

0CD11-M11300EN

P R E F A C E

1. This parts catalog is the 1st edition of 4TNV88-BDHKS for HOKUETSU INDUSTRIES CO.,LTD.

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2. Model name

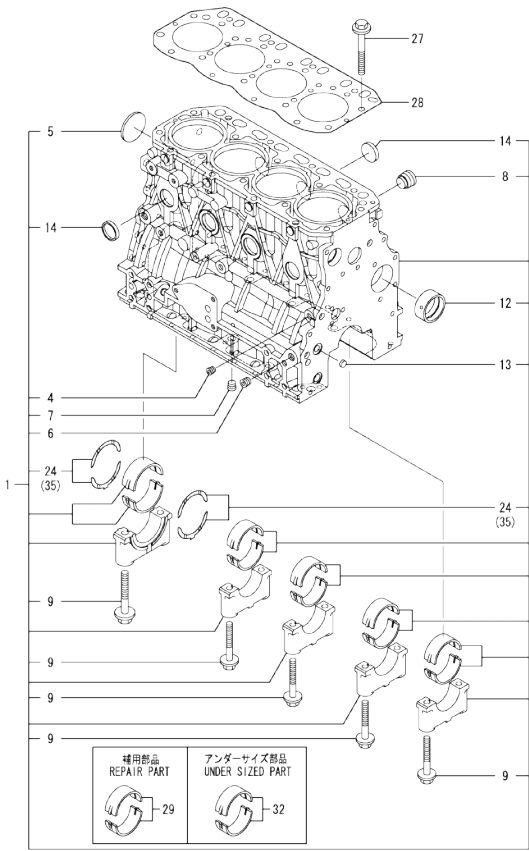
Engine model	Vehicle	Vehicle made by
4TNV88-BDHKS	ENGINE COMPRESSOR	HOKUETSU INDUSTRIES CO.,LTD.

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0CD11-M11300

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Fig.1. CYLINDER BLOCK



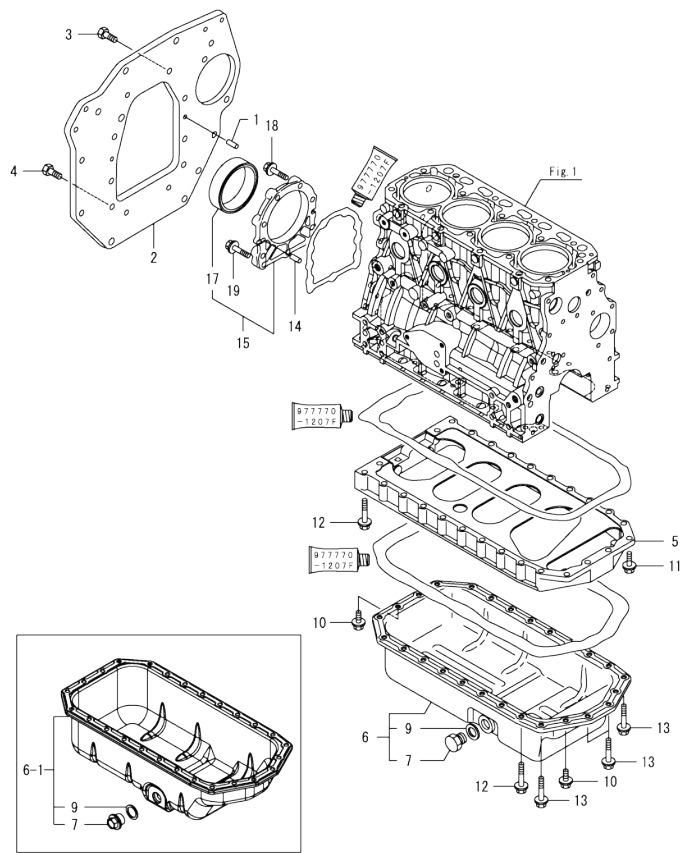
Remarks
(1)Spare parts.
(2)Under-sized(U.S.=0.25) parts.
(3)Over-sized(O.S.=0.25) parts.

(A)=4TNV88-BDHKS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729602-01560	BLOCK ASSY, CYLINDER	1							
4	2	124060-01050	PLUG, PT1/8	1							
5	2	129001-01250	PLUG, DISH TYPE 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	10							
12	2	129795-02412	BUSH, CAMSHAFT	1							
13	2	27241-120000	PLUG, 12	2							
14	2	27241-300000	PLUG 30	8							
24	2	129150-02931	BEARING ASSY, THRUST	2							
27	1	129150-01200	BOLT, CYLINDER HEAD	18							
28	1	129407-01340	GASKET, HEAD	1							
29	1	129001-02931	BEARING ASSY, MAIN	5							1
32	1	129150-02871	BEARING ASSY, MAIN	5							2
35	1	129150-02941	BEARING, THRUST 0.25	1							3

Fig.3. MOUNTING FLANGE & OIL SUMP

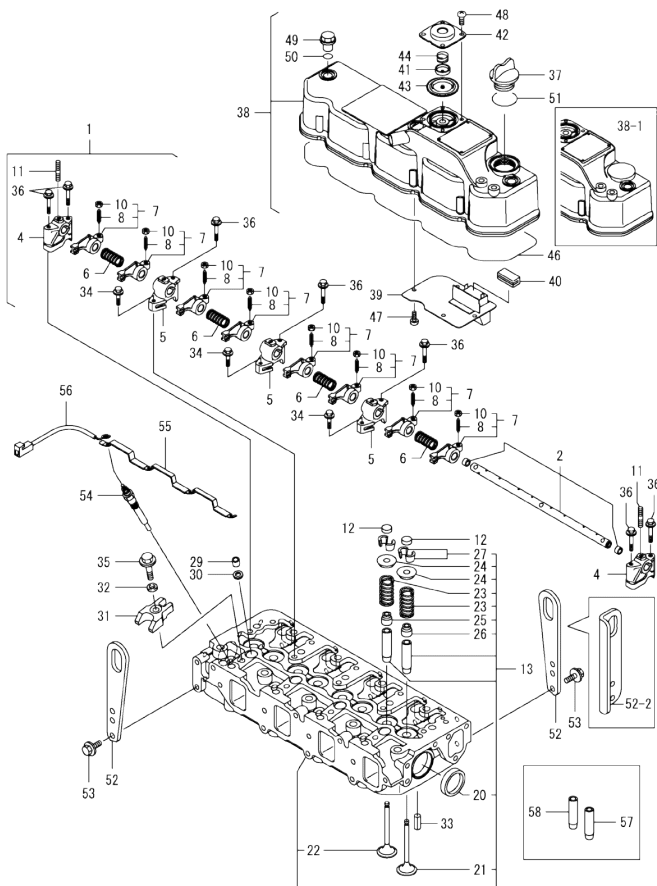


(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, PARALLEL 8X16	2							
2	1	129129-01600	FLANGE, MOUNTING	1							
3	1	26206-100202	BOLT, M10X 20 PLATED	6							
4	1	26206-100252	BOLT, M10X 25 PLATED	2							
5	1	129400-01730	SPACER, OIL-PAN	1							
6	1	129400-01770	OIL PAN ASSY	1							
6-1	1	129688-01780	OIL PAN ASSY, DEEP	1							N
(A=EZZZZZ)											
7	2	119640-01640	PLUG, DRAIN M22	1							
9	2	22190-220002	WASHER, SEAL 22	1							
10	1	26106-080162	BOLT, M8X 16 PLATED	4							
11	1	26106-080252	BOLT, M8X 25 PLATED	2							
12	1	26106-080452	BOLT, M8X 45 PLATED	20							
13	1	26106-080502	BOLT, M8X 50 PLATED	4							
14	1	129100-01580	PIN, PARALLEL 8X16	2							
15	1	129648-01600	CASE ASSY, OIL SEAL	1							
17	2	129648-01780	SEAL, OIL	1							
18	1	129486-01670	BOLT, M8X30	6							
19	1	26106-080352	BOLT, M8X 35 PLATED	3							

Fig.4. CYLINDER HEAD & BONNET



Remarks
(1)Spare parts.

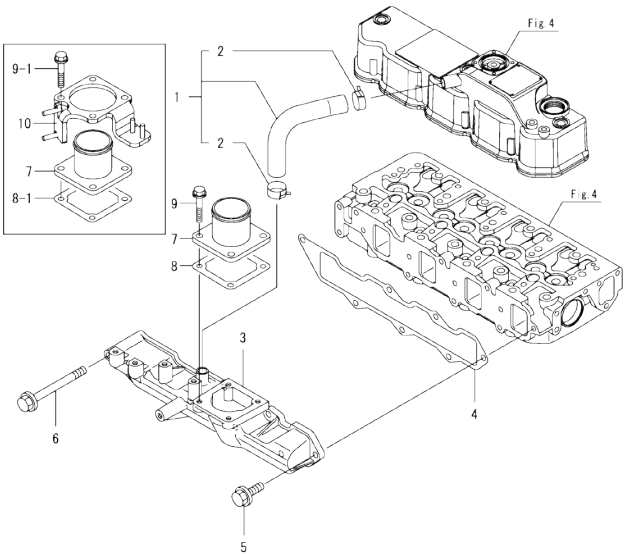
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(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129601-11241	SHAFT ASSY, ROCKER	1							
2	2	129601-11251	SHAFT, ROCKER ARM	1							
4	2	119802-11260	SUPPORT, ROCKER ARM	2							
5	2	119802-11270	SUPPORT, ROCKER ARM	3							
6	2	129150-11280	SPRING, ROCKER	4							
7	2	129004-11650	ARM ASSY, ROCKER	8							
8	3	129150-11230	SCREW, VALVE ADJUST	8							
10	3	129150-11750	NUT, M8	8							
11	2	26226-080182	STUD, M8X 18	3							
12	1	129150-11370	CAP, VALVE	8							
13	1	129688-11700	HEAD ASSY, CYLINDER	1							
20	2	27241-400000	PLUG, 40	2							
21	2	129005-11100	VALVE, SUCTION	4							
22	2	129100-11112	VALVE, EXHAUST	4							
23	2	129795-11120	SPRING, VALVE	8							
24	2	129795-11180	RETAINER, SPRING	8							
25	2	121400-11340	SEAL, VALVE STEM	4							
26	2	124460-11340	SEAL, VALVE STEM	4							
27	2	27310-080001	COTTER, 8	8							
29	1	119802-11870	PROTECTOR, NOZZLE	4							
30	1	119625-11880	SEAT, NOZZLE	4							
31	1	129004-11900	RETAINER, NOZZLE	4							
32	1	120270-54410	WASHER, INJECTOR	4							
33	1	22351-060012	PIN, SPRING 6.0X12	2							
34	1	26106-080252	BOLT, M8X 25 PLATED	3							
35	1	26106-080352	BOLT, M8X 35 PLATED	4							
36	1	26106-080502	BOLT, M8X 50 PLATED	7							
37	1	124160-01751	CAP, FILLER	1							Z
(A=EM9954)											
38	1	129601-11350	BONNET ASSY, HEAD	1							
38-1	1	129652-11350	BONNET ASSY, HEAD	1							N
(A=EM9954)											
39	2	129004-03010	PLATE, BAFFLE	1							
40	2	129150-03070	BAFFLE, BREATHER	1							
41	2	119802-03110	PLATE, DIAPHRAGM	1							
42	2	119802-03121	COVER, DIAPHRAGM	1							
43	2	119802-03130	DIAPHRAGM	1							
44	2	119802-03141	SPRING, DIAPHRAGM	1							
46	2	129601-11310	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							Z
(A=EM9954)											
52	1	129900-07900	LIFTER, ENGINE	2							
52-1	1	129900-07900	LIFTER, ENGINE	1							K
(A=*2020.02.)											
52-2	1	129688-07900	LIFTER, ENGINE	1							N
(A=*2020.02.)											
53	1	26106-080162	BOLT, M8X 16 PLATED	4							

N:Old $\frac{Y05}{10}$ New, Q:Old $\frac{Y05}{10}$ New, R:Old $\frac{Y05}{10}$ New, S:Old $\frac{Y05}{10}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
++ CONTINUE ++
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Fig.5. SUCTION MANIFOLD



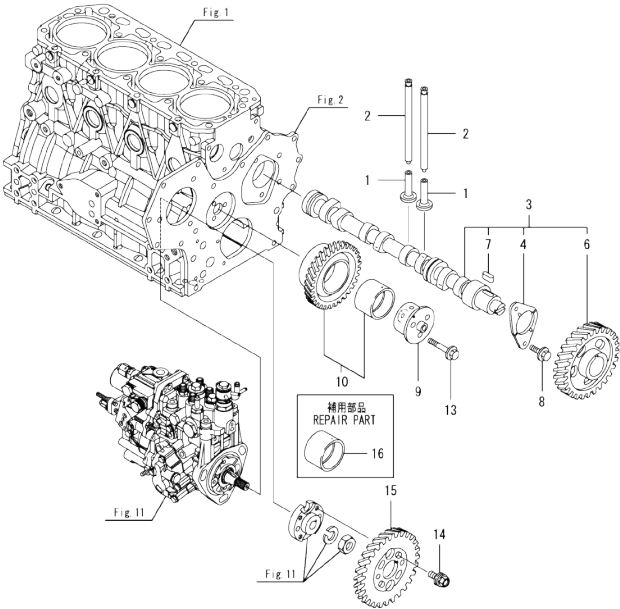
Remarks
(1)Interchangeable by simultaneous replacement with Ref.No.10 and Fig.13 Ref.No.79.

(A)=4TNV88-BDHKS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129005-03080	HOSE ASSY, BREATHER	1							
2	2	129410-03990	CLAMP, HOSE 21.5	2							
3	1	129602-12101	MANIFOLD, AIR INTAKE	1							
4	1	129407-12110	GASKET, MANIFOLD	1							
5	1	26106-080202	BOLT, M8X 20 PLATED	6							
6	1	26106-080802	BOLT, M8X 80 PLATED	1							
7	1	129486-12581	JOINT, MANIFOLD	1							
8	1	129150-77511	GASKET, AIR HEATER	1							
8-1	1	129100-77510	GASKET, AIR HEATER	1						N	
8-2	(A=EJ1850) 1	129150-77511	GASKET, AIR HEATER	1						N	
9	1	26106-080202	BOLT, M8X 20 PLATED	4							
9-1	1	26106-080252	BOLT, M8X 25 PLATED	4						N	
	(A=EJ1850)										
10	1	129688-59160	BRACKET, F.I. PIPE	1						W	1
	(A=EJ1850)										

Fig.7. CAMSHAFT & DRIVING GEAR

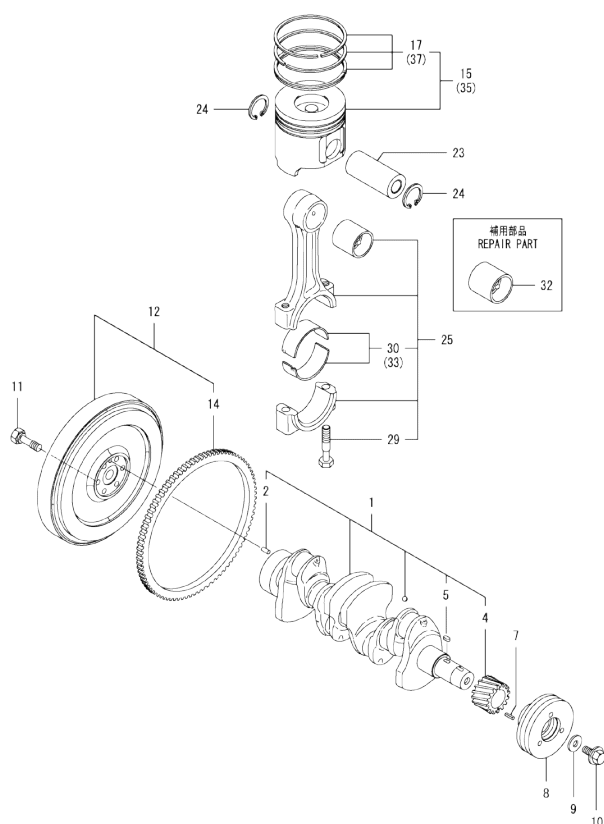


Remarks
(1)Spare parts.

(A)=4TNV88-BDHS
(B)=
(C)=

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

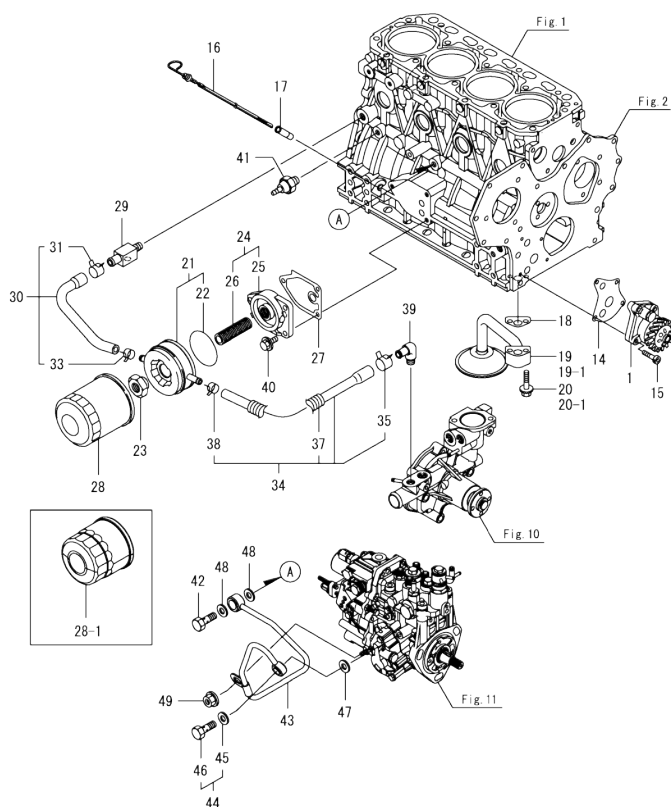
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129150-14200	TAPPET	8							
2	1	129150-14400	PUSH-ROD, L=178	8							
3	1	729402-14580	CAMSHAFT ASSY	1							
4	2	129150-02450	BEARING, THRUST	1							
6	2	129150-14101	GEAR, CAMSHAFT	1							
7	2	22512-070140	KEY, 7X 14	1							
8	1	26106-080142	BOLT, M8X 14 PLATED	2							
9	1	119803-25050	SHAFT, IDLE	1							
10	1	119802-25101	GEAR ASSY, IDLE	1							
13	1	26106-080402	BOLT, M8X 40 PLATED	3							
14	1	129150-25301	BOLT	4							
15	1	119802-25901	GEAR, PUMP	1							
16	1	119802-25071	BUSH, IDLE GEAR	1							1



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	(A)	(B)	(C)	(D)	(E)	(F)	I	R
1	1	129604-21000	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	119802-21660	V-PULLEY, CRANK 120	1							
8-1	1	119802-21650	V-PULLEY, CRANKSHAFT	1						N	
		(A=ED9860)									
9	1	129795-21661	WASHER	1							
10	1	121850-21680	BOLT	1							
11	1	121111-21501	BOLT, FLYWHEEL	6							
12	1	171420-21580	FLYWHEEL ASSY	1							
14	2	119865-21600	GEAR, RING Z=116	1							
15	1	129005-22080	PISTON ASSY	4							
17	2	129005-22500	RING SET, PISTON	4							
23	1	129202-22300	PIN, PISTON D26 L70	4							
24	1	22252-000260	RING, 26	8							
25	1	729402-23100	ROD ASSY, CONNECTING	4							
29	2	121550-23200	BOLT, CONNECTING ROD	8							
30	2	129150-23601	BEARING, CRANK PIN	4							
32	1	129100-23910	BEARING, PISTON PIN	4							1
33	1	129150-23611	BEARING, 0.25 US	4							2
35	1	129005-22900	PISTON ASSY, 0.25 OS	4							3
37	2	129005-22950	RING SET, 0.25 OS	4							

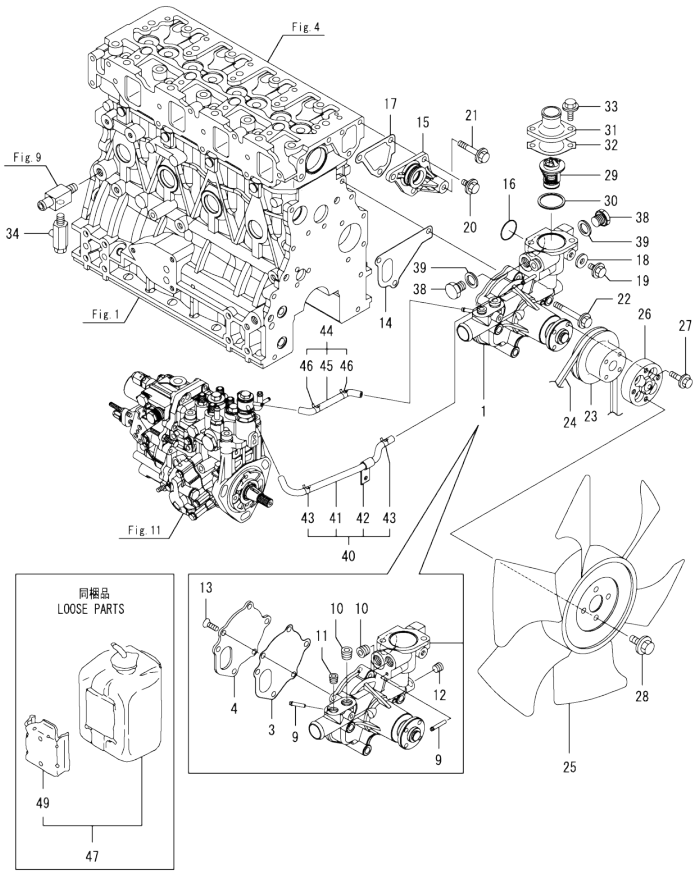
N:Old ^{YES}/_{NO} New. Q:Old ^{NO}/_{YES} New. R:Old ^{YES}/_{YES} New. S:Old ^{NO}/_{NO} New. W:Add. Z:Discontinued. F:Interchangeable by set. K:Qty Change



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	I	R
14	1	129407-32000	PUMP ASSY, OIL	1							
1	1	129150-32020	GASKET, PUMP	1							
15	1	26450-060252	BOLT, M6X 25	4							
16	1	129004-34802	DIPSTICK	1							
17	1	121520-34810	GUIDE, DIPSTICK	1							
18	1	129150-35042	GASKET	1							
19	1	129436-35091	PIPE ASSY, OIL INLET	1							
19-1	1	129436-35070	PIPE ASSY, OIL INLET	1							S
(A=EF5157)											
20	1	26106-080352	BOLT, M8X 35 PLATED	2							
20-1	1	26106-080552	BOLT, M8X 55 PLATED	2							S
(A=EF5157)											
21	1	129508-33010	COOLER ASSY, OIL	1							
22	2	129508-33050	O-RING	1							
23	1	129417-33110	NUT	1							
24	1	129006-35100	BRACKET ASSY, FILTER	1							
25	2	119802-35110	BRACKET, FILTER	1							
26	2	129417-35150	BOLT, STUD M20X67	1							
27	1	129150-35111	GASKET	1							
28	1	119005-35151	FILTER, D80X100	1							
28-1	1	129150-35153	FILTER ASSY, D80X80L	1							N
(A=EM9954)											
29	1	129006-44480	JOINT	1							
30	1	129508-49030	HOSE ASSY, WATER	1							
31	2	171008-03990	CLAMP, HOSE 18.5	1							
33	2	23080-015000	CLAMP, 15	1							
34	1	129508-49040	HOSE ASSY, WATER	1							
35	2	171008-03990	CLAMP, HOSE 18.5	1							
37	2	119940-59130	TUBE, CORRUGATED 19	1							
38	2	23080-015000	CLAMP, 15	1							
39	1	129103-49301	ELBOW, PT1/4	1							
40	1	26106-080202	BOLT, M8X 20 PLATED	3							
41	1	114250-39450	SWITCH, HYDRAULIC	1							
42	1	124160-39140	BOLT, PIPE JOINT M10	1							
43	1	119802-39450	PIPE ASSY, OIL	1							
44	1	129005-59830	BOLT ASSY, JOINT M8	1							
45	2	22190-080002	WASHER, SEAL 6	1							
46	2	23857-030000	BOLT, JOINT 3	1							
47	1	22190-080002	WASHER, SEAL 6	1							
48	1	22190-100002	WASHER, SEAL 10	2							
49	1	26366-060002	NUT, M6	1							

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

Fig.10. COOLING WATER SYSTEM

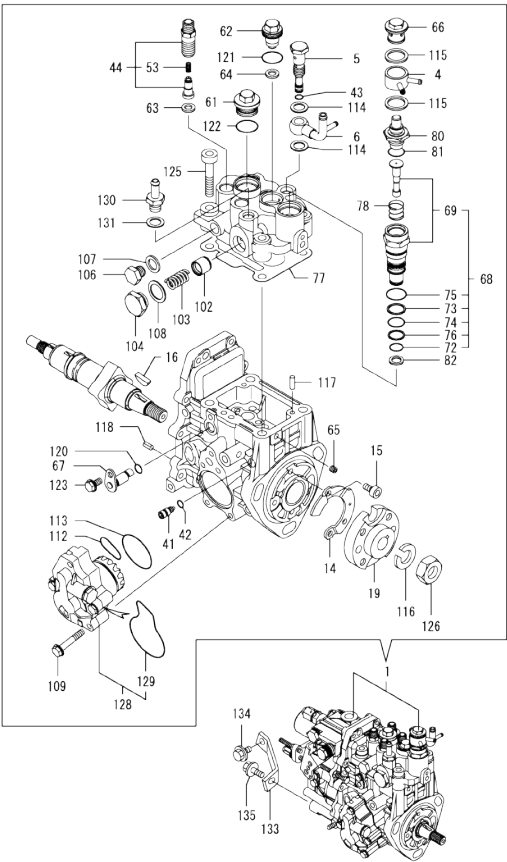


(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-42001	PUMP ASSY, WATER	1							
3	2	129100-42051	GASKET, WATER PUMP	1							
4	2	129100-42121	PLATE, PUMP	1							
9	2	119802-49113	JOINT, PIPE	2							
10	2	129916-49740	PLUG, R3/8	2							
11	2	23875-020000	PLUG, R02	1							
12	2	23876-010000	PLUG, R01	1							
13	2	26577-060142	SCREW M 6X 14	3							
14	1	129486-42021	GASKET, WATER PUMP	1							
15	1	129004-42040	JOINT	1							
16	1	129486-42140	O-RING, G30	1							
17	1	124395-49840	GASKET, THERMOSTAT	1							
18	1	23414-080000	GASKET, 8X1.0	1							
19	1	26106-080122	BOLT, M8X 12 PLATED	1							
20	1	26106-080162	BOLT, M8X 16 PLATED	3							
21	1	26106-080452	BOLT, M8X 45 PLATED	1							
22	1	26106-080602	BOLT, M8X 60 PLATED	3							
23	1	129403-42380	V-PULLEY, D=110	1							
23-1	1	129550-42350	V-PULLEY, PUMP	1							N
(A=ED9860)											
24	1	129612-42350	V-BELT, A38	1							
25	1	129916-44740	FAN, COOLING D=430	1							
26	1	129648-44770	SPACER, FAN	1							
27	1	26106-060222	BOLT, M6X 22 PLATED	4							
28	1	26106-080162	BOLT, M8X 16 PLATED	4							
29	1	129155-49801	THERMOSTAT, 71C	1							
30	1	129150-49811	GASKET, THERMOSTAT	1							
31	1	129350-49530	COVER, THERMOSTAT	1							
32	1	129795-49551	GASKET	1							
33	1	26106-080222	BOLT, M8X 22 PLATED	2							
34	1	119620-49290	COCK ASSY, 1/4	1							
38	1	121450-42450	PLUG, M16	2							
39	1	124465-44950	GASKET, 16	2							
40	1	129004-49610	HOSE ASSY, WATER	1							
41	2	129004-49711	HOSE, WATER	1							
42	2	119802-49730	RETAINER, PIPE	1							
43	2	124722-59050	CLAMP, HOSE 9	2							
44	1	129004-49620	HOSE ASSY, WATER	1							
45	2	129004-49721	HOSE, WATER	1							
46	2	124722-59050	CLAMP, HOSE 9	2							
47	1	720445-44200	TANK ASSY, SUB	1							
49	2	120445-44540	SUPPORT	1							

Fig.11. FUEL INJECTION PUMP



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

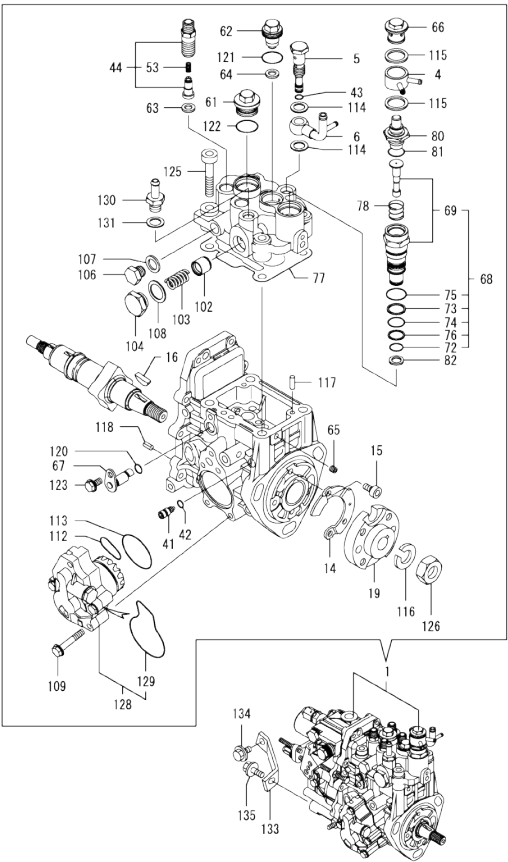
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(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729688-51350	INJECTION PUMP ASSY	1							1
4	2	158553-51551	JOINT, COOLING WATER	1							
5	2	158601-51650	JOINT, OVER FLOW	1							
6	2	158552-51670	JOINT, OVER FLOW	1							
14	2	129008-51900	COVER, PUMP	1							
15	2	129008-51920	BOLT, SOCKET M6X10	2							
16	2	119802-51090	FEATHER KEY, 4X16	1							
19	2	158552-51151	FLANGE	1							
41	2	158600-51270	STOPPER, TAPPET	1							
42	2	158563-51281	O-RING, 4D S6	1							
43	2	158563-51281	O-RING, 4D S6	1							
44	2	129008-51390	VALVE ASSY, DELIVERY	4							
53	3	158563-51330	SPRING, DELIVERY	4							
61	2	158601-51550	PLUG, M22	1							
62	2	119802-51560	PLUG, M14	1							
63	2	158552-51571	GASKET, PLUG	3							
64	2	158552-51571	GASKET, PLUG	1							
65	2	158557-51570	PLUG, RACK	1							
66	2	158601-51570	PLUG	1							
67	2	158552-51580	LIFTER, LINK	1							
68	2	119802-51590	TIMER ASSY	1							
69	3	119802-51600	TIMER ASSY	1							
72	3	158553-51670	O-RING	1							
73	3	119802-51680	RING, BACKUP	1							
74	3	119802-51690	O-RING	1							
75	3	24356-190200	O-RING, 4D19020	1							
76	3	24372-000150	RING, BACK UP T2P15	1							
77	2	158552-51600	GASKET	1							
78	2	158553-51630	SPRING, TIMER	1							
80	2	158553-51650	THERMOELEMENT	1							
81	2	158553-51660	O-RING, P14	1							
82	2	158553-51680	GASKET, TIMER	1							
102	2	158601-51770	PISTON, ACCUMULATOR	1							
103	2	158552-51781	SPRING, ACCUMULATOR	1							
104	2	158601-51790	PLUG	1							
106	2	158553-51930	PLUG, M12	1							
107	2	22190-120002	WASHER, SEAL 12	1							
108	2	22190-180002	WASHER, SEAL 18	1							
109	2	158553-51770	BOLT	4							
112	2	158552-52311	O-RING	1							
113	2	158552-52400	O-RING, 4E S42	1							
114	2	22190-120002	WASHER, SEAL 12	2							
115	2	22190-180002	WASHER, SEAL 18	2							
116	2	22217-140000	WASHER, SPRING 14	1							
117	2	22312-050140	PIN, PARALLEL M5X14	2							
118	2	22351-050010	PIN, SPRING 5.0X10	2							
120	2	24311-000070	O-RING, 1AP7.0	1							
121	2	24356-190180	O-RING, 4D19018	1							
122	2	24356-190200	O-RING, 4D19020	1							
123	2	26106-060102	BOLT, M6X 10 PLATED	1							
125	2	26450-080452	BOLT, M8X 45	4							

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
++ CONTINUE ++
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Fig.11. FUEL INJECTION PUMP



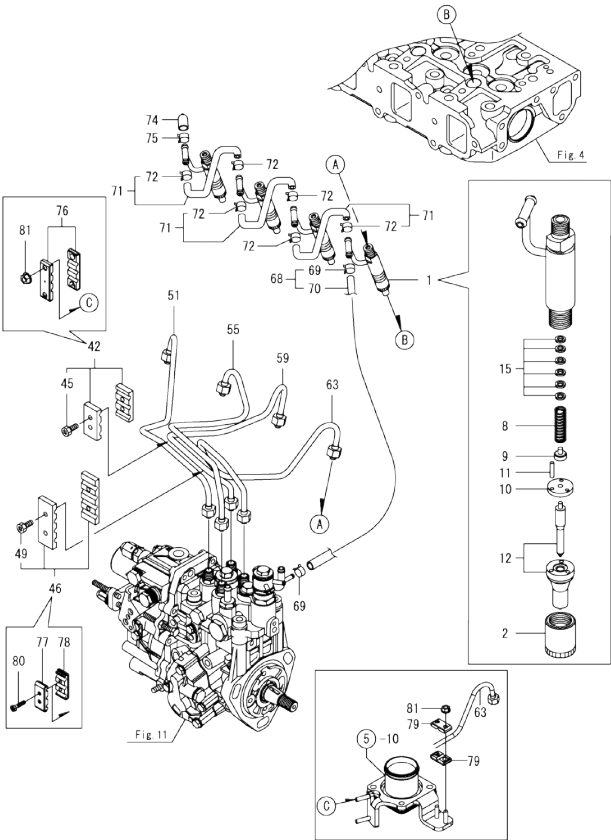
Remarks
(1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).

(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
126	2	26776-140002	NUT, LOCK M14	1							
128	2	158552-52100	PUMP ASSY, FUEL FEED	1							
129	3	158552-52500	O-RING	1							
130	2	119934-59910	JOINT, PIPE	1							
131	2	22190-120002	WASHER, SEAL 12	1							
133	1	129601-51250	RETAINER, PUMP	1							
134	1	26106-080162	BOLT, M8X 16 PLATED	1							
135	1	26106-080202	BOLT, M8X 20 PLATED	1							

Fig.13. FUEL INJECTION VALVE



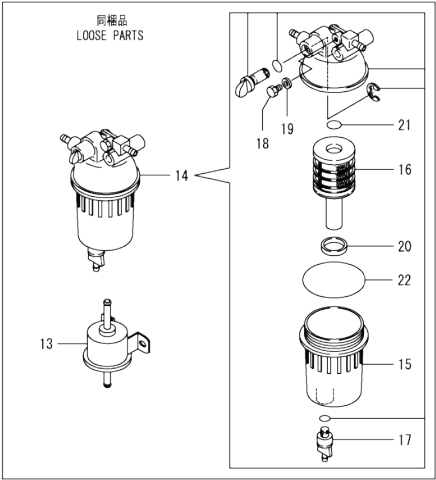
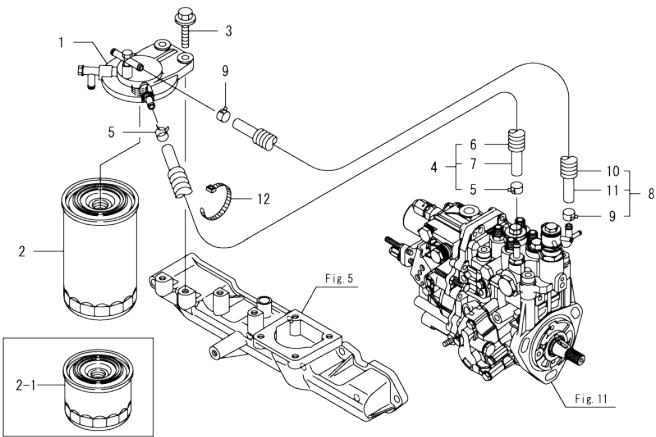
Remarks
(1)Interchangeable by simultaneous replacement with ReNo.79 and Fig.5 Ref.No.10.

(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729604-53400	VALVE ASSY,INJECTION	4							
2	2	114250-53080	NUT, NOZZLE	4							
8	2	114250-53120	SPRING, NOZZLE	4							
9	2	114250-53130	SEAT, SPRING	4							
10	2	114250-53140	SPACER	4							
11	2	114250-53210	PIN	8							
12	2	129604-53300	NOZZLE ASSY, F.I.	4							
15	2	119803-53400	SHIM SET	4							
42	1	129150-59120	RETAINER, PIPE	1							Z
45	(A=EJ1850) 2	129150-59131	BOLT, M4X14	2							Z
46	(A=EJ1850) 1	129550-59120	RETAINER, PIPE	1							Z
49	(A=EJ1850) 2	129150-59131	BOLT, M4X14	2							Z
51	(A=EJ1850) 1	129601-59810	PIPE ASSY, INJECTION	1							
55	1	129601-59820	PIPE ASSY, INJECTION	1							
59	1	129601-59830	PIPE ASSY, INJECTION	1							
63	1	129601-59840	PIPE ASSY, INJECTION	1							
68	1	119802-59550	HOSE ASSY, RETURN	1							
69	2	124722-59050	CLAMP, HOSE 9	2							
70	2	119802-59560	HOSE, FUEL RETURN	1							
71	1	129486-59551	HOSE ASSY, RETURN	3							
72	2	124722-59050	CLAMP, HOSE 9	6							
74	1	119593-59581	CAP	1							
75	1	124060-77680	CLAMP, HOSE 10	1							
76	1	129688-59100	CLAMP, FO PIPE	2							W
77	(A=EJ1850) 1	129688-59110	CLAMP, FO PIPE	1							W
78	(A=EJ1850) 1	129688-59120	CLAMP, FO PIPE	1							W
79	(A=EJ1850) 1	129688-59130	CLAMP, FO PIPE	2							W 1
80	(A=EJ1850) 1	129688-59150	BOLT, HB4X18	2							W
81	(A=EJ1850) 1	26366-060002	NUT, M6	4							W

Fig.14. FUEL PIPE

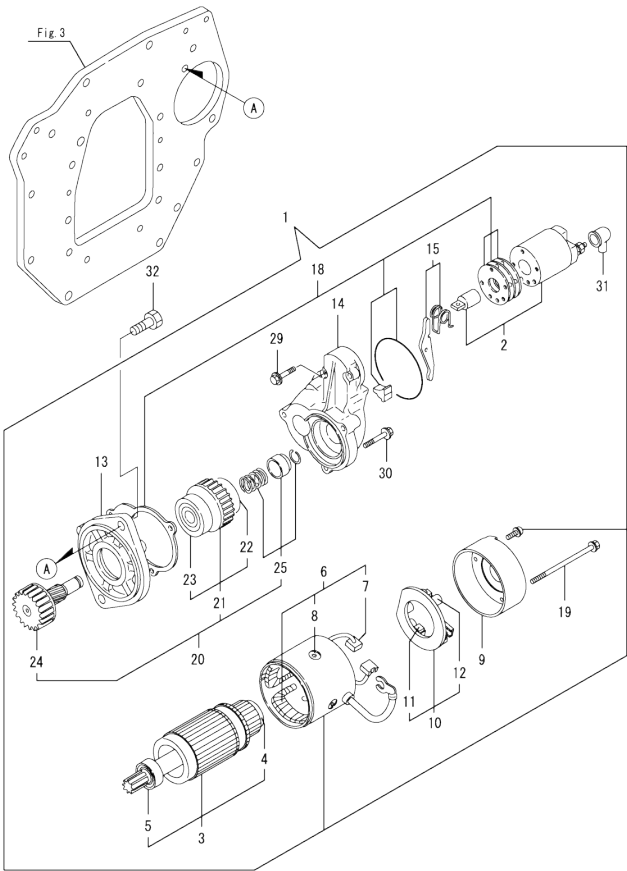


(A)=4TNV88-BDHS
(B)=
(C)=

(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	129907-55801	FILTER, FUEL	1							
2-1	1	119802-55801	FILTER, FUEL	1						N	
(A=EM9954)											
3	1	26106-080302	BOLT, M8X 30 PLATED	2							
4	1	129630-59010	HOSE ASSY, FUEL	1							
5	2	124766-59050	CLAMP, HOSE 11.5	2							
6	2	129961-59110	TUBE, CORRUGATED 15	1							
7	2	105025-59560	HOSE, FUEL	1							
8	1	129956-59010	HOSE ASSY, FUEL	1							
9	2	124766-59050	CLAMP, HOSE 11.5	2							
10	2	129957-59101	TUBE, CORRUGATED 15	1							
11	2	105225-59511	HOSE, FUEL	1							
12	1	121750-59890	BAND, NYLON	1							
13	1	129612-52100	PUMP, FUEL FEED	1							
14	1	129242-55700	SEPARATOR ASSY, WATER	1							
14-1	1	129242-55701	SEPARATOR ASSY, WATER	1						N	
(A=EE2405)											
14-2	1	129268-55701	SEPARATOR ASSY	1						N	
(A=ES5567)											
15	2	129242-55720	CUP, SEPARATOR	1							
16	2	129242-55730	ELEMENT, FUEL	1							
17	2	129242-55740	PLUG, DRAIN	1							
18	2	129242-55750	VALVE, AIR VENT	1							
19	2	129242-55760	GASKET, PLUG	1							
20	2	129242-55770	FLOAT	1							
21	2	24311-000160	O-RING, 1AP16.0	1							
22	2	24321-000750	O-RING, 1AG75.0	1							

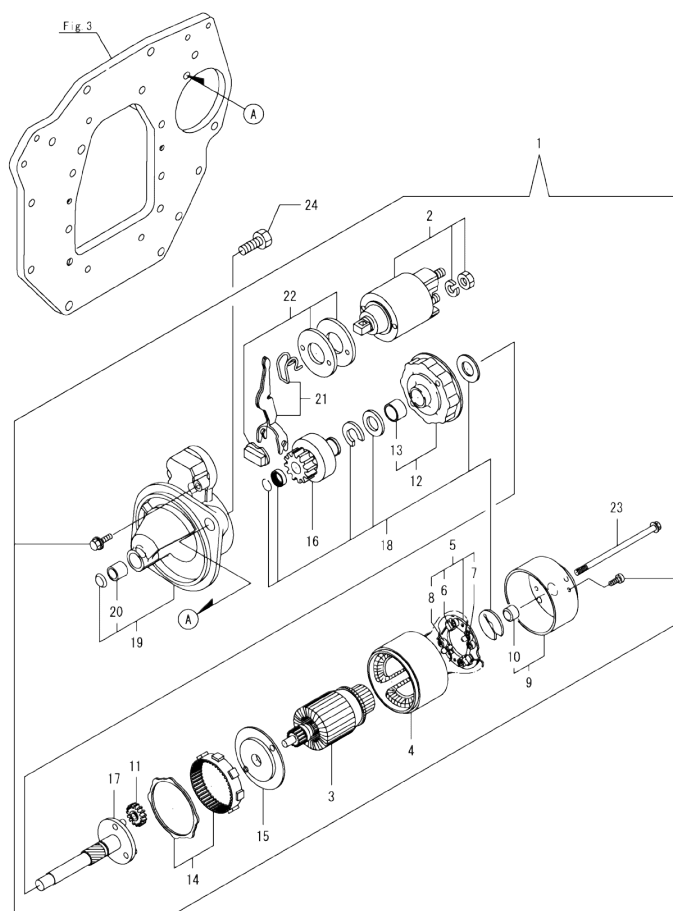
Fig.15. STARTER MOTOR(TO EE6304)



(A)=4TNV88-BDHS
(B)=
(C)=

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

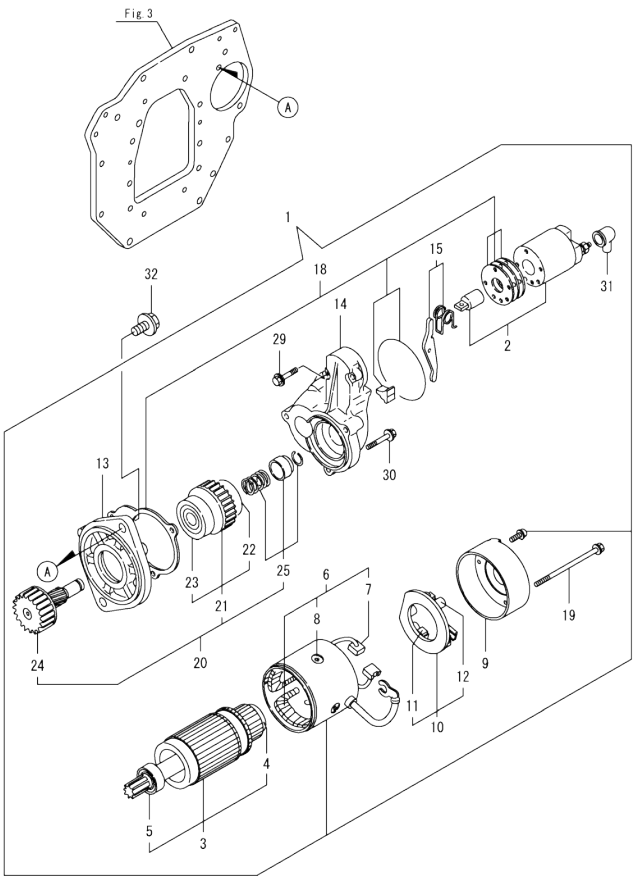
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129136-77011	STARTER ASSY	1							
2	2	129136-77310	SWITCH ASSY	1							
3	2	129900-77400	ARMATURE ASSY	1							
4	3	X2130350900	BEARING, BALL	1							
5	3	X2114255110	BEARING, BALL	1							
6	2	129900-77440	COIL ASSY, FIELD	1							
7	3	129900-77450	BRUSH	2							
8	3	171008-77450	SCREW, CORE SET	4							
9	2	129900-77460	COVER	1							
10	2	129900-77480	HOLDER ASSY, BRUSH	1							
11	3	129900-77450	BRUSH	2							
12	3	129400-77490	SPRING, BRUSH	4							
13	2	171008-77510	CASE, GEAR	1							
14	2	129136-77520	HOUSING, STARTOR	1							
15	2	171008-77540	LEVER SET	1							
18	2	129400-77571	COVER KIT, DUST	1							
19	2	129900-77640	BOLT, THROUGH	2							
20	2	171008-77650	PINION ASSY,W/CLUTCH	1							
21	3	X2114555500	CLUTCH ASSY	1							
22	4	X2114955020	BEARING, BALL	1							
23	4	X2240410100	BEARING, BALL	1							
24	3	171008-77660	SHAFT, PINION	1							
25	3	171008-77670	STOPPER SET, PINION	1							
29	2	26106-060322	BOLT, M6X 32 PLATED	2							
30	2	26106-060402	BOLT, M6X 40 PLATED	3							
31	2	171008-77750	COVER, TERMINAL	1							
32	1	26116-120202	BOLT, M12X 20 PLATED	2							



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1		129242-77010 (A)=EE6305)	STARTER ASSY	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	1							
10	3	129242-77170	BEARING, COVER	1							
11	2	118400-77170	GEAR, PLANETARY	3							
12	2	129242-77180	BRACKET, CENTER	1							
13	3	129698-77190	BRACKET, CENTER	1							
14	2	129698-77200	GEAR, INTERNAL	1							
15	2	129242-77210	BRACKET, CENTER	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	BEARING, STARTER	1							
21	2	129242-77270	LEVER SET	1							
22	2	129242-77280	COVER KIT, DUST	1							
23	2	124195-77770	BOLT, THROUGH	2							
24	1	26116-120202	BOLT, M12X 20 PLATED	2							

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. (15B)STARTER MOTOR(FROM ES7222)

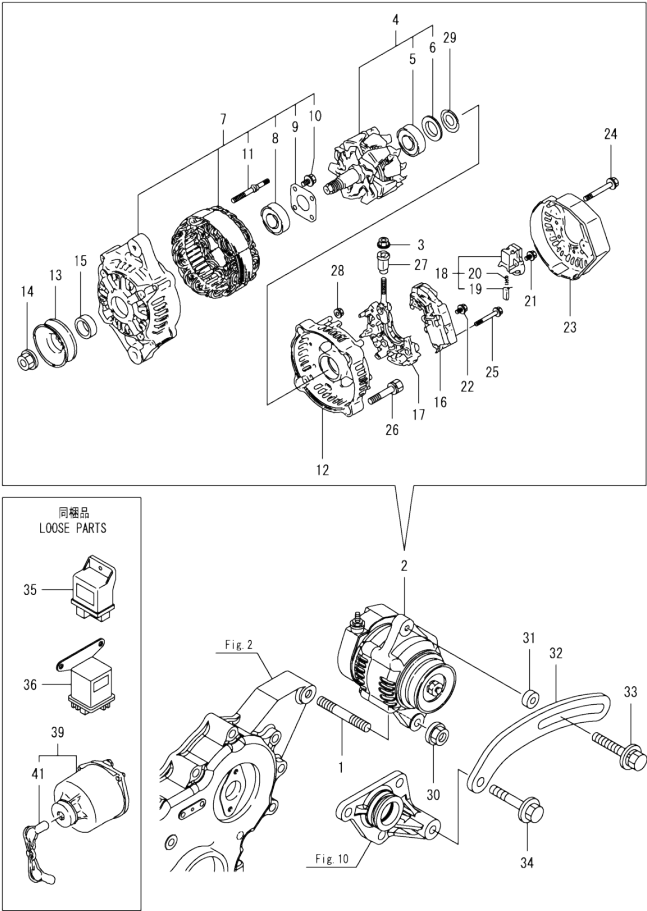


(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129136-77011 (A=ES7222)	STARTER	1							
2	2	129136-77310	SWITCH ASSY, MAGNET	1							
3	2	129900-77400	ARMATURE ASSY	1							
4	3	X2130350900	BEARING, BALL	1							
5	3	X2114255110	BEARING, BALL	1							
6	2	129900-77440	COIL ASSY, FIELD	1							
7	3	129900-77450	BRUSH, +	2							
8	3	171008-77450	SCREW, CORE SET	4							
9	2	129900-77460	COVER, REAR	1							
10	2	129900-77480	HOLDER ASSY, BRUSH	1							
11	3	129900-77500	BRUSH	2							
12	3	129400-77490	SPRING, BRUSH	4							
13	2	171008-77510	CASE, GEAR	1							
14	2	129136-77520	HOUSING, STARTOR	1							
15	2	171008-77540	LEVER SET, SHIFT	1							
18	2	129400-77571	COVER KIT, DUST	1							
19	2	129900-77640	BOLT, THROUGH	2							
20	2	171008-77650	PINION ASSY,W/CLUTCH	1							
21	3	X2114555500	CLUTCH ASSY	1							
22	4	X2114955020	BEARING, BALL	1							
23	4	X2240410100	BEARING, BALL	1							
24	3	171008-77660	SHAFT, PINION	1							
25	3	171008-77670	STOPPER SET, PINION	1							
29	2	26106-060322	BOLT, M6X 32 PLATED	2							
30	2	26106-060402	BOLT, M6X 40 PLATED	3							
31	2	171008-77750	COVER, TERMINAL	1							
32	1	26106-120252	BOLT, M12X 25 PLATED	2							

Fig.16. GENERATOR

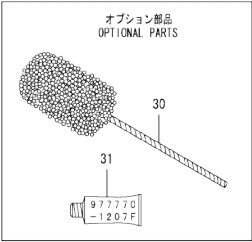
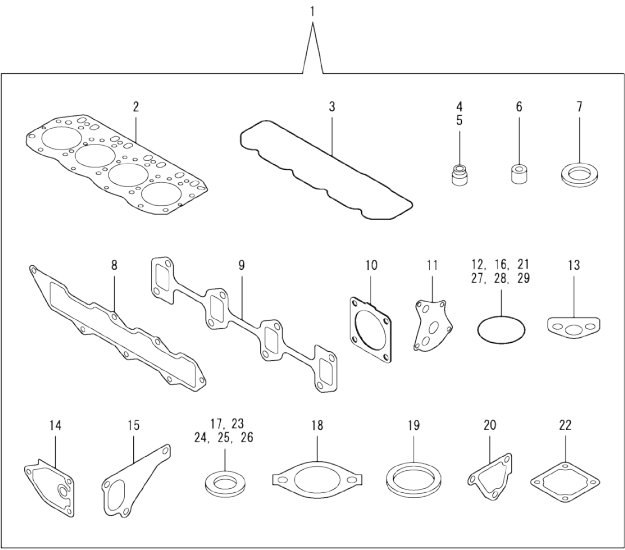


(A)=4TNV88-BDHKS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129795-01900	BOLT, STUD M10X33	1							
2	1	129423-77200	GENERATOR ASSY, 40A	1							
3	2	X9490561001	NUT	1							
4	2	119620-77380	ROTOR ASSY	1							
5	3	123501-79240	BEARING, BALL	1							
6	3	119620-79250	COVER, BEARING	1							
7	2	119620-77421	FRAME ASSY,GENERATOR	1							
8	3	119620-79200	BEARING, BALL	1							
9	3	119620-79210	RETAINER	1							
10	3	119620-79220	SCREW	4							
11	3	119620-79230	BOLT, STUD	2							
12	2	119620-77440	FRAME ASSY	1							
13	2	119620-77461	PULLEY, GENERATOR	1							
14	2	119620-77471	NUT	1							
15	2	119620-77490	COLLAR	1							
16	2	129423-77710	REGULATOR ASSY	1							
17	2	119620-79260	HOLDER	1							
18	2	129052-79270	HOLDER, BRUSH	1							
19	3	119620-77480	BRUSH	2							
20	3	119620-79280	SPRING	2							
21	2	119620-79290	SCREW	6							
22	2	119620-79300	SCREW	1							
23	2	129240-79300	COVER	1							
24	2	119620-79310	BOLT	3							
25	2	119620-79320	SCREW	2							
26	2	119620-79330	BOLT	2							
27	2	119620-79340	BUSH, INSULATION	1							
28	2	119620-79350	NUT	2							
29	2	119620-79360	WASHER, THRUST	1							
30	1	26306-100002	NUT, M10	1							
31	1	119940-77270	SPACER	1							
32	1	119802-77330	ADJUSTER, BELT	1							
33	1	129972-77341	BOLT, ADJUST L=50	1							
34	1	26106-080452	BOLT, M8X 45 PLATED	1							
35	1	119802-77200	RELAY, SAFETY	1							
36	1	119650-77910	RELAY ASSY, GLOW	2							
39	1	129115-91250	SWITCH ASSY, STARTER	1							
41	2	129115-91270	KEY	1							

Fig.17. GASKET SET



Remarks
(1)Optional parts.

(A)=4TNV88-BDHS
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129688-92600	GASKET SET	1							1
2	2	129407-01340	GASKET, HEAD	1							
3	2	129601-11310	GASKET, BONNET	1							
4	2	121400-11340	SEAL, VALVE STEM	4							
5	2	124460-11340	SEAL, VALVE STEM	4							
6	2	119802-11870	PROTECTOR, NOZZLE	4							
7	2	119625-11880	SEAT, NOZZLE	4							
8	2	129407-12110	GASKET, MANIFOLD	1							
9	2	129550-13110	GASKET, EXH.MANIFOLD	1							
10	2	129930-13201	GASKET, SILENCER	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	124465-44950	GASKET, 16	2							
18	2	129795-49551	GASKET	1							
19	2	129150-49811	GASKET, THERMOSTAT	1							
20	2	124395-49840	GASKET, THERMOSTAT	1							
21	2	121850-51960	O-RING	1							
22	2	129150-77511	GASKET, AIR HEATER	1							
23	2	22190-080002	WASHER, SEAL 6	2							
24	2	22190-100002	WASHER, SEAL 10	2							
25	2	22190-220002	WASHER, SEAL 22	1							
26	2	23414-080000	GASKET, 8X1.0	1							
27	2	24311-000120	O-RING, 1AP12.0	3							
28	2	24311-000320	O-RING, 1AP32.0	3							
29	2	24341-000240	O-RING, 1AS24.0	1							
30	1	129400-92430	HONE, FLEX	1							1
31	1	977770-1207F	GASKET,LIQUID	1							1

Parts No. Index

Parts No.	Fig. No.	Ref. No.
105025-59560	14	7
105225-59511	14	11
114250-39450	9	41
114250-53080	13	2
114250-53120	13	8
114250-53130	13	9
114250-53140	13	10
114250-53210	13	11
118400-77170	18	11
119005-35151	9	28
119131-18320	6	5
119233-77932	12	134
119593-59581	13	74
119609-32040	2	9
	17	12
119620-49290	10	34
119620-77380	16	4
119620-77421	16	7
119620-77440	16	12
119620-77461	16	13
119620-77471	16	14
119620-77480	16	19
119620-77490	16	15
119620-79200	16	8
119620-79210	16	9
119620-79220	16	10
119620-79230	16	11
119620-79250	16	6
119620-79260	16	17
119620-79280	16	20
119620-79290	16	21
119620-79300	16	22
119620-79310	16	24
119620-79320	16	25
119620-79330	16	26
119620-79340	16	27
119620-79350	16	28
119620-79360	16	29
119625-11880	4	30
	17	7
119640-01640	3	7
119650-77910	16	36
119660-61901	12	61
119802-01561	2	5
119802-03110	4	41
119802-03121	4	42
119802-03130	4	43
119802-03141	4	44
119802-11260	4	4
119802-11270	4	5

Parts No.	Fig. No.	Ref. No.
119802-11870	4	29
	17	6
119802-21650	8	8 -1
119802-21660	8	8
119802-25071	7	16
119802-25101	7	10
119802-25901	7	15
119802-35110	9	25
119802-39450	9	43
119802-49113	10	9
119802-49730	10	42
119802-51090	11	16
119802-51560	11	62
119802-51590	11	68
119802-51600	11	69
119802-51680	11	73
119802-51690	11	74
119802-55801	14	2 -1
119802-59550	13	68
119802-59560	13	70
119802-77200	16	35
119802-77330	16	32
119803-01520	2	4
119803-21200	8	4
119803-25050	7	9
119803-53400	13	15
119807-61420	12	24
119865-21600	8	14
119934-01800	2	3
119934-59910	11	130
119940-59130	9	37
119940-77270	16	31
120130-11860	4	57
120270-54410	4	32
120445-44540	10	49
121023-01551	2	19
121111-21501	8	11
121400-11340	4	25
	17	4
121450-42450	10	38
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129005-03080	5	1
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129150-11810	4	58
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129150-23611	8	33
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129916-49740	10	10
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