

0CV10-M70600EN

PREFACE

1. This Parts Catalog carries all parts incorporated in YANMAR Model 3TNE78A - EMG engine manufactured since February, 2000.
2. Each illustration corresponds to the parts list on the following page.
3. When ordering parts, clearly write down the engine model and serial number, as well as the name and number of each part in your order sheet. This will help insure reliable delivery of the parts you have ordered.

Directions for the Parts Catalog.

1. This Parts Catalog shows both standard and optional parts.
2. Parts may change without prior notice.
3. The following is an example of the Parts Catalog format.

OCF10-G21601 29. FUEL INJECTION PUMP(W/BOOST)										
REF.	LEV.	PARTS NO.	DESCRIPTION	(A)	(B)	(C)	(D)	(E)	(F)	
1	1	729595-51390	FUEL INJECTION PUMP	1	1	1	1	1		1
1-1	1	729595-51391	FUEL INJECTION PUMP	1	1	1	1	1	N	1
		(A=E00185) (B=E00200)								
3	2	26022-060162	SCREW M 6X 16	9	9	9	9	9		
3-1	2	26022-060162	SCREW M 6X 16	4	4	4	4	4	K	
		(A=E00156) (B=E00156) (C=E00156) (D=E00156) (E=E00156)								
4	2	129470-51040	CAMSHAFT	1	1	1	1	1		
5	2	122710-51050	BEARING, ROLLER	2	2	2	2	2		
6	2	129470-51060	RETAINER	1	1	1	1	1		

Remarks

(1) BOOST COMPEMSATOR TYPE. OPTIONAL PART, TO E00155,(4JH-DT, 4JH-DTZ

① Ref. No.

The Ref. No. listed may not be in accordance with the illustration Ref. No.

(Ex.) Illustration No.

List Ref No.

1 1 (Before change) → 1-1 (After change)

For interchangeable symbols N, R and K, illustrations for new parts may be abbreviated.

② Lev. (Level)

Level indication

The numbers below indicate the level of relativity towards the main part.

1 ---- Main parts (Assembly parts)

2 ---- Sub component included in " 1 ".

3 ---- Sub component included in " 2 ".

Note) Parts that are not for sale are partially illustrated but not listed.

③ Interchangeability Symbol

When a part change takes place, one of the following interchangeability symbols is indicated beside the part.

Symbol	Interchangeability	Contents note
N	Old $\xrightarrow{\text{Yes}}$ New No	New Part is interchangeable for Old Part but Old Part is not interchangeable for New Part.
Q	Old $\xrightarrow{\text{No}}$ New Yes	New Part is not interchangeable for Old Part but Old Part is interchangeable for New Part.
R	Old $\xrightarrow{\text{Yes}}$ New Yes	New/ Old Parts are both interchangeable.
S	Old $\xrightarrow{\text{No}}$ New No	New/ Old Parts are both not interchangeable.
W		Part newly added.
Z		Part discontinued.
F		Not interchangeable by a single part but interchangeable together with related parts.
K		Changes only for used parts quantities.

④ Effective Machine No.

When a part changes, the effective Machine No. will be indicated in the (A)-(F) column.

Product Symbol	Product No.	Product Symbol	Product No.
C	Clutch No. Compressor No.	F	Machine No. (Agricultural Equip.)
D	Drive No.	M	Machine No.
E	Engine No.		

Note 1) A date may follow the symbol. (Ex.) 1996.01

Note 2) "XXXXX" and "ZZZZZ" are for parts that could not be predicted or for engine models that could not be identified.

Note 3) (A=E00185) is the E (Engine Serial Number) for the column (A) model (in this case 4JH-DT) after the parts design change.

⑤ Remarks

Figures or alphabets (symbols) are entered in the remarks column.

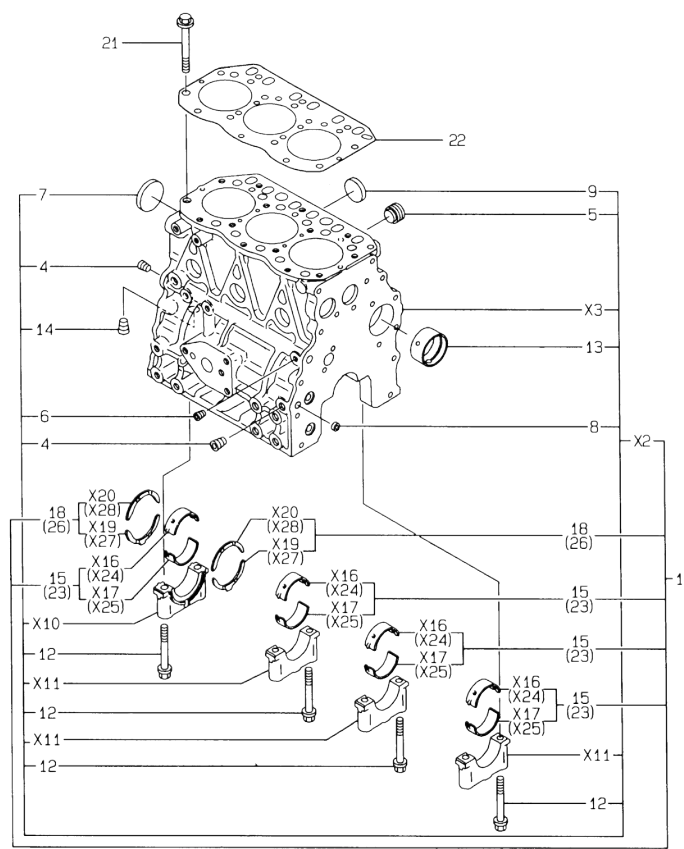
The comments (remarks) on parts that are indicated at the bottom of the illustration are the same symbols as those stated above.

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4.	CYLINDER HEAD & BONNET		
5.	SUCTION MANIFOLD		
6.	CAMSHAFT & DRIVING GEAR		
7.	CRANKSHAFT & PISTON		
8.	LUB.OIL SYSTEM		
9.	COOLING WATER SYSTEM		
10.	FUEL INJECTION PUMP		
11.	GOVERNOR		
12.	FUEL INJECTION VALVE		
13.	FUEL FILTER		
14.	STARTING MOTOR		
15.	GENERATOR		
16.	GASKET SET		

Fig.1. CYLINDER BLOCK

1. CYLINDER BLOCK



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719822-01560	BLOCK ASSY, CYLINDER	1							
4	3	124160-01910	PLUG, PT1/4	2							
5	3	171051-01921	PLUG, NPTF1	1							
6	3	23876-010000	PLUG, R01	1							
7	3	129001-01250	PLUG, 50	1							
8	3	27241-120000	PLUG, 12	2							
9	3	27241-300000	PLUG 30	6							
12	3	119620-02020	BOLT, METAL CAP	8							
13	3	129795-02411	BUSH, CAMSHAFT	1							
14	3	124160-01910	PLUG, PT1/4	1							
15	2	119810-02800	BEARING, MAIN	4							
18	2	119810-02930	BEARING, THRUST	1							
21	1	119810-01200	BOLT, HEAD	14							
22	1	119818-01330	GASKET, HEAD	1							
23	1	119810-02870	BEARING, 0.25 US	4							1
26	1	119810-02940	BEARING, THRUST 0.25	2							2

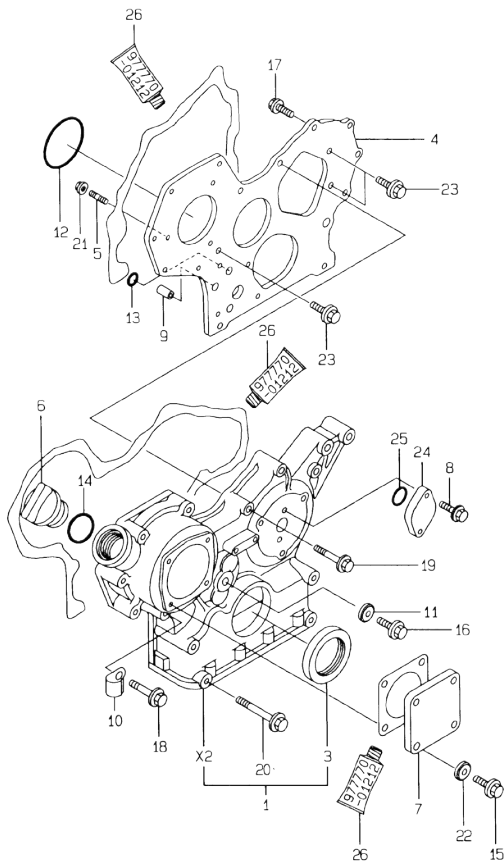
Remarks

- (1) UNDER-SIZE(U.S=0.25)PART.
(2) OVER-SIZE(O.S=0.25)PART.

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Fig.2. GEAR HOUSING

2. GEAR HOUSING



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719810-01500	CASE ASSY, GEAR	1							
3	2	129795-01800	SEAL, OIL	1							
4	1	129400-01520	FLANGE, GEAR CASE	1							
5	1	121450-01560	STUD, M8X22	3							
6	1	124160-01751	COVER, FILLER	1							
7	1	124240-01871	COVER	1							
8	1	26106-060162	BOLT, M6X 16 PLATED	2							
9	1	129795-01950	PIPE, KNOCK L=18	2							
10	1	129150-03100	RETAINER, PIPE	1							
11	1	22190-080002	WASHER, SEAL 6	1							
12	1	121850-51960	O-RING	1							
13	1	24311-000160	O-RING, 1AP16.0	2							
14	1	24311-000320	O-RING, 1AP32.0	1							
15	1	26106-080122	BOLT, M8X 12 PLATED	4							
16	1	26106-080162	BOLT, M8X 16 PLATED	1							
17	1	26106-080202	BOLT, M8X 20 PLATED	2							
18	1	26106-080452	BOLT, M8X 45 PLATED	6							
19	1	26106-080552	BOLT, M8X 55 PLATED	3							
20	1	129001-91841	BOLT, M8X85	4							
21	1	26366-080002	NUT, M8	3							
22	1	22190-080002	WASHER, SEAL 6	4							
23	1	26106-080162	BOLT, M8X 16 PLATED	3							
24	1	121023-01550	COVER	1							
25	1	24341-000240	O-RING, 1AS24.0	1							
26	1	977770-01212	GASKET, LIQUID	1							1

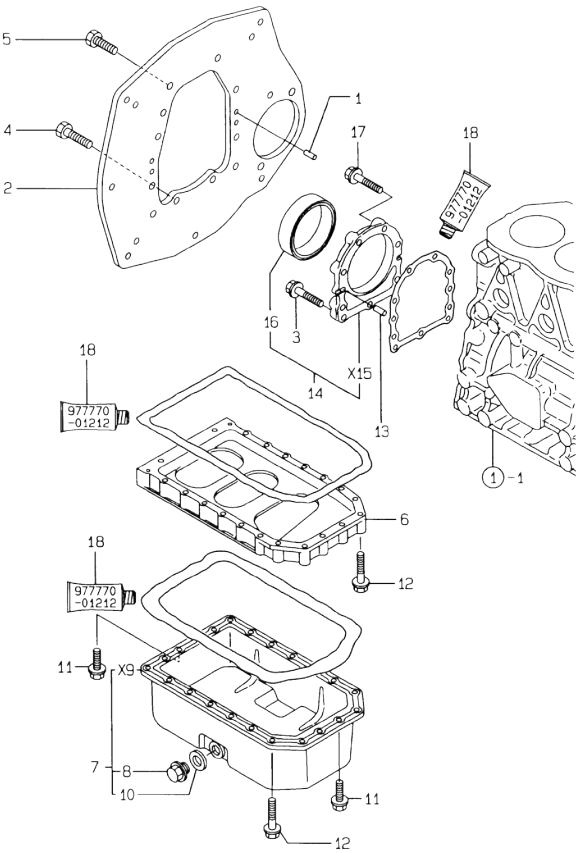
Remarks

(1) OPTIONAL PART.

N:Old $\frac{YBS}{100}$ New, Q:Old $\frac{H10}{100}$ New, R:Old $\frac{YBS}{100}$ New, S:Old $\frac{H10}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.3. MOUNTING FLANGE & OIL SUMP

3.MOUNTING FLANGE & OIL SUMP

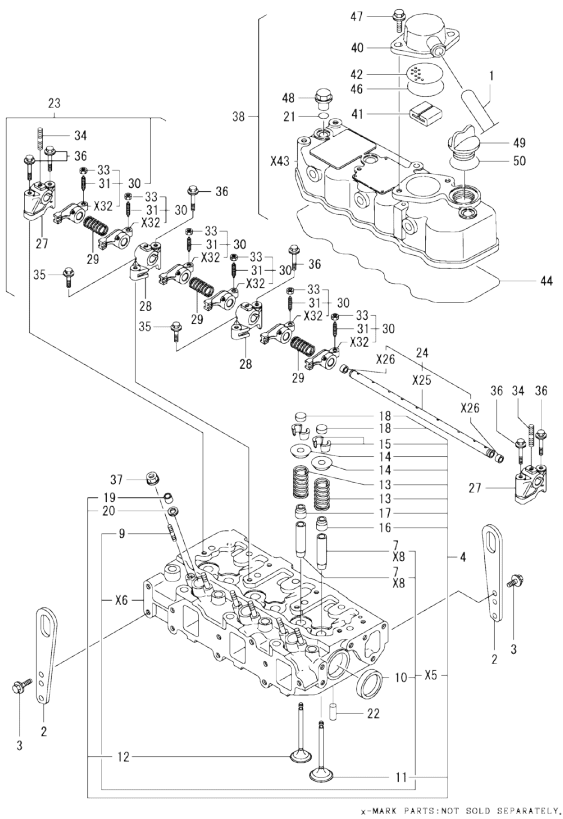


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, M8X16	2							
2	1	129176-01601	FLANGE, MOUNTING	1							
3	1	26106-080352	BOLT, M8X 35 PLATED	3							
4	1	26206-100252	BOLT, M10X 25 PLATED	4							
5	1	26206-100202	BOLT, M10X 20 PLATED	6							
6	1	119810-01730	SPACER, OIL SUMP	1							
7	1	119810-01770	SUMP ASSY, OIL	1							
8	2	119640-01640	PLUG, DRAIN M22	1							
10	2	22190-220002	WASHER, SEAL 22	1							
11	1	26106-080162	BOLT, M8X 16 PLATED	6							
12	1	26106-080452	BOLT, M8X 45 PLATED	22							
13	1	129100-01580	PIN, M8X16	2							
14	1	719810-01650	CASE ASSY, OIL SEAL	1							
16	2	119810-01780	SEAL, 769310	1							
17	1	129486-01670	BOLT, M8X30	6							
18	1	977770-01212	GASKET, LIQUID	1							1

Remarks
(1) OPTIONAL PART.

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Fig.4. CYLINDER HEAD & BONNET



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129150-03090	HOSE, ID16X2T	1							
2	1	129900-07900	LIFTER	2							
3	1	26106-080162	BOLT, M8X 16 PLATED	4							
4	1	119812-11700	HEAD ASSY, CYLINDER	1							1
7	3	124060-11800	GUIDE, VALVE	6							
9	3	26216-060302	STUD, M6X 30	6							
10	3	27241-400000	PLUG, 40	2							
11	2	119810-11100	VALVE, INTAKE	3							
12	2	119810-11110	VALVE, EXHAUST	3							
13	2	119810-11120	SPRING, VALVE	6							
14	2	104211-11180	RETAINER, SPRING	6							
15	2	27310-070001	COTTER, 7	6							
16	2	124160-11340	SEAL, VALVE STEM	3							
17	2	124950-11340	SEAL, VALVE STEM	3							
18	2	104211-11370	CAP, VALVE	6							
19	2	119625-11870	PROTECTOR, NOZZLE	3							
20	2	119625-11880	SEAT, NOZZLE	3							
21	1	24311-000120	O-RING, 1AP12.0	3							
22	1	22351-060012	PIN, SPRING 6.0X12	2							
23	1	119865-11210	SUPPORT ASSY	1							
24	2	119810-11240	SHAFT ASSY, ROCKER	1							
27	2	129155-11260	SUPPORT, ROCKER ARM	2							
28	2	129155-11270	SUPPORT, ROCKER ARM	2							
29	2	129150-11280	SPRING	3							
30	2	719810-11660	ARM ASSY, ROCKER	6							
31	3	129150-11230	SCREW, VALVE ADJUST	6							
33	3	129150-11750	NUT, M8	6							
34	2	26226-080182	STUD, M8X 18	3							
35	1	26106-080252	BOLT, M8X 25 PLATED	2							
36	1	26106-080502	BOLT, M8X 50 PLATED	6							
37	1	26366-060002	NUT, M6	6							
38	1	719810-11521	BONNET ASSY, HEAD	1							
40	2	129150-03020	COVER, BREATHER	1							
41	2	129150-03070	BAFFLE, BREATHER	1							
42	2	129150-03080	PLATE, BAFFLE	1							
44	2	119865-11310	GASKET, BONNET	1							
46	2	24341-000500	O-RING, 1AS50.0	1							
47	2	26106-080162	BOLT, M8X 16 PLATED	2							
48	1	124160-11360	KNOB	3							
49	1	124160-01751	COVER, FILLER	1							
50	1	24311-000320	O-RING, 1AP32.0	1							

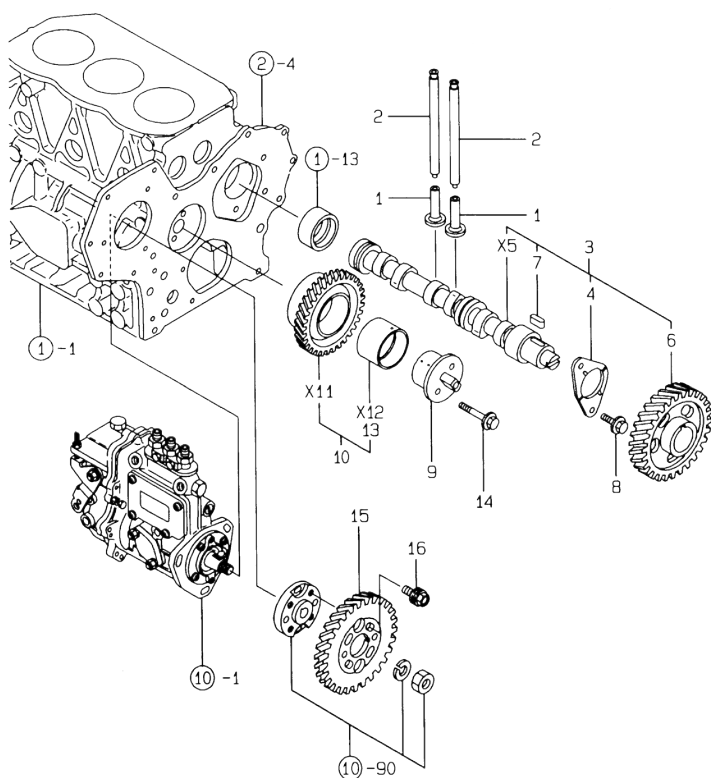
Remarks

(1) REPAIR PART.

N:Old $\frac{N_{OLD}}{N_{NEW}}$ New, Q:Old $\frac{Q_{OLD}}{Q_{NEW}}$ New, R:Old $\frac{R_{OLD}}{R_{NEW}}$ New, S:Old $\frac{S_{OLD}}{S_{NEW}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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				(A)=3TNE78A-EMG	(D)=					I	R
				(B)=	(E)=						
				(C)=	(F)=						
No.	Rev.	Parts No.	Description	Qty							
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119813-12100	MANIFOLD, AIR INTAKE	1							
2	1	119813-12110	GASKET, MANIFOLD	1							
3	1	26106-080252	BOLT, M8X 25 PLATED	6							
4	1	129120-77501	HEATER	1							
5	1	129150-77511	GASKET	1							
6	1	26106-080352	BOLT, M8X 35 PLATED	4							
7	1	119810-13110	GASKET	1							

6. CAMSHAFT & DRIVING GEAR



Remarks
(1) REPAIR PART.

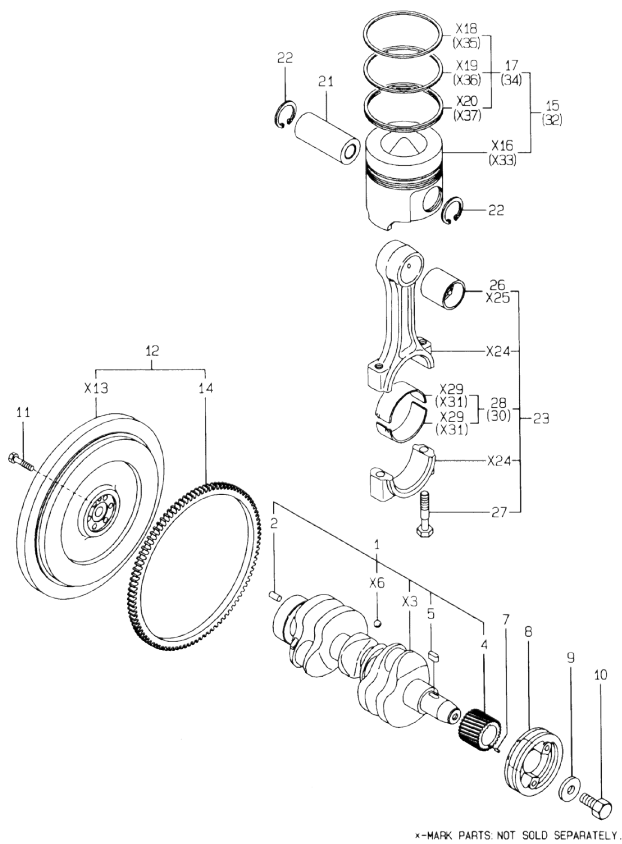
				(A)=3TNE78A-EMG					(D)=			I	R
				(B)=					(E)=				
				(C)=					(F)=				
No.	Lev.	Parts No.	Description	Qty									
				(A)	(B)	(C)	(D)	(E)	(F)				
1	1	129150-14200	TAPPET	6									
2	1	119810-14400	ROD, PUSH	6									
3	1	119810-14580	CAMSHAFT ASSY	1									
4	2	129150-02450	BEARING, THRUST	1									
6	2	129150-14101	GEAR, CAMSHAFT	1									
7	2	22512-070140	KEY, 7X 14	1									
8	1	26106-080142	BOLT, M8X 14 PLATED	2									
9	1	129100-25061	SHAFT, IDLE	1									
10	1	129150-25101	GEAR ASSY, IDLE	1									
13	2	129150-25920	BUSH, IDLE GEAR	1									1
14	1	26106-080452	BOLT, M8X 45 PLATED	2									
15	1	129150-25931	GEAR, PUMP	1									
16	1	129150-25301	BOLT	4									

N:Old $\xleftrightarrow[\text{No}]{\text{Yes}}$ New, Q:Old $\xleftrightarrow[\text{Yes}]{\text{No}}$ New, R:Old $\xleftrightarrow[\text{Yes}]{\text{No}}$ New, S:Old $\xleftrightarrow[\text{No}]{\text{Yes}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.7. CRANKSHAFT & PISTON

7.CRANKSHAFT & PISTON



x-MARK: PARTS NOT SOLD SEPARATELY.

Remarks

- (1) REPAIR PART.
- (2) UNDER-SIZE(U.S=0.25)PART.
- (3) OVER-SIZE(O.S=0.25)PART.

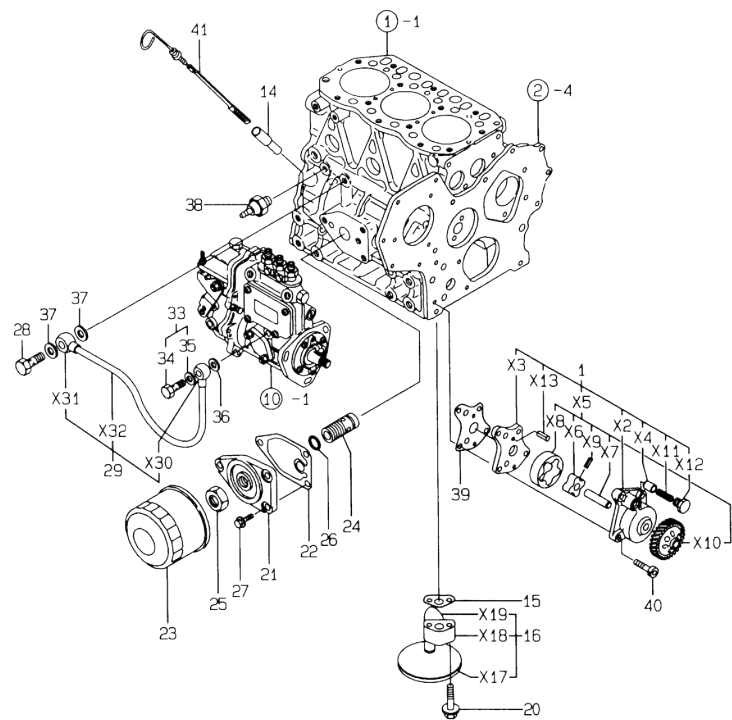
(A)=3TNE78A-EMG
(B)=
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119813-21000	CRANKSHAFT ASSY	1							
2	2	129100-01580	PIN, M8X16	1							
4	2	129150-21200	GEAR, CRANKSHAFT	1							
5	2	22512-070140	KEY, 7X 14	1							
7	1	22351-040010	PIN, SPRING 4.0X10	1							
8	1	129550-21650	V-PULLEY	1							
9	1	129795-21661	WASHER	1							
10	1	121850-21680	BOLT	1							
11	1	121111-21501	BOLT, FLYWHEEL	6							
12	1	119811-21570	FLYWHEEL ASSY	1							
14	2	124550-21600	GEAR, RING	1							
15	1	119923-22080	PISTON ASSY	3							
17	2	119818-22500	RING SET, PISTON	3							
21	1	119813-22300	PIN, PISTON	3							
22	1	129792-22400	CIRCLIP, 23	6							
23	1	719810-23100	ROD ASSY, CONNECTING	3							
26	2	119810-23910	BEARING, PISTON PIN	3							1
27	2	119810-23200	BOLT, CONNECTING ROD	6							
28	2	119810-23600	BEARING, CRANK PIN	3							
30	1	119810-23610	BEARING, 0.25 US	3							2
32	1	119818-22930	PISTON ASSY, 0.25 OS	3							3
34	2	119818-22950	RING SET, 0.25 OS	3							3

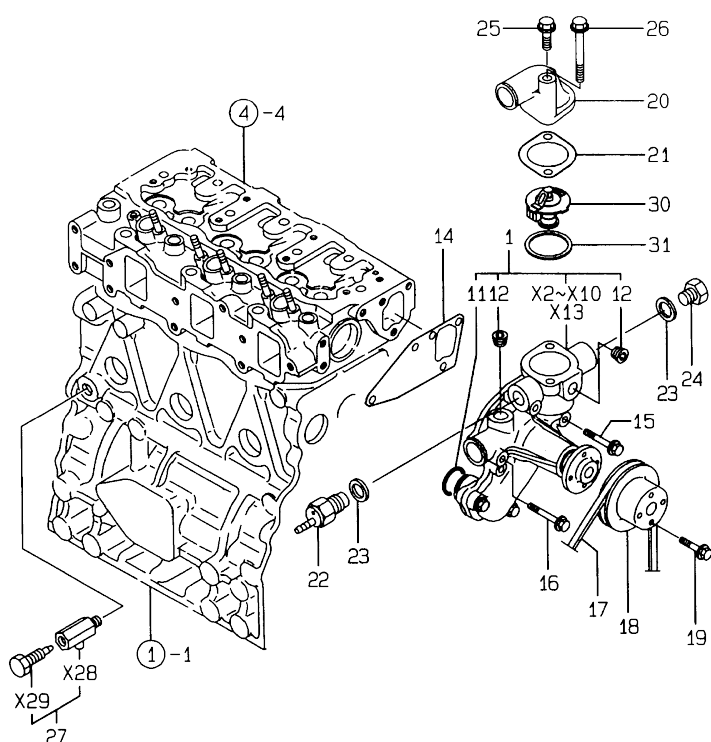
Fig.8. LUB.OIL SYSTEM

8.LUB.OIL SYSTEM



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129001-32001	PUMP ASSY, OIL	1							
14	1	121520-34810	GUIDE, DIPSTICK	1							
15	1	129150-35041	GASKET	1							
16	1	119810-35300	PIPE ASSY, OIL INLET	1							
20	1	26106-080352	BOLT, M8X 35 PLATED	2							
21	1	129150-35101	BRACKET, STRAINER	1							
22	1	129150-35111	GASKET	1							
23	1	129150-35151	FILTER, D80XL80	1							
24	1	129001-35300	BOLT, FILTER	1							
25	1	129150-35350	NUT	1							
26	1	24311-000160	O-RING, 1AP16.0	1							
27	1	26106-080202	BOLT, M8X 20 PLATED	3							
28	1	124160-39140	BOLT, PIPE JOINT M10	1							
29	1	119810-39200	PIPE ASSY, OIL	1							
33	1	124550-59830	BOLT ASSY, JOINT M8	1							
34	2	124550-59820	BOLT, PIPE JOINT M8	1							
35	2	22190-080002	WASHER, SEAL 6	1							
36	1	22190-080002	WASHER, SEAL 6	1							
37	1	22190-100002	WASHER, SEAL 10	2							
38	1	114250-39450	SWITCH, 0.5KG	1							
39	1	129150-32020	GASKET, PUMP	1							
40	1	26450-060252	BOLT, M6X 25	4							
41	1	119932-34800	DIPSTICK, OIL	1							

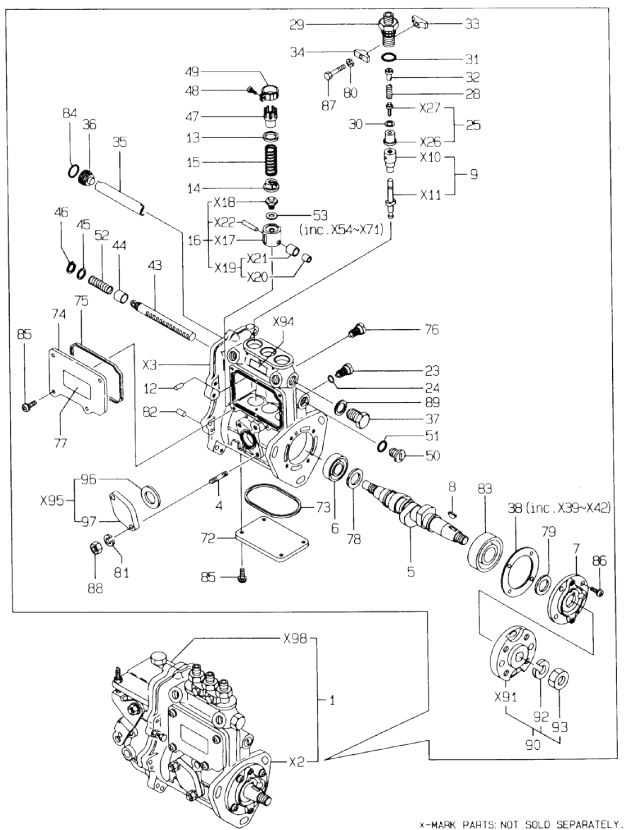
9. COOLING WATER SYSTEM



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	119810-42001	PUMP ASSY, WATER	1							
11	2	129150-42320	O-RING	1							
12	2	23876-030000	PLUG, R03	2							
14	1	129486-42050	GASKET, WATER PUMP	1							
15	1	26106-080352	BOLT, M8X 35 PLATED	1							
16	1	26106-080552	BOLT, M8X 55 PLATED	3							
17	1	25132-003800	V-BELT, A38	1							
18	1	129155-42350	V-PULLEY	1							
19	1	26014-060142	BOLT, M6X 14	4							
20	1	119889-49530	COVER, THERMOSTAT	1							
21	1	129795-49561	GASKET	1							
22	1	46150-503100	SWITCH, 95	1							
23	1	124465-44950	GASKET, 16	2							
24	1	121450-42450	PLUG, M16	1							
25	1	26106-080252	BOLT, M8X 25 PLATED	1							
26	1	26106-080652	BOLT, M8X 65 PLATED	1							
27	1	119620-49290	COCK ASSY, 1/4	1							
30	1	129155-49800	THERMOSTAT, 71	1							
31	1	129150-49811	GASKET, THERMOSTAT	1							

Fig.10. FUEL INJECTION PUMP

10.FUEL INJECTION PUMP



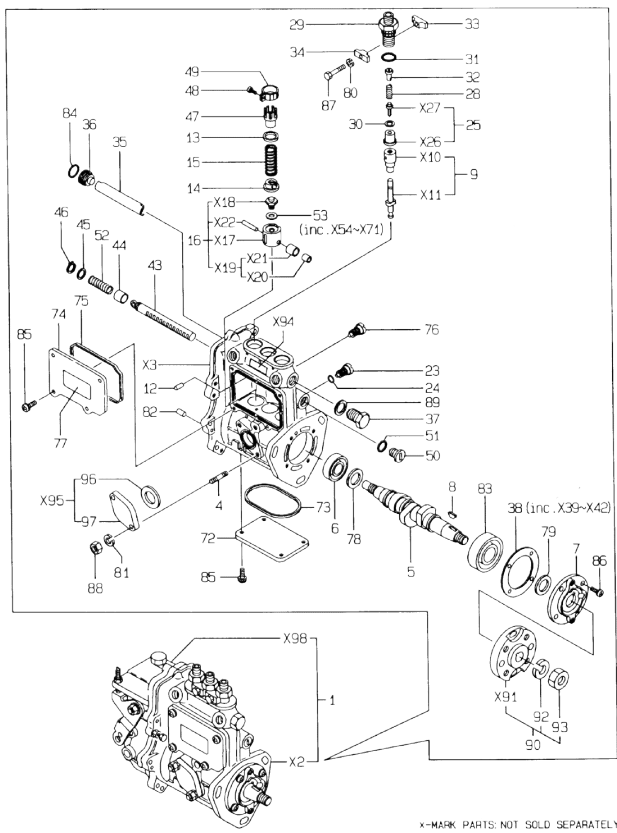
x-MARK PARTS: NOT SOLD SEPARATELY.

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719822-51490	PUMP ASSY, INJECTION	1							1
4	3	129155-51020	STUD	2							
5	3	119810-51040	CAMSHAFT	1							
6	3	129155-51050	BEARING, 17BM001D	1							
7	3	129208-51060	SUPPORT	1							
8	3	122710-51090	KEY	1							
9	3	129108-51100	PLUNGER ASSY	3							
12	3	129155-51140	PIN	3							
13	3	174307-51170	RETAINER, SPRING A	3							
14	3	129155-51180	RETAINER, SPRING	3							
15	3	124950-51190	SPRING, PLUNGER	3							
16	3	129155-51200	TAPPET ASSY	3							
23	3	129155-51270	STOPPER, TAPPET	3							
24	3	129155-51280	O-RING, S6	3							
25	3	128170-51300	VALVE ASSY, DELIVERY	3							
28	3	129155-51320	SPRING, DELIVERY	3							
29	3	129155-51340	RETAINER	3							
30	3	124550-51350	GASKET, DELIVERY	3							
31	3	124550-51370	O-RING	3							
32	3	129155-51370	STOPPER, VALVE	3							
33	3	129155-51380	STOPPER	2							
34	3	129155-51390	STOPPER	2							
35	3	129155-51400	DEFLECTOR	1							
36	3	129155-51410	BOLT	1							
37	3	129155-51420	PLUG, M16	1							
38	3	129155-51450	SHIM SET, ADJUSTING	1							
43	3	129155-51500	RACK, CONTROL	1							
44	3	129155-51521	BUSH, RACK	1							
45	3	129155-51530	SPACER	1							
46	3	129155-51540	CIRCLIP	1							
47	3	129155-51550	PINION, CONTROL	3							
48	3	122117-51560	SCREW	3							
49	3	174307-51560	PINION	3							
50	3	129155-51570	PLUG, M12	1							
51	3	129155-51580	O-RING	1							
52	3	129155-51591	SPRING, RACK	1							
53	3	129155-51600	SHIM SET, ADJUSTING	3							
72	3	129155-51701	COVER	1							
73	3	129155-51710	GASKET	1							
74	3	129155-51751	COVER	1							
75	3	129155-51760	GASKET	1							
76	3	129155-51790	STOOPER, RACK	1							
77	3	129156-51910	LABEL, CAUTION	1							
78	3	129155-51930	SPACER, T=3.25	1							
79	3	129155-51940	SPACER, T=1.5	1							
80	3	22217-050000	WASHER, SPRING 5	2							
81	3	22217-060000	WASHER, SPRING 6	2							
82	3	22351-050010	PIN, SPRING 5.0X10	2							
83	3	24101-063034	BEARING, BALL 6303	1							
84	3	24341-000160	O-RING, 1AS16.0	1							
85	3	26022-050122	SCREW, M5X12	8							

N:Old $\frac{100}{100}$ New, Q:Old $\frac{100}{100}$ New, R:Old $\frac{100}{100}$ New, S:Old $\frac{100}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
++ CONTINUE ++
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Fig.10. FUEL INJECTION PUMP

10.FUEL INJECTION PUMP

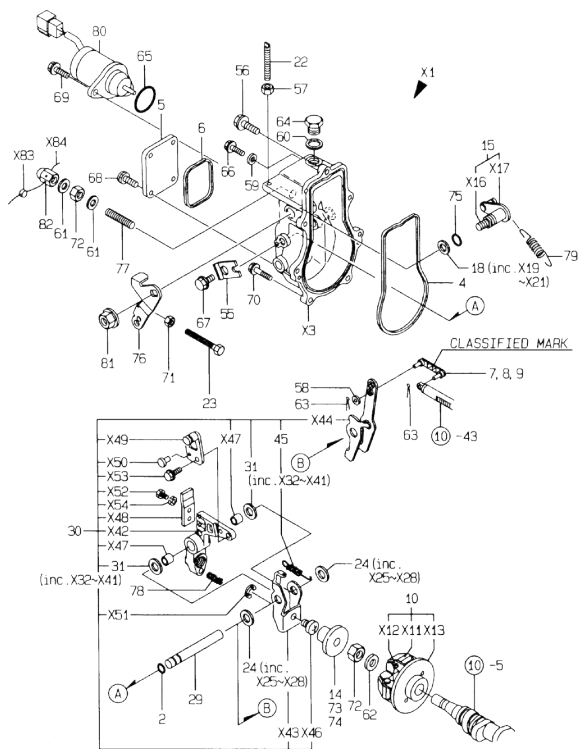


X-MARK PARTS NOT SOLD SEPARATELY.

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
86	3	26022-060162	SCREW, M6X16	4							
87	3	26116-050302	BOLT, M5X 30 PLATED	2							
88	3	26716-060002	NUT, M6	2							
89	3	22190-160002	WASHER, SEAL 16	1							
90	3	129208-54500	FLANGE ASSY	1							
92	4	22217-120000	WASHER, SPRING 12	1							
93	4	26716-120002	NUT, M12	1							
96	3	129155-52050	GASKET	1							
97	3	129100-52200	COVER	1							

Fig.11. GOVERNOR

11. GOVERNOR



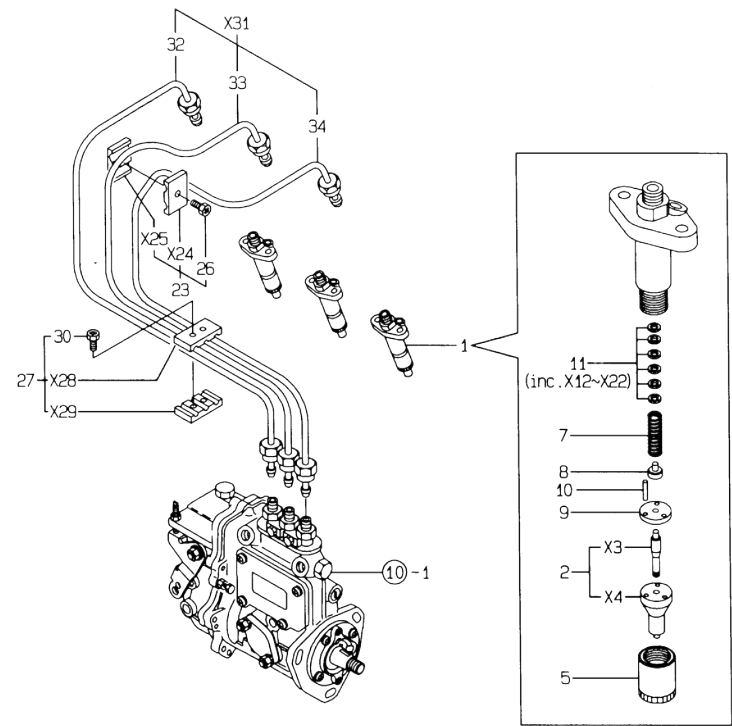
Remarks
(1) SELECTIVE PARTS: CERTAIN THE CLASSIFICATION MARK, THEN PLACE YOUR ORDER.(REFER TO ILLUSTRATION).
(2) SELECTIVE PARTS.
* THIS FIGURE(GOVERNOR ASSY)IS INCORPORATED IN THE FUEL INJECTION PUMP ASSY(FIG.10).

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
2	3	129155-51280	O-RING, S6	1							
4	3	129052-61050	GASKET	1							
5	3	129052-61060	COVER, GOVERNOR CASE	1							
6	3	129052-61070	GASKET	1							
7	3	129155-61120	LINK, L=30 MARK 0	1							1
8	3	129155-61130	LINK, L=31 MARK 1	1							1
9	3	129155-61140	LINK, L=30.5 MARK 05	1							1
10	3	171488-61200	WEIGHT ASSY,GOVERNOR	1							
14	3	129155-61341	SLEEVE	1							2
15	3	129100-61400	SHAFT ASSY	1							
18	3	129155-61430	SPACER	1							
22	3	129155-61450	BOLT, LIMITER	1							
23	3	129155-61460	BOLT, IDLE	1							
24	3	129155-61480	SPACER ASSY	2							
29	3	129052-61390	SHAFT	1							
30	3	129412-61500	LEVER ASSY, GOVERNOR	1							
31	4	174307-51700	SHIM SET	2							
45	4	119843-61540	SPRING, SET	1							
55	3	119660-61901	RETAINER, SHAFT	1							
56	3	129155-61950	BOLT	1							
57	3	124550-66370	NUT, M6	1							
58	3	22117-040000	WASHER, 4	1							
59	3	22190-060003	SEAL WASER 6	1							
60	3	22190-100002	WASHER, SEAL 10	1							
61	3	22190-120002	WASHER, SEAL 12	2							
62	3	22287-120000	WASHER, 12	1							
63	3	22372-040000	PIN, SNAP 4	2							
64	3	23887-100002	PLUG, 10	1							
65	3	24341-000280	O-RING, 1AS28.0	1							
65-1	3	158552-61900	O-RING	1							N
(A=EXXXXX)											
66	3	26106-060102	BOLT, M6X 10 PLATED	1							
67	3	26106-060102	BOLT, M6X 10 PLATED	1							
68	3	26106-060102	BOLT, M6X 10 PLATED	4							
69	3	26106-060142	BOLT, M6X 14 PLATED	2							
70	3	26106-060202	BOLT, M6X 20 PLATED	6							
71	3	26756-060002	NUT, LOCK M6	1							
72	3	26776-120002	NUT, LOCK M12	2							
73	3	129155-61350	SLEEVE, L=24.9	1							2
74	3	129155-61360	SLEEVE, L=25.2	1							2
75	3	129155-61830	O-RING, S10	1							
76	2	171488-61440	LEVER, CONTROL	1							
77	2	129155-61470	BOLT, CONTROL	1							
78	2	129500-61650	SPRING, FUEL CONTROL	1							
79	2	129477-61720	SPRING, GOVERNOR	1							
80	2	119653-77950	SOLENOID, STOP	1							
81	2	26366-080002	NUT, M8	1							
82	2	129100-61930	NUT, CAP	1							

OCV10-M70600

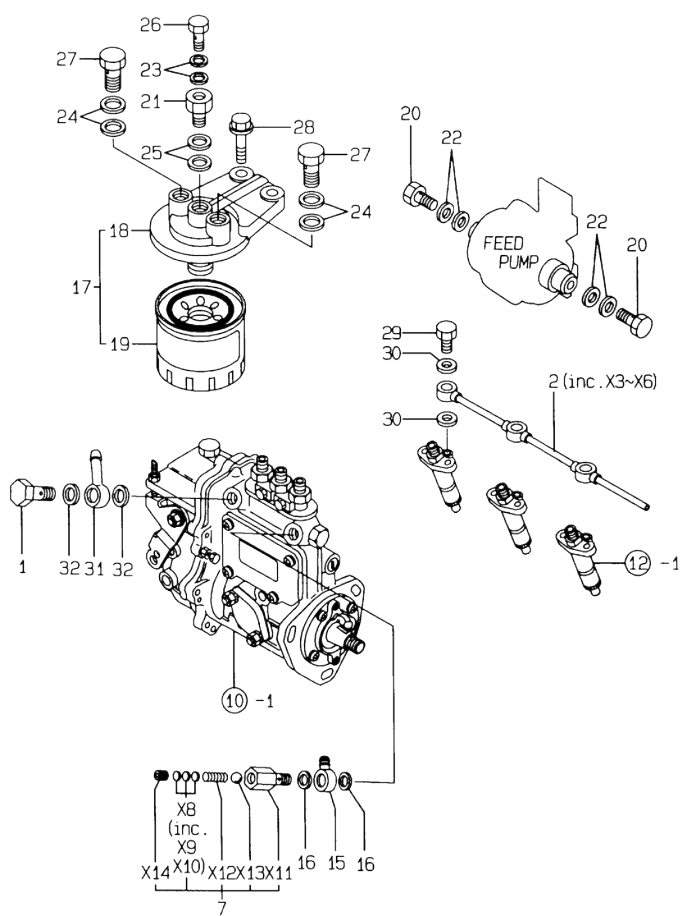
Fig.12. FUEL INJECTION VALVE

12.FUEL INJECTION VALVE



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719989-53300	VALVE ASSY,INJECTION	3							
2	2	119818-53000	VALVE ASSY,INJECTION	3							
5	2	114250-53080	NUT, NOZZLE D16.95	3							
7	2	114250-53120	SPRING, NOZZLE	3							
8	2	114250-53130	SEAT, SPRING	3							
9	2	114250-53140	PLATE	3							
10	2	114250-53210	PIN	6							
11	2	114250-53400	SHIM SET	3							
23	1	119305-59120	RETAINER, PIPE	1							
26	2	129150-59131	BOLT, M4X14	1							
27	1	129150-59120	RETAINER, PIPE	1							
30	2	129150-59131	BOLT, M4X14	2							
32	2	119813-59812	PIPE ASSY, INJECTION	1							
33	2	119813-59821	PIPE ASSY, INJECTION	1							
34	2	119813-59831	PIPE ASSY, INJECTION	1							

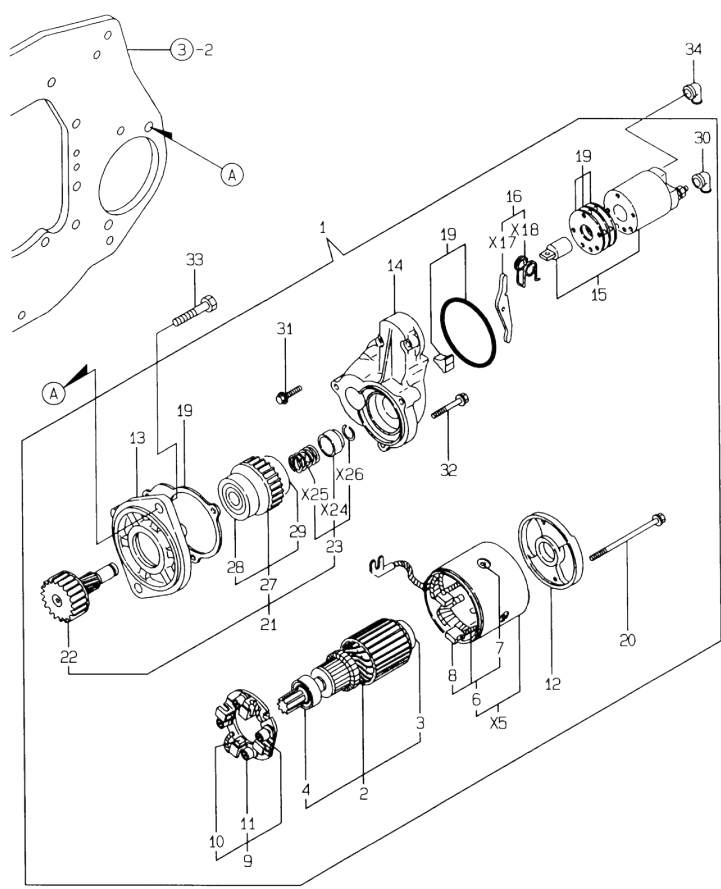
13. FUEL FILTER



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	103854-39140	BOLT, PIPE JOINT	1							
2	1	119988-59551	PIPE ASSY, RETURN	1							
7	1	129100-59951	VALVE ASSY, CHECK	1							
15	1	101304-59020	JOINT, PIPE 12	1							
16	1	22190-120002	WASHER, SEAL 12	2							
17	1	129470-55601	FILTER ASSY, FUEL	1							
18	2	129470-55610	BODY, STRAINER	1							
19	2	129470-55701	STRAINER ASSY, FUEL	1							
20	1	105582-59150	BOLT, PIPE JOINT	2							
21	1	129495-59300	BOLT, PIPE JOINT	1							
22	1	23414-080012	GASKET, 8X1.0	4							
23	1	23414-080012	GASKET, 8X1.0	2							
24	1	23414-120000	GASKET, 12X1.0	4							
25	1	23414-140000	GASKET, 14X1.0	2							
26	1	23857-030000	BOLT, JOINT 3	1							
27	1	23857-060000	BOLT, JOINT 6	2							
28	1	26106-100302	BOLT, M10X 30 PLATED	2							
29	1	129491-59540	BOLT, PIPE JOINT M6	3							
30	1	22190-060002	WASHER, SEAL 6	6							
31	1	101304-59020	JOINT, PIPE 12	1							
32	1	22190-120002	WASHER, SEAL 12	2							

Fig.14. STARTING MOTOR

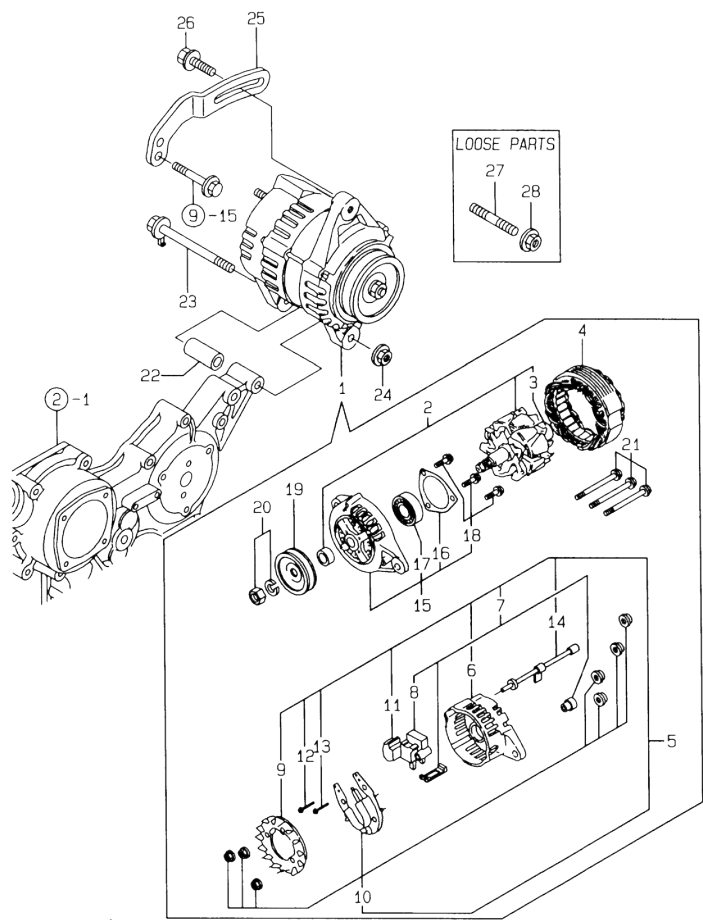
14.STARTING MOTOR



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	171008-77010	STARTER, S114-483	1							
2	2	171008-77400	ARMATURE ASSY	1							
3	3	X2130350900	BEARING, BALL	1							
4	3	X2114255110	BEARING, BALL	1							
6	3	171008-77440	COIL ASSY, FIELD	1							
7	4	171008-77450	SCREW	4							
8	4	171008-77460	BRUSH (+)	2							
9	2	171008-77470	HOLDER ASSY, BRUSH	1							
10	3	171008-77480	BRUSH (-)	2							
11	3	171008-77490	SPRING, BRUSH	4							
12	2	171008-77500	COVER, REAR	1							
13	2	171008-77510	CASE, GEAR	1							
14	2	171008-77520	HOUSING, CENTER	1							
15	2	171008-77531	MAGNETIC SWITCH ASSY	1							
16	2	171008-77540	LEVER SET	1							
19	2	171008-77571	COVER KIT, DUST	1							
20	2	171008-77640	BOLT, THROUGH	2							
21	2	171008-77650	PINION ASSY	1							
22	3	171008-77660	SHAFT	1							
23	3	171008-77670	STOPPER SET	1							
27	3	X2114555500	CLUTCH ASSY	1							
28	4	X2114955020	BEARING, BALL	1							
29	4	X2240410100	BEARING, BALL	1							
30	2	171008-77750	COVER	1							
31	2	26106-060322	BOLT, M6X 32 PLATED	2							
32	2	26106-060402	BOLT, M6X 40 PLATED	3							
33	1	26116-120252	BOLT, M12X 25 PLATED	2							
34	1	124550-77030	COVER, TERMINAL	1							

Fig.15. GENERATOR

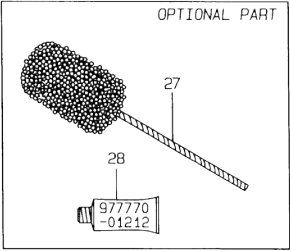
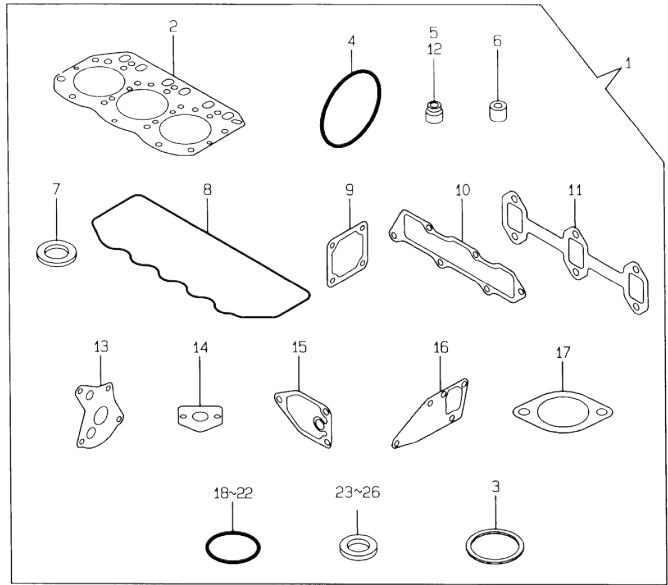
15. GENERATOR



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119836-77200	GENERATOR	1							
2	2	119836-77700	ROTOR ASSY	1							
3	3	119836-77850	BALL BEARING	1							
4	2	119836-77710	STATOR ASSY	1							
5	2	119836-77721	COVER ASSY, REAR	1							
6	3	119836-77730	COVER, REAR	1							
7	3	119836-77741	BRUSH ASSY,REGULATOR	1							
8	4	119836-77750	BRUSH ASSY	1							
9	3	119836-77760	GUIDE, FAN SIDE	1							
10	3	119836-77770	DIODE ASSY	1							
11	3	119836-77780	CONDENSER	1							
12	3	119836-77871	BOLT (1)	1							
13	3	119836-77880	BOLT (2)	1							
14	3	119836-77890	WIRE ASSY, LEAD	1							
15	2	119836-77790	COVER ASSY, FRONT	1							
16	3	119836-77800	RETAINER, BEARING	1							
17	3	119836-77840	BALL BEARING	1							
18	3	119836-77860	SCREW KID	1							
19	2	119836-77810	PULLEY	1							
20	2	119836-77820	NUT ASSY, PULLEY	1							
21	2	119836-77830	BOLT, THROUGH	1							
22	1	119820-77340	PIECE, DISTANCE	1							
23	1	129136-77251	BOLT, M8X110	1							
24	1	129612-77260	NUT, ALTERNATOR	1							
25	1	119810-77330	ADJUSTER	1							
26	1	119810-77340	BOLT, ADJUSTER	1							
27	1	129795-01900	STUD	1							
28	1	26366-100002	NUT, M10	1							

Fig.16. GASKET SET

16.GASKET SET



Remarks
(1) OPTIONAL PART.

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719818-92660	GASKET SET	1							1
2	2	119818-01330	GASKET, HEAD	1							
3	2	129150-49811	GASKET, THERMOSTAT	1							
4	2	121850-51960	O-RING	1							
5	2	124160-11340	SEAL, VALVE STEM	3							
6	2	119625-11870	PROTECTOR, NOZZLE	3							
7	2	119625-11880	SEAT, NOZZLE	3							
8	2	119865-11310	GASKET, BONNET	1							
9	2	129150-77511	GASKET	1							
10	2	119813-12110	GASKET, MANIFOLD	1							
11	2	119810-13110	GASKET	1							
12	2	124950-11340	SEAL, VALVE STEM	3							
13	2	129150-32020	GASKET, PUMP	1							
14	2	129150-35041	GASKET	1							
15	2	129150-35111	GASKET	1							
16	2	129486-42050	GASKET, WATER PUMP	1							
17	2	129795-49551	GASKET	1							
18	2	24311-000120	O-RING, 1AP12.0	3							
19	2	24311-000160	O-RING, 1AP16.0	3							
20	2	24311-000320	O-RING, 1AP32.0	2							
21	2	24341-000500	O-RING, 1AS50.0	1							
22	2	24341-000240	O-RING, 1AS24.0	1							
23	2	124465-44950	GASKET, 16	2							
24	2	23414-120000	GASKET, 12X1.0	4							
25	2	23414-080012	GASKET, 8X1.0	6							
26	2	23414-140000	GASKET, 14X1.0	2							
27	1	129400-92420	HONE	1							1
28	1	977770-01212	GASKET, LIQUID	1							1

Parts No. Index

Parts No.	Fig. No.	Ref. No.
101304-59020	13	15
		31
103854-39140	13	1
104211-11180	4	14
104211-11370	4	18
105582-59150	13	20
114250-39450	8	38
114250-53080	12	5
114250-53120	12	7
114250-53130	12	8
114250-53140	12	9
114250-53210	12	10
114250-53400	12	11
119305-59120	12	23
119620-02020	1	12
119620-49290	9	27
119625-11870	4	19
	16	6
119625-11880	4	20
	16	7
119640-01640	3	8
119653-77950	11	80
119660-61901	11	55
119810-01200	1	21
119810-01730	3	6
119810-01770	3	7
119810-01780	3	16
119810-02800	1	15
119810-02870	1	23
119810-02930	1	18
119810-02940	1	26
119810-11100	4	11
119810-11110	4	12
119810-11120	4	13
119810-11240	4	24
119810-13110	5	7
	16	11
119810-14400	6	2
119810-14580	6	3
119810-23200	7	27
119810-23600	7	28
119810-23610	7	30
119810-23910	7	26
119810-35300	8	16
119810-39200	8	29
119810-42001	9	1
119810-51040	10	5
119810-77330	15	25
119810-77340	15	26
119811-21570	7	12

Parts No.	Fig. No.	Ref. No.
119812-11700	4	4
119813-12100	5	1
119813-12110	5	2
	16	10
119813-21000	7	1
119813-22300	7	21
119813-59812	12	32
119813-59821	12	33
119813-59831	12	34
119818-01330	1	22
	16	2
119818-22500	7	17
119818-22930	7	32
119818-22950	7	34
119818-53000	12	2
119820-77340	15	22
119836-77200	15	1
119836-77700	15	2
119836-77710	15	4
119836-77721	15	5
119836-77730	15	6
119836-77741	15	7
119836-77750	15	8
119836-77760	15	9
119836-77770	15	10
119836-77780	15	11
119836-77790	15	15
119836-77800	15	16
119836-77810	15	19
119836-77820	15	20
119836-77830	15	21
119836-77840	15	17
119836-77850	15	3
119836-77860	15	18
119836-77871	15	12
119836-77880	15	13
119836-77890	15	14
119843-61540	11	45
119865-11210	4	23
119865-11310	4	44
	16	8
119889-49530	9	20
119923-22080	7	15
119932-34800	8	41
119988-59551	13	2
121023-01550	2	24
121111-21501	7	11
121450-01560	2	5
121450-42450	9	24
121520-34810	8	14

Parts No.	Fig. No.	Ref. No.
121850-21680	7	10
121850-51960	2	12
	16	4
122117-51560	10	48
122710-51090	10	8
124060-11800	4	7
124160-01751	2	6
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124160-01910	1	4
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124160-11340	4	16
	16	5
124160-11360	4	48
124160-39140	8	28
124240-01871	2	7
124465-44950	9	23
	16	23
124550-21600	7	14
124550-51350	10	30
124550-51370	10	31
124550-59820	8	34
124550-59830	8	33
124550-66370	11	57
124550-77030	14	34
124950-11340	4	17
	16	12
124950-51190	10	15
128170-51300	10	25
129001-01250	1	7
129001-32001	8	1
129001-35300	8	24
129001-91841	2	20
129052-61050	11	4
129052-61060	11	5
129052-61070	11	6
129052-61390	11	29
129100-01580	3	1
	13	
	7	2
129100-25061	6	9
129100-52200	10	97
129100-59951	13	7
129100-61400	11	15
129100-61930	11	82
129108-51100	10	9
129120-77501	5	4
129136-77251	15	23
129150-02450	6	4
129150-03020	4	40
129150-03070	4	41

Parts No.	Fig. No.	Ref. No.
129150-03080	4	42
129150-03090	4	1
129150-03100	2	10
129150-11230	4	31
129150-11280	4	29
129150-11750	4	33
129150-14101	6	6
129150-14200	6	1
129150-21200	7	4
129150-25101	6	10
129150-25301	6	16
129150-25920	6	13
129150-25931	6	15
129150-32020	8	39
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129150-35041	8	15
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129150-35101	8	21
129150-35111	8	22
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129150-35151	8	23
129150-35350	8	25
129150-42320	9	11
129150-49811	9	31
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129150-59131	12	26
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129150-77511	5	5
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129155-11260	4	27
129155-11270	4	28
129155-42350	9	18
129155-49800	9	30
129155-51020	10	4
129155-51050	10	6
129155-51140	10	12
129155-51180	10	14
129155-51200	10	16
129155-51270	10	23
129155-51280	10	24
	11	2
129155-51320	10	28
129155-51340	10	29
129155-51370	10	32
129155-51380	10	33
129155-51390	10	34
129155-51400	10	35
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