

# **PARTS MANUAL**

**Model**

**EX210D50170  
ENGINE**

PUB-EPTTI  
Rev. 03/05

# **Robin America, Inc.**

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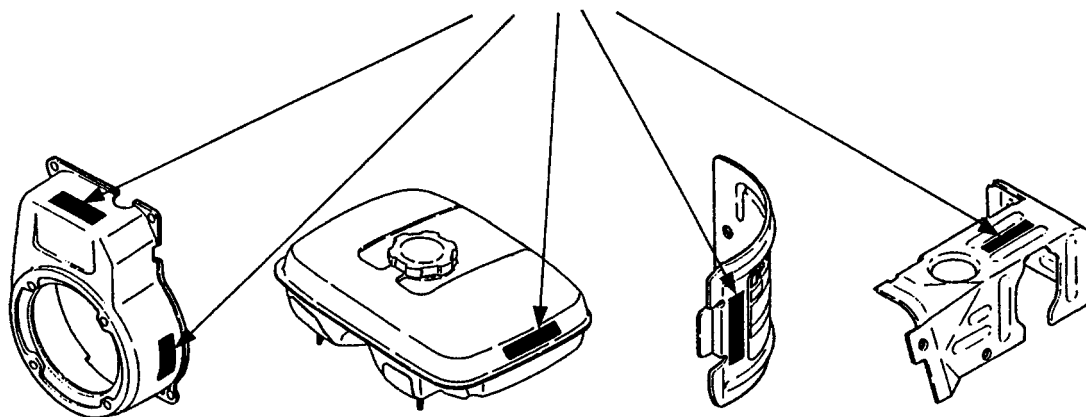
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## HOW TO USE THIS MANUAL

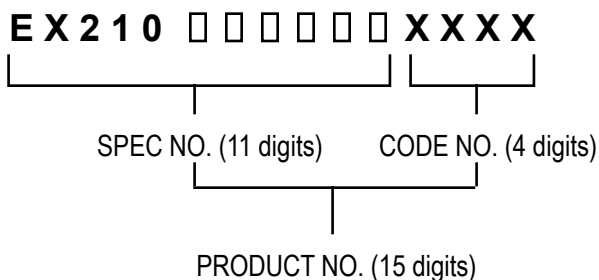
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant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





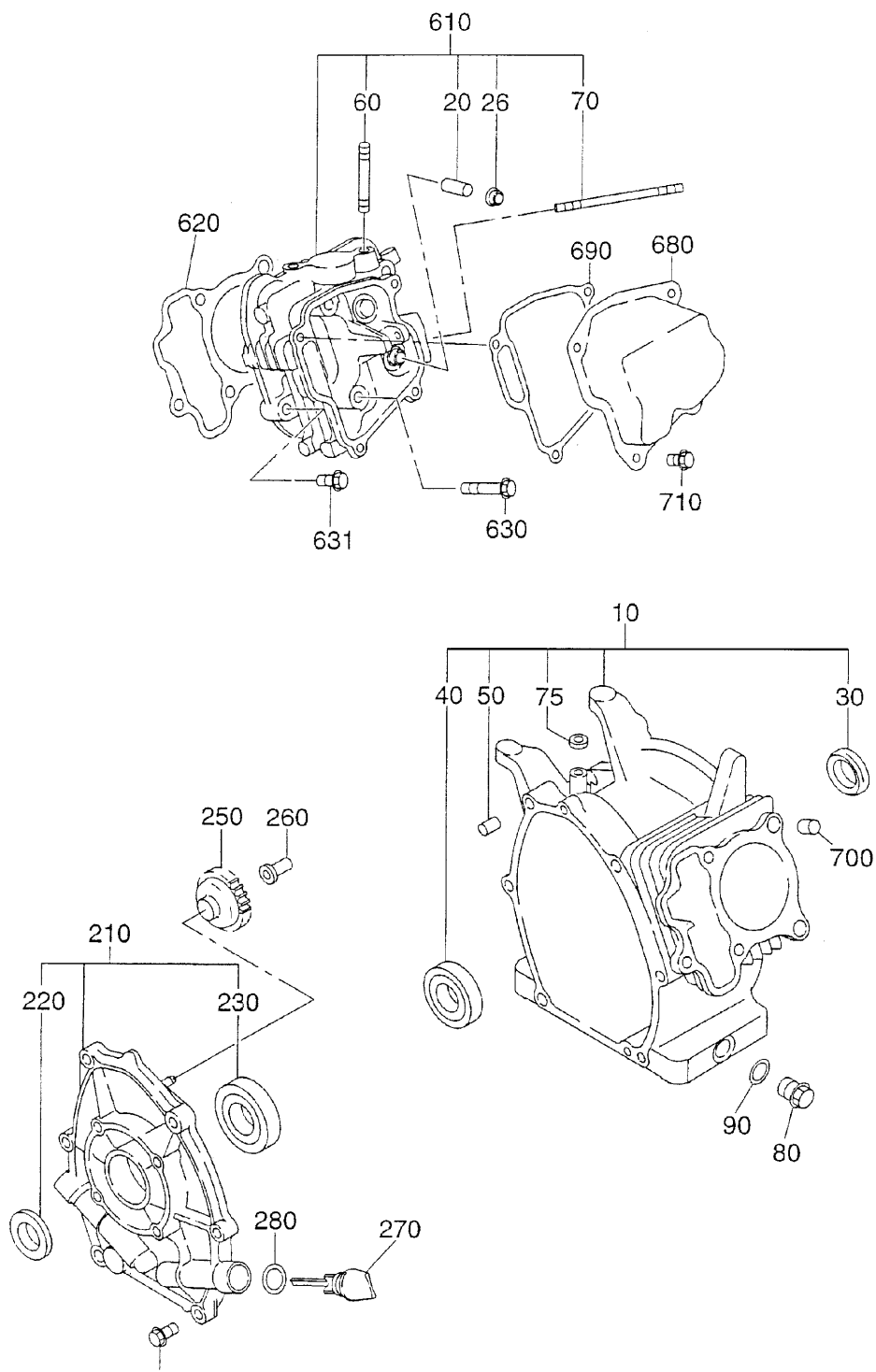
# GROUP INDEX

Group Name	Page
CRANKCASE GROUP .....	6
CRANKSHAFT GROUP .....	8
INTAKE and EXHAUST GROUP .....	10
GOVERNOR GROUP .....	14
COOLING and STARTING GROUP .....	16
FUEL, LUBRICANT GROUP .....	20
CARBURETOR GROUP .....	24
ELECTRIC DEVICE GROUP .....	26

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

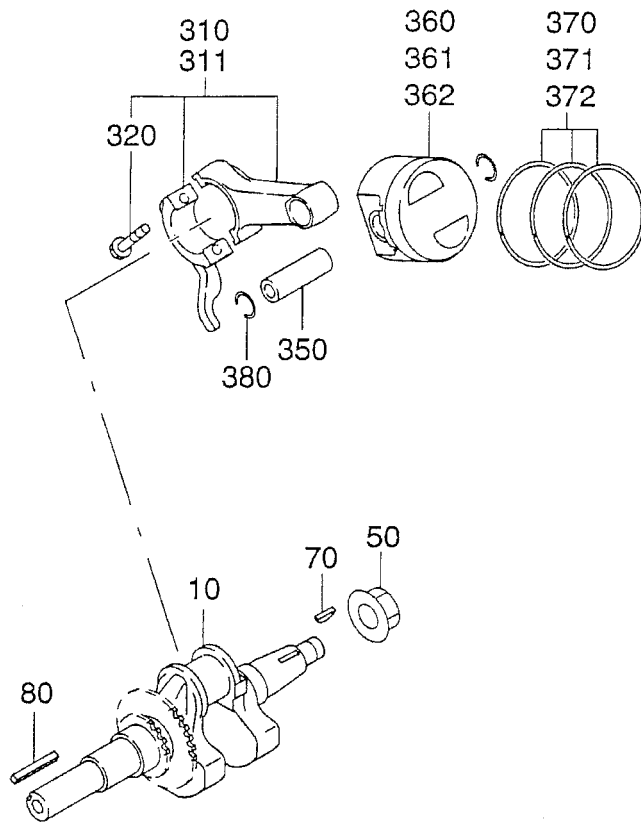
FIG. 100





SECTION 2 CRANKSHAFT GROUP

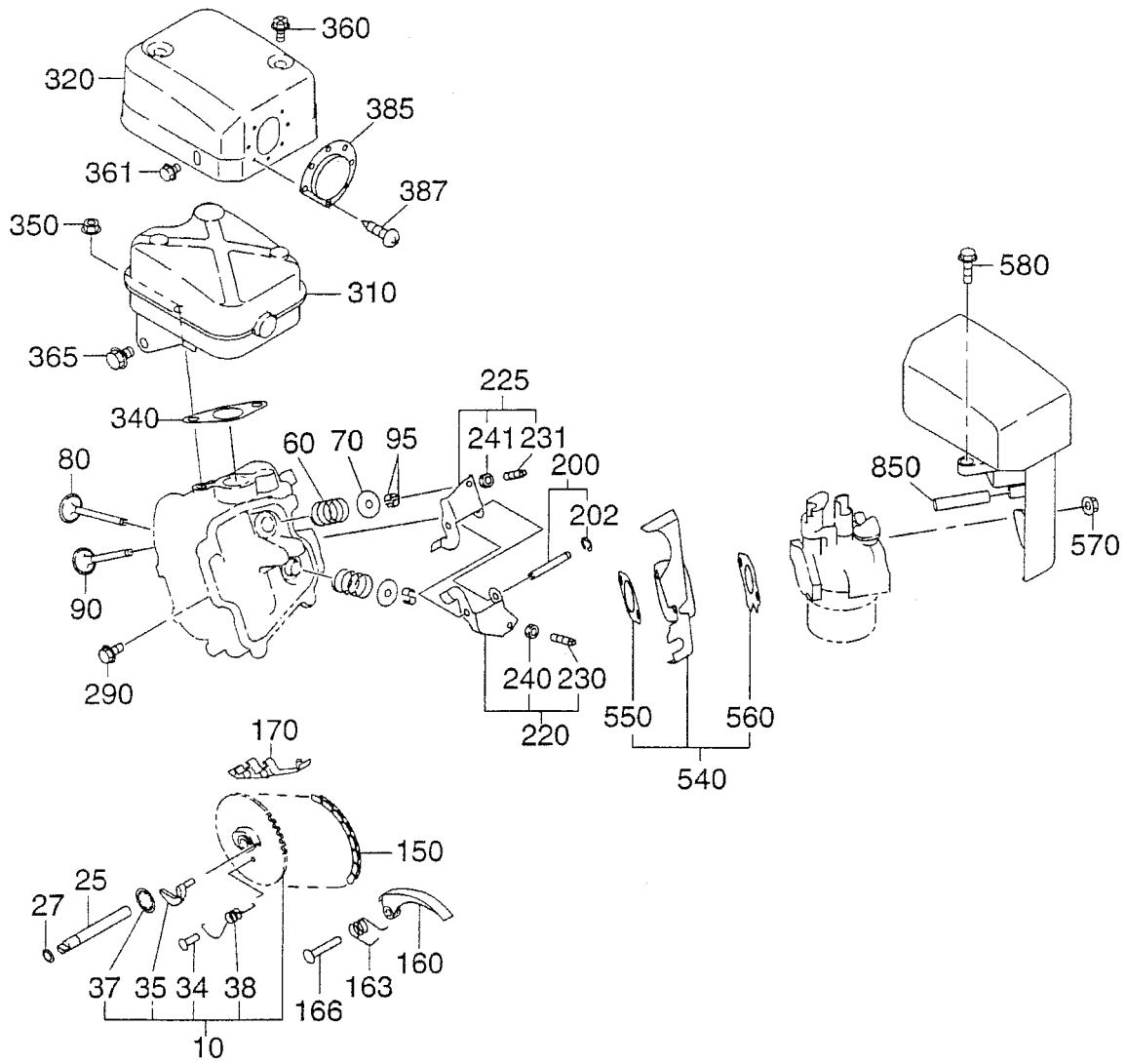
FIG. 200





**SECTION 3 INTAKE and EXHAUST GROUP**

**FIG. 300**

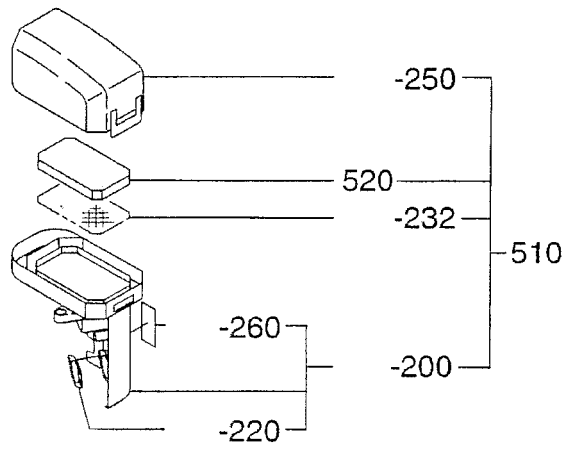


### SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	277-31601-21	CAMSHAFT	1		6545~	300
	277-31601-11	CAMSHAFT	1		~6544	300
25	277-35101-03	PIN, camshaft	1			300
27	024-00600-10	O RING	1			300
34	277-38601-03	PIN, spring	1			300
35	277-36401-03	RELEASE LEVER	1			300
37	277-36501-03	CLIP	1			300
38	277-38702-03	RETURN SPRING	1			300
60	279-33601-03	VALVE SPRING	2			300
70	269-33701-03	SPRING RETAINER	2			300
80	277-33401-H3	INTAKE VALVE	1			300
90	277-33501-H3	EXHAUST VALVE	1			300
95	132-10KA0-31	COLLET VALVE	4			300
150	278-35601-11	TIMING CHAIN	1	92 Link		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	277-35002-01	PIN, rocker	1			300
202	003-13050-00	CLIP	1			300
220	277-36201-00	ROCKER ARM, intake	1			300
225	277-36202-00	ROCKER ARM, 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	277-30101-H1	MUFFLER	1			300
320	277-34204-01	MUFFLER COVER	1			300
340	277-35201-13	GASKET, muffler	1			300
350	980-20082-80	FLANGE NUT	2			300
360	015-20600-90	TAPPING BOLT	2			300
361	011-00600-10	FLANGE BOLT	1			300
365	011-00803-20	FLANGE BOLT	1			300
385	277-37203-H1	SCREEN	1			300
387	015-00400-60	TAPPING SCREW	2			300
540	277-32902-J1	INSULATOR	1			300
550	277-35903-J3	GASKET 2, insulator	1			300
560	277-35902-J3	GASKET 1, insulator	1			300
570	002-38060-00	FLANGE NUT	2			300
580	011-00600-50	FLANGE BOLT	1			300
850	085-10800-00	RUBBER PIPE	1			300

SECTION 3 INTAKE and EXHAUST GROUP

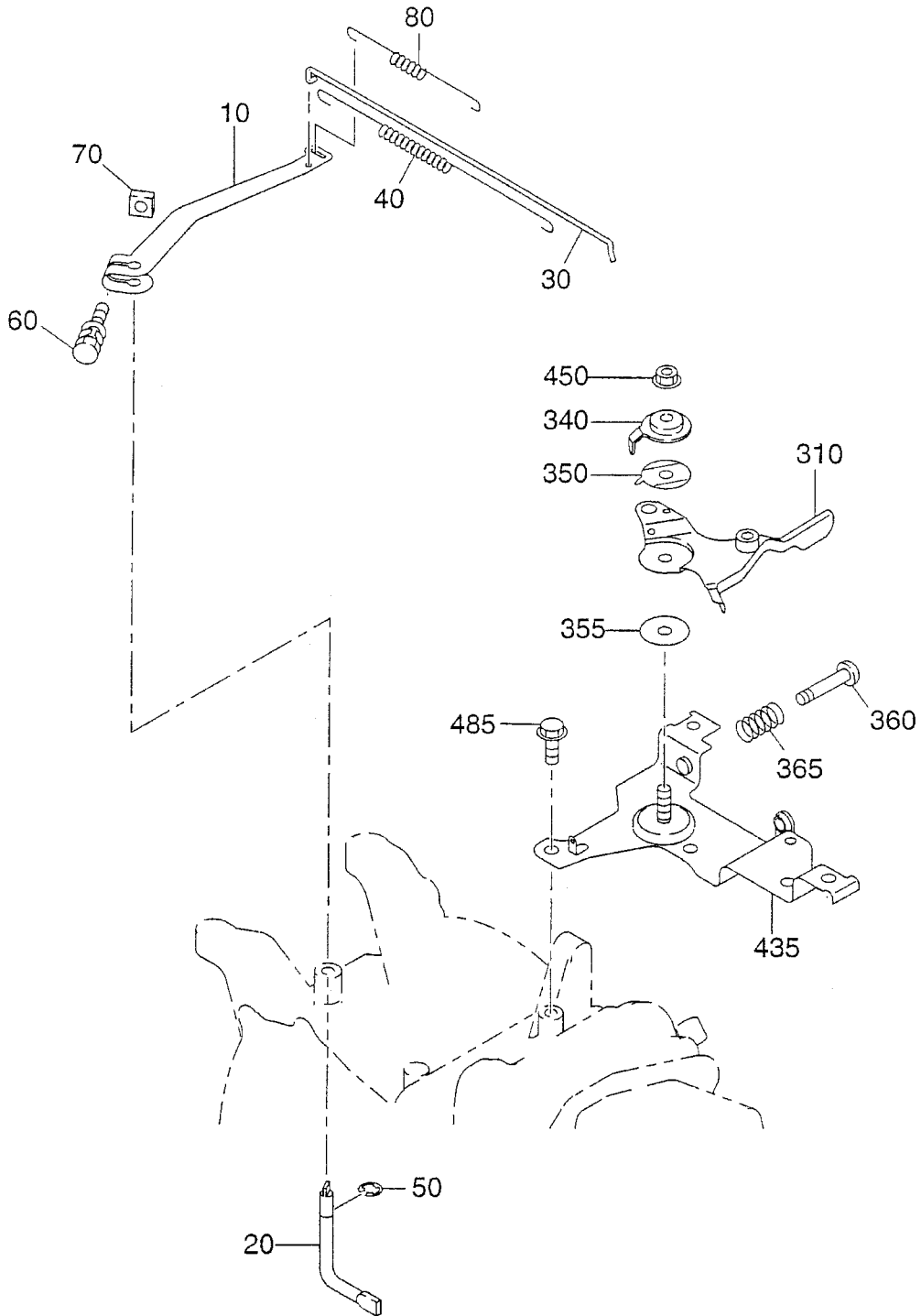
FIG. 315





SECTION 4 GOVERNOR GROUP

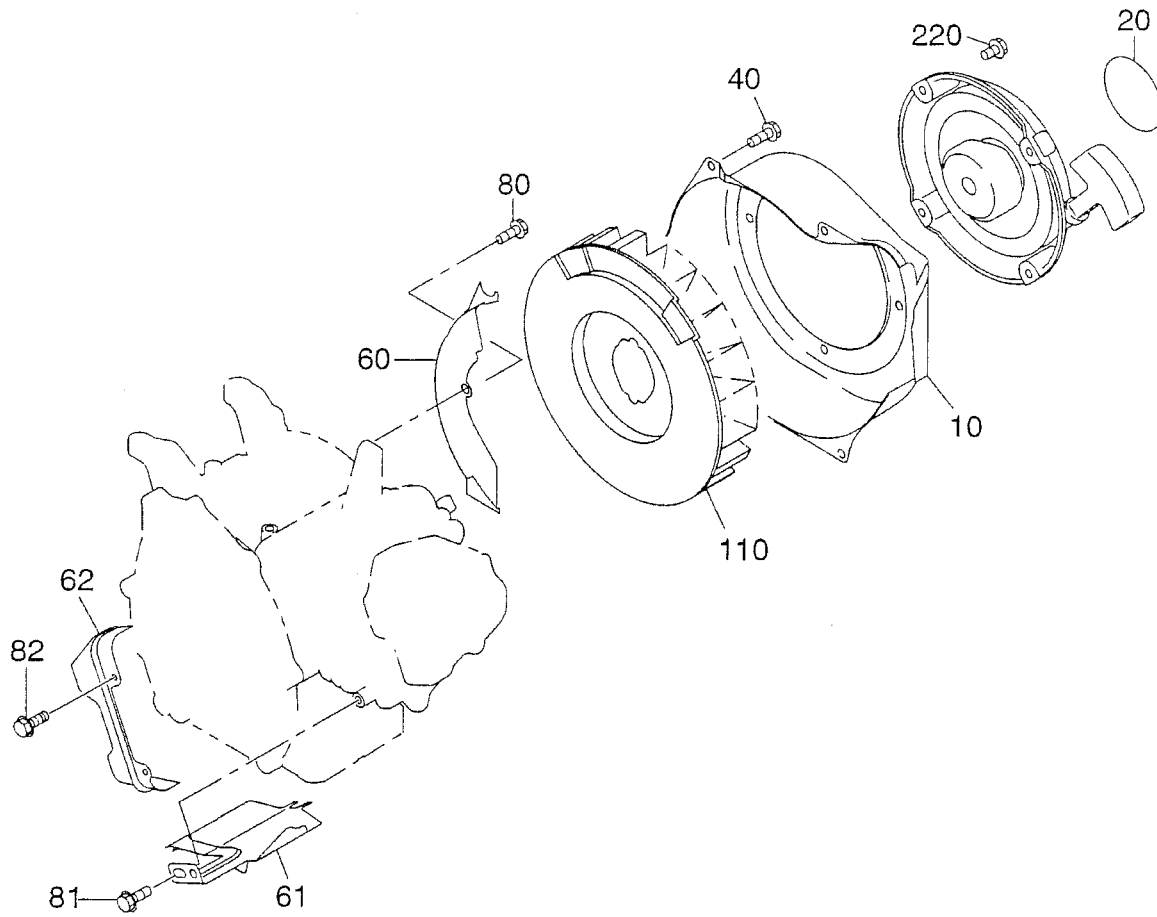
FIG. 400





SECTION 5 COOLING and STARTING GROUP

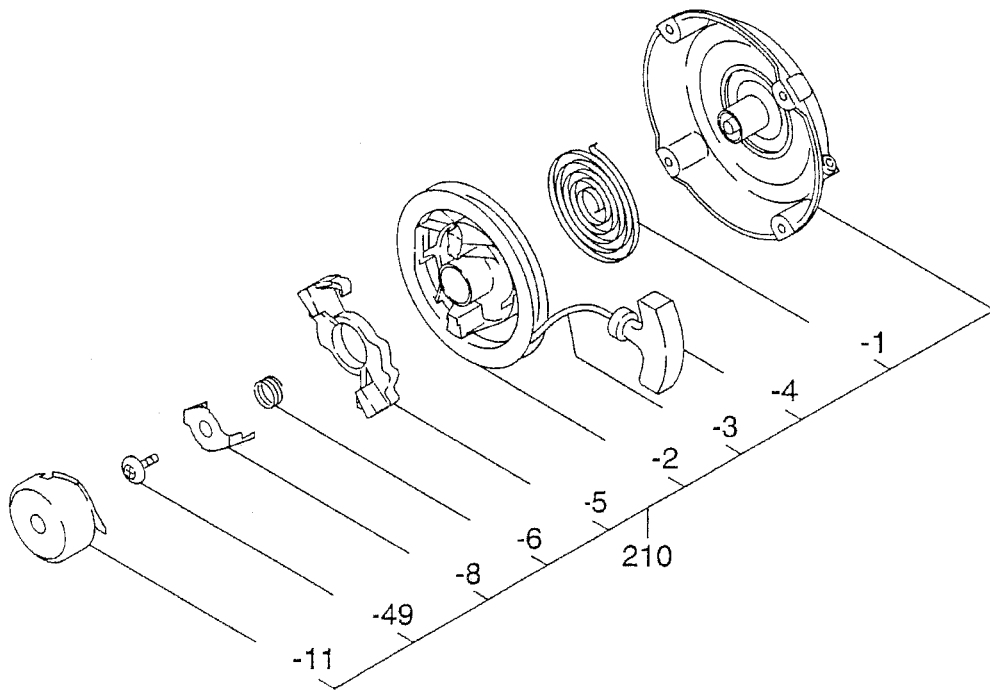
FIG. 500





SECTION 5 COOLING and STARTING GROUP

FIG. 510

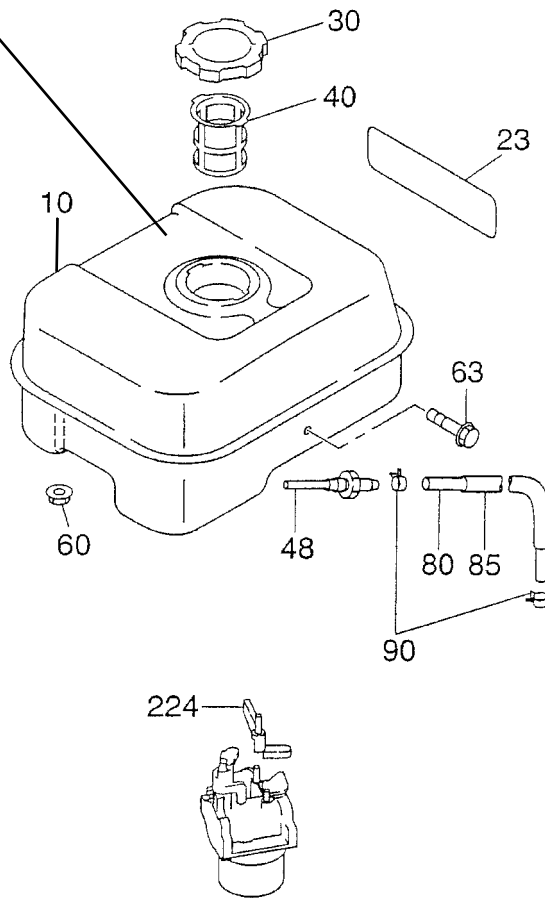




SECTION 6 FUEL, LUBRICATION GROUP

FIG. 600

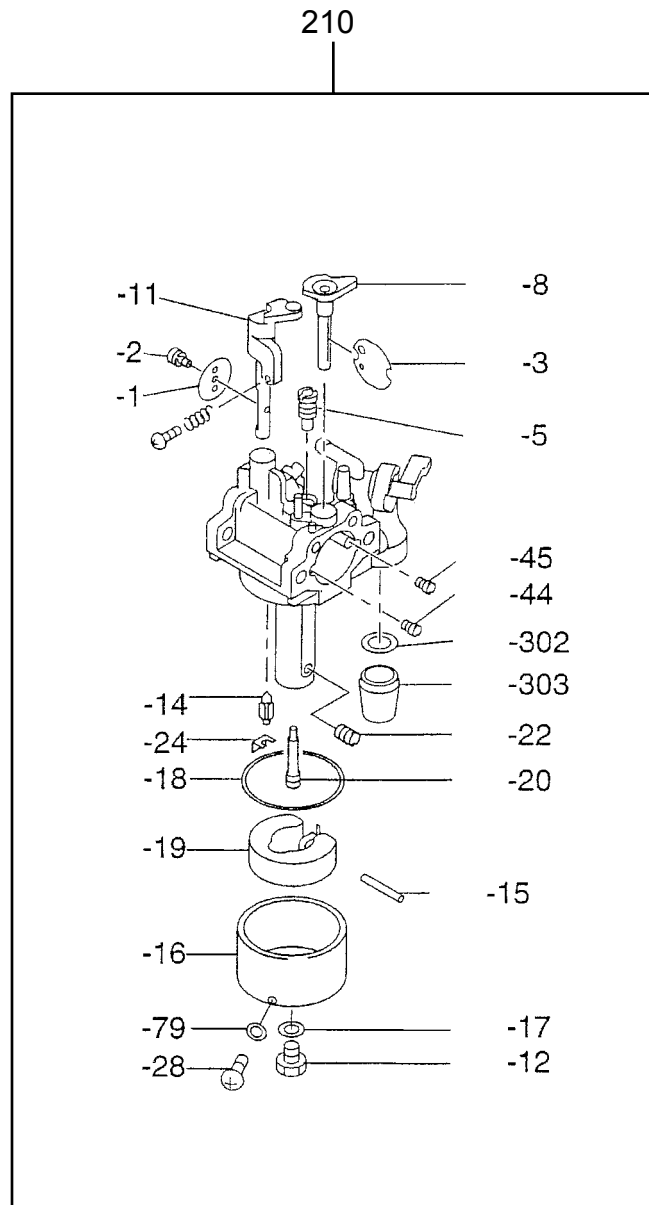
Plastic Fuel Spill Dam  
Supplied by Ryobi





SECTION 6 FUEL, LUBRICATION GROUP

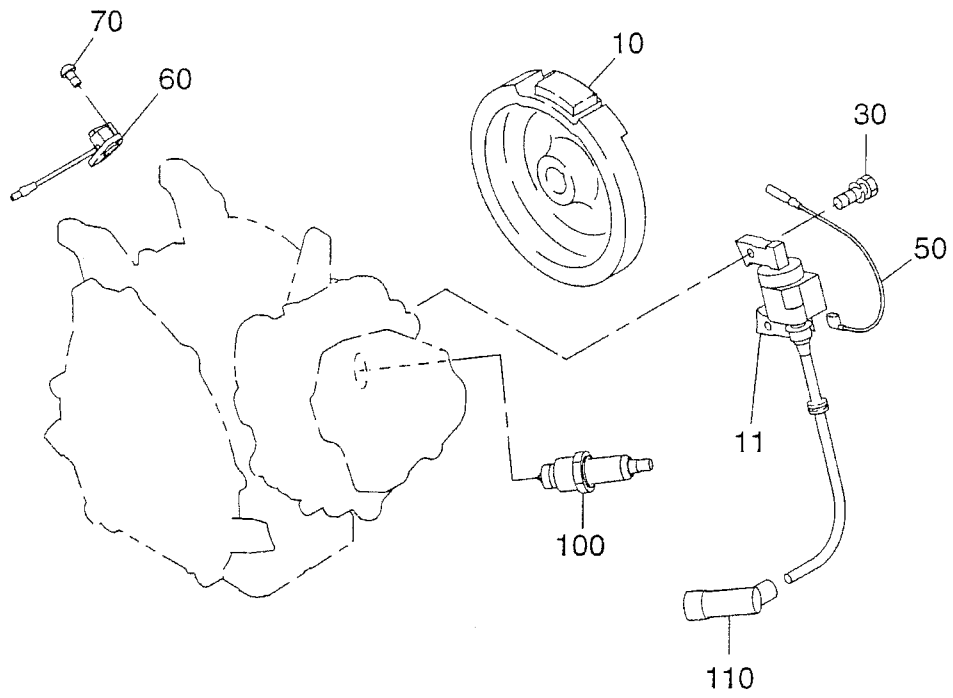
FIG. 610





SECTION 7 ELECTRIC DEVICE GROUP

FIG. 700





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