

0CD50-M05850EN

P R E F A C E

This parts catalog is the 1st edition of 3TNV88-BWWA for Thwaites.

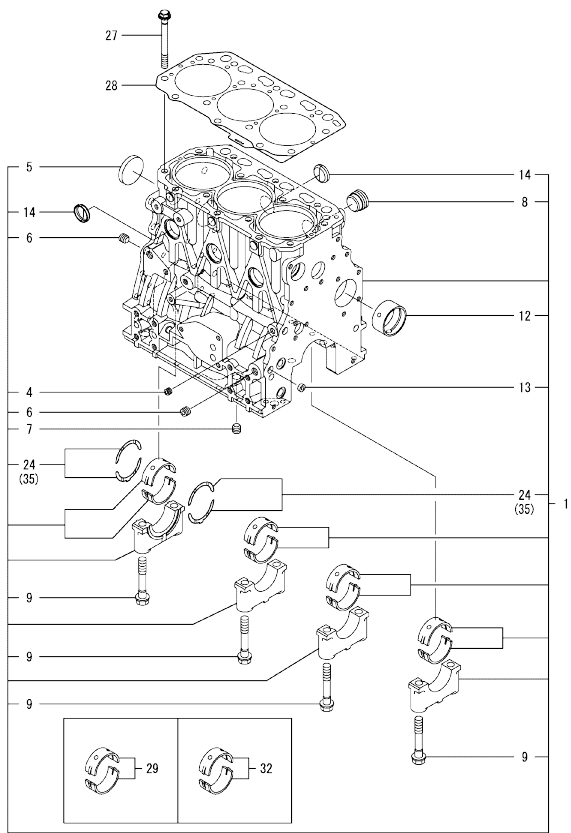
Published : January, 2020

Contents

0CD50-M05850

Fig. No.	Fig. Name	Fig. No.	Fig. Name
ENGINE			
1.	CYLINDER BLOCK		
2.	GEAR HOUSING		
3.	FLYWHEEL HOUSING & OIL SUMP		
4.	CYLINDER HEAD & BONNET		
5.	SUCTION MANIFOLD		
6.	EXHAUST MANIFOLD		
7.	CAMSHAFT & DRIVING GEAR		
8.	CRANKSHAFT & PISTON		
9.	LUB. OIL SYSTEM		
10.	COOLING WATER SYSTEM		
11.	FUEL INJECTION PUMP		
12.	GOVERNOR		
13.	FUEL INJECTION VALVE		
14.	FUEL PIPE		
15.	STARTER MOTOR		
16.	GENERATOR		
17.	ACCESSORY		
18.	GASKET SET		

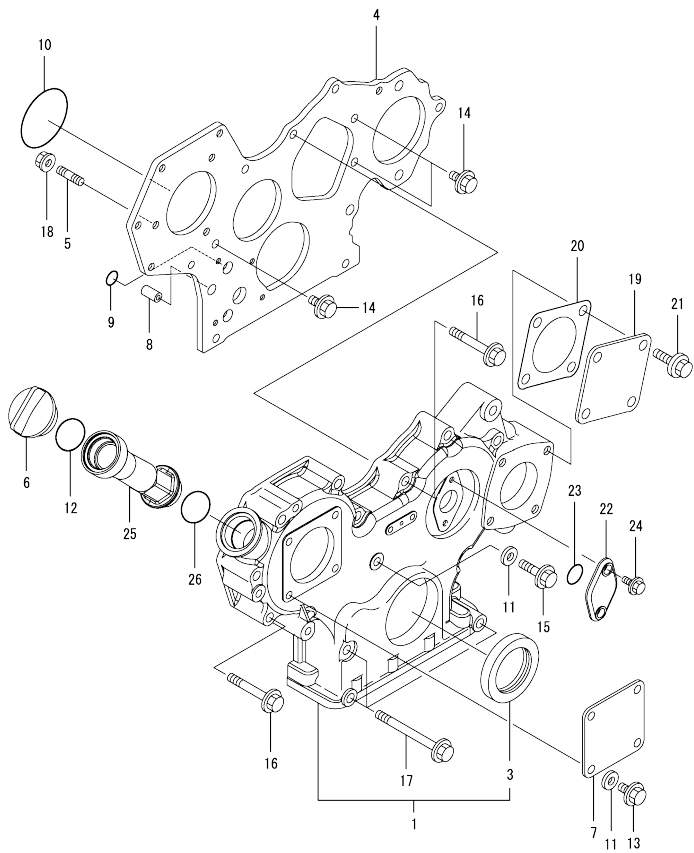
Fig.1. CYLINDER BLOCK



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

				Description	Q'ty						I	R
No.	Lev.	Parts No.			(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729005-01560		BLOCK ASSY, CYLINDER	1							
4	2	124060-01050		PLUG, PT1/8	1							
5	2	129001-01250		PLUG, 50	1							
6	2	124160-01910		PLUG, PT1/4	2							
7	2	124160-01910		PLUG, PT1/4	1							
8	2	171051-01921		PLUG, NPTF1	1							
9	2	129150-02020		BOLT, METAL CAP	8							
12	2	129795-02412		BUSH, CAMSHAFT	1							
13	2	27241-120000		PLUG, 12	2							
14	2	27241-300000		PLUG 30	6							
24	2	129150-02931		METAL ASSY, THRUST	2							
27	1	129150-01200		BOLT, CYLINDER HEAD	14							
28	1	129001-01340		GASKET, HEAD	1							
29	1	129001-02931		METAL ASSY, MAIN	4							1
32	1	129150-02871		METAL ASSY, MAIN .25	4							2
35	1	129150-02941		METAL ASSY, 0.25 OS	1							3

Fig.2. GEAR HOUSING

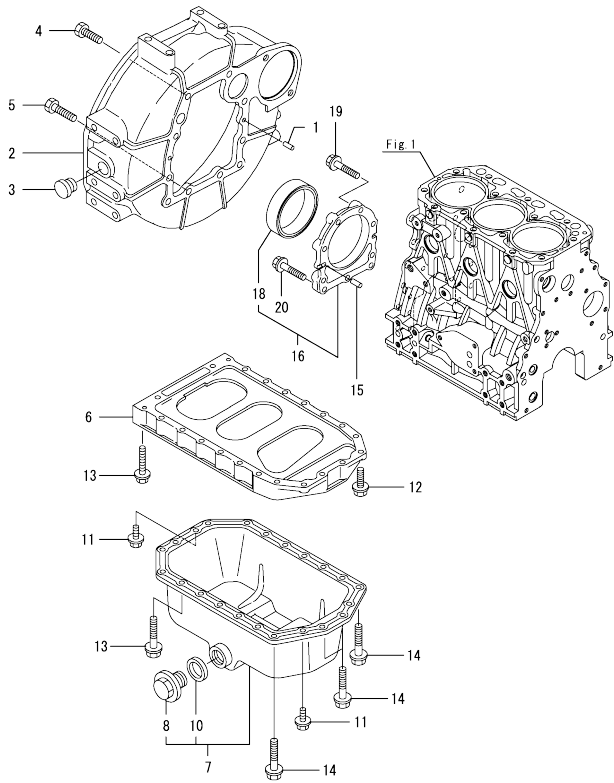


(A)=3TNV88-BWWA
(B)=
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(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729652-01500	CASE ASSY, GEAR	1							
3	2	119934-01800	SEAL, OIL	1							
4	1	129604-01520	FLANGE, GEAR CASE	1							
5	1	119802-01561	STUD, M8X25	3							
6	1	124160-01751	CAP, FILLER	1							
7	1	124240-01871	COVER, HYDRAULIC PUMP	1							
8	1	129795-01950	PIPE, KNOCK L=18	2							
9	1	119609-32040	O-RING, P16	2							
10	1	121850-51960	O-RING, FUEL PUMP	1							
11	1	22190-080002	WASHER, SEAL 8	5							
12	1	24311-000320	O-RING, 1AP32.0	1							
13	1	26106-080162	BOLT, M8X 16 PLATED	4							
14	1	26106-080162	BOLT, M8X 16 PLATED	3							
15	1	26106-080302	BOLT, M8X 30 PLATED	1							
16	1	26106-080552	BOLT, M8X 55 PLATED	10							
17	1	26106-080852	BOLT, M8X 85 PLATED	3							
18	1	26306-080002	NUT, M8	3							
19	1	124240-01871	COVER, HYDRAULIC PUMP	1							
20	1	129C26-01890	GASKET, PUMP	1							
21	1	26106-080162	BOLT, M8X 16 PLATED	4							
22	1	121023-01551	COVER, TACHOMETER	1							
23	1	24341-000240	O-RING, 1AS24.0	1							
24	1	26106-060162	BOLT, M6X 16 PLATED	2							
25	1	121027-11743	PIPE, FILLER	1							
26	1	24311-000320	O-RING, 1AP32.0	1							

Fig.3. FLYWHEEL HOUSING & OIL SUMP

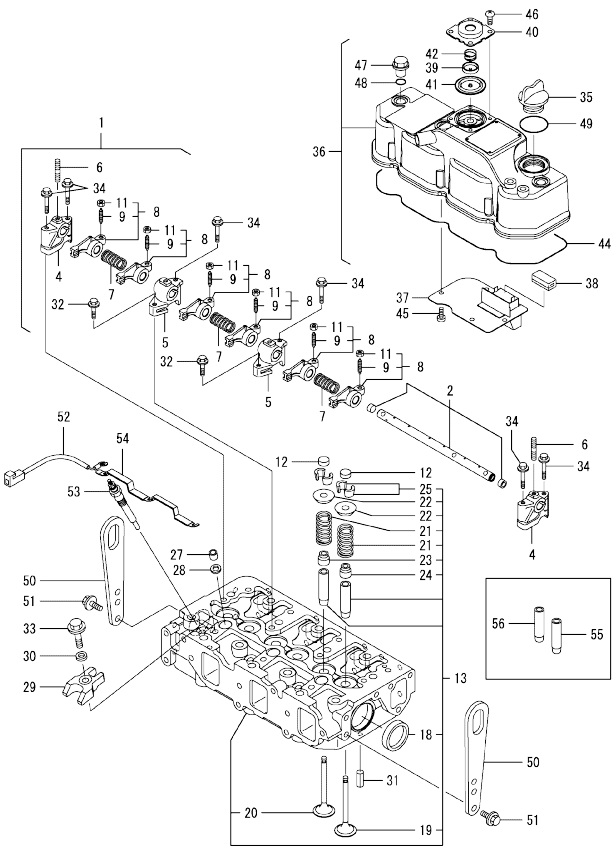


(A)=3TNV88-BWWA
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, PARALLEL 8X16	2							
2	1	129612-01600	HOUSING, FLYWHEEL	1							
3	1	119620-01750	CAP, WHEEL COVER	1							
4	1	26206-100252	BOLT, M10X 25 PLATED	6							
5	1	26206-100302	BOLT, M10X 30 PLATED	4							
6	1	129100-01730	SPACER, OIL PAN	1							
7	1	129100-01760	OIL PAN ASSY	1							
8	2	119640-01640	PLUG, DRAIN M22	1							
10	2	22190-220002	WASHER, SEAL 22	1							
11	1	26106-080162	BOLT, M8X 16 PLATED	4							
12	1	26106-080252	BOLT, M8X 25 PLATED	2							
13	1	26106-080452	BOLT, M8X 45 PLATED	16							
14	1	26106-080502	BOLT, M8X 50 PLATED	4							
15	1	129100-01580	PIN, PARALLEL 8X16	2							
16	1	129100-01640	CASE ASSY, OIL SEAL	1							
18	2	129795-01780	SEAL, OIL	1							
19	1	129486-01670	BOLT, M8X30	6							
20	1	26106-080352	BOLT, M8X 35 PLATED	3							

Fig.4. CYLINDER HEAD & BONNET



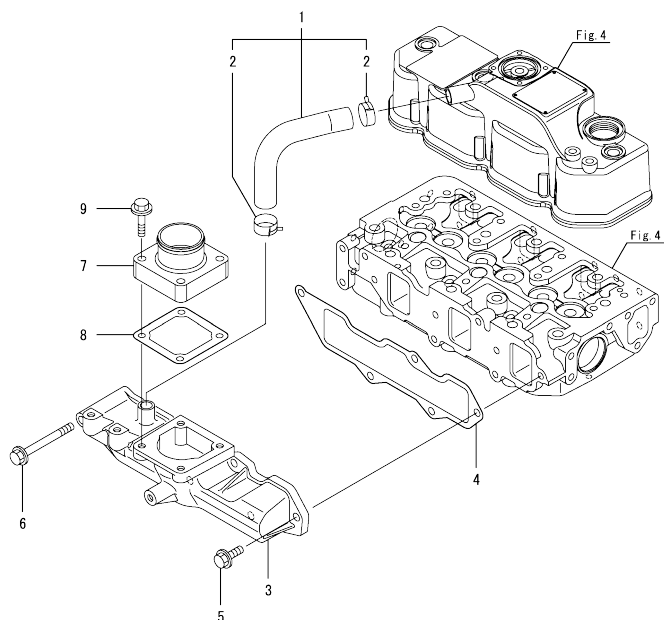
Remarks
(1)Spare parts.

(A)=3TNV88-BWWA
(B)=
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No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-11241	SHAFT ASSY,ROCKER	1							
2	2	129004-11251	SHAFT,ROCKER ARM	1							
4	2	119802-11260	SUPPORT,ROCKER ARM	2							
5	2	119802-11270	SUPPORT,ROCKER ARM	2							
6	2	119802-11280	BOLT,STUD	3							
7	2	129150-11280	SPRING,SHAFT	3							
8	2	129004-11650	ARM ASSY,ROCKER	6							
9	3	129150-11230	SCREW,VALVE ADJUST	6							
11	3	129150-11750	NUT,M8XP1.0	6							
12	1	129150-11370	CAP,VALVE	6							
13	1	129008-11700	HEAD ASSY,CYLINDER	1							
18	2	27241-400000	PLUG,40	2							
19	2	129005-11100	VALVE,INTAKE	3							
20	2	129100-11112	VALVE,EXHAUST	3							
21	2	129795-11120	SPRING,VALVE	6							
22	2	129795-11180	RETAINER,SPRING	6							
23	2	121400-11340	SEAL,VALVE STEM	3							
24	2	124460-11340	SEAL,VALVE STEM	3							
25	2	27310-080001	COTTER,8	6							
27	1	119802-11870	PROTECTOR,NOZZLE	3							
28	1	119625-11880	SEAT,NOZZLE	3							
29	1	129004-11900	RETAINER,NOZZLE	3							
30	1	120270-54410	WASHER,INJECTOR	3							
31	1	22351-060012	PIN,SPRING 6.0X12	2							
32	1	26106-080252	BOLT,M8X 25 PLATED	2							
33	1	26106-080352	BOLT,M8X 35 PLATED	3							
34	1	26106-080502	BOLT,M8X 50 PLATED	6							
35	1	124160-01751	CAP,FILLER	1							
36	1	129004-11350	BONNET ASSY,HEAD	1							
37	2	129004-03010	PLATE,BAFFLE	1							
38	2	129150-03070	BAFFLE,BREATHER	1							
39	2	119802-03110	PLATE,DIAPHRAGM	1							
40	2	119802-03121	COVER,DIAPHRAGM	1							
41	2	119802-03130	DIAPHRAGM,BREATHER	1							
42	2	119802-03141	SPRING,DIAPHRAGM	1							
44	2	129004-11310	GASKET,BONNET	1							
45	2	22857-500100	SCREW,5X10	4							
46	2	22857-500100	SCREW,5X10	4							
47	1	124160-11360	KNOB,BONNET	3							
48	1	24311-000120	O-RING,1AP12.0	3							
49	1	24311-000320	O-RING,1AP32.0	1							
50	1	129900-07900	LIFTER,ENGINE	2							
51	1	26106-080162	BOLT,M8X 16 PLATED	4							
52	1	119803-77830	HARNES, WIRE	1							
53	1	129008-77800	PLUG,GLOW	3							
54	1	129008-77820	CONNECTOR,GLOW PLUG	1							
55	1	120130-11860	GUIDE,VALVE	3							1
56	1	129150-11810	GUIDE,VALVE	3							1

Fig.5. SUCTION MANIFOLD



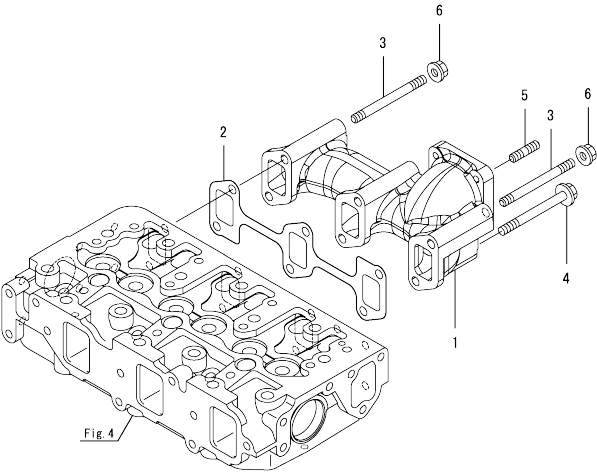
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No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	129005-03080	HOSE ASSY, BREATHER	1							
2	2	129410-03990	CLAMP, HOSE 21.5	2							
3	1	129005-12101	MANIFOLD, INTAKE	1							
4	1	129001-12110	GASKET, MANIFOLD	1							
5	1	26106-080202	BOLT, M8X 20 PLATED	4							
6	1	26106-080802	BOLT, M8X 80 PLATED	1							
7	1	171463-12581	JOINT, MANIFOLD	1							
8	1	129150-77511	GASKET, AIR HEATER	1							
9	1	26106-080352	BOLT, M8X 35 PLATED	4							

N:Old ^{Yes}/_{No} New. Q:Old ^{No}/_{Yes} New. R:Old ^{Yes}/_{Yes} New. S:Old ^{No}/_{No} New. W:Add. Z:Discontinued. F:Interchangeable by set. K:Qty Change

0CD50-M05850 ENGINE
Fig.6. EXHAUST MANIFOLD



0CD50-M05850 Fig.6

(A)=3TNV88-BWWA

(D)=

(B)=

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(C)=

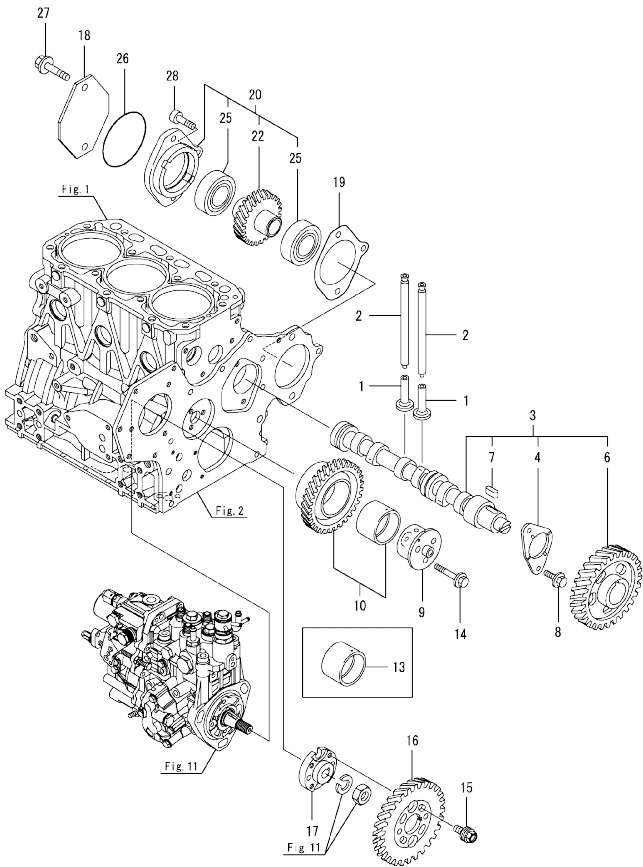
(F)=

Q'ty

I R

No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)
1	1	129100-13110	MANIFOLD, EXHAUST	1					
2	1	129150-13110	GASKET, MANIFOLD	1					
3	1	123900-13610	STUD, M8X80	2					
4	1	129E00-13640	BOLT, M8X80 10.9T	4					
5	1	119131-18320	STUD, M8X22	4					
6	1	26306-080002	NUT, M8	2					

Fig.7. CAMSHAFT & DRIVING GEAR



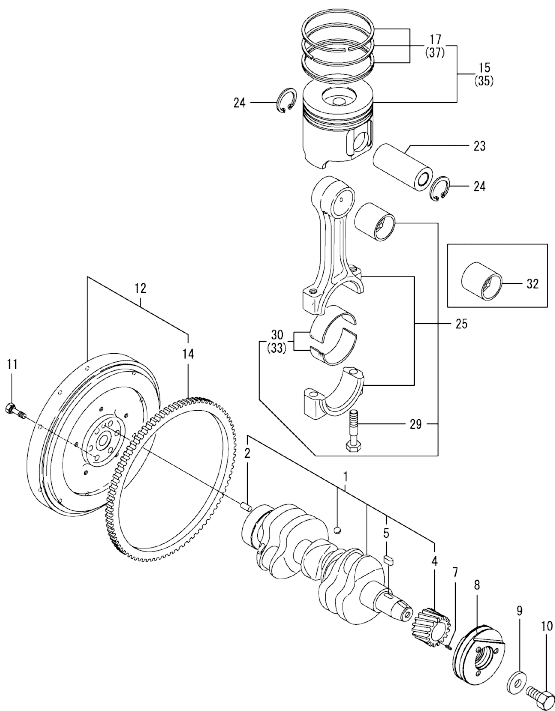
(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129150-14200	TAPPET	6							
2	1	129150-14400	ROD, PUSH L=178	6							
3	1	129129-14580	CAMSHAFT ASSY	1							
4	2	129150-02450	METAL, THRUST	1							
6	2	129150-14101	GEAR, CAMSHAFT	1							
7	2	22512-070140	KEY, 7X 14	1							
8	1	26106-080142	BOLT, M8X 14 PLATED	2							
9	1	119803-25050	SHAFT, IDLE GEAR	1							
10	1	119802-25101	GEAR ASSY, IDLE	1							
13	1	119802-25071	BUSH, IDLE GEAR	1							1
14	1	26106-080402	BOLT, M8X 40 PLATED	3							
15	1	129150-25301	BOLT, INJECTION PUMP	4							
16	1	119802-25901	GEAR, PUMP	1							
17	1	158552-51151	FLANGE, CAMSHAFT	1							
18	1	121023-26071	COVER, PUMP	1							
19	1	171353-26081	GASKET, PUMP	1							
20	1	129484-26200	DRIVE ASSY, PUMP	1							
22	2	129484-26210	GEAR ASSY, PUMP	1							
25	2	24105-060064	BEARING, BALL 6006Z	2							
26	1	24321-000850	O-RING, 1AG85.0	1							
27	1	26106-100452	BOLT, M10X 45 PLATED	2							
28	1	26450-080282	BOLT, M8X 28	1							

Remarks
(1)Spare parts.

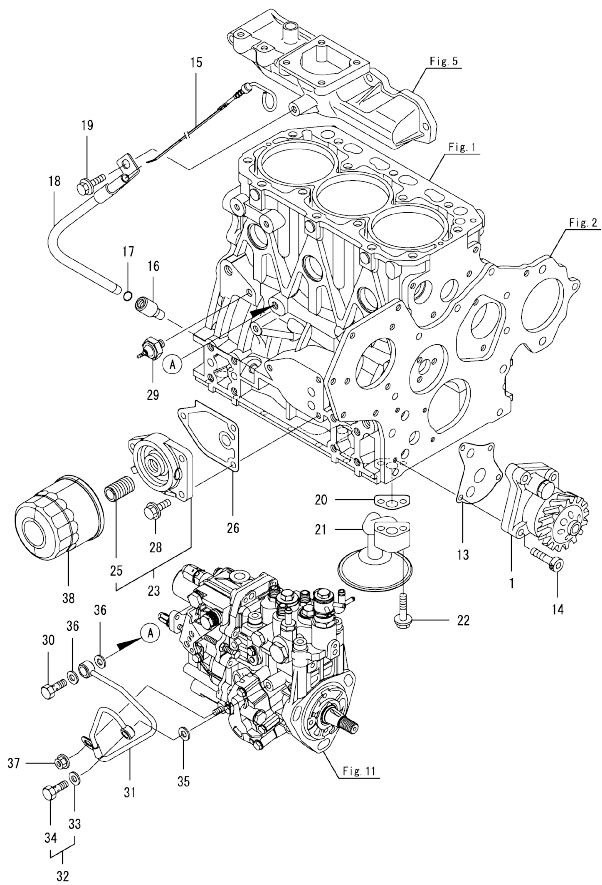
Fig.8. CRANKSHAFT & PISTON



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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129008-21000	CRANKSHAFT ASSY	1							
2	2	129100-01580	PIN, PARALLEL 8X16	1							
4	2	119803-21200	GEAR, CRANKSHAFT	1							
5	2	22512-070140	KEY, 7X 14	1							
7	1	22351-030010	PIN, SPRING 3.0X10	1							
8	1	129005-21650	V-PULLEY, CRANKSHAFT	1							
9	1	129795-21661	WASHER, 14	1							
10	1	121850-21680	BOLT, V-PULLEY	1							
11	1	121111-21501	BOLT, FLYWHEEL	6							
12	1	129245-21580	FLYWHEEL ASSY	1							
14	2	119865-21600	GEAR, RING Z=116	1							
15	1	129005-22080	PISTON ASSY	3							
17	2	129005-22500	RING SET, PISTON	3							
23	1	129202-22300	PIN, PISTON D26 L70	3							
24	1	22252-000260	RING, 26	6							
25	1	729402-23100	ROD ASSY, CONNECTING	3							
29	2	121550-23200	BOLT, CONNECTING ROD	6							
30	2	129150-23601	METAL ASSY,CRANK PIN	3							
32	1	129100-23910	METAL, PISTON PIN	3							1
33	1	129150-23611	METAL, CRANK PIN .25	3							2
35	1	129005-22900	PISTON ASSY, 0.25 OS	3							3
37	2	129005-22950	RING SET, PISTON .25	3							3

Fig.9. LUB. OIL SYSTEM



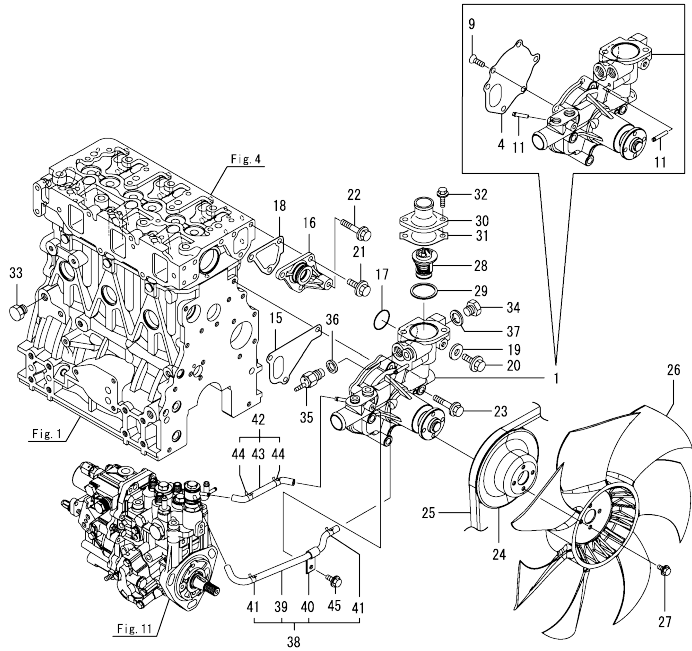
Remarks
(1)Spare parts.

(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129001-32002	PUMP ASSY, OIL	1							
13	1	129150-32020	GASKET, PUMP	1							
14	1	26450-060252	BOLT, M6X 25	4							
15	1	129601-34801	DIPSTICK, OIL	1							
16	1	119260-34810	GUIDE, DIPSTICK	1							
17	1	24316-240100	O-RING, 4DP10A	1							
18	1	119802-34850	GUIDE, DIPSTICK	1							
19	1	26106-080162	BOLT, M8X 16 PLATED	1							
20	1	129150-35042	GASKET, INLET PIPE	1							
21	1	129100-35301	PIPE ASSY, OIL INLET	1							
22	1	26106-080352	BOLT, M8X 35 PLATED	2							
23	1	119802-35100	BRACKET ASSY, FILTER	1							
25	2	129100-35140	STUD	1							
26	1	129150-35111	GASKET, BRACKET	1							
28	1	26106-080202	BOLT, M8X 20 PLATED	3							
29	1	114250-39450	SWITCH, HYDRAULIC	1							
30	1	124160-39140	BOLT, PIPE JOINT M10	1							
31	1	119802-39450	PIPE ASSY, OIL	1							
32	1	129005-59830	BOLT ASSY, JOINT M8	1							
33	2	22190-080002	WASHER, SEAL 8	1							
34	2	23857-030000	BOLT, JOINT 3	1							
35	1	22190-080002	WASHER, SEAL 8	1							
36	1	22190-100002	WASHER, SEAL 10	2							
37	1	26366-060002	NUT, M6	1							
38	1	129150-35153	FILTER ASSY, D80X80L	1							1

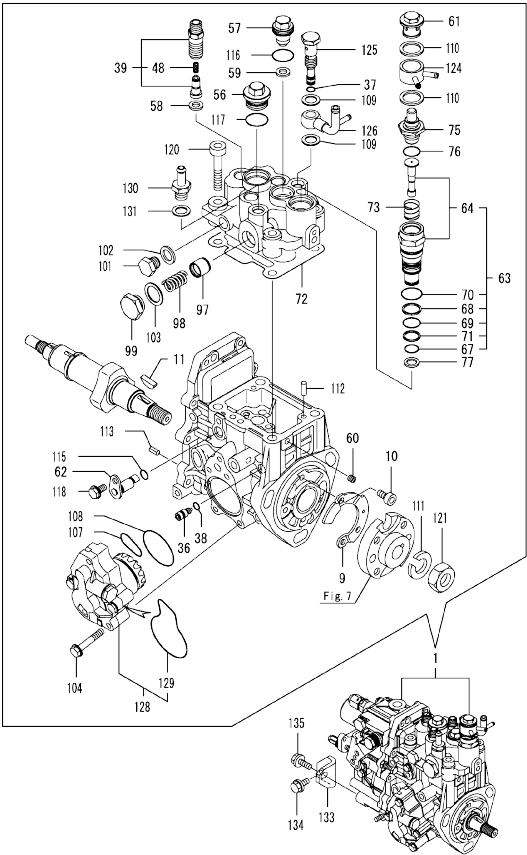
Fig.10. COOLING WATER SYSTEM



(A)=3TNV88-BWWA
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-42002	PUMP ASSY, CW	1							
4	2	129100-42051	GASKET, WATER PUMP	1							
9	2	129150-42290	SCREW, FLAT M6X15	3							
11	2	119802-49113	JOINT, PIPE	2							
15	1	129486-42021	GASKET, WATER PUMP	1							
16	1	129004-42040	JOINT, WATER PIPE	1							
17	1	129486-42140	O-RING, G30	1							
18	1	124395-49840	GASKET, THERMOSTAT	1							
19	1	23414-080000	GASKET, 8X1.0	1							
20	1	26106-080122	BOLT, M8X 12 PLATED	1							
21	1	26106-080162	BOLT, M8X 16 PLATED	3							
22	1	26106-080452	BOLT, M8X 45 PLATED	1							
23	1	26106-080602	BOLT, M8X 60 PLATED	3							
24	1	129120-42351	V-PULLEY, PUMP	1							
25	1	25152-003700	V-BELT, A37	1							
26	1	129655-44740	FAN, COOLING D=380	1							
27	1	26106-060122	BOLT, M6X 12 PLATED	4							
28	1	129155-49801	THERMOSTAT, 71C	1							
29	1	129150-49811	GASKET, THERMOSTAT	1							
30	1	129350-49530	COVER, THERMOSTAT	1							
31	1	129795-49551	GASKET, COVER	1							
32	1	26106-080222	BOLT, M8X 22 PLATED	2							
33	1	171056-49120	PLUG, DRAIN R1/4	1							
34	1	121450-42450	PLUG, M16	1							
35	1	121250-44901	SWITCH, TEMPERATURE	1							
36	1	124465-44950	GASKET, 16	1							
37	1	124465-44950	GASKET, 16	1							
38	1	129004-49610	HOSE ASSY, WATER A	1							
39	2	129004-49711	HOSE, WATER A	1							
40	2	119802-49730	RETAINER, PIPE	1							
41	2	124722-59050	CLAMP, HOSE 9	2							
42	1	129004-49620	HOSE ASSY, WATER B	1							
43	2	129004-49721	HOSE, WATER B	1							
44	2	124722-59050	CLAMP, HOSE 9	2							
45	1	26106-060122	BOLT, M6X 12 PLATED	1							

Fig.11. FUEL INJECTION PUMP

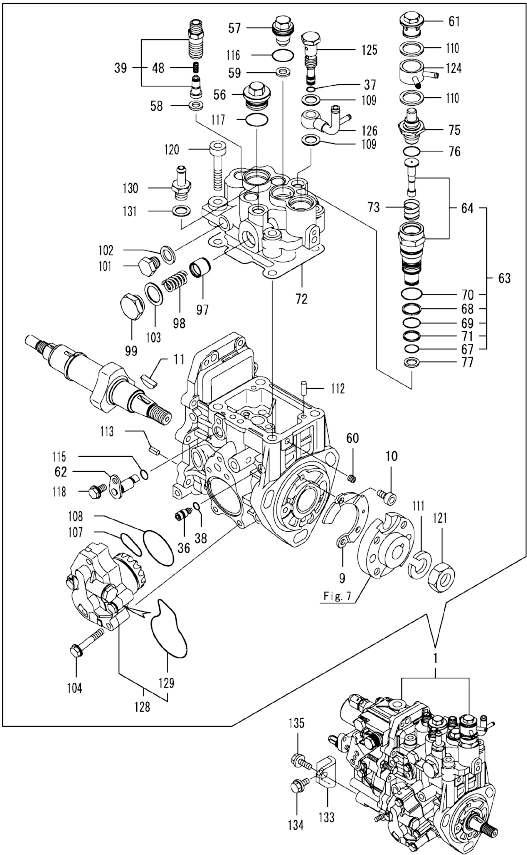


Remarks
(1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).

										OCD50-M05850 Fig.11	
										(A)=3TNV88-BWWA	(D)=
										(B)=	(E)=
										(C)=	(F)=
										Q'ty	
										(A)	(B)
										(C)	(D)
										(E)	(F)
										I	
										R	
No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729008-51400	FIE ASSY	1						1	
9	2	129008-51900	COVER, PUMP	1							
10	2	129008-51920	BOLT, M6X10	2							
11	2	119802-51090	KEY, FEATHER 4X16	1							
36	2	158600-51270	STOPPER, TAPPET	1							
37	2	158563-51281	O-RING, 4D S6	1							
38	2	158563-51281	O-RING, 4D S6	1							
39	2	129008-51390	VALVE ASSY, DELIVERY	3							
48	3	158563-51330	SPRING, DELIVERY	3							
56	2	158601-51550	PLUG, M22	1							
57	2	119802-51560	PLUG, BARREL M14	1							
58	2	158552-51571	GASKET, BARREL PLUG	3							
59	2	158552-51571	GASKET, BARREL PLUG	1							
60	2	158557-51570	PLUG, RACK	1							
61	2	158601-51570	PLUG	1							
62	2	158552-51580	LIFTER, LINK	1							
63	2	119802-51590	TIMER ASSY	1							
64	3	119802-51600	TIMER ASSY	1							
67	3	158553-51670	O-RING, PUMP TIMER	1							
68	3	119802-51680	RING, BACKUP	1							
69	3	119802-51690	O-RING, 1016	1							
70	3	24356-190200	O-RING, 4D19020	1							
71	3	24372-000150	RING, BACK UP T2P15	1							
72	2	158552-51600	GASKET, HEAD	1							
73	2	158553-51630	SPRING, TIMER	1							
75	2	158553-51650	ELEMENT, THERMOSTAT	1							
76	2	158553-51660	O-RING, P14	1							
77	2	158553-51680	GASKET, TIMER	1							
97	2	158601-51770	PISTON, ACCUMULATOR	1							
98	2	158552-51781	SPRING, ACCUMULATOR	1							
99	2	158601-51790	PLUG, ACCUMULATOR	1							
101	2	158553-51930	PLUG, M12	1							
102	2	22190-120002	WASHER, SEAL 12	1							
103	2	22190-180002	WASHER, SEAL 18	1							
104	2	158553-51770	BOLT	4							
107	2	158552-52311	O-RING, FEED PUMP	1							
108	2	158552-52400	O-RING, 4E S42	1							
109	2	22190-120002	WASHER, SEAL 12	2							
110	2	22190-180002	WASHER, SEAL 18	2							
111	2	22217-140000	WASHER, SPRING 14	1							
112	2	22312-050140	PIN, PARALLEL 5X14	2							
113	2	22351-050010	PIN, SPRING 5.0X10	2							
115	2	24311-000070	O-RING, 1AP7.0	1							
116	2	24356-190180	O-RING, 4D19018	1							
117	2	24356-190200	O-RING, 4D19020	1							
118	2	26106-060102	BOLT, M6X 10 PLATED	1							
120	2	26450-080452	BOLT, M8X 45	4							
121	2	26776-140002	NUT, LOCK M14	1							
124	2	158553-51551	JOINT, COOLING WATER	1							
125	2	158601-51650	JOINT, OVERFLOW	1							
126	2	158552-51670	JOINT, OVERFLOW	1							

N:Old, New, O:Old, New, R:Old, New, S:Old, New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.11. FUEL INJECTION PUMP



(A)=3TNV88-BWWA
(B)=
(C)=

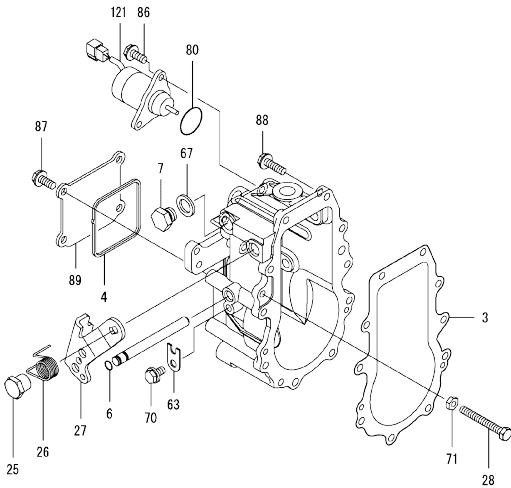
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
128	2	158552-52100	PUMP ASSY, FUEL FEED	1							
129	3	158552-52500	O-RING, PUMP INNER	1							
130	2	119934-59910	JOINT, PIPE	1							
131	2	22190-120002	WASHER, SEAL 12	1							
133	1	119802-51250	RETAINER, FUEL PUMP	1							
134	1	26106-080162	BOLT, M8X 16 PLATED	1							
135	1	26106-080202	BOLT, M8X 20 PLATED	1							

Remarks

(1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).

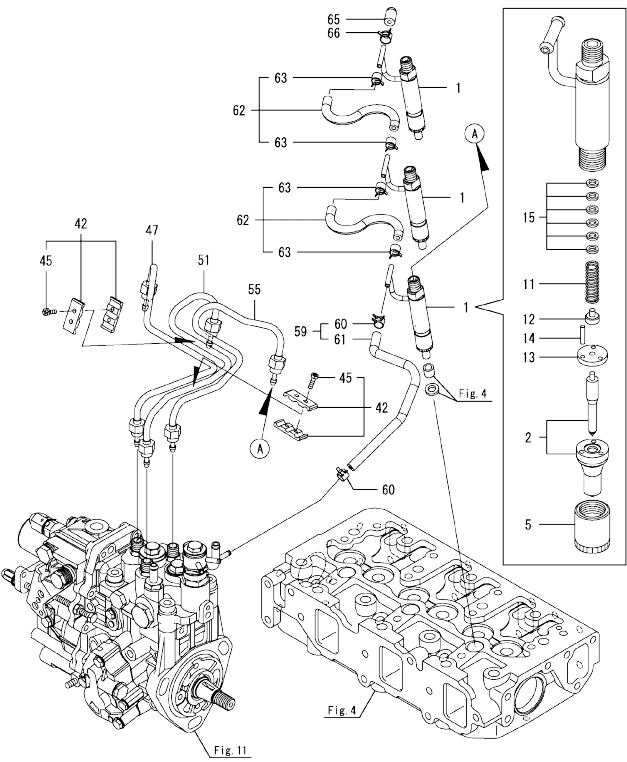
OCD50-M05850 ENGINE
Fig.12. GOVERNOR



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

										OCD50-M05850					Fig.12	
										(A)=3TNV88-BWWA					(D)=	
										(B)=					(E)=	
										(C)=					(F)=	
No.	Lev.	Parts No.	Description	Q'ty					I	R						
				(A)	(B)	(C)	(D)	(E)			(F)					
3	2	158553-61050	GASKET, CASE	1												
4	2	158553-61070	GASKET, CASE	1												
6	2	129155-51280	O-RING, S6	1												
7	2	158553-51930	PLUG, M12	1												
25	2	129255-61410	NUT, CONTROL LEVER	1												
26	2	119807-61420	SPRING, RETURN	1												
27	2	158552-61441	LEVER, REGULATOR	1												
28	2	129155-61461	BOLT,IDLE LIMIT	1												
63	2	119660-61901	STOPPER, SHAFT	1												
67	2	22190-120002	WASHER, SEAL 12	1												
70	2	26106-060102	BOLT, M6X 12 PLATED	1												
71	2	119740-61470	NUT	1												
80	2	158552-61900	O-RING	1												
86	2	26106-060122	BOLT, M6X 12 PLATED	2												
87	2	26106-060122	BOLT, M6X 12 PLATED	4												
88	2	26106-060202	BOLT, M6X 20 PLATED	10												
89	2	129642-61060	COVER, GOVERNOR CASE	1												
121	2	129630-77910	SOLENOID, STOP	1												

Fig.13. FUEL INJECTION VALVE



(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729236-53100	VALVE ASSY,INJECTION	3							
2	2	129236-53000	VALVE ASSY,INJECTION	3							
5	2	114250-53080	NUT, NOZZLE	3							
11	2	114250-53120	SPRING, NOZZLE	3							
12	2	114250-53130	SEAT, SPRING	3							
13	2	114250-53140	SPACER, VALVE STOP	3							
14	2	114250-53210	PIN, POSITIONING	6							
15	2	119803-53400	SHIM SET	3							
42	1	129150-59120	RETAINER, PIPE	2							1
45	2	129150-59131	BOLT, M4X14	4							
47	1	129004-59811	PIPE ASSY, INJECTION	1							
51	1	129004-59821	PIPE ASSY, INJECTION	1							
55	1	129004-59831	PIPE ASSY, INJECTION	1							
59	1	119802-59550	HOSE ASSY, RETURN	1							
60	2	124722-59050	CLAMP, HOSE 9	2							
61	2	119802-59560	HOSE, FUEL RETURN	1							
62	1	129486-59551	HOSE ASSY, RETURN	2							
63	2	124722-59050	CLAMP, HOSE 9	4							
65	1	119593-59581	CAP, RETURN PIPE	1							
66	1	124060-77680	CLAMP, HOSE 10	1							

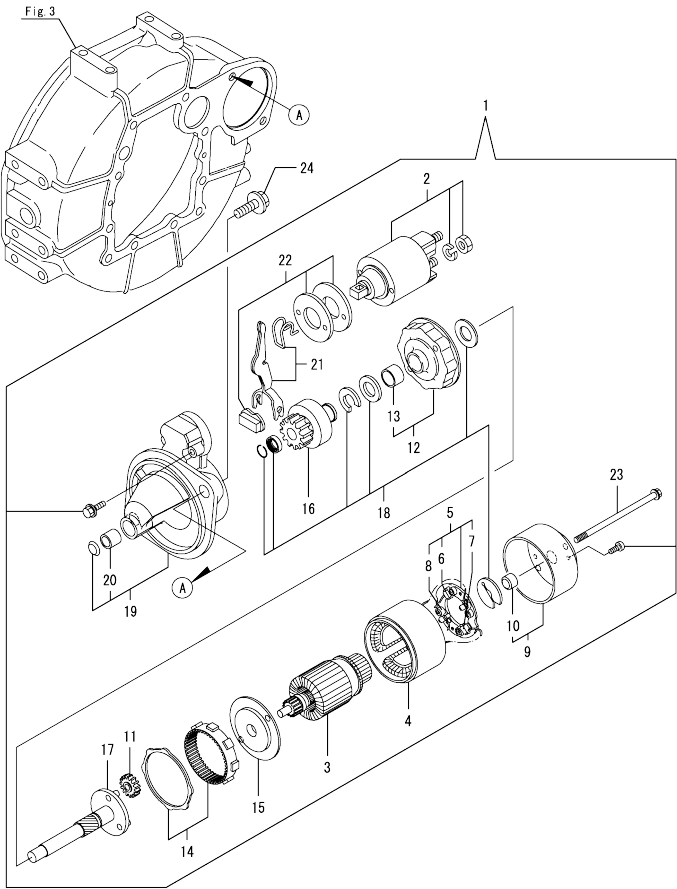
Remarks
(1)Spare parts.



Fig. 11

No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	129004-55612	BRACKET, FILTER	1							
2	1	119802-55801	FILTER, FUEL	1							
3	1	26106-080302	BOLT, M8X 30 PLATED	2							
4	1	129044-59010	HOSE ASSY, D13XL220	1							
5	2	124766-59050	CLAMP, HOSE 11.5	2							
6	2	129044-59100	TUBE, CORRUGATED 15	1							
7	2	129044-59510	HOSE, FUEL L=220	1							
8	1	129950-59311	HOSE ASSY, FUEL	1							
9	2	124766-59050	CLAMP, HOSE 11.5	2							
10	2	129961-59110	TUBE, CORRUGATED 15	1							
11	2	105025-59580	HOSE, FUEL	1							
12	1	121750-59890	RAND. NYLON	1							

Fig.15. STARTER MOTOR



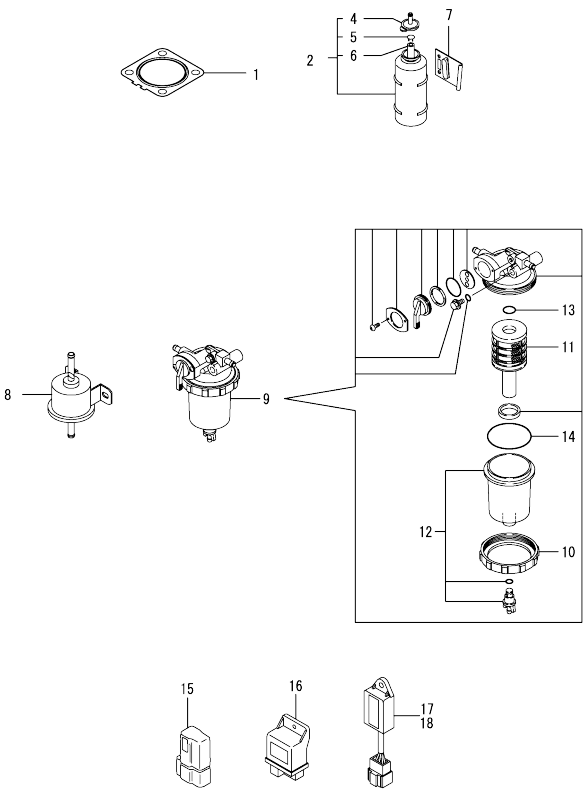
(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129242-77010	STARTER, 1.7	1							
2	2	129698-77020	SWITCH ASSY, MAGNET	1							
3	2	129242-77100	ARMATURE ASSY	1							
4	2	129242-77110	YOKE ASSY	1							
5	2	129242-77120	HOLDER ASSY, BRUSH	1							
6	3	129242-77130	BRUSH, -	2							
7	3	129242-77140	BRUSH SET	1							
8	3	129242-77150	SPRING, BRUSH	4							
9	2	129242-77160	COVER ASSY, STARTER	1							
10	3	129242-77170	METAL, REAR COVER	1							
11	2	118400-77170	GEAR, PLANETARY	3							
12	2	129242-77180	BRACKET, CENTER P	1							
13	3	129698-77190	BRACKET, CENTER	1							
14	2	129698-77200	GEAR, INTERNAL	1							
15	2	129242-77210	BRACKET, CENTER A	1							
16	2	129698-77220	PINION ASSY	1							
17	2	129698-77230	SHAFT, PINION	1							
18	2	129698-77250	WASHER SET	1							
19	2	129242-77260	CASE ASSY, GEAR	1							
20	3	X2114535200	METAL, STARTER	1							
21	2	129242-77270	LEVER SET, SHIFT	1							
22	2	129242-77280	COVER KIT, DUST	1							
23	2	124195-77770	BOLT, THROUGH	2							
24	1	26106-120252	BOLT, M12X 25 PLATED	2							



Fig.17. ACCESSORY

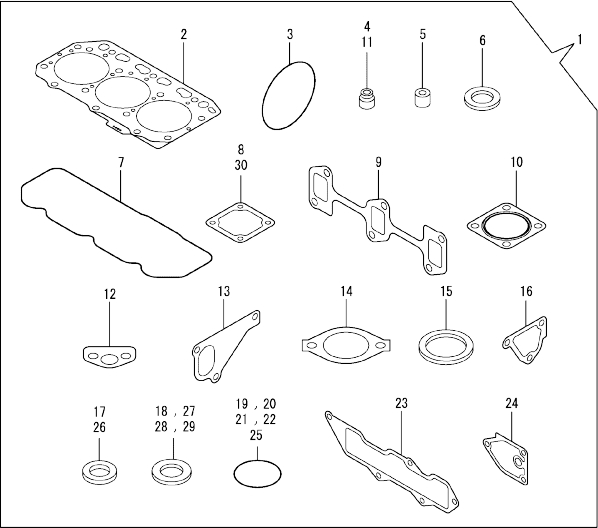


(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-13200	GASKET, SILENCER	1							
2	1	124450-44510	TANK ASSY, SUB	1							
4	2	124450-44530	CAP, SUB TANK	1							
5	2	124450-44560	CLAMP, PIPE	1							
6	2	23061-070230	PIPE, 7X 230	1							
7	1	121256-44600	BRACKET, SUB TANK	1							
8	1	119225-52102	PUMP, FUEL FEED	1							
9	1	119802-55700	SEPARATOR ASSY,WATER	1							
10	2	129100-55690	NUT, RETAINING	1							
11	2	119802-55710	ELEMENT, FUEL	1							
12	2	119802-55730	CUP ASSY, SEPARATOR	1							
13	2	24311-000160	O-RING, 1AP16.0	1							
14	2	24321-000650	O-RING, 1AG65.0	1							
15	1	119643-66900	DIODE	1							
16	1	119802-77200	RELAY, SAFETY	1							
17	1	128300-77920	TIMER, GLOW PLUG	1							
18	1	129211-77920	TIMER, SECTION 1	1							

Fig.18. GASKET SET



Remarks
(1)Optional parts.

(A)=3TNV88-BWWA
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729001-92840	GASKET SET	1							1
2	2	129001-01340	GASKET, HEAD	1							
3	2	121850-51960	O-RING, FUEL PUMP	1							
4	2	124460-11340	SEAL, VALVE STEM	3							
5	2	119802-11870	PROTECTOR, NOZZLE	3							
6	2	119625-11880	SEAT, NOZZLE	3							
7	2	129004-11310	GASKET, BONNET	1							
8	2	129150-77511	GASKET, AIR HEATER	1							
9	2	129150-13110	GASKET, MANIFOLD	1							
10	2	124701-11911	GASKET, SILENCER	1							
11	2	121400-11340	SEAL, VALVE STEM	3							
12	2	129150-35042	GASKET, INLET PIPE	1							
13	2	129486-42021	GASKET, WATER PUMP	1							
14	2	129795-49551	GASKET, COVER	1							
15	2	129150-49811	GASKET, THERMOSTAT	1							
16	2	124395-49840	GASKET, THERMOSTAT	1							
17	2	22190-080002	WASHER, SEAL 8	2							
18	2	124465-44950	GASKET, 16	1							
19	2	24311-000120	O-RING, 1AP12.0	3							
20	2	24311-000320	O-RING, 1AP32.0	2							
21	2	24341-000240	O-RING, 1AS24.0	1							
22	2	129486-42140	O-RING, G30	1							
23	2	129001-12110	GASKET, MANIFOLD	1							
24	2	129150-35111	GASKET, BRACKET	1							
25	2	119609-32040	O-RING, P16	4							
26	2	22190-100002	WASHER, SEAL 10	2							
27	2	23414-080000	GASKET, 8X1.0	1							
28	2	129150-49360	GASKET, 10	1							
29	2	22190-220002	WASHER, SEAL 22	1							
30	2	129100-77510	GASKET, AIR HEATER	1							

Parts No. Index

Parts No.	Fig. No.	Ref. No.
105025-59580	14	11
114250-39450	9	29
114250-53080	13	5
114250-53120	13	11
114250-53130	13	12
114250-53140	13	13
114250-53210	13	14
118400-77170	15	11
119131-18320	6	5
119225-52102	17	8
119260-34810	9	16
119593-59581	13	65
119609-32040	2	9
	18	25
119620-01750	3	3
119620-77380	16	3
119620-77421	16	6
119620-77440	16	11
119620-77461	16	12
119620-77471	16	13
119620-77480	16	18
119620-77490	16	14
119620-79200	16	7
119620-79210	16	8
119620-79220	16	9
119620-79230	16	10
119620-79250	16	5
119620-79260	16	16
119620-79280	16	19
119620-79290	16	20
119620-79300	16	21
119620-79310	16	23
119620-79320	16	24
119620-79330	16	25
119620-79340	16	26
119620-79350	16	27
119620-79360	16	28
119625-11880	4	28
	18	6
119640-01640	3	8
119643-66900	17	15
119660-61901	12	63
119740-61470	12	71
119802-01561	2	5
119802-03110	4	39
119802-03121	4	40
119802-03130	4	41
119802-03141	4	42
119802-11260	4	4
119802-11270	4	5

Parts No.	Fig. No.	Ref. No.
119802-11280	4	6
119802-11870	4	27
	18	5
119802-25071	7	13
119802-25101	7	10
119802-25901	7	16
119802-34850	9	18
119802-35100	9	23
119802-39450	9	31
119802-49113	10	11
119802-49730	10	40
119802-51090	11	11
119802-51250	11	133
119802-51560	11	57
119802-51590	11	63
119802-51600	11	64
119802-51680	11	68
119802-51690	11	69
119802-55700	17	9
119802-55710	17	11
119802-55730	17	12
119802-55801	14	2
119802-59550	13	59
119802-59560	13	61
119802-77200	17	16
119803-21200	8	4
119803-25050	7	9
119803-53400	13	15
119803-77830	4	52
119807-61420	12	26
119865-21600	8	14
119934-01800	2	3
119934-59910	11	130
120130-11860	4	55
120270-54410	4	30
121023-01551	2	22
121023-26071	7	18
121027-11743	2	25
121111-21501	8	11
121250-44901	10	35
121256-44600	17	7
121400-11340	4	23
	18	11
121450-42450	10	34
121550-23200	8	29
121750-59890	14	12
121850-21680	8	10
121850-51960	2	10
	18	3
123501-79240	16	4

Parts No.	Fig. No.	Ref. No.
123900-13610	6	3
124060-01050	1	4
124060-77680	13	66
124160-01751	2	6
	4	35
124160-01910	1	6
		7
124160-11360	4	47
124160-39140	9	30
124195-77770	15	23
124240-01871	2	7
		19
124395-49840	10	18
	18	16
124450-44510	17	2
124450-44530	17	4
124450-44560	17	5
124460-11340	4	24
	18	4
124465-44950	10	36
		37
	18	18
124701-11911	18	10
124722-59050	10	41
		44
	13	60
		63
124766-59050	14	5
		9
128300-77920	17	17
129001-01250	1	5
129001-01340	1	28
	18	2
129001-02931	1	29
129001-12110	5	4
	18	23
129001-32002	9	1
129004-03010	4	37
129004-11241	4	1
129004-11251	4	2
129004-11310	4	44
	18	7
129004-11350	4	36
129004-11650	4	8
129004-11900	4	29
129004-13200	17	1
129004-42002	10	1
129004-42040	10	16
129004-49610	10	38
129004-49620	10	42

Parts No.	Fig. No.	Ref. No.
129004-49711	10	39
129004-49721	10	43
129004-55612	14	1
129004-59811	13	47
129004-59821	13	51
129004-59831	13	55
129005-03080	5	1
129005-11100	4	19
129005-12101	5	3
129005-21650	8	8
129005-22080	8	15
129005-22500	8	17
129005-22900	8	35
129005-22950	8	37
129005-59830	9	32
129008-11700	4	13
129008-21000	8	1
129008-51390	11	39
129008-51900	11	9
129008-51920	11	10
129008-77800	4	53
129008-77820	4	54
129044-59010	14	4
129044-59100	14	6
129044-59510	14	7
129052-79270	16	17
129064-77330	16	31
129067-77340	16	32
129100-01580	3	1
		15
	8	2
129100-01640	3	16
129100-01730	3	6
129100-01760	3	7
129100-11112	4	20
129100-13110	6	1
129100-23910	8	32
129100-35140	9	25
129100-35301	9	21
129100-42051	10	4
129100-55690	17	10
129100-77510	18	30
129120-42351	10	24
129129-14580	7	3
129150-01200	1	27
129150-02020	1	9
129150-02450	7	4
129150-02871	1	32
129150-02931	1	24
129150-02941	1	35

Parts No. Index

Parts No.	Fig. No.	Ref. No.
129150-03070	4	38
129150-11230	4	9
129150-11280	4	7
129150-11370	4	12
129150-11750	4	11
129150-11810	4	56
129150-13110	6	2
	18	9
129150-14101	7	6
129150-14200	7	1
129150-14400	7	2
129150-23601	8	30
129150-23611	8	33
129150-25301	7	15
129150-32020	9	13
129150-35042	9	20
	18	12
129150-35111	9	26
	18	24
129150-35153	9	38
129150-42290	10	9
129150-49360	18	28
129150-49811	10	29
	18	15
129150-59120	13	42
129150-59131	13	45
129150-77511	5	8
	18	8
129155-49801	10	28
129155-51280	12	6
129155-61461	12	28
129202-22300	8	23
129211-77920	17	18
129236-53000	13	2
129240-79300	16	22
129240-79310	16	2
129242-77010	15	1
129242-77100	15	3
129242-77110	15	4
129242-77120	15	5
129242-77130	15	6
129242-77140	15	7
129242-77150	15	8
129242-77160	15	9
129242-77170	15	10
129242-77180	15	12
129242-77210	15	15
129242-77260	15	19
129242-77270	15	21
129242-77280	15	22

Parts No.	Fig. No.	Ref. No.
129245-21580	8	12
129255-61410	12	25
129350-49530	10	30
129410-03990	5	2
129423-77210	16	1
129423-77730	16	15
129484-26200	7	20
129484-26210	7	22
129486-01670	3	19
129486-42021	10	15
	18	13
129486-42140	10	17
	18	22
129486-59551	13	62
129601-34801	9	15
129604-01520	2	4
129612-01600	3	2
129630-77910	12	121
129642-61060	12	89
129655-44740	10	26
129698-77020	15	2
129698-77190	15	13
129698-77200	15	14
129698-77220	15	16
129698-77230	15	17
129698-77250	15	18
129795-01780	3	18
129795-01900	16	29
129795-01950	2	8
129795-02412	1	12
129795-11120	4	21
129795-11180	4	22
129795-21661	8	9
129795-49551	10	31
	18	14
129900-07900	4	50
129950-59311	14	8
129961-59110	14	10
129972-77341	16	33
129C26-01890	2	20
129E00-13640	6	4
158552-51151	7	17
158552-51571	11	58
		59
158552-51580	11	62
158552-51600	11	72
158552-51670	11	126
158552-51781	11	98
158552-52100	11	128
158552-52311	11	107

Parts No.	Fig. No.	Ref. No.
158552-52400	11	108
158552-52500	11	129
158552-61441	12	27
158552-61900	12	80
158553-51551	11	124
158553-51630	11	73
158553-51650	11	75
158553-51660	11	76
158553-51670	11	67
158553-51680	11	77
158553-51770	11	104
158553-51930	11	101
	12	7
158553-61050	12	3
158553-61070	12	4
158557-51570	11	60
158563-51281	11	37
		38
158563-51330	11	48
158600-51270	11	36
158601-51550	11	56
158601-51570	11	61
158601-51650	11	125
158601-51770	11	97
158601-51790	11	99
171051-01921	1	8
171056-49120	10	33
171353-26081	7	19
171463-12581	5	7
22190-080002	2	11
	9	33
		35
	18	17
22190-100002	9	36
	18	26
22190-120002	11	102
		109
		131
	12	67
22190-180002	11	103
		110
22190-220002	3	10
	18	29
22217-140000	11	111
22252-000260	8	24
22312-050140	11	112
22351-030010	8	7
22351-050010	11	113
22351-060012	4	31
22512-070140	7	7

Parts No.	Fig. No.	Ref. No.
22512-070140	8	5
22857-500100	4	45
		46
23061-070230	17	6
23414-080000	10	19
	18	27
23857-030000	9	34
24105-060064	7	25
24311-000070	11	115
24311-000120	4	48
	18	19
24311-000160	17	13
24311-000320	2	12
		26
	4	49
	18	20
24316-240100	9	17
24321-000650	17	14
24321-000850	7	26
24341-000240	2	23
	18	21
24356-190180	11	116
24356-190200	11	70
		117
24372-000150	11	71
25152-003700	10	25
26106-060102	11	118
	12	70
26106-060122	10	27
		45
	12	86
		87
26106-060162	2	24
26106-060202	12	88
26106-080122	10	20
26106-080142	7	8
26106-080162	2	13
		14
		21
	3	11
	4	51
	9	19
	10	21
	11	134
26106-080202	5	5
	9	28
	11	135
26106-080222	10	32
26106-080252	3	12
	4	32

Parts No. Index

Parts No.	Fig. No.	Ref. No.
26106-080302	2	15
	14	3
26106-080352	3	20
	4	33
	5	9
	9	22
26106-080402	7	14
26106-080452	3	13
	10	22
26106-080502	3	14
	4	34
26106-080552	2	16
26106-080602	10	23
26106-080802	5	6
26106-080852	2	17
26106-100452	7	27
26106-120252	15	24
26206-100252	3	4
26206-100302	3	5
26306-080002	2	18
	6	6
26306-100002	16	30
26366-060002	9	37
26450-060252	9	14
26450-080282	7	28
26450-080452	11	120
26776-140002	11	121
27241-120000	1	13
27241-300000	1	14
27241-400000	4	18
27310-080001	4	25
729001-92840	18	1
729005-01560	1	1
729008-51400	11	1
729236-53100	13	1
729402-23100	8	25
729652-01500	2	1
X2114535200	15	20

Parts No.	Fig. No.	Ref. No.