

PARTS MANUAL

Model

EY28

ENGINE

PUB-EP5736A
Rev. 02/00

Robin America, Inc.

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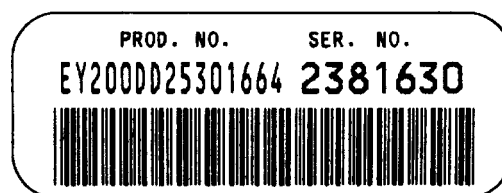
HOW TO USE THIS MANUAL

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.

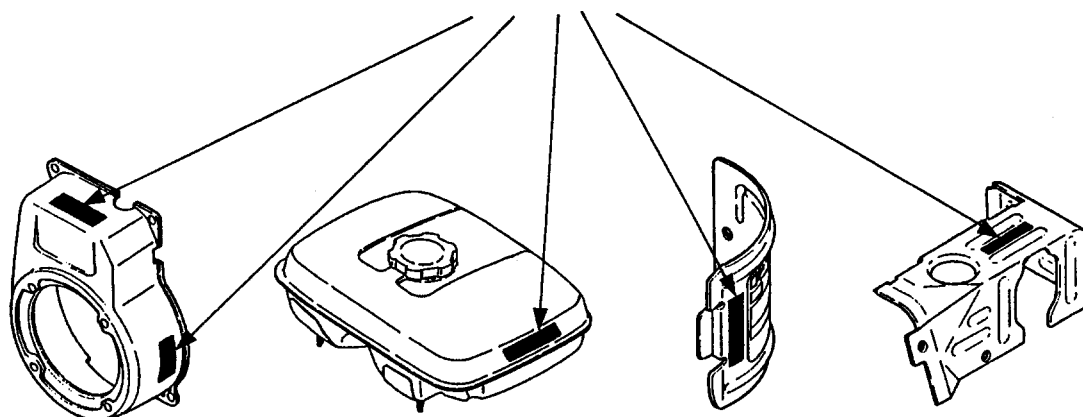
In order to identify the correct service part number, it is important to confirm the specification and code numbers for your engine. The specification and code number together are known as the PRODUCT NUMBER.

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

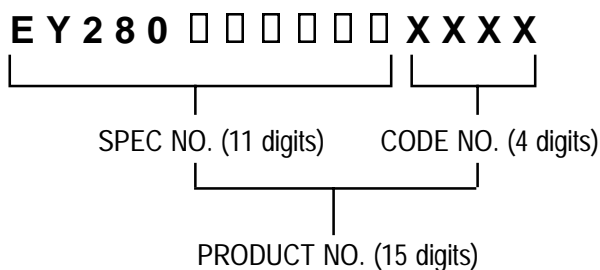
PRODUCT NUMBER LABEL



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

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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	LABEL, EMISSION		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	-4	064-20003-20	1	NUT		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.

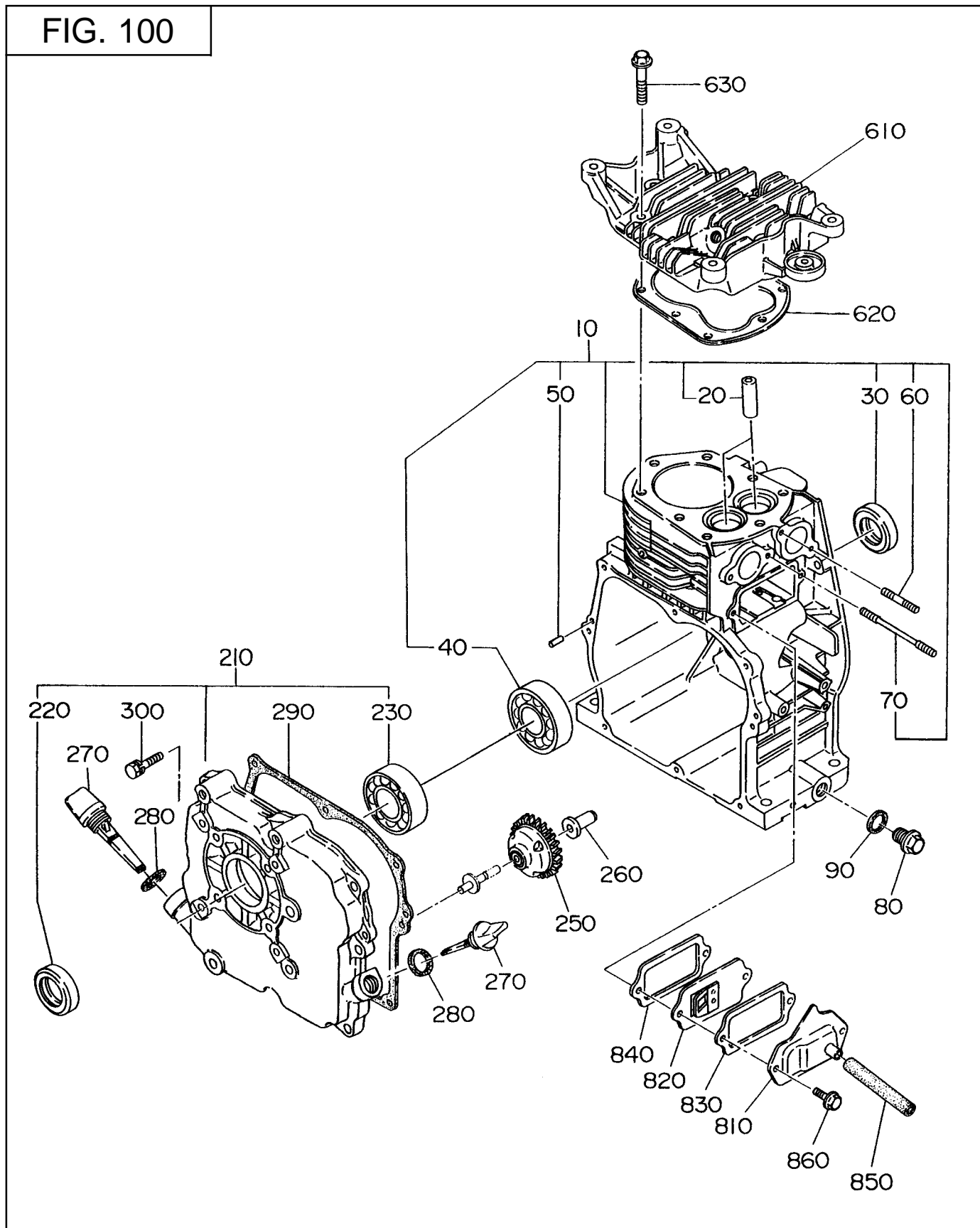
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INDEX OF DESCRIPTION SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AY	ASSEMBLY	P=	PITCH (in mm)
CP	COMPLETE	P.T.O. (PTO)	POWER TAKE OFF
EX	EXPORT (from Japan)	REF.	REFERENCE
FIG.	FIGURE	R.H. (RH)	RIGHT HAND SIDE
FR.	FRONT	RR.	REAR
"	INCH	STD.	STANDARD
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



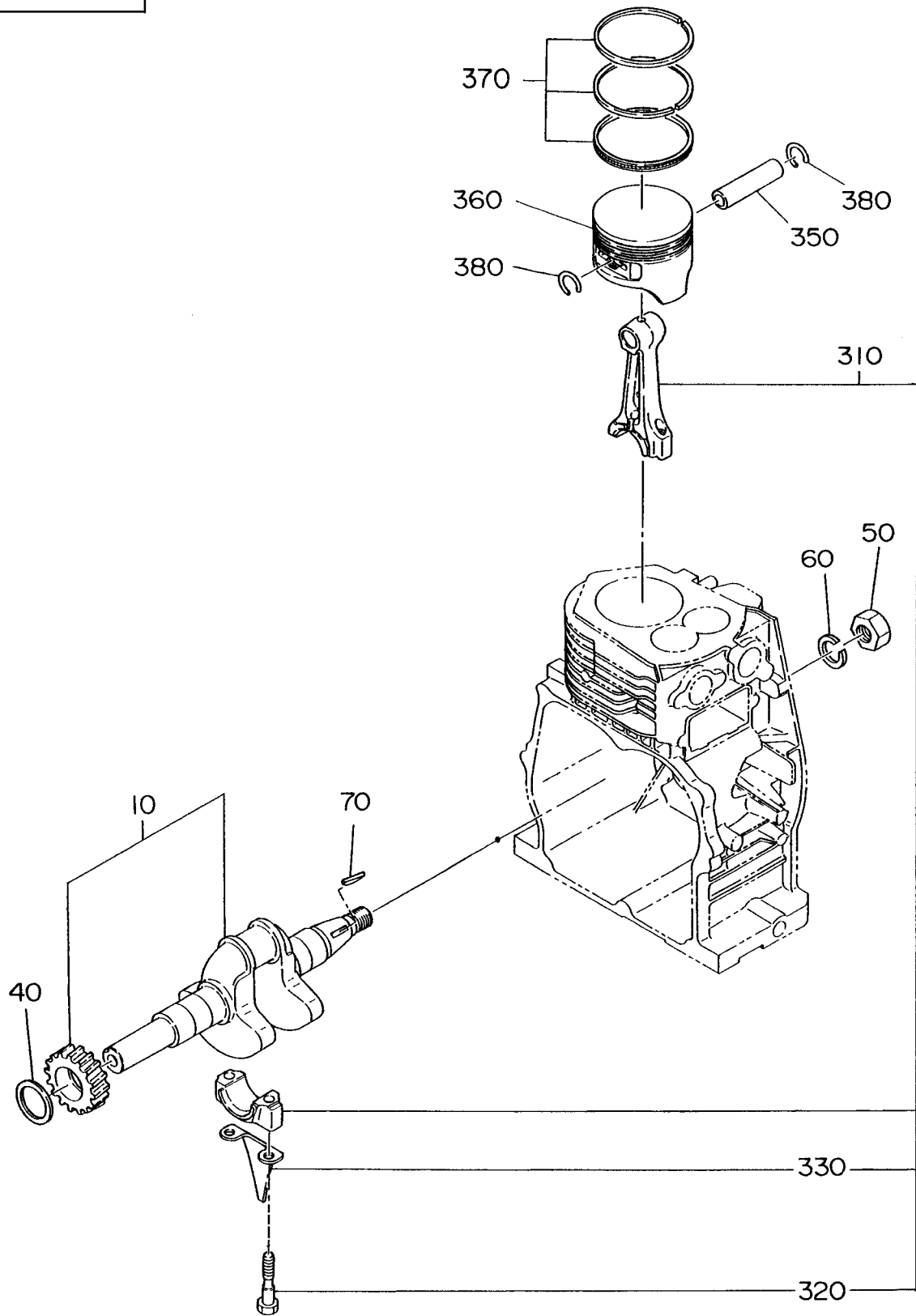
SECTION 1 CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	234-10101-31	CRANKCASE, compl.	1	Recoil start type		100
	234-10102-31	CRANKCASE, compl.	1	Electric start type		100
20	227-14202-03	VALVE GUIDE	2	Oversize		100
30	044-03000-30	OIL SEAL	1			100
40	060-03002-20	BALL BEARING	1			100
50	031-00600-20	DOWEL PIN	2			100
60	010-50802-90	STUD, muffler	2			100
70	010-50601-91	STUD, carburetor	2			100
80	040-11400-30	PLUG	2			100
90	021-11400-20	GASKET	2			100
210	234-12001-01	MAIN BEARING COVER, cp	1	SAE		100
	234-11001-01	MAIN BEARING COVER, cp	1	Metric		100
220	044-03000-30	OIL SEAL	1			100
230	060-03002-20	BALL BEARING	1			100
250	234-45001-01	GOVERNOR GEAR, compl.	1			100
260	205-41901-03	GOVERNOR SLEEVE	1			100
270	227-63601-03	OIL GAUGE	2			100
	227-63601-03	OIL GAUGE	1	Oil Sensor type		100
280	021-31600-20	GASKET	2			100
	021-31600-20	GASKET	1	Oil Sensor type		100
290	234-16001-03	GASKET, bearing cover	1			100
300	001-14082-80	BOLT and WASHER AY	8			100
610	234-13001-23	CYLINDER HEAD, compl.	1			100
620	234-15001-01	GASKET, head	1			100
630	011-00800-10	FLANGE BOLT	8			100
810	234-14301-01	TAPPET COVER, compl.	1			100
820	234-14401-01	BREATHER PLATE, compl.	1			100
830	234-16006-03	GASKET, tappet cover	1			100
840	234-16007-03	GASKET, breather plate	1			100
850	085-10800-00	RUBBER PIPE	1	Ø 8mm X Ø 11mm		100
860	011-00600-20	FLANGE BOLT	2			100
*960	234-99001-07	GASKET SET	1			100

* Gasket set includes the following:
 Fig. 100 items 280, 290, 620, 830 and 840
 Fig. 300 items 340, 550 and 560
 Fig. 310 item 510-2*

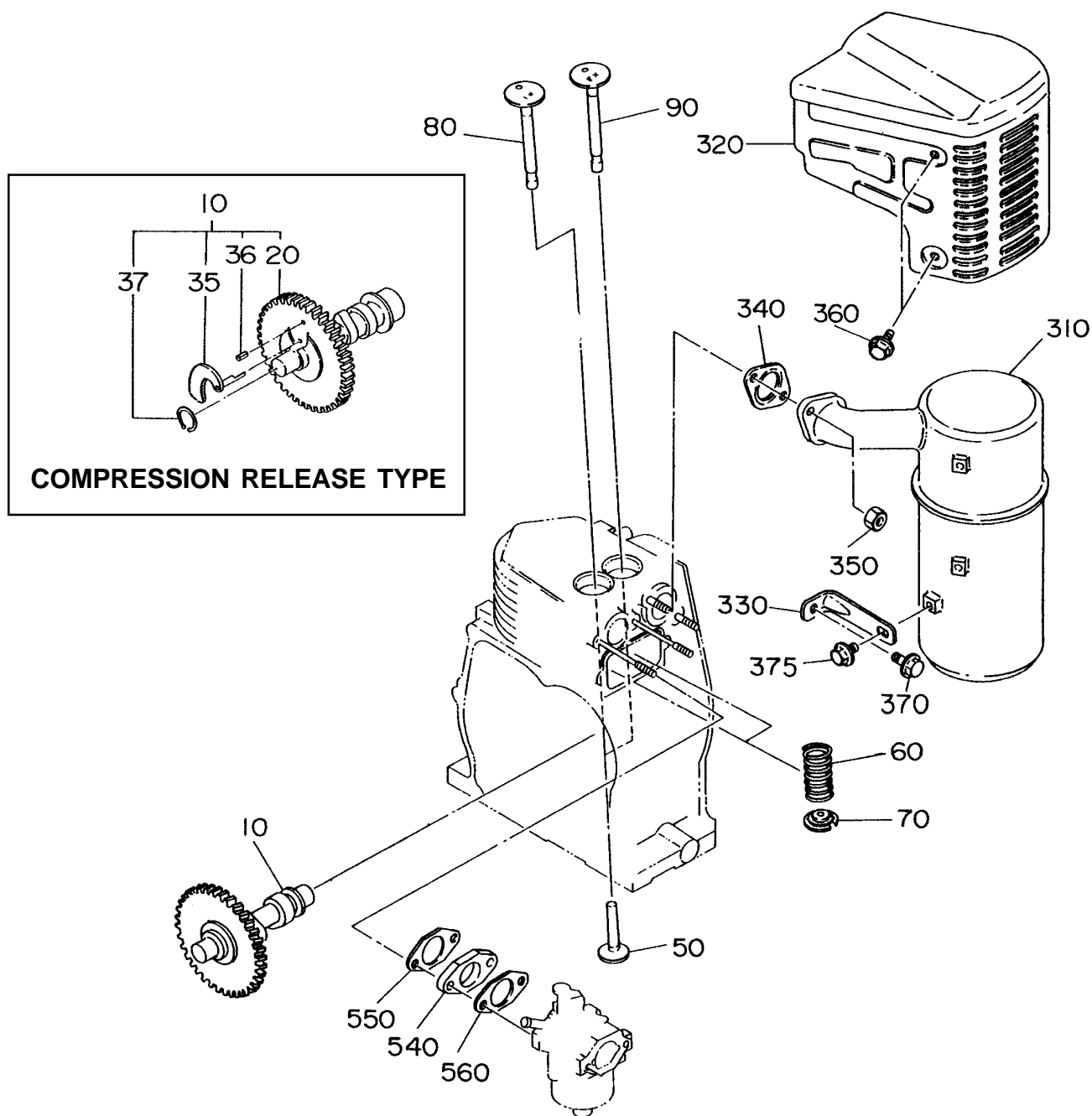
SECTION 2 CRANKSHAFT GROUP

FIG. 200



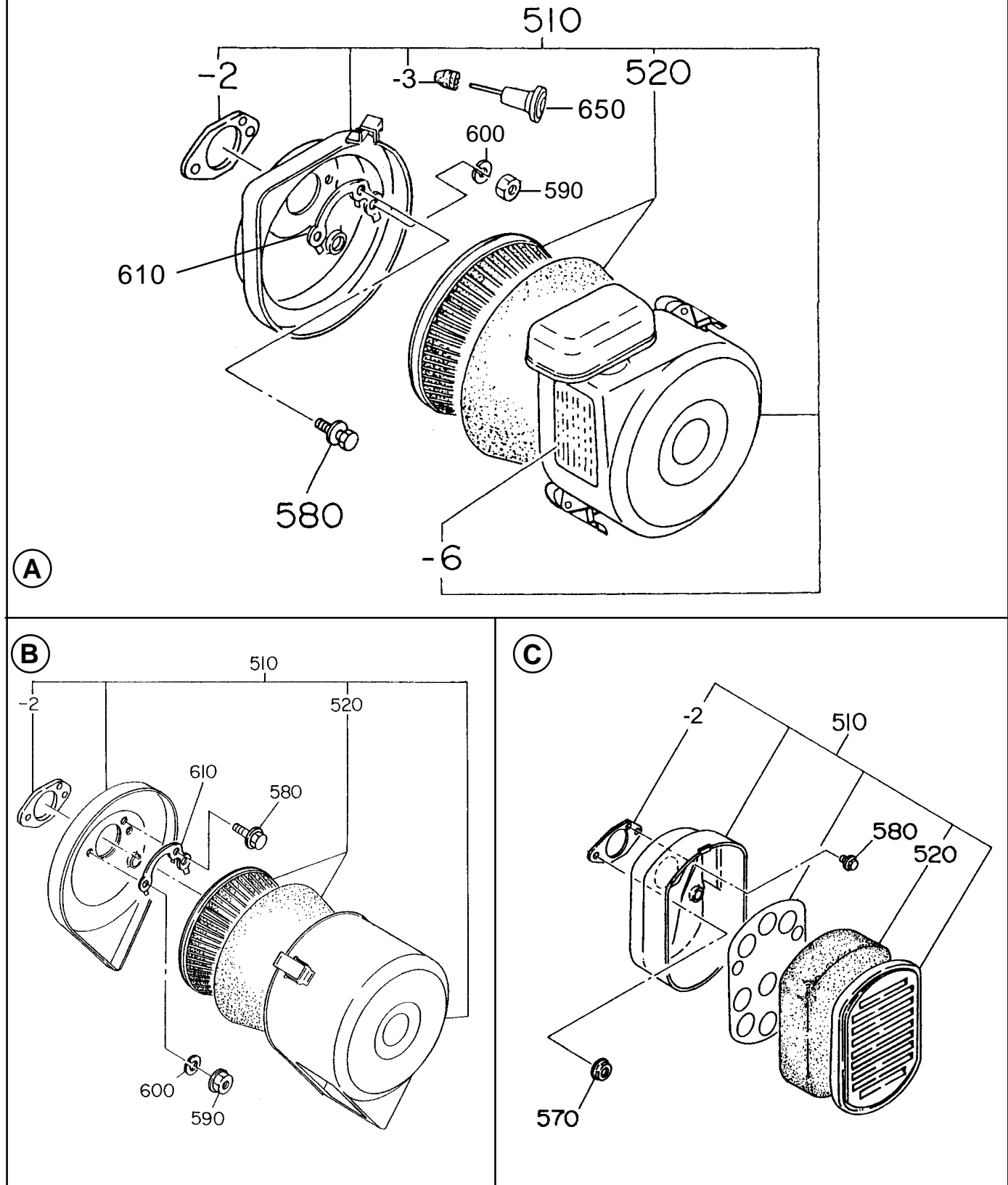
SECTION 3 INTAKE and EXHAUST GROUP

FIG. 300



SECTION 3 INTAKE and EXHAUST GROUP

FIG. 310

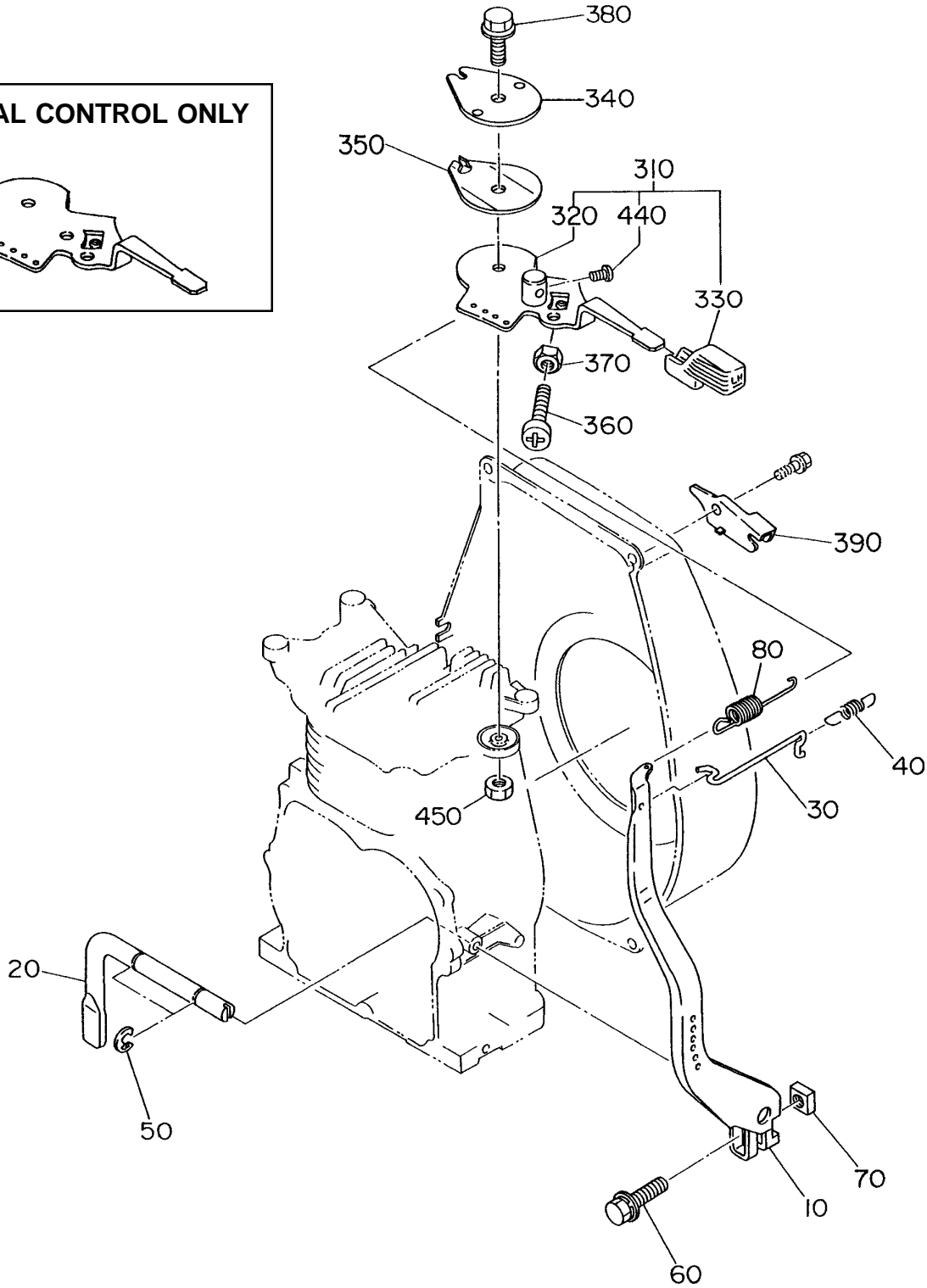
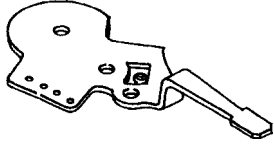


SECTION 4 GOVERNOR GROUP

FIG. 400

MANUAL WITH UPPER REMOTE CABLE CONTROL

MANUAL CONTROL ONLY



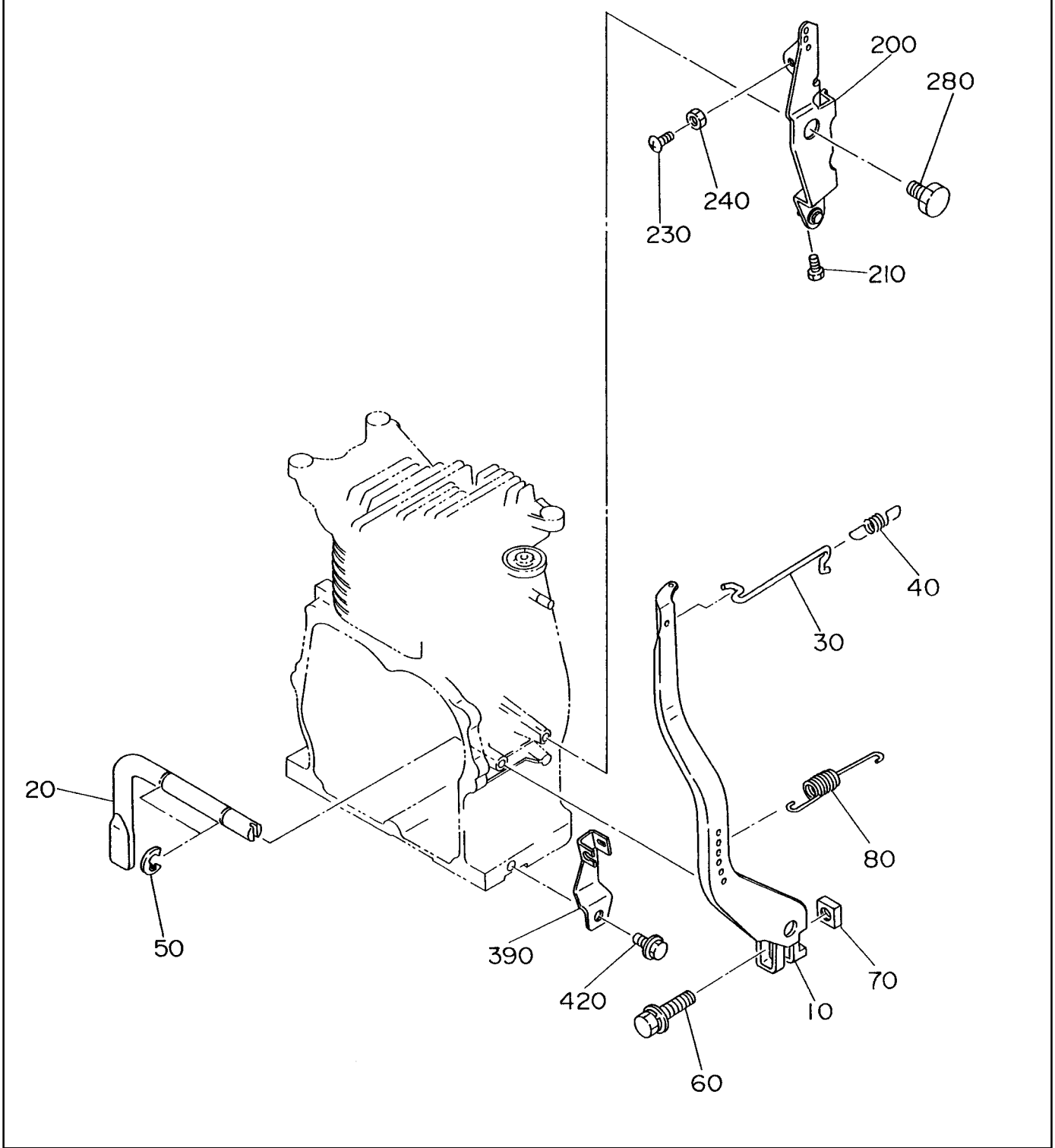
SECTION 4 GOVERNOR GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	234-42308-01	GOVERNOR LEVER, compl.	1			400
20	234-42201-03	GOVERNOR SHAFT	1			400
30	234-42701-01	GOVERNOR ROD	1			400
40	234-42801-13	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	234-42501-13	GOVERNOR SPRING	1			400
310	234-43301-00	SPEED CONTROL AY	1	Manual throttle control only		400
	234-43302-00	SPEED CONTROL AY	1	Upper cable control only		400
320	234-43301-01	SPEED CONTROL, compl.	1	Manual throttle control only		400
	234-43302-01	SPEED CONTROL, compl.	1	Upper cable control only		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	004-31064-00	SCREW	1			400
370	002-27060-00	NUT	1			400
380	011-00600-30	FLANGE BOLT	1	Manual throttle control only		400
	011-00600-50	FLANGE BOLT	1	Upper cable control only		400
390	234-44202-13	WIRE BRACKET, compl.	1	Upper cable control only		400
440	004-31040-80	SCREW	1	Upper cable control only		400
450	002-27060-00	NUT	1	Upper cable control only		400

SECTION 4 GOVERNOR GROUP

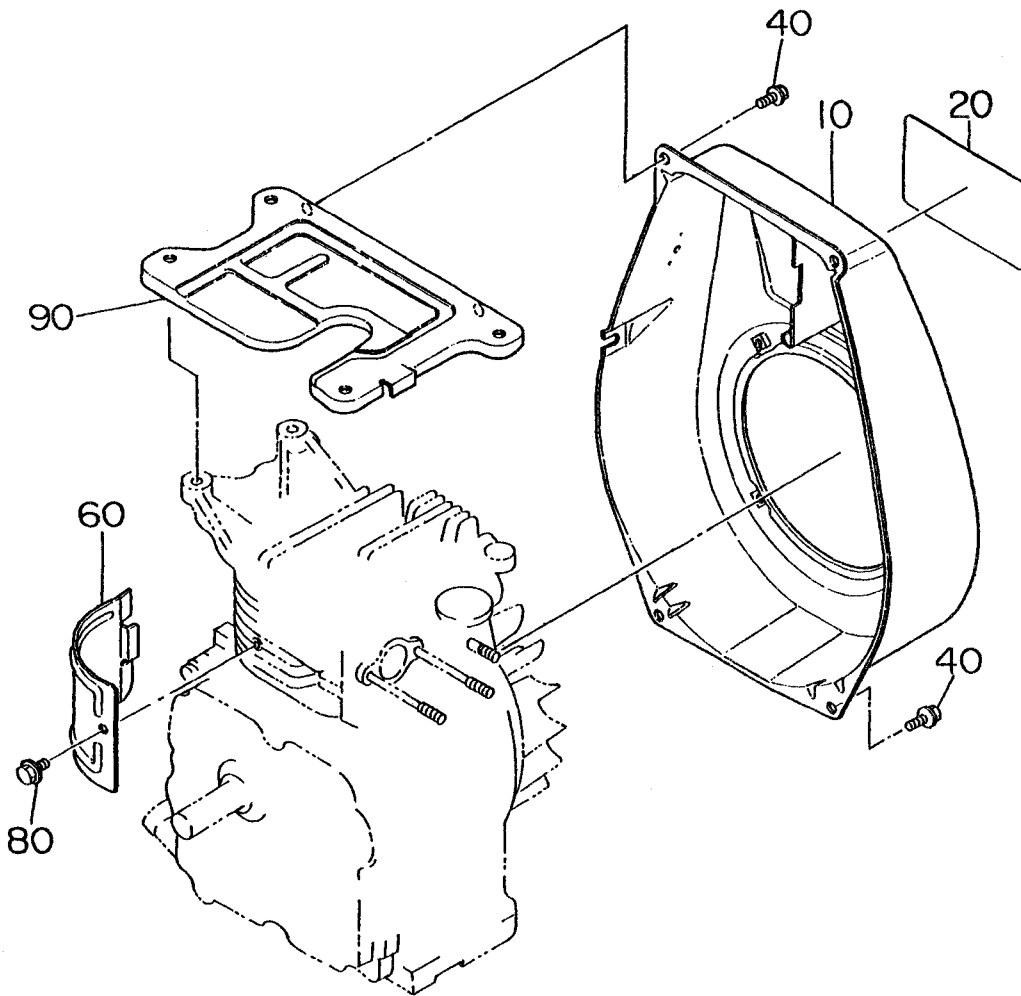
FIG. 410

LOWER REMOTE CABLE CONTROL



SECTION 5 COOLING and STARTING GROUP

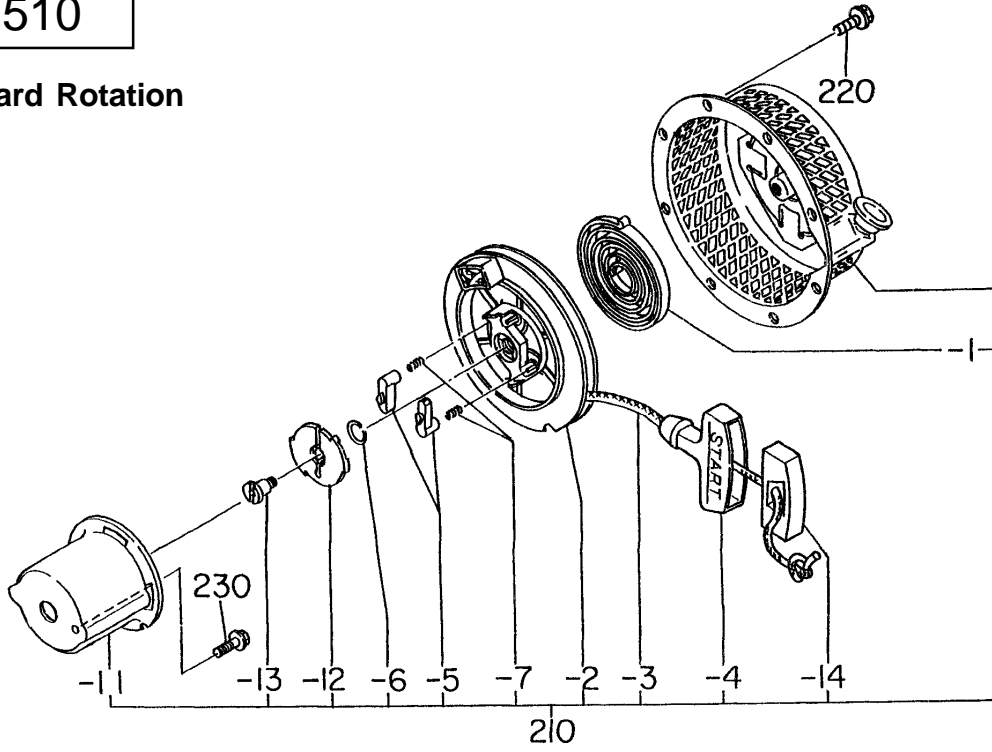
FIG. 500



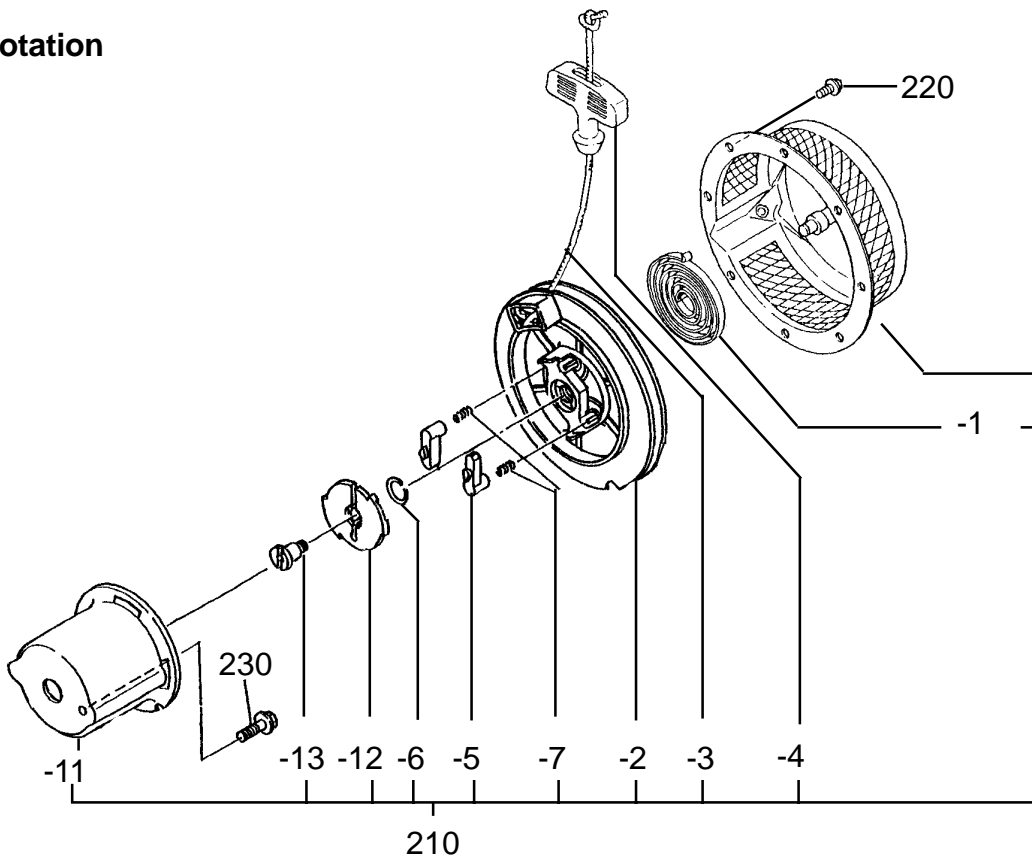
SECTION 5 COOLING and STARTING GROUP - NEW STYLE

FIG. 510

Standard Rotation



Reverse Rotation



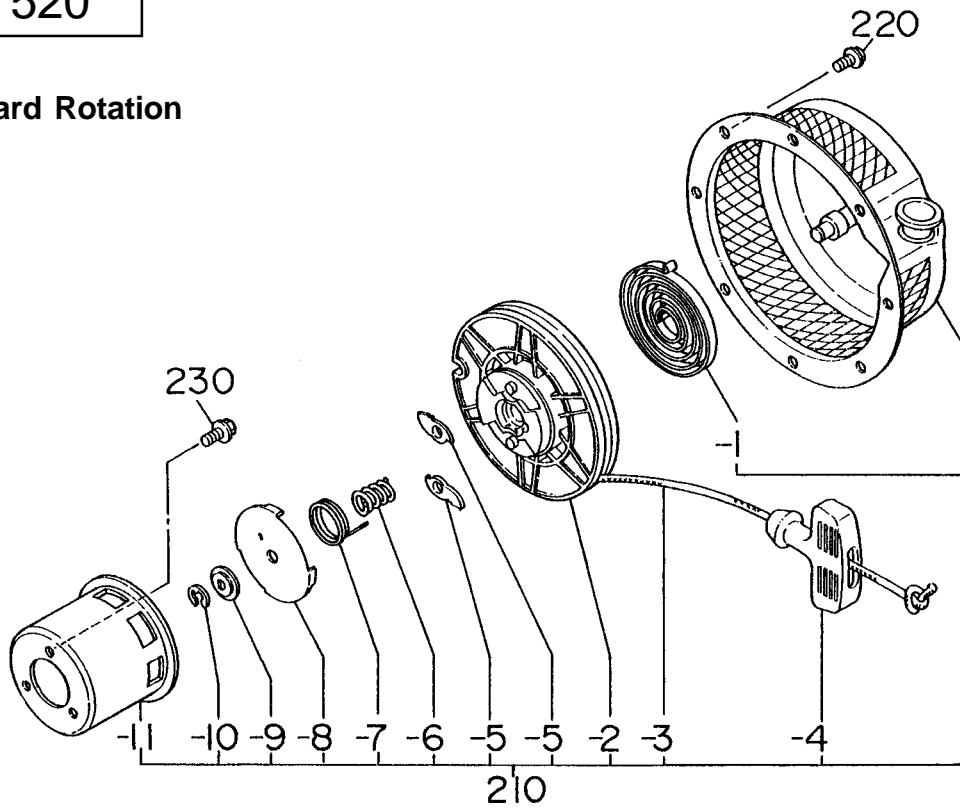
SECTION 5 COOLING and STARTING GROUP - NEW STYLE

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	234-50221-10	RECOIL STARTER AY	1	STD. Rotation	From 1948	510
	234-50121-00	RECOIL STARTER AY	1	Reverse Rotation	From 2465	510
-1	215-50515-08	SPIRAL SPRING	1	STD Rotation	From 1309	510
	215-50515-08	SPIRAL SPRING	1	Reverse Rotation	From 2466	510
-2	234-50120-18	REEL, compl.	1	STD Rotation	From 1948	510
	234-50120-18	REEL, compl.	1	Reverse Rotation	From 2466	510
-3	234-50183-08	STARTER ROPE	1			510
-4	226-50100-08	STARTER KNOB	1			510
-5	161-50125-08	RATCHET	2			510
-6	227-50131-08	FRICTION SPRING	1			510
-7	227-50135-08	RETURN SPRING	2			510
-11	234-50146-18	STARTER PULLEY	1			510
-12	161-50150-08	RATCHET GUIDE	1	STD Rotation	From 1309	510
	252-50150-08	RATCHET GUIDE	1	Reverse Rotation	From 2466	510
-13	227-50152-08	SET SCREW	1			510
-14	224-50150-08	KNOB CAP	1	STD. Rotation		510
220	011-00600-10	FLANGE BOLT	4			510
230	011-00600-30	FLANGE BOLT	1			510

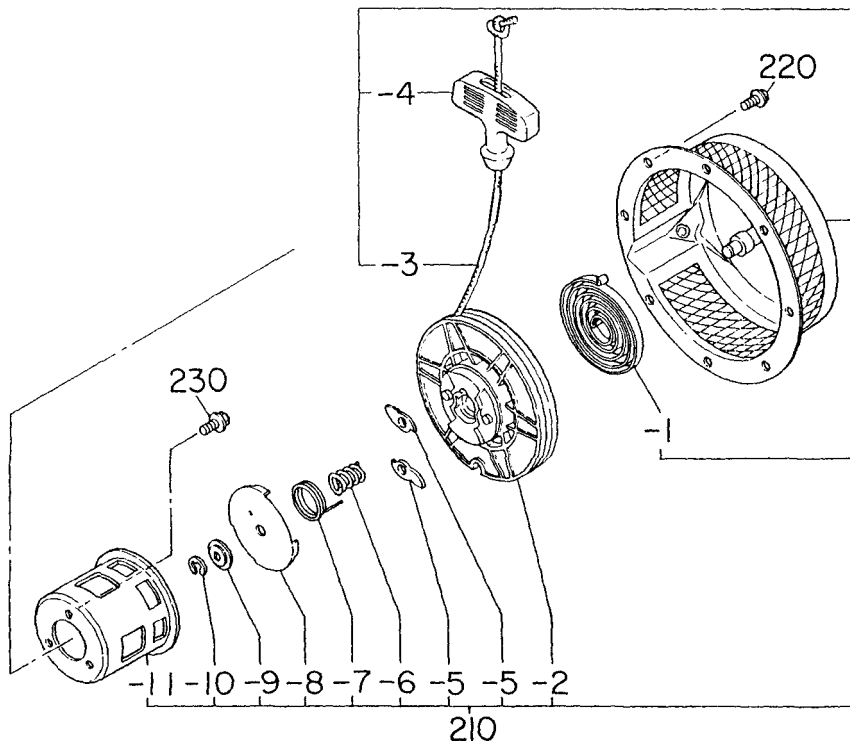
SECTION 5 RECOIL STARTER - OLD STYLE

FIG. 520

Standard Rotation



Reverse Rotation

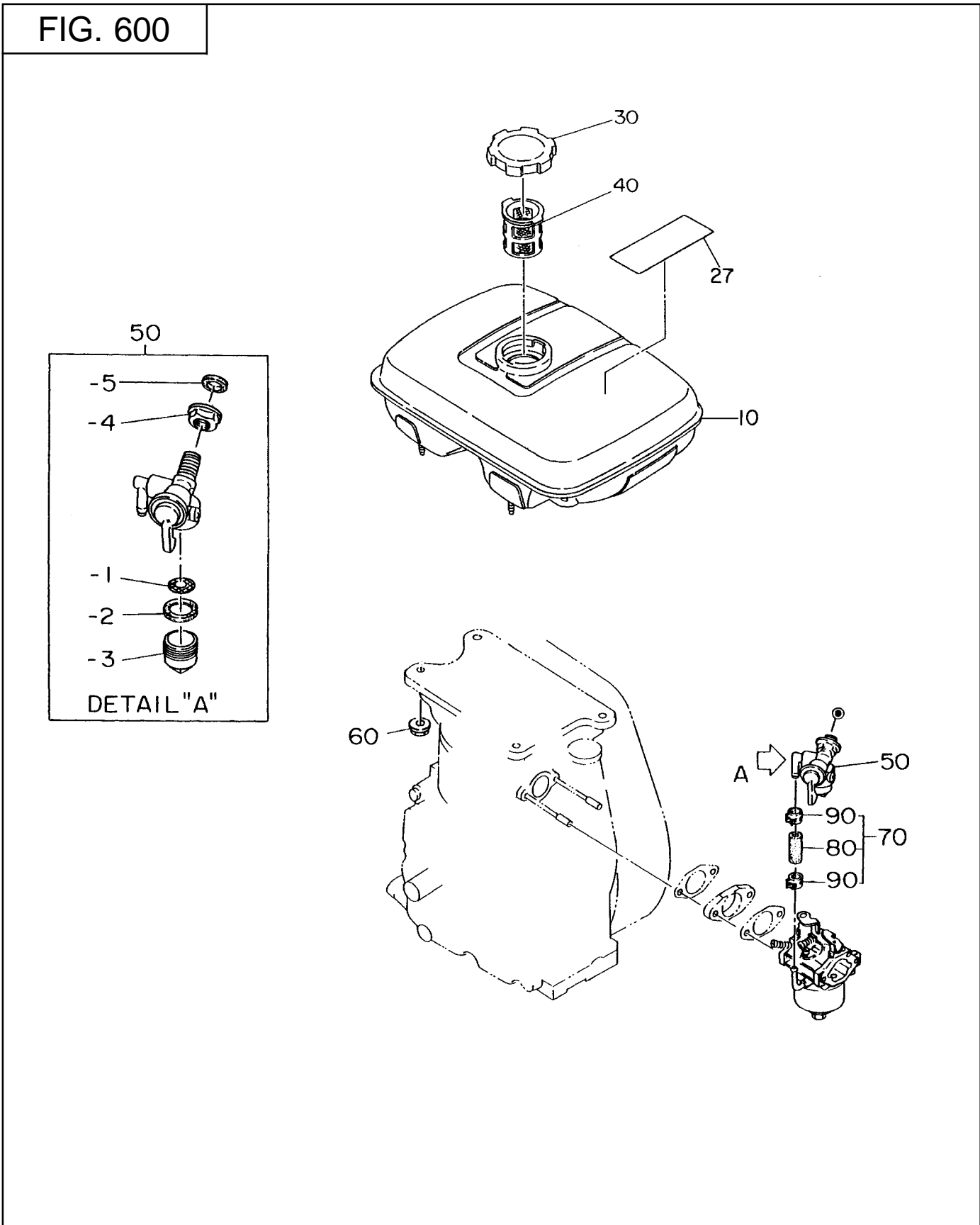


SECTION 5 RECOIL STARTER - OLD STYLE

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	234-50221-10	RECOIL STARTER AY	1	STD. Rotation	To 1308	520
	234-50111-00	RECOIL STARTER AY	1	Reverse Rotation	To 2465	520
-1	106-50116-08	SPIRAL SPRING	1	STD Rotation	To 1308	520
	106-50116-08	SPIRAL SPRING	1	Reverse Rotation	To 2465	520
-2	207-50122-18	REEL, compl.	1			520
-3	106-50113-08	STARTER ROPE	1			520
-4	206-50101-08	STARTER KNOB	1			520
-5	106-50128-18	RATCHET	2			520
-6	106-50132-08	FRICTION SPRING	1			520
-7	106-50136-08	RETURN SPRING	2	STD. Rotation	To 1308	520
	106-50137-08	RETURN SPRING	2	Reverse Rotation	To 2465	520
-8	106-50144-08	FRICTION SPRING	1			520
-9	106-50185-08	THRUST WASHER	1			520
-10	106-50186-08	CLIP	1			520
-11	234-50145-08	STARTER PULLEY	1			520
220	011-00600-10	FLANGE BOLT	4			520
230	011-00600-30	FLANGE BOLT	1			520

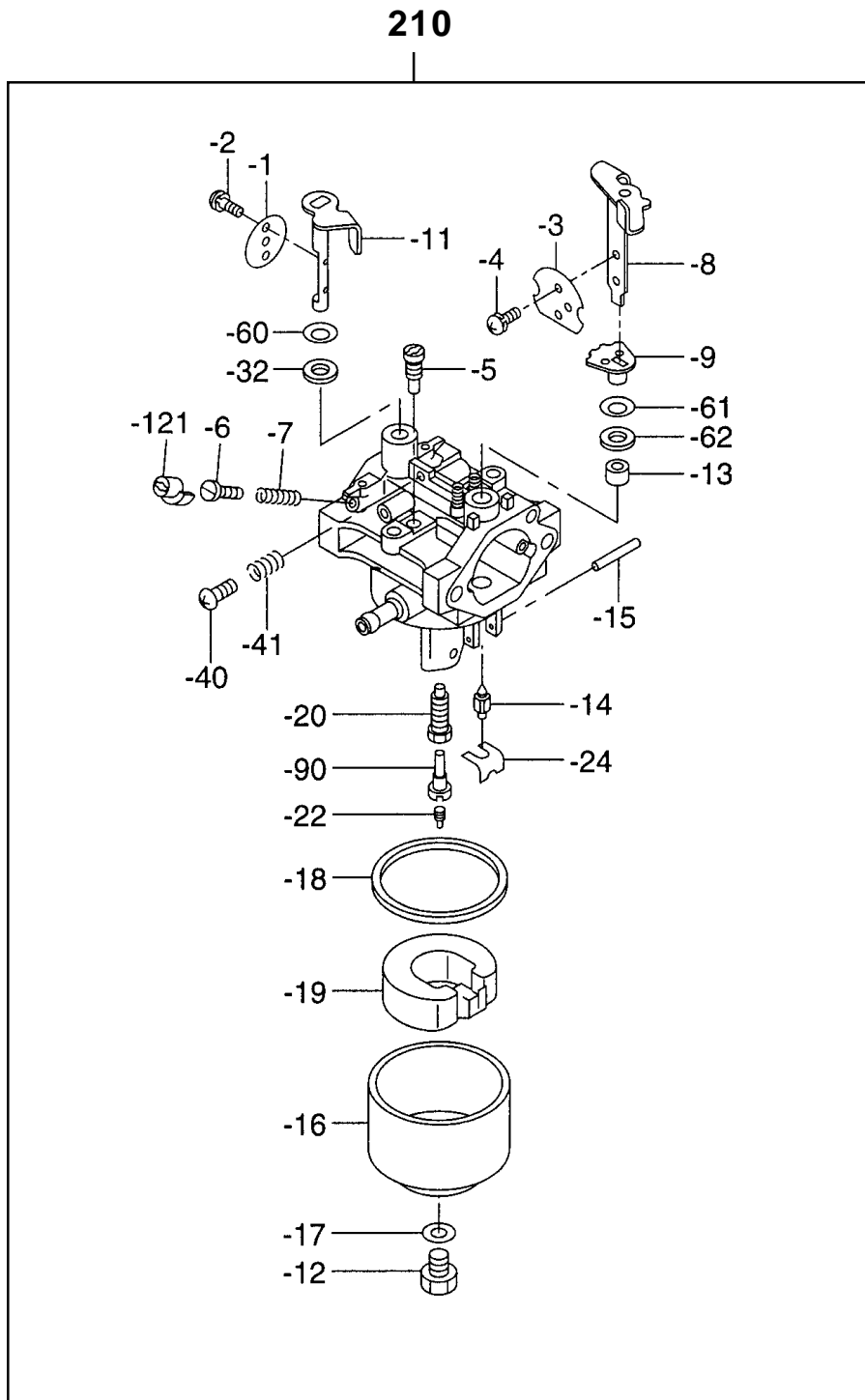
SECTION 6 FUEL GROUP

FIG. 600



SECTION 6 FUEL GROUP - CARBURETOR

FIG. 610

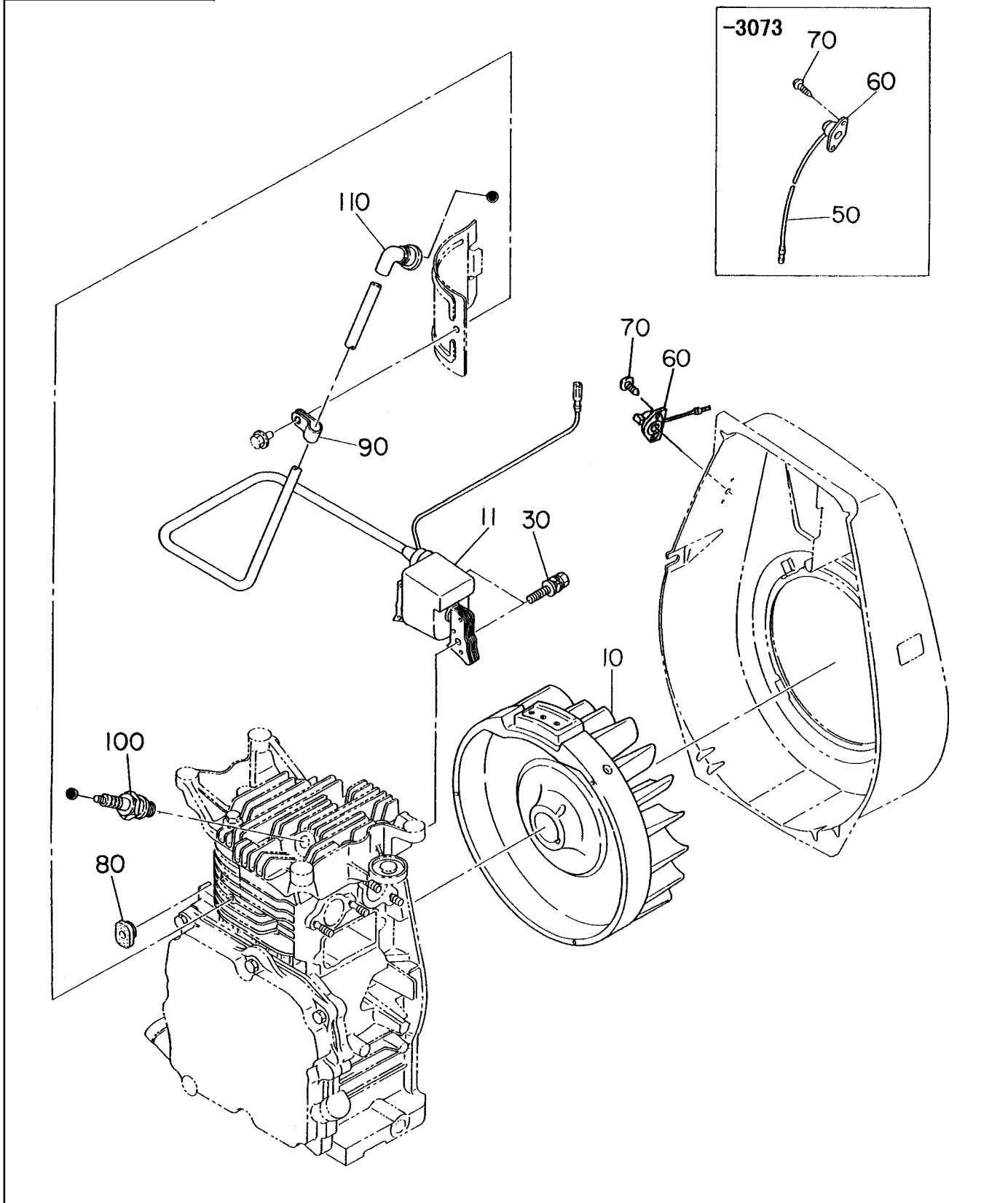


SECTION 6 FUEL GROUP - CARBURETOR

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	234-62551-00	CARBURETOR AY	1	Premium		610
	234-62502-00	CARBURETOR AY	1	Value Line		610
	234-62505-00	CARBURETOR AY	1	Homelite Gen./ EY280YD2510		610
-1	234-62541-08	THROTTLE VALVE	1	Premium		610
	213-62537-08	THROTTLE VALVE	1	Value Line		610
	213-62537-08	THROTTLE VALVE	1	Homelite Gen./ EY280YD2510		610
-2	209-62351-08	SCREW	2			610
-3	234-62527-08	CHOKE VALVE	1	Premium		610
	234-62525-08	CHOKE VALVE	1	Value Line		610
	234-62525-08	CHOKE VALVE	1	Homelite		610
-4	237-62451-08	SCREW	2			610
-5	234-62421-08	PILOT JET	1			610
-6	234-62435-08	ADJUSTER	1			610
-7	206-62446-08	SPRING	1			610
-8	234-62521-08	CHOKE LEVER AY	1	Premium, used w/ remote pull		610
	234-62520-08	CHOKE LEVER AY	1	Value Line		610
	234-62520-08	CHOKE LEVER AY	1	Homelite Gen./ EY280YD2510		610
-9	239-62560-08	RING, choke	1			610
-11	234-62536-08	THROTTLE SHAFT AY	1			610
-12	129-62351-08	BOLT	1			610
-13	226-62550-08	RING	1			610
-14	224-62312-18	NEEDLE VALVE AY	1			610
-15	214-62515-08	PIN	1			610
-16	224-62552-08	FLOAT CHAMBER BODY	1			610
-17	207-62345-08	INSERT WASHER	1			610
-18	206-62540-08	CHAMBER PACKING	1			610
-19	234-62506-08	FLOAT AY	1			610
-20	234-62443-08	NOZZLE	1	Premium		610
	234-62440-08	NOZZLE	1	Value Line		610
	234-62440-08	NOZZLE	1	Homelite Gen./ EY280YD2510		610
-22	234-62404-08	MAIN JET	1			610
-24	224-62569-18	CLIP	1	Premium		610
	224-62569-18	CLIP	1	Value Line		610
	224-62569-18	CLIP	1	Homelite Gen./ EY280YD2510		610
-32	106-62392-08	SEAL	1			610
-40	224-62452-08	SCREW	1			610
-41	230-62446-08	SPRING	1			610
-60	156-62351-08	PACKING	1			610
-61	247-62550-08	CAP, choke	1			610
-62	236-62680-08	SEAL	1			610
-90	234-62425-08	PIPE AY	1			610
-121	246-62551-08	CAP	1			610

SECTION 7A ELECTRIC DEVICE GROUP - RECOIL START

FIG. 700

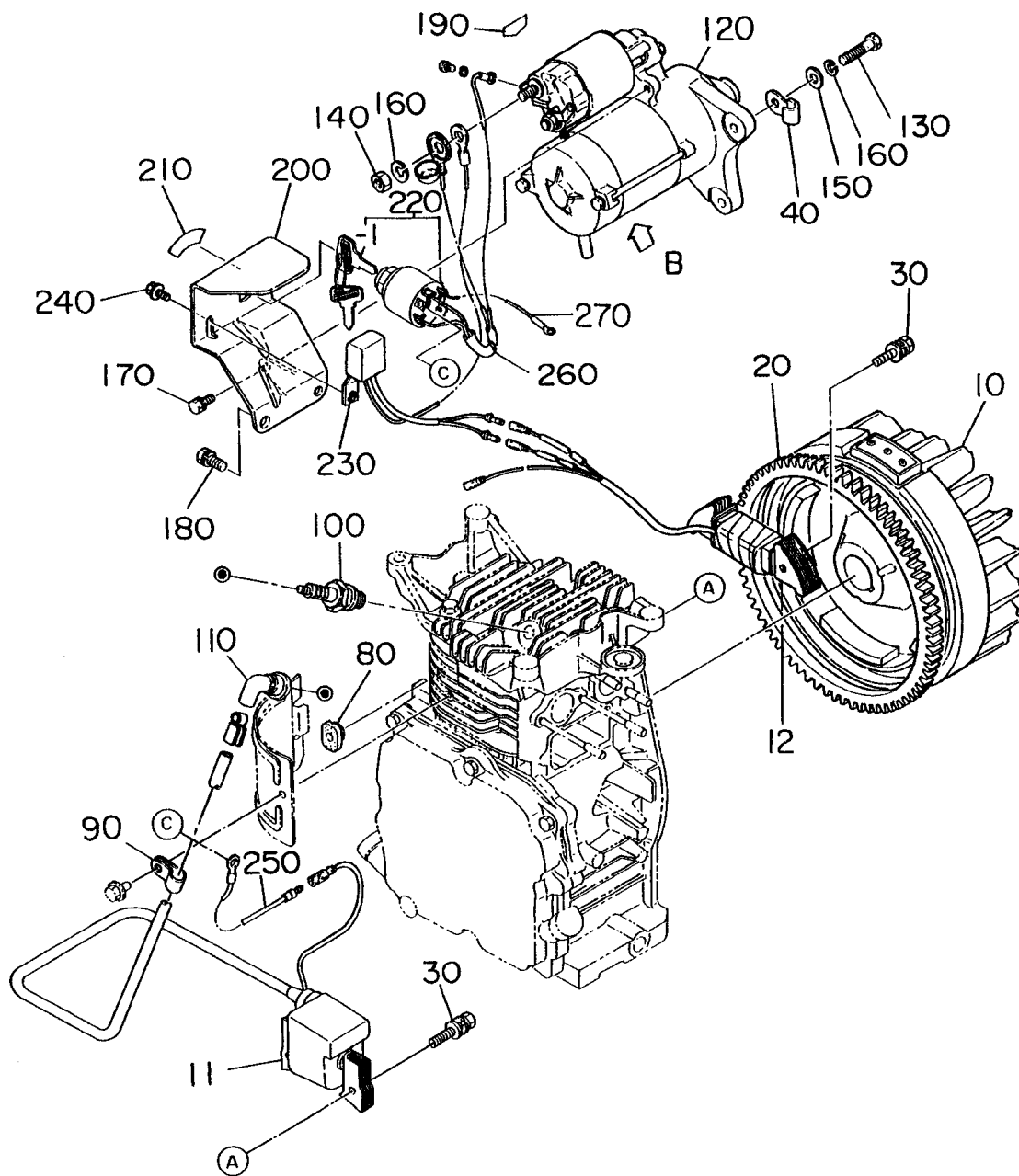


SECTION 7A ELECTRIC DEVICE GROUP - RECOIL START

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	234-70201-11	FLYWHEEL, compl.	1	STD. Rotation		700
	234-70101-11	FLYWHEEL, compl.	1	Reverse Rotation		700
11	234-70124-21	IGNITION COIL, compl.	1			700
30	001-17062-50	BOLT and WASHER AY	2			700
50	214-73201-01	WIRE 1, compl.	1			700
60	066-00003-71	SWITCH AY	1			700
	066-20000-11	STOP BUTTON	1	Obsolete, use 066-00003-71		700
70	015-00400-90	TAPPING SCREW	2			700
80	226-75501-03	GROMMET	1			700
90	206-75501-01	CLAMP	1			700
100	065-01404-20	SPARK PLUG	1	NGK BP6HS		700
110	065-50000-51	SPARK PLUG CAP	1			700

SECTION 7B ELECTRIC DEVICE GROUP - ELECTRIC START

FIG. 710

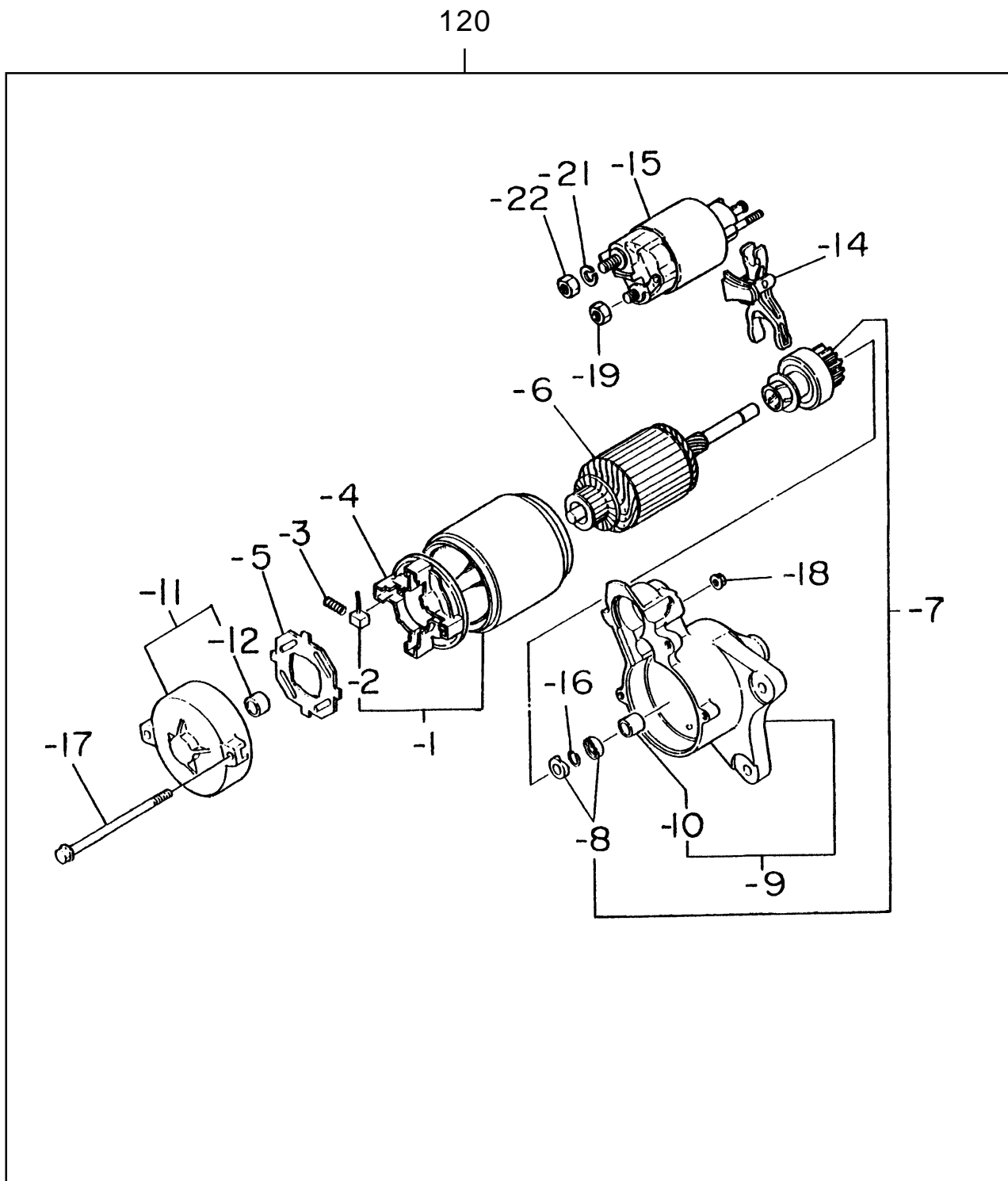


SECTION 7B ELECTRIC DEVICE GROUP - ELECTRIC START

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	234-70203-11	FLYWHEEL, compl.	1	Electric Start		710
11	234-70124-21	IGNITION COIL, compl.	1			710
12	234-70166-01	CHARGE COIL, compl.	1			710
20	263-71002-03	RING GEAR	1			710
30	001-17062-50	BOLT and WASHER AY	4			710
40	207-75001-01	CLAMP, compl.	1			710
80	226-75501-03	GROMMET	1			710
90	206-75501-01	CLAMP	1			710
100	065-01404-20	SPARK PLUG	1	NGK BP6HS		710
110	065-50000-51	SPARK PLUG CAP	1			710
120	234-70502-00	STARTING MOTOR	1			710
130	214-79007-01	BOLT, compl.	2			710
140	002-17080-00	NUT	1			710
150	003-10080-00	WASHER	2			710
160	003-20080-00	SPRING WASHER	3			710
170	001-10061-20	BOLT and WASHER AY	1			710
180	001-10081-60	BOLT and WASHER AY	2			710
190	073-20044-80	LABEL, battery	1			710
200	234-75101-11	CONTROL BOX, compl.	1			710
210	073-20044-60	LABEL, starter switch	1			710
220	066-00003-30	SWITCH	1		From 2405	710
	066-00001-11	SWITCH	1		To 2404	710
-1	066-00099-80	KEY, switch	1		From 2405	710
	066-00099-90	KEY	1		To 2404	710
230	209-71401-01	DIODE RECTIFIER, compl.	1			710
240	011-00600-10	FLANGE BOLT	1			710
250	224-73102-01	WIRE 3, compl.	1			710
260	234-73122-01	WIRE 22, compl.	1			710
270	234-73123-01	WIRE 23, compl.	1			710

SECTION 7C ELECTRIC DEVICE GROUP - STARTING MOTOR

FIG. 720



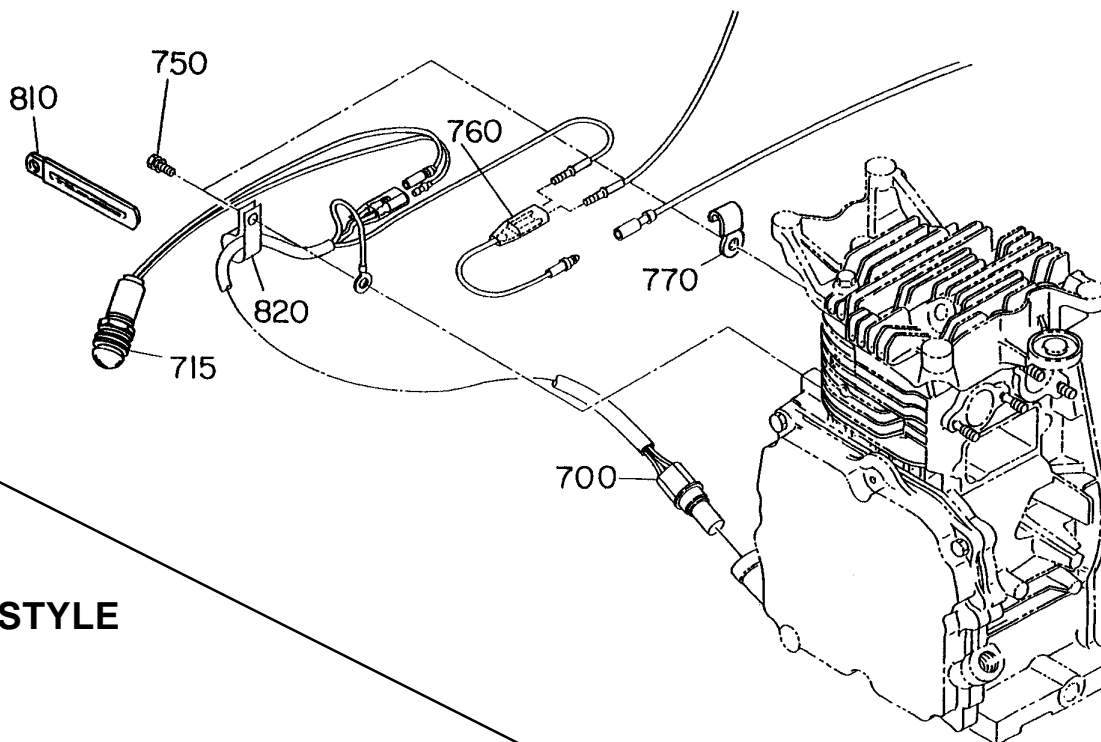
SECTION 7C ELECTRIC DEVICE GROUP - STARTING MOTOR

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
120	234-70502-00	STARTING MOTOR	1	Includes items -1 thru -22		720
-1	209-70550-08	yoke, COMPL.	1			720
-2	209-70551-08	BRUSH	4			720
-3	209-70545-08	SPRING, brush	4			720
-4	209-70530-08	BRUSH HOLDER	1			720
-5	209-70552-08	INSULATOR	1			720
-6	234-70554-08	ARMATURE AY	1			720
-7	234-70521-08	CLUTCH, compl.	1			720
-8	234-70555-08	PINION STOPPER	1			720
-9	234-70500-08	HOUSING AY	1			720
-10	209-70511-08	BUSHING	1			720
-11	234-70505-18	FRAME, compl.	1			720
-12	209-70510-08	BUSHING	1			720
-14	209-70525-08	LEVER	1			720
-15	209-70515-08	MAGNETIC SWITCH, compl.	1			720
-16	209-70557-18	SNAP RING	1			720
-17	209-70558-08	BOLT, through	2			720
-18	949-29970-02	NUT	2			720
-19	209-70560-08	NUT	1			720
-21	107-70562-08	SPRING WASHER	1			720
-22	211-70584-08	NUT	1			720

SECTION 7D ELECTRIC DEVICE GROUP - OIL SENSOR

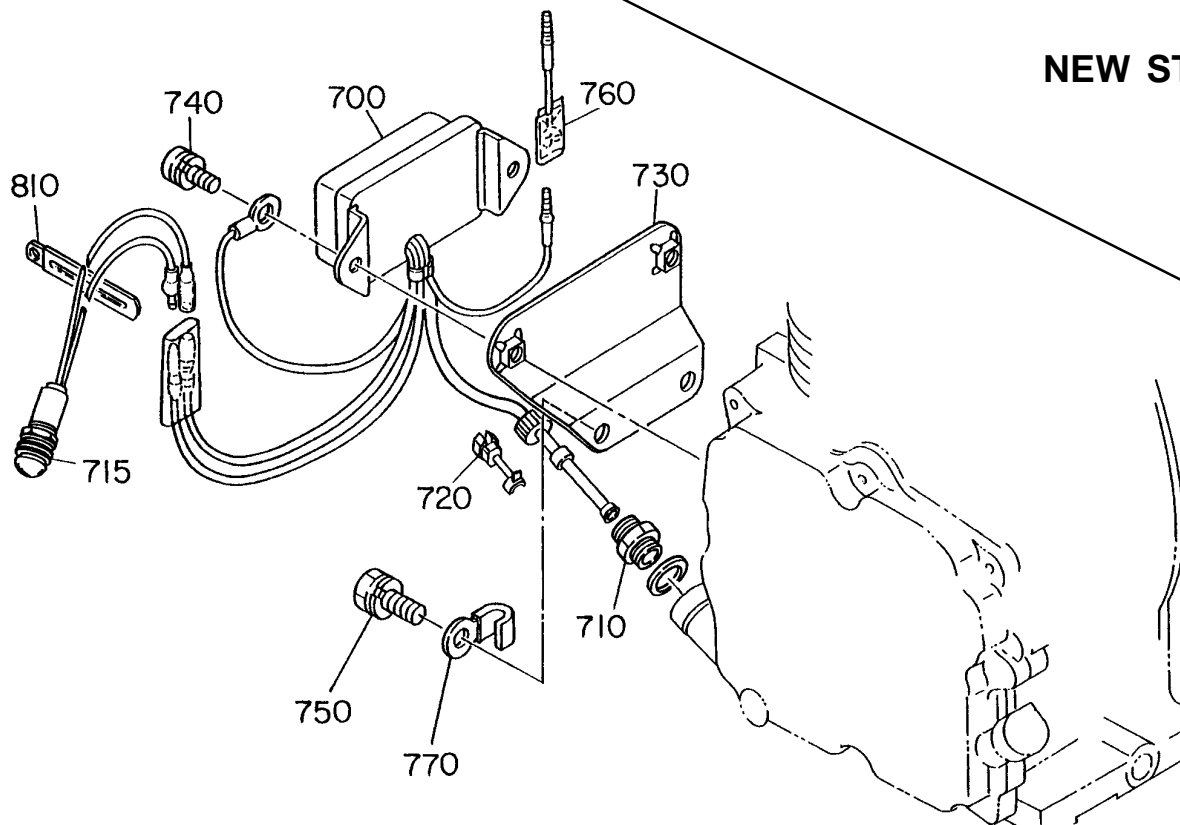
FIG. 730

OPPOSITE CARBURETOR SIDE



OLD STYLE

NEW STYLE



SECTION 7D ELECTRIC DEVICE GROUP - OIL SENSOR

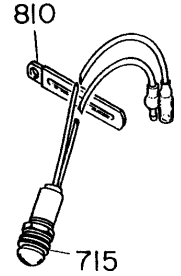
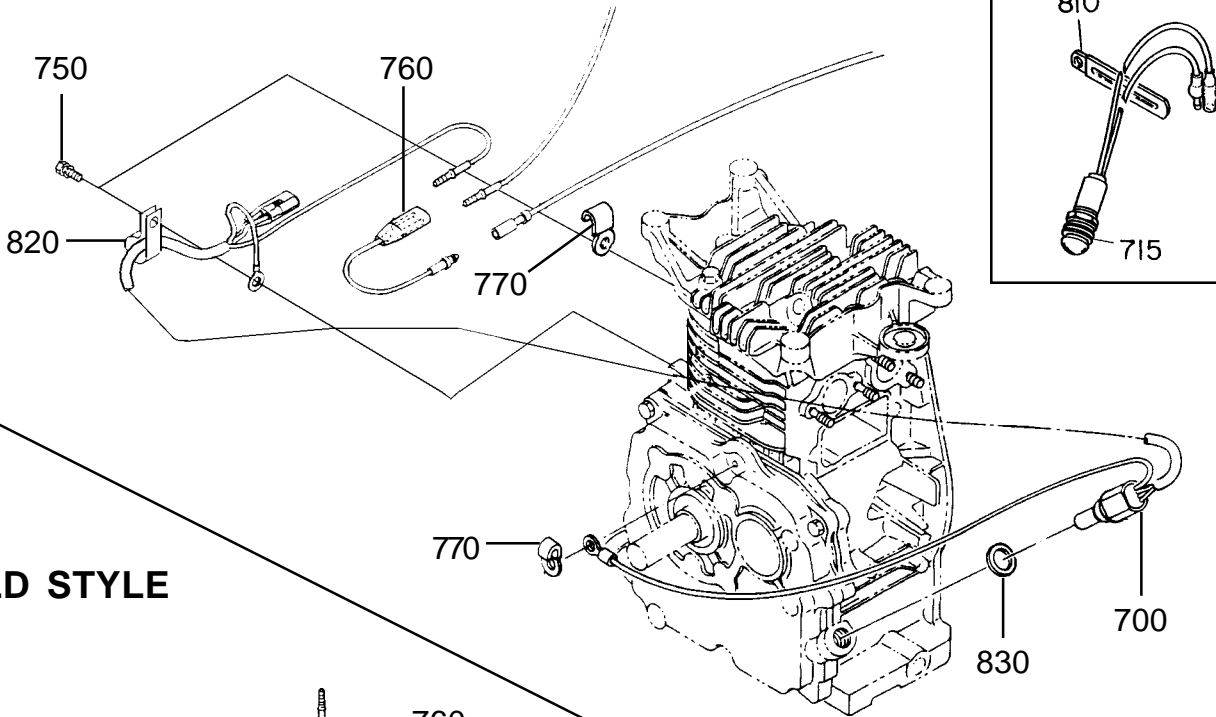
REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
700	KS3-11017-01	OIL LEVEL SENSOR, compl.	1	New style, opp. carb side	From 2617	730
	234-76001-11	OIL LEVEL SENSOR, compl.	1	Old style, opp. carb. side	To 2616	730
710	234-76201-03	JOINT	1	Old style, opp. carb. side	To 2616	730
715	227-77002-00	LED LAMP AY	1			730
720	227-78001-03	BUSHING, cord	1	Old style	To 2616	730
730	234-76501-01	BRACKET, compl.	1	Old style	To 2616	730
740	004-36061-00	SCREW and WASHER AY	2	Old style	To 2616	730
750	001-10081-60	BOLT and WASHER AY	2			730
760	214-73122-01	WIRE 22, compl.	1			730
770	207-75001-01	CLAMP, compl.	1			730
810	056-60002-50	CLAMP, compl.	1			730
820	214-79003-01	CLAMP, compl.	1	New style	From 2617	730

SECTION 7E ELECTRIC DEVICE GROUP - OIL SENSOR

FIG. 740

CARBURETOR SIDE

OPTIONAL LED LAMP



OLD STYLE

NEW STYLE

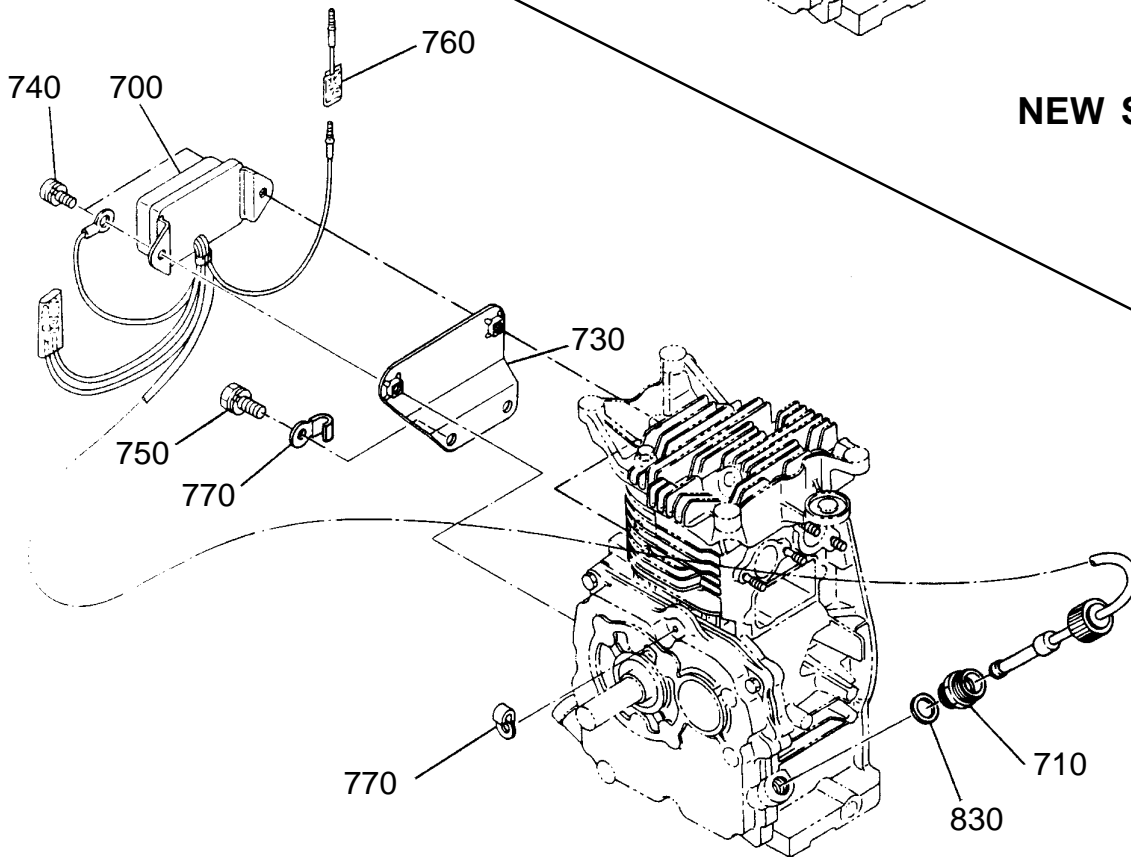
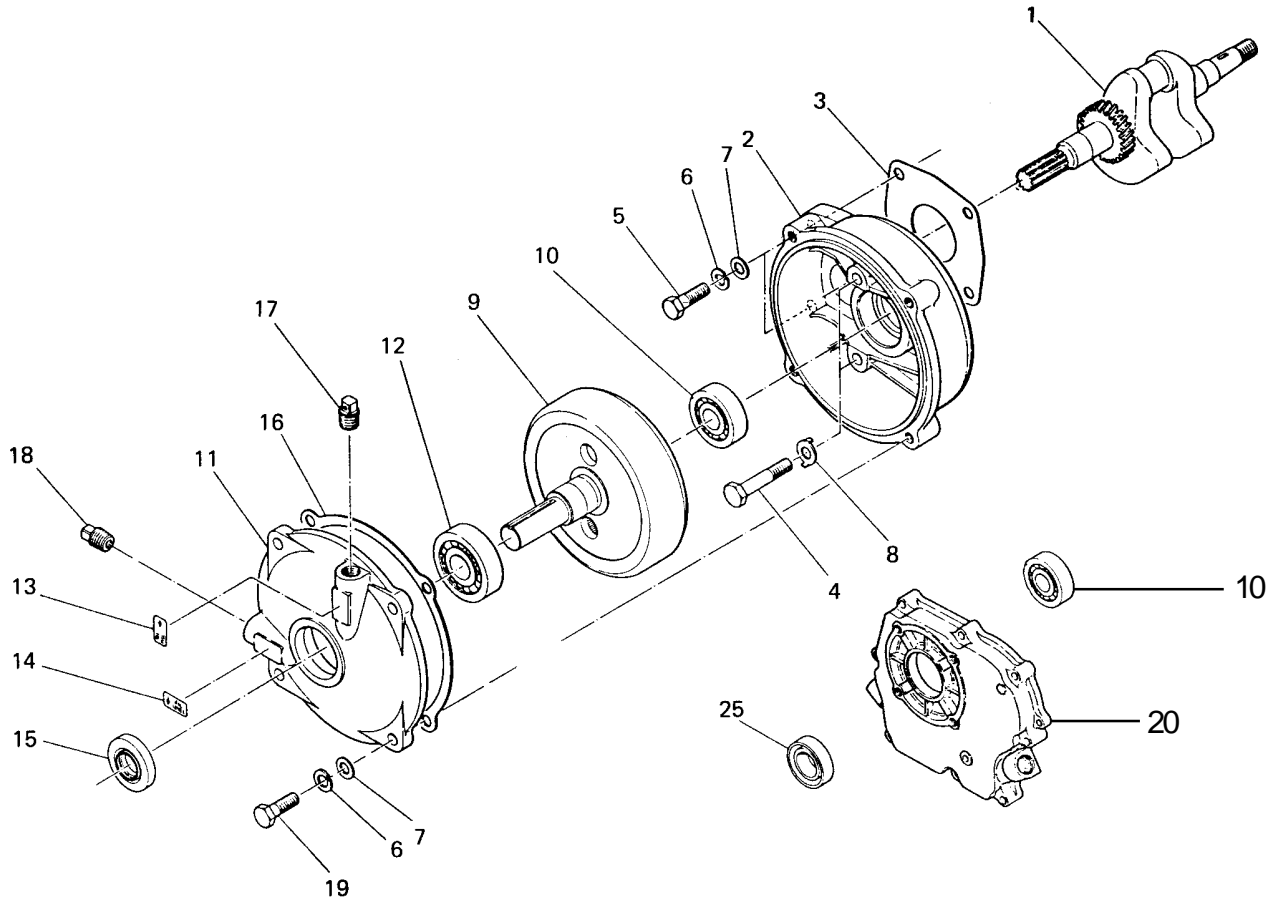


FIG. 800



SECTION 8 6:1 GEAR REDUCTION

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
1	234-20801-11	CRANKSHAFT	1			800
2	234-80101-01	REDUCTION CASE	1			800
3	234-85101-03	GASKET A	1			800
4	010-10800-30	BOLT	2			800
5	010-10800-80	BOLT	2			800
6	003-20080-00	SPRING WASHER	2			800
7	003-10080-00	WASHER	2			800
8	003-38080-00	LOCK WASHER	2			800
9	207-81101-13	DRIVING SHAFT	1			800
10	060-01500-20	BALL BEARING	2			800
11	207-80701-01	REDUCTION COVER, compl.	1			800
12	060-03002-20	BALL BEARING	1			800
13	206-95001-03	LABEL, oil filler	1			800
14	206-95002-03	LABEL, level mark	1			800
15	044-03000-30	OIL SEAL	1			800
16	206-85102-03	GASKET B	1			800
17	206-85001-03	PLUG A	1			800
18	206-85002-03	PLUG B	1			800
19	001-14082-50	BOLT and WASHER	4			800
20	234-12003-01	MAIN BEARING COVER	1			800
25	044-02501-70	OIL SEAL	1			800

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