

OCR10-M58000EN

# P R E F A C E

1. This Parts Catalog carries all parts incorporated in YANMAR Model 3TNV70-ASA, 3TNV70-ASAT engine manufactured since June, 2004.
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.

# Contents

OCR10-M58000

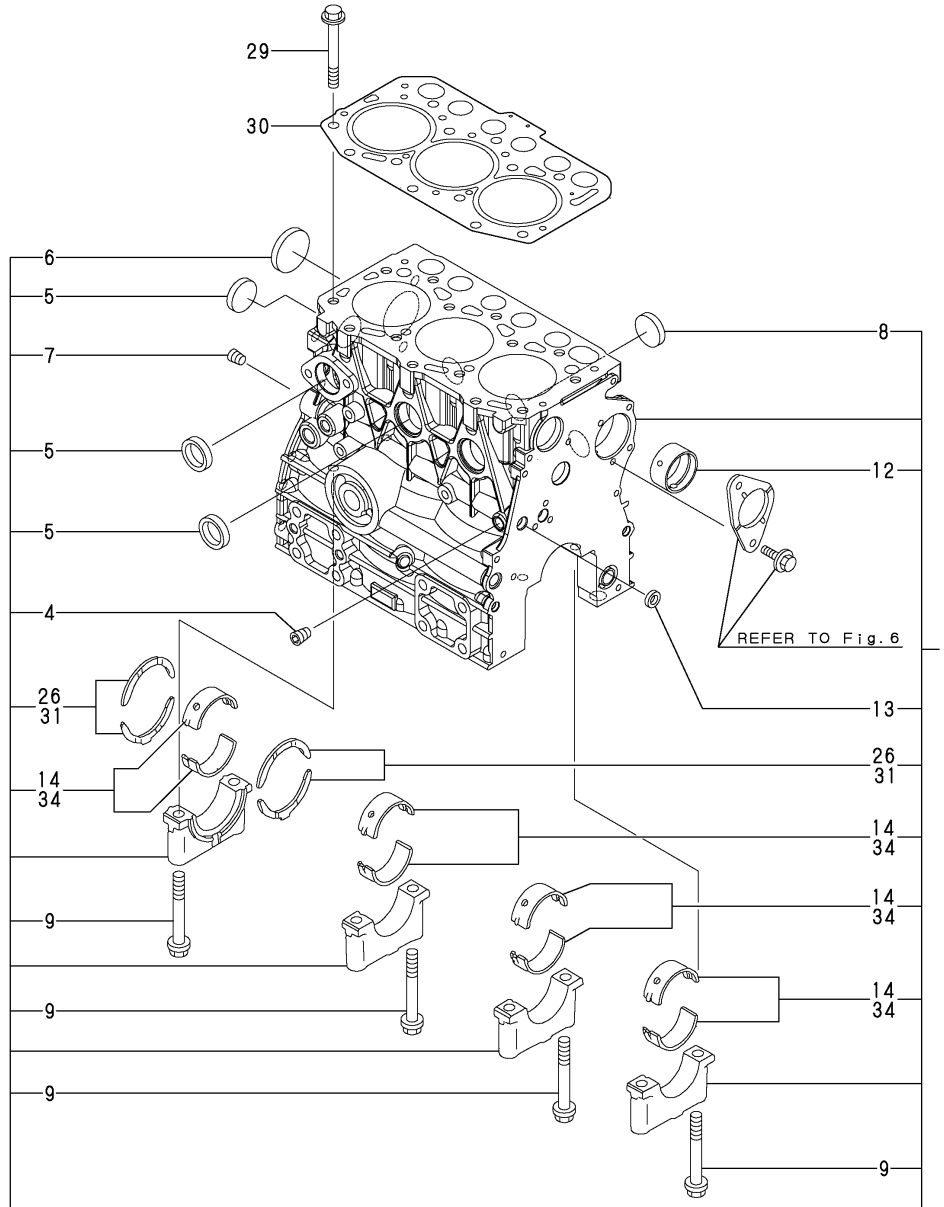
Fig. No.	Fig. Name
ENGINE SECTION (3TNV70-ASA)	
1.	CYLINDER BLOCK
2.	GEAR HOUSING
3.	FLYWHEEL HOUSING & OIL SUMP
4.	CYLINDER HEAD & BONNET
5.	EXHAUST MANIFOLD
6.	CAMSHAFT & DRIVING GEAR
7.	CRANKSHAFT & PISTON
8.	LUB.OIL SYSTEM
9.	COOLING WATER SYSTEM
10.	FUEL INJECTION PUMP
11.	GOVERNOR
12.	FUEL INJECTION VALVE
13.	FUEL PIPE
14.	STARTING MOTOR
15.	GENERATOR
16.	GASKET SET & TOOLS

Fig. No.	Fig. Name
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Fig.1. CYLINDER BLOCK

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-01560	BLOCK ASSY, CYLINDER	1	1						
4	3	124060-01050	PLUG, PT1/8	1	1						
5	3	105311-01090	PLUG, 30	4	4						
6	3	119623-01250	PLUG, 45	1	1						
7	3	124160-01910	PLUG, PT1/4	1	1						
8	3	119285-01990	PLUG, 25	3	3						
9	3	119620-02020	BOLT, METAL CAP	8	8						
12	3	119717-02410	BUSH, CAMSHAFT	1	1						
13	3	27241-120000	PLUG, 12	1	1						
14	2	719717-02900	BEARING, MAIN	4	4						2
26	2	119717-02930	BEARING, THRUST	2	2						
29	1	119515-01200	BOLT, HEAD	14	14						
30	1	119515-01330	GASKET, HEAD	1	1						
31	1	119810-02940	BEARING, THRUST 0.25	2	2						1
34	1	719717-02910	BEARING, 0.25 US	4	4						3

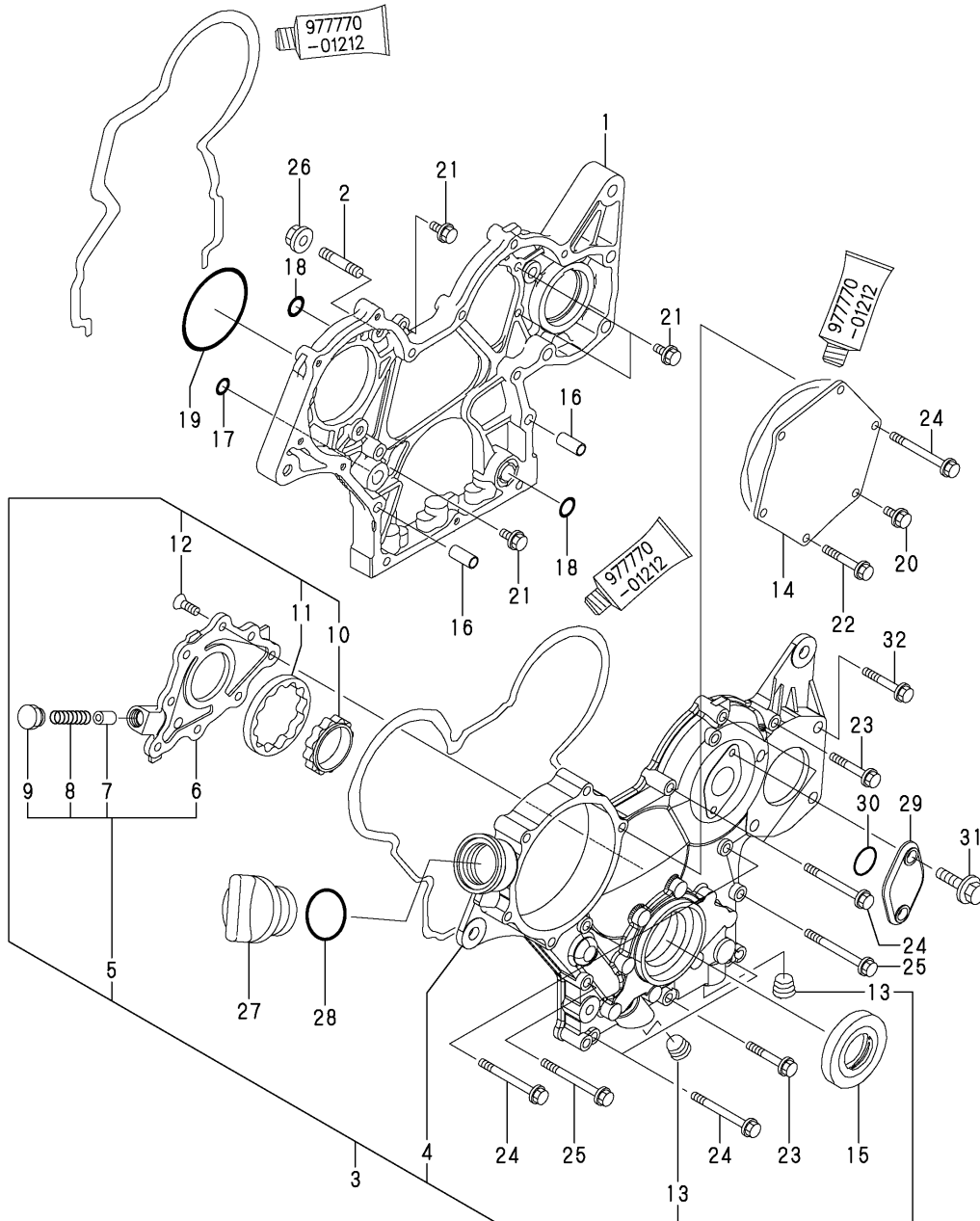
Remarks

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

Fig.2. GEAR HOUSING

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

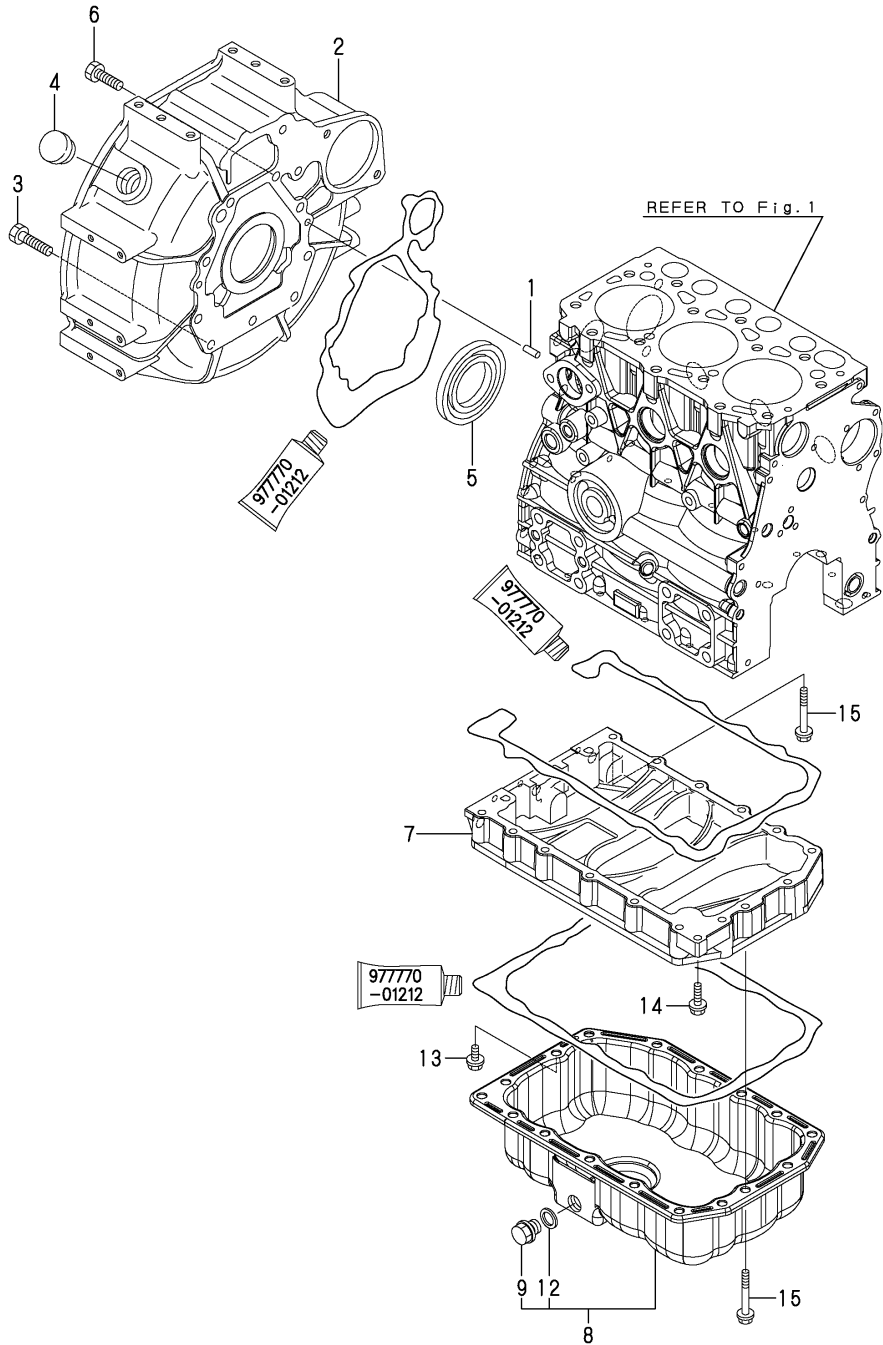


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119742-01500	CASE, GEAR	1	1						
2	1	119717-01570	STUD	3	3						
3	1	119740-01590	COVER ASSY, GEAR CASE	1	1						
4	2	119740-01521	COVER, GEAR CASE	1	1						
5	2	119717-32100	COVER ASSY	1	1						
6	3	119717-32080	COVER	1	1						
7	3	129900-32130	VALVE, RELIEF	1	1						
8	3	129001-32320	SPRING	1	1						
9	3	129001-32330	PLUG	1	1						
10	2	119717-32110	ROTOR, INNER	1	1						
11	2	119717-32120	ROTOR, OUTER	1	1						
12	2	119802-32130	SCREW, M6X16	8	8						
13	2	23876-030000	PLUG, R03	2	2						
14	1	119717-01750	COVER	1	1						
15	1	119620-01800	SEAL, OIL	1	1						
16	1	119660-01911	PIPE, KNOCK	4	4						
17	1	119624-32040	O-RING, P12.0	1	1						
18	1	119717-32050	O-RING, P17.0	3	3						
19	1	121850-51960	O-RING	1	1						
20	1	26106-060122	BOLT, M6X 12 PLATED	1	1						
21	1	26106-060162	BOLT, M6X 16 PLATED	4	4						
22	1	26106-060402	BOLT, M6X 40 PLATED	4	4						
23	1	26106-060402	BOLT, M6X 40 PLATED	2	2						
24	1	26106-060602	BOLT, M6X 60 PLATED	7	7						
25	1	26106-060652	BOLT, M6X 65 PLATED	2	2						
26	1	26306-080002	NUT, M8	3	3						
27	1	124160-01751	COVER, FILLER	1	1						
28	1	24311-000320	O-RING, 1AP32.0	1	1						
29	1	121023-01550	COVER	1	1						
30	1	24341-000240	O-RING, 1AS24.0	1	1						
31	1	26106-060162	BOLT, M6X 16 PLATED	2	2						
32	1	26106-080352	BOLT, M8X 35 PLATED	3	3						

Fig.3. FLYWHEEL HOUSING & OIL SUMP

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

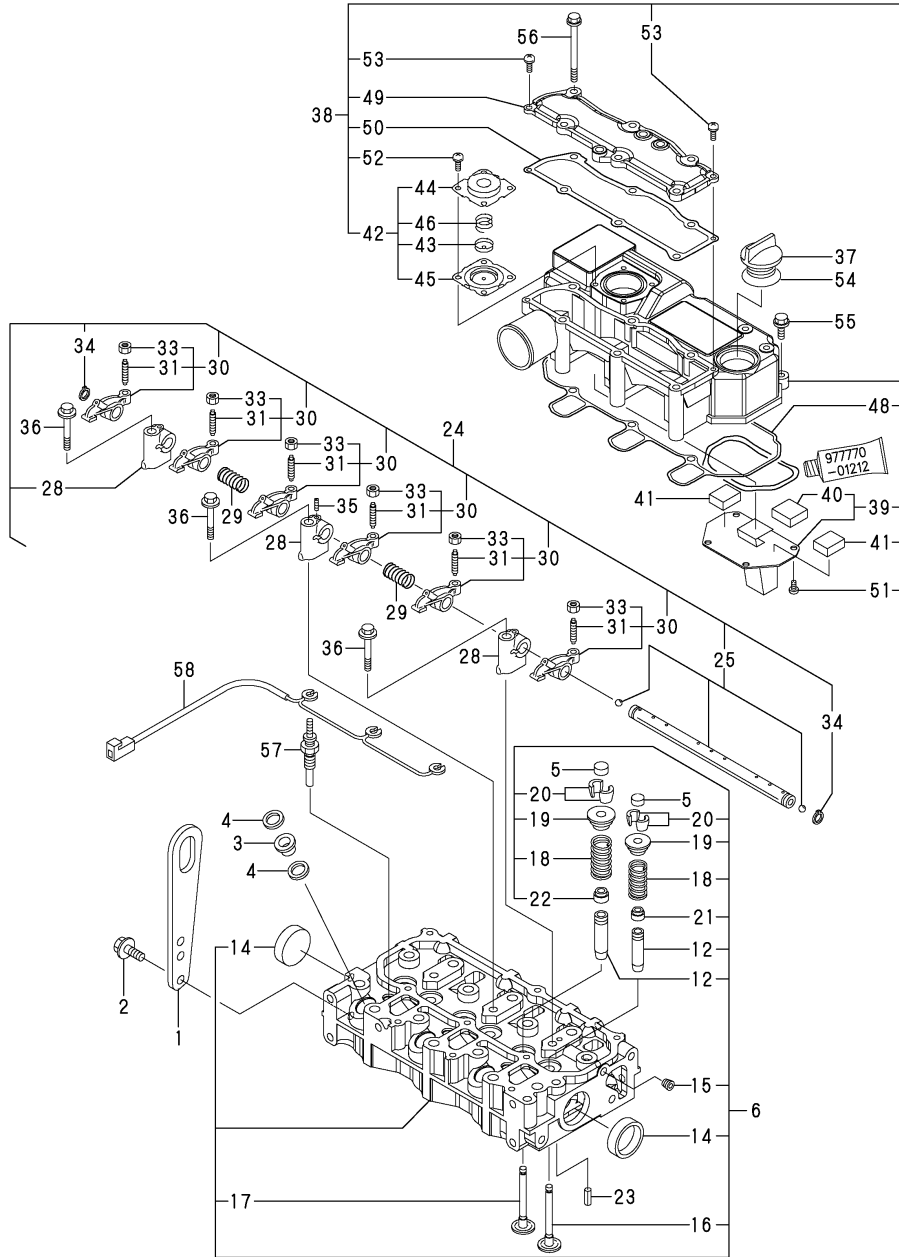


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, M8X16	2	2						
2	1	119717-01610	HOUSING, FLYWHEEL	1	1						
3	1	121120-01620	BOLT, M10X28	3	3						
4	1	119620-01750	CAP	1	1						
5	1	124085-02220	SEAL, OIL	1	1						
6	1	26206-100252	BOLT, M10X 25 PLATED	8	8						
7	1	119515-01720	SPACER, OIL SUMP	1	1						
8	1	119515-01770	SUMP ASSY, OIL	1	1						
9	2	105425-01690	PLUG, 16	1	1						
12	2	22190-160002	WASHER, SEAL 16	1	1						
13	1	26106-060122	BOLT, M6X 12 PLATED	1	1						
14	1	26106-060252	BOLT, M6X 25 PLATED	1	1						
15	1	26106-060452	BOLT, M6X 45 PLATED	17	17						

Fig.4. CYLINDER HEAD & BONNET

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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



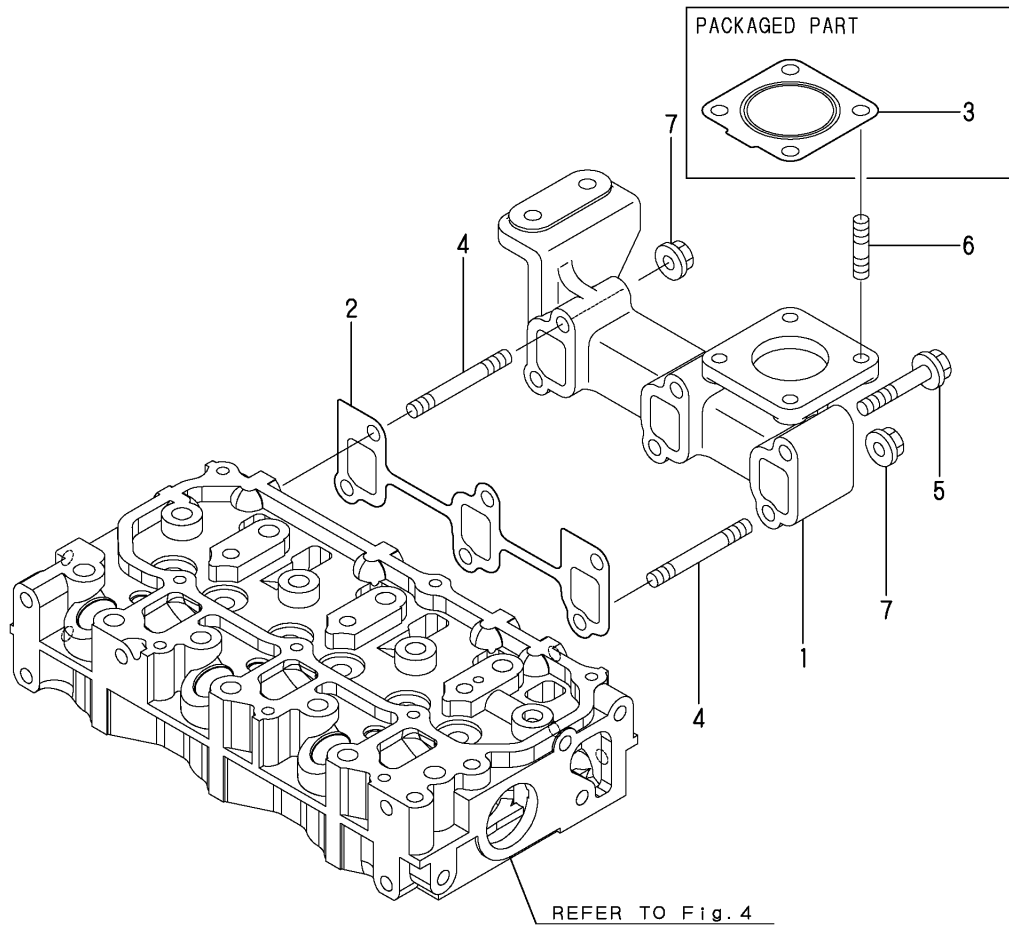
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129900-07900	LIFTER	1	1						
2	1	26106-080162	BOLT, M8X 16 PLATED	2	2						
3	1	129901-11450	PROTECTOR, NOZZLE	3	3						
4	1	119600-11460	GASKET, NOZZLE	6	6						
5	1	105010-11490	CAP, VALVE	6	6						
6	1	119515-11750	HEAD ASSY, CYLINDER	1	1						
12	3	119515-11800	GUIDE, VALVE	6	6						1
14	3	119285-11990	PLUG, 35	2	2						
15	3	23876-005000	PLUG, R005	1	1						
16	2	119515-11100	VALVE, INTAKE	3	3						
17	2	119515-11110	VALVE, EXHAUST	3	3						
18	2	119717-11131	SPRING, VALVE	6	6						
19	2	129508-11180	RETAINER, SPRING	6	6						
20	2	119717-11190	COTTER	12	12						
21	2	119717-11340	SEAL, VALVE STEM	3	3						
22	2	119717-11350	SEAL, VALVE STEM	3	3						
23	1	22351-060012	PIN, SPRING 6.0X12	2	2						
24	1	119515-11200	SUPPORT ASSY, ARM	1	1						
25	2	119515-11240	SHAFT ASSY, ROCKER	1	1						
28	2	119717-11260	SUPPORT, ROCKER ARM	3	3						
29	2	119515-11280	SPRING	2	2						
30	2	119717-11650	ARM, ROCKER	6	6						
31	3	129150-11230	SCREW, VALVE ADJUST	6	6						
33	3	129150-11750	NUT, M8	6	6						
34	2	22242-000120	RING, 12	2	2						
35	2	26979-050162	SCREW, M5X16	1	1						
36	1	26106-080402	BOLT, M8X 40 PLATED	3	3						
37	1	124160-01751	COVER, FILLER	1	1						
38	1	119515-11380	BONNET ASSY, HEAD	1	1						
39	2	119717-03031	PLATE	1	1						
40	3	119717-03070	BAFFLE, BREATHER	1	1						
41	2	119717-03070	BAFFLE, BREATHER	2	2						
42	2	119802-03100	DIAPHRAGM ASSY	1	1						
43	3	119802-03110	PLATE	1	1						
44	3	119802-03121	COVER, DIAPHRAGM	1	1						
45	3	119802-03131	DIAPHRAGM	1	1						
46	3	119802-03141	SPRING, DIAPHRAGM	1	1						
48	2	119515-11310	GASKET, BONNET	1	1						
49	2	119515-11320	COVER, BONNET	1	1						
50	2	119515-11330	GASKET	1	1						
51	2	22857-500100	SCREW, 5X10	4	4						
52	2	22857-500100	SCREW, 5X10	4	4						
53	2	22857-500160	SCREW, 5X16	2	2						
54	1	24311-000320	O-RING, 1AP32.0	1	1						
55	1	26106-060202	BOLT, M6X 20 PLATED	3	3						
56	1	26106-060752	BOLT, M6X 75 PLATED	6	6						
57	1	119717-77800	PLUG, GLOW	3	3						
58	1	119717-77820	CONNECTOR, GLOW PLUG	1	1						

Remarks

(1)REPAIR PART.

N:Old  $\begin{matrix} \leftarrow \text{Yes} \\ \text{No} \end{matrix}$  New, Q:Old  $\begin{matrix} \leftarrow \text{No} \\ \text{Yes} \end{matrix}$  New, R:Old  $\begin{matrix} \leftarrow \text{Yes} \\ \text{Yes} \end{matrix}$  New, S:Old  $\begin{matrix} \leftarrow \text{No} \\ \text{No} \end{matrix}$  New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.5. EXHAUST MANIFOLD



(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

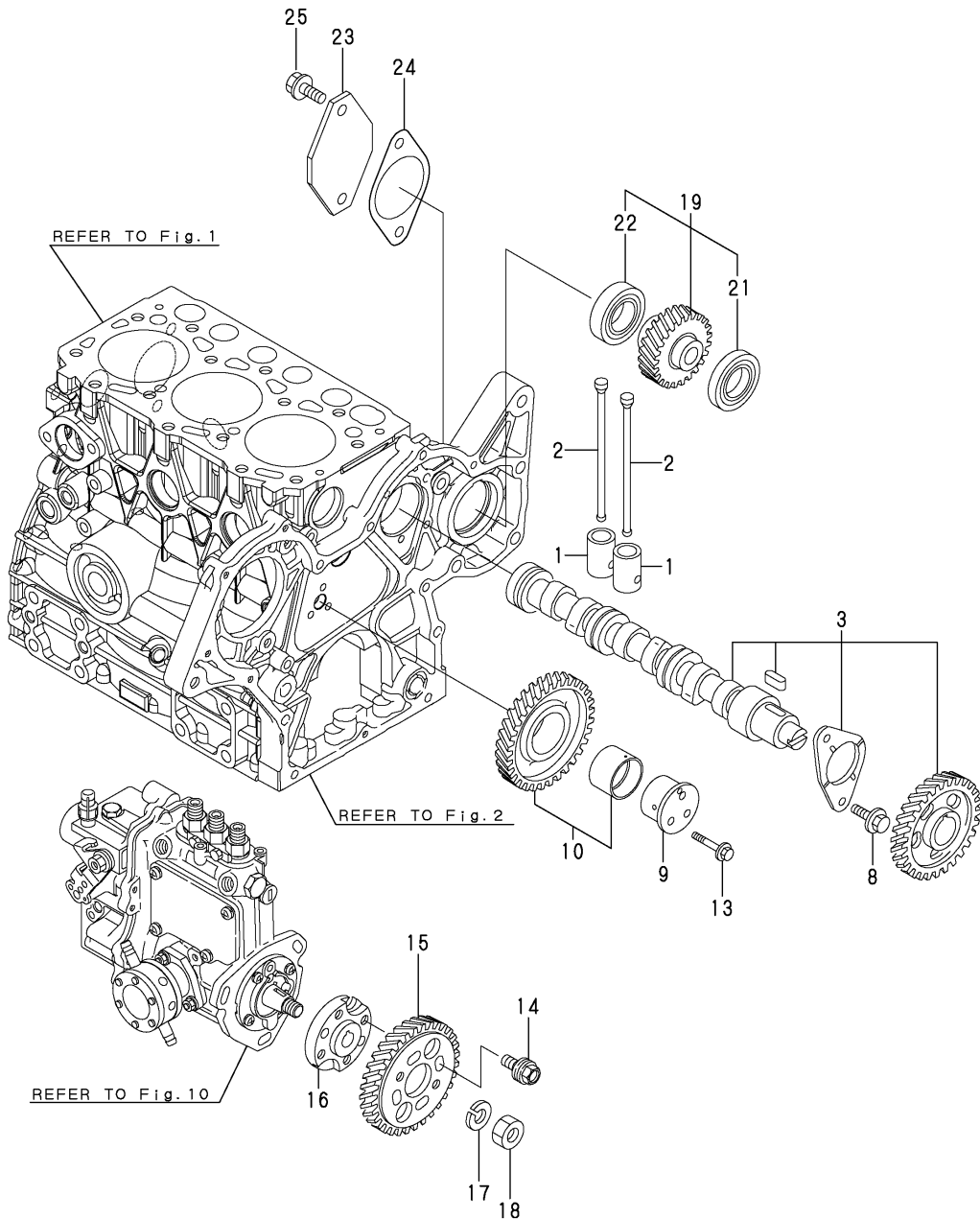
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119717-13109	MANIFOLD, EXHAUST	1	1						
2	1	119717-13110	GASKET	1	1						
3	1	119515-13200	GASKET, SILENCER	1	1						
4	1	119717-13600	STUD, M8X50	2	2						
5	1	119802-13620	BOLT, M8X50	4	4						
6	1	119131-18320	STUD, M8X22	4	4						
7	1	26306-080002	NUT, M8	2	2						



Fig.6. CAMSHAFT & DRIVING GEAR

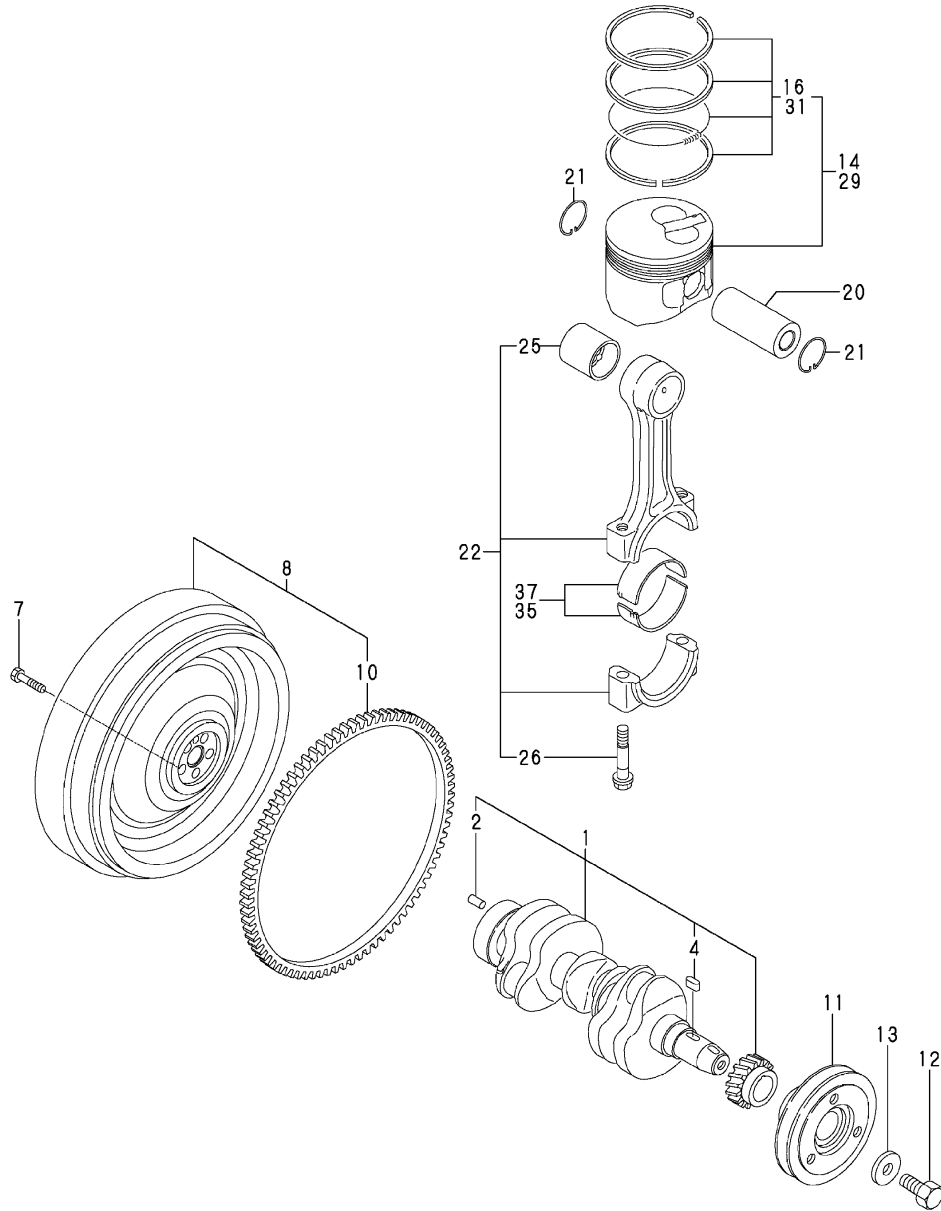
(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119620-14200	TAPPET	6	6						
2	1	119515-14400	ROD, PUSH	6	6						
3	1	119515-14580	CAMSHAFT ASSY	1	1						
8	1	26106-060122	BOLT, M6X 12 PLATED	2	2						
9	1	119717-25050	SHAFT, IDLE	1	1						
10	1	119717-25100	GEAR ASSY, IDLE	1	1						
13	1	26106-060352	BOLT, M6X 35 PLATED	3	3						
14	1	129150-25301	BOLT	4	4						
15	1	119717-25930	GEAR, PUMP	1	1						
16	1	119717-51150	FLANGE	1	1						
17	1	22217-120000	WASHER, SPRING 12	1	1						
18	1	26716-120002	NUT, M12	1	1						
19	1	119744-26000	GEAR ASSY, PUMP	1	1						
21	2	129350-26490	BEARING, BALL 16005	1	1						
22	2	24104-060054	BEARING, BALL 6005UU	1	1						
23	1	119742-26070	COVER	1	1						
24	1	119742-26080	GASKET	1	1						
25	1	26106-080162	BOLT, M8X 16 PLATED	2	2						

Fig.7. CRANKSHAFT & PISTON



(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

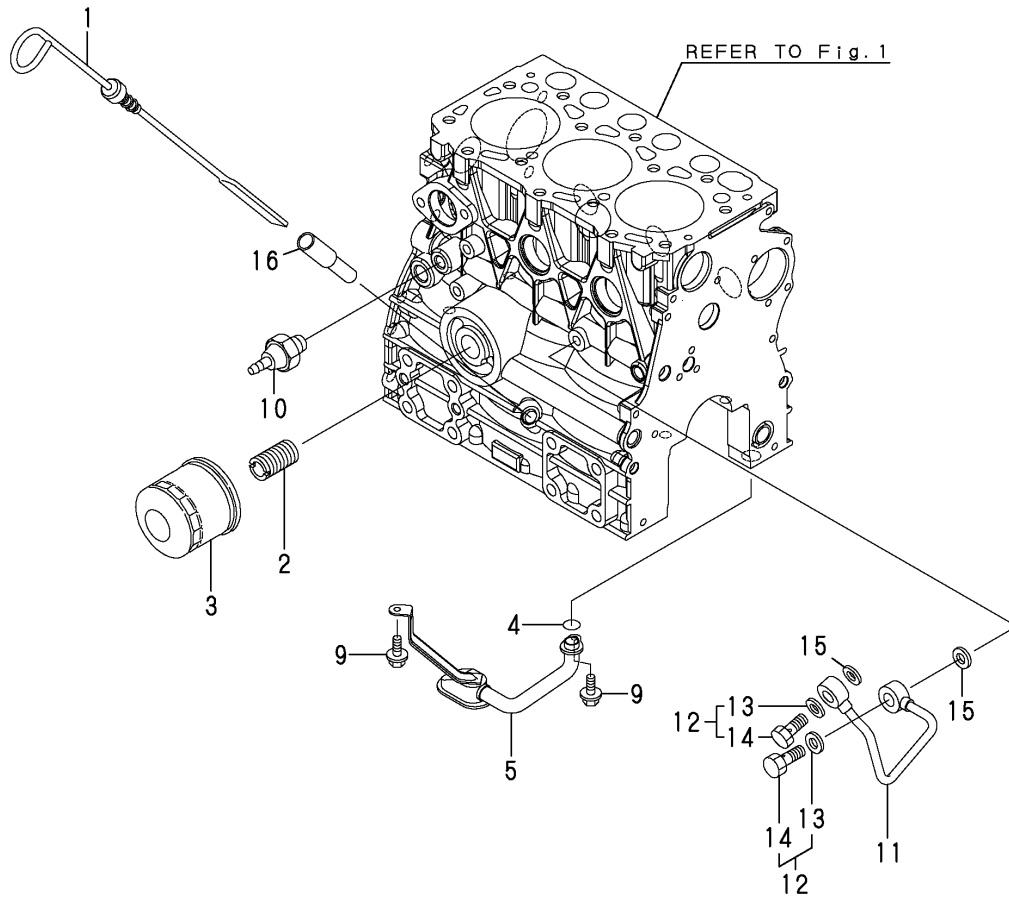
(D)=  
(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-21700	CRANKSHAFT ASSY	1	1						
2	2	129100-01580	PIN, M8X16	1	1						
4	2	22512-040120	KEY, 4X 12	1	1						
7	1	121111-21501	BOLT, FLYWHEEL	5	5						
8	1	119746-21570	FLYWHEEL ASSY	1	1						
10	2	119865-21600	GEAR, RING	1	1						
11	1	119717-21650	V-PULLEY	1	1						
12	1	119621-21680	BOLT, FLANGE 12X1.25	1	1						
13	1	119620-21941	WASHER	1	1						
14	1	119515-22080	PISTON ASSY	3	3						
16	2	119515-22500	RING SET, PISTON	3	3						
20	1	119515-22300	PIN, PISTON	3	3						
21	1	22252-000220	RING, 22	6	6						
22	1	119515-23000	ROD ASSY, CONNECTING	3	3						
25	2	119717-23910	BEARING, PISTON PIN	3	3						2
26	2	119717-23200	BOLT, CONNECTING ROD	6	6						
29	1	119515-22900	PISTON ASSY, 0.25 OS	3	3						1
31	2	119515-22550	RING SET, 0.25 OS	3	3						1
35	1	119515-23610	METAL ASSY, 0.25	3	3						3
37	1	119515-23600	BEARING, CRANK PIN	3	3						

Remarks

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

Fig.8. LUB.OIL SYSTEM



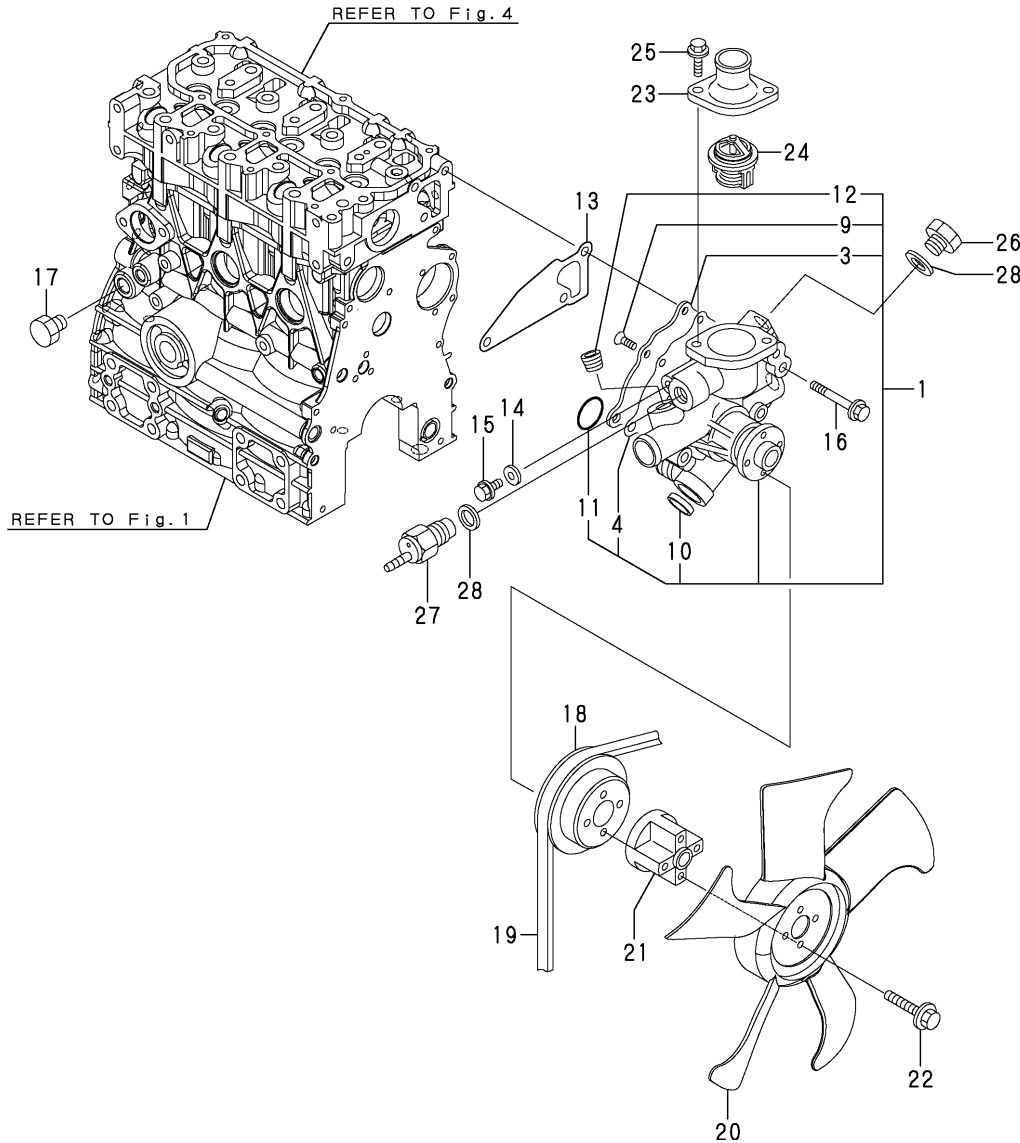
(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-34801	DIPSTICK, OIL	1	1						
2	1	129100-35140	STUD	1	1						
3	1	119305-35170	FILTER ASSY, D68XL65	1	1						1
4	1	119717-32060	O-RING, P15.0	1	1						
5	1	119515-35080	PIPE ASSY, OIL INLET	1	1						
9	1	26106-060102	BOLT, M6X 10 PLATED	2	2						
10	1	114250-39450	SWITCH, 0.5KG	1	1						
11	1	119717-39210	PIPE, OIL	1	1						
12	1	129005-59830	BOLT ASSY, JOINT M8	2	2						
13	2	22190-080002	WASHER, SEAL 6	2	2						
14	2	23857-030000	BOLT, JOINT 3	2	2						
15	1	22190-080002	WASHER, SEAL 6	2	2						
16	1	121520-34810	GUIDE, DIPSTICK	1	1						

Remarks  
(1) REPAIR PART.

Fig.9. COOLING WATER SYSTEM



(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

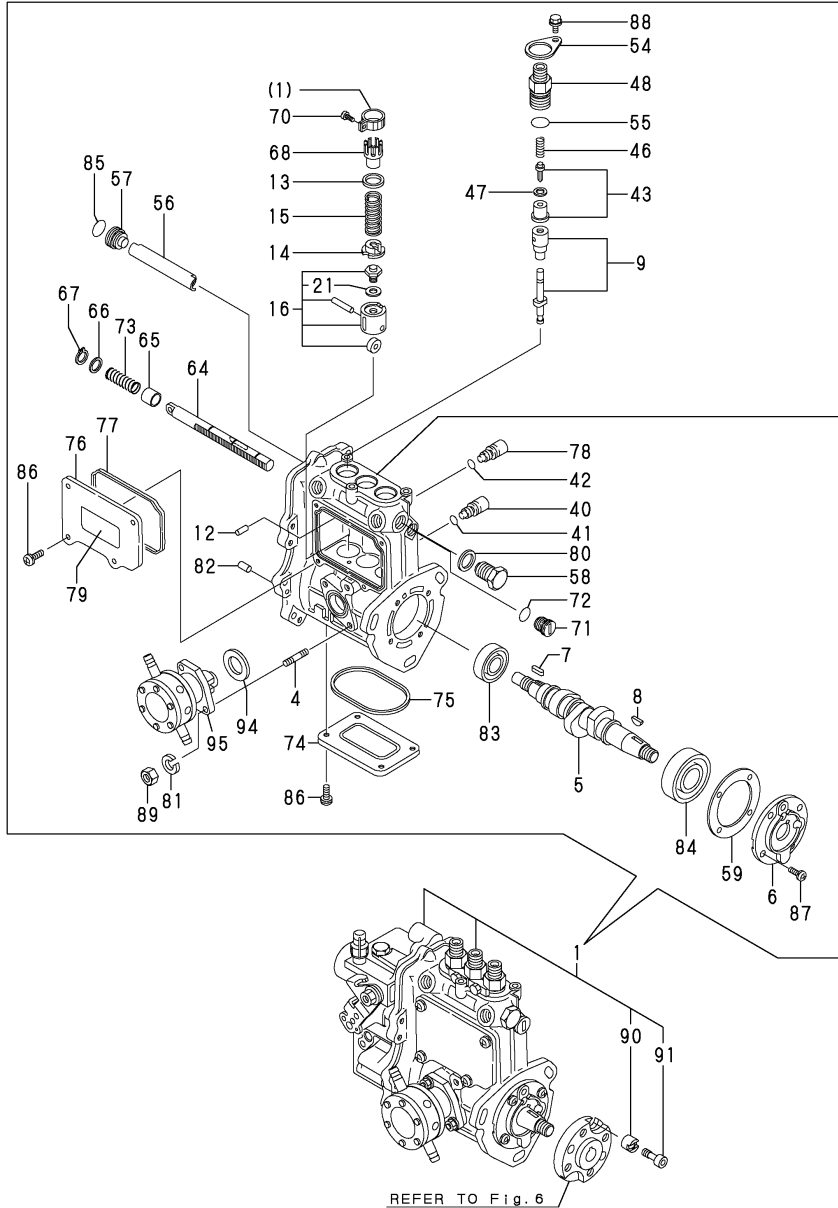
(D)=  
(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119540-42000	PUMP ASSY, WATER	1	1						
1-1	1	119C10-42000	PUMP ASSY, WATER	1	1						N
		(A=E/ 85894)	(B=E/ 85894)								
3	2	119515-42041	COVER	1	1						
4	2	119717-42031	GASKET	1	1						
9	2	26577-060122	SCREW, M6X12	4	4						
10	2	27241-250000	PLUG, 25	1	1						
11	2	119717-42320	O-RING, P26	1	1						
11-1	2	119C10-42320	O-RING, 2028	1	1						S
		(A=E/ 85894)	(B=E/ 85894)								
12	2	129916-49740	PLUG, R03	1	1						
13	1	119515-42020	GASKET, WATER PUMP	1	1						
14	1	23414-080000	GASKET, 8X1.0	1	1						
15	1	26106-080122	BOLT, M8X 12 PLATED	1	1						
16	1	26106-080502	BOLT, M8X 50 PLATED	3	3						
17	1	171056-49120	PLUG, DRAIN	1	1						
18	1	119717-42350	V-PULLEY, D=100	1	1						
19	1	25132-003600	V-BELT, A36	1	1						
20	1	119258-44740	FAN, COOLING D300	1	1						
21	1	171353-44760	SPACER, FAN	1	1						
22	1	26106-060402	BOLT, M6X 40 PLATED	4	4						
23	1	129350-49530	COVER, THERMOSTAT	1	1						
24	1	119717-49800	THERMOSTAT, 71	1	1						
25	1	26106-080202	BOLT, M8X 20 PLATED	2	2						
26	1	121450-42450	PLUG, M16	1	1						
27	1	121250-44901	SWITCH, 110	1	1						
28	1	124465-44950	GASKET, 16	2	2						

Fig.10. FUEL INJECTION PUMP

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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



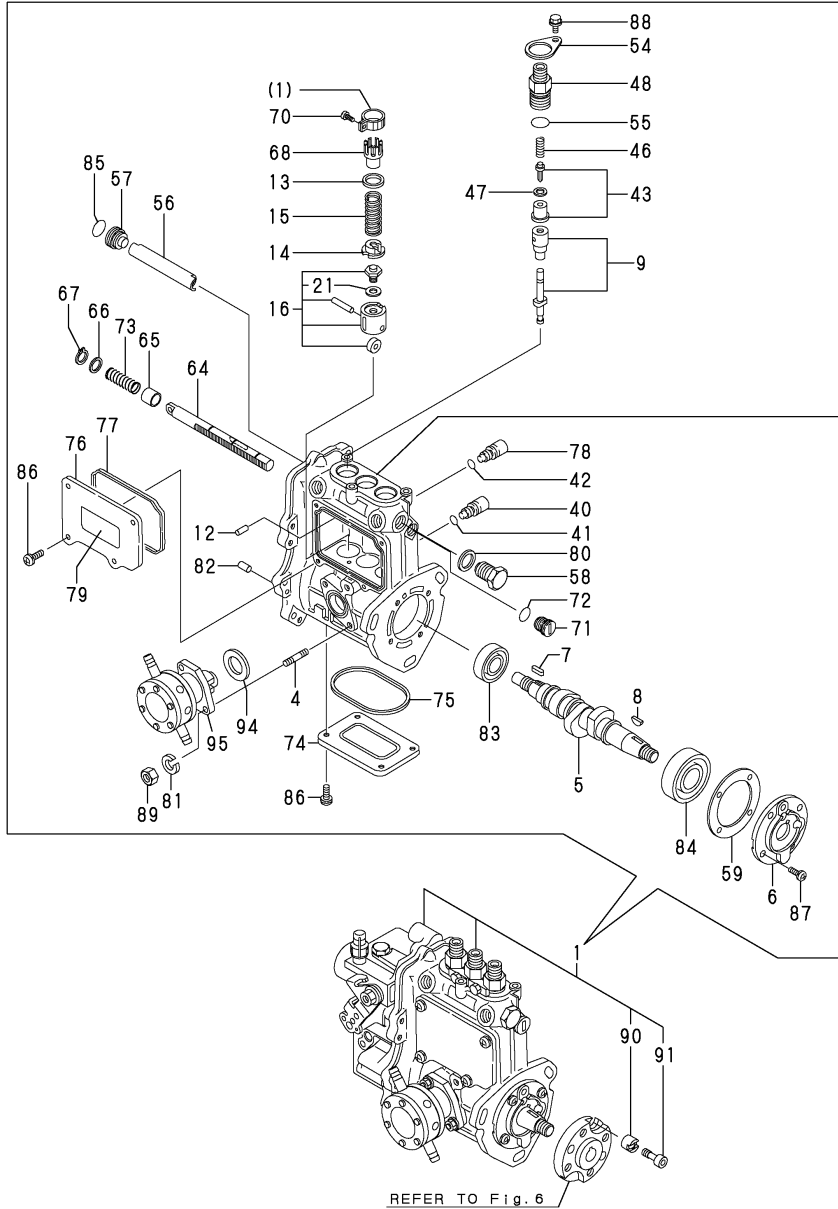
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-51360	PUMP ASSY, INJECTION	1	1						1
4	2	129155-51020	STUD	2	2						
5	2	119717-51030	CAMSHAFT	1	1						
6	2	119717-51060	SUPPORT, CAMSHAFT	1	1						
7	2	119717-51070	KEY	1	1						
8	2	122710-51090	KEY	1	1						
9	2	119415-51100	PLUNGER ASSY	3	3						
12	2	129155-51140	PIN	3	3						
13	2	158600-51170	RETAINER, SPRING	3	3						
14	2	119717-51180	RETAINER, SPRING	3	3						
15	2	119717-51190	SPRING, PLUNGER	3	3						
16	2	119717-51200	TAPPET ASSY	3	3						
21	3	129155-51600	SHIM SET, ADJUSTING	3	3						
40	2	158600-51270	STOPPER, TAPPET	3	3						
41	2	129155-51280	O-RING, S6	3	3						
42	2	129155-51280	O-RING, S6	1	1						
43	2	119717-51300	VALVE ASSY, DELIVERY	3	3						
46	2	119717-51330	SPRING, DELIVERY	3	3						
47	2	124550-51350	GASKET, DELIVERY	3	3						
48	2	158600-51440	VALVE ASSY, DELIVERY	3	3						
54	2	118400-51370	LOCKING	3	3						
55	2	24316-000150	O-RING, 4DP15.0	3	3						
56	2	129155-51400	DEFLECTOR	1	1						
57	2	158600-51410	PLUG, DEFLECTOR	1	1						
58	2	158600-51420	PLUG, DEFLECTOR	1	1						
59	2	129155-51450	SHIM SET, ADJUSTING	1	1						
64	2	119717-51500	RACK, CONTROL	1	1						
65	2	129155-51521	BUSH, RACK	1	1						
66	2	129155-51530	SPACER	1	1						
67	2	129155-51540	CIRCLIP	1	1						
68	2	129155-51550	PINION, CONTROL	3	3						
70	2	129100-51570	SCREW	3	3						
71	2	158600-51570	PLUG	1	1						
72	2	129155-51580	O-RING	1	1						
73	2	129155-51591	SPRING, RACK	1	1						
74	2	129155-51701	COVER	1	1						
75	2	119717-51710	GASKET	1	1						
76	2	119717-51750	COVER	1	1						
77	2	119717-51760	GASKET	1	1						
78	2	158600-51790	STOOPER, RACK	1	1						
79	2	129156-51910	LABEL, CAUTION	1	1						
80	2	22190-160002	WASHER, SEAL 16	1	1						
81	2	22217-060000	WASHER, SPRING 6	2	2						
82	2	22351-050010	PIN, SPRING 5.0X10	2	2						
83	2	24101-060034	BEARING, BALL 6003	1	1						
84	2	24101-063034	BEARING, BALL 6303	1	1						
85	2	119717-51420	O-RING	1	1						
86	2	26022-050122	SCREW, M5X12	8	8						
87	2	26022-060162	SCREW, M6X16	4	4						
88	2	26106-050102	BOLT, M5X 10 PLATED	3	3						
89	2	26716-060002	NUT, M6	2	2						

Remarks  
(1)GOVERNOR ASSY(FIG.11)IS  
INCORPORATED IN THIS FUEL  
INJECTION PUMP ASSY(REF.NO.1).

Fig.10. FUEL INJECTION PUMP

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

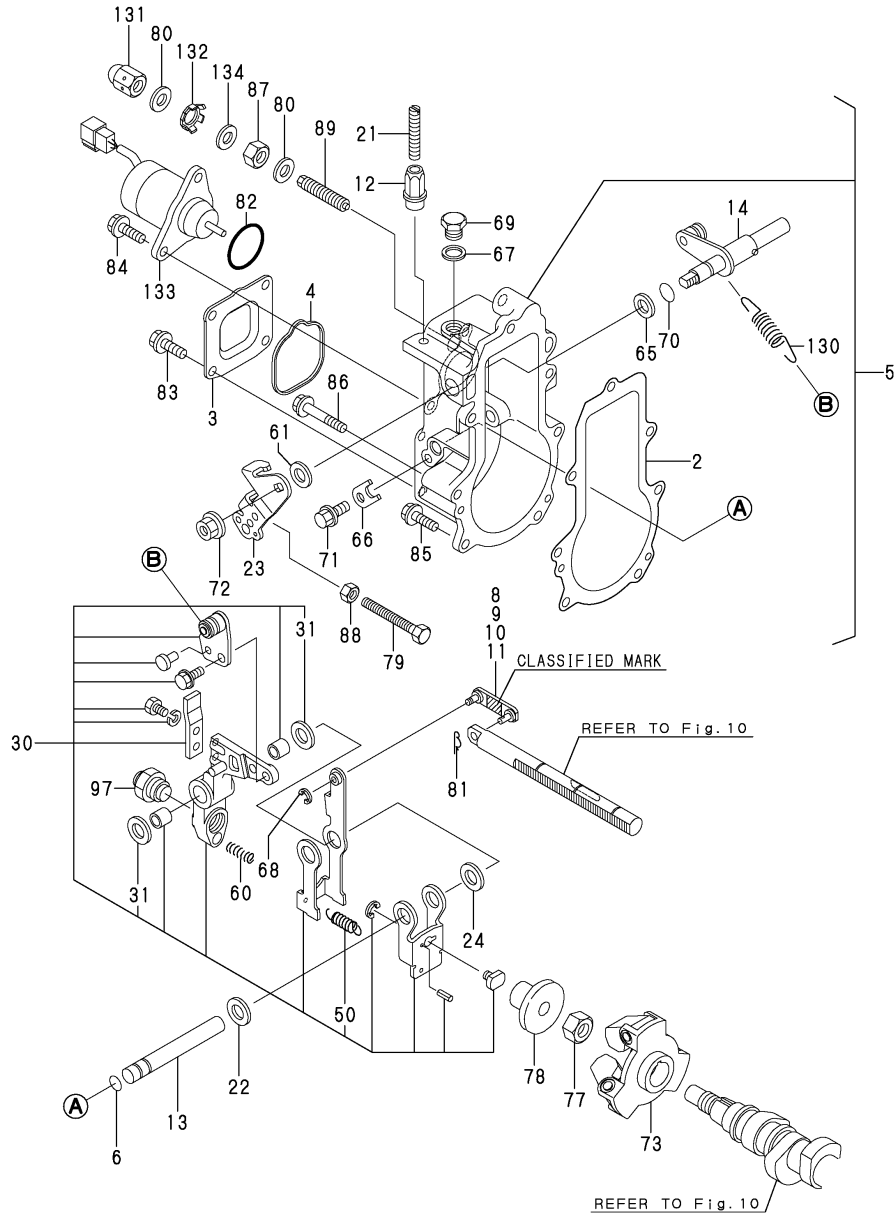
(D)=  
(E)=  
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
90	2	119717-51480	COLLAR	1	1						
91	2	119717-51490	BOLT	1	1						
94	2	129155-52051	GASKET	1	1						
95	2	129100-52100	PUMP ASSY, FUEL FEED	1	1						

Remarks  
(1)GOVERNOR ASSY(FIG.11)IS  
INCORPORATED IN THIS FUEL  
INJECTION PUMP ASSY(REF.NO.1).

Fig.11. GOVERNOR



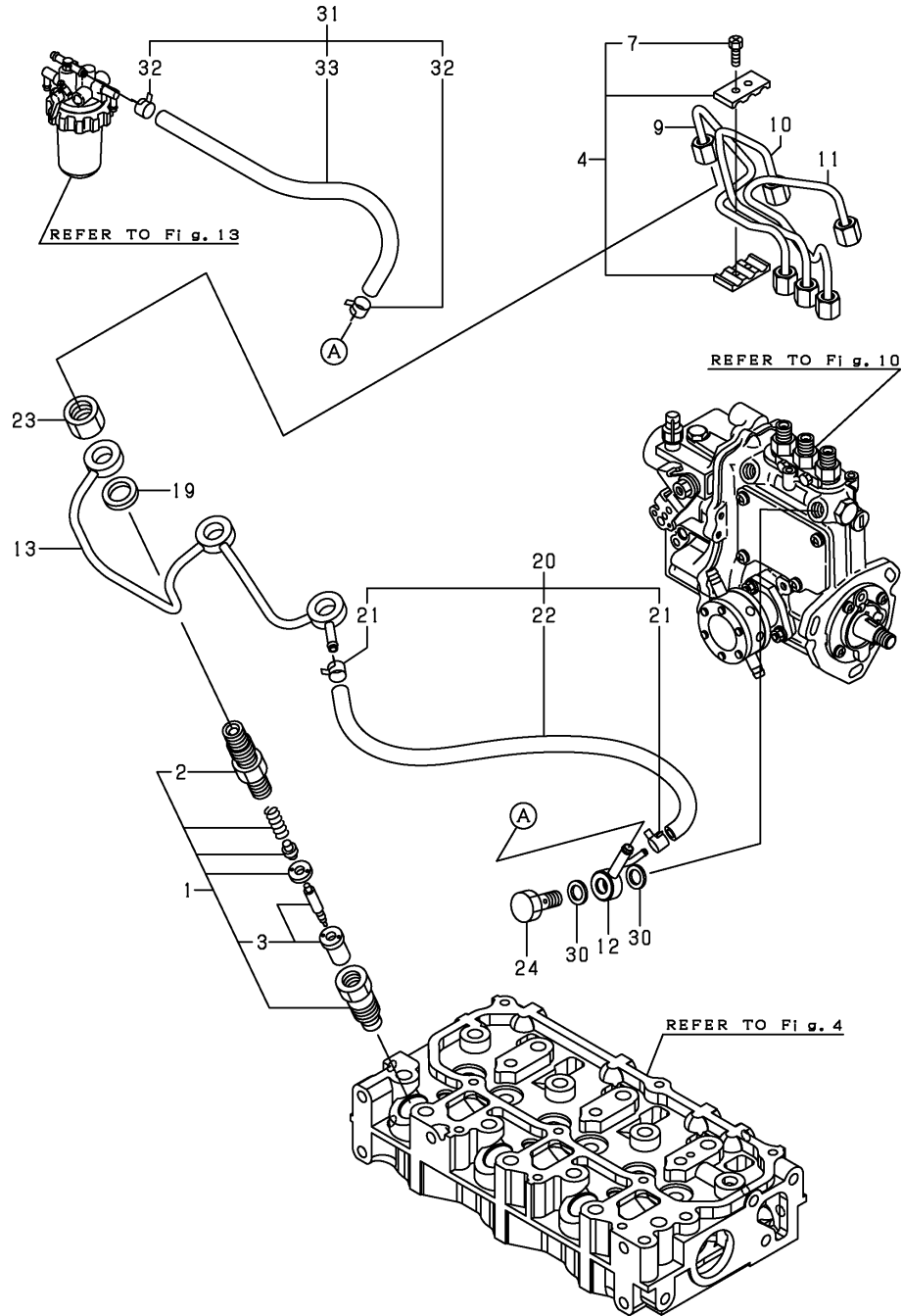
(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
2	2	119717-61050	GASKET	1	1						
3	2	119717-61060	COVER, GOVERNOR CASE	1	1						
4	2	119717-61070	GASKET	1	1						
5	2	119717-61100	CASE ASSY, GOVERNOR	1	1						
6	3	129155-51280	O-RING, S6	1	1						
8	3	119717-61120	LINK, MARK :3	1	1						1
9	3	119717-61130	LINK, MARK 98	1	1						1
10	3	119717-61140	LINK, MARK 88	1	1						1
11	3	119717-61150	LINK, MARK 03	1	1						1
12	3	129209-61370	NUT, M6	1	1						
13	3	129052-61390	SHAFT	1	1						
14	3	119717-61400	SHAFT ASSY	1	1						
21	3	129155-61450	BOLT, LIMITER	1	1						
22	3	129156-61460	SHIM, T=0.6	1	1						
23	3	119515-61440	LEVER, CONTROL	1	1						
24	3	129155-61480	SPACER ASSY	1	1						
30	3	119717-61500	LEVER ASSY, GOVERNOR	1	1						
31	4	174307-51700	SHIM SET	2	2						
50	4	129486-61540	SPRING, SET	1	1						
60	3	129100-61650	SPRING, CONTROLLER	1	1						
61	3	158552-61700	SHIM SET	1	1						
65	3	158552-61710	SHIM, T=1.0	1	1						
66	3	119660-61901	RETAINER, SHAFT	1	1						
67	3	22190-100002	WASHER, SEAL 10	1	1						
68	3	22272-000030	RING, E- 3	1	1						
69	3	23887-100002	PLUG, 10	1	1						
70	3	24341-000070	O-RING, 1AS7.0	1	1						
71	3	26106-060102	BOLT, M6X 10 PLATED	1	1						
72	3	26366-080002	NUT, M8	1	1						
73	2	119717-61200	WEIGHT ASSY,GOVERNOR	1	1						
77	2	119660-61300	NUT	1	1						
78	2	129155-61341	SLEEVE	1	1						
79	2	129155-61460	BOLT, IDLE	1	1						
80	2	22190-120002	WASHER, SEAL 12	2	2						
81	2	22372-040000	PIN, SNAP 4	1	1						
82	2	24341-000280	O-RING, 1AS28.0	1	1						
82-1	2	158552-61900	O-RING	1	1						N
(A=EXXXXX) (B=EXXXXX)											
83	2	26106-060102	BOLT, M6X 10 PLATED	4	4						
84	2	26106-060142	BOLT, M6X 14 PLATED	2	2						
85	2	26106-060202	BOLT, M6X 20 PLATED	4	4						
86	2	26106-060452	BOLT, M6X 45 PLATED	3	3						
87	2	26736-120002	NUT, M12	1	1						
88	2	26756-060002	NUT, LOCK M6	1	1						
89	2	158601-61700	LIMITER ASSY, FUEL	1	1						
97	2	119515-61560	ANGLEICH ASSY	1	1						
130	2	129573-61700	SPRING, GOVERNOR	1	1						
131	2	129209-61930	NUT, CAP	1	1						
132	2	129209-61970	PLATE	1	1						
133	2	119653-77950	SOLENOID, STOP	1	1						
134	2	23414-120016	GASKET, 12X1.0	1	1						

Remarks  
(1)SELECTION USE PARTS:CERTAIN THE CLASSIFICATION MARK,THEN PLACE YOUR ORDER.(REFER TO ILLUSTRATION)

Fig.12. FUEL INJECTION VALVE



(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

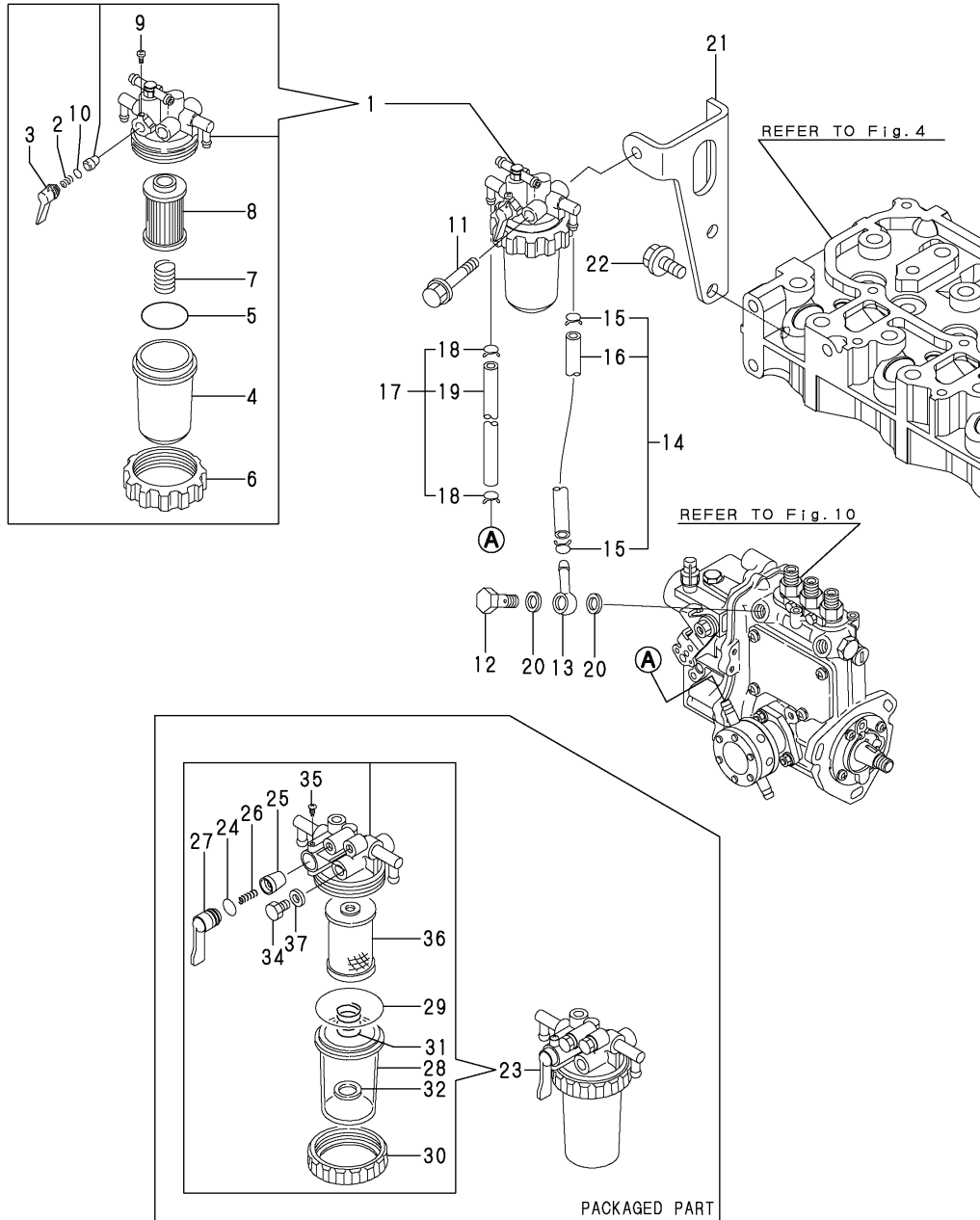
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-53001	VALVE ASSY,INJECTION	3	3						
2	2	118200-53010	HOLDER, NOZZLE	3	3						
3	2	119515-53010	VALVE ASSY,INJECTION	3	3						
4	1	129150-59120	RETAINER, PIPE	1	1						
7	2	129150-59131	BOLT, M4X14	2	2						
9	1	119515-59810	PIPE, INJECTION NO.1	1	1						
10	1	119515-59820	PIPE, INJECTION NO.2	1	1						
11	1	119515-59830	PIPE, INJECTION NO.3	1	1						
12	1	119840-59570	JOINT, OVERFLOW	1	1						
13	1	119515-59540	PIPE ASSY, RETURN	1	1						
19	1	129901-59560	GASKET, FUEL RETURN	3	3						
20	1	119515-59570	HOSE ASSY, RETURN	1	1						
20-1	1	119540-59570	HOSE ASSY, RETURN	1	1						N
		(A=E01699) (B=E98446)									
21	2	124066-59100	CLAMP, HOSE 8	2	2						
22	2	105225-59240	HOSE, FUEL RETURN	1	1						
22-1	2	119540-59560	HOSE ASSY, RETURN	1	1						N
		(A=E01699) (B=E98446)									
23	1	119620-59700	NUT, NOZZLE RETURN	3	3						
24	1	119813-59950	VALVE ASSY, CHECK	1	1						
30	1	22190-120002	WASHER, SEAL 12	2	2						
31	1	129210-59150	HOSE ASSY, FUEL L400	1	1						
32	2	124766-59050	CLAMP, HOSE 11.5	2	2						
33	2	105025-59530	HOSE, FUEL D13X400	1	1						



Fig.13. FUEL PIPE

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

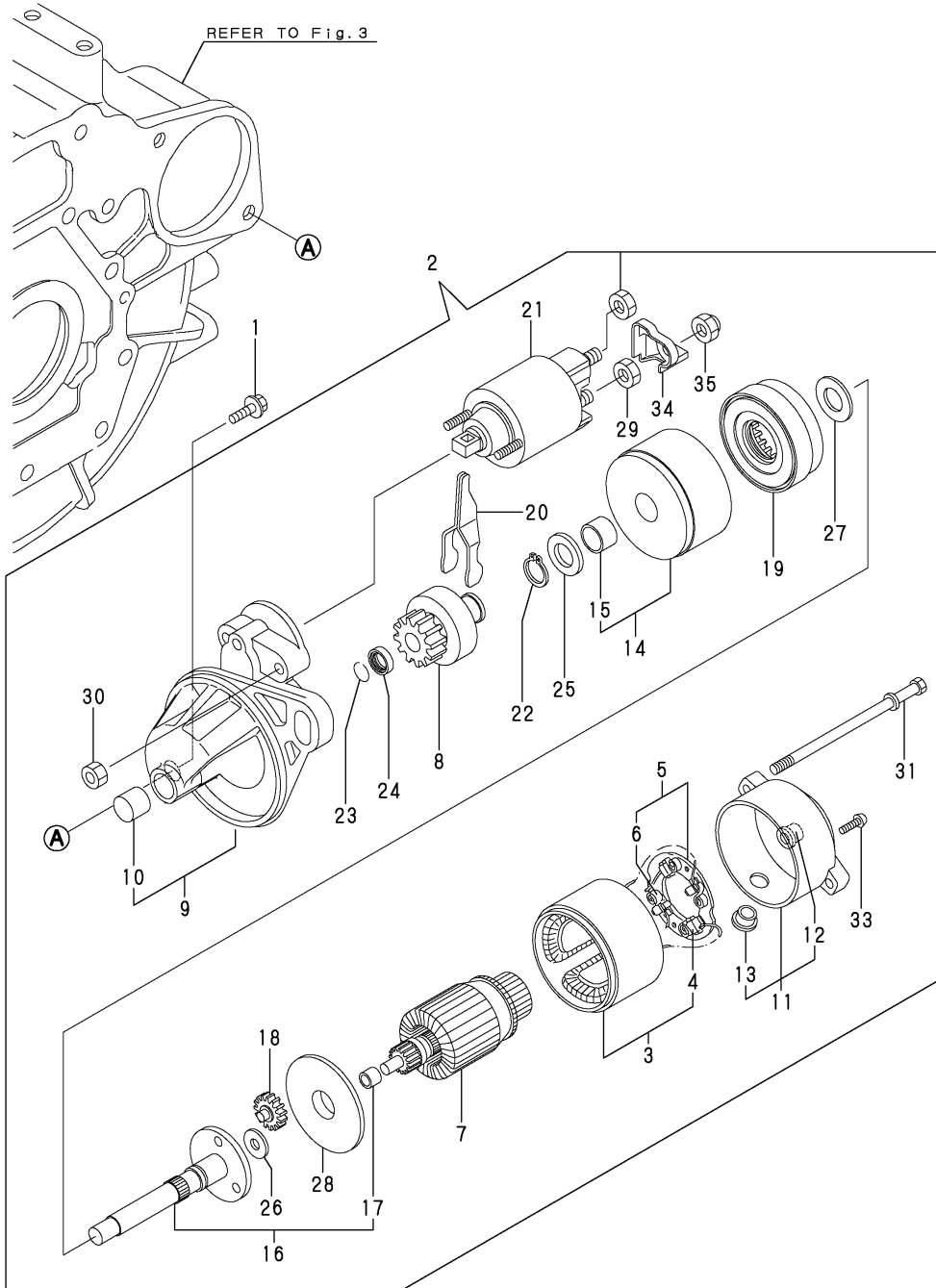


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119833-55620	FILTER ASSY, FUEL	1	1						
2	2	104200-55330	SPRING, VALVE	1	1						
3	2	119810-55340	LEVER	1	1						
4	2	121254-55510	COVER	1	1						
5	2	102103-55520	O-RING	1	1						
6	2	110250-55610	RING, RETAINING	1	1						
7	2	121250-55620	SPRING	1	1						
8	2	119810-55650	ELEMENT	1	1						
9	2	104200-55750	SCREW, M4	1	1						
10	2	24311-240100	O-RING, 1AP10A	1	1						
11	1	26014-080702	BOLT, M8X 70	1	1						
12	1	103854-39140	BOLT, PIPE JOINT	1	1						
13	1	101304-59020	JOINT, PIPE 12	1	1						
14	1	129210-59080	PIPE ASSY, FUEL	1	1						
15	2	124766-59050	CLIP, HOSE 12	2	2						
16	2	129136-59110	PIPE, D13/7.5X270	1	1						
17	1	129210-59150	PIPE ASSY, FUEL	1	1						
18	2	124766-59050	CLIP, HOSE 12	2	2						
19	2	105025-59530	PIPE, FUEL D13X400	1	1						
20	1	22190-120002	WASHER, SEAL 12	2	2						
21	1	119717-55650	BRACKET, FILTER	1	1						
22	1	26106-080142	BOLT, M8X 14 PLATED	2	2						
23	1	129335-55700	SEPARATOR ASSY,WATER	1	1						
24	2	24311-240100	O-RING, 1AP10A	1	1						
25	2	104200-55321	VALVE, TAPER	1	1						
26	2	104200-55330	SPRING, VALVE	1	1						
27	2	104200-55341	HANDLE	1	1						
28	2	124064-55510	COVER	1	1						
29	2	102103-55520	O-RING	1	1						
30	2	110250-55610	RING, RETAINING	1	1						
31	2	121257-55720	SPRING	1	1						
32	2	121257-55731	FLOAT	1	1						
34	2	101720-55750	PLUG, 6	2	2						
35	2	104200-55750	SCREW, M4	1	1						
36	2	171081-55910	SCREEN	1	1						
37	2	23418-060000	GASKET, 6X1.0	2	2						

Fig.14. STARTING MOTOR

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

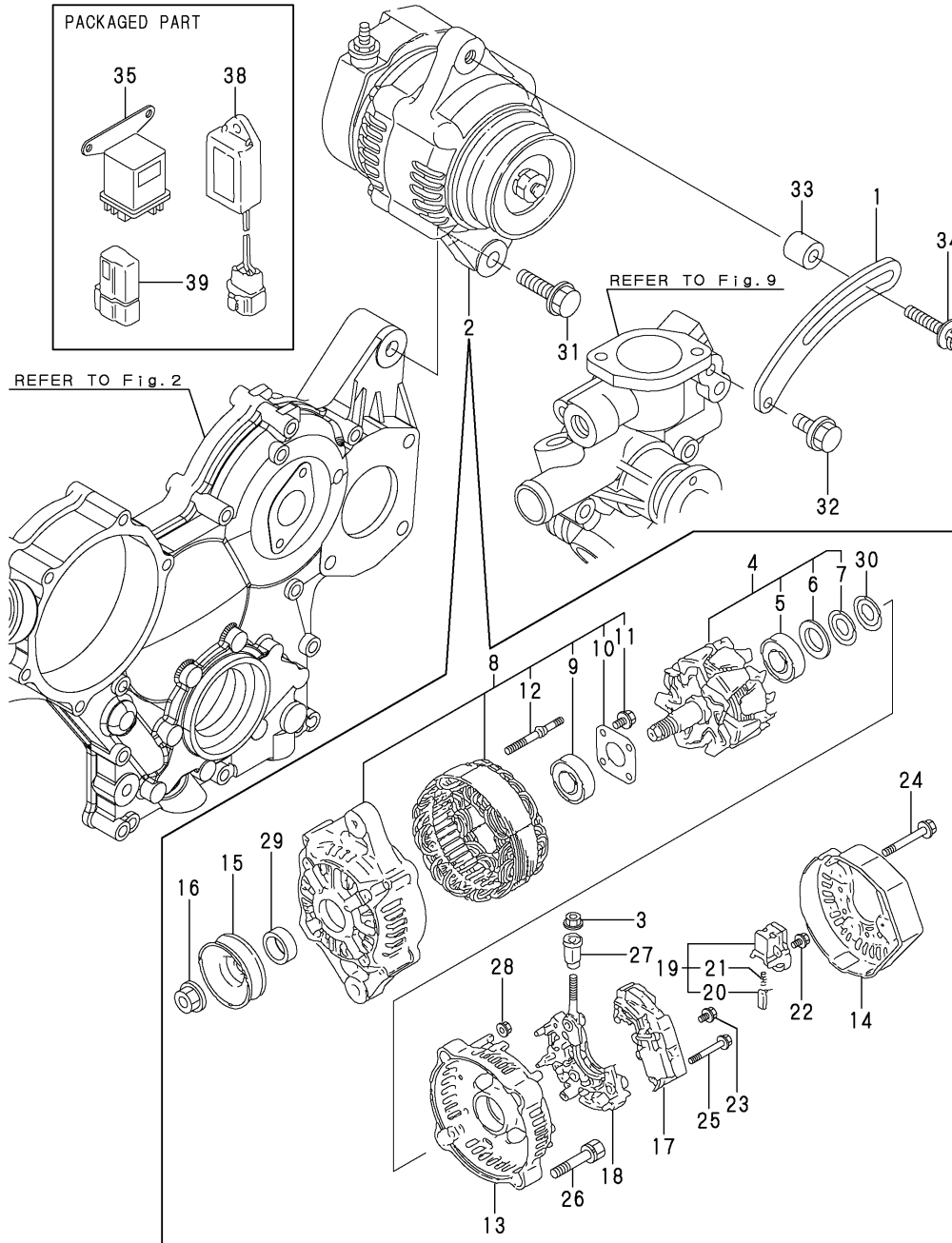


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	26106-100252	BOLT, M10X 25 PLATED	2	2						
2	1	119717-77010	STARTER, P1.1	1	1						
3	2	X0281007750	YOKE ASSY	1	1						
4	3	X0280996180	STARTER KIT	2	2						
5	2	X0285105190	HOLDER ASSY	1	1						
6	3	X0285205030	SPRING	4	4						
7	2	X0282005991	ARMATURE ASSY	1	1						
8	2	X0283006960	CLUTCH ASSY	1	1						
9	2	X4284001590	HOUSING ASSY	1	1						
10	3	X9491050100	BEARING, NEEDLE	1	1						
11	2	X0285007030	FRAME ASSY	1	1						
12	3	X9491040990	BEARING	1	1						
13	3	X0280626010	COVER	1	1						
14	2	X0284105040	BEARING ASSY	1	1						
15	3	X9491034330	BEARING	1	1						
16	2	X0286105010	SHAFT ASSY	1	1						
17	3	X9491034320	BEARING	1	1						
18	2	X0286305010	GEAR	3	3						
19	2	X0286355010	GEAR	1	1						
20	2	X0287405140	LEVER	1	1						
21	2	X0534007800	SWITCH ASSY	1	1						
22	2	X9055715000	RING	1	1						
23	2	X9490721360	RING	1	1						
24	2	X0280210331	NUT	1	1						
25	2	X9490138110	WASHER	1	1						
26	2	X9490138090	WASHER	1	1						
27	2	X9490138100	WASHER	1	1						
28	2	X0284525010	PLATE	1	1						
29	2	X9490562360	NUT	1	1						
30	2	X9490560750	NUT	2	2						
31	2	X9490423420	BOLT, THROUGH	2	2						
33	2	X9490065670	SCREW, M4X6	2	2						
34	2	X0280335350	COVER, TERMINAL	1	1						
35	2	X1289510130	NUT	1	1						

Fig.15. GENERATOR

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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

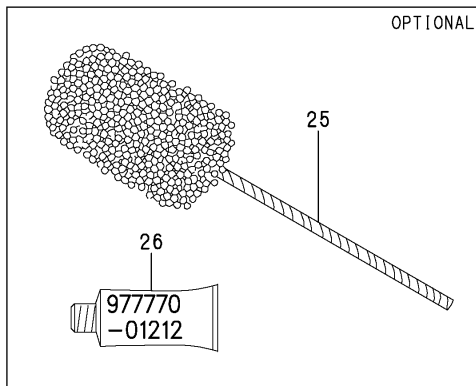
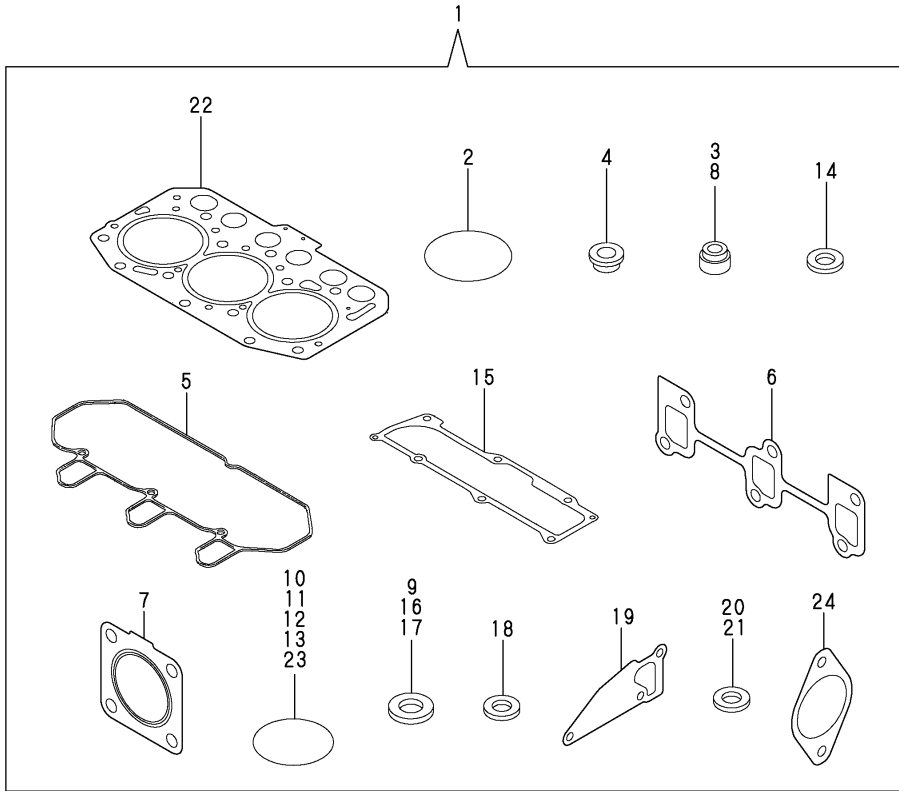


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-77330	ADJUSTER	1	1						
2	1	129423-77200	GENERATOR, 12V-40A	1	1						
3	2	X9490561001	NUT	1	1						
4	2	119620-77380	ROTOR ASSY	1	1						
5	3	119620-79240	BEARING, BALL	1	1						
6	3	119620-79250	COVER	1	1						
7	3	119620-79360	WASHER, THRUST	1	1						
8	2	119620-77421	FRAME ASSY, DRIVE	1	1						
9	3	119620-79200	BEARING, BALL	1	1						
10	3	119620-79210	PLATE, RETAINER	1	1						
11	3	119620-79220	SCREW	4	4						
12	3	119620-79230	STUD	2	2						
13	2	119620-77440	FRAME ASSY	1	1						
14	2	129240-79300	COVER	1	1						
15	2	119620-77461	PULLEY	1	1						
16	2	119620-77471	NUT	1	1						
17	2	129423-77710	REGULATOR ASSY	1	1						
18	2	119620-79260	HOLDER	1	1						
19	2	119620-79270	HOLDER, BRUSH	1	1						
20	3	119620-77480	BRUSH ASSY	2	2						
21	3	119620-79280	SPRING	2	2						
22	2	119620-79290	SCREW	1	1						
23	2	119620-79300	SCREW	1	1						
24	2	119620-79310	BOLT	3	3						
25	2	119620-79320	SCREW	2	2						
26	2	119620-79330	BOLT	2	2						
27	2	119620-79340	BUSH, INSULATION	1	1						
28	2	119620-79350	NUT	2	2						
29	2	119620-77490	COLLAR	1	1						
30	2	119620-79360	WASHER, THRUST	1	1						
31	1	26106-100452	BOLT, M10X 45 PLATED	1	1						
32	1	26106-080202	BOLT, M8X 20 PLATED	1	1						
33	1	124732-77340	SPACER	1	1						
34	1	26014-080452	BOLT, M8X 45	1	1						
35	1	119650-77910	RELAY ASSY, GLOW	1	1						
38	1	129211-77920	TIMER	1	1						
39	1	119643-66900	DIODE	1	1						

Fig.16. GASKET SET & TOOLS

(A)=3TNV70-ASA  
(B)=3TNV70-ASAT  
(C)=

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-92600	GASKET SET	1	1						1
2	2	121850-51960	O-RING	1	1						
3	2	119717-11340	SEAL, VALVE STEM	3	3						
4	2	129901-11450	PROTECTOR, NOZZLE	3	3						
5	2	119515-11310	GASKET, BONNET	1	1						
6	2	119717-13110	GASKET	1	1						
7	2	119515-13200	GASKET, SILENCER	1	1						
8	2	119717-11350	SEAL, VALVE STEM	3	3						
9	2	22190-080002	WASHER, SEAL 6	4	4						
10	2	24311-000320	O-RING, 1AP32.0	2	2						
11	2	119717-32060	O-RING, P15.0	1	1						
12	2	119624-32040	O-RING, P12.0	1	1						
13	2	119717-32050	O-RING, P17.0	3	3						
14	2	119600-11460	GASKET, NOZZLE	6	6						
15	2	119515-11330	GASKET	1	1						
16	2	22190-160002	WASHER, SEAL 16	1	1						
17	2	22190-120002	WASHER, SEAL 12	4	4						
18	2	129901-59560	GASKET	3	3						
19	2	119515-42020	GASKET, WATER PUMP	1	1						
20	2	23414-080000	GASKET, 8X1.0	1	1						
21	2	124465-44950	GASKET, 16	2	2						
22	2	119515-01330	GASKET, HEAD	1	1						
23	2	24341-000240	O-RING, 1AS24.0	1	1						
24	2	119742-26080	GASKET	1	1						
25	1	129400-92420	HONE	1	1						1
26	1	977770-01212	GASKET, LIQUID	1	1						1

Remarks  
(1)OPTIONAL

## Parts No. Index

Parts No.	Fig. No.	Ref. No.
101304-59020	13	13
101720-55750	13	34
102103-55520	13	5
		29
103854-39140	13	12
104200-55321	13	25
104200-55330	13	2
		26
104200-55341	13	27
104200-55750	13	9
		35
105010-11490	4	5
105025-59530	12	33
	13	19
105225-59240	12	22
105311-01090	1	5
105425-01690	3	9
110250-55610	13	6
		30
114250-39450	8	10
118200-53010	12	2
118400-51370	10	54
119131-18320	5	6
119258-44740	9	20
119285-01990	1	8
119285-11990	4	14
119305-35170	8	3
119415-51100	10	9
119515-01200	1	29
119515-01330	1	30
	16	22
119515-01720	3	7
119515-01770	3	8
119515-11100	4	16
119515-11110	4	17
119515-11200	4	24
119515-11240	4	25
119515-11280	4	29
119515-11310	4	48
	16	5
119515-11320	4	49
119515-11330	4	50
	16	15
119515-11380	4	38
119515-11750	4	6
119515-11800	4	12
119515-13200	5	3
	16	7
119515-14400	6	2
119515-14580	6	3

Parts No.	Fig. No.	Ref. No.
119515-21700	7	1
119515-22080	7	14
119515-22300	7	20
119515-22500	7	16
119515-22550	7	31
119515-22900	7	29
119515-23000	7	22
119515-23600	7	37
119515-23610	7	35
119515-34801	8	1
119515-35080	8	5
119515-42020	9	13
	16	19
119515-42041	9	3
119515-53001	12	1
119515-53010	12	3
119515-59540	12	13
119515-59570	12	20
119515-59810	12	9
119515-59820	12	10
119515-59830	12	11
119515-61440	11	23
119515-61560	11	97
119515-77330	15	1
119540-42000	9	1
119540-59560	12	22 -1
119540-59570	12	20 -1
119600-11460	4	4
	16	14
119620-01750	3	4
119620-01800	2	15
119620-02020	1	9
119620-14200	6	1
119620-21941	7	13
119620-59700	12	23
119620-77380	15	4
119620-77421	15	8
119620-77440	15	13
119620-77461	15	15
119620-77471	15	16
119620-77480	15	20
119620-77490	15	29
119620-79200	15	9
119620-79210	15	10
119620-79220	15	11
119620-79230	15	12
119620-79240	15	5
119620-79250	15	6
119620-79260	15	18
119620-79270	15	19

Parts No.	Fig. No.	Ref. No.
119620-79280	15	21
119620-79290	15	22
119620-79300	15	23
119620-79310	15	24
119620-79320	15	25
119620-79330	15	26
119620-79340	15	27
119620-79350	15	28
119620-79360	15	7
		30
119621-21680	7	12
119623-01250	1	6
119624-32040	2	17
	16	12
119643-66900	15	39
119650-77910	15	35
119653-77950	11	133
119660-01911	2	16
119660-61300	11	77
119660-61901	11	66
119717-01570	2	2
119717-01610	3	2
119717-01750	2	14
119717-02410	1	12
119717-02930	1	26
119717-03031	4	39
119717-03070	4	40
		41
119717-11131	4	18
119717-11190	4	20
119717-11260	4	28
119717-11340	4	21
	16	3
119717-11350	4	22
	16	8
119717-11650	4	30
119717-13109	5	1
119717-13110	5	2
	16	6
119717-13600	5	4
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