

0CD10-M81800EN

PREFACE

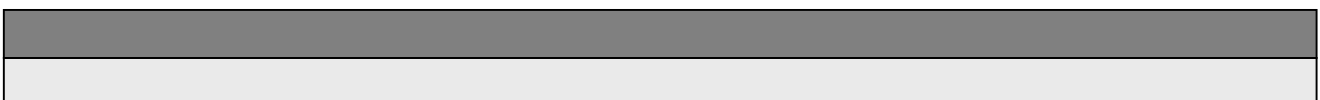
1. This parts catalog is the Second edition of 4TNV88-QTBZ for Takeuchi Mfg. Co., Ltd.
2. This parts catalog does not contain the technical data needed for maintenance service.
3. The illustrations used in this parts catalog have been simplified for clarity.

Pub. No.: 000Y00D8180
Published: January.,2004

4. Model name

Engine model	Vehicle		Vehicle made by
	Products	Model name	
4TNV88-QTBZ	EXCAVATOR	F10	Takeuchi Mfg. Co., Ltd.

5. The contents of this parts catalog are subject to change without prior notice.



Directions for the Parts Catalog.

1. This Parts Catalog shows both standard and optional parts.
2. Parts may change without prior notice.
3. The following is an example of the Parts Catalog format.

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729595-51390	FUEL INJECTION PUMP	1	1	1	1	1			1
1-1	1	729595-51391	FUEL INJECTION PUMP	1	1	1	1	1		N	1
		(A=E00185) (B=E00200)									
3	2	26022-060162	SCREW M 6X 16	9	9	9	9	9			
3-1	2	26022-060162	SCREW M 6X 16	4	4	4	4	4		K	
		(A=E00156) (B=E00156) (C=E00156) (D=E00156) (E=E00156)									
4	2	129470-51040	CAMSHAFT	1	1	1	1	1			
5	2	122710-51050	BEARING, ROLLER	2	2	2	2	2			
6	2	129470-51060	RETAINER	1	1	1	1	1			

Remarks
(1) BOOST COMPEMSATOR TYPE. OPTIONAL PART, TO E00155,(4JH-DT, 4JH-DTZ

① Ref. No.

The Ref. No. listed may not be in accordance with the illustration Ref. No.

(Ex.) Illustration No.

List Ref No.

1

1

(Before change)

1-1

(After change)

For interchangeable symbols N, R and K, illustrations for new parts may be abbreviated.

② Lev. (Level)

Level indication

The numbers below indicate the level of relativity towards the main part.

1 ----- Main parts (Assembly parts)

2 ----- Sub component included in " 1 ".

3 ----- Sub component included in " 2 ".

Note) Parts that are not for sale are partially illustrated but not listed.

③ Interchangeability Symbol

When a part change takes place, one of the following interchangeability symbols is indicated beside the part.

Symbol	Interchangeability	Contents note
N	Old $\begin{matrix} \leftarrow \text{Yes} \\ \text{No} \rightarrow \end{matrix}$ New	New Part is interchangeable for Old Part but Old Part is not interchangeable for New Part.
Q	Old $\begin{matrix} \leftarrow \text{No} \\ \text{Yes} \rightarrow \end{matrix}$ New	New Part is not interchangeable for Old Part but Old Part is interchangeable for New Part.
R	Old $\begin{matrix} \leftarrow \text{Yes} \\ \text{Yes} \rightarrow \end{matrix}$ New	New/ Old Parts are both interchangeable.
S	Old $\begin{matrix} \leftarrow \text{No} \\ \text{No} \rightarrow \end{matrix}$ New	New/ Old Parts are both not interchangeable.
W		Part newly added.
Z		Part discontinued.
F		Not interchangeable by a single part but interchangeable together with related parts.
K		Changes only for used parts quantities.

④ Effective Machine No.

When a part changes, the effective Machine No. will be indicated in the (A)-(F) column.

Product Symbol	Product No.	Product Symbol	Product No.
C	Clutch No. Compressor No.	F	Machine No. (Agricultural Equip.)
D	Drive No.	M	Machine No.
E	Engine No.		

Note 1) A date may follow the symbol. (Ex.) 1996.01

Note 2) "XXXXX" and "ZZZZZ" are for parts that could not be predicted or for engine models that could not be identified.

Note 3) (A=E00185) is the E (Engine Serial Number) for the column (A) model (in this case 4JH-DT) after the parts design change.

⑤ Remarks

Figures or alphabets (symbols) are entered in the remarks column.

The comments (remarks) on parts that are indicated at the bottom of the illustration are the same symbols as those stated above.

Contents

OCD10-M81800

Fig. No. Fig. Name

4TNV88-QTBZ

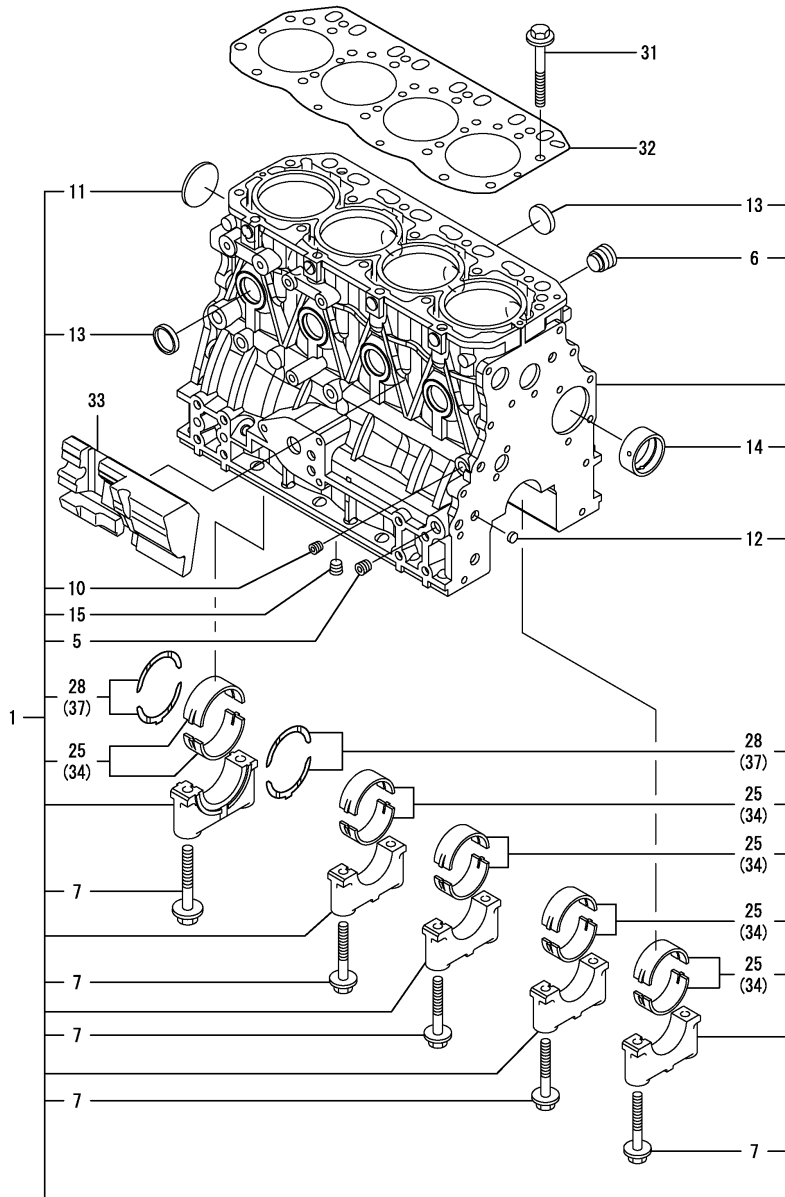
1. CYLINDER BLOCK
2. GEAR HOUSING
3. FLYWHEEL HOUSING & OIL SUMP
4. CYLINDER HEAD & BONNET
5. SUCTION MANIFOLD & AIR CLEANER
6. EXHAUST MANIFOLD & SILENCER
7. CAMSHAFT & DRIVING GEAR
8. CRANKSHAFT & PISTON
9. LUB. OIL SYSTEM
10. COOLING WATER SYSTEM
11. FUEL INJECTION PUMP
12. FUEL INJECTION VALVE
13. FUEL LINE
14. STARTING MOTOR
15. GENERATOR
16. TOOL & GASKET SET

Fig. No. Fig. Name

Fig.1. CYLINDER BLOCK

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

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

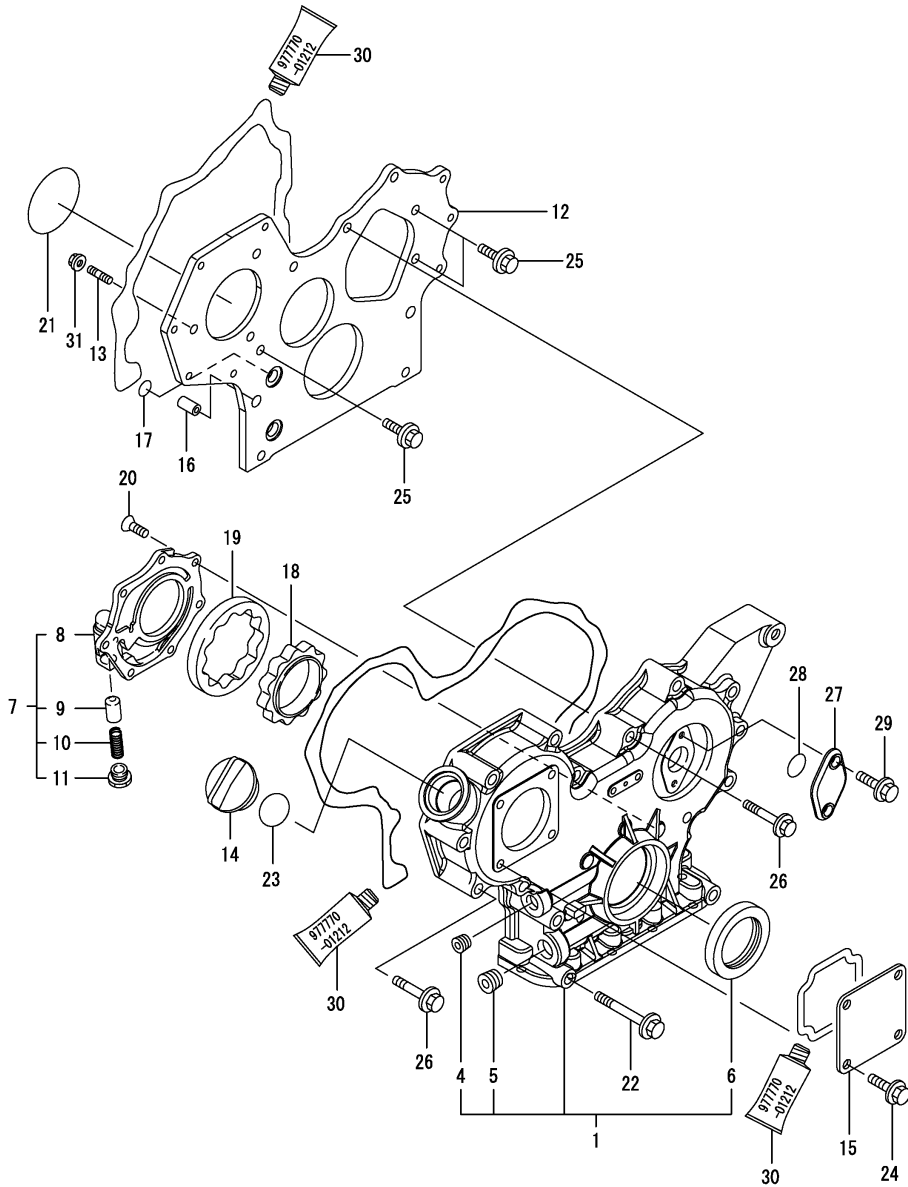


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729602-01560	BLOCK ASSY, CYLINDER	1							
5	2	124160-01910	PLUG, PT1/4	2							
6	2	171051-01921	PLUG, NPTF1	1							
7	2	129150-02020	BOLT, METAL CAP	10							
10	2	124060-01050	PLUG, PT1/8	1							
11	2	129001-01250	PLUG, 50	1							
12	2	27241-120000	PLUG, 12	2							
13	2	27241-300000	PLUG 30	8							
14	2	129795-02411	BUSH, CAMSHAFT	1							
15	2	124160-01910	PLUG, PT1/4	1							
25	2	129001-02930	BEARING, MAIN	5							3
28	2	129150-02930	BEARING, THRUST	2							
31	1	129150-01200	BOLT, HEAD	18							
32	1	129407-01340	GASKET, HEAD	1							
33	1	129004-01190	SPACER	1							
34	1	129150-02870	BEARING, 0.25 US	5							1
37	1	129150-02940	BEARING, THRUST 0.25	1							2

Remarks

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

Fig.2. GEAR HOUSING



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

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729233-01500	CASE ASSY, GEAR	1							
4	2	23876-030000	PLUG, R03	1							
5	2	23876-040000	PLUG, R04	1							
6	2	119934-01800	SEAL, OIL	1							
7	1	119802-32100	COVER ASSY	1							
8	2	119802-32070	COVER	1							
9	2	129900-32130	VALVE, RELIEF	1							
10	2	129418-32320	SPRING	1							
11	2	129001-32330	PLUG	1							
12	1	119802-01520	FLANGE, GEAR CASE	1							
13	1	119802-01560	STUD, M8X25	3							
14	1	124160-01751	COVER, FILLER	1							
15	1	124240-01871	COVER	1							
16	1	129795-01950	PIPE, KNOCK L=18	2							
17	1	119609-32040	O-RING, P16	4							
18	1	119802-32111	ROTOR, INNER	1							
19	1	119802-32120	ROTOR, OUTER	1							
20	1	119802-32130	SCREW, M6X16	7							
21	1	121850-51960	O-RING	1							
22	1	129001-91841	BOLT, M8X85	3							
23	1	24311-000320	O-RING, 1AP32.0	1							
24	1	26106-080162	BOLT, M8X 16 PLATED	4							
25	1	26106-080162	BOLT, M8X 16 PLATED	3							
26	1	26106-080552	BOLT, M8X 55 PLATED	12							
27	1	121023-01550	COVER	1							
28	1	24341-000240	O-RING, 1AS24.0	1							
29	1	26106-060162	BOLT, M6X 16 PLATED	2							
30	1	977770-01212	GASKET, LIQUID	1							1
31	1	26306-080002	NUT, M8	3							

Remarks
(1) OPTIONAL PART.

Fig.3. FLYWHEEL HOUSING & OIL SUMP

(A)=4TNV88-QTBZ

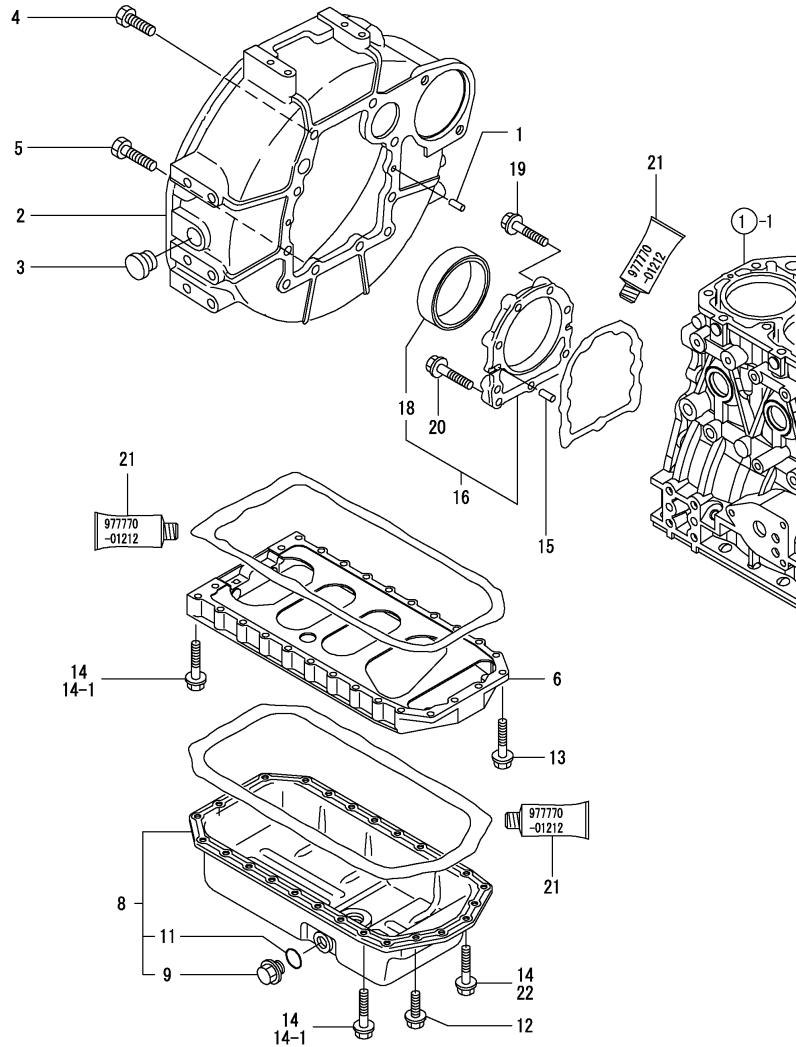
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(C)=

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(F)=



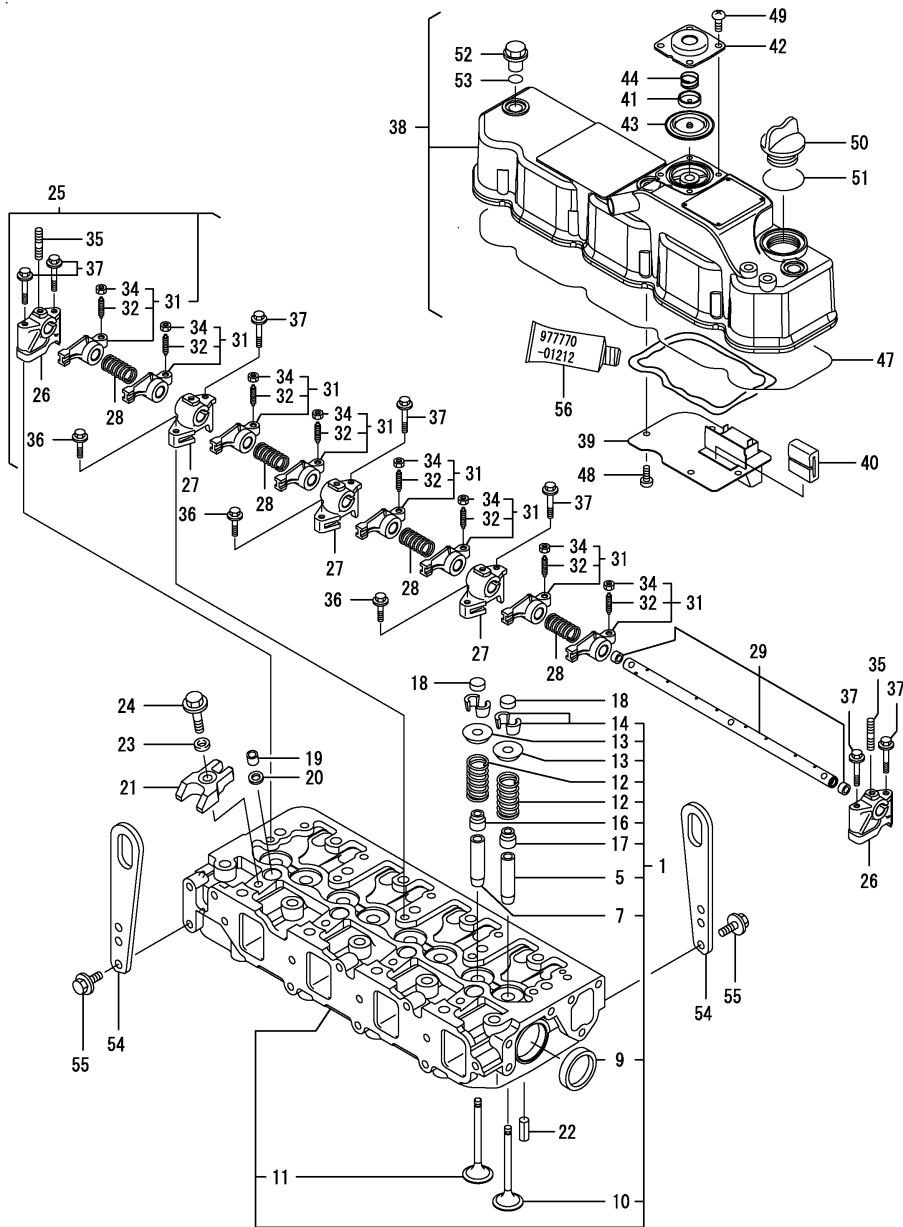
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129100-01580	PIN, M8X16	2							
2	1	129612-01600	HOUSING, FLYWHEEL	1							
3	1	119620-01750	CAP	1							
4	1	26206-100252	BOLT, M10X 25 PLATED	6							
5	1	26206-100302	BOLT, M10X 30 PLATED	4							
6	1	129400-01730	SPACER, OIL SUMP	1							
8	1	129400-01770	SUMP ASSY, OIL	1							
8-1	1	129688-01780	OIL PAN ASSY, DEEP	1						N	2
(A=REF. TO R)											
9	2	171301-01640	PLUG, 22	1							
11	2	24341-000250	O-RING, 1AS25.0	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	24							
14-1	1	26106-080452	BOLT, M8X 45 PLATED	20							K
(A=FROM 1ST)											
15	1	129100-01580	PIN, M8X16	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							
21	1	977770-01212	GASKET, LIQUID	1							1
22	1	26106-080502	BOLT, M8X 50 PLATED	4							W
(A=FROM 1ST)											

Remarks

(1)Optional parts.

(2)REF. TO R

Fig.4. CYLINDER HEAD & BONNET



(A)=4TNV88-QTBZ

(B)=

(C)=

(D)=

(E)=

(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129601-11700	HEAD ASSY, CYLINDER	1							
5	2	120130-11860	GUIDE, VALVE	4							1
7	2	129150-11810	GUIDE, VALVE	4							1
9	2	27241-400000	PLUG, 40	2							
10	2	129004-11100	VALVE, INTAKE	4							
11	2	129100-11110	VALVE, EXHAUST	4							
12	2	129795-11120	SPRING, VALVE	8							
13	2	129795-11180	RETAINER, SPRING	8							
14	2	27310-080001	COTTER, 8	8							
16	2	121400-11340	SEAL, VALVE STEM	4							
17	2	124460-11340	SEAL, VALVE STEM	4							
18	1	129150-11370	CAP, VALVE	8							
19	1	119802-11870	PROTECTOR, NOZZLE	4							
20	1	119625-11880	SEAT, NOZZLE	4							
21	1	129004-11900	RETAINER, NOZZLE	4							
22	1	22351-060012	PIN, SPRING 6.0X12	2							
23	1	120270-54410	WASHER, INJECTOR	4							
24	1	26106-080352	BOLT, M8X 35 PLATED	4							
25	1	129601-11241	SHAFT ASSY, ROCKER	1							
26	2	119802-11260	SUPPORT, ROCKER ARM	2							
27	2	119802-11270	SUPPORT, ROCKER ARM	3							
28	2	129150-11280	SPRING	4							
29	2	129601-11251	SHAFT, ROCKER ARM	1							
31	2	129004-11650	ARM, ROCKER	8							
32	3	129150-11230	SCREW, VALVE ADJUST	8							
34	3	129150-11750	NUT, M8	8							
35	2	26226-080182	STUD, M8X 18	3							
36	1	26106-080252	BOLT, M8X 25 PLATED	3							
37	1	26106-080502	BOLT, M8X 50 PLATED	7							
38	1	129601-11350	BONNET ASSY, HEAD	1							
39	2	129004-03010	PLATE	1							
40	2	129150-03070	BAFFLE, BREATHER	1							
41	2	119802-03110	PLATE	1							
42	2	119802-03120	COVER, DIAPHRAGM	1							
43	2	119802-03130	DIAPHRAGM	1							
44	2	119802-03140	SPRING, DIAPHRAGM	1							
47	2	129601-11310	GASKET, BONNET	1							
48	2	22857-500100	SCREW, 5X10	4							
49	2	22857-500100	SCREW, 5X10	4							
50	1	124160-01751	COVER, FILLER	1							
51	1	24311-000320	O-RING, 1AP32.0	1							
52	1	124160-11360	KNOB	3							
53	1	24311-000120	O-RING, 1AP12.0	3							
54	1	129900-07900	LIFTER	2							
55	1	26106-080142	BOLT, M8X 14 PLATED	4							
56	1	977770-01212	GASKET, LIQUID	1							2

Remarks

(1) REPAIR PART.

(2) OPTIONAL PART.

Fig.5. SUCTION MANIFOLD & AIR CLEANER

(A)=4TNV88-QTBZ

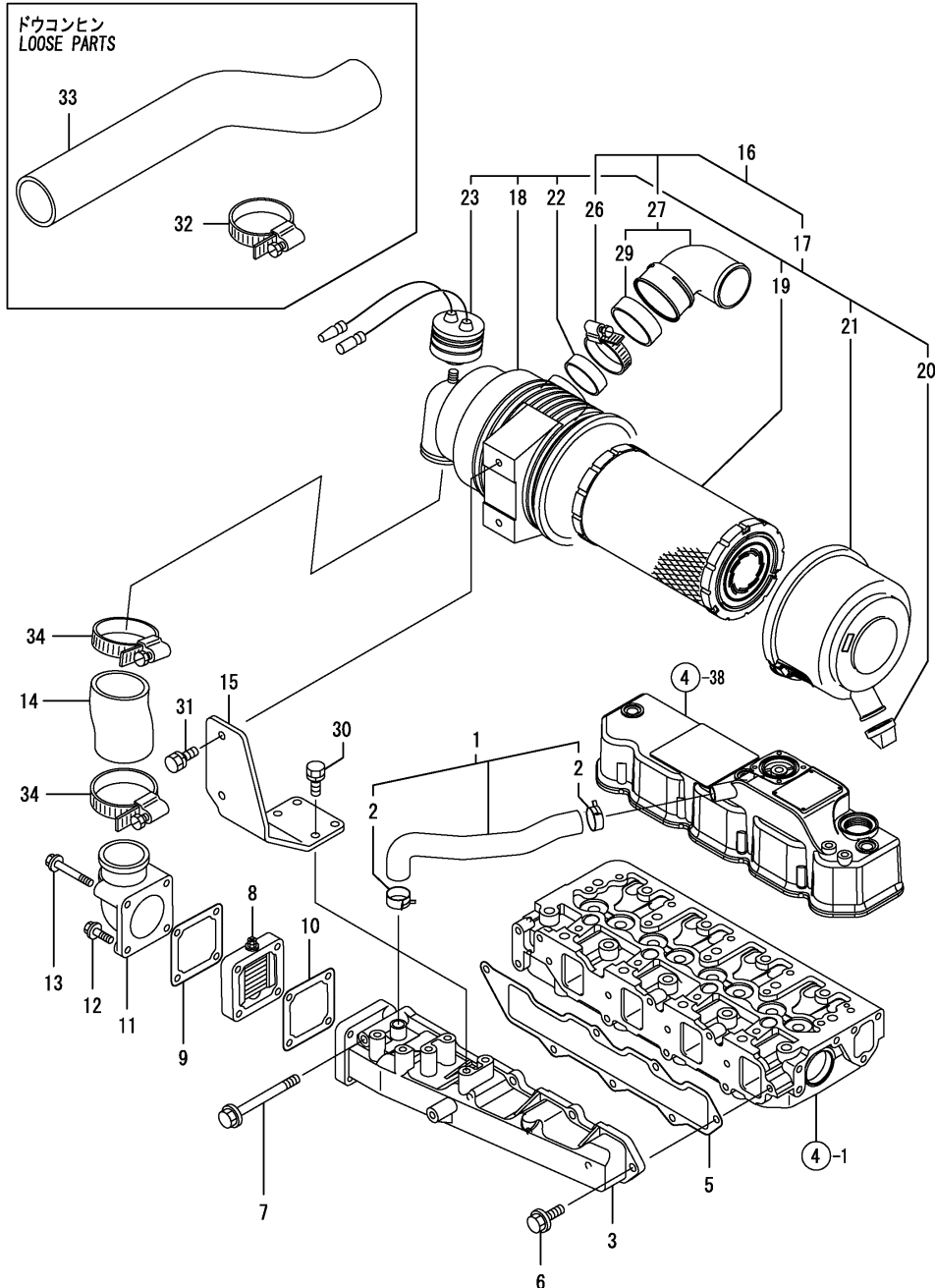
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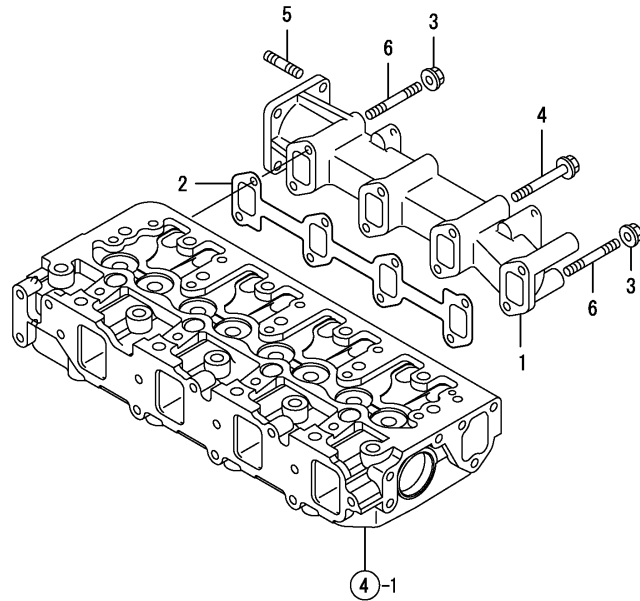
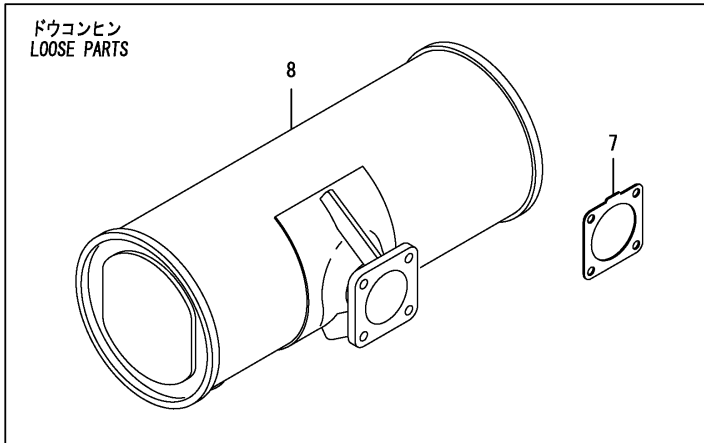


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129601-03080	PIPE , BREATHER	1							
2	2	129410-03990	CLAMP 22	2							
3	1	129601-12100	MANIFOLD, AIR INTAKE	1							
5	1	129407-12110	GASKET, MANIFOLD	1							
6	1	26106-080202	BOLT, M8X 20 PLATED	6							
7	1	26106-080802	BOLT, M8X 80 PLATED	1							
8	1	129100-77500	HEATER, AIR 12V	1							
9	1	129100-77510	GASKET, AIR HEATER	1							
10	1	129150-77511	GASKET	1							
11	1	171340-77520	BEND	1							
12	1	26106-080402	BOLT, M8X 40 PLATED	2							
13	1	26106-080802	BOLT, M8X 80 PLATED	2							
14	1	119910-12210	PIPE, AIR INTAKE	1							
15	1	119802-12560	BRACKET, AIR CLEANER	1							
16	1	129612-12681	CLEANER ASSY, AIR	1							
17	2	129612-12691	CLEANER ASSY, AIR	1							
18	3	119910-12510	BODY, AIR CLEANER	1							
19	3	119808-12520	ELEMENT	1							
20	3	119808-12540	VALVE, UNLOADER	1							
21	3	119866-12541	COVER ASSY	1							
22	3	129259-12570	RING	1							
23	3	129953-12620	INDICATOR ASSY	1							
26	2	23000-060000	CLAMP, 60	1							
27	2	129612-12560	ELBOW	1							
29	3	129612-12590	GASKET	1							
30	1	26013-080222	BOLT, M8X 22	4							
31	1	26013-080222	BOLT, M8X 22	2							
32	1	23000-060000	CLAMP, 60	1							
33	1	129642-12270	PIPE, AIR INTAKE	1							
34	1	23000-060000	CLAMP, 60	2							

Fig.6. EXHAUST MANIFOLD & SILENCER

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

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

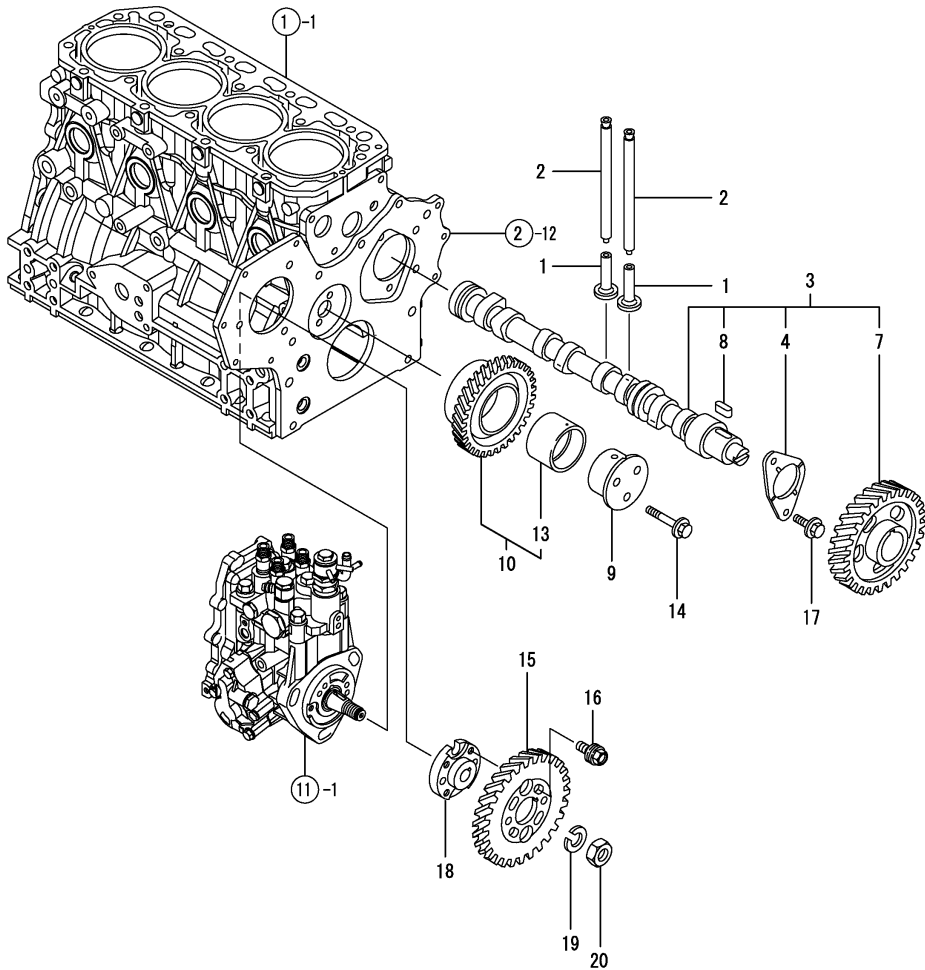


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129640-13109	MANIFOLD, EXHAUST	1							
2	1	129550-13110	GASKET	1							
3	1	26306-080002	NUT, M8	2							
4	1	123900-13630	BOLT, M8X80	6							
5	1	119131-18320	STUD, M8X22	4							
6	1	123900-13610	STUD, M8X80	2							
7	1	129930-13200	GASKET, SILENCER	4							
8	1	129642-13540	SILENCER	1							

Fig.7. CAMSHAFT & DRIVING GEAR

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

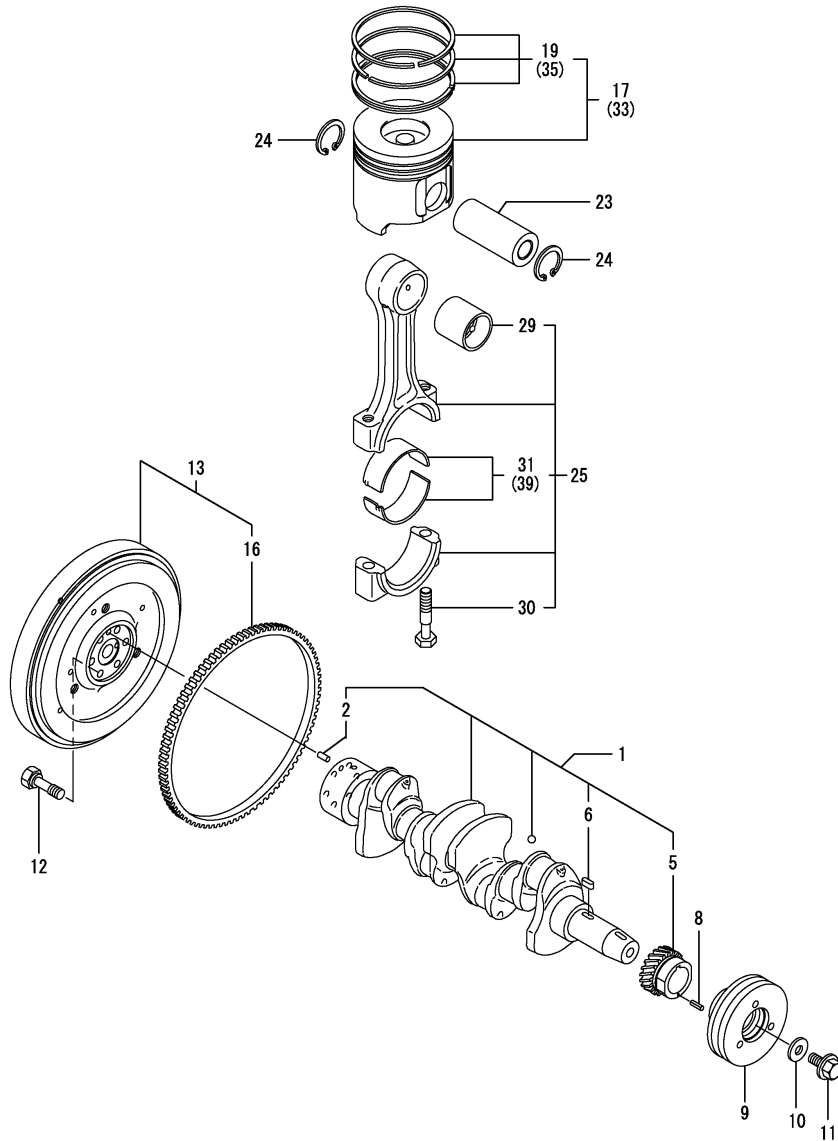
(D)=
(E)=
(F)=



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	ROD, PUSH L=178	8							
3	1	729402-14580	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	119802-25051	SHAFT, IDLE	1							
10	1	119802-25100	GEAR ASSY, IDLE	1							
13	2	119802-25070	BUSH, IDLE GEAR	1							1
14	1	26106-080402	BOLT, M8X 40 PLATED	3							
15	1	119802-25901	GEAR, PUMP	1							
16	1	129150-25301	BOLT	4							
17	1	26106-080142	BOLT, M8X 14 PLATED	2							
18	1	158552-51151	FLANGE	1							
19	1	22217-140000	WASHER, SPRING 14	1							
20	1	26776-140002	NUT, LOCK M14	1							

Remarks
(1) REPAIR PART.

Fig.8. CRANKSHAFT & PISTON



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

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129601-21001	CRANKSHAFT ASSY	1							
2	2	129100-01580	PIN, M8X16	1							
5	2	119802-21201	GEAR, CRANKSHAFT	1							
6	2	22512-070140	KEY, 7X 14	1							
8	1	22351-030010	PIN, SPRING 3.0X10	1							
9	1	119802-21660	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	129642-21590	FLYWHEEL ASSY	1							
16	2	119865-21600	GEAR, RING	1							
17	1	129005-22080	PISTON ASSY	4							
19	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	129100-23910	BEARING, PISTON PIN	4							1
30	2	121550-23200	BOLT, CONNECTING ROD	8							
31	2	129150-23600	BEARING, CRANK PIN	4							
33	1	129005-22900	PISTON ASSY, 0.25 OS	4							2
35	2	129005-22950	RING SET, 0.25 OS	4							2
39	1	129150-23610	BEARING, 0.25 US	4							3

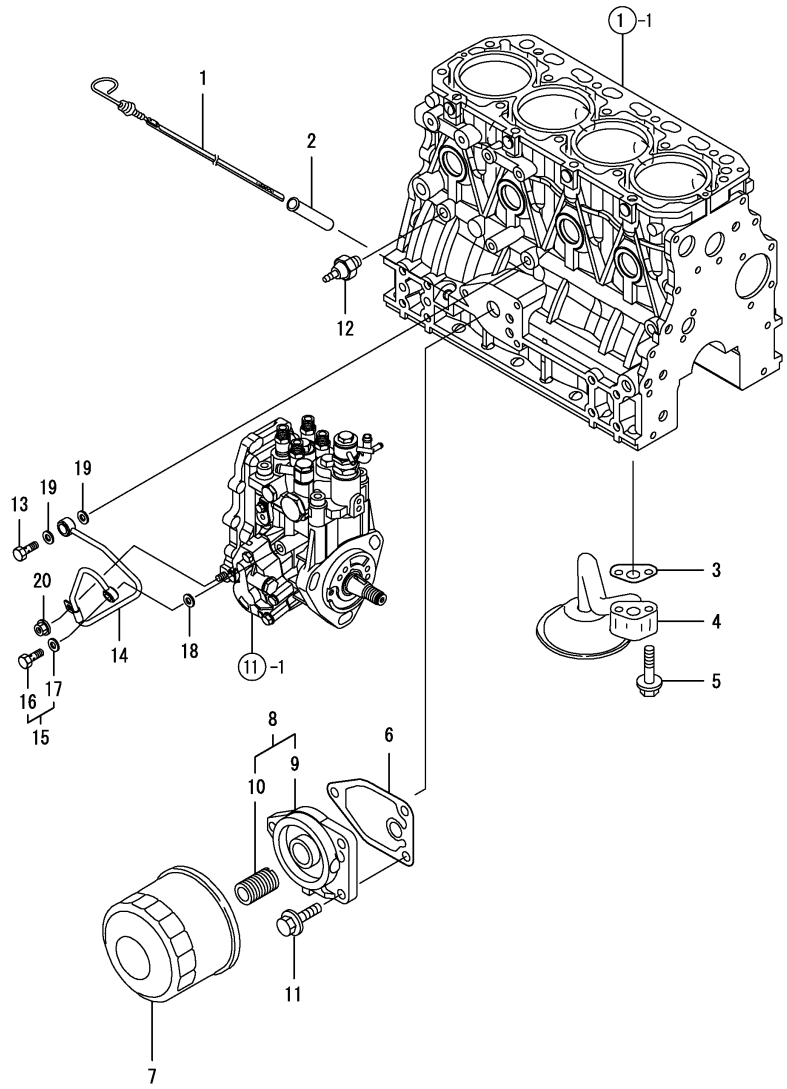
Remarks

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

Fig.9. LUB. OIL SYSTEM

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

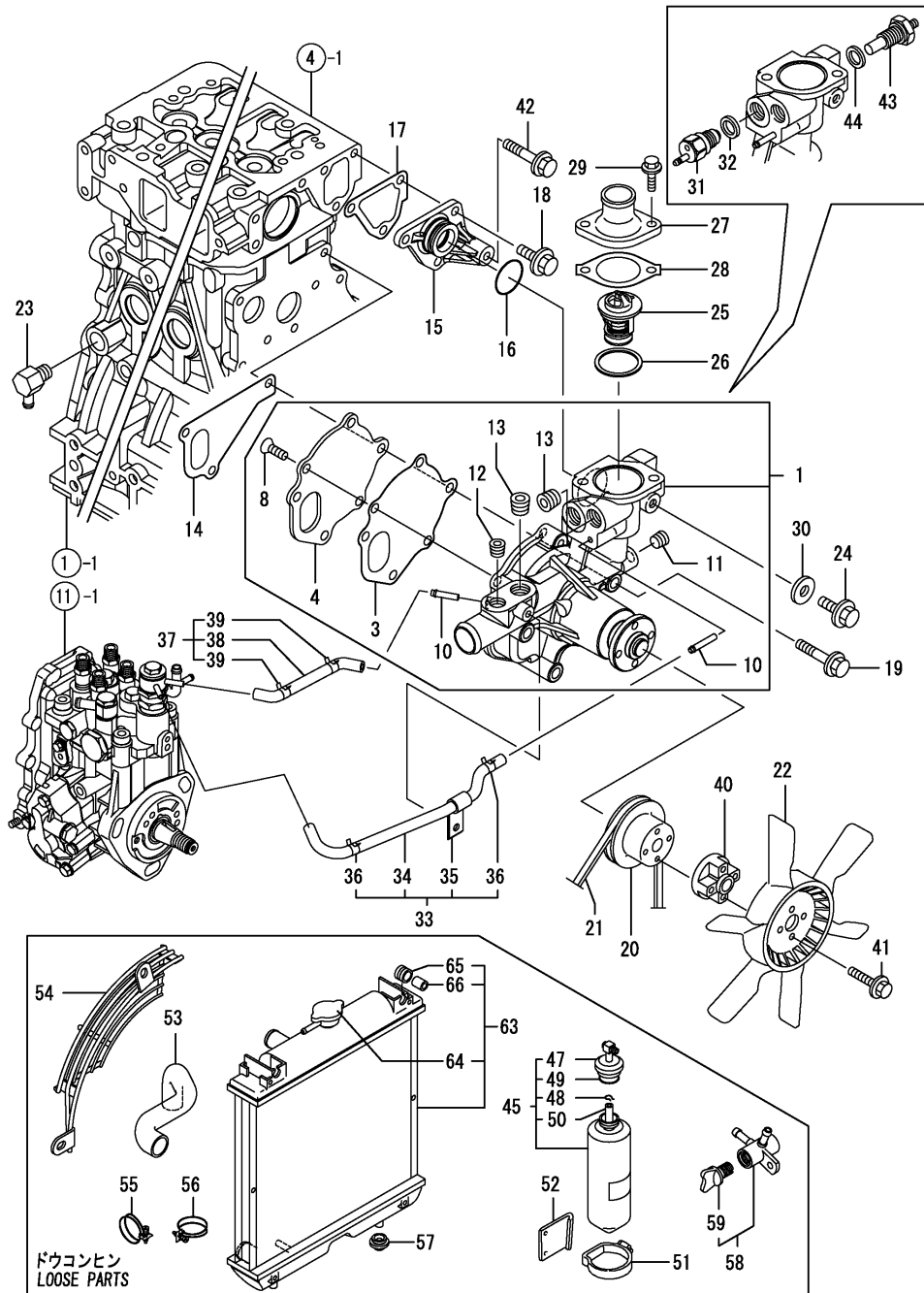
(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-34801	DIPSTICK, OIL	1							
2	1	121520-34810	GUIDE, DIPSTICK	1							
3	1	129150-35041	GASKET	1							
4	1	129436-35091	PIPE ASSY, OIL INLET	1							
5	1	26106-080352	BOLT, M8X 35 PLATED	2							
6	1	129150-35111	GASKET	1							
7	1	129150-35153	FILTER 80X80L	1							1
8	1	119802-35100	BRACKET ASSY, FILTER	1							
9	2	119802-35110	BRACKET, FILTER	1							
10	2	129100-35140	STUD	1							
11	1	26106-080202	BOLT, M8X 20 PLATED	3							
12	1	114250-39450	SWITCH, 0.5KG	1							
13	1	124160-39140	BOLT, PIPE JOINT M10	1							
14	1	119802-39450	PIPE ASSY, OIL	1							
15	1	129005-59830	BOLT ASSY, JOINT M8	1							
16	2	23857-030000	BOLT, JOINT 3	1							
17	2	22190-080002	WASHER, SEAL 6	1							
18	1	22190-080002	WASHER, SEAL 6	1							
19	1	22190-100002	WASHER, SEAL 10	2							
20	1	26366-060002	NUT, M6	1							

Remarks
(1) REPAIR PART.

Fig.10. COOLING WATER SYSTEM



(A)=4TNV88-QTBZ

(B)=

(C)=

(D)=

(E)=

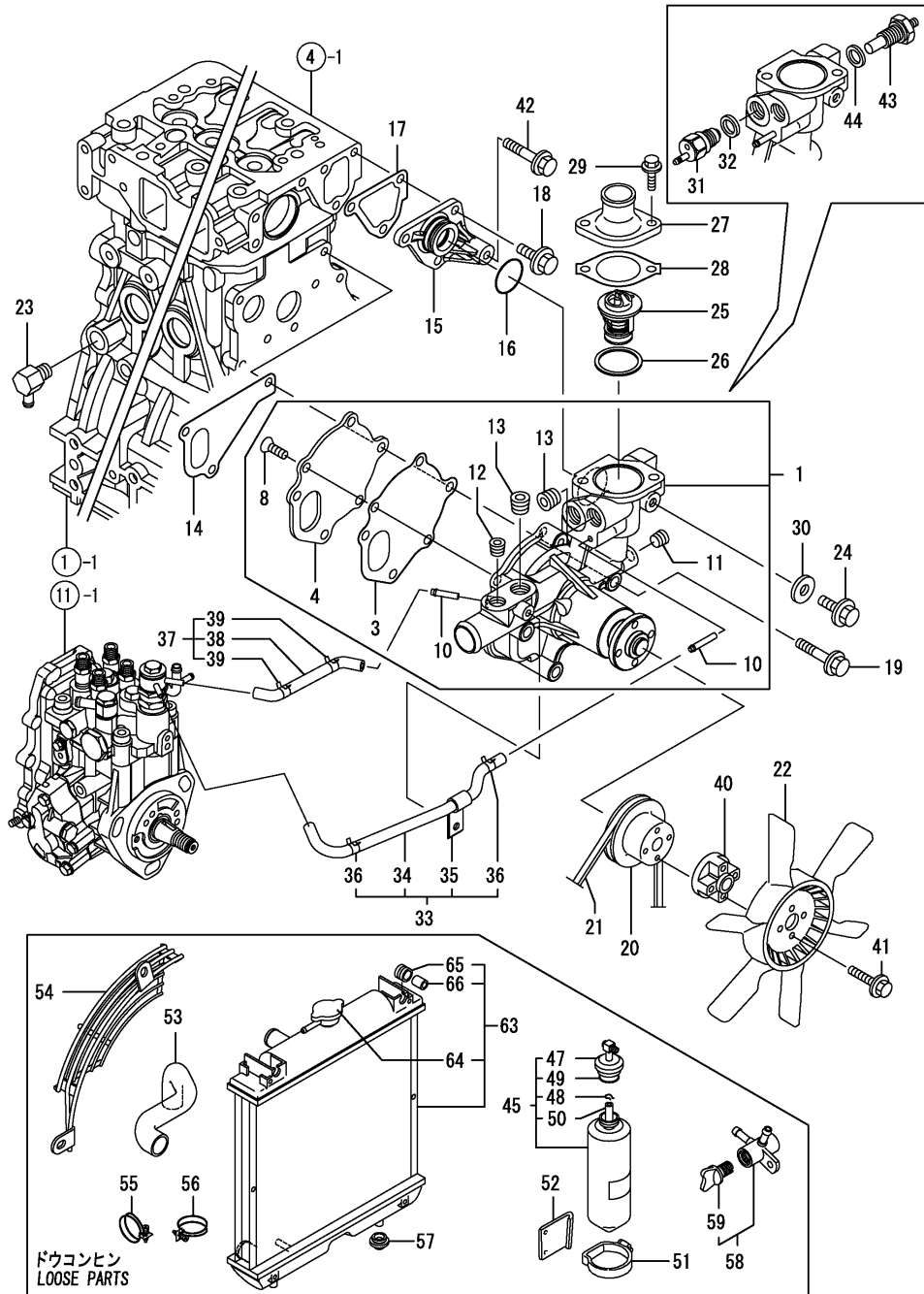
(F)=

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	1							
8	2	121850-42410	SCREW	3							
10	2	119802-49113	JOINT, PIPE	2							
11	2	23876-010000	PLUG, R01	1							
12	2	23876-020000	PLUG, R02	1							
13	2	129916-49740	PLUG, R03	2							
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	1							
18	1	26106-080162	BOLT, M8X 16 PLATED	3							
19	1	26106-080602	BOLT, M8X 60 PLATED	3							
20	1	129403-42380	V-PULLEY, D=110	1							
21	1	129612-42290	V-BELT, A37.5	1							
22	1	129110-44740	FAN, COOLING D390	1							
23	1	121750-49110	JOINT	1							
24	1	26106-080122	BOLT, M8X 12 PLATED	1							
25	1	129457-49801	THERMOSTAT, 82	1							
26	1	129150-49811	GASKET, THERMOSTAT	1							
27	1	129350-49530	COVER, THERMOSTAT	1							
28	1	129795-49551	GASKET	1							
29	1	26106-080222	BOLT, M8X 22 PLATED	2							
30	1	23414-080000	GASKET, 8X1.0	1							
31	1	121250-44901	SWITCH, 110	1							
32	1	124465-44950	GASKET, 16	1							
33	1	129004-49610	PIPE ASSY, WATER	1							
34	2	129004-49711	PIPE ASSY, WATER	1							
35	2	119802-49730	RETAINER, PIPE	1							
36	2	124722-59050	CLIP, HOSE 9	2							
37	1	129004-49620	PIPE ASSY, WATER	1							
38	2	129004-49721	PIPE ASSY, WATER	1							
39	2	124722-59050	CLIP, HOSE 9	2							
40	1	121267-44760	SPACER	1							
41	1	26106-060302	BOLT, M6X 30 PLATED	4							
42	1	26106-080452	BOLT, M8X 45 PLATED	1							
43	1	119266-49350	SWITCH	1							
44	1	129150-49360	GASKET	1							
45	1	171064-44510	TANK ASSY, SUB	1							
47	2	121450-44531	CAP	1							
48	2	124450-44560	RETAINER	1							
49	2	121470-44581	GASKET	1							
50	2	23065-070225	HOSE 7X 225	1							
51	1	124450-44550	BAND	1							
52	1	121256-44600	BRACKET, SUB TANK	1							
53	1	129612-49030	PIPE, WATER	1							
53-1	1	129602-49010	PIPE, WATER	1							N
(A=E01890)											
54	1	129132-44590	NET, WIRE	1							
55	1	23010-038000	CLAMP, 38	2							

Fig.10. COOLING WATER SYSTEM

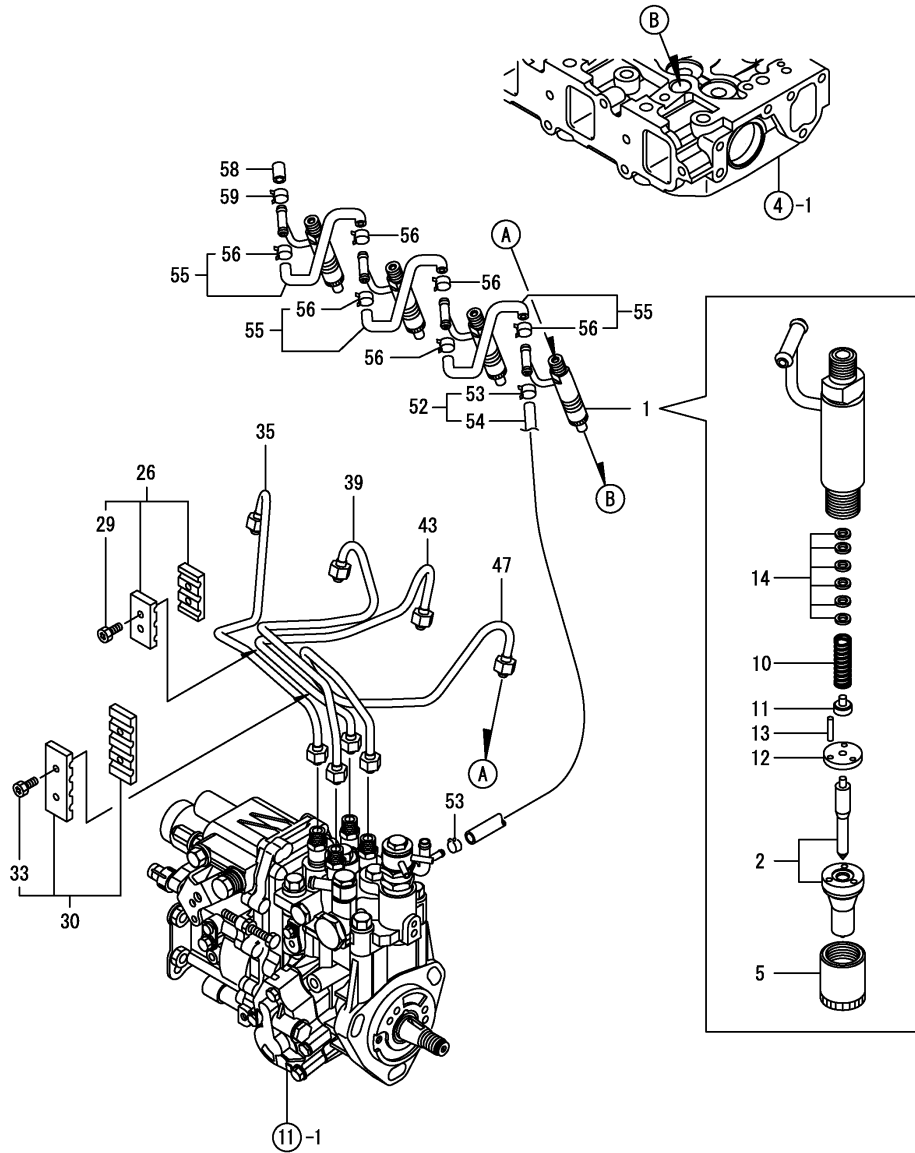
(A)=4TNV88-QTBZ
(B)=
(C)=

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
56	1	23010-044000	CLAMP, 44	2							
57	1	119255-44660	ABSORBER	2							
58	1	129150-49100	COCK ASSY, 3-WAY	1							
59	2	129150-49080	COCK, DRAIN	1							
63	1	129642-44510	RADIATOR ASSY	1							
64	2	129107-44590	CAP, RADIATOR	1							
65	2	129467-44580	MOUNT, RUBBER	2							
66	2	129467-44590	COLLAR	2							

Fig.12. FUEL INJECTION VALVE

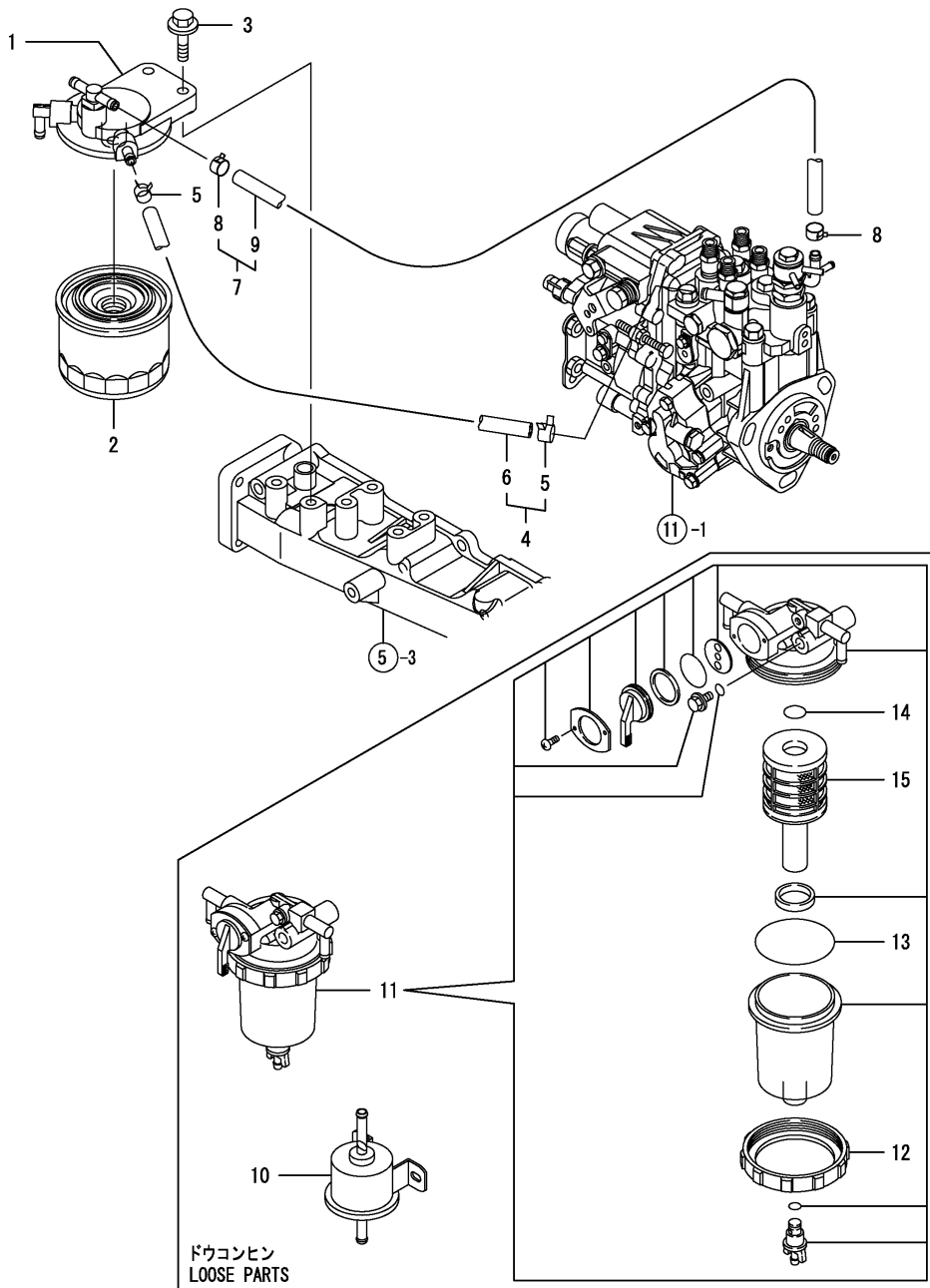


(A)=4TNV88-QTBZ
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729642-53100	VALVE ASSY,INJECTION	4							
2	2	129640-53001	VALVE ASSY,INJECTION	4							
5	2	114250-53080	NUT, NOZZLE D16.95	4							
10	2	114250-53120	SPRING, NOZZLE	4							
11	2	114250-53130	SEAT, SPRING	4							
12	2	114250-53140	PLATE	4							
13	2	114250-53210	PIN	8							
14	2	114250-53400	SHIM SET	4							
26	1	129150-59120	RETAINER, PIPE	1							
29	2	129150-59131	BOLT, M4X14	2							
30	1	129550-59120	RETAINER, PIPE	1							
33	2	129150-59131	BOLT, M4X14	2							
35	1	129601-59810	PIPE ASSY, INJECTION	1							
39	1	129601-59820	PIPE ASSY, INJECTION	1							
43	1	129601-59830	PIPE ASSY, INJECTION	1							
47	1	129601-59840	PIPE ASSY, INJECTION	1							
52	1	119802-59550	PIPE ASSY, RETURN	1							
53	2	124722-59050	CLIP, HOSE 9	2							
54	2	119802-59560	PIPE, FUEL RETURN	1							
55	1	129486-59551	PIPE ASSY, RETURN	3							
56	2	124722-59050	CLIP, HOSE 9	6							
58	1	119593-59580	CAP	1							
59	1	124060-77680	CLIP, HOSE 10	1							

Fig.13. FUEL LINE

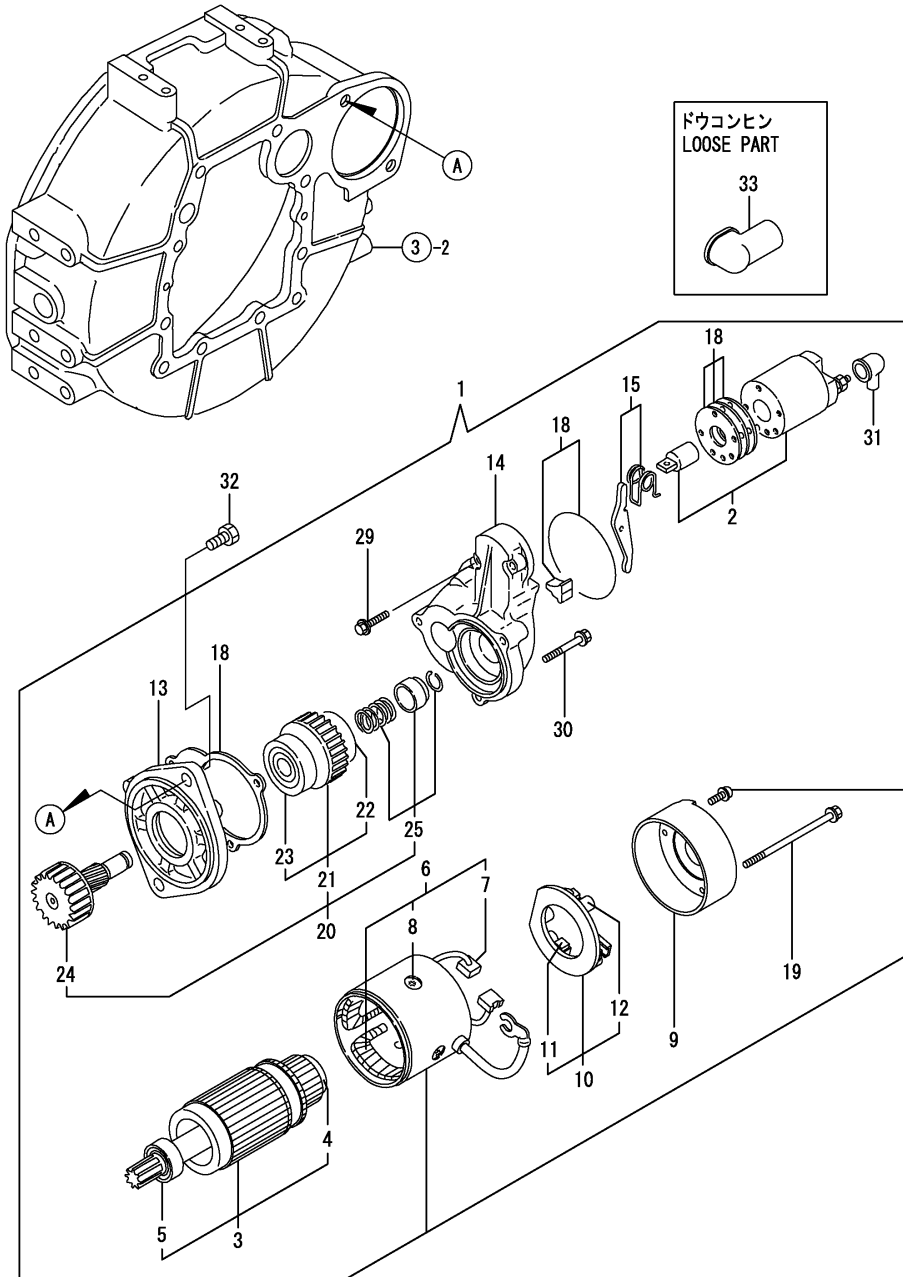


(A)=4TNV88-QTBZ
(B)=
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	129004-55610	BRACKET, FILTER	1							
2	1	119802-55800	FILTER, FUEL	1							
3	1	26106-080302	BOLT, M8X 30 PLATED	2							
4	1	129210-59090	PIPE ASSY, FUEL	1							
5	2	124766-59050	CLIP, HOSE 12	2							
6	2	105325-59570	PIPE, FUEL	1							
7	1	129210-59150	PIPE ASSY, FUEL	1							
8	2	124766-59050	CLIP, HOSE 12	2							
9	2	105025-59530	PIPE, FUEL D13X400	1							
10	1	129612-52100	PUMP ASSY, FUEL FEED	1							
11	1	129906-55700	SEPARATOR ASSY	1							
12	2	129100-55690	RING, RETAINING	1							
13	2	24321-000650	O-RING, 1AG65.0	1							
14	2	24311-000160	O-RING, 1AP16.0	1							
15	2	119802-55710	ELEMENT	1							

Fig.14. STARTING MOTOR



(A)=4TNV88-QTBZ
(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	1							
2	2	129136-77310	SWITCH ASSY	1							
3	2	129900-77400	ARMATURE ASSY	1							
4	3	X2130350900	BALL BEARING	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	4							
9	2	129900-77460	COVER, REAR	1							
10	2	129900-77480	HOLDER ASSY, BRASH	1							
11	3	129900-77450	BRUSH (+)	2							
12	3	129400-77490	SPRING, BRUSH	4							
13	2	171008-77510	HOUSING ASSY, GEAR	1							
14	2	129136-77520	CENTER HOUSING	1							
15	2	171008-77540	LEVER SET, SHIFT	1							
18	2	129400-77571	DUST COVER,(NON-ASB.	1							
19	2	129900-77640	BOLT, THROUGH	2							
20	2	171008-77650	PINION ASSY	1							
21	3	X2114555500	CLUTCH ASSY	1							
22	4	X2114955020	BALL BEARING	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, M TERMINAL	1							
32	1	26116-120252	BOLT, M12X 25 PLATED	2							
33	1	124550-77030	COVER, TERMINAL	1							

Fig.15. GENERATOR

(A)=4TNV88-QTBZ

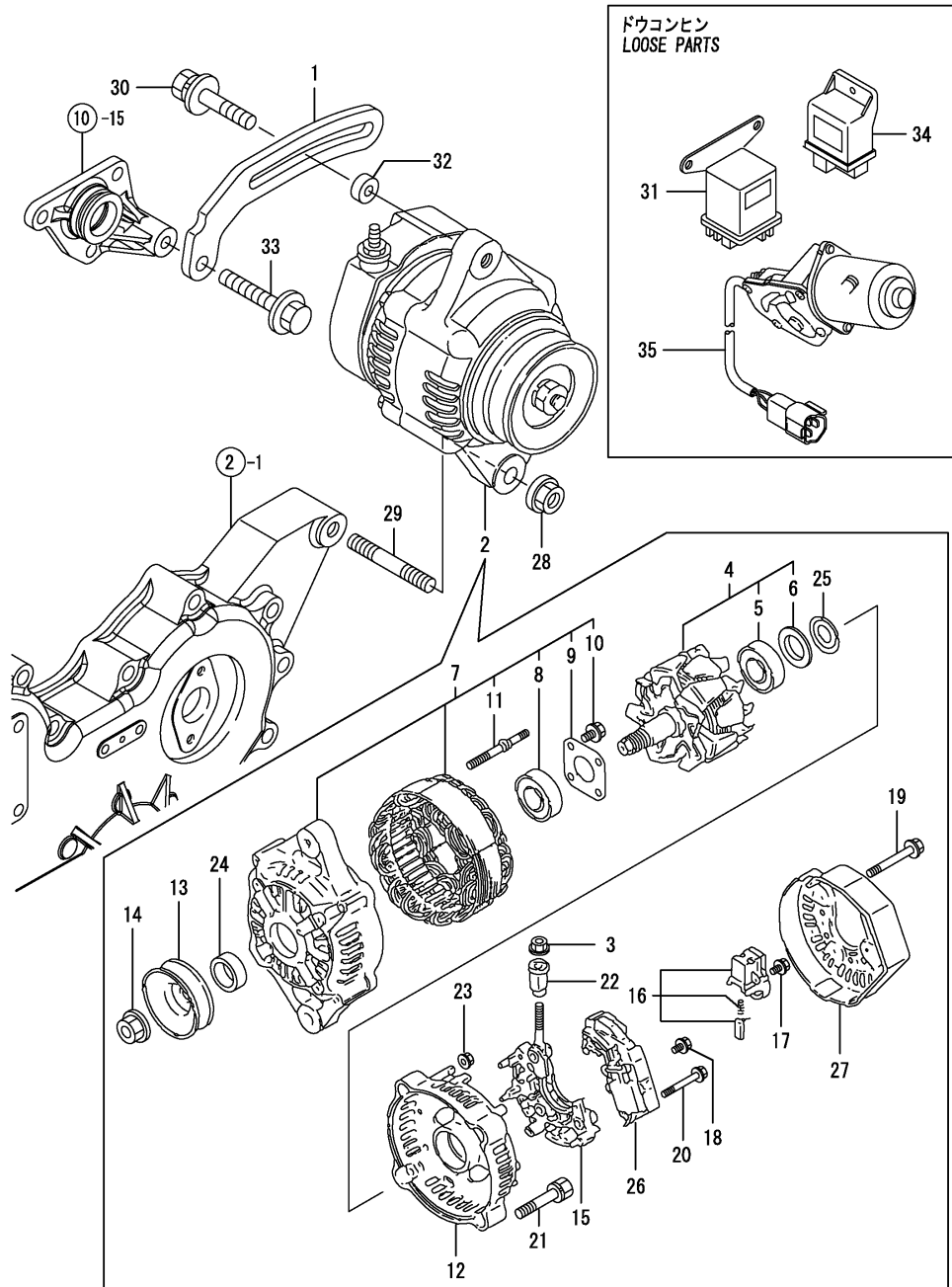
(B)=

(C)=

(D)=

(E)=

(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	119940-77330	ADJUSTER	1							
2	1	129240-77200	ALTERNATOR	1							
3	2	129240-79310	NUT	1							
4	2	119620-77380	ROTOR ASSY	1							
5	3	126501-79240	BALL BEARING	1							
6	3	119620-79250	COVER, BEARING	1							
7	2	119620-77421	FRAME ASSY, DRIVE	1							
8	3	119620-79200	BALL BEARING	1							
9	3	119620-79210	PLATE	1							
10	3	119620-79220	SCREW	4							
11	3	119620-79230	BOLT, STUD	2							
12	2	119620-77440	FLAME ASSY, REAR	1							
13	2	119620-77461	PULLEY	1							
14	2	119620-77471	NUT	1							
15	2	119620-79260	HOLDER	1							
16	2	129052-79270	HOLDER, BRUSH	1							
17	2	119620-79290	SCREW	6							
18	2	119620-79300	SCREW	1							
19	2	119620-79310	BOLT	3							
20	2	119620-79320	SCREW W/WASHER	2							
21	2	119620-79330	BOLT	2							
22	2	119620-79340	INSULATION BUSH	1							
23	2	119620-79350	NUT	2							
24	2	119620-77490	COLLAR	1							
25	2	119620-79360	WASHER, THRUST	1							
26	2	129240-77710	REGULATOR ASSY	1							
27	2	129240-79300	COVER	1							
28	1	26306-100002	NUT, M10	1							
29	1	129795-01900	STUD	1							
30	1	119802-77340	BOLT, ADJUSTER	1							
31	1	119646-77900	RELAY, POWER	1							
32	1	119940-77270	SPACER, GENERATOR	1							
33	1	26106-080452	BOLT, M8X 45 PLATED	1							
34	1	119802-77200	RELAY, SAFETY	1							
35	1	129136-66810	MOTOR, STOP	1							

Fig.16. TOOL & GASKET SET

(A)=4TNV88-QTBZ

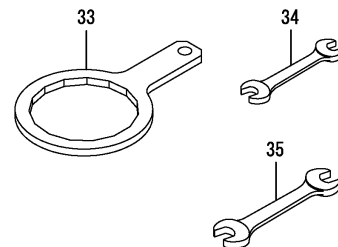
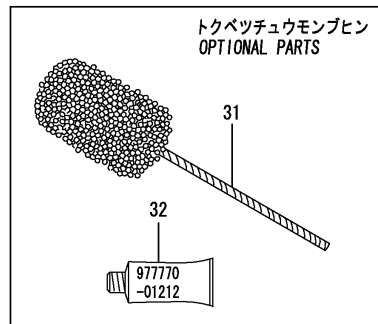
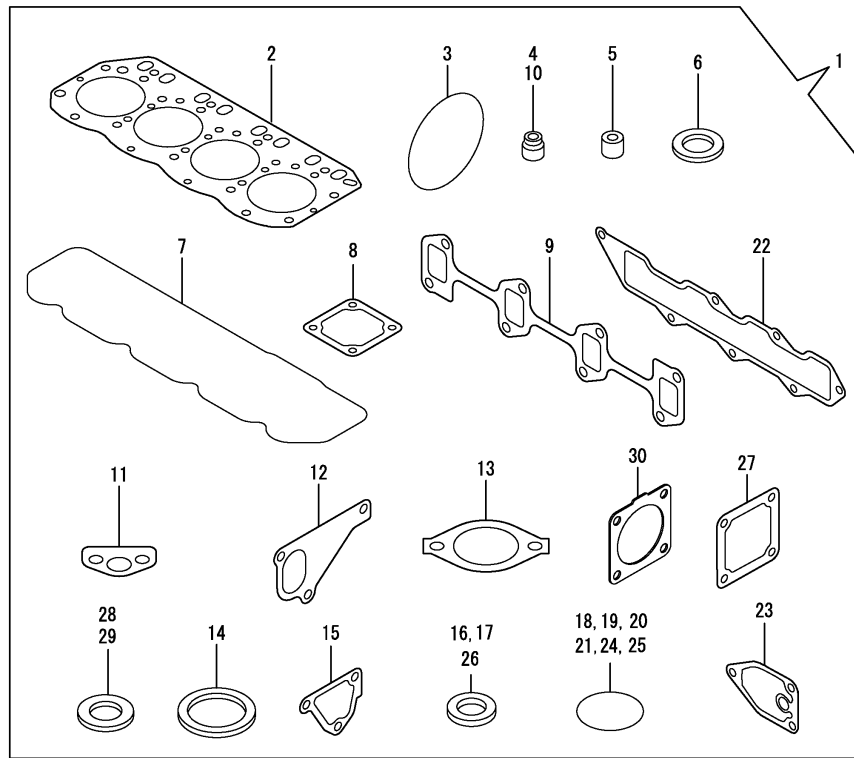
(B)=

(C)=

(D)=

(E)=

(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729601-92700	GASKET SET	1							1
2	2	129407-01340	GASKET, HEAD	1							
3	2	121850-51960	O-RING	1							
4	2	124460-11340	SEAL, VALVE STEM	4							
5	2	119802-11870	PROTECTOR, NOZZLE	4							
6	2	119625-11880	SEAT, NOZZLE	4							
7	2	129601-11310	GASKET, BONNET	1							
8	2	129150-77511	GASKET	1							
9	2	129550-13110	GASKET	1							
10	2	121400-11340	SEAL, VALVE STEM	4							
11	2	129150-35041	GASKET	1							
12	2	129486-42021	GASKET, WATER PUMP	1							
13	2	129795-49551	GASKET	1							
14	2	129150-49811	GASKET, THERMOSTAT	1							
15	2	124395-49840	GASKET	1							
16	2	22190-080002	WASHER, SEAL 6	2							
17	2	124465-44950	GASKET, 16	1							
18	2	24311-000120	O-RING, 1AP12.0	3							
19	2	24311-000320	O-RING, 1AP32.0	2							
20	2	24341-000240	O-RING, 1AS24.0	1							
21	2	129486-42140	O-RING, G30	1							
22	2	129407-12110	GASKET, MANIFOLD	1							
23	2	129150-35111	GASKET	1							
24	2	24341-000250	O-RING, 1AS25.0	1							
25	2	119609-32040	O-RING, P16	4							
26	2	22190-100002	WASHER, SEAL 10	2							
27	2	129100-77510	GASKET, AIR HEATER	1							
28	2	23414-080000	GASKET, 8X1.0	1							
29	2	129150-49360	GASKET	1							
30	2	129930-13200	GASKET, SILENCER	4							
31	1	129400-92430	HONE	1							1
32	1	977770-01212	GASKET, LIQUID	1							1
33	1	119640-92750	WRENCH, FILTER 80	1							
34	1	28110-100120	SPANNER, 10X12	1							
35	1	28110-140170	SPANNER, 14X17	1							

Remarks

(1) OPTIONAL PART.

Parts No. Index

Parts No.	Fig. No.	Ref. No.
105025-59530	13	9
105325-59570	13	6
114250-39450	9	12
114250-53080	12	5
114250-53120	12	10
114250-53130	12	11
114250-53140	12	12
114250-53210	12	13
114250-53400	12	14
119131-18320	6	5
119255-44660	10	57
119266-49350	10	43
119593-59580	12	58
119609-32040	2	17
	16	25
119620-01750	3	3
119620-77380	15	4
119620-77421	15	7
119620-77440	15	12
119620-77461	15	13
119620-77471	15	14
119620-77490	15	24
119620-79200	15	8
119620-79210	15	9
119620-79220	15	10
119620-79230	15	11
119620-79250	15	6
119620-79260	15	15
119620-79290	15	17
119620-79300	15	18
119620-79310	15	19
119620-79320	15	20
119620-79330	15	21
119620-79340	15	22
119620-79350	15	23
119620-79360	15	25
119625-11880	4	20
	16	6
119640-92750	16	33
119646-77900	15	31
119802-01520	2	12
119802-01560	2	13
119802-03110	4	41
119802-03120	4	42
119802-03130	4	43
119802-03140	4	44
119802-11260	4	26
119802-11270	4	27
119802-11870	4	19
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Parts No.	Fig. No.	Ref. No.
119802-12560	5	15
119802-21201	8	5
119802-21660	8	9
119802-25051	7	9
119802-25070	7	13
119802-25100	7	10
119802-25901	7	15
119802-32070	2	8
119802-32100	2	7
119802-32111	2	18
119802-32120	2	19
119802-32130	2	20
119802-35100	9	8
119802-35110	9	9
119802-39450	9	14
119802-49113	10	10
119802-49730	10	35
119802-55710	13	15
119802-55800	13	2
119802-59550	12	52
119802-59560	12	54
119802-77200	15	34
119802-77340	15	30
119808-12520	5	19
119808-12540	5	20
119865-21600	8	16
119866-12541	5	21
119910-12210	5	14
119910-12510	5	18
119934-01800	2	6
119940-77270	15	32
119940-77330	15	1
120130-11860	4	5
120270-54410	4	23
121023-01550	2	27
121111-21501	8	12
121250-44901	10	31
121256-44600	10	52
121267-44760	10	40
121400-11340	4	16
	16	10
121450-44531	10	47
121470-44581	10	49
121520-34810	9	2
121550-23200	8	30
121750-49110	10	23
121850-21680	8	11
121850-42410	10	8
121850-51960	2	21
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Parts No.	Fig. No.	Ref. No.
123900-13610	6	6
123900-13630	6	4
124060-01050	1	10
124060-77680	12	59
124160-01751	2	14
	4	50
124160-01910	1	5
		15
124160-11360	4	52
124160-39140	9	13
124240-01871	2	15
124395-49840	10	17
	16	15
124450-44550	10	51
124450-44560	10	48
124460-11340	4	17
	16	4
124465-44950	10	32
	16	17
124550-77030	14	33
124722-59050	10	36
		39
	12	53
		56
124766-59050	13	5
		8
126501-79240	15	5
129001-01250	1	11
129001-02930	1	25
129001-32330	2	11
129001-91841	2	22
129004-01190	1	33
129004-03010	4	39
129004-11100	4	10
129004-11650	4	31
129004-11900	4	21
129004-34801	9	1
129004-42001	10	1
129004-42040	10	15
129004-49610	10	33
129004-49620	10	37
129004-49711	10	34
129004-49721	10	38
129004-55610	13	1
129005-22080	8	17
129005-22500	8	19
129005-22900	8	33
129005-22950	8	35
129005-59830	9	15
129052-79270	15	16

Parts No.	Fig. No.	Ref. No.
129100-01580	3	1
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129100-01640	3	16
129100-11110	4	11
129100-23910	8	29
129100-35140	9	10
129100-42051	10	3
129100-42121	10	4
129100-55690	13	12
129100-77500	5	8
129100-77510	5	9
	16	27
129107-44590	10	64
129110-44740	10	22
129132-44590	10	54
129136-66810	15	35
129136-77011	14	1
129136-77310	14	2
129136-77520	14	14
129150-01200	1	31
129150-02020	1	7
129150-02450	7	4
129150-02870	1	34
129150-02930	1	28
129150-02940	1	37
129150-03070	4	40
129150-11230	4	32
129150-11280	4	28
129150-11370	4	18
129150-11750	4	34
129150-11810	4	7
129150-14101	7	7
129150-14200	7	1
129150-14400	7	2
129150-23600	8	31
129150-23610	8	39
129150-25301	7	16
129150-35041	9	3
	16	11
129150-35111	9	6
	16	23
129150-35153	9	7
129150-49080	10	59
129150-49100	10	58
129150-49360	10	44
	16	29
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