

PARTS MANUAL

Models

EX21

**Electronic Fuel Injection
ENGINE**

PUB-EP6675
Rev. 07/09

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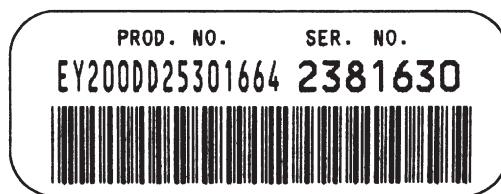
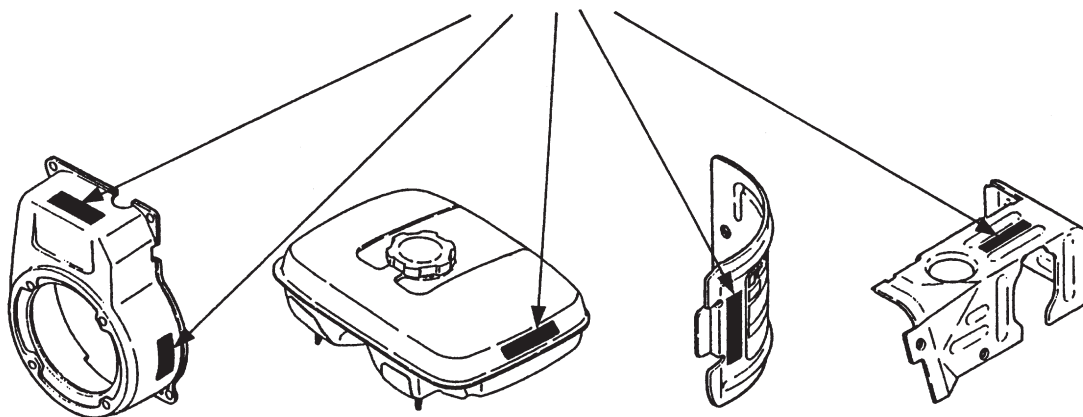
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HOW TO USE THIS MANUAL

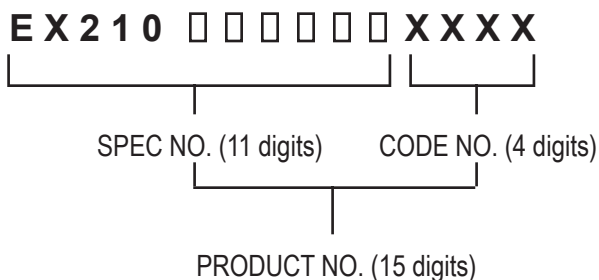
Robin engines are identified by MODEL, SPECIFICATION, and CODE NUMBER. For each model there may be many different versions called specifications. Each specification will be unique in some way. The difference may only be the paint color or it may have a different type of PTO or some other significant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

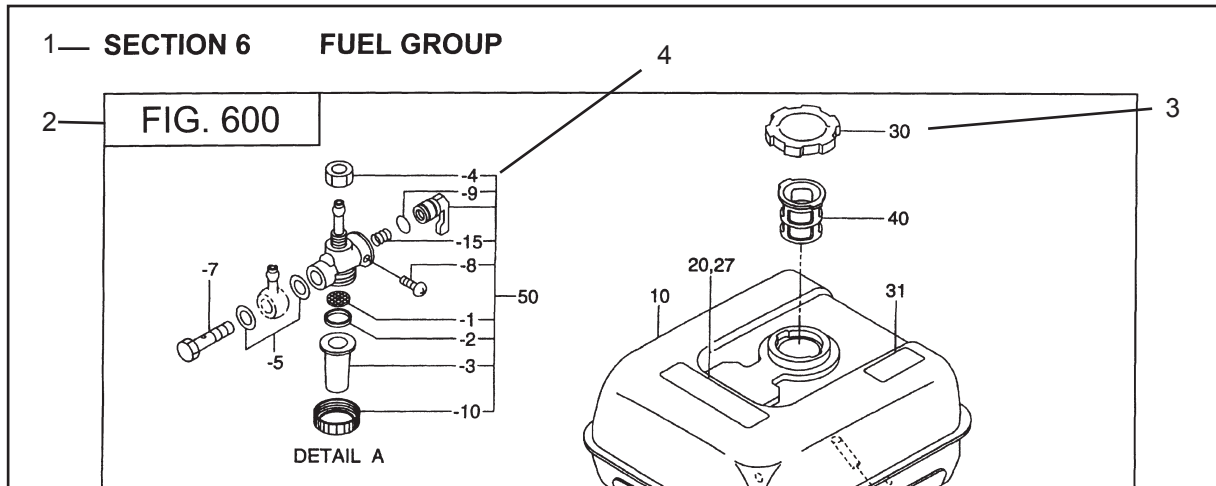
All Robin 4 cycle engines have a Product Number label similar to the label illustrated below.



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.

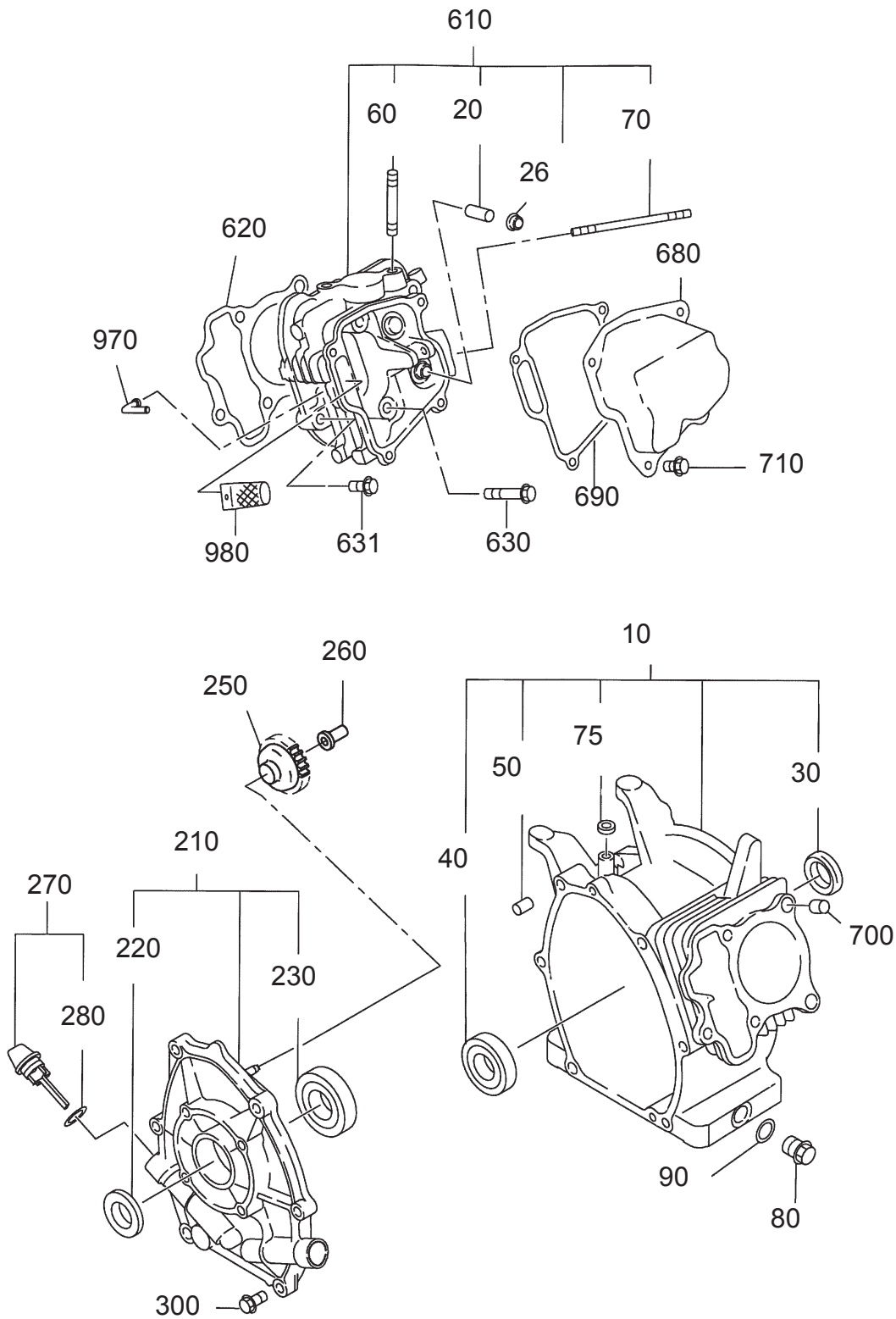
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INDEX OF DESCRIPTION SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AY	ASSEMBLY	P=	PITCH (in mm)
CP	COMPLETE	P.T.O. (PTO)	POWER TAKE OFF
EX	EXPORT (from Japan)	REF	REFERENCE
FIG	FIGURE	R.H. (RH)	RIGHT HAND SIDE
FR	FRONT	RR	REAR
"	INCH	STD.	STANDARD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

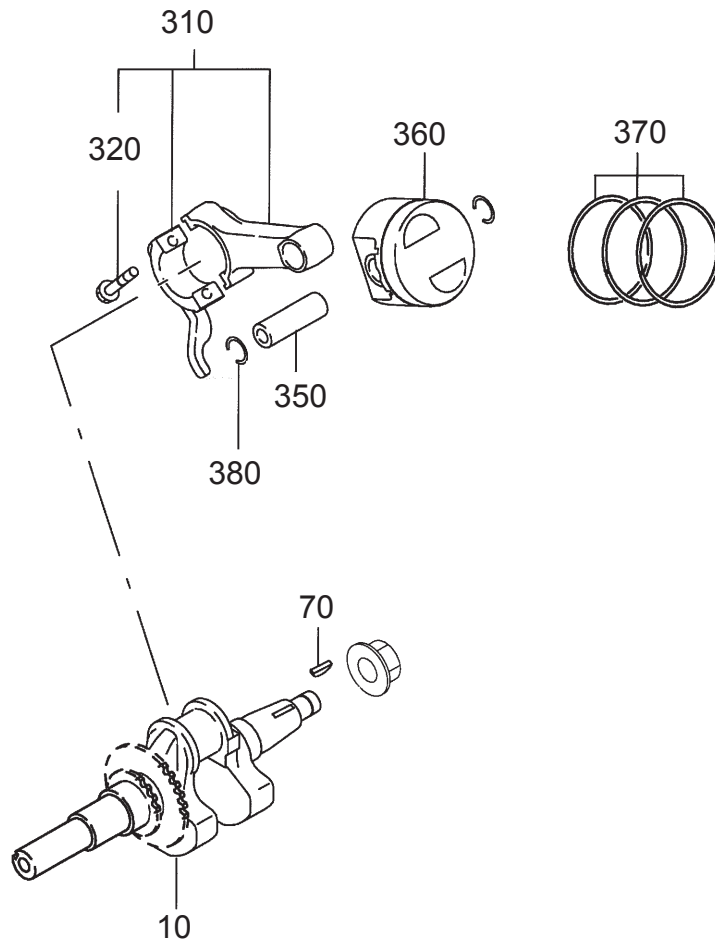


SECTION 1 CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	278-10102-51	Crankcase Cp	1			100
20	237-14202-03	Valve Guide	2			100
26	277-16010-01	Stem Seal	1			100
30	044-02502-00	Oil Seal	1			100
40	060-02800-21	Ball Bearing	1			100
50	277-15011-03	Pipe Knock	2			100
60	010-50802-50	Stud	2			100
70	010-50603-51	Stud	2			100
75	044-00600-20	Oil Seal	1			100
80	040-11400-30	Plug	1			100
90	021-11400-20	Gasket	1			100
210	277-11002-21	Main Bearing Cover Cp	1			100
220	044-02502-10	Oil Seal	1			100
230	X60-02501-40	Ball Bearing	1			100
250	277-45004-J1	Governor Gear Cp	1			100
260	277-41901-03	Governor Sleeve	1			100
270	277-63601-30	Oil Gauge Ay	2			100
280	277-63601-08	Gasket	2			100
300	001-04083-50	Flange Bolt	6			100
610	278-13006-01	Cylinder Head Cp	1			100
620	277-15001-33	Gasket, head	1			100
630	011-00802-40	Flange Bolt	4			100
631	011-00803-10	Flange Bolt	1			100
680	277-15504-01	Rocker Cover Cp	1			100
690	277-16001-13	Gasket, rocker cover	1			100
700	277-15011-03	Pipe Knock	2			100
710	011-00600-20	Flange Bolt	4			100
960	277-99001-47	Gasket Set	1			100
970	251-66301-01	Elbow	1			100
980	278-15901-03	Sus Mesh	1			100

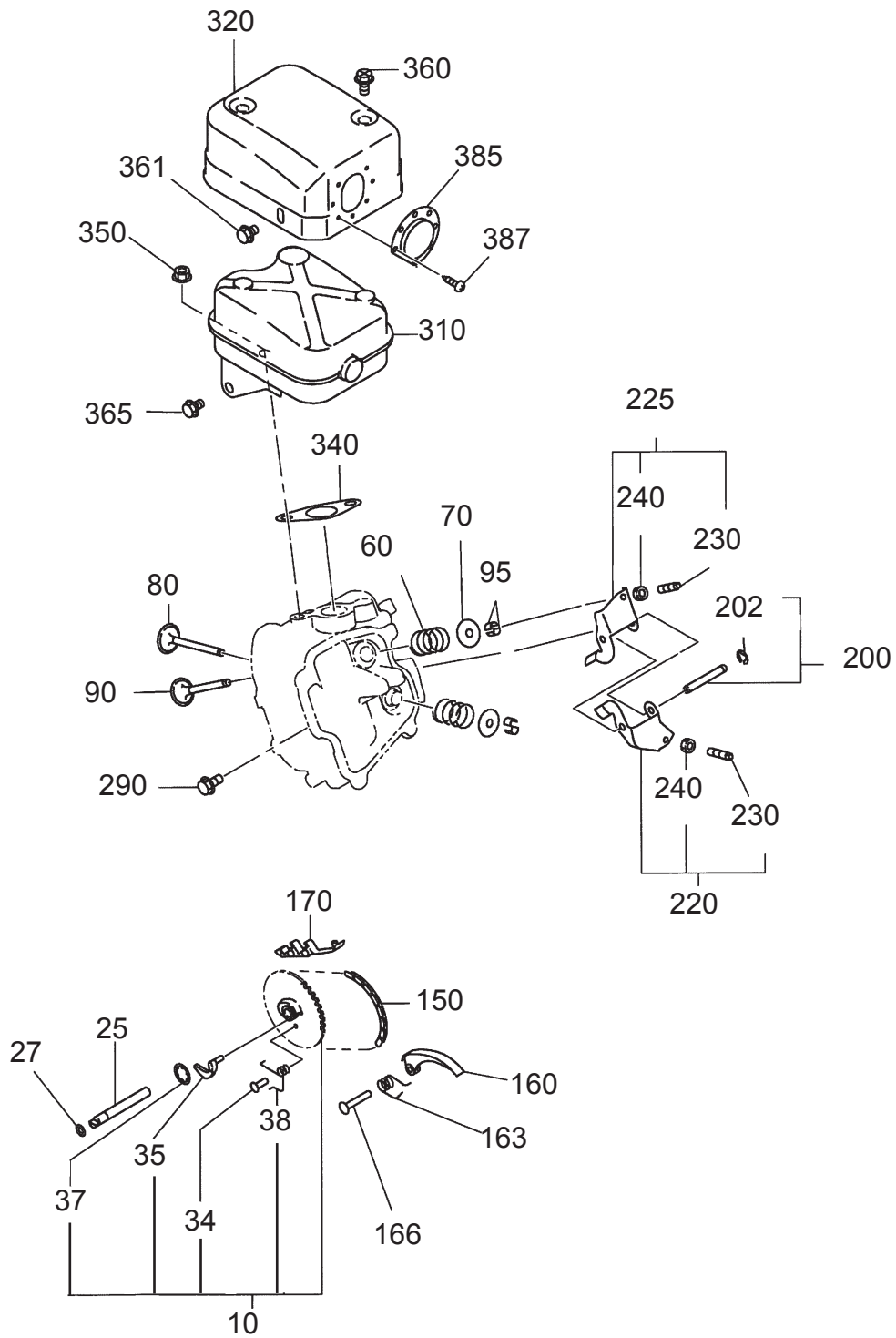
SECTION 2 CRANKSHAFT GROUP

FIG. 200



SECTION 3 INTAKE and EXHAUST GROUP

FIG. 300

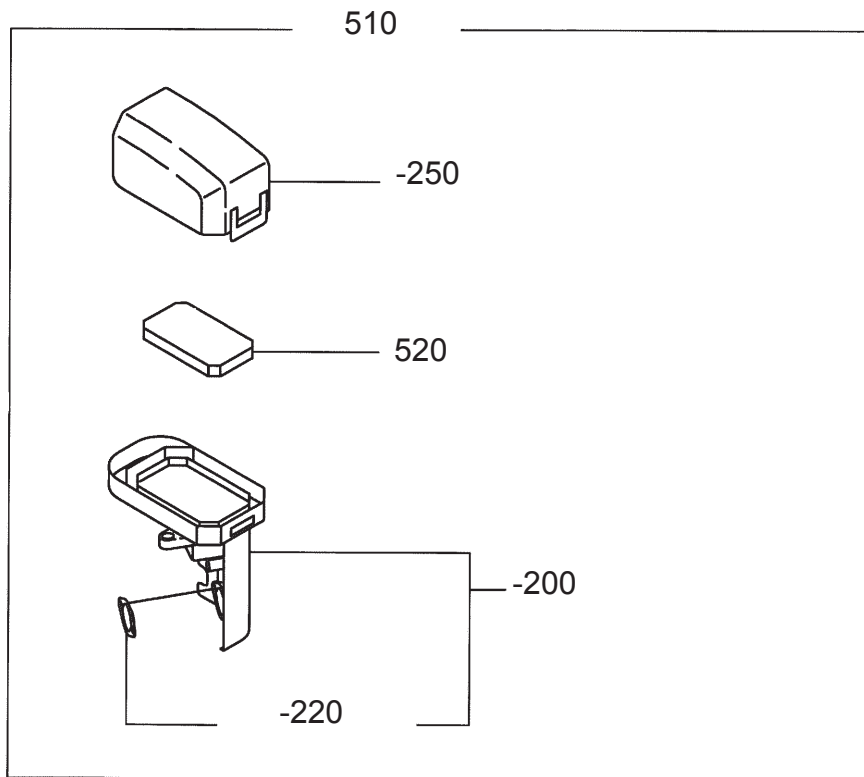
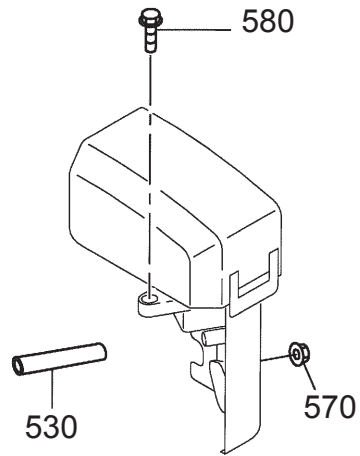


SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	277-31601-31	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	277-38702-03	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 Cp	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	277-35004-01	Pin Cp, rocker	1			300
202	003-13050-00	Clip	1			300
220	277-36201-00	Rocker Arm Ay, intake	1			300
225	277-36202-00	Rocker Arm Ay, exhaust	1			300
230	014-90500-20	Adjust Screw	1			300
230	014-90500-20	Adjust Screw	1			300
240	017-00500-30	Nut	1			300
240	017-00500-30	Nut	1			300
290	011-00600-10	Flange Bolt	1			300
310	277-30101-J1	Muffler Cp	1			300
320	277-34201-31	Muffler Cover Cp	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 Cp	1			300
387	015-00400-60	Tapping Screw	2			300

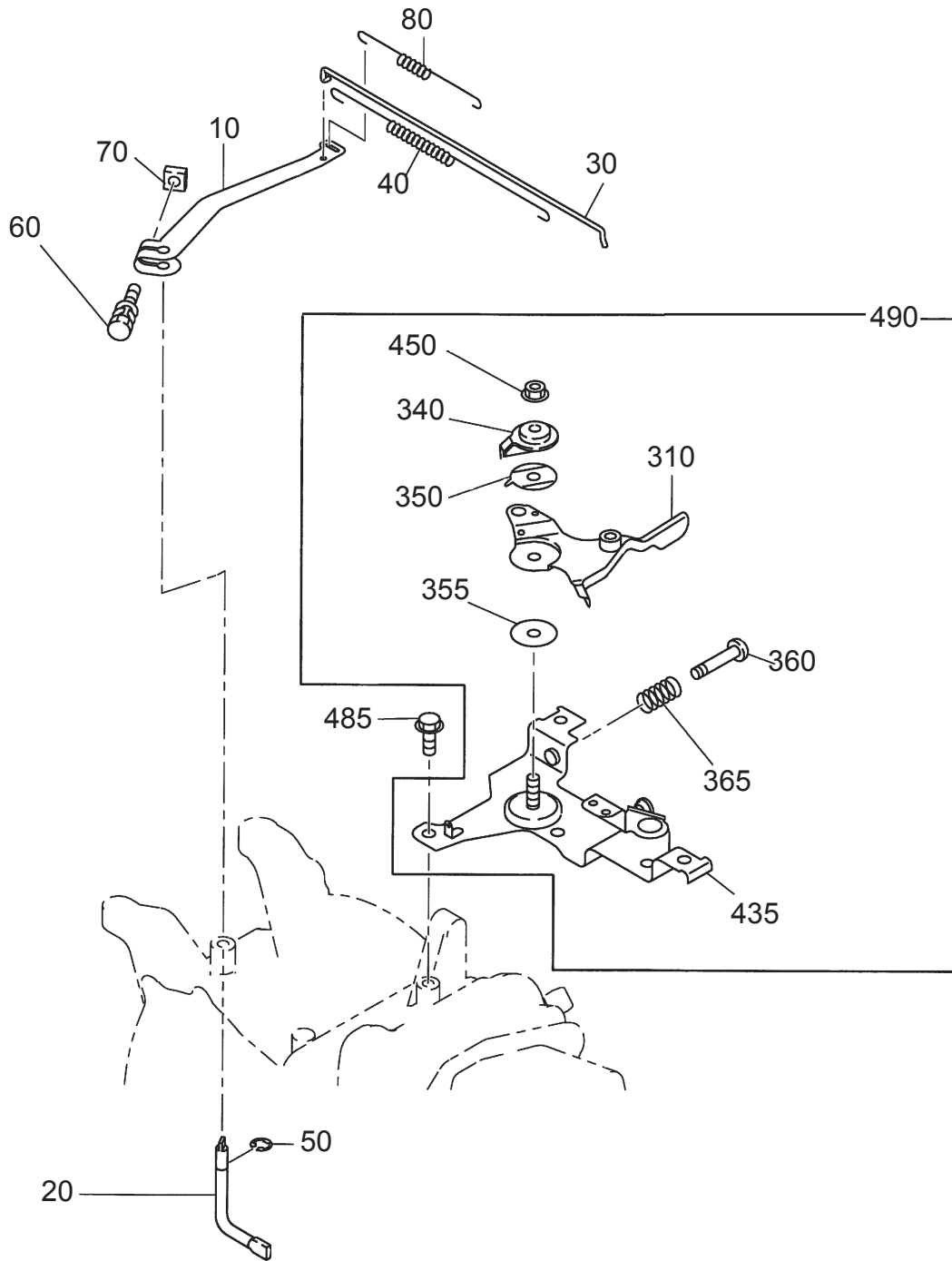
SECTION 3 INTAKE and EXHAUST GROUP

FIG. 350



SECTION 4 GOVERNOR GROUP

FIG. 400

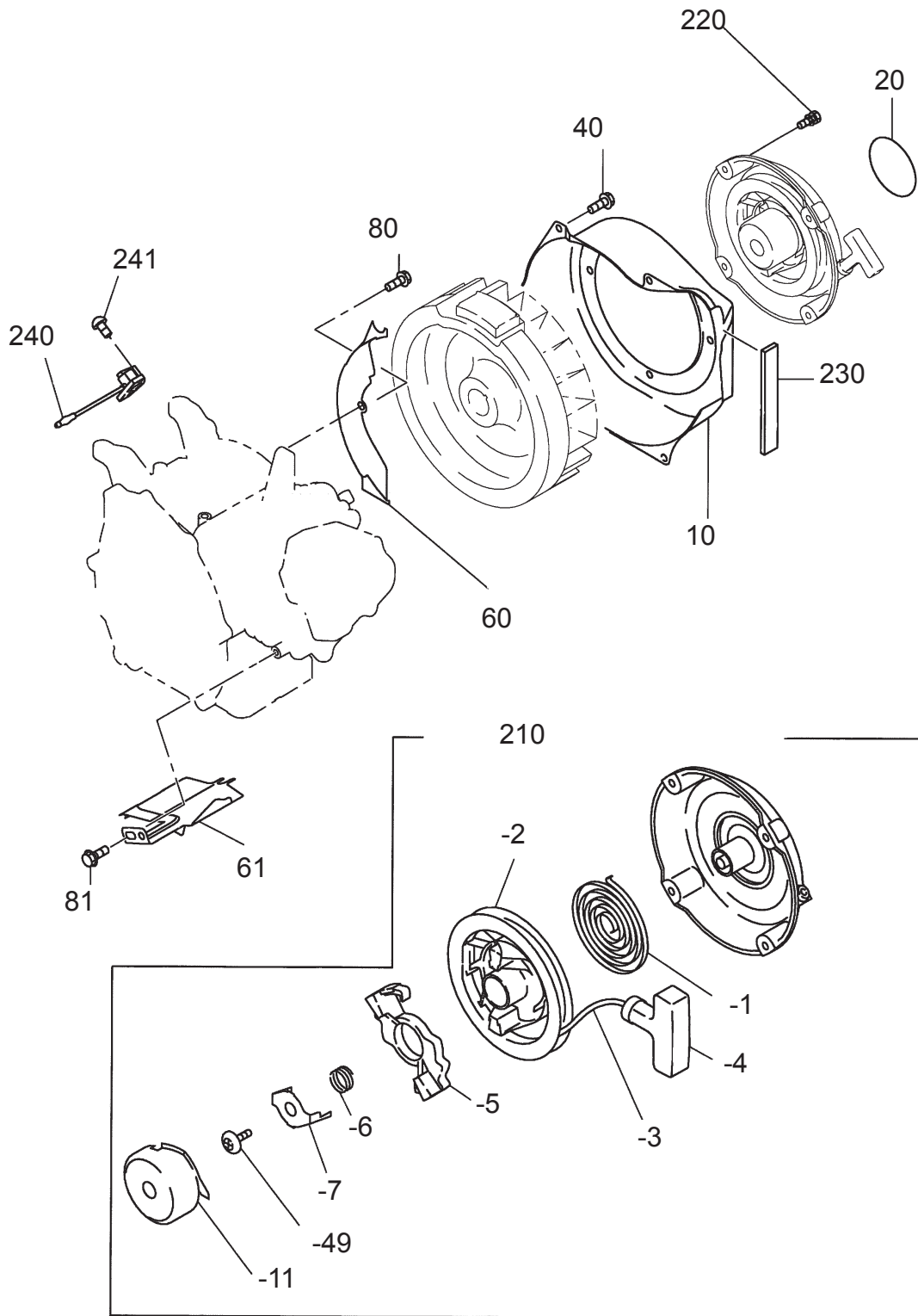


SECTION 4 GOVERNOR GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	277-42301-43	Governor Lever	1			400
20	277-42201-33	Governor Shaft	1			400
30	277-42701-11	Governor Rod Cp	1			400
40	277-42801-23	Rod Spring	1			400
50	003-13050-00	Clip	1			400
60	013-00602-40	Bolt and Washer Ay	1			400
70	018-60600-20	Nut	1			400
80	277-42510-13	Governor Spring	1			400
310	277-43303-03	Speed Control Lever	1			400
340	277-43502-03	Stop Plate	1			400
350	277-44501-03	Washer	1			400
355	021-70600-70	Friction Washer	1			400
360	004-31062-50	Screw	1			400
365	237-45004-23	Spring, adjust	1			400
435	277-46002-02	Speed Control Bracket Un	1			400
450	002-35060-00	Self Lock Nut	1			400
485	011-00600-20	Flange Bolt	2			400
490	277-46002-20	Speed Control Ay	1			400

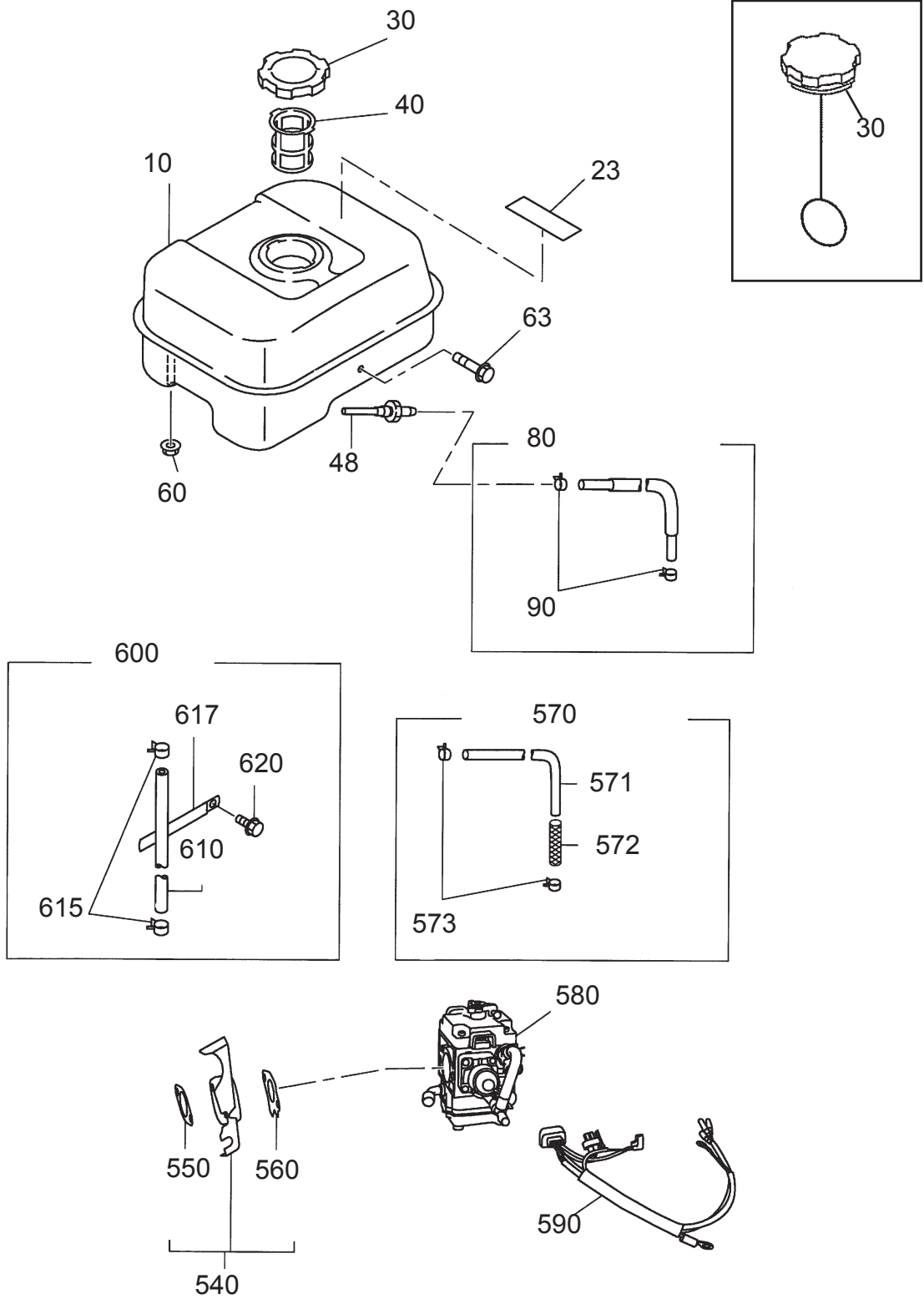
SECTION 5 COOLING and STARTING GROUP

FIG. 500



SECTION 6 FUEL, LUBRICATION GROUP

FIG. 600

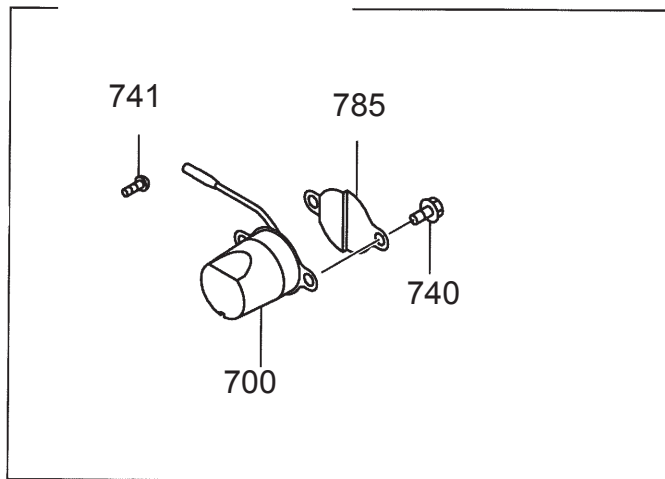
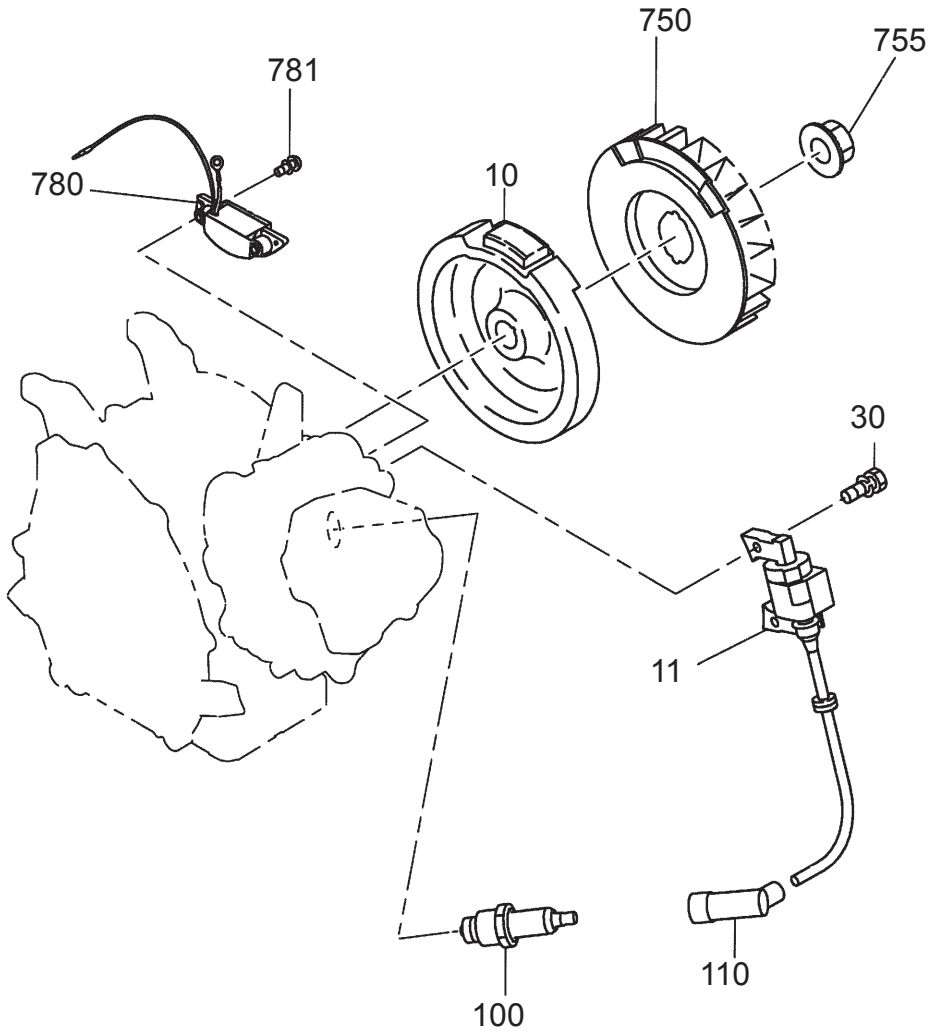


SECTION 6 FUEL, LUBRICATION GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	277-60902-01	Fuel Tank Cp	1			600
23	278-95113-03	Label, model	1			600
30	043-04300-15	Fuel Tank Cap Cp	1	49 State		600
30	X43-04401-42	Fuel Tank Cap Cp	1	50 State, TIER 3		600
40	X64-13600-10	Fuel Filter	1			600
48	X50-51200-30	Union	1			600
60	002-38060-00	Flange Nut	2			600
63	011-00601-30	Flange Bolt	1			600
80	278-62603-01	Fuel Pipe Cp	1			600
90	056-11000-30	Hose Clamp	2			600
540	277-32902-J1	Insulator Cp	1			600
550	277-35903-J3	Gasket 2, insulator	1			600
560	277-35902-J3	Gasket 1, insulator	1			600
570	278-62604-01	Fuel Pipe Cp	1			600
571	085-10301-20	Rubber Pipe	1			600
572	278-66501-03	Mesh Protector	1			600
573	056-10800-60	Hose Clamp	2			600
580	278-65601-H0	Throttle body Ay	1			600
590	278-73201-H1	Wire Harness Cp	1			600
600	278-62614-01	Pulse Pipe Cp	1		8149~	600
	278-62613-01	Pulse Pipe Cp	1		~8148	600
610	278-68002-A3	Rubber Pipe	1		8149~	600
	085-10621-40	Rubber Pipe	1		~8148	600
615	278-68501-A3	Hose Clamp	2		8149~	600
	056-11000-30	Hose Clamp	2		~8148	600
617	056-60002-50	Clamp	1			600
620	011-00600-10	Flange Bolt	1			600

SECTION 7 ELECTRIC DEVICE GROUP

FIG. 700

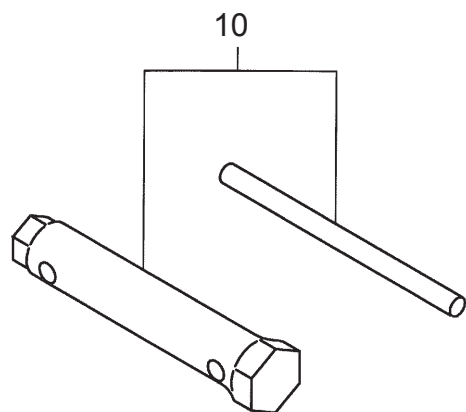


SECTION 7 ELECTRIC DEVICE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	278-79241-01	Flywheel Cp	1			700
11	277-79431-11	Ignition Coil Cp	1			700
30	001-14062-50	Bolt and Washer Ay	2			700
100	065-01401-50	Spark Plug	1			700
110	065-50002-70	Spark Plug Cap	1			700
700	277-76301-21	Oil Sensor Cp	1			700
740	013-00602-60	Bolt and Washer Ay	2			700
741	015-20500-10	Tapping Screw	1			700
750	278-54101-03	Cooling Blower	1			700
755	018-01400-20	Flange Nut	1			700
780	278-79311-H1	Power Coil Cp	1			700
781	013-10600-40	Screw and Washer Ay	2			700
785	277-75801-03	Shield Plate	1			700

SECTION 9 ACCESSORY GROUP

FIG. 900



SECTION 10 SHIP LOOSE

FIG. 1000



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