

0CD11-M19200EN

P R E F A C E

1. This parts catalog is the 1st edition of 3TNV88-ESIK for KATO WORKS CO.,LTD.

Published : October, 2013

2. Model name

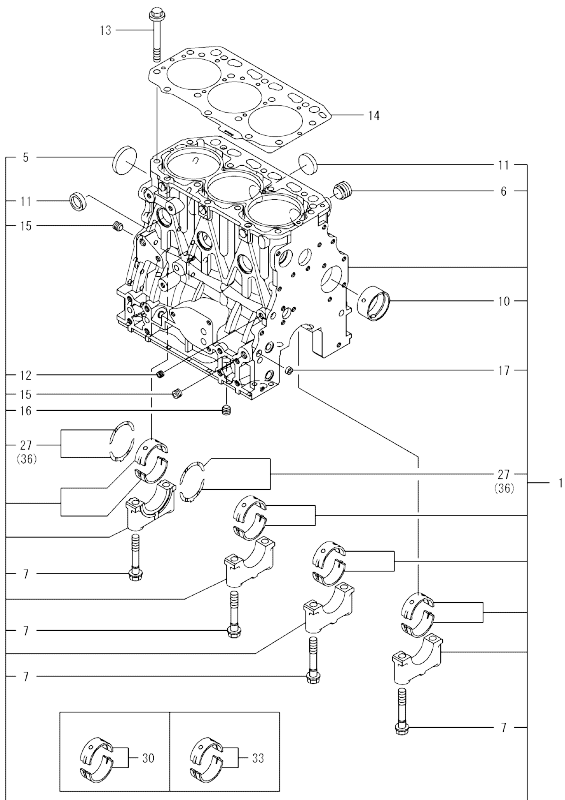
Engine model	Vehicle	Vehicle made by
3TNV88-ESIK	EXCAVATOR	KATO WORKS CO.,LTD.

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0CD11-M19200

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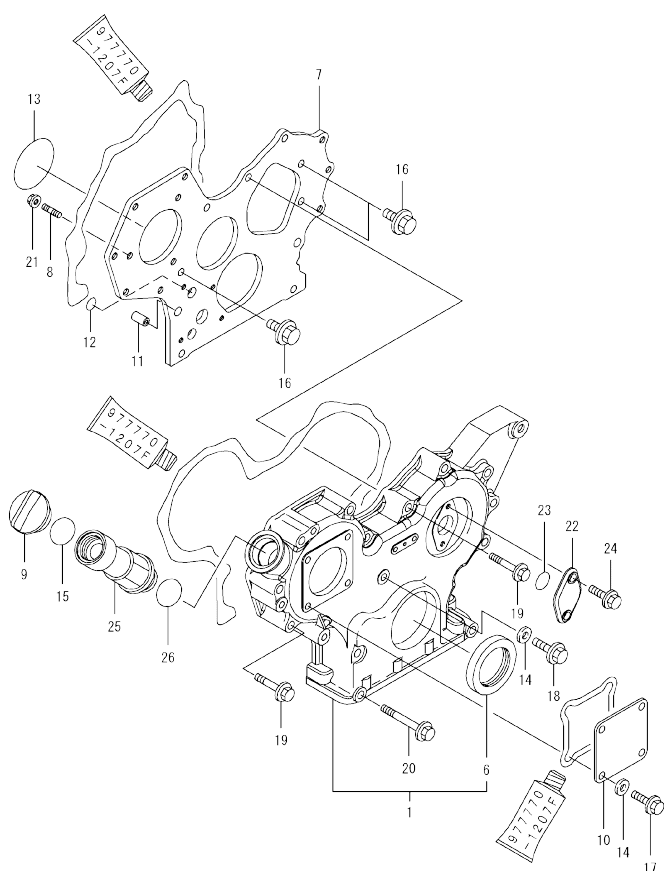
Fig.1. CYLINDER BLOCK



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	729005-01560	BLOCK ASSY, CYLINDER	1							
5	3	129001-01250	PLUG, 50	1							
6	3	171051-01921	PLUG, NPTF1	1							
7	3	129150-02020	BOLT, METAL CAP	8							
10	3	129795-02412	BUSH, CAMSHAFT	1							
11	3	27241-300000	PLUG 30	6							
12	2	124060-01050	PLUG, PT1/8	1							
13	2	129150-01200	BOLT, HEAD	14							
14	2	129001-01340	GASKET, HEAD	1							
15	2	124160-01910	PLUG, PT1/4	2							
16	2	124160-01910	PLUG, PT1/4	1							
17	2	27241-120000	PLUG, 12	2							
27	1	129150-02931	BEARING, THRUST	2							
30	1	129001-02931	BEARING, MAIN	4							1
33	1	129150-02871	BEARING, 0.25 US	4							2
36	1	129150-02941	BEARING, THRUST 0.25	1							3

Fig.2. GEAR HOUSING



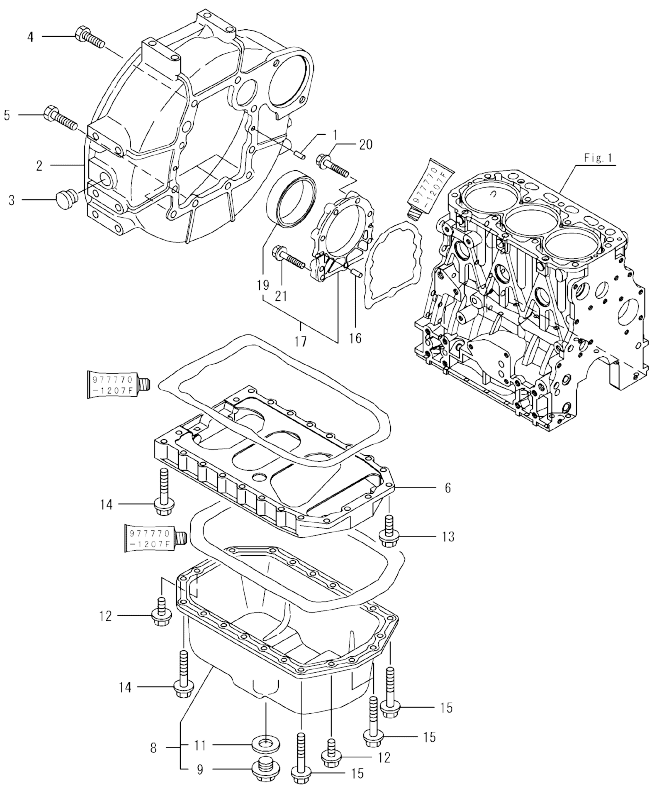
(D)=
(E)=
(F)=

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

No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	719803-01500	CASE ASSY, GEAR	1							
6	2	719934-01800	SEAL, OIL	1							
7	1	719803-01520	FLANGE, GEAR CASE	1							
8	1	719802-01561	STUD, M8X25	3							
9	1	124160-01751	COVER, FILLER	1							
10	1	124240-01871	COVER	1							
11	1	129795-01950	PIPE, KNOCK L=18	2							
12	1	119609-32040	O-RING, P16	2							
13	1	121850-51960	O-RING	1							
14	1	22190-080002	WASHER, SEAL 8	5							
15	1	24311-000320	O-RING, 1AP32.0	1							
16	1	26106-080162	BOLT, M8X 16 PLATED	3							
17	1	26106-080162	BOLT, M8X 16 PLATED	4							
18	1	26106-080302	BOLT, M8X 30 PLATED	1							
19	1	26106-080552	BOLT, M8X 55 PLATED	12							
20	1	26106-080852	BOLT, M8X 85 PLATED	3							
21	1	26306-080002	NUT, M8	3							
22	1	121023-01551	COVER	1							
23	1	24341-000240	O-RING, 1AS24.0	1							
24	1	26106-060162	BOLT, M6X 16 PLATED	2							
25	1	171031-11741	PIPE	1							
26	1	24311-000320	O-RING, 1AP32.0	1							

N:Old $\xleftrightarrow[\text{No}]{\text{Yes}}$ New, Q:Old $\xleftrightarrow[\text{Yes}]{\text{No}}$ New, R:Old $\xleftrightarrow[\text{Yes}]{\text{No}}$ New, S:Old $\xleftrightarrow[\text{No}]{\text{Yes}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.3. FLYWHEEL HOUSING & OIL SUMP

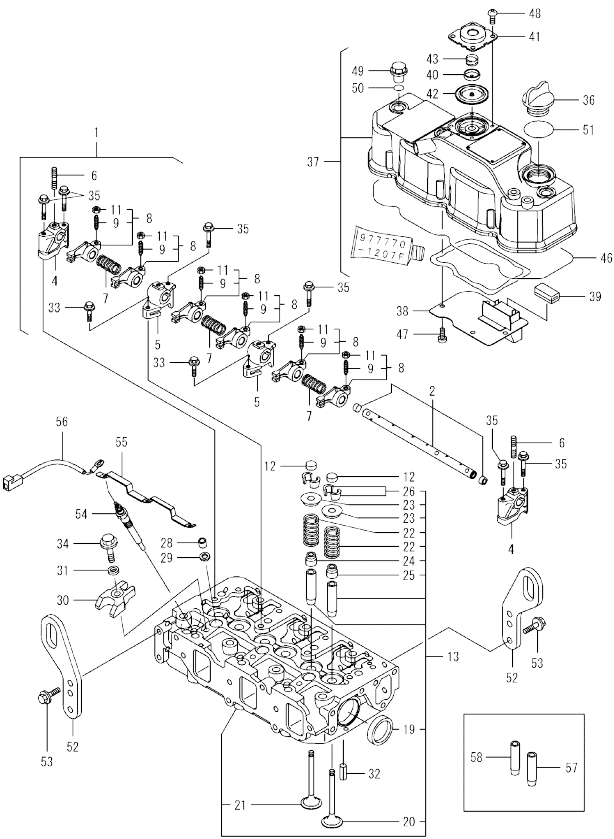


(A)=3TNV88-ESIK
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, 8X16	2							
2	1	129612-01600	HOUSING, FLYWHEEL	1							
3	1	119620-01750	CAP	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 SUMP	1							
8	1	129136-01780	SUMP ASSY, OIL	1							
9	2	119640-01640	PLUG, DRAIN M22	1							
11	2	22190-220002	WASHER, SEAL 22	1							
12	1	26106-080162	BOLT, M8X 16 PLATED	4							
13	1	26106-080252	BOLT, M8X 25 PLATED	2							
14	1	26106-080452	BOLT, M8X 45 PLATED	16							
15	1	26106-080502	BOLT, M8X 50 PLATED	4							
16	1	129100-01580	PIN, 8X16	2							
17	1	129100-01640	CASE ASSY, OIL SEAL	1							
19	2	129795-01780	SEAL, OIL	1							
20	1	129486-01670	BOLT, M8X30	6							
21	1	26106-080352	BOLT, M8X 35 PLATED	3							

Fig.4. CYLINDER HEAD & BONNET



Remarks
(1)Spare parts.

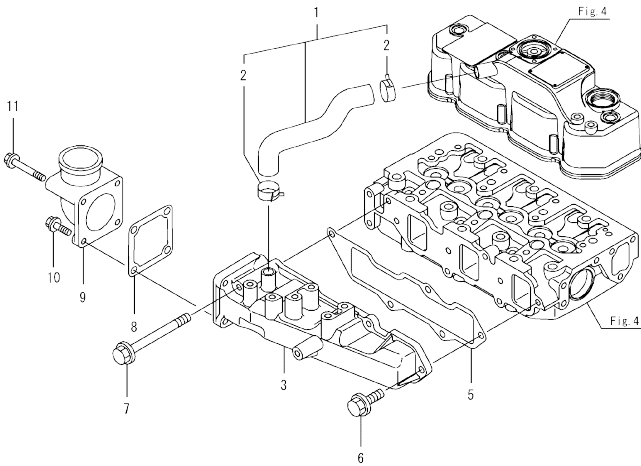
(A)=3TNV88-ESIK
(B)=
(C)=

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

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	STUD	3							
7	2	129150-11280	SPRING	3							
8	2	129004-11650	ARM,ROCKER	6							
9	3	129150-11230	SCREW, VALVE ADJUST	6							
11	3	129150-11750	NUT, M8	6							
12	1	129150-11370	CAP, VALVE	6							
13	1	129008-11700	HEAD ASSY, CYLINDER	1							
19	3	27241-400000	PLUG, 40	2							
20	2	129005-11100	VALVE, INTAKE	3							
21	2	129100-11112	VALVE, EXHAUST	3							
22	2	129795-11120	SPRING, VALVE	6							
23	2	129795-11180	RETAINER, SPRING	6							
24	2	121400-11340	SEAL, VALVE STEM	3							
25	2	124460-11340	SEAL, VALVE STEM	3							
26	2	27310-080001	COTTER, 8	6							
28	1	119802-11870	PROTECTOR, NOZZLE	3							
29	1	119625-11880	SEAT, NOZZLE	3							
30	1	129004-11900	RETAINER, NOZZLE	3							
31	1	120270-54410	WASHER, INJECTOR	3							
32	1	22351-060012	PIN, SPRING 6.0X12	2							
33	1	26106-080252	BOLT, M8X 25 PLATED	2							
34	1	26106-080352	BOLT, M8X 35 PLATED	3							
35	1	26106-080502	BOLT, M8X 50 PLATED	6							
36	1	124160-01751	COVER, FILLER	1							
37	1	129004-11350	BONNET ASSY, HEAD	1							
38	2	129004-03010	PLATE	1							
39	2	129150-03070	BAFFLE, BREATHER	1							
40	2	119802-03110	PLATE	1							
41	2	119802-03121	COVER, DIAPHRAGM	1							
42	2	119802-03130	DIAPHRAGM	1							
43	2	119802-03141	SPRING, DIAPHRAGM	1							
46	2	129004-11310	GASKET, BONNET	1							
47	2	22857-500100	SCREW, 5X10	4							
48	2	22857-500100	SCREW, 5X10	4							
49	1	124160-11360	KNOB	3							
50	1	24311-000120	O-RING, 1AP12.0	3							
51	1	24311-000320	O-RING, 1AP32.0	1							
52	1	129486-07901	LIFTER	2							
53	1	26106-080142	BOLT, M8X 14 PLATED	4							
54	1	129008-77800	PLUG, GLOW	3							
55	1	129008-77820	CONNECTOR, GLOW PLUG	1							
56	1	119803-77830	HARNES, WIRE	1							
57	1	120130-11860	GUIDE, VALVE	3							1
58	1	129150-11810	GUIDE, VALVE	3							1

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Fig.5. SUCTION MANIFOLD



0CD11-M19200 Fig.5

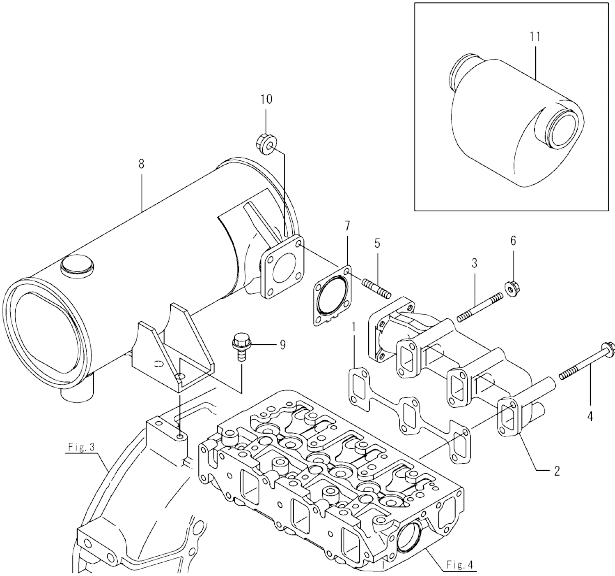
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(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-03080	PIPE , BREATHER	1							
2	2	129410-03990	CLIP,HOSE 21.5	2							
3	1	129004-12101	MANIFOLD, AIR INTAKE	1							
5	1	129001-12110	GASKET, MANIFOLD	1							
6	1	26106-080202	BOLT, M8X 20 PLATED	4							
7	1	26106-080802	BOLT, M8X 80 PLATED	1							
8	1	129150-77511	GASKET	1							
9	1	119803-77520	BEND, AIR HEATER	1							
10	1	26106-080202	BOLT, M8X 20 PLATED	2							
11	1	26106-080802	BOLT, M8X 80 PLATED	2							

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Fig.6. EXHAUST MANIFOLD & SILENCER



Remarks
(1)Loose parts.

OCD11-M19200 Fig.6

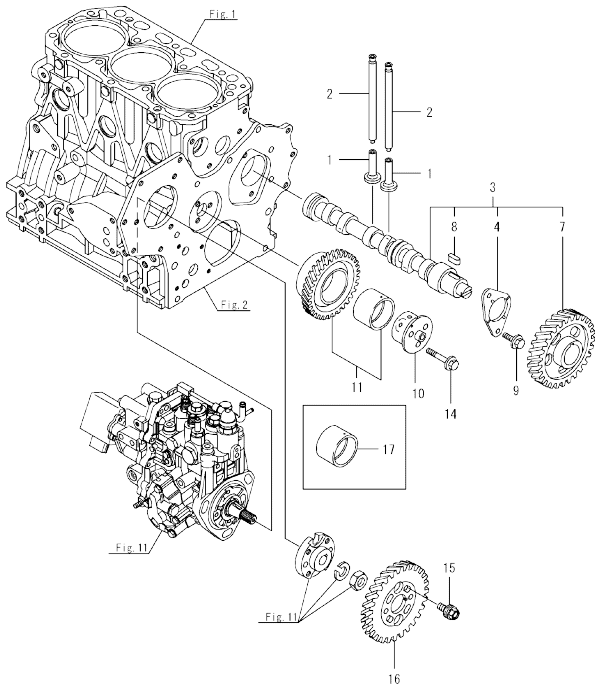
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(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129150-13110	GASKET	1							
2	1	129004-13129	MANIFOLD, EXHAUST	1							
3	1	123900-13610	STUD, M8X80	2							
4	1	123900-13630	BOLT, M8X80	4							
5	1	119131-18320	STUD, M8X22	4							
6	1	26306-080002	NUT, M8	2							
7	1	129004-13200	GASKET, SILENCER	1							
8	1	129240-13550	SILENCER	1							
9	1	26106-100202	BOLT, M10X 20 PLATED	2							
10	1	26306-080002	NUT, M8	4							
11	1	121855-12060	SILENCER ASSY	1							1

N:Old $\frac{NBS}{100}$ New, Q:Old $\frac{HQ}{100}$ New, R:Old $\frac{RBS}{100}$ New, S:Old $\frac{HS}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.7. CAMSHAFT & DRIVING GEAR



Remarks
(1)Spare parts.

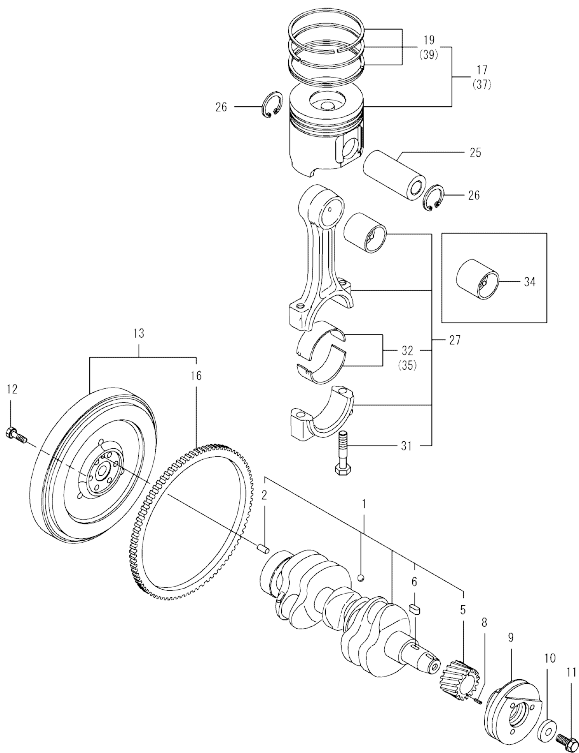
(A)=3TNV88-ESIK
(B)=
(C)=

(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	BEARING, THRUST	1							
7	2	129150-14101	GEAR, CAMSHAFT	1							
8	2	22512-070140	KEY, 7X 14	1							
9	1	26106-080142	BOLT, M8X 14 PLATED	2							
10	1	119803-25050	SHAFT, IDLE	1							
11	1	119802-25101	GEAR ASSY, IDLE	1							
14	1	26106-080402	BOLT, M8X 40 PLATED	3							
15	1	129150-25301	BOLT	4							
16	1	119802-25901	GEAR, PUMP	1							
17	1	119802-25071	BUSH, IDLE GEAR	1							1

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Fig.8. CRANKSHAFT & PISTON



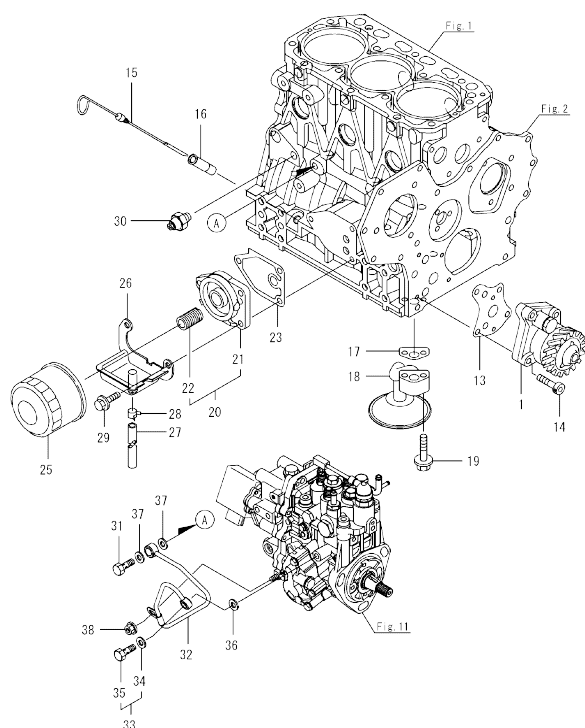
Remarks
(1)Spare parts.
(2)Under-sized(U.S.=0.25)parts.
(3)Over-sized(O.S.=0.25)parts.

OCD11-M19200 Fig.8

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

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

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, 8X16	1							
5	2	119803-21200	GEAR, CRANKSHAFT	1							
6	2	22512-070140	KEY, 7X 14	1							
8	1	22351-030010	PIN, SPRING 3.0X10	1							
9	1	129005-21650	V-PULLEY, 120	1							
10	1	129795-21661	WASHER	1							
11	1	121850-21680	BOLT	1							
12	1	121111-21501	BOLT, FLYWHEEL	6							
13	1	129211-21590	FLYWHEEL ASSY	1							
16	2	119865-21600	GEAR, RING	1							
17	1	129005-22080	PISTON ASSY	3							
19	2	129005-22500	RING SET, PISTON	3							
25	1	129202-22300	PIN, PISTON D26 L70	3							
26	1	22252-000260	RING, 26	6							
27	1	729402-23100	ROD ASSY, CONNECTING	3							
31	2	121550-23200	BOLT, CONNECTING ROD	6							
32	2	129150-23601	BEARING, CRANK PIN	3							
34	1	129100-23910	BEARING, PISTON PIN	3							1
35	1	129150-23611	BEARING, 0.25 US	3							2
37	1	129005-22900	PISTON ASSY, 0.25 OS	3							3
39	2	129005-22950	RING SET, 0.25 OS	3							3



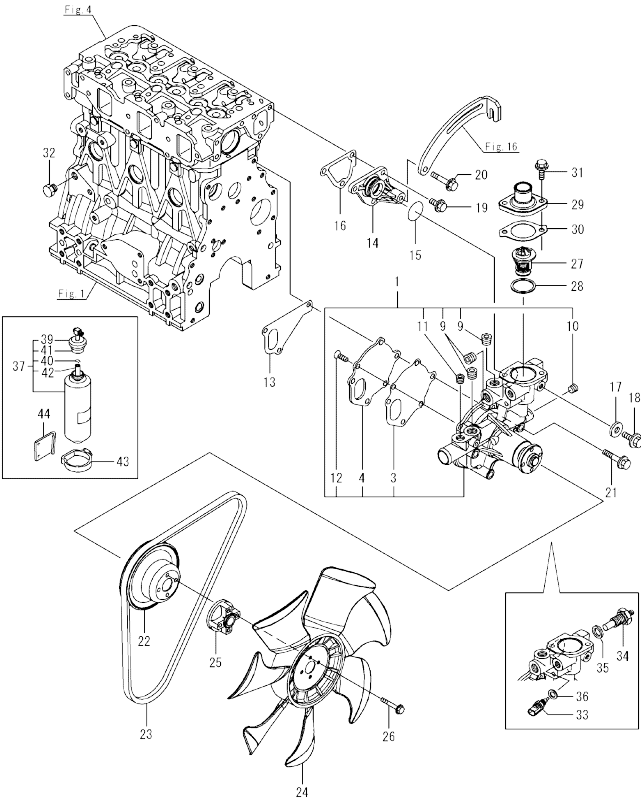
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
13	1	129001-32002	PUMP ASSY, OIL	1							
1		129150-32020	GASKET, PUMP	1							
14	1	26450-060252	BOLT, M6X 25	4							
15	1	129004-34802	DIPSTICK, OIL	1							
16	1	121520-34810	GUIDE, DIPSTICK	1							
17	1	129150-35042	GASKET	1							
18	1	129100-35301	PIPE ASSY, OIL INLET	1							
19	1	26106-080352	BOLT, M8X 35 PLATED	2							
20	1	119802-35100	BRACKET ASSY, FILTER	1							
21	2	119802-35110	BRACKET, FILTER	1							
22	2	129100-35140	STUD	1							
23	1	129150-35111	GASKET	1							
25	1	129150-35153	FILTER	1							1
26	1	129240-35800	OIL PAN	1							
27	1	23065-120230	PIPE, 12X 230	1							
28	1	23080-014000	CLAMP, 14	1							
29	1	26106-080202	BOLT, M8X 20 PLATED	3							
30	1	121252-39450	SWITCH, 0.5KG	1							
31	1	124160-39140	BOLT, PIPE JOINT M10	1							
32	1	119802-39450	PIPE ASSY, OIL	1							
33	1	129005-59830	BOLT ASSY, JOINT M8	1							
34	2	22190-080002	WASHER, SEAL 8	1							
35	2	23857-030000	BOLT, JOINT 3	1							
36	1	22190-080002	WASHER, SEAL 8	1							
37	1	22190-100002	WASHER, SEAL 10	2							
38	1	26366-060002	NUT, M6	1							

Remarks
(1) Spare parts.

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:Q'ty Change

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Fig.10. COOLING WATER SYSTEM



OCD11-M19200 Fig.10

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

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

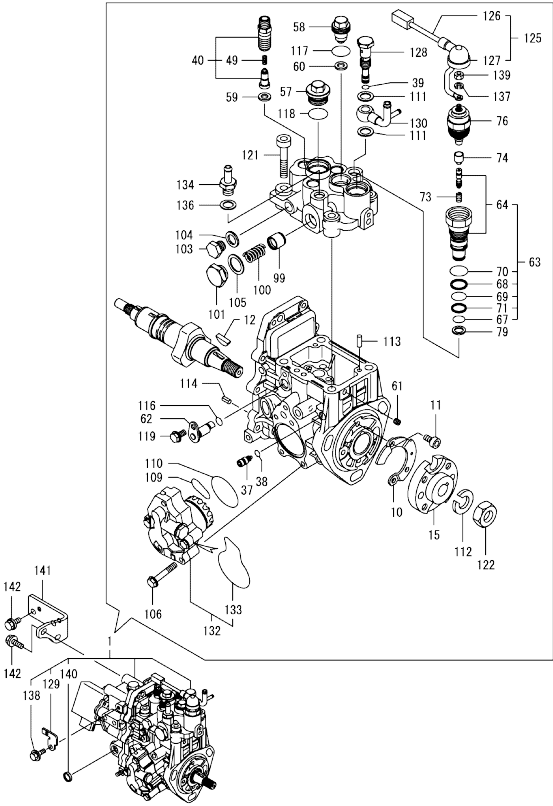
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129237-42000	PUMP ASSY, CW	1							
3	2	129100-42051	GASKET, WATER PUMP	1							
4	2	129100-42121	PLATE	1							
9	2	129916-49740	PLUG, R03	3							
10	2	23876-010000	PLUG, R01	1							
11	2	23876-020000	PLUG, R02	1							
12	2	26577-060142	SCREW M 6X 14	3							
13	1	129486-42021	GASKET, WATER PUMP	1							
14	1	129004-42040	JOINT	1							
15	1	129486-42140	O-RING, G30	1							
16	1	124395-49840	GASKET	1							
17	1	23414-080000	GASKET, 8X1.0	1							
18	1	26106-080122	BOLT, M8X 12 PLATED	1							
19	1	26106-080162	BOLT, M8X 16 PLATED	3							
20	1	26106-080452	BOLT, M8X 45 PLATED	1							
21	1	26106-080602	BOLT, M8X 60 PLATED	3							
22	1	129556-42350	V-PULLEY, 96	1							
23	1	25152-003800	V-BELT, A38	1							
24	1	121267-44741	FAN, COOLING D=360	1							
25	1	129457-44760	SPACER, FAN	1							
26	1	26106-060452	BOLT, M6X 45 PLATED	4							
27	1	129155-49801	THERMOSTAT, 71	1							
28	1	129150-49811	GASKET, THERMOSTAT	1							
29	1	129350-49530	COVER, THERMOSTAT	1							
30	1	129795-49551	GASKET	1							
31	1	26106-080222	BOLT, M8X 22 PLATED	2							
32	1	171056-49120	PLUG, DRAIN	1							
33	1	129927-44900	SENSOR	1							
34	1	119266-49350	SWITCH	1							
35	1	129150-49360	GASKET	1							
36	1	22190-120002	WASHER, SEAL 12	1							
37	1	171064-44510	TANK ASSY, SUB	1							1
39	2	121450-44531	CAP	1							
40	2	124450-44560	RETAINER	1							
41	2	121470-44581	GASKET	1							
42	2	23065-070225	HOSE 7X 225	1							
43	1	124450-44550	BAND	1							1
44	1	121256-44600	BRACKET, SUB TANK	1							1

Remarks
(1)Loose parts.

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.11. FUEL INJECTION PUMP



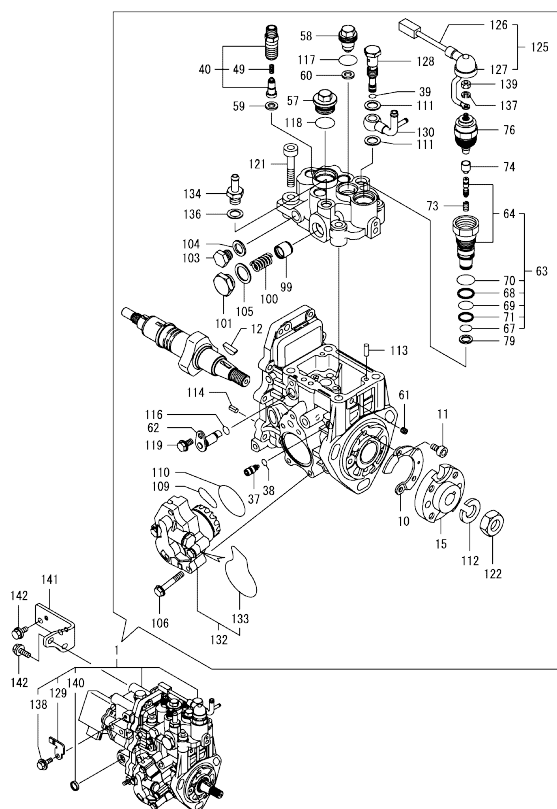
Remarks
(1)Governor(Fig.12)is incorporated in this Fuel Injection Pump (Ref.1).
(1)Eco Pump
Make sure to update the engines ECU information when replacing the Eco Pump.
Failing to do so will result in engine malfunction.

OCD11-M19200 Fig.11

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729249-51300	FIE ASSY	1							1
10	4	129008-51900	COVER, PUMP	1							
11	4	129008-51920	BOLT, SOCKET M6X10	2							
12	3	119802-51090	FEATHER KEY, 4X16	1							
15	3	158552-51151	FLANGE	1							
37	3	158600-51270	STOPPER, TAPPET	1							
38	3	158563-51281	O-RING, 4D S6	1							
39	3	158563-51281	O-RING, 4D S6	1							
40	3	129008-51390	VALVE ASSY, DELIVERY	3							
49	4	158563-51330	SPRING, DELIVERY	3							
57	3	158601-51550	PLUG, M22	1							
58	3	119802-51560	PLUG, M14	1							
59	3	158552-51571	GASKET, PLUG	3							
60	3	158552-51571	GASKET, PLUG	1							
61	3	158557-51570	PLUG, RACK	1							
62	3	158552-51580	LIFTER, LINK	1							
63	3	129657-51590	TIMER ASSY	1							
64	4	129657-51600	TIMER ASSY	1							
67	4	158553-51670	O-RING	1							
68	4	119802-51680	RING, BACKUP	1							
69	4	119802-51690	O-RING	1							
70	4	24356-190200	O-RING, 4D19020	1							
71	4	24372-000150	RING, BACK UP T2P15	1							
73	3	119852-51630	SPRING, TIMER	1							
74	3	119852-51640	CAP. TIMER	1							
76	3	119852-51650	VALVE ASSY, SOLENOID	1							
79	3	158553-51680	GASKET, TIMER	1							
99	4	158601-51770	PISTON, ACCUMULATOR	1							
100	4	158552-51781	SPRING, ACCUMULATOR	1							
101	4	158601-51790	PLUG	1							
103	4	158553-51930	PLUG, M12	1							
104	4	22190-120002	WASHER, SEAL 12	1							
105	4	22190-180002	WASHER, SEAL 18	1							
106	3	158553-51770	BOLT	4							
109	3	158552-52311	O-RING	1							
110	3	158552-52400	O-RING, 4E S42	1							
111	3	22190-120002	WASHER, SEAL 12	2							
112	3	22217-140000	WASHER, SPRING 14	1							
113	3	22312-050140	PIN, PARALLEL 5X14	2							
114	3	22351-050010	PIN, SPRING 5.0X10	2							
116	3	24311-000070	O-RING, 1AP7.0	1							
117	3	24356-190180	O-RING, 4D19018	1							
118	3	24356-190200	O-RING, 4D19020	1							
119	3	26106-060102	BOLT, M6X 10 PLATED	1							
121	3	26450-080452	BOLT, M8X 45	4							
122	3	26776-140002	NUT, LOCK M14	1							
125	2	129927-51650	HARNESS ASSY, WIRE	1							
126	3	129927-51660	HARNESS	1							
127	3	129263-77941	CAP. RUBBER	1							
128	2	158601-51650	JOINT, OVER FLOW	1							
129	2	129927-51670	BRACKET	1							

N:Old $\frac{100}{100}$ New, O: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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No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
130	2	158552-51670	JOINT, OVER FLOW	1							
132	2	158552-52100	PUMP ASSY, FUEL FEED	1							
133	3	158552-52500	O-RING	1							
134	2	119934-59910	JOINT, PIPE	1							
136	2	22190-120002	WASHER, SEAL 12	1							
137	2	22217-050000	WASHER, SPRING 5	1							
138	2	26106-060142	BOLT, M6X 14 PLATED	1							
139	2	26716-050002	NUT, M5	1							
140	2	27241-160000	PLUG, 16	1							
141	1	129263-51251	RETAINER, PUMP	1							
142	1	26106-080162	BOLT, M8X 16 PLATED	4							

Remarks
(1)Governor(Fig.12)is incorporated in this Fuel Injection Pump (Ref.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.

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

Fig.13. FUEL INJECTION VALVE

(A)=3TNV88-ESIK
(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 D16.95	3							
11	2	114250-53120	SPRING, NOZZLE	3							
12	2	114250-53130	SEAT, SPRING	3							
13	2	114250-53140	PLATE	3							
14	2	114250-53210	PIN	6							
15	2	119803-53400	SHIM SET	3							
42	1	129150-59120	RETAINER, PIPE	2							
45	2	129150-59131	BOLT, M4X14	4							
47	2	129017-59810	PIPE	1							
51	2	129017-59820	PIPE	1							
55	2	129017-59830	PIPE	1							
60	1	119802-59550	PIPE ASSY, RETURN	1							
61	2	124722-59050	CLIP, HOSE 9	2							
62	2	119802-59560	PIPE, FUEL RETURN	1							
63	1	129486-59551	PIPE ASSY, RETURN	2							
64	2	124722-59050	CLIP, HOSE 9	4							
66	1	119593-59581	CAP	1							
67	1	124060-77680	CLIP, HOSE 10	1							

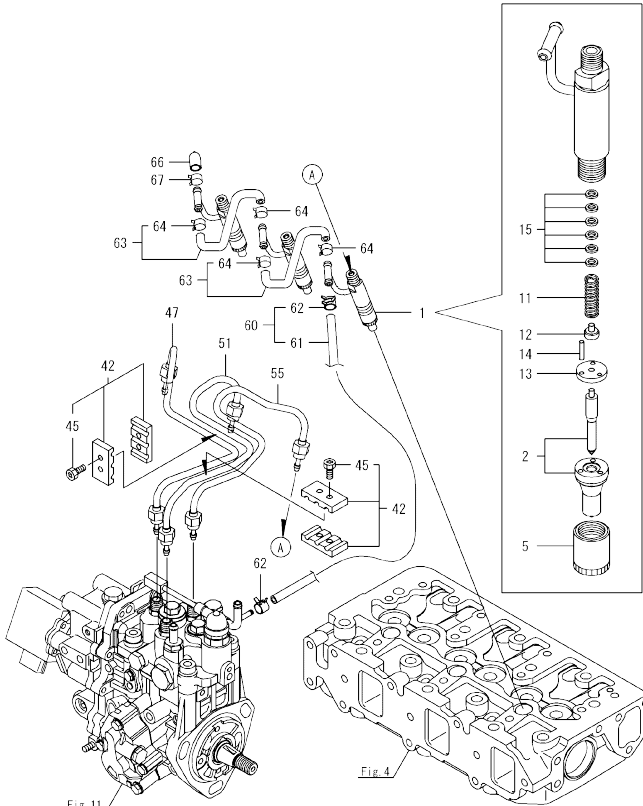
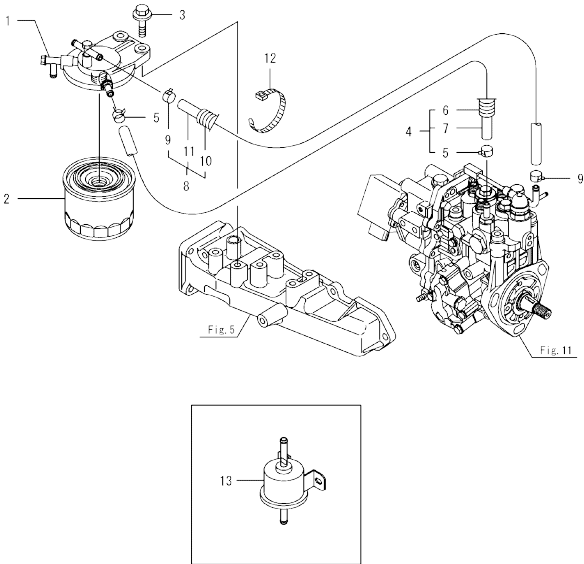


Fig.14. FUEL LINE

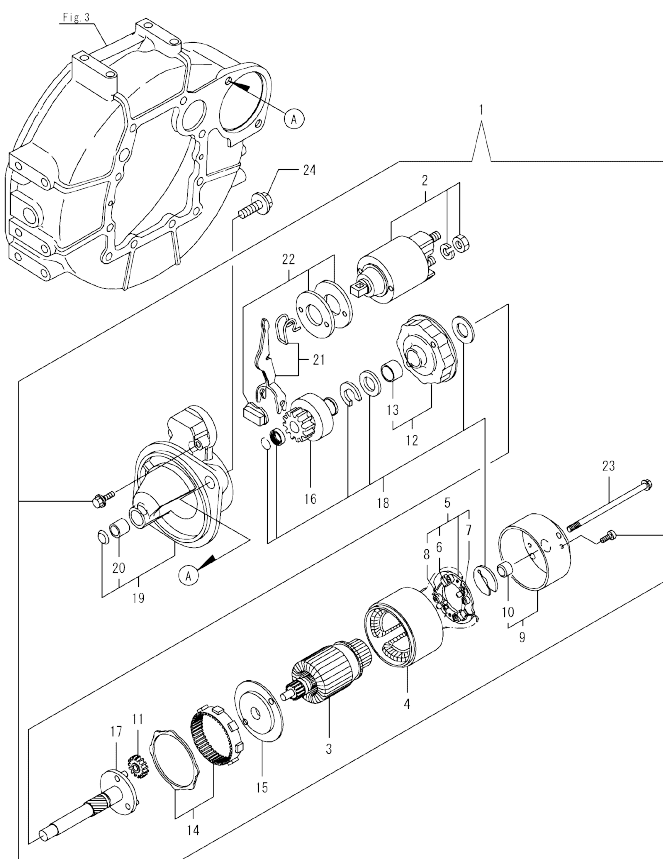


Remarks
(1)Loose parts.

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

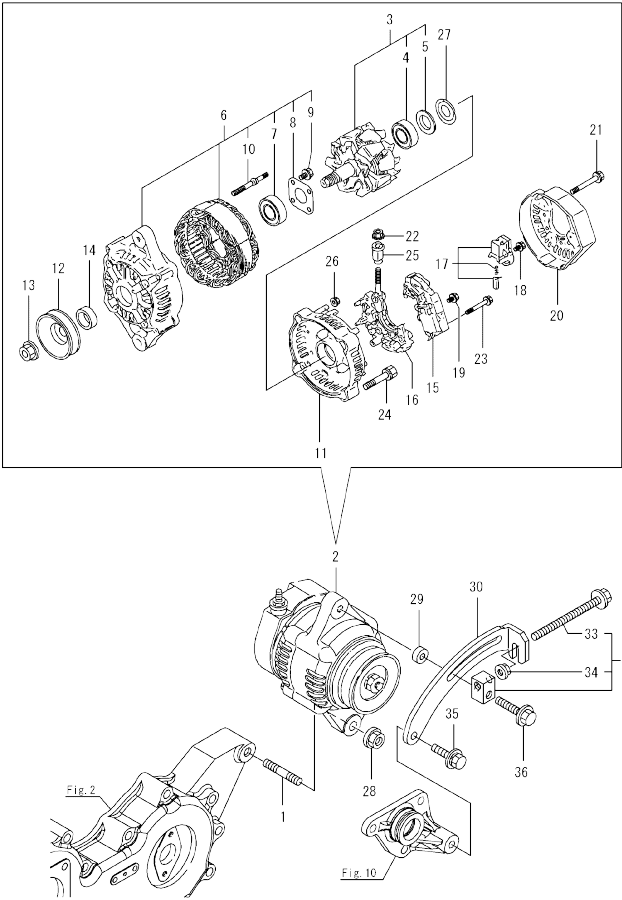
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
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	PIPE, D13/7.5X220	1							
5	2	124766-59050	CLIP, HOSE 11.5	2							
6	2	129044-59100	TUBE, CORRUGATED	1							
7	2	129044-59510	PIPE, FUEL 220	1							
8	1	129950-59311	PIPE, FUEL	1							
9	2	124766-59050	CLIP, HOSE 11.5	2							
10	2	129961-59110	TUBE, CORRUGATED	1							
11	2	105025-59580	PIPE, FUEL	1							
12	1	121750-59890	BAND, 140	1							
13	1	119225-52102	PUMP ASSY, FUEL FEED	1							1



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	129242-77010	STARTER	1							
2	2	129698-77020	SWITCH ASSY	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	4							
9	2	129242-77160	COVER ASSY	1							
10	3	129242-77170	METAL	1							
11	2	118400-77170	GEAR	3							
12	2	129242-77180	BRACKET	1							
13	3	129698-77190	BRACKET	1							
14	2	129698-77200	GEAR, INTERNAL	1							
15	2	129242-77210	BRACKET	1							
16	2	129698-77220	PINION ASSY	1							
17	2	129698-77230	SHAFT	1							
18	2	129698-77250	WASHER SET	1							
19	2	129242-77260	CASE ASSY	1							
20	3	X2114535200	METAL, STARTER	1							
21	2	129242-77270	LEVER SET	1							
22	2	129242-77280	COVER ASSY, DUST	1							
23	2	124195-77770	BOLT, THROUGH	2							
24	1	26106-120252	BOLT, M12X 25 PLATED	2							

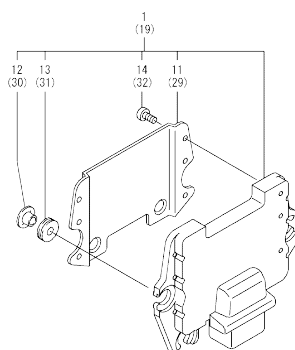
Fig.16. GENERATOR



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

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

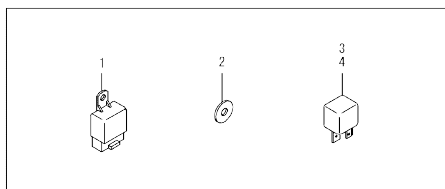
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129795-01900	STUD	1							
2	1	129240-77200	ALTERNATOR	1							
3	2	119620-77380	ROTOR ASSY	1							
4	3	123501-79240	BEARING, BALL	1							
5	3	119620-79250	COVER	1							
6	2	119620-77421	FRAME ASSY, DRIVE	1							
7	3	119620-79200	BEARING, BALL	1							
8	3	119620-79210	PLATE, RETAINER	1							
9	3	119620-79220	SCREW	4							
10	3	119620-79230	STUD	2							
11	2	119620-77440	FRAME ASSY	1							
12	2	119620-77461	PULLEY	1							
13	2	119620-77471	NUT	1							
14	2	119620-77490	COLLAR	1							
15	2	129240-77710	REGULATOR ASSY	1							
16	2	119620-79260	HOLDER	1							
17	2	129052-79270	HOLDER, BRUSH	1							
18	2	119620-79290	SCREW	6							
19	2	119620-79300	SCREW	1							
20	2	129240-79300	COVER	1							
21	2	119620-79310	BOLT	3							
22	2	129240-79310	NUT	1							
23	2	119620-79320	SCREW	2							
24	2	119620-79330	BOLT	2							
25	2	119620-79340	BUSH, INSULATION	1							
26	2	119620-79350	NUT	2							
27	2	119620-79360	WASHER, THRUST	1							
28	1	26306-100002	NUT, M10	1							
29	1	119940-77270	SPACER, GENERATOR	1							
30	1	129240-77320	ADJUSTER	1							
31	1	119624-77351	BLOCK ASSY, ADJUSTER	1							
33	2	26106-081004	BOLT, M8X100 PLATED	1							
34	2	26306-080002	NUT, M8	1							
35	1	26106-080452	BOLT, M8X 45 PLATED	1							
36	1	26106-080552	BOLT, M8X 55 PLATED	1							



0CD11-M19200 3TNV88-ESIK
Fig.17. ELECTRONIC CONTROL UNIT(ECU)

				(A)=3TNV88-ESIK (B)= (C)=	OCD11-M19200 Fig.17 (D)= (E)= (F)=					
No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I R
1	1	129249-75210	ECU ASSY,3TNV88-ESIK	1						1
11	2	129927-77600	SHIELD	1						
12	2	129927-77680	COLLAR	3						
13	2	191578-91351	ABSORBER	3						
14	2	22877-500080	SCREW, 5X 8	6						
19	1	129927-75900	CONTROLLER ASSY, EUC	1						2
29	2	129927-77600	SHIELD	1						
30	2	129927-77680	COLLAR	3						
31	2	191578-91351	ABSORBER	3						
32	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.

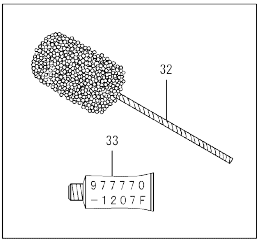
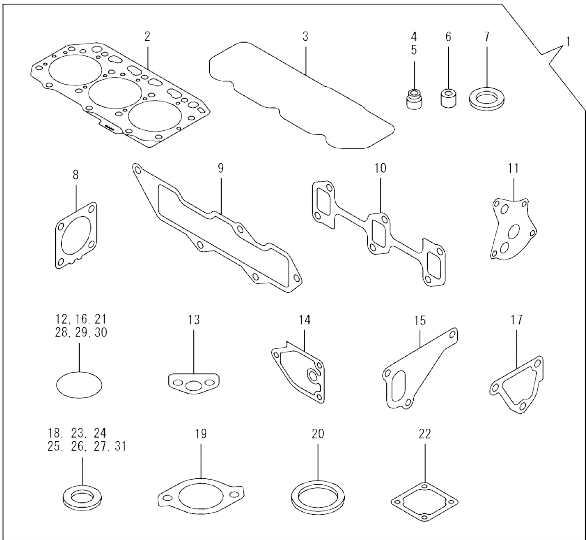


				(A)=3TNV88-ESIK (B)= (C)=	0CD11-M19200 Fig.18 (D)= (E)= (F)=					
No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I R
1	1	198461-52950	RELAY, CA TYPE C	3						1
1-1	1	172B02-17150	RELAY, CA TYPE C	3						R 1
(A=ES2528)										
2	1	129927-77690	WASHER, ECU	3						1
3	1	129927-77920	RELAY, ISO 70A	1						1
4	1	129927-77930	RELAY, ISO 40A	1						

Remarks
(1) Loose parts.

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

Fig.19. GASKET SET



Remarks
(1)Optional parts. (Parts number will be informed later.)

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

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129237-92620	PACKING	1							1
2	2	129001-01340	GASKET, HEAD	1							
3	2	129004-11310	GASKET, BONNET	1							
4	2	121400-11340	SEAL, VALVE STEM	3							
5	2	124460-11340	SEAL, VALVE STEM	3							
6	2	119802-11870	PROTECTOR, NOZZLE	3							
7	2	119625-11880	SEAT, NOZZLE	3							
8	2	129004-13200	GASKET, SILENCER	1							
9	2	129001-12110	GASKET, MANIFOLD	1							
10	2	129150-13110	GASKET	1							
11	2	129150-32020	GASKET, PUMP	1							
12	2	119609-32040	O-RING, P16	2							
13	2	129150-35042	GASKET	1							
14	2	129150-35111	GASKET	1							
15	2	129486-42021	GASKET, WATER PUMP	1							
16	2	129486-42140	O-RING, G30	1							
17	2	124395-49840	GASKET	1							
18	2	129150-49360	GASKET	1							
19	2	129795-49551	GASKET	1							
20	2	129150-49811	GASKET, THERMOSTAT	1							
21	2	121850-51960	O-RING	1							
22	2	129150-77511	GASKET	1							
23	2	22190-080002	WASHER, SEAL 8	7							
24	2	22190-100002	WASHER, SEAL 10	2							
25	2	22190-120002	WASHER, SEAL 12	1							
26	2	22190-220002	WASHER, SEAL 22	1							
27	2	23414-080000	GASKET, 8X1.0	1							
28	2	24311-000120	O-RING, 1AP12.0	3							
29	2	24311-000320	O-RING, 1AP32.0	3							
30	2	24341-000240	O-RING, 1AS24.0	1							
31	2	124465-44950	GASKET, 16	1							
32	1	129400-92430	HONE	1							1
33	1	977770-1207F	GASKET,LIQUID	1							1

Parts No. Index

Parts No.	Fig. No.	Ref. No.
105025-59580	14	11
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	14	13
119266-49350	10	34
119578-91351	17	13
		31
119593-59581	13	66
119609-32040	2	12
	19	12
119620-01750	3	3
119620-77380	16	3
119620-77421	16	6
119620-77440	16	11
119620-77461	16	12
119620-77471	16	13
119620-77490	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
119620-79290	16	18
119620-79300	16	19
119620-79310	16	21
119620-79320	16	23
119620-79330	16	24
119620-79340	16	25
119620-79350	16	26
119620-79360	16	27
119624-77351	16	31
119625-11880	4	29
	19	7
119640-01640	3	9
119802-01561	2	8
119802-03110	4	40
119802-03121	4	41
119802-03130	4	42
119802-03141	4	43
119802-11260	4	4
119802-11270	4	5
119802-11280	4	6
119802-11870	4	28
	19	6

Parts No.	Fig. No.	Ref. No.
119802-25071	7	17
119802-25101	7	11
119802-25901	7	16
119802-35100	9	20
119802-35110	9	21
119802-39450	9	32
119802-51090	11	12
119802-51560	11	58
119802-51680	11	68
119802-51690	11	69
119802-55801	14	2
119802-59550	13	60
119802-59560	13	62
119803-01520	2	7
119803-21200	8	5
119803-25050	7	10
119803-53400	13	15
119803-77520	5	9
119803-77830	4	56
119852-51630	11	73
119852-51640	11	74
119852-51650	11	76
119865-21600	8	16
119934-01800	2	6
119934-59910	11	134
119940-77270	16	29
120130-11860	4	57
120270-54410	4	31
121023-01551	2	22
121111-21501	8	12
121252-39450	9	30
121256-44600	10	44
121267-44741	10	24
121400-11340	4	24
	19	4
121450-44531	10	39
121470-44581	10	41
121520-34810	9	16
121550-23200	8	31
121750-59890	14	12
121850-21680	8	11
121850-51960	2	13
	19	21
121855-12060	6	11
123501-79240	16	4
123900-13610	6	3
123900-13630	6	4
124060-01050	1	12
124060-77680	13	67
124160-01751	2	9

Parts No.	Fig. No.	Ref. No.
124160-01751	4	36
124160-01910	1	15
		16
124160-11360	4	49
124160-39140	9	31
124195-77770	15	23
124240-01871	2	10
124395-49840	10	16
	19	17
124450-44550	10	43
124450-44560	10	40
124460-11340	4	25
	19	5
124465-44950	19	31
124722-59050	13	61
		64
124766-59050	14	5
		9
129001-01250	1	5
129001-01340	1	14
	19	2
129001-02931	1	30
129001-12110	5	5
	19	9
129001-32002	9	1
129004-03010	4	38
129004-03080	5	1
129004-11241	4	1
129004-11251	4	2
129004-11310	4	46
	19	3
129004-11350	4	37
129004-11650	4	8
129004-11900	4	30
129004-12101	5	3
129004-13129	6	2
129004-13200	6	7
	19	8
129004-34802	9	15
129004-42040	10	14
129004-55612	14	1
129005-11100	4	20
129005-21650	8	9
129005-22080	8	17
129005-22500	8	19
129005-22900	8	37
129005-22950	8	39
129005-59830	9	33
129008-11700	4	13
129008-21000	8	1

Parts No.	Fig. No.	Ref. No.
129008-51390	11	40
129008-51900	11	10
129008-51920	11	11
129008-61301	12	20
129008-77800	4	54
129008-77820	4	55
129017-59810	13	47
129017-59820	13	51
129017-59830	13	55
129044-59010	14	4
129044-59100	14	6
129044-59510	14	7
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