



**BS6D125-1
ENGINE**



**ON
BE300
EXCAVATOR**

PARTS CATALOGUE

BEML LIMITED
MYSORE, INDIA.

FOREWORD

Parts book details are subject to periodical changes due to design improvements, standardisation, etc.,

It is recommended that customers contact Beml service centres for information on latest revision.

To avoid errors in ordering, the following procedures should be followed:

1. Be sure to give the serial number of engine.
2. Give the part number, name of part and quantity ordered. Ensure the part number is applicable for the particular engine Sl.No.
3. Give the desired destination and method of shipment along with any special invoicing instructions.

EXPLANATION OF PARTS BOOK :

DETAIL	EXPLANATION
FIG. No.	Generally a fig. number indicates an assembly group.
ITEM	The item number is the Sl.No. of the part as mentioned in the figure.
PART NUMBER	The number by which the parts are identified. This shall be quoted in the order.
NAME OF PART	Component / Assembly name. This shall be quoted in the order.
QTY.	Quantity. If no level code : Means quantity per engine. With level code : Means quantity per assembly to which it is a part
ENGINE SL. No.	Engine serial numbers to which the part is applicable. If no number appears after "-" the part is currently applicable.
*	This part is not supplied as individual part but supplied only as assembly
LEVEL CODE	One of this level codes when mentioned against "name of part", indicates level in assembly. Parts with no level code are assembled directly to engine. '..' items are part of '.. '..' items are part of '.
K1, K2, ETC.,	When followed with part number it indicates that it is part of a gasket kit.
STD.	Standard part
U/S	Under – size part
O/S	Over – size part
AR	As required.
OPT.	Optional.

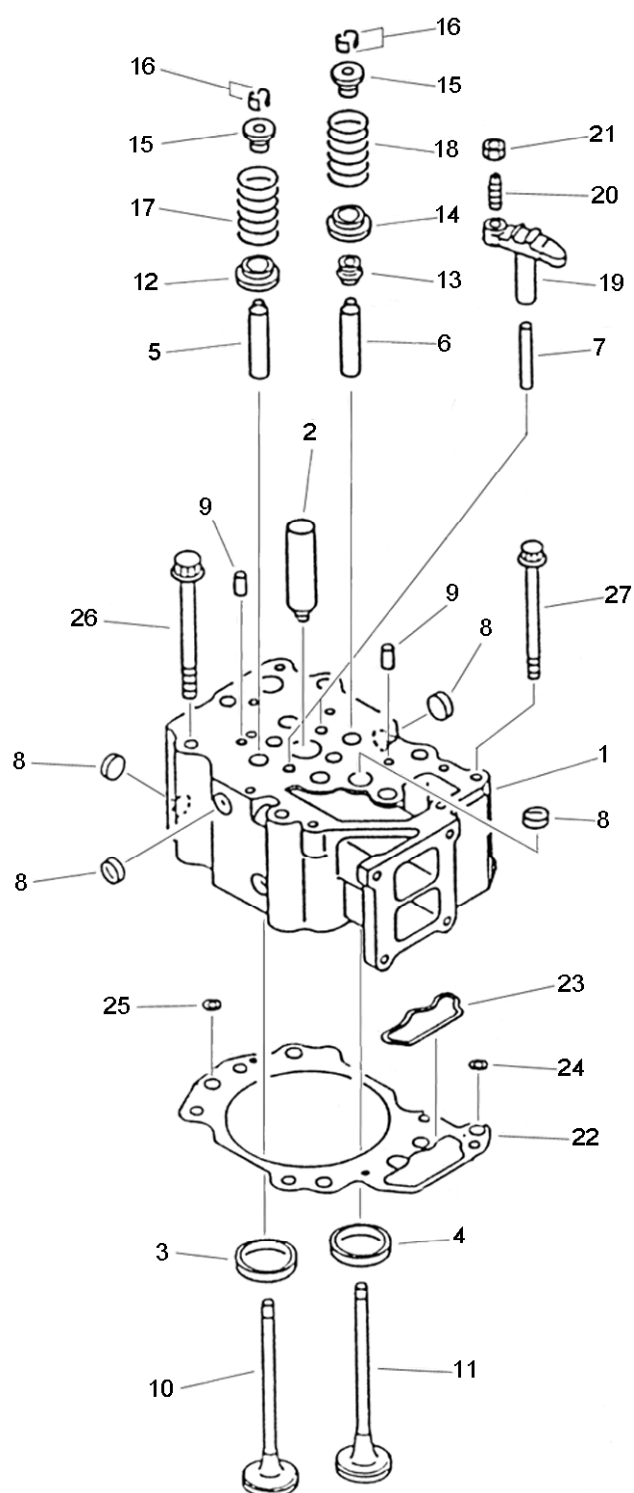
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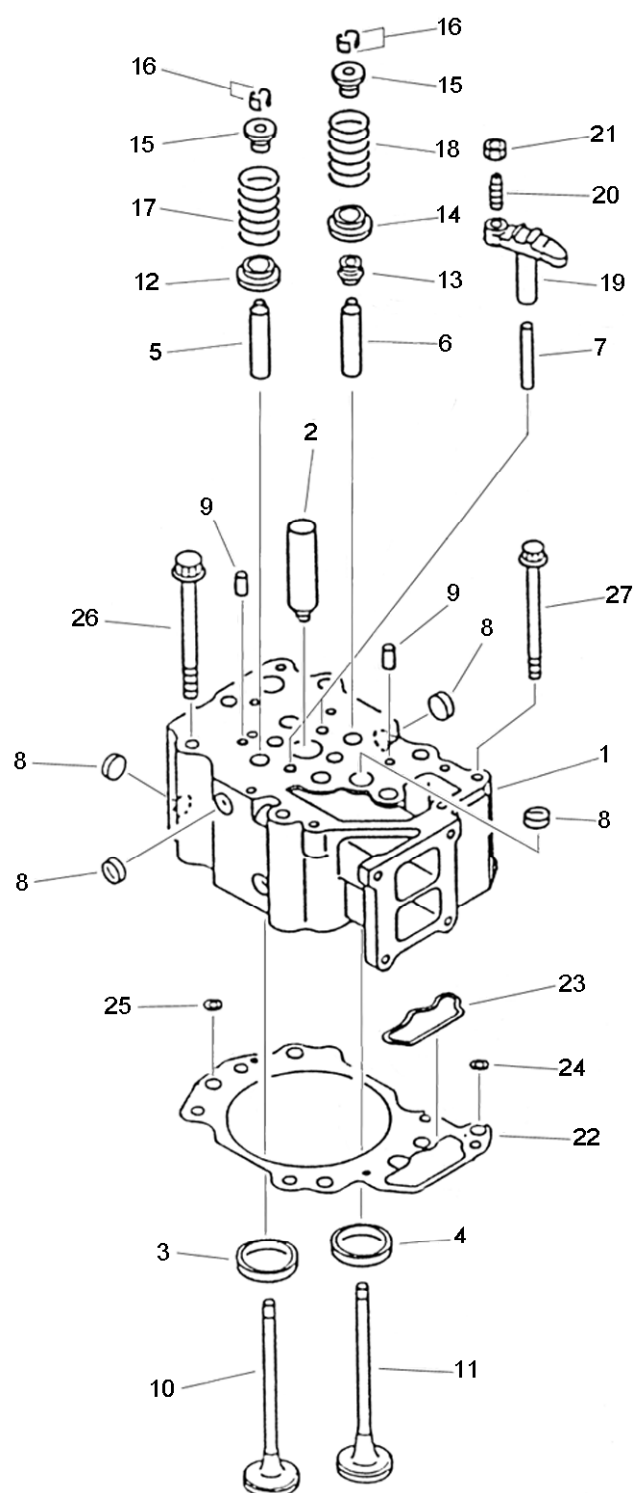
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CYLINDER HEAD

FIG. No. 1010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z1100026	CYLINDER HEAD ASSLY	6	Z311600001-0084
	31Z1100164	CYLINDER HEAD ASSLY	6	Z311600085-
1	(*31Z1140073)	. CYLINDER HEAD	1	Z311600001-
2	30Z1120158	. SLEEVE, NOZZLE HOLDER	1	Z311600001-
3	30Z1180252	. SEAT,VALVE,INTAKE,STD	2	Z311600001-
3	30Z1180293	. SEAT,VALVE,INTAKE,O/S 0.25	2	Z311600001-
3	30Z1180309	. SEAT,VALVE,INTAKE,O/S 0.50	2	Z311600001-
3	30Z1180317	. SEAT,VALVE,INTAKE,O/S 0.75	2	Z311600001-
3	30Z1180325	. SEAT,VALVE,INTAKE,O/S 1.00	2	Z311600001-
4	30Z1180244	. SEAT,VALVE,EXHAUST,STD	2	Z311600001-
4	30Z1180333	. SEAT,VALVE,EXHAUST, O/S 0.25	2	Z311600001-
4	30Z1180341	. SEAT,VALVE,EXHAUST, O/S 0.50	2	Z311600001-
4	30Z1180358	. SEAT,VALVE,EXHAUST, O/S 0.75	2	Z311600001-
4	30Z1180366	. SEAT,VALVE,EXHAUST, O/S 1.00	2	Z311600001-
5	(*30Z1140181)	. GUIDE,INTAKE VALVE	2	Z311600001-
5	30Z1140376	. GUIDE,IN.VALVE(SEMI-FINISHED)	2	Z311600001-
6	(*30Z1140198)	. GUIDE,EXHAUST VALVE	2	Z311600001-0084
6	(*30Z1140181)	. GUIDE,EXHAUST VALVE	2	Z311600085-
6	30Z1140384	. GUIDE,EX.VALVE(SEMI-FINISHED)	2	Z311600001-0084
6	30Z1140376	. GUIDE,EX.VALVE(SEMI-FINISHED)	2	Z311600085-
7	30Z1110057	. GUIDE	2	Z311600001-
8	30Z1110146	. PLUG,EXPANSION	8	Z311600001-
9	CFP04-00820	. DOWEL PIN	2	Z311600001-
10	30Z1180399	VALVE,INTAKE	12	Z311600001-
11	30Z1180269	VALVE EXHAUST	12	Z311600001-
12	31Z1180088	ROTATOR, VALVE	12	Z311600001-
13	30Z1180236 K1	SEAL,VALVE	12	Z311600001-0084
13	30Z1180447 K1	SEAL,VALVE	12	Z311600085-
14	30Z1110098	SEAT,SPRING,LOWER	12	Z311600001-
15	30Z1110105	SEAT,SPRING,UPPER	24	Z311600001-
16	30Z1110049	COTTER,VALVE	48	Z311600001-
17	31Z1180055	SPRING,VALVE,INTAKE	12	Z311600001-

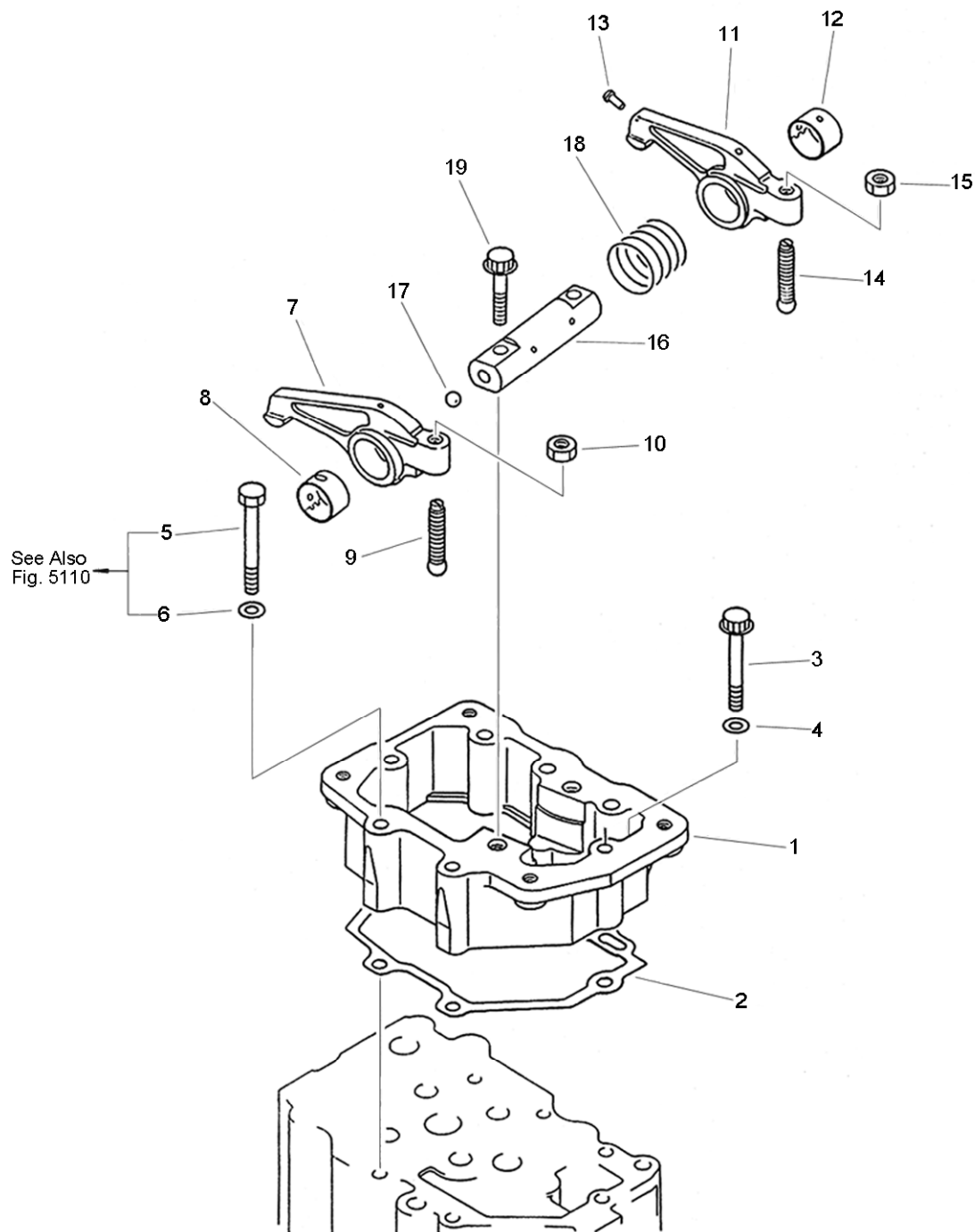


CYLINDER HEAD**FIG. No. 1010**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
18	30Z1110081	SPRING,VALVE EXHUST	12	Z311600001-
	30Z1100037	CROSS HEAD ASSY.	12	Z311600001-
19	30Z1150209	. CROSS HEAD	1	Z311600001-
20	30Z1110113	. SCREW	1	Z311600001-
21	30Z1110121	. NUT	1	Z311600001-
22	31Z1100018 K1	GASKET,HEAD	6	Z311600001-
23	31Z1160104	. GROMMET, OIL	1	Z311600001-
24	31Z1160112	. GROMMET, OIL	1	Z311600001-
25	30Z1160407	. GROMMET,WATER	4	Z311600001-
26	30Z1110065	BOLT	36	Z311600001-
27	01438-01020	BOLT	6	Z311600001-

ROCKER ARM AND HOUSING

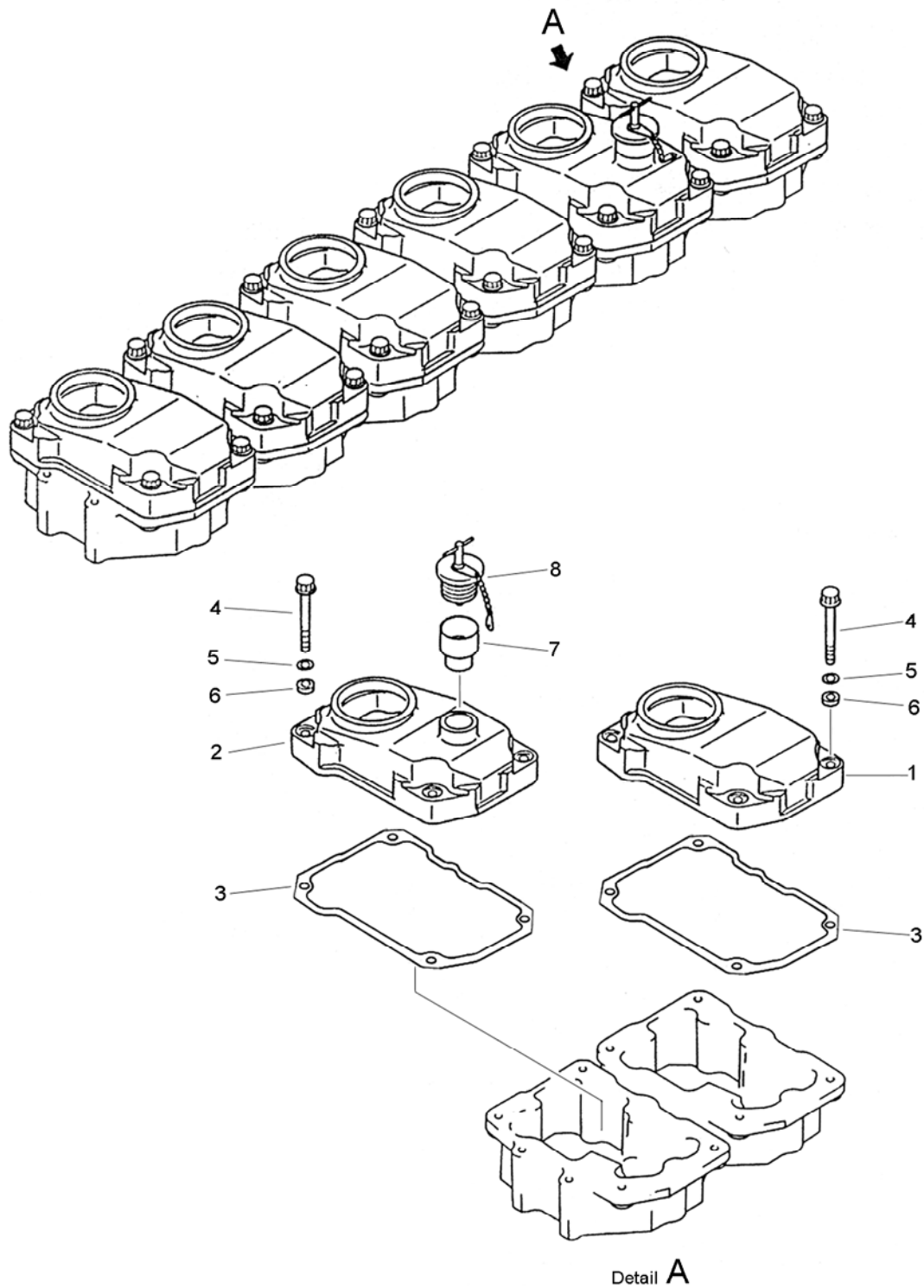
FIG. No. 1110



ROCKER ARM AND HOUSING
FIG. No. 1110

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	30Z4120236	HOUSING,ROCKER	6	Z311600001-
2	30Z4170287 K1	GASKET	6	Z311600001-
3	01437-01075	BOLT	40	Z311600001-
4	CFW05-10032	WASHER	40	Z311600001-
5	CFB01-21095	BOLT	2	Z311600001-
6	CFW02-11020	WASHER	2	Z311600001-
	30Z4100075	ARM,ROCKER,ASSY	6	Z311600001-
	30Z4100067	. ARM,ROCKER,ASSY	1	Z311600001-
7	(*30Z4150182)	.. ARM,ROCKER,INTAKE	1	Z311600001-
8	30Z4180299	.. BUSHING,ROCKER ARM	1	Z311600001-
9	30Z4110208	. SCREW	1	Z311600001-
10	CFN19-41008	. NUT	1	Z311600001-
	30Z4100091	ARM,ROCKER,ASSY	6	Z311600001-
	30Z4100083	. ARM,ROCKER,ASSY	1	Z311600001-
11	(*30Z4150199)	.. ARM,ROCKER,EXHAUST	1	Z311600001-
12	30Z4180299	.. BUSHING,ROCKER ARM	1	Z311600001-
13	30Z4190253	.. RIVET	1	Z311600001-
14	30Z4110208	. SCREW	1	Z311600001-
15	CFN19-41008	. NUT	1	Z311600001-
	30Z4100059	SHAFT,ROCKER ARM, ASSY	6	Z311600001-
16	(*30Z4110168)	. SHAFT,ROCKER ARM	1	Z311600001-
17	30Z4190318	. BALL	1	Z311600001-
18	30Z4180177	SPRING	6	Z311600001-
19	30Z4110224	BOLT	12	Z311600001-

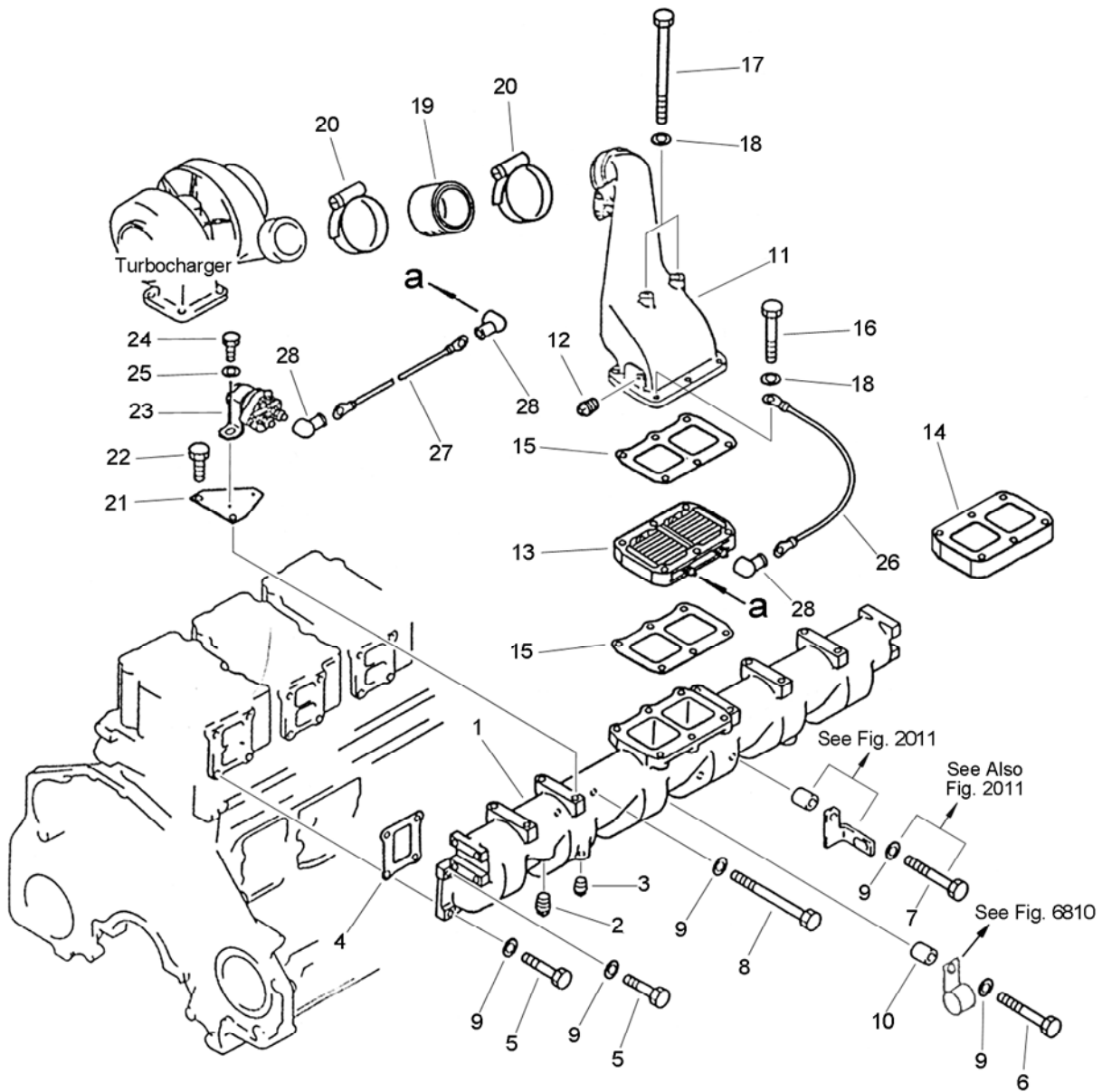
FIG. No. 1150 ROCKER ARM HOUSING COVER



ROCKER ARM HOUSING COVER**FIG. No. 1150**

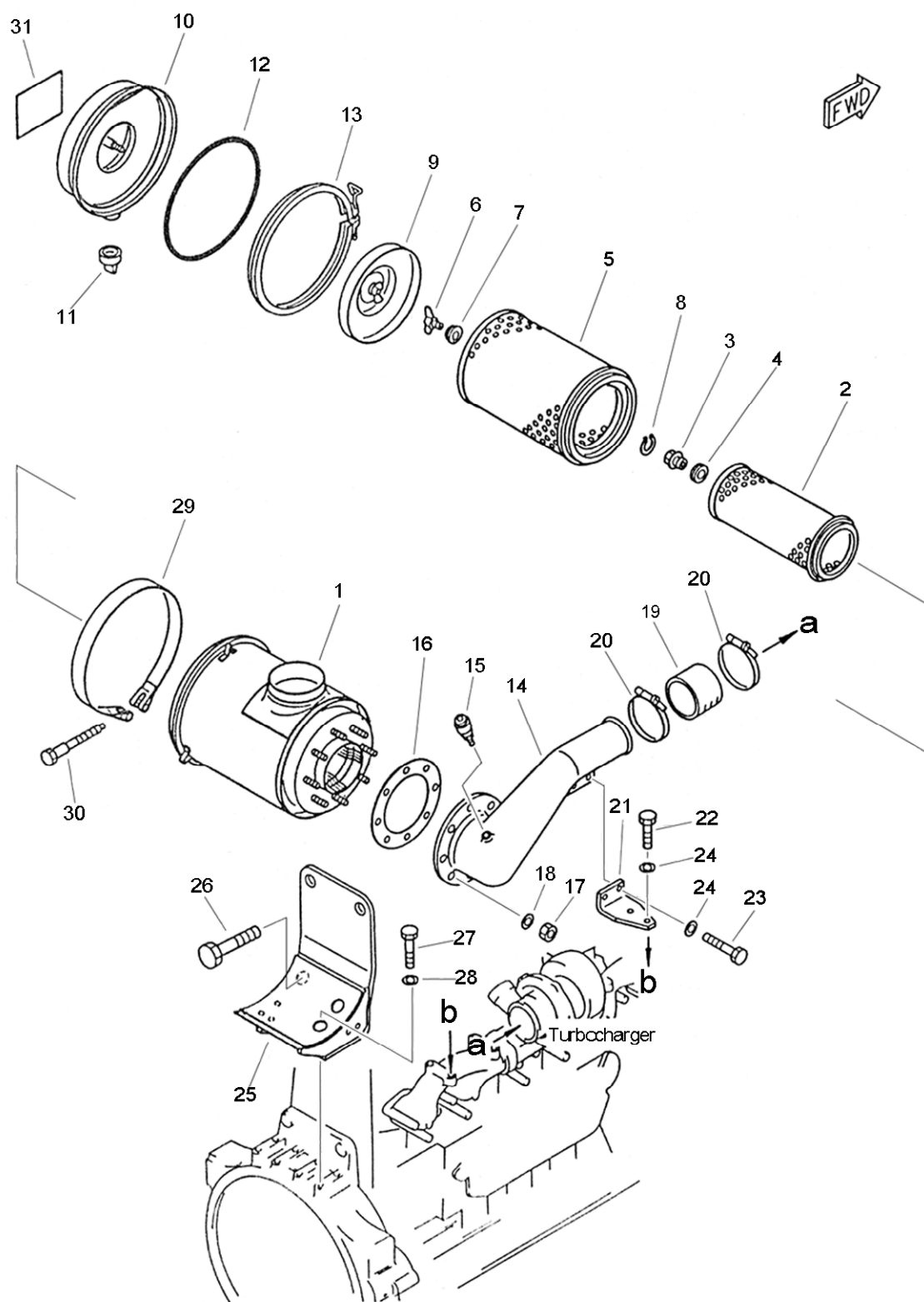
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	30Z1120166	COVER,CYL.HEAD NO.1,2,3,4 & 6	5	Z311600001-0127
1	30Z1120474	COVER,CYL.HEAD NO.1,2,3,4 & 6	5	Z311600128-
2	31Z1120066	COVER,CYL.HEAD, NO. 5	1	Z311600001-0127
2	30Z1120466	COVER,CYL.HEAD, NO. 5	1	Z311600128-
3	30Z1160212 K1	GASKET	6	Z311600001-0127
3	30Z1120482 K1	GASKET	6	Z311600128-
4	30Z4110224	BOLT	24	Z311600001-
5	CFW02-11020	WASHER	24	Z311600001-
6	30Z1160229 K1	RUBBER	24	Z311600001-
7	31Z1110038	TUBE	1	Z311600001-
8	07025-00100	CAP,FILLER	1	Z311600001-

FIG. No. 1310 AIR INTAKE MANIFOLD



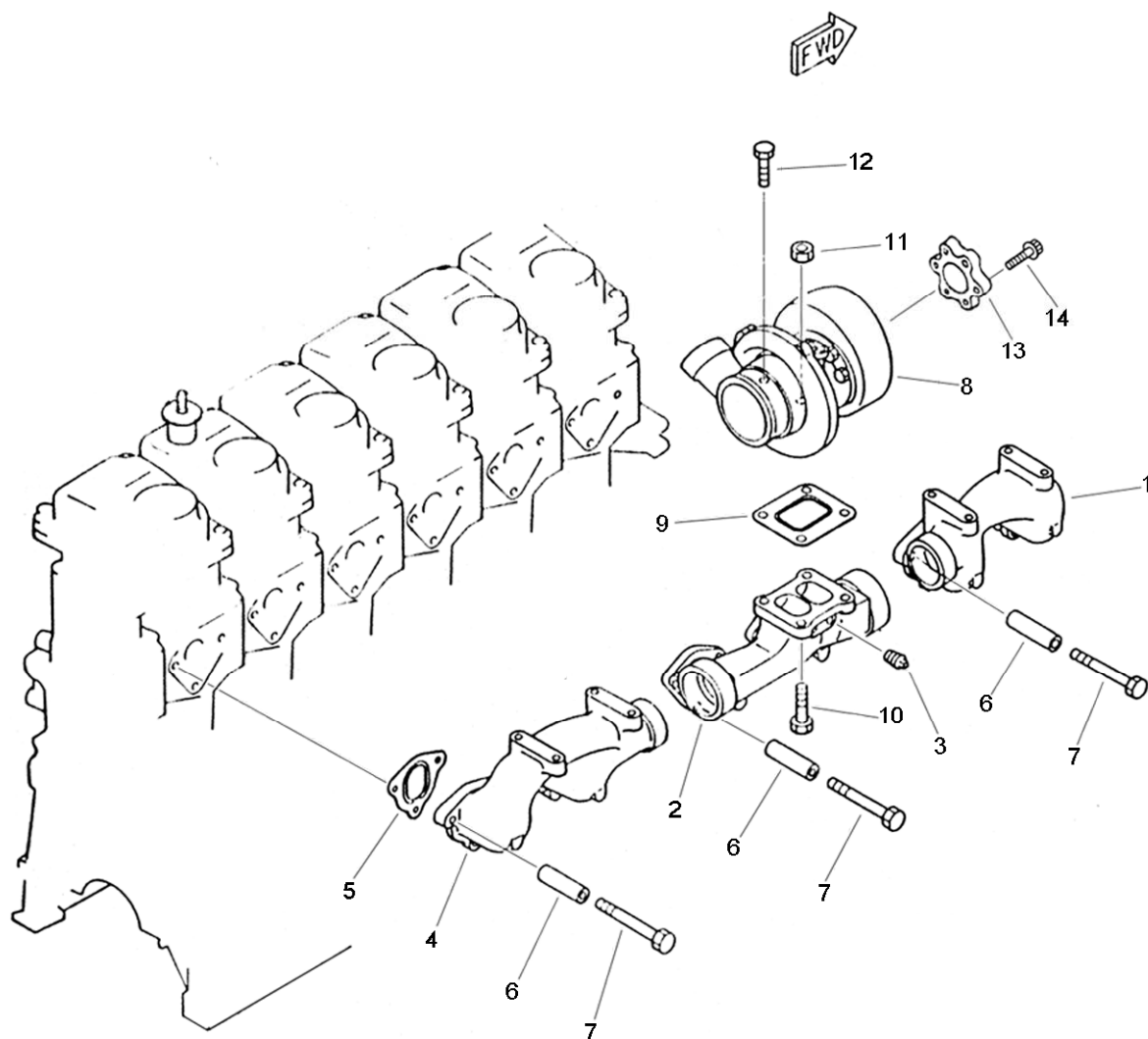
AIR INTAKE MANIFOLD
FIG. No. 1310

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z1200012	MANIFOLD ASSY	1	Z311600001-
1	(*31Z1220044)	. MANIFOLD,AIR INTAKE	1	Z311600001-
2	CPL01-11521	. PLUG	1	Z311600001-
3	CPL01-10810	. PLUG	2	Z311600001-
4	30Z1270113 K1	GASKET	6	Z311600001-
5	CFB01-21030	BOLT	12	Z311600001-
6	CFB01-21045	BOLT	3	Z311600001-
7	CFB01-21060	BOLT	1	Z311600001-
8	CFB02-21010	BOLT	8	Z311600001-
9	CFW02-11020	WASHER	24	Z311600001-
10	31Z1210032	SPACER	3	Z311600001-
11	31Z1220255	CONNECTOR	1	Z311600001-
12	CPL01-10810	PLUG	1	Z311600001-
13	30Z8280705	HEATER, AIR(OPT)	1	Z311600001-
14	30Z8221048	SPACER	1	Z311600001-
15	30Z1270121 K1	GASKET	2	Z311600001-
16	CFB01-21055	BOLT	4	Z311600001-
17	CFB02-21075	BOLT	2	Z311600001-
18	CFW02-11020	WASHER	6	Z311600001-
19	31Z1280188	HOSE	1	Z311600001-
20	CCC01-09020	CLAMP	2	Z311600001-
21	31Z8210053	PLATE(OPT)	1	Z311600001-
22	CFS01-31020	BOLT(OPT)	2	Z311600001-
23	30Z8280098	SWITCH,HEATER(OPT)	1	Z311600001-
24	CFS01-30610	BOLT(OPT)	2	Z311600001-
25	CFW02-10616	WASHER(OPT)	2	Z311600001-
26	31Z8280095	WIRE(OPT)	1	Z311600001-
27	30Z8280121	WIRE(OPT)	1	Z311600001-
28	08038-00519	CAP(OPT)	3	Z311600001-



AIR CLEANER
FIG. No. 1410

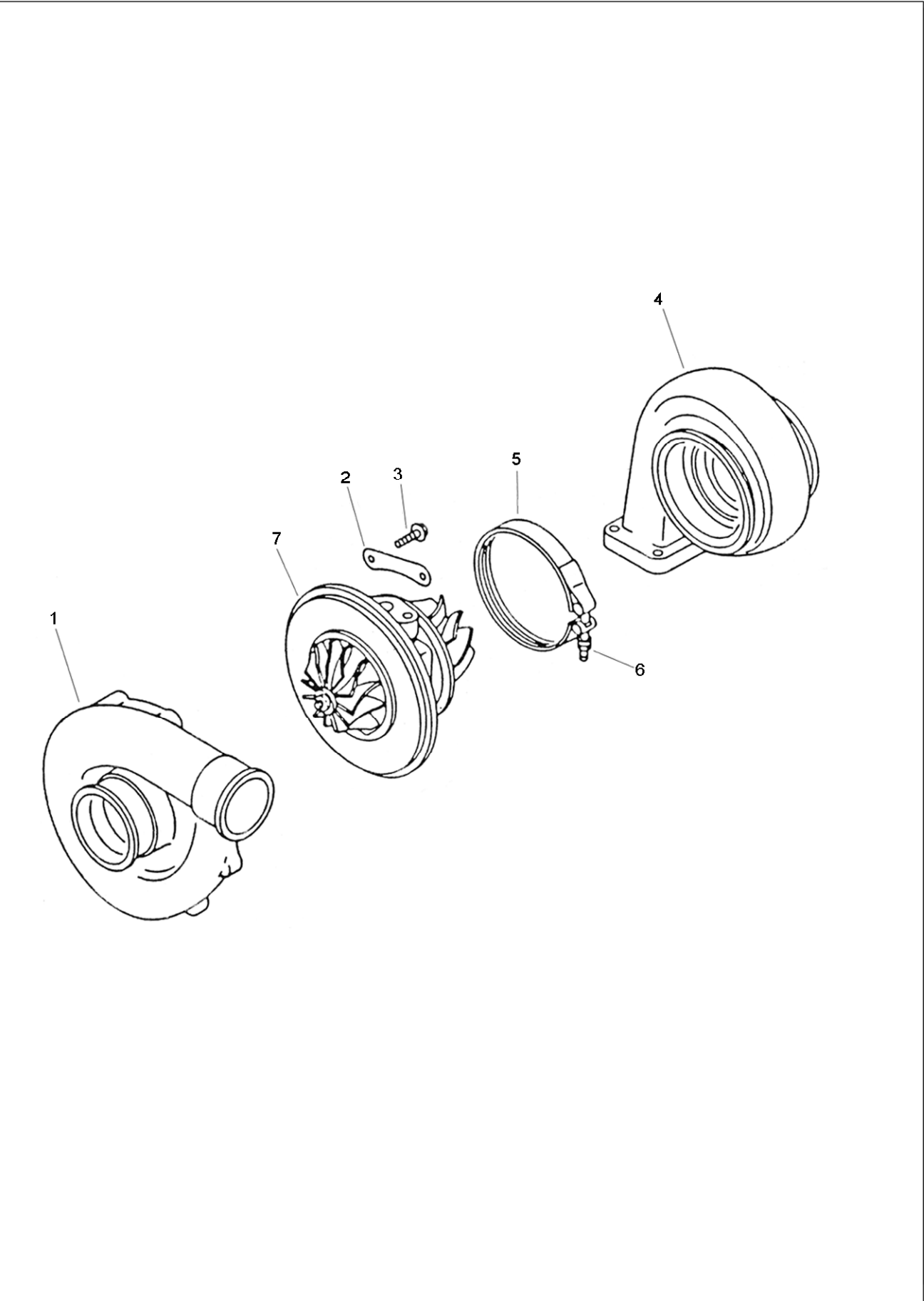
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z1280203	AIR CLEANER ASSY.	1	Z311600001-
1	31Z1280211	. BODY	1	Z311600001-
	31Z1200272	. ELEMENT ASSY,	1	Z311600001-
2	(*31Z1280139)	.. ELEMENT,INNER	1	Z311600001-
3	31Z1280163	.. NUT,SPECIAL,	1	Z311600001-
4	30Z1280214	.. SEAL WASHER	1	Z311600001-
	31Z1280147	.. OUTER, ELEMENT ASSY	1	Z311600001-
5	(*31Z1280155)	... OUTER,ELEMENT	1	Z311600001-
6	31Z1280122	... WING NUT,	1	Z311600001-
7	30Z1280206	... SEAL WASHER	1	Z311600001-
8	CFL01-11510	... SNAP RING	1	Z311600001-
9	31Z1280236	. BAFFLE	1	Z311600001-
10	31Z1280228	. CUP	1	Z311600001-
11	31Z1280114	. VALVE,EVACUATOR	1	Z311600001-
12	31Z1260083	. O-RING,	1	Z311600001-
13	31Z1290101	. CLAMP	1	Z311600001-
14	31Z1220052	CONNECTOR,AIR INTAKE	1	Z311600001-0116
14	31Z1220425	CONNECTOR,AIR INTAKE	1	Z311600117-
15	08670-02001	DUST INDICATOR	1	Z311600001-
16	31Z1270095 K1	GASKET	1	Z311600001-
17	CFN01-21084	NUT	8	Z311600001-
18	CFW02-11020	WASHER	8	Z311600001-
19	31Z1280196	HOSE	1	Z311600001-
20	CCC01-11520	CLAMP	2	Z311600001-
21	31Z1210024	BRACKET	1	Z311600001-
22	CFB01-21025	BOLT	2	Z311600001-
23	CFB01-21030	BOLT	2	Z311600001-
24	CFW02-11020	WASHER	4	Z311600001-
25	31Z1230072	BRACKET	1	Z311600001-
26	CFB01-21660	BOLT	2	Z311600001-
27	CFB01-21025	BOLT	2	Z311600001-
28	CFW02-11020	WASHER	2	Z311600001-
29	31Z1280285	BAND	1	Z311600001-
30	30Z1210043	BOLT	1	Z311600001-
31	10Z1270315	PLATE,CAUTION	1	Z311600001-



EXHAUST MANIFOLD & TURBOCHARGER

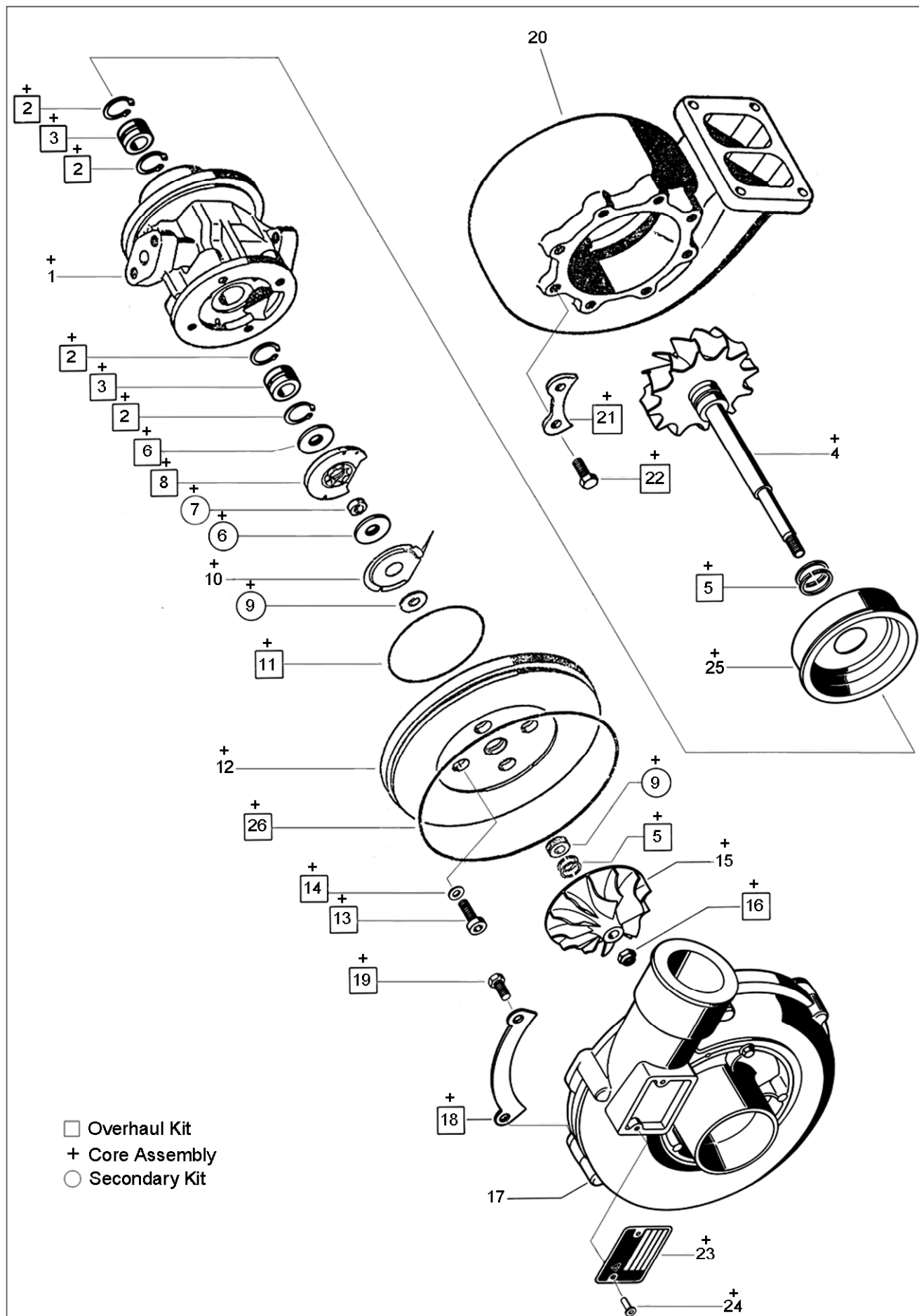
FIG. No. 1510

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	30Z1340098	MANIFOLD,EXHAUST,FRONT	1	Z311600001-
2	31Z1340095	MANIFOLD,EXHAUST,CENTRE	1	Z311600001-
3	CPL01-10810	PLUG	1	Z311600001-
4	30Z1340105	MAINFOLD,EXHAUST.REAR	1	Z311600001-
5	30Z1310046 K1	GASKET	6	Z311600001-
6	30Z2110059	SPACER	18	Z311600001-
7	01011-E1000	BOLT	18	Z311600001-
8	31Z8100014	TURBO CHARGER	1	Z311600001-0116
8	31Z8100096	TURBO CHARGER	1	Z311600117-
9	31Z1310051 K1	GASKET	1	Z311600001-
10	CFB17-51045	BOLT	2	Z311600001-
11	30Z1310013	NUT	2	Z311600001-
12	01010-E1030	BOLT	2	Z311600001-
13	31Z1210446	FLANGE	1	Z311600117-
14	30Z5110201	BOLT	6	Z311600117-



TURBOCHARGER**FIG. No.1511**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z8100014	TURBOCHARGER	1	Z311600001-0116
1	31Z8180084	. HOUSING,COMPRESSOR	1	Z311600001-0116
2	31Z8180051	. CLAMP	1	Z311600001-0116
3	31Z8180035	. BOLT	8	Z311600001-0116
4	31Z8180076	. HOUSING,TURBINE	1	Z311600001-0116
5	31Z8180043	. V-BAND	1	Z311600001-0116
6	31Z8180027	.. NUT,LOCK	1	Z311600001-0116
7	31Z8180068	. ROTOR ASSY	1	Z311600001-0116

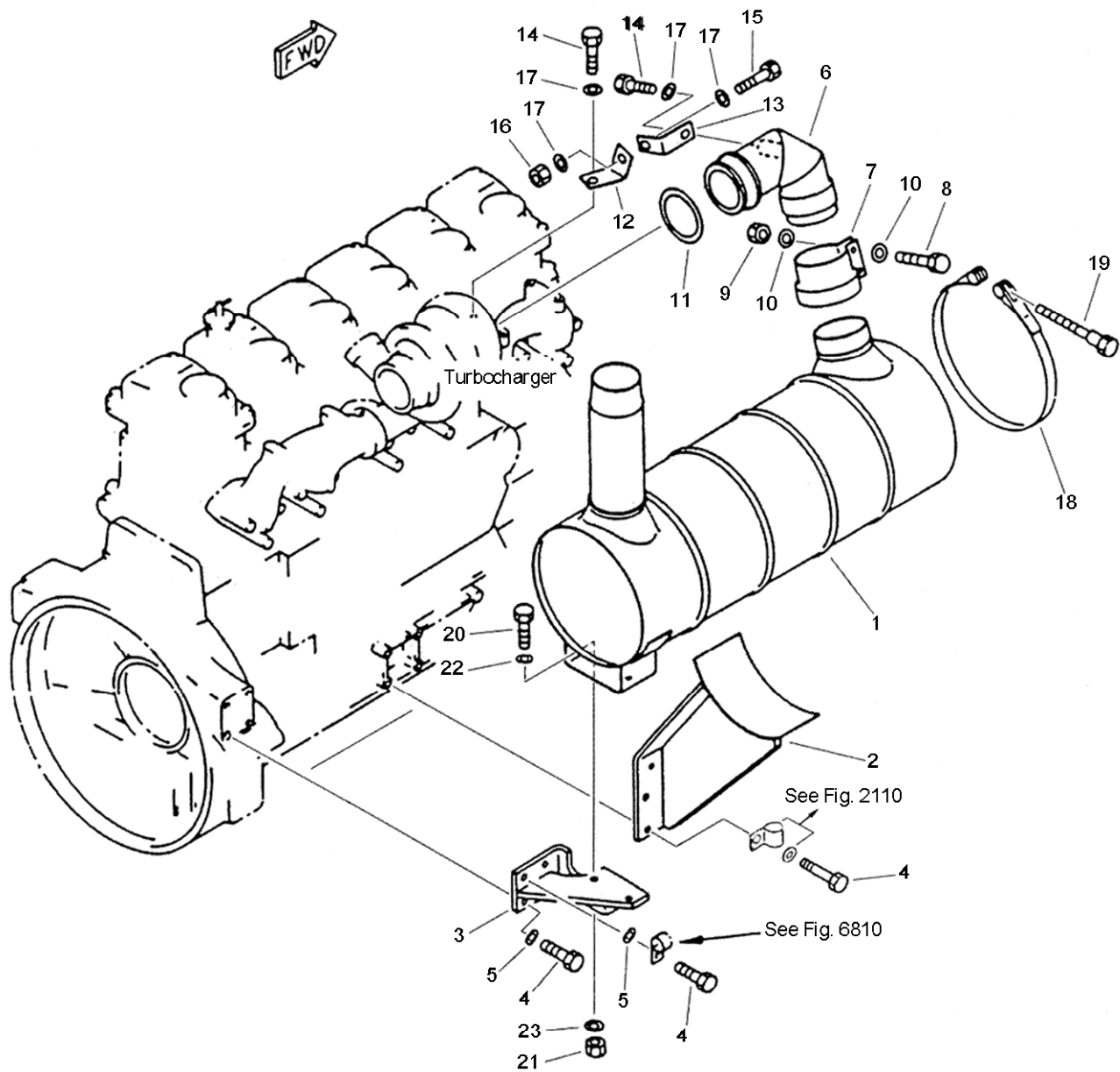


TURBOCHARGER ASSY. (TEL)**FIG. No. 1512**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z8100096	TURBO CHARGER ASSY(TEL)	1	Z311600117-
	31Z8100274 KT	CORE ASSY	1	Z311600117-
	31Z8100282 KT	OVERHAUL KIT	1	Z311600117-
	31Z8100299 KT	SECONDARY KIT	1	Z311600117-
1		BEARING HOUSING	1	Z311600117-
2		SNAP RING	4	Z311600117-
3		BEARING,BUSH	2	Z311600117-
4		SHAFT & TURBINE WHEEL ASSY.	1	Z311600117-
5		RINGS,PISTON	3	Z311600117-
6		RING,THRUST	2	Z311600117-
7		SPACER SLEEVE	1	Z311600117-
8		PLATE,THRUST	1	Z311600117-
9		FLINGER SLEEVE	1	Z311600117-
10		DEFLECTOR,OIL	1	Z311600117-
11		O-RING	1	Z311600117-
12		PLATE,BACK	1	Z311600117-
13		BOLT,SOCKET HEAD	4	Z311600117-
14		WASHER	4	Z311600117-
15		COMPRESSOR, WHEEL	1	Z311600117-
16		LOCK NUT	1	Z311600117-
17	31Z8140231	HOUSING,COMPRESSOR	1	Z311600117-
18		SEGMENT, COMPRESSOR SIDE	4	Z311600117-
19		BOLT,HEX	8	Z311600117-
20	31Z8140248	HOUSING,TURBINE	1	Z311600117-
21		SEGMENT,TURBINE SIDE	4	Z311600117-
22		BOLT,HEX	8	Z311600117-
23		PLATE,NAME	1	Z311600117-
24		RIVET	2	Z311600117-
25		SHIELD,HEAT	1	Z311600117-
26		O-RING	1	Z311600117-

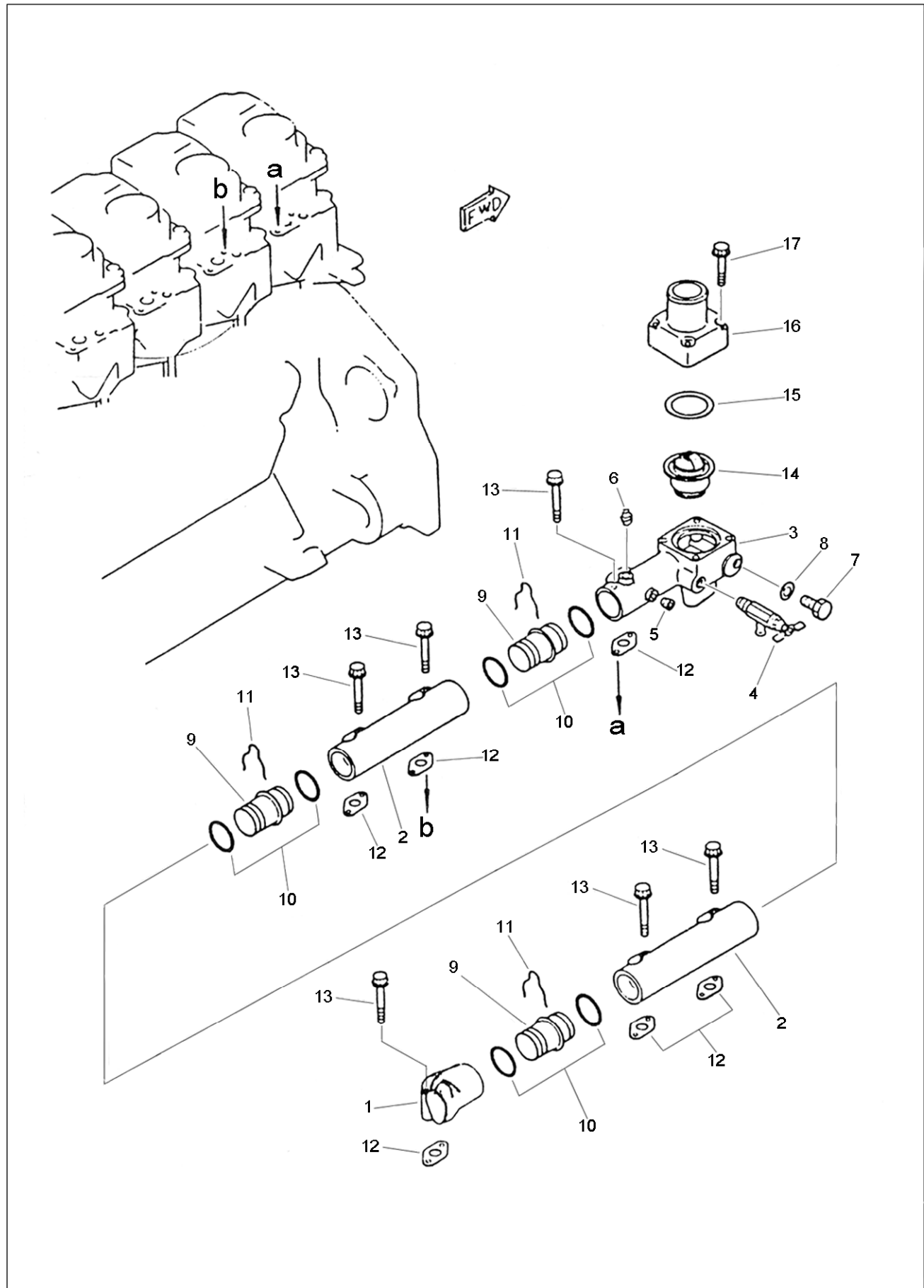
MUFFLER

FIG. No. 1610



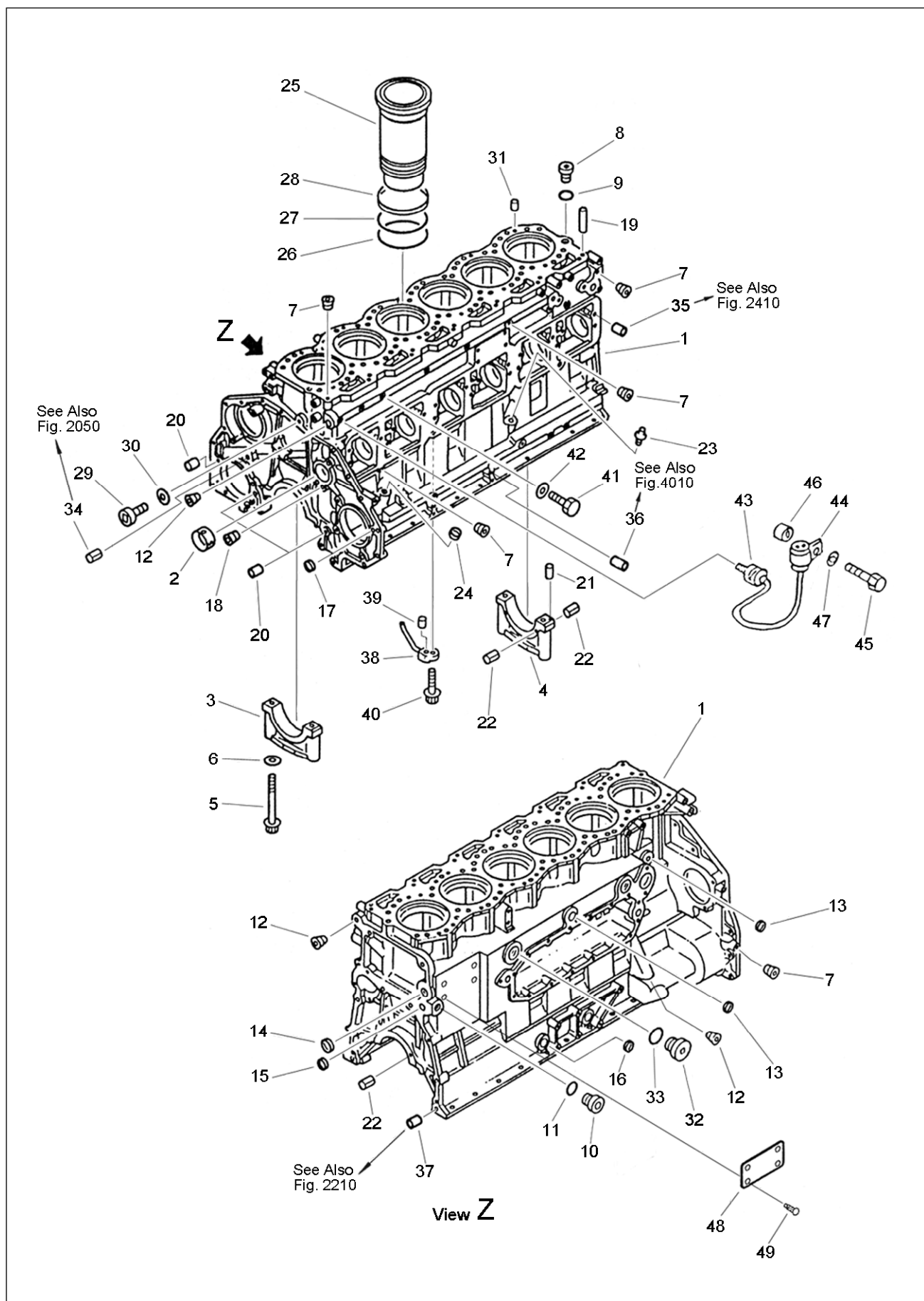
MUFFLER**FIG. No. 1610**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z1380133	MUFFLER	1	Z311600001-
2	31Z1330067	BRACKET,MUFFLER	1	Z311600001-
3	31Z1330075	BRACKET,MUFFLER	1	Z311600001-
4	01010-E1025	BOLT	8	Z311600001-
5	CFW06-10032	WASHER	4	Z311600001-
6	31Z1330083	ELBOW	1	Z311600001-
7	31Z1390112	CLAMP	1	Z311600001-
8	01010-E1245	BOLT	2	Z311600001-
9	CFN01-21211	NUT	2	Z311600001-
10	CFW05-12032	WASHER	4	Z311600001-
11	31Z1380125	RING,SEAL	1	Z311600001-
12	31Z1310043	PLATE	1	Z311600001-
13	31Z1310035	PLATE	1	Z311600001-
14	01010-E1025	BOLT	2	Z311600001-
15	01010-E1030	BOLT	1	Z311600001-
16	CFN01-21084	NUT	1	Z311600001-
17	CFW05-10032	WASHER	4	Z311600001-
18	31Z1380109	BAND	1	Z311600001-
19	30Z1210043	BOLT	1	Z311600001-
20	01010-E1030	BOLT	2	Z311600001-
21	CFN01-21084	NUT	2	Z311600001-
22	CFW05-10032	WASHER	2	Z311600001-
23	CFW02-11020	WASHER	2	Z311600001-



WATER MANIFOLD & THERMOSTAT**FIG. No. 1710**

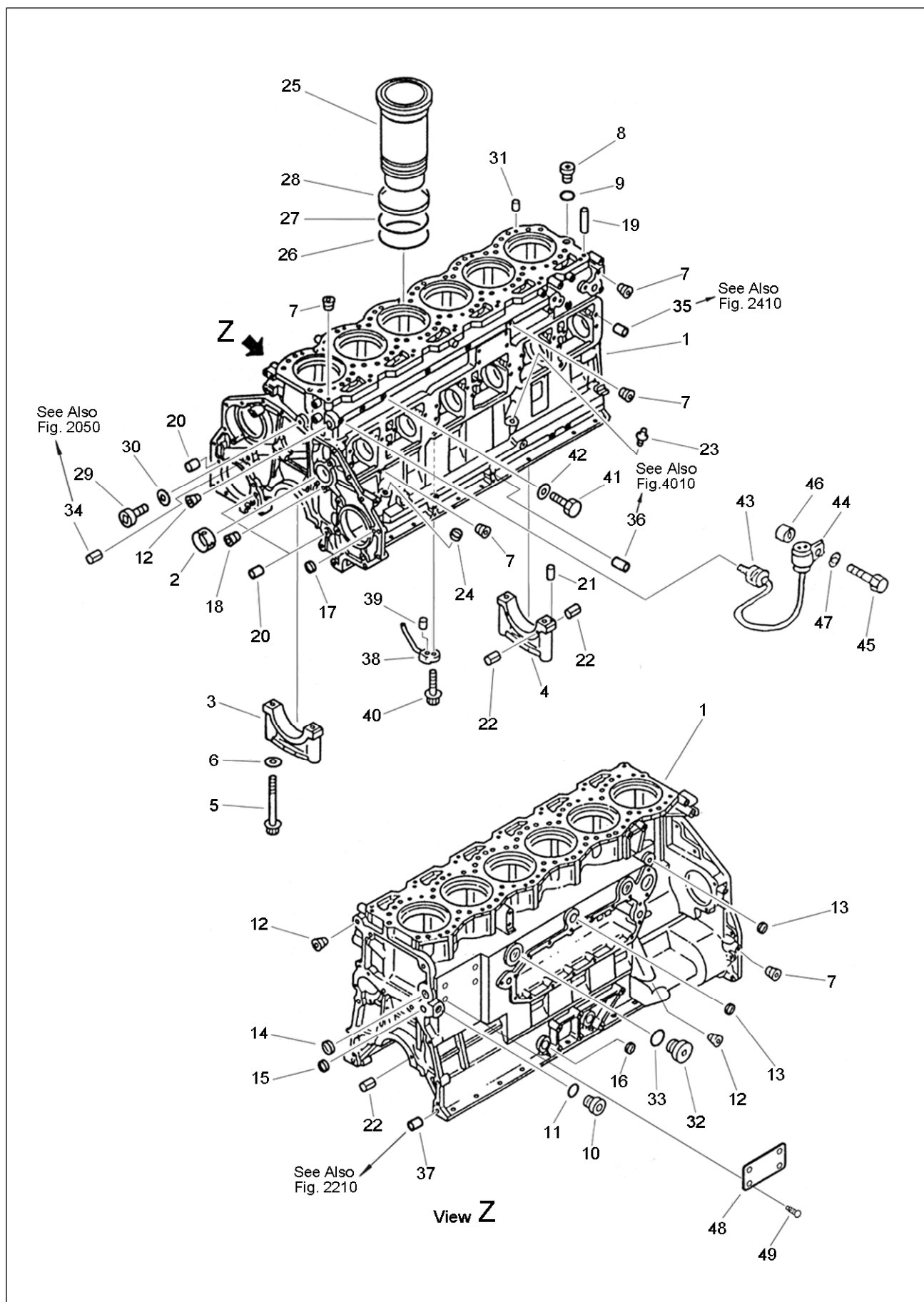
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	30Z6140255	MANIFOLD,WATER	1	Z311600001-
2	30Z6140247	MANIFOLD,WATER	2	Z311600001-
3	31Z6140074	HOUSING,THERMOSTAT	1	Z311600001-
4	09482-20000	VALVE	1	Z311600001-
5	CPL02-10810	PLUG	1	Z311600001-
6	CPL01-10810	PLUG	1	Z311600001-
7	31Z6110225	PLUG	1	Z311600001-
8	CPF06-01612 K1	GASKET	1	Z311600001-
9	30Z6110041	TUBE	3	Z311600001-
10	02893-05043 K1	O-RING	6	Z311600001-
11	30Z6180059	SPRING	3	Z311600001-
12	30Z6170396 K1	GASKET	6	Z311600001-
13	01437-01065	BOLT	12	Z311600001-
14	30Z6180456	THERMOSTAT	1	Z311600001-
15	30Z6160376 K1	GASKET	1	Z311600001-
16	31Z6140082	COVER,WATER OUTLET	1	Z311600001-
17	01437-01050	BOLT	4	Z311600001-



CYLINDER BLOCK

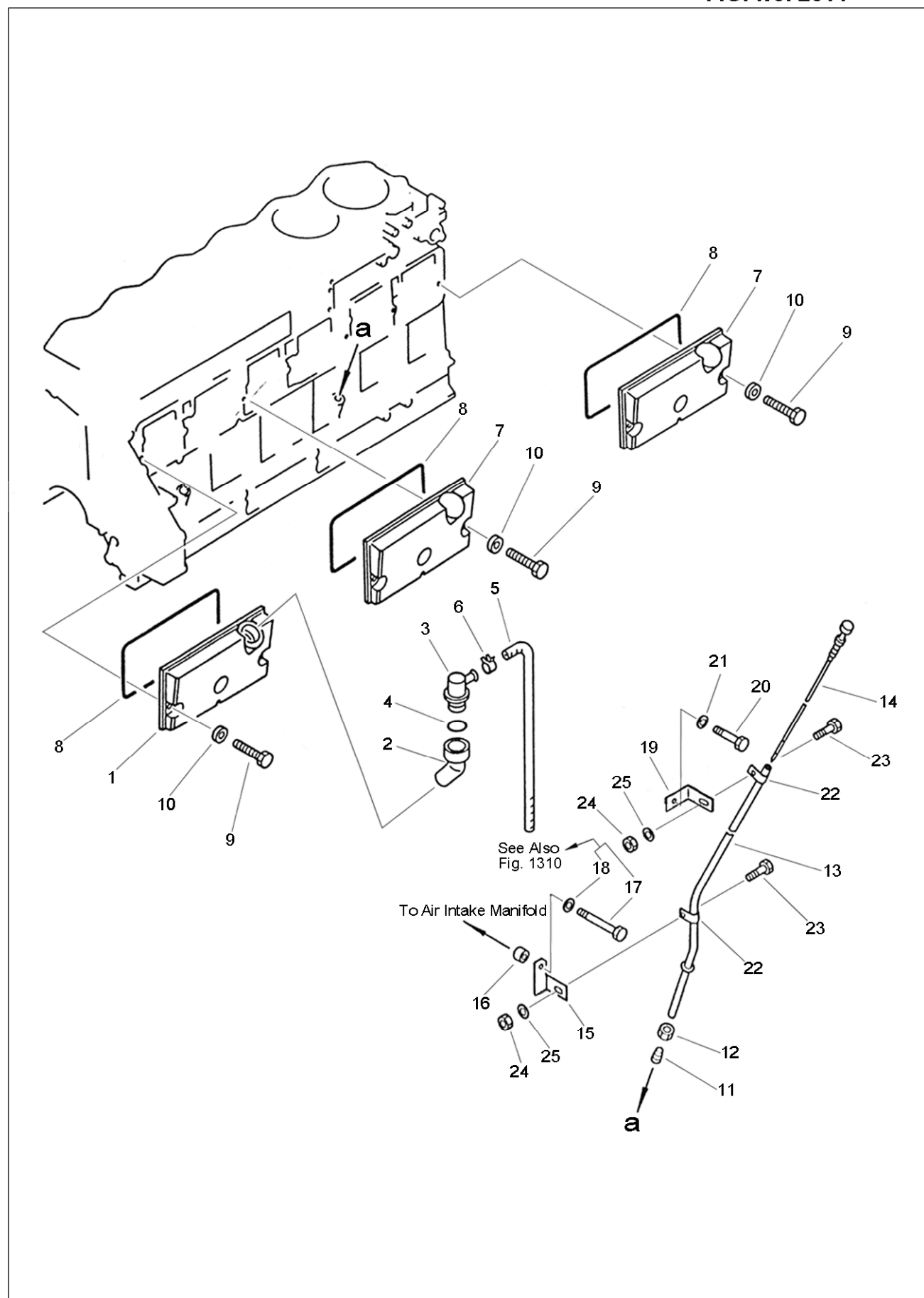
FIG. No. 2010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z2100028	CYLINDER BLOCK ASSY	1	Z311600001-
1	(*31Z2140189)	. CYLINDER BLOCK	1	Z311600001-
2	30Z2180351	. BUSHING,CAM SHAFT	7	Z311600001-
3	31Z2140115	. CAP,MAIN BEARING	6	Z311600001-
4	31Z2140123	. CAP,MAIN BEARING	1	Z311600001-
5	30Z2110083	. BOLT	14	Z311600001-
6	CFW05-16045	. WASHER	14	Z311600001-
7	07043-50108	. PLUG	5	Z311600001-
8	07040-12414	. PLUG	1	Z311600001-
9	07002-22434 K2	. O-RING	1	Z311600001-
10	07040-13016	. PLUG	1	Z311600001-
11	07002-23034 K2	. O-RING	1	Z311600001-
12	07043-50617	. PLUG	3	Z311600001-
13	07046-43016	. .PLUG	2	Z311600001-
14	07046-44016	. PLUG	1	Z311600001-
15	07046-22516	. PLUG	1	Z311600001-
16	07046-42816	. PLUG	1	Z311600001-
17	07046-21210	. PLUG	4	Z311600001-
18	07043-50211	. PLUG	4	Z311600001-
19	30Z2110067	. TUBE	1	Z311600001-
20	30Z2110156	. PIN	3	Z311600001-
21	CFP04-00514	. DOWEL PIN	2	Z311600001-
22	CFP13-04008	. PIN, ROLL	6	Z311600001-
23	30Z2110107	. BUSHING	1	Z311600001-
24	07046-22010	. PLUG	1	Z311600001-
25	31Z2140156	. LINER,CYLINDER	6	Z311600001-
26	30Z2160296 K2	. O-RING,LINER,LOWER	6	Z311600001-
27	30Z2160303 K2	. O-RING,LINER,UPPER	6	Z311600001-
28	30Z2160311 K2	. SEAL,LINER,CREVICE	6	Z311600001-
29	30Z2110042	. PLUG	1	Z311600001-
30	CPF06-01412 K2	. GASKET	1	Z311600001-
31	CFP04-00820	DOWEL PIN	12	Z311600001-



CYLINDER BLOCK**FIG. No. 2010**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
32	30Z2110075	PLUG	2	Z311600001-
33	30Z2160288 K2	O-RING	2	Z311600001-
34	CFP13-05012	PIN,SPRING	1	Z311600001-
35	30Z2110156	PIN	12	Z311600001-
36	CFP04-01024	DOWEL PIN	2	Z311600001-
37	30Z3210111	PIN	2	Z311600001-
	31Z2100011	NOZZLE,PISTON COOLING ASSY	6	Z311600001-
38	31Z2130096	. NOZZLE,PISTON COOLING	1	Z311600001-
39	31Z2110072	. PIN	1	Z311600001-
40	01437-01030	BOLT	6	Z311600001-
41	07040-11007	PLUG	2	Z311600001-
42	CPF06-01012 K2	GASKET	2	Z311600001-
43	31Z2180179	SENSOR,OIL PRESSURE	1	Z311600001-
44	08052-11711	CLAMP	1	Z311600001-
45	CFB01-21030	BOLT	1	Z311600001-
46	31Z1210032	SPACER	1	Z311600001-
47	CFW02-11020	WASHER	1	Z311600001-
48	31Z2190214	PLATE, NAME	1	Z311600001-
49	04418-02550	SCREW	4	Z311600001-



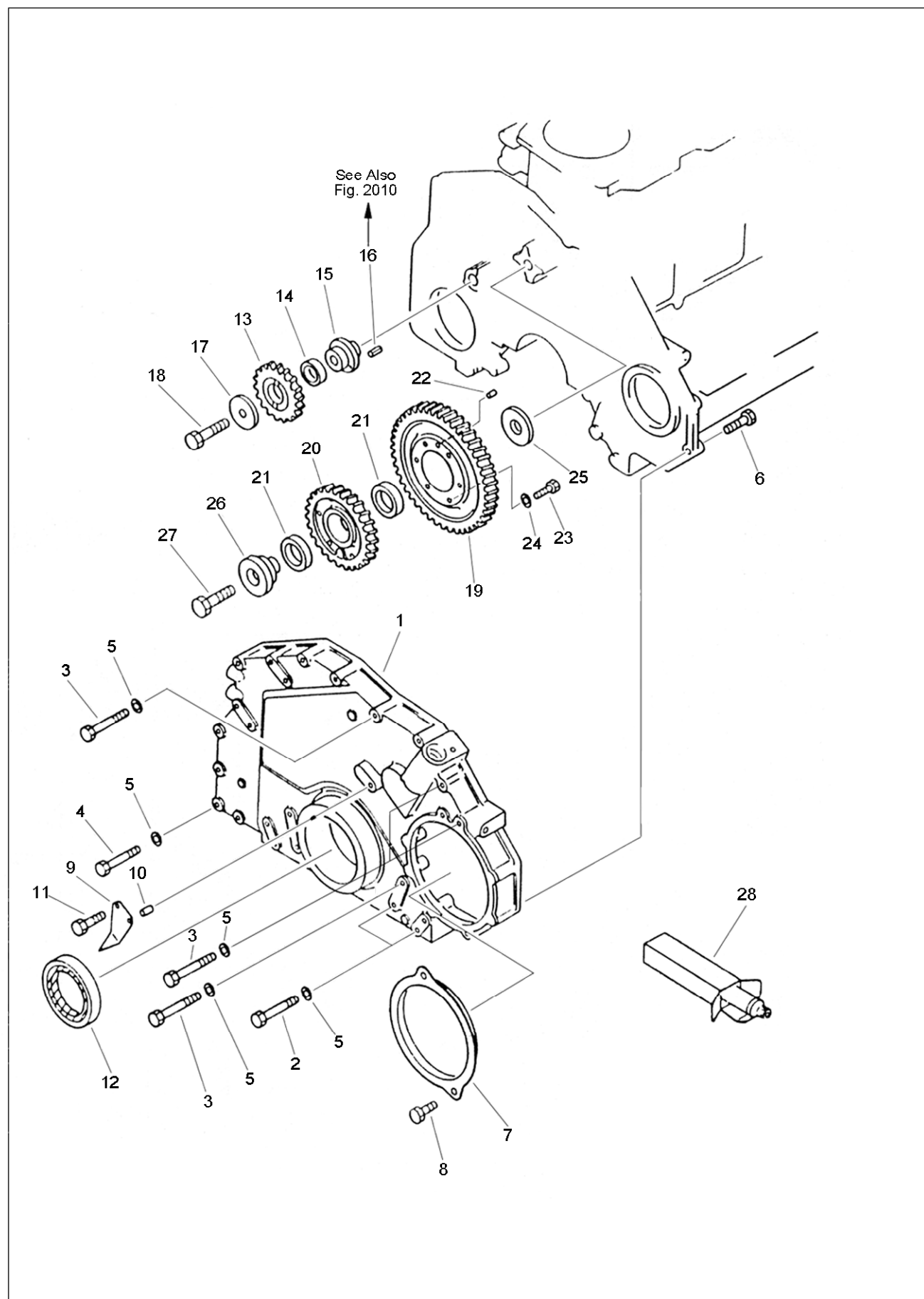
CYLINDER BLOCK COVER

FIG. No. 2011

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z2100403	COVER ASSLY	1	Z311600001-
1	(*30Z2120192)	. COVER	1	Z311600001-
2	(*30Z2120208)	. CONNECTOR	1	Z311600001-
3	30Z2180392	BREATER ASSLY	1	Z311600001-
4	30Z2160271 K2	O-RING	1	Z311600001-
5	07286-01990	HOSE	1	Z311600001-
6	07285-00220	CLIP	1	Z311600001-
7	30Z2120184	COVER	2	Z311600001-
8	30Z2160474 K2	GASKET	3	Z311600001-
9	30Z2110164	BOLT	9	Z311600001-
10	30Z2180376 K2	PACKING	9	Z311600001-
11	30Z2120176	COLLAR	1	Z311600001-
12	30Z2110115	NUT	1	Z311600001-
13	31Z2130103	GUIDE,OIL LEVEL GAUGE	1	Z311600001-
14	31Z2180162	GAUGE,OIL LEVEL	1	Z311600001-
15	31Z2110064	BRACKET	1	Z311600001-
16	31Z2110048	SEAT	1	Z311600001-
17	CFB01-21060	BOLT	1	Z311600001-
18	CFW02-11020	WASHER	1	Z311600001-
19	31Z2110089	BRACKET,OIL LEVEL GAUGE	1	Z311600001-
20	CFB01-21030	BOLT	1	Z311600001-
21	CFW02-11020	WASHER	2	Z311600001-
22	31Z2190052	CLAMP	2	Z311600001-
23	CFS01-31020	BOLT	2	Z311600001-
24	CFN01-21084	NUT	2	Z311600001-
25	CFW02-11020	WASHER	2	Z311600001-

FRONT COVER AND SUPPORT

FIG. No. 2060

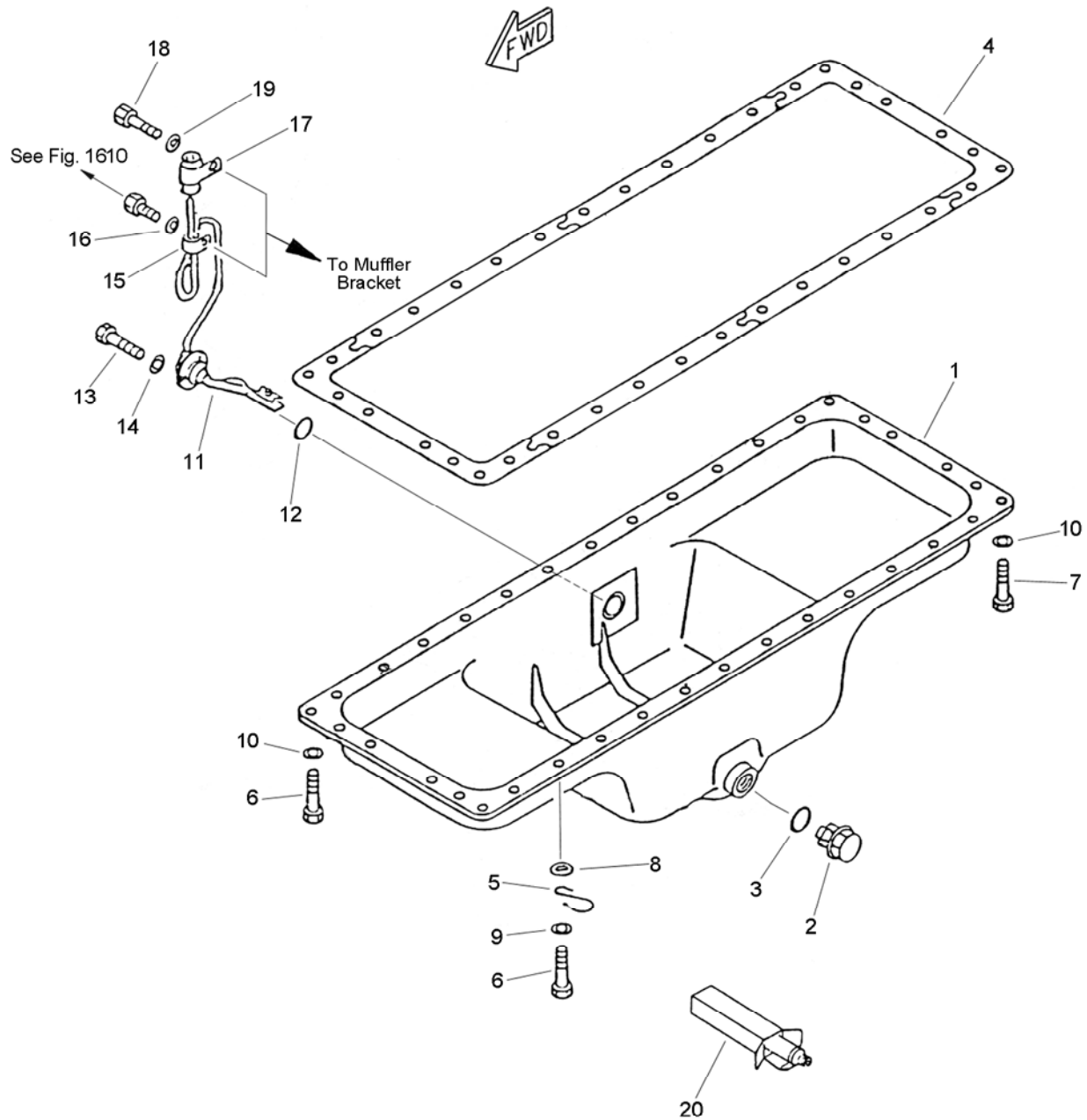


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FRONT COVER AND SUPPORT
FIG. No. 2050

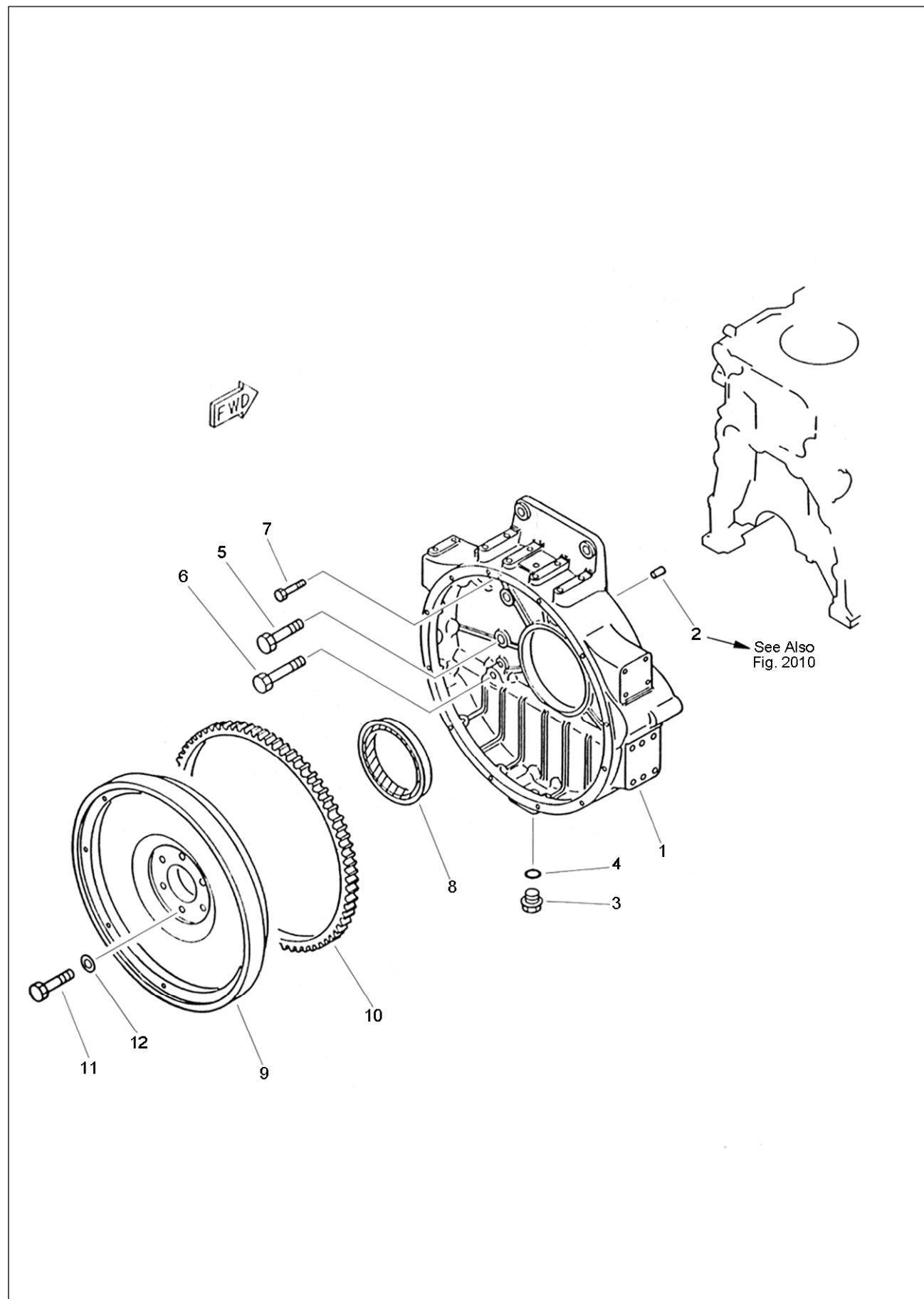
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z2340031	COVER,FRONT	1	Z311600001-
2	CFB01-21070	BOLT	4	Z311600001-
3	CFB01-21075	BOLT	5	Z311600001-
4	CFB01-21065	BOLT	7	Z311600001-
5	CFW02-11020	WASHER	16	Z311600001-
6	30Z2310112	BOLT	4	Z311600001-
7	30Z2330128	COVER	1	Z311600001-
8	CFS01-31020	BOLT	2	Z311600001-
9	31Z2310012	POINTER	1	Z311600001-0111
9	31Z2310061	POINTER	1	Z311600112-
10	31Z2310029	PIN	1	Z311600001-
11	CFS01-30610	BOLT	1	Z311600001-
12	30Z2380179 K2	SEAL,FRONT	1	Z311600001-
	30Z2300011	GEAR ASSY	1	Z311600001-
13	30Z2350143	GEAR	1	Z311600001-
14	30Z2380187	BUSHING	1	Z311600001-
15	30Z2310072	SHAFT	1	Z311600001-
16	CFP13-05012	PIN,SPRING	1	Z311600001-
17	30Z2310089	WASHER	1	Z311600001-
18	CFB01-21460	BOLT	1	Z311600001-
19	30Z2350216	GEAR	1	Z311600001-
	30Z2300222	GEAR ASSLY	1	Z311600001-
20	30Z2350232	GEAR	1	Z311600001-
21	30Z2380195	BUSHING	2	Z311600001-
22	30Z2310031	DOWEL PIN	1	Z311600001-
23	CFB01-21030	BOLT	6	Z311600001-
24	CFW06-10032	WASHER	6	Z311600001-
25	30Z2310056	PLATE	1	Z311600001-
26	30Z2310048	SHAFT	1	Z311600001-
27	30Z2310064	BOLT	1	Z311600001-
28	10Z5180559	LIQUID GASKET,LG-7	AR	Z311600001-

FIG. No. 2110 OIL PAN



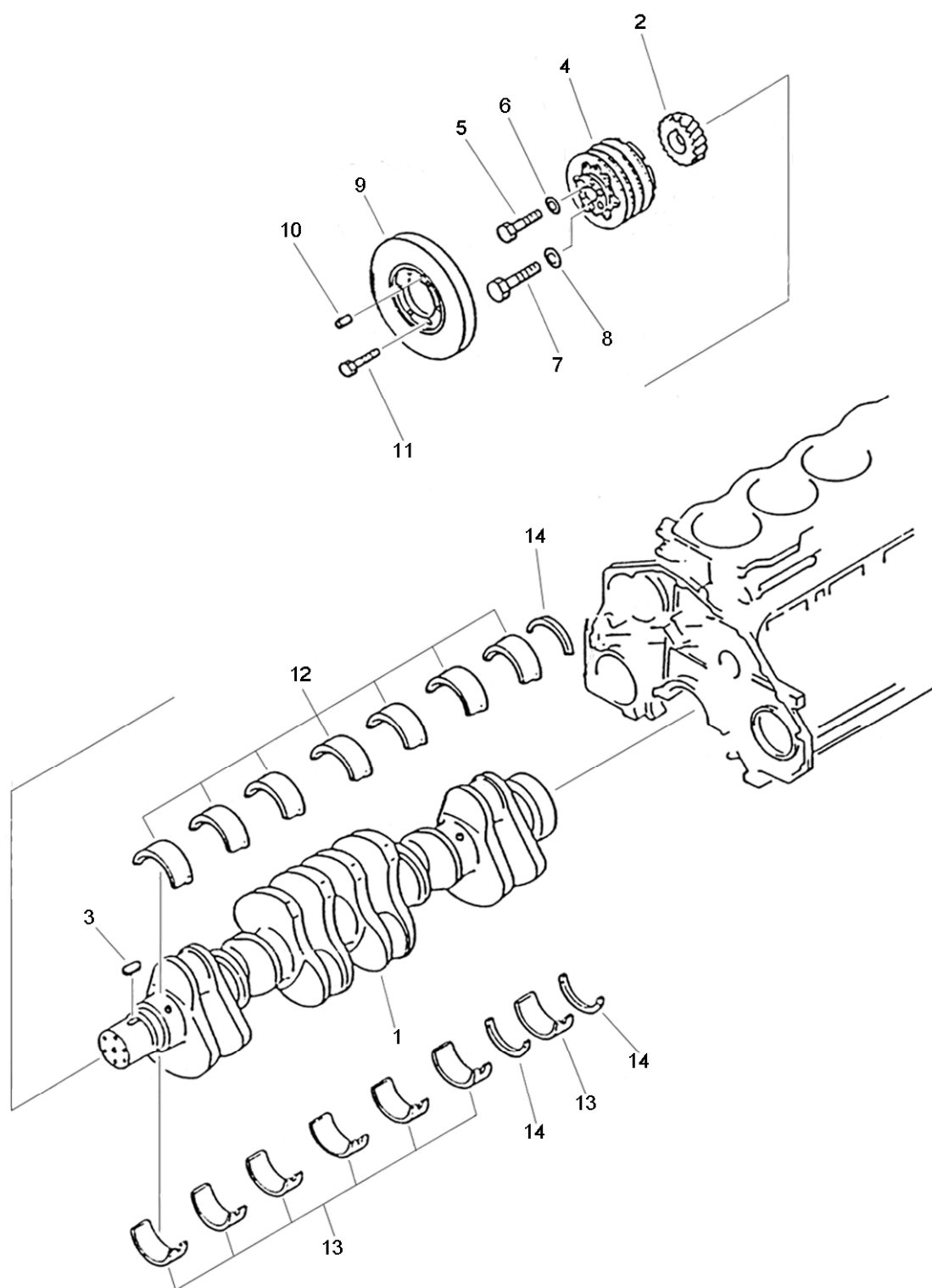
OIL PAN**FIG. No. 2110**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z5130247	PAN,OIL	1	Z311600001-0101
1	31Z5130417	PAN,OIL	1	Z311600102-
2	31Z5110142	PLUG	1	Z311600001-
3	07002-03634 K2	O-RING	1	Z311600001-
4	30Z5170467 K2	GASKET	1	Z311600001-0101
5	30Z2190411	CLIP	1	Z311600001-
6	CFB01-21030	BOLT	7	Z311600001-0101
6	CFB01-21035	BOLT	7	Z311600102-
7	CFB01-21025	BOLT	29	Z311600001-0101
7	CFB01-21030	BOLT	29	Z311600102-
8	CFW05-10032	WASHER	1	Z311600001-
9	CFW02-11020	WASHER	1	Z311600001-
10	CFW02-11020	WASHER	35	Z311600001-0101
10	CFW01-11030	WASHER	35	Z311600102-
11	31Z5180557	SENSOR,OIL LEVEL	1	Z311600001-
12	31Z5160614 K2	O-RING	1	Z311600001-
13	CFS01-30612	BOLT	3	Z311600001-
14	CFW03-10616	WASHER	3	Z311600001-
15	CCC06-10810	CLIP	1	Z311600001-
16	CFW02-11020	WASHER	1	Z311600001-
17	08052-11311	CLIP	1	Z311600001-
18	CFS01-31016	BOLT	1	Z311600001-
19	CFW05-10032	WASHER	1	Z311600001-
20	10Z5180559	LIQUID GASKET,LG-7	AR	Z311600102-



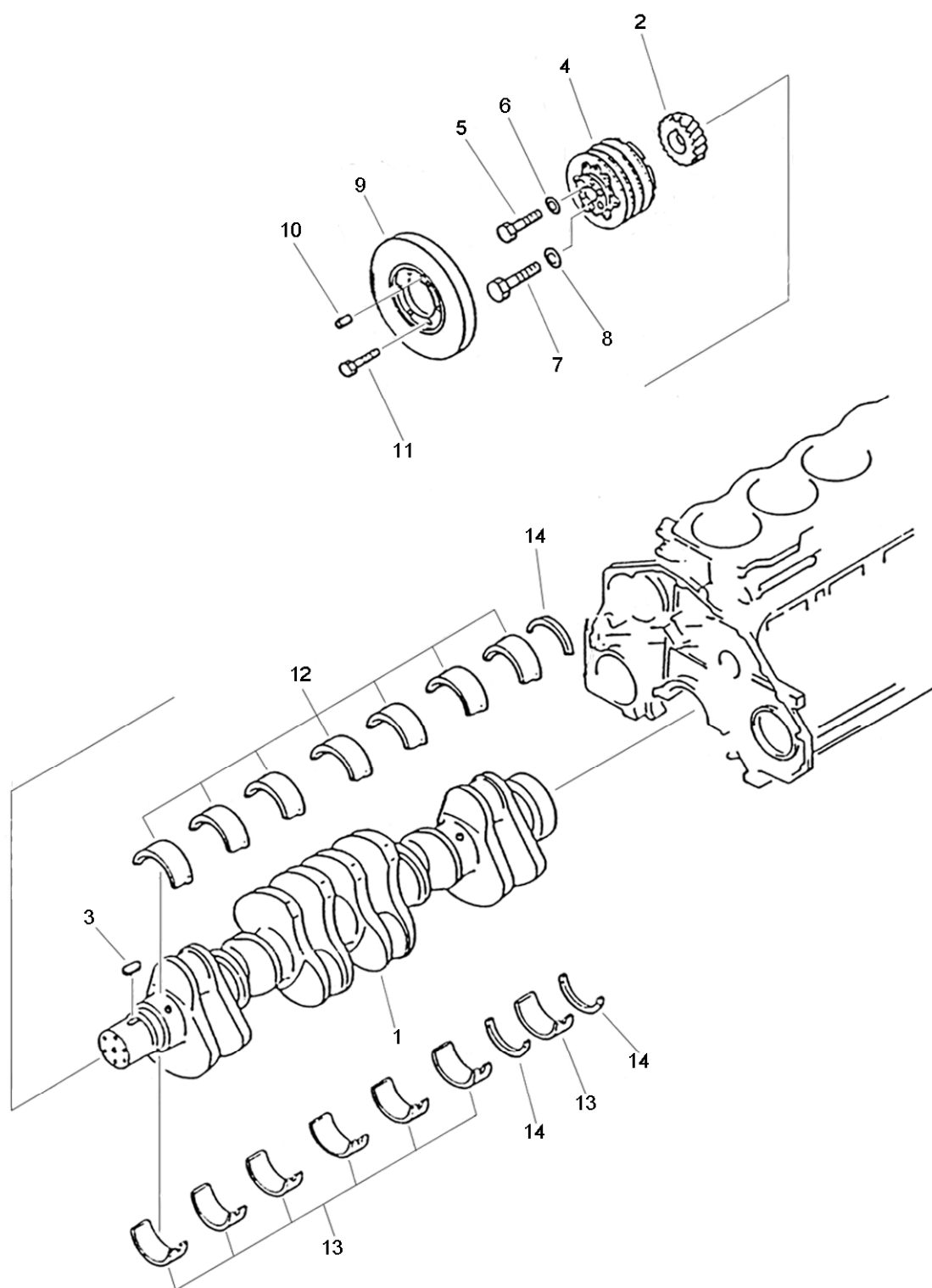
FLYWHEEL & FLY WHEEL HOUSING
FIG. No. 2210

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z3240022	HOUSING, FLY WHEEL	1	Z311600001-
2	30Z3210111	PIN	2	Z311600001-
3	CPL03-12412	PLUG	1	Z311600001-
4	07002-02434 K2	O-RING	1	Z311600001-
5	CFB01-21650	BOLT	6	Z311600001-
6	CFB01-21660	BOLT	2	Z311600001-
7	CFB01-21050	BOLT	2	Z311600001-
8	30Z3280842 K2	SEAL	1	Z311600001-
	31Z3200016	FLY WHEEL ASSLY	1	Z311600001-
9	31Z3240039	. FLY WHEEL	1	Z311600001-
10	31Z3250042	. GEAR,RING	1	Z311600001-
11	CFB17-51645	BOLT	6	Z311600001-
12	CFW05-16045	WASHER	6	Z311600001-



CRANKSHAFT AND DAMPER**FIG. No. 2310**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z3100143	CRANK SHAFT ASSLY	1	Z311600001-
1	(*31Z3150048)	. CRANK SHAFT	1	Z311600001-
2	30Z3150083	. GEAR, CRANK SHAFT	1	Z311600001-
3	30Z3190227	. KEY	1	Z311600001-
4	31Z3140158	PULLEY	1	Z311600001-
5	01051-51430	BOLT	1	Z311600001-
6	30Z3110036	WASHER	1	Z311600001-
7	01051-51635	BOLT	5	Z311600001-
8	30Z3210128	WASHER	5	Z311600001-
9	31Z3180083	DAMPER ASSLY	1	Z311600001-
10	CFP04-01228	DOWEL PIN	1	Z311600001-
11	CFS01-31225	BOLT	6	Z311600001-
	30Z3100243	BEARING,MAIN STD.1 ENG.SET	1	Z311600001-
	30Z3100251	. BEARING,MAIN,STD.1 PAIR	7	Z311600001-
12	(*30Z3180118)	.. BEARING,MAIN,UPPER,STD	1	Z311600001-
13	(*30Z3180126)	.. BEARING,MAIN,LOWER,STD	1	Z311600001-
	30Z3100284	. BEARING,THRUST,STD,ASSLY	1	Z311600001-
14	(*30Z3180134)	.. MAIN BEARING, THRUST	3	Z311600001-
	30Z3100292	BEARING, MAIN,US 0.25 1 PAIR	7	Z311600001-
12	(*30Z3180304)	. BEARING, MAIN,UPPER, U/S 0.25	1	Z311600001-
13	(*30Z3180312)	. BEARING, MAIN,LOWER, U/S 0.25	1	Z311600001-
	30Z3100413	BEARING, THRUST,OS 0.25, ASSL	1	Z311600001-
14	(*30Z3180426)	. BEARING, THRUST,OS 0.25,	3	Z311600001-
	30Z3100324	BEARING, MAIN,US 0.50, 1 PAIR	7	Z311600001-
12	(*30Z3180337)	. BEARING, MAIN,UPPER,U/S 0.50	1	Z311600001-
13	(*30Z3180345)	. BEARING, MAIN,LOWER,U/S 0.50	1	Z311600001-
	30Z3100438	BEARING, THRUST,OS 0.50, ASSL	1	Z311600001-
14	(*30Z3180467)	. BEARING, THRUST,OS 0.50	3	Z311600001-
	30Z3100357	BEARING, MAIN,US 0.75,1 PAIR	7	Z311600001-
12	(*30Z3180361)	. BEARING, MAIN,UPPER, US 0.75	1	Z311600001-
13	(*30Z3180378)	. BEARING, MAIN,LOWER,U/S 0.75	1	Z311600001-

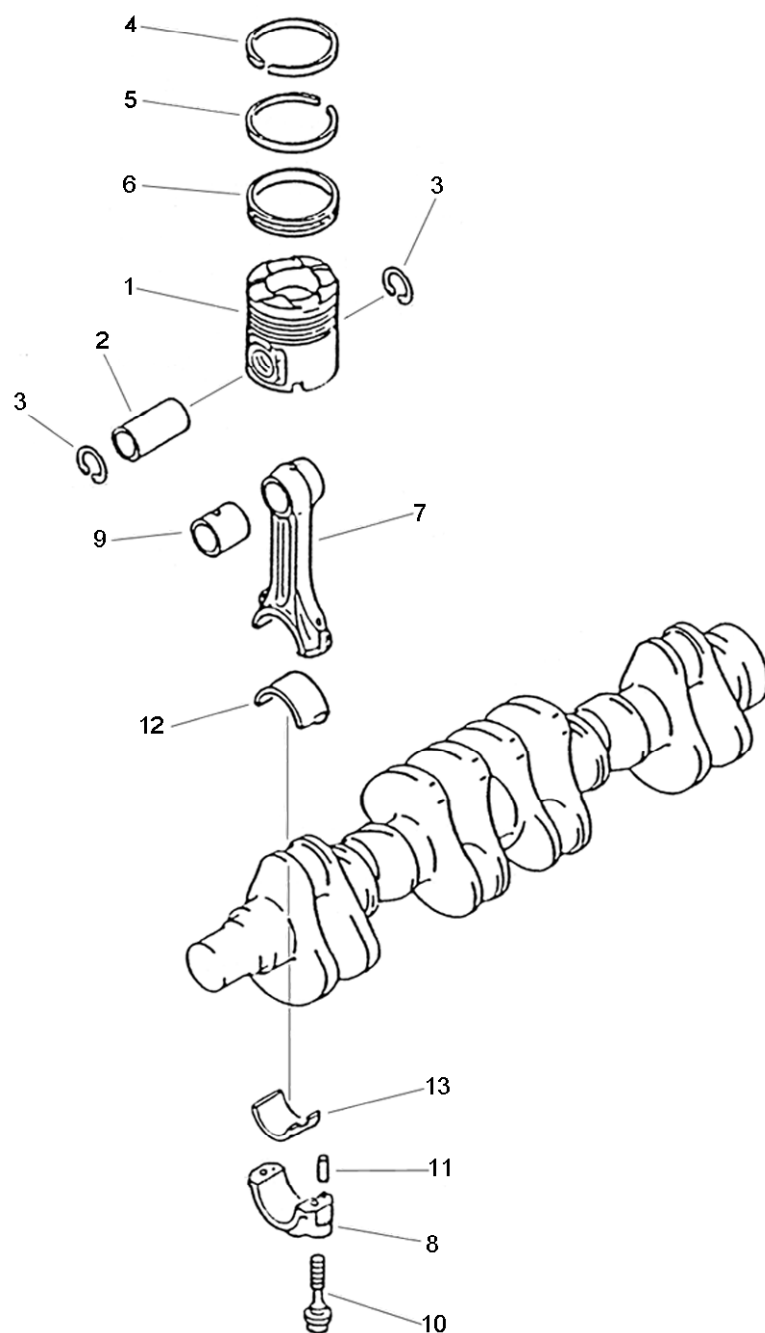


CRANKSHAFT AND DAMPER**FIG. No. 2310**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
14	30Z3100454	BEARING, THRUST,OS 0.75, ASSL	1	Z311600001-
	(*30Z3180442)	. BEARING,THRUST,OS 0.75	3	Z311600001-
12	30Z3100381	BEARING,MAIN,US 1.00,1 PAIR	7	Z311600001-
	(*30Z3180394)	. BEARING,MAIN,UPPER,U/S 1.00	1	Z311600001-
13	(*30Z3180401)	. BEARING,MAIN,LOWER,U/S 1.00	1	Z311600001-
14	30Z3100479	BEARING,THRUST,OS 1.00, ASSL	1	Z311600001-
	(*30Z3180483)	. BEARING,THRUST,OS 1.00	3	Z311600001-

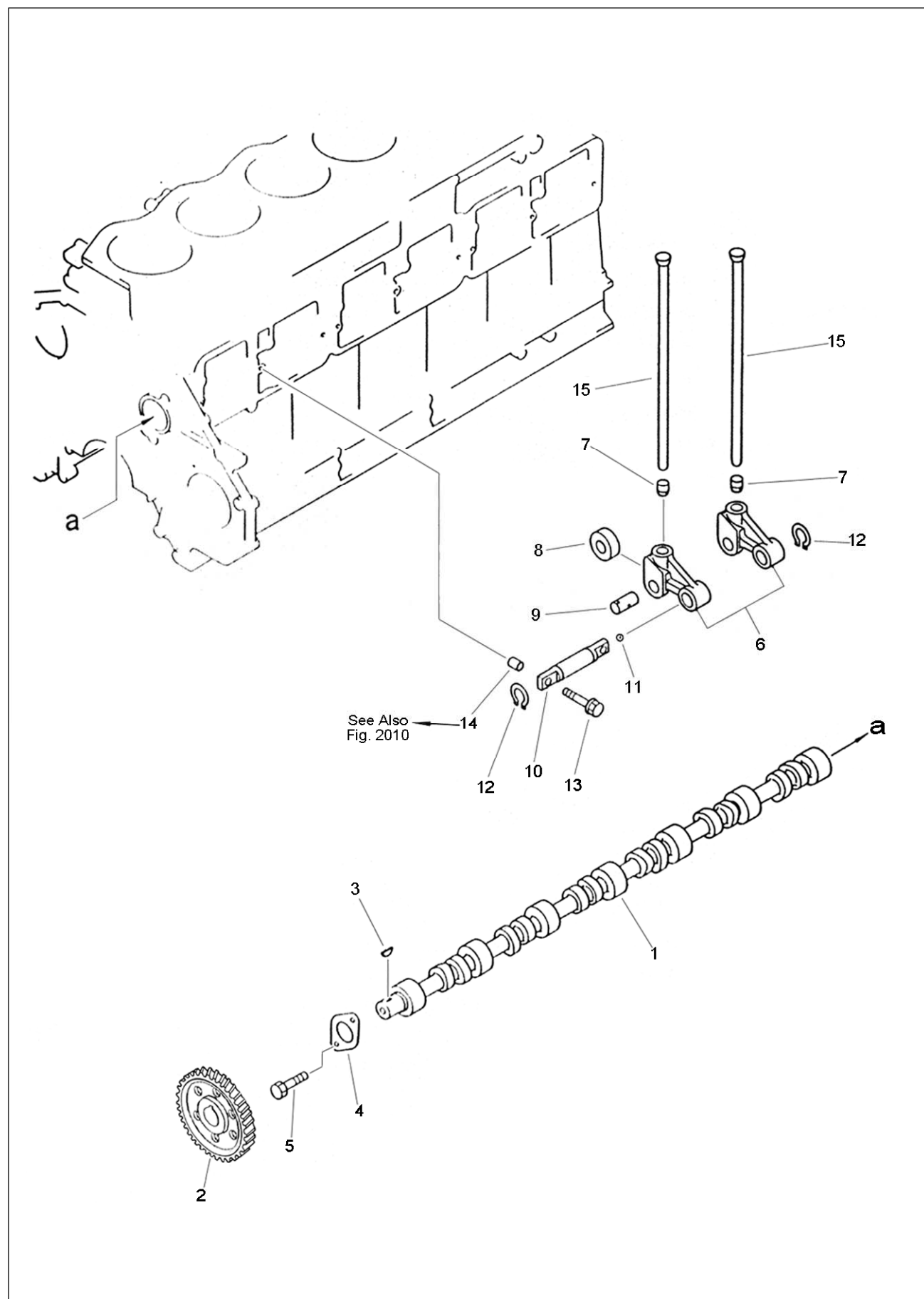
PISTON AND CONNECTING ROD

FIG. No. 2350



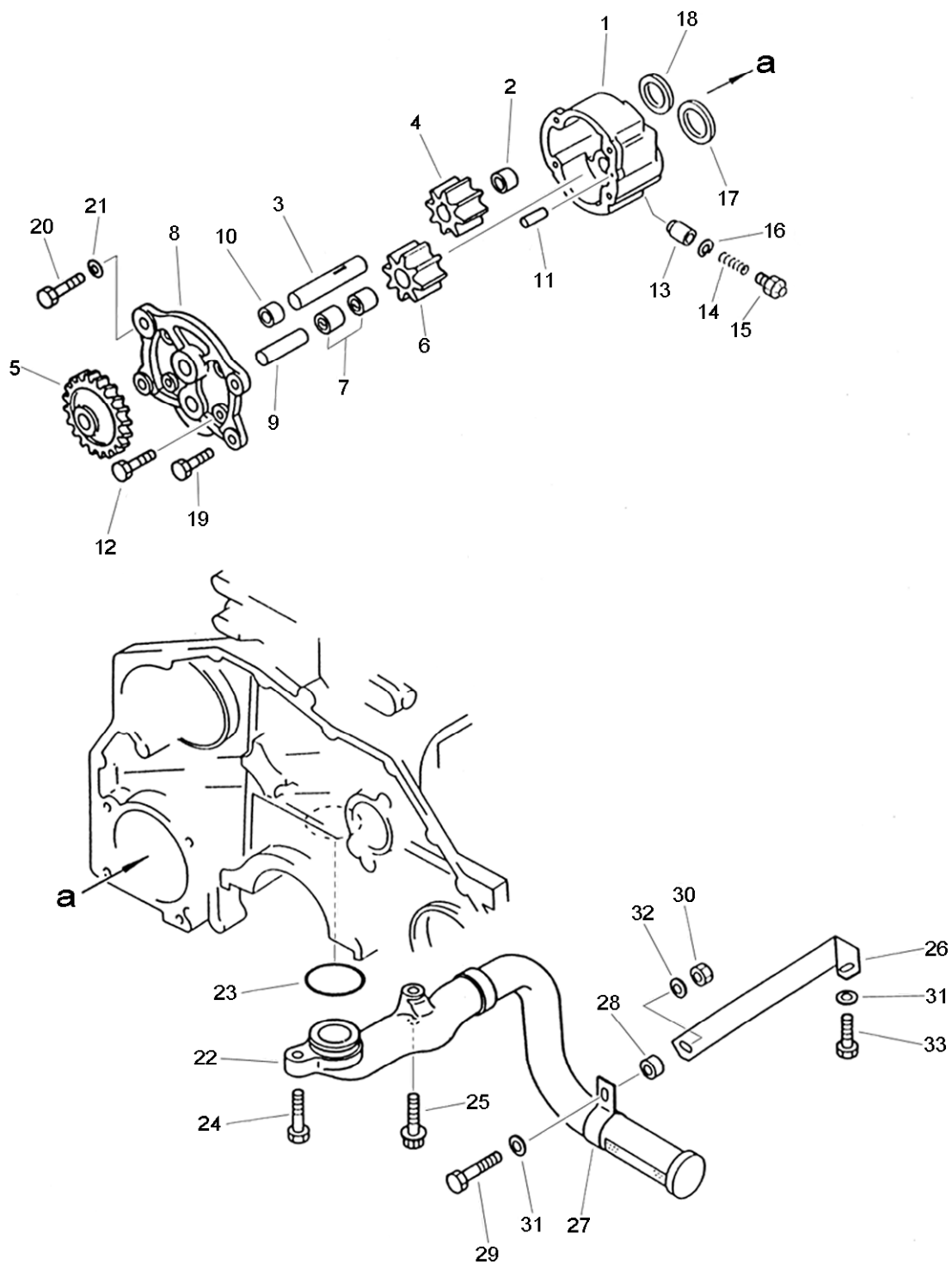
PISTON & CONNECTING ROD
FIG. No. 2350

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z3180067	PISTON	6	Z311600001-
2	31Z3110025	PIN	6	Z311600001-
3	CFL02-14818	SNAP RING	12	Z311600001-
	30Z3100657	PISTON RING ASSLY	6	Z311600001-
4	30Z3180215	. RING, PISTON, TOP	1	Z311600001-
5	30Z3180678	. RING, PISTON, SECOND	1	Z311600001-
6	30Z3180167	. RING, PISTON, OIL	1	Z311600001-
	31Z3100013	CON ROD ASSLY	6	Z311600001-
7	(*31Z3150056)	. CON ROD	1	Z311600001-
8	(*30Z3150107)	. CAP, CON ROD	1	Z311600001-
9	30Z3180175	. BUSHING, CON ROD	1	Z311600001-
10	30Z3110052	. BOLT, CON ROD	2	Z311600001-
11	02400-10413	. DOWEL PIN	2	Z311600001-
	30Z3100495	BEARING,CRNKPIN,STD(SP),1PR	6	Z311600001-
12	(*30Z3180183)	. BEARING,CRNKPIN,UPPER,STD	1	Z311600001-
13	(*30Z3180191)	. BEARING,CRNKPIN,LOWER,STD	1	Z311600001-
	30Z3100527	BEARING,CRNKPIN,US 0.25,PAIR	6	Z311600001-
12	(*30Z3180531)	. BEARING,CRNKPIN,UPPER US 0.25	1	Z311600001-
13	(*30Z3180548)	. BEARING,CRNKPIN,LOWER,US 0.25	1	Z311600001-
	30Z3100551	BEARING,CRNKPIN,US 0.50,PAIR	6	Z311600001-
12	(*30Z3180564)	. BEARING,CRNKPIN,UPPER,US 0.50	1	Z311600001-
13	(*30Z3180572)	. BEARING,CRNKPIN,LOWER,US 0.50	1	Z311600001-
	30Z3100584	BEARING,CRNKPIN,US 0.75,PAIR	6	Z311600001-
12	(*30Z3180597)	. BEARING,CRNKPIN,UPPER,US 0.75	1	Z311600001-
13	(*30Z3180604)	. BEARING,CRNKPIN,LOWER,US 0.75	1	Z311600001-
	30Z3100616	BEARING,CRNKPIN,US 1.00,PAIR	6	Z311600001-
12	(*30Z3180629)	. BEARING,CRNKPIN,UPPER,US 1.00	1	Z311600001-
13	(*30Z3180637)	. BEARING,CRNKPIN,LOWER,US 1.00	1	Z311600001-



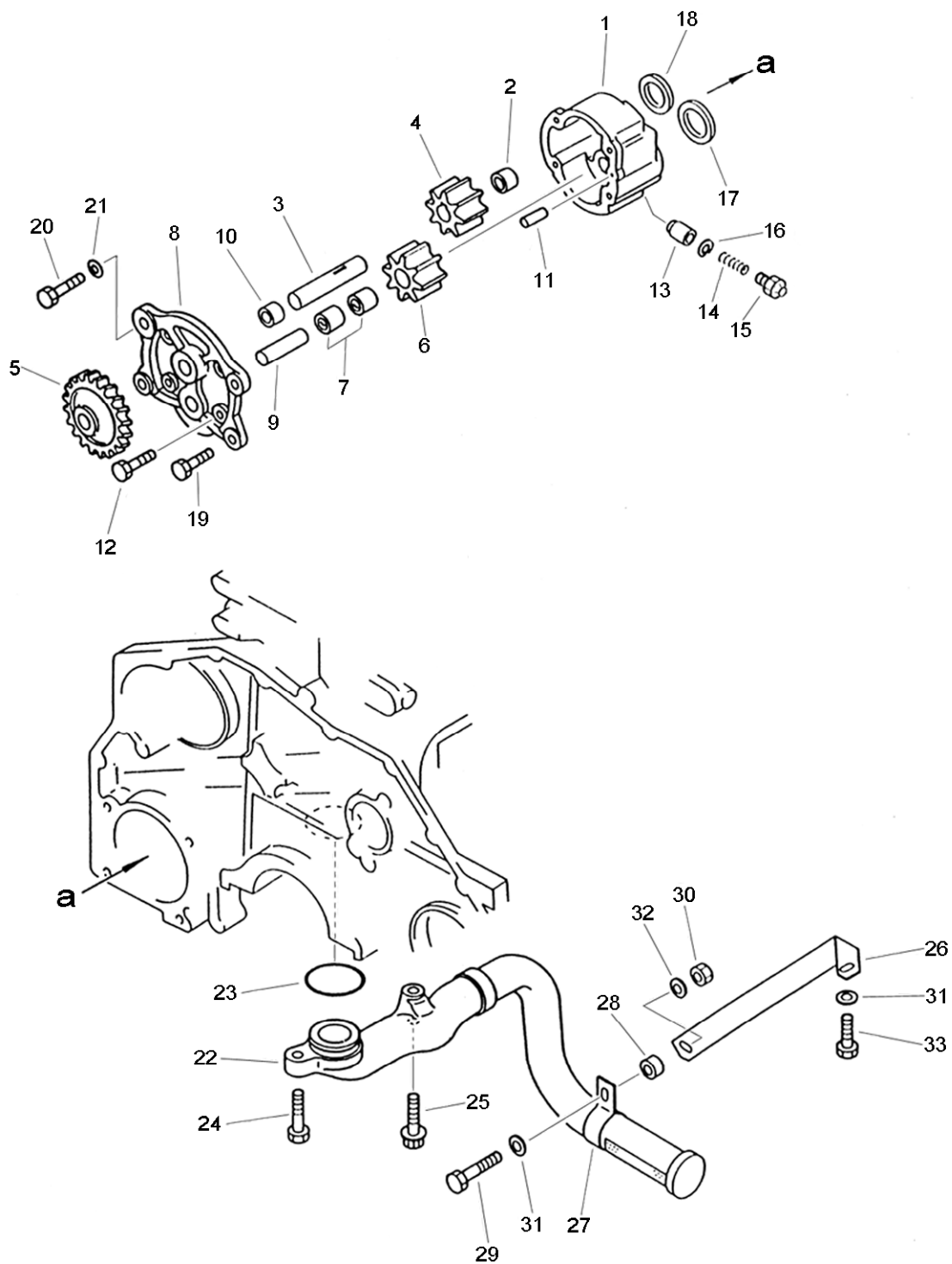
CAM SHAFT & TAPPET
FIG. No. 2410

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z4100018	CAM SHAFT ASSLY	1	Z311600001-
1	(*30Z4110305)	. CAM SHAFT	1	Z311600001-
2	30Z4150271	. GEAR, CAM SHAFT	1	Z311600001-
3	04010-00725	. KEY	1	Z311600001-
4	30Z4110102	. PLATE, THRUST	1	Z311600001-
5	01010-31022	BOLT	2	Z311600001-
	30Z4100026	LEVER ASSLY SET	6	Z311600001-
	30Z4100034	. LEVER ASSLY	2	Z311600001-
6	30Z4140268	.. LEVER	1	Z311600001-
7	30Z4110119	.. SOCKET	1	Z311600001-
8	30Z4110127	.. ROLLER	1	Z311600001-
9	30Z4120358	.. PIN	1	Z311600001-
	30Z4100042	. SHAFT ASSLY	1	Z311600001-
10	30Z4110143	.. SHAFT	1	Z311600001-
11	30Z4190318	.. BALL	1	Z311600001-
12	CFL01-12012	. SNAP RING	2	Z311600001-
13	30Z4110135	BOLT	12	Z311600001-
14	30Z2110156	PIN	12	Z311600001-
15	30Z4110151	PUSH ROD	12	Z311600001-



LUBRICATING OIL PUMP & SUCTION PIPE
FIG. No. 3010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z5100025	OIL PUMP ASSLY	1	Z311600001-
	31Z5100041	. BODY ASSLY,OIL PUMP	1	Z311600001-
1	(*31Z5140348)	.. BODY, OIL PUMP	1	Z311600001-
2	31Z5180508	.. BUSH,OIL PUMP	1	Z311600001-
	31Z5100058	. SHAFT ASSLY	1	Z311600001-
3	31Z5110183	.. SHAFT	1	Z311600001-
4	31Z5180516	.. GEAR DRIVEN, OIL PUMP	1	Z311600001-
5	31Z5150351	. GEAR, OIL PUMP	1	Z311600001-
	31Z5100066	. GEAR ASSY, OIL PUMP	1	Z311600001-
6	31Z5180484	.. GEAR,DRIVEN, OIL PUMP	1	Z311600001-
7	31Z5180492	.. BUSH, OIL PUMP	2	Z311600001-
	31Z5100033	. COVER ASSLY, OIL PUMP	1	Z311600001-
8	(*31Z5140331)	.. COVER, OIL PUMP	1	Z311600001-
9	31Z5110191	.. SHAFT,DRIVEN,OIL PUMP	1	Z311600001-
10	31Z5180508	.. BUSH OIL PUMP	1	Z311600001-
11	30Z5110112	. PIN	1	Z311600001-
12	CFS01-30825	. BOLT	4	Z311600001-
13	30Z5110129	. VALVE OIL PUMP	1	Z311600001-
14	30Z5110137	. SPRING,OIL PUMP	1	Z311600001-
15	31Z5110159	. PLUG	1	Z311600001-
16	30Z5190611	. SHIM,OIL PUMP	1	Z311600001-
17	30Z5160422 K2	RING	1	Z311600001-
18	30Z5160439 K2	GASKET	1	Z311600001-
19	CFB01-21025	BOLT	3	Z311600001-
20	CFB01-21035	BOLT	1	Z311600001-
21	CFW05-10032	WASHER	1	Z311600001-
22	31Z5130255	STRAINER	1	Z311600001-
23	07000-63045 K2	O-RING	1	Z311600001-
24	CFB01-21035	BOLT	1	Z311600001-
25	30Z4110224	BOLT	1	Z311600001-
26	31Z5110175	BRACKET	1	Z311600001-
27	31Z5190163	CLAMP	1	Z311600001-

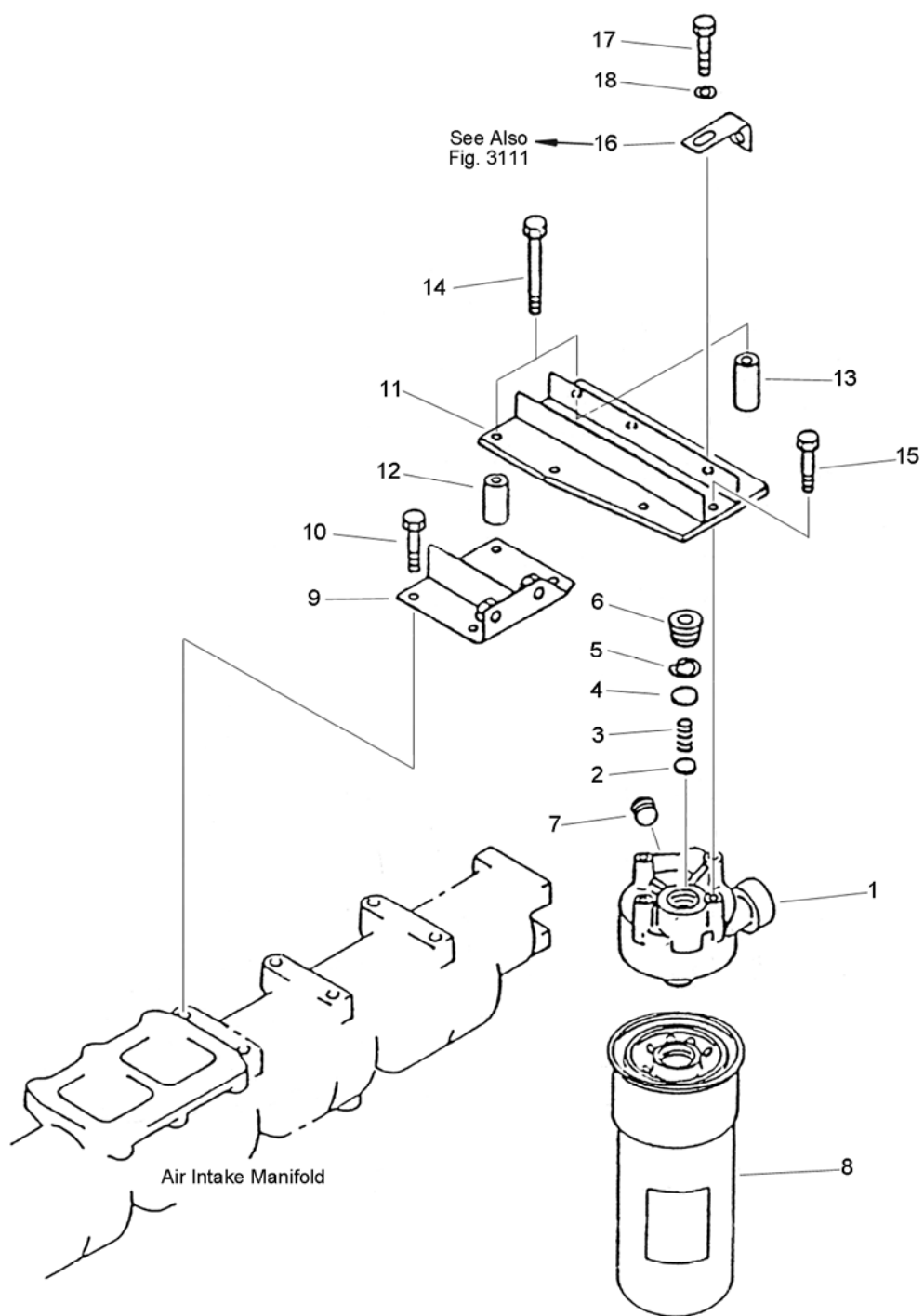


LUBRICATING OIL PUMP & SUCTION PIPE

FIG. No. 3010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
28	31Z5110094	SPACER	3	Z311600001-
29	CFB01-21040	BOLT	1	Z311600001-
30	CFN01-21084	NUT	1	Z311600001-
31	CFW02-11020	WASHER	2	Z311600001-
32	31Z5110101	WASHER	1	Z311600001-
33	CFS01-31020	BOLT	1	Z311600001-

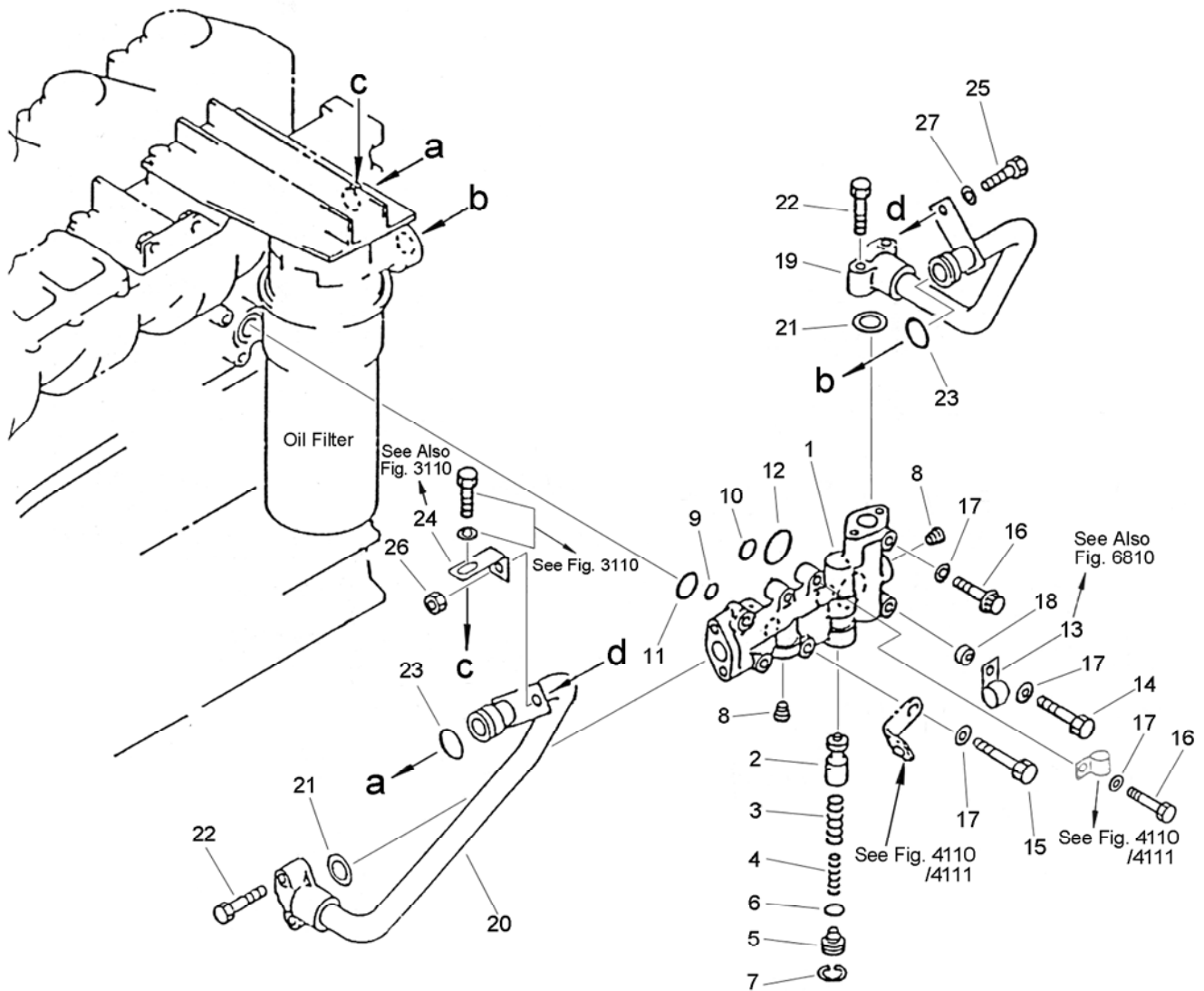
FIG. No. 3110 LUBRICATING OIL FILTER



LUBRICATING OIL FILTER**FIG. No. 3110**

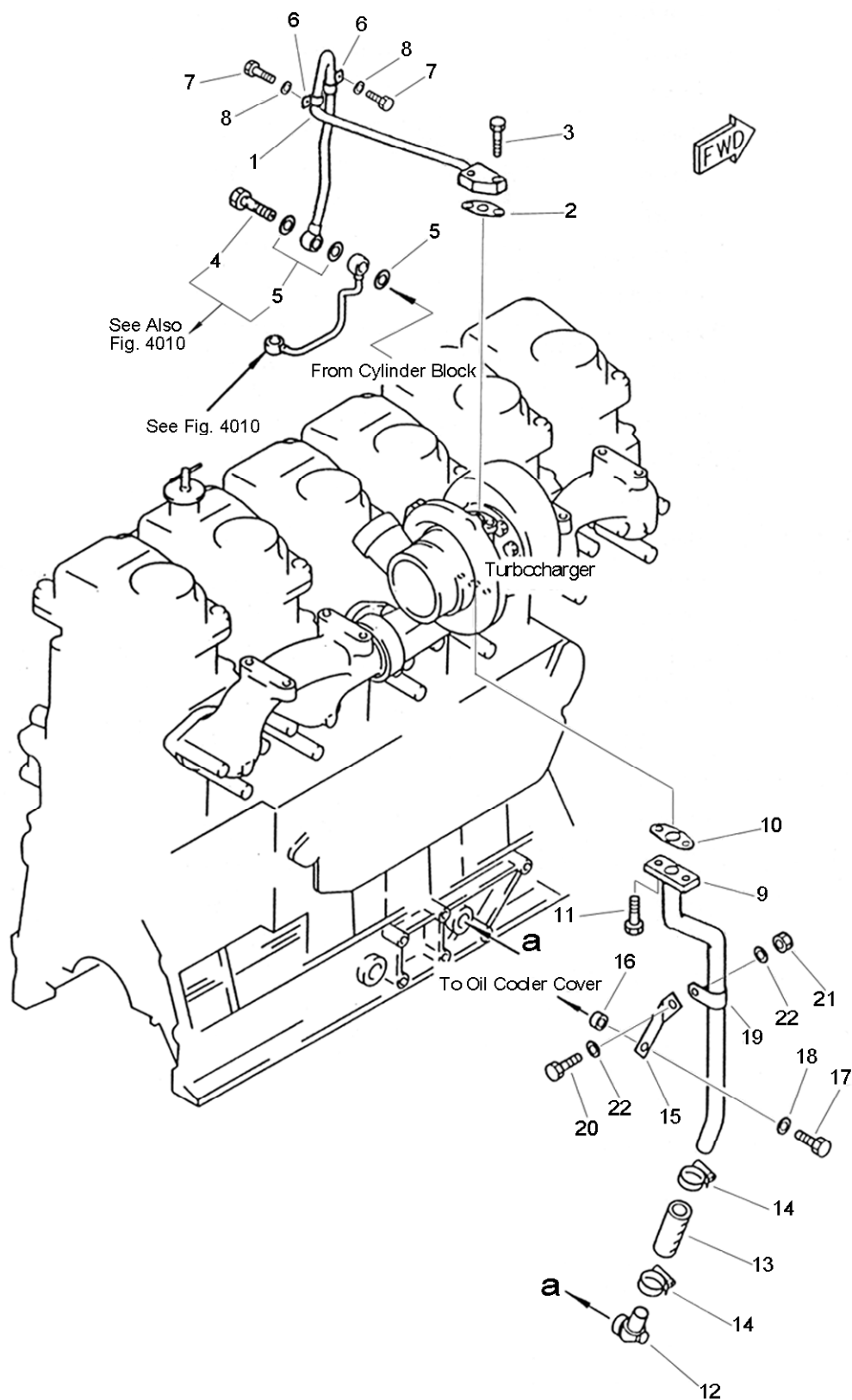
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z5100082	FILTER,OIL, ASSLY	1	Z311600001-
1	31Z5120235	. HEAD OIL FILTER	1	Z311600001-
2	31Z5180468	. DISC,OIL FILTER	1	Z311600001-
3	31Z5180524	. SPRING, OIL FILTER	1	Z311600001-
4	31Z5180451	. RETAINER,OIL FILTER	1	Z311600001-
5	CFL02-13012	. SNAP RING	1	Z311600001-
6	02720-21616	. PLUG	1	Z311600001-
7	07043-50617	. PLUG	1	Z311600001-
8	31Z5180443	. CARTRIDGE,OIL FILTER	1	Z311600001-
9	31Z7130089	BRACKET,FUEL FILTER	1	Z311600001-
10	CFB01-21025	BOLT	2	Z311600001-
11	31Z5130263	BRACKET	1	Z311600001-
12	31Z5110134	SPACER	2	Z311600001-
13	31Z5110215	SPACER	2	Z311600001-
14	CFB01-21080	BOLT	4	Z311600001-
15	CFB01-21030	BOLT	3	Z311600001-
16	31Z5110126	BRACKET	1	Z311600001-
17	CFB01-21035	BOLT	1	Z311600001-
18	CFW05-10032	WASHER	1	Z311600001-

FIG. No. 3111 LUBRICATING OIL PIPING



LUBRICATING OIL PIPING
FIG. No. 3111

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z5100074	ADAPTER ASSY	1	Z311600001-
1	30Z5120643	. BODY, ADAPTER	1	Z311600001-
2	30Z5110178	. VALVE, ADAPTER	1	Z311600001-
3	30Z5110218	. SPRING, OUTER	1	Z311600001-
4	30Z5110226	. SPRING, INNER	1	Z311600001-
5	30Z5110186	. PLUG	1	Z311600001-
6	07000-62020 K2	. O-RING	1	Z311600001-
7	CFL02-12412	. RING, SNAP	1	Z311600001-
8	CPL02-11217	. PLUG	2	Z311600001-
9	07000-62015 K2	O-RING	1	Z311600001-
10	07000-62020 K2	O-RING	1	Z311600001-
11	07000-63028 K2	O-RING	1	Z311600001-
12	07000-63035 K2	O-RING	1	Z311600001-
13	31Z8290147	CLIP	1	Z311600001-
14	CFB01-21060	BOLT	1	Z311600001-
15	CFB01-21050	BOLT	1	Z311600001-
16	30Z4110224	BOLT	5	Z311600001-
17	CFW02-11020	WASHER	7	Z311600001-
18	31Z1210032	SPACER	1	Z311600001-
19	31Z5130271	TUBE	1	Z311600001-
20	31Z5130288	TUBE	1	Z311600001-
21	30Z5160414 K2	GROMMET	2	Z311600001-
22	CFB01-21050	BOLT	4	Z311600001-
23	07000-63025 K2	O-RING	2	Z311600001-
24	31Z5110126	BRACKET	1	Z311600001-
25	CFB01-21025	BOLT	1	Z311600001-
26	CFN01-21084	NUT	1	Z311600001-
27	CFW05-10032	WASHER	1	Z311600001-

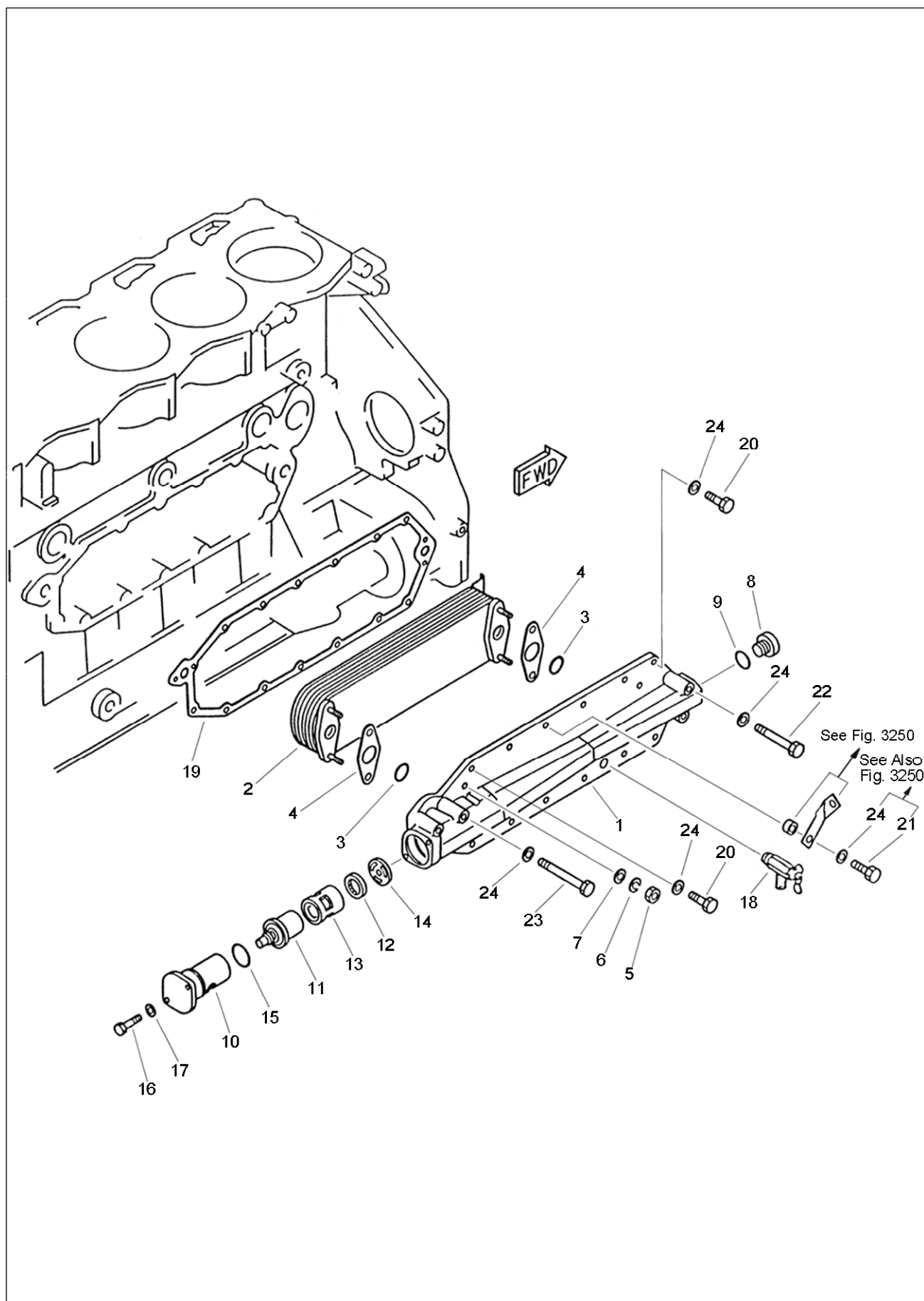


TURBOCHARGER LUBRICATING OIL PIPING
FIG. No. 3250

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z5130603	TUBE	1	Z311600001-
2	31Z5170367 K1	GASKET	1	Z311600001-
3	CFB01-20830	BOLT	2	Z311600001-
4	31Z7110016	BOLT	1	Z311600001-
5	CPF06-01412 K1	GASKET	3	Z311600001-
6	41Z5190557	CLIP	2	Z311600001-
7	CFS01-31016	BOLT	2	Z311600001-
8	CFW02-11020	WASHER	2	Z311600001-
9	31Z5130311	TUBE	1	Z311600001-
10	31Z5170375 K1	GASKET	1	Z311600001-
11	CFS01-30820	BOLT	2	Z311600001-
12	31Z5130296	ELBOW	1	Z311600001-
13	07260-22011	HOSE	1	Z311600001-
14	CCC01-03510	CLAMP	2	Z311600001-
15	31Z5110207	STAY	1	Z311600001-
16	31Z5110118	SPACER	1	Z311600001-
17	CFB01-21040	BOLT	1	Z311600001-
18	CFW02-11020	WASHER	1	Z311600001-
19	31Z5190544	CLAMP	1	Z311600001-
20	CFS01-31020	BOLT	1	Z311600001-
21	CFN01-21084	NUT	1	Z311600001-
22	CFW02-11020	WASHER	2	Z311600001-

LUBRICATING OIL COOLER

FIG. No. 3310

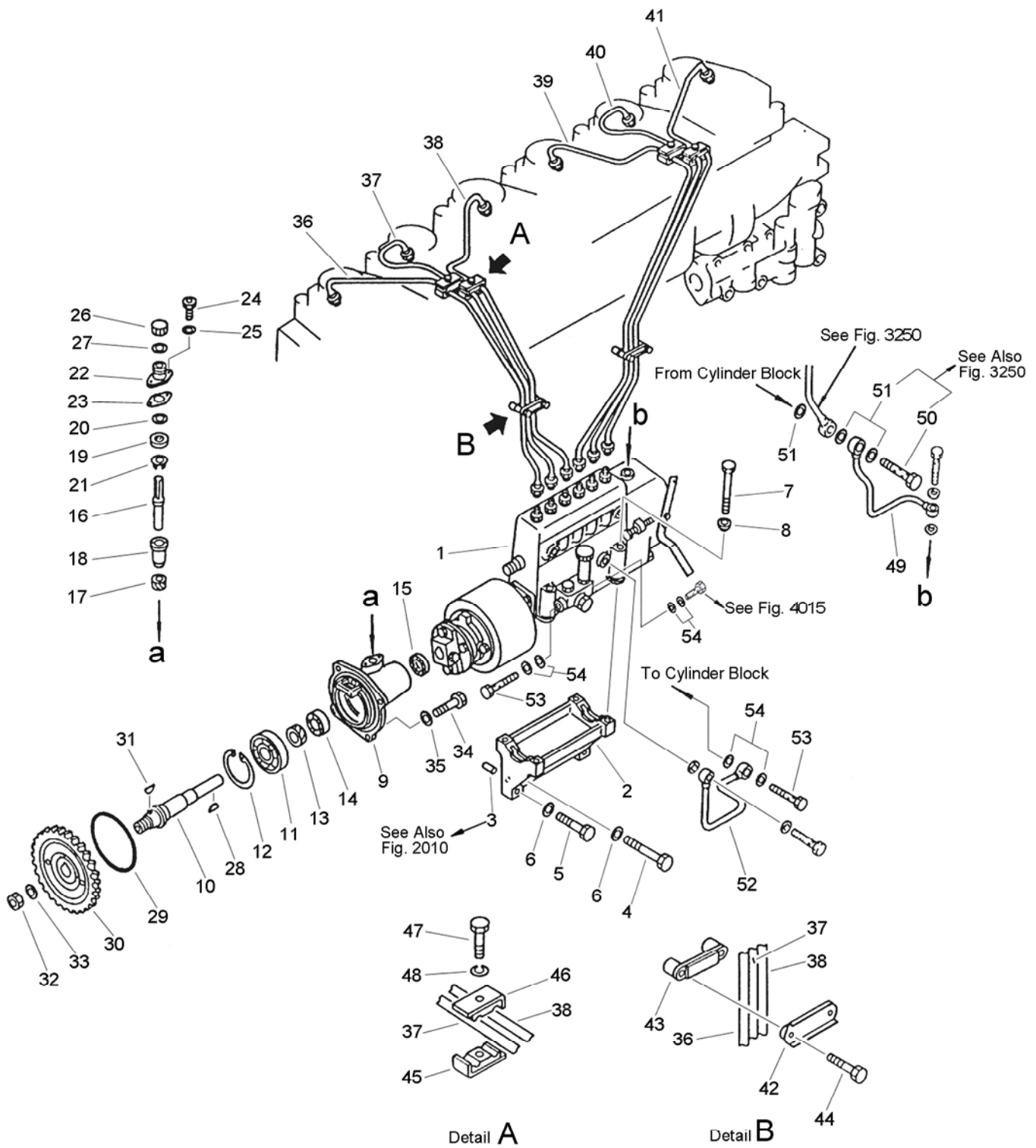


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LUBRICATING OIL COOLER
FIG. No. 3310

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z5100585	OIL COOLER	1	Z311600001-
1	30Z5120254	. COVER	1	Z311600001-
2	31Z5180598	. ELEMENT	1	Z311600001-
3	30Z5160447 K2	. O-RING	2	Z311600001-
4	30Z5160455 K2	. GASKET	2	Z311600001-
5	CFN19-41008	. NUT	4	Z311600001-
6	CFW01-11030	. WASHER	4	Z311600001-
7	CFW02-11020	. WASHER	4	Z311600001-
8	30Z5120279	. PLUG	1	Z311600001-
9	30Z5170475 K2	. O-RING, OIL COOLER	1	Z311600001-
10	30Z5120262	. COVER	1	Z311600001-
11	30Z5180632	. THERMO VALVE	1	Z311600001-
12	30Z5180576 K2	. SEAL,OIL COOLER	1	Z311600001-
13	30Z5140383	. COLLAR,OIL COOLER	1	Z311600001-
14	30Z5110194	. PLATE,OIL COOLER	1	Z311600001-
15	07000-63042 K2	. O-RING	1	Z311600001-
16	CFS01-30825	. BOLT	2	Z311600001-
17	CFW02-11020	. WASHER	2	Z311600001-
18	31Z5180435	VALVE	1	Z311600001-
19	30Z5170483 K2	GASKET	1	Z311600001-
20	CFB01-21025	BOLT	12	Z311600001-
21	CFB01-21040	BOLT	1	Z311600001-
22	CFB01-21065	BOLT	2	Z311600001-
23	CFB01-21080	BOLT	2	Z311600001-
24	CFW02-11020	WASHER	17	Z311600001-

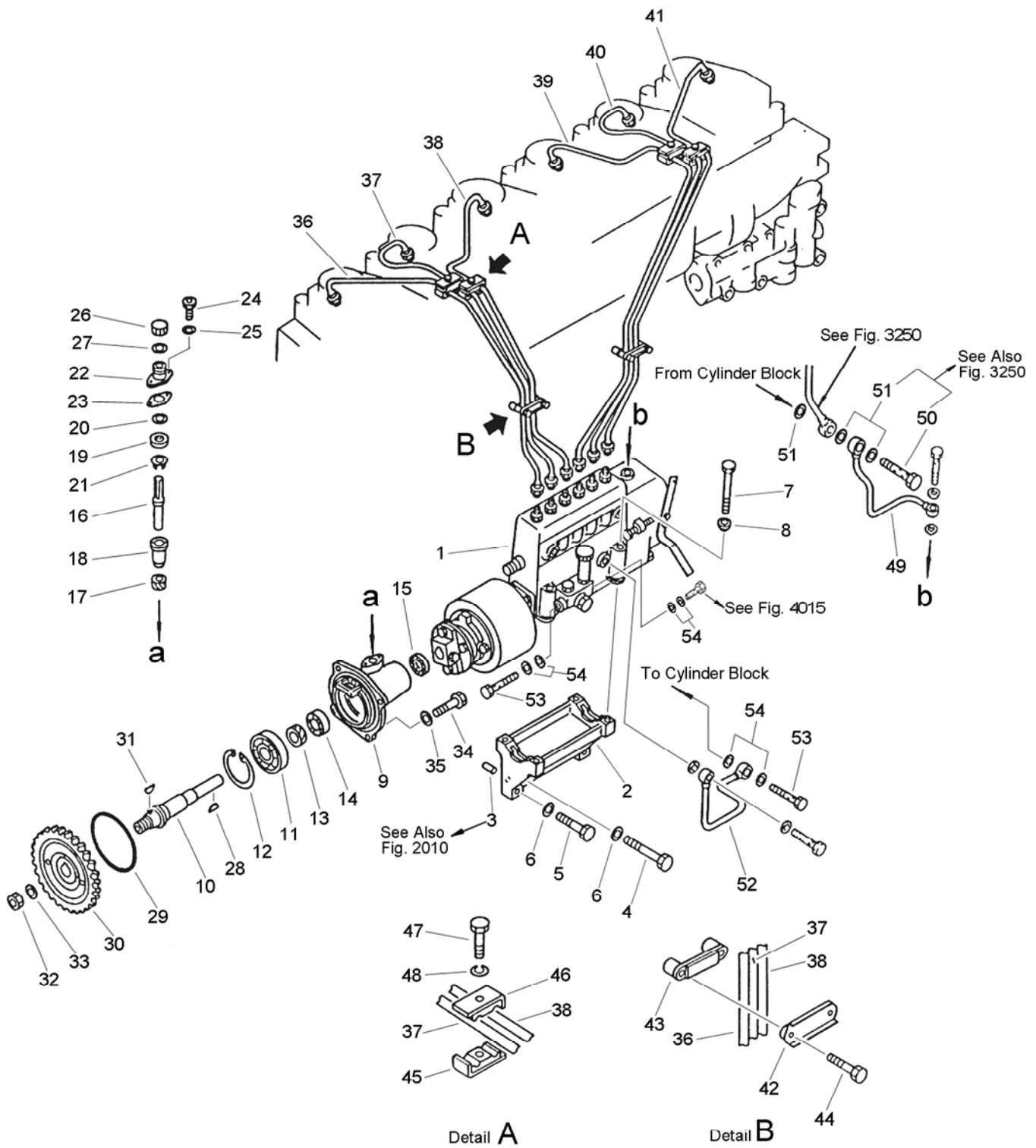
FIG. No. 4010 FUEL INJECTION PUMP AND PIPING



FUEL INJECTION PUMP & PIPING
FIG. No. 4010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z7180155	FUEL INJECTION PUMP ASSY.	1	Z311600001-
2	30Z7120169	BRACKET	1	Z311600001-
3	CFP04-01024	DOWEL, PIN	2	Z311600001-
4	CFB01-21080	BOLT	2	Z311600001-
5	CFB01-21070	BOLT	2	Z311600001-
6	CFW05-10032	WASHER	4	Z311600001-
7	CFB01-20875	BOLT	4	Z311600001-
8	30Z7110043	WASHER, FIP	4	Z311600001-
	30Z7100023	CASE ASSY	1	Z311600001-
9	30Z7140298	. CASE	1	Z311600001-
10	30Z7110108	. SHAFT	1	Z311600001-
11	06030-06307	. BEARING, BALL	1	Z311600001-
12	CFL02-18025	. SNAP RING	1	Z311600001-
13	30Z7150317	. GEAR	1	Z311600001-
14	06000-06005	. BEARING, BALL	1	Z311600001-
15	30Z7170357 K2	. SEAL	1	Z311600001-
	30Z7180458	. TACHOMETER DRIVE ASSY	1	Z311600001-
16	30Z7110092	.. SHAFT	1	Z311600001-
17	30Z7150309	.. GEAR	1	Z311600001-
18	30Z7180425	.. BUSHING	1	Z311600001-
19	30Z7180433 K2	. SEAL, OIL	1	Z311600001-
20	30Z7190478 K2	. WASHER, FELT	1	Z311600001-
21	30Z7110149	. SPACER	1	Z311600001-
22	30Z7120177	. HOUSING	1	Z311600001-
23	31Z2370042 K2	. GASKET	1	Z311600001-
24	30Z7110051	. BOLT	2	Z311600001-
25	30Z7110068	. WASHER	2	Z311600001-
26	30Z7190526	CAP	1	Z311600001-
27	30Z7160337 K2	GASKET	1	Z311600001-
28	04010-00516	KEY	1	Z311600001-
29	07000-62125 K2	O-RING	1	Z311600001-
30	30Z7150325	GEAR	1	Z311600001-

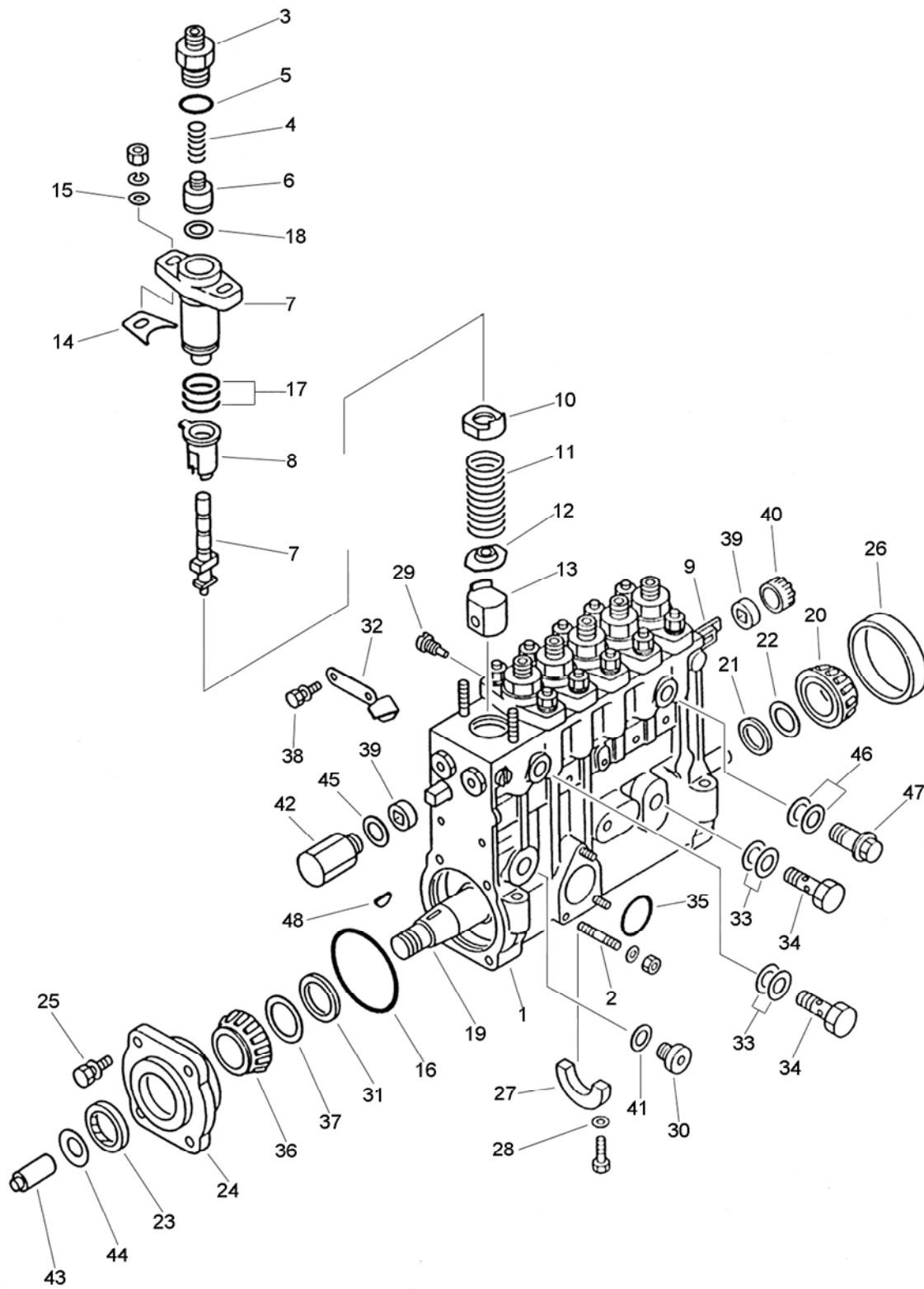
FIG. No. 4010 FUEL INJECTION PUMP AND PIPING



FUEL INJECTION PUMP & PIPING**FIG. No. 4010**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
31	04010-00519	KEY	1	Z311600001-
32	CFN20-42414	NUT	1	Z311600001-
33	CFW05-24060	WASHER	1	Z311600001-
34	CFB01-21025	BOLT	4	Z311600001-
35	CFW02-11020	WASHER	4	Z311600001-
36	30Z7130189	TUBE,INJ. NO.1	1	Z311600001-
37	30Z7130197	TUBE,INJ. NO.2	1	Z311600001-
38	30Z7130204	TUBE,INJ. NO.3	1	Z311600001-
39	30Z7130212	TUBE,INJ. NO.4	1	Z311600001-
40	30Z7130229	TUBE,INJ. NO.5	1	Z311600001-
41	30Z7130237	TUBE,INJ. NO.6	1	Z311600001-
42	30Z7190389	CLAMP	2	Z311600001-
43	30Z7190461	CLAMP	2	Z311600001-
44	CFB01-21055	BOLT	4	Z311600001-
	30Z7190494	CLIP ASSY.	4	Z311600001-
45	30Z7190518	. CLIP	1	Z311600001-
46	30Z7190501	. CLIP	1	Z311600001-
47	CFB01-20630	. BOLT	1	Z311600001-
48	CFW01-10619	. WASHER	1	Z311600001-
49	31Z7130072	TUBE	1	Z311600001-
50	31Z7110016	BOLT	1	Z311600001-
51	CPF06-01412 K2	GASKET	3	Z311600001-
52	30Z7130253	TUBE	1	Z311600001-
53	CPF12-11014	JOINT BOLT	2	Z311600001-
54	CPF06-01412 K2	GASKET	6	Z311600001-

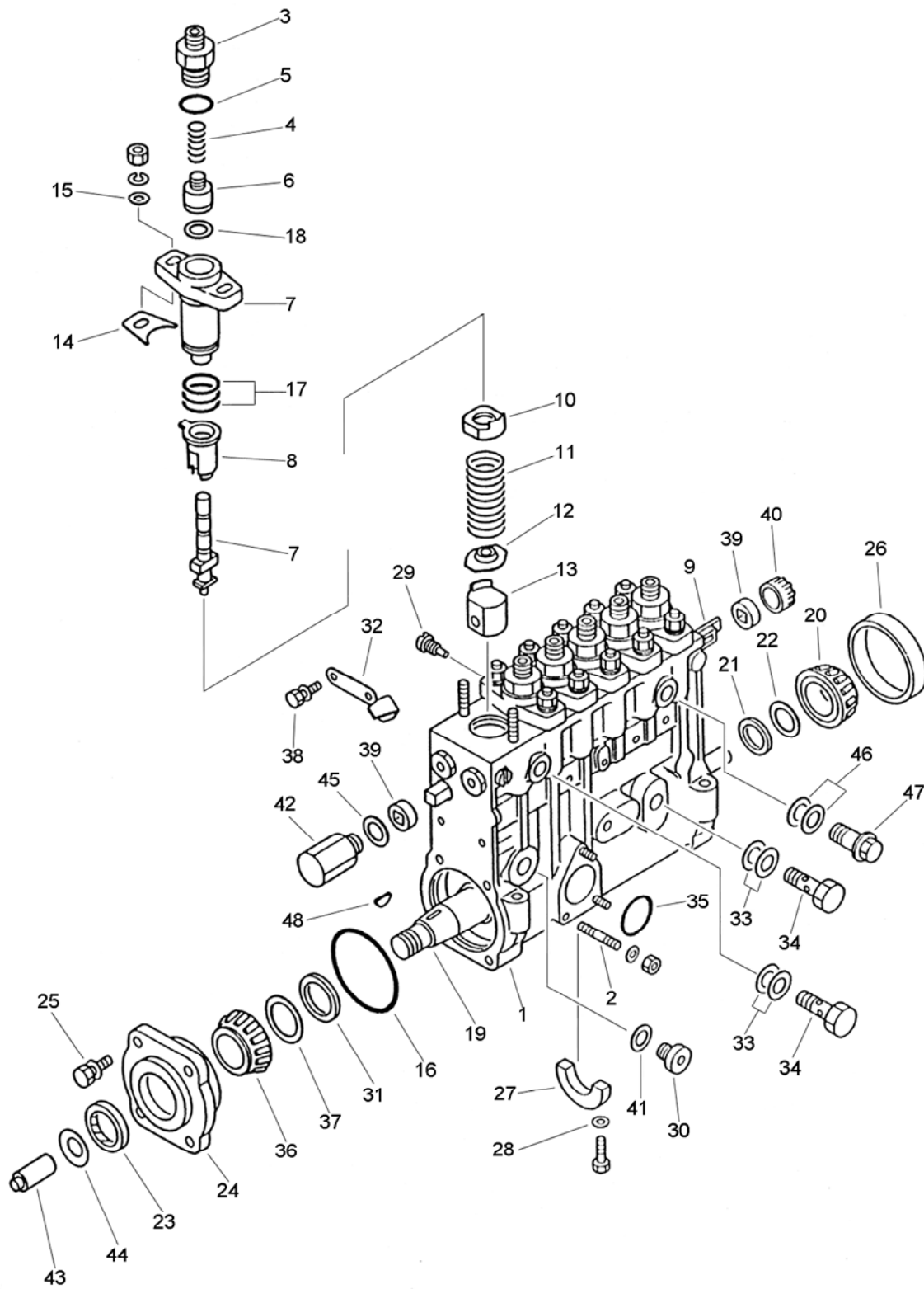
FIG. No. 4011 FUEL INJECTION PUMP



FUEL INJECTION PUMP**FIG. No. 4011**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180155	FUEL INJECTION PUMP ASSEMBLY	1	Z311600001-
	31Z7181808	. INJECTION PUMP ASSEMBLY	1	Z311600001-
1	31Z7181816	.. HOUSING	1	Z311600001-
2	42Z7182093	... STUD	3	Z311600001-
3	31Z7101852	.. HOLDER ASSY, DELIVERY VALVE	6	Z311600001-
4	31Z7181865	.. SPRING, DELIVERY VALVE	6	Z311600001-
5	31Z7181087	.. O- RING	6	Z311600001-
6	31Z7101099	.. DELIVERY VALVE SUB ASSY.	6	Z311600001-
7	31Z7101106	.. ELEMENT SUB ASSY.	6	Z311600001-
8	31Z7101114	.. SLEEVE SUB ASSY, CONTROL	6	Z311600001-
9	31Z7181824	.. RACK, CONTROL	1	Z311600001-
10	31Z7111134	.. SEAT, SPRING UPPER	6	Z311600001-
11	31Z7181143	.. SPRING, PLUNGER	6	Z311600001-
12	31Z7181151	.. SEAT, SPRING LOWER	6	Z311600001-
13	31Z7101163	.. TAPPET SUB ASSY.	6	Z311600001-
14	31Z7181257	.. SHIM, 1.75 MM	AR	Z311600001-
14	31Z7181265	.. SHIM, 1.80 MM	AR	Z311600001-
14	31Z7181273	.. SHIM, 1.85 MM	AR	Z311600001-
14	31Z7181281	.. SHIM, 1.90 MM	AR	Z311600001-
14	31Z7181298	.. SHIM, 1.95 MM	AR	Z311600001-
14	31Z7181873	.. SHIM, 2.00 MM	AR	Z311600001-
14	31Z7181881	.. SHIM, 2.05 MM	AR	Z311600001-
14	31Z7181898	.. SHIM, 2.10 MM	AR	Z311600001-
14	31Z7181905	.. SHIM, 2.15 MM	AR	Z311600001-
14	31Z7181913	.. SHIM, 2.20 MM	AR	Z311600001-
14	31Z7181921	.. SHIM, 2.25 MM	AR	Z311600001-
14	31Z7181938	.. SHIM, 2.30 MM	AR	Z311600001-
14	31Z7181946	.. SHIM, 2.35 MM	AR	Z311600001-
14	31Z7181954	.. SHIM, 2.40 MM	AR	Z311600001-
15	31Z7111304	.. WASHER, PLATE	12	Z311600001-
16	31Z7181313	.. O - RING	1	Z311600001-
17	31Z7181321	.. O - RING	18	Z311600001-
18	31Z7111337	.. WASHER, PLATE	6	Z311600001-
19	31Z7181832	.. CAMSHAFT	1	Z311600001-
20	31Z7181354	.. BEARING, ROLLER	1	Z311600001-

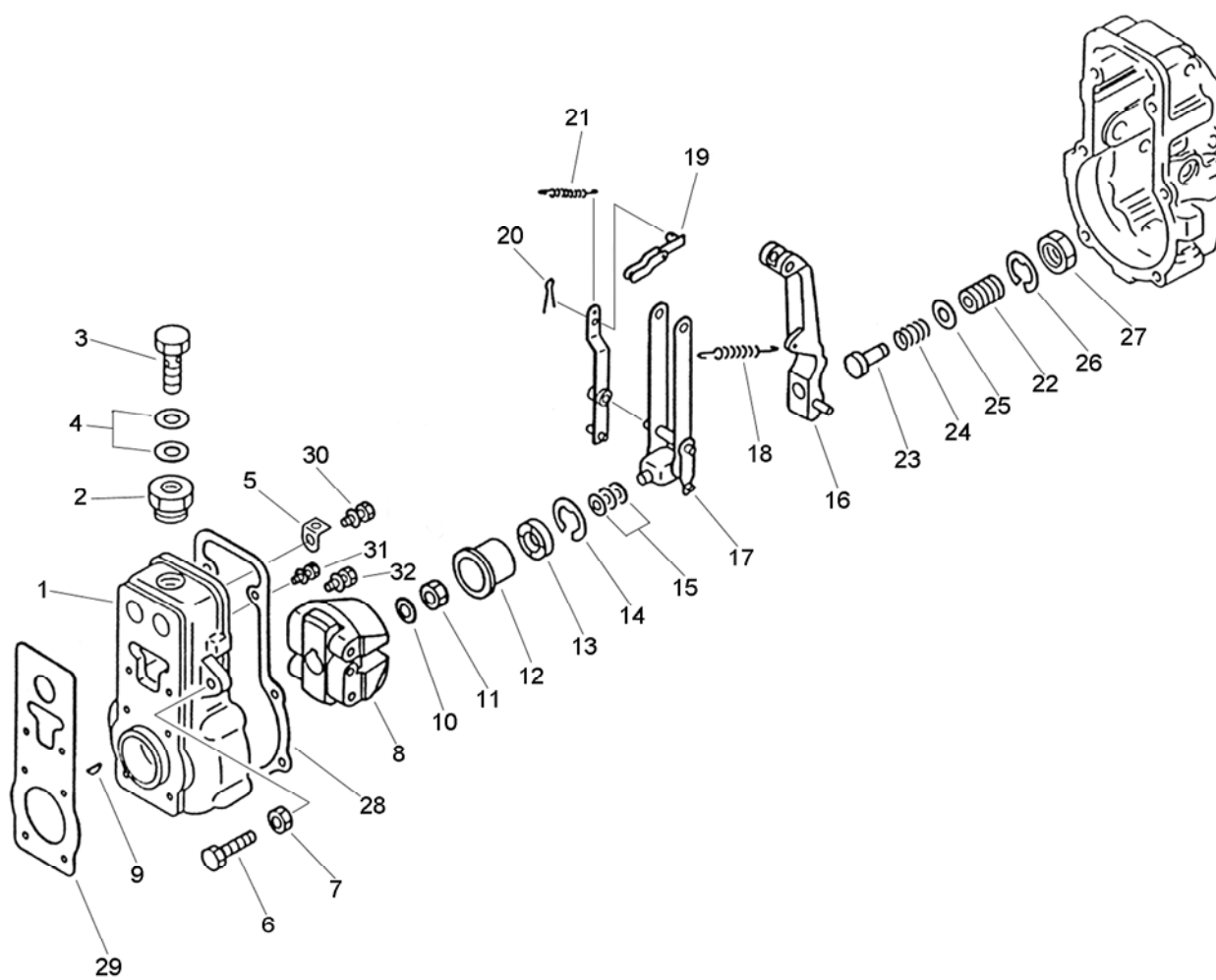
FIG. No. 4011 FUEL INJECTION PUMP



FUEL INJECTION PUMP**FIG. No. 4011**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
21	31Z7181362	.. RING ADJUST	1	Z311600001-
22	31Z7181379	.. PLATE, SHIM 0.10 MM	AR	Z311600001-
22	31Z7181387	.. PLATE, SHIM 0.15 MM	AR	Z311600001-
22	31Z7181395	.. PLATE, SHIM 0.30 MM	AR	Z311600001-
22	31Z7181962	.. PLATE, SHIM,0.50 MM	AR	Z311600001-
23	31Z7181419	.. SEAL, OIL	1	Z311600001-
24	31Z7181427	.. COVER, BEARING	1	Z311600001-
25	31Z7111434	.. BOLT, WITH WASHER	4	Z311600001-
26	31Z7181443	.. RETAINER, BEARING	1	Z311600001-
27	31Z7181451	.. BEARING, CENTRE	1	Z311600001-
28	31Z7111467	.. WASHER	2	Z311600001-
29	31Z7181849	.. SCREW BACK GUIDE	1	Z311600001-
30	31Z7181484	.. PLUG, SCREW	1	Z311600001-
31	31Z7181492	.. RING, ADJUST	1	Z311600001-
32	31Z7181508	.. NEEDLE, TIMING	1	Z311600001-
33	42Z7180651	.. WASHER	4	Z311600001-
34	42Z7180279	.. SCREW	2	Z311600001-
35	31Z7181516	.. O-RING	1	Z311600001-
36	42Z7182263	.. BEARING, ROLLER	1	Z311600001-
37	31Z7181524	.. PLATE, SHIM, 0.10 MM	AR	Z311600001-
37	31Z7181532	.. PLATE, SHIM, 0.15 MM	AR	Z311600001-
37	31Z7181549	.. PLATE, SHIM. 0.30 MM	AR	Z311600001-
37	31Z7181557	.. PLATE, SHIM, 0.50 MM	AR	Z311600001-
38	31Z7111029	.. BOLT, WITH WASHER	2	Z311600001-
39	31Z7181573	.. BUSHING, CONTROL RACK	2	Z311600001-
40	31Z7181581	.. BUSHING, CONTROL RACK	1	Z311600001-
41	31Z7111612	.. WASHER, PLATE	1	Z311600001-
42	31Z7181621	.. COVER CONTROL RACK	1	Z311600001-
43	31Z7111637	.. NUT, TIMER ROUND	1	Z311600001-
44	31Z7181654	.. WASHER	1	Z311600001-
45	31Z7111661	.. WASHER PLATE	1	Z311600001-
46	42Z7180651	.. WASHER	2	Z311600001-
47	31Z7101674	.. VALVE ASSY, OVERFLOW	1	Z311600001-
48	42Z7181745	.. KEY	1	Z311600001-

FIG. No. 4012 GOVERNOR(1/2) FUEL INJECTION PUMP

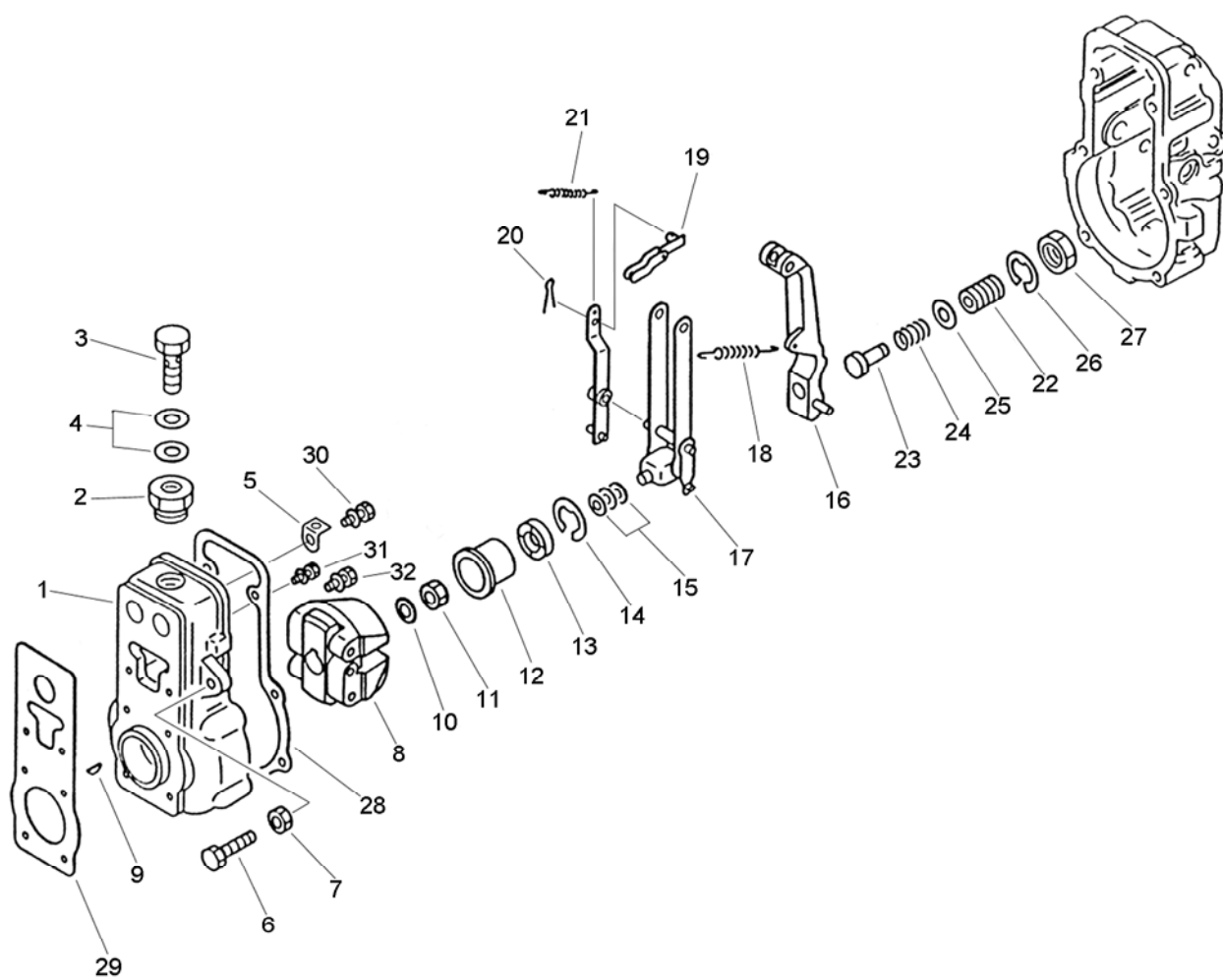


GOVERNOR(1/2), FUEL INJECTION PUMP

FIG. No. 4012

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180155	FUEL INJECTION PUMP ASSEMBLY	1	Z311600001-
	31Z7181719	. GOVERNOR ASSY	1	Z311600001-
1	31Z7181979	.. HOUSING GOVERNOR	1	Z311600001-
2	31Z7110973	.. PLUG,SCREW	1	Z311600001-
3	31Z7111004	.. SCREW,HOLLOW	1	Z311600001-
4	31Z7111012	.. WASHER,UNION	2	Z311600001-
5	31Z7181987	.. PLATE	1	Z311600001-
6	42Z7181315	.. SCREW,ADJUSTING	1	Z311600001-
7	31Z7110876	.. NUT,WITHHOLE	2	Z311600001-
8	31Z7100897	.. FLYWEIGHT ASSY	1	Z311600001-
9	42Z7182296	.. KEY	1	Z311600001-
10	42Z7182036	.. WASHER,SPRING	1	Z311600001-
11	42Z7181056	.. NUT,ROUND	1	Z311600001-
12	42Z7181064	.. SLEEVE SUB ASSY.GOVERNOR	1	Z311600001-
13	31Z7181995	.. BEARING,THRUST	1	Z311600001-
14	42Z7181778	.. E-RING	1	Z311600001-
15	42Z7181915	.. WASHER,PLATE 0.20 MM	AR	Z311600001-
15	42Z7181923	.. WASHER,PLATE 0.30 MM	AR	Z311600001-
15	42Z7181931	.. WASHER,PLATE 0.40 MM	AR	Z311600001-
15	42Z7181948	.. WASHER,PLATE 0.10 MM	AR	Z311600001-
15	42Z7181956	.. WASHER,PLATE 1.00 MM	AR	Z311600001-
16	31Z7102005	.. LEVER,ASSY,TENSION	1	Z311600001-
17	31Z7100864	.. LEVER,ASSY,CONTROL	1	Z311600001-
18	31Z7182018	.. SPRING,SPEED CONTROL	1	Z311600001-
19	31Z7100889	.. SHACKLE ASSY	1	Z311600001-
20	42Z7181097	.. PIN,SPLIT	1	Z311600001-
21	31Z7182026	.. SPRING,START	1	Z311600001-
	31Z7102038	.. ADAPTER ASSY	1	Z311600001-
22	42Z7181129	... SCREW,ADJUST	1	Z311600001-
23	31Z7110949	... ADAPTER	1	Z311600001-
24	31Z7182042	... SPRING,ADAPTER	1	Z311600001-
25	42Z7181883	... WASHER,PLATE 0.10 MM	AR	Z311600001-

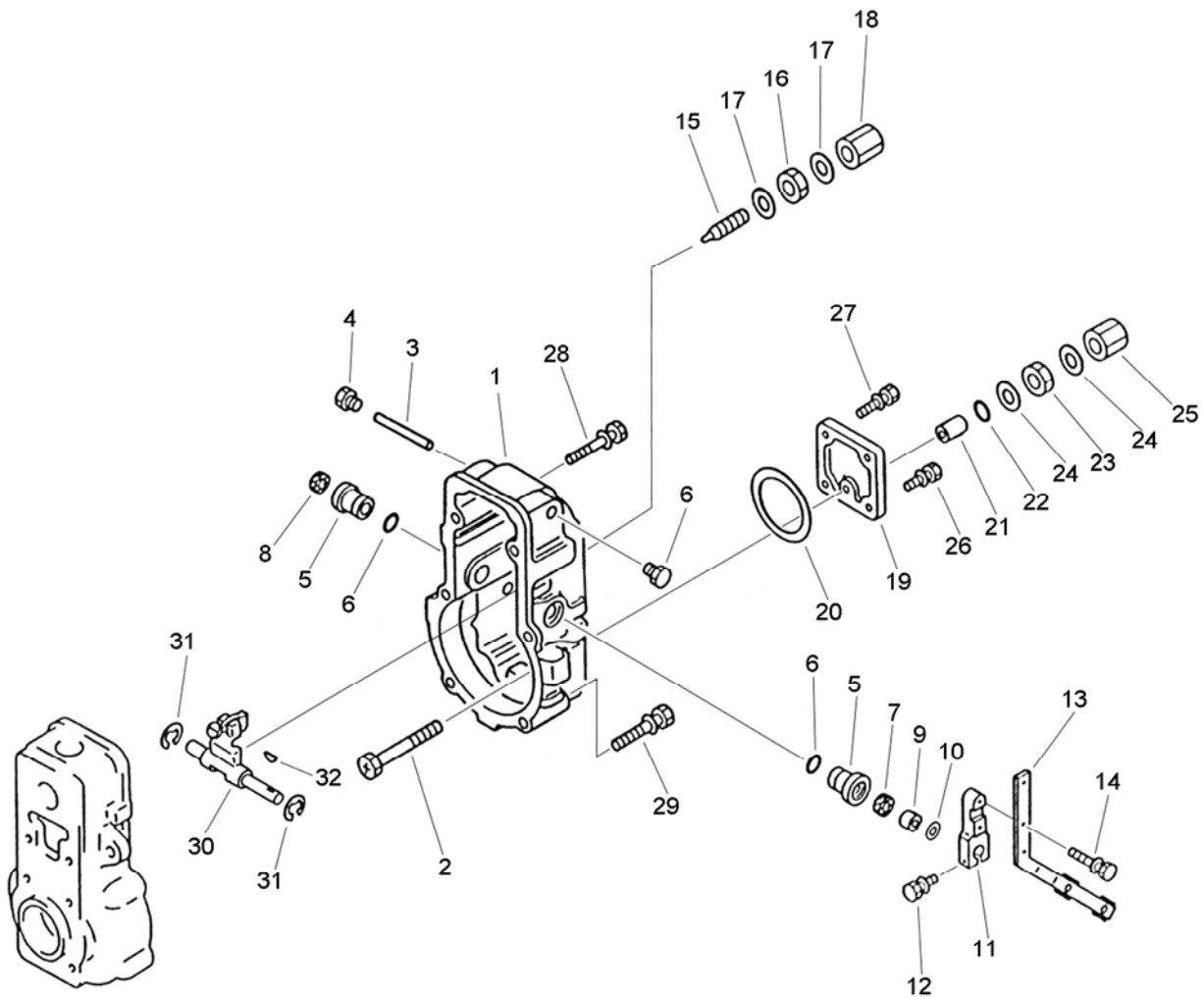
FIG. No. 4012 GOVERNOR(1/2) FUEL INJECTION PUMP



GOVERNOR(1/2), FUEL INJECTION PUMP**FIG. No. 4012**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
25	31Z7110965	... WASHER,PLATE 0.20 MM	AR	Z311600001-
25	42Z7181907	... WASHER,PLATE 0.50 MM	AR	Z311600001-
25	42Z7181989	... WASHER,PLATE 1.00 MM	AR	Z311600001-
25	31Z7182059	... WASHER,PLATE 2.00 MM	AR	Z311600001-
26	42Z7181097	.. E-RING	1	Z311600001-
27	42Z7181153	.. NUT,ADAPTER LOCK	1	Z311600001-
28	31Z7180999	.. GASKET,BODY	1	Z311600001-
29	31Z7180982	.. GASKET,BODY	1	Z311600001-
30	31Z7111029	.. BOLT,WITH WASHER	2	Z311600001-
31	31Z7111037	.. BOLT,WITH WASHER	2	Z311600001-
32	31Z7111045	.. BOLT,WITH WASHER	4	Z311600001-

FIG. No. 4013 GOVERNOR(2/2) FUEL INJECTION PUMP

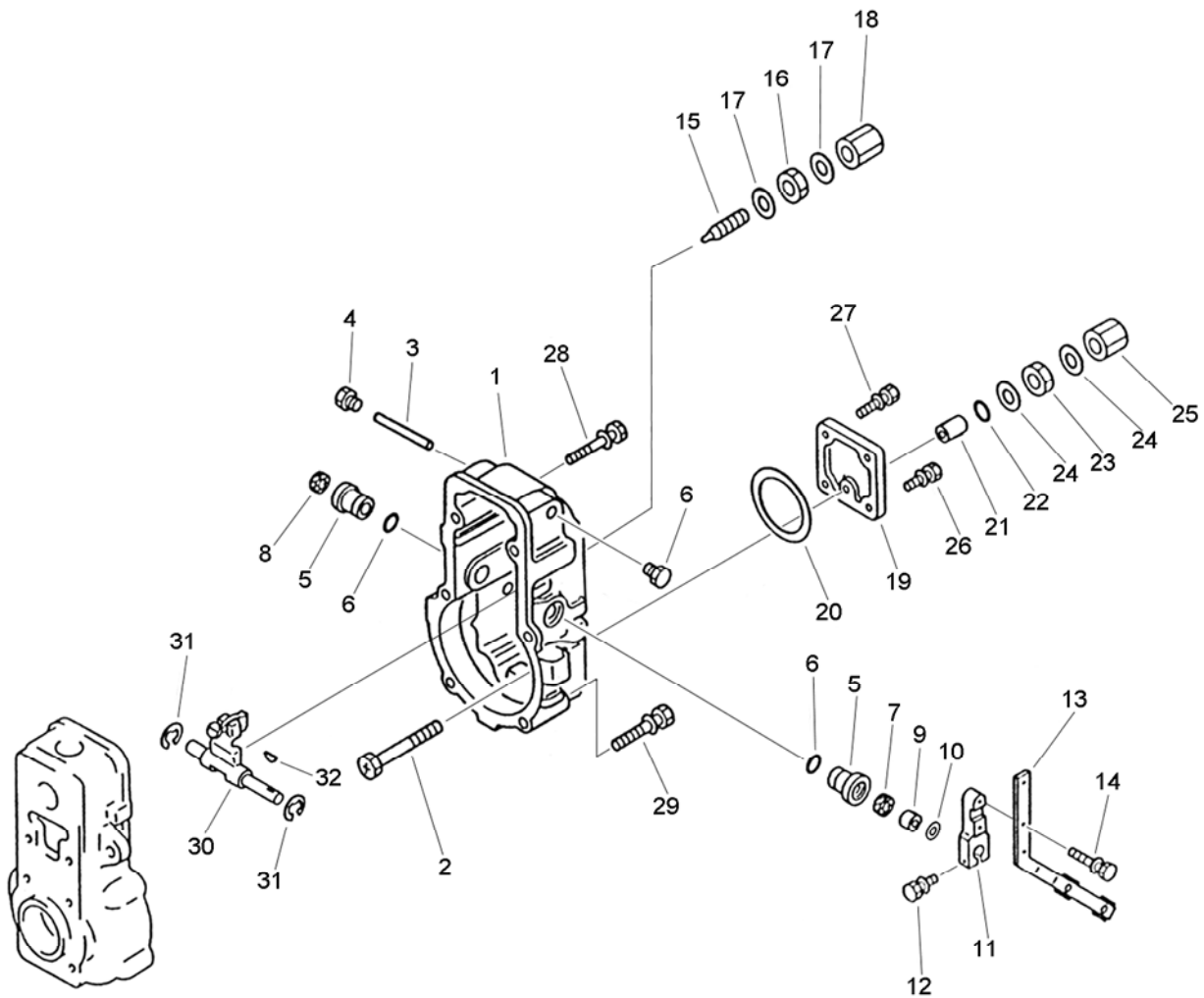


GOVERNOR(2/2), FUEL INJECTION PUMP

FIG. No. 4013

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180155	FUEL INJECTION PUMP ASSEMBLY	1	Z311600001-
	31Z7181719	. GOVERNOR ASSY	1	Z311600001-
1	31Z7181727	.. COVER,GOVERNOR	1	Z311600001-
2	31Z7110576	.. SCREW,STROKE ADJUSTING	1	Z311600001-
3	31Z7110592	.. SHAFT,LEVER SUPPORTING	1	Z311600001-
4	42Z7181259	.. PLUG,SCREW	2	Z311600001-
5	31Z7181735	.. BUSHING	2	Z311600001-
6	42Z7182328	.. O-RING	2	Z311600001-
7	42Z7181704	.. SEAL,OIL	1	Z311600001-
8	42Z7181397	.. CAP,LEVER	1	Z311600001-
9	31Z7181784	.. BUSHING	1	Z311600001-
10	42Z7181997	.. WASHER 0.30 MM	AR	Z311600001-
10	42Z7182003	.. WASHER 0.60 MM	AR	Z311600001-
10	42Z7182011	.. WASHER 0.90 MM	AR	Z311600001-
11	31Z7181743	.. LEVER,ADJUSTING	1	Z311600001-
12	42Z7182125	.. BOLT,WITH WASHER	1	Z311600001-
13	31Z7181751	.. LEVER,ADJUSTING	1	Z311600001-
14	31Z7110779	.. BOLT,WITH WASHER	2	Z311600001-
15	31Z7180609	.. CAPSULE,FULLSTOP	1	Z311600001-
16	31Z7110616	.. NUT	1	Z311600001-
17	42Z7180676	.. WASHER,NIPPLE	2	Z311600001-
18	42Z7181323	.. NUT,CAP	1	Z311600001-
19	31Z7181768	.. PLATE,COVER	1	Z311600001-
20	31Z7181776	.. PACKING,RUBBER PLATE	1	Z311600001-
21	31Z7180585	.. BUSHING	1	Z311600001-
22	42Z7182311	.. O-RING	1	Z311600001-
23	31Z7181792	.. NUT	1	Z311600001-
24	42Z7182052	.. WASHER,COVERPLATE	2	Z311600001-
25	42Z7181331	.. NUT,CAP	1	Z311600001-
26	42Z7182141	.. BOLT,WITH WASHER	2	Z311600001-
27	42Z7181794	.. BOLT,WITH WASHER	2	Z311600001-

FIG. No. 4013 GOVERNOR(2/2) FUEL INJECTION PUMP

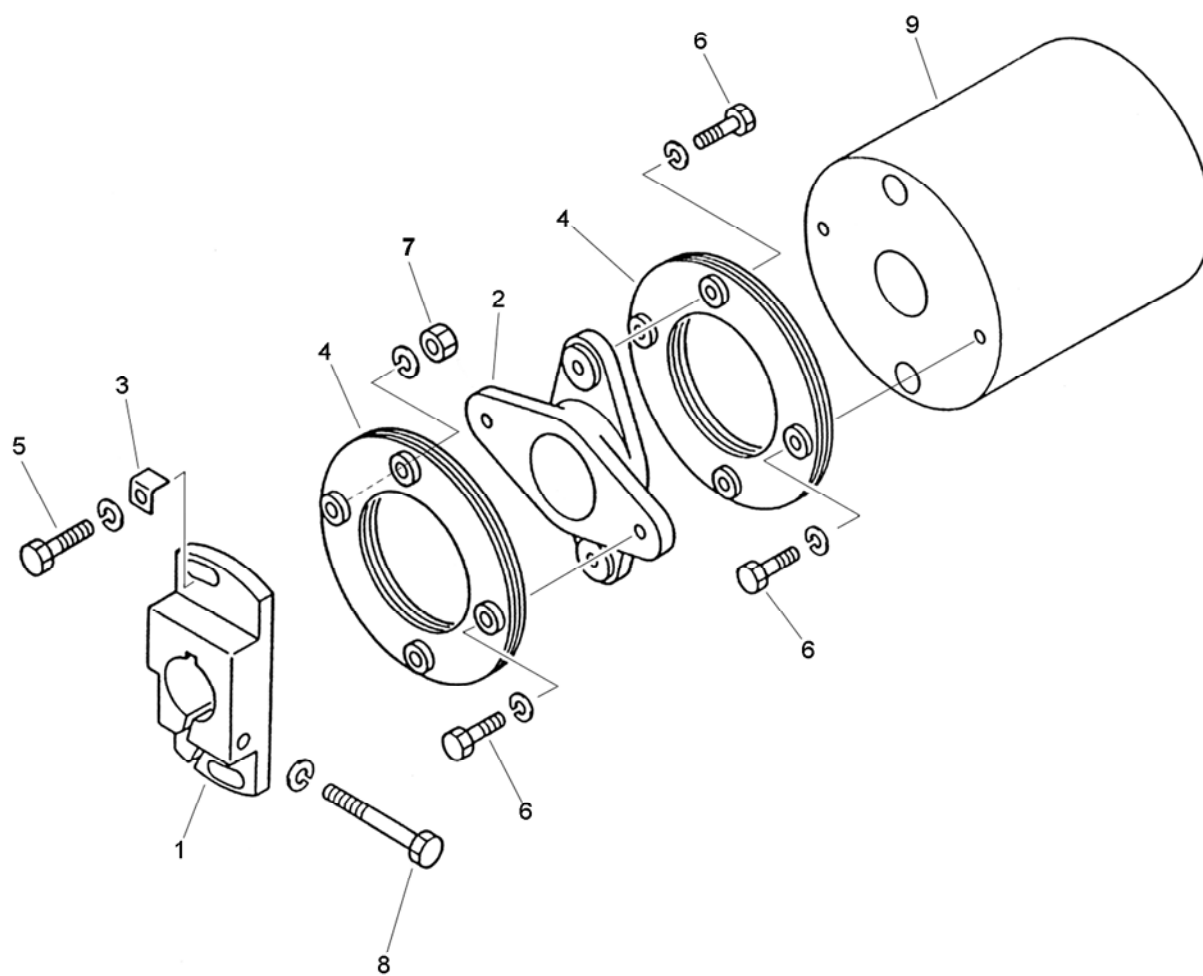


GOVERNOR(2/2), FUEL INJECTION PUMP

FIG. No. 4013

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
28	42Z7182133	.. BOLT,WITH WASHER	2	Z311600001-
29	31Z7110657	.. BOLT,WITH WASHER	4	Z311600001-
30	31Z7110624	.. LEVER,SWIVELING ASSY	1	Z311600001-
31	42Z7182206	.. WASHER,SNAP	2	Z311600001-
32	42Z7182288	.. KEY,WOODRUFF	1	Z311600001-

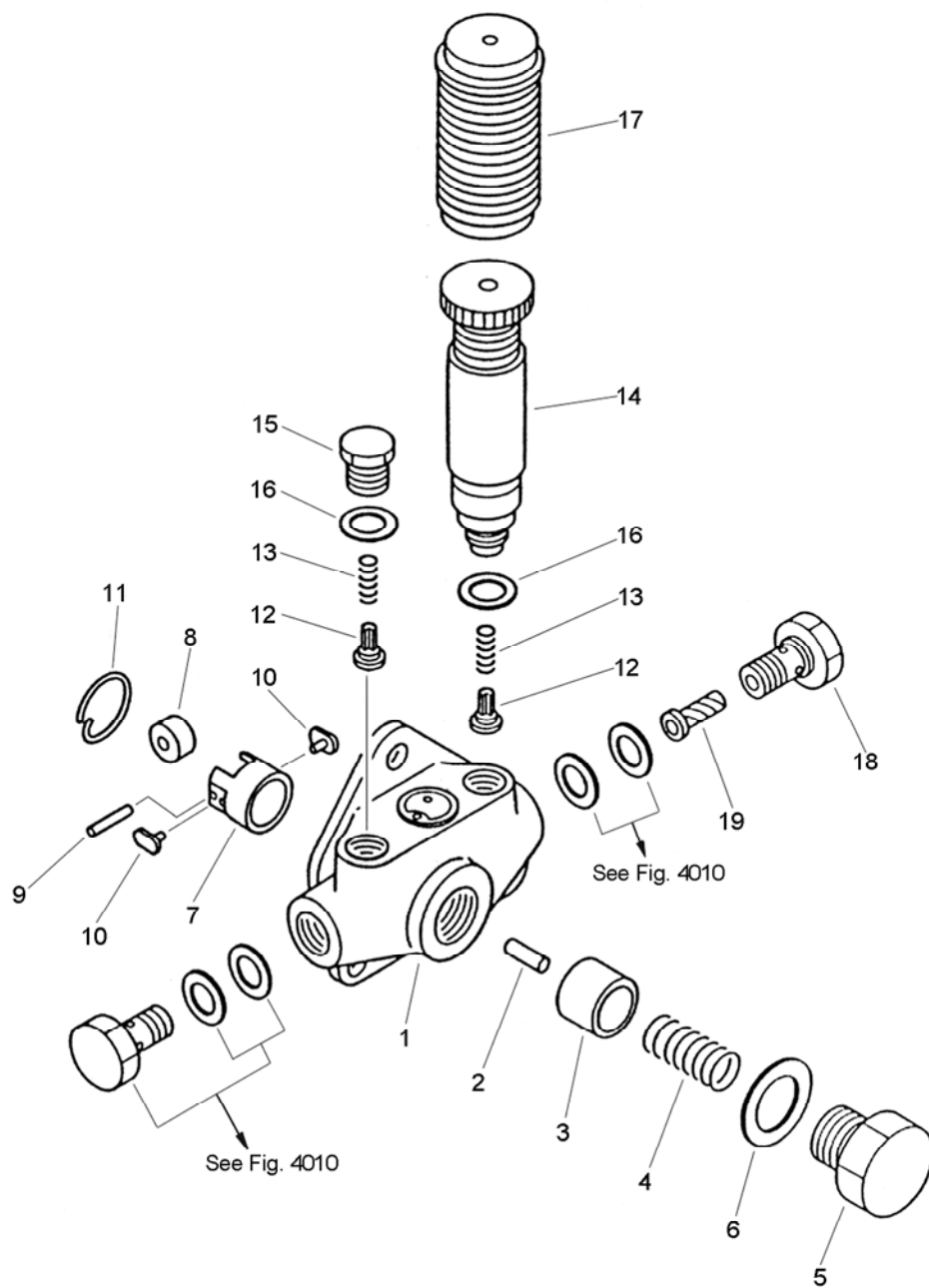
FIG. No. 4014 COUPLING, FUEL INJECTION PUMP



COUPLING, FUEL INJECTION PUMP**FIG. No. 4014**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180155	FUEL INJECTION PUMP ASSEMBLY	1	Z311600001-
	31Z7102062	. COUPLING ASSY	1	Z311600001-
1	31Z7182075	.. FLANGE,COUPLING	1	Z311600001-
2	31Z7182083	.. COUPLING,CROSS	1	Z311600001-
3	31Z7182091	.. WASHER	2	Z311600001-
4	31Z7102102	.. PLATE SUB ASSY.	2	Z311600001-
5	31Z7110519	.. BOLT	2	Z311600001-
6	31Z7110527	.. BOLT	6	Z311600001-
7	42Z7182166	.. NUT	2	Z311600001-
8	31Z7110535	.. BOLT	1	Z311600001-
9	31Z7180544	.. BLOCK,COUPLING	1	Z311600001-

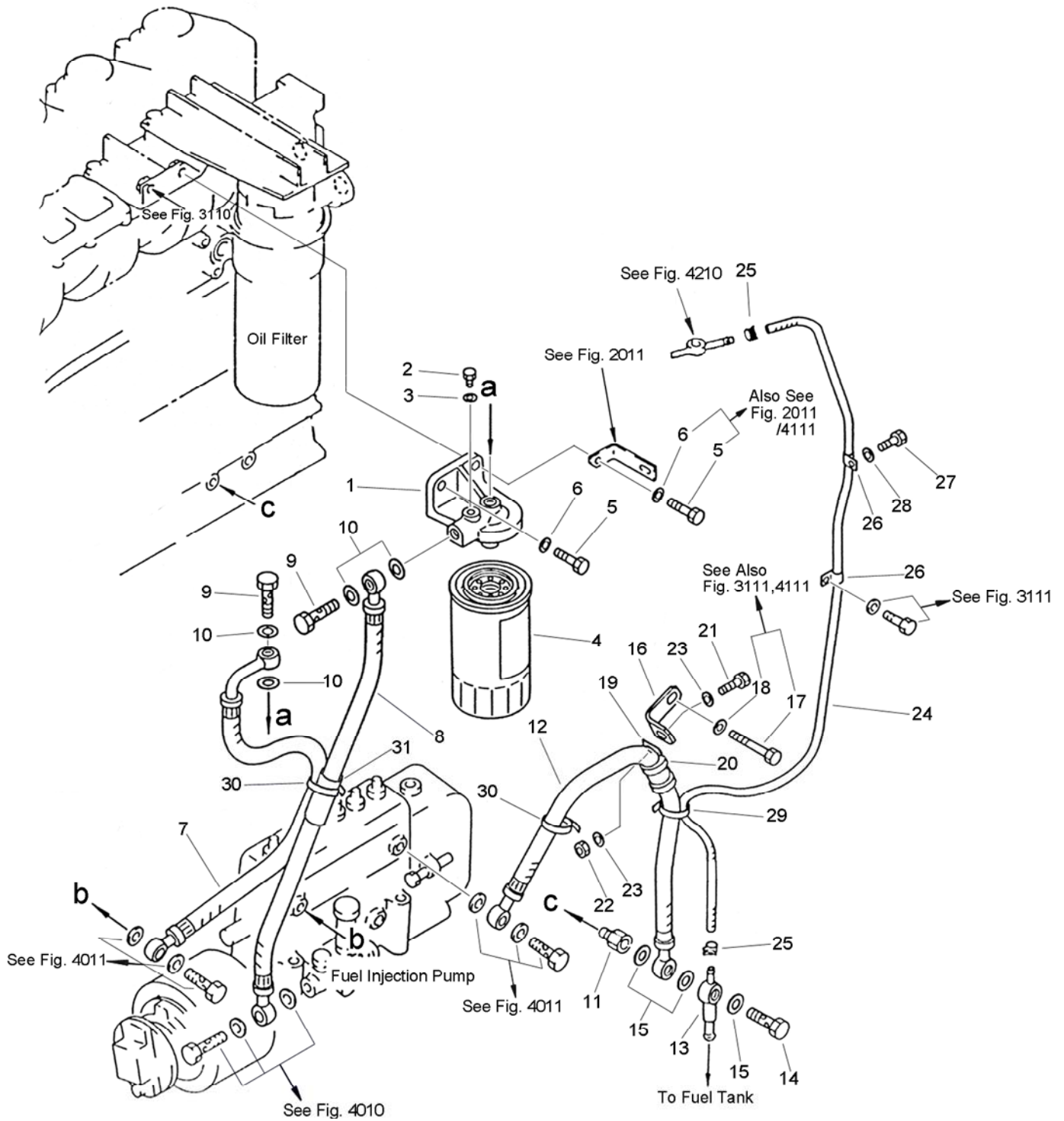
FIG. No. 4015 FEED PUMP, FUEL INJECTION PUMP



FEED PUMP, FUEL INJECTION PUMP
FIG. No. 4015

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180155	FUEL INJECTION PUMP ASSEMBLY	1	Z311600001-
	31Z7102119	. FEED PUMP ASSY.	1	Z311600001-
1	31Z7120311	.. HOUSING	1	Z311600001-
2	31Z7110324	... ROD,BUSH SMALL(BLUE)	AR	Z311600001-
2	31Z7180333	... ROD,BUSH (RED)	AR	Z311600001-
2	31Z7180358	... ROD,BUSH (YELLOW)	AR	Z311600001-
2	31Z7181565	... ROD,BUSH (GREEN)	AR	Z311600001-
2	31Z7180366	... ROD,BUSH (WHITE)	AR	Z311600001-
2	31Z7180374	... ROD,BUSH LARGER (BROWN)	AR	Z311600001-
3	31Z7110405	.. PISTON	1	Z311600001-
4	31Z7182123	.. SPRING,PISTON	1	Z311600001-
5	42Z7181591	.. PLUG,PISTON CHAMBER	1	Z311600001-
6	42Z7182069	.. WASHER,PLATE	1	Z311600001-
7	31Z7180447	.. TAPPET	1	Z311600001-
8	31Z7110413	.. ROLLER,TAPPET	1	Z311600001-
9	31Z7110421	.. PIN,TAPPET ROLLER	1	Z311600001-
10	31Z7110438	.. BLOCK,TAPPET SLIDING	2	Z311600001-
11	42Z7182222	.. RING,SNAP	1	Z311600001-
12	42Z7181461	.. VALVE,CHECK	2	Z311600001-
13	42Z7181478	.. SPRING,CHECK VALVE	2	Z311600001-
14	31Z7100394	.. PUMP ASSY,PRIMING	1	Z311600001-
15	42Z7181494	.. PLUG	1	Z311600001-
16	42Z7181486	.. GASKET	2	Z311600001-
17	42Z7180302	.. COVER,PRIMING PUMP	1	Z311600001-
18	42Z7181623	.. SCREW,HOLLOW	1	Z311600001-
19	42Z7181615	.. FILTER,FUEL	1	Z311600001-

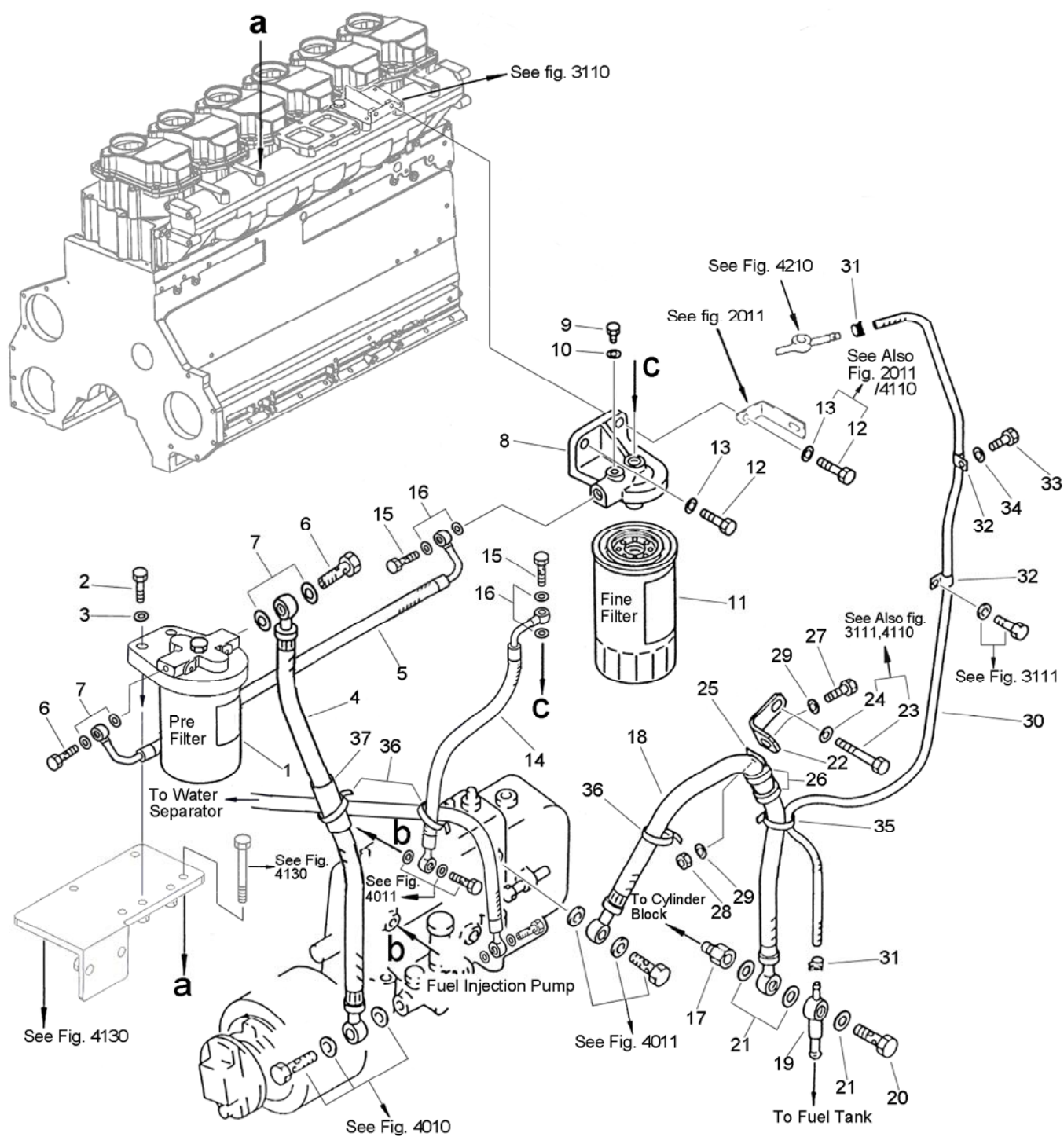
FIG. No. 4110 FUEL FILTER AND PIPING



FUEL FILTER AND PIPING**FIG. No. 4110**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z7180147	FILTER, FUEL ASSY.	1	Z311600001-0099
1	31Z7120069	. BRACKET, FUEL FILTER	1	Z311600001-0099
2	30Z7110076	. PLUG	1	Z311600001-0099
3	CPF06-00812 K2	. GASKET	1	Z311600001-0099
4	30Z7180369	. CARTRIDGE, FUEL FILTER	1	Z311600001-0099
5	CFB01-21030	BOLT	2	Z311600001-0099
6	CFW02-11020	WASHER	2	Z311600001-0099
7	30Z7180441	HOSE	1	Z311600001-0099
8	07271-01460	HOSE	1	Z311600001-0099
9	CPF12-11014	BOLT, JOINT	2	Z311600001-0099
10	CPF06-01412 K2	GASKET	4	Z311600001-0099
11	31Z7110049	ADAPTER	1	Z311600001-0099
12	07271-01470	HOSE	1	Z311600001-0099
13	31Z7130097	JOINT	1	Z311600001-0099
14	31Z7110016	BOLT,JOINT	1	Z311600001-0099
15	CPF06-01412 K2	GASKET	3	Z311600001-0099
16	31Z1310035	PLATE	1	Z311600001-0099
17	CFB01-21050	BOLT	1	Z311600001-0099
18	CFW02-11020	WASHER	1	Z311600001-0099
19	04434-52511	CLAMP	1	Z311600001-0099
20	07095-20318	CUSHION	1	Z311600001-0099
21	CFB01-21025	BOLT	1	Z311600001-0099
22	CFN01-21084	NUT	1	Z311600001-0099
23	CFW02-11020	WASHER	2	Z311600001-0099
24	07270-20490	TUBE	1	Z311600001-0099
25	07285-00085	CLIP	2	Z311600001-0099
26	CCC06-10814	CLIP	2	Z311600001-0099
27	CFS01-31020	BOLT	1	Z311600001-0099
28	CFW02-11020	WASHER	1	Z311600001-0099
29	08034-00414	BAND	1	Z311600001-0099
30	08034-00519	BAND	2	Z311600001-0099
31	51Z7193149	COVER	1	Z311600001-0099

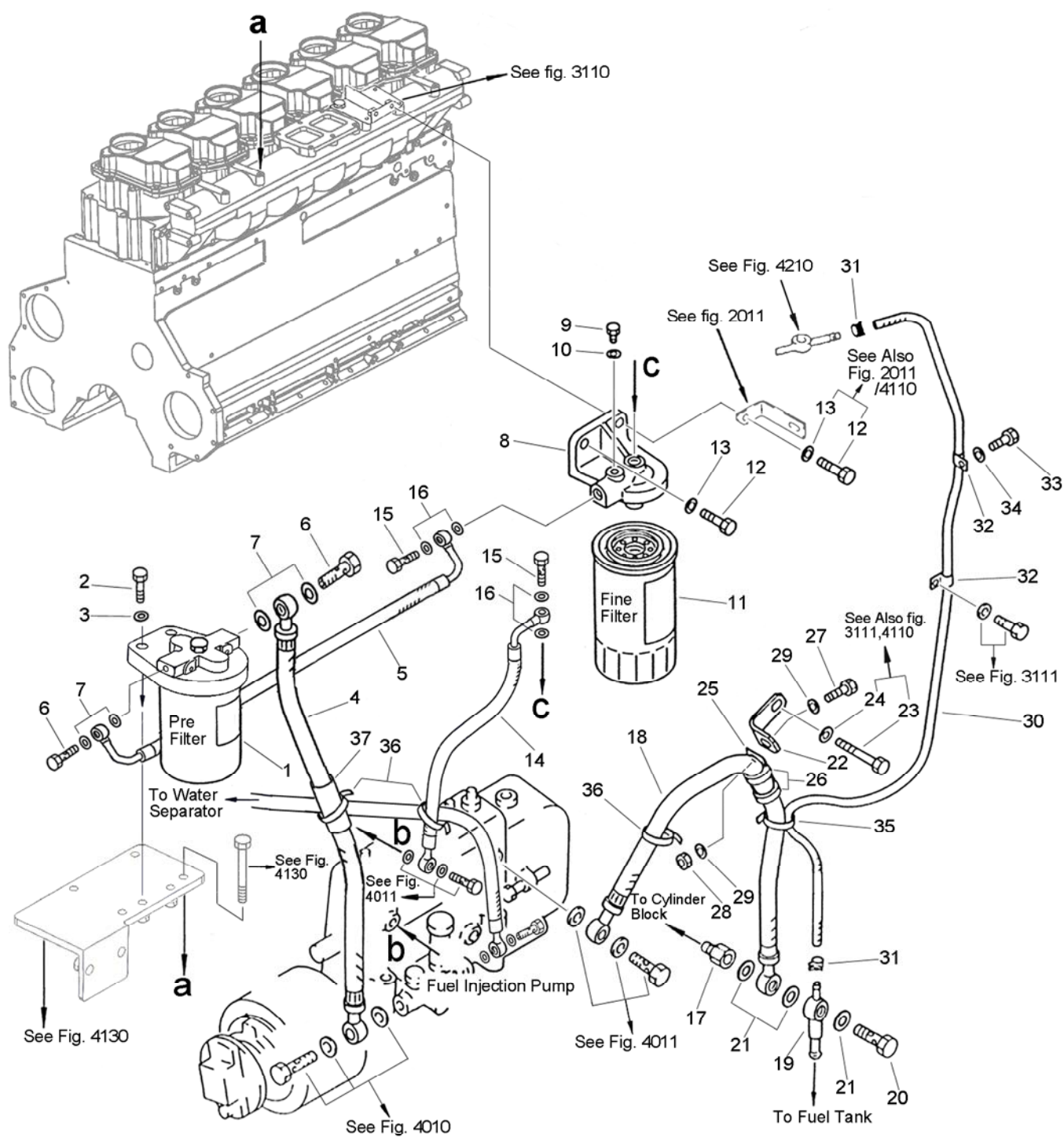
FIG. No. 4111 FUEL PRE-FILTER, FILTER & PIPING



FUEL PRE-FILTER, FILTER & PIPING**FIG. No. 4111**

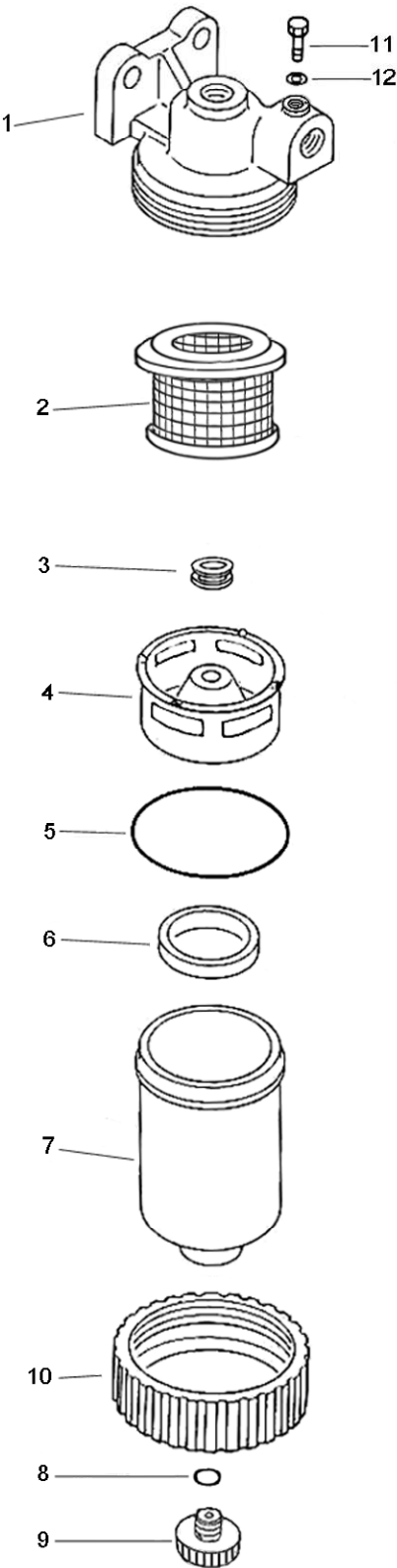
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	11Z7100222	PREFILTER, ASSY.	1	Z311600100-
1	11Z7180235	. CARTRIDGE, FUEL PREFILTER	1	Z311600100-
2	CFB01-21240	BOLT	2	Z311600100-
3	CFW01-11236	WASHER	2	Z311600100-
4	07271-01460	HOSE	1	Z311600100-
5	31Z7100264	HOSE	1	Z311600100-
6	CPF12-11014	BOLT, JOINT	2	Z311600100-
7	CPF06-01412 K2	GASKET	4	Z311600100-
	31Z7180147	FILTER, FUEL, ASSY.	1	Z311600100-
8	31Z7120069	. BRACKET, FUEL FILTER	1	Z311600100-
9	30Z7110076	. PLUG	1	Z311600100-
10	CPF06-00812 K2	. GASKET	1	Z311600100-
11	30Z7180369	. CARTRIDGE, FUEL FILTER	1	Z311600100-
12	CFB01-21030	BOLT	2	Z311600100-
13	CFW02-11020	WASHER	2	Z311600100-
14	30Z7180441	HOSE	1	Z311600100-
15	CPF12-11014	BOLT, JOINT	2	Z311600100-
16	CPF06-01412 K2	GASKET	4	Z311600100-
17	31Z7110049	ADAPTER	1	Z311600100-
18	07271-01470	HOSE	1	Z311600100-
19	31Z7130097	JOINT	1	Z311600100-
20	31Z7110016	BOLT,JOINT	1	Z311600100-
21	CPF06-01412 K2	GASKET	3	Z311600100-
22	31Z1310035	PLATE	1	Z311600100-
23	CFB01-21050	BOLT	1	Z311600100-
24	CFW02-11020	WASHER	1	Z311600100-
25	04434-52511	CLAMP	1	Z311600100-
26	07095-20318	CUSHION	1	Z311600100-
27	CFB01-21025	BOLT	1	Z311600100-
28	CFN01-21084	NUT	1	Z311600100-
29	CFW02-11020	WASHER	2	Z311600100-
30	07270-20490	TUBE	1	Z311600100-

FIG. No. 4111 FUEL PRE-FILTER, FILTER & PIPING



FUEL PRE-FILTER, FILTER & PIPING**FIG. No. 4111**

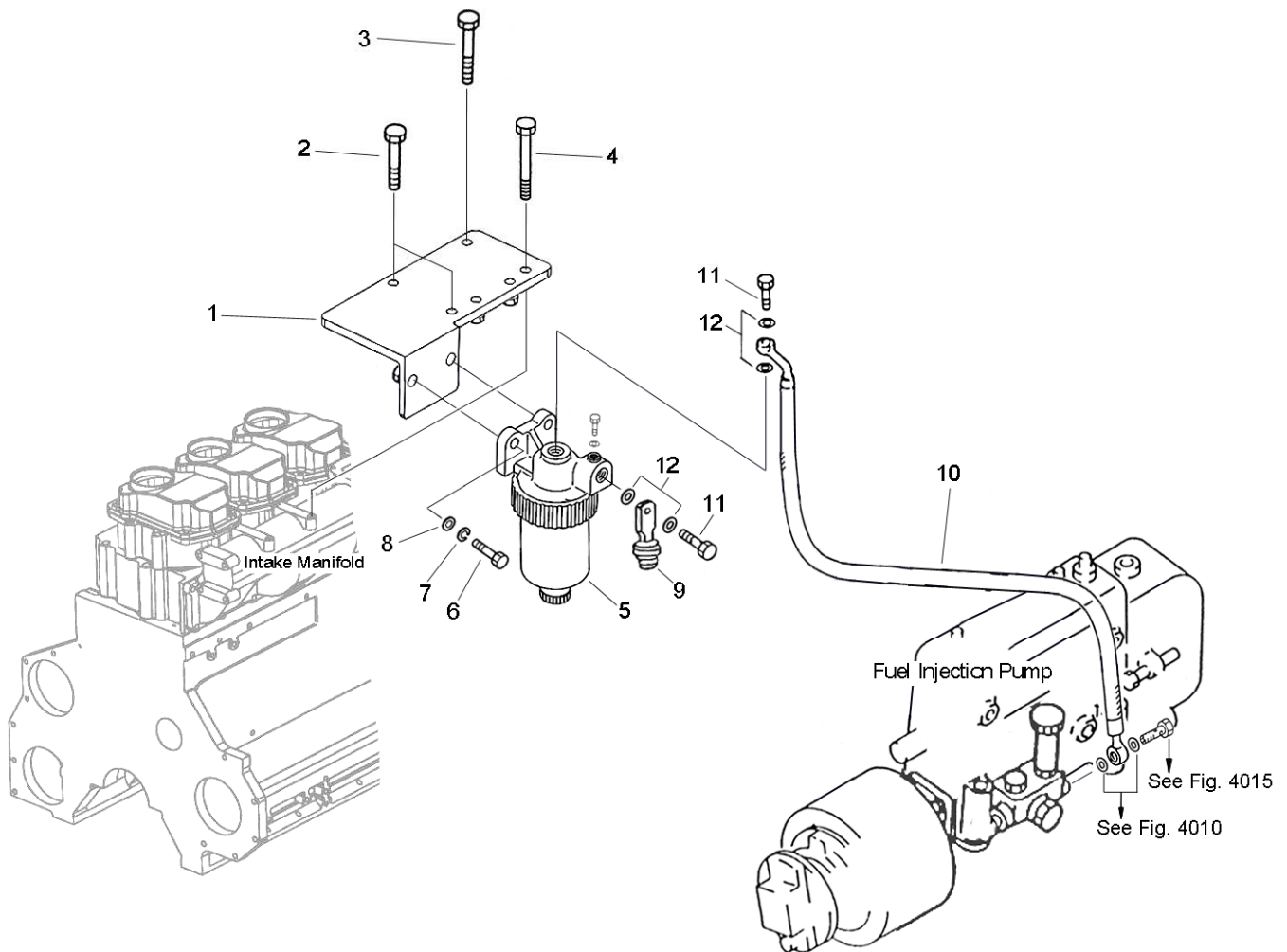
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
31	07285-00085	CLIP	2	Z311600100-
32	CCC06-10814	CLIP	2	Z311600100-
33	CFS01-31020	BOLT	1	Z311600100-
34	CFW02-11020	WASHER	1	Z311600100-
35	08034-00414 K2	BAND	1	Z311600100-
36	08034-00519 K2	BAND	3	Z311600100-
37	51Z7193149	COVER	1	Z311600100-



WATER SEPARATOR**FIG. No. 4120**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z7181024	WATER SEPARATOR ASSY.	1	Z311600001-
	30Z7181032	. HEAD	1	Z311600001-
1	(*30Z7100964)	. BODY ASSY.	1	Z311600001-
2	30Z7181008	. SCREEN	1	Z311600001-
3	30Z7181065	. GASKET	1	Z311600001-
4	30Z7181057	. HOLDER	1	Z311600001-
5	30Z7180977	. O RING	1	Z311600001-
6	30Z7180993	. FLOAT	1	Z311600001-
7	30Z7181049	. BODY	1	Z311600001-
8	30Z7181016	. O-RING	1	Z311600001-
9	30Z7181081	. PLUG	1	Z311600001-
10	30Z7180952	. NUT,RING	1	Z311600001-
11	30Z7110076	. PLUG	1	Z311600001-
12	CPF06-00812 K2	. GASKET	1	Z311600001-

FIG. No. 4130 WATER SEPARATOR, MOUNTING

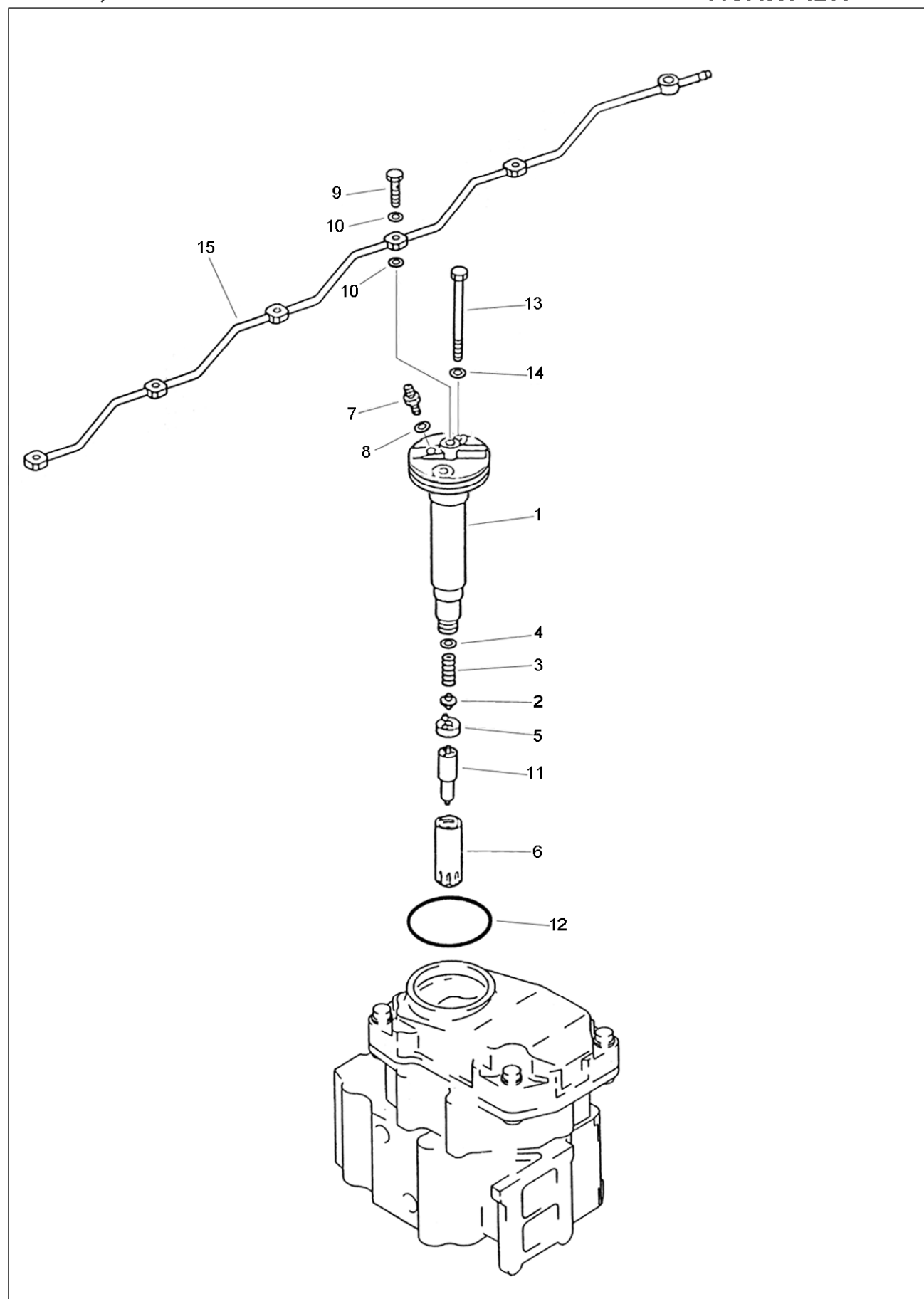


WATER SEPARATOR MOUNTING**FIG. No. 4130**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z7110219	WATER SEPARATOR,MTG BRACKET	1	Z311600001-0099
1	31Z7100272	WATER SEPARATOR,MTG BRACKET	1	Z311600100-
2	CFB01-21025	BOLT	2	Z311600001-
3	CFB01-21030	BOLT	1	Z311600001-
4	CFB01-21035	BOLT	1	Z311600001-
5	30Z7181024	WATER SEPARATOR ASSY.	1	Z311600001-
6	CFB01-21030	BOLT	2	Z311600001-
7	CFW01-11030	WASHER,SPRING	2	Z311600001-
8	CFW02-11020	WASHER	2	Z311600001-
9	31Z7130226	JOINT	1	Z311600001-
10	41Z7180257	HOSE	1	Z311600001-0099
10	30Z6180529	HOSE	1	Z311600100-
11	CPF12-11014	BOLT, JOINT	2	Z311600001-
12	CPF06-01412 K2	GASKET	4	Z311600001-

NOZZLE, FUEL INJECTION

FIG. No. 4210



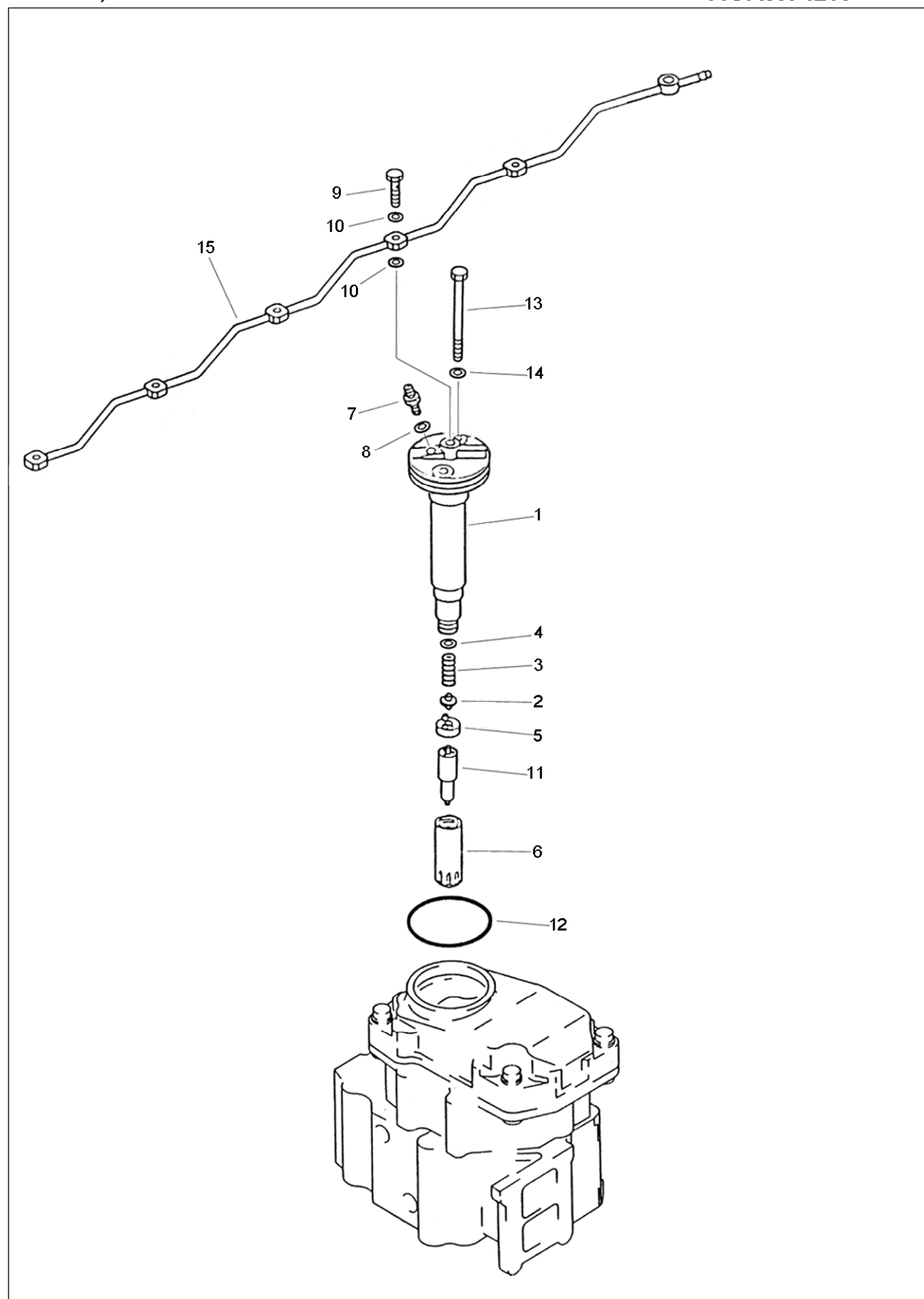
BS6D125-1(BE300)

NOZZLE, FUEL INJECTION**FIG. No. 4210**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z7180011	NOZZLE HOLDER ASSLY	6	Z311600001-
	30Z7180393	. NOZZLE HOLDER	1	Z311600001-
1	30Z7180539	.. BODY,NOZZLE HOLDER	1	Z311600001-
2	30Z7180547	.. PIN,PRESSURE	1	Z311600001-
3	30Z7180555	.. SPRING PRESSURE	1	Z311600001-
4	30Z7180563	.. SHIM, 0.700 MM	AR	Z311600001-
4	30Z7180571	.. SHIM, 0.725 MM	AR	Z311600001-
4	30Z7180588	.. SHIM, 0.750 MM	AR	Z311600001-
4	30Z7180596	.. SHIM, 0.775 MM	AR	Z311600001-
4	30Z7180603	.. SHIM, 0.800 MM	AR	Z311600001-
4	30Z7180611	.. SHIM, 0.825 MM	AR	Z311600001-
4	30Z7180758	.. SHIM, 0.850 MM	AR	Z311600001-
4	30Z7180628	.. SHIM, 0.875 MM	AR	Z311600001-
4	30Z7180766	.. SHIM, 0.900 MM	AR	Z311600001-
4	30Z7180636	.. SHIM, 0.925 MM	AR	Z311600001-
4	30Z7180774	.. SHIM, 0.950 MM	AR	Z311600001-
4	30Z7180644	.. SHIM, 0.975 MM	AR	Z311600001-
4	30Z7180782	.. SHIM, 1.000 MM	AR	Z311600001-
4	30Z7180652	.. SHIM, 1.025 MM	AR	Z311600001-
4	30Z7180799	.. SHIM, 1.050 MM	AR	Z311600001-
4	30Z7180669	.. SHIM, 1.075 MM	AR	Z311600001-
4	30Z7180806	.. SHIM, 1.100 MM	AR	Z311600001-
4	30Z7180677	.. SHIM, 1.125 MM	AR	Z311600001-
4	30Z7180814	.. SHIM, 1.150 MM	AR	Z311600001-
4	30Z7180685	.. SHIM, 1.175 MM	AR	Z311600001-
4	30Z7180822	.. SHIM, 1.200 MM	AR	Z311600001-
4	30Z7180693	.. SHIM, 1.225 MM	AR	Z311600001-
4	30Z7180839	.. SHIM, 1.250 MM	AR	Z311600001-
4	30Z7180709	.. SHIM, 1.275 MM	AR	Z311600001-
4	30Z7180847	.. SHIM, 1.300 MM	AR	Z311600001-
4	30Z7180717	.. SHIM, 1.325 MM	AR	Z311600001-
4	30Z7180855	.. SHIM, 1.350 MM	AR	Z311600001-

NOZZLE, FUEL INJECTION

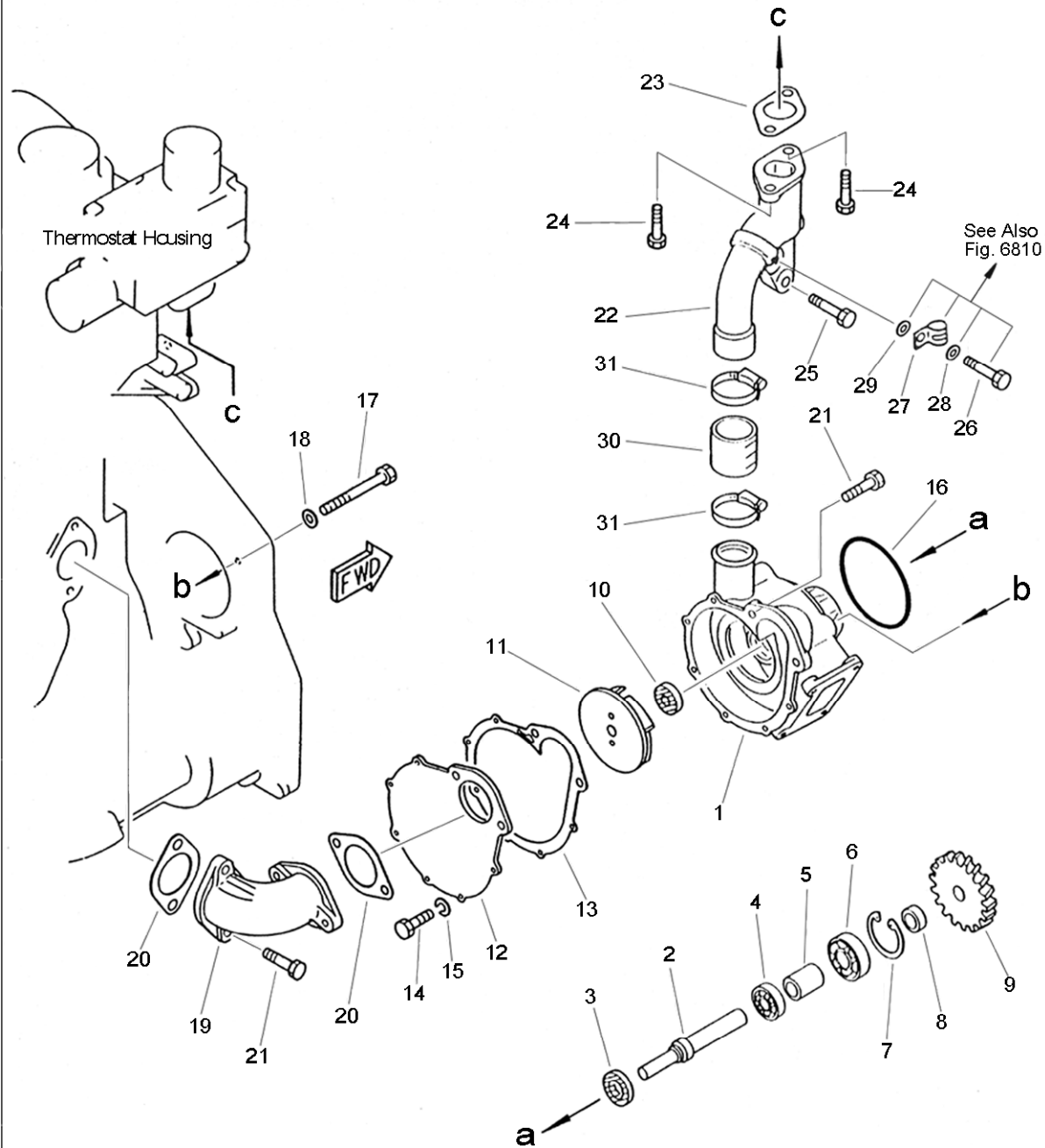
FIG. No. 4210



BS6D125-1(BE300)

NOZZLE, FUEL INJECTION**FIG. No. 4210**

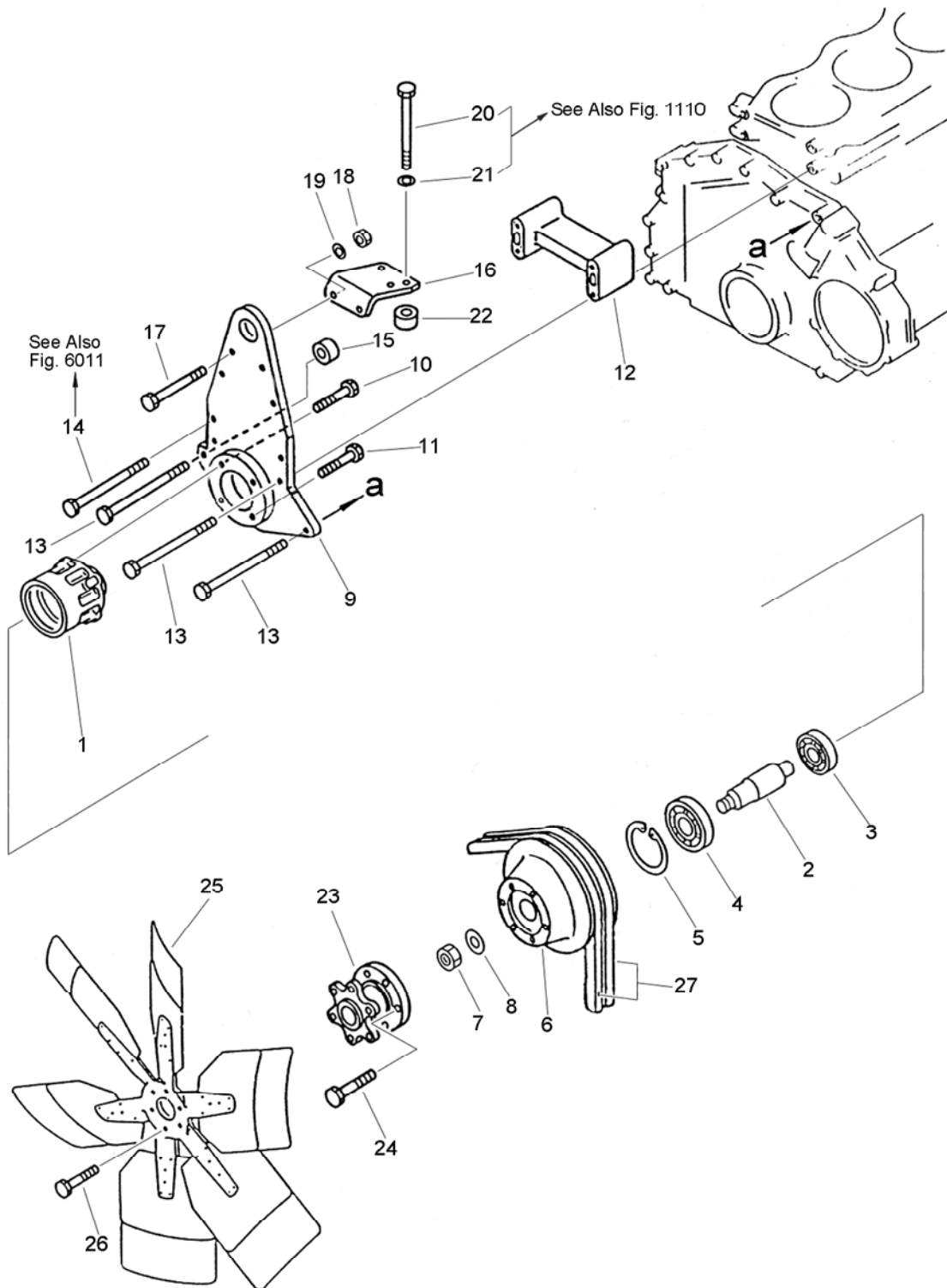
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
4	30Z7180725	.. SHIM, 1.375 MM	AR	Z311600001-
4	30Z7180863	.. SHIM, 1.400 MM	AR	Z311600001-
4	30Z7180733	.. SHIM, 1.425 MM	AR	Z311600001-
4	30Z7180871	.. SHIM, 1.450 MM	AR	Z311600001-
4	30Z7180741	.. SHIM, 1.475 MM	AR	Z311600001-
4	30Z7180888	.. SHIM, 1.500 MM	AR	Z311600001-
5	30Z7180896	.. PACKING	1	Z311600001-
6	30Z7180903	.. NUT, RETAINING	1	Z311600001-
7	30Z7180911	.. CONNECTOR, INLET	1	Z311600001-
8	30Z7180928	.. GASKET	1	Z311600001-
9	30Z7180936	.. SCREW	1	Z311600001-
10	CPF06-00812 K1	.. GASKET	2	Z311600001-
11	30Z7180409	. NOZZLE	6	Z311600001-
12	07000-65065 K1	O-RING	6	Z311600001-
13	CFB02-21045	BOLT	12	Z311600001-
14	CPF06-01012 K1	GASKET	12	Z311600001-
15	30Z7130245	TUBE	1	Z311600001-



WATER PUMP**FIG. No. 5010**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z6100013	WATER PUMP ASSY.	1	Z311600001-
1	(*30Z6140303)	. BODY,WATER PUMP	1	Z311600001-
2	30Z6110122	. SHAFT, WATER PUMP	1	Z311600001-
3	30Z6180497 KW K4	. OIL SEAL, WATER PUMP	1	Z311600001-
4	06030-06004 KW	. BEARING, BALL	1	Z311600001-
5	30Z6110139	. SPACER	1	Z311600001-
6	06030-06304 KW	. BEARING,BALL	1	Z311600001-
7	CFL02-15220 KW	. SNAP, RING	1	Z311600001-
8	30Z6110066	. SPACER	1	Z311600001-
9	30Z6150364	. GEAR, WATER PUMP	1	Z311600001-
10	41Z6180822 KW K4	. SEAL, WATER PUMP	1	Z311600001-
11	30Z6140311	. IMPELLER, WATER PUMP	1	Z311600001-
12	30Z6110114	. COVER, WATER PUMP	1	Z311600001-
13	30Z6160384 KW K4	. GASKET,WATER PUMP	1	Z311600001-
14	CFS01-30816	. BOLT	6	Z311600001-
15	CFW01-10825	. WASHER	6	Z311600001-
16	07000-62115 K4	O-RING	1	Z311600001-
17	CFB02-21010	BOLT	3	Z311600001-
18	CFW02-11020	WASHER	3	Z311600001-
19	31Z6140122	CONNECTOR	1	Z311600001-
20	30Z6270066 K4	GASKET	2	Z311600001-
21	CFB01-21030	BOLT	4	Z311600001-
22	31Z6140099	CONNECTOR	1	Z311600001-
23	30Z6170403 K1	GASKET	1	Z311600001-
24	CFB01-21030	BOLT	2	Z311600001-
25	CFB01-21040	BOLT	1	Z311600001-
26	CFB01-21045	BOLT	1	Z311600001-
27	31Z8290122	CLIP	1	Z311600001-
28	CFW02-11020	WASHER	1	Z311600001-
29	CFW05-10032	WASHER	1	Z311600001-
30	30Z6180489	HOSE	1	Z311600001-
31	CCC01-07020	CLAMP	2	Z311600001-

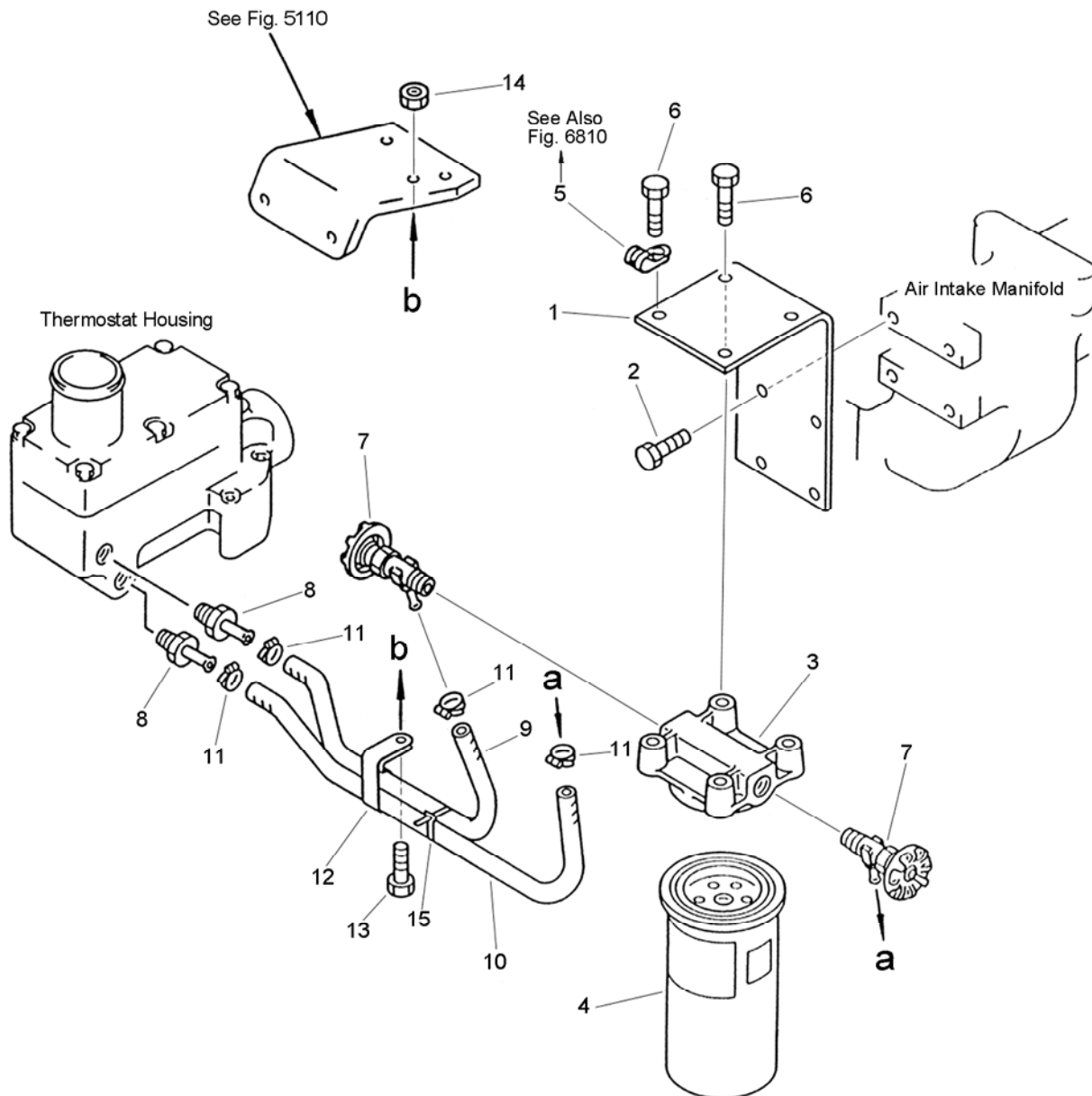
FIG. No. 5110 FAN, COOLING



FAN, COOLING
FIG. No. 5110

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z6100019	CASE ASSY, FAN DRIVE	1	Z311600001-
1	30Z6140336	. CASE, FAN DRIVE	1	Z311600001-
2	30Z6110147	. SHAFT, FAN DRIVE	1	Z311600001-
3	06037-06206	. BEARING, BALL	1	Z311600001-
4	06037-06307	. BEARING, BALL	1	Z311600001-
5	CFL02-18025	. SNAP RING	1	Z311600001-
6	31Z6140114	. PULLEY,FAN DRIVE	1	Z311600001-
7	CFN20-42414	. NUT	1	Z311600001-
8	CFW05-24060	. WASHER	1	Z311600001-
9	31Z6130062	PLATE, FAN DRIVE	1	Z311600001-
10	CFB01-21055	BOLT	2	Z311600001-
11	CFB01-21050	BOLT	2	Z311600001-
12	31Z6120059	SPACER,FAN DRIVE	1	Z311600001-
13	CFB01-21090	BOLT	5	Z311600001-
14	CFB01-21090	BOLT	1	Z311600001-0081
14	CFB02-21000	BOLT	1	Z311600082-
15	31Z6110039	SPACER	1	Z311600001-
16	31Z6110047	BRACKET,FAN DRIVE	1	Z311600001-
17	CFB01-21040	BOLT	2	Z311600001-
18	CFN01-21084	NUT	2	Z311600001-
19	CFW05-10032	WASHER	2	Z311600001-
20	CFB01-21095	BOLT	2	Z311600001-
21	CFW02-11020	WASHER	2	Z311600001-
22	30Z6110033	SPACER	2	Z311600001-
23	31Z6140106	SPACER,FAN DRIVE	1	Z311600001-
24	CFB01-21030	BOLT	6	Z311600001-
25	31Z6180137	FAN	1	Z311600001-
26	CFB01-21030	BOLT	6	Z311600001-
27	04121-22261	V- BELT	1	Z311600001-

FIG. No. 5210 CORROSION RESISTOR AND PIPING



CORROSION RESISTOR AND PIPING**FIG. No. 5210**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z6110022	BRACKET,CORR.RESISTOR	1	Z311600001-
2	CFB01-21030	BOLT	4	Z311600001-
	30Z6180504	CORROSION RESISTOR	1	Z311600001-
3	30Z6120191	. HEAD,CORR. RESISTOR	1	Z311600001-
4	30Z6180448	. CARTRIDGE, CORR. RESISTOR	1	Z311600001-
5	31Z6190173	CLIP	1	Z311600001-
6	CFB25-21025	BOLT	4	Z311600001-
7	30Z6180512	VALVE,CORR.RESISTOR	2	Z311600001-
8	30Z6130219	NIPPLE	2	Z311600001-
9	07260-20936	HOSE	1	Z311600001-
10	07260-20963	HOSE	1	Z311600001-
11	CCC01-02006	CLAMP	4	Z311600001-
12	30Z6190532	CLIP	1	Z311600001-
13	CFS01-31020	BOLT	1	Z311600001-
14	CFN01-21084	NUT	1	Z311600001-
15	08034-00414 K2	BAND	1	Z311600001-

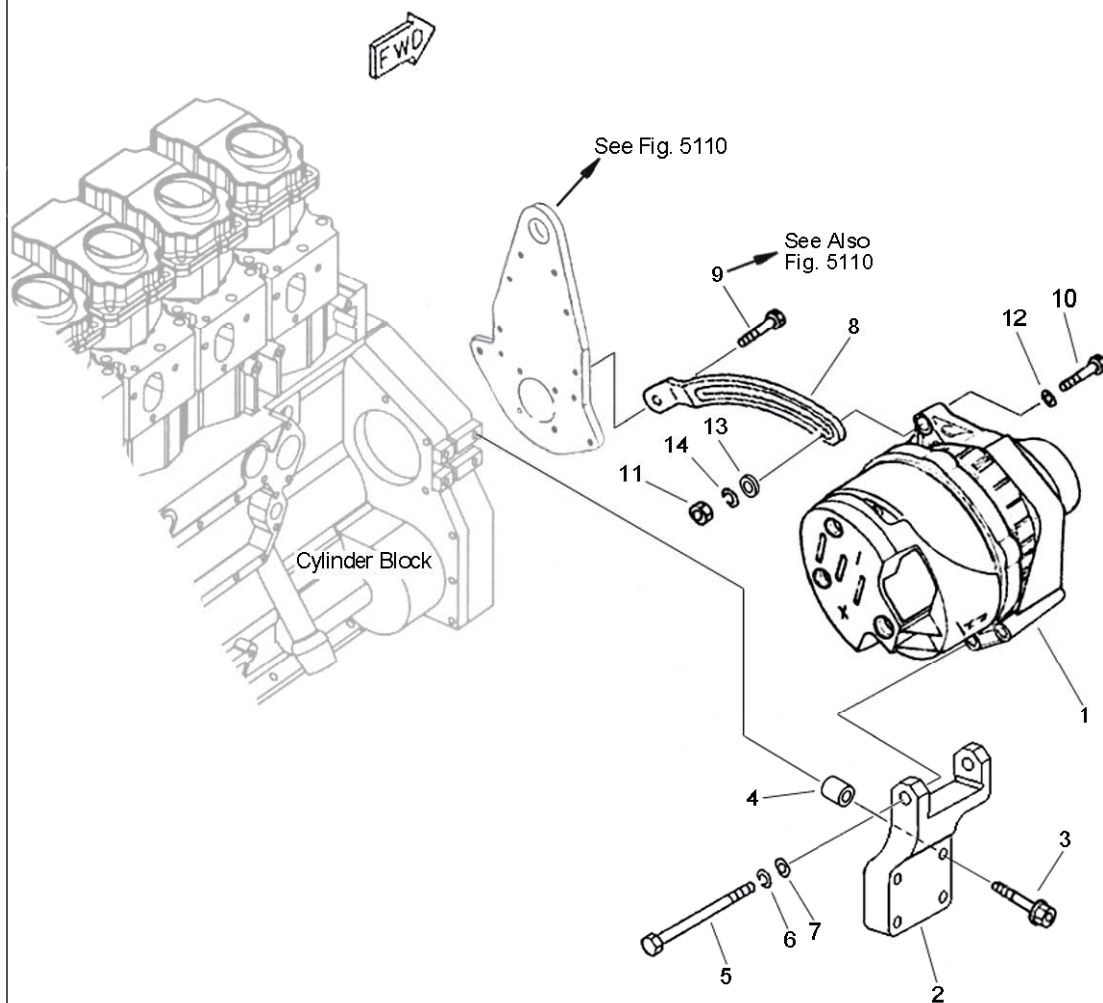
This diagram illustrates the exploded view of a front wheel hub assembly. The components are numbered as follows:

- 1**: The central hub assembly, featuring a circular hub with multiple mounting points and a central axle hole.
- 2**: A triangular mounting bracket or knuckle arm.
- 3**: A small bolt or screw used to secure the bracket.
- 4**: A long bolt or screw for mounting the hub to the frame.
- 5**: A small nut or washer.
- 6**: A small washer or spacer plate.
- 7**: A curved metal arm or bracket.
- 8**: A long bolt or screw for the curved arm.
- 9**: A small cylindrical component, possibly a bush or spacer.
- 10**: A small nut or washer.
- 11**: A small washer or spacer plate.
- 12**: A small nut or washer.

The diagram also includes a partial view of the vehicle's front end on the left, showing the "FWD" (Front Wheel Drive) label and a "Block" label, indicating the assembly's location within the vehicle's chassis.

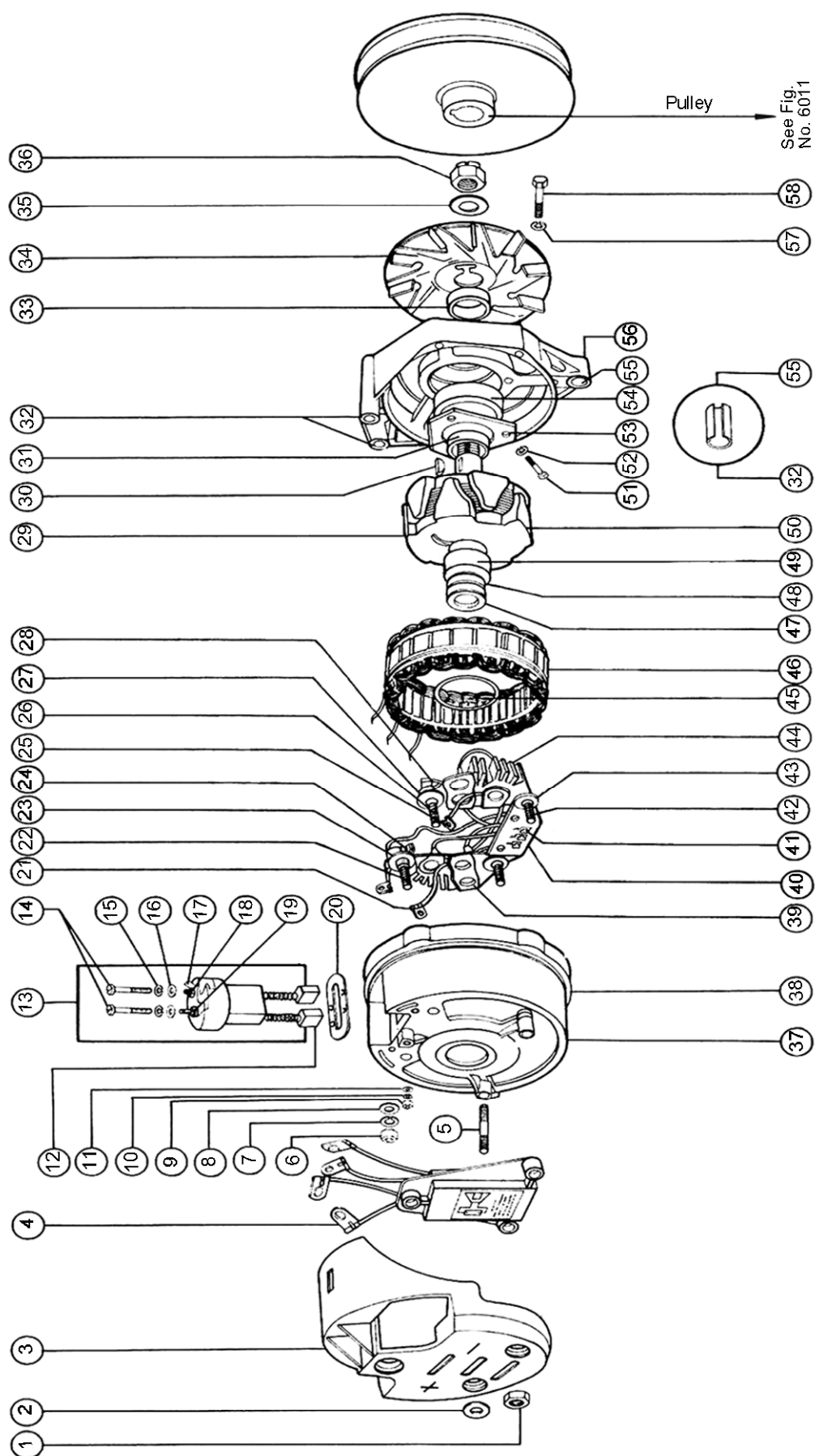
ALTERNATOR & MOUNTING**FIG. No. 6010**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z8280898	ALTERNATOR	1	Z311600001-0081
2	31Z8240064	BRACKET, ALTERNATOR	1	Z311600001-0081
3	01437-01030	BOLT	4	Z311600001-0081
4	CFB08-21425	BOLT	1	Z311600001-0081
5	CFN04-11411	NUT	1	Z311600001-0081
6	CFW02-11425	WASHER	2	Z311600001-0081
7	31Z8210045	PLATE	1	Z311600001-0081
8	CFB02-21010	BOLT	1	Z311600001-0081
9	31Z8210037	SPACER	1	Z311600001-0081
10	CFS24-31235	BOLT	1	Z311600001-0081
11	CFW05-12032	WASHER	1	Z311600001-0081
12	31Z8210029	BOSS	1	Z311600001-0081



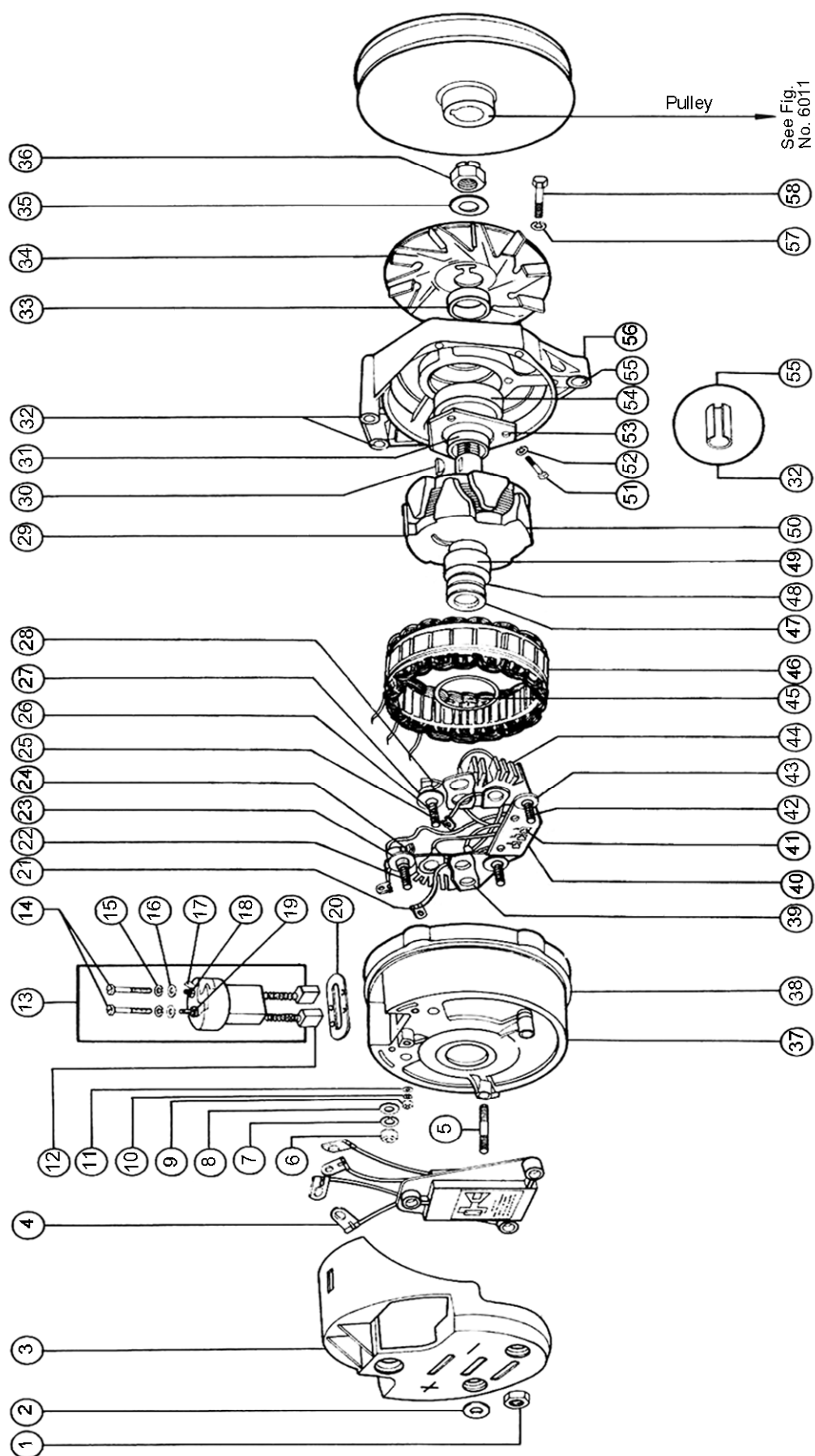
ALTERNATOR & MOUNTING (LUCAS TVS-30A)**FIG. No. 6011**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	30Z8201795	ALTERNATOR ASSY.	1	Z311600082-
	51Z8280736	. ALTERNATOR(W/O PULLEY)	1	Z311600082-
	30Z8241769	. PULLEY	1	Z311600082-
2	30Z8211052	BRACKET	1	Z311600082-
3	01437-01065	BOLT	4	Z311600082-
4	10Z1310094	SPACER	4	Z311600082-
5	01011-61225	BOLT	1	Z311600082-
6	CFW01-11236	WASHER,SPRING	1	Z311600082-
7	CFW02-11225	WASHER	1	Z311600082-
8	31Z8211058	ADJUST PLATE	1	Z311600082-
9	CFB02-21000	BOLT	1	Z311600082-
10	CFB01-21055	BOLT	1	Z311600082-
11	CFN01-21084	NUT	1	Z311600082-
12	CFW02-11020	WASHER	1	Z311600082-
13	51Z8210638	WASHER	1	Z311600082-
14	CFW01-11030	WASHER,SPRING	1	Z311600082-



ALTERNATOR (LUCAS TVS 30A)**FIG. No. 6111**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	51Z8280736 (L-TVS P/No.)	ALTERNATOR (L-TVS 30A)	1	Z311600082-
1	261 302 87	. NUT FIXING STUD	3	Z311600082-
2	261 413 16	. SPRING WASHER	3	Z311600082-
3	9030-1765	. MOULDED COVER	1	Z311600082-
4	269 380 63A	. REGULATOR	1	Z311600082-
5	9030-1358	. FIXING STUD	3	Z311600082-
6	261 304 37	. NUT, POSITIVE TERMINAL	2	Z311600082-
7	261 403 94	. SPRING WASHER, POSITIVE TERM.	2	Z311600082-
8	261 402 47	. PLAIN WASHER, POS. TERM.	1	Z311600082-
9	261 301 07	. NUT, NEG. TERMINAL	2	Z311600082-
10	261 403 84	. SPRING WASHER	2	Z311600082-
11	261 401 37	. PLAIN WASHER, NEG. TER.	1	Z311600082-
12	9030-340	. BRUSH ASSEMBLY	2	Z311600082-
13	9030-315 A	. BRUSH BOX ASSEMBLY	1	Z311600082-
14	261 002 16	. SCREW	1	Z311600082-
15	261 403 47	. SPRING WASHER	1	Z311600082-
16	261 400 97	. PLAIN WASHER	1	Z311600082-
17	9030-713 A	. INSULATOR	1	Z311600082-
18	261 300 77	. NUT, BRUSH TERMINAL	2	Z311600082-
19	261 440 96	. PLAIN WASHER	2	Z311600082-
20	9030-2040	. GASKET	1	Z311600082-
21	9030-1524	. LEAD ASSY. POSITIVE	1	Z311600082-
22	261 013 27	. TERMINAL, POSITIVE	1	Z311600082-
23	9030-1032 A	. INSULATOR WASHER	1	Z311600082-
24	9030-1518 A	. LOCATOR, POSITIVE TERM.	1	Z311600082-
25	9030-1510	. LEAD ASSY. NEGATIVE	1	Z311600082-
26	261 013 37	. TERMINAL, NEGATIVE	1	Z311600082-
27	9030-1032	. INSULATOR WASHER	1	Z311600082-
28	9030-1518	. LOCATOR, NEGATIVE	1	Z311600082-
29	9030-791	. ROTOR COIL	1	Z311600082-
30	NK 1-8	. KEY	1	Z311600082-

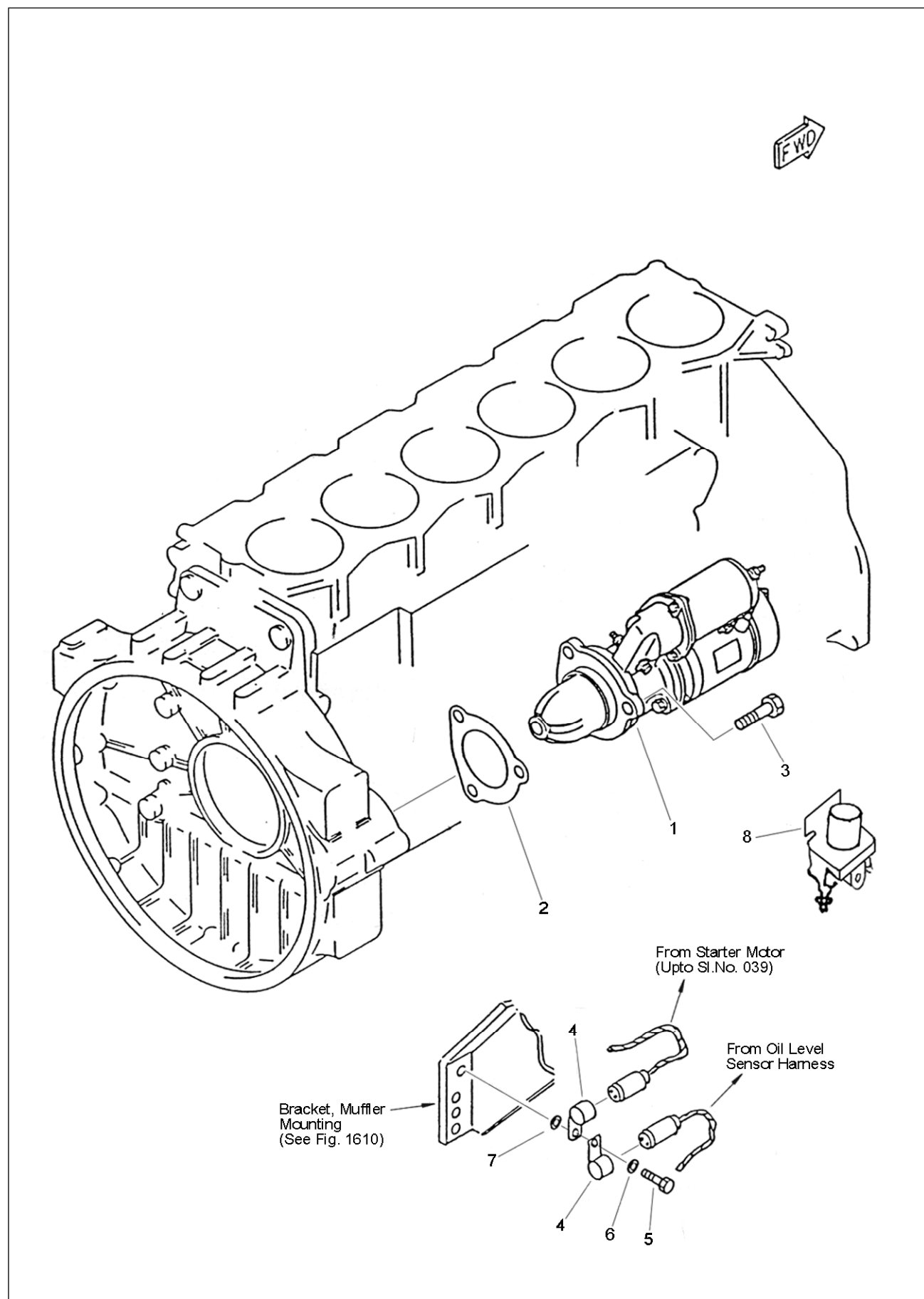


ALTERNATOR (LUCAS TVS 30A)**FIG. No. 6111**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
31	9030-2079 A	. SPACER	1	Z311600082-
32	9030-1756	. INSERT DE. (TOP)	2	Z311600082-
33	9030-2136	. FAN SPACER	1	Z311600082-
34	9030-683	. FAN	1	Z311600082-
35	NW 1 39' Z1	. WASHER	1	Z311600082-
36	9030-330	. NUT, PULLEY	1	Z311600082-
37	9030-669	. INSULATOR	1	Z311600082-
38	9030-784 A	. SRE SHIELD	1	Z311600082-
39	9030-1938	. HEAT SINK ASSY. POSITIVE	1	Z311600082-
40	9030-1603 B	. HEAT SINK ASSY. AUX.	1	Z311600082-
41	9030-1799	. AUX. DIODE	1	Z311600082-
42	261 013 16	. SCREW	2	Z311600082-
43	9030-1398	. INSULATOR BUSH	2	Z311600082-
44	9030-1939	. HEAT SINK ASSY. NEGATIVE	1	Z311600082-
45	9030-1285 H	. O-RING	1	Z311600082-
46	9030-1391	. STARTER ASSEMBLY	1	Z311600082-
47	9030-1513	. SLIP RING ASSY.	1	Z311600082-
48	5959'25	. CIRCLIP	1	Z311600082-
49	9030-1690	. BEARING, SRE	1	Z311600082-
50	9030-610	. ROTOR ASSEMBLY	1	Z311600082-
51	261 012 96	. SCREW	3	Z311600082-
52	261 403 44	. SPRING WASHER	3	Z311600082-
53	9030-873	. CLAMP PLATE	1	Z311600082-
54	9030-1689	. BEARING, D.E	1	Z311600082-
55	9030-321	. INSERT	1	Z311600082-
56	9030-1688 D	. D.E. SHIELD	1	Z311600082-
57	261-403-84	. SPRING WASHER	3	Z311600082-
58	9030-382	. FIXING SCREW	3	Z311600082-

STARTER MOTOR AND MOUNTING

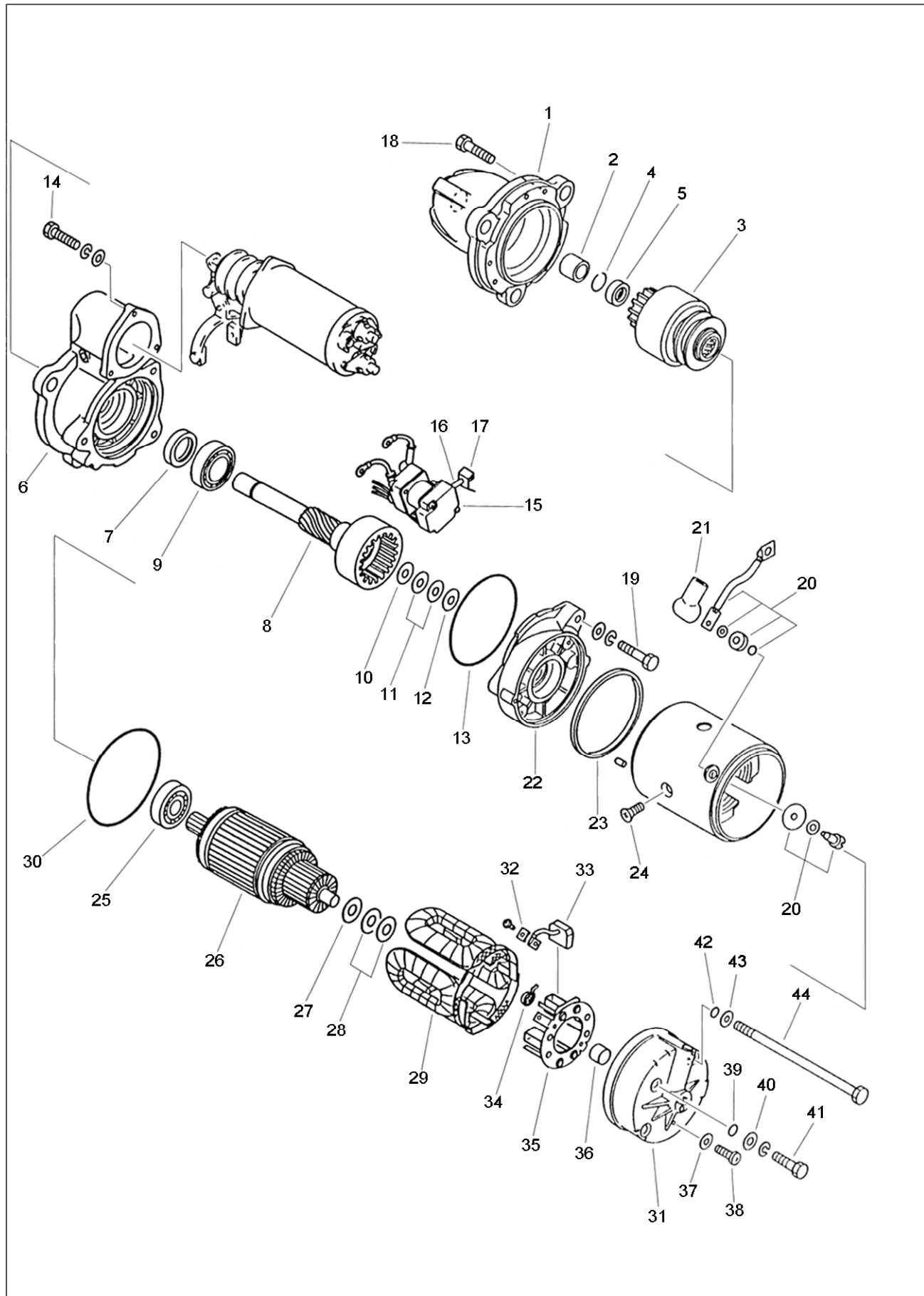
FIG. No. 6210



BS6D125-1(BE300)

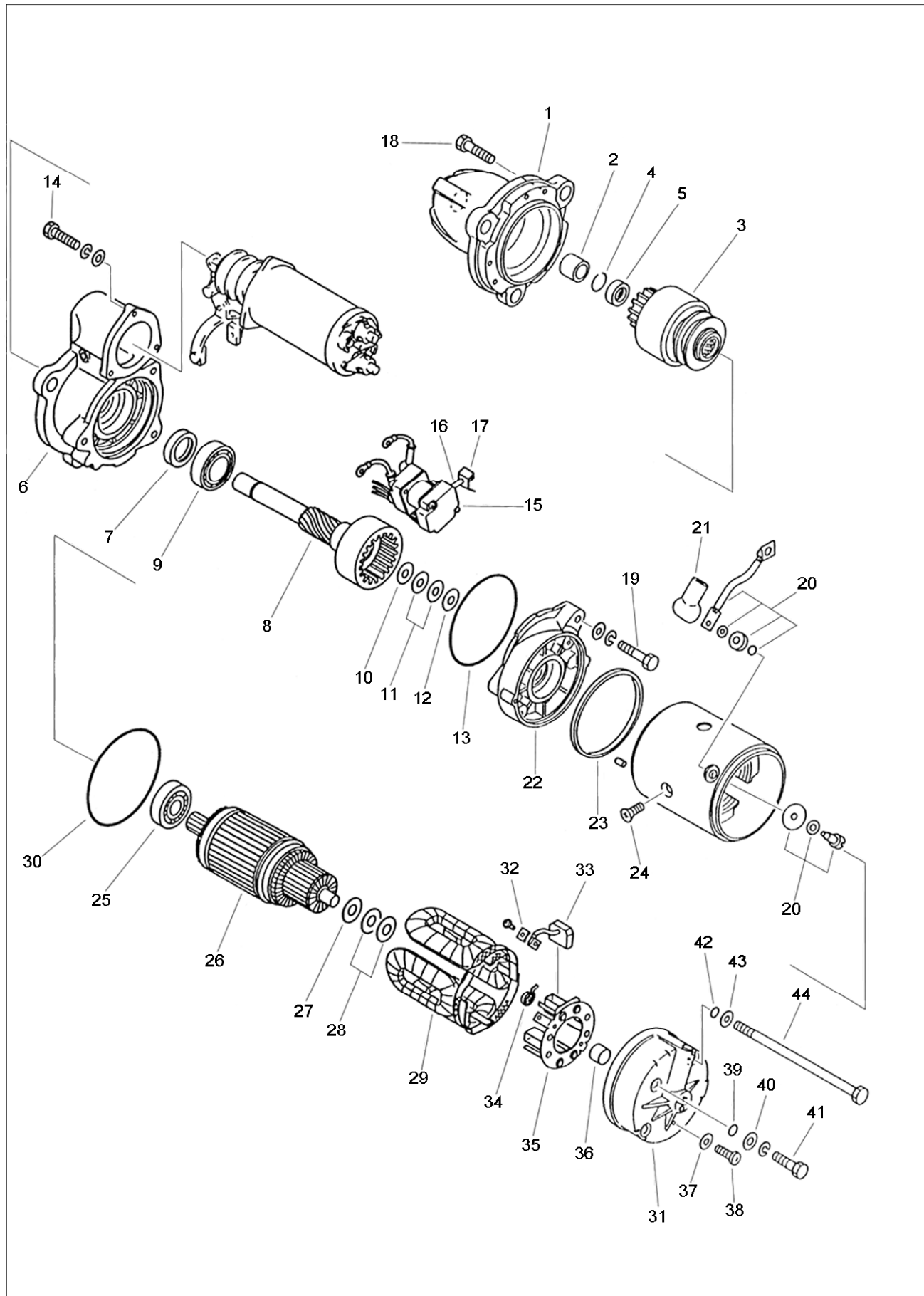
STARTER MOTOR & MOUNTING**FIG. No. 6210**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z8280079	STARTER MOTOR ASSY	1	Z311600001-0039
1	30Z8281078	STARTER MOTOR ASSY	1	Z311600040-
2	30Z8270078 K2	GASKET	1	Z311600001-
3	CFS01-31640	BOLT	3	Z311600001-
4	08052-11711	CLAMP	2	Z311600001-0039
4	08052-11711	CLAMP	1	Z311600040-
5	CFS01-31016	BOLT	1	Z311600001-
6	CFW02-11020	WASHER	1	Z311600001-
7	CFW05-10032	WASHER	1	Z311600001-
8	30Z8281061	SOLENOID 24V-4ST(L_TVS)	1	Z311600040-



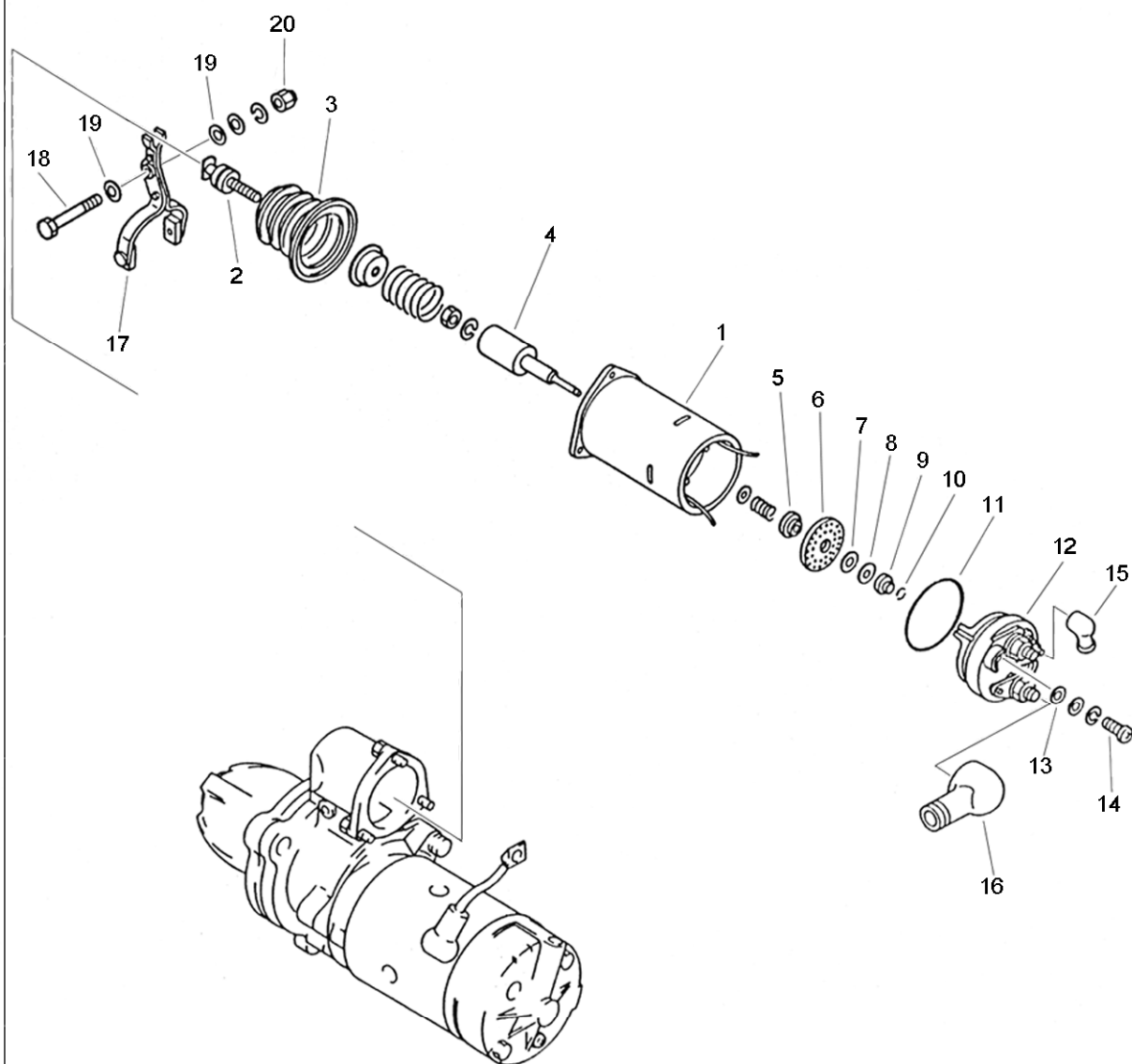
STARTER MOTOR(1/2)**FIG. No. 6215**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z8280079	STARTER	1	Z311600001-0039
1	31Z8280613	. FRONT BRACKET ASSY	1	Z311600001-0039
2	30Z8280413	.. BEARING	1	Z311600001-0039
3	30Z8280632	. CLUTCH ASSY,OVER RUNNING	1	Z311600001-0039
4	30Z8280421	. RING,CLIP	1	Z311600001-0039
5	31Z8280435	. STOPPER,PINION	1	Z311600001-0039
6	31Z8280646	. CENTRE BRACKET ASSY	1	Z311600001-0039
7	30Z8280251	.. SEAL,OIL	1	Z311600001-0039
8	31Z8280824	.. SEAL,ASSY	1	Z311600001-0039
9	31Z8280508	.. BEARING,BALL	1	Z311600001-0039
10	30Z8280284	. WASHER	1	Z311600001-0039
11	30Z8280292	. WASHER	2	Z311600001-0039
12	30Z8280308	. WASHER,INSULATE	1	Z311600001-0039
13	30Z8280316	. O-RING	1	Z311600001-0039
14	30Z8280146	. BOLT	3	Z311600001-0039
15	31Z8280249	. SWITCH ASSY,SAFETY RELAY	1	Z311600001-0039
16	31Z8280176	.. BOLT	1	Z311600001-0039
17	31Z8280816	.. HOLDER	1	Z311600001-0039
18	31Z8280468	. BOLT	6	Z311600001-0039
19	30Z8280187	. BOLT	3	Z311600001-0039
20	31Z8280857	. TERMINAL ASSY	1	Z311600001-0039
21	30Z8280195	. CAP	1	Z311600001-0039
22	31Z8280654	. BRACKET,CENTRE	1	Z311600001-0039
23	31Z8280687	. PACKING	1	Z311600001-0039
24	31Z8280451	. SCREW	4	Z311600001-0039
25	31Z8280516	. BEARING,BALL	1	Z311600001-0039
26	31Z8280605	. ARMATURE ASSY	1	Z311600001-0039
27	31Z8280598	. WASHER	1	Z311600001-0039
28	31Z8280679	. WASHER	2	Z311600001-0039
29	31Z8280208	. FIELD COIL ASSY	1	Z311600001-0039
30	31Z8280557	. O-RING	1	Z311600001-0039
31	31Z8280224	.. BRACKET,REAR	1	Z311600001-0039



STARTER MOTOR(1/2)**FIG. No. 6215**

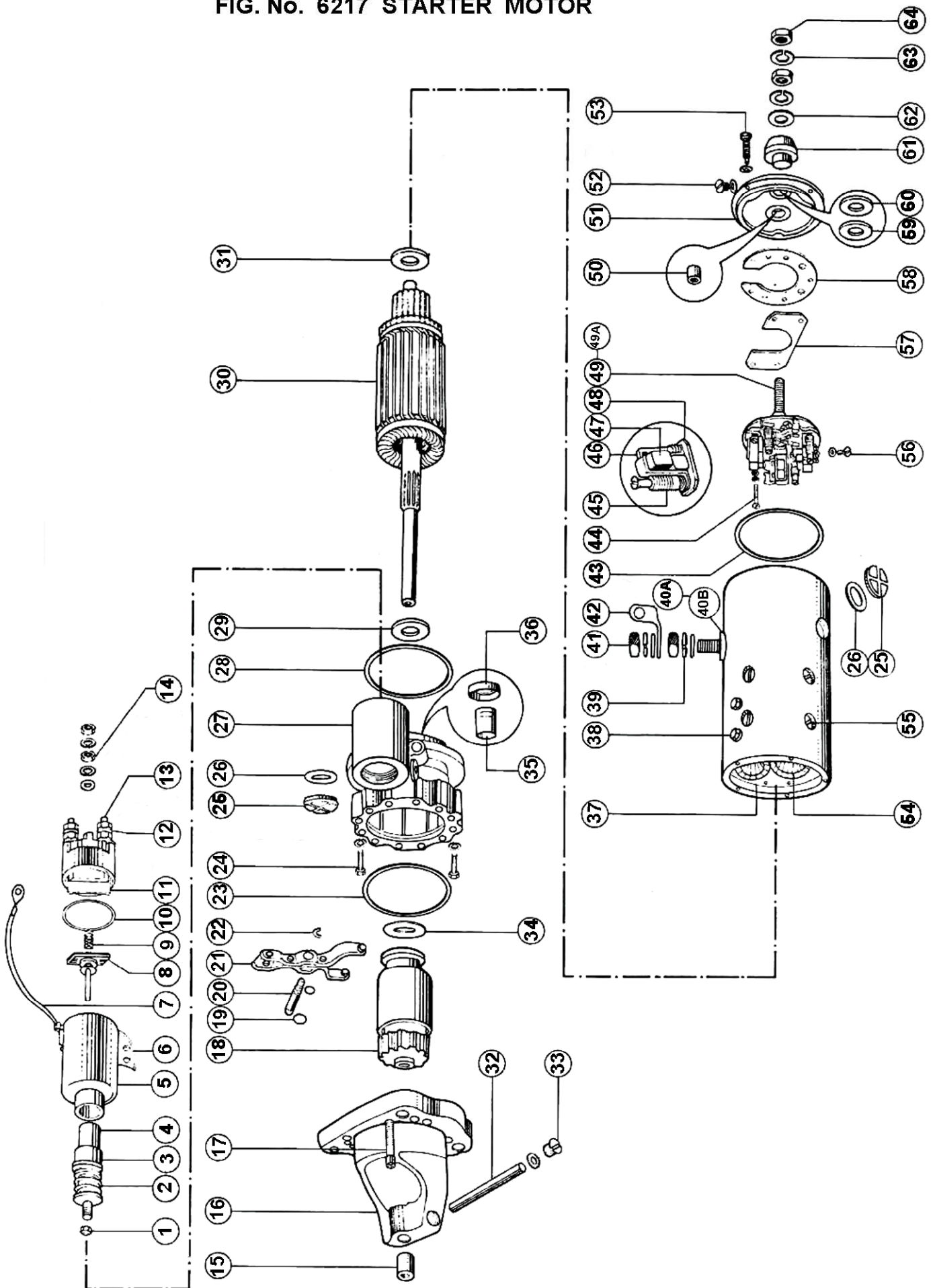
ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
32	31Z8280695	.. PLATE	4	Z311600001-0039
33	31Z8280662	.. BRUSH ASSY	4	Z311600001-0039
34	30Z8280349	.. SPRING,BRUSH	4	Z311600001-0039
35	31Z8280232	.. BRUSH HOLDER ASSY	1	Z311600001-0039
36	31Z8280832	.. METAL	1	Z311600001-0039
37	30Z8280673	.. WASHER,SEAL	1	Z311600001-0039
38	31Z8280168	.. SCREW	1	Z311600001-0039
39	31Z8280524	.. O-RING	2	Z311600001-0039
40	31Z8280808	.. WASHER	2	Z311600001-0039
41	31Z8280184	.. BOLT	2	Z311600001-0039
42	30Z8280373	. O-RING	2	Z311600001-0039
43	30Z8280381	. WASHER	2	Z311600001-0039
44	31Z8280192	. BOLT	2	Z311600001-0039



STARTER MOTOR(2/2)**FIG. No. 6216**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z8280079	STARTER	1	Z311600001-0039
1	31Z8280427	. MAGNETIC SWITCH ASSY	1	Z311600001-0039
2	31Z8280443	.. SCREW	1	Z311600001-0039
3	30Z8280551	.. CAP	1	Z311600001-0039
4	31Z8280792	.. PLUNGER ASSY	1	Z311600001-0039
5	30Z8280592	.. BUSHING,INSULATE	1	Z311600001-0039
6	30Z8280608	.. CONTACTOR,MOVING	1	Z311600001-0039
7	30Z8280616	.. WASHER,INSULATE	1	Z311600001-0039
8	30Z8280624	.. WASHER	2	Z311600001-0039
9	30Z8280632	.. HOLDER	1	Z311600001-0039
10	30Z8280649	.. RING,CLIP	2	Z311600001-0039
11	31Z8280549	.. O-RING	1	Z311600001-0039
12	31Z8280435	.. TERMINAL ASSY	1	Z311600001-0039
13	30Z8280673	.. WASHER,SEAL	2	Z311600001-0039
14	30Z8280681	.. SCREW	2	Z311600001-0039
15	31Z8280573	. CAP,GUM	1	Z311600001-0039
16	31Z8280565	. CAP,GUM	1	Z311600001-0039
17	31Z8280621	. SHIFT LEVER ASSY	1	Z311600001-0039
18	31Z8280216	. PIN,LEVER	1	Z311600001-0039
19	31Z8280476	. WASHER SEAL	2	Z311600001-0039
20	31Z8280581	. NUT	1	Z311600001-0039

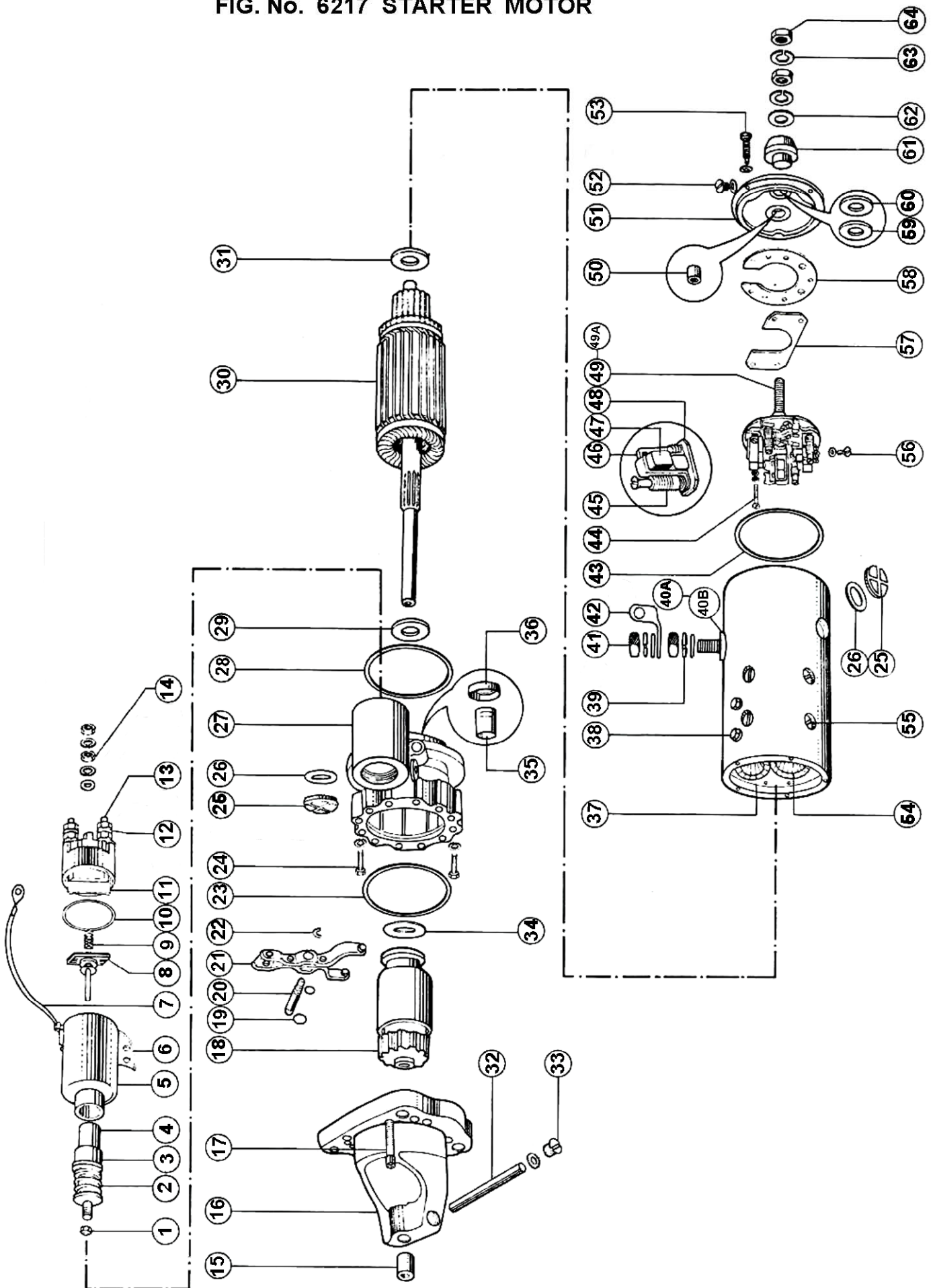
FIG. No. 6217 STARTER MOTOR



STARTER MOTOR**FIG. No. 6217**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z8281078 (LUCAS PT.No.)	STARTER MOTOR (LUCAS TVS)	1	Z311600040-
1	261 307 26	. NUT PLUNGER SHAFT	1	Z311600040-
2	266 403 67	. PLUNGER SPRING	1	Z311600040-
3	266 403 65	. SHROUD	1	Z311600040-
4	266 403 35	. PLUNGER ASSEMBLY	1	Z311600040-
5	266 407 95	. BODY & WINDING ASSY	1	Z311600040-
6	269 640 12B	. SOLENOID SWITCH (37 S)	1	Z311600040-
7	262 524 47	. SHUNT LEAD	1	Z311600040-
8	266 407 79	. SPINDLE & CONT.ASSY	1	Z311600040-
9	266 406 80	. SPRING	1	Z311600040-
10	266 407 85	. SEAL(SOL)	1	Z311600040-
11	266 407 94	. TERMINAL BASE ASSY	1	Z311600040-
12	261 307 47	. NUT	4	Z311600040-
13	266 404 73	. TERM.CONT.ASSY	2	Z311600040-
14	261 301 17	. NUT	4	Z311600040-
15	262 521 00	. BEARING BUSH	1	Z311600040-
16	262 520 96	. MOUNTING FLANGE ASSY	1	Z311600040-
17	261 015 56	. FIXING SCREW	6	Z311600040-
18	262 535 80	. DRIVE ASSEMBLY	1	Z311600040-
19	9030-1285K	. "O" RING	1	Z311600040-
20	262 521 57	. PIVOT PIN	1	Z311600040-
21	262 521 27	. ENGAGING LEVER ASSEMBLY	1	Z311600040-
22	267 111 81	. CIRCLIP	1	Z311600040-
23	262 527 73	. SEALING RING	1	Z311600040-
24	261 015 36	. FIXING SCREW D.E	6	Z311600040-
25	262 521 54	. SEALING PLUG	2	Z311600040-
26	262 521 55	. SEALING WASHER	6	Z311600040-
27	262 520 93	. D.E BRACKET	1	Z311600040-
28	262 524 25	. SEALING RING C.E	1	Z311600040-
29	262 521 41	. THRUST WASHER D.E	1	Z311600040-
30	262 530 68	. ARMATURE ASSEMBLY	1	Z311600040-
31	262 521 43	. THRUST WASHER C.E	1	Z311600040-
32	262 521 68	. FELT CORD	AR	Z311600040-

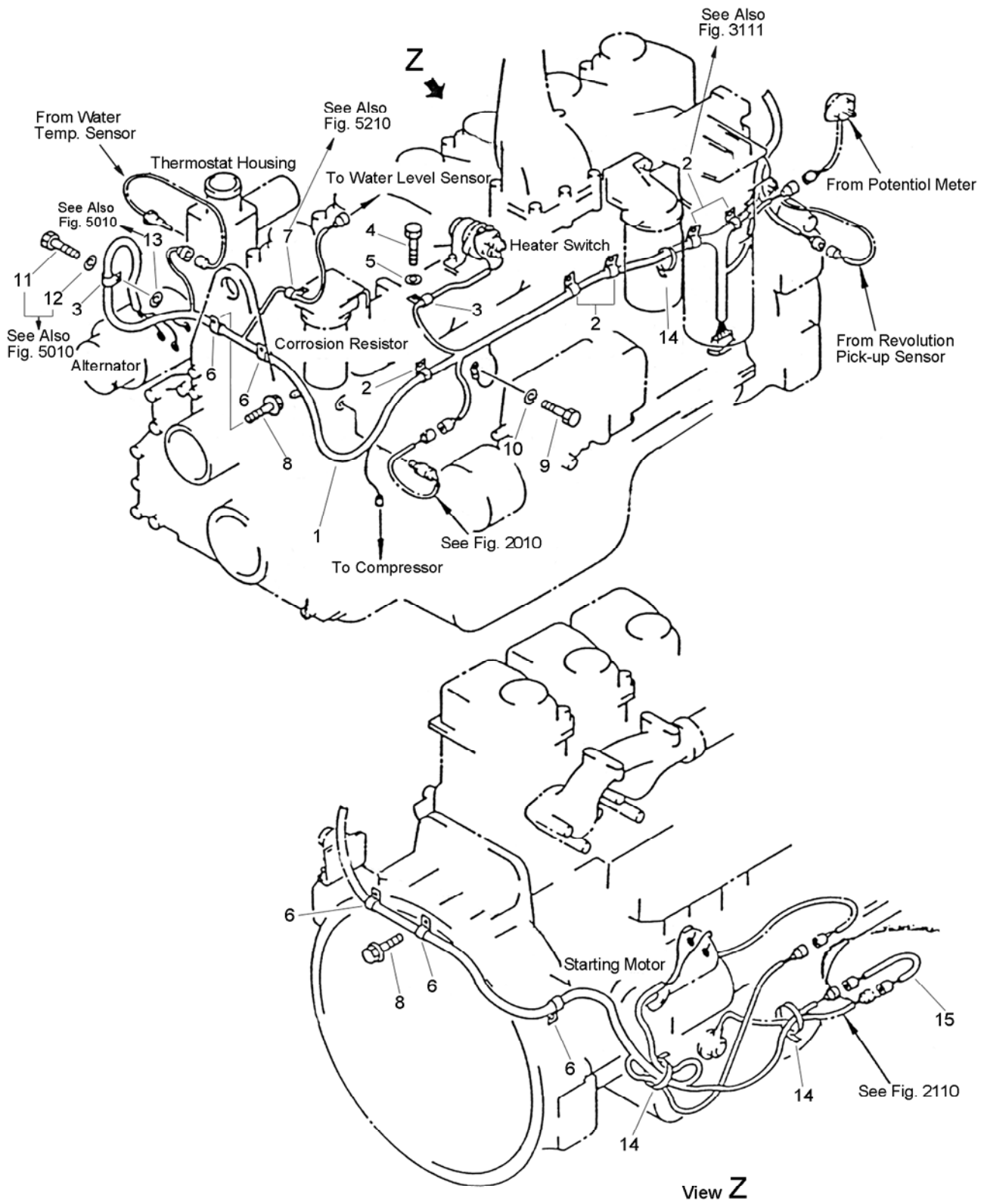
FIG. No. 6217 STARTER MOTOR



STARTER MOTOR**FIG. No. 6217**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
33	9030-1958	. SCREW	1	Z311600040-
34	262 521 42	. STOP WASHER	1	Z311600040-
35	262 521 01	. BEARING BUSH D.E	1	Z311600040-
36	262 521 64	. OIL SEAL D.E	1	Z311600040-
37	262 538 59	. INSULATOR YOKE	1	Z311600040-
38	261 006 96	. SCREW(SOL.FXG)	4	Z311600040-
39	9030-167	. SPRING WASHER	2	Z311600040-
40A	262 521 61	. INSUL(BUSH)TOP	1	Z311600040-
40B	263 301 22	. INSUL(BUSH)BOTTOM	1	Z311600040-
41	261 307 47	. NUT	2	Z311600040-
42	262 539 05	. CONNECTOR	1	Z311600040-
43	262 524 25	. SEALING RING D.E	1	Z311600040-
44	261 005 86	. SCREW BR GEAR FXG	3	Z311600040-
45	262 521 62	. SPRING BRUSH	8	Z311600040-
46	262 521 06	. BRUSH HOLDER	4	Z311600040-
47	262 521 37	. BRUSH ASSEMBLY	8	Z311600040-
48	262 521 09	. INSULATOR BR ASSY.	2	Z311600040-
49	262 521 53	. BRUSH GEAR RING ASSY	1	Z311600040-
49A	262 538 21	. BRUSH CARRIER ASSY	1	Z311600040-
50	262 521 02	. BEARING BUSH C.E	1	Z311600040-
51	262 521 05	. C.E.BRACKET ASSY	1	Z311600040-
52	9030-1958	. SCREW	1	Z311600040-
53	261 015 36	. SCREW	4	Z311600040-
54	262 521 46	. FIELD OIL ASSY	1	Z311600040-
55	9030-809	. POLE SCREW	8	Z311600040-
56	261 005 86	. SCREW	6	Z311600040-
57	262 524 50	. POSITIVE CONNECTOR	1	Z311600040-
58	262 521 08	. BRUSH GEAR CARRIER	1	Z311600040-
59	262 521 35	. SEALING WASHER	1	Z311600040-
60	262 537 05	. INSUL WASHER	1	Z311600040-
61	262 525 26	. INSUL BUSH	1	Z311600040-
62	261 404 09	. WASHER	1	Z311600040-
63	9030-167	. SPRING WASHER	2	Z311600040-
64	261 307 47	. NUT	2	Z311600040-

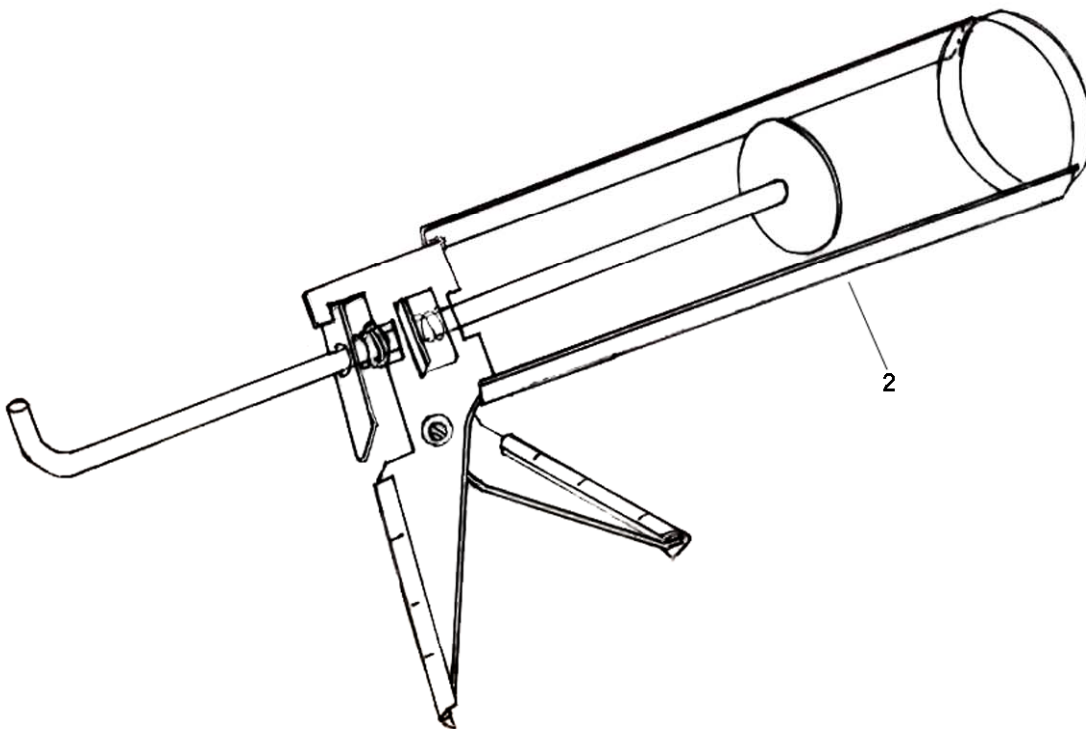
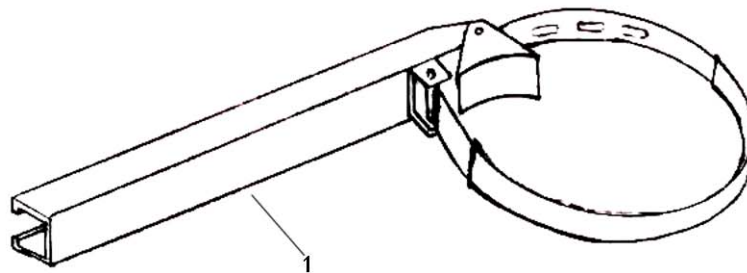
FIG. No. 6810 ELECTRICAL WIRING



ELECTRICAL WIRING**FIG. No. 6810**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z8200017	WIRING HARNESS	1	Z311600001-
2	31Z8290147	CLIP	5	Z311600001-
3	31Z8290122	CLIP	2	Z311600001-
4	CFS01-31016	BOLT	1	Z311600001-
5	CFW02-11020	WASHER	1	Z311600001-
6	31Z8290139	CLIP	5	Z311600001-
7	31Z6190173	CLIP	1	Z311600001-
8	ZFB46-10812	BOLT	4	Z311600001-
9	CFS01-31016	BOLT	1	Z311600001-
10	CFW02-11020	WASHER	1	Z311600001-
11	CFB01-21045	BOLT	1	Z311600001-
12	CFW02-11020	WASHER	1	Z311600001-
13	CFW05-10032	WASHER	1	Z311600001-
14	08034-00414 K2	BAND	4	Z311600001-
15	31Z8280102	WIRING HARNESS	1	Z311600001-

FIG. No. 9010 TOOLS



TOOLS

FIG. No. 9010

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	09019-08035	WRENCH, FILTER	1	Z311600001-
2	7427500995	LIQUID GASKET APPLICATOR	1	Z311600001-

GASKET KITS

CYLINDER HEAD GASKET KIT**FIG. No. K1**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z9900038	CYLINDER HEAD GASKET KIT	1	Z311600001-
1	02893-05043	. O-RING	6	Z311600001-
2	07000-65065	. O-RING	6	Z311600001-
3	30Z1120482	. GASKET	6	Z311600128-
4	30Z1160212	. GASKET	6	Z311600001-0127
5	30Z1160229	. RUBBER	24	Z311600001-
6	30Z1180236	. SEAL, VALVE	12	Z311600001-0084
7	30Z1180447	. SEAL, VALVE	12	Z311600085-
8	30Z1270113	. GASKET	6	Z311600001-
9	30Z1270121	. GASKET	2	Z311600001-
10	30Z1310046	. GASKET	6	Z311600001-
11	30Z4170287	. GASKET	6	Z311600001-
12	30Z6160376	. GASKET	1	Z311600001-
13	30Z6170396	. GASKET	6	Z311600001-
14	30Z6170403	. GASKET	1	Z311600001-
15	31Z1100018	. GASKET, HEAD	6	Z311600001-
16	31Z1270095	. GASKET	1	Z311600001-
17	31Z1310051	. GASKET	1	Z311600001-
18	31Z5170367	. GASKET	1	Z311600001-
19	31Z5170375	. GASKET	1	Z311600001-
20	CPF06-00812	. GASKET	12	Z311600001-
21	CPF06-01012	. GASKET	12	Z311600001-
22	CPF06-01412	. GASKET	3	Z311600001-
23	CPF06-01612	. GASKET	1	Z311600001-

CYLINDER BLOCK GASKET KIT**FIG. No.K2**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z9900046	CYLINDER BLOCK GASKET KIT	1	Z311600001-
1	07000-62015	. O-RING	1	Z311600001-
2	07000-62020	. O-RING	1	Z311600001-
3	07000-62020	. O-RING	1	Z311600001-
4	07000-62125	. O-RING	1	Z311600001-
5	07000-63025	. O-RING	2	Z311600001-
6	07000-63028	. O-RING	1	Z311600001-
7	07000-63035	. O-RING	1	Z311600001-
8	07000-63042	. O-RING	1	Z311600001-
9	07000-63045	. O-RING	1	Z311600001-
10	07002-02434	. O-RING	1	Z311600001-
11	07002-03634	. O-RING	1	Z311600001-
12	07002-22434	. O-RING	1	Z311600001-
13	07002-23034	. O-RING	1	Z311600001-
14	08034-00414	. BAND	1	Z311600100-
15	08034-00414	. BAND	1	Z311600001-
16	08034-00414	. BAND	4	Z311600001-
17	08034-00519	. BAND	3	Z311600100-
18	30Z2160271	. O-RING	1	Z311600001-
19	30Z2160288	. O-RING	2	Z311600001-
20	30Z2160296	. O-RING, LINER, LOWER	6	Z311600001-
21	30Z2160303	. O-RING, LINER, UPPER	6	Z311600001-
22	30Z2160311	. SEAL, LINER, CREVICE	6	Z311600001-
23	30Z2160474	. GASKET	3	Z311600001-
24	30Z2180376	. PACKING	9	Z311600001-
25	30Z2380179	. SEAL, FRONT	1	Z311600001-
26	30Z3280842	. SEAL	1	Z311600001-
27	30Z5160414	. GROMMET	2	Z311600001-
28	30Z5160422	. RING	1	Z311600001-
29	30Z5160439	. GASKET	1	Z311600001-
30	30Z5160447	. O-RING	2	Z311600001-
31	30Z5160455	. GASKET	2	Z311600001-

CYLINDER BLOCK GASKET KIT**FIG. No. K2**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
32	30Z5170467	. GASKET	1	Z311600001-0101
33	30Z5170475	. O-RING, OIL COOLER	1	Z311600001-
34	30Z5170483	. GASKET	1	Z311600001-
35	30Z5180576	. SEAL, OIL COOLER	1	Z311600001-
36	30Z7160337	. GASKET	1	Z311600001-
37	30Z7170357	. SEAL	1	Z311600001-
38	30Z7180433	. SEAL, OIL	1	Z311600001-
39	30Z7190478	. WASHER, FELT	1	Z311600001-
40	30Z8270078	. GASKET	1	Z311600001-
41	31Z2370042	. GASKET	1	Z311600001-
42	31Z5160614	. O-RING	1	Z311600001-
43	CPF06-00812	. GASKET	1	Z311600001-
44	CPF06-00812	. GASKET	1	Z311600001-
45	CPF06-01012	. GASKET	2	Z311600001-
46	CPF06-01412	. GASKET	3	Z311600001-
47	CPF06-01412	. GASKET	4	Z311600100-
48	CPF06-01412	. GASKET	6	Z311600001-
49	CPF06-01412	. GASKET	1	Z311600001-
50	CPF06-01412	. GASKET	3	Z311600001-
51	CPF06-01412	. GASKET	4	Z311600000-
52	CPF06-01412	. GASKET	4	Z311600001-

WATER PUMP GASKET KIT

FIG. No. K4

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	31Z9900054	WATER PUMP GASKET KIT	1	Z311600001-
1	07000-62115	. O-RING	1	Z311600001-
2	30Z6160384	. GASKET, WATER PUMP	1	Z311600001-
3	30Z6180497	. OIL SEAL, WATER PUMP	1	Z311600001-
4	30Z6270066	. GASKET	2	Z311600001-
5	41Z6180822	. SEAL, WATER PUMP	1	Z311600001-

WATER PUMP SERVICE KIT**FIG. No. KW**

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
	30Z9900487	WATER PUMP SERVICE KIT	1	Z311600001-
1	06030-06004	. BEARING, BALL	1	Z311600001-
2	06030-06304	. BEARING, BALL	1	Z311600001-
3	CFL02-15220	. SNAP, RING	1	Z311600001-
4	30Z6180497	. OIL SEAL, WATER PUMP	1	Z311600001-
5	30Z6160384	. GASKET, WATER PUMP	1	Z311600001-
6	41Z6180822	. SEAL, WATER PUMP	1	Z311600001-

TURBOCHARGER KIT

FIG. No. KT

ITEM	PART NUMBER	NAME OF PART	QTY	ENGINE SL.No.
1	31Z8100274	CORE ASSY	1	Z311600117-
2	31Z8100282	OVERHAUL KIT	1	Z311600117-
3	31Z8100299	SECONDARY KIT	1	Z311600117-

INDEX

INDEX

PART No.	F/N	ITEM	PART No.	F/N	ITEM	PART No.	F/N	ITEM
31Z5110215	3110	13	31Z7101674	4011	47	31Z7180155	4015	
31Z5120235	3110	1	31Z7101852	4011	3	31Z7180155	4010	1
31Z5130247	2110	1	31Z7102005	4012	16	31Z7180333	4015	2
31Z5130255	3010	22	31Z7102038	4012		31Z7180358	4015	2
31Z5130263	3110	11	31Z7102062	4014		31Z7180366	4015	2
31Z5130271	3111	19	31Z7102102	4014	4	31Z7180374	4015	2
31Z5130288	3111	20	31Z7102119	4015		31Z7180447	4015	7
31Z5130296	3250	12	31Z7110016	4111	20	31Z7180544	4014	9
31Z5130311	3250	9	31Z7110016	3250	4	31Z7180585	4013	21
31Z5130417	2110	1	31Z7110016	4010	50	31Z7180609	4013	15
31Z5130603	3250	1	31Z7110016	4110	14	31Z7180982	4012	29
31Z5140331	3010	8	31Z7110049	4111	17	31Z7180999	4012	28
31Z5140348	3010	1	31Z7110049	4110	11	31Z7181087	4011	5
31Z5150351	3010	5	31Z7110219	4130	1	31Z7181143	4011	11
31Z5160614	2110	12	31Z7110324	4015	2	31Z7181151	4011	12
31Z5160614	K2	42	31Z7110405	4015	3	31Z7181257	4011	14
31Z5170367	3250	2	31Z7110413	4015	8	31Z7181265	4011	14
31Z5170367	K1	18	31Z7110421	4015	9	31Z7181273	4011	14
31Z5170375	3250	10	31Z7110438	4015	10	31Z7181281	4011	14
31Z5170375	K1	19	31Z7110519	4014	5	31Z7181298	4011	14
31Z5180435	3310	18	31Z7110527	4014	6	31Z7181313	4011	16
31Z5180443	3110	8	31Z7110535	4014	8	31Z7181321	4011	17
31Z5180451	3110	4	31Z7110576	4013	2	31Z7181354	4011	20
31Z5180468	3110	2	31Z7110592	4013	3	31Z7181362	4011	21
31Z5180484	3010	6	31Z7110616	4013	16	31Z7181379	4011	22
31Z5180492	3010	7	31Z7110624	4013	30	31Z7181387	4011	22
31Z5180508	3010	2	31Z7110657	4013	29	31Z7181395	4011	22
31Z5180508	3010	10	31Z7110779	4013	14	31Z7181419	4011	23
31Z5180516	3010	4	31Z7110876	4012	7	31Z7181427	4011	24
31Z5180524	3110	3	31Z7110949	4012	23	31Z7181443	4011	26
31Z5180557	2110	11	31Z7110965	4012	25	31Z7181451	4011	27
31Z5180598	3310	2	31Z7110973	4012	2	31Z7181484	4011	30
31Z5190163	3010	27	31Z7111004	4012	3	31Z7181492	4011	31
31Z5190544	3250	19	31Z7111012	4012	4	31Z7181508	4011	32
31Z6100019	5110		31Z7111029	4011	38	31Z7181516	4011	35
31Z6110022	5210	1	31Z7111029	4012	30	31Z7181524	4011	37
31Z6110039	5110	15	31Z7111037	4012	31	31Z7181532	4011	37
31Z6110047	5110	16	31Z7111045	4012	32	31Z7181549	4011	37
31Z6110225	1710	7	31Z7111134	4011	10	31Z7181557	4011	37
31Z6120059	5110	12	31Z7111304	4011	15	31Z7181565	4015	2
31Z6130062	5110	9	31Z7111337	4011	18	31Z7181573	4011	39
31Z6140074	1710	3	31Z7111434	4011	25	31Z7181581	4011	40
31Z6140082	1710	16	31Z7111467	4011	28	31Z7181621	4011	42
31Z6140099	5010	22	31Z7111612	4011	41	31Z7181654	4011	44
31Z6140106	5110	23	31Z7111637	4011	43	31Z7181719	4012	
31Z6140114	5110	6	31Z7111661	4011	45	31Z7181719	4013	
31Z6140122	5010	19	31Z7120069	4111	8	31Z7181727	4013	1
31Z6180137	5110	25	31Z7120069	4110	1	31Z7181735	4013	5
31Z6190173	5210	5	31Z7120311	4015	1	31Z7181743	4013	11
31Z6190173	6810	7	31Z7130072	4010	49	31Z7181751	4013	13
31Z7100264	4111	5	31Z7130089	3110	9	31Z7181768	4013	19
31Z7100272	4130	1	31Z7130097	4111	19	31Z7181776	4013	20
31Z7100394	4015	14	31Z7130097	4110	13	31Z7181784	4013	9
31Z7100864	4012	17	31Z7130226	4130	9	31Z7181792	4013	23
31Z7100889	4012	19	31Z7180147	4111		31Z7181808	4011	
31Z7100897	4012	8	31Z7180147	4110		31Z7181816	4011	1
31Z7101099	4011	6	31Z7180155	4011		31Z7181824	4011	9
31Z7101106	4011	7	31Z7180155	4012		31Z7181832	4011	19
31Z7101114	4011	8	31Z7180155	4013		31Z7181849	4011	29
31Z7101163	4011	13	31Z7180155	4014		31Z7181865	4011	4