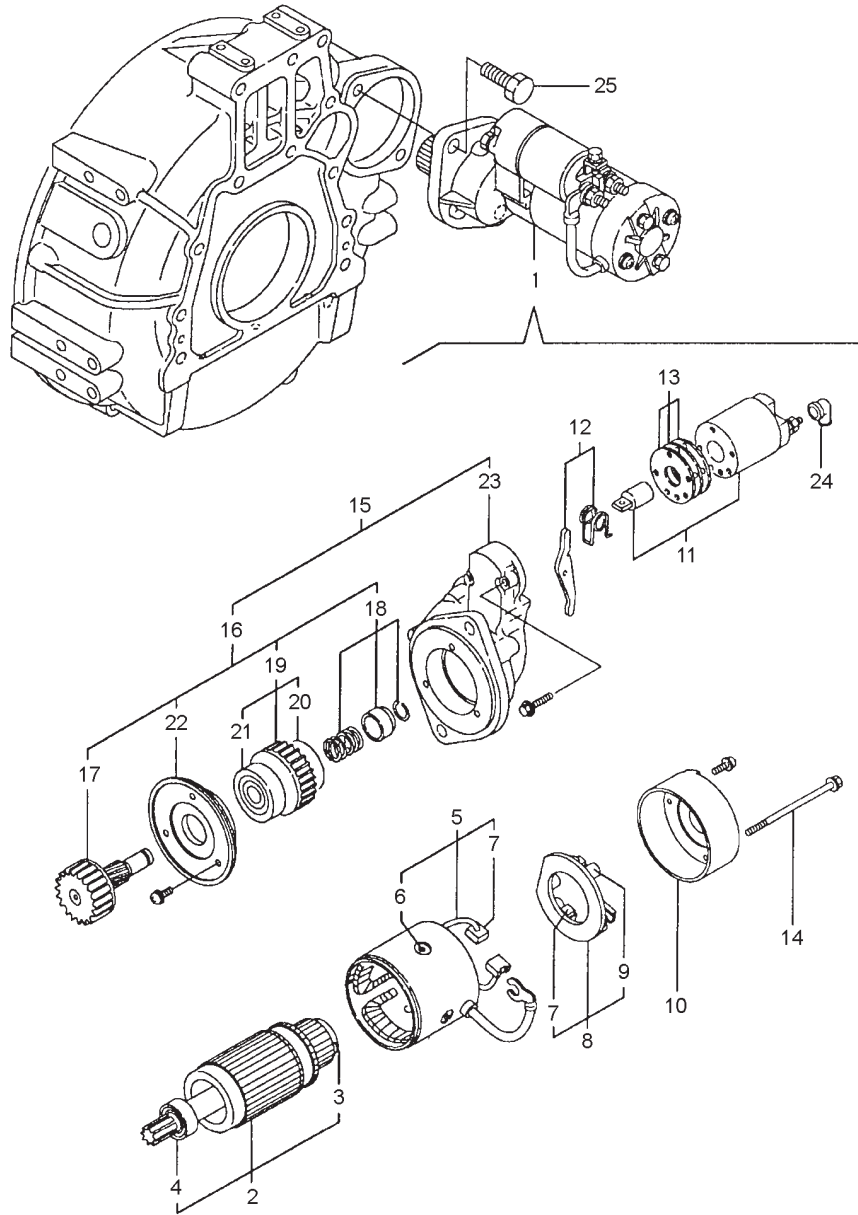
Electrical Assembly 12 Volt Standard Ground



A-9845/ B-9243

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	22-48502	1	Wire Harness	-
2	198487590	1	Banjo Bolt, Tapped 1/8 NPT	-
3	21-05400	1	Street Tee, Steel 1/8 NPT	-
4	22-41016	1	Pressure Sender, 0-80 PSI	-
5	22-45201	1	Temperature Sender 250°F	-
6	15-01001	2	Sealing Washer, Copper M16	-
7	22-40366	1	Temperature Switch, 110°C, 230°F	-
8	22-40233	1	Oil Pressure Switch 15 PSI	-
9	22-70083-1	1	Relay Board Sub-Assembly (see parts detail)	-
10	22-47311	1	Pigtail Harness 36"	-
11	00-70051	1	Grommet, 3/4" x 2" OD	-
12	22-40407	1	Timer Module 12 VDC 20 Amp	-
13	21-00050	1	Plug, Square Head Steel 1/8 BSPT (not shown)	-
14	129423-77200	1	Alternator (see parts detail)	-
15	129900-77010	1	Starter (see parts detail)	-

Starter

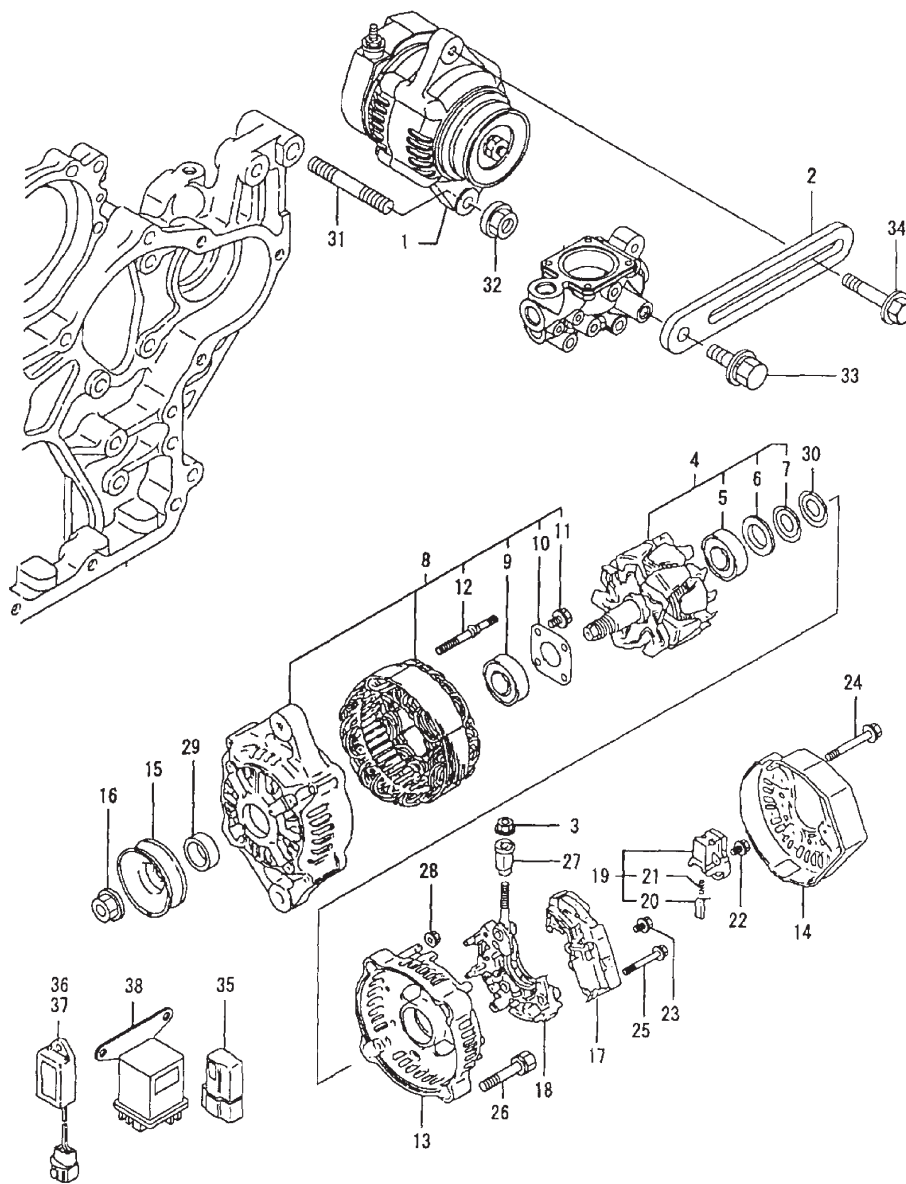


Ystarter



KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129900-77010	1	Starter (includes all keys)	-
2	129900-77400	1	Armature	-
3	X2114155110	1	Ball Bearing	-
4	X2114255110	1	Ball Bearing	-
5	129900-77440	1	Field Coil Assembly	-
6	171008-77450	4	Screw, Pole Core Set	-
7	129900-77450	4	Brush	-
8	129900-77480	1	Brush Holder Assembly	-
9	X2130631300	4	Brush Spring	-
10	129900-77460	1	Rear Cover	-
11	129900-77591	1	Magnetic Switch Assembly	-
12	129900-77620	1	Shift Lever Set	-
13	129900-77650	1	Dust Cover Assembly	-
14	129900-77640	2	Bolt	-
15	129900-77700	1	Gear Case	-
16	129900-77510	1	Pinion	-
17	129900-77540	1	Pinion Shaft	-
18	129900-77550	1	Stopper Set	-
19	129900-77520	1	Clutch Assembly	-
20	171008-77730	1	Ball Bearings (3)	-
21	171008-77740	1	Ball Bearings (4)	-
22	129900-77610	1	Bearing Retainer	-
23	129900-77710	1	Gear Housing	-
24	171008-77750	1	Terminal Cover	-
25	26116-120302	2	Bolt, M12 x 30 Plated	-

Alternator

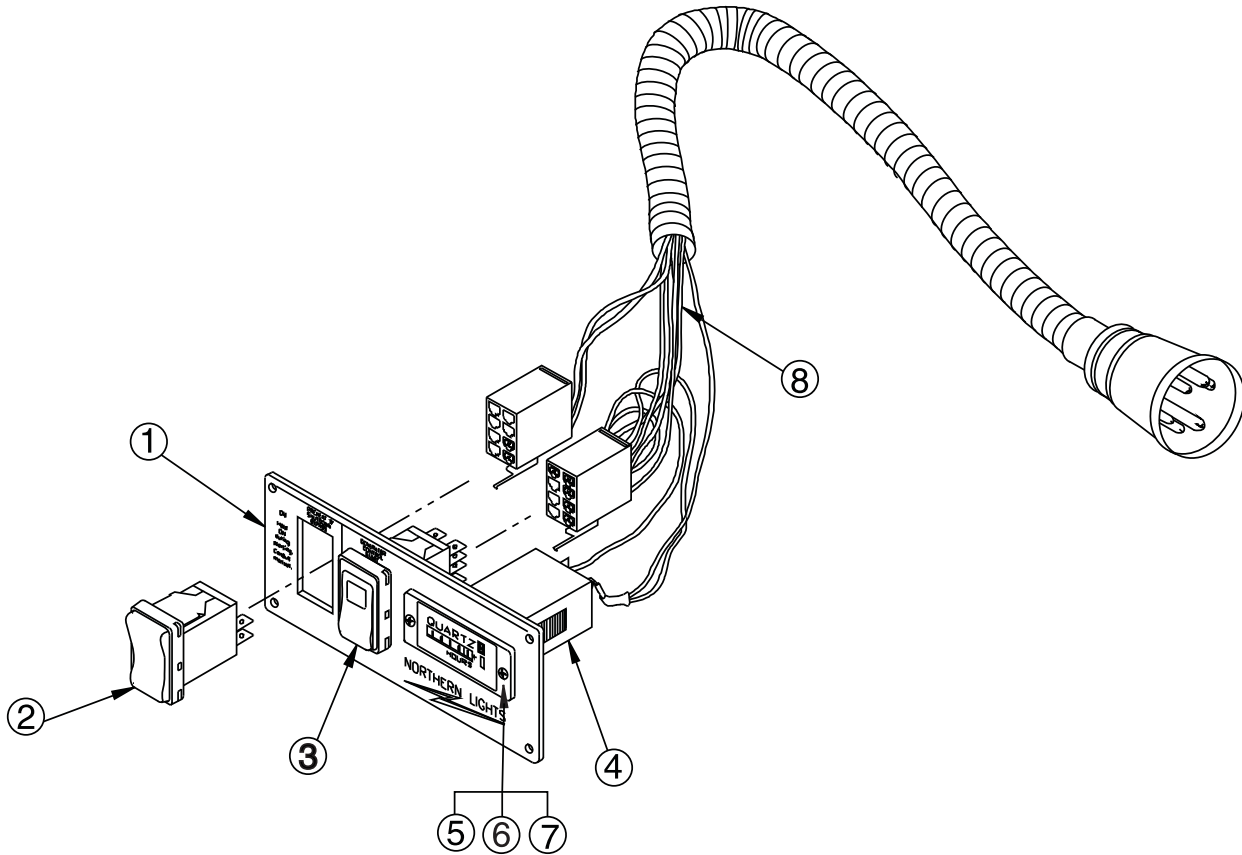


Yalternator

Alternator

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	129423-77200	1	Alternator (includes keys # 3- 30)	-
2	129900-77330	1	Tensioning Arm	-
3	X9490561001	1	Nut	-
4	119620-77380	1	Rotor Assembly	-
5	119620-79240	1	Ball Bearing	-
6	119620-79250	1	Bearing Cover	-
7	119620-79360	1	Thrust Washer	-
8	119620-77421	1	Front Frame & Stator Assembly	-
9	119620-79200	1	Ball Bearing	-
10	119620-79210	1	Plate	-
11	119620-79220	4	Screw	-
12	119620-79230	2	Stud Bolt	-
13	119620-77440	1	Rear Frame Assembly	-
14	129423-77450	1	Cover	-
15	119620-77461	1	Pulley	-
16	119620-77471	1	Nut	-
17	129423-77710	1	Regulator	-
18	119620-79260	1	Holder	-
19	119620-79270	1	Brush Holder	-
20	119620-77480	2	Brush Assembly	-
21	119620-79280	2	Spring	-
22	119620-79290	1	Screw	-
23	119620-79300	1	Screw	-
24	119620-79310	3	Bolt	-
25	119620-79320	2	Screw with Washer	-
26	119620-79330	2	Bolt	-
27	119620-79340	1	Insulation Bushing	-
28	119620-79350	2	Nut	-
29	119620-77490	1	Collar	-
30	119620-79360	1	Thrust Washer	-
31	129795-01900	1	Stud	-
32	26306-100002	1	Nut	-
33	26014-080252	1	Bolt M8 x 25	-
34	119810-77340	1	Bolt	-
35	119643-66900	1	Diode	-
36	128300-77920	1	Timer	-
37	129211-77920	1	Timer	-
38	119650-77910	1	Relay	-

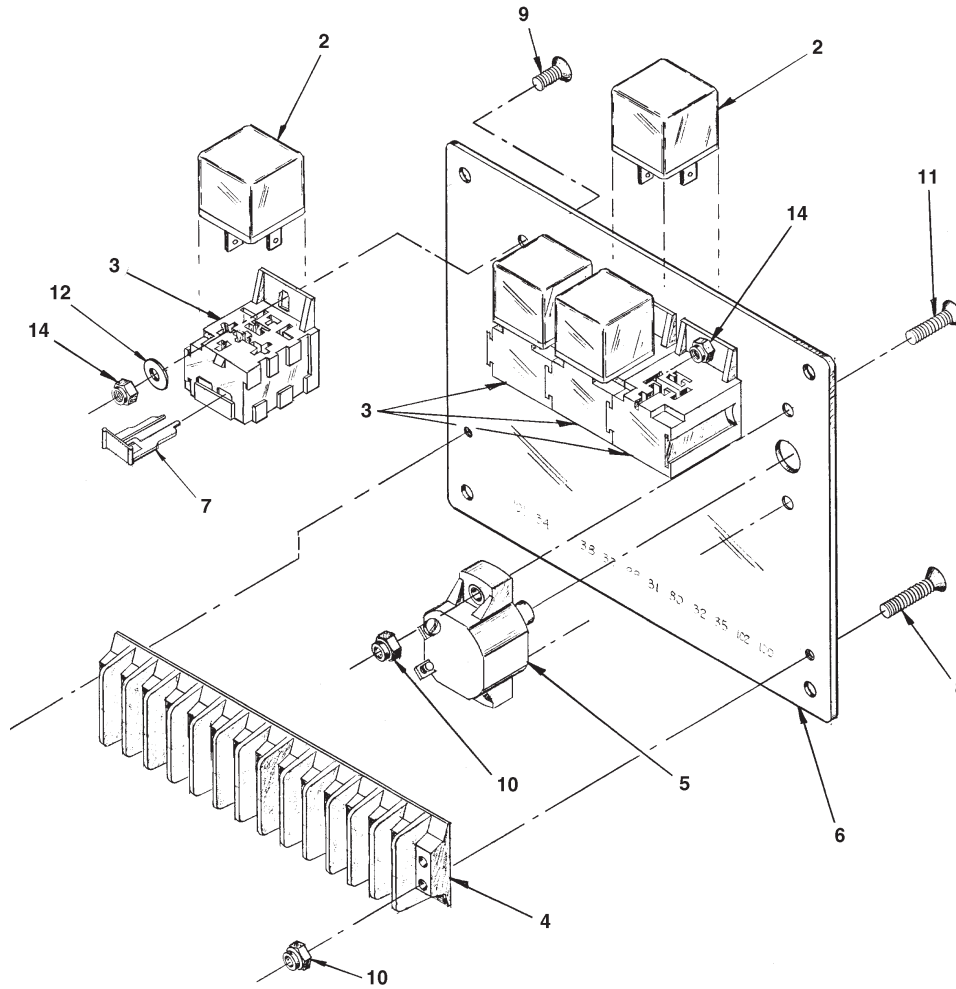
S-1B Start/Stop Control Panel



A-8553/ B-5971

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-92120	1	S-1B Control Panel Assembly (includes all keys)	-
1	28-90003	1	Plate	-
2	22-90167	1	Rocker Switch, Momentary SPST	-
3	22-90168	1	Rocker Switch with Lamp, SPST	-
4	22-90009	1	Hourmeter	-
5	12-00093	2	Machine Screw, Round Head Phillips #6- 32 x 1/2"	-
6	15-00030	2	Star Washer, Internal #6 S/S	-
7	14-00015	2	Hex Nut #6- 32 S/S	-
8	22-42063	1	Wire Harness	-
9	00-00013	1	Label, "12 Volt" (not shown)	-

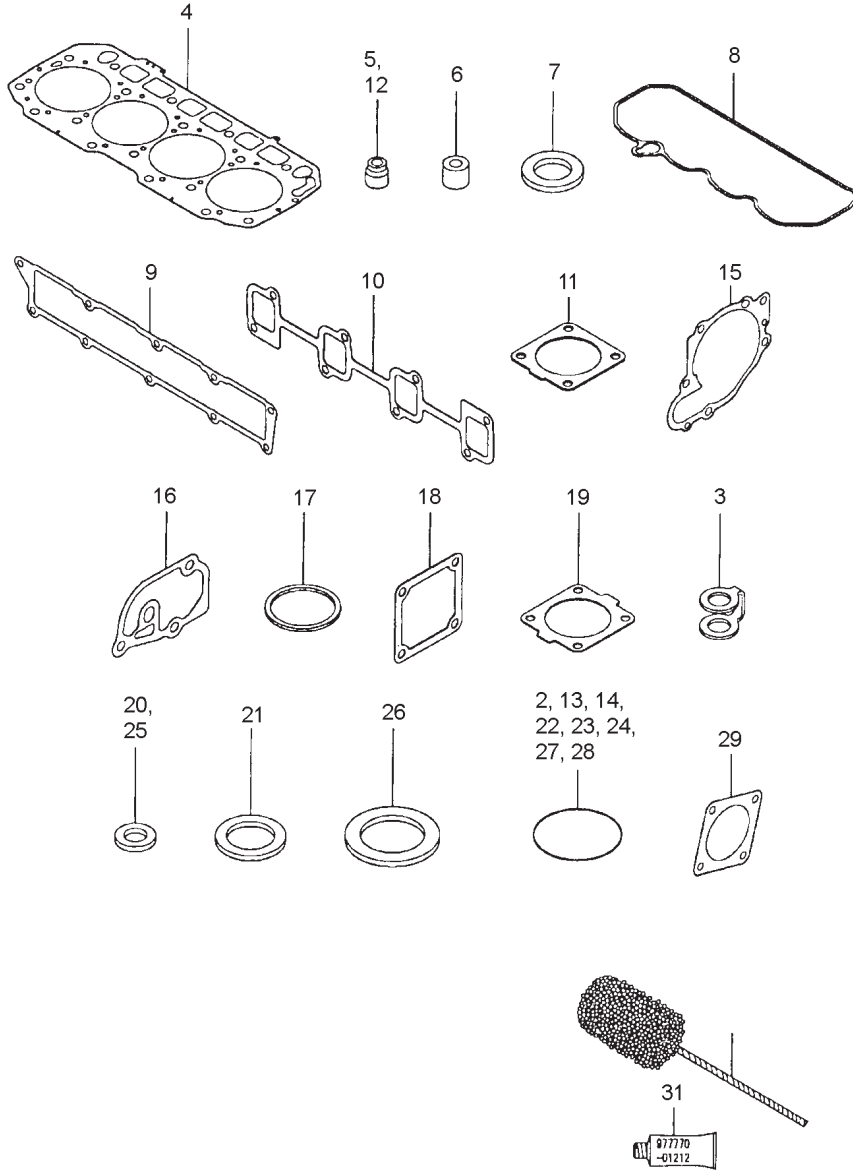
12 & 24 Volt Relay Logic Board



A-8851, A-8852, A-8854, A-8855/ C-2041C

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
••	22-70083	1	12V Relay Logic Board, Manual Start (Includes all keys)	-
••	22-70084	1	24V Relay Logic Board, Manual Start (Includes all keys)	-
••	22-70086	1	12V Relay Logic Board, Autostart (Includes all keys)	-
••	22-70087	1	24V Relay Logic Board, Autostart (Includes all keys)	-
1	22-41060	2	6 amp Diode (not shown)	-
2	22-42047	4	12V Relay SPDT	-
	22-40085	4	24V Relay SPDT	-
3	22-40391	4	Relay Base	-
	22-40393	4	Clip	-
4	22-40193	1	12 Connection Terminal Board, 600 VAC	-
5	22-40018	1	10 amp Circuit Breaker	-
6	28-40001	1	Relay Board Mounting Plate- Manual Start	-
	28-90018	1	Relay Board Mounting Plate- Autostart	-
7	22-40393	4	Terminal Retainer Clip	-
8	12-00083	2	Machine Screw, Flat Head Countersunk #8-32 x 3/4"	-
9	12-00082	4	Machine Screw, Flat Head Countersunk #8-32 x 3/8"	-
10	14-00003	2	Hex Nut, Nylock, #8 x 32	-
11	12-00089	2	Machine Screw, Flat Head Countersunk, #8-32 x 7/8"	-
12	15-00001	4	Flat Washer, #8	-
13	22-40347	1	Wire Harness, Manual Start	} Not shown
	22-40392	1	Wire Harness, Autostart	
14	14-00000	4	Hex Nut #8- 32	-

Gasket Set

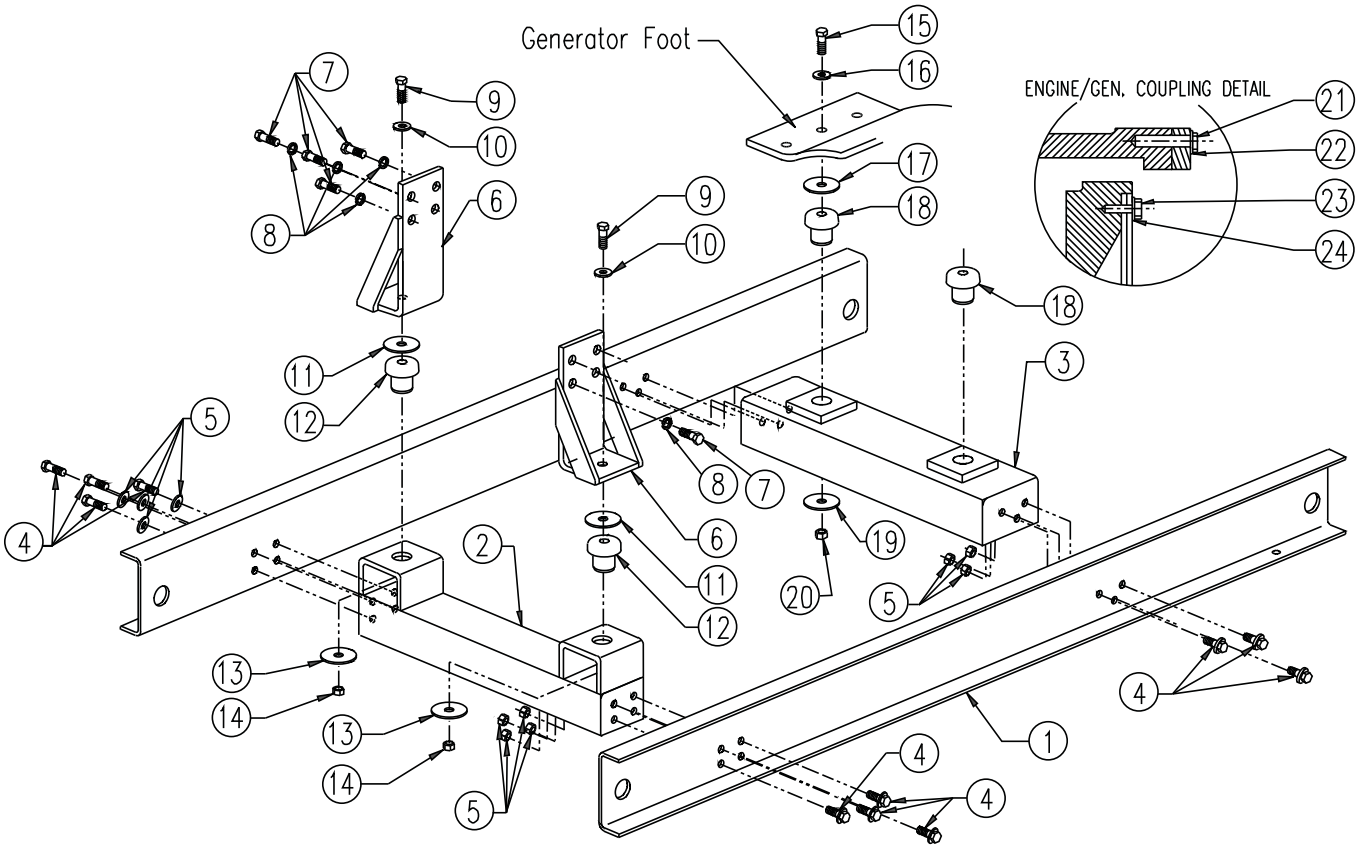


Ygaskets

Gasket Set

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	729907-92760	1	Gasket Set (includes keys #2- 29)	-
2	24341-000240	1	O-ring	-
3	123907-59550	5	Fuel Return Packing	-
4	129907-01331	1	Cylinder Head Gasket	-
5	124160-11340	8	Valve Stem Seal	-
6	119802-11870	4	Nozzle Protector	-
7	119625-11880	4	Nozzle Seat	-
8	129907-11310	1	Rocker Arm Cover Gasket	-
9	129907-12110	1	Intake Manifold Gasket	-
10	129900-13251	1	Gasket	-
11	129930-13200	1	Silencer Gasket	-
12	124950-11340	8	Valve Stem Seal	-
13	129900-32030	2	O-ring	-
14	129900-32040	1	O-ring	-
15	129900-42020	1	Gasket	-
16	129900-49870	1	Gasket	-
17	121850-49550	1	Thermostat Gasket	-
18	121850-77021	1	Gasket	-
19	121850-49540	1	Thermostat Gasket	-
20	23414-080000	3	Round Gasket	-
21	124465-44950	2	Gasket	-
22	24311-000070	1	O-ring	-
23	24311-000120	8	O-ring	-
24	24311-000320	2	O-ring	-
25	22190-080002	7	Seal Washer	-
26	22190-220002	1	Seal Washer	-
27	24351-030750	1	O-ring	-
28	24321-000850	1	O-ring	-
29	124240-01883	1	Gasket	-
30	129400-92450	1	Flex Brush	-
31	97770-01212	1	Liquid Gasket	-

Base Frame



A-9844/ B-9244

KEY	PART NUMBER	QTY	DESCRIPTION	SERIAL NUMBER
1	39-88503	2	Side Rail	-
2	39-88501	1	Front Support	-
3	39-88506	1	Bracket, Generator Support	-
4	12-80313	14	Capscrew, Hex Head Flanged 3/8- 16 x 1- 1/4"	-
5	14-00302	14	Lock Nut, Plain Flanged 3/8- 16	-
6	23-88501	2	Bracket, Front Engine Mounting	-
7	12-00805	8	Capscrew, Hex Head M10 x 1.5 x 20 mm	-
8	15-00802	8	Lock Washer, Helical M10	-
9	12-00817	2	Capscrew, Hex Head M10 x 1.5 x 55 mm	-
10	15-00805	2	Flat Washer, M10	-
11	15-00014	2	Head/ Tail Washer	-
12	33-83151	2	Mount, Centerbonded 200 lbs.	-
13	15-00014	2	Head/ Tail Washer	-
14	14-00812	2	Hex Nut, Nylock M10 x 1.5	-
15	12-00964	2	Capscrew, Hex Head M12 x 1.75 x 75 mm	-
16	15-00007	2	Flat Washer, M12	-
17	15-00016	2	Head Washer	-
18	33-81054	2	Mount, Centerbonded 400 lbs.	-
19	15-00026	2	Tail Washer	-
20	14-00830	2	Hex Nut, Nylock M12 x 1.75	-
21	12-00831	12	Capscrew, Hex Head M10 x 1.5 x 25 mm	-
22	15-00802	12	Lock Washer, Helical M10	-
23	01437-01020	8	Capscrew, 12 Pt., M10 x 1.5 x 20 mm	-
24	15-00307	8	Flat Washer, 3/8" / M10 Hardened	-
25	28-68502	1	Plate, J-Box Access (not shown)	-



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