

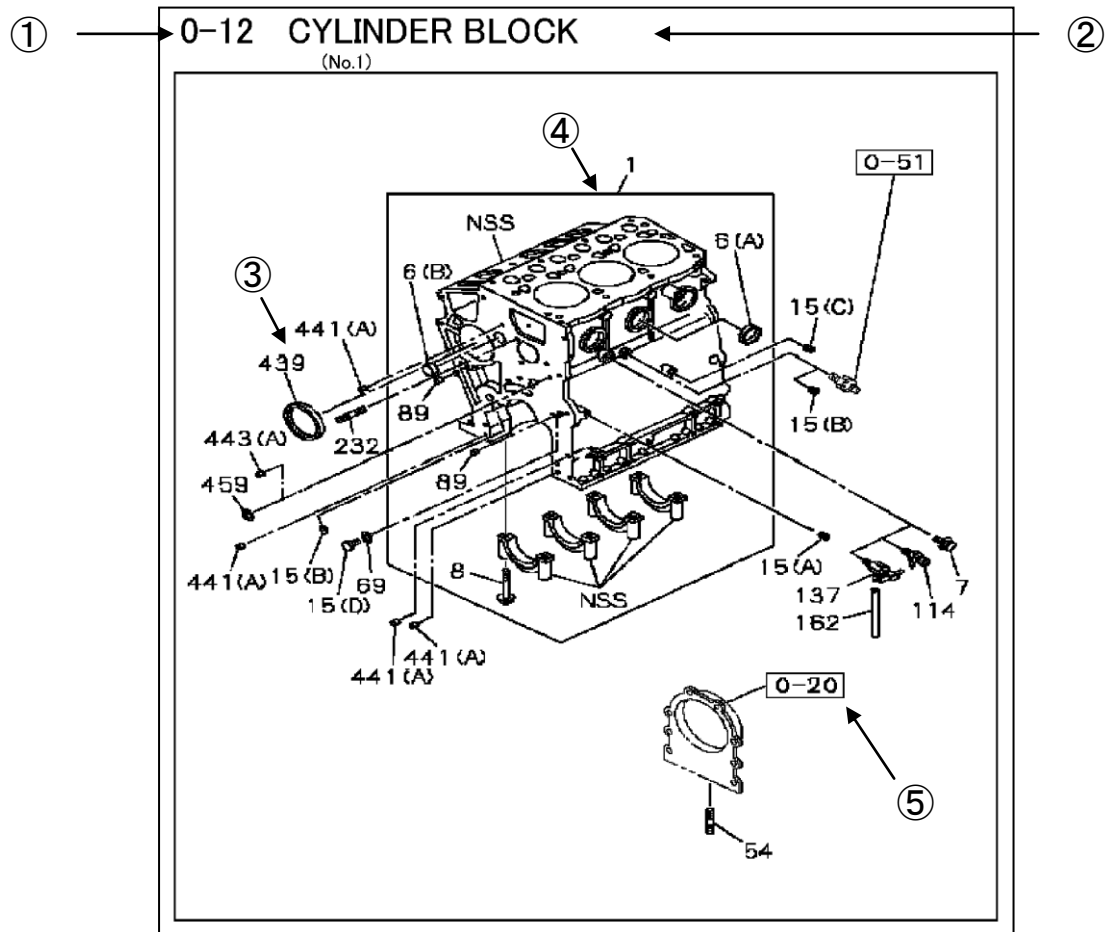
ISUZU

DIESEL ENGINE

4LE1 NYGD02

PARTS CATALOG

How to refer to the Parts Catalog



① FIG NO.

A 3-digit (X-XX) Figure Number has been assigned to every section/illustration of the catalog.

The first digit of the Figure Number identifies the primary catalog section.

And the second and third digits identify the subsections.

EXAMPLE : 0-12 = Engine (0) ; Cylinder Block (12).

② ILLUSTRATION TITLE

The title contains a generic name(s) for the item(s) illustrated.

③ **KEY NUMBER**

The Key Number connects the illustrated part to the appropriate text.

Items identified with a “NSS” (Not Serviced Separately) are not available individually, however, they may be available as part of an assembly.

④ **ASSEMBLIES, KITS, SETS AND THEIR COMPONENTS**

Assemblies, Kits and/or Sets are shown within a frame/box. Also shown within the frame/box are any components included with the assembly, Kit or Set.

⑤ **SEE FIG NO.**

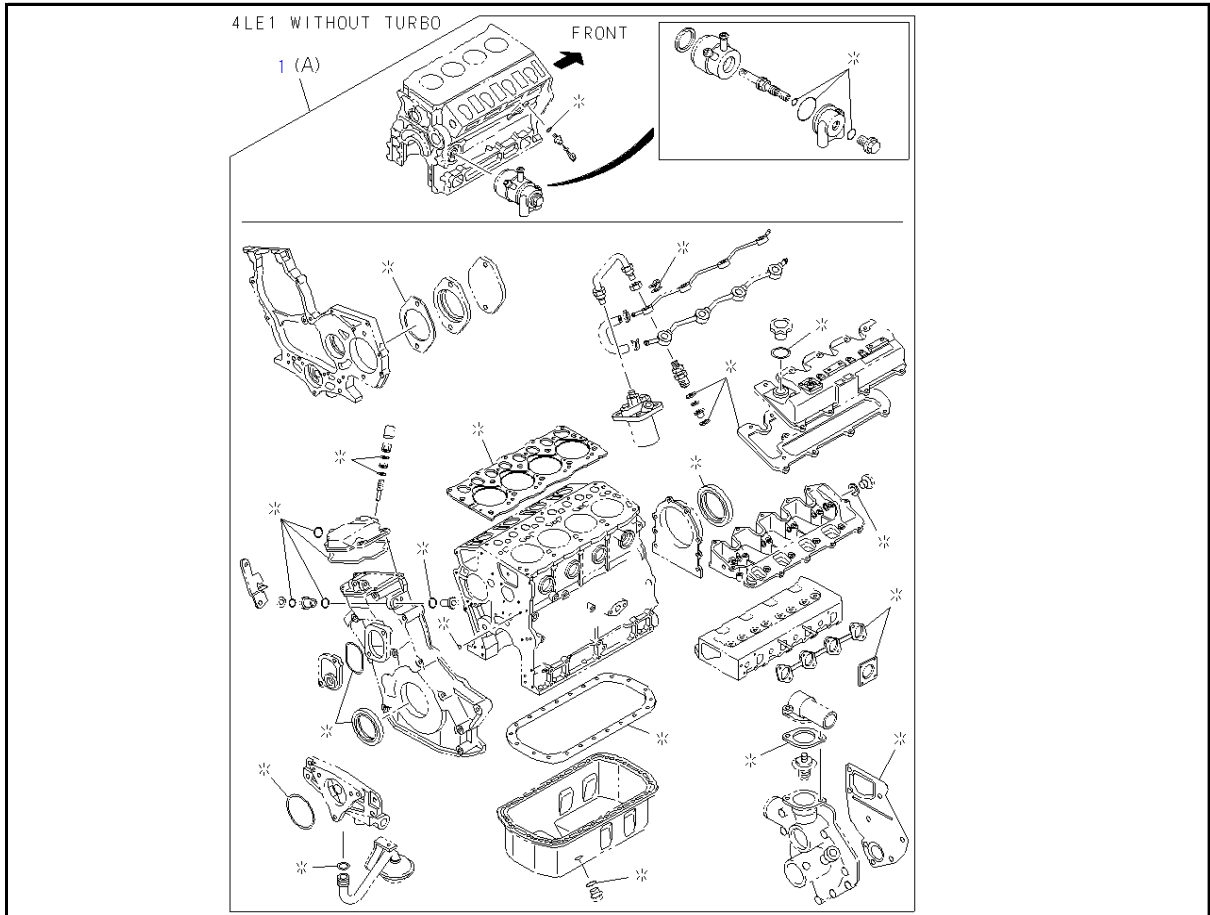
Items shown as a point of reference are not identified with a Key Number. These items are shown because of the way they fit within the illustration. They are described in more detail in another section of the Catalog.

The applicable catalog section is shown next to the illustration.

FIGURE NUMBER INDEX

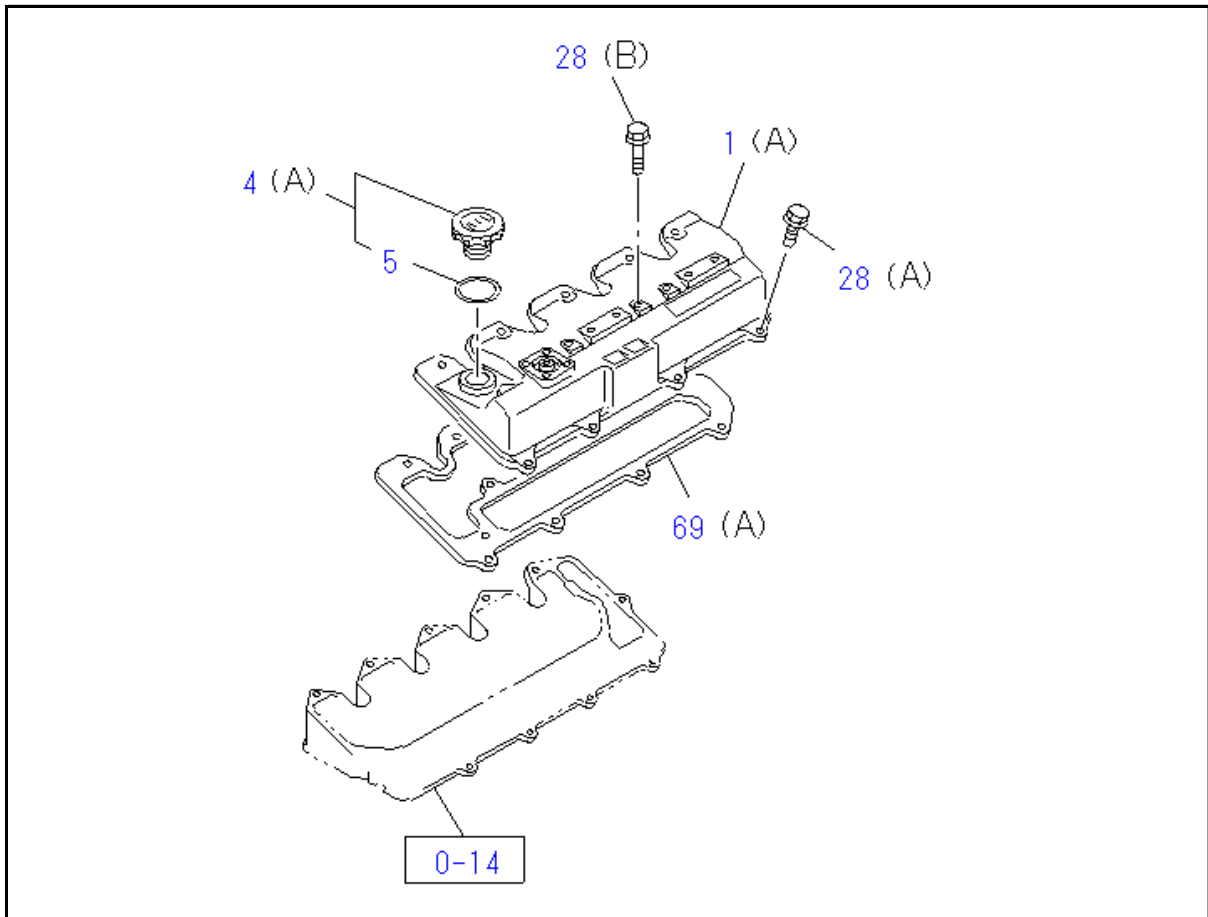
FIG NO.	TITLE (SUBTITLE)	PAGE
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0-10	CYLINDER HEAD COVER	2
0-11	CYLINDER HEAD	3
0-12	CYLINDER BLOCK	5
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0-05 ENGINE GASKET KIT



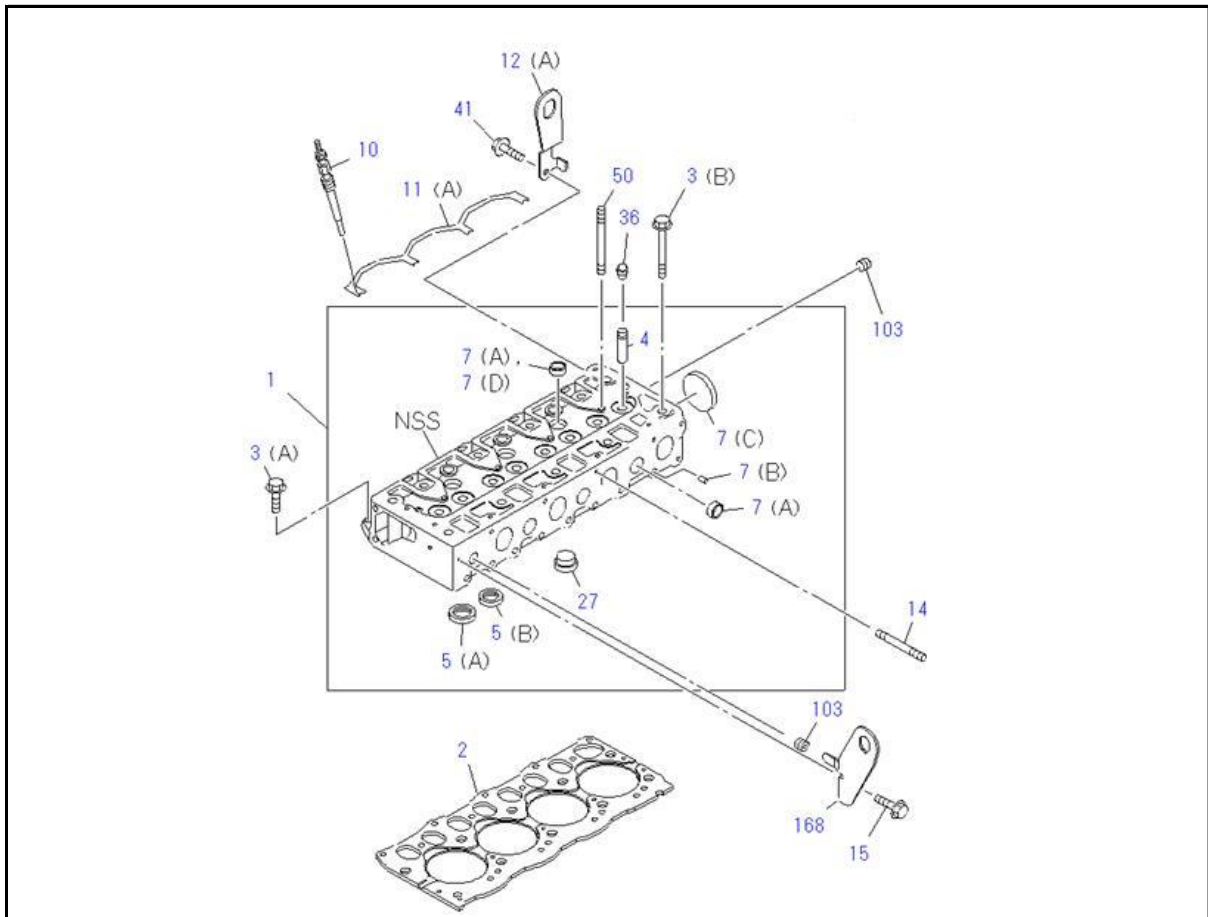
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	5-87818-121-0 <5-87815-343-2>	1	GASKET SET; ENG OVERHAUL	

0-10 CYLINDER HEAD COVER



KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-97378-024-0	1	COVER; CYL HD	
4 (A)	8-94133-207-5	1	CAP; OIL FILLER	
5	8-94123-623-1	1	GASKET; OIL FILLER ID=32 OD=40	
28 (A)	0-28050-620-0	9	BOLT; HD COVER M6X20 FLANGE	
28 (B)	0-28050-645-0	4	BOLT; HD COVER M6X45 FLANGE	
69 (A)	8-97201-466-1	1	GASKET; HD TO COVER	

0-11 CYLINDER HEAD

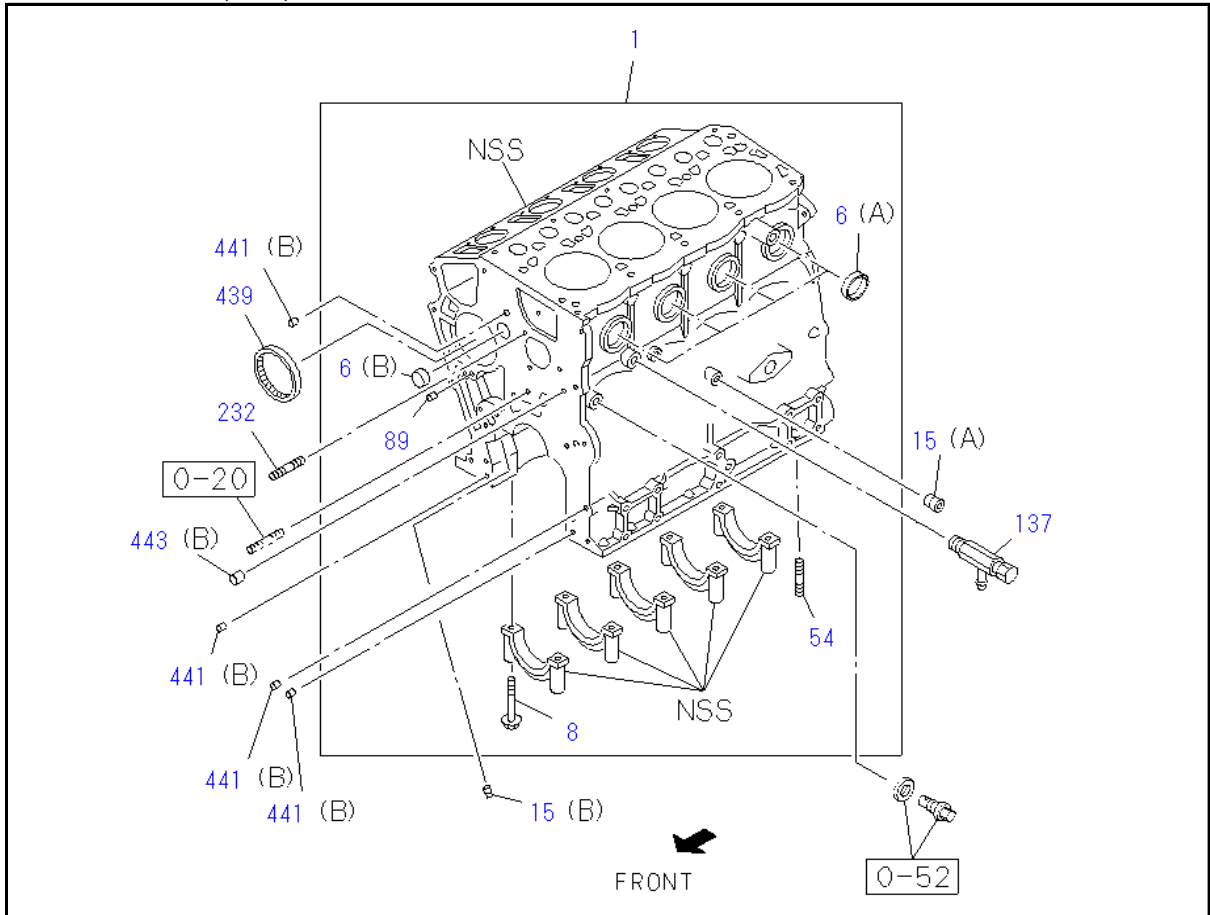


KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97114-713-5	1	HEAD ASM; CYL	
2	8-98074-776-0	1	GASKET; CYL HD	
3 (A)	8-94463-784-0	5	BOLT; CYL HD TO BLOCK M8X25	
3 (B)	8-97036-959-1	10	BOLT; CYL HD TO BLOCK M12X89	
4	8-97231-969-0 <8-97031-749-0>	8	GUIDE; VLV	
5 (A)	8-97045-391-2	4	SEAT; VLV INSERT INLET	
5 (B)	8-97045-392-0	4	SEAT; VLV INSERT EXHAUST	
7 (A)	8-97209-609-0	3	CUP; SEALING,CYL HEAD OD=22	
7 (B)	8-97233-429-0	5	CUP; SEALING,CYL HEAD OD=8	
7 (C)	8-97036-550-1 <8-97351-451-0>	1	CUP; SEALING,CYL HEAD OD=45	
7 (D)	9-11129-128-0	3	CUP; SEALING,CYL HEAD OD=20	
10	8-97106-549-4	4	PLUG; GLOW 12V	
11 (A)	8-98100-786-0	1	CONNECTOR; GLOW PLUG	
12 (A)	8-97085-390-0	1	HANGER; ENG,RR	
14	5-09300-065-0	2	STUD; EXH MANIF M8X79 L=92	
15	0-28050-816-0	1	BOLT; HANGER,FRT M8X16 FLANGE	
27	8-97115-315-1	4	PLUG; HOT	
36	8-94110-559-1	8	SEAL; OIL,VLV GUIDE	

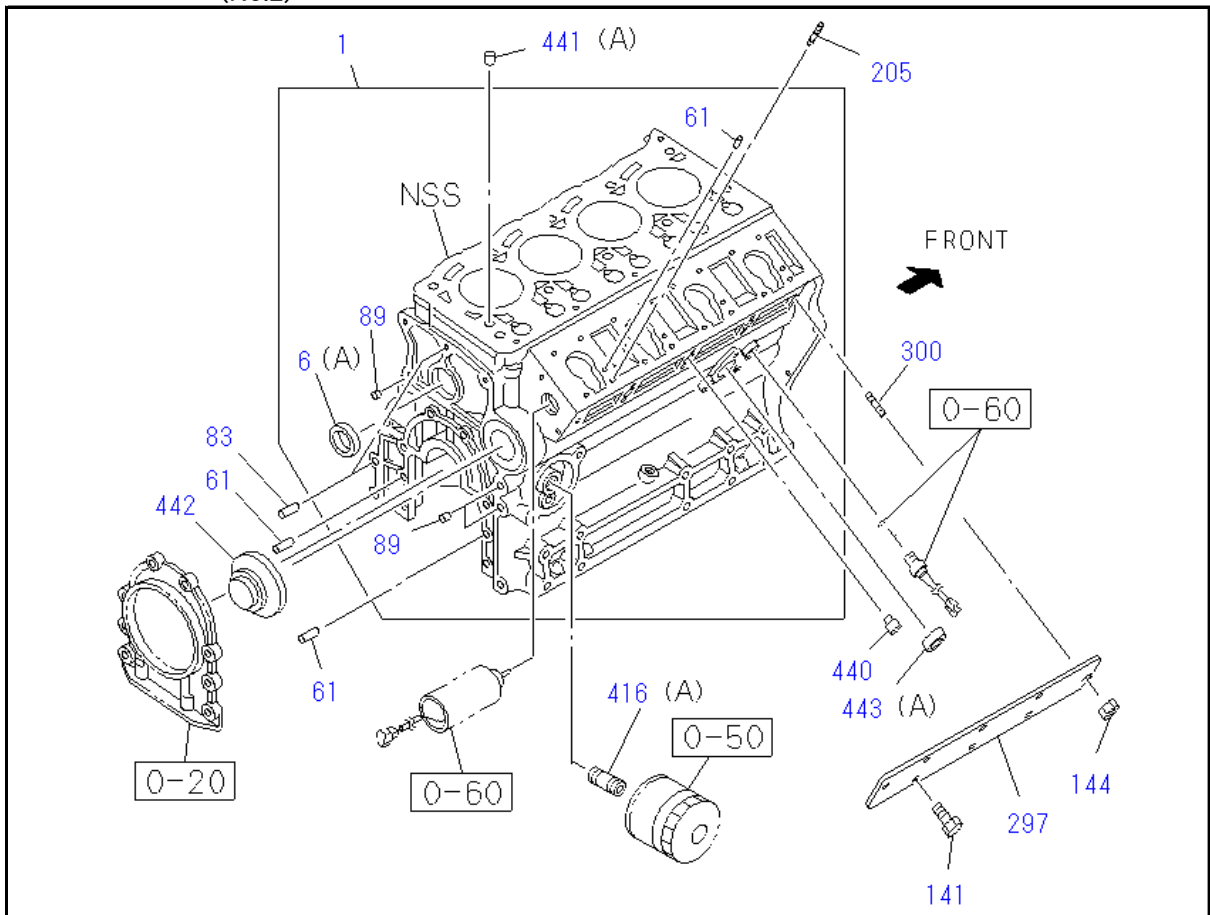
KEY No.	Part no.	qty	Part description	Engine serial no.
41	0-28050-816-0	1	BOLT; ENG HANGER M8X16 FLANGE	
50	8-97094-641-1	6	STUD; ROCKER SHAFT BRKT M6X45 L=53	
103	5-09605-005-0	1	PLUG; HD PT 3/8	
168	8-97085-389-0	1	HANGER; ENG,FRT	

0-12 CYLINDER BLOCK

(No.1)



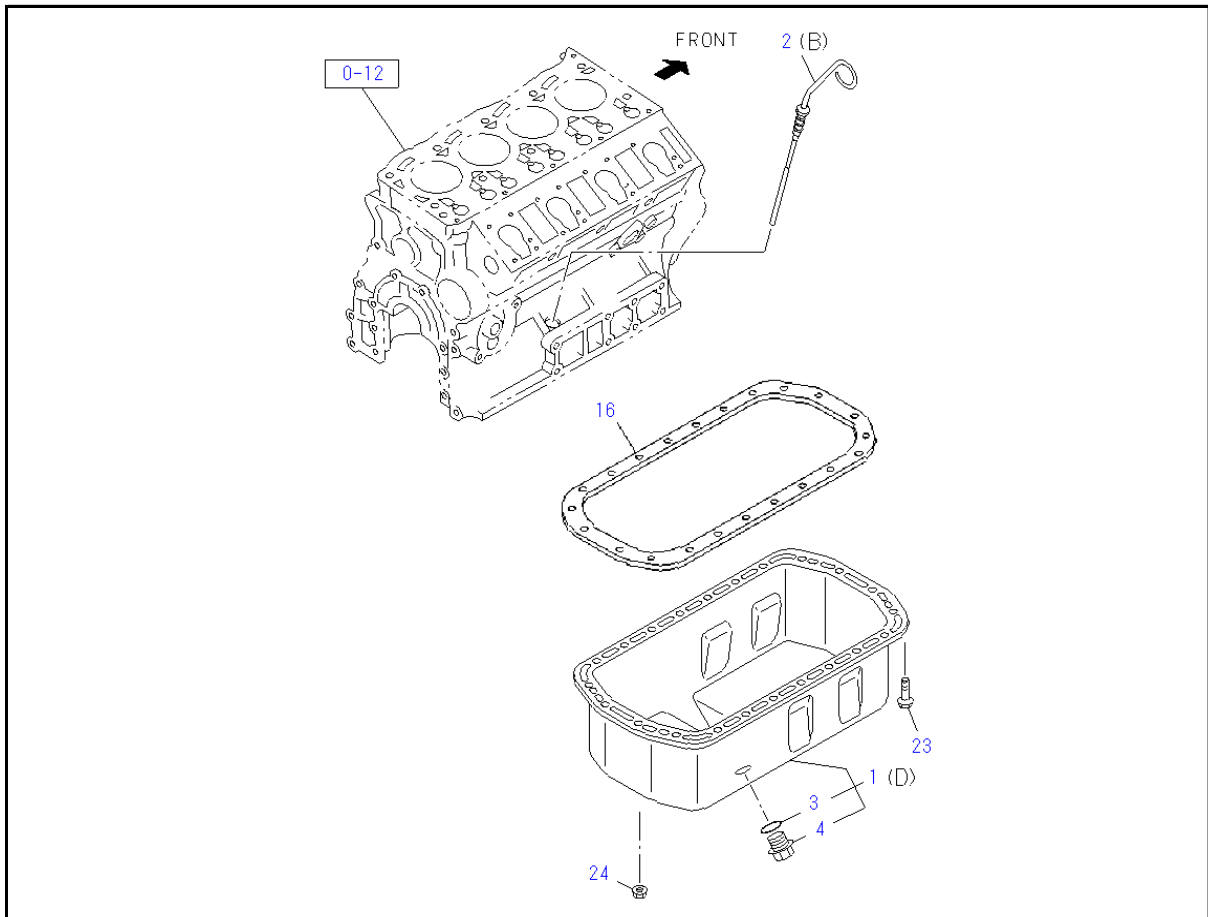
(No.2)



0-12 CYLINDER BLOCK

KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97369-555-6	1	BLOCK ASM; CYL	
6 (A)	8-94229-853-0	5	CUP; SEALING OD=35	
6 (B)	8-97209-609-0	1	CUP; SEALING OD=22	
8	8-94167-470-1	10	BOLT; BRG CAP M11X83	
15 (A)	1-09605-019-0	1	PLUG; OIL GALLERY PT 1/4	
15 (B)	9-09204-510-0	1	PLUG; OIL GALLERY PT 1/8	
54	0-41010-616-0	4	STUD; OIL PAN TO BLOCK M6X16 L=25	
61	9-08150-616-0	6	PIN; STRAIGHT OD=6 L=16	
83	9-08150-816-0 <9-08160-816-0>	2	PIN; FLYWHEEL HSG OD=8 L=16	
89	5-09600-013-0	4	CUP; SEALING,OIL GALLERY OD=12.3	
137	8-94342-414-0	1	COCK; DRAIN,WATER	
141	0-28050-612-0	6	BOLT; COVER M6X12 FLANGE	
144	8-97329-622-0	2	NUT; COVER FIX M6 W/LK WASHER	
205	1-09305-005-0	8	STUD; PUMP HOLE M8X20 L=32	
232	8-97262-145-1	1	STUD; WATER PUMP M8X40 L=52	
297	8-97118-989-2	1	COVER; CYL BLOCK	
300	8-97262-147-1	1	STUD; COVER M6X16 L=25	
300	8-97262-148-1	1	STUD; COVER M6X19 L=27	
416 (A)	8-94325-595-0	1	STUD; OIL FILTER M20X20 L=32	
439	8-98063-794-0	1	BEARING; NEEDLE NSK	
440	8-97039-495-3	2	PIN; CONT LINK	
441 (A)	8-94200-819-0	2	DOWEL; CYL BLOCK OD=15.25	
441 (B)	9-11229-058-1	4	DOWEL; CYL BLOCK OD=11 L=8	
442	8-97047-142-1	1	PLUG; THRUST	
443 (A)	1-09600-012-2	1	CAP; SEALING OD=32	
443 (B)	5-09600-013-0	1	CAP; SEALING OD=12.3	

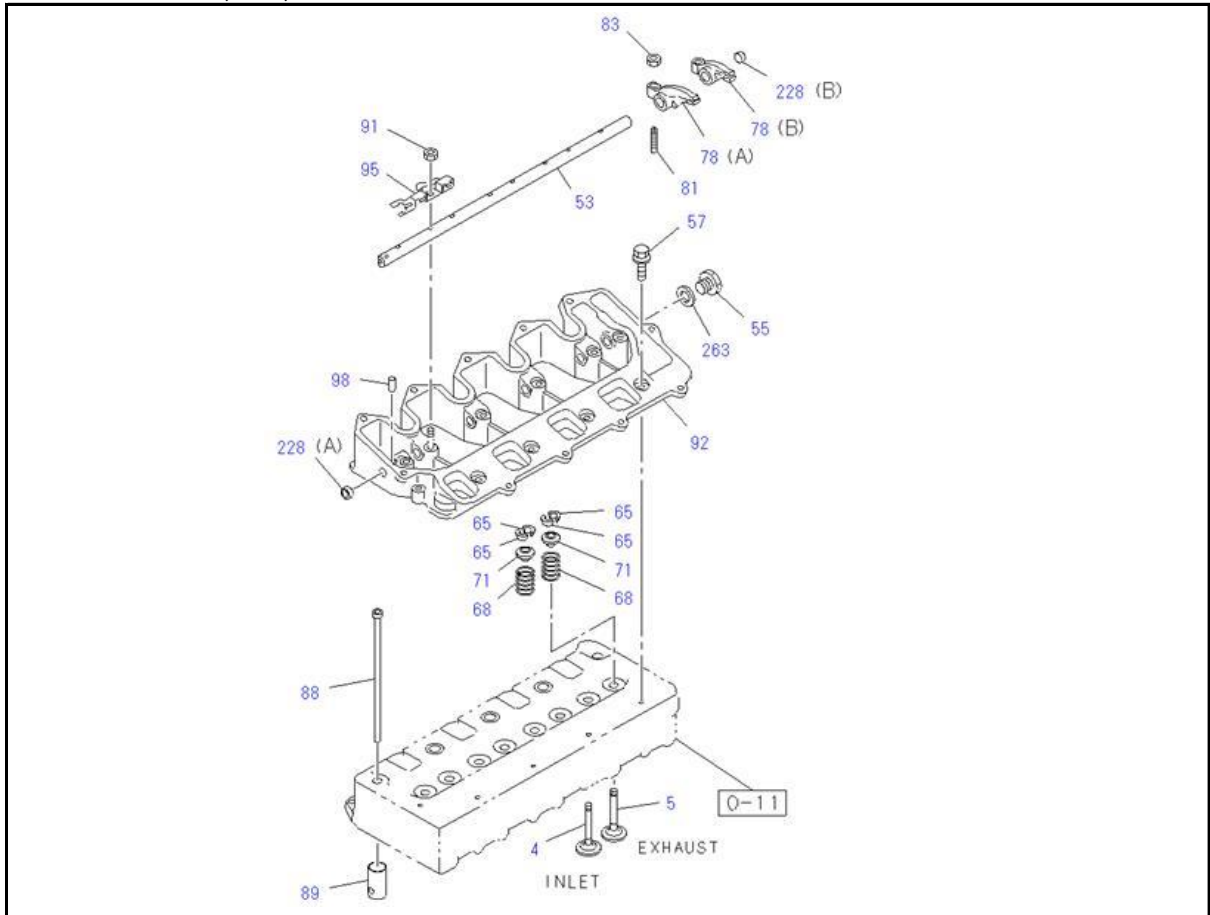
0-13 OIL PAN AND LEVEL GAUGE



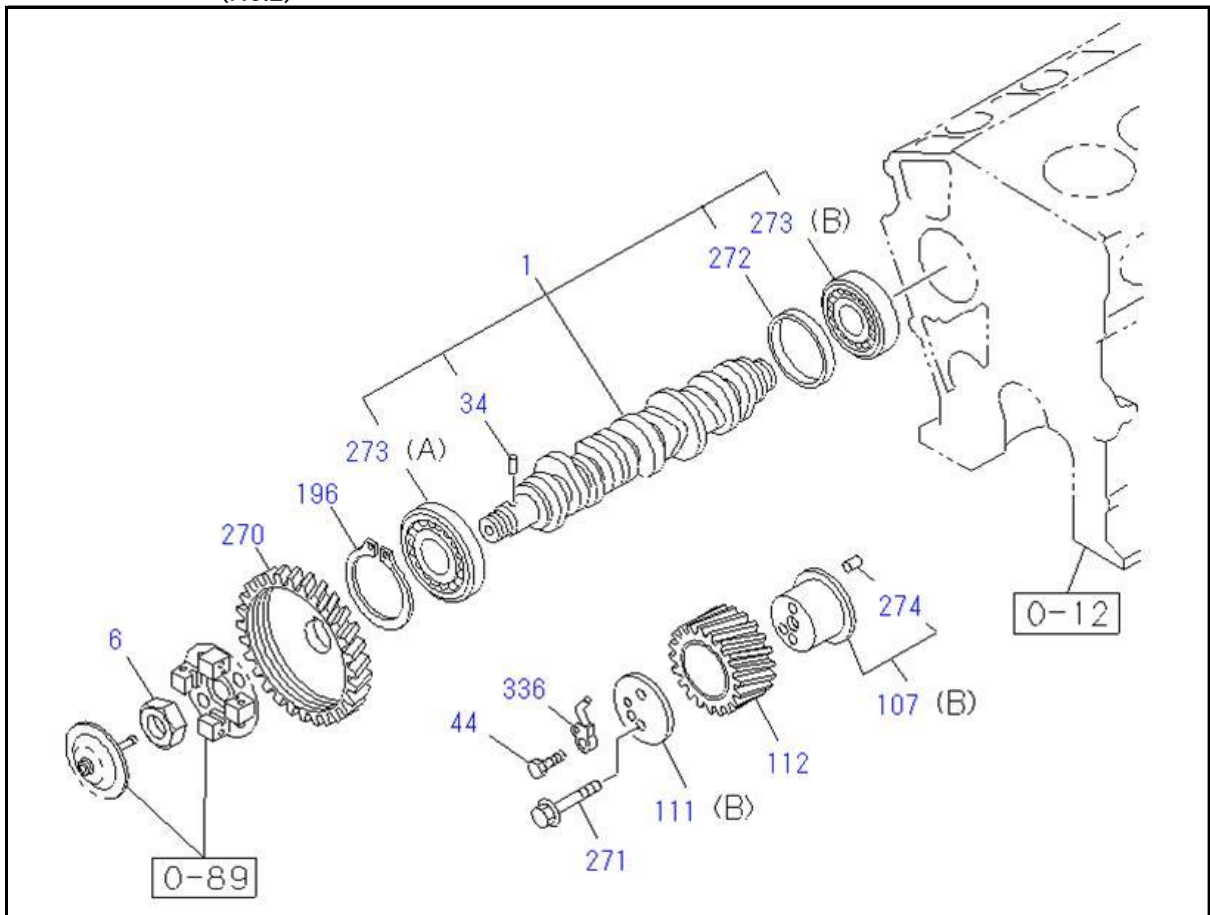
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (D)	8-97171-126-0	1	PAN ASM; OIL	
2 (B)	8-94422-595-0	1	GAUGE; OIL LEVEL	
3	1-09623-057-0	1	GASKET; DRAIN PLUG ID=24.4	
4	9-09662-012-0	1	PLUG; DRAIN,OIL M20X16.5	
16	8-97314-914-0	1	GASKET; OIL PAN TO C/BL	
23	8-97135-141-0	18	BOLT; OIL PAN M6X13 W/WASHER	
24	8-97329-622-0	4	NUT; OIL PAN M6 W/LK WASHER	

0-14 CAMSHAFT AND VALVE

(No.1)



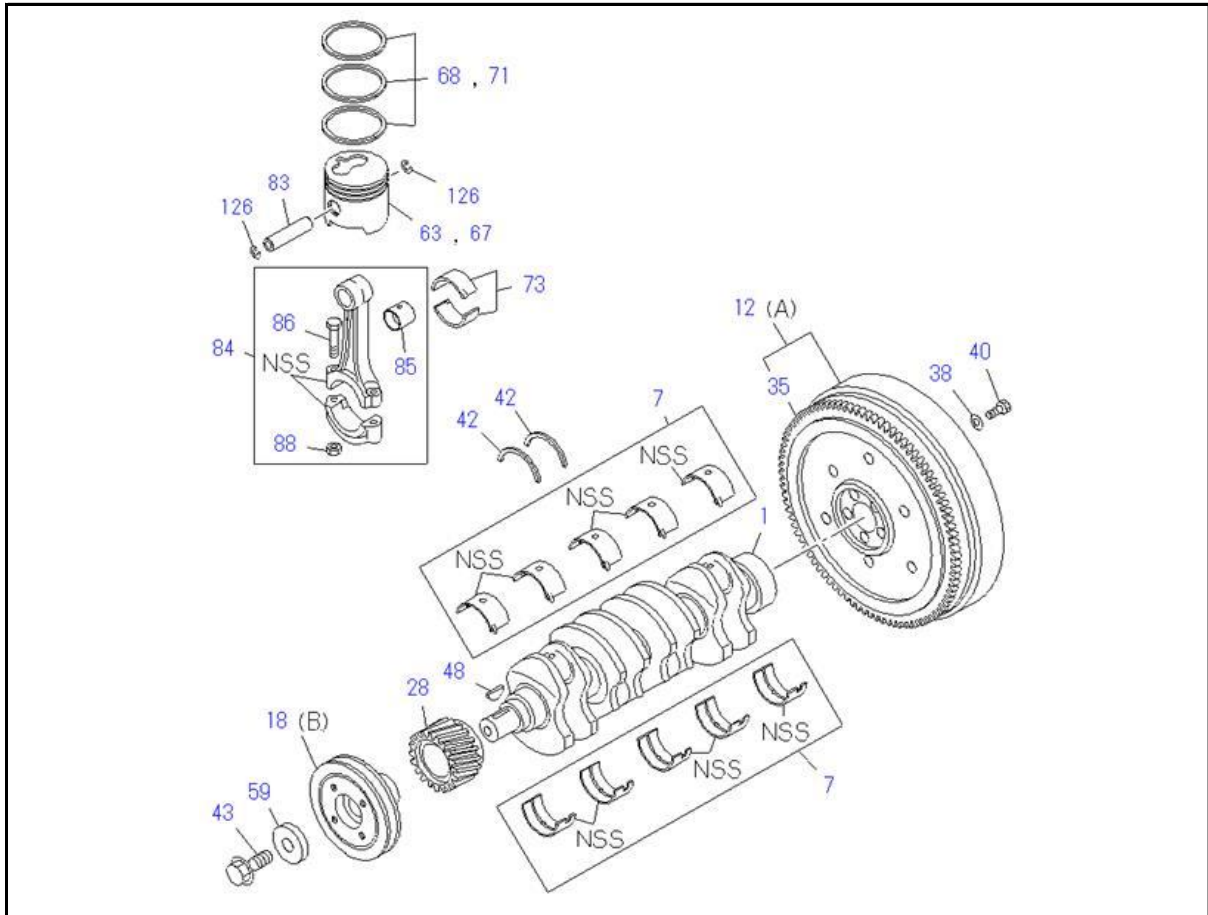
(No.2)



0-14 CAMSHAFT AND VALVE

KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97145-198-1	1	CAMSHAFT	
4	8-97102-123-1	4	VALVE; INL	
5	8-97045-410-3	4	VALVE; EXH	
6	8-97303-225-0	1	NUT; CM/SHF GEAR M20 H=8	
34	9-09878-626-0	1	PIN; CM/SHF OD=5 L=6	
44	9-09906-205-1	1	BOLT M10X24	
53	8-97118-656-1	1	SHAFT; ROCKER ARM	
55	8-98042-944-0	1	PLUG; ROCKER SHAFT END M14X9	
57	0-28050-625-0	5	BOLT; ROCKER ARM BRKT M6X25 FLANGE	
57	0-28050-650-0	5	BOLT; ROCKER ARM BRKT M6X50 FLANGE	
65	8-94239-501-0	16	COLLAR; SPLIT	
68	8-97034-629-1	8	SPRING; VLV	
71	8-94251-031-1	8	SEAT; SPR	
78 (A)	8-97212-518-0	4	ARM; ROCKER INLET	
78 (B)	8-97212-520-0	4	ARM; ROCKER EXHAUST	
81	8-97010-485-0	8	SCREW; ADJ,ROCKER ARM	
83	0-91111-506-0	8	NUT; ADJ SCREW,LK M6	
88	8-98273-084-0 <8-97069-575-3>	8	ROD; PUSH	
89	8-97034-630-1	8	TAPPET; VLV	
91	8-97329-622-0	6	NUT; ROCKER SHAFT M6 W/LK WASHER	
92	8-98048-889-0	1	BRACKET; ROCKER ARM	
95	8-97070-698-2	4	SPRING; ROCKER SHAFT	
98	9-08150-516-0	1	PIN; SHAFT SET OD=5 L=16	
107 (B)	8-97310-122-2	1	SHAFT; IDLE GEAR	
111 (B)	8-97310-177-1	1	COLLAR; THRUST,IDLE GEAR	
112	8-97129-782-0	1	GEAR; IDLE	
196	9-09180-162-0	1	RING; SNAP ID=57.9	
228 (A)	5-09600-013-0 <9-11129-083-0>	1	CUP; SEALING,CAMSHAFT OD=12	
228 (B)	8-97233-429-0	1	CUP; SEALING,CAMSHAFT OD=8	
263	9-09571-414-0	1	GASKET; CAM END ID=14.2 OD=20.0	
270	8-97102-288-2	1	GEAR; INJ PUMP & VLV	
271	0-28060-845-0	2	BOLT; COLLAR M8X45 FLANGE	
272	8-97062-048-0	1	RING; CAMSHAFT	
273 (A)	9-00090-610-0	1	BEARING; CAMSHAFT NSK	
273 (B)	9-00090-657-0	1	BEARING; CAMSHAFT NSK	
274	9-08160-510-0	1	PIN; IDLE SHAFT OD=5 L=10	
336	8-97310-125-2	1	PIPE; OIL JET	

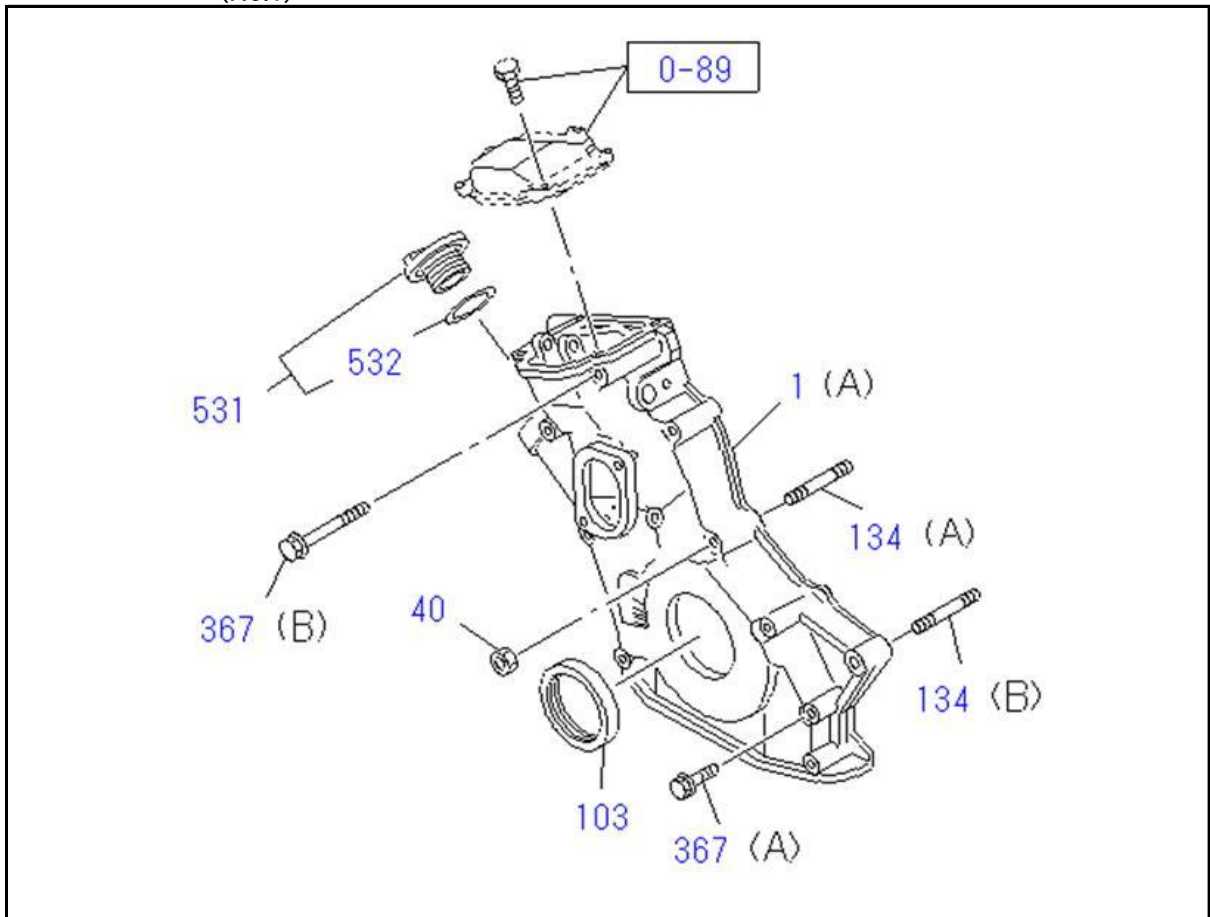
0-15 CRANKSHAFT,PISTON AND FLYWHEEL



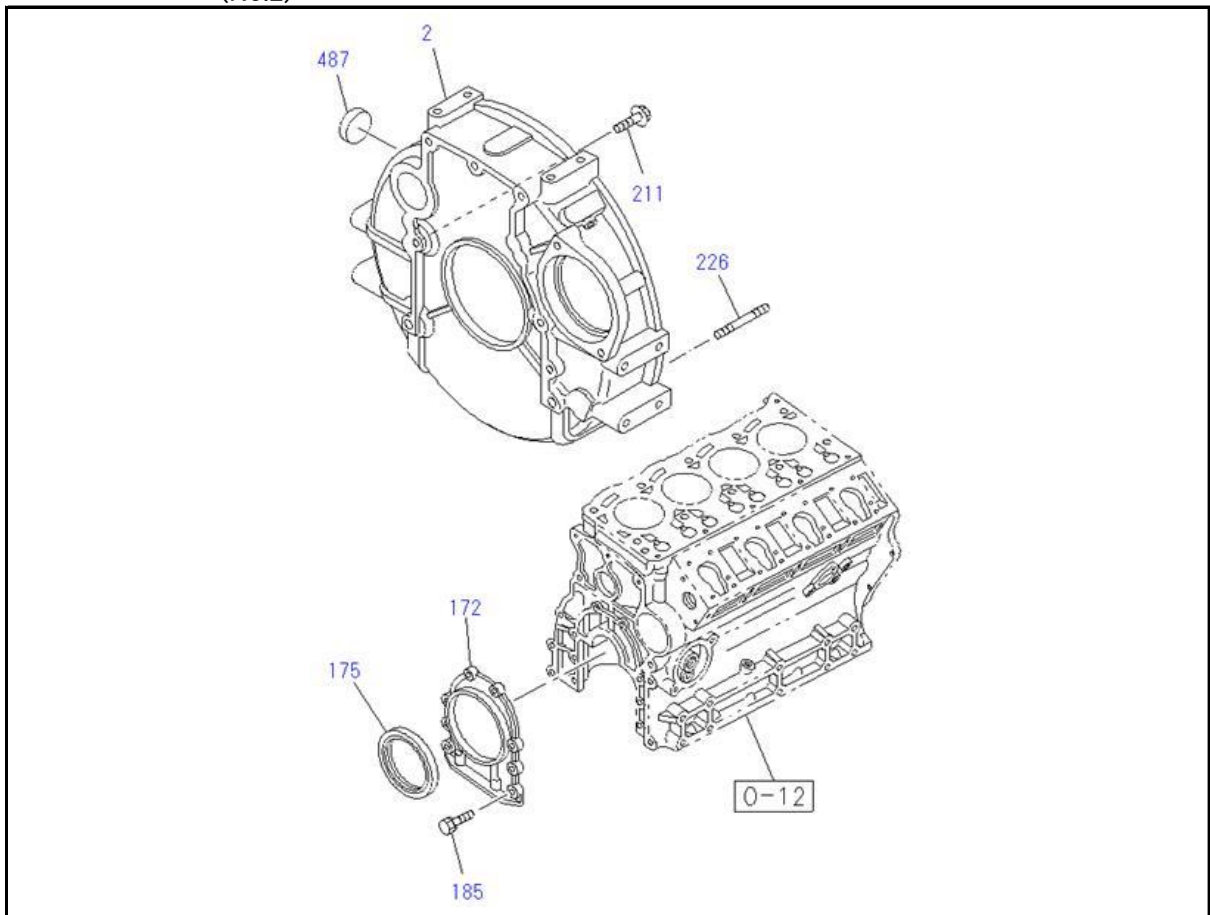
KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97115-177-2	1	CRANKSHAFT	
7	8-98089-084-0	1	METAL KIT; CRANKSHAFT,STANDARD	
12 (A)	8-97164-530-0	1	FLYWHEEL	
18 (B)	8-97226-830-1	1	PULLEY; CR/SHF OD=125 W/DAMPER	
28	8-97328-612-0	1	GEAR; CR/SHF	
35	8-94419-602-1	1	GEAR; RING Z=108	
38	8-97023-268-0	6	WASHER; FLYWHEEL	
40	8-94133-328-1	6	BOLT; FLYWHEEL M12X32	
42	8-98063-783-0	2	WASHER; THRUST,CR/SHF	
43	8-94386-079-0	1	BOLT; CR/SHF PULLEY M14X34 FLANGE	
48	8-94201-641-0	1	KEY; WOODRUFF,CR/SHF	
59	8-94134-792-0	1	WASHER; CR/SHF PULLEY	
63	8-97257-876-0	4	PISTON	
67	8-97257-875-0	4	PISTON; O/S=0.25	
68	8-97141-208-0	4	RING SET; PISTON,STANDARD	
71	8-97141-209-0	4	RING SET; PISTON,O/S=0.25	
73	8-98051-928-0	4	METAL SET; CONN ROD,STANDARD	
83	5-12211-018-0	4	PIN; PISTON	
84	8-97310-351-0	4	ROD ASM; CONN	
85	8-97310-352-0	4	BUSHING; CONNROD	
86	8-94216-206-4	8	BOLT; CONNROD M10 L=60	
88	8-94224-236-2	8	NUT; CONNROD M10 FLANGE	
126	8-94114-049-1	8	RING; SNAP,PISTON PIN	

0-20 TIMING GEAR CASE AND FLYWHEEL HOUSING

(No.1)



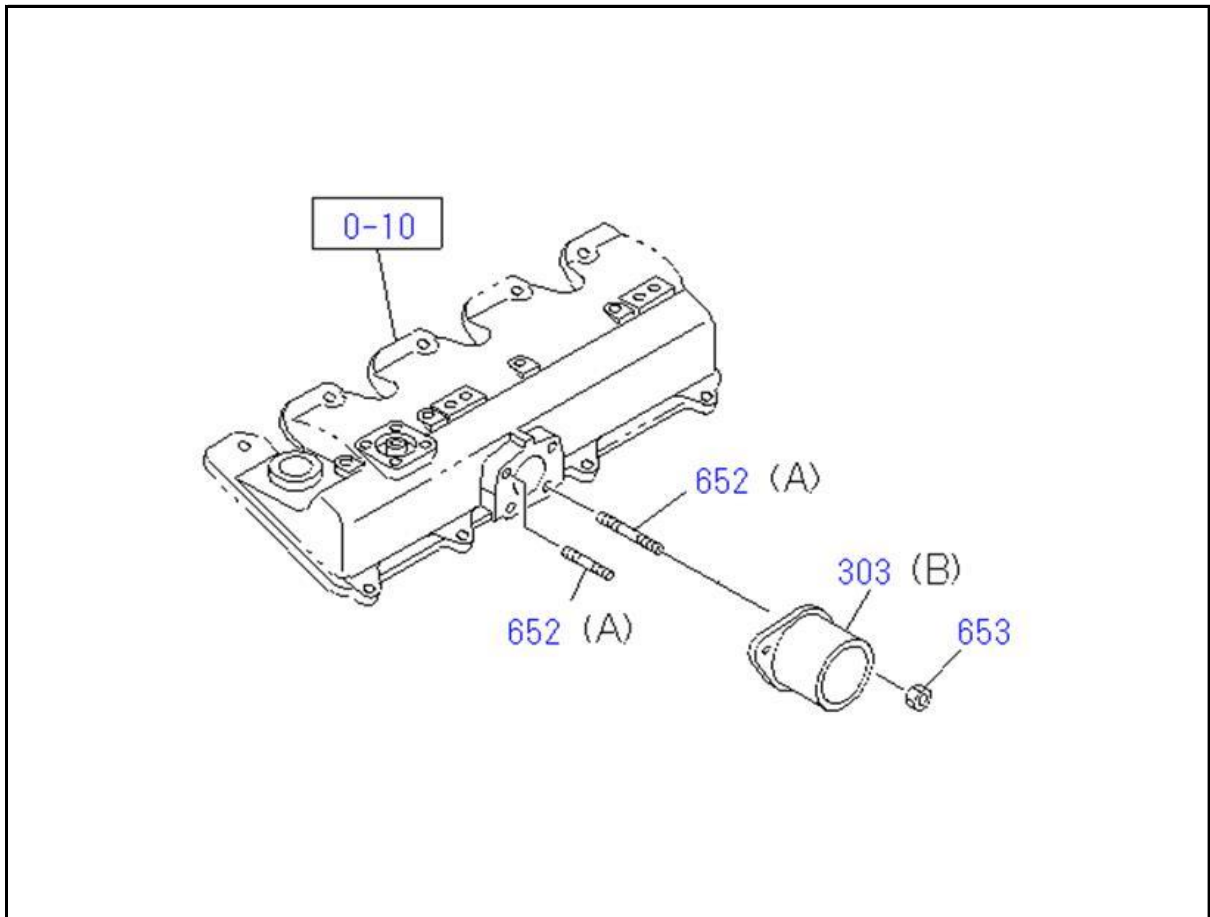
(No.2)



0-20 TIMING GEAR CASE AND FLYWHEEL HOUSING

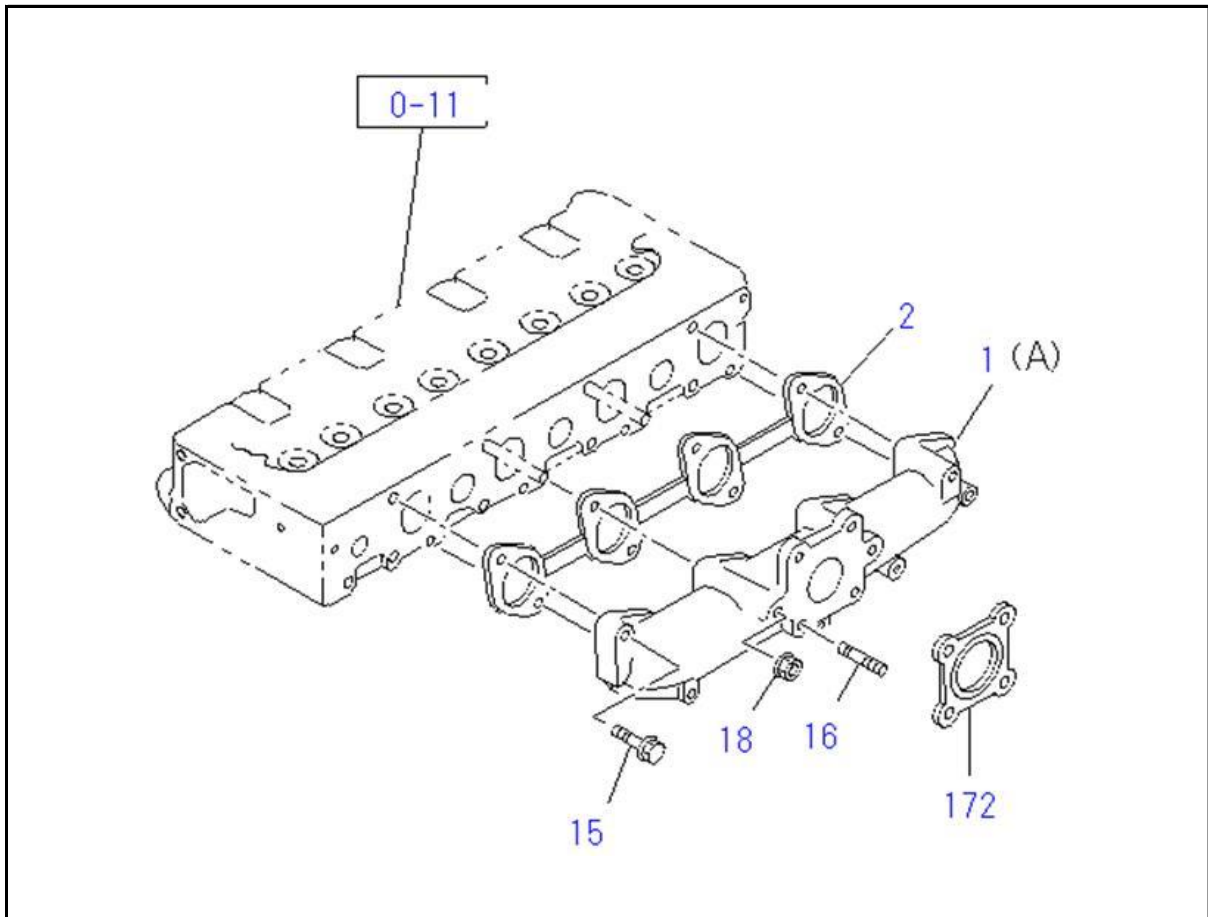
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-97303-411-2	1	CASE; TIMING GEAR	
2	8-97304-046-1	1	HOUSING; FLYWHEEL	
40	0-91180-208-0	2	NUT; GEAR CASE M8 FLANGE	
103	8-97351-704-0	1	SEAL; OIL,CR/SHF,FRT	
134 (A)	0-41010-860-0	1	STUD; TIMING GEAR CASE M8X60 L=72	
134 (B)	8-97262-146-1	1	STUD; TIMING GEAR CASE M8X50 L=62	
172	8-97231-030-2	1	RETAINER; CR/SHF	
175	5-09625-094-0	1	SEAL; OIL,CR/SHF,RR	
185	0-28050-620-0	8	BOLT; RET TO C/BL M6X20 FLANGE	
211	0-28151-025-0	4	BOLT; HSG M10X25 FLANGE	
226	8-94127-703-0	2	STUD; HSG M10X111 L=126	
367 (A)	0-28060-860-0	6	BOLT; GEAR CASE M8X60 FLANGE	
367 (B)	0-28050-880-0	2	BOLT; GEAR CASE M8X80 FLANGE	
487	8-97220-740-0	1	COVER; HOLE	
531	8-94425-685-2	1	CAP; OIL FILLER	
532	8-94123-623-1	1	GASKET; CAP ID=32 OD=40	

0-25 INLET MANIFOLD



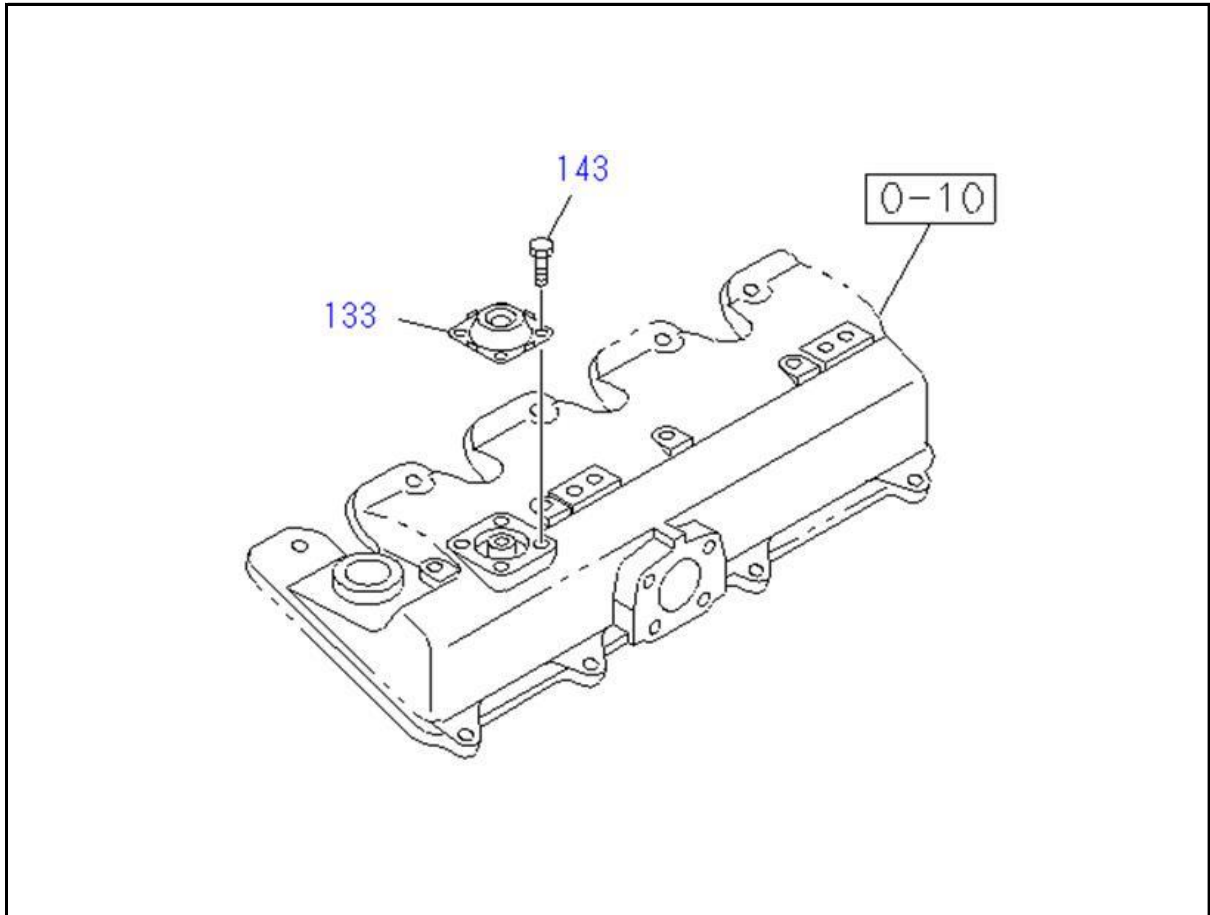
KEY No.	Part no.	qty	Part description	Engine serial no.
303 (B)	8-97239-594-0	1	PIPE; AIR	
652 (A)	0-41010-616-0	2	STUD; DUCT,AIR INLET M6X16 L=25	
653	8-97329-622-0	2	NUT; DUCT,AIR INLET M6 W/LK WASHER	

0-27 EXHAUST MANIFOLD



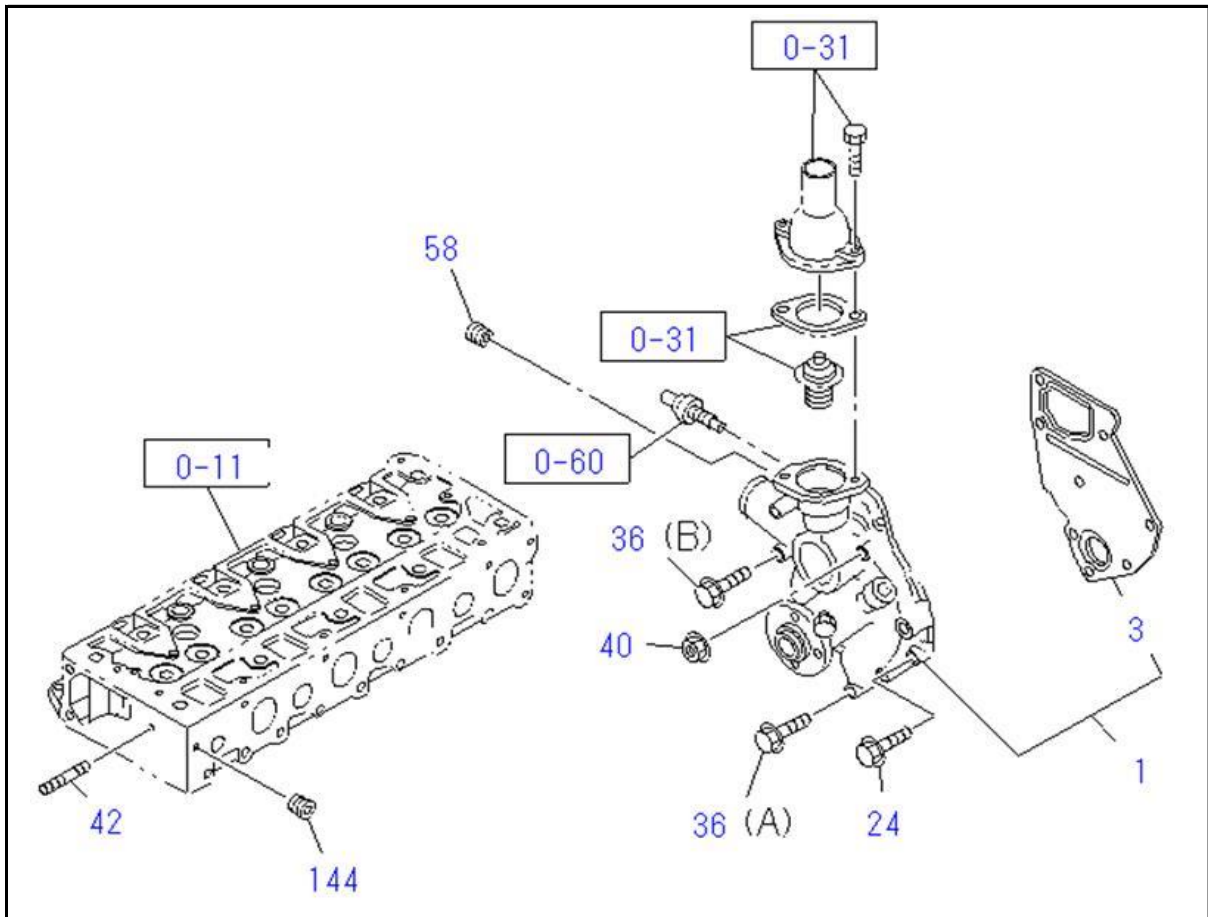
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-97117-590-1	1	MANIFOLD; EXHAUST	
2	8-97126-186-0	1	GASKET; EXH MANIF TO HD	
15	0-28050-870-0	6	BOLT; EXH MANIF M8X70 FLANGE	
16	9-04130-820-0	4	STUD; EXH PIPE TO MANIF M8X20 L=32	
18	0-91180-208-0	2	NUT; EXH MANIF M8 FLANGE	
172	8-97042-028-0	1	GASKET; EXH PIPE	

0-28 VENTILATION SYSTEM



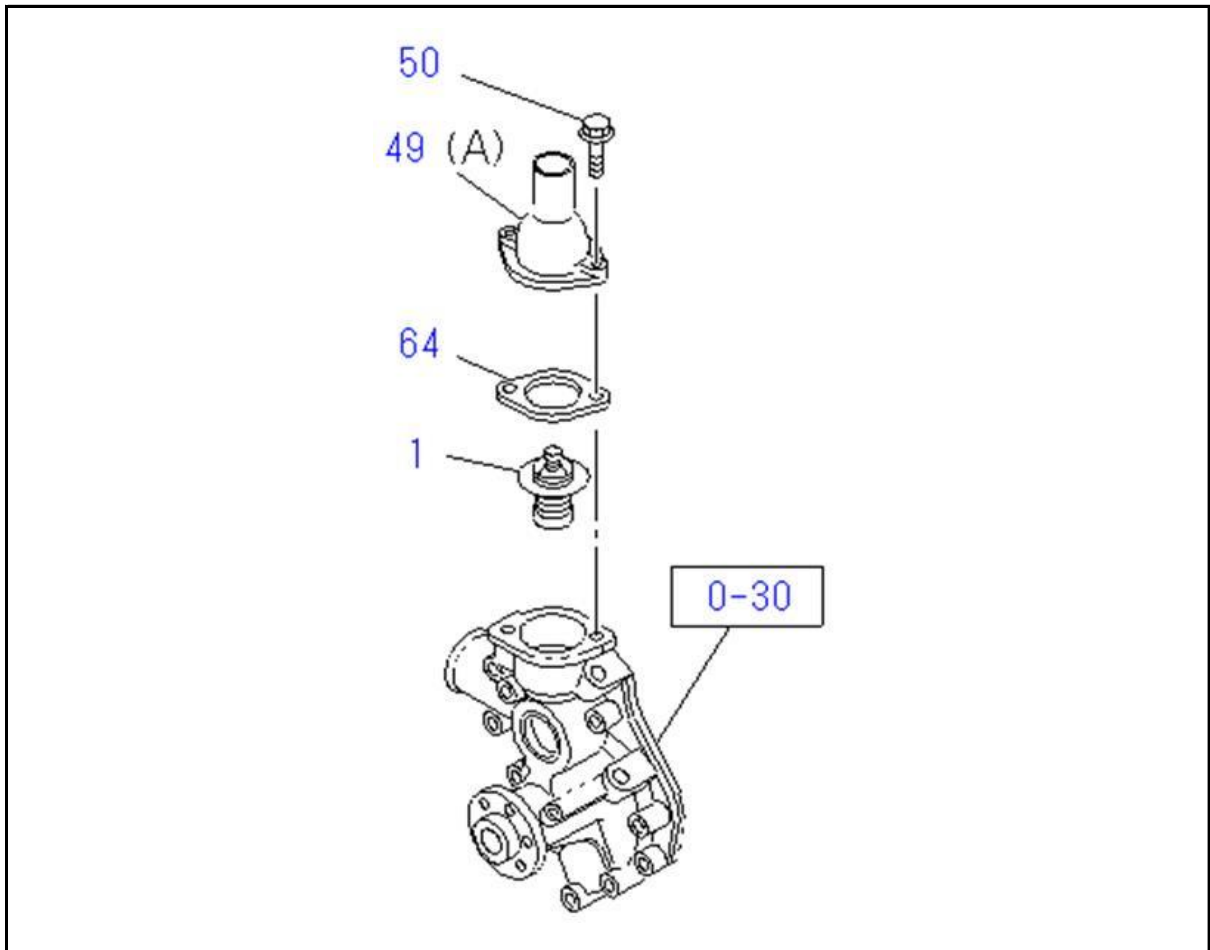
KEY No.	Part no.	qty	Part description	Engine serial no.
133	8-94329-549-0	1	VALVE; PCV	
143	0-36220-410-0	4	SCREW; PCV COVER M4X10 W/LK WASHER	

0-30 WATER PUMP AND CORROSION RESISTOR



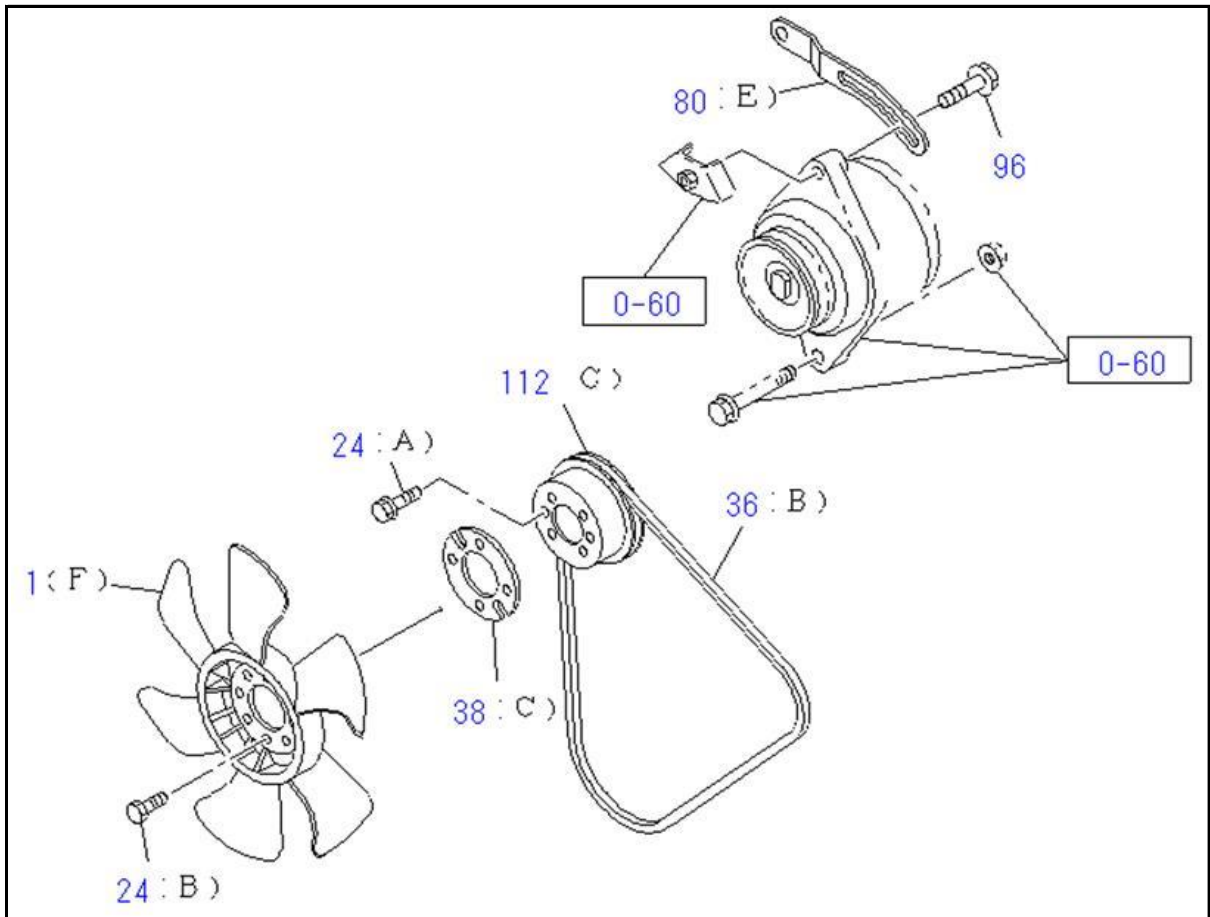
KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-98126-231-3	1	PUMP ASM; WATER W/GASKET	
3	8-97289-543-0	1	GASKET; PUMP TO C/BL	
24	0-28050-845-0	1	BOLT; WATER PUMP M8X45 FLANGE	
36 (A)	0-28050-840-0	2	BOLT; WATER PUMP TO C/BL M8X40 FLANGE	
36 (B)	0-28060-860-0	2	BOLT; WATER PUMP TO C/BL M8X60 FLANGE	
40	0-91180-208-0	2	NUT; WATER PUMP M8 FLANGE	
42	0-41010-845-0	1	STUD; WATER PUMP M8X45 L=57	
58	5-09605-005-0	1	PLUG; HTR PT 3/8	
144	8-97369-552-1	1	PLUG; THERMOMETER PT 1/8	

0-31 THERMOSTAT AND HOUSING



KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97211-209-0	1	THERMOSTAT	
49 (A)	8-97169-015-1	1	PIPE; WATER OUTLET	
50	0-28650-825-0	2	BOLT; OUTLET PIPE M8X25 FLANGE	
64	8-97264-690-1	1	GASKET; OUTLET PIPE TO HSG	

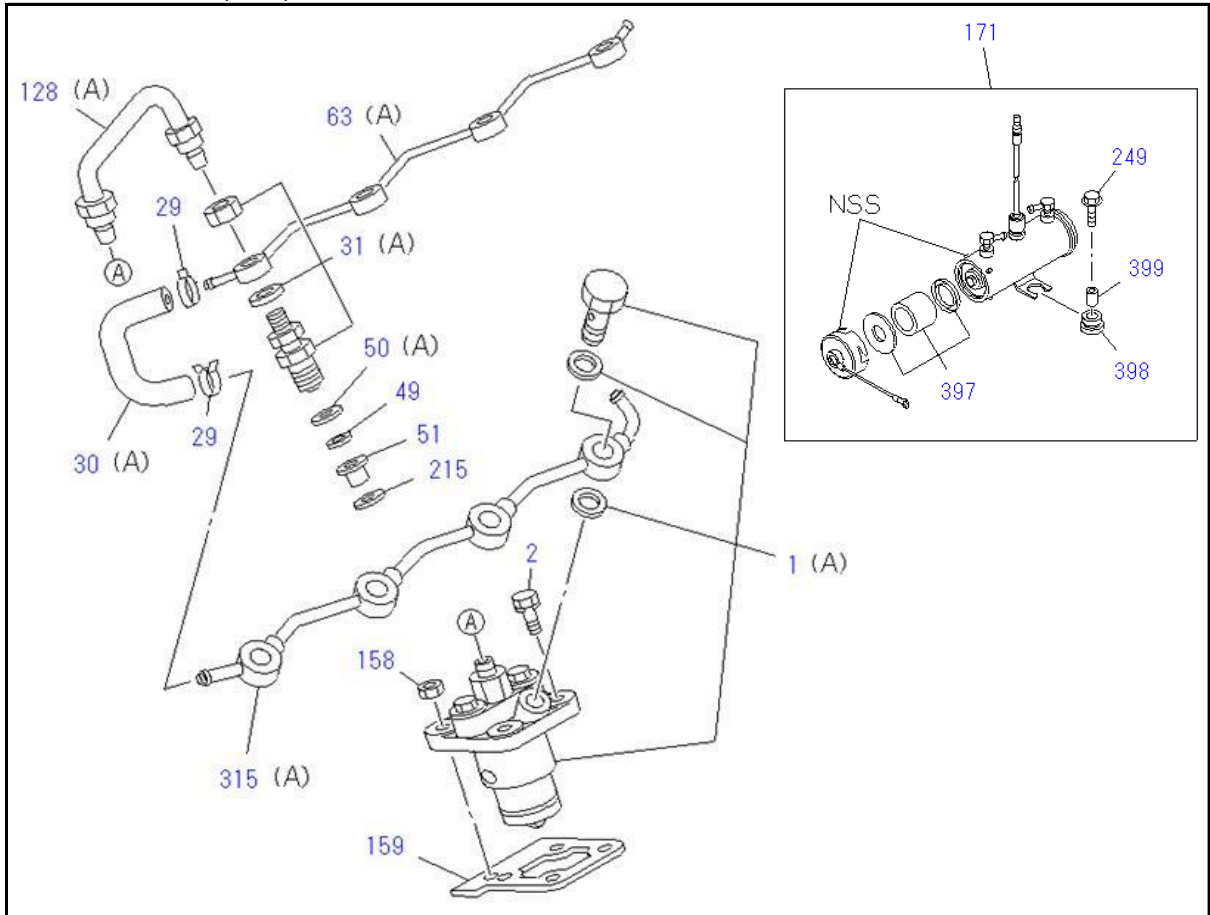
0-33 FAN AND FAN BELT



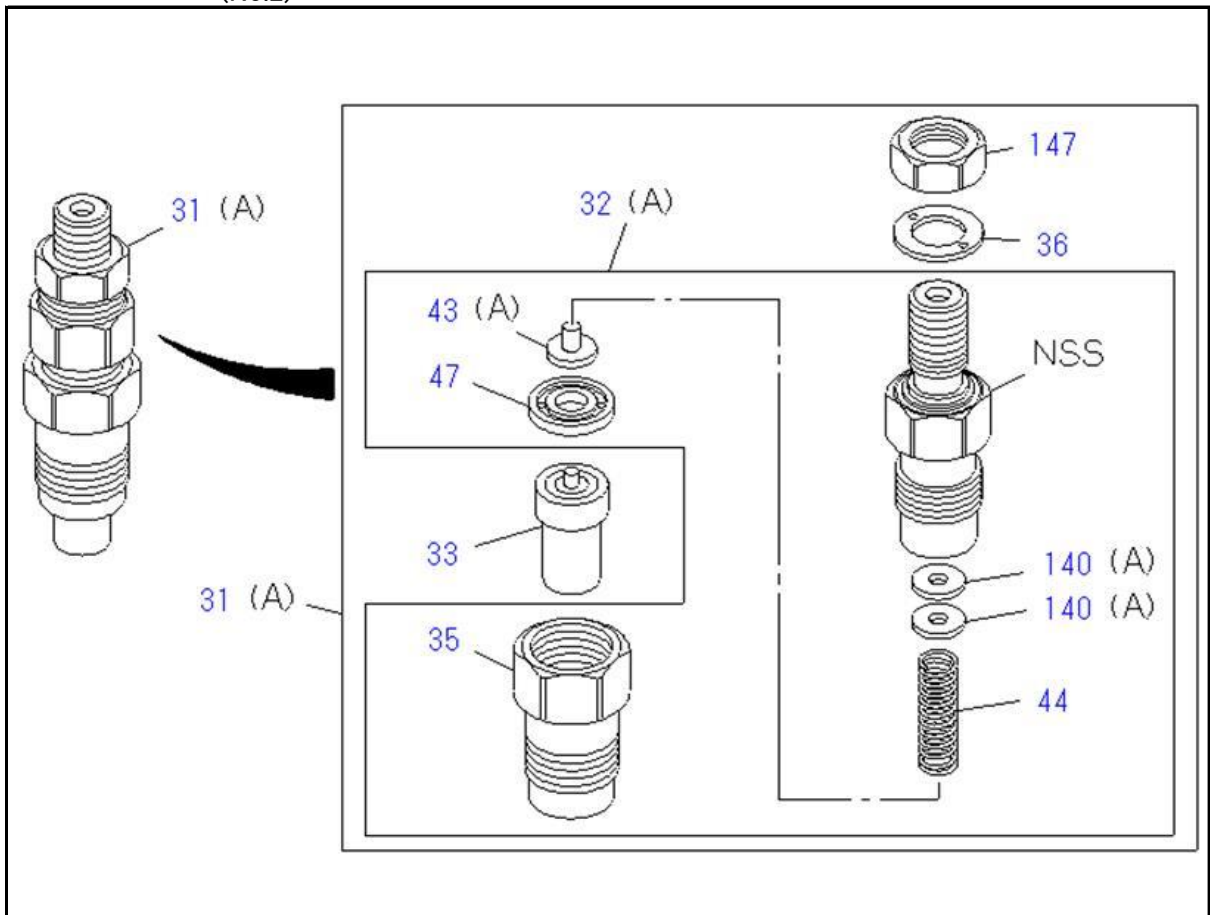
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (F)	8-97022-810-1	1	FAN; COOLING 6 BLADE OD=380	
24 (A)	0-20800-612-0	2	BOLT; FAN M6X12	
24 (B)	0-28050-825-0	4	BOLT; FAN M8X25 FLANGE	
36 (B)	8-97224-999-1	1	BELT; COOLING FAN 1-PIECE L=840	
38 (C)	8-97063-400-3	1	SPACER; FAN	
80 (E)	5-13674-104-1	1	PLATE; ADJ	
96	0-28050-830-0	1	BOLT; ADJ PLATE M8X30 FLANGE	
112 (C)	8-97227-689-0	1	PULLEY; FAN CENTER OD=108 1 GROOVE	

0-40 FUEL INJECTION SYSTEM

(No.1)



(No.2)

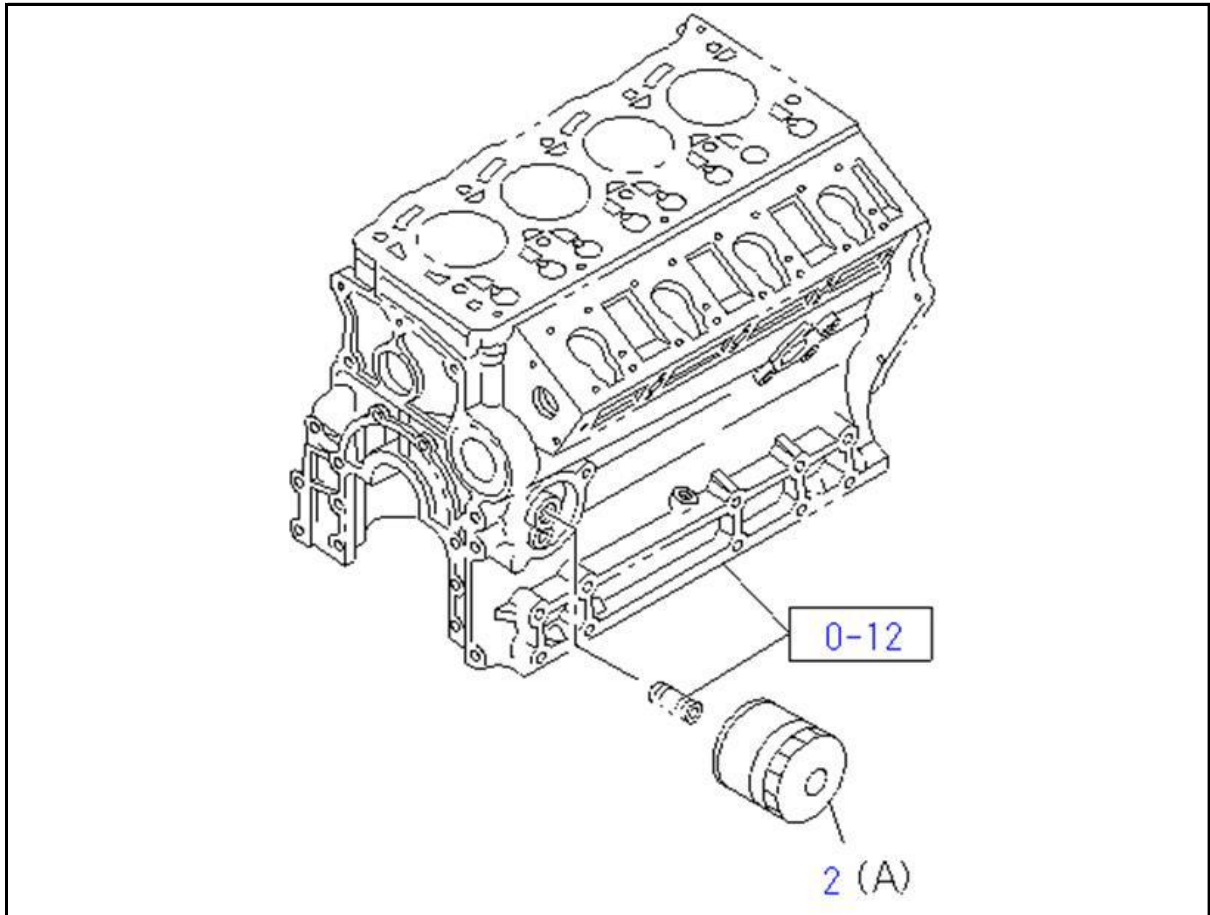


0-40 FUEL INJECTION SYSTEM

KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-98098-875-0	4	PUMP ASM; INJ	
2	0-28050-820-0	8	BOLT; INJ PUMP M8X20 FLANGE	
29	1-09707-087-0 <5-09707-005-1>	2	CLIP; HOSE ID=11 WHITE	
30 (A)	8-97046-794-1	1	HOSE; RUBBER,FUEL LEAK	
31 (A)	8-97129-614-0	4	NOZZLE ASM; INJ	
32 (A)	8-97360-786-0	4	HOLDER ASM; NOZZLE	
33	8-97129-644-0	4	NOZZLE; INJ	
35	8-97130-581-0	4	NUT; NOZZLE RET,NOZZLE HOLDER	
36	8-94104-993-0	4	GASKET; RETURN PIPE,NOZZLE	
43 (A)	8-94128-963-1	4	SEAT; NOZZLE SPRING,NOZZLE	
44	8-94320-302-0	4	SPRING; NOZZLE,NOZZLE HOLDER	
47	8-97086-141-0	4	SPACER; NOZZLE SPRING,NOZZLE HOLDER	
49	8-94106-040-3	4	WASHER; CORRUGATED,NOZZLE	
50 (A)	8-94257-592-0	4	GASKET; NOZZLE HOLDER	
51	8-94106-055-1	4	SHIELD; HEAT,INJ NOZZLE	
63 (A)	8-97126-188-0	1	PIPE; FUEL,NOZZLE LEAK OFF	
128 (A)	8-98101-466-0	4	PIPE ASM; INJ	
140 (A)	8-94176-962-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-963-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-964-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-965-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-966-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-967-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-968-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-969-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-970-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
140 (A)	8-94176-971-0	1	SHIM; NOZZLE SPRING,NOZZLE HOLDER	
147	8-94174-344-0	4	NUT; RETURN CONNECTOR,NOZZLE HOLDER	
158	0-91180-208-0	8	NUT; INJ PUMP M8 FLANGE	
159	8-97227-282-1	1	SHIM; INJ PUMP T=0.20	
159	8-97227-283-1	1	SHIM; INJ PUMP T=0.30	
159	8-97227-284-1	1	SHIM; INJ PUMP T=0.40	
159	8-97227-285-1	1	SHIM; INJ PUMP T=0.50	
159	8-97227-286-1	1	SHIM; INJ PUMP T=0.60	
159	8-97227-287-1	1	SHIM; INJ PUMP T=0.70	
159	8-97227-288-1	1	SHIM; INJ PUMP T=0.80	

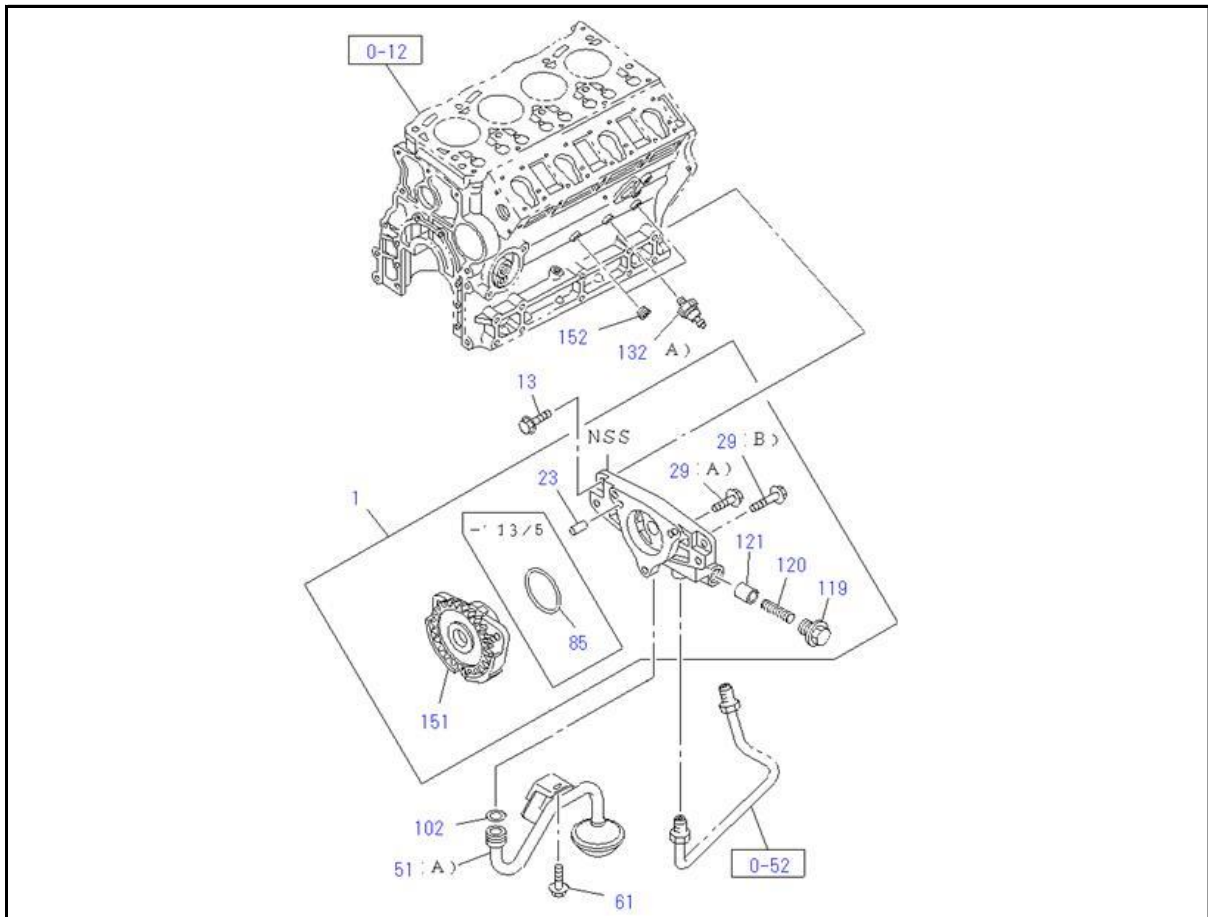
KEY No.	Part no.	qty	Part description	Engine serial no.
159	8-98114-445-0	1	SHIM; INJ PUMP T=0.90	
159	8-98114-446-0	1	SHIM; INJ PUMP T=1.10	
159	8-97227-290-1	1	SHIM; INJ PUMP T=1.20	
159	8-98275-925-0	1	SHIM; INJ PUMP T=1.00	
171	8-97240-675-0	1	PUMP ASM; FUEL FEED 12V	
215	8-94257-593-0	4	GASKET; HEAT SHIELD	
249	8-98174-461-0	2	SCREW; FEED PUMP	
315 (A)	8-97144-724-0	1	PIPE; FUEL,SUCTION	
397	8-94437-022-0 <8-94337-022-0>	1	REPAIR KIT; FUEL PUMP	
398	8-94233-655-0	2	GROMMET; FUEL PUMP	
399	8-97047-265-0	2	COLLAR; FUEL PUMP	

0-50 OIL COOLER AND OIL FILTER



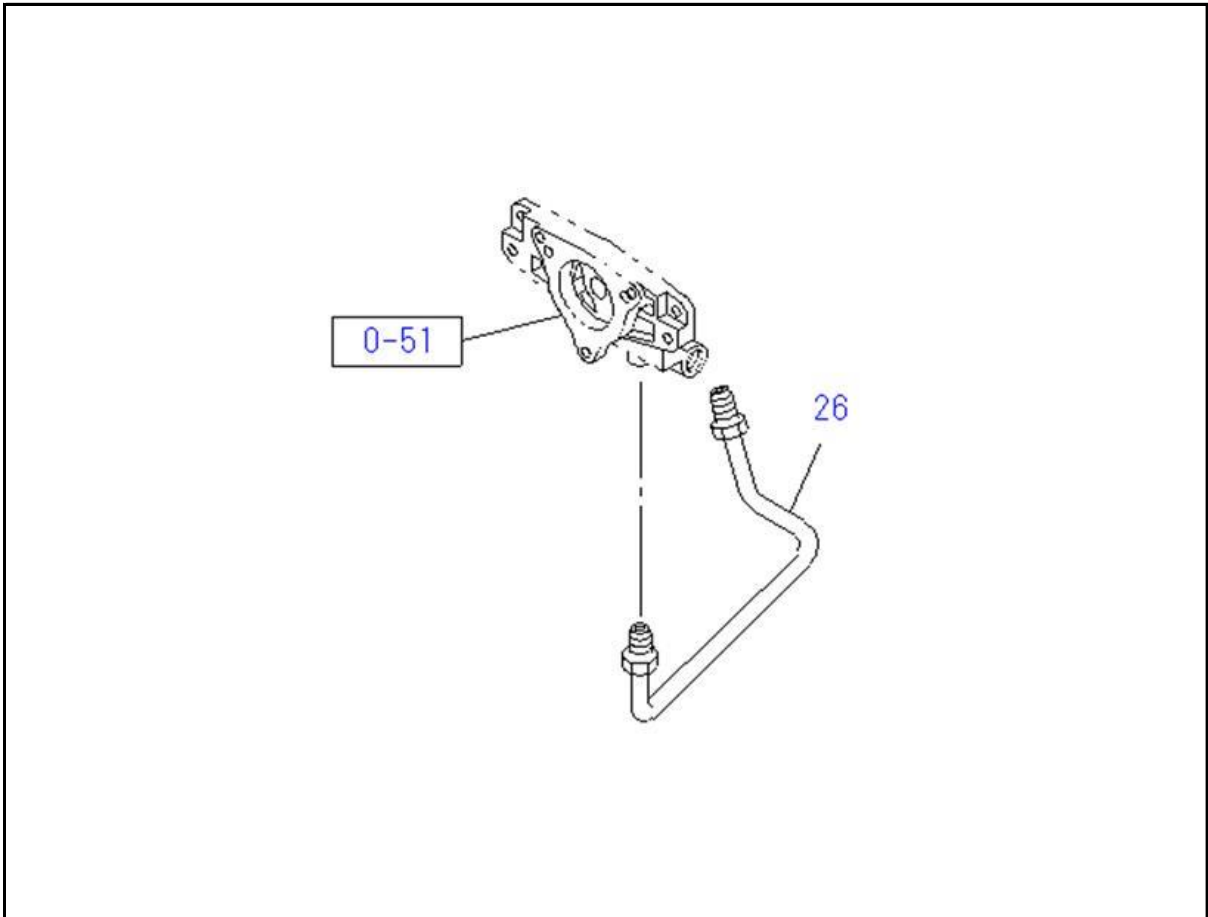
KEY No.	Part no.	qty	Part description	Engine serial no.
2 (A)	8-94456-741-2	1	ELEMENT; OIL FILTER	

0-51 OIL PUMP AND OIL STRAINER



KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97048-809-7 <8-97048-809-8>	1	PUMP ASM; OIL	
13	0-28050-830-0	4	BOLT; OIL PUMP TO C/BL M8X30 FLANGE	
23	9-08150-616-0	2	PIN; BODY,OIL PUMP	
29 (A)	0-28050-630-0	2	BOLT; OIL PUMP M6X30 FLANGE	
29 (B)	0-28050-650-0	1	BOLT; OIL PUMP M6X50 FLANGE	
51 (A)	8-97117-299-0	1	STRAINER & PIPE ASM; OIL	
61	0-28050-816-0	1	BOLT; OIL STRAINER M8X16 FLANGE	
85	8-97109-679-0	1	GASKET; OIL PUMP	
102	1-09623-496-0	1	GASKET; STRAINER	
119	8-94104-615-0	1	PLUG; RELIEF VLV	
120	8-97113-332-0	1	SPRING; RELIEF VLV	
121	8-94235-567-1	1	VALVE; RELIEF,OIL PUMP	
132 (A)	8-98201-472-0	1	SWITCH; OIL PRESSURE	
151	8-97044-813-3	1	PUMP SUB ASM; OIL	
152	8-97369-552-1	2	PLUG PT 1/8	

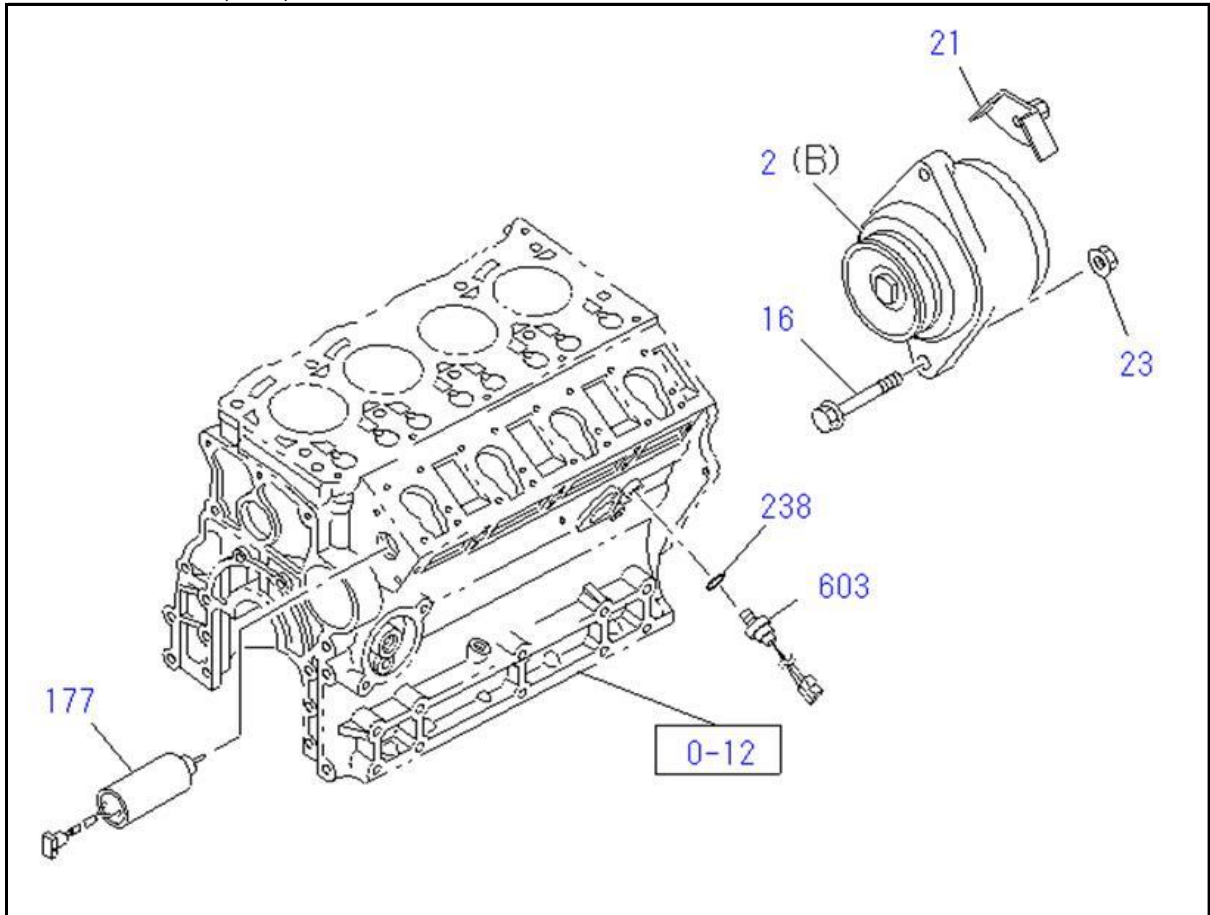
0-52 OIL AND VACUUM PIPING; ENGINE



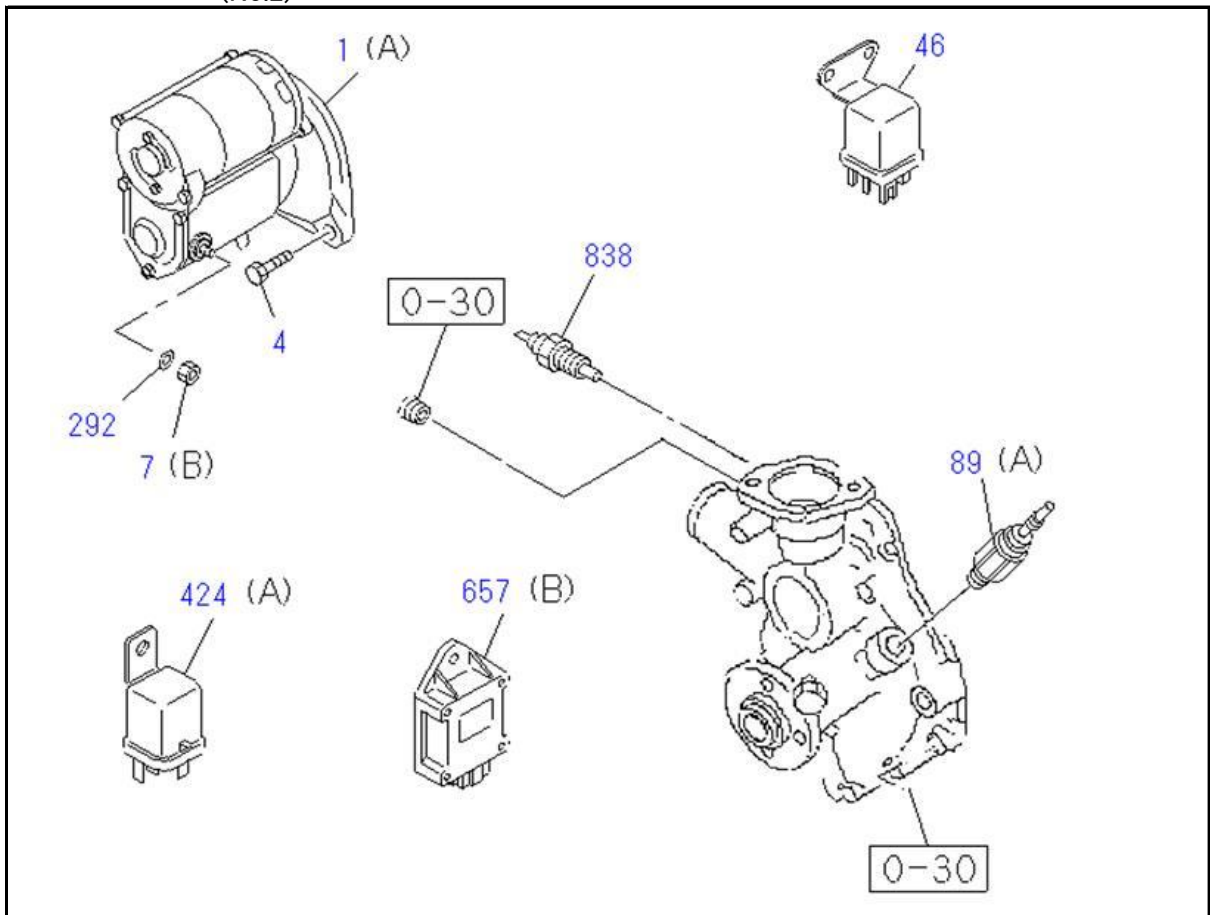
KEY No.	Part no.	qty	Part description	Engine serial no.
26	8-97045-400-0	1	PIPE; OIL,PUMP TO C/BL	

0-60 ENGINE ELECTRICAL CONTROL PARTS

(No.1)



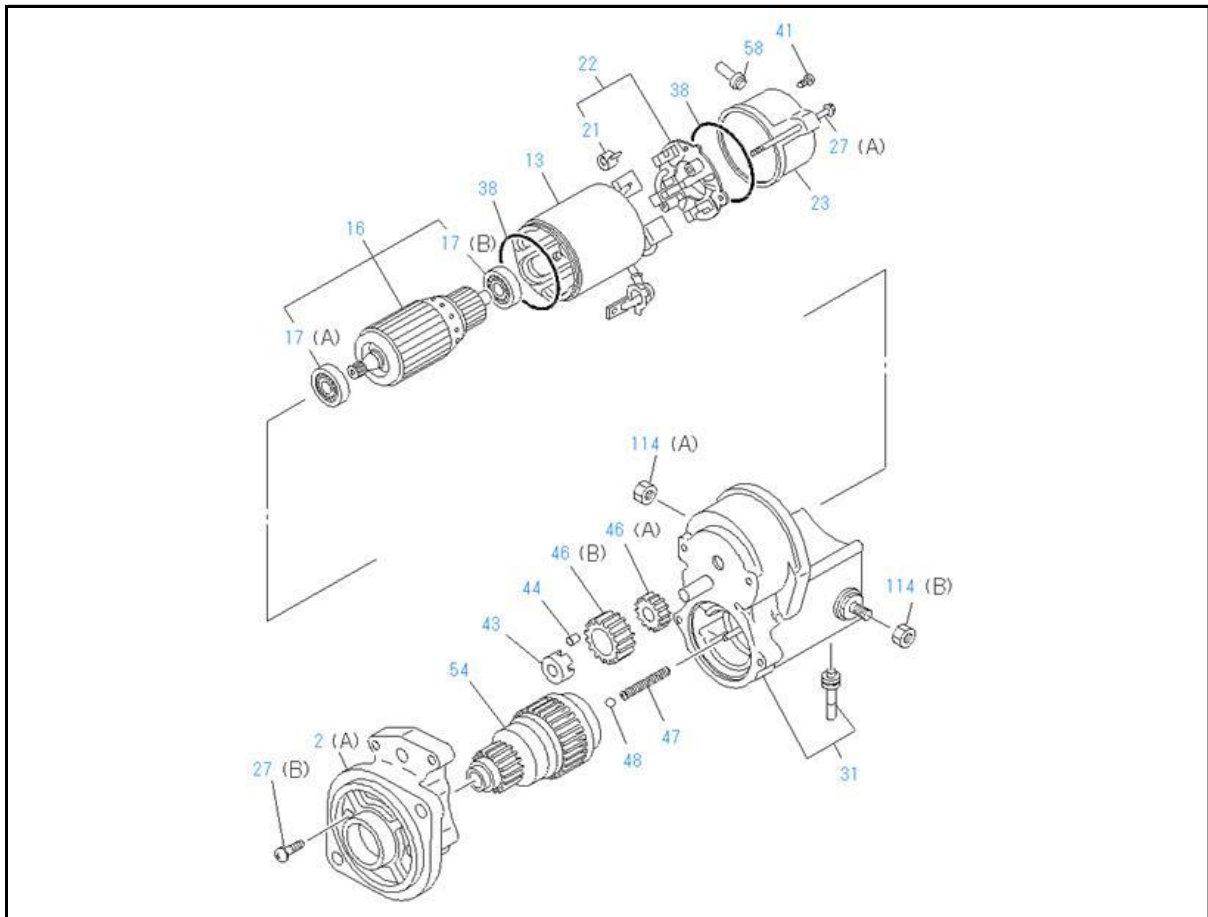
(No.2)



0-60 ENGINE ELECTRICAL CONTROL PARTS

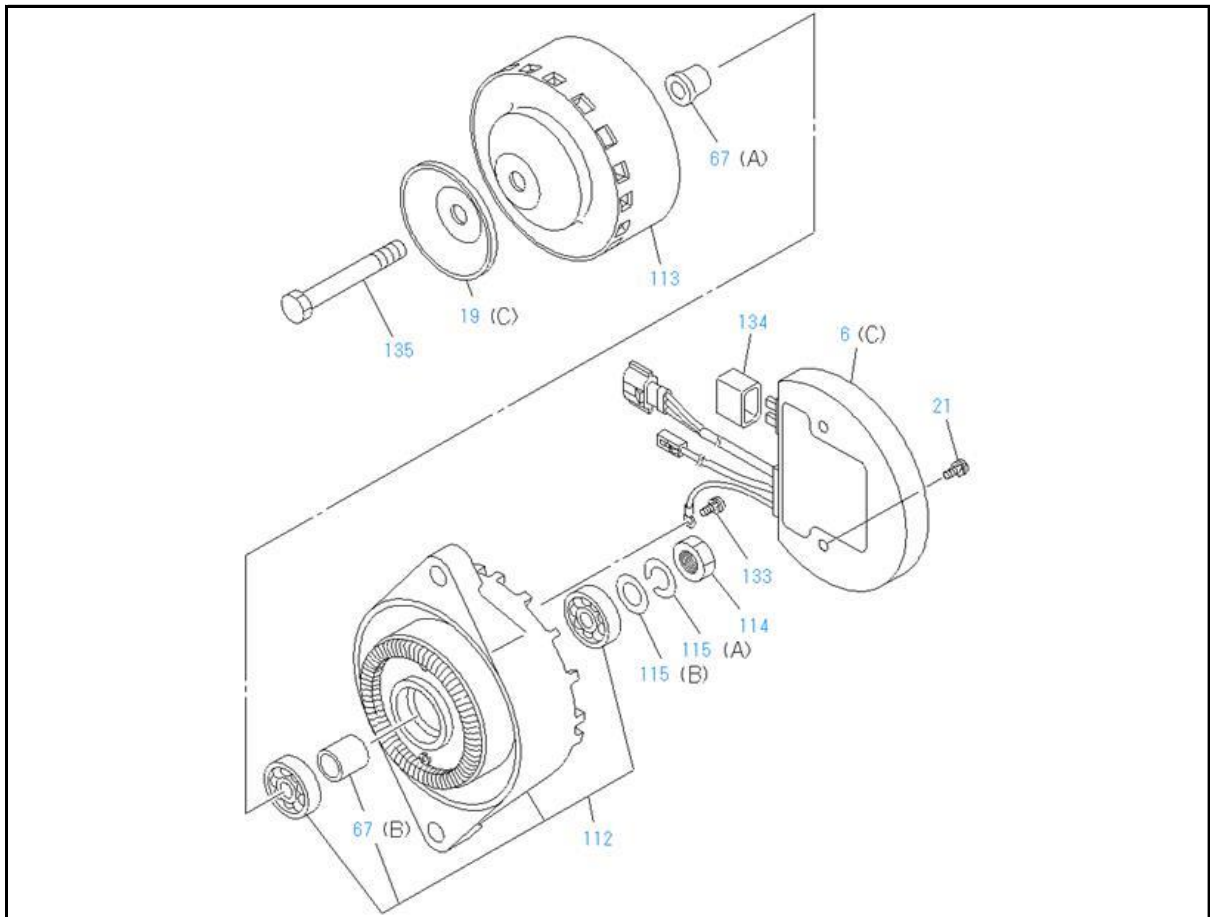
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-97112-865-2	1	STARTER ASM 12V-2.0KW DENSO	
2 (B)	8-98156-527-0 <8-97226-840-5>	1	GENERATOR ASM 12V-20A HITACHI	
4	0-28151-230-0	2	BOLT; STARTER M12X30 FLANGE	
7 (B)	0-91111-508-0	1	NUT; STARTER M8	
16	0-28051-070-0	1	BOLT; GEN M10X70 FLANGE	
21	8-97378-857-0	1	BRACKET; GEN	
23	0-91180-210-0	1	NUT; GEN M10 FLANGE	
46	8-94248-161-0	1	RELAY; GLOW PLUG	
89 (A)	8-94132-331-0	1	SWITCH; OVER HEAT WARNING	
177	8-97329-568-0	1	SOLENOID ASM; ENG STOP 12V	
238	9-09572-014-0	1	GASKET; PICKUP ID=14.2 OD=23.0	
292	0-91510-808-0	1	WASHER; LK,STARTER ID=8.2	
424 (A)	5-82550-029-0	1	RELAY; SAFETY,STARTER 12V	
603	8-94126-822-0	1	SENSOR; TACHO	
657 (B)	8-97040-501-1	1	TIMER; GLOW PLUG 12V	
838	8-97063-301-0	1	SENSOR; THERMO,QOS	

0-65 STARTER



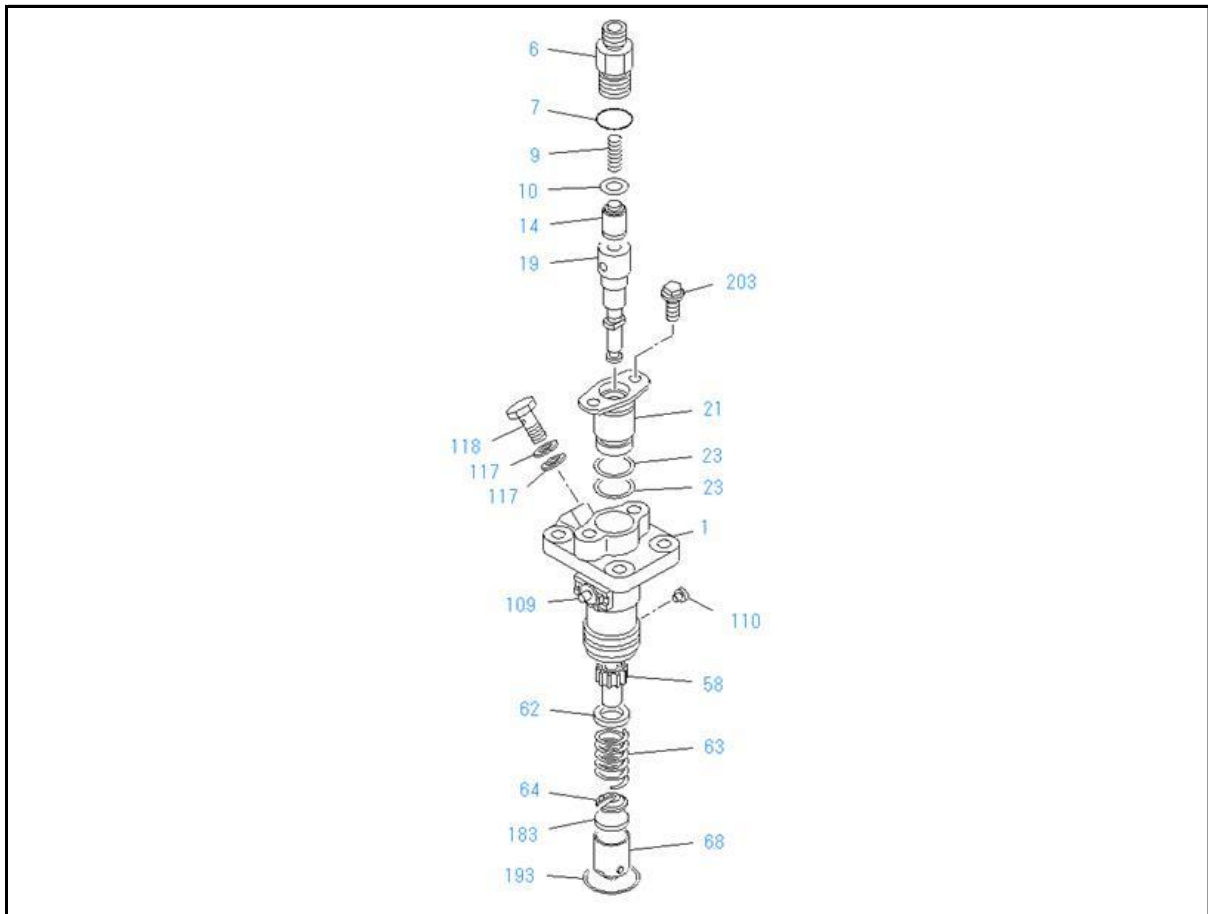
KEY No.	Part no.	qty	Part description	Engine serial no.
2 (A)	8-97112-871-0	1	CASE; PINION,STARTER	
13	8-97135-497-0	1	YOKE; STARTER	
16	8-97112-869-0	1	ARMATURE; STARTER	
17 (A)	5-09800-079-0 <8-94377-240-0>	1	BEARING; ARMATURE,STARTER	
17 (B)	8-97112-954-0	1	BEARING; ARMATURE,STARTER	
21	8-97112-880-0	4	SPRING; BRUSH HOLDER STARTER	
22	8-97112-873-0	1	HOLDER; BRUSH STARTER	
23	8-97112-875-0	1	COVER; RR COVER STARTER	
27 (A)	8-97112-957-0	2	BOLT; THROUGH,STARTER	
27 (B)	8-97112-881-0	2	BOLT; THROUGH,STARTER	
31	8-97112-872-0	1	SWITCH; ENGAGE STARTER	
38	8-94170-214-0	2	GASKET; RR COVER,STARTER	
41	8-97142-903-0	2	SCREW; RR COVER,STARTER	
43	8-94377-246-0	1	RETAINER; PINION,STARTER	
44	5-81129-099-0	5	ROLLER; PINION,STARTER	
46 (A)	8-97112-879-0	1	GEAR; CLU STARTER	
46 (B)	8-97078-649-0	1	GEAR; CLU STARTER	
47	8-94377-245-0	1	SPRING; PINION,STARTER	
48	5-81129-092-0	1	BALL; PINION,STARTER	
54	8-97112-870-0	1	CLUTCH; PINION,STARTER	
58	8-94377-239-1 <8-94377-239-0>	1	PIPE; DRAIN RR COVER,STARTER	
114 (A)	5-09400-042-0 <8-94109-763-0>	1	NUT; TERMINAL	
114 (B)	8-94377-238-0	1	NUT; TERMINAL	

0-66 GENERATOR



KEY No.	Part no.	qty	Part description	Engine serial no.
6 (C)	8-98158-660-0 <8-97386-322-0>	1	REGULATOR ASM; VOLTAGE,GEN	
19 (C)	8-97229-789-0	1	PULLEY; GEN	
21	0-36220-620-0 <9-03910-620-0>	2	BOLT; THROUGH,GEN	
67 (A)	8-97229-783-0	1	COLLAR; SPACE,GEN	
67 (B)	8-97229-784-0	1	COLLAR; SPACE,GEN	
112	8-97229-779-0	1	PLATE ASM; GEN	
113	8-97229-785-0	1	FLYWHEEL ASM; GEN	
114	5-81229-186-0	1	NUT; FLYWHEEL,GEN	
115 (A)	5-81229-187-0	1	WASHER; FLYWHEEL,GEN	
115 (B)	5-81229-188-0	1	WASHER; FLYWHEEL,GEN	
133	8-97369-335-0	1	SCREW; TERMINAL,GEN	
134	8-97229-788-0	1	COVER; TERMINAL,GEN	
135	8-97229-791-0	1	SHAFT; GENERATOR	

0-80 INJECTION PUMP



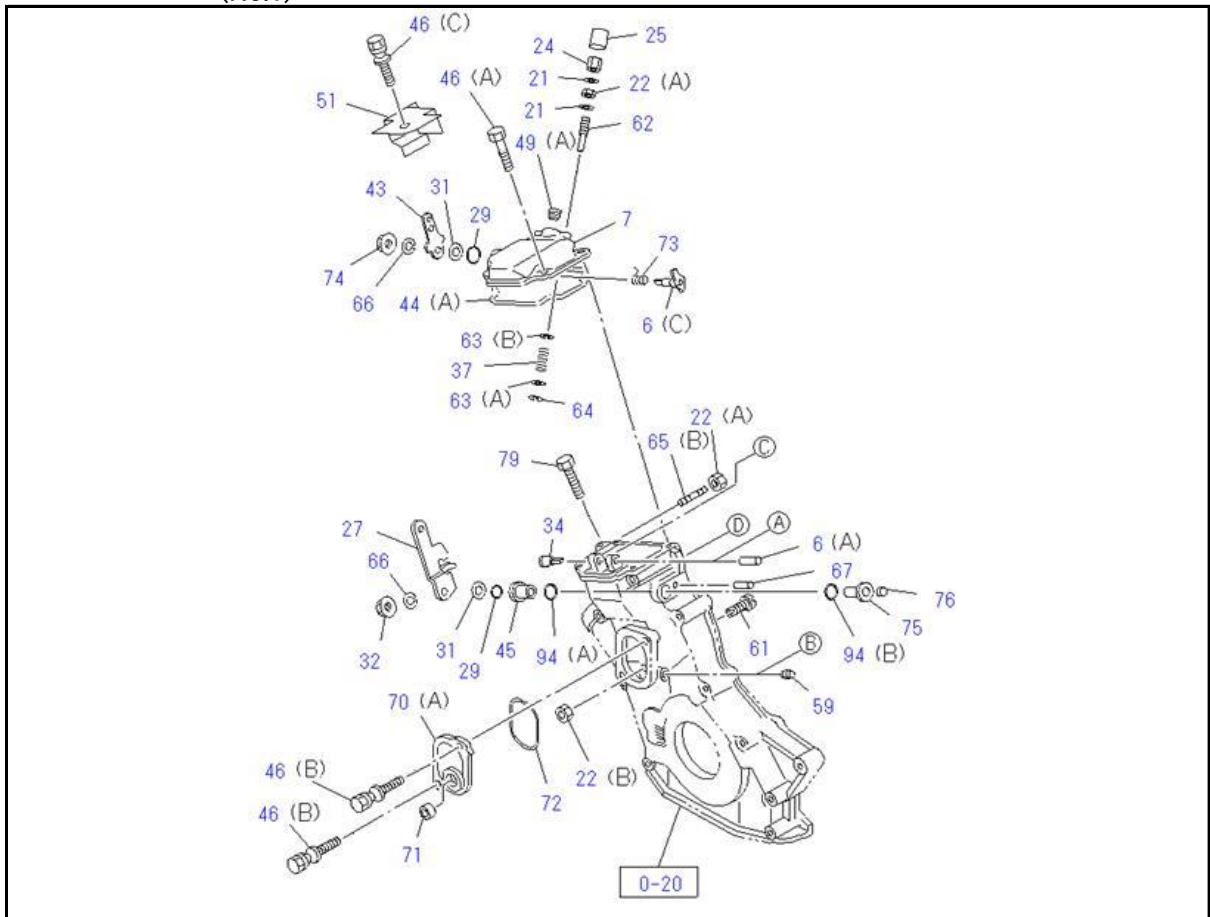
KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-98111-793-0	1	HOUSING; PUMP,FUEL INJ	
6	8-97223-455-0	1	HOLDER; DELIVERY VLV,INJ PUMP	
7	8-97253-153-0	1	GASKET; HOLDER,DELIVERY VLV	
9	8-94128-911-0	1	SPRING; DELIVERY VLV	
10	8-94128-912-0	1	GASKET; DELIVERY VLV,INJ PUMP	
14	8-97083-346-0	1	VALVE; DELIVERY,INJ PUMP	
19	8-97160-901-0	1	PLUNGER ASM; INJ PUMP	
21	8-97083-348-0	1	FLANGE; PLUNGER	
23	8-97253-154-0	2	GASKET; PLUNGER,BARREL SIDE	
58	8-94128-923-0	1	SLEEVE; CONT,INJ PUMP	
62	8-94128-920-0	1	SEAT; PLUNGER SPRING,INJ PUMP	
63	8-94128-919-0	1	SPRING; PLUNGER,INJ PUMP	
64	8-94128-921-0	1	SEAT; PLUNGER SPRING LWR,INJ	
68	8-94128-916-0	1	TAPPET; CM/SHF,INJ PUMP	
109	8-97083-355-3	1	RACK; CONT,INJ PUMP	
110	8-97083-349-0	1	PIN; CONT RACK,INJ PUMP	
117	8-94144-588-0 <1-15639-008-0>	2	GASKET; EYE BOLT,INJ PUMP	
118	8-94379-688-0	1	BOLT; EYE,FUEL INL,INJ PUMP	
183	8-94128-931-0	1	PLATE; TAPPET T=2.600	
183	8-94128-932-0	1	PLATE; TAPPET T=2.650	
183	8-94128-933-0	1	PLATE; TAPPET T=2.700	
183	8-94128-934-0	1	PLATE; TAPPET T=2.750	
183	8-94128-935-0	1	PLATE; TAPPET T=2.800	

KEY No.	Part no.	qty	Part description	Engine serial no.
183	8-94128-936-0	1	PLATE; TAPPET T=2.850	
183	8-94128-937-0	1	PLATE; TAPPET T=2.900	
183	8-94128-938-0	1	PLATE; TAPPET T=2.950	
183	8-94128-939-0	1	PLATE; TAPPET T=3.000	
183	8-94128-940-0	1	PLATE; TAPPET T=3.050	
183	8-94128-941-0	1	PLATE; TAPPET T=3.100	
183	8-94128-942-0	1	PLATE; TAPPET T=3.150	
183	8-94128-943-0	1	PLATE; TAPPET T=3.200	
183	8-94128-944-0	1	PLATE; TAPPET T=3.250	
183	8-94128-945-0	1	PLATE; TAPPET T=3.300	
183	8-94128-946-0	1	PLATE; TAPPET T=3.350	
183	8-94128-947-0	1	PLATE; TAPPET T=3.400	
183	8-94128-948-0	1	PLATE; TAPPET T=3.450	
183	8-94128-949-0	1	PLATE; TAPPET T=3.500	
183	8-94128-950-0	1	PLATE; TAPPET T=3.550	
183	8-94128-951-0	1	PLATE; TAPPET T=3.600	
183	8-94128-952-0	1	PLATE; TAPPET T=3.650	
183	8-94128-953-0	1	PLATE; TAPPET T=3.700	
183	8-94128-954-0	1	PLATE; TAPPET T=3.750	
183	8-94128-955-0	1	PLATE; TAPPET T=3.800	
183	8-94128-956-0	1	PLATE; TAPPET T=3.850	
183	8-94128-957-0	1	PLATE; TAPPET T=3.900	
183	8-94128-958-0	1	PLATE; TAPPET T=3.950	
183	8-94128-959-0	1	PLATE; TAPPET T=4.000	
183	8-94128-960-0	1	PLATE; TAPPET T=4.050	
183	8-94128-961-0	1	PLATE; TAPPET T=4.100	
183	8-97225-955-0	1	PLATE; TAPPET T=2.620	
183	8-97225-956-0	1	PLATE; TAPPET T=2.670	
183	8-97225-957-0	1	PLATE; TAPPET T=2.720	
183	8-97225-958-0	1	PLATE; TAPPET T=2.770	

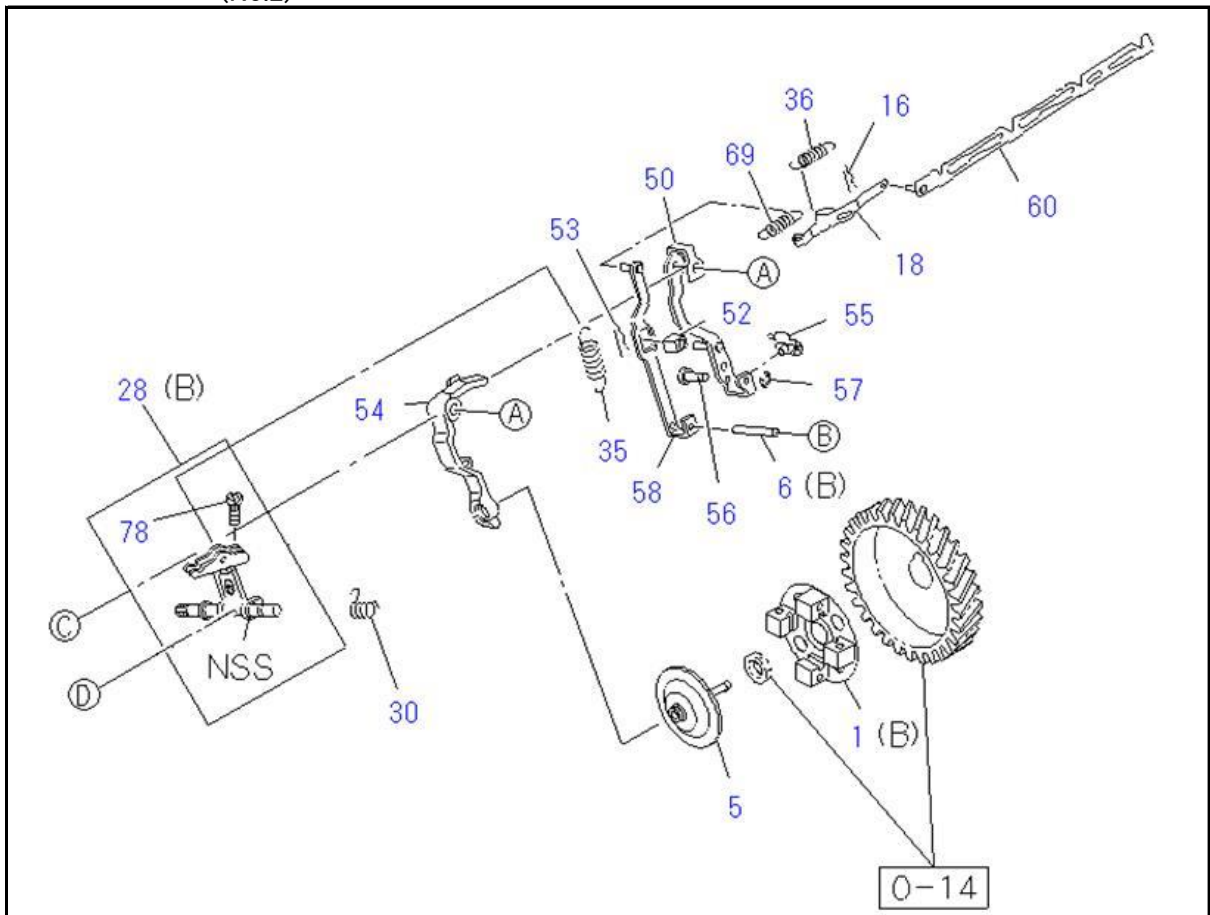
KEY No.	Part no.	qty	Part description	Engine serial no.
183	8-97225-959-0	1	PLATE; TAPPET T=2.820	
183	8-97225-960-0	1	PLATE; TAPPET T=2.870	
183	8-97225-961-0	1	PLATE; TAPPET T=2.920	
183	8-97225-962-0	1	PLATE; TAPPET T=2.970	
183	8-97225-964-0	1	PLATE; TAPPET T=3.020	
183	8-97225-965-0	1	PLATE; TAPPET T=3.070	
183	8-97225-966-0	1	PLATE; TAPPET T=3.120	
183	8-97225-967-0	1	PLATE; TAPPET T=3.170	
183	8-97225-968-0	1	PLATE; TAPPET T=3.220	
183	8-97225-969-0	1	PLATE; TAPPET T=3.270	
183	8-97225-970-0	1	PLATE; TAPPET T=3.320	
183	8-97225-971-0	1	PLATE; TAPPET T=3.370	
183	8-97225-972-0	1	PLATE; TAPPET T=3.420	
183	8-97225-973-0	1	PLATE; TAPPET T=3.470	
183	8-97225-974-0	1	PLATE; TAPPET T=3.520	
183	8-97225-976-0	1	PLATE; TAPPET T=3.570	
183	8-97225-977-0	1	PLATE; TAPPET T=3.620	
183	8-97225-978-0	1	PLATE; TAPPET T=3.670	
183	8-97225-979-0	1	PLATE; TAPPET T=3.720	
183	8-97225-980-0	1	PLATE; TAPPET T=3.770	
183	8-97225-981-0	1	PLATE; TAPPET T=3.820	
183	8-97225-982-0	1	PLATE; TAPPET T=3.870	
183	8-97225-983-0	1	PLATE; TAPPET T=3.920	
183	8-97225-984-0	1	PLATE; TAPPET T=3.970	
183	8-97225-985-0	1	PLATE; TAPPET T=4.020	
183	8-97225-986-0	1	PLATE; TAPPET T=4.070	
193	8-98098-248-0	1	RING; SNAP	
203	8-94379-691-0	2	BOLT; FUEL INL	

0-89 TIMING CHAIN CASE

(No.1)



(No.2)

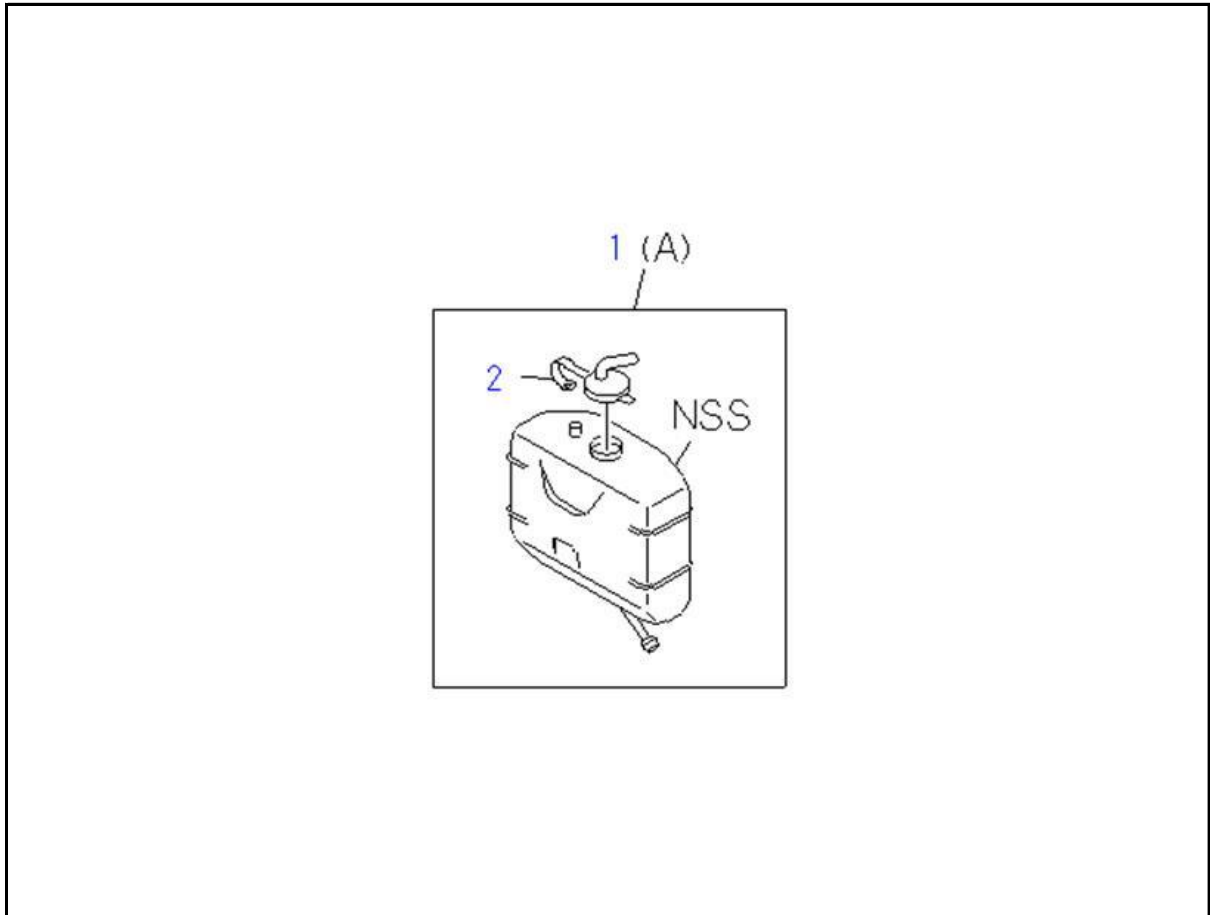


0-89 TIMING CHAIN CASE

KEY No.	Part no.	qty	Part description	Engine serial no.
1 (B)	8-97309-671-0	1	FLYWEIGHT	
5	8-97147-489-3	1	SLEEVE; FLYWEIGHT	
6 (A)	9-08150-850-0	1	SHAFT; LEVER	
6 (B)	9-08150-545-0	1	SHAFT; LEVER	
6 (C)	8-97016-446-0	1	SHAFT; LEVER	
7	8-98113-804-0	1	COVER; GOV SHAFT	
16	1-09747-002-0	1	PIN; LEVER TO LINK PLATE L=17.9	
18	8-97148-550-0	1	PLATE; LINK,LEVER TO PUMP	
21	5-09503-132-1	2	GASKET; SCREW	
22 (A)	0-91111-506-0	3	NUT; SCREW M6	
22 (B)	0-91110-506-0	1	NUT; SCREW M6	
24	5-09400-048-0	1	NUT; CAP,SCREW	
25	5-15669-002-1	1	CAP; IDLE SET	
27	8-97049-328-1	1	LEVER; CONT	
28 (B)	8-97160-572-0 <8-97160-572-1>	1	LEVER; MAIN SPR	
29	1-09623-055-0	2	GASKET; SHAFT,CONT ID=9.8	
30	8-97016-940-0	1	SPRING; RETURN,CONT	
31	5-09503-135-0	2	WASHER; THRUST,LEVER	
32	0-91110-508-0	1	NUT; LEVER TO SHAFT M8	
34	5-15729-239-2	1	EYE; START SPR	
35	8-97321-348-1	1	SPRING; MAIN,LEVER L=47 YELLOW	
36	8-97149-603-1	1	SPRING; START PINK	
37	8-97171-243-1	1	SPRING; IDLE GRAY	
43	8-97303-454-0	1	LEVER; FUEL CUT	
44 (A)	8-97064-688-1	1	GASKET; COVER	
45	8-97262-883-0	1	BUSHING; GEAR CASE TO CONT	
46 (A)	0-28050-620-0	3	BOLT; COVER M6X20 FLANGE	
46 (B)	8-97132-291-2	2	BOLT; COVER M6X16	
46 (C)	8-97132-292-2	1	BOLT; COVER M6X22	
49 (A)	1-09605-019-0	1	PLUG; COVER,GOV PT 1/4	
50	8-97303-577-2	1	LEVER; GUIDE	
51	8-97358-000-1	1	COVER; ADJ	
52	8-97303-583-0	1	PIECE; GUIDE	
53	1-09747-002-0	1	PIN; GUIDE LEVER L=17.9	
54	8-97160-574-3	1	LEVER; TENSION,GOV	
55	8-97321-335-2	1	SHIFTER; GOV	
56	8-97303-667-0	1	SHAFT; SHIFTER	
57	0-91805-504-0	1	RING; SNAP,SHAFT ID=4	
58	8-97303-580-2	1	LEVER; FLOATING	
59	8-97369-552-1	1	PLUG; SHAFT,FLOATING LEVER PT 1/8	
60	8-97148-865-0	1	LINK; CONT,INJ PUMP	
61	8-97039-584-2	1	SCREW; SET,FULL LOAD	
62	8-97016-441-0	1	SCREW; SET,IDLE SPR	

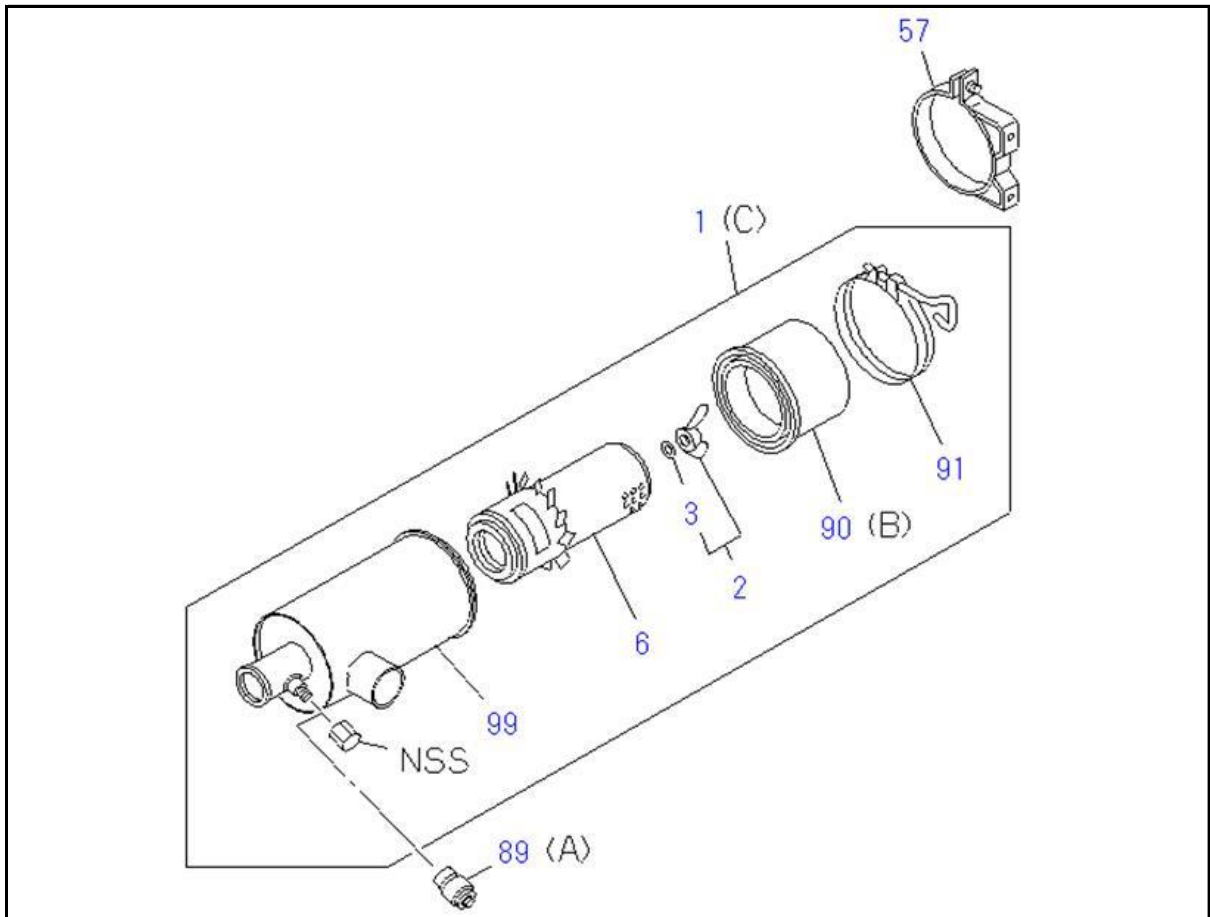
KEY No.	Part no.	qty	Part description	Engine serial no.
63 (A)	0-91610-504-0	1	WASHER; IDLE SPR ID=4.3	
63 (B)	0-91610-704-0	1	WASHER; IDLE SPR ID=4.3 OD=14	
64	0-91805-503-0	1	RING; SNAP,SET SCREW ID=3	
65 (B)	8-94317-638-1	1	SCREW; CONT SET SPEED L=38	
66	0-91510-808-0	2	WASHER; LK ID=8.2	
67	9-08150-436-0	1	PIN; SPR,CONT	
69	8-97083-714-1	1	SPRING; SET	
70 (A)	8-97307-467-1	1	COVER; ANGLEICH	
71	5-11129-006-0	1	CUP; SEALING OD=16	
72	8-97226-842-1	1	GASKET; COVER,ANGLEICH	
73	8-97039-546-1	1	SPRING; FUEL CUT	
74	0-91110-508-0	1	NUT; SHAFT M8	
75	8-97262-817-0	1	BUSHING; LEVER,MAIN SPR	
76	8-94454-615-0	1	CUP; SEALING,BUSHING	
78	8-97105-909-0	1	ADJUSTER; GOV	
79	0-20800-655-0	1	BOLT; CONT SET SPEED M6X55	
94 (A)	9-09565-114-0	1	GASKET; BUSH ID=13.8	
94 (B)	9-09565-116-0	1	GASKET; BUSH ID=15.8	

1-11 RADIATOR HOSE AND SUB TANK



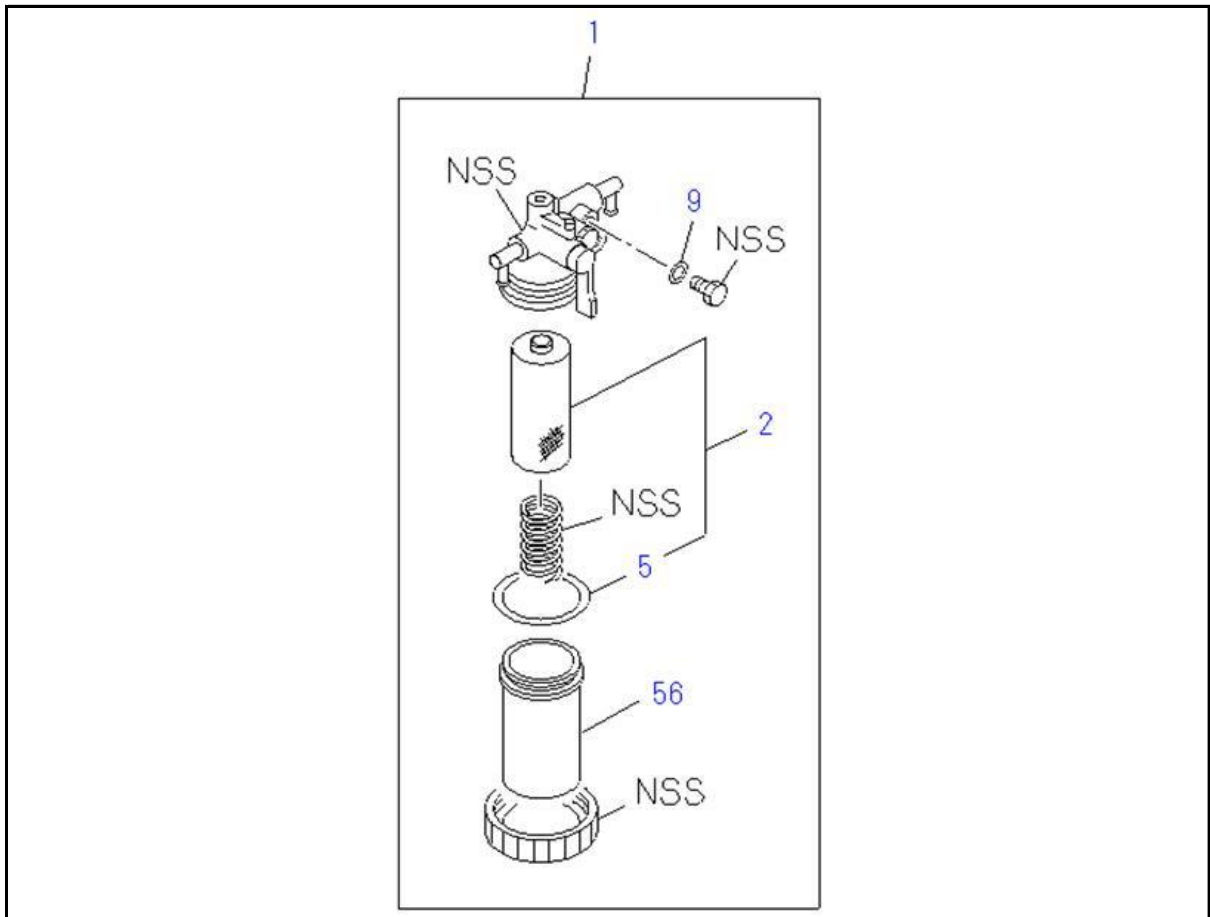
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (A)	8-94440-969-0	1	TANK; SURGE, RAD	
2	8-94449-363-0	1	CAP; SURGE TANK	

1-30 AIR CLEANER



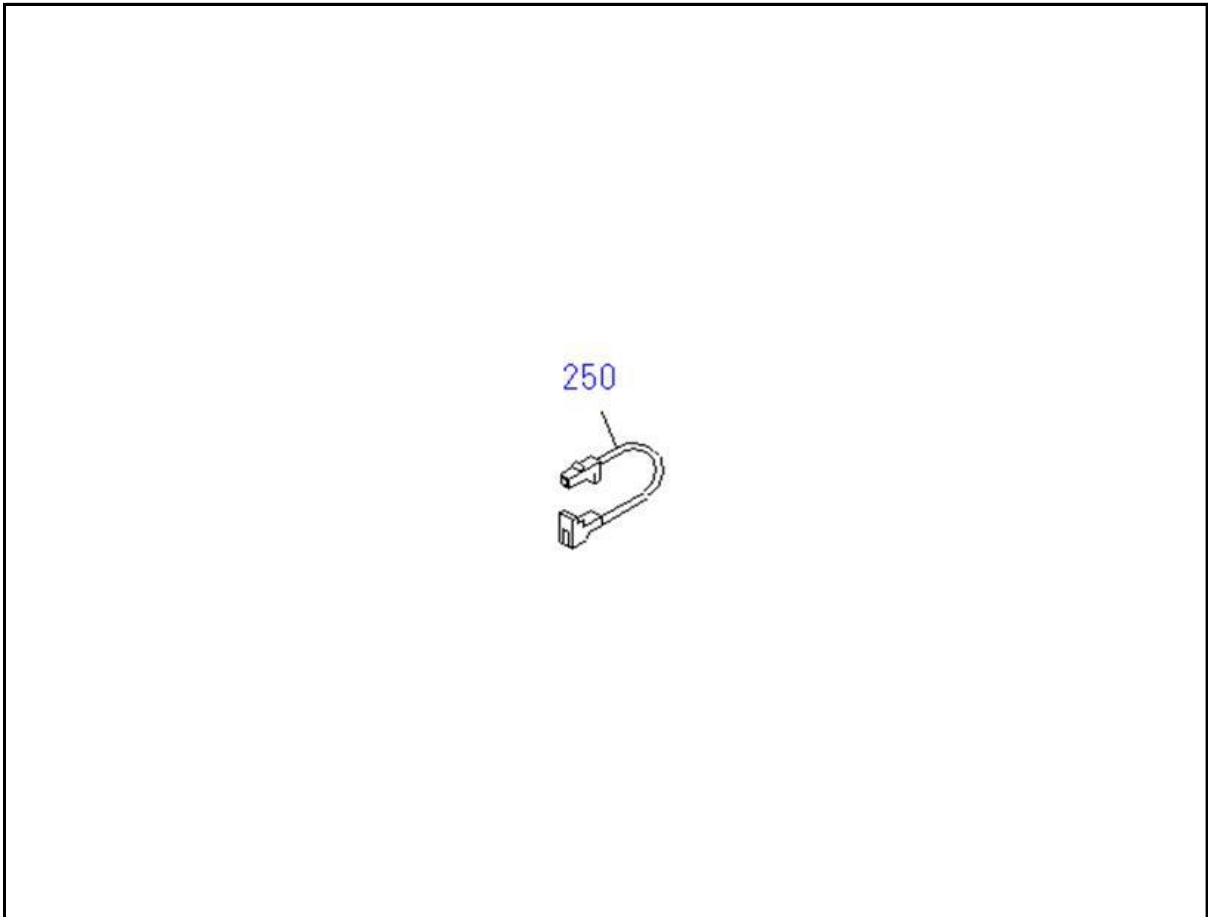
KEY No.	Part no.	qty	Part description	Engine serial no.
1 (C)	8-94152-112-0	1	CLEANER ASM; AIR	
2	1-14217-003-0 <9-14217-062-0>	1	NUT; WING,ELEMENT	
3	9-14219-177-0	1	WASHER; SEAL,WING NUT	
6	5-14215-014-0	1	FILTER; ACL	
57	8-94365-128-0	2	BAND; ACL	
89 (A)	1-14219-212-0	1	INDICATOR; ACL	
90 (B)	8-94159-151-0	1	CUP; ACL	
91	5-14217-004-0	1	CLAMP	
99	8-94448-008-0 <8-94436-076-0>	1	CAP; NIPPLE	

1-45 WATER SEDIMENTER; FUEL



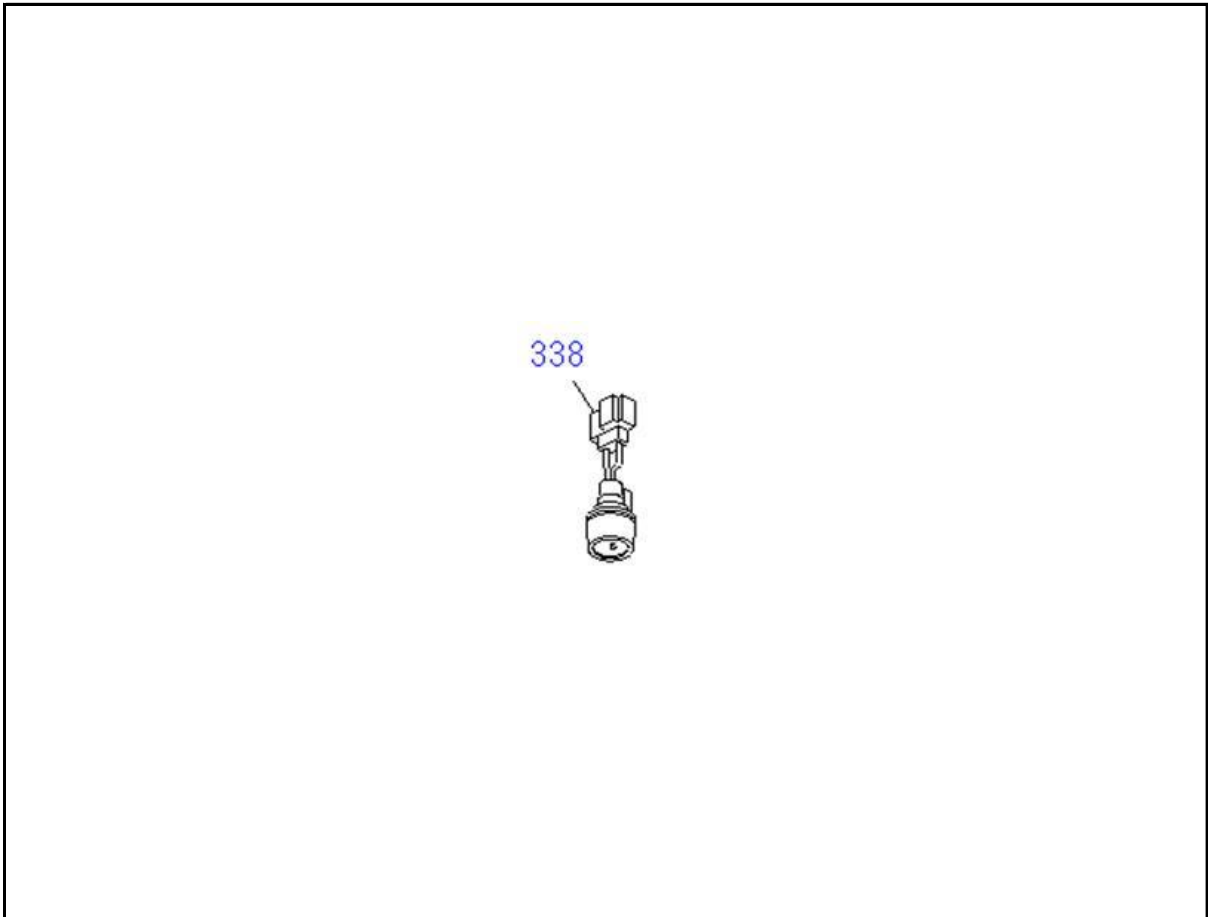
KEY No.	Part no.	qty	Part description	Engine serial no.
1	8-97086-245-3	1	SEDIMENTER; FUEL	
2	8-97213-381-0	1	ELEMENT; FUEL FILTER	
5	8-94155-183-0	1	GASKET; UPR. COVER,SEDIMENTER	
9	8-97308-988-0	2	GASKET; DRAIN PLUG & CONNECTOR	
56	8-94360-255-0	1	CASE; FUEL SEDIMENTER	

8-10 WIRING HARNESS AND FUSE



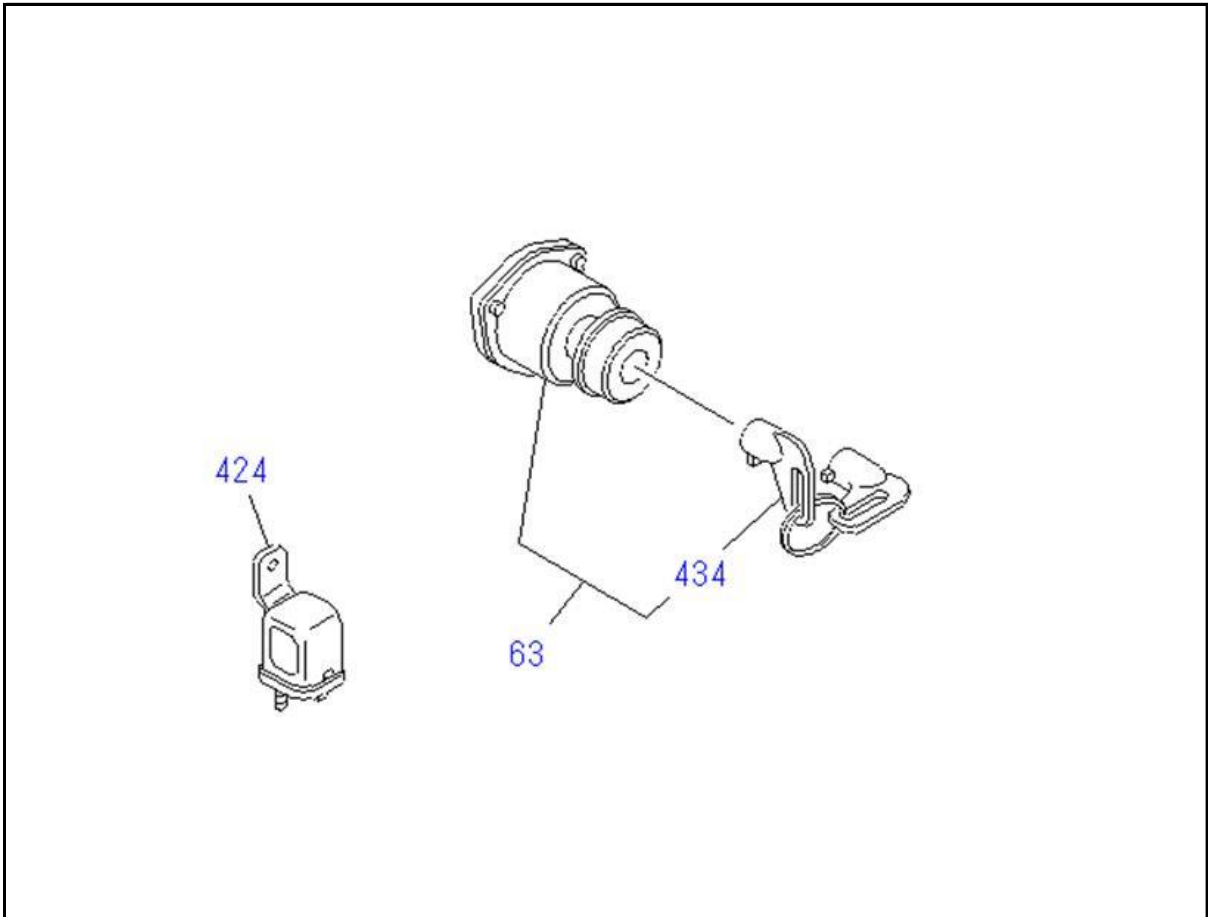
KEY No.	Part no.	qty	Part description	Engine serial no.
250	8-94331-131-0	1	WIRE; FUSIBLE LINK L=160 GRAY	

8-21 METER ASM



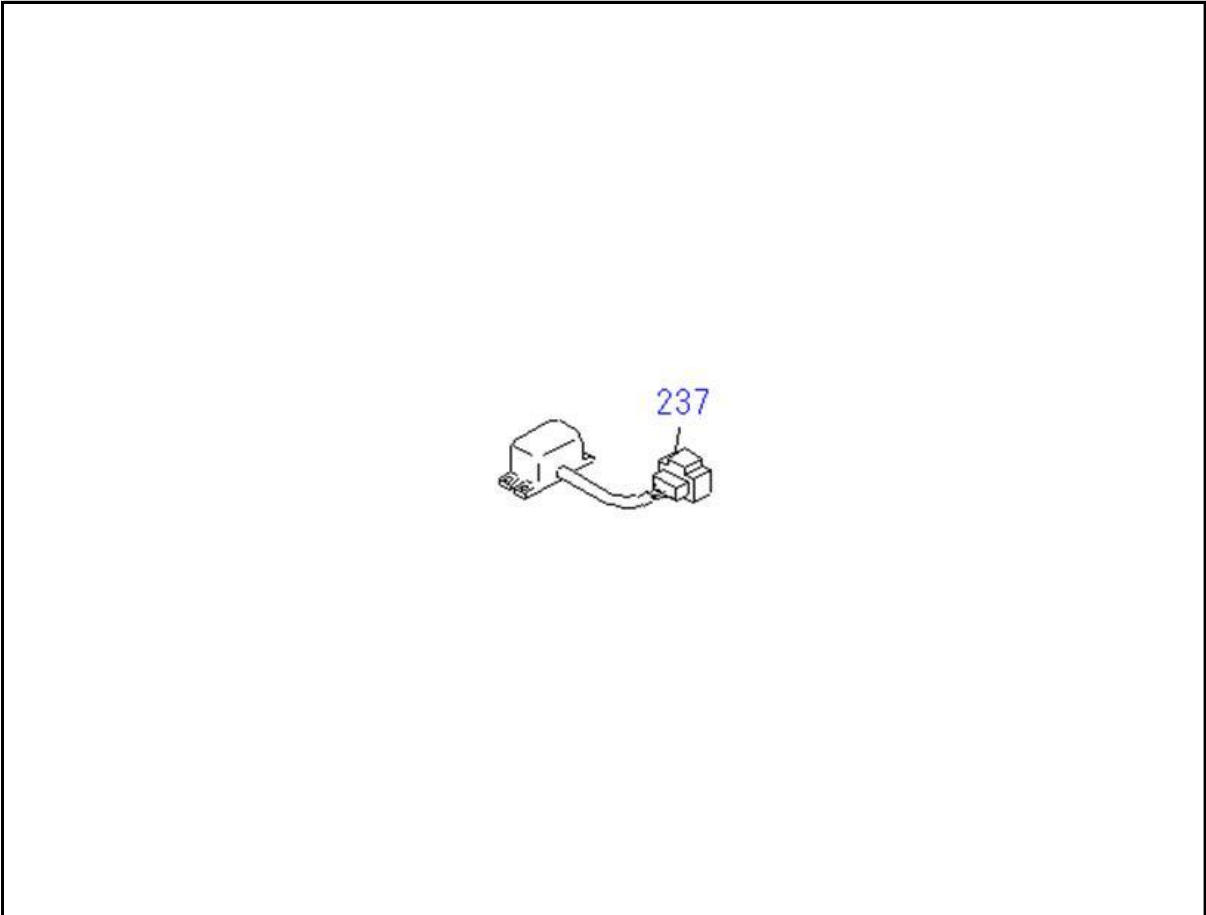
KEY No.	Part no.	qty	Part description	Engine serial no.
338	8-94459-918-0 <5-82250-008-2>	1	INDICATOR; GLOW	

8-25 SWITCH AND RELAY; INSTRUMENT PANEL



KEY No.	Part no.	qty	Part description	Engine serial no.
63	8-94402-500-0	1	SWITCH ASM; STARTER	
424	5-82550-029-0	1	RELAY 12V	
434	8-94402-498-0	1	KEY; STARTER SW	

8-26 ELECTRICAL CONTROL AND OTHER PARTS



KEY No.	Part no.	qty	Part description	Engine serial no.
237	8-97111-962-1	1	TIMER ASM	