

# **PARTS MANUAL**

**Models**

**DY30 / DY35**

**DY41 / DY42**

**ENGINE**

PUB-EP5769A  
Rev. 08/00

# **Robin America, Inc.**

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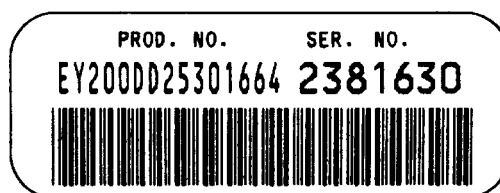
## HOW TO USE THIS MANUAL

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.

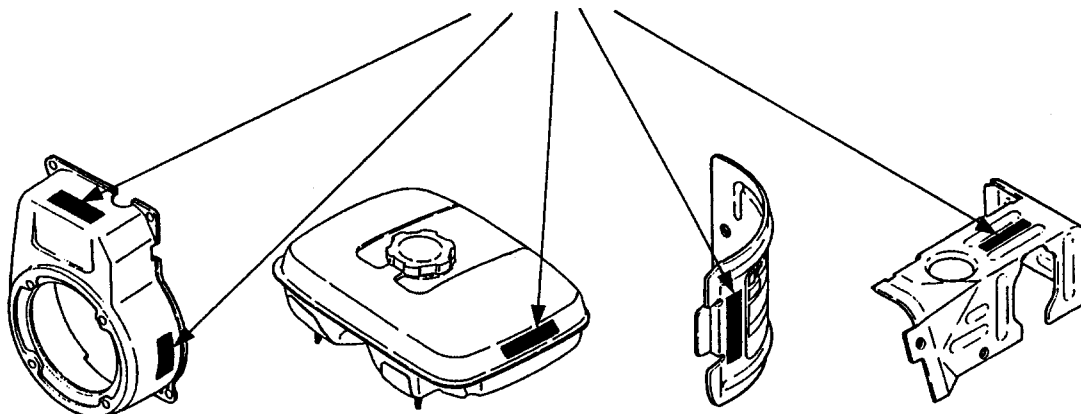
In order to identify the correct service part number, it is important to confirm the specification and code numbers for your engine. The specification and code number together are known as the PRODUCT NUMBER.

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

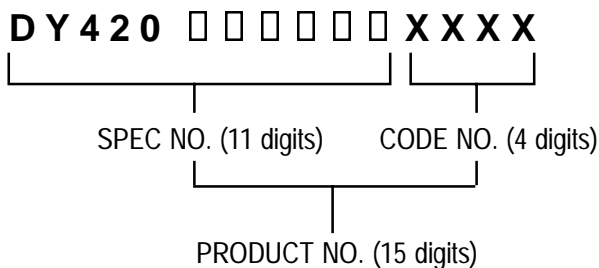
### PRODUCT NUMBER LABEL



### 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

**3**

**4**

**5**

**6**

**7**

**8**

**9**

**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	2101 -	600
	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
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
-4	064-20003-20	NUT	1			600

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

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.

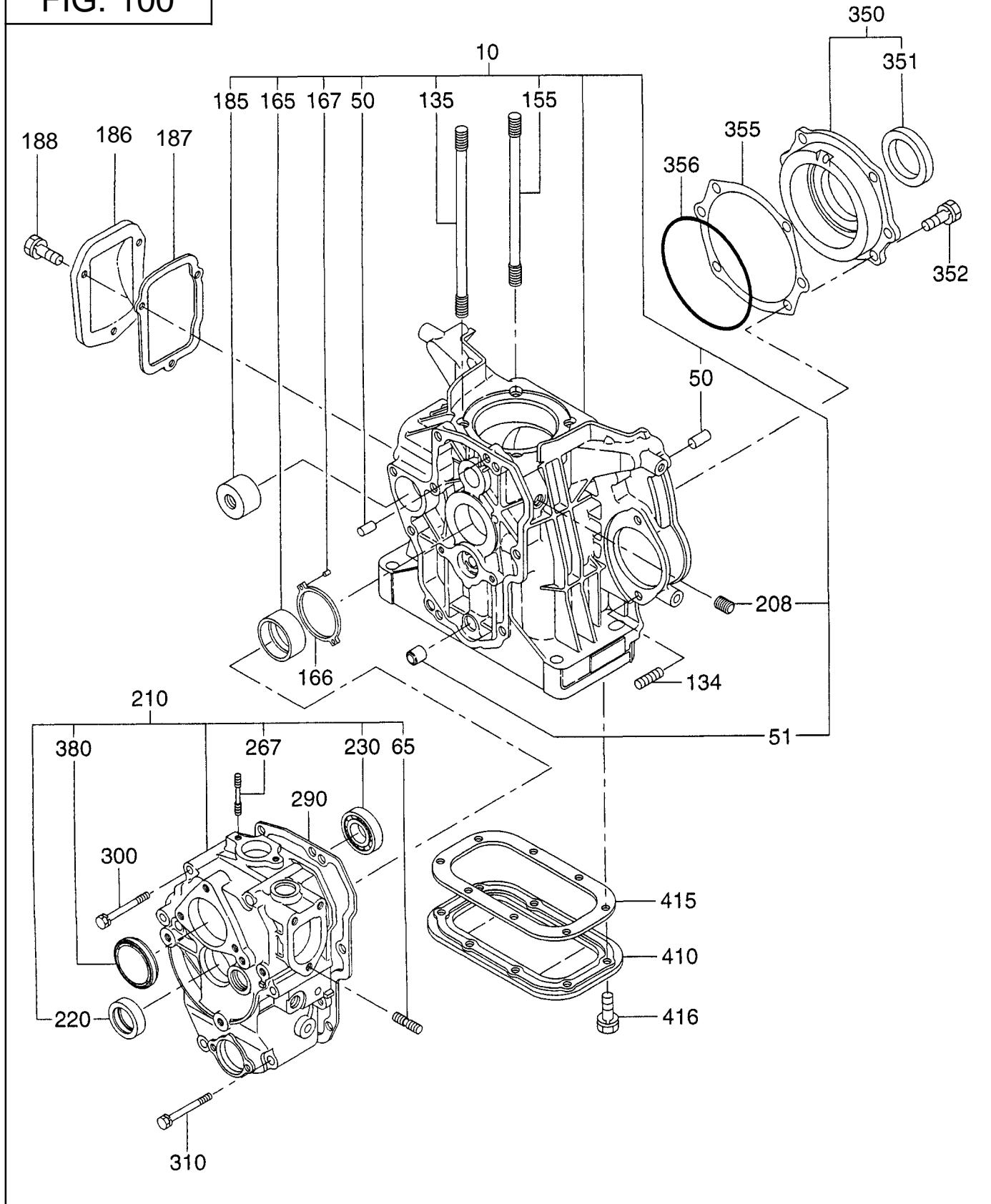
# GROUP INDEX

Group Name	Page
CRANKCASE GROUP .....	6
CRANKSHAFT GROUP .....	12
INTAKE and EXHAUST GROUP .....	16
GOVERNOR GROUP .....	22
COOLING and STARTING GROUP .....	24
FUEL, LUBRICANT GROUP .....	26
ELECTRIC DEVICE GROUP .....	34

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

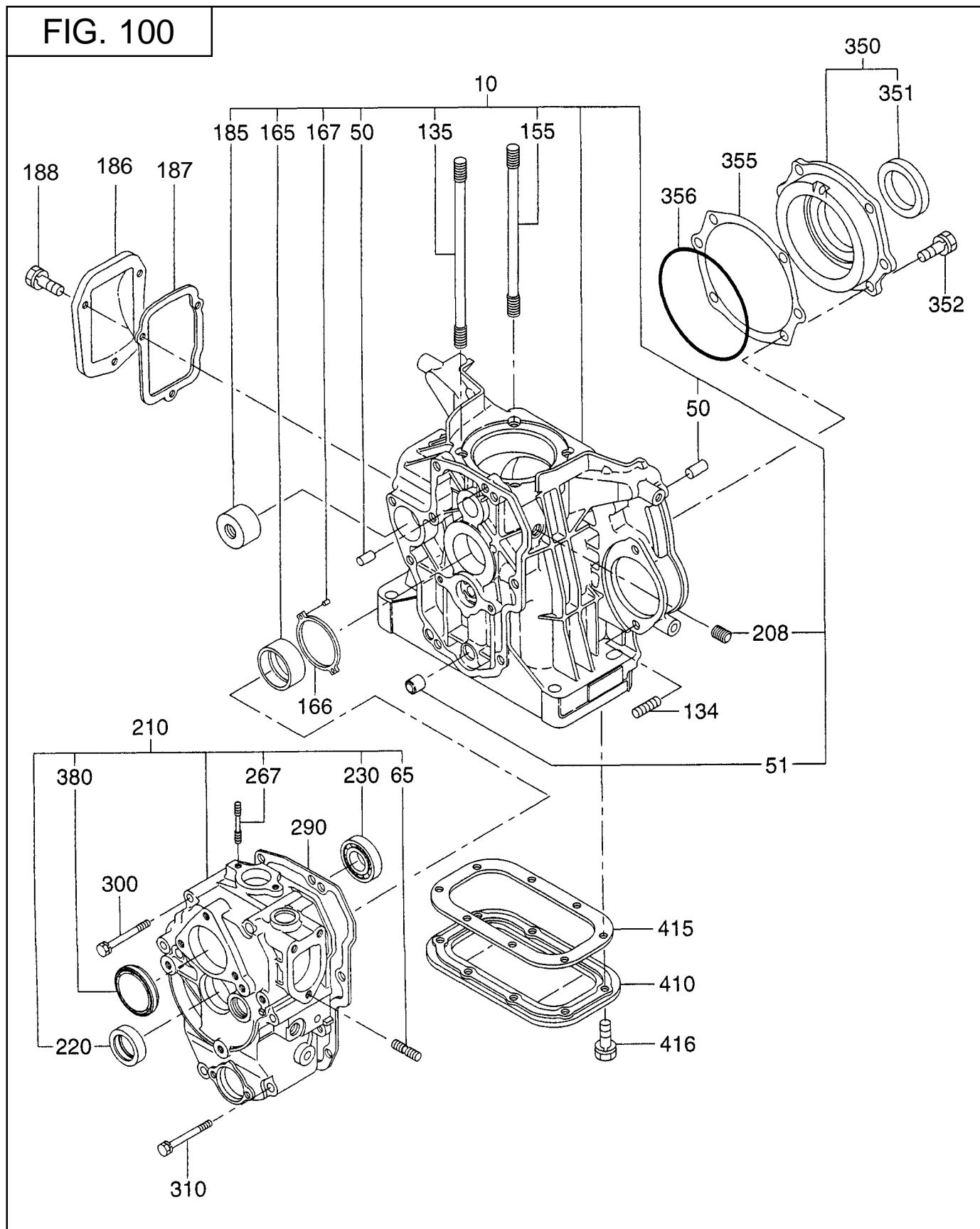


## SECTION 1 CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-10111-01	CRANKCASE CP	1	DY30		100
	228-10115-01	CRANKCASE CP	1	DY30, Electric Start		100
10	229-10111-01	CRANKCASE CP	1	DY35		100
	229-10115-01	CRANKCASE CP	1	DY35, Electric Start		100
10	231-10108-11	CRANKCASE CP	1	DY41 / DY42		100
	231-10110-01	CRANKCASE CP	1	DY41 / DY42, Electric Start		100
50	005-26081-80	DOWEL PIN	4			100
51	228-15003-13	PIPE KNOCK	1			100
65	001-32083-51	STUD	3			100
134	010-50800-44	STUD	2	Electric Start		100
135	228-16001-11	TENSION BOLT 1	2	DY30 / DY35		100
	231-16001-11	TENSION BOLT 1	2	DY41/ DY42		100
155	228-16002-21	TENSION BOLT 2	2	DY30 / DY35		100
	231-16002-11	TENSION BOLT 2	2	DY41 / DY42		100
165	228-15801-03	MAIN BEARING	1	STD.		100
	228-15802-03	MAIN BEARING	1	0.25mm undersize		100
	228-15803-03	MAIN BEARING	1	0.50mm undersize		100
166	228-15002-03	THRUST BEARING	1			100
167	005-19250-60	SPRING PIN	2			100
185	228-25002-03	SLEEVE, balancer	1			100
186	228-26001-01	BALANCER COVER CP	1			100
187	228-25004-03	GASKET, balancer cover	1			100
188	980-05060-10	BOLT and WASHER AY	3			100
208	212-15008-13	BLIND PLUG	1			100
210	228-11701-11	GEAR CASE COVER CP	1	DY30 / DY35		100
	231-11701-01	GEAR CASE COVER	1	DY41 / DY42		100
220	044-02200-50	OIL SEAL	1			100
230	060-03500-40	BALL BEARING	1			100
267	001-32064-50	STUD	2			100
290	228-15007-03	GASKET, case cover	1	DY30 / DY35		100
	231-15033-03	GASKET, case cover	1	DY41 / DY42		100
300	001-13088-50	BOLT and WASHER AY	4			100
310	001-13086-50	BOLT and WASHER AY	4			100
350	228-11501-11	BEARING HOUSING CP	1	DY30 / DY35		100
	228-11502-11	BEARING HOUSING CP	1	DY30 / DY35, Electric Start		100
350	231-11501-21	BEARING HOUSING CP	1	DY41 / DY42		100
	231-11502-21	BEARING HOUSING CP	1	DY41 / DY42, Electric Start		100
351	044-04000-20	OIL SEAL	1			100
352	001-13082-00	BOLT and WASHER AY	7			100
355	228-15004-03	GASKET, T= 0.1	1	Select one piece only, DY30/35		100
	228-15005-03	GASKET, T= 0.2	1	Select one piece only, DY30-35		100
	228-15006-03	GASKET, T= 0.3	1	Select one piece only, DY30/35		100

SECTION 1 CRANKCASE GROUP

FIG. 100



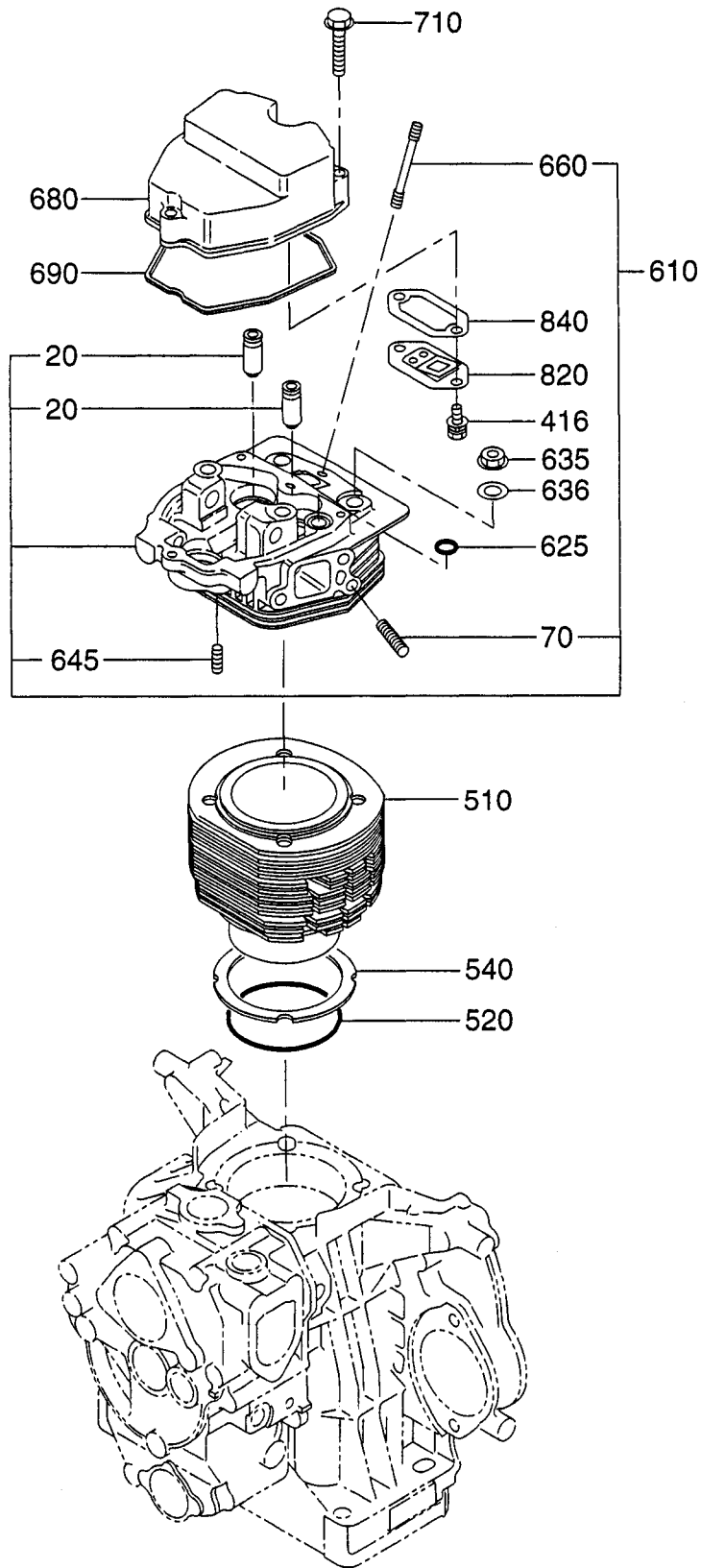


# SECTION 1      CRANKCASE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
355	231-15004-03	GASKET, T= 0.1	1	Select one piece only, DY41/42		100
	231-15005-03	GASKET, T= 0.2	1	Select one piece only, DY41/42		100
	231-15006-03	GASKET, T= 0.3	1	Select one piece only, DY41/42		100
356	228-15014-03	O RING	1	DY30 / DY35		100
	231-15014-03	O RING	1	DY41 / DY42		100
380	041-05000-11	BLIND PLATE	1			100
410	228-11601-03	OIL PAN	1	DY30 / DY35		100
	231-11601-03	OIL PAN	1	DY41 / DY42		100
415	228-15034-03	GASKET, oil pan	1	DY30 / DY35		100
415	231-15034-03	GASKET, oil pan	1	DY41 / DY42	From 3774	100
	231-15008-03	GASKET, oil pan	1	DY41 / DY42	To 3773	100
416	980-05060-10	BOLT and WASHER AY	8			100

SECTION 1 CRANKCASE GROUP

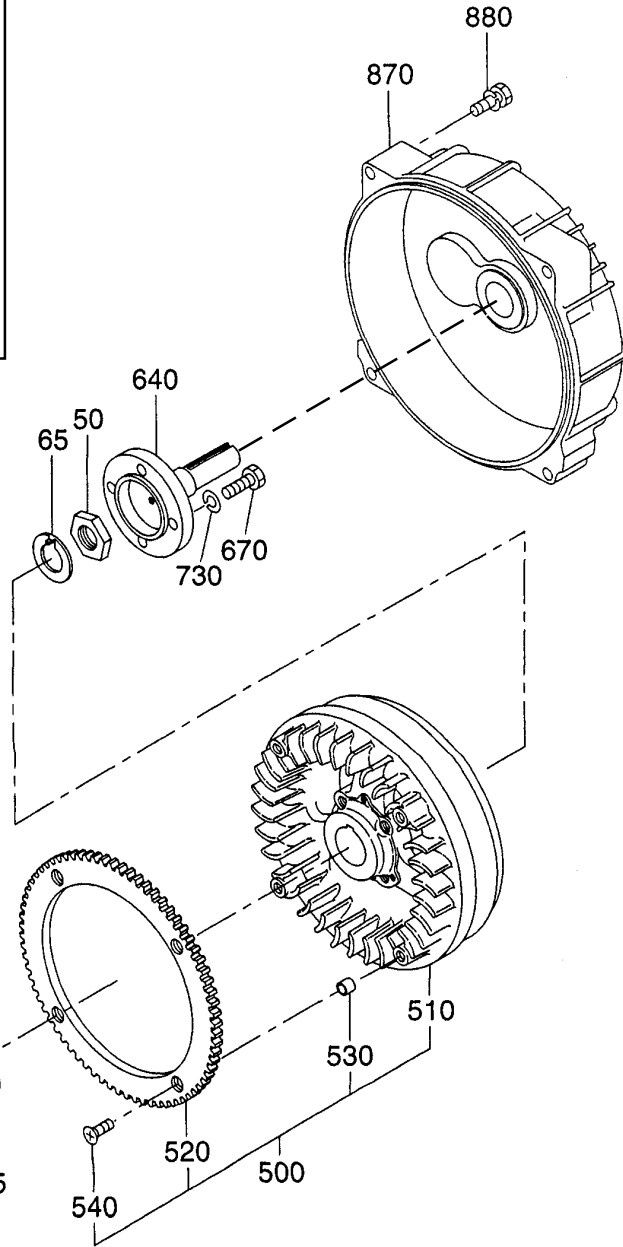
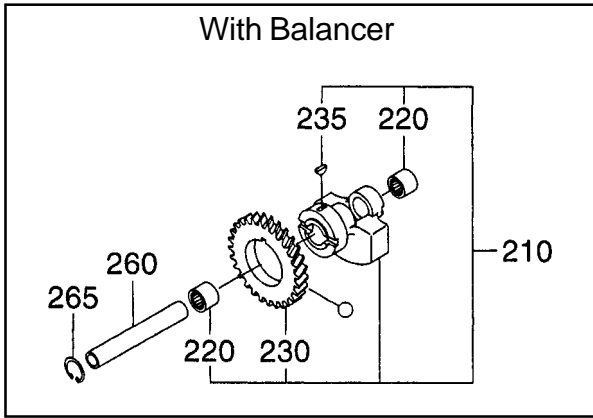
FIG. 110





SECTION 2 CRANKSHAFT GROUP

FIG. 200

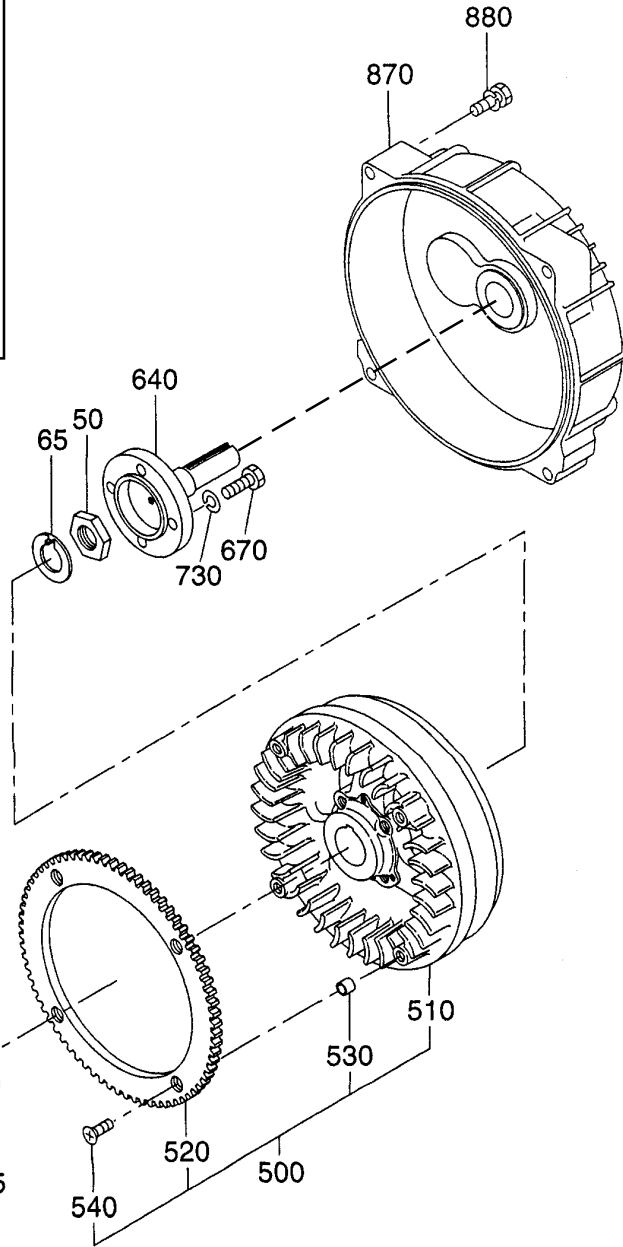
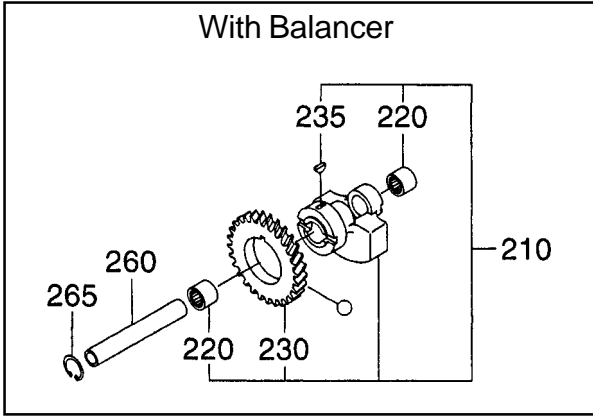


## SECTION 2 CRANKSHAFT GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-20202-11	CRANKSHAFT CP	1	DY30 / DY35		200
	262-20202-01	CRANKSHAFT CP	1	DY41 / DY42		200
25	060-04000-30	BALL BEARING	1			200
50	017-32600-10	LOCK NUT	1			200
65	020-52600-12	LOCK WASHER	1			200
70	005-30040-81	KEY	1	DY30 / DY35		200
	005-30072-01	KEY	1	DY41 / DY42		200
210	228-24301-11	BALANCER CP	1	DY30 / DY35		200
	231-24301-11	BALANCER CP	1	DY41 / DY42		200
220	061-01500-10	NEEDLE BEARING	2			200
230	228-24202-03	BALANCER GEAR 2	1	DY30 / DY35		200
	231-24202-03	BALANCER GEAR 2	1	DY41 / DY42		200
235	005-32042-01	WOODRUFF KEY	1			200
260	228-24101-03	BALANCER SHAFT	1			200
265	003-14150-00	SNAP RING, inner	1			200
310	228-22501-10	CONNECTING ROD AY	1	DY30 / DY35		200
	262-22501-00	CONNECTING ROD AY	1	DY42		200
	231-22501-00	CONNECTING ROD AY	1	DY41		200
320	228-23001-13	CONNECTING ROD BOLT	2	DY30 / DY35		200
	231-23001-13	CONNECTING ROD BOLT	2	DY41 / DY42		200
350	228-23301-03	PISTON PIN	1	DY30 / DY35		200
350	262-23301-03	PISTON PIN	1	DY42		200
	228-23301-03	PISTON PIN	1	DY41		200
360	228-23401-43	PISTON	1	STD., DY30		200
	228-23402-43	PISTON	1	0.25mm oversize, DY30		200
	228-23403-43	PISTON	1	0.50mm oversize, DY30		200
360	229-23401-63	PISTON	1	STD., DY35		200
	229-23402-63	PISTON	1	0.25mm oversize, DY35		200
	229-23403-63	PISTON	1	0.50mm oversize, DY35		200
360	262-23401-03	PISTON	1	STD., DY42		200
	262-23402-03	PISTON	1	0.25mm oversize, DY42		200
	262-23403-03	PISTON	1	0.50mm oversize, DY42		200
360	231-23401-43	PISTON	1	STD., DY41		200
	231-23402-43	PISTON	1	0.25mm oversize, DY41		200
	231-23403-43	PISTON	1	0.50mm oversize, DY41		200
370	228-23501-07	PISTON RING SET	1	STD., DY30		200
	228-23502-07	PISTON RING SET	1	0.25mm oversize, DY30		200
	228-23503-07	PISTON RING SET	1	0.50mm oversize, DY30		200
370	229-23501-27	PISTON RING SET	1	STD., DY35/DY41/DY42		200
	229-23502-27	PISTON RING SET	1	0.25mm oversize, DY35/41/42		200
	229-23503-27	PISTON RING SET	1	0.50mm oversize, DY35/41/42		200
380	056-52100-10	CLIP	2	DY30 / DY35		200
	233-25002-03	CLIP	2	DY41 / DY42		200

SECTION 2 CRANKSHAFT GROUP

FIG. 200

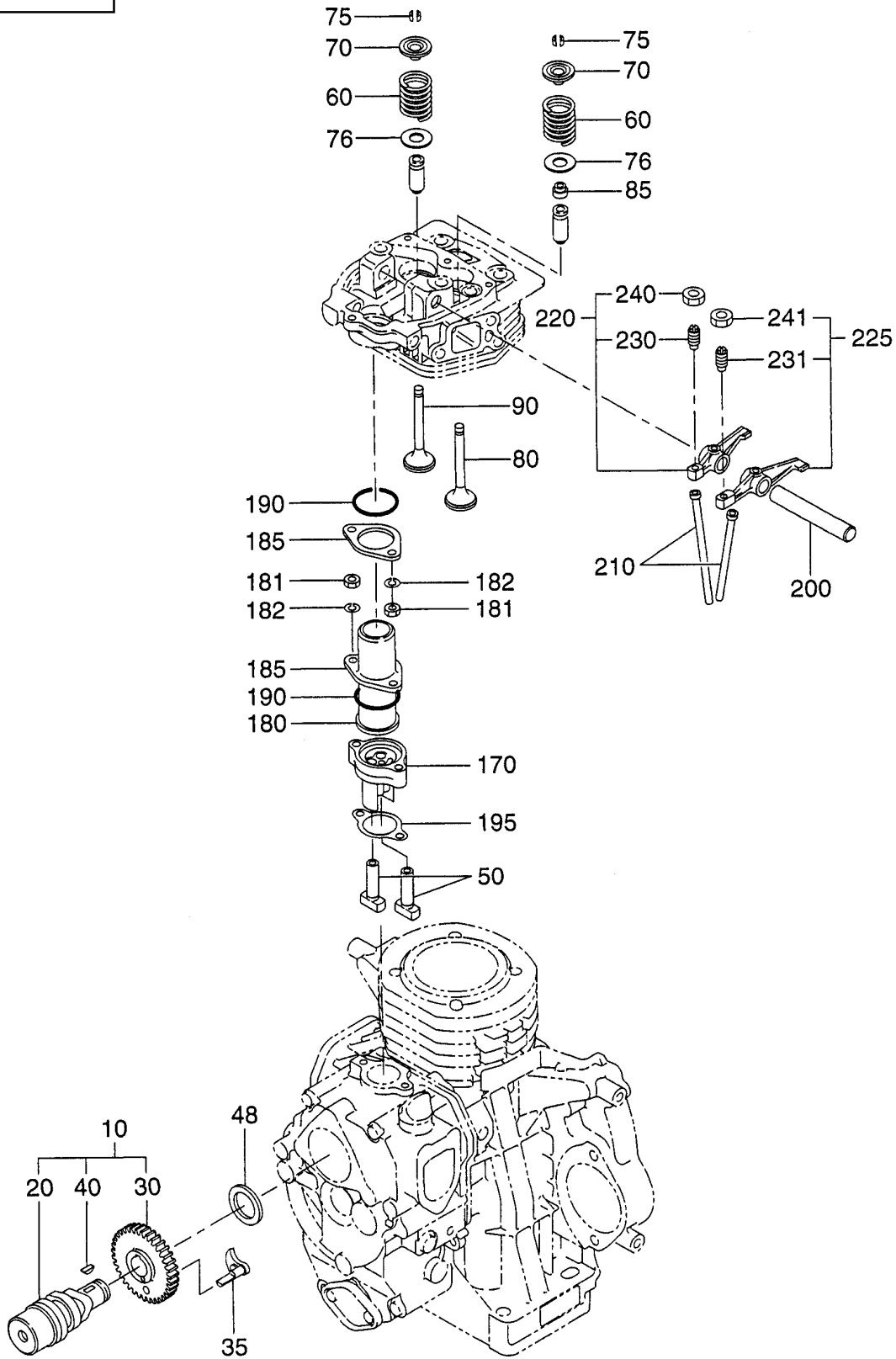


**SECTION 2      CRANKSHAFT GROUP**

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
395	228-22801-13	LARGE END BEARING	2	STD.		200
	228-22802-13	LARGE END BEARING	2	0.25mm undersize		200
	228-22803-13	LARGE END BEARING	2	0.50mm undersize		200
500	228-22421-21	FLYWHEEL CP	1	DY30 / DY35		200
	262-22401-01	FLYWHEEL CP	1	DY41 / DY42		200
510	228-22420-23	FLYWHEEL	1	DY30 / DY35		200
	262-22401-03	FLYWHEEL	1	DY41 / DY42		200
520	228-71001-03	RING GEAR	1	Electric Start		200
530	243-15011-03	PIPE KNOCK	2	Electric Start		200
540	004-11082-50	SCREW	4	Electric Start		200
640	228-24406-03	DRIVING SHAFT	1	STD. 1" key, 3/8"-24UNF		200
	228-24407-03	DRIVING SHAFT	1	Generator, SAE Taper		200
	228-24408-03	DRIVING SHAFT	1	Pump, 1" threaded		200
	228-24401-03	DRIVING SHAFT	1	Metric 25mm key, M10 X 1.5		200
	228-24402-13	DRIVING SHAFT	1	Generator, Metric Taper		200
	228-24403-03	DRIVING SHAFT	1	Metric Pump, 25mm threaded		200
670	001-67103-00	BOLT	4			200
730	003-20100-00	SPRING WASHER	4			200
870	228-17911-23	ADAPTER 3	1	STD.		200
	228-17821-03	ADAPTER	1	Generator		200
	228-17920-13	ADAPTER 4	1	Pump		200
880	001-13086-00	BOLT and WASHER AY	4			200

SECTION 3 INTAKE and EXHAUST GROUP

FIG. 300



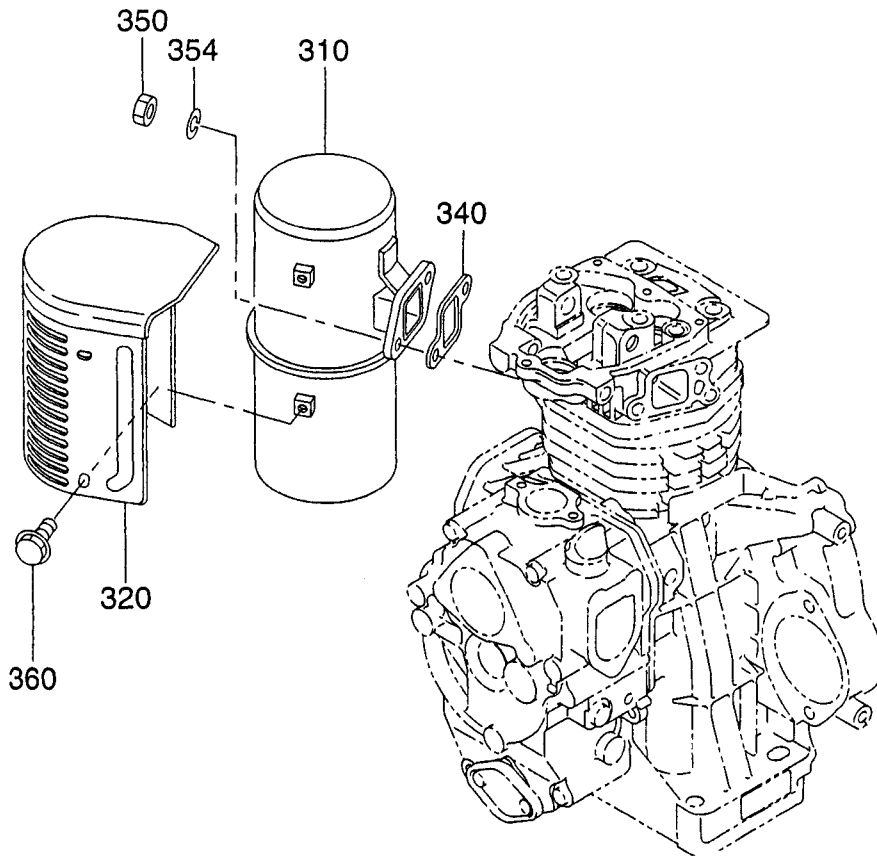


### SECTION 3 INTAKE and EXHAUST GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-31604-00	CAMSHAFT AY	1			300
20	228-31604-01	CAMSHAFT CP	1			300
30	228-33222-01	CAMSHAFT GEAR CP	1			300
35	228-35561-03	RELEASE LEVER	1			300
40	005-32042-01	WOODRUFF KEY	1			300
48	023-02000-20	SPACER, T= 0.8	1	Select one piece only		300
	023-02000-30	SPACER, T= 1.0	1	Select one piece only		300
	023-02000-40	SPACER, T= 1.2	1	Select one piece only		300
50	228-33301-03	TAPPET	2			300
60	228-33601-03	VALVE SPRING	2			300
70	228-33701-03	SPRING RETAINER	2			300
75	228-33801-03	RETAINER LOCK	4	DY30 / DY35		300
	262-33801-03	RETAINER LOCK	4	DY41 / DY42		300
76	020-01500-30	WASHER	2			300
80	228-33401-13	INTAKE VALVE	1			300
85	228-35003-03	VALVE STEM SEAL	1	DY30 / DY35		300
	262-35001-03	VALVE STEM SEAL	1	DY41 / DY42		300
90	228-33501-03	EXHAUST VALVE		DY30 / DY35		300
	262-33501-03	EXHAUST VALVE	1	DY41 / DY42		300
170	228-35701-13	TAPPET GUIDE	1			300
180	228-35603-11	PUSH ROD SLEEVE	1	DY30 / DY35		300
	231-35603-11	PUSH ROD SLEEVE	1	DY41 / DY42		300
181	002-18060-00	NUT	4			300
182	003-20060-00	SPRING WASHER	4			300
185	228-35801-01	PLATE CP, push rod	2			300
190	024-03200-70	O RING	2			300
195	228-35013-03	GASKET, tappet guide	1			300
200	228-35004-03	ROCKER SHAFT	1			300
210	228-35005-03	PUSH ROD	2	DY30 / DY35		300
	231-35005-03	PUSH ROD	2	DY41 / DY42		300
220	228-36201-01	EXHAUST ROCKER ARM CP	1			300
225	228-36301-01	INTAKE ROCKER ARM CP	1			300
230	014-90600-80	ADJUSTING SCREW	1			300
231	014-90600-80	ADJUSTING SCREW	1			300
240	017-00600-80	NUT	1			300
241	017-00600-80	NUT	1			300

SECTION 3 INTAKE and EXHAUST GROUP

FIG. 310



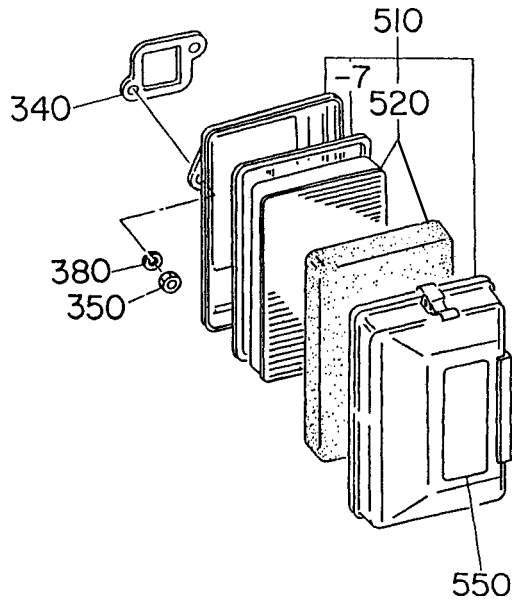
**SECTION 3      INTAKE and EXHAUST GROUP**

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
310	228-30105-01	MUFFLER CP	1			310
320	228-34201-11	MUFFLER COVER CP	1			310
340	228-35006-03	GASKET	1			310
350	002-19080-00	NUT	2			310
354	003-20080-00	SPRING WASHER	2			310
360	011-00600-10	FLANGE BOLT	4			310

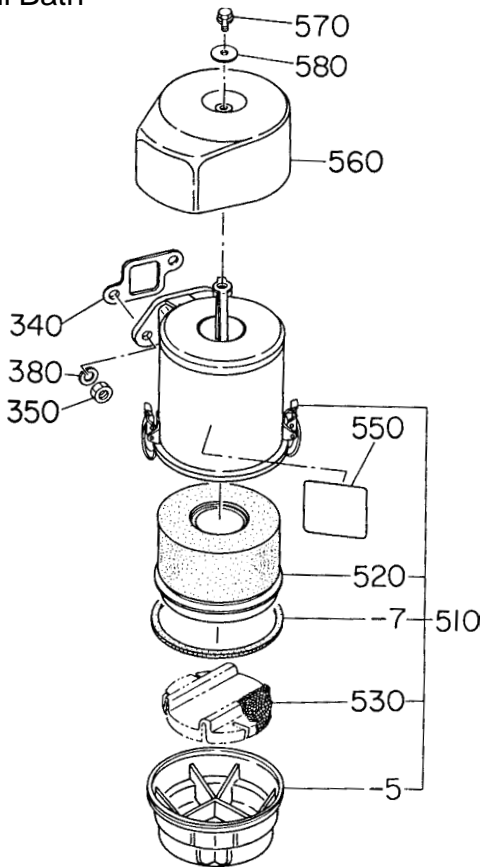
**SECTION 3 INTAKE and EXHAUST GROUP**

**FIG. 320**

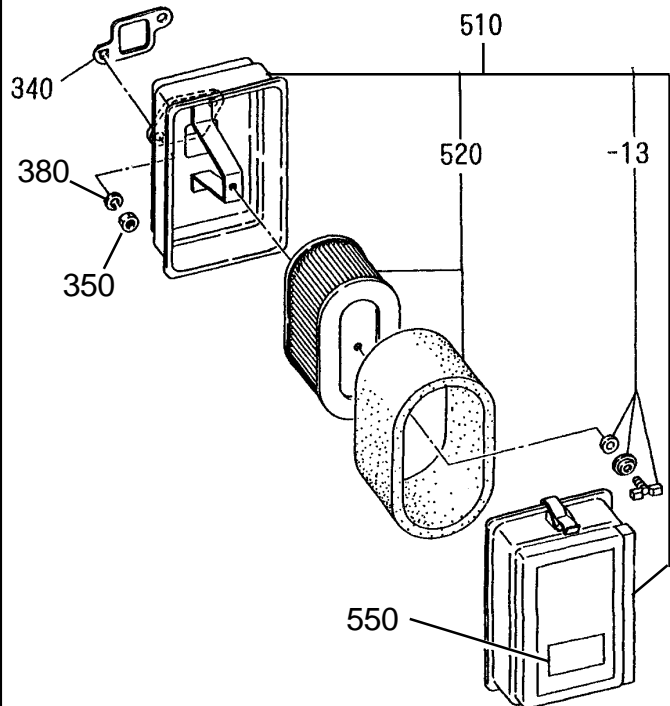
**A** STD. 2-Stage  
Flat Pleated



**B** Oil Bath



**C** 2- Stage Oval

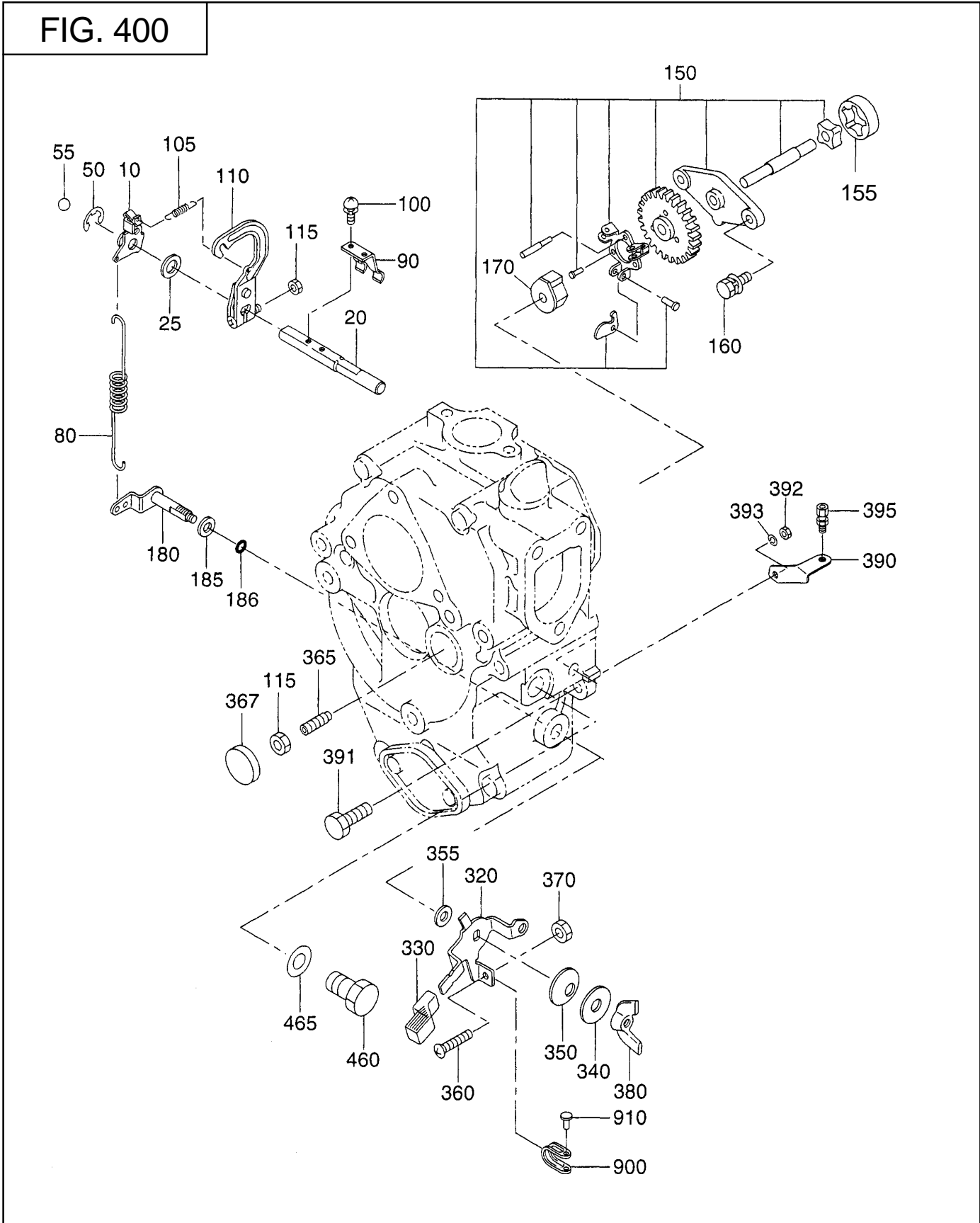


**SECTION 3 INTAKE and EXHAUST GROUP**

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
340	228-35006-03	GASKET, muffler	1			320
350	002-18080-00	NUT	2			320
380	003-20080-00	SPRING WASHER	2			320
510	228-32801-00	AIR CLEANER AY	1	STD. 2 - Stage, flat pleated		320A
	231-32601-20	AIR CLEANER AY	1	Oil Bath		320B
	262-32601-00	AIR CLEANER AY	1	2- Stage, oval, DY41/42 only		320C
-5	228-32710-08	OIL PAN CP	1			320B
-7	228-32805-08	PACKING	1			320A
	228-32720-08	PACKING	1			320B
-13	246-32653-08	WING NUT CP	1			320C
520	228-32801-07	ELEMENT	1	STD. 2-Stage, flat pleated		320A
	228-32600-08	ELEMENT	1	Oil Bath		320B
	262-32601-07	ELEMENT	1	2-Stage, oval		320C
530	228-32601-18	ELEMENT	1			320B
550	228-92301-03	LABEL, air cleaner	1			320A
	228-92306-03	LABEL, air cleaner	1			320B
	243-72305-03	LABEL, air cleaner	1			320C
560	231-35009-03	AIR CLEANER CAP	1			320B
570	980-05060-10	BOLT and WASHER	1			320B
580	020-00600-20	WASHER	1			320B

SECTION 4 GOVERNOR GROUP

FIG. 400

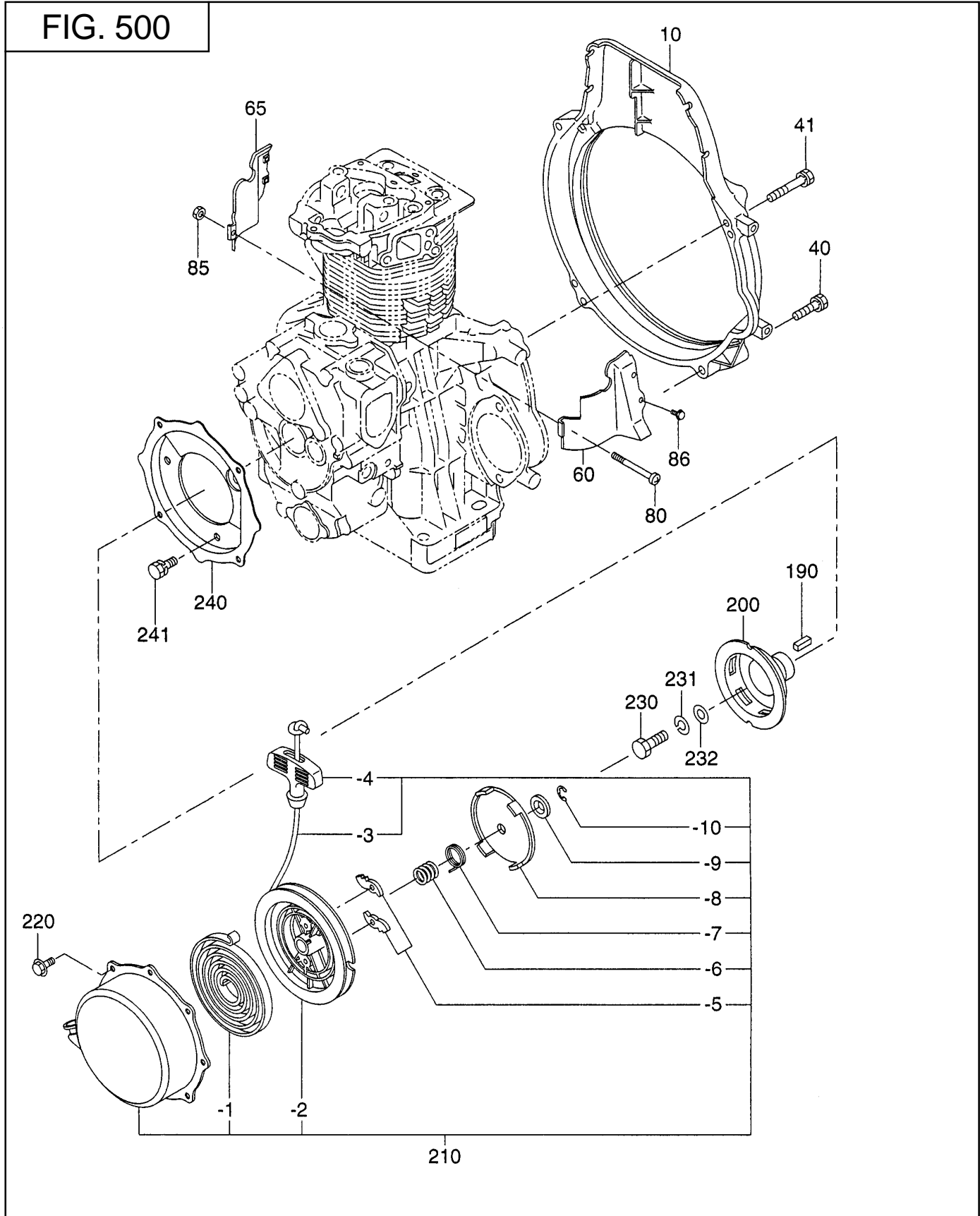


# SECTION 4 GOVERNOR GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-42302-03	GOVERNOR LEVER 1	1			400
20	228-42201-03	GOVERNOR SHAFT	1			400
25	003-10100-00	WASHER	1			400
50	003-13080-00	CLIP	1			400
55	045-00600-10	STEEL BALL	1			400
80	228-42501-23	GOVERNOR SPRING	1			400
90	228-42101-23	GOVERNOR YOKE	1			400
100	004-35051-20	SCREW and WASHER AY	2			400
105	228-45001-33	START SPRING	1			400
110	228-42310-02	GOVERNOR LEVER 2	1			400
115	002-18060-00	NUT	2			400
150	228-41701-30	GOVERNOR PLATE AY	1			400
155	228-63902-03	OIL PUMP, outer	1			400
160	001-13062-00	BOLT and WASHER AY	2			400
170	228-41910-01	GOVERNOR SLEEVE CP	1			400
180	228-42904-02	CONTROL LINK	1			400
185	023-00800-10	SPACER	1			400
186	006-26100-50	O RING	1			400
320	231-43311-01	SPEED CONTROL 1 CP	1			400
330	228-45003-03	KNOB	1			400
340	020-00800-50	WASHER	1			400
350	020-00800-10	WASHER	1			400
355	021-70800-10	FRICTION WASHER	1			400
360	004-31063-50	SCREW	1			400
365	014-90600-70	ADJUSTING SCREW	1			400
367	041-12200-10	BLIND PLUG	1			400
370	002-18060-00	NUT	1			400
380	017-90800-12	WING NUT	1			400
390	228-44201-01	WIRE BRACKET 1 CP	1			400
391	001-65061-60	BOLT	1			400
392	002-18060-00	NUT	1			400
393	003-20600-00	SPRING WASHER	1			400
395	014-90600-40	ADJUSTING SCREW	1			400
460	040-11200-30	PLUG	1			400
465	003-70120-00	GASKET, aluminum	1			400
900	228-45004-03	LOCK PLATE	1			400
910	033-00500-10	RIVET	1			400

SECTION 5 COOLING and STARTING GROUP

FIG. 500



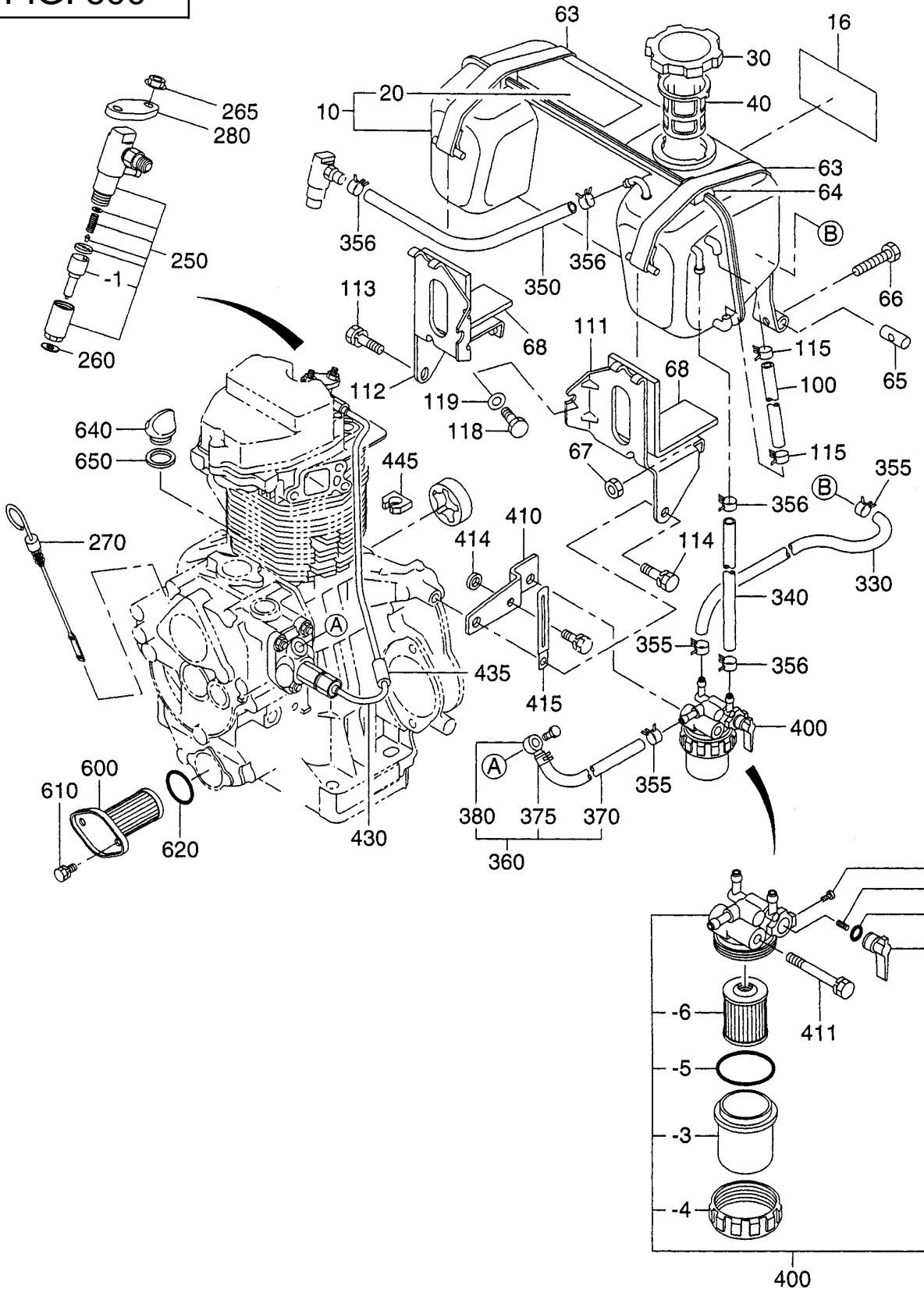


**SECTION 5 COOLING and STARTING GROUP**

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-51101-03	BLOWER HOUSING	1	DY30 / DY35		500
	231-51202-13	BLOWER HOUSING	1	DY41 / DY42		500
40	001-13084-00	BOLT and WASHER AY	2			500
41	001-13085-50	BOLT and WASHER AY	2			500
60	228-52601-12	CYLINDER BAFFLE 1	1	DY30 / DY35		500
	231-52601-12	CYLINDER BAFFLE 1	1	DY41 / DY42		500
65	228-52701-12	CYLINDER BAFFLE 2	1	DY30 / DY35		500
	231-52701-12	CYLINDER BAFFLE 2	1	DY41 / DY42		500
80	014-00500-40	SCREW, panhead	1			500
85	002-17050-00	NUT	1			500
86	011-00600-20	FLANGE BOLT	4			500
190	005-30040-81	KEY	1			500
200	228-54201-21	STARTING PULLY, compl.	1			500
210	228-50101-00	RECOIL STARTER AY	1			500
-1	106-50116-08	SPIRAL SPRING	1			500
-2	107-50121-08	REEL, compl.	1			500
-3	228-50110-08	STARTER ROPE	1			500
-4	206-50101-08	STARTER KNOB	1			500
-5	106-50128-18	RATCHET	2			500
-6	106-50132-08	FRICTION SPRING	1			500
-7	106-50136-18	RETURN SPRING	1			500
-8	106-50144-08	FRICTION PLATE	1			500
-9	106-50185-08	THRUST WASHER	1			500
-10	106-50186-08	CLIP	1			500
220	011-00600-10	FLANGE BOLT	4			500
230	001-66102-00	BOLT	1			500
231	003-20100-00	SPRING WASHER	1			500
232	803011070	WASHER	1			500
240	228-55201-02	RECOIL COVER	1			500
241	001-13082-00	BOLT and WASHER AY	3			500

SECTION 6 FUEL, LUBRICANT GROUP

FIG. 600



## SECTION 6 FUEL, LUBRICANT GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-60101-41	FUEL TANK CP	1			600
16	228-91801-23	LABEL, trademark	1	DY30		600
	229-91714-03	LABEL, trademark	1	DY35		600
	231-91701-03	LABEL, trademark	1	DY41		600
	262-91712-03	LABEL, trademark	1	DY42		600
20	228-91908-03	LABEL, instruction	1			600
30	043-04300-15	FUEL TANK CAP CP	1			600
40	064-13600-10	FUEL FILTER	1			600
63	228-65510-01	TANK BAND CP	2			600
64	228-65001-13	BAND GUIDE	2			600
65	228-65601-11	PIN CP, tank band	2			600
66	001-66064-50	BOLT	2			600
67	002-18060-00	NUT	2			600
68	228-65002-03	FELT	2			600
100	085-00500-40	VINYL PIPE	1			600
111	228-61601-11	TANK BRACKET 1 CP	1	DY30 / DY35		600
	231-61601-11	TANK BRACKET 1 CP	1	DY41 / DY42		600
112	228-61701-11	TANK BRACKET 2 CP	1	DY30 / DY35		600
	231-61701-11	TANK BRACKET 2 CP	1	DY41 / DY42		600
113	001-13082-00	BOLT and WASHER AY	1			600
114	001-13082-00	BOLT and WASHER AY	1			600
	001-13082-50	BOLT and WASHER AY	1	Electric Start		600
115	056-10800-10	HOSE CLAMP	2			600
118	001-13081-80	BOLT and WASHER AY	2			600
119	003-10080-00	WASHER	2			600
250	228-63201-10	NOZZLE HOLDER AY	1			600
-1	228-63211-08	NOZZLE	1			600
260	228-65004-03	GASKET, nozzle	1			600
265	002-38060-00	FLANGE NUT	2			600
270	228-63610-01	OIL GAUGE CP	1			600
280	243-66001-01	BRACKET CP, nozzle 1	1			600
330	085-10600-00	RUBBER PIPE	1	6 X 12 X 260		600
	085-10600-00	RUBBER PIPE	1	6 X 12 X 140, Electric Start		600
340	085-14500-00	RUBBER PIPE	1	4.5 X 9 X 90		600
350	085-14500-00	RUBBER PIPE	1	4.5 X 9 X 260		600
	085-14500-00	RUBBER PIPE	1	4.5 X 9 X 220, Electric Start		600
355	056-11100-20	HOSE CLAMP	3			600
356	056-10800-10	HOSE CLAMP	4			600
360	228-62610-01	FUEL PIPE 10 CP	1			600
	228-62611-01	FUEL PIPE 11 CP	1	Electric Start		600
370	085-10600-00	RUBBER PIPE	1	6 X 12 X 90		600
	085-10600-00	RUBBER PIPE	1	6 X 12 X 250, Electric Start		600
375	056-11100-20	HOSE CLAMP	1			600
380	052-10500-12	BANJO	1			600

SECTION 6 FUEL, LUBRICANT GROUP

FIG. 600

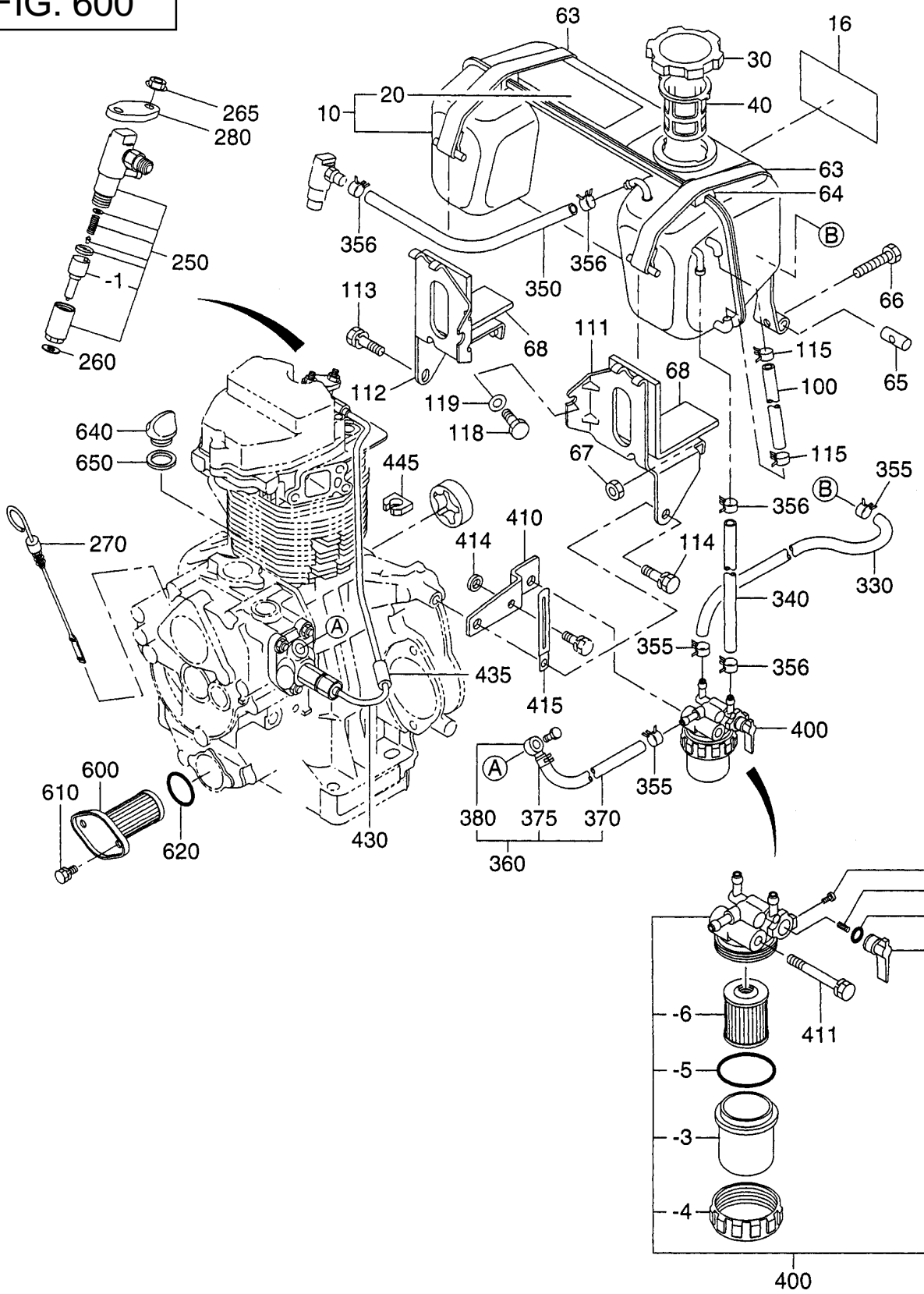




FIG. 610

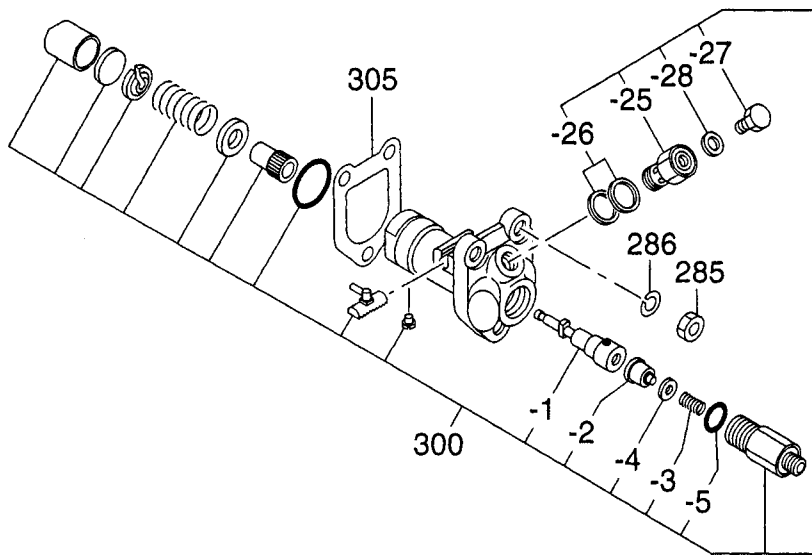
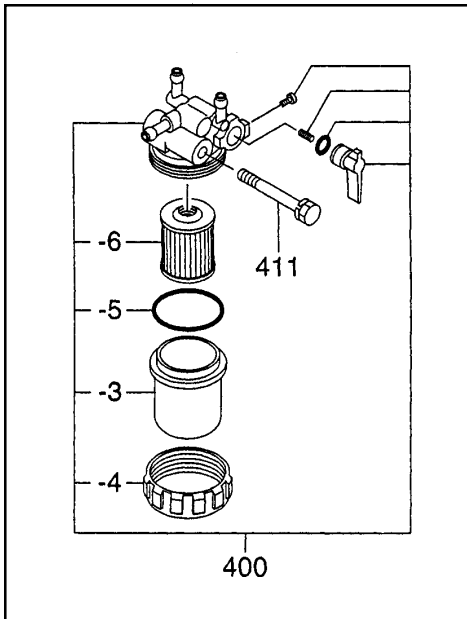
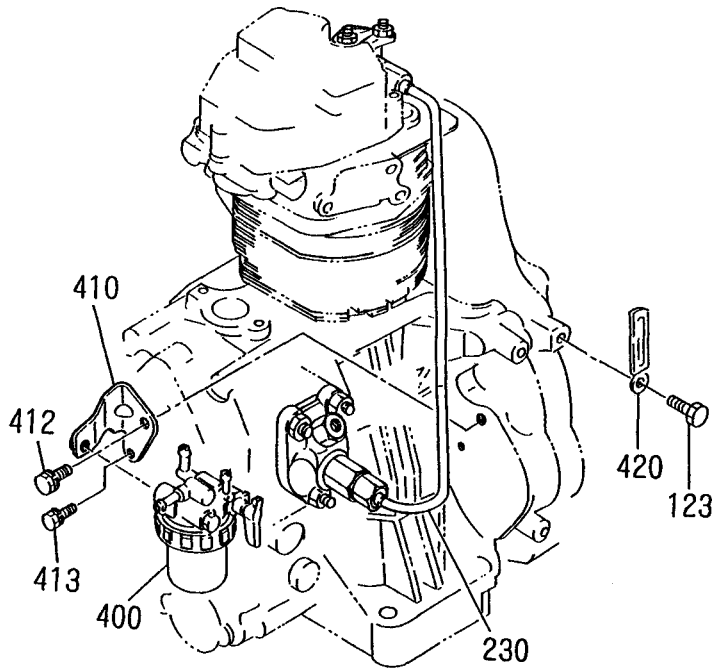




FIG. 620

Without Starting Motor





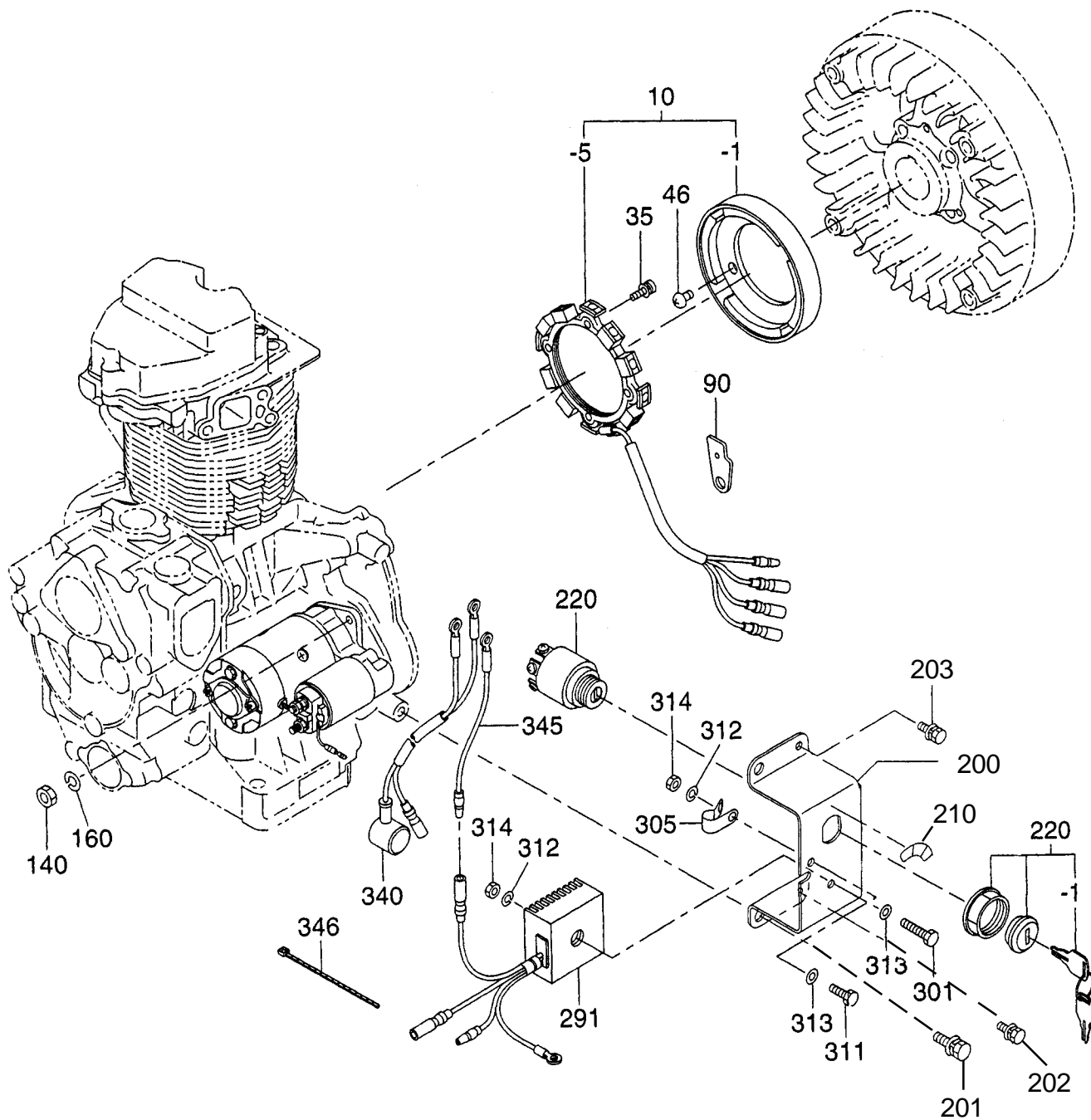
**SECTION 6**

**FUEL, LUBRICANT GROUP**

<b>REF.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY.</b>	<b>REMARKS</b>	<b>FROM-TO</b>	<b>FIG.</b>
123	001-10061-00	BOLT and WASHER AY	1			620
230	228-63302-01	INJECTION PIPE	1	DY30 / DY35		620
	231-63301-01	INJECTION PIPE, compl.	1	DY41 / DY42		620
400	228-62106-10	FUEL FILTER AY	1			620
-3	243-62101-08	CUP	1			620
-4	228-62108-08	RING NUT	1			620
-5	228-62109-08	O RING	1			620
-6	228-62110-08	ELEMENT	1			620
410	228-67630-01	FUEL FILTER BRACKET	1			620
411	001-13086-50	BOLT and WASHER AY	1			620
412	001-13082-00	BOLT and WASHER AY	1			620
413	001-13061-80	BOLT and WASHER AY	1			620
420	150-75201-03	CLAMP	1			620

SECTION 7 ELECTRIC DEVICE GROUP

FIG. 700

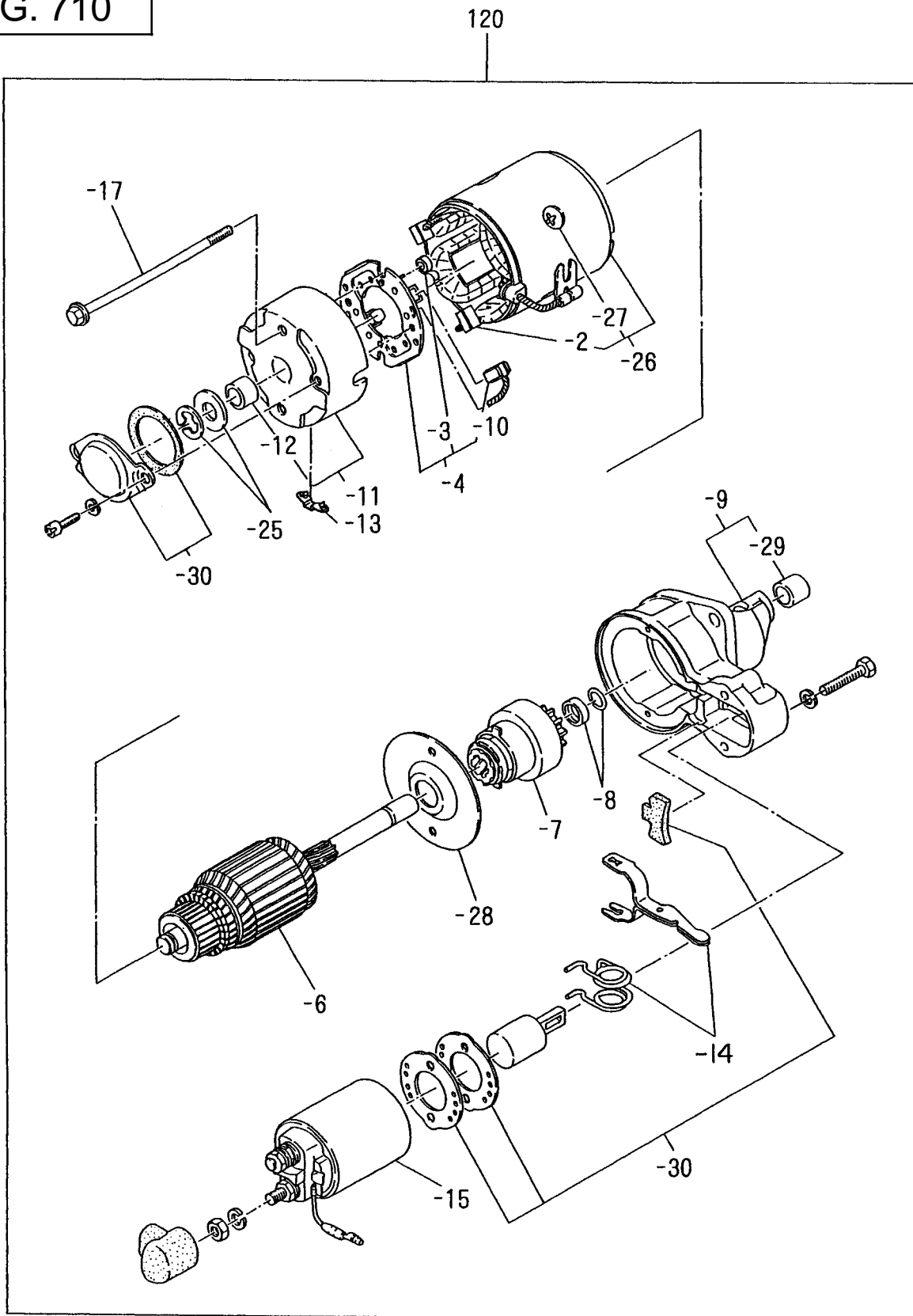


## SECTION 7 ELECTRIC DEVICE GROUP

REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.
10	228-70401-01	GENERATOR CP	1	STD. 30 watt		700
	228-70402-01	GENERATOR CP	1	45 watt		700
	228-70412-01	GENERATOR CP	1	65 watt		700
	228-70410-01	GENERATOR CP	1	180 watt		700
-1	228-70401-08	FLYWHEEL	1	STD. 30 watt		700
	228-70404-08	FLYWHEEL	1	45 watt		700
	228-70415-08	FLYWHEEL	1	65 watt		700
	228-70410-08	FLYWHEEL	1	180 watt		700
-5	228-70402-08	STATOR CP	1	STD. 30 watt		700
	228-70403-08	STATOR CP	1	45 watt		700
	228-70414-08	STATOR CP	1	65 watt		700
	228-70411-08	STATOR CP	1	180 watt		700
35	004-35041-20	SCREW and WASHER AY	4			700
46	004-11061-00	SCREW	3			700
90	228-75002-01	CLAMP CP	1			700
140	002-18080-00	NUT	2			700
160	003-20080-00	SPRING WASHER	2			700
200	228-40630-01	CONTROL BOX	1			700
201	001-13082-00	BOLT and WASHER AY	1			700
202	001-13061-20	BOLT and WASHER AY	1			700
203	001-13062-00	BOLT and WASHER AY	1			700
210	073-20010-90	LABEL, starter switch	1			700
220	066-00003-30	SWITCH	1			700
-1	066-00099-80	KEY	2			700
291	228-71901-01	REGULATOR CP	1	30 & 45 & 65 watt		700
	228-71910-01	REGULATOR CP	1	180 watt		700
301	001-65062-50	BOLT	1			700
305	056-61000-21	CLAMP	1			700
311	001-65061-00	BOLT	1			700
312	003-2060-00	SPRING WASHER	2			700
313	003-10060-00	WASHER	2			700
314	002-17060-00	NUT	2			700
340	228-73101-01	WIRE 1 CP	1			700
345	228-73108-01	WIRE 2 CP	1			700
346	056-30000-20	WIRE BAND	1			700
*	228-73122-01	WIRE 5 CP	1	180 watt only, Not Shown		

SECTION 7 ELECTRIC DEVICE GROUP - STARTER MOTOR

FIG. 710



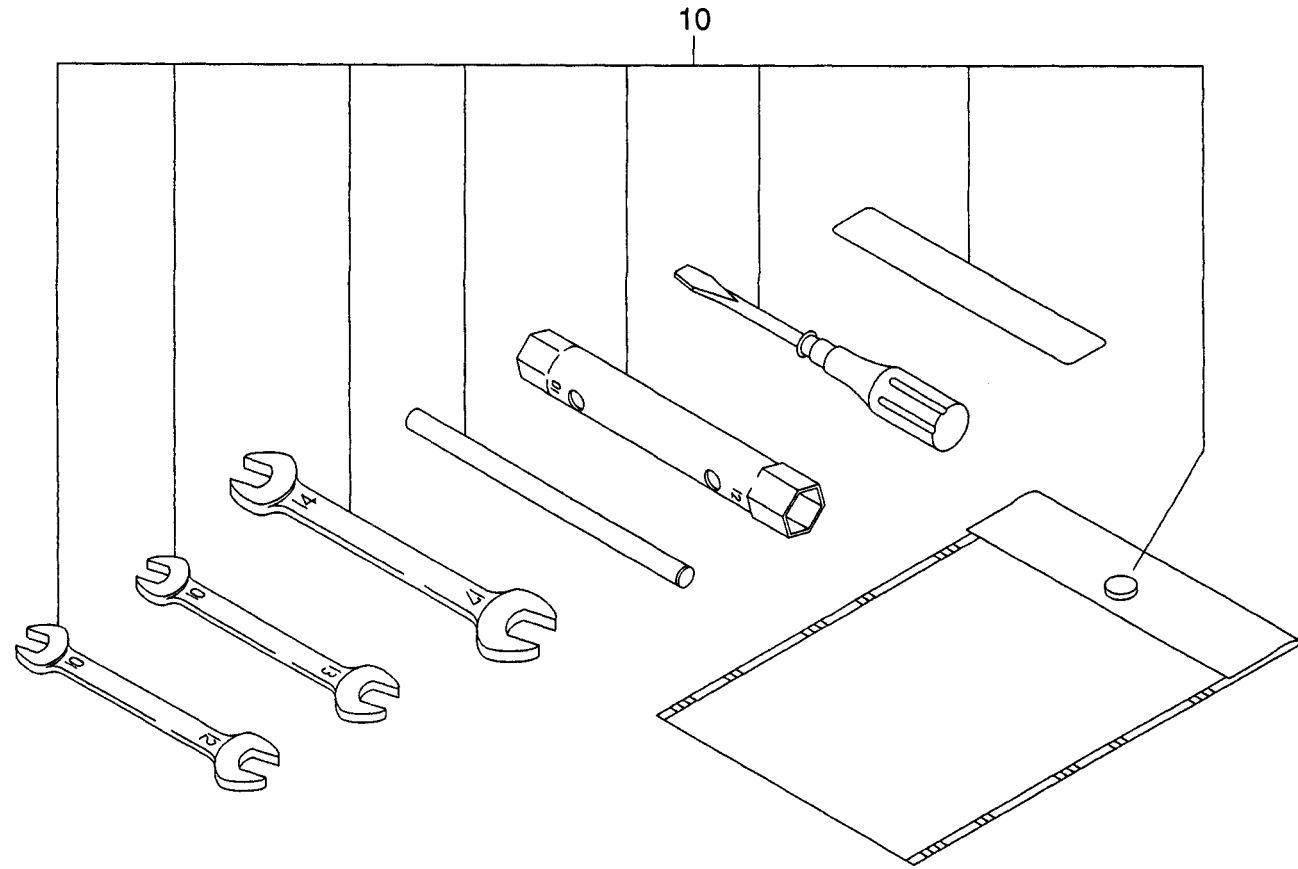
**SECTION 7**

**ELECTRIC DEVICE GROUP - STARTER MOTOR**

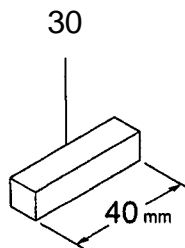
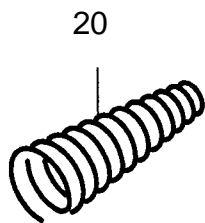
REF.	PART NO.	DESCRIPTION	QTY.	REMARKS	FROM-TO	FIG.210
120	210-70502-10	STARTING MOTOR AY	1			710
-2	210-70539-08	BRUSH (+)	2			710
-3	210-70541-08	BRUSH SPRING	4			710
-4	210-70538-08	BRUSH HOLDER	1			710
-6	210-70532-08	ARMATURE	1			710
-7	210-70544-08	PINION AY	1			710
-8	210-70534-08	PINION STOPPER SET	1			710
-9	210-70545-08	GEAR CASE AY	1			710
-10	210-70540-08	BRUSH (-)	2			710
-11	210-70537-18	REAR COVER AY	1			710
-12	210-70542-08	REAR COVER METAL	1			710
-13	210-70551-08	BLIND COVER	1			710
-14	210-70546-08	SHIFT LEVER KIT	1			710
-15	210-70548-08	MAGNETIC SWITCH AY	1			710
-17	210-70549-08	BOLT	2			710
-25	210-70533-08	THRUST WASHER KIT	1			710
-26	210-70535-08	FIELD COIL	1			710
-27	210-70508-08	SCREW	4			710
-28	210-70543-08	CENTER PLATE	1			710
-29	210-70547-08	GEAR CASE METAL	1			710
-30	210-70550-18	DUST COVER KIT	1			710

SECTION 8 ACCESSORIES GROUP

FIG. 800



LOOSE SHIP PARTS





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