

0CD50-M02850EN

# P R E F A C E

This parts catalog is the 1st edition of 4TNV98-ZCVKBHC for KATO WORKS CO., LTD.

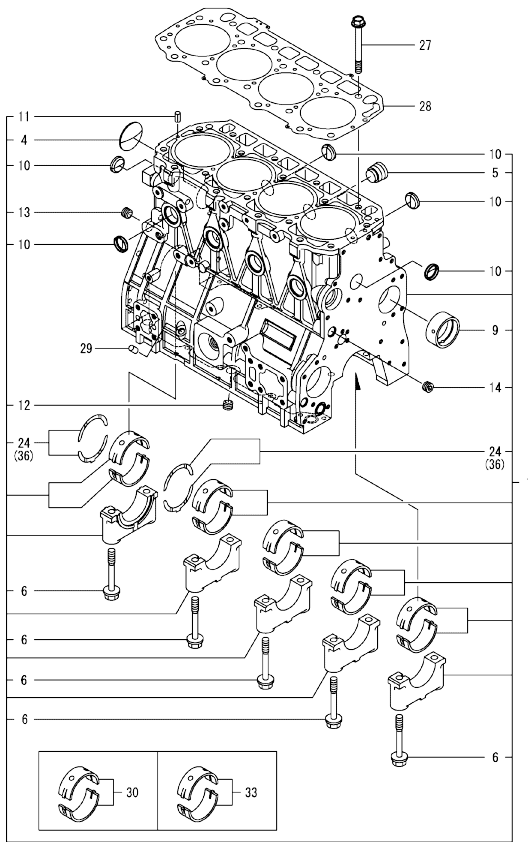
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OCD50-M02850

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Fig.1. CYLINDER BLOCK



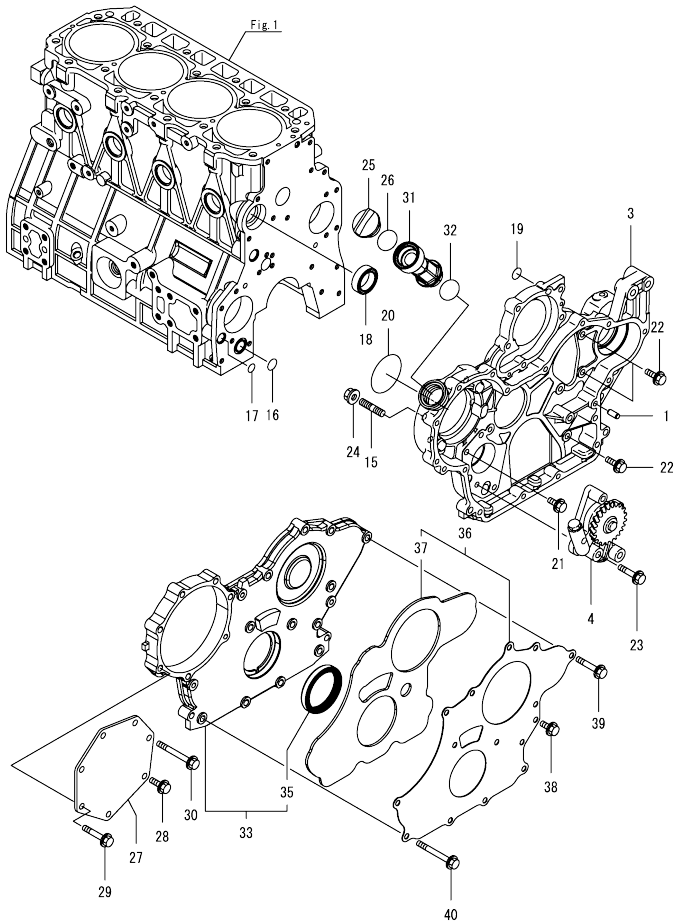
(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729927-01560	BLOCK ASSY, CYLINDER	1							
4	2	129900-01250	PLUG, DISH TYPE 55	1							
5	2	171051-01921	PLUG, NPTF1	1							
6	2	129900-02020	BOLT, METAL CAP	10							
9	2	129900-02410	BUSH, CAMSHAFT	1							
10	2	27241-300000	PLUG 30	8							
11	2	22351-060012	PIN, SPRING 6.0X12	2							
12	2	23876-030000	PLUG, R03	1							
13	2	23876-030000	PLUG, R03	1							
14	2	23876-030000	PLUG, R03	1							
24	2	129900-02931	BEARING ASSY, THRUST	2							
27	1	129900-01200	BOLT, CYLINDER HEAD	18							
28	1	129907-01331	GASKET, HEAD	1							
29	1	119309-01810	PLUG	1							
30	1	729900-02801	BEARING, MAIN	5							1
33	1	129900-02341	BEARING ASSY, MAIN	5							2
36	1	129900-02941	BEARING, THRUST 0.25	2							3

Remarks  
(1) Spare parts.  
(2) Under-sized (U.S.=0.25) parts.  
(3) Over-sized (O.S.=0.25) parts.

Fig.2. GEAR HOUSING

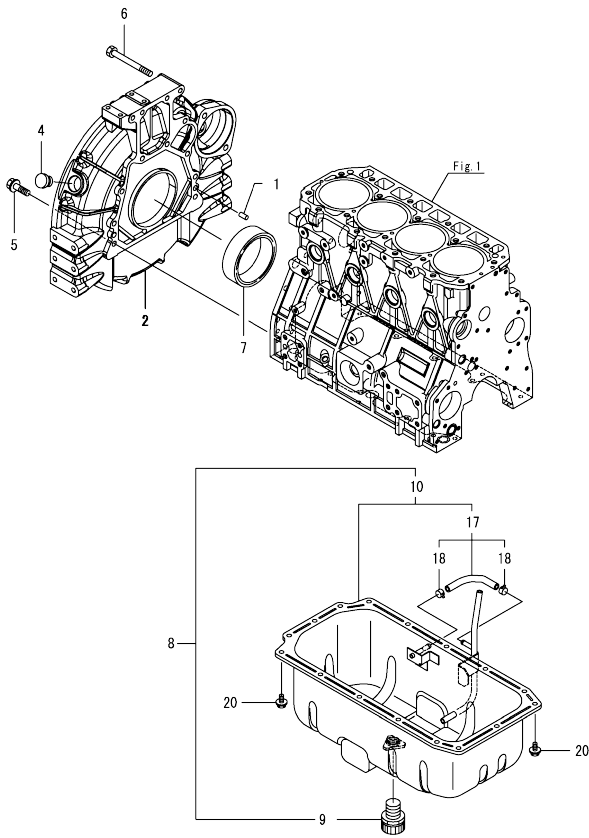


(A)=4TNV98-ZCVKBHC  
(B)=  
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(D)=  
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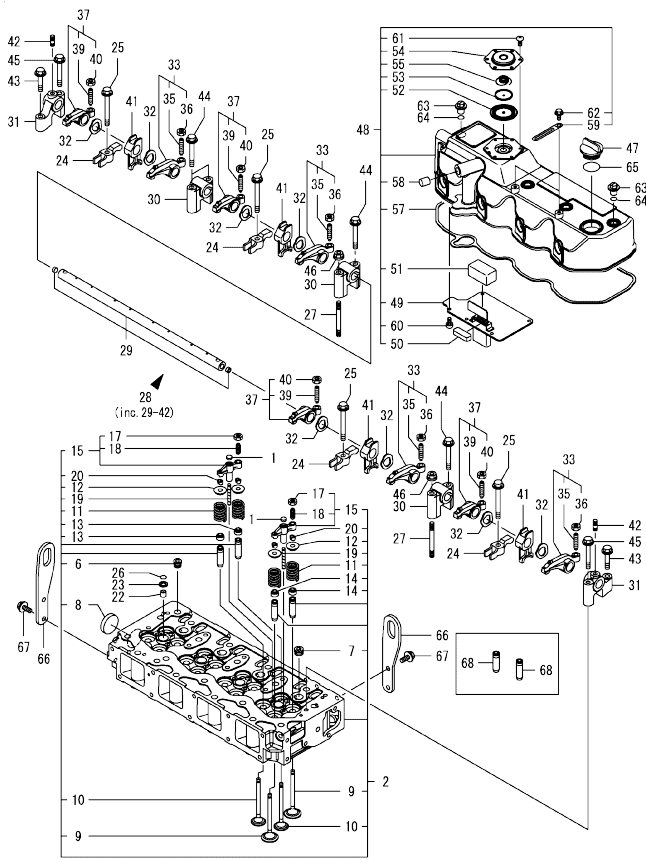
No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, PARALLEL 8X16	4							
3	1	129944-01500	CASE, GEAR	1							
4	1	129900-32001	PUMP ASSY, OIL	1							
15	1	26216-100302	STUD, M10X 30	4							
16	1	129900-32030	O-RING, P20	1							
17	1	129900-32040	O-RING, P14	1							
18	1	129927-42140	GASKET, CW-P OUT	1							
19	1	24311-000070	O-RING, 1AP7.0	1							
20	1	24351-030750	O-RING, 1A3075	1							
21	1	26106-080162	BOLT, M8X 16 PLATED	1							
22	1	26106-080202	BOLT, M8X 20 PLATED	3							
23	1	26106-080452	BOLT, M8X 45 PLATED	3							
24	1	26306-100002	NUT, M10	4							
25	1	124160-01751	CAP, FILLER	1							
26	1	24311-000320	O-RING, 1AP32.0	1							
27	1	129951-01740	COVER	1							
28	1	26106-080202	BOLT, M8X 20 PLATED	1							
29	1	26106-080452	BOLT, M8X 45 PLATED	5							
30	1	26106-080752	BOLT, M8X 75 PLATED	1							
31	1	121027-11743	PIPE	1							
32	1	24311-000320	O-RING, 1AP32.0	1							
33	1	729907-01559	COVER ASSY,GEAR CASE	1							
35	2	129916-01800	SEAL, OIL	1							
36	1	129900-01850	COVER ASSY,GEAR CASE	1							
37	2	129900-01870	SPONGE, GEAR CASE	1							
38	1	26106-080162	BOLT, M8X 16 PLATED	3							
39	1	26106-080402	BOLT, M8X 40 PLATED	5							
40	1	26106-080702	BOLT, M8X 70 PLATED	6							

Fig.3. FLYWHEEL HOUSING & OIL SUMP



No.	Lev.	Parts No.	Description	Q'ty					
				(A)	(B)	(C)	(D)	(E)	(F)
1	1	129100-01580	PIN, PARALLEL 8X16	2					
2	1	129926-01640	HOUSING, FLYWHEEL	1					
4	1	119620-01750	CAP	1					
5	1	26206-100352	BOLT, M10X 35 PLATED	9					
6	1	26206-100952	BOLT, M10X 95 PLATED	4					
7	1	129916-01790	SEAL, D115/95XT11	1					
8	1	129923-01700	OIL PAN ASSY	1					
9	2	129906-01640	COCK, DRAIN	1					
10	2	129E20-01700	OIL PAN ASSY	1					
17	3	129E20-59500	HOSE ASSY	1					
18	4	124766-59050	CLAMP, HOSE 11.5	2					
20	1	26106-080122	BOLT, M8X 12 PLATED	16					

Fig.4. CYLINDER HEAD & BONNET



(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

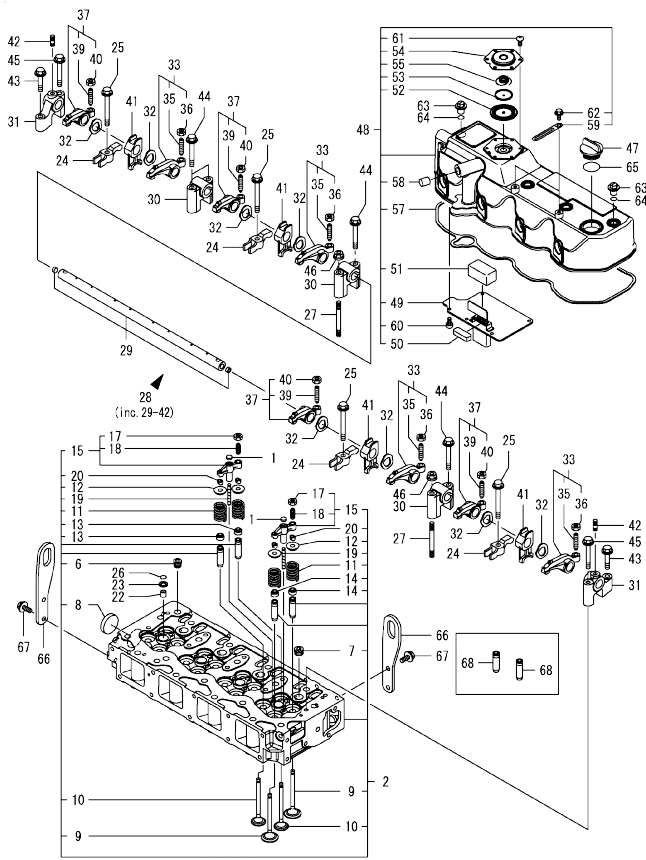
(D)=  
(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	123907-11550	SEAT, VALVE BRIDGE	8							
2	1	129927-11700	HEAD ASSY, CYLINDER	1							
6	2	23876-020000	PLUG, R02	1							
7	2	23876-030000	PLUG, R03	4							
8	2	27241-400000	PLUG, 40	1							
9	2	129907-11100	VALVE, SUCTION	8							
10	2	129907-11110	VALVE, EXHAUST	8							
11	2	129907-11120	SPRING, VALVE	16							
12	2	119620-11180	RETAINER, SPRING	16							
13	2	119803-11340	SEAL, VALVE STEM	8							
14	2	124160-11340	SEAL, VALVE STEM	8							
15	2	129907-11510	BRIDGE ASSY, VALVE	8							
17	3	129150-11750	NUT, M8	8							
18	3	123907-11830	ADJUSTER	8							
19	2	123907-11820	GUIDE, BRIDGE	8							
20	2	27310-070001	COTTER, 7	16							
22	1	119802-11870	PROTECTOR, NOZZLE	4							
23	1	119625-11880	SEAT, NOZZLE	4							
24	1	129907-11910	RETAINER, NOZZLE	4							
25	1	129907-11950	BOLT, M8X75	4							
26	1	24311-000120	O-RING, 1AP12.0	4							
27	1	119593-11301	BOLT, STUD M8X80	2							
28	1	129907-11341	SHAFT ASSY, ROCKER	1							
29	2	129907-11250	SHAFT, ROCKER ARM	1							
30	2	129907-11260	SUPPORT, ROCKER ARM	3							
31	2	129907-11270	SUPPORT, ROCKER ARM	2							
32	2	123907-11280	WASHER	8							
33	2	129907-11650	ARM ASSY, ROCKER	4							
35	3	129150-11230	SCREW, VALVE ADJUST	4							
36	3	129150-11750	NUT, M8	4							
37	2	129907-11660	ARM ASSY, ROCKER	4							
39	3	129150-11230	SCREW, VALVE ADJUST	4							
40	3	129150-11750	NUT, M8	4							
41	2	129907-11920	RETAINER, NOZZLE	4							
42	2	26226-080222	STUD, M8X 22	2							
43	1	26106-080402	BOLT, M8X 40 PLATED	2							
44	1	26106-080602	BOLT, M8X 60 PLATED	4							
45	1	26106-080602	BOLT, M8X 60 PLATED	2							
46	1	26306-080002	NUT, M8	2							
47	1	124160-01751	CAP, FILLER	1							
48	1	129927-11320	BONNET ASSY, HEAD	1							
49	2	129907-03011	PLATE, BAFFLE	1							
50	2	129907-03061	BAFFLE, BREATHER	1							
51	2	129907-03070	BAFFLE, BREATHER	1							
52	2	123907-03100	DIAPHRAGM	1							
53	2	123907-03110	PLATE	1							
54	2	123907-03120	PLATE, BREATHER	1							
55	2	123907-03140	SPRING, DIAPHRAGM	1							
57	2	129933-11310	GASKET, BONNET	1							
58	2	119640-61400	PLUG	1							
59	2	175339-79700	CLIP	2							

Remarks

(1)Spare parts.

Fig.4. CYLINDER HEAD & BONNET



(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
60	2	22857-500100	SCREW, 5X10	6							
61	2	22857-500100	SCREW, 5X10	6							
62	2	26106-060122	BOLT, M6X 12 PLATED	2							
63	1	124160-11360	KNOB	4							
64	1	24311-000120	O-RING, 1AP12.0	4							
65	1	24311-000320	O-RING, 1AP32.0	1							
66	1	129907-07900	LIFTER, ENGINE	2							
67	1	26106-080162	BOLT, M8X 16 PLATED	4							
68	1	129907-11800	GUIDE, VALVE	16							1

Remarks

(1)Spare parts.



Fig.5. SUCTION MANIFOLD

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty					
				(A)	(B)	(C)	(D)	(E)	(F)
1	1	129907-12110	GASKET, MANIFOLD	1					
2	1	129927-12150	MANIFOLD ASSY,INTAKE	1					
3	2	129927-12100	MANIFOLD, AIR INTAKE	1					
4	2	26216-060202	STUD, M6X 20	2					
5	1	26106-080452	BOLT, M8X 45 PLATED	6					
6	1	26106-080802	BOLT, M8X 80 PLATED	4					
7	1	119129-77020	GASKET	1					
8	1	121850-77021	GASKET, AIR HEATER	1					
9	1	119129-77500	HEATER, AIR	1					
10	1	119129-77520	BEND	1					
11	1	26106-080402	BOLT, M8X 40 PLATED	2					
12	1	26106-080902	BOLT, M8X 90 PLATED	2					

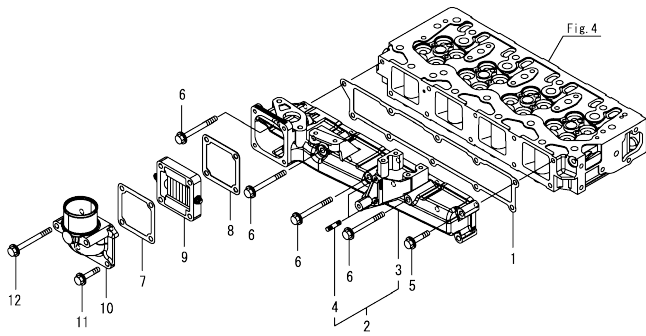


Fig.6. EXHAUST MANIFOLD

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129927-13150	MANIFOLD ASSY, EXH.	1							
2	2	129927-13101	MANIFOLD, EXHAUST	1							
3	2	119131-18320	BOLT, STUD M8X22	4							
4	2	129418-18320	BOLT, STUD M8X20	2							
5	1	129263-13210	BOLT, STUD M8X90	2							
6	1	129900-13251	GASKET, EXH.MANIFOLD	1							
7	1	129E00-13650	BOLT, M8X90 10.9T	6							
8	1	26306-080002	NUT, M8	2							
9	1	129927-13800	PIPE ASSY, EGR	1							
10	1	129927-13810	GASKET	1							
11	1	26106-100302	BOLT, M10X 30 PLATED	2							
12	1	26306-080002	NUT, M8	2							
13	1	129928-13900	VALVE, EGR	1							
14	1	129927-13910	GASKET, EGR	1							
15	1	129927-13920	GASKET, EGR	1							
16	1	26106-100302	BOLT, M10X 30 PLATED	1							
17	1	26106-100952	BOLT, M10X 95 PLATED	1							

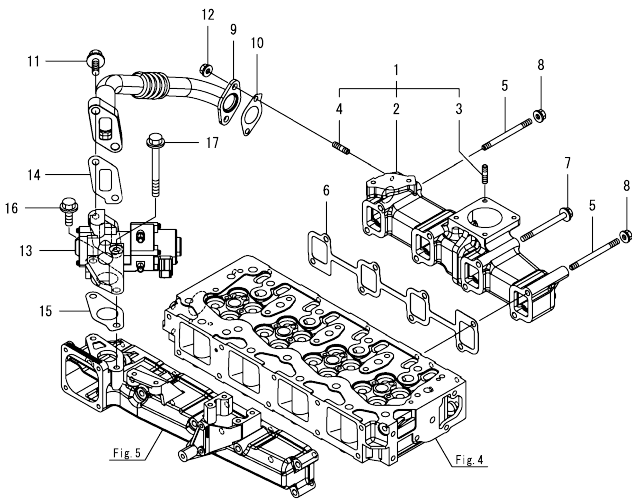
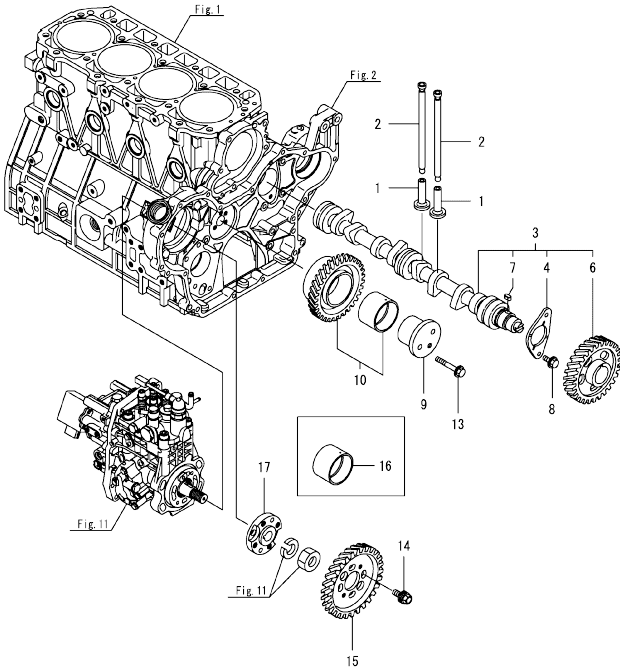


Fig.7. CAMSHAFT & DRIVING GEAR



(A)=4TNV98-ZCVKBHC  
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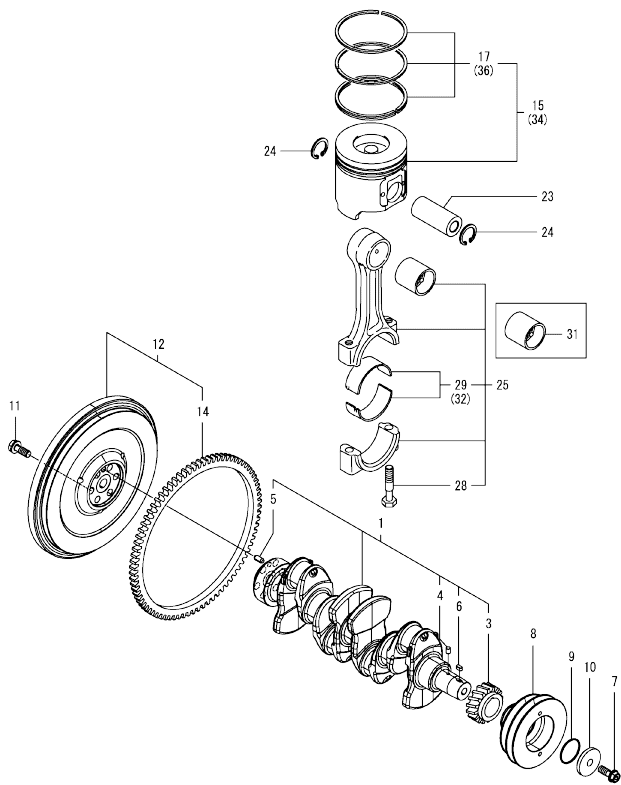
(D)=  
(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129150-14200	TAPPET	8							
2	1	129907-14400	PUSH-ROD	8							
3	1	129908-14581	CAMSHAFT ASSY	1							
3-1	1	129932-14580	CAMSHAFT ASSY	1							N
		(A=E18765A)									
4	2	129150-02450	BEARING, THRUST	1							
6	2	129900-14100	GEAR, CAMSHAFT	1							
7	2	22512-070140	KEY, 7X 14	1							
8	1	26106-080142	BOLT, M8X 14 PLATED	2							
9	1	123900-25060	SHAFT, IDLE GEAR	1							
10	1	129900-25100	GEAR ASSY, IDLE	1							
13	1	26106-080552	BOLT, M8X 55 PLATED	3							
14	1	129953-25300	BOLT	4							
15	1	129907-25900	GEAR, PUMP	1							
16	1	129150-25920	BUSH, IDLE GEAR	1							1
17	1	158563-51150	FLANGE	1							

Remarks

(1)Spare parts.

Fig.8. CRANKSHAFT & PISTON



(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

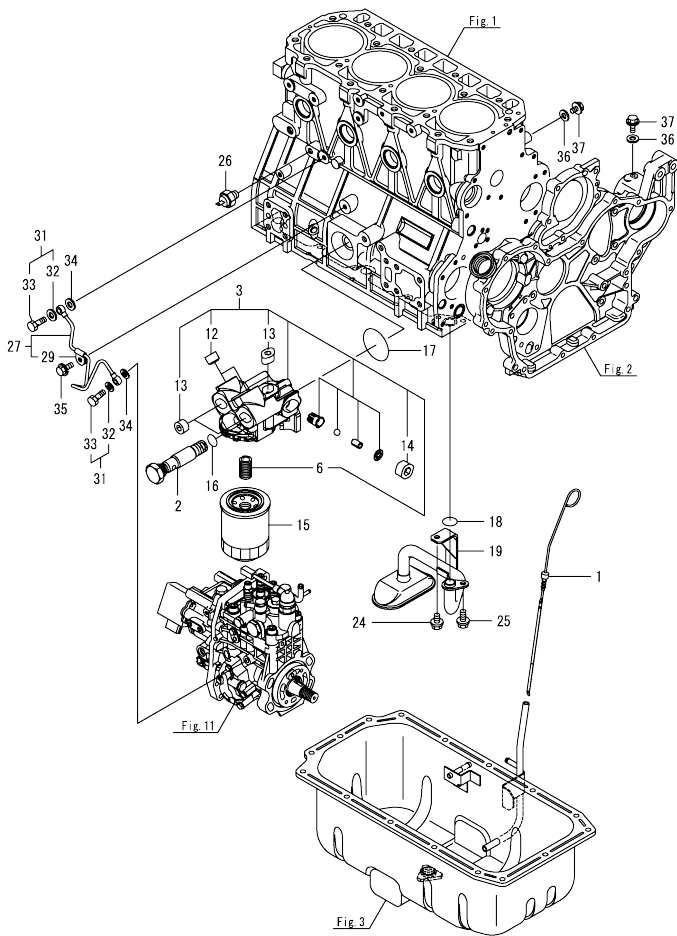
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(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129908-21000	CRANKSHAFT ASSY	1							
3	2	129900-21200	GEAR, CRANKSHAFT	1							
4	2	121850-21290	PIN	1							
5	2	121850-21920	PIN, PARALLEL 10X22	1							
6	2	22512-070140	KEY, 7X 14	1							
7	1	129916-21610	BOLT	1							
8	1	129950-21670	V-PULLEY	1							
9	1	129960-21930	GASKET, WASHER	1							
10	1	129960-21940	WASHER, V-PULLEY	1							
11	1	121850-21130	BOLT, FLYWHEEL	6							
12	1	129929-21320	FLYWHEEL ASSY	1							
14	2	129900-21600	GEAR, RING	1							
15	1	129968-22080	PISTON ASSY	4							
17	2	129927-22050	RING SET, PISTON	4							
23	1	120130-22301	PIN, PISTON	4							
24	1	22252-000300	RING, 30	8							
25	1	129900-23001	ROD ASSY, CONNECTING	4							
28	2	129900-23200	BOLT, CONNECTING ROD	8							
29	2	129900-23601	BEARING, CRANK PIN	4							
31	1	129900-23911	BEARING, PISTON PIN	4							1
32	1	129900-23611	BEARING ASSY, 0.25US	4							2
34	1	729927-22900	PISTON ASSY, 0.25 OS	4							3
36	2	729927-22950	RING SET, 0.25 OS	4							3

Remarks

- (1) Spare parts.
- (2) Under-sized (U.S.=0.25) parts.
- (3) Over-sized (O.S.=0.25) parts.

Fig.9. LUB. OIL SYSTEM

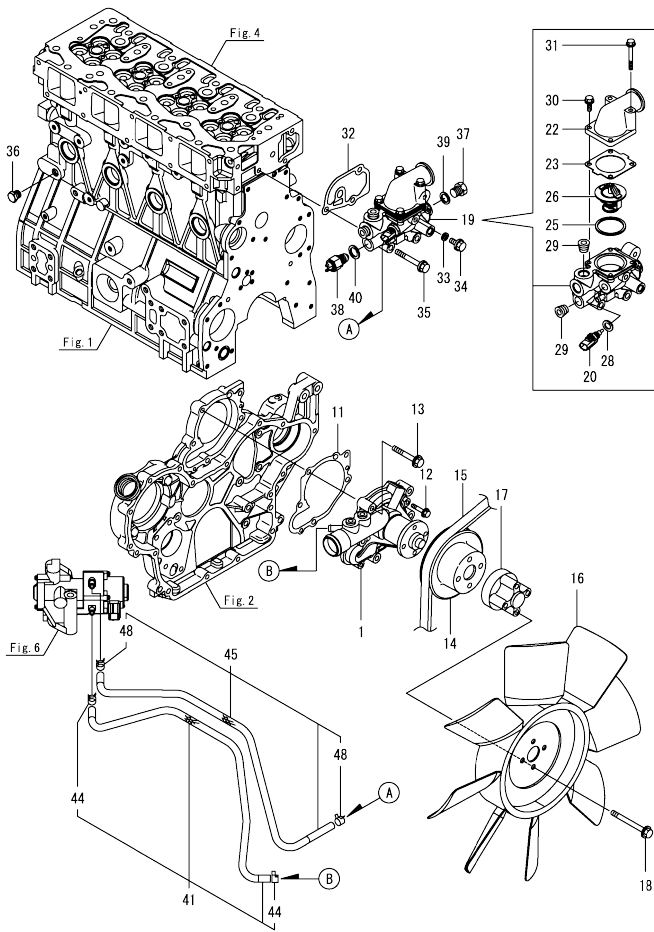


(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129E20-34861	DIPSTICK	1							
2	1	129956-33110	BOLT	1							
3	1	129923-35111	BRACKET ASSY, FILTER	1							
6	2	129100-35140	BOLT, STUD	1							
12	2	23875-040000	PLUG, R04	2							
13	2	23876-040000	PLUG, R04	3							
14	2	23876-060000	PLUG, R06	1							
15	1	129150-35160	FILTER, D80XL80	1							
16	1	24314-000200	O-RING, 4CP20.0	1							
17	1	24321-000600	O-RING, 1AG60.0	1							
18	1	129900-32030	O-RING, P20	1							
19	1	129953-35000	PIPE ASSY, OIL INLET	1							
24	1	26106-080122	BOLT, M8X 12 PLATED	1							
25	1	26106-080162	BOLT, M8X 16 PLATED	1							
26	1	119761-39450	SWITCH, HYDRAULIC	1							
27	1	129927-39060	PIPE ASSY, OIL	1							
29	2	123907-39500	RETAINER, PIPE	1							
31	1	129005-59830	BOLT ASSY, JOINT M8	2							
32	2	22190-080002	WASHER, SEAL 8	2							
33	2	23857-030000	BOLT, JOINT 3	2							
34	1	22190-080002	WASHER, SEAL 8	2							
35	1	26106-080122	BOLT, M8X 12 PLATED	1							
36	1	22190-080002	WASHER, SEAL 8	2							
37	1	26106-080122	BOLT, M8X 12 PLATED	2							

Fig.10. COOLING WATER SYSTEM



(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

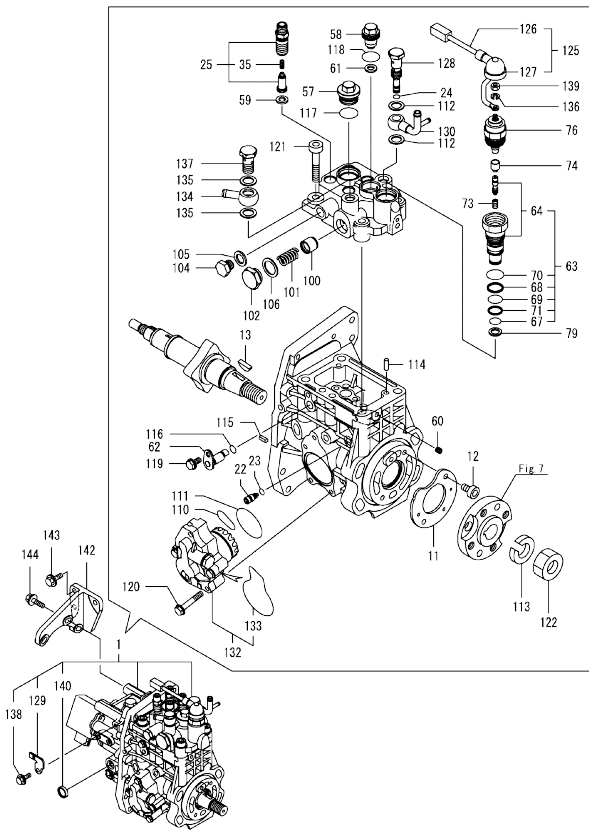
(D)=  
(E)=  
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129927-42001	PUMP ASSY, WATER	1							
11	1	129900-42020	GASKET, WATER PUMP	1							
12	1	26106-060302	BOLT, M6X 30 PLATED	2							
13	1	26106-080552	BOLT, M8X 55 PLATED	5							
14	1	129916-42410	V-PULLEY, C.W.PUMP	1							
15	1	129932-42240	V-BELT, B43.5CH	1							
16	1	129985-44710	FAN, COOLING	1							
17	1	129973-44760	SPACER, FAN 50	1							
18	1	26106-080652	BOLT, M8X 65 PLATED	4							
19	1	129927-49810	CASE ASSY,THERMOSTAT	1							
20	2	129927-44900	SENSOR, WATER TEMP.	1							
22	2	129980-49530	COVER, THERMOSTAT	1							
23	2	121850-49540	GASKET, THERMOSTAT	1							
25	2	121850-49550	GASKET, THERMOSTAT	1							
26	2	121850-49811	THERMOSTAT, 71C	1							
28	2	22190-120002	WASHER, SEAL 12	1							
29	2	23875-030000	PLUG, R03	2							
30	2	26106-060202	BOLT, M6X 20 PLATED	2							
31	2	26106-060552	BOLT, M6X 55 PLATED	2							
32	1	129900-49870	GASKET, THERMOSTAT	1							
33	1	23414-080000	GASKET, 8X1.0	1							
34	1	26106-080122	BOLT, M8X 12 PLATED	1							
35	1	26106-080602	BOLT, M8X 60 PLATED	3							
36	1	171056-49120	PLUG, DRAIN R1/4	1							
37	1	121450-42450	PLUG, M16	1							
38	1	121250-44901	SWITCH, THERMO 110	1							
39	1	124465-44950	GASKET, 16	1							
40	1	124465-44950	GASKET, 16	1							
41	1	129927-49610	HOSE ASSY, WATER	1							
44	2	23080-012000	CLAMP, 12	2							
45	1	129927-49620	HOSE ASSY, WATER	1							
48	2	23080-012000	CLAMP, 12	2							

Fig.11. FUEL INJECTION PUMP

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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



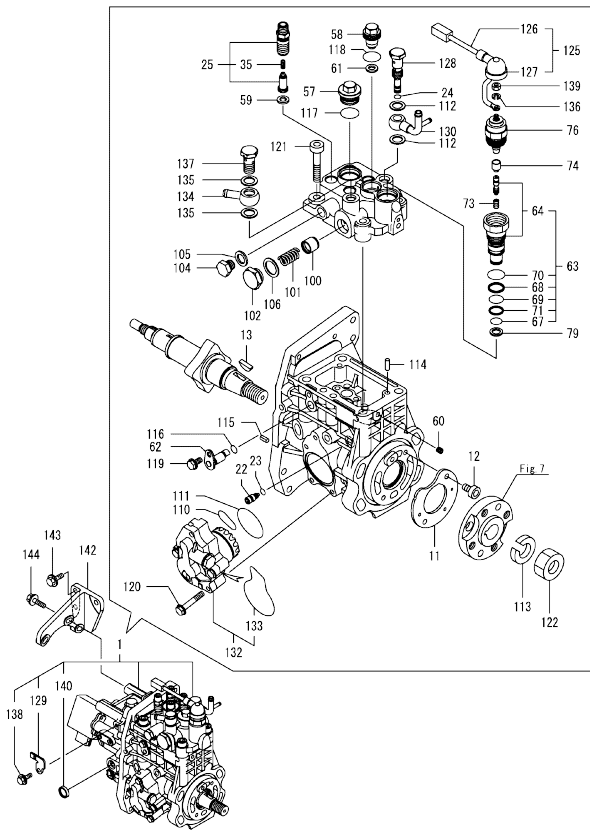
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729926-51330	FIE ASSY	1							1
11	2	129928-51900	COVER	1							
12	2	129008-51920	BOLT, SOCKET M6X10	2							
13	2	144626-51090	FEATHER KEY, 5X19	1							
22	2	158600-51270	STOPPER, TAPPET	1							
23	2	158563-51281	O-RING, 4D S6	1							
24	2	158563-51281	O-RING, 4D S6	1							
25	2	129927-51390	VALVE ASSY, DELIVERY	4							
35	3	158563-51330	SPRING, DELIVERY	4							
57	2	158601-51550	PLUG, M22	1							
58	2	129907-51560	PLUG, M16	1							
59	2	158552-51571	GASKET, PLUG	4							
60	2	158557-51570	PLUG, RACK	1							
61	2	129906-51580	GASKET, PLUG	1							
62	2	158552-51580	LIFTER, LINK	1							
63	2	129657-51590	TIMER ASSY	1							
64	3	129657-51600	TIMER ASSY	1							
67	3	158553-51670	O-RING	1							
68	3	119802-51680	RING, BACKUP	1							
69	3	119802-51690	O-RING	1							
70	3	24356-190200	O-RING, 4D19020	1							
71	3	24372-000150	RING, BACK UP T2P15	1							
73	2	119852-51630	SPRING, TIMER	1							
74	2	119852-51640	CAP, TIMER	1							
76	2	119852-51650	VALVE ASSY, SOLENOID	1							
79	2	158553-51680	GASKET, TIMER	1							
100	2	158601-51770	PISTON, ACCUMULATOR	1							
101	2	158552-51781	SPRING, ACCUMULATOR	1							
102	2	158601-51790	PLUG	1							
104	2	158553-51930	PLUG, M12	1							
105	2	22190-120002	WASHER, SEAL 12	1							
106	2	22190-180002	WASHER, SEAL 18	1							
110	2	158552-52311	O-RING	1							
111	2	158552-52400	O-RING, 4E S42	1							
112	2	22190-120002	WASHER, SEAL 12	2							
113	2	22217-180000	WASHER, SPRING 18	1							
114	2	22312-050140	PIN, PARALLEL 5X14	2							
115	2	22351-050010	PIN, SPRING 5.0X10	2							
116	2	24311-000070	O-RING, 1AP7.0	1							
117	2	24356-190200	O-RING, 4D19020	1							
118	2	24356-240210	O-RING, 4D24021	1							
119	2	26106-060102	BOLT, M6X 10 PLATED	1							
120	2	26106-060352	BOLT, M6X 35 PLATED	4							
121	2	26450-100452	BOLT, M10X 45	4							
122	2	26776-180002	NUT, LOCK M18	1							
125	2	129927-51650	HARNES ASSY, WIRE	1							
126	3	129927-51660	HARNES	1							
127	3	129263-77941	CAP, RUBBER	1							
128	2	158601-51650	JOINT, OVER FLOW	1							
129	2	129927-51670	BRACKET	1							
130	2	158552-51670	JOINT, OVER FLOW	1							

Remarks  
 (1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).  
 (1)Eco pump  
 Make sure to update the engines ECU information when replacing the Eco pump.  
 Failing to do so will result in engine malfunction.

Fig.11. FUEL INJECTION PUMP

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
132	2	158552-52100	PUMP ASSY, FUEL FEED	1							
133	3	158552-52500	O-RING	1							
134	2	129916-59020	JOINT, PIPE 12	1							
135	2	22190-120002	WASHER, SEAL 12	2							
136	2	22217-050000	WASHER, SPRING 5	1							
137	2	23857-060000	BOLT, JOINT 6	1							
138	2	26106-060122	BOLT, M6X 12 PLATED	1							
139	2	26716-050002	NUT, M5	1							
140	2	27241-160000	PLUG, 16	1							
142	1	129927-51250	RETAINER, PUMP	1							
143	1	26106-080202	BOLT, M8X 20 PLATED	3							
144	1	26106-080302	BOLT, M8X 30 PLATED	3							

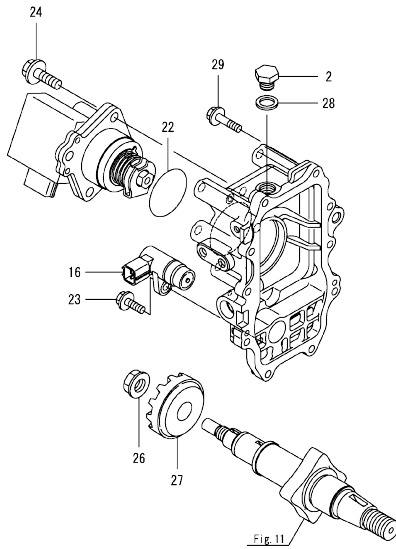
Remarks

(1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).  
(1)Eco pump  
Make sure to update the engines ECU information when replacing the Eco pump.  
Failing to do so will result in engine malfunction.



OCD50-M02850 ENGINE  
 Fig.12. GOVERNOR

OCD50-M02850 Fig.12



(A)=4TNV98-ZCVKBHC  
 (B)=  
 (C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
2	2	158553-51930	PLUG, M12	1							
16	2	158557-61720	SENSOR	1							
22	2	24341-000480	O-RING, 1AS48.0	1							
23	2	26106-060162	BOLT, M6X 16 PLATED	1							
24	2	26106-080252	BOLT, M8X 25 PLATED	3							
26	2	129008-61301	NUT	1							
27	2	158553-61780	GEAR, SENSOR	1							
28	2	22190-120002	WASHER, SEAL 12	1							
29	2	26106-060252	BOLT, M6X 25 PLATED	10							

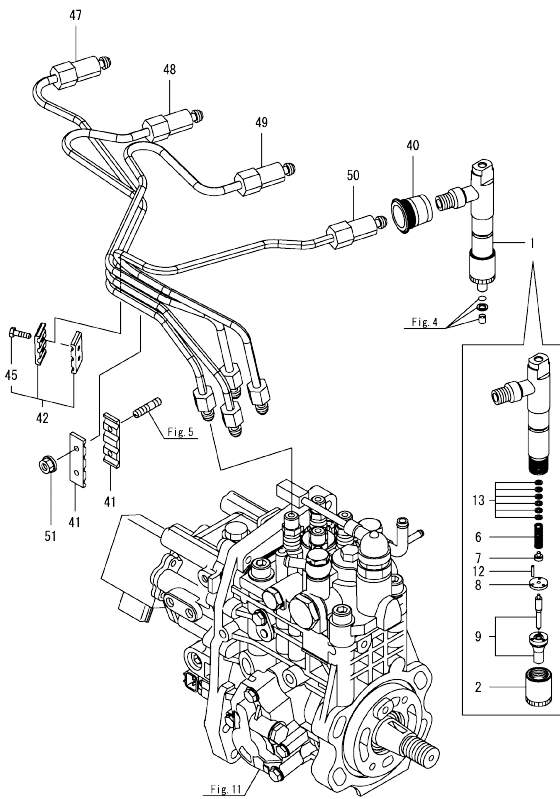
Remarks  
 \* This figure(Governor) is incorporated in the Fuel Injection Pump(Fig.11).

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  
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Fig.13. FUEL INJECTION VALVE

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

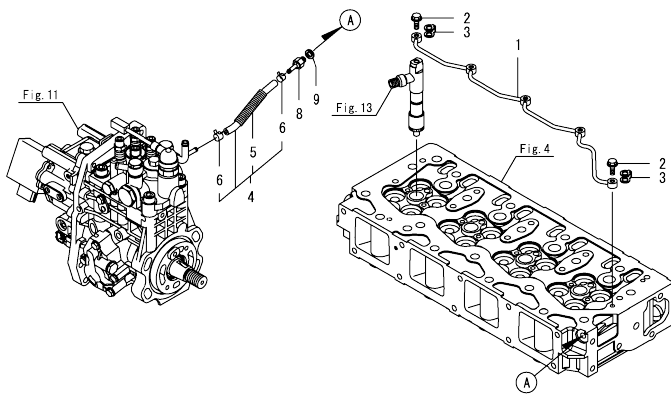
(D)=  
(E)=  
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729927-53200	FUEL INJECTOR ASSY	4							
2	2	114250-53080	NUT, NOZZLE	4							
6	2	114250-53120	SPRING, NOZZLE	4							
7	2	114250-53130	SEAT, SPRING	4							
8	2	114250-53140	SPACER	4							
9	2	129927-53200	NOZZLE ASSY, F.I.	4							
12	2	114250-53210	PIN	8							
13	2	119803-53400	SHIM SET	4							1
40	1	123907-11601	SEAL, PIPE	4							
41	1	123472-59120	RETAINER, PIPE	2							
42	1	129150-59120	RETAINER, PIPE	1							
45	2	129150-59131	BOLT, M4X14	2							
47	1	129927-59810	PIPE ASSY, INJECTION	1							
48	1	129927-59820	PIPE ASSY, INJECTION	1							
49	1	129927-59830	PIPE ASSY, INJECTION	1							
50	1	129927-59840	PIPE ASSY, INJECTION	1							
51	1	26366-060002	NUT, M6	2							

Remarks  
(1)Spare parts.

Fig.14. FUEL PIPE

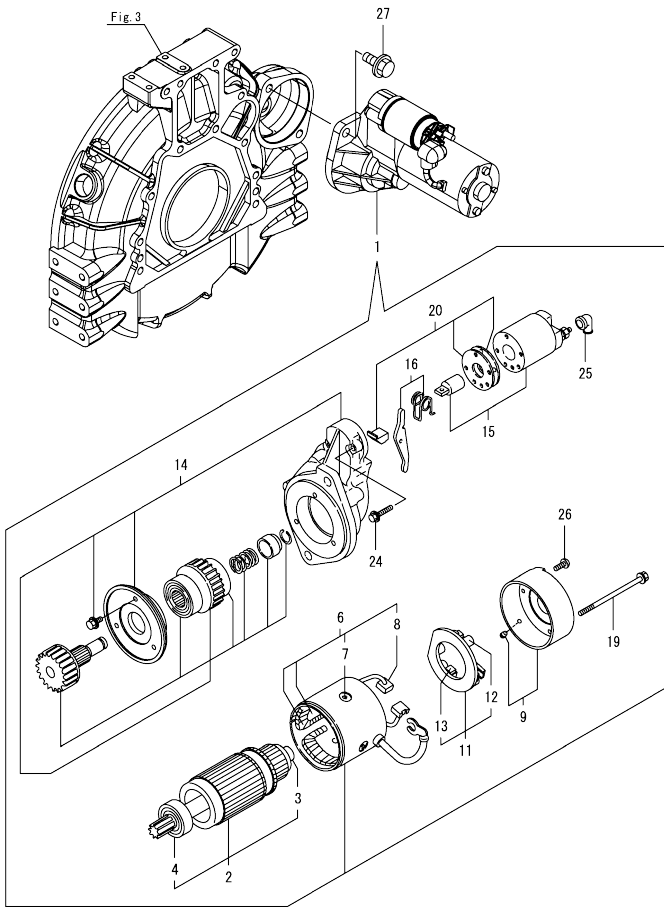


(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty					
				(A)	(B)	(C)	(D)	(E)	(F)
1	1	129907-59140	PIPE ASSY, RETURN	1					
2	1	123907-59540	BOLT, PIPE JOINT M6	5					
3	1	123907-59550	GASKET	5					
4	1	129927-59550	HOSE ASSY, RETURN	1					
5	2	129263-49750	TUBE, CORRUGATED	1					
6	2	124722-59050	CLAMP, HOSE 9	2					
8	1	123907-59560	JOINT, HOSE	1					
9	1	22190-080002	WASHER, SEAL 8	1					

Fig.15. STARTER MOTOR



(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119131-77011	STARTER ASSY, 3.5KW	1							
2	2	119131-77400	ARMATURE ASSY	1							
3	3	171008-77410	BEARING, BALL	1							
4	3	119131-77420	BEARING, BALL	1							
6	2	119131-77440	COIL ASSY, FIELD	1							
7	3	119260-77070	SCREW, CORE SET	4							
8	3	119131-77450	BRUSH	2							
9	2	119131-77460	COVER ASSY, REAR	1							
11	2	119131-77480	HOLDER ASSY, BRUSH	1							
12	3	119131-77490	SPRING, BRUSH	4							
13	3	119131-77500	BRUSH	2							
14	2	119131-77510	PINION	1							
15	2	119131-77590	SWITCH, MAGNET	1							
16	2	119131-77620	LEVER SET, SHIFT	1							
19	2	129400-77640	BOLT, THROUGH	2							
20	2	119131-77650	COVER KIT, DUST	1							
24	2	119131-77690	BOLT, COLLAR M 6X 37	2							
25	2	121254-77810	COVER, TERMINAL	1							
26	2	26557-040102	SCREW, M4X10	2							
27	1	26106-120252	BOLT, M12X 25 PLATED	2							

Fig.16. GENERATOR

(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129908-77260	ALTERNATOR	1							
2	2	129908-77780	BEARING, BALL FR	1							
3	2	129908-77790	ROTOR	1							
4	2	129908-77800	BEARING, BALL RR	1							
5	2	129908-77810	RECTIFIER	1							
6	2	129908-77820	REGULATOR	1							
7	2	129908-77830	STATOR	1							
8	2	129908-77840	PROTECTOR	1							
9	1	129470-77340	PIECE, DISTANCE	1							
10	1	26116-101302	BOLT, M10X130 PLATED	1							
11	1	26306-100002	NUT, M10	1							
12	1	129923-77300	ADJUSTER, BELT	1							
13	1	129926-77310	SPACER, ADJUSTER	1							
14	1	119624-77351	BLOCK ASSY, ADJUSTER	1							
16	2	26106-081004	BOLT, M8X100 PLATED	1							
17	2	26306-080002	NUT, M8	1							
18	1	26106-080452	BOLT, M8X 45 PLATED	2							

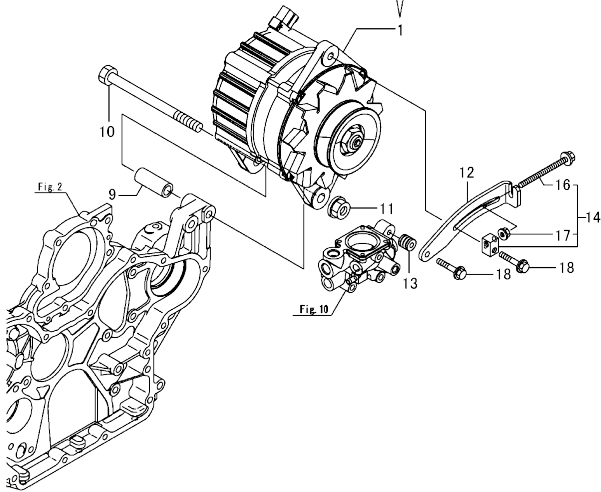
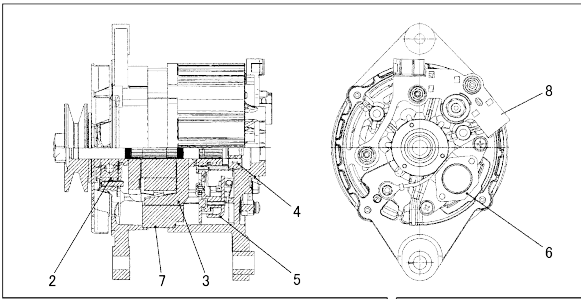
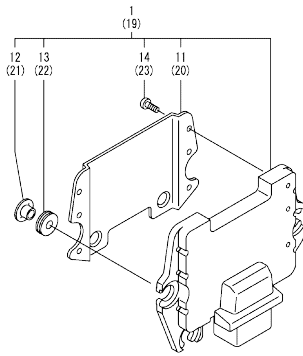


Fig.17. ELECTRONIC CONTROL UNIT(ECU)



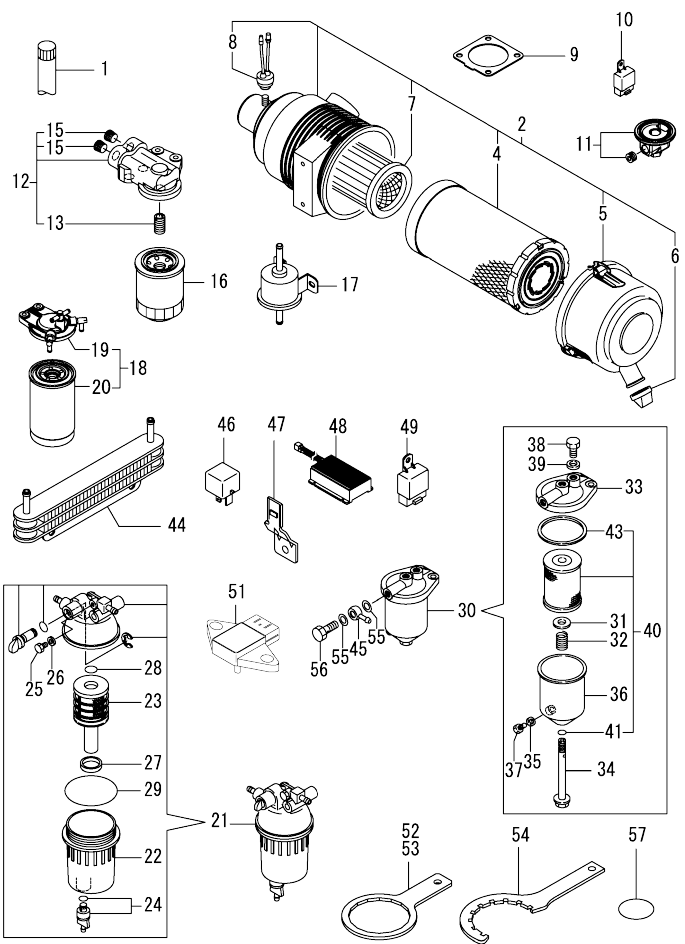
(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129926-75150	ECU ASSY,4V98-ZCVKBH	1							1
11	2	129927-77600	SHIELD, ECU	1							
12	2	129927-77680	COLLAR, CONTROL	3							
13	2	119578-91351	ABSORBER	3							
14	2	22877-500080	SCREW, 5X 8	6							
19	1	129927-75901	ECU ASSY, SERVICE	1							2
20	2	129927-77600	SHIELD, ECU	1							
21	2	129927-77680	COLLAR, CONTROL	3							
22	2	119578-91351	ABSORBER	3							
23	2	22877-500080	SCREW, 5X 8	6							

Remarks  
 (1)Eco ECU  
 This part cannot be ordered.  
 Replace the part using a Service ECU with the proper engine information installed.  
 (2)Service ECU  
 If the proper information is not installed, the engine will not operate.  
 To install proper information, go to an authorized distributor.

Fig.18. ACCESSORY



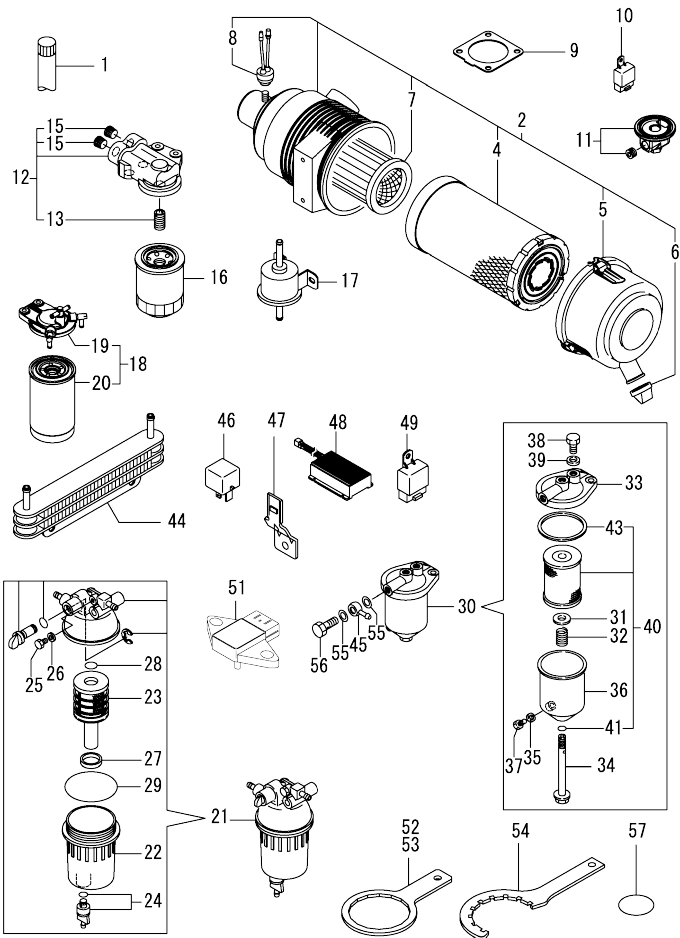
(A)=4TNV98-ZCVKBHC  
(B)=  
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129923-01650	CONNECTOR ASSY,DRAIN	1							
2	1	129935-12500	AIR CLEANER ASSY	1							
4	2	129935-12520	ELEMENT, OUTER	1							
5	2	119160-12530	COVER ASSY	1							
6	2	119160-12540	VALVE	1							
7	2	119160-12570	ELEMENT, INNER	1							
8	2	119140-12680	INDICATOR, CLEANER	1							
9	1	129930-13201	GASKET, SILENCER	1							
10	1	172B02-17150	RELAY,CAC TYPE	1							
11	1	129238-35111	PLUG	1							
12	1	129923-35130	BRACKET ASSY, FILTER	1							
13	2	129100-35140	BOLT, STUD	1							
15	2	23876-040000	PLUG, R04	2							
16	1	119005-35160	FILTER, OIL 80X100L	1							
17	1	129907-52100	PUMP, FUEL FEED	1							
18	1	129940-55620	FILTER ASSY, FUEL	1							
19	2	119934-55611	BRACKET, FILTER	1							
20	2	129907-55801	FILTER, FUEL	1							
21	1	129245-55711	SEPARATOR ASSY,WATER	1							
22	2	129245-55720	CUP ASSY, SEPARATOR	1							
23	2	129242-55730	ELEMENT, FUEL	1							
24	2	129242-55740	PLUG, DRAIN	1							
25	2	129242-55750	VALVE, AIR VENT	1							
26	2	129242-55760	GASKET, PLUG	1							
27	2	129242-55770	FLOAT	1							
28	2	24311-000160	O-RING, 1AP16.0	1							
29	2	24321-000750	O-RING, 1AG75.0	1							
30	1	129065-55750	SEPARATOR ASSY,WATER	1							
31	2	123325-35160	WASHER	1							
32	2	129065-55170	SPRING, FILTER	1							
33	2	129495-55610	BODY, STRAINER	1							
34	2	129495-55620	BOLT	1							
35	2	123672-55760	GASKET	1							
36	2	129065-55760	CASE, SEPARATOR	1							
37	2	129065-55770	PLUG, DRAIN M8	1							
38	2	129065-55800	PLUG, M14	1							
39	2	123678-55890	GASKET, PLUG	1							
40	2	41650-502320	ELEMENT ASSY(D72XL90	1							
41	3	24311-000120	O-RING, 1AP12.0	1							
43	3	123325-35140	GASKET	1							
44	1	129973-55900	COOLER,FUEL OIL	1							
45	1	121750-59910	JOINT, BALL	2							
46	1	129927-77900	RELAY, ISO 90A	3							
47	1	129927-77910	BRACKET, CONNECTOR	3							
48	1	129927-77950	CONVERTER, DC-DC	1							
49	1	129927-77980	RELAY, DC24V	3							
51	1	129927-91200	SENSOR, ATM.PRESSURE	1							
52	1	119803-92701	WRENCH, FILTER	1							
53	1	119640-92750	TOOL, FILTER WRENCH	1							
54	1	171301-92750	WRENCH, FILTER	1							
55	1	22190-140002	WASHER, SEAL 14	4							

N:Old  $\frac{New}{Old}$  New, Q:Old  $\frac{New}{Old}$  New, R:Old  $\frac{New}{Old}$  New, S:Old  $\frac{New}{Old}$  New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change  
 ++ CONTINUE ++  
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Fig.18. ACCESSORY



No.	Lev.	Parts No.	Description	Q'ty					
				(A)	(B)	(C)	(D)	(E)	(F)
56	1	23857-080000	BOLT, JOINT 8	2					
57	1	24321-000600	O-RING, 1AG60.0	1					



## Parts No. Index

Parts No.	Fig. No.	Ref. No.
114250-53080	13	2
114250-53120	13	6
114250-53130	13	7
114250-53140	13	8
114250-53210	13	12
119005-35160	18	16
119129-77020	5	7
119129-77500	5	9
119129-77520	5	10
119131-18320	6	3
119131-77011	15	1
119131-77400	15	2
119131-77420	15	4
119131-77440	15	6
119131-77450	15	8
119131-77460	15	9
119131-77480	15	11
119131-77490	15	12
119131-77500	15	13
119131-77510	15	14
119131-77590	15	15
119131-77620	15	16
119131-77650	15	20
119131-77690	15	24
119140-12680	18	8
119160-12530	18	5
119160-12540	18	6
119160-12570	18	7
119260-77070	15	7
119309-01810	1	29
119578-91351	17	13
		22
119593-11301	4	27
119620-01750	3	4
119620-11180	4	12
119624-77351	16	14
119625-11880	4	23
119640-61400	4	58
119640-92750	18	53
119761-39450	9	26
119802-11870	4	22
119802-51680	11	68
119802-51690	11	69
119803-11340	4	13
119803-53400	13	13
119803-92701	18	52
119852-51630	11	73
119852-51640	11	74
119852-51650	11	76
119934-55611	18	19

Parts No.	Fig. No.	Ref. No.
120130-22301	8	23
121027-11743	2	31
121250-44901	10	38
121254-77810	15	25
121450-42450	10	37
121750-59910	18	45
121850-21130	8	11
121850-21290	8	4
121850-21920	8	5
121850-49540	10	23
121850-49550	10	25
121850-49811	10	26
121850-77021	5	8
123325-35140	18	43
123325-35160	18	31
123472-59120	13	41
123672-55760	18	35
123678-55890	18	39
123900-25060	7	9
123907-03100	4	52
123907-03110	4	53
123907-03120	4	54
123907-03140	4	55
123907-11280	4	32
123907-11550	4	1
123907-11601	13	40
123907-11820	4	19
123907-11830	4	18
123907-39500	9	29
123907-59540	14	2
123907-59550	14	3
123907-59560	14	8
124160-01751	2	25
	4	47
124160-11340	4	14
124160-11360	4	63
124465-44950	10	39
	40	
124722-59050	14	6
124766-59050	3	18
129005-59830	9	31
129008-51920	11	12
129008-61301	12	26
129065-55170	18	32
129065-55750	18	30
129065-55760	18	36
129065-55770	18	37
129065-55800	18	38
129100-01580	2	1
	3	1

Parts No.	Fig. No.	Ref. No.
129100-35140	9	6
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129906-51580	11	61
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129907-14400	7	2
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129907-51560	11	58
129907-52100	18	17
129907-55801	18	20
129907-59140	14	1
129908-14581	7	3
129908-21000	8	1
129908-77260	16	1
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129927-12100	5	3
129927-12150	5	2
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