PARTS MANUAL

Models

EX40

ENGINES

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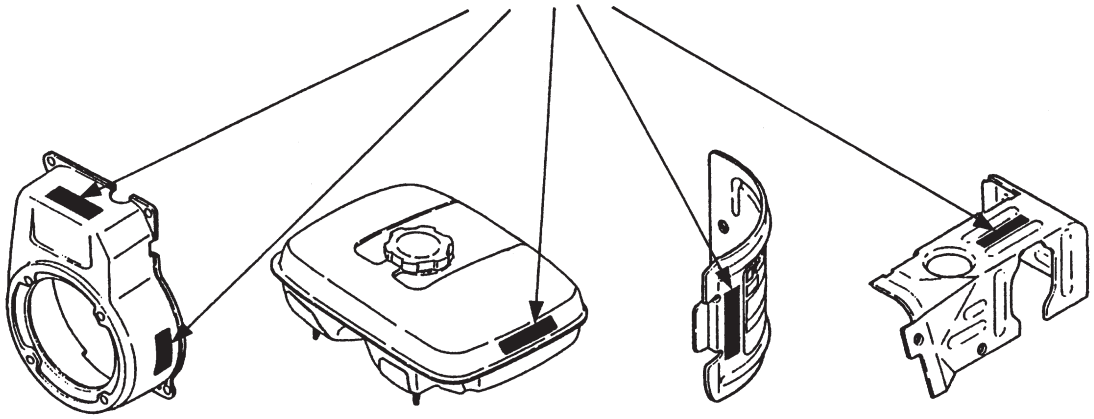
HOW TO USE THIS MANUAL

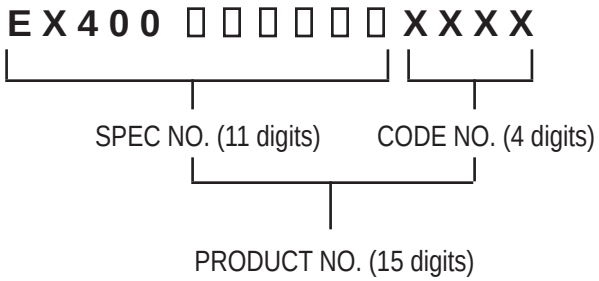
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant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

In order the 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 know as the PRODUCT NUMBER.

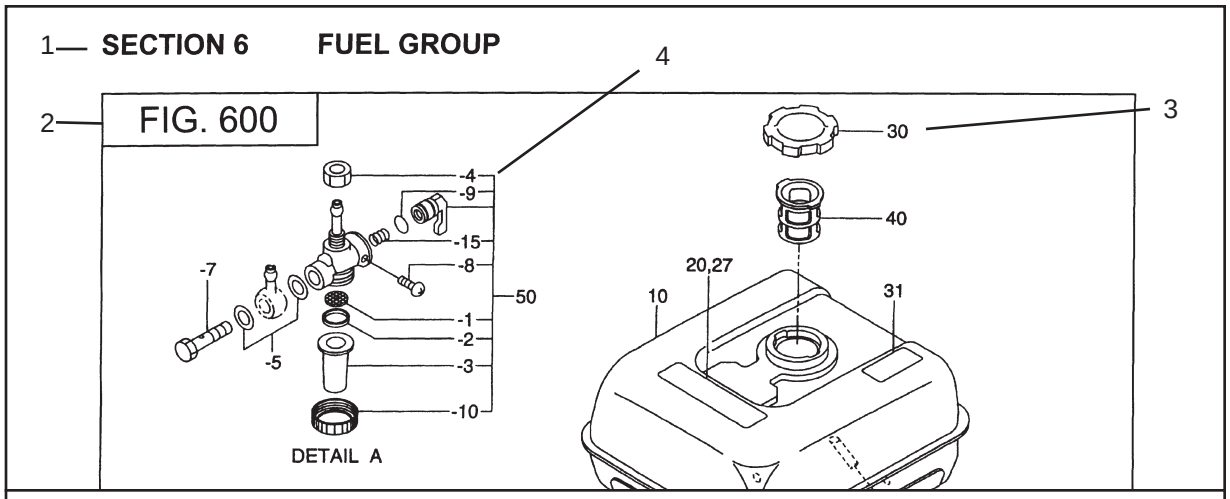
All Robin 4 cycle engines have a Product Number label similar to the label illustrated below.



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

6 7 9 2

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	267-60103-01	FUEL TANK CP	1	YD, YS TYPE, BLACK		600
	267-60101-01	FUEL TANK CP	1	YELLOW		600
27	073-20039-00	LABEL, WARNING	1	YD, YS TYPE		600
30	043-04300-15	FUEL TANK CAP CP	1			600
31	267-95201-03	LABEL, EMISSION	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

3 5 4 8

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

Group Name	Page
CRANKCASE GROUP	6
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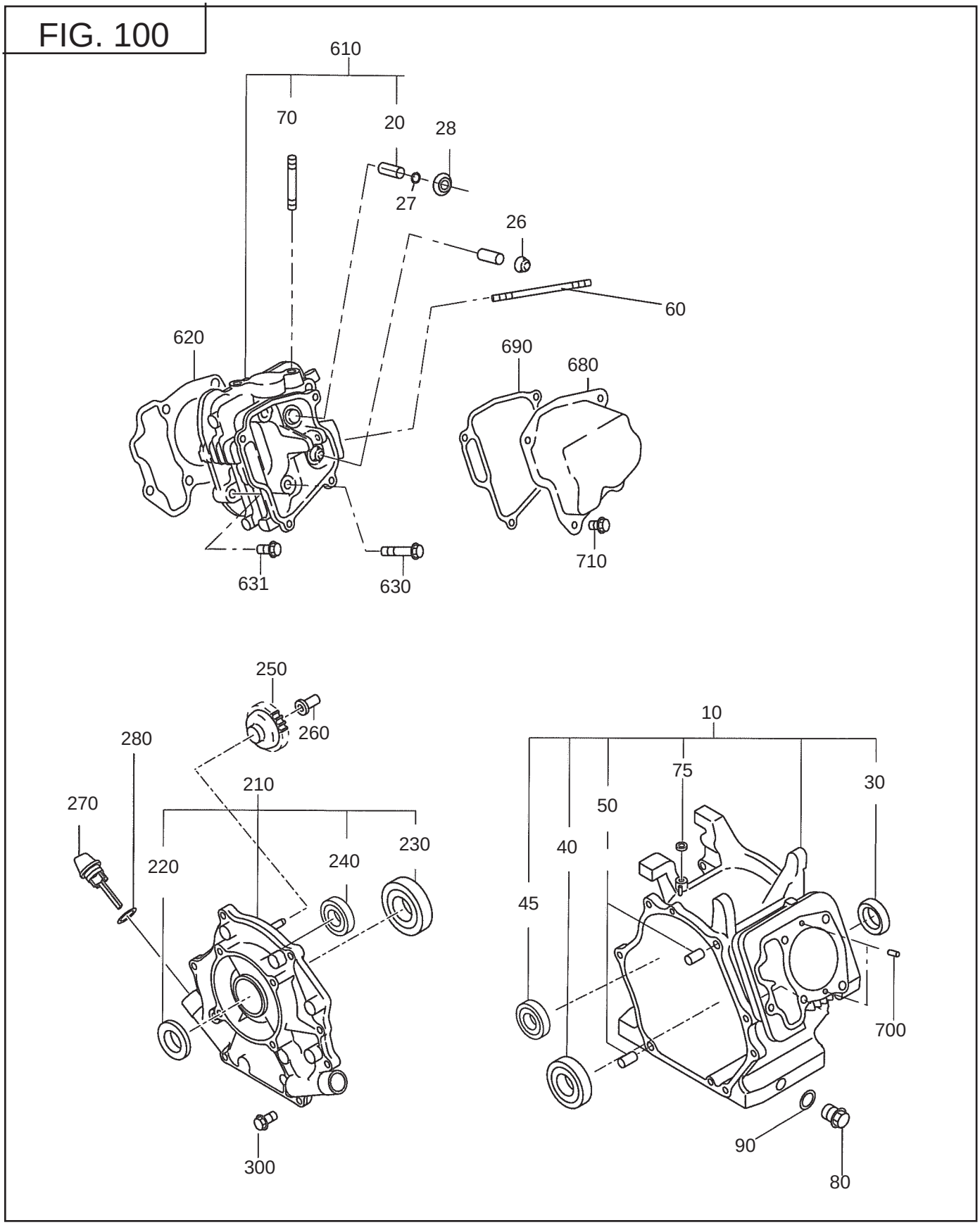
INDEX OF DESCRIPTION SYMBOLS

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

FIG. 100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710
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700
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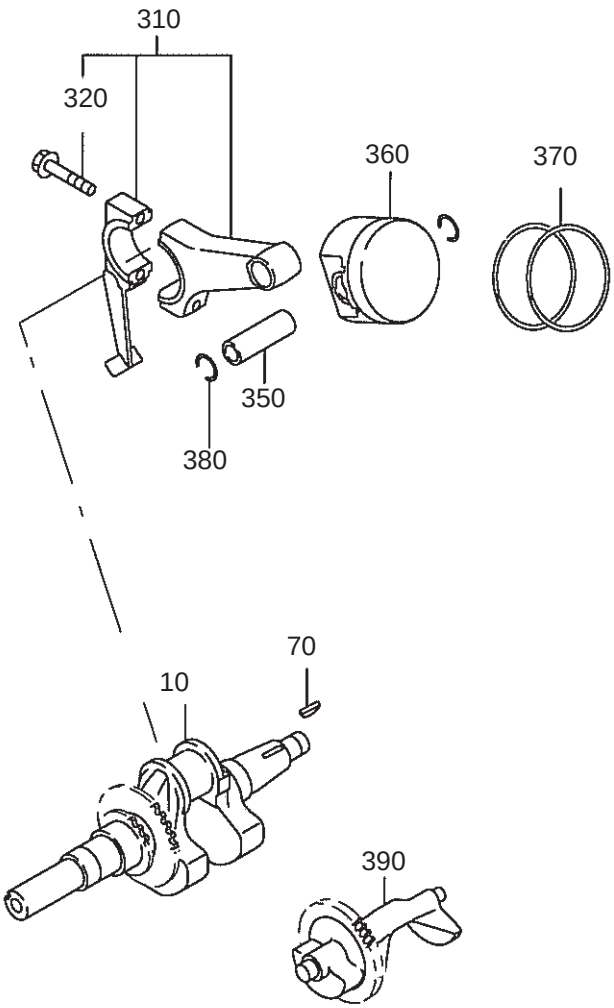
80

SECTION 1 CRANKCASE GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-10102-11	Crankcase Cp	1			100
20	20B-14202-03	Valve Guide	2			100
26	132-07AA0-50	Seal, intake valve	1			100
27	056-51000-50	Clip	1			100
28	263-35341-03	Retainer Plate	1			100
30	044-03500-90	Oil Seal	1			100
40	060-03502-40	Ball Bearing	1			100
45	X60-01500-11	Ball Bearing	1			100
50	277-15011-03	Pipe Knock	2			100
60	010-50603-51	Stud, intake	2			100
70	010-50802-90	Stud, exhaust	2			100
75	044-00800-10	Oil Seal	1			100
80	040-11400-30	Plug	1			100
90	021-11400-20	Gasket	1			100
210	20B-11002-11	Main Bearing Cover Cp	1			100
220	044-03500-90	Oil Seal	1			100
230	060-03502-40	Ball Bearing	1			100
240	X60-01500-11	Ball Bearing	1			100
250	20B-45003-01	Governor Gear Cp	1			100
260	277-41901-03	Governor Sleeve	1			100
270	279-63601-30	Oil Gauge Ay	1		8157-	100
	224-63601-03	Oil Gauge	1		-8156	100
280	021-32000-50	Gasket	1			100
300	011-00803-40	Flange Bolt	8			100
610	20B-13001-01	Cylinder Head Cp	1			100
620	20B-15001-03	Gasket, cylinder head	1			100
630	011-01000-40	Flange Bolt	4			100
631	001-04083-50	Flange Bolt	2			100
680	20B-15501-01	Rocker Cover Cp	1			100
690	20B-16001-03	Gasket, rocker cover	1			100
700	031-00600-20	Dowel Pin	2			100
710	011-00600-20	Flange Bolt	4			100
960	20B-99001-07	Gasket Set	1			100

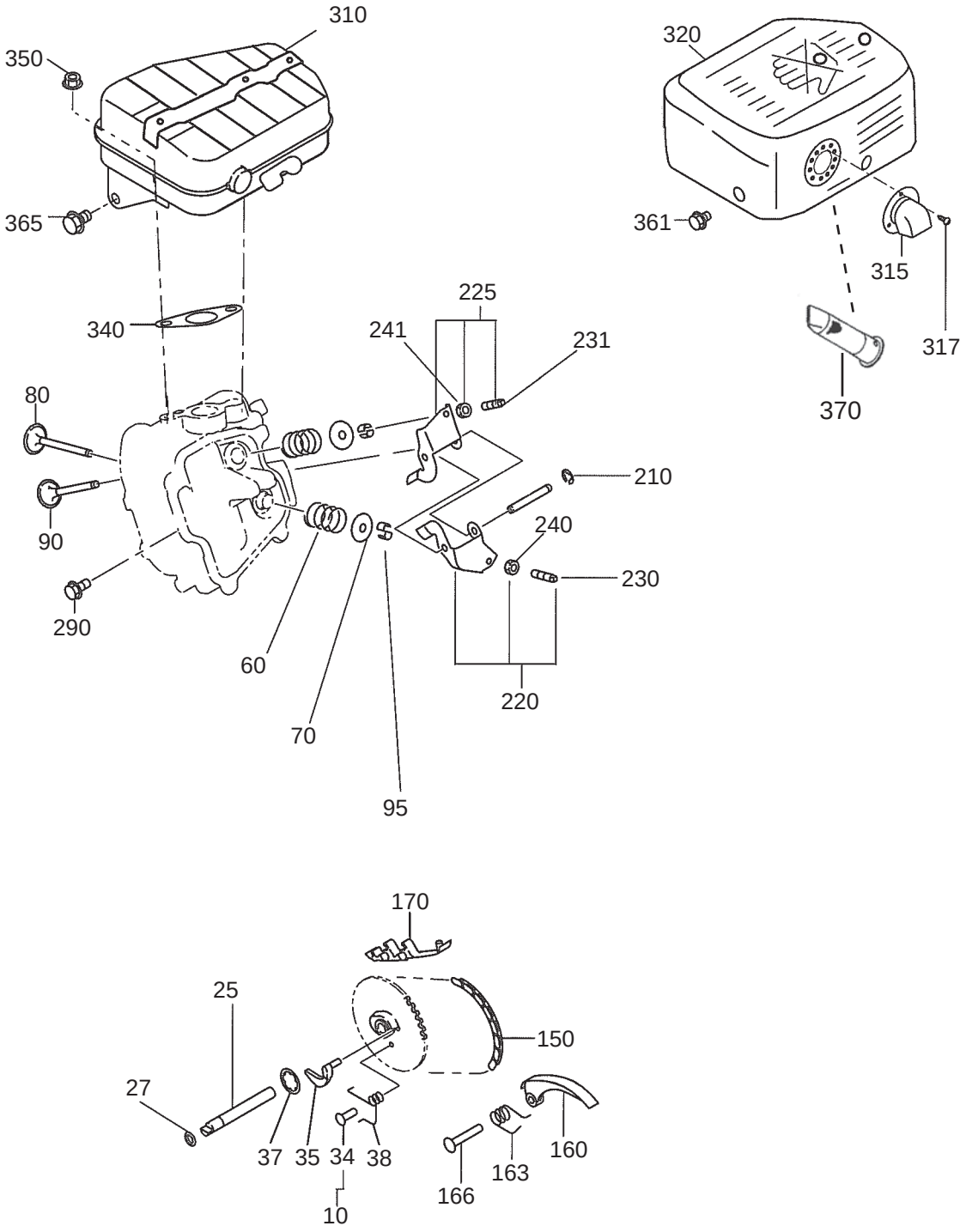
FIG. 200



SECTION 2 CRANKSHAFT GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-20901-01	Crankshaft Cp	1	1" Key		200
	20B-21201-01	Crankshaft Cp	1	7/8" Taper		200
	20B-21001-01	Crankshaft Cp	1	1" Pump		200
70	005-32054-01	Woodruff Key	1			200
310	20B-22501-00	Connecting Rod Ay	1			200
320	001-05084-00	Connecting Rod Bolt	2			200
350	263-23301-33	Piston Pin	1			200
360	20B-23401-H3	Piston	1	Std		200
360	20B-23403-H3	Piston	1	Oversize 0.25mm		200
360	20B-23404-H3	Piston	1	Oversize 0.50mm		200
370	20B-23501-07	Piston Ring Set	1	Std		200
370	20B-23502-07	Piston Ring Set	1	Oversize 0.25mm		200
370	20B-23503-07	Piston Ring Set	1	Oversize 0.50mm		200
380	056-52100-20	Clip	2			200
390	20B-24101-03	Balancer Shaft	1			200

FIG. 300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SECTION 3 INTAKE and EXHAUST GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-31601-01	Camshaft Cp	1			300
25	20B-35101-03	Pin, camshaft	1			300
27	024-00700-20	O ring	1			300
34	005-19041-00	Pin, spring	2			300
35	277-36401-03	Release lever	1			300
37	20B-36501-03	Clip	1			300
38	277-38702-03	Return Spring	1			300
60	246-33611-03	Valve Spring	2			300
70	246-33711-13	Spring Retainer	2			300
80	20B-33401-H3	Intake Valve	1			300
90	20B-33501-H3	Exhaust Valve	1			300
95	246-35501-03	Collet Valve	4			300
150	20B-35601-H1	Timing Chain	1			300
160	277-36911-03	Tentioner	1			300
163	277-37101-03	Spring, tentioner	1			300
166	277-36902-03	Pin, tentioner	1			300
170	277-36913-13	Chain Guide	1			300
200	20B-35001-01	Pin, rocker	1			300
210	003-13060-00	Clip	1			300
220	20B-36101-00	Rocker Arm Ay, intake	1			300
225	20B-36102-10	Rocker Arm Ay, exhaust	1			300
230	014-90500-20	Adjust Screw	1			300
231	014-90500-20	Adjust Screw	1			300
240	017-00500-30	Nut	1			300
241	017-00500-30	Nut	1			300
290	011-00600-20	Flange Bolt	1			300
310	20B-30101-J2	Muffler	1			300
315	20B-37001-01	Deflector Cp	1			300
317	015-00400-60	Tapping Screw	3			300
320	20B-34201-11	Muffler Cover Cp	1			300
340	20B-35201-03	Gasket, muffler	1			300
350	980-20082-80	Flange Nut	2			300
361	011-00600-10	Flange Bolt	5			300
365	011-00803-20	Flange Bolt	1			300
370	267-37601-01	Spark Arrestor	1			300

FIG. 310A

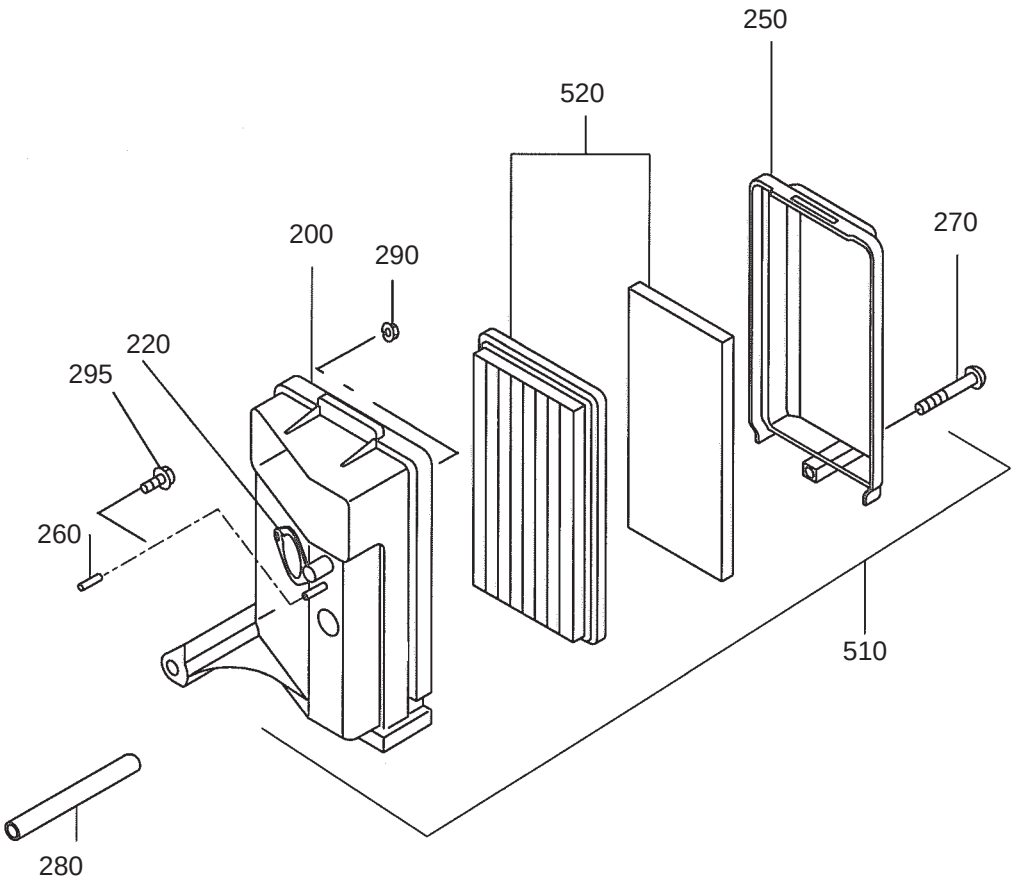
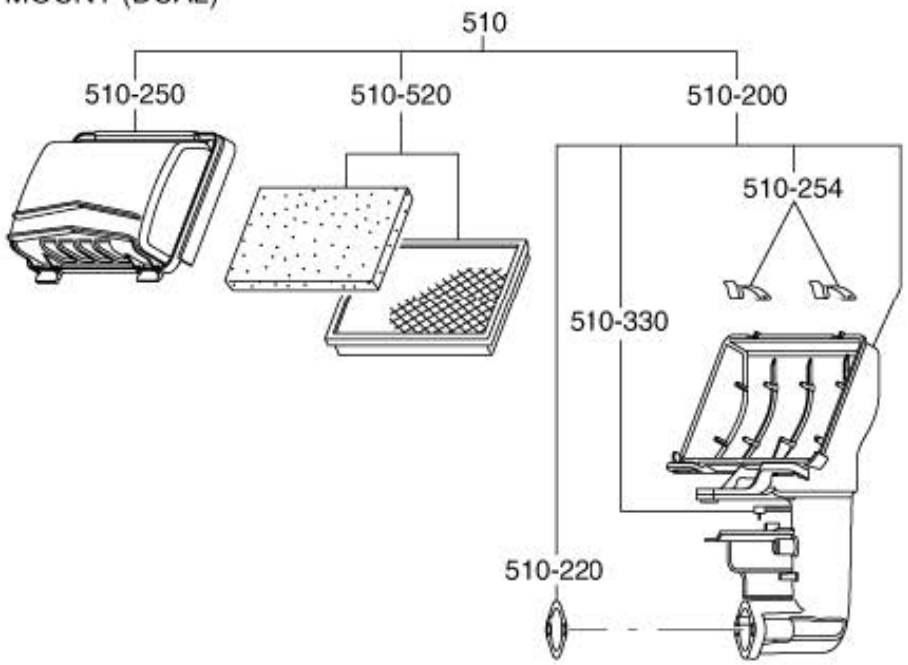
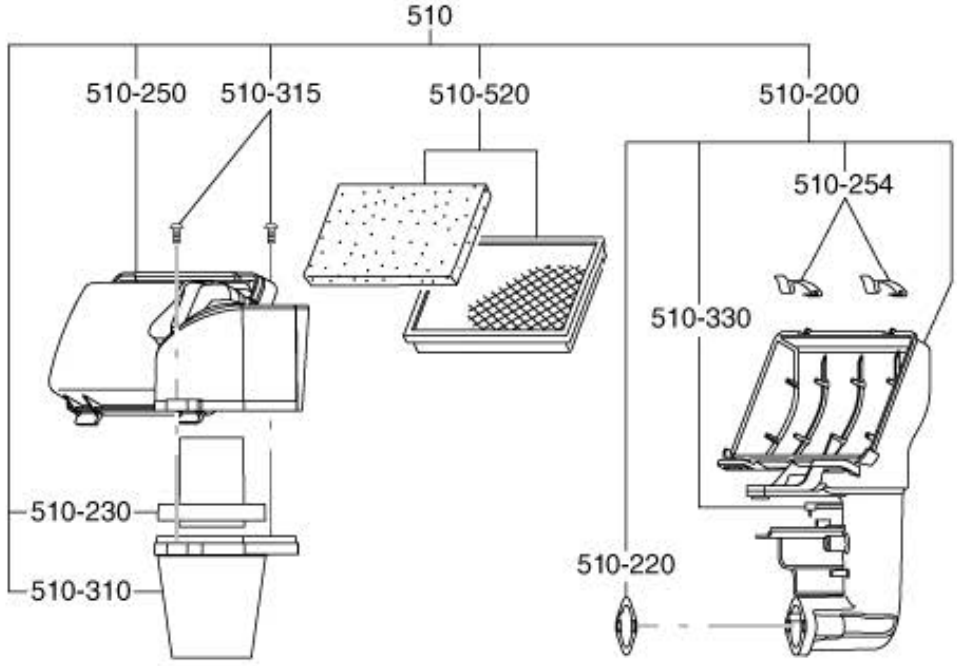


FIG. 310B

HI MOUNT (DUAL)



HI MOUNT (PRE CYCLONE)

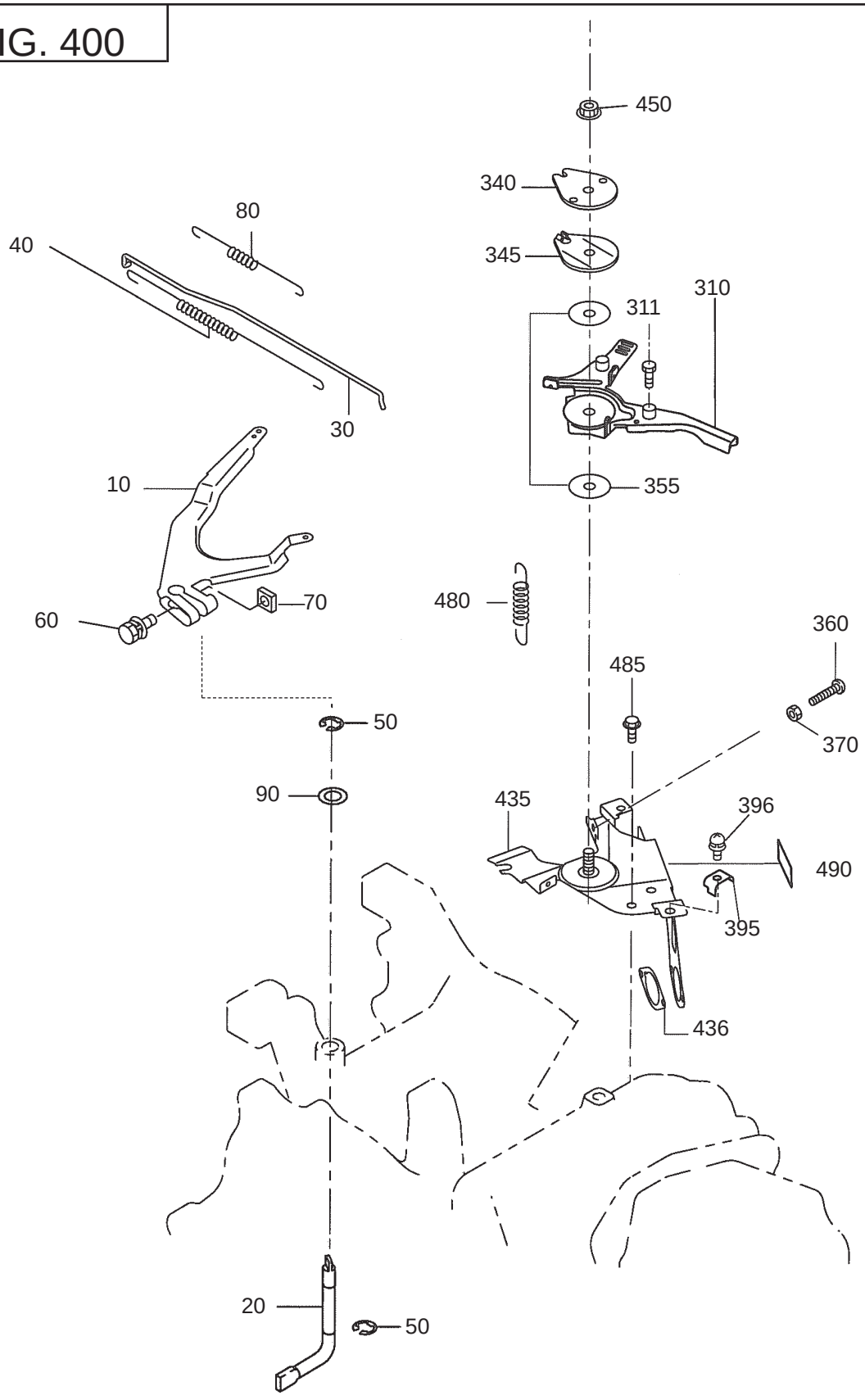


EX40 20B031701W00

SECTION 3 INTAKE and EXHAUST GROUP

Ref.	Part Number	Description	Q1ty	Remarks	To-From	Fig.
510	20B-32611-H0	Air Cleaner Ay	1	Dual		310A
510	20B-32651-H0	Air Cleaner Ay	1			310B
200	20B-32630-H8	Cleaner Body	1			310A
220	20B-32720-H8	Gasket, packing	1			310A&B
250	20B-32640-H8	Cover	1			310A
250	20B-32641-H8	Cover	1			310B
254	20B-32680-H8	Clip1	2			310B
260	20B-32850-H8	Cap	1			310A
270	20B-32650-H8	Bolt	1			310A
280	X85-11001-80	Rubber Pipe, breather	1			310A
290	002-38060-00	Flange Nut	2			310A
295	001-04061-60	Flange Bolt	1			310A
520	20B-32610-H7	Element	1			310A&B

FIG. 400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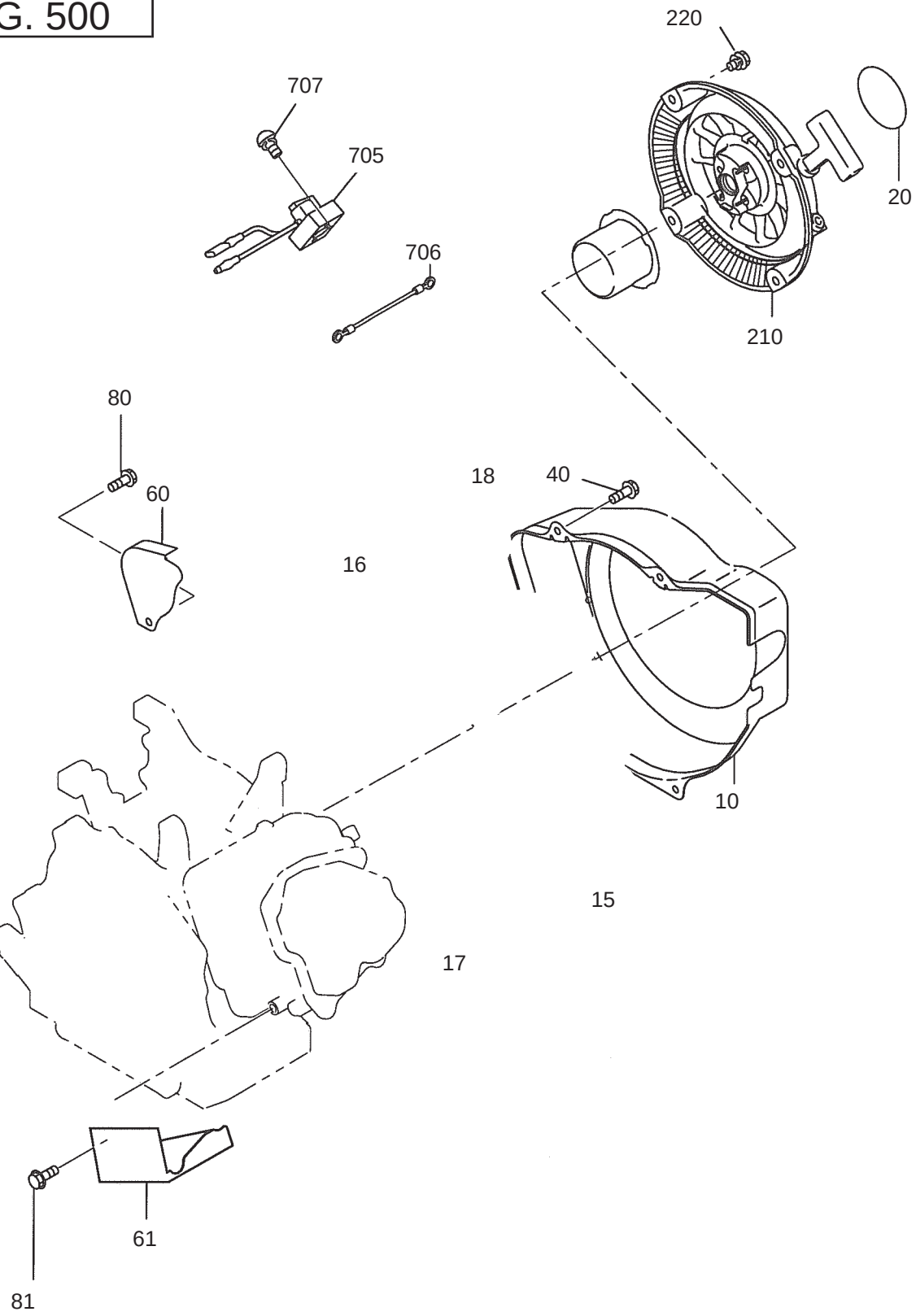
SECTION 4 GOVERNOR GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	20B-42301-03	Governor Lever	1			400
20	20B-42201-13	Governor Shaft	1			400
30	20B-42701-01	Governor Rod	1			400
40	20B-42801-13	Rod Spring	1			400
50	003-13060-00	Clip	2			400
60	001-14062-50	Bolt and Washer	1			400
70	018-60600-20	Nut	1			400
80	20B-42503-13	Governor Spring	1			400
90	003-11080-00	Washer	1			400
310	20B-43301-01	Speed Control Lever Cp	1	Std		400
	20B-43351-03	Speed Control Lever	1	Generator		400
311	011-60400-30	Bolt, swivel	1			400
340	227-43501-13	Stop Plate	1			400
345	227-45002-03	Spring Washer	1			400
355	021-70600-30	Friction Washer	2			400
360	004-31061-80	Screw, panhead	1			400
370	002-27060-00	Nut	1			400
395	277-43902-03	Clamp	1			400
396	013-10500-30	Screw and Washer	1			400
435	20B-46001-11	Speed Control Bracket Cp	1			400
436	20B-35903-03	Gasket 3	1			400
450	002-35060-00	Self Lock Nut	1			400
480	267-45101-03	Return Spring	1			400
485	011-00600-20	Flange Bolt	1			400

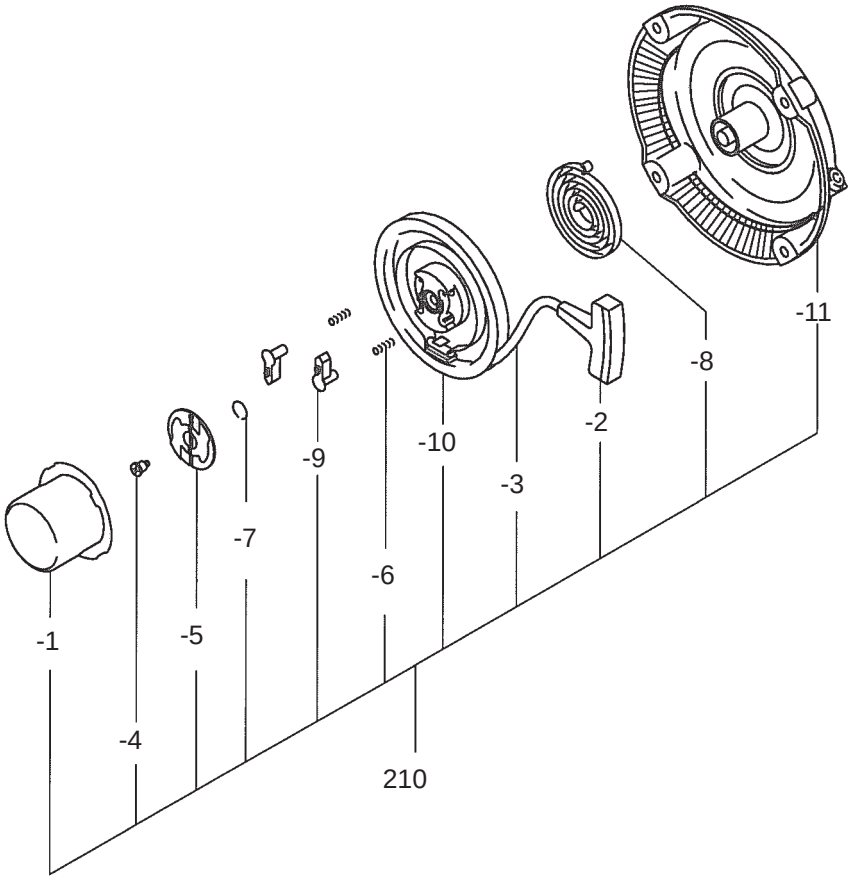
FIG. 500



SECTION 5 COOLING and STARTING GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
490	277-36107-03	Label, arrow	1			500
10	20B-51201-H1	Blower Housing	1			500
15	20B-55101-02	Recoil Bracket Un	1			500
16	010-00804-40	Bolt	2			500
17	010-00804-50	Bolt	2			500
18	002-38060-00	Flange Nut	4			500
20	073-20054-70	Label, trademark	1			500
40	001-04061-60	Flange Bolt	5			500
60	001-65081-20	Bolt	1			500
61	20B-52702-H1	Baffle 2, head	1			500
80	279-52711-11	Baffle 1, case	1			500
81	011-00600-20	Flange Bolt	3			500
220	013-00602-81	Bolt and Washer Ay	4			500
705	KU3-11077-01	Float C/U Cp11	1			500
706	20B-73102-01	Wire 2 Cp	1			500

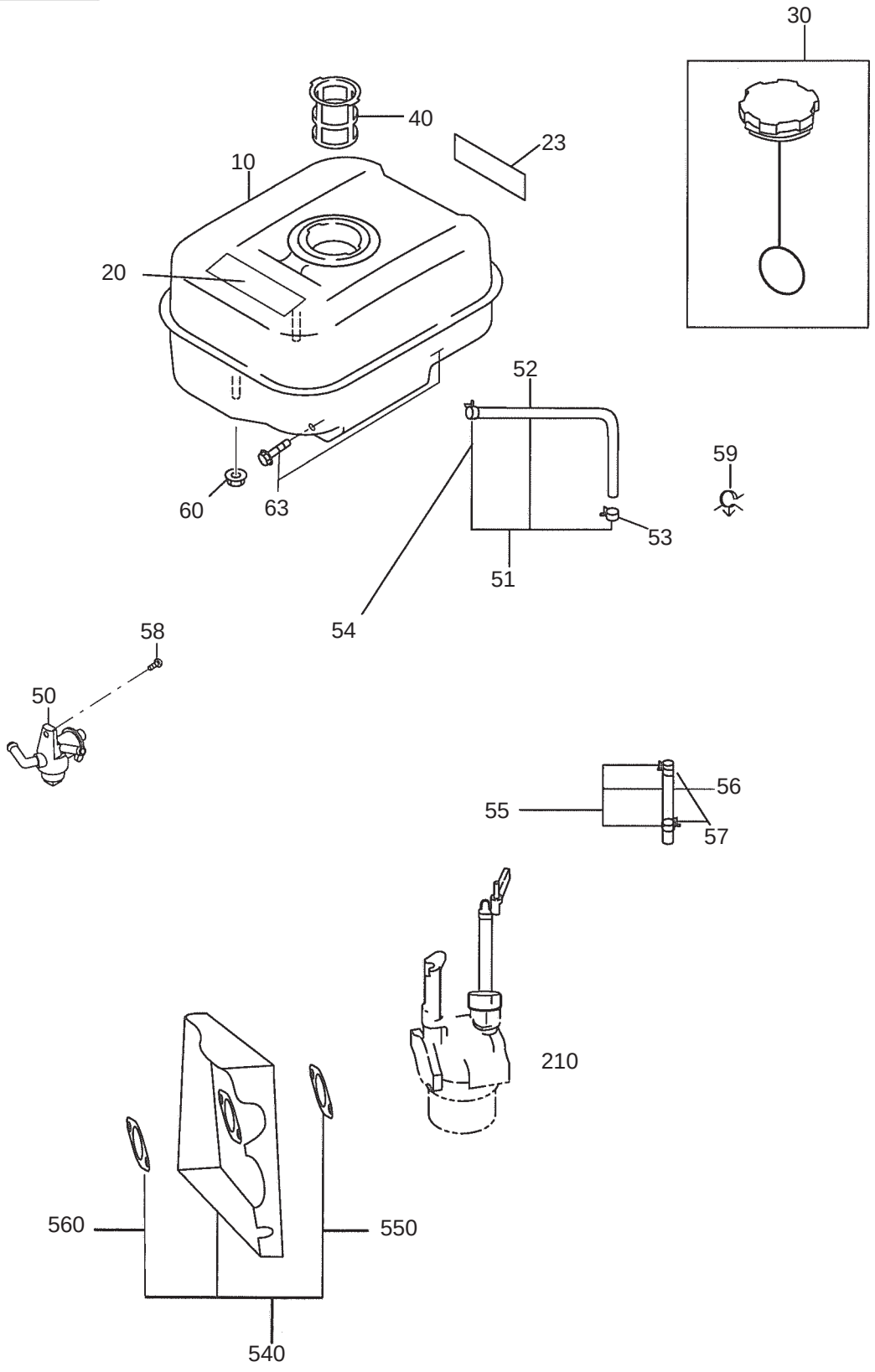
FIG. 520



SECTION 5 COOLING and STARTING GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
210	20B-50301-00	Recoil Starter Ay	1			520
-1	20B-50145-08	Starter Pulley	1			520
-2	261-50100-08	Starter Knob	1			520
-3	20B-50110-08	Starter Rope	1			520
-4	20B-50101-08	Set Screw	1			520
-5	161-50150-08	Ratchet Guide	1			520
-6	227-50135-08	Return Spring	2			520
-7	227-50131-08	Friction Spring	1			520
-8	277-50155-08	Spiral Spring	1			520
-9	161-50125-08	Ratchet	2			520
-10	20B-50120-08	Reel	1			520
-11	20B-50150-08	Starter Case	1			520

FIG. 600



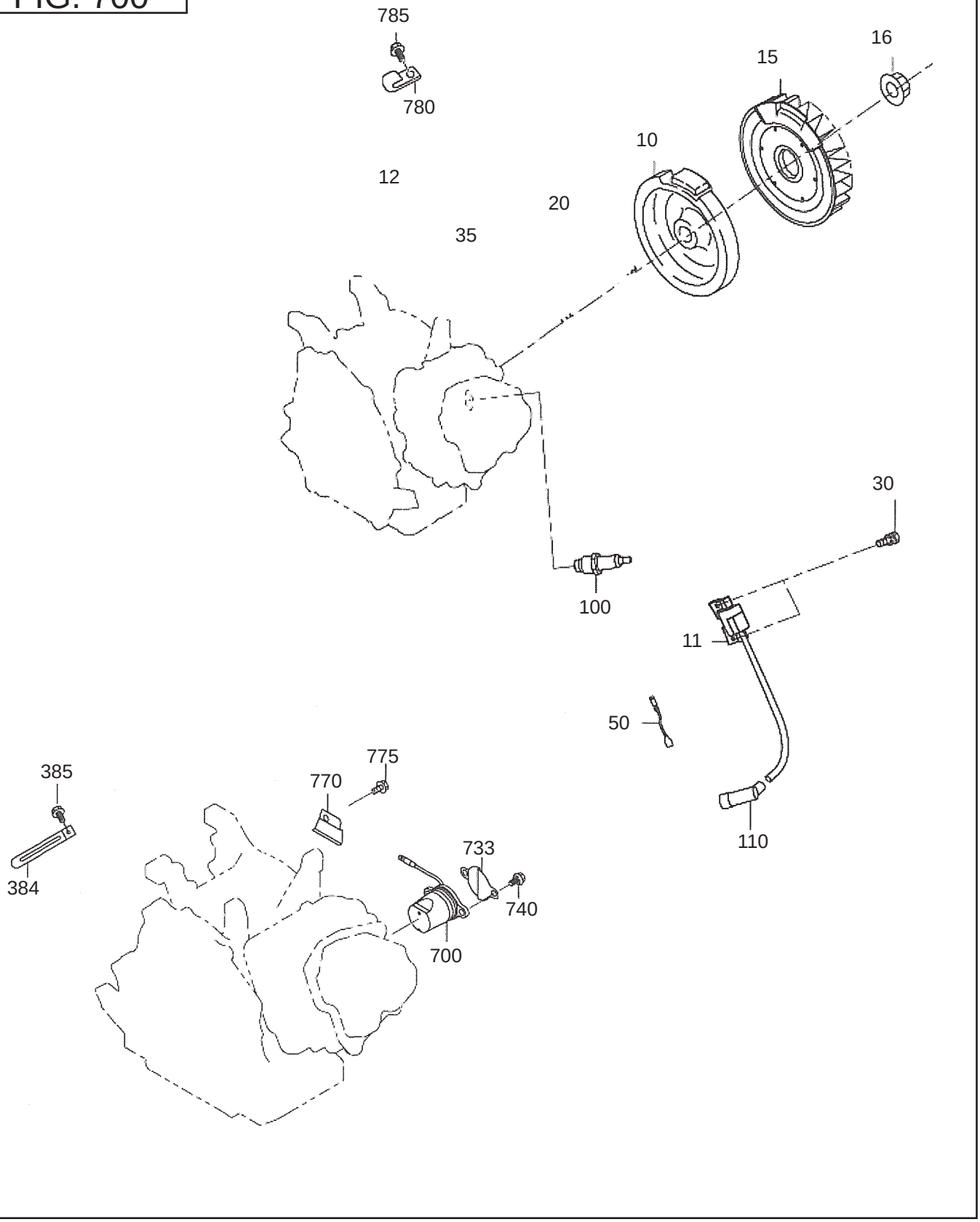
SECTION 6 FUEL, LUBRICATION GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig
707	004-30041-20	Screw and Washer Ay	2			500
10	20B-60102-01	Fuel Tank Cp	1			600
20	073-20051-81	Label, warning	1			600
23	20B-95101-03	Label, model	1			600
30	X43-04401-61	Fuel Tank Cap Cp	1			600
40	X64-13600-10	Fuel Filter	1			600
50	X64-20122-00	Fuel Strainer Ay	1			600
51	267-62604-11	Fuel Pipe Cp	1	fuel tank strainer		600
52	X85-10614-91	Rubber Pipe	1			600
53	X56-11100-60	Hose Clamp	1	fuel pipe, strainer		600
54	056-11200-40	Hose Clamp	1	fuel pipe, tank		600
55	20B-62601-01	Fuel Pipe Cp	1	strainer, carb		600
56	085-10620-90	Rubber Pipe	1			600
57	056-11000-30	Hose Clamp	2	fuel pipe		600
58	011-00600-20	Flange Bolt	1			600
59	056-81200-10	Clamp	1			600
60	002-38080-00	Flange Nut	2			600
63	011-00802-50	Flange Bolt	2			600
540	20B-32901-J1	Insulator Cp	1			600
550	20B-35901-H3	Gasket 1, insulator	1			600

FIG. 610

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
560	20B-35902-H3	Gasket 2, Insulator	1			660
210	20B-62301-00	Carburetor Ay	1	Std		640

FIG. 700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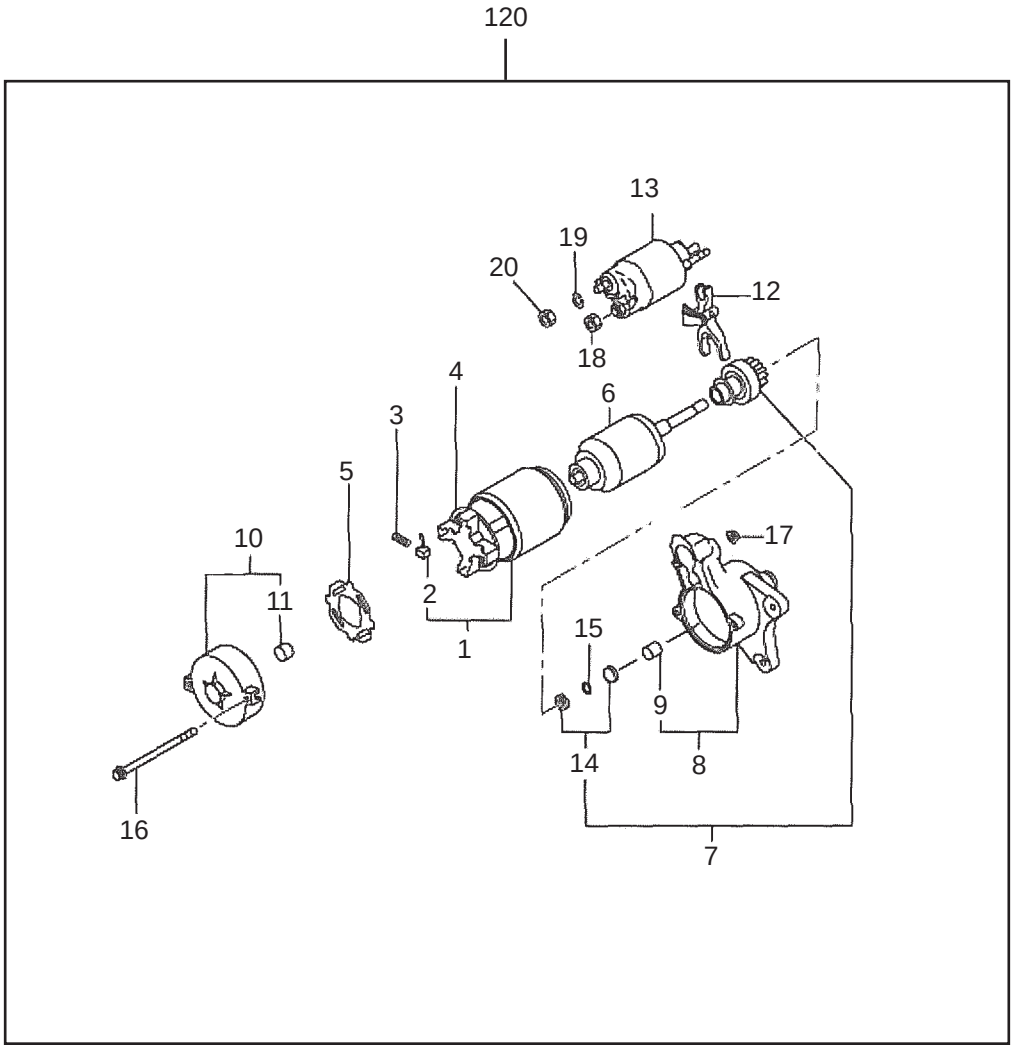
SECTION 7 ELECTRIC DEVICE GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
1	20B-62302-00	Carburetor Ay	1	Generator		640
10	20B-79230-H1	Flywheel Cp	1	Std		700
	20B-79241-H1	Flywheel Cp	1	15 Watt		700
11	20B-79430-H1	Ignition Coil	1			700
12	20B-79301-H1	Charge Coil	1	15 Watt		700
15	20B-54101-H3	Cooling Blower	1			700
16	018-01800-10	Flange Nut	1			700
20	20B-71002-03	Ring Gear	1			700
30	001-14062-50	Bolt and Washer Ay	2			700
35	004-35062-00	Screw and Washer Ay	2			700
50	20B-73101-01	Wire 1	1			700
100	065-01401-50	Spark Plug	1			700
110	065-50003-11	Spark Plug Cap	1			700
384	056-60002-50	Clamp	1			700
385	011-00600-10	Flange Bolt	1			700
700	279-76301-51	Oil Sensor	1			700
733	277-75801-03	Shield Plate	1			700
740	013-00602-60	Bolt and Washer	2			700
770	20B-75501-03	Wire Clamp	1			700
775	015-20600-50	Tapping Bolt	1			700
780	214-79006-01	Clamp Cp	1	stop wire		700
785	011-00600-10	Flange Bolt	1	clamp		700

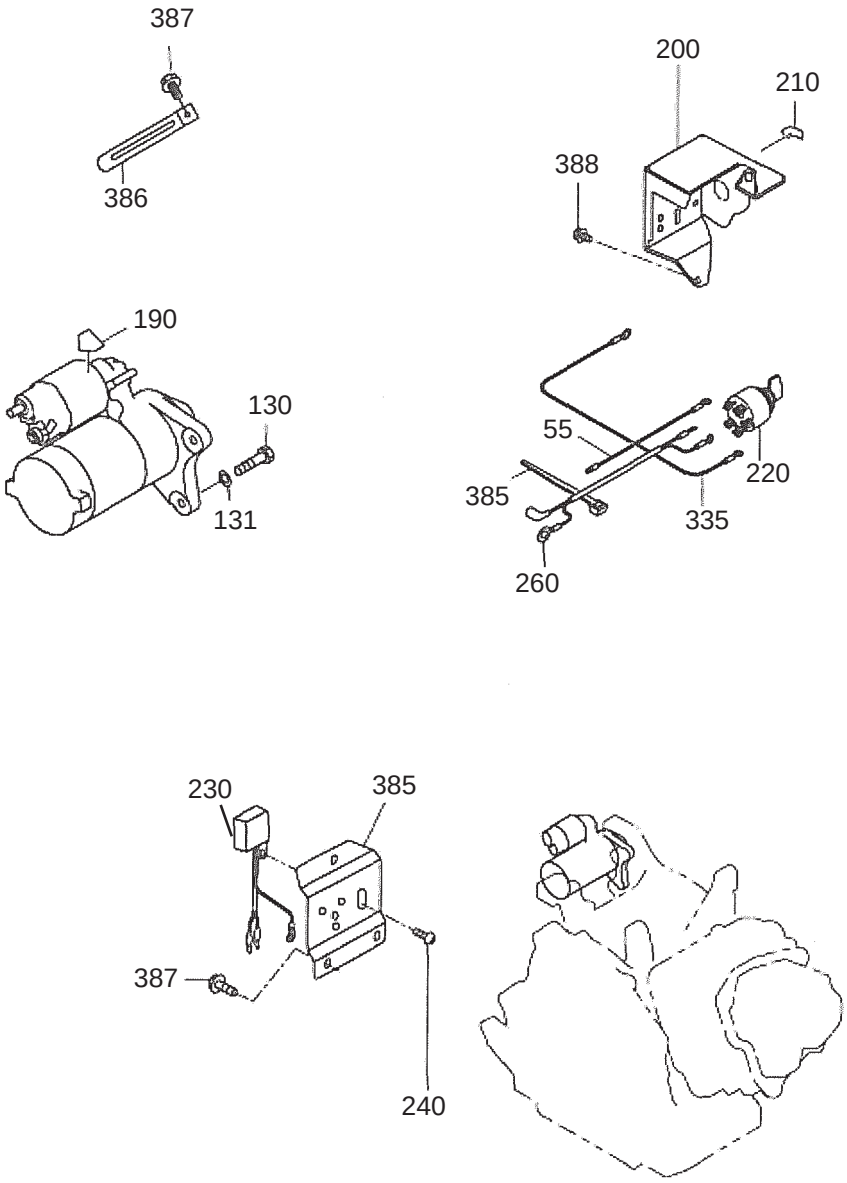
FIG. 710



SECTION 7 ELECTRIC DEVICE GROUP - ELECTRIC STARTER

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
120	279-70502-00	Starting Motor Ay	1			710
-1	209-70550-08	Yoke Cp	1			710
-2	209-70551-08	Brush	4			710
-3	209-70545-08	Brush Spring	4			710
-4	209-70530-08	Brush Holder	1			710
-5	209-70552-08	Insulator	1			710
-6	209-70554-08	Armature Ay	1			710
-7	209-70521-08	Over Running Clutch Cp	1			710
-8	279-70550-08	Housing Cp	1			710
-9	209-70511-08	Bush	1			710
-10	209-70505-18	Frame Cp	1			710
-11	209-70510-08	Bush	1			710
-12	209-70525-08	Lever	1			710
-13	279-70515-18	Magnet Switch Cp	1			710
-14	234-70555-08	Pinion Stopper	1			710
-15	209-70557-18	Snap Ring	1			710
-16	209-70558-08	Through Bolt	2			710
-17	949-29970-02	Nut	2			710
-18	209-70560-08	Nut	1			710
-19	107-70652-08	Spring Washer	1			710
-20	211-70584-08	Nut	1			710

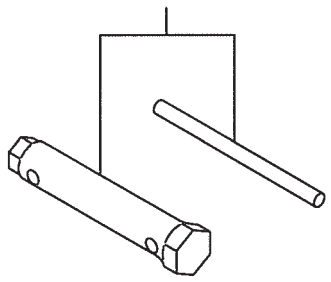
FIG. 720


387
386
200
210
388
190
130
131
55
220
385
335
260
230
385
387
240

SECTION 7 ELECTRIC DEVICE GROUP - CONTROL BOX

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
55	277-73105-01	Wire 5	1			720
130	214-79007-01	Bolt, starter	2			720
131	003-10080-00	Washer	2			720
190	073-20044-80	Label, battery	1			720
200	20B-75101-01	Control Box Cp	1			720
210	073-20044-70	Label, starter switch	1			720
220	066-00003-30	Switch Ay	1			720
-1	066-00099-80	Key	1			720
230	277-71401-01	Diode Rectifier Cp	1			720
240	044-35061-00	Screw and Washer Ay	1			720
260	277-73103-11	Wire 3 Cp	1			720
335	277-73104-01	Wire 4 Cp	1			720
385	056-30000-60	Wire Band	1			720
385	20B-76511-01	Bracket Cp, SEL	1			720
386	056-60002-50	Clamp, sel	1			720
387	011-00600-20	Flange Bolt	3			720
388	013-50600-10	Bolt and Washer Ay	2			720

FIG. 900



SECTION 9 ACCESSORY GROUP

Ref.	Part Number	Description	Qty	Remarks	To-From	Fig.
10	224-90303-00	Accessory Tool Kit	1			900

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