

# **PARTS MANUAL**

**Models**

**EX13, EX17, EX21  
ENGINE**

PUB-EP1676  
Rev. 02/03

# **Robin America, Inc.**

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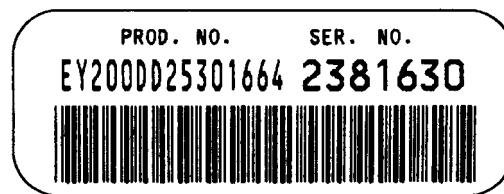
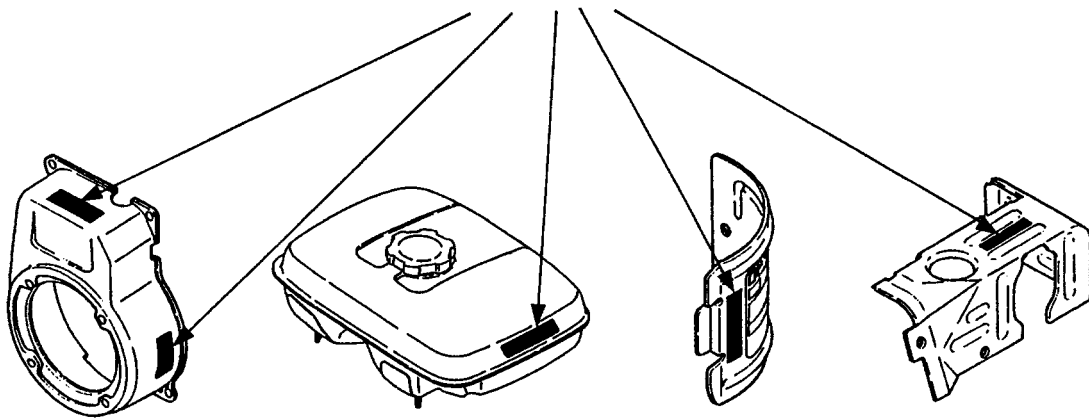
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## HOW TO USE THIS MANUAL

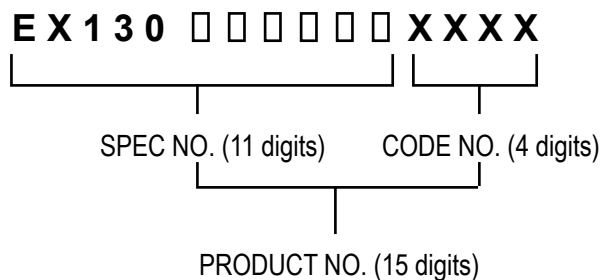
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant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

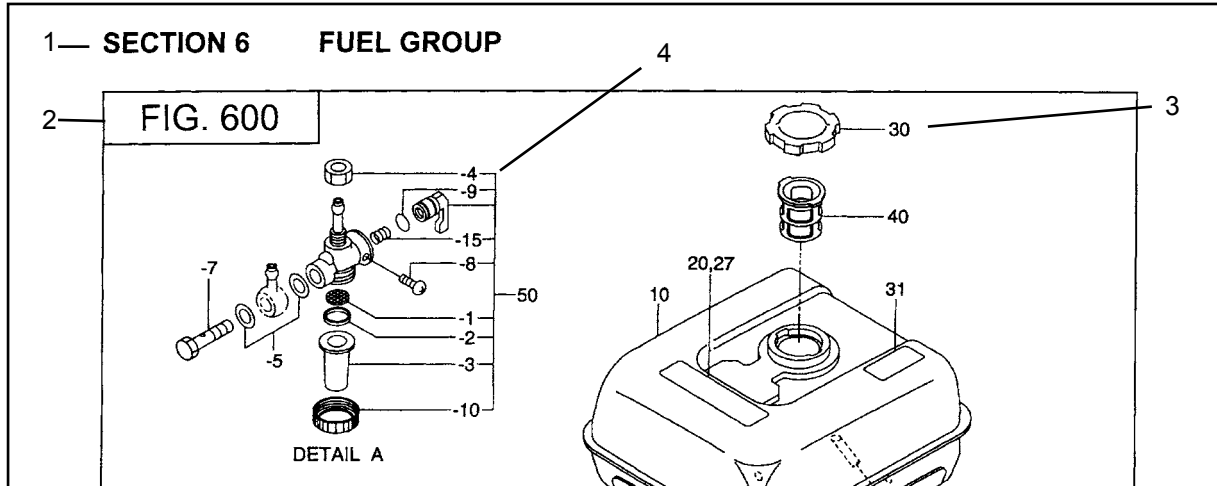
All Robin 4 cycle engines have a Product Number label similar to the label illustrated below.



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:



# MANUAL LAYOUT



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

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.

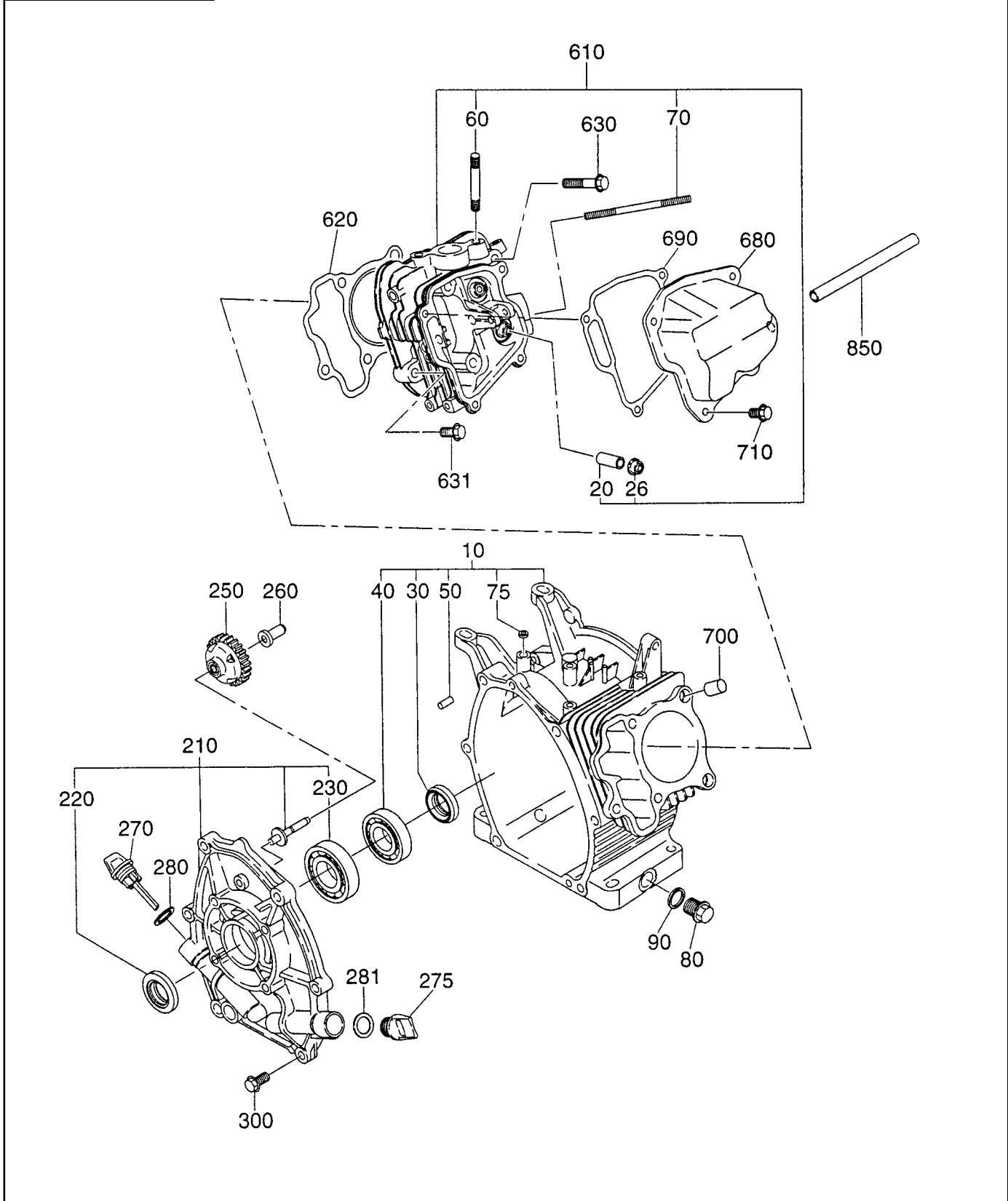
# GROUP INDEX

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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

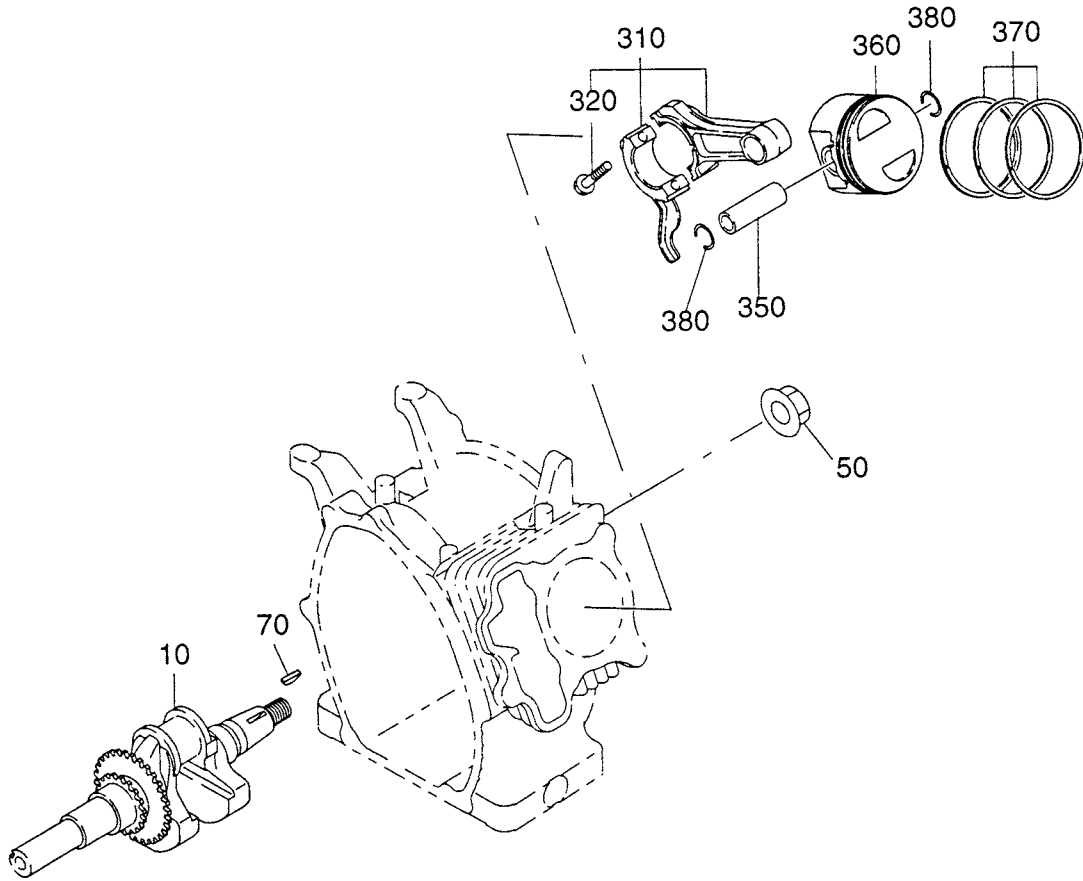
FIG. 100





SECTION 2 CRANKSHAFT GROUP

FIG. 200







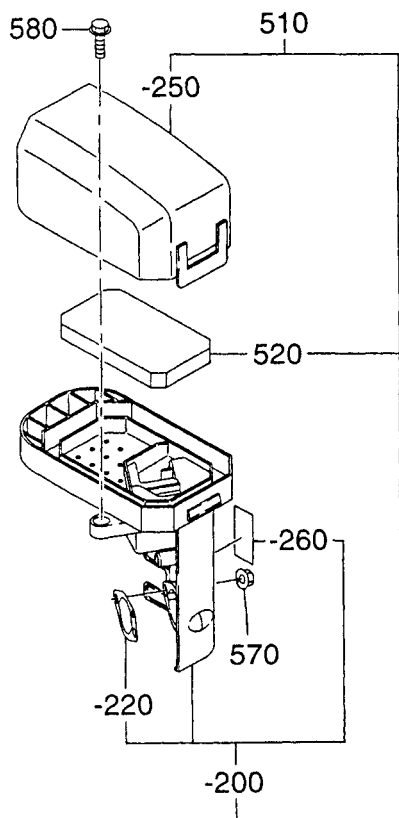


### SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	277-31601-01	CAMSHAFT CP	1			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	277-38701-03	RETURN SPRING	1			300
60	279-33601-03	VALVE SPRING	2			300
70	269-33701-03	RETAINER VALVE SPRING	2			300
80	276-33401-33	INTAKE VALVE	1	EX13		300
	277-33401-13	INTAKE VALVE	1	EX17 and EX21		300
90	276-33501-33	EXHAUST VALVE	1	EX13		300
	277-33501-13	EXHAUST VALVE	1	EX17 and EX21		300
95	132-10KA0-31	COLLET VALVE	4			300
150	276-35601-01	TIMING CHAIN CP	1	EX13		300
	277-35601-01	TIMING CHAIN CP	1	EX17		300
	278-35601-01	TIMING CHAIN CP	1	EX21		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	277-35001-23	PIN, rocker	1			300
220	277-36101-00	ROCKER ARM AY, in	1			300
225	277-36102-00	ROCKER ARM AY, ex	1			300
230	014-90500-10	ADJUST SCREW	1			300
231	014-90500-10	ADJUST SCREW	1			300
240	017-00500-20	NUT	1			300
241	017-00500-20	NUT	1			300
290	011-00600-20	FLANGE BOLT	1			300
310	276-30101-11	MUFFLER CP	1	EX13		300
	277-30101-11	MUFFLER CP	1	EX17		300
	278-30101-11	MUFFLER CP	1	EX21		300
320	277-34201-01	MUFFLER COVER	1			300
340	277-35201-03	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	011-00801-50	FLANGE BOLT	1			300
440	277-37001-03	DEFLECTOR	1			300
445	015-00400-60	TAPPING SCREW	2			300
540	277-32901-13	INSULATOR	1			300
550	277-35901-13	GASKET, insulator	1			300
570	002-38060-00	FLANGE NUT	2			300
580	011-00600-50	FLANGE BOLT	1			300

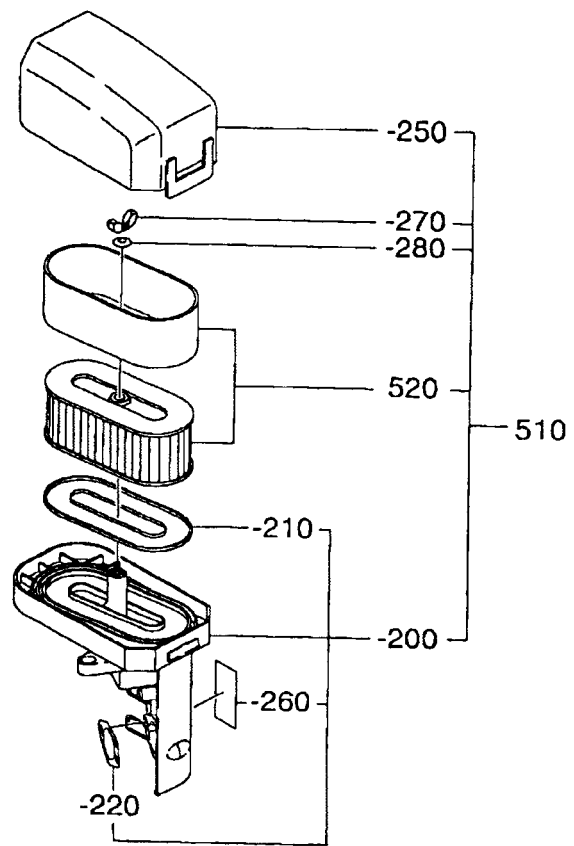
SECTION 3 INTAKE and EXHAUST GROUP

FIG. 310



**A**

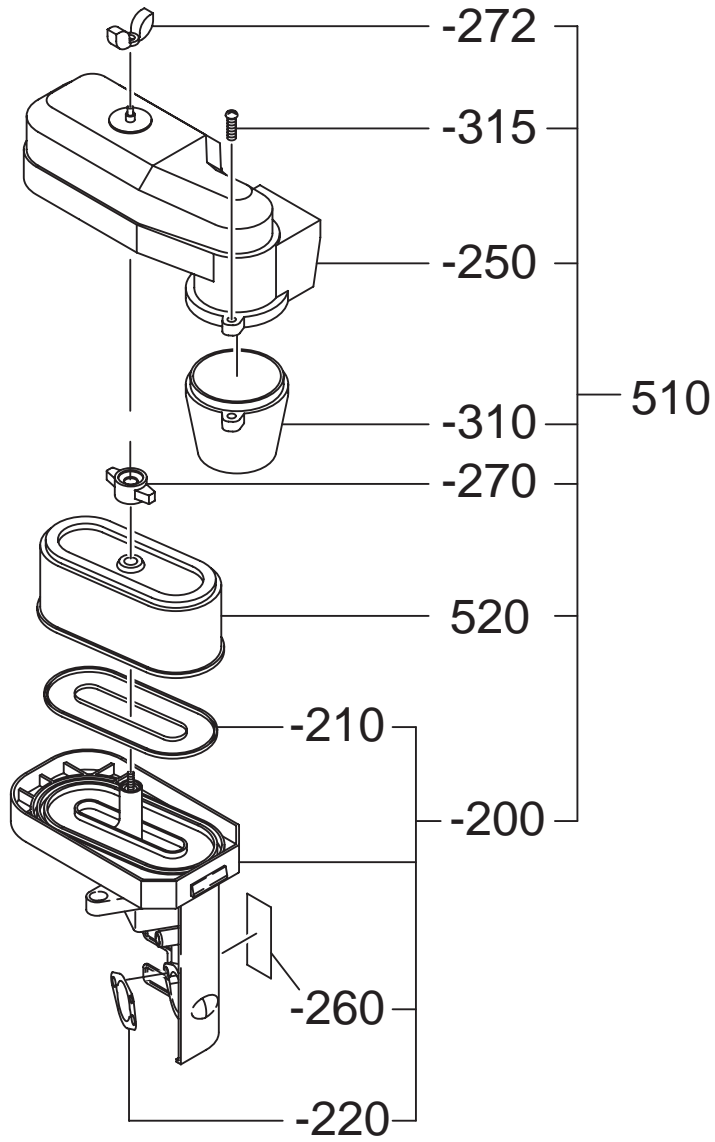
**B**





SECTION 3 INTAKE and EXHAUST GROUP - Cyclone Pre-Cleaner

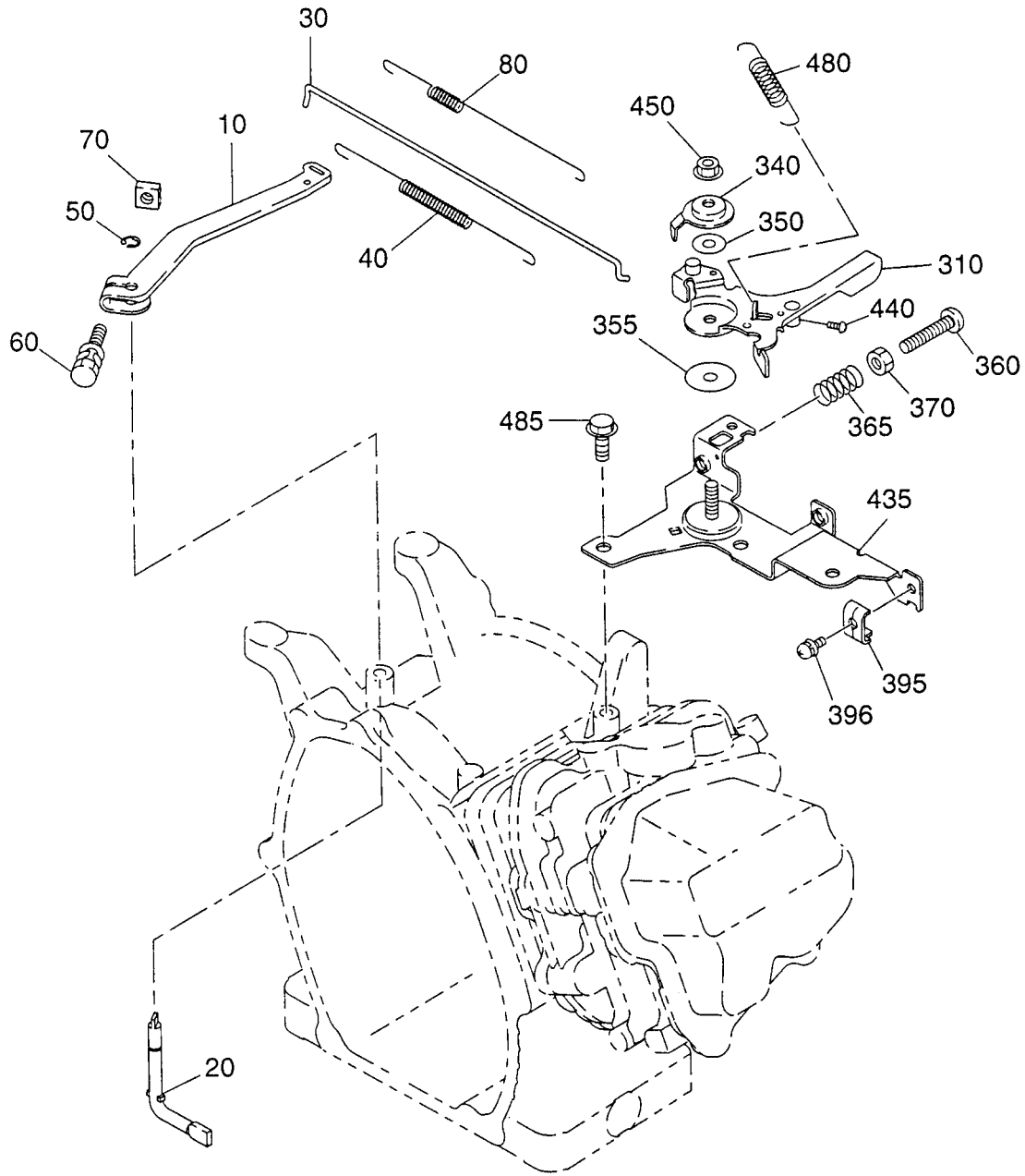
FIG. 320





SECTION 4 GOVERNOR GROUP

FIG. 400

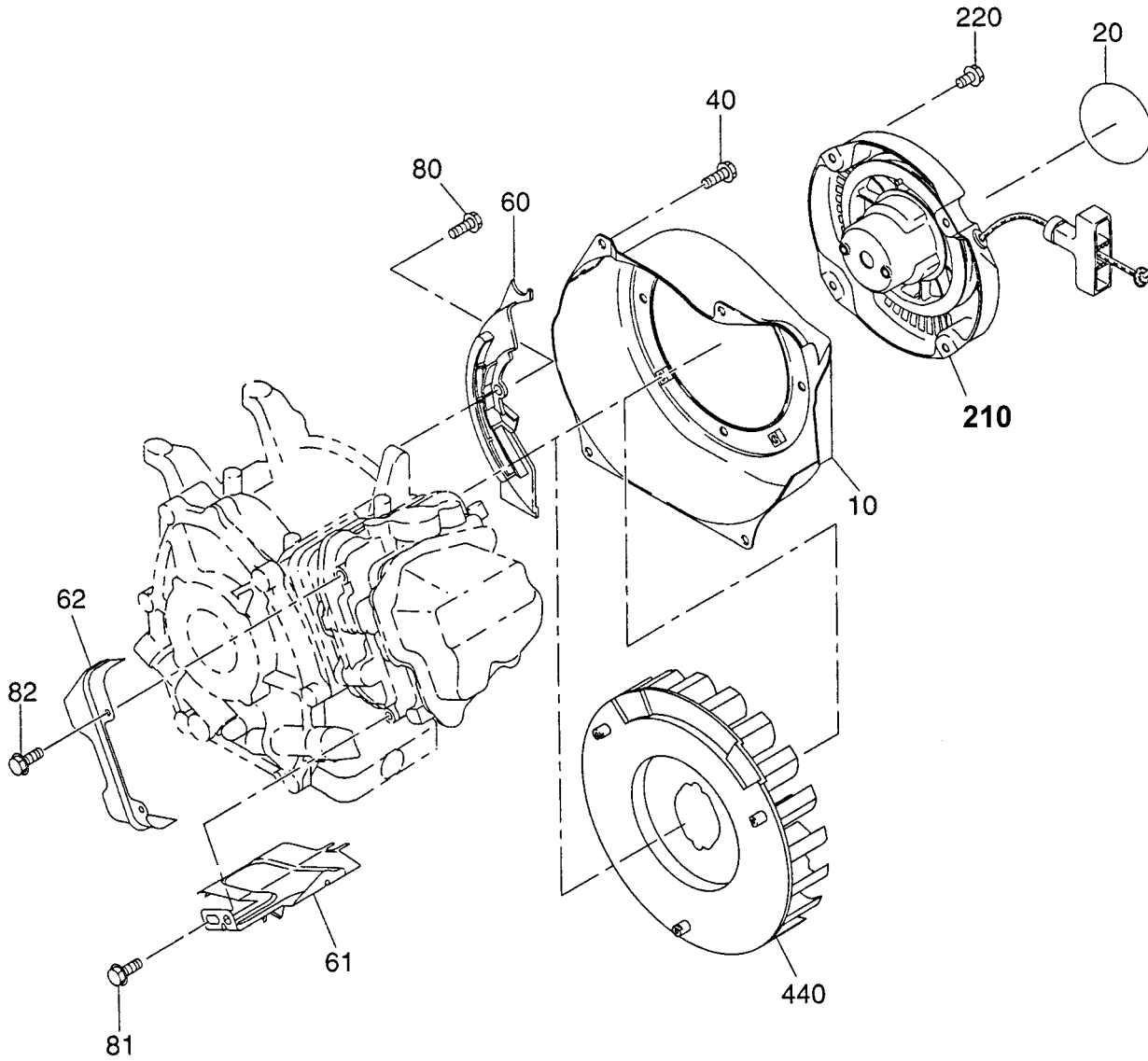






SECTION 5 COOLING and STARTING GROUP

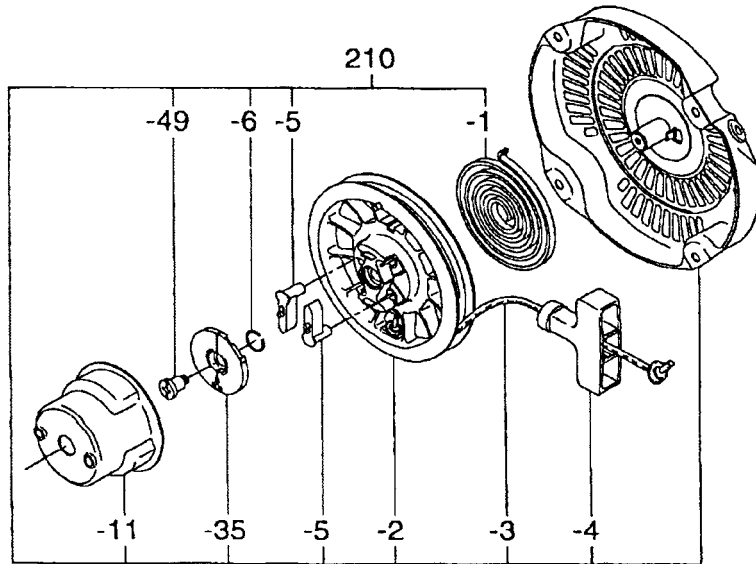
FIG. 500





SECTION 5 COOLING and STARTING GROUP

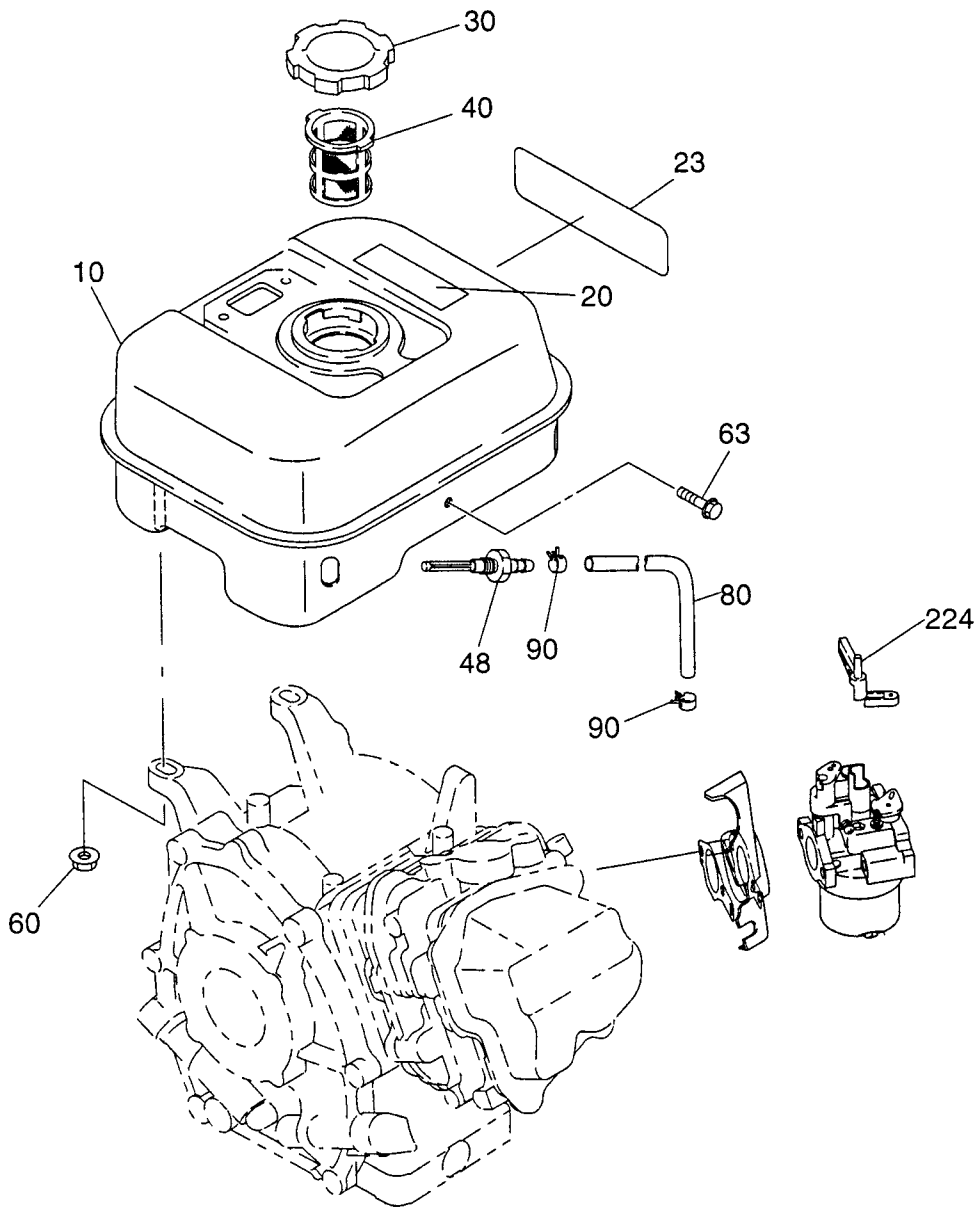
FIG. 510





SECTION 6 FUEL, LUBRICATION GROUP

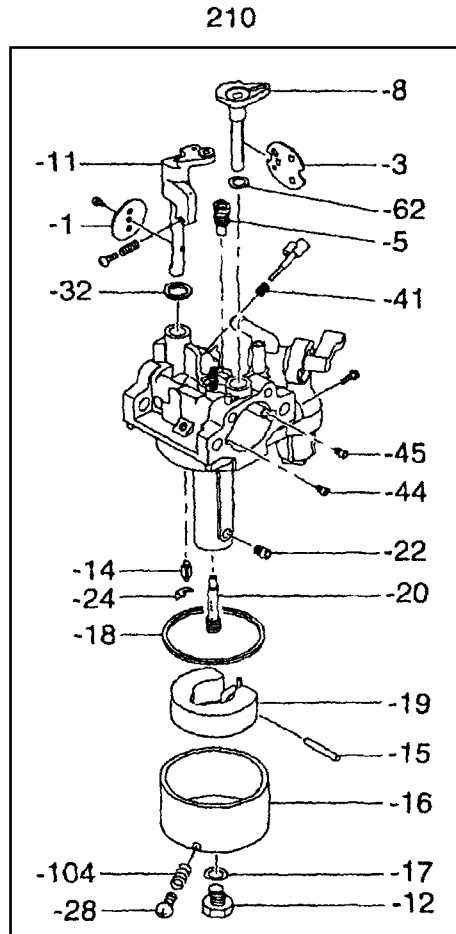
FIG. 600





SECTION 6 FUEL, LUBRICATION GROUP

FIG. 610



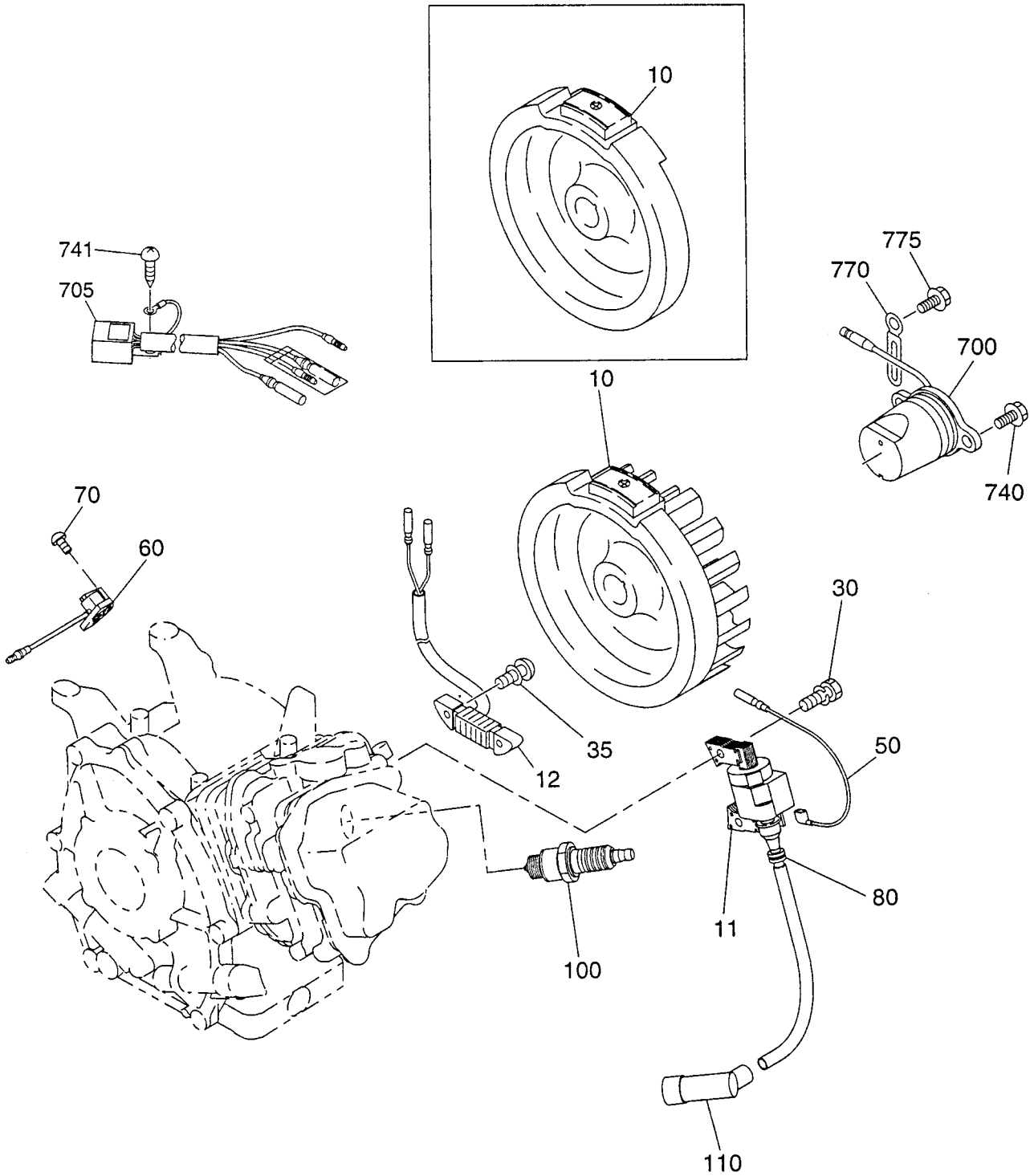


## SECTION 6 FUEL, LUBRICATION GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
210	276-62302-00	CARBURETOR AY	1	EX13, Dual element		610
	276-62301-00	CARBURETOR AY	1	EX13, Foam		610
	277-62302-00	CARBURETOR AY	1	EX17, Dual element		610
	277-62301-00	CARBURETOR AY	1	EX17, Foam		610
	278-62302-00	CARBURETOR AY	1	EX21, Dual element		610
	278-62301-00	CARBURETOR AY	1	EX21, Foam		610
-1	106-62538-08	THROTTLE VALVE	1	EX13		610
-1	277-62535-08	THROTTLE VALVE	1	EX17,EX21		610
-3	277-62525-08	CHOKE VALVE	1			610
-5	234-62421-08	PILOT JET	1	EX13		610
-5	246-62420-08	PILOT JET	1	EX17		610
-5	252-62420-08	PILOT JET	1	EX21		610
-8	277-62520-08	CHOKE LEVER	1			610
-11	276-62530-08	THROTTLE SHAFT	1	EX13, Foam		610
-11	276-62531-08	THROTTLE SHAFT	1	EX13, Dual element		610
-11	277-62530-08	THROTTLE SHAFT	1	EX17, EX21, Foam		610
-11	277-62531-08	THROTTLE SHAFT	1	EX17, EX21, Dual element		610
-12	227-62451-08	BOLT	1			610
-14	277-62500-08	NEEDLE	1			610
-15	277-62515-08	PIN	1			610
-16	277-62505-08	FLOAT 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	276-62440-08	MAIN NOZZLE	1	EX13		610
-20	277-62440-08	MAIN NOZZLE	1	EX17		610
-20	278-62440-08	MAIN NOZZLE	1	EX21		610
-22	276-62400-08	MAIN JET	1	EX13		610
-22	226-62411-08	MAIN JET	1	EX17, Foam		610
-22	277-62401-08	MAIN JET	1	EX17, Dual element		610
-22	278-62400-08	MAIN JET	1	EX21, Foam		610
-22	226-62412-08	MAIN JET	1	EX21, Dual element		610
-24	226-62701-08	CLIP	1			610
-28	277-62350-08	BOLT	1			610
-32	246-62390-08	SEAL	1	Dual element		610
-41	230-62446-08	SPRING	1			610
-44	242-62321-08	AIR JET	1	EX13		610
-44	105-62410-08	AIR JET	1	EX17		610
-44	107-62410-08	AIR JET	1	EX21		610
-45	106-62410-08	AIR JET, PILOT	1			610
-62	236-62680-08	SEAL	1	Dual element		610
-104	236-62541-08	PACKING	1			610

SECTION 7 ELECTRIC DEVICE GROUP

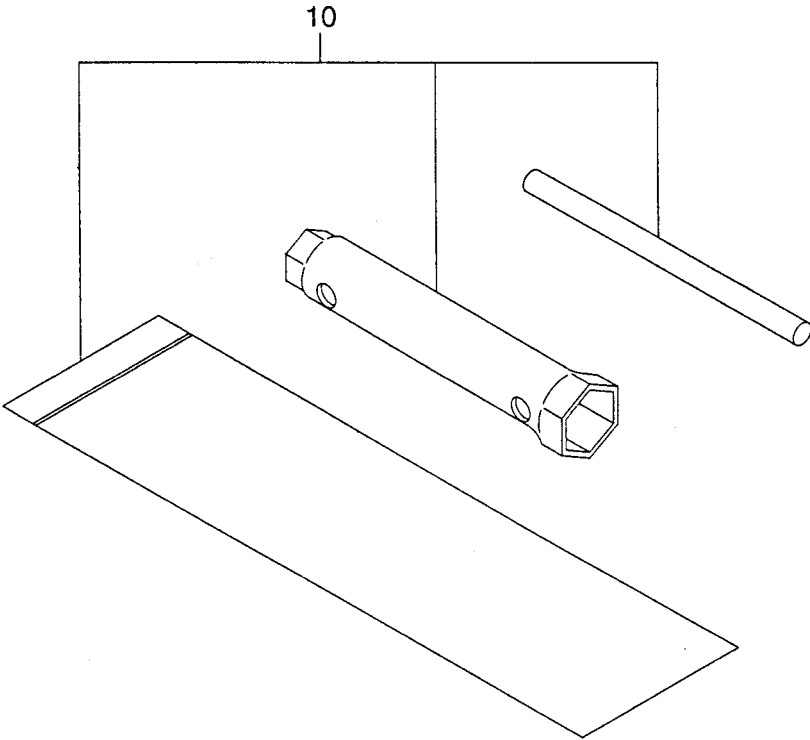
FIG. 700





SECTION 9 ACCESSORY GROUP

FIG. 900





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