

OCD10-M85100EN

PREFACE

1. This Parts Catalog is the 1st edition of 3TNV70-FDW Diesel Engine for Denyo Co., Ltd.

Pub. No. : 000Y00D8510

Published : May.,2005

2. Model name

Engine model	Vehicle		Vehicle made by
	Products	Model name	
3TNV70-FDW	GENERATOR	TLG-12ESX TLG-13ESY	Denyo Co., Ltd.

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Fig. No. Fig. Name

Fig.1. CYLINDER BLOCK

(A)=3TNV70-FDW

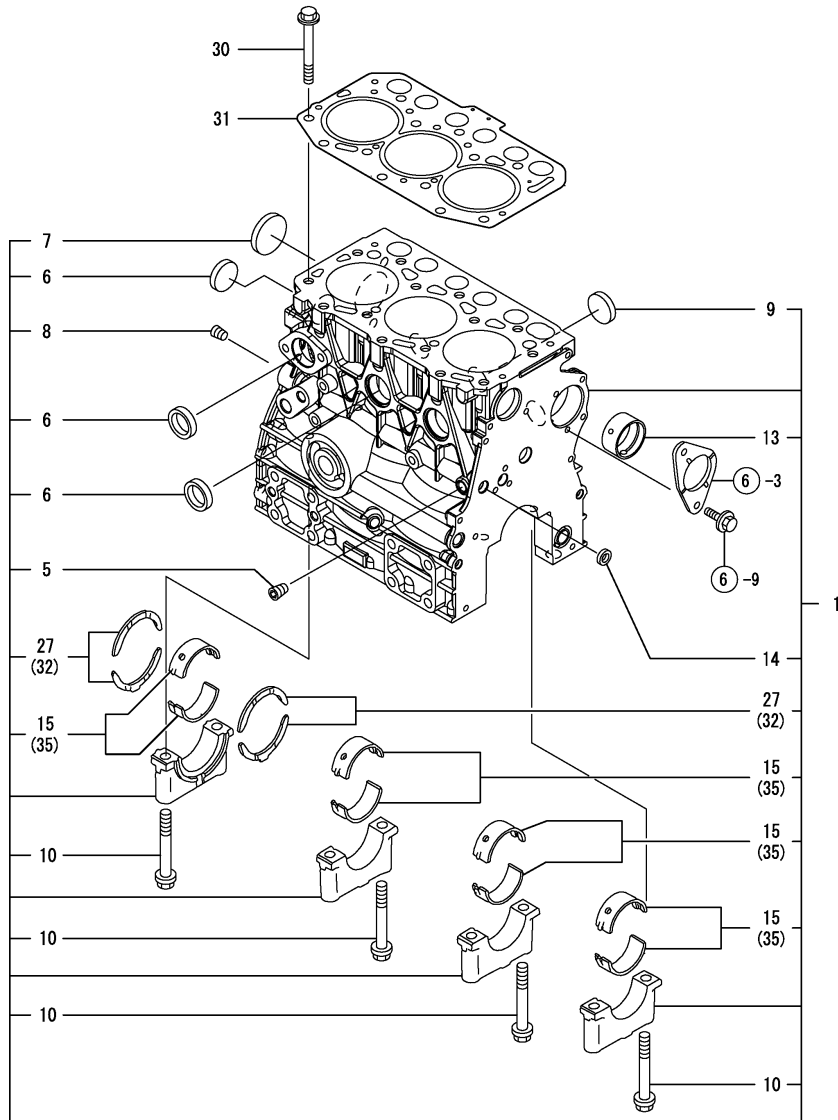
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-01560	BLOCK ASSY, CYLINDER	1							
5	2	124060-01050	PLUG, PT1/8	1							
6	2	105311-01090	PLUG, 30	4							
7	2	119623-01250	PLUG, 45	1							
8	2	124160-01910	PLUG, PT1/4	1							
9	2	119285-01990	PLUG, 25	3							
10	2	119620-02020	BOLT, METAL CAP	8							
13	2	119717-02410	BUSH, CAMSHAFT	1							
14	2	27241-120000	PLUG, 12	1							
15	2	719717-02900	BEARING, MAIN	4							2
27	2	119717-02930	BEARING, THRUST	2							
30	1	119515-01200	BOLT, HEAD	14							
31	1	119515-01330	GASKET, HEAD	1							
32	1	119810-02940	BEARING, THRUST 0.25	2							1
35	1	719717-02910	BEARING, 0.25 US	4							3

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

Fig.2. GEAR HOUSING

(A)=3TNV70-FDW

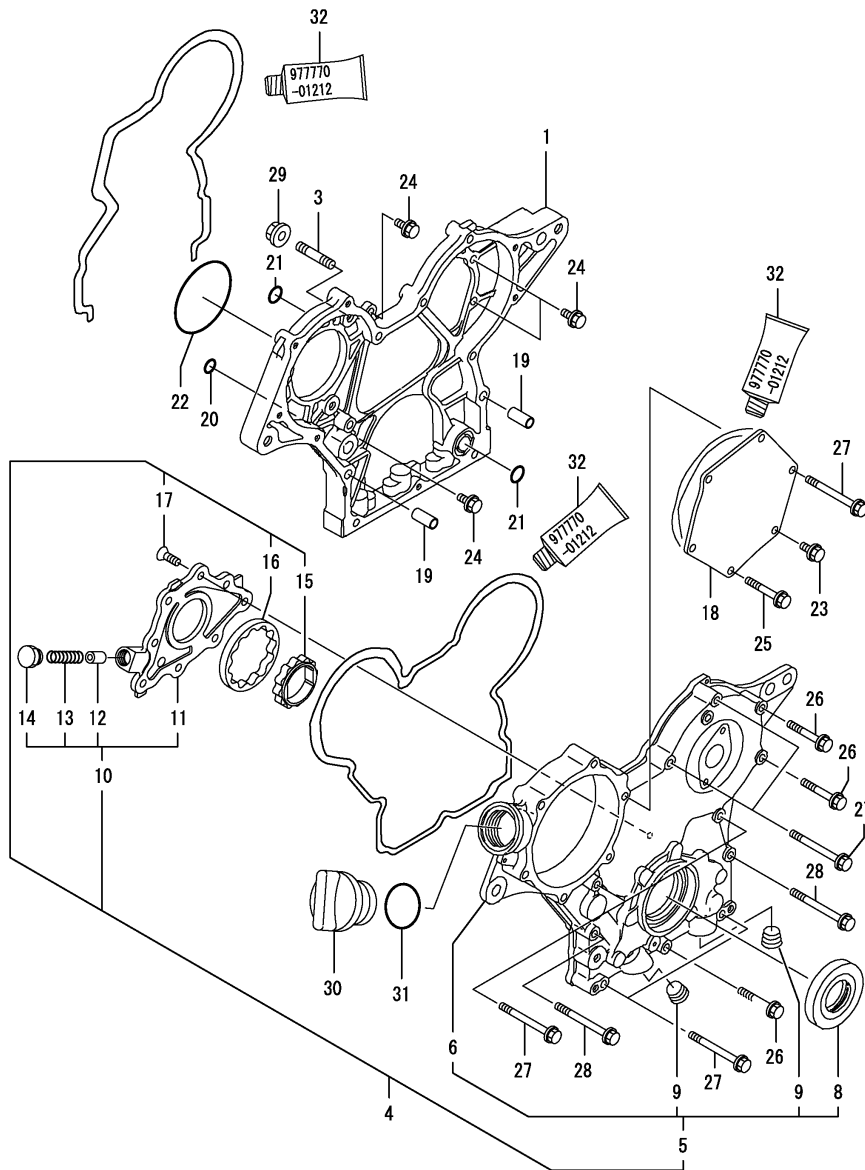
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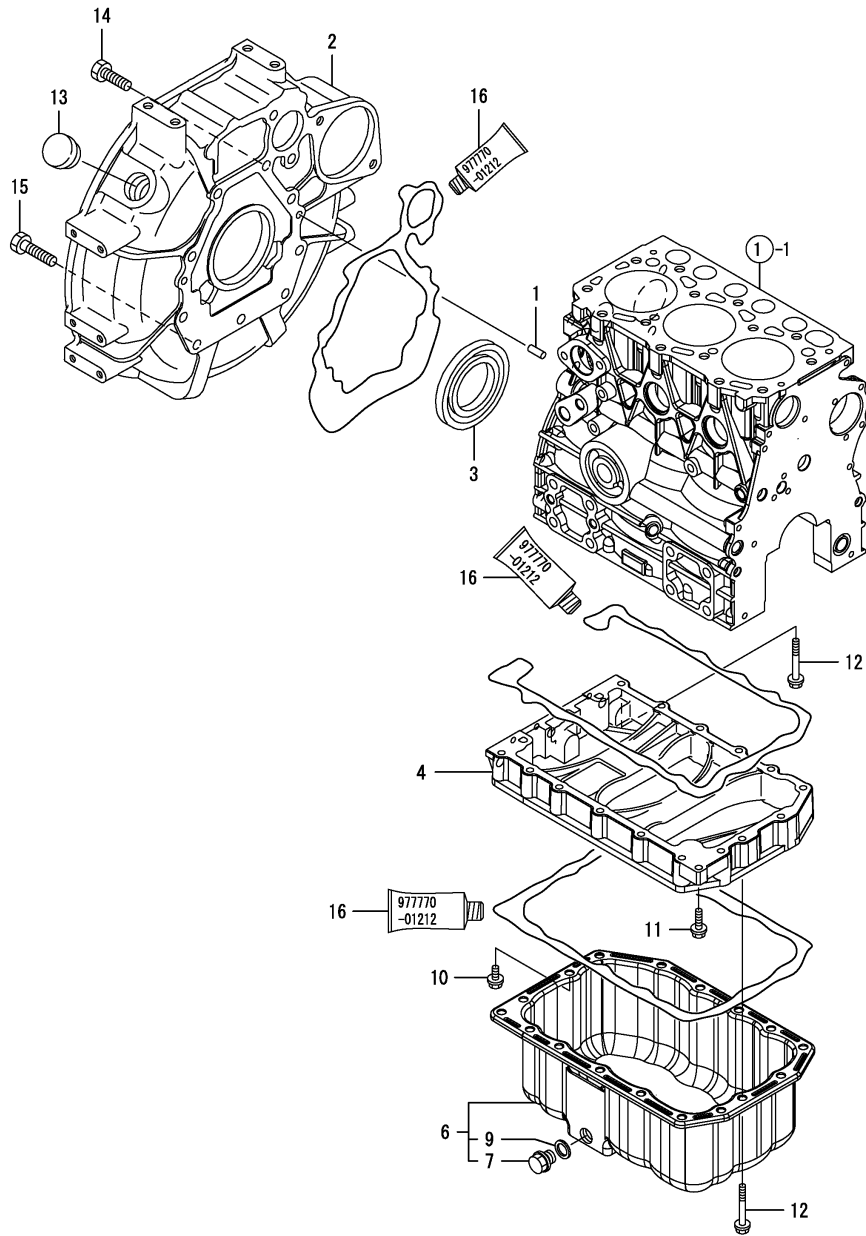
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119717-01501	CASE, GEAR	1							
3	1	119717-01570	STUD	3							
4	1	119717-01590	COVER ASSY,GEAR CASE	1							
5	2	719717-01500	COVER ASSY,GEAR CASE	1							
6	3	119717-01521	COVER, GEAR CASE	1							
8	3	119620-01800	SEAL, OIL	1							
9	3	23876-030000	PLUG, R03	2							
10	2	119717-32100	COVER ASSY	1							
11	3	119717-32080	COVER	1							
12	3	129900-32130	VALVE, RELIEF	1							
13	3	129001-32320	SPRING	1							
14	3	129001-32330	PLUG	1							
15	2	119717-32110	ROTOR, INNER	1							
16	2	119717-32120	ROTOR, OUTER	1							
17	2	119802-32130	SCREW, M6X16	8							
18	1	119717-01750	COVER	1							
19	1	119660-01911	PIPE, KNOCK	4							
20	1	119624-32040	O-RING, P12.0	1							
21	1	119717-32050	O-RING, P17.0	3							
22	1	121850-51960	O-RING	1							
23	1	26106-060122	BOLT, M6X 12 PLATED	1							
24	1	26106-060162	BOLT, M6X 16 PLATED	4							
25	1	26106-060402	BOLT, M6X 40 PLATED	4							
26	1	26106-060402	BOLT, M6X 40 PLATED	3							
27	1	26106-060602	BOLT, M6X 60 PLATED	7							
28	1	26106-060652	BOLT, M6X 65 PLATED	2							
29	1	26306-080002	NUT, M8	3							
30	1	124160-01751	COVER, FILLER	1							
31	1	24311-000320	O-RING, 1AP32.0	1							
32	1	977770-01212	GASKET, LIQUID	1							1

Remarks
(1) OPTIONAL PART.

Fig.3. FLYWHEEL HOUSING & OIL SUMP



(A)=3TNV70-FDW

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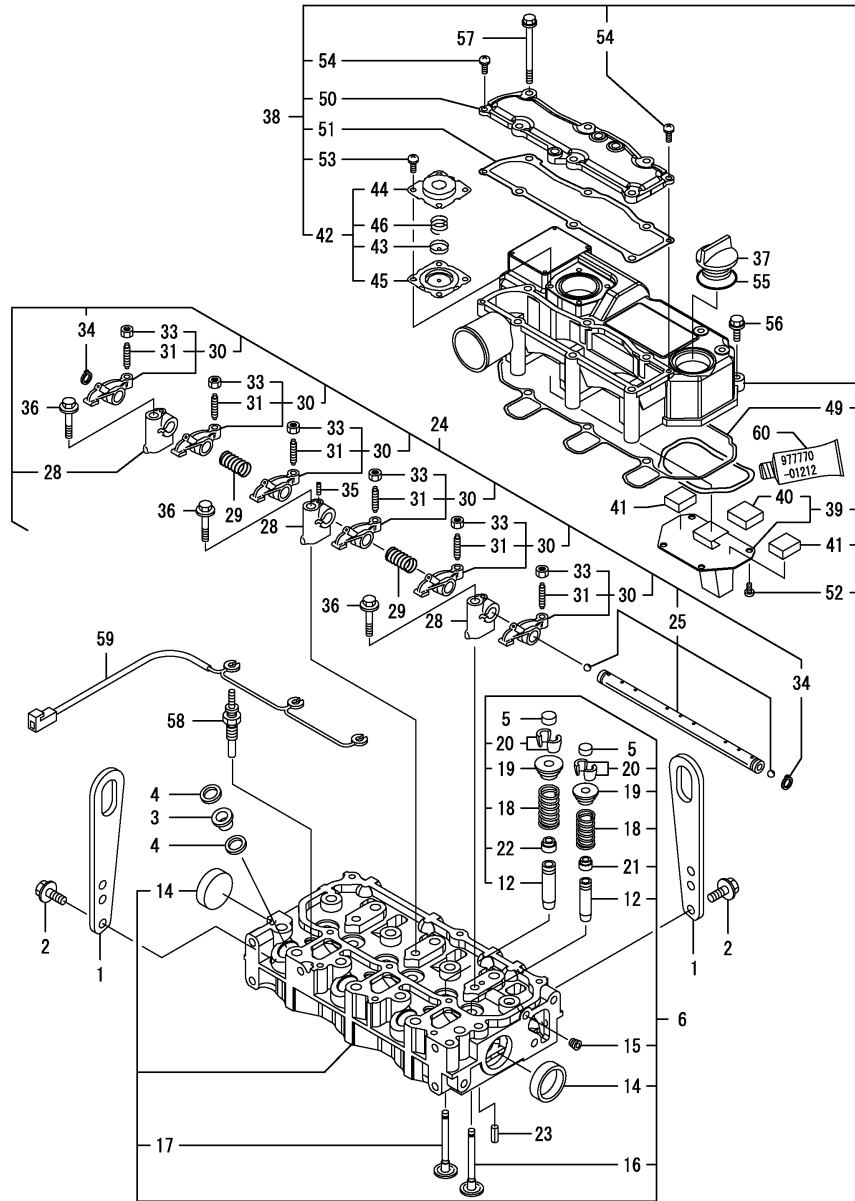
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, M8X16	2							
2	1	119717-01601	HOUSING, FLYWHEEL	1							
3	1	124085-02220	SEAL, OIL	1							
4	1	119515-01720	SPACER, OIL SUMP	1							
6	1	119546-01770	SUMP ASSY, OIL	1							
7	2	105425-01690	PLUG, 16	1							
9	2	22190-160002	WASHER, SEAL 16	1							
10	1	26106-060122	BOLT, M6X 12 PLATED	1							
11	1	26106-060252	BOLT, M6X 25 PLATED	1							
12	1	26106-060452	BOLT, M6X 45 PLATED	17							
13	1	119620-01750	CAP	1							
14	1	26206-100252	BOLT, M10X 25 PLATED	8							
15	1	121120-01620	BOLT, M10X28	3							
16	1	977770-01212	GASKET, LIQUID	1							1

Remarks
(1) OPTIONAL PART.

Fig.4. CYLINDER HEAD & BONNET



(A)=3TNV70-FDW

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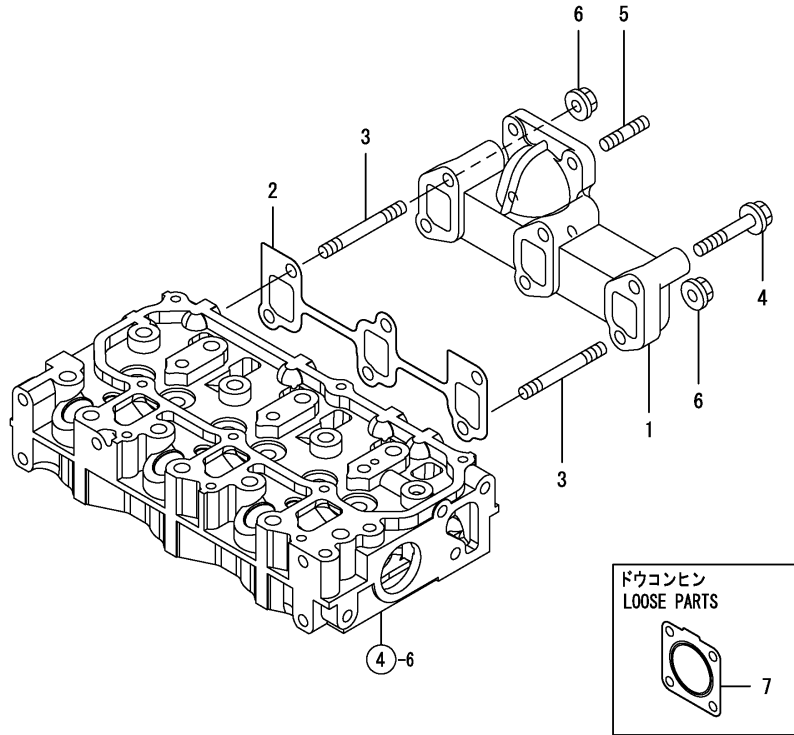
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129900-07900	LIFTER	2							
2	1	26106-080162	BOLT, M8X 16 PLATED	4							
3	1	129901-11450	PROTECTOR, NOZZLE	3							
4	1	119600-11460	GASKET, NOZZLE	6							
5	1	105010-11490	CAP, VALVE	6							
6	1	119515-11750	HEAD ASSY, CYLINDER	1							
12	2	119515-11800	GUIDE, VALVE	6							1
14	2	119285-11990	PLUG, 35	2							
15	2	23876-005000	PLUG, R005	1							
16	2	119515-11100	VALVE, INTAKE	3							
17	2	119515-11110	VALVE, EXHAUST	3							
18	2	119717-11131	SPRING, VALVE	6							
19	2	129508-11180	RETAINER, SPRING	6							
20	2	119717-11190	COTTER	12							
21	2	119717-11340	SEAL, VALVE STEM	3							
22	2	119717-11350	SEAL, VALVE STEM	3							
23	1	22351-060012	PIN, SPRING 6.0X12	2							
24	1	119515-11200	SUPPORT ASSY, ARM	1							
25	2	119515-11240	SHAFT ASSY, ROCKER	1							
28	2	119717-11260	SUPPORT, ROCKER ARM	3							
29	2	119515-11280	SPRING	2							
30	2	119717-11650	ARM, ROCKER	6							
31	3	129150-11230	SCREW, VALVE ADJUST	6							
33	3	129150-11750	NUT, M8	6							
34	2	22242-000120	RING, 12	2							
35	2	26979-050162	SCREW, M5X16	1							
36	1	26106-080402	BOLT, M8X 40 PLATED	3							
37	1	124160-01751	COVER, FILLER	1							
38	1	119515-11380	BONNET ASSY, HEAD	1							
39	2	119717-03031	PLATE	1							
40	3	119717-03070	BAFFLE, BREATHER	1							
41	2	119717-03070	BAFFLE, BREATHER	2							
42	2	119802-03100	DIAPHRAGM ASSY	1							
43	3	119802-03110	PLATE	1							
44	3	119802-03121	COVER, DIAPHRAGM	1							
45	3	119802-03131	DIAPHRAGM	1							
46	3	119802-03141	SPRING, DIAPHRAGM	1							
49	2	119515-11310	GASKET, BONNET	1							
50	2	119515-11320	COVER, BONNET	1							
51	2	119515-11330	GASKET	1							
52	2	22857-500100	SCREW, 5X10	4							
53	2	22857-500100	SCREW, 5X10	4							
54	2	22857-500160	SCREW, 5X16	2							
55	1	24311-000320	O-RING, 1AP32.0	1							
56	1	26106-060202	BOLT, M6X 20 PLATED	3							
57	1	26106-060752	BOLT, M6X 75 PLATED	6							
58	1	119717-77800	PLUG, GLOW	3							
59	1	119717-77820	CONNECTOR, GLOW PLUG	1							
60	1	97770-01212	GASKET, LIQUID	1							2

Remarks
 (1) REPAIR PART.
 (2) OPTIONAL PART.

Fig.5. EXHAUST MANIFOLD

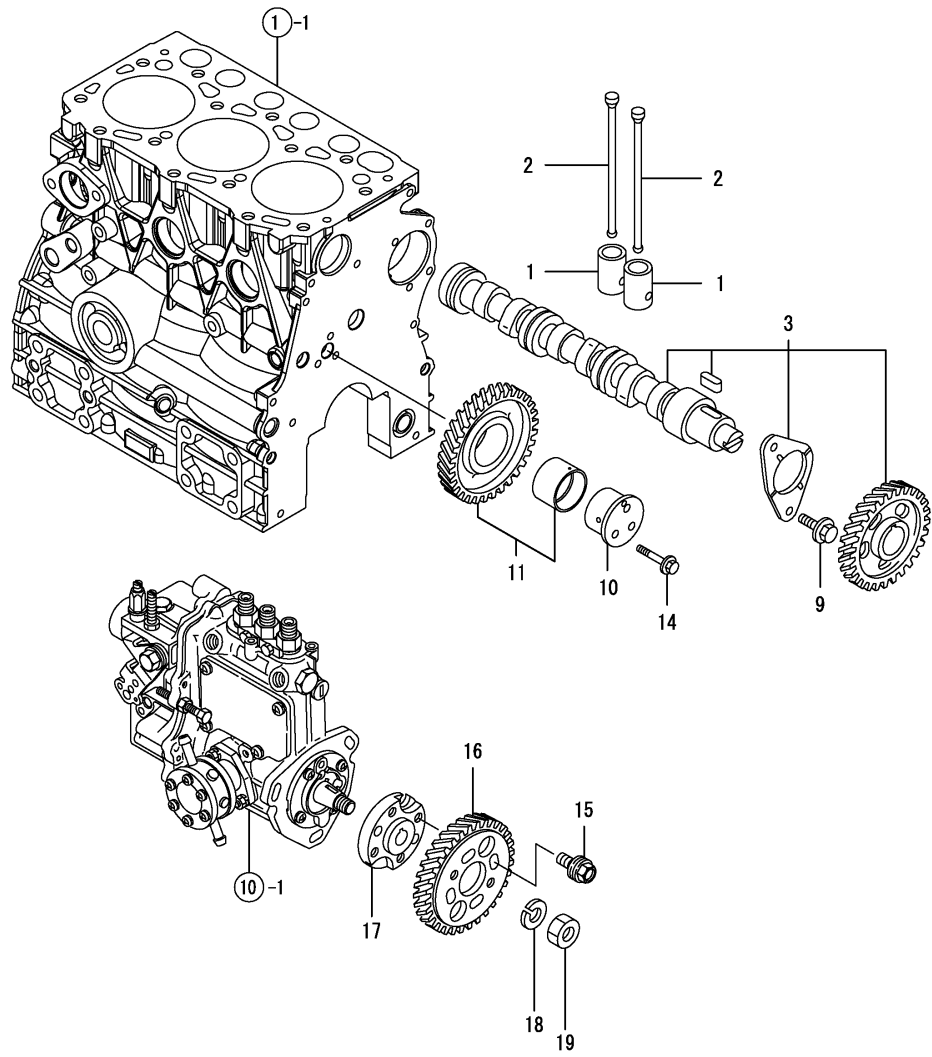


(A)=3TNV70-FDW
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119718-13100	MANIFOLD, EXHAUST	1							
2	1	119717-13110	GASKET	1							
3	1	119717-13600	STUD, M8X50	2							
4	1	119802-13620	BOLT, M8X50	4							
5	1	119131-18320	STUD, M8X22	4							
6	1	26306-080002	NUT, M8	2							
7	1	119515-13200	GASKET, SILENCER	1							

Fig.6. CAMSHAFT & DRIVING GEAR

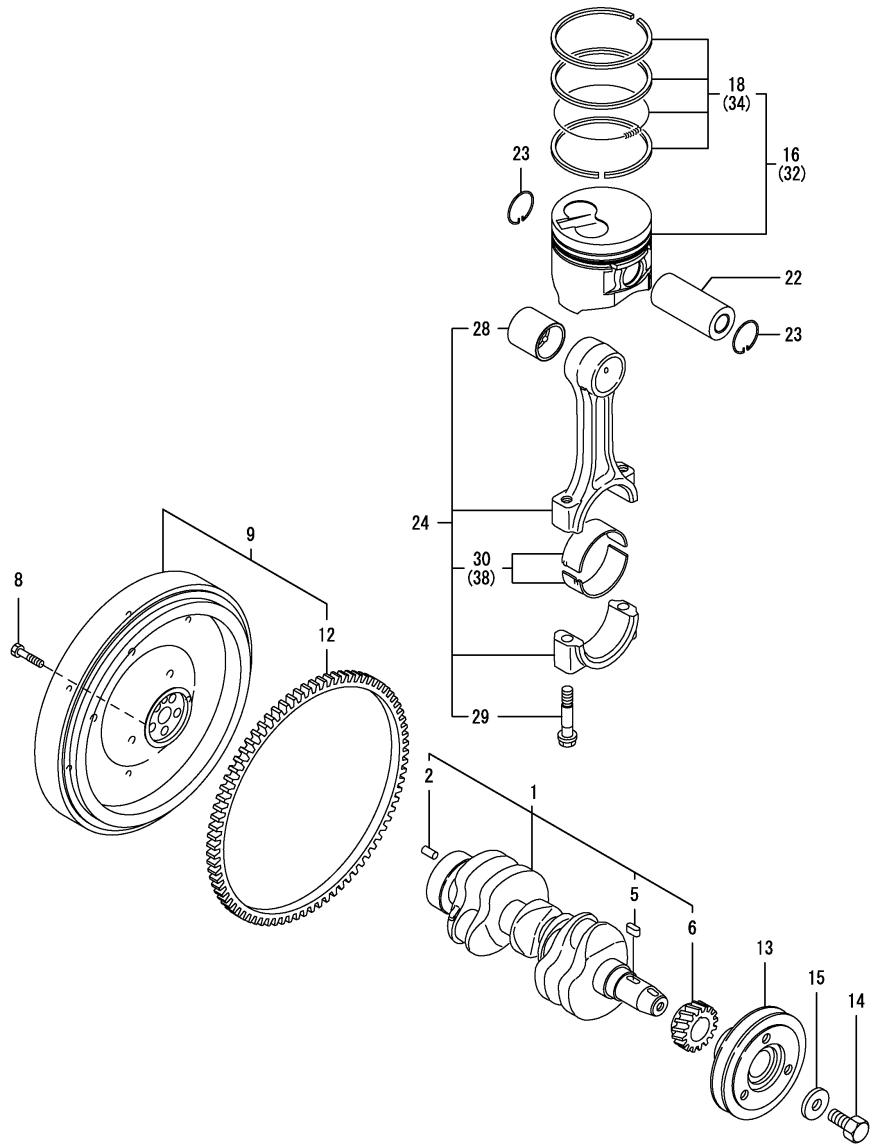


(A)=3TNV70-FDW
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119620-14200	TAPPET	6							
2	1	119515-14400	ROD, PUSH	6							
3	1	119515-14580	CAMSHAFT ASSY	1							
9	1	26106-060122	BOLT, M6X 12 PLATED	2							
10	1	119717-25050	SHAFT, IDLE	1							
11	1	119717-25100	GEAR ASSY, IDLE	1							
14	1	26106-060352	BOLT, M6X 35 PLATED	3							
15	1	129150-25301	BOLT	4							
16	1	119717-25930	GEAR, PUMP	1							
17	1	119717-51150	FLANGE	1							
18	1	22217-120000	WASHER, SPRING 12	1							
19	1	26716-120002	NUT, M12	1							

Fig.7. CRANKSHAFT & PISTON



(A)=3TNV70-FDW

(B)=

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(E)=

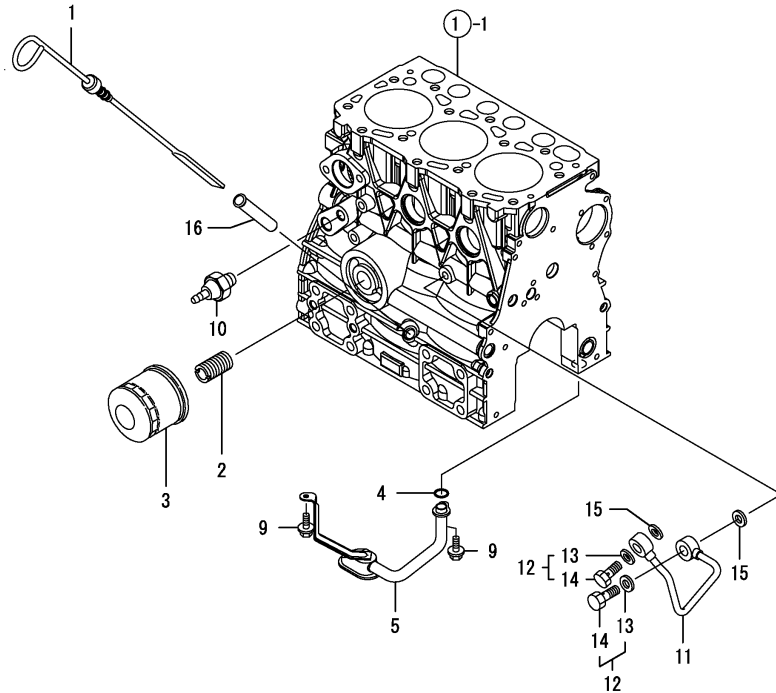
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-21700	CRANKSHAFT ASSY	1							
2	2	129100-01580	PIN, M8X16	1							
5	2	22512-040120	KEY, 4X 12	1							
6	2	119717-21200	GEAR, CRANKSHAFT	1							
8	1	121111-21501	BOLT, FLYWHEEL	5							
9	1	119546-21590	FLYWHEEL ASSY	1							
12	2	119865-21600	GEAR, RING	1							
13	1	119717-21650	V-PULLEY	1							
14	1	119621-21680	BOLT, FLANGE 12X1.25	1							
15	1	119620-21941	WASHER	1							
16	1	119515-22080	PISTON ASSY	3							
18	2	119515-22500	RING SET, PISTON	3							
22	1	119515-22300	PIN, PISTON	3							
23	1	22252-000220	RING, 22	6							
24	1	119515-23000	ROD ASSY, CONNECTING	3							
28	2	119717-23910	BEARING, PISTON PIN	3							2
29	2	119717-23200	BOLT, CONNECTING ROD	6							
30	2	119515-23600	BEARING, CRANK PIN	3							
32	1	119515-22900	PISTON ASSY, 0.25 OS	3							1
34	2	119515-22550	RING SET, 0.25 OS	3							1
38	1	119515-23610	METAL ASSY, 0.25	3							3

Remarks

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

Fig.8. LUB.OIL SYSTEM



(A)=3TNV70-FDW

(B)=

(C)=

(D)=

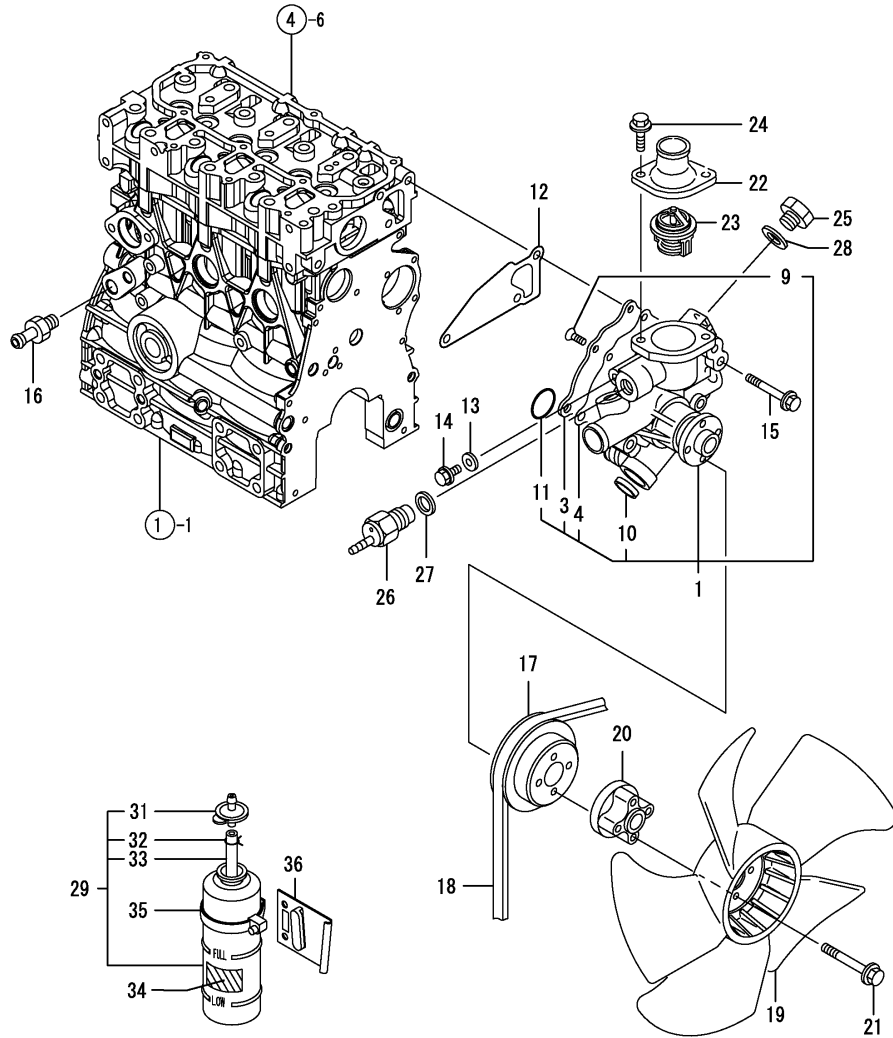
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119802-34802	DIPSTICK, OIL	1							
2	1	129100-35140	STUD	1							
3	1	119305-35151	FILTER ASSY, D68XL65	1							1
4	1	119717-32060	O-RING, P15.0	1							
5	1	119546-35080	PIPE ASSY, OIL INLET	1							
9	1	26106-060102	BOLT, M6X 10 PLATED	2							
10	1	114250-39450	SWITCH, 0.5KG	1							
11	1	119717-39210	PIPE, OIL	1							
12	1	129005-59830	BOLT ASSY, JOINT M8	2							
13	2	22190-080002	WASHER, SEAL 6	2							
14	2	23857-030000	BOLT, JOINT 3	2							
15	1	22190-080002	WASHER, SEAL 6	2							
16	1	121520-34810	GUIDE, DIPSTICK	1							

Remarks
(1) REPAIR PART.

Fig.9. COOLING WATER SYSTEM



(A)=3TNV70-FDW

(B)=

(C)=

(D)=

(E)=

(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-42001	PUMP ASSY, WATER	1							
1-1	1	119515-42002	PUMP ASSY, CW	1							N
(A=E/ 85945)											
3	2	119515-42041	COVER	1							
4	2	119717-42031	GASKET	1							
9	2	26577-060122	SCREW, M6X12	4							
10	2	27241-250000	PLUG, 25	1							
11	2	119717-42320	O-RING, P26	1							
11-1	2	119C10-42320	O-RING, 2028	1							S
(A=E/ 85945)											
12	1	119515-42020	GASKET, WATER PUMP	1							
13	1	23414-080000	GASKET, 8X1.0	1							
14	1	26106-080122	BOLT, M8X 12 PLATED	1							
15	1	26106-080502	BOLT, M8X 50 PLATED	3							
16	1	121550-49111	JOINT, PT1/4	1							
17	1	119515-42350	V-PULLEY, D=110	1							
18	1	129612-42340	V-BELT, A36	1							
19	1	119415-44740	FAN, COOLING D=260VC	1							
20	1	129457-44760	SPACER, FAN	1							
21	1	26106-060452	BOLT, M6X 45 PLATED	4							
22	1	129350-49530	COVER, THERMOSTAT	1							
23	1	119717-49800	THERMOSTAT, 71	1							
24	1	26106-080202	BOLT, M8X 20 PLATED	2							
25	1	121450-42450	PLUG, M16	1							
26	1	121250-44901	SWITCH, 110	1							
27	1	124465-44950	GASKET, 16	1							
28	1	124465-44950	GASKET, 16	1							
29	1	124450-44510	TANK ASSY, SUB	1							
31	2	124450-44530	CAP	1							
32	2	124450-44560	RETAINER	1							
33	2	23061-070230	PIPE, 7X 230	1							
34	1	121470-44540	LABEL, SUB-TANK	1							
35	1	124450-44550	BAND	1							
36	1	121256-44600	BRACKET, SUB TANK	1							

Fig.10. FUEL INJECTION PUMP

(A)=3TNV70-FDW

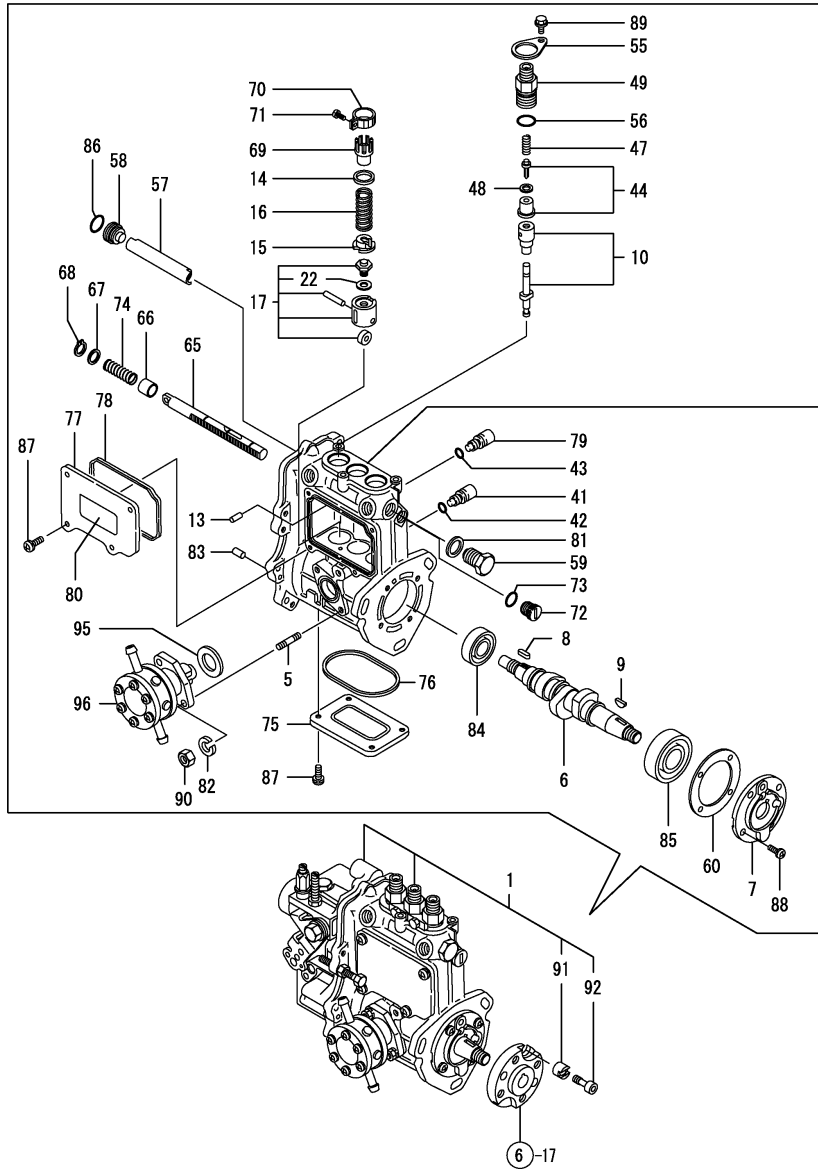
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719546-51380	PUMP ASSY, INJECTION	1							1
5	2	129155-51020	STUD	2							
6	2	119717-51030	CAMSHAFT	1							
7	2	119717-51060	SUPPORT, CAMSHAFT	1							
8	2	119717-51070	KEY	1							
9	2	122710-51090	KEY	1							
10	2	119415-51100	PLUNGER ASSY	3							
13	2	129155-51140	PIN	3							
14	2	158600-51170	RETAINER, SPRING	3							
15	2	119717-51180	RETAINER, SPRING	3							
16	2	119717-51190	SPRING, PLUNGER	3							
17	2	119717-51200	TAPPET ASSY	3							
22	3	129155-51600	SHIM SET, ADJUSTING	1							
41	2	158600-51270	STOPPER, TAPPET	3							
42	2	129155-51280	O-RING, S6	3							
43	2	129155-51280	O-RING, S6	1							
44	2	119717-51300	VALVE ASSY, DELIVERY	3							
47	2	119717-51330	SPRING, DELIVERY	3							
48	2	124550-51350	GASKET, DELIVERY	3							
49	2	158600-51441	VALVE ASSY, DELIVERY	3							
55	2	118400-51370	LOCKING	3							
56	2	24316-000150	O-RING, 4DP15.0	3							
57	2	129155-51400	DEFLECTOR	1							
58	2	158600-51410	PLUG, DEFLECTOR	1							
59	2	158600-51420	PLUG, DEFLECTOR	1							
60	2	129155-51450	SHIM SET, ADJUSTING	1							
65	2	119717-51500	RACK, CONTROL	1							
66	2	129155-51521	BUSH, RACK	1							
67	2	129155-51530	SPACER	1							
68	2	129155-51540	CIRCLIP	1							
69	2	129155-51550	PINION, CONTROL	3							
70	2	129100-51560	PINION	3							
71	2	129100-51570	SCREW	3							
72	2	158600-51570	PLUG	1							
73	2	129155-51580	O-RING	1							
74	2	129155-51591	SPRING, RACK	1							
75	2	129155-51701	COVER	1							
76	2	119717-51710	GASKET	1							
77	2	119717-51750	COVER	1							
78	2	119717-51760	GASKET	1							
79	2	158600-51790	STOOPER, RACK	1							
80	2	129156-51910	LABEL, CAUTION	1							
81	2	22190-160002	WASHER, SEAL 16	1							
82	2	22217-060000	WASHER, SPRING 6	2							
83	2	22351-050010	PIN, SPRING 5.0X10	2							
84	2	24101-060034	BEARING, BALL 6003	1							
85	2	24101-063034	BEARING, BALL 6303	1							
86	2	119717-51420	O-RING	1							
87	2	26022-050122	SCREW, M5X12	8							
88	2	26022-060162	SCREW, M6X16	4							
89	2	26106-050102	BOLT, M5X 10 PLATED	3							

Remarks
 (1) GOVERNOR ASSY(FIG.11) IS
 INCORPORATED IN THIS FOP.CMP
 (REF.NO.1).

Fig.10. FUEL INJECTION PUMP

(A)=3TNV70-FDW

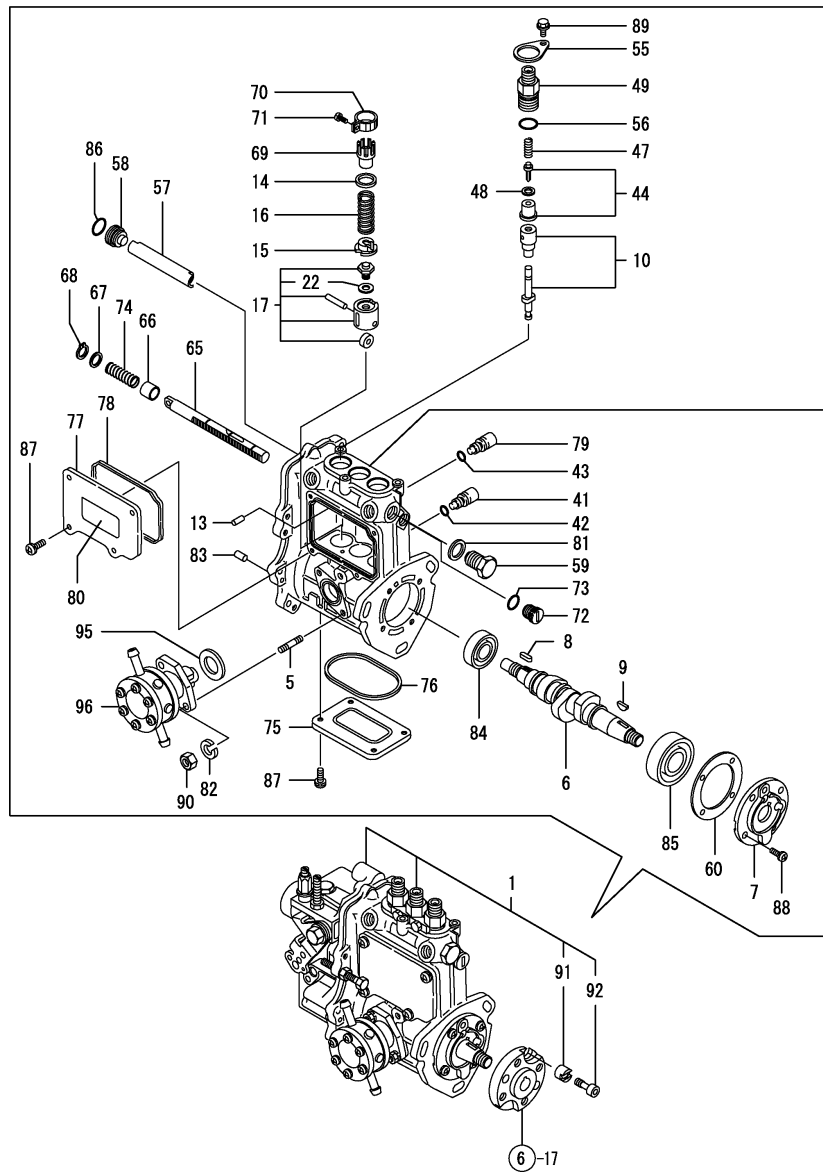
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
90	2	26716-060002	NUT, M6	2							
91	2	119717-51480	COLLAR	1							
92	2	119717-51490	BOLT	1							
95	2	129155-52051	GASKET	1							
96	2	129100-52101	PUMP ASSY, FUEL FEED	1							

Remarks
 (1) GOVERNOR ASSY(FIG.11) IS
 INCORPORATED IN THIS FOP.CMP
 (REF.NO.1).

Fig.11. GOVERNOR

(A)=3TNV70-FDW

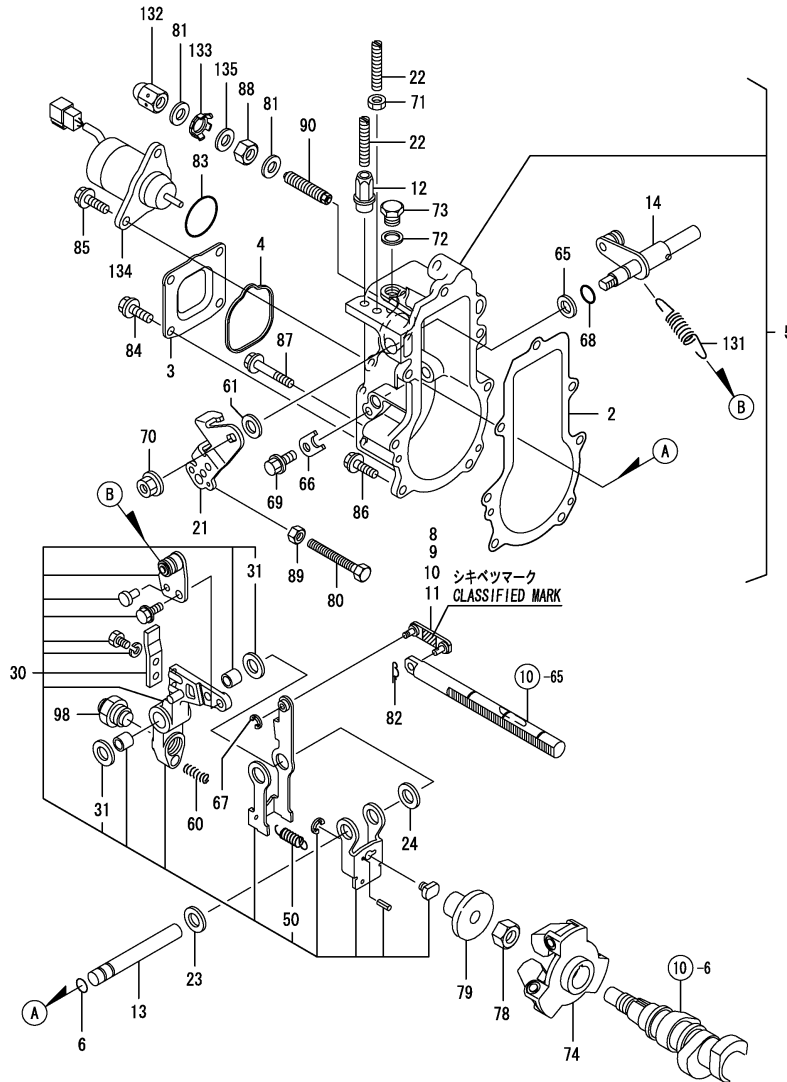
(B)=

(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							
3	2	119717-61060	COVER, GOVERNOR CASE	1							
4	2	119717-61070	GASKET	1							
5	2	119742-61100	CASE ASSY, GOVERNOR	1							
6	3	129155-51280	O-RING, S6	1							
8	3	119717-61120	LINK, MARK :3	1							1
9	3	119717-61130	LINK, MARK 98	1							1
10	3	119717-61140	LINK, MARK 88	1							1
11	3	119717-61150	LINK, MARK 03	1							1
12	3	129209-61370	NUT, M6	1							
13	3	129052-61390	SHAFT	1							
14	3	119717-61400	SHAFT ASSY	1							
21	3	119515-61440	LEVER, CONTROL	1							
22	3	129155-61450	BOLT, LIMITER	2							
23	3	129156-61460	SHIM, T=0.6	1							
24	3	129155-61480	SPACER ASSY	1							
30	3	119717-61500	LEVER ASSY, GOVERNOR	1							
31	4	174307-51700	SHIM SET	2							
50	4	129486-61540	SPRING, SET	1							
60	3	129100-61650	SPRING, CONTROLLER	1							
61	3	158552-61700	SHIM SET	1							
65	3	158552-61710	SHIM, T=1.0	1							
66	3	119660-61901	RETAINER, SHAFT	1							
67	3	22272-000030	RING, E- 3	1							
68	3	24341-000070	O-RING, 1AS7.0	1							
69	3	26106-060102	BOLT, M6X 10 PLATED	1							
70	3	26366-080002	NUT, M8	1							
71	3	26756-060002	NUT, LOCK M6	1							
72	2	22190-100002	WASHER, SEAL 10	1							
73	2	23887-100002	PLUG, 10	1							
74	2	119717-61200	WEIGHT ASSY,GOVERNOR	1							
78	2	119660-61300	NUT	1							
79	2	129155-61341	SLEEVE	1							
80	2	129155-61460	BOLT, IDLE	1							
81	2	22190-120002	WASHER, SEAL 12	2							
82	2	22372-040000	PIN, SNAP 4	1							
83	2	24341-000280	O-RING, 1AS28.0	1							
83-1	2	158552-61900	O-RING	1							N
(A=EXXXXX)											
84	2	26106-060102	BOLT, M6X 10 PLATED	4							
85	2	26106-060142	BOLT, M6X 14 PLATED	2							
86	2	26106-060202	BOLT, M6X 20 PLATED	4							
87	2	26106-060452	BOLT, M6X 45 PLATED	3							
88	2	26736-120002	NUT, M12	1							
89	2	26756-060002	NUT, LOCK M6	1							
90	2	158601-61700	LIMITER ASSY, FUEL	1							
98	2	119761-61560	ANGLEICH ASSY	1							
131	2	129573-61700	SPRING, GOVERNOR	1							
132	2	129209-61930	NUT, CAP	1							
133	2	129209-61970	PLATE	1							
134	2	119233-77932	SOLENOID, STOP	1							

Remarks

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

Fig.11. GOVERNOR

(A)=3TNV70-FDW

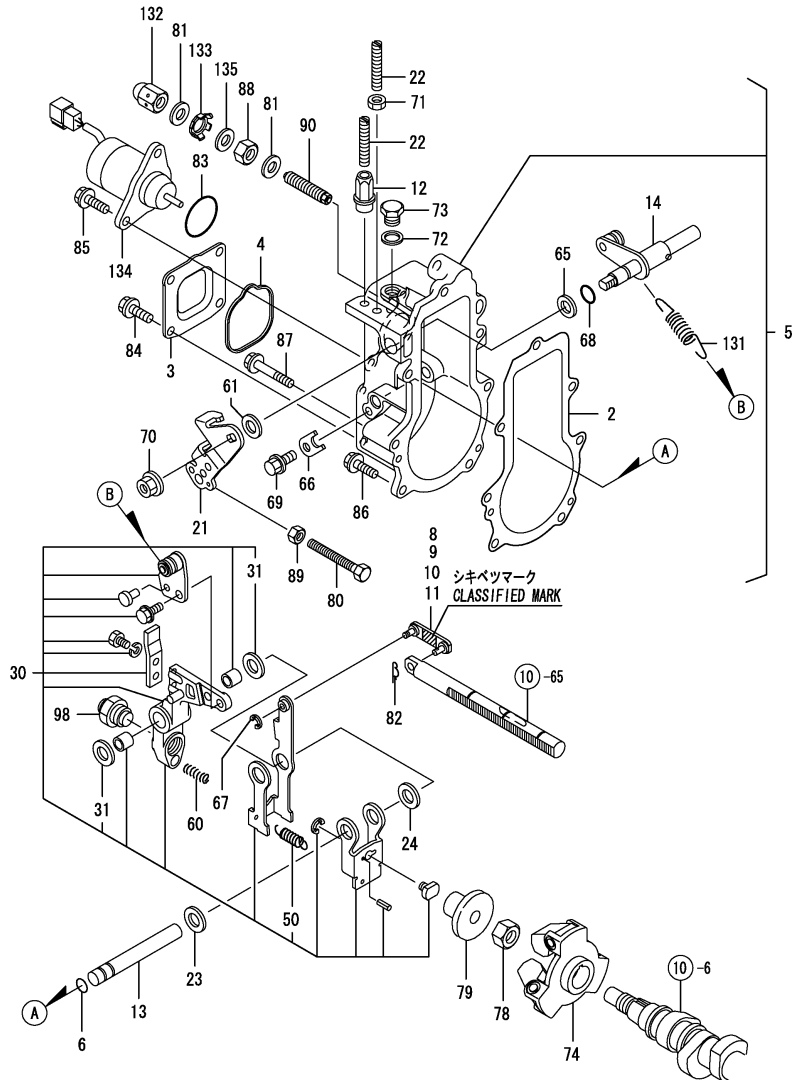
(B)=

(C)=

(D)=

(E)=

(F)=

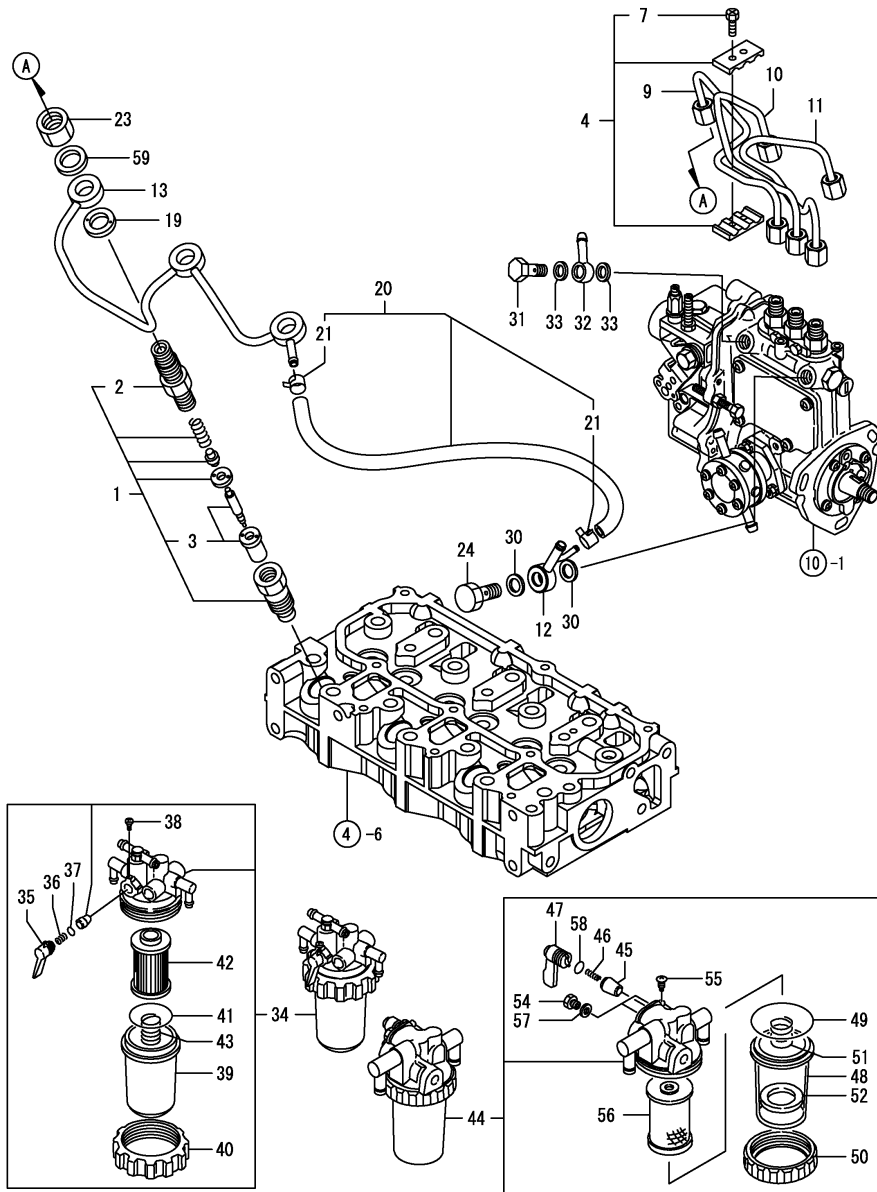


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
135	2	23414-120016	GASKET, 12X1.0	1							

Remarks

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

Fig.12. FUEL INJECTION VALVE



(A)=3TNV70-FDW

(B)=

(C)=

(D)=

(E)=

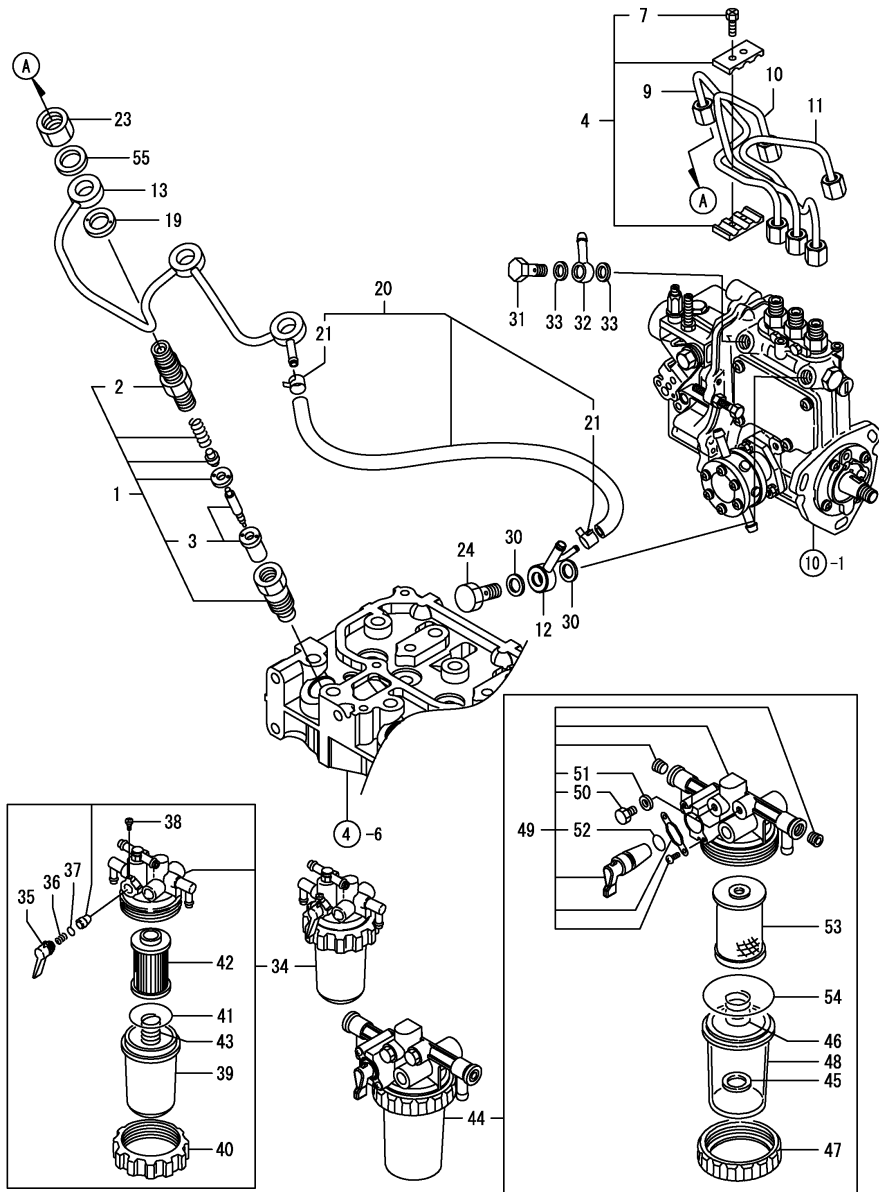
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-53001	VALVE ASSY,INJECTION	3							
2	2	118200-53010	HOLDER, NOZZLE	3							
3	2	119515-53010	VALVE ASSY,INJECTION	3							
4	1	129150-59120	RETAINER, PIPE	1							
7	2	129150-59131	BOLT, M4X14	2							
9	1	119546-59810	PIPE ASSY, INJECTION	1							
10	1	119546-59820	PIPE ASSY, INJECTION	1							
11	1	119546-59830	PIPE ASSY, INJECTION	1							
12	1	119840-59570	JOINT	1							
13	1	119515-59540	PIPE ASSY, RETURN	1							
19	1	129901-59560	GASKET	3							
20	1	119540-59570	PIPE ASSY, RETURN	1							
21	2	124066-59100	CLIP, HOSE 8	2							
23	1	119620-59700	NUT, NOZZLE	3							
24	1	119813-59950	VALVE ASSY, CHECK	1							
30	1	22190-120002	WASHER, SEAL 12	2							
31	1	103854-39140	BOLT, PIPE JOINT	1							
32	1	101304-59020	JOINT, PIPE 12	1							
33	1	22190-120002	WASHER, SEAL 12	2							
34	1	119833-55620	FILTER ASSY, FUEL	1							
35	2	119810-55340	LEVER	1							
36	2	104200-55330	SPRING, VALVE	1							
37	2	24311-240100	O-RING, 1AP10A	1							
38	2	104200-55750	SCREW, M4	1							
39	2	121254-55510	COVER	1							
40	2	110250-55610	RING, RETAINING	1							
41	2	102103-55520	O-RING	1							
42	2	119810-55650	ELEMENT	1							
43	2	121250-55620	SPRING	1							
44	1	129335-55700	SEPARATOR ASSY,WATER	1							
45	2	104200-55321	VALVE, TAPER	1							
46	2	104200-55330	SPRING, VALVE	1							
47	2	104200-55341	HANDLE	1							
48	2	124064-55510	COVER	1							
49	2	102103-55520	O-RING	1							
50	2	110250-55610	RING, RETAINING	1							
51	2	121257-55720	SPRING	1							
52	2	121257-55731	FLOAT	1							
54	2	101720-55750	PLUG, 6	2							
55	2	104200-55750	SCREW, M4	1							
56	2	171081-55910	SCREEN	1							
57	2	23418-060000	GASKET, 6X1.0	2							
58	2	24311-240100	O-RING, 1AP10A	1							
59	1	22190-120002	WASHER, SEAL 12	3							

Remarks

*This item is applicable to [(A)=EZZZZ-1] or previous machines. Refer to Fig.18.

Fig.17. (12A)FUEL INJECTION VALVE



(A)=3TNV70-FDW

(B)=

(C)=

(D)=

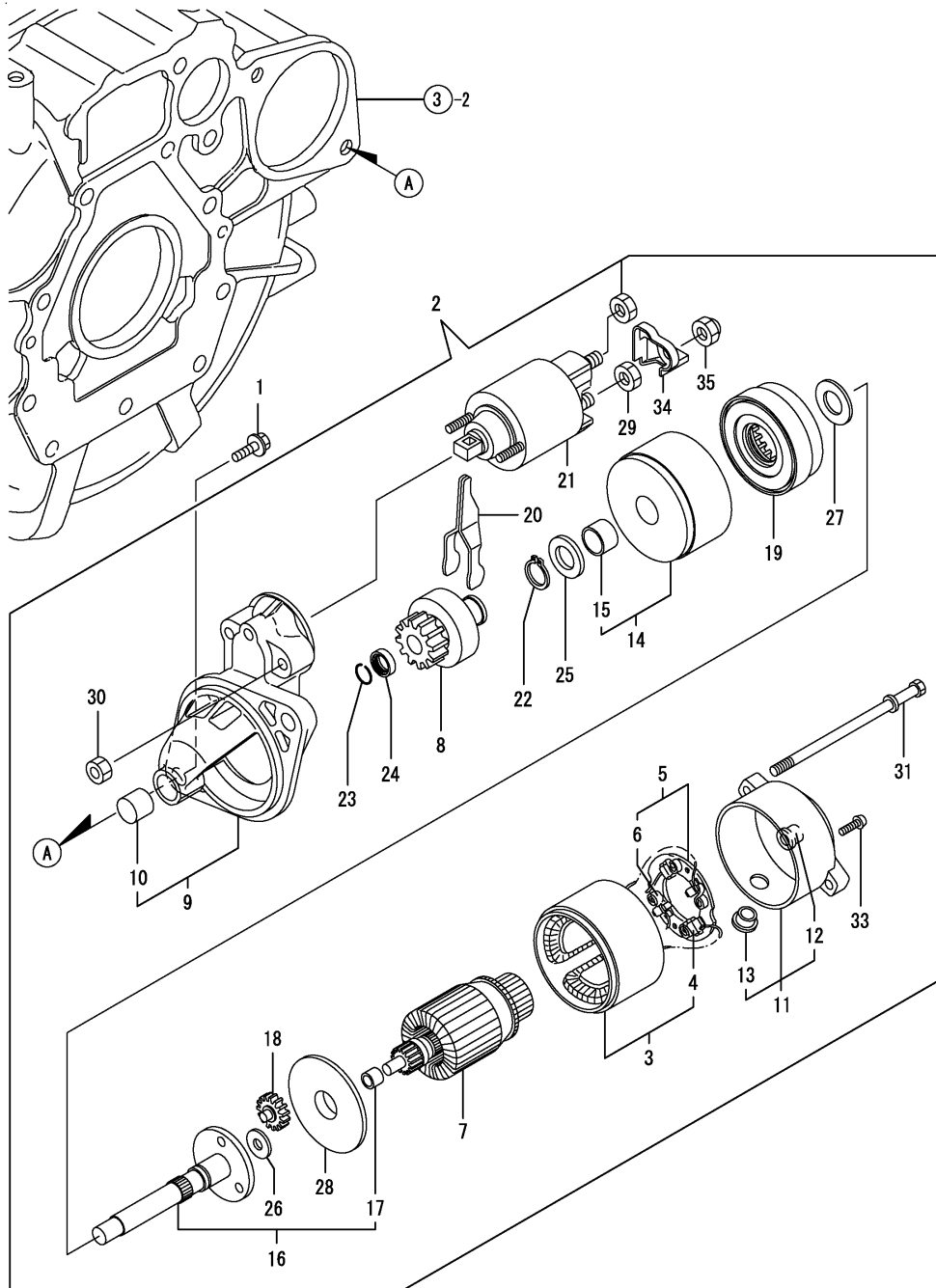
(E)=

(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119515-53001	VALVE ASSY,INJECTION	3							
2	2	118200-53010	HOLDER, NOZZLE	3							
3	2	119515-53010	VALVE ASSY,INJECTION	3							
4	1	129150-59120	RETAINER, PIPE	1							
7	2	129150-59131	BOLT, M4X14	2							
9	1	119546-59810	PIPE ASSY, INJECTION	1							
10	1	119546-59820	PIPE ASSY, INJECTION	1							
11	1	119546-59830	PIPE ASSY, INJECTION	1							
12	1	119840-59570	JOINT	1							
13	1	119515-59540	PIPE ASSY, RETURN	1							
19	1	129901-59560	GASKET	3							
20	1	119540-59570	PIPE ASSY, RETURN	1							
21	2	124066-59100	CLIP, HOSE 8	2							
23	1	119620-59700	NUT, NOZZLE	3							
24	1	119813-59950	VALVE ASSY, CHECK	1							
30	1	22190-120002	WASHER, SEAL 12	2							
31	1	103854-39140	BOLT, PIPE JOINT	1							
32	1	101304-59020	JOINT, PIPE 12	1							
33	1	22190-120002	WASHER, SEAL 12	2							
34	1	119833-55620	FILTER ASSY, FUEL	1							
35	2	119810-55340	LEVER	1							
36	2	104200-55330	SPRING, VALVE	1							
37	2	24311-240100	O-RING, 1AP10A	1							
38	2	104200-55750	SCREW, M4	1							
39	2	121254-55510	COVER	1							
40	2	110250-55610	RING, RETAINING	1							
41	2	102103-55520	O-RING	1							
42	2	119810-55650	ELEMENT	1							
43	2	121250-55620	SPRING	1							
44	1	129335-55750	SEPARATOR ASSY,WATER	1							
45	2	129053-55640	FLOAT	1							
46	2	129053-55650	SPRING, SCREEN	1							
47	2	119833-55660	RING, RETAINING	1							
48	2	129335-55740	CUP	1							
49	2	129335-55770	BODY ASSY	1							
50	3	129242-55750	VALVE, AIR VENT	2							
51	3	129242-55760	GASKET	2							
52	3	24311-000110	O-RING, 1AP11.0	1							
53	2	129335-55780	ELEMENT ASSY	1							
54	2	24311-000440	O-RING, 1AP44.0	1							
55	1	22190-120002	WASHER, SEAL 12	3							

Remarks
 *This item is applicable to
 [(A)=EZZZZZ] or following
 machines. Refer to Fig.12.

Fig.13. STARTING MOTOR



(A)=3TNV70-FDW

(B)=

(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	1	119515-77010	STARTER	1							
3	2	X0281007680	YOKE ASSY	1							
4	3	X0280996180	STARTER KIT	2							
5	2	X0285105190	HOLDER ASSY	1							
6	3	X0285205030	SPRING	4							
7	2	X0282005871	ARMATURE ASSY	1							
8	2	X0283006960	CLUTCH ASSY	1							
9	2	X4284001590	HOUSING ASSY	1							
10	3	X9491050100	BEARING, NEEDLE	1							
11	2	X0285007030	FRAME ASSY	1							
12	3	X9491040990	BEARING	1							
13	3	X0280626010	COVER	1							
14	2	X0284105040	BEARING ASSY	1							
15	3	X9491034330	BEARING	1							
16	2	X0286105010	SHAFT ASSY	1							
17	3	X9491034320	BEARING	1							
18	2	X0286305010	GEAR	3							
19	2	X0286355010	GEAR	1							
20	2	X0287405140	LEVER	1							
21	2	X0534007800	SWITCH ASSY	1							
22	2	X9055715000	RING	1							
23	2	X9490721360	RING	1							
24	2	X0280210331	NUT	1							
25	2	X9490138110	WASHER	1							
26	2	X9490138090	WASHER	1							
27	2	X9490138100	WASHER	1							
28	2	X0284525010	PLATE	1							
29	2	X9490562360	NUT	1							
30	2	X9490560750	NUT	2							
31	2	X9490423520	BOLT, THROUGH	2							
33	2	X9490065670	SCREW, M4X6	2							
34	2	X0280335360	COVER, TERMINAL	1							
35	2	X1289510130	NUT	1							

Fig.14. GENERATOR

(A)=3TNV70-FDW

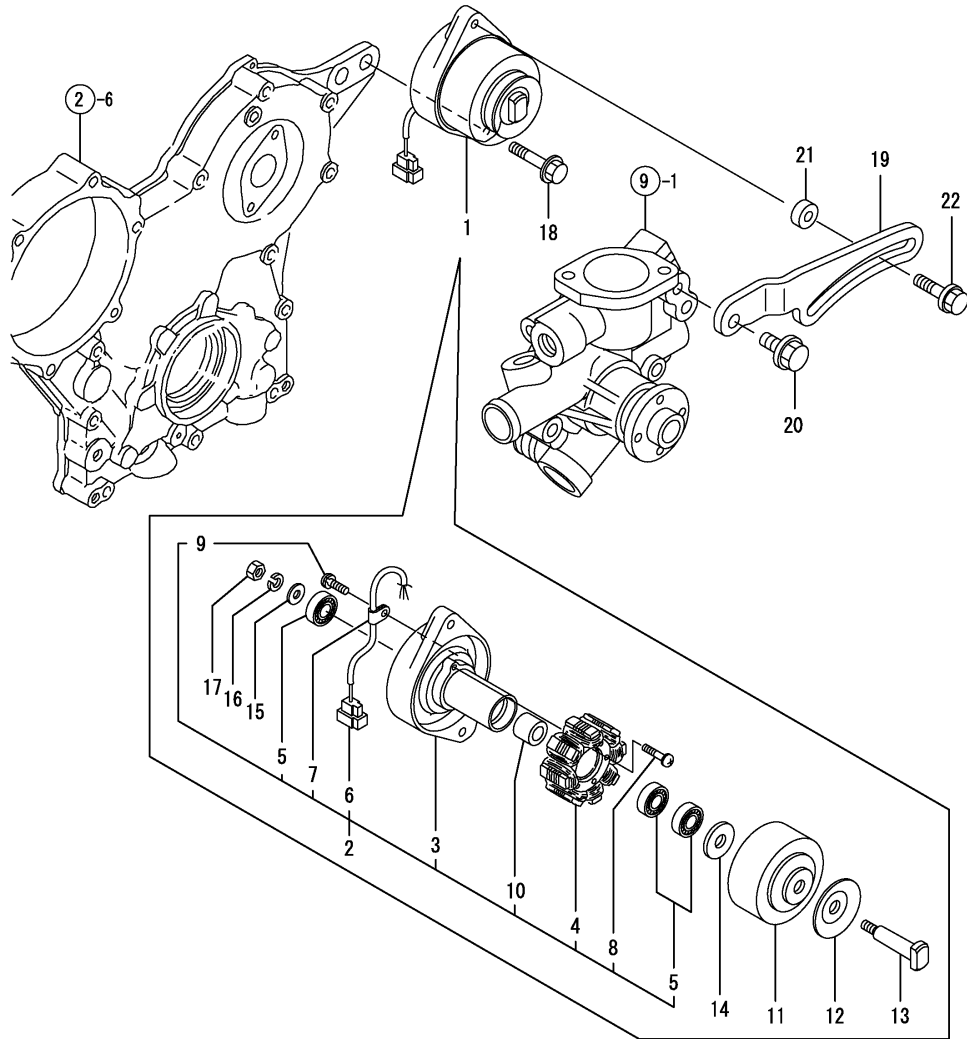
(B)=

(C)=

(D)=

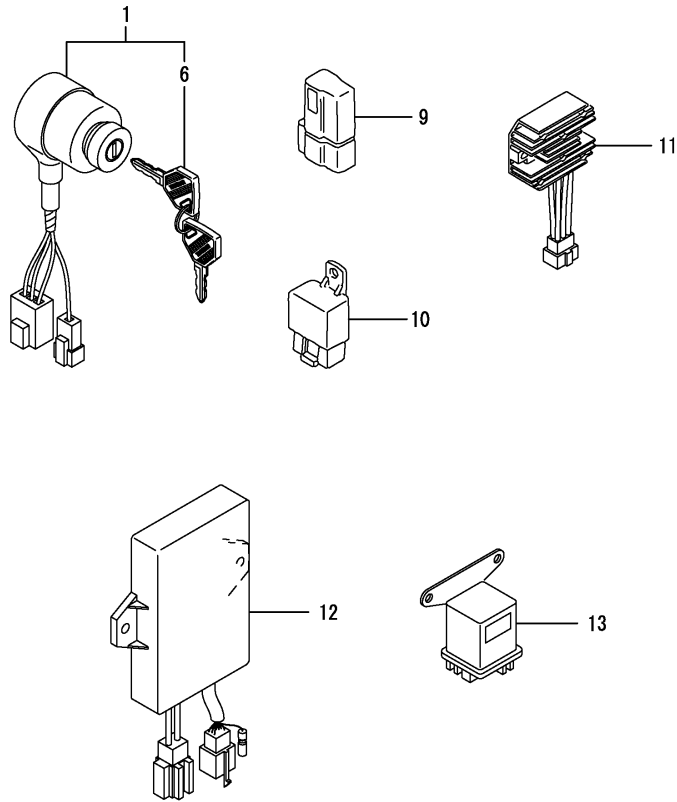
(E)=

(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	171301-77201	DYNAMO ASSY, 15A	1							
2	2	XM08137	PLATE ASSY	1							
3	3	X2A07073KA	PLATE	1							
4	3	X4A07023KB	STATOR ASSY	1							
5	3	24104-062010	BEARING, 6201UUC3	3							
6	3	X417878	COUPLER	1							
7	3	XM069000000	CLAMP	1							
8	3	XYSPS402400	SCREW	2							
9	3	XYSPS400800	SCREW	1							
10	3	XM329830000	COLLAR	1							
11	2	X3A08877KA	FLYWHEEL	1							
12	2	XM721740000	PULLEY	1							
13	2	X4A07403K01	SHAFT	1							
14	2	XM67935	WASHER	1							
15	2	XM860250000	WASHER	1							
16	2	XM219230000	WASHER	1							
17	2	XM863720000	NUT	1							
18	1	26106-100402	BOLT, M10X 40 PLATED	1							
19	1	119742-77300	ADJUSTER	1							
20	1	26106-080202	BOLT, M8X 20 PLATED	1							
21	1	119940-77270	SPACER, GENERATOR	1							
22	1	129972-77341	BOLT, ADJUSTER L=50	1							

Fig.15. ELECTLIC PART



(A)=3TNV70-FDW
(B)=
(C)=

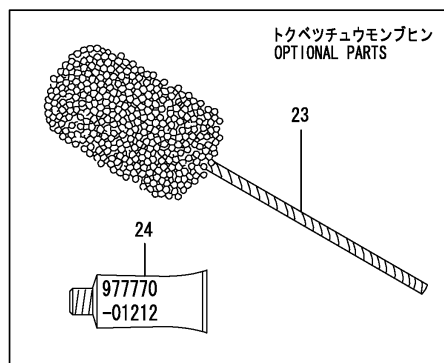
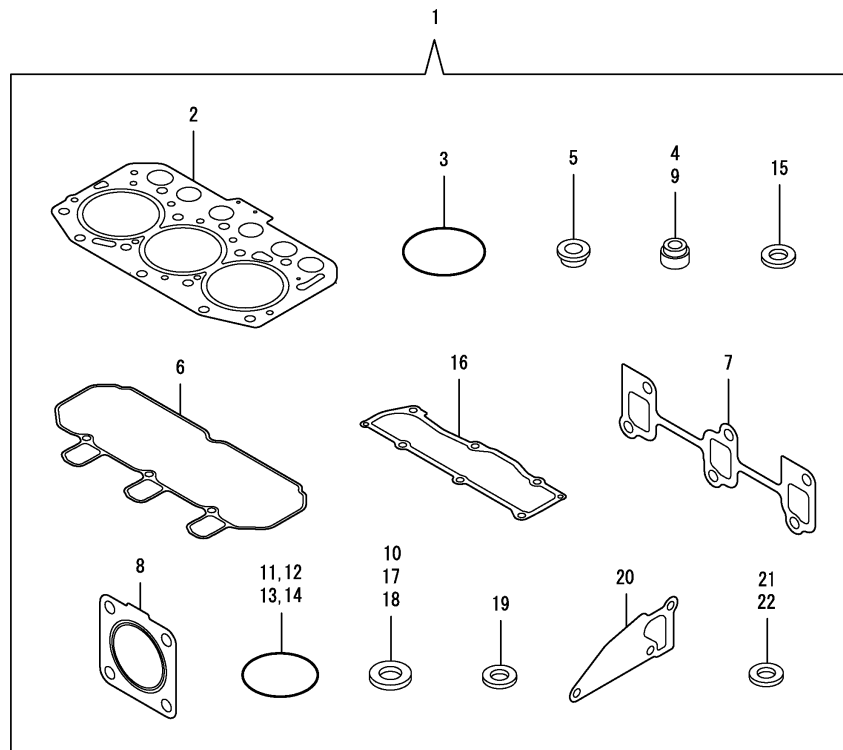
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	194940-52110	SWITCH, STARTING	1							
6	2	198360-52160	KEY ASSY	1							
9	1	119643-66900	DIODE	2							
10	1	119247-77100	RELAY, SAFETY	1							
11	1	119865-77700	LIMITER ASSY,CURRENT	1							
12	1	119546-77800	RELAY, EMERGENCY	1							
13	1	119650-77910	RELAY ASSY, GLOW	1							

Fig.16. GASKET SET

(A)=3TNV70-FDW
(B)=
(C)=

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	719515-92630	GASKET SET	1							1
2	2	119515-01330	GASKET, HEAD	1							
3	2	121850-51960	O-RING	1							
4	2	119717-11340	SEAL, VALVE STEM	3							
5	2	129901-11450	PROTECTOR, NOZZLE	3							
6	2	119515-11310	GASKET, BONNET	1							
7	2	119717-13110	GASKET	1							
8	2	119515-13200	GASKET, SILENCER	1							
9	2	119717-11350	SEAL, VALVE STEM	3							
10	2	22190-080002	WASHER, SEAL 6	4							
11	2	24311-000320	O-RING, 1AP32.0	2							
12	2	119717-32060	O-RING, P15.0	1							
13	2	119624-32040	O-RING, P12.0	1							
14	2	119717-32050	O-RING, P17.0	3							
15	2	119600-11460	GASKET, NOZZLE	6							
16	2	119515-11330	GASKET	1							
17	2	22190-160002	WASHER, SEAL 16	1							
18	2	22190-120002	WASHER, SEAL 12	4							
19	2	129901-59560	GASKET	3							
20	2	119515-42020	GASKET, WATER PUMP	1							
21	2	23414-080000	GASKET, 8X1.0	1							
22	2	124465-44950	GASKET, 16	2							
23	1	129400-92410	HONE	1							1
24	1	977770-01212	GASKET, LIQUID	1							1

Remarks
(1) OPTIONAL PART.

Parts No. Index

Parts No.	Fig. No.	Ref. No.
101304-59020	12	32
	17	32
101720-55750	12	54
102103-55520	12	41
		49
	17	41
103854-39140	12	31
	17	31
104200-55321	12	45
104200-55330	12	36
		46
	17	36
104200-55341	12	47
104200-55750	12	38
		55
	17	38
105010-11490	4	5
105311-01090	1	6
105425-01690	3	7
110250-55610	12	40
		50
	17	40
114250-39450	8	10
118200-53010	12	2
	17	2
118400-51370	10	55
119131-18320	5	5
119233-77932	11	134
119247-77100	15	10
119285-01990	1	9
119285-11990	4	14
119305-35151	8	3
119415-44740	9	19
119415-51100	10	10
119515-01200	1	30
119515-01330	1	31
	16	2
119515-01720	3	4
119515-11100	4	16
119515-11110	4	17
119515-11200	4	24
119515-11240	4	25
119515-11280	4	29
119515-11310	4	49
	16	6
119515-11320	4	50
119515-11330	4	51
	16	16
119515-11380	4	38
119515-11750	4	6

Parts No.	Fig. No.	Ref. No.
119515-11800	4	12
119515-13200	5	7
	16	8
119515-14400	6	2
119515-14580	6	3
119515-21700	7	1
119515-22080	7	16
119515-22300	7	22
119515-22500	7	18
119515-22550	7	34
119515-22900	7	32
119515-23000	7	24
119515-23600	7	30
119515-23610	7	38
119515-42001	9	1
119515-42002	9	1 -1
119515-42020	9	12
	16	20
119515-42041	9	3
119515-42350	9	17
119515-53001	12	1
	17	1
119515-53010	12	3
	17	3
119515-59540	12	13
	17	13
119515-61440	11	21
119515-77010	13	2
119540-59570	12	20
	17	20
119546-01770	3	6
119546-21590	7	9
119546-35080	8	5
119546-59810	12	9
	17	9
119546-59820	12	10
	17	10
119546-59830	12	11
	17	11
119546-77800	15	12
119600-11460	4	4
	16	15
119620-01750	3	13
119620-01800	2	8
119620-02020	1	10
119620-14200	6	1
119620-21941	7	15
119620-59700	12	23
	17	23
119621-21680	7	14

Parts No.	Fig. No.	Ref. No.
119623-01250	1	7
119624-32040	2	20
	16	13
119643-66900	15	9
119650-77910	15	13
119660-01911	2	19
119660-61300	11	78
119660-61901	11	66
119717-01501	2	1
119717-01521	2	6
119717-01570	2	3
119717-01590	2	4
119717-01601	3	2
119717-01750	2	18
119717-02410	1	13
119717-02930	1	27
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	4
119717-11350	4	22
	16	9
119717-11650	4	30
119717-13110	5	2
	16	7
119717-13600	5	3
119717-21200	7	6
119717-21650	7	13
119717-23200	7	29
119717-23910	7	28
119717-25050	6	10
119717-25100	6	11
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