

PARTS MANUAL

Models

DY23-2 / DY27-2

ENGINE

PUB-EP5754A
Rev. 07/00

Robin America, Inc.

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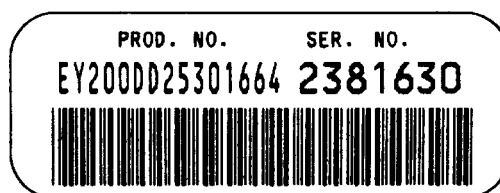
HOW TO USE THIS MANUAL

Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant difference.

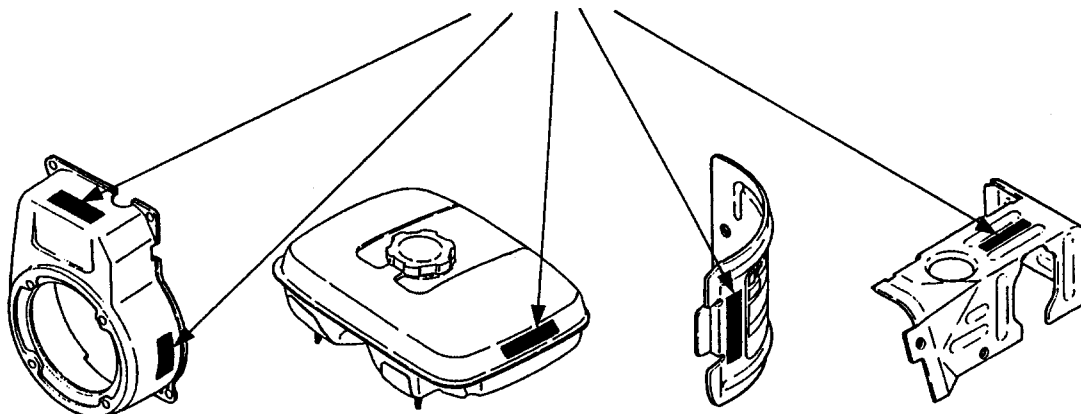
In order to identify the correct service part number, it is important to confirm the specification and code numbers for your engine. The specification and code number together are known as the PRODUCT NUMBER.

All Robin 4 cycle engines have a Product Number label similar to the label illustrated below.

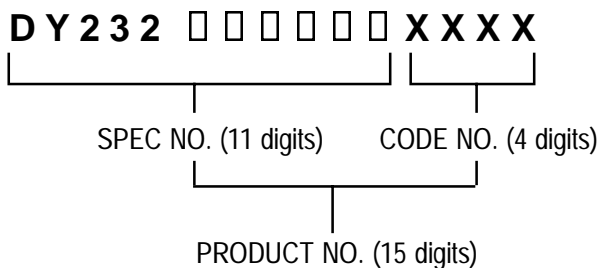
PRODUCT NUMBER LABEL



PRODUCT NUMBER LABEL LOCATIONS



The Product Number Label has a 15 digit alphanumeric string that consists of the SPECIFICATION (SPEC) number (11 digits) and the CODE number (4 digits). Please note the illustration below:



MANUAL LAYOUT

1 — SECTION 6 **FUEL GROUP**

2 — FIG. 600

3

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2

1 — SECTION 6 **FUEL GROUP**

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	267-60103-01	FUEL TANK CP	1	YD, YS TYPE, BLACK	2101 -	600
3	267-60101-01	FUEL TANK CP	1	YELLOW	- 2100	600
27	073-20039-00	LABEL, WARNING	1	YD, YS TYPE		600
30	043-04300-15	FUEL TANK CAP CP	1			600
5	31	267-95201-03	1	YD, YS TYPE		600
40	064-13600-10	FUEL FILTER	1			600
50	064-20021-01	FUEL STRAINER AY	1			600
-1	064-20002-20	FILTER	1			600
-2	064-20002-30	GASKET	1			600
-3	064-20019-10	CUP	1			600
-4	064-20003-20	NUT	1			600

1. SECTION NAME Parts are broadly classified according to their functions. Refer to the Group Index (table of contents) for respective section name.
2. FIG. No. The FIG. number indexes the reference and part numbers to the illustration. Figure numbers that vary only in the tens place (i.e.: 700 and 710) are in a group of the same section (i.e.: Electrical Device Group).
3. REF. No. The Reference number identifies the part illustration with the corresponding part number in the part list.
4. SUBASSEMBLY SUBASSEMBLY parts of part assembly are listed below the assembly part. The subassembly part reference number is indicated by the number led by "-" such as "-1", "-2".
5. PART NUMBER It is the number assigned for sales unit. Use the PART No. when making an order.
6. DESCRIPTION It is designation of the part.
7. QTY. Quantity of each part used for each product.
8. REMARKS This gives a distinctive feature and/or a supplementary comment for the type, the specification, and the part concerned. It also shows part number(s) interchangeable for the part.
9. FROM-TO This section shows the CODE No. to indicate the history of progress in which improved parts have been introduced in the product. The FROM-TO CODE No. helps to identify PART No. being employed in the product concerned. See the examples below:
 - The part is used in the product irrespective of CODE No.
 - 2101- The part is used in the products with CODE No. of 2101 and after this number.
 - 2100 The part is used in the products with CODE No. of 2100 and before this number.

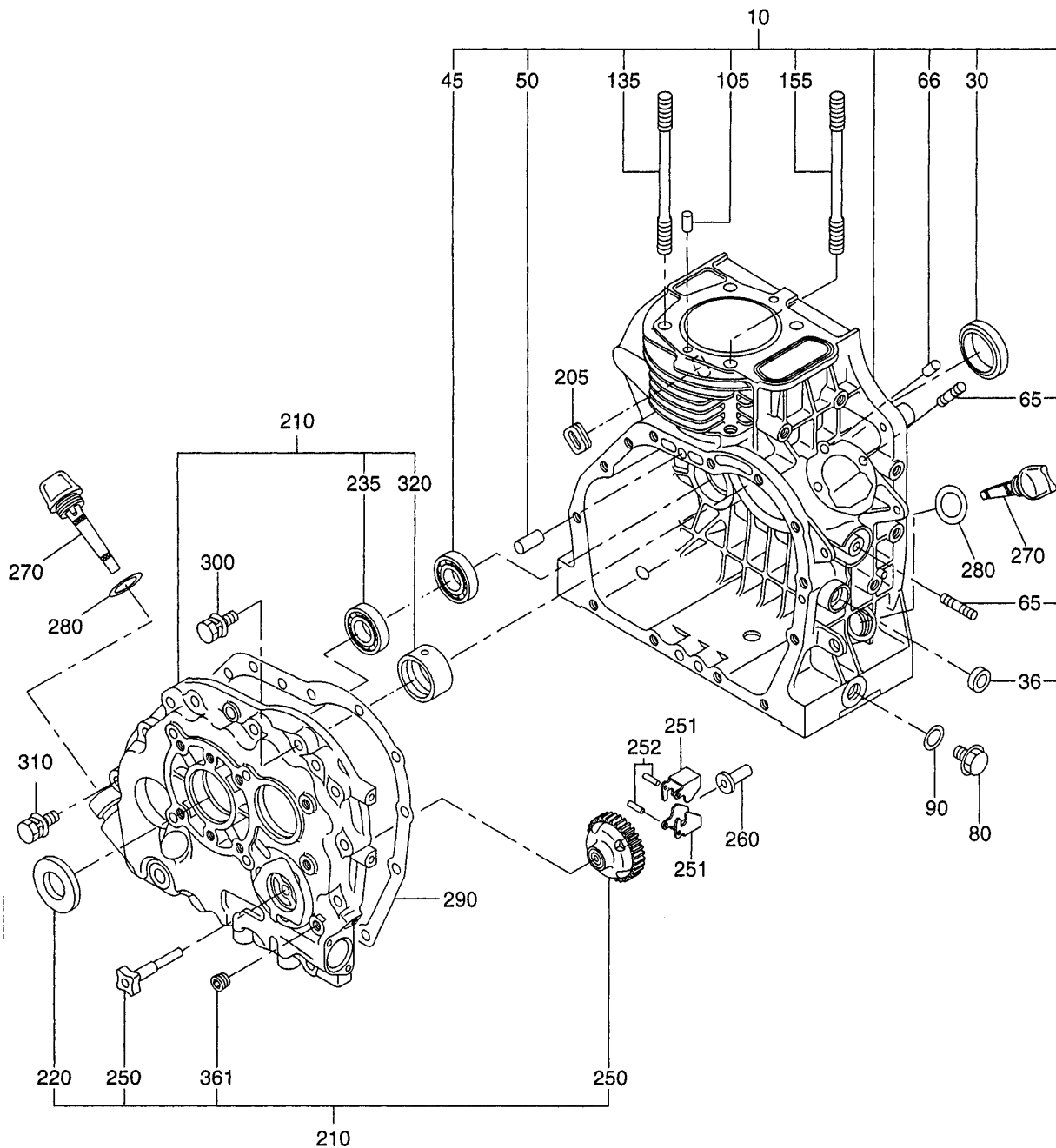
GROUP INDEX

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INDEX OF DESCRIPTION SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AY	ASSEMBLY	P=	PITCH (in mm)
CP	COMPLETE	P.T.O. (PTO)	POWER TAKE OFF
EX	EXPORT (from Japan)	REF.	REFERENCE
FIG.	FIGURE	R.H. (RH)	RIGHT HAND SIDE
FR.	FRONT	RR.	REAR
"	INCH	STD.	STANDARD
INCL.	INCLUDE	SW	SWITCH
~L	LITER	T=	THICKNESS (in mm)
L=	LENGTH (in. mm)	UN	UNIT
L.H. (LH)	LEFT-HAND SIDE	U.S.	UNDER SIZE
MECH	MECHANICAL	~V	VOLTAGE
NO (NON)	NONE	~W	WATT
OPT.	OPTIONAL	W/	WITH
O.S.	OVER SIZE	W/O	WITHOUT

SECTION 1 CRANKCASE GROUP

FIG. 100

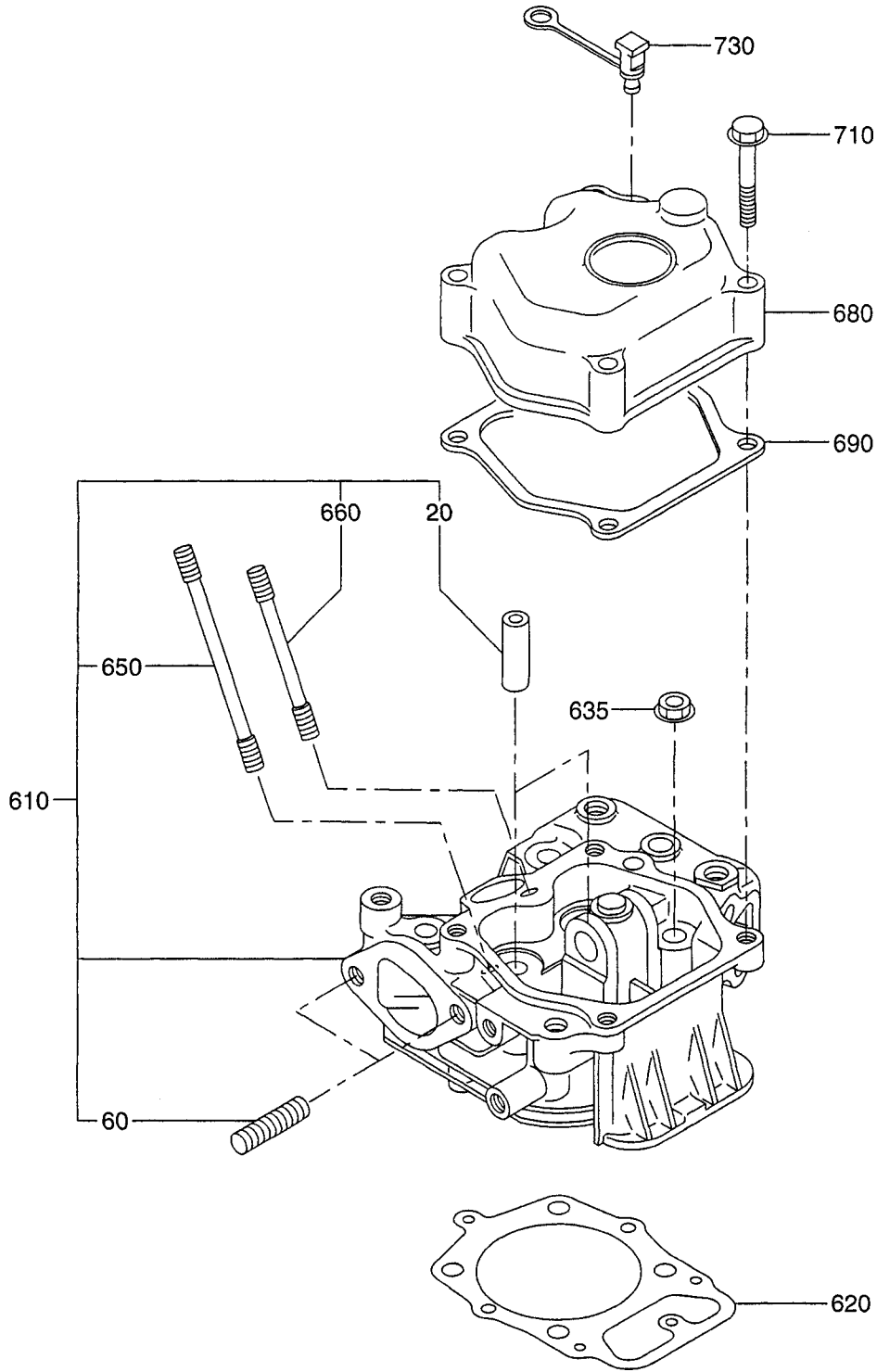


SECTION 1 CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	243-10101-61	CRANKCASE CP	1	DY23-2		100
	243-10105-61	CRANKCASE CP	1	DY23-2, Electric Start		100
10	244-10101-61	CRANKCASE CP	1	DY27-2		100
	244-10105-61	CRANKCASE CP	1	DY27-2, Electric Start		100
30	044-03000-60	OIL SEAL	1			100
36	044-00800-30	OIL SEAL	1			100
45	060-01700-40	BALL BEARING	1			100
50	005-26081-80	DOWEL PIN	2			100
65	001-37062-21	STUD	3			100
66	031-00500-10	DOWEL PIN	1			100
80	040-11400-30	PLUG	2			100
90	021-11400-20	GASKET	2			100
105	031-00600-10	DOWEL PIN	2			100
135	244-16002-11	TENSION BOLT CP	3			100
155	244-16002-11	TENSION BOLT CP	1			100
205	243-75001-03	GROMMET	1	Electric Start		100
210	244-11009-21	MAIN BEARING COVER CP	1			100
220	044-03000-30	OIL SEAL	1			100
250	243-45011-07	GOVERNOR GEAR SET	1			100
251	220-41601-03	FLYWEIGHT	2			100
252	030-73000-70	PIN	2			100
260	205-41901-03	GOVERNOR SLEEVE	1			100
270	214-63601-13	OIL GAUGE	2			100
280	021-32000-10	GASKET	2			100
290	243-15026-03	GASKET, main bearing cover	1			100
300	001-13083-50	BOLT and WASHER AY	12			100
310	001-13084-00	BOLT and WASHER AY	1			100
320	243-15801-03	MAIN BEARING	1	STD.		100
	243-15802-03	MAIN BEARING	1	0.25mm undersize		100
	243-15803-03	MAIN BEARING	1	0.50mm undersize		100
361	212-15008-13	BLIND PLUG	1			100

SECTION 1 CRANKCASE GROUP

FIG. 110



SECTION 1 CRANKCASE GROUP

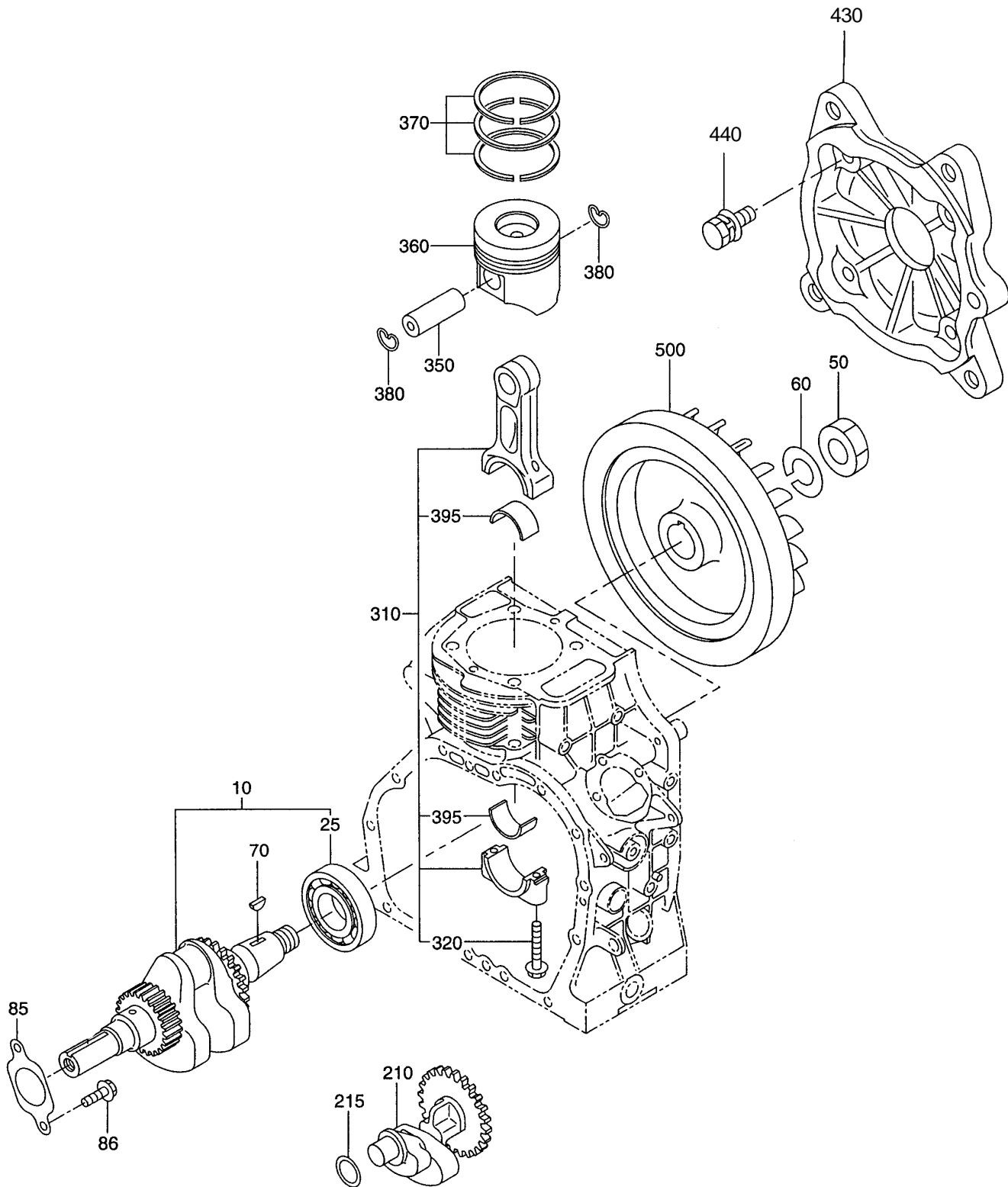
REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
20	243-14204-13	VALVE GUIDE	2			110
60	001-37082-01	STUD	2			110
610	243-13001-71	CYLINDER HEAD CP	1			110
620	243-15027-13	GASKET, T= 0.2	1	Select one piece only, DY23-2		110
	243-15028-13	GASKET, T= 0.3	1	Select one piece only, DY23-2		110
620	244-15027-13	GASKET, T= 0.2	1	Select one piece only, DY27-2		110
	244-15028-13	GASKET, T= 0.3	1	Select one piece only, DY27-2		110
635	018-00900-10	FLANGE NUT	4			110
650	001-39066-00	STUD	1			110
660	010-50601-50	STUD	1			110
680	243-17101-01	ROCKER COVER CP	1			110
690	243-1 5032-13	GASKET, rocker cover	1			110
710	011-00601-70	FLANGE BOLT	4			110
730	243-15030-03	PLUG	1			110
*960	255-99001-07	GASKET SET	1	DY23-2		
*960	256-99001-07	GASKET SET	1	DY27-2		

<p>* The gasket set for the DY23-2 contains the following: Fig. 100 items 90, 280, 290 Fig. 110 items 620, 690 Fig. 310 items 340, 555</p> <p>* The gasket set for the DY27-2 contains the following: Fig. 100 items 90, 280, 900 Fig. 110 items 620, 690 Fig. 310 items 340, 510-2, 555</p>
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SECTION 2

CRANKSHAFT GROUP

FIG. 200

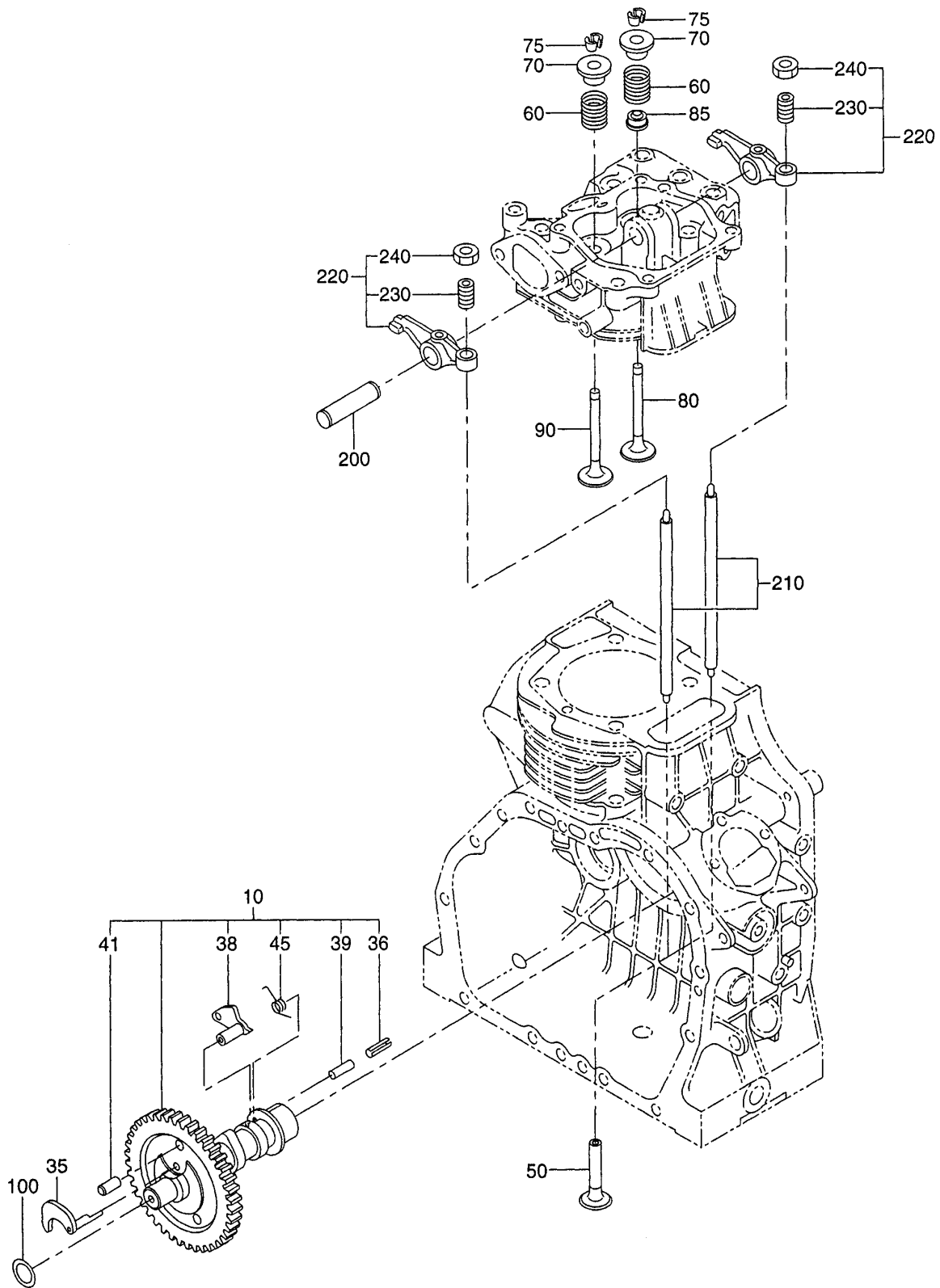


SECTION 2 CRANKSHAFT GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	244-20401-11	CRANKSHAFT CP	1			200
25	060-03500-20	BALL BEARING	1			200
50	002-18180-00	NUT	1			200
60	003-20180-00	SPRING WASHER	1			200
70	032-30300-10	WOODRUFF KEY	1			200
85	243-25001-03	THRUST WASHER, T=0.8	1	Select one piece only		200
	243-25002-03	THRUST WASHER, T=1.0	1	Select one piece only		200
	243-25003-03	THRUST WASHER, T=1.2	1	Select one piece only		200
86	011-00600-10	FLANGE BOLT	2			200
210	243-24301-01	BALANCER CP	1			200
215	023-01700-20	SPACER, T= 0.8	1	Select one piece only		200
	023-01700-30	SPACER, T= 1.0	1	Select one piece only		200
	023-01700-40	SPACER, T= 1.2	1	Select one piece only		200
310	243-22510-00	CONNECTING ROD AY	1			200
320	243-23002-03	CONNECTING ROD BOLT	2			200
350	243-23301-03	PISTON PIN	1			200
360	243-23401-13	PISTON	1	STD., DY23-2		200
	243-23402-13	PISTON	1	0.25mm oversize, DY23-2		200
	243-23403-13	PISTON	1	0.50mm oversize, DY23-2		200
360	244-23401-13	PISTON	1	STD., DY27-2		200
	244-23402-13	PISTON	1	0.25mm oversize, DY27-2		200
	244-23403-13	PISTON	1	0.50mm oversize, DY27-2		200
370	243-23501-27	PISTON RING SET	1	STD., DY23-2		200
	243-23502-27	PISTON RING SET	1	0.25mm oversize, DY23-2		200
	243-23503-27	PISTON RING SET	1	0.50mm oversize, DY23-2		200
370	244-23501-27	PISTON RING SET	1	STD., DY27-2		200
	244-23502-27	PISTON RING SET	1	0.25mm oversize, DY27-2		200
	244-23503-27	PISTON RING SET	1	0.50mm oversize, DY27-2		200
380	056-52000-30	CLIP	2			200
395	243-22801-03	LARGE END BEARING	2	STD.		200
	243-22802-03	LARGE END BEARING	2	0.25mm undersize		200
	243-22803-03	LARGE END BEARING	2	0.50mm undersize		200
430	244-17501-13	ADAPTER	1			200
440	001-13082-50	BOLT and WASHER AY	4			200
500	243-22410-13	FLYWHEEL	1			200

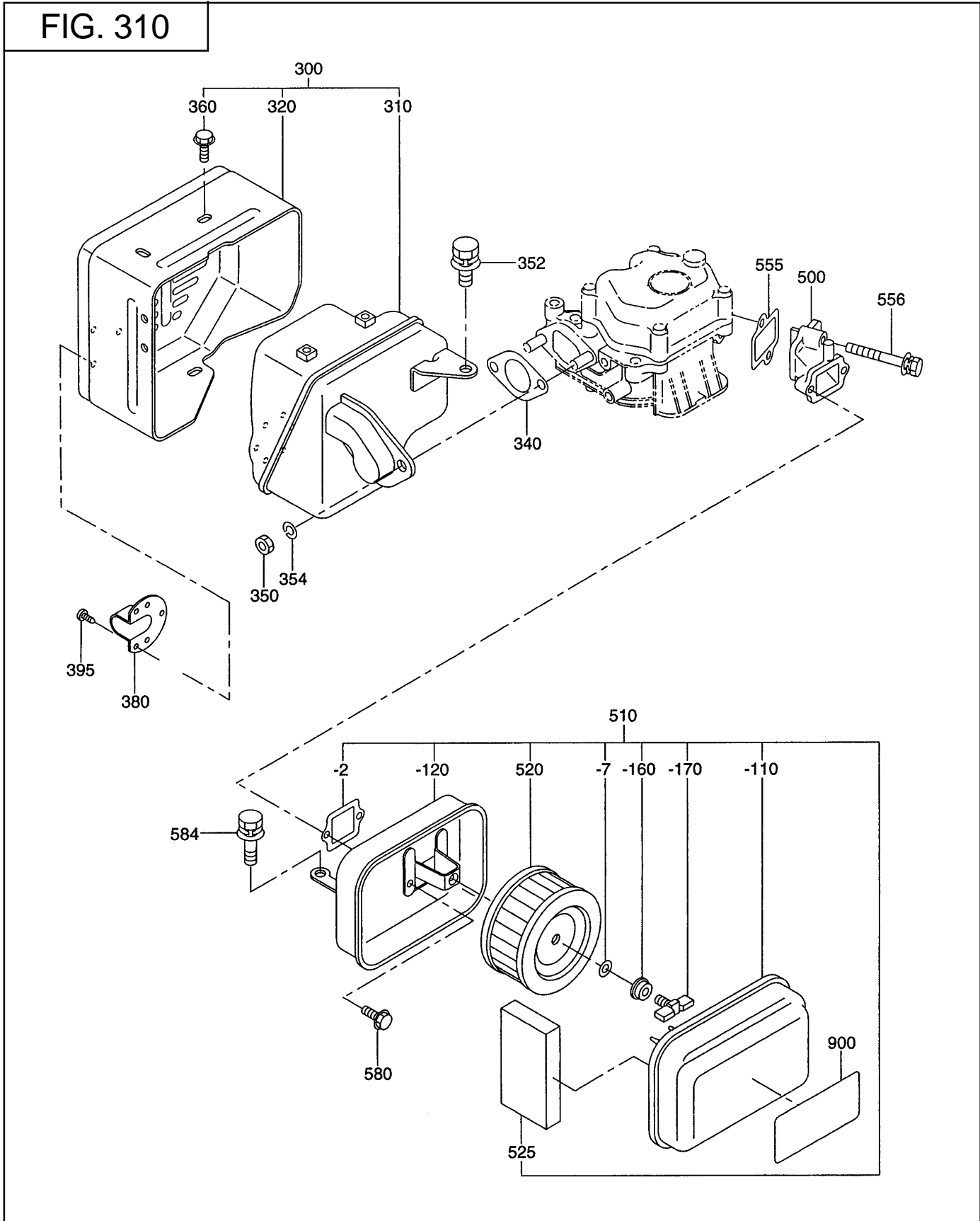
SECTION 3 INTAKE and EXHAUST GROUP

FIG. 300



SECTION 3 INTAKE and EXHAUST GROUP

FIG. 310

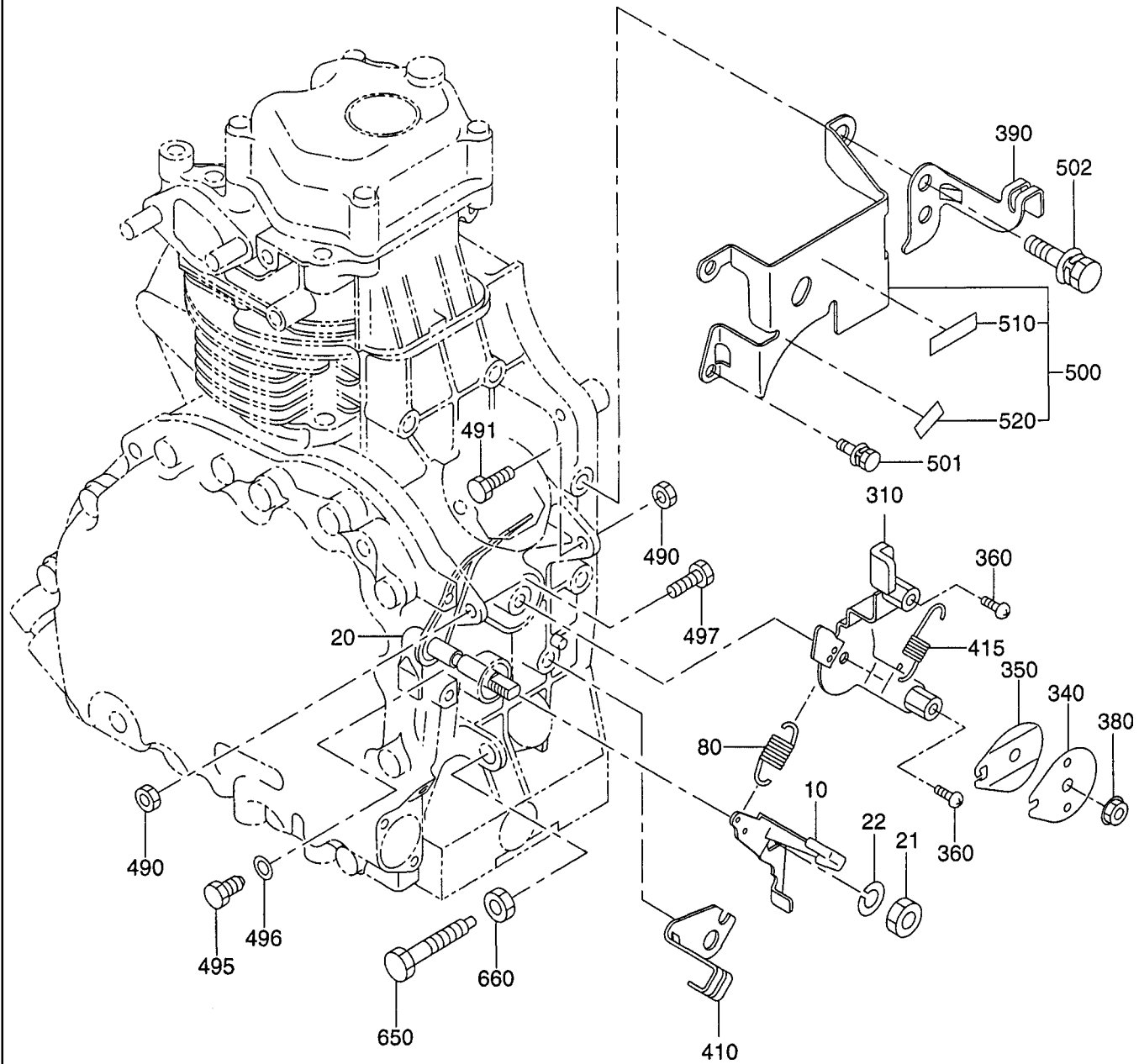


SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
300	255-30103-00	MUFFLER AY	1			310
310	243-30101-51	MUFFLER CP	1			310
320	243-34201-01	MUFFLER COVER CP	1			310
340	243-35002-03	GASKET, exhaust	1			310
350	002-19080-00	NUT	2			310
360	001-10061-00	BOLT and WASHER AY	4			310
380	243-37002-11	TAIL PIPE CP	1			310
395	015-00400-60	TAPPING SCREW	3			310
500	243-33101-13	INTAKE MANIFOLD	1			310
510	243-32601-00	AIR CLEANER AY	1			310
-2	243-32651-08	PACKING	1			310
-7	243-32650-08	PACKING	1			310
-110	243-32640-08	COVER CP	1			310
-120	243-32620-08	BACK PLATE CP	1			310
-160	243-32660-08	WASHER	1			310
-170	243-32670-08	WING BOLT	1			310
520	243-32600-08	ELEMENT CP	1			310
525	243-32611-08	ELEMENT	1			310
555	243-35503-13	GASKET, intake manifold	1			310
556	001-13083-50	BOLT and WASHER AY	2			310
580	001-13061-20	BOLT and WASHER AY	2			310
584	001-13081-60	BOLT and WASHER AY	1			310
900	243-92302-03	LABEL, air cleaner	1			310

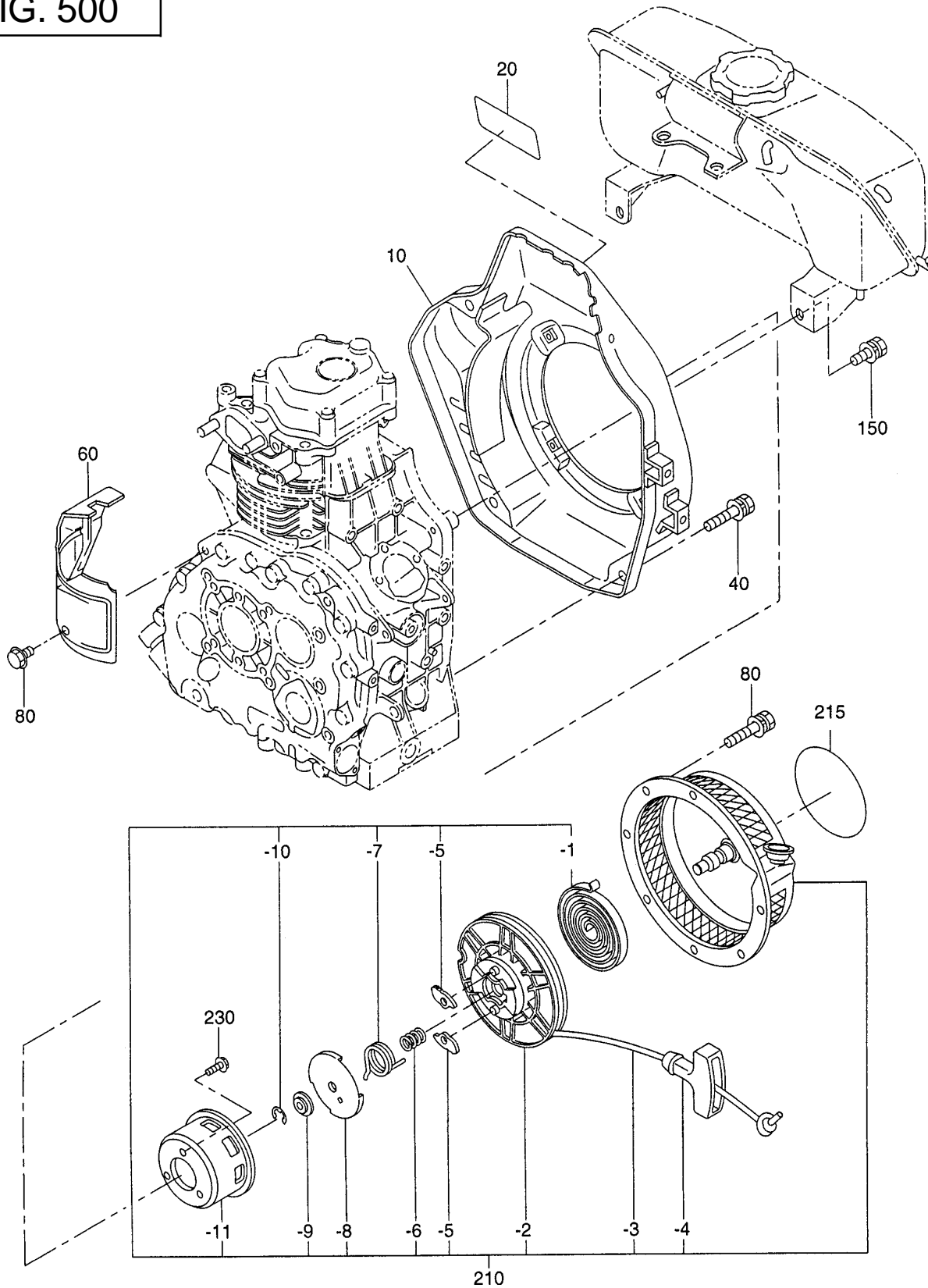
SECTION 4 GOVERNOR GROUP

FIG. 400



SECTION 5 COOLING and STARTING GROUP

FIG. 500



SECTION 5 COOLING and STARTING GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	243-51201-21	BLOWER HOUSING CP	1			500
40	001-13082-00	BOLT and WASHER AY	2			500
60	243-52601-33	CYLINDER BAFFLE	1			500
80	011-00600-10	FLANGE BOLT	5			500
150	001-13083-00	BOLT and WASHER AY	2			500
210	243-50201-20	RECOIL STARTER AY	1			500
-1	106-50116-08	SPIRAL SPRING	1			500
-2	239-50220-08	REEL CP	1			500
-3	243-50110-08	STARTER ROPE	1			500
-4	236-50101-08	STARTER KNOB	1			500
-5	106-50128-18	RATCHET	2			500
-6	106-50132-08	FRICTION SPRING	1			500
-7	106-50136-18	RETURN SPRING	1			500
-8	106-50144-08	FRICTION PLATE	1			500
-9	106-50185-08	THRUST WASHER	1			500
-10	106-50186-08	CLIP	1			500
-11	243-50145-08	STARTING PULLEY	1			500
215	243-95004-13	LABEL, diesel mark	1			500
230	001-14061-20	BOLT and WASHER AY	3			500

SECTION 6 FUEL, LUBRICANT GROUP

FIG. 600

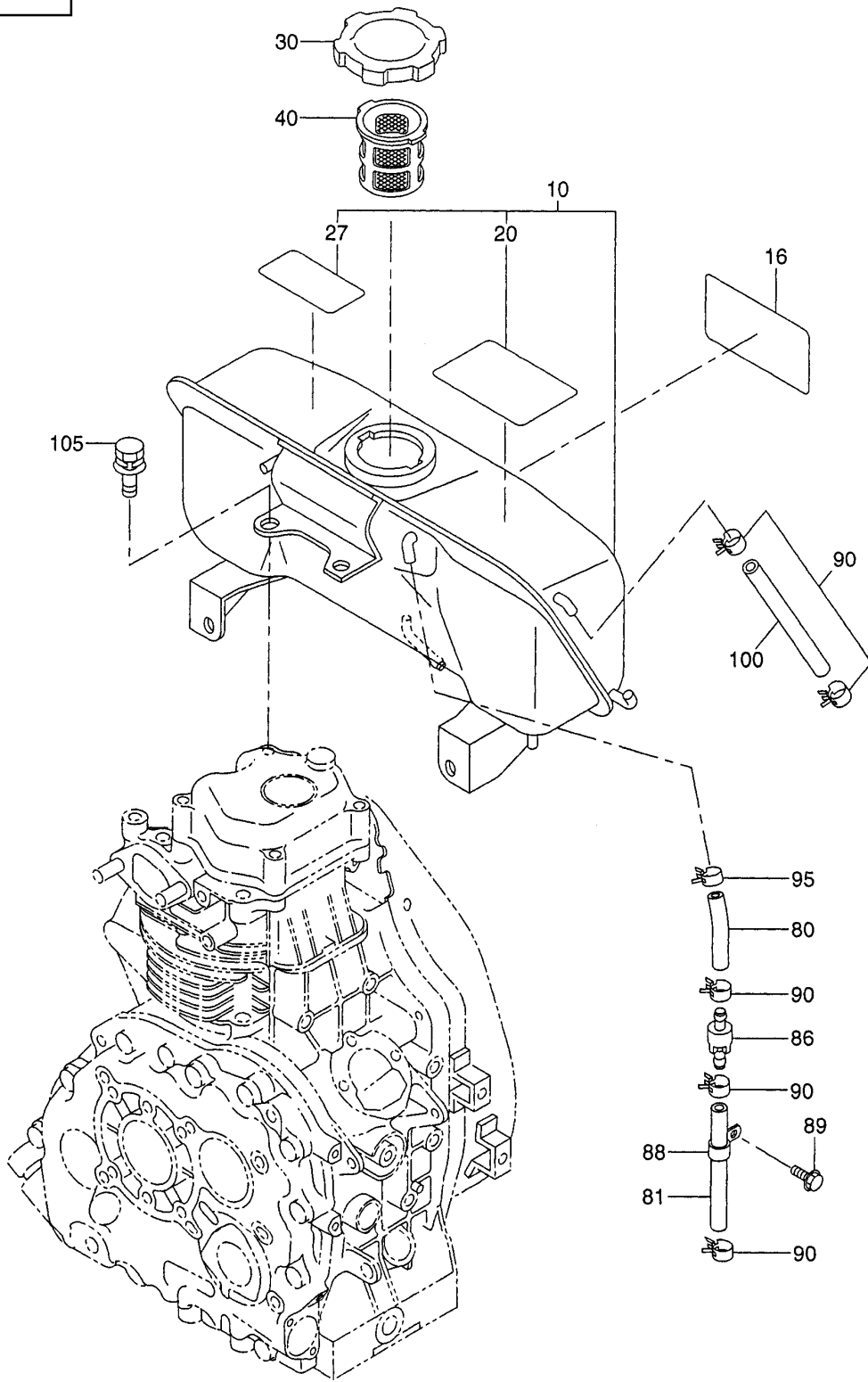
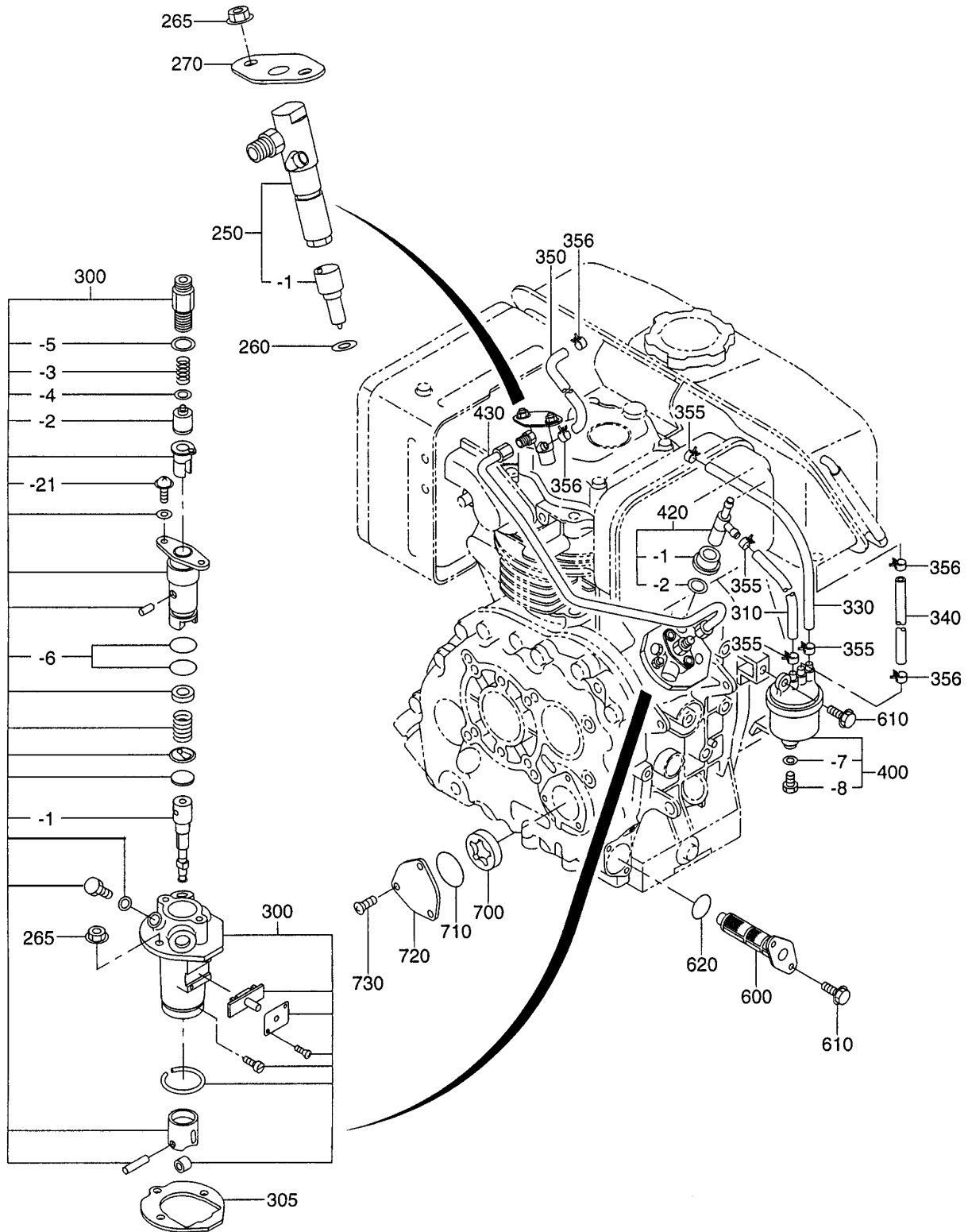


FIG. 610



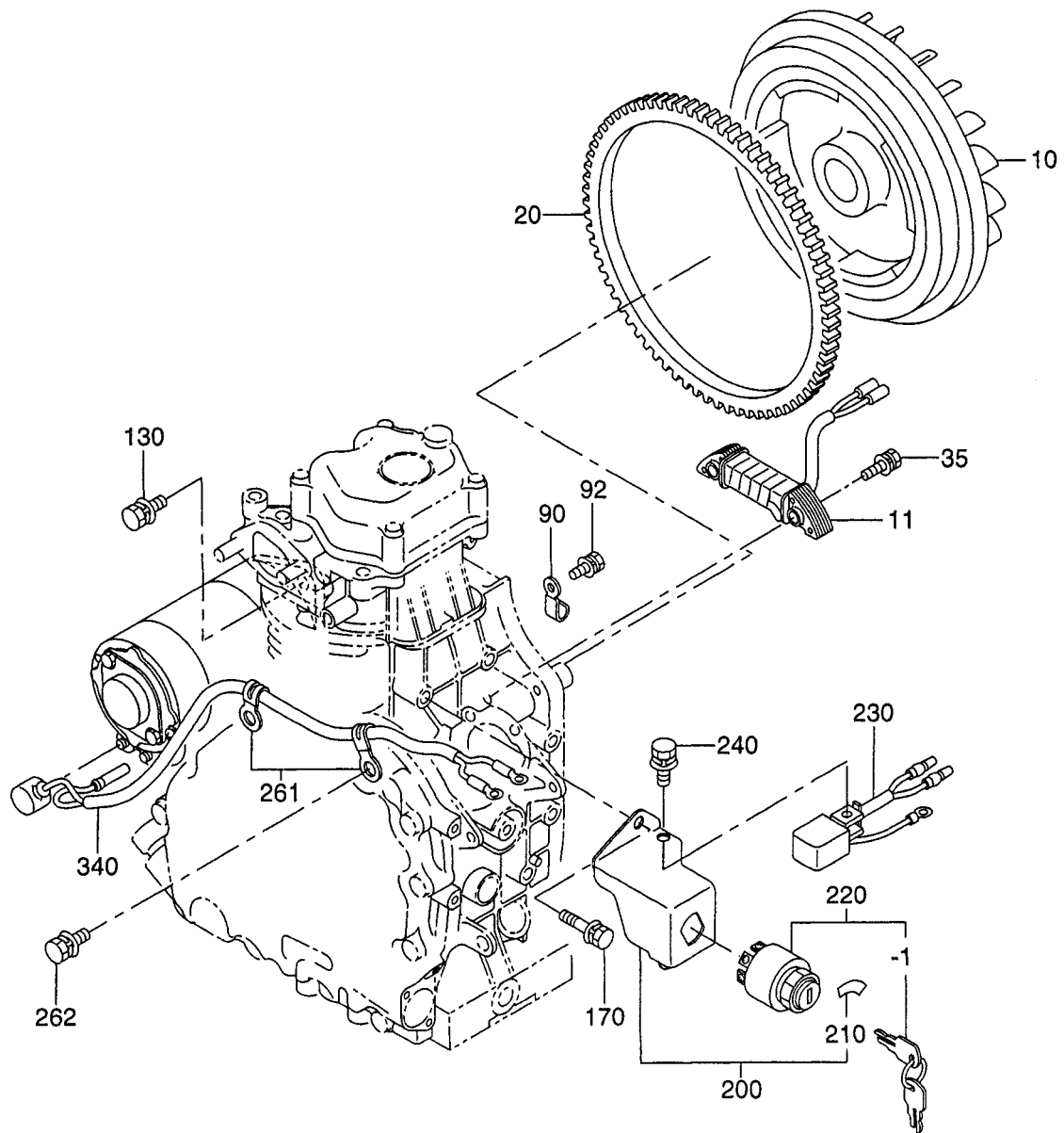
SECTION 6

FUEL, LUBRICANT GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
250	243-63201-00	NOZZLE AY	1			610
-1	243-63204-08	NOZZLE	1			610
260	228-65004-03	GASKET, nozzle	1			610
265	002-38060-00	FLANGE NUT	4			610
270	243-66001-01	BRACKET CP, nozzle 1	1			610
300	255-63103-00	INJECTION PUMP AY	1			610
-1	243-63131-08	PLUNGER AY	1			610
-2	243-63103-08	DELIVERY VALVE	1			610
-3	243-63104-08	DELIVERY SPRING	1			610
-4	243-63105-08	GASKET	1			610
-5	243-63107-08	ORING	1			610
-6	243-63129-08	ORING	2			610
-21	243-63130-08	SCREW	2			610
305	243-65001-03	GASKET, T= 0.1	1	Select one piece only		610
	243-65002-03	GASKET, T= 0.2	1	Select one piece only		610
	243-65003-03	GASKET, T= 0.3	1	Select one piece only		610
310	085-10600-00	RUBBER PIPE	1	6 X 12 X 120		610
330	085-10600-00	RUBBER PIPE	1	6 X 12 X 180		610
340	085-14500-00	RUBBER PIPE	1	4.5 X 9 X 90		610
350	085-14500-00	RUBBER PIPE	1	4.5 X 9 X 315		610
355	056-11100-20	HOSE CLAMP	4			610
356	056-10800-10	HOSE CLAMP	4			610
400	243-62101-20	FUEL FILTER AY	1			610
-7	228-62112-08	PACKING	1			610
-8	228-62111-08	PLUG	1			610
420	243-66520-10	T-CONNECTOR AY	1			610
-1	243-66521-08	NUT	1			610
-2	243-66506-08	PACKING	1			610
430	243-63301-21	INJECTION PIPE CP	1			610
600	243-64301-00	OIL FILTER AY	1			610
610	001-14061-60	BOLT and WASHER AY	2			610
620	006-26202-00	ORING	1			610
700	228-63902-03	OIL PUMP, outer	1			610
710	006-26103-30	ORING	1			610
720	243-66020-01	COVER CP, oil pump	1			610
730	004-11061-60	SCREW, countersink	3			610

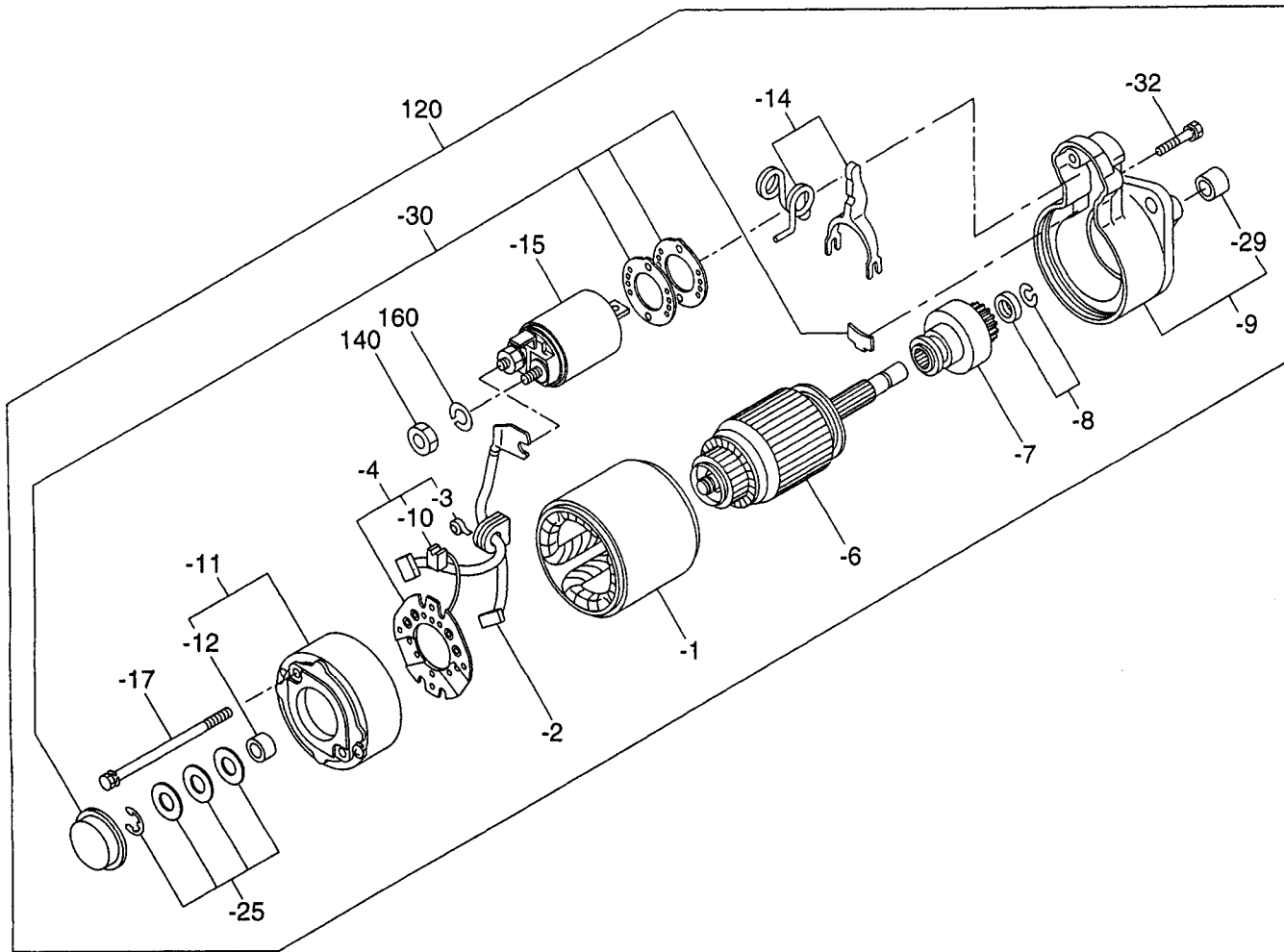
SECTION 7 ELECTRIC DEVICE GROUP

FIG. 700



SECTION 7 ELECTRIC DEVICE GROUP - STARTER MOTOR

FIG. 710

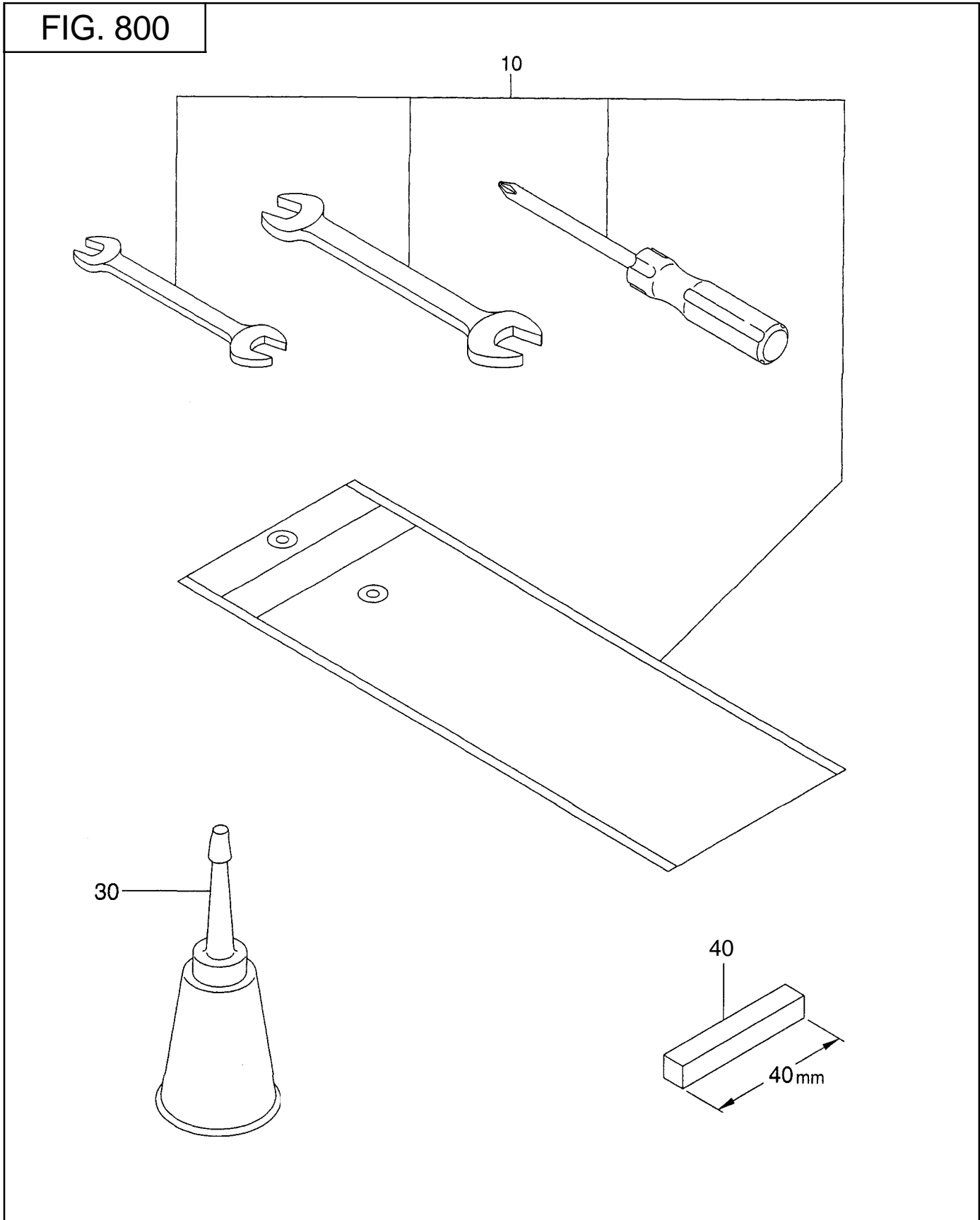


SECTION 7 ELECTRIC DEVICE GROUP - STARTER MOTOR

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
120	255-70502-00	STARTING MOTOR AY	1			710
-1	255-70580-08	YOKE AY	1			710
-2	255-70551-08	BRUSH SET	1			710
-3	228-70516-08	BRUSH SPRING	4			710
-4	255-70531-08	BRUSH HOLDER AY	1			710
-6	255-70561-08	AMATEUR AY	1			710
-7	255-70521-08	PINION AY	1			710
-8	210-70534-08	PINION STOPPER SET	1			710
-9	255-70501-08	GEAR CASE AY	1			710
-10	228-70514-08	BRUSH (-)	2			710
-11	255-70505-08	REAR COVER AY	1			710
-12	210-70542-08	REAR COVER METAL	1			710
-14	243-70525-08	SHIFT LEVER KIT	1			710
-15	255-70515-08	MAGNETIC SWITCH AY	1			710
-17	207-70524-08	THROUGH BOLT	2			710
-25	210-70533-08	THRUST WASHER KIT	1			710
-29	210-70542-08	REAR COVER METAL	1			710
-30	255-70570-08	DUST COVER KIT	1			710
-32	228-70522-08	BOLT	2			710
140	002-28080-00	NUT	1			710
160	003-20080-00	SPRING WASHER	1			710

SECTION 8 ACCESSORIES GROUP

FIG. 800



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