

PARTS MANUAL

Model

**EY20-3
ENGINE**

PUB-EP1641
Rev. 01/02

Robin America, Inc.

940 Lively Blvd. • Wood Dale, IL 60191 • Phone: 630-350-8200 • Fax: 630-350-8212
e-mail: sales@robinamerica.com • www.robinamerica.com

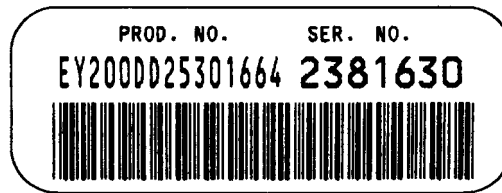
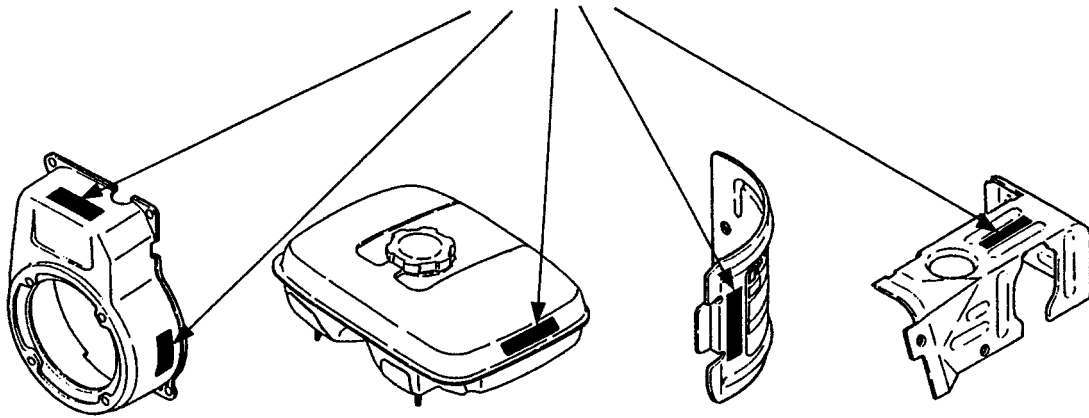
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HOW TO USE THIS MANUAL

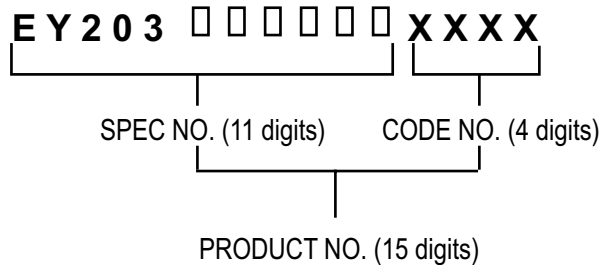
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant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



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

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DETAIL A

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		600
27	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

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.

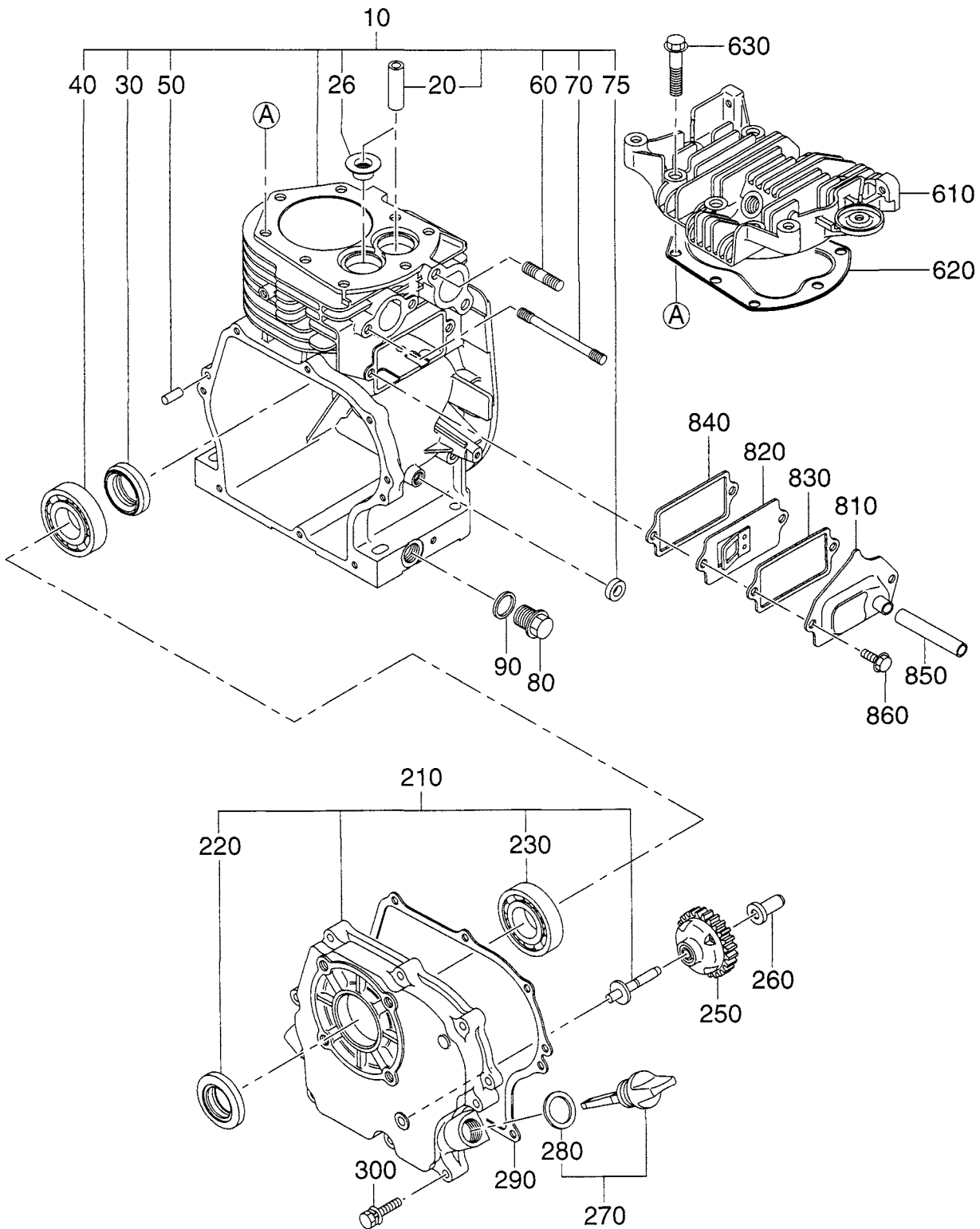
GROUP INDEX

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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



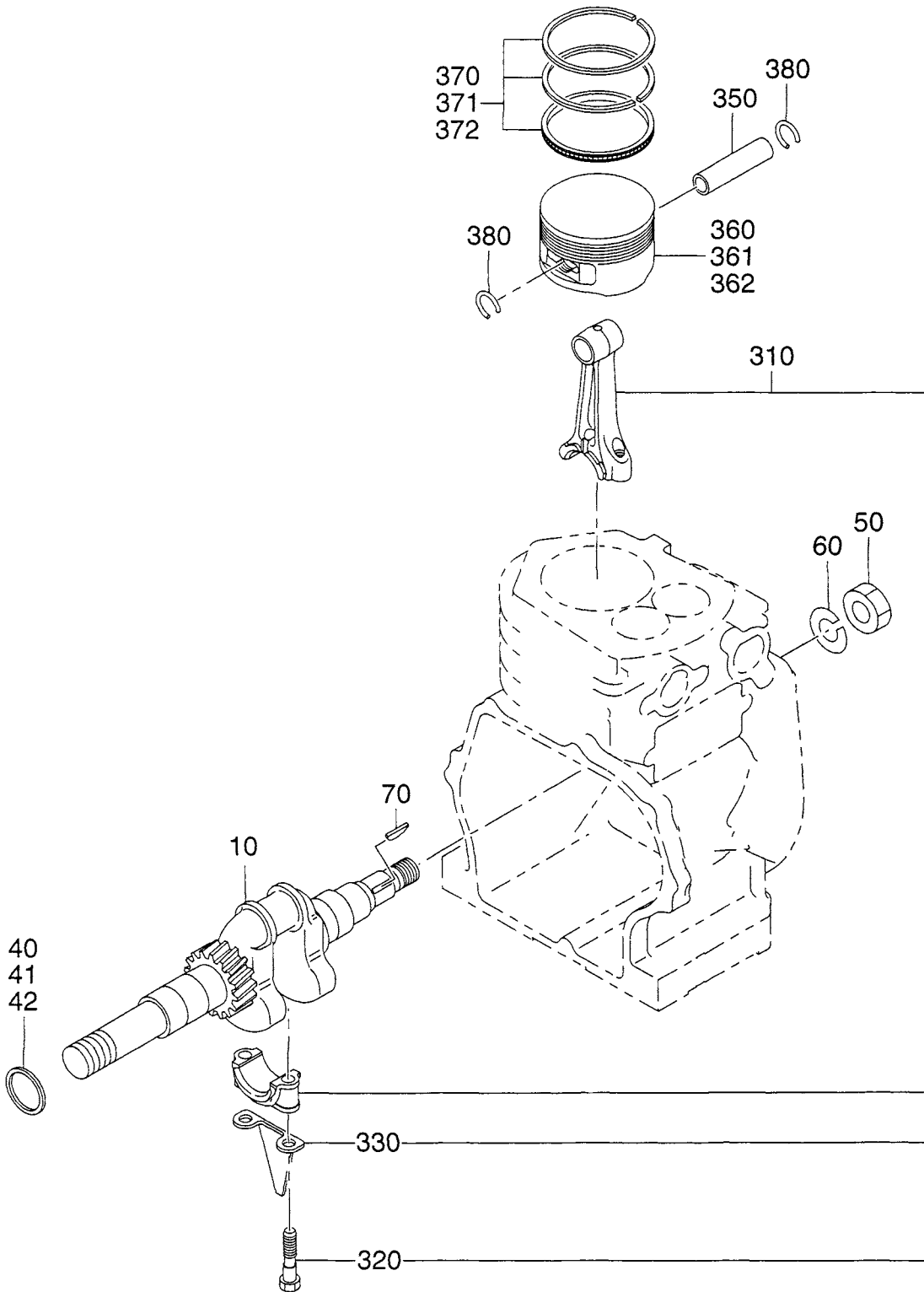
SECTION 1 CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	282-10111-01	CRANKCASE CP	1	w/ stem seal		100
20	227-14202-03	VALVE GUIDE	2			100
26	282-16301-03	STEM SEAL	1			100
30	044-02501-50	OIL SEAL	1			100
40	X60-02500-10	BALL BEARING	1			100
50	031-00600-20	DOWEL PIN	2			100
60	010-50802-50	STUD	2			100
70	010-50601-20	STUD	2			100
75	044-00800-10	OIL SEAL	1			100
80	040-11400-30	PLUG	2			100
90	021-11400-20	GASKET	2	EY203YD1030		100
	021-81400-10	GASKET	2	EY203YD4000		100
210	282-11002-01	MAIN BEARING COVER CP	1			100
220	044-02501-60	OIL SEAL	1			100
230	X60-02500-10	BALL BEARING	1			100
250	227-45003-01	GOVERNOR GEAR CP	1			100
260	205-41901-03	GOVERNOR SLEEVE	1			100
270	282-63601-H1	OIL GAUGE CP	2			100
280	X21-31600-20	GASKET	2			100
290	227-16001-03	GASKET, bearing cover	1			100
300	013-00600-40	BOLT and WASHER AY	8			100
610	227-13001-13	CYLINDER HEAD	1			100
620	282-15001-01	GASKET CP, head	1			100
630	011-00800-10	FLANGE BOLT	8			100
810	227-14301-01	TAPPET COVER CP	1			100
820	227-14401-01	BREATHER PLATE	1			100
830	282-16006-03	GASKET, tappet cover	1			100
840	282-16007-03	GASKET, breather plate	1			100
850	085-10800-00	RUBBER PIPE	1			100
860	011-00600-20	FLANGE BOLT	2			100
*960	282-99001-07	GASKET SET	1			100

* Gasket Set 282-99001-07 includes the following:
 Fig 100 items 290, 620, 830 and 840
 Fig 300 items 340, 550 and 560

SECTION 2 CRANKSHAFT GROUP

FIG. 200

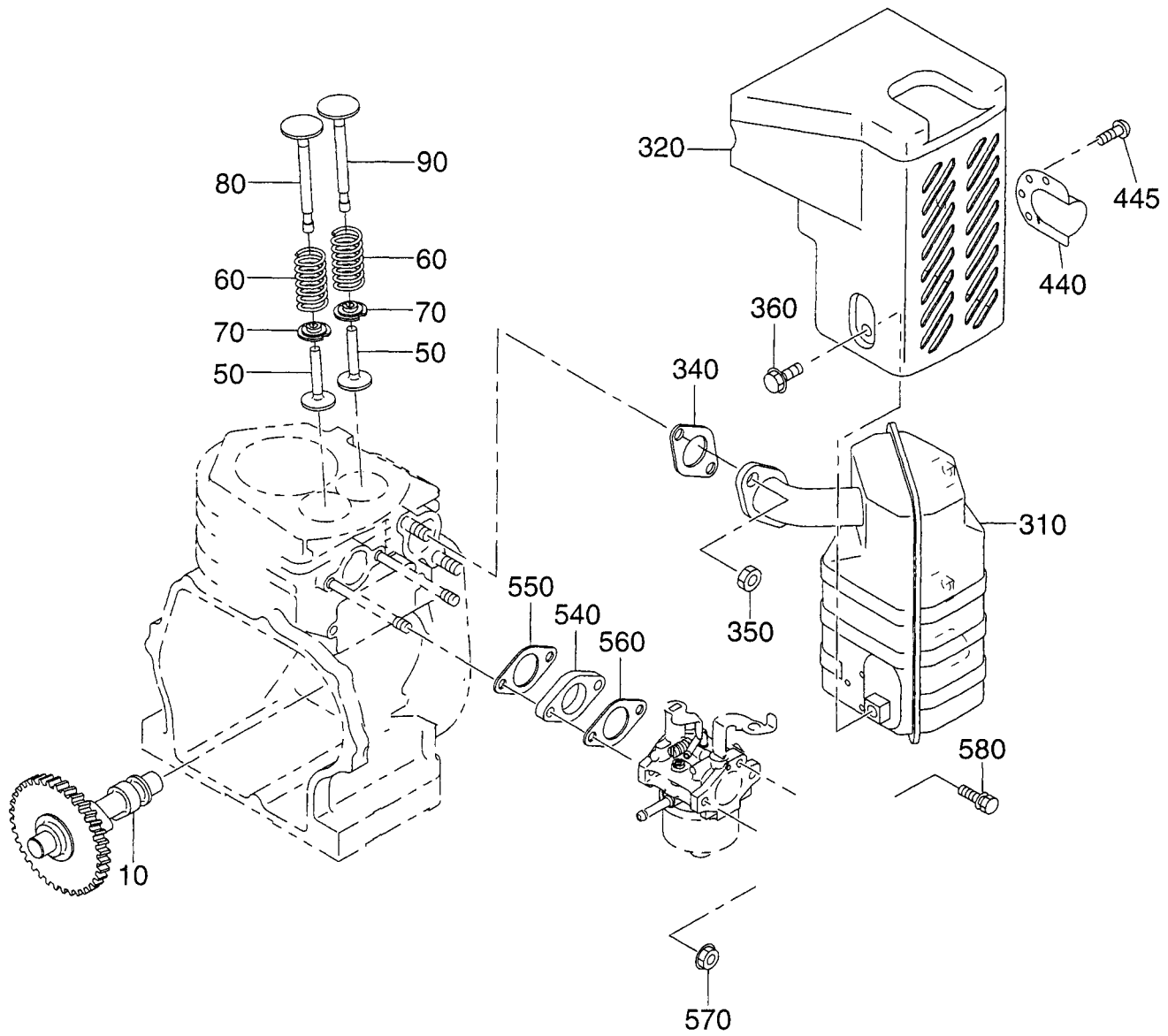


SECTION 2 CRANKSHAFT GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	282-21001-01	CRANKSHAFT CP	1	EY203YD1030		200
	282-20901-01	CRANKSHAFT CP	1	EY203YD4000		200
40	023-02501-10	SPACER	1			200
41	023-02501-20	SPACER	1			200
42	023-02501-30	SPACER	1			200
50	002-18140-00	NUT	1			200
60	003-20140-00	SPRING WASHER	1			200
70	032-30300-10	WOODRUFF KEY	1			200
310	227-22501-10	CONNECTING ROD AY	1			200
320	227-23001-13	CONNECTING ROD BOLT	2			200
330	227-23101-03	OIL SCRAPER	1			200
350	214-23301-13	PISTON PIN	1			200
360	282-23401-03	PISTON	1	STD		200
361	282-23402-03	PISTON	1	Oversize 0.25		200
362	282-23403-03	PISTON	1	Oversize 0.50		200
370	282-23501-07	PISTON RING SET	1	STD		200
371	282-23502-07	PISTON RING SET	1	Oversize 0.25		200
372	282-23503-07	PISTON RING SET	2	Oversize 0.50		200
380	056-51400-10	CLIP	1			200

SECTION 3 INTAKE and EXHAUST GROUP

FIG. 300



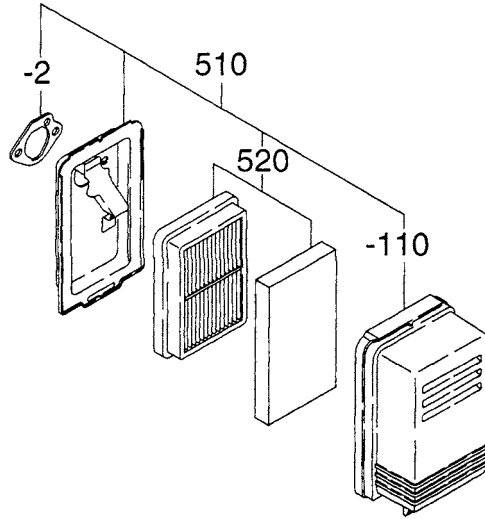
SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	227-31701-03	CAMSHAFT	1			300
50	227-33301-03	TAPPET	2			300
60	227-33601-03	VALVE SPRING	2			300
70	227-33701-03	SPRING RETAINER	2			300
80	282-33401-03	INTAKE VALVE	1			300
90	282-33501-03	EXHAUST VALVE	1			300
310	282-30101-H1	MUFFLER CP	1			300
320	282-34201-H1	MUFFLER COVER CP	1			300
340	282-35201-01	GASKET CP, exhaust	1			300
350	017-00800-30	NUT	2			300
360	011-00600-10	FLANGE BOLT	3			300
440	282-37001-H3	DEFLECTOR	1			300
445	015-00400-10	TAPPING SCREW	2			300
540	227-32901-13	INSULATOR	1			300
550	282-35901-03	GASKET, insulator	1			300
560	227-35904-03	GASKET 2, insulator	1			300
570	226-39212-00	NUT and WASHER AY	2			300
580	001-10061-20	BOLT and WASHER AY	1			300

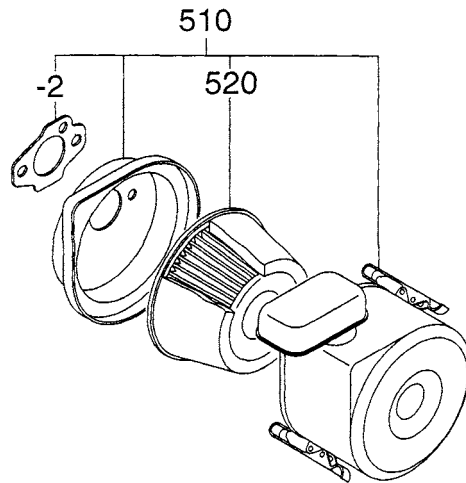
SECTION 3 INTAKE and EXHAUST GROUP

FIG. 310

A

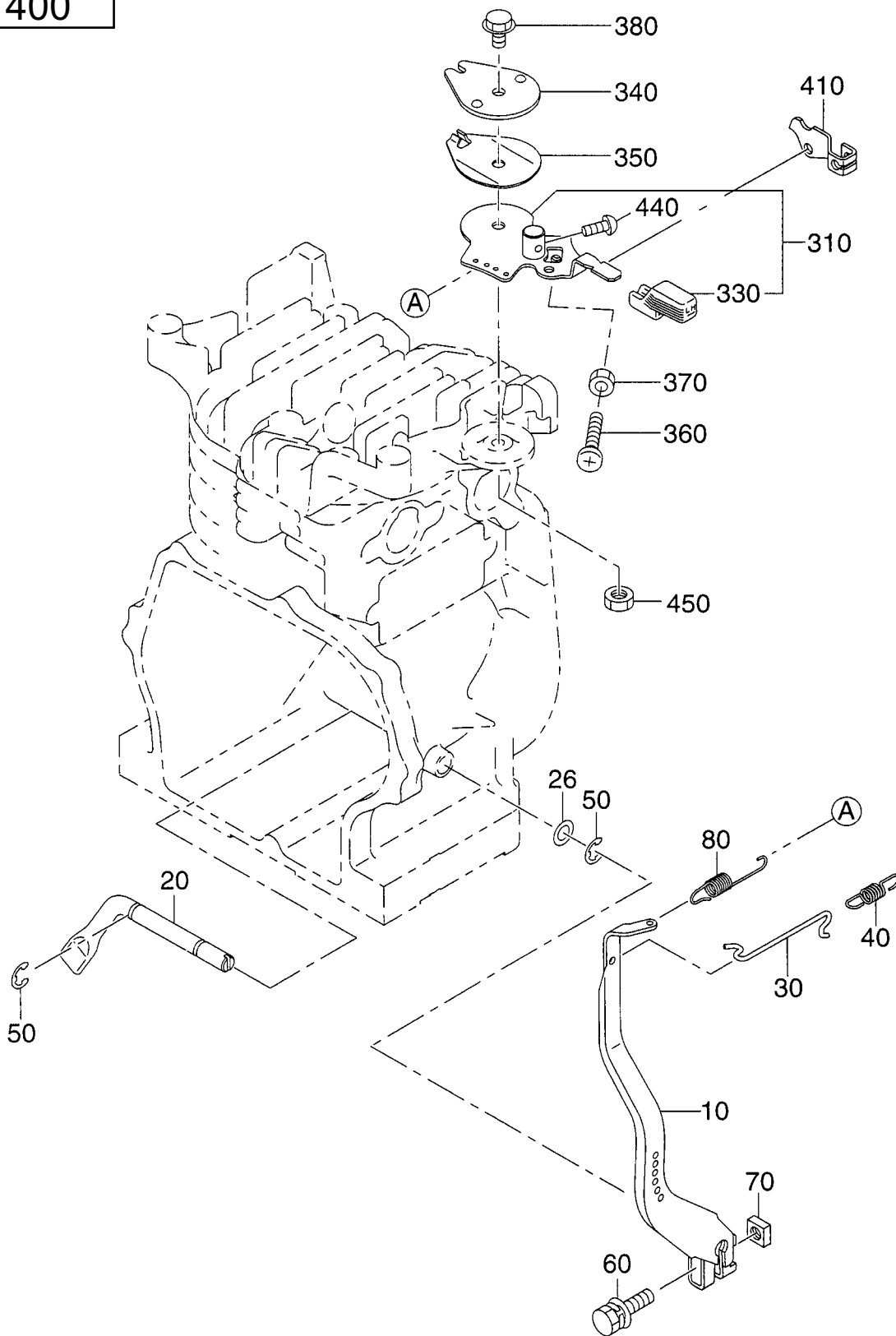


B



SECTION 4 GOVERNOR GROUP

FIG. 400

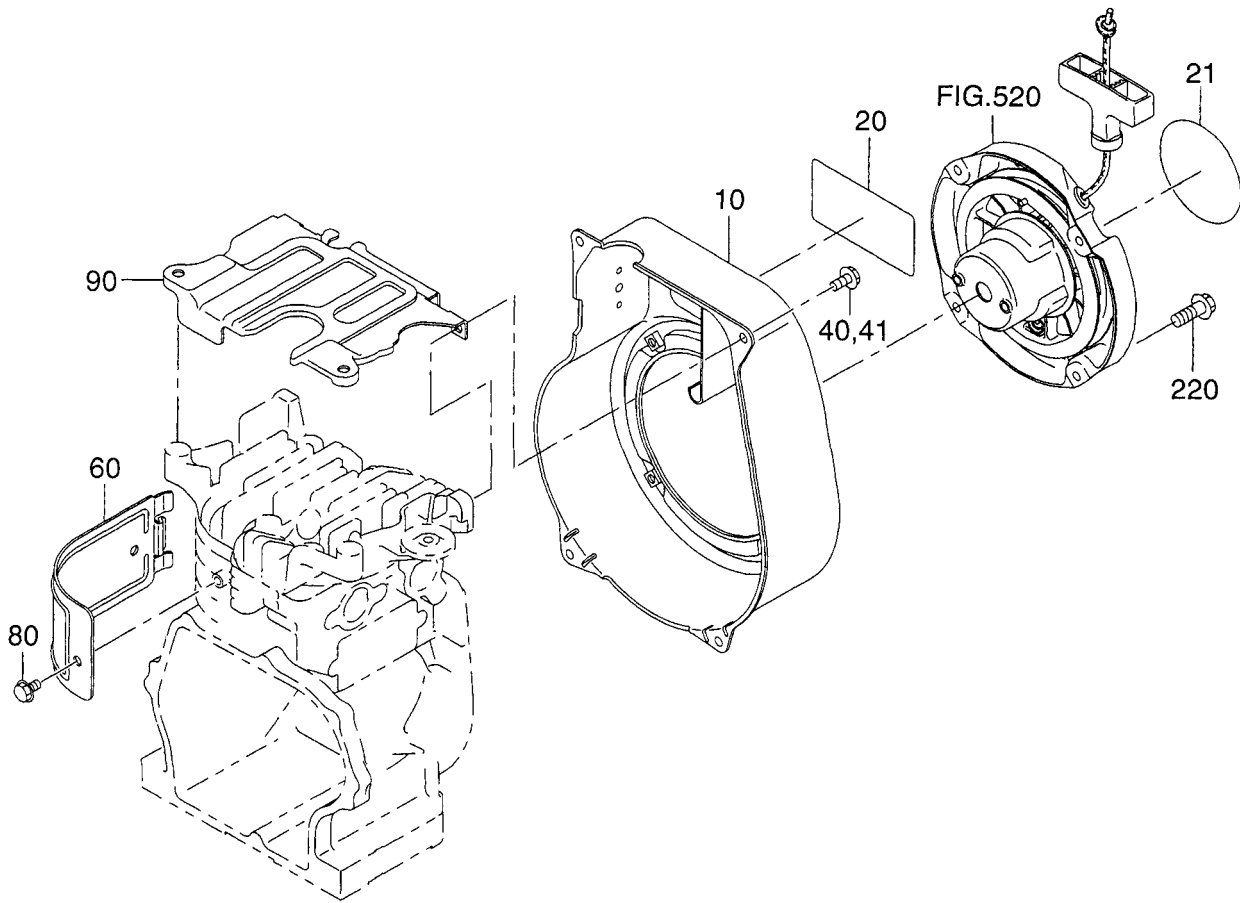


SECTION 4 GOVERNOR GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	227-42301-11	GOVERNOR LEVER CP	1			400
20	227-42201-03	GOVERNOR SHAFT	1			400
26	003-11080-00	WASHER	1			400
30	227-42701-01	GOVERNOR ROD	1			400
40	227-42801-03	ROD SPRING	1			400
50	003-13060-00	CLIP	2			400
60	001-14062-50	BOLT and WASHER AY	1			400
70	018-60600-20	NUT	1			400
80	227-42501-13	GOVERNOR SPRING	1			400
310	227-43301-10	SPEED CONTROL AY	1	EY203YD1030		400
	227-43302-20	SPEED CONTROL AY	1	EY203YD4000		400
330	227-43601-03	KNOB	1			400
340	227-43501-13	STOP PLATE	1			400
350	227-45002-03	SPRING WASHER	1			400
360	004-31063-00	SCREW	1			400
370	002-27060-00	NUT	1			400
380	011-00600-30	FLANGE BOLT	1	EY203YD1030		400
	011-00600-50	FLANGE BOLT	1	EY203YD4000		400
410	227-44203-13	WIRE BRACKET	1			400
440	004-31040-80	SCREW	1			400
450	002-27060-00	NUT	1			400

SECTION 5 COOLING and STARTING GROUP

FIG. 500

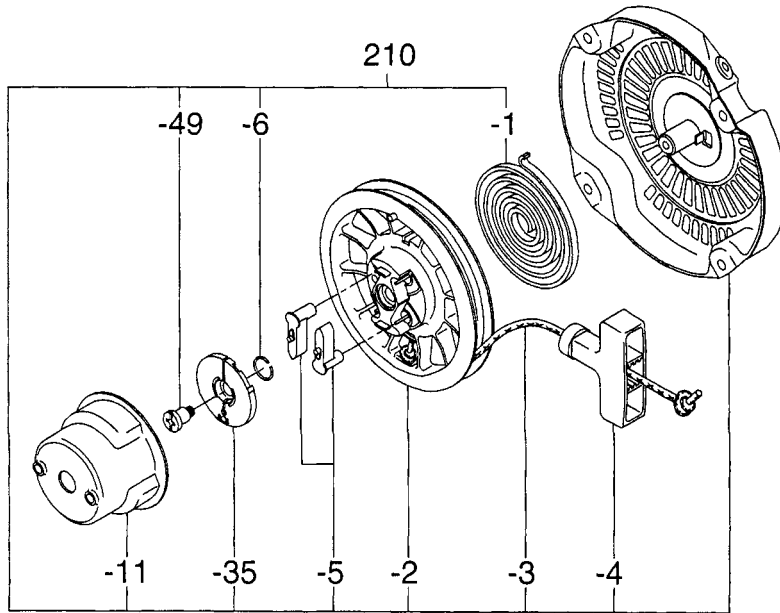


SECTION 5 COOLING and STARTING GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	282-51262-01	BLOWER HOUSING CP	1	EY201YD1030		500
	282-51361-01	BLOWER HOUSING CP	1	EY203YD4000		500
20	282-95101-03	LABEL, model	1			500
21	073-20051-40	LABEL, trademark	1			500
40	011-00600-30	FLANGE BOLT	4			500
41	001-11062-00	BOLT and WASHER AY	1			500
60	227-52601-03	CYLINDER BAFFLE	1			500
80	011-00600-10	FLANGE BOLT	1			500
90	227-52701-03	HEAD COVER	1			500
220	011-00600-10	FLANGE BOLT	4			500

SECTION 5 COOLING and STARTING GROUP

FIG. 510

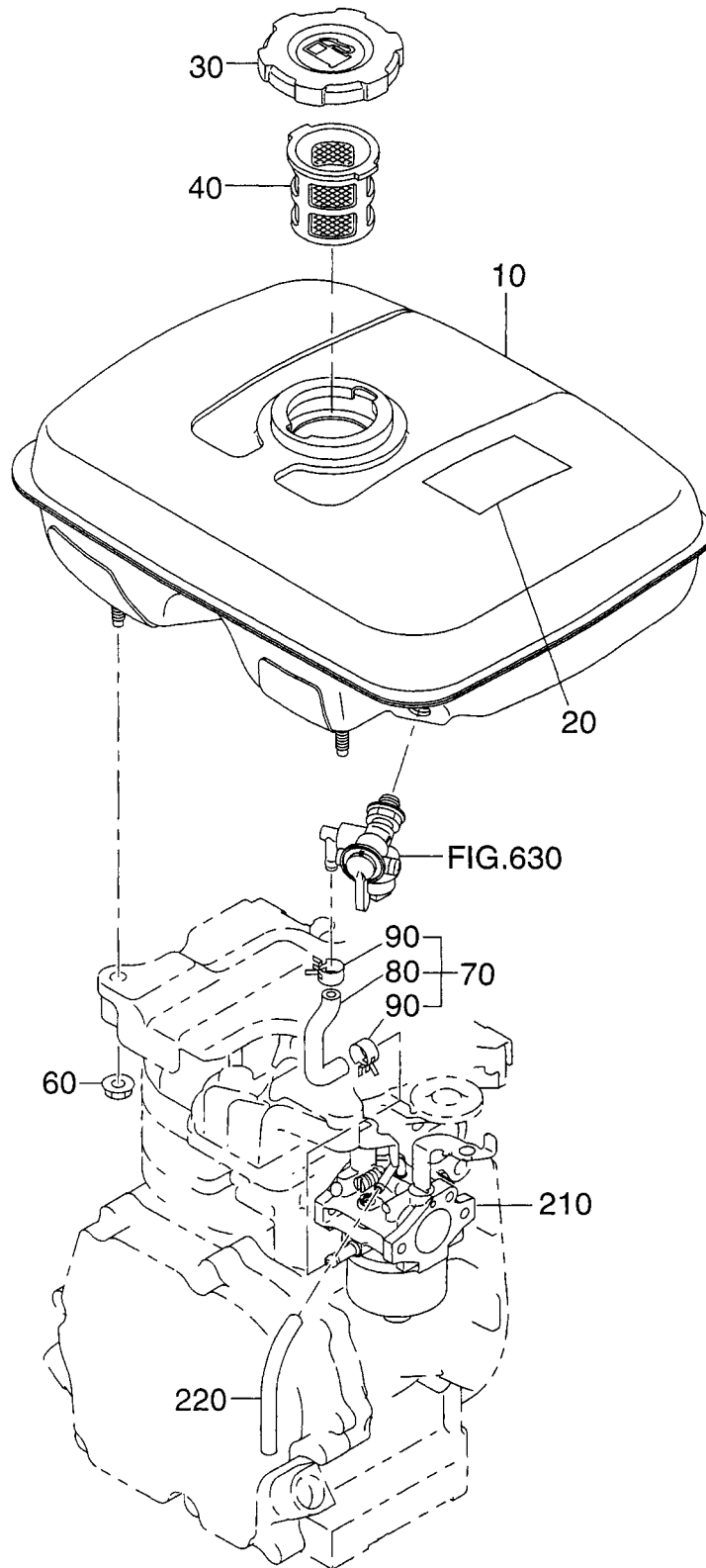


SECTION 5 COOLING and STARTING GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	282-50211-00	RECOIL STARTER AY	1			510
-1	270-50115-08	SPIRAL SPRING	1			510
-2	269-50120-08	REEL	1			510
-3	282-50111-08	STARTER ROPE	1			510
-4	261-50100-08	STARTER KNOB	1			510
-5	270-50125-08	RATCHET	2			510
-6	227-50131-08	FRICTION SPRING	1			510
-11	269-50145-18	STARTER PULLEY	1			510
-35	270-50261-08	RATCHET GUIDE	1			510
-49	227-50152-08	SET SCREW	1			510

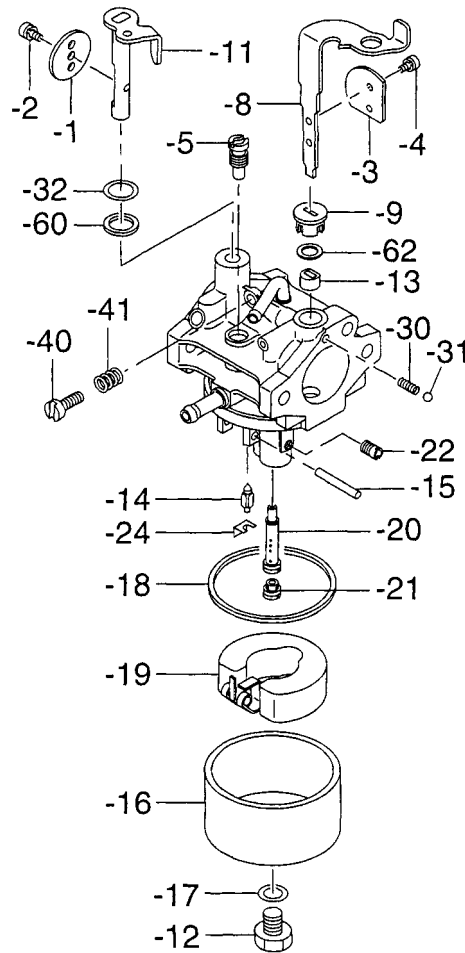
SECTION 6 FUEL, LUBRICANT GROUP

FIG. 600



SECTION 6 FUEL, LUBRICATION GROUP

FIG. 610

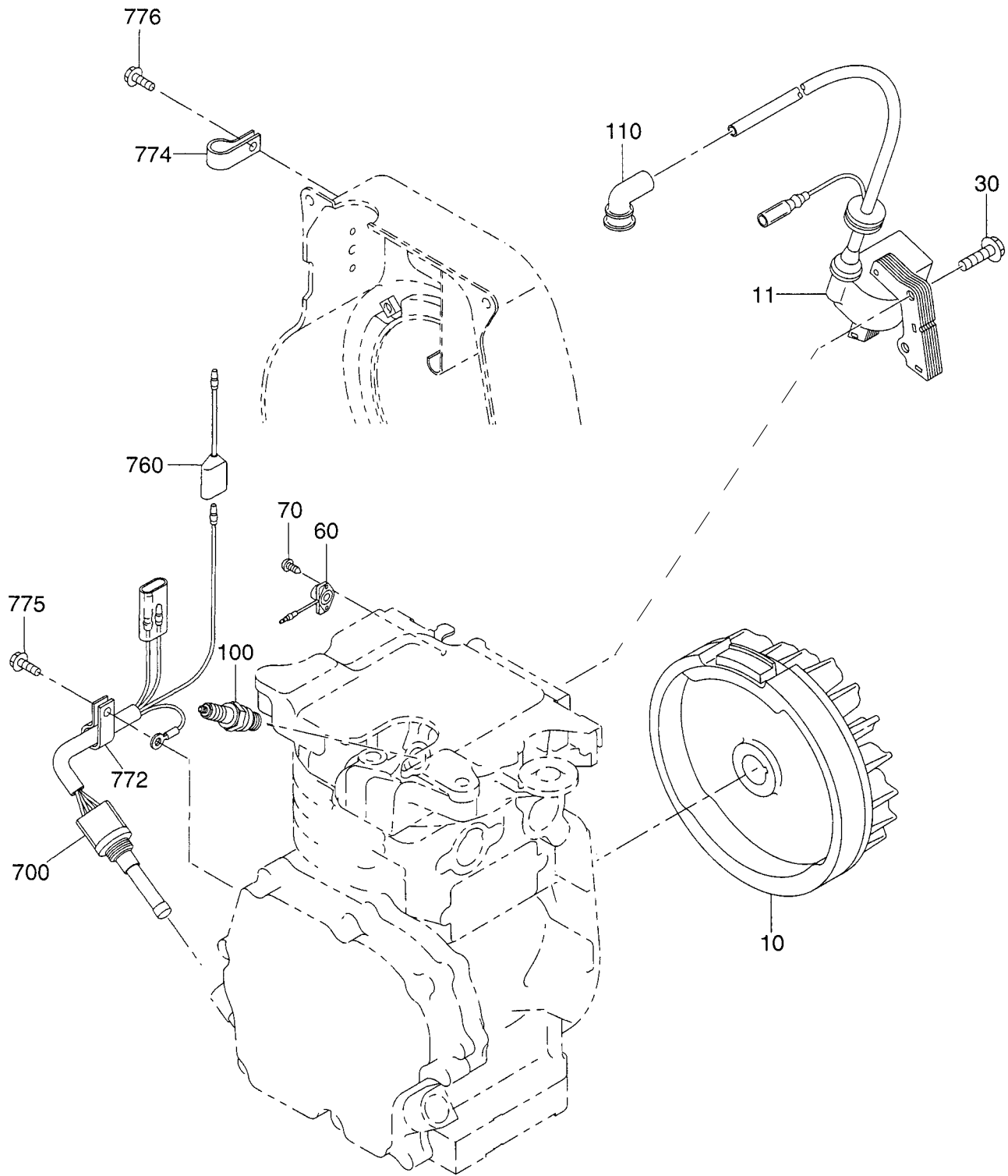


SECTION 6 FUEL, LUBRIACTION GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	227-62480-00	CARBURETOR AY	1	EY203YD1030		610
	227-62475-00	CARBURETOR AY	1	EY203YD4000		610
-1	252-62535-08	THROTTLE VALVE	1	EY203YD1030		610
	220-62535-08	THROTTLE VALVE	1	EY203YD4000		610
-2	209-62351-08	SCREW	1			610
-3	226-62525-08	CHOKE VALVE	1	EY203YD1030		610
	227-62527-08	CHOKE VALVE	1	EY203YD4000		610
-4	237-62451-08	SCREW	2			610
-5	227-62423-08	PILOT JET	1	EY203YD1030		610
	227-62422-08	PILOT JET	1	EY203YD4000		610
-8	226-62520-18	SHAFT AY, choke	1			610
-9	226-62551-08	RING	1			610
-11	226-62532-08	SHAFT AY, throttle	1			610
-12	227-62451-08	BOLT	1			610
-13	226-62550-08	RING	1			610
-14	226-62502-08	NEEDLE VALVE AY	1			610
-15	214-62515-08	PIN	1			610
-16	227-62558-08	FLOAT CHAMBER BODY	1			610
-17	214-62450-08	PACKING	1			610
-18	214-62540-08	CHAMBER PACKING	1			610
-19	226-62506-08	FLOAT AY	1			610
-20	227-62443-08	MAIN NOZZLE	1	EY203YD4000		610
-21	227-62441-08	NOZZLE	1	EY203YD4000		610
-22	226-62411-08	MAIN JET	1	EY203YD1030		610
	227-62410-08	MAIN JET	1	EY203YD4000		610
-24	226-62701-18	CLIP	1			610
-30	209-62446-08	CHOKE SPRING	1			610
-31	209-62353-08	STEEL BALL	1			610
-32	106-62392-08	SEAL	1			610
-40	209-62352-08	SCREW	1			610
-41	209-62445-08	SPRING	1			610
-60	156-62351-08	PACKING	1			610
-62	227-62559-08	SEAL	1			610

SECTION 7 ELECTRIC DEVICE GROUP

FIG. 700



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