

OPERATION AND PARTS MANUAL



MODEL GA4.5R/GA4.5RA PORTABLE AC GENERATOR (ROBIN GASOLINE ENGINE)

Revision #1 (11/27/06)

**THIS MANUAL MUST ACCOMPANY
THE EQUIPMENT AT ALL TIMES.**

GA-4.5R/GA-4.5RA — AC Portable Generators

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GA-4.5R/GA-4.5RA — SUGGESTED SPARE PARTS

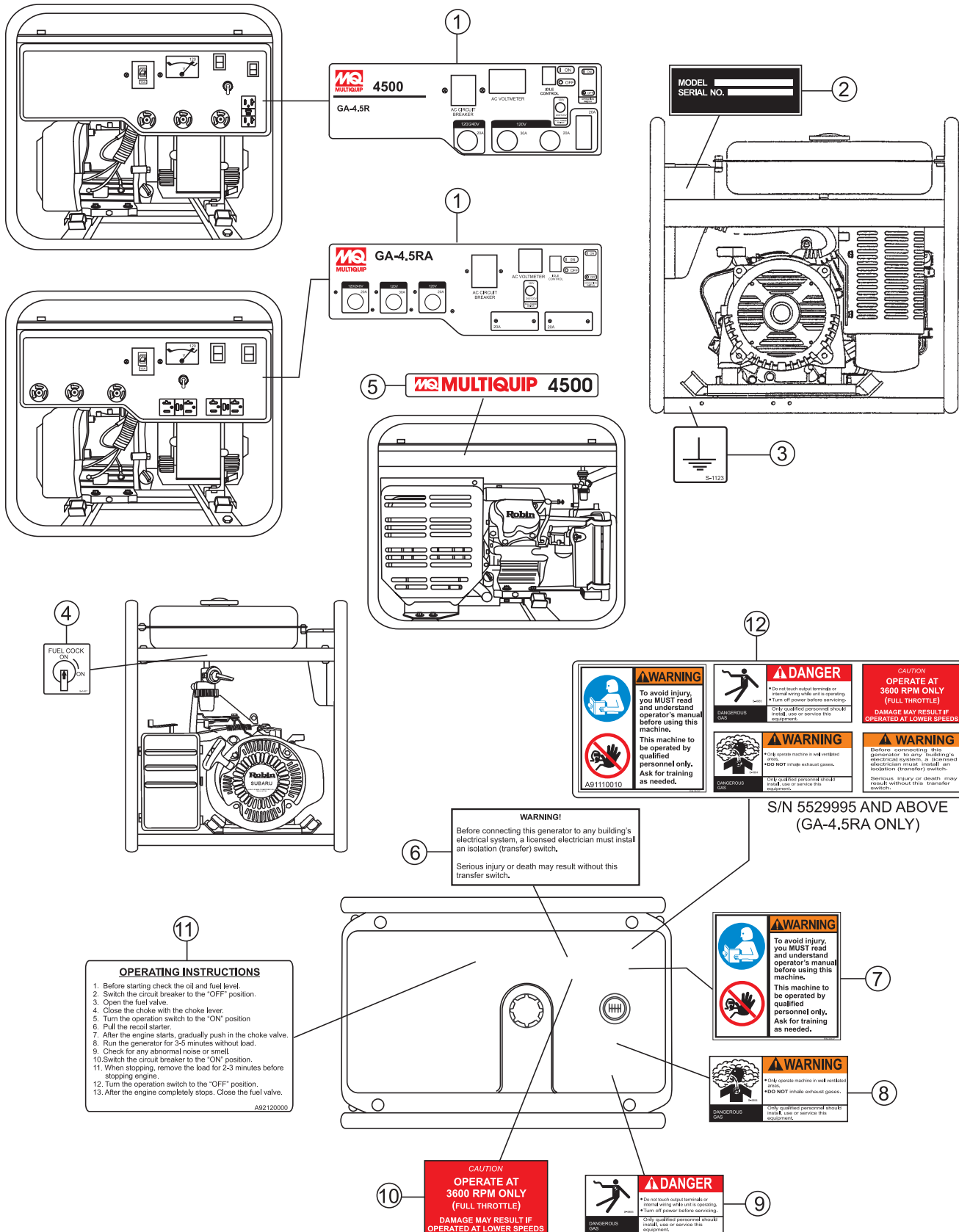
GA-4.5R/GA-4.5RA 1 TO 3 UNITS WITH ROBIN EX270D ENGINE

1 to 3 Units

Qty.	P/N	Description
1	A9924800014	CAP, FUEL TANK
1	A9924800004	FUEL FILTER, FUEL TANK
3	0650140150	SPARK PLUG
3	2793260907	ELEMENT, AIR CLEANER
1	2795011008	ROPE, RECOIL STARTER

GA-4.5R/GA-4.5RA — NAME PLATE AND DECALS

NAMEPLATE AND DECALS



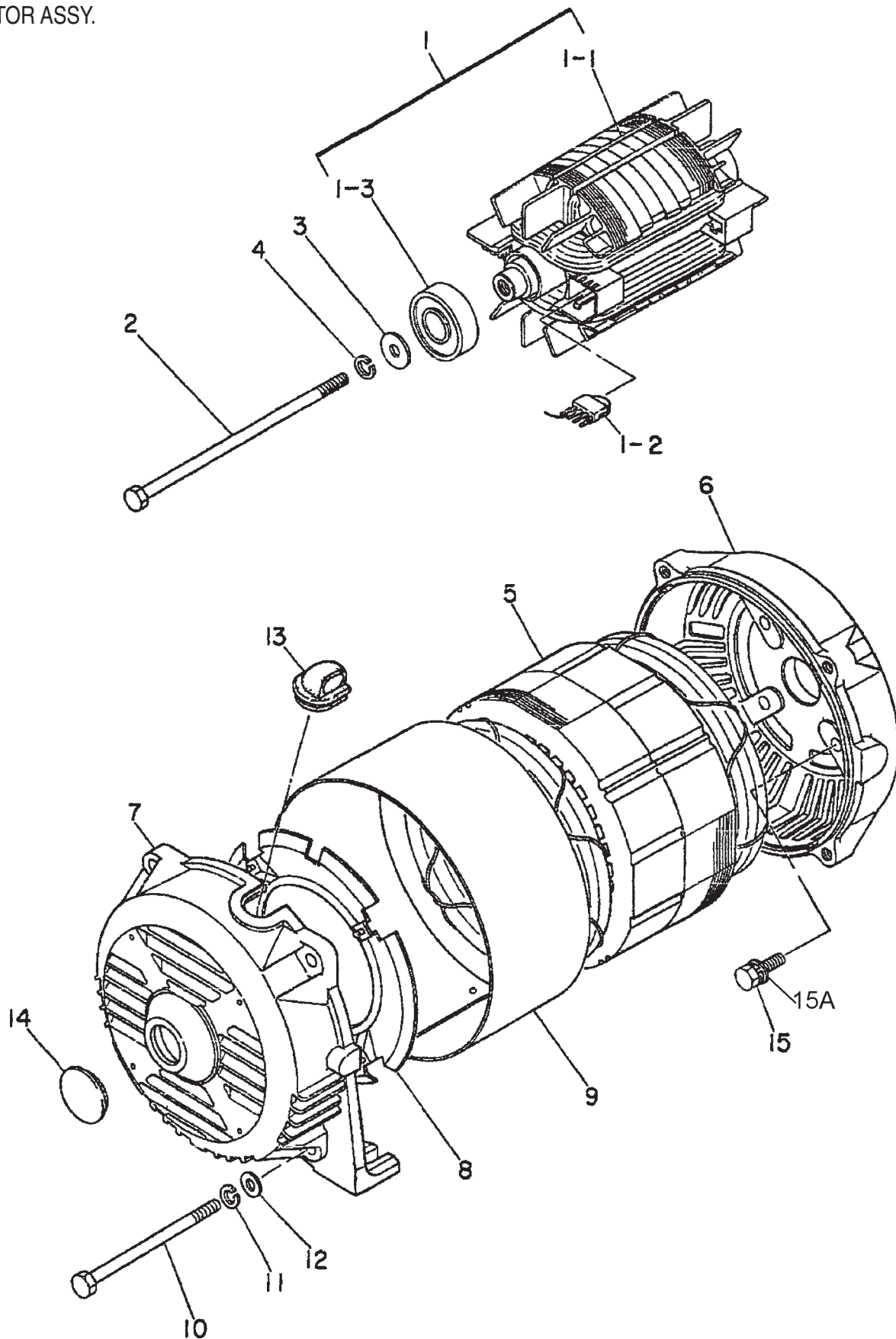
GA-4.5R/GA-4.5RA — NAME PLATE AND DECALS

NAMEPLATE AND DECALS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A4511200002	DECAL; CONTROL PANEL	1	A41120000 GA-4.5R ONLY
1	A4511200702	DECAL; CONTROL PANEL	1	A41120070 GA-4.5RA ONLY
2		NAMEPLATE	1	CONTACT MQ PARTS DEPT.
3	0800628504	DECAL; GROUND	1	S-1123
4	1630680104	DECAL; FUEL COCK	1	S-1407
5	A4561000003	DECAL; MQ MULTQUIP	1	
6	0820610404	DECAL; WARNING	1	S-3627
7	35137	DECAL; WARNING READ MANUAL	1	
8	8700611804	DECAL; WARNING DANGEROUS GAS	1	S-4984
9	8700611904	DECAL; DANGER ELECTRICAL SHOCK HAZ.	1	S-4985
10	7900636004	DECAL; CAUTION OPER. AT 3600 RPM ONLY	1	S-4461
11	A9521200004	DECAL; OPERATING INSTRUCTIONS	1	A92120000
12	A9511100103	DECAL; WARNINGS MULTIPLE	1	A91110010 GA-4.5RA ONLY
			S/N 5529995 AND ABOVE

GA-4.5R/GA-4.5RA — GENERATOR ASSY.

GENERATOR ASSY.



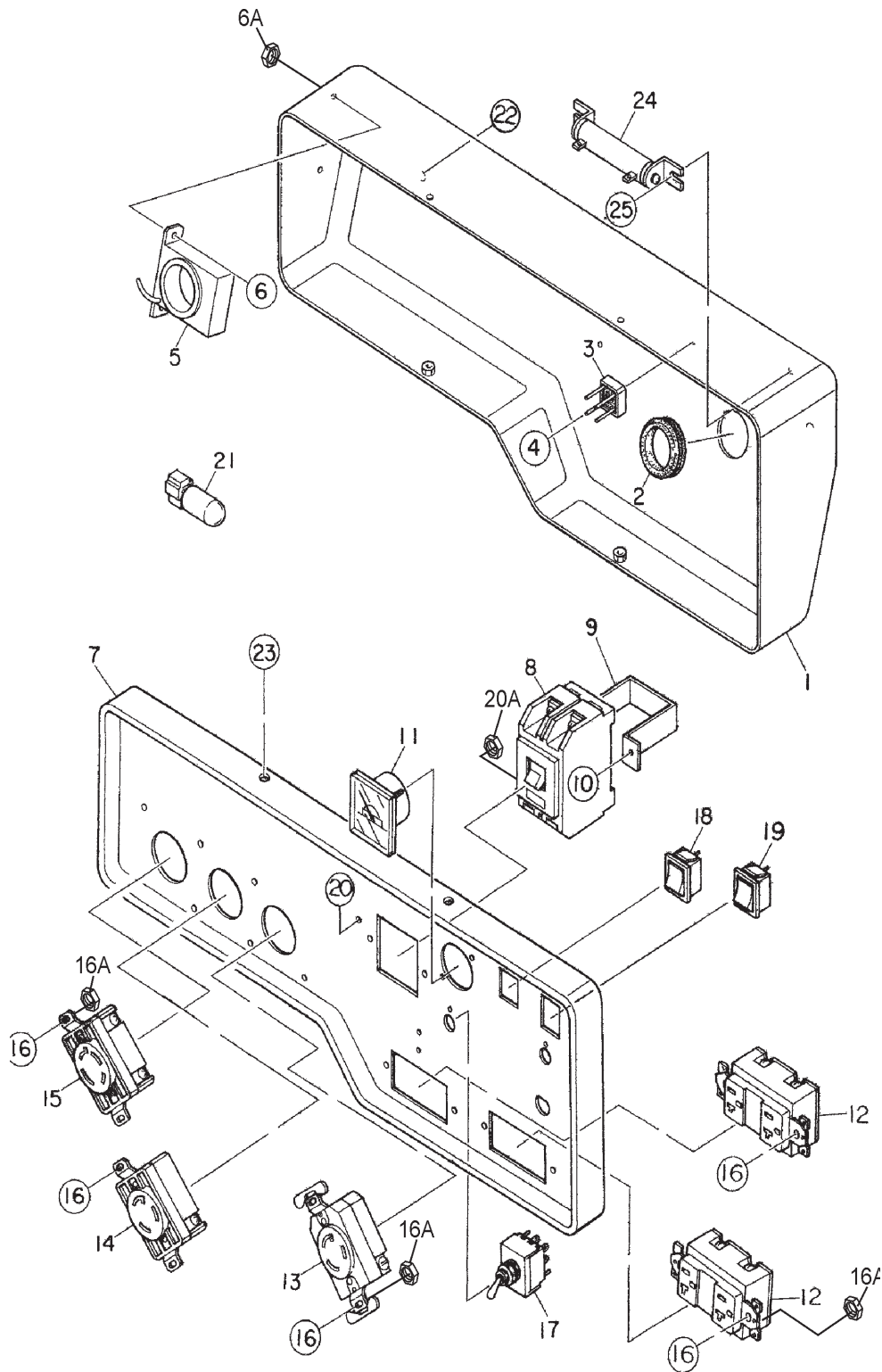
GA-4.5R/GA-4.5RA — GENERATOR ASSY.

GENERATOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A3110200003	ROTOR ASSY.	1	INCLUDES ITEMS W/*
1-1*	7661080003	FIELD COIL ASSY.	1	
1-2	0601823213	RECTIFIER	2	
1-2	0601822638	SURGE ABSORBER	2	
1-3*	0071706304	BEARING	1	
2	7661017104	SET BOLT, ROTOR	1	
3	0801086104	SET WASHER, BEARING	1	
4	0040010000	SPRING WASHER	1	
5	A4135000103	ARMATURE ASSY.	1	
6	7661315112	END BRACKET	1	
7	7871315022	END BRACKET	1	
8	7875021523	GUIDE PANEL, AIR	1	
9	7661331003	COVER	1	
10	7661344204	SET BOLT, STATOR	4	
11	0040008000	SPRING WASHER	4	
12	0041208000	PLAIN WASHER	4	
13	7871329514	GROMMET	1	
14	0601851760	CAP	1	
15	0013608020	HEX. HEAD BOLT	4	
15A	0040008000	WASHER, LOCK	4	

MQ GA-4.5R — CONTROL BOX ASSY.

CONTROL BOX ASSY. (GA-4.5R ONLY)



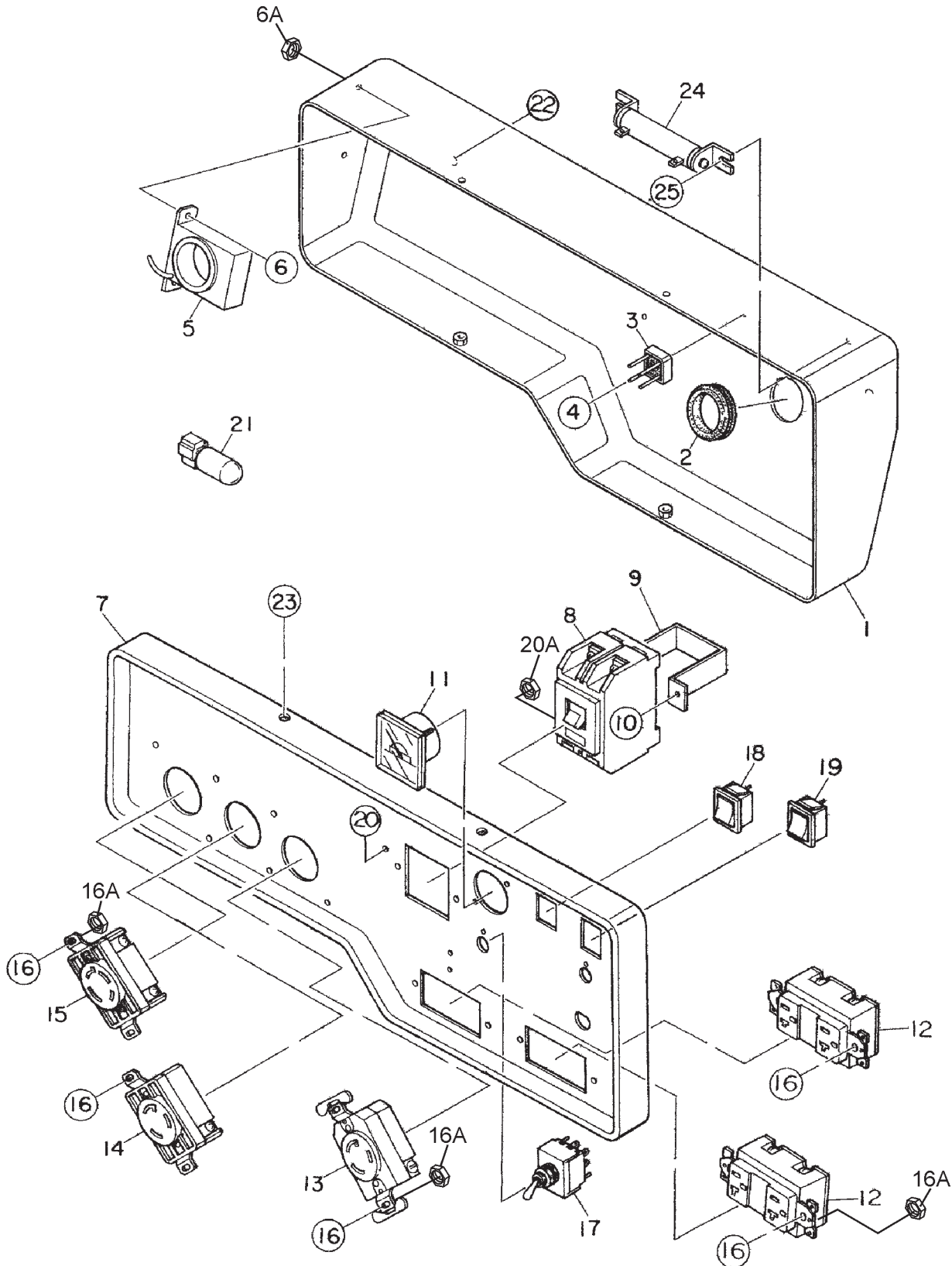
MQ GA-4.5R — CONTROL BOX ASSY.

CONTROL BOX ASSY. (GA-4.5R ONLY)

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A3214000003	CONTROL BOX	1	
2	0601850102	GROMMET	1	
3	0601823204	RECTIFIER, S5VB60	2	
4	0027103012	MACHINE SCREW	2	
5	0601823853	SLOW-DOWN UNIT	1	
6	0027104010	MACHINE SCREW	2	
6A	0207004000	HEX NUT	2	
7	A3224000003	CONTROL PANEL	1	
8	0601802651	CIRCUIT BREAKER, 15 AMP	1	
9	4341817004	BRACKET, CIRCUIT BREAKER	1	
10	0021004010	MACHINE SCREW	2	
11	0601806819	AC VOLTMETER, 0 ~ 120/240V	1	
12	0601812598	RECEPTACLE, 5-20R : 125V, 20A	1	
13	0601812592	RECEPTACLE, L5-20R : 125V, 20A	1	
14	0601811035	RECEPTACLE, L5-30R : 125V, 30A	1	
15	0601814010	RECEPTACLE, L14-20R : 125/250V, 30A	1	
16	0021004010	MACHINE SCREW	8	
16A	0207004000	HEX NUT	8	
17	0601830737	SWITCH, FULL POWER	1	
18	0601831620	SWITCH, IDLE CONTROL	1	
19	0601831620	SWITCH, OPERATION	1	
20	0021004015	MACHINE SCREW	1	
20A	0207004000	HEX NUT	1	
21	A3262800004	CONDENSER ASSY. 50V @ 1000 μ F	1	
22	0017106016	HEX. HEAD BOLT	4	
23	0017105010	HEX. HEAD BOLT	4	
24	0601842426	RESISTOR, 40W 400 OHMS	1	
25	0027104010	MACHINE SCREW	2	

MQ GA-4.5RA — CONTROL BOX ASSY.

CONTROL BOX ASSY. (GA-4.5RA ONLY)



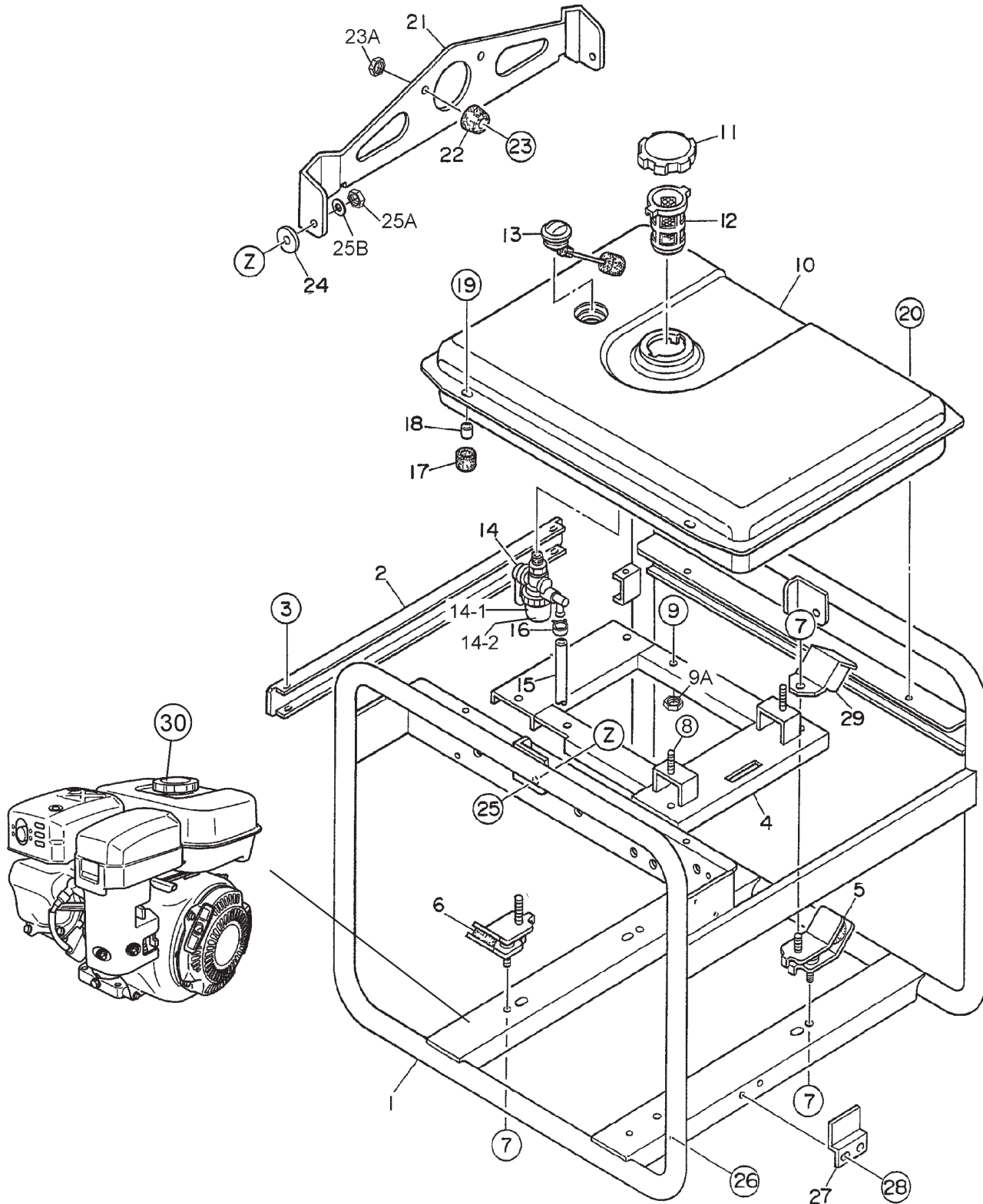
MQ GA-4.5RA — CONTROL BOX ASSY.

CONTROL BOX ASSY. (GA-4.5RA ONLY)

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A3214000103	CONTROL BOX	1	
2	0601850102	GROMMET	1	
3	0601823204	RECTIFIER, S5VB60	2	
4	0027103012	MACHINE SCREW	2	
5	0601823853	SLOW-DOWN UNIT	1	
6	0027104010	MACHINE SCREW	2	
6A	0207004000	HEX NUT	2	
7	A3224000103	CONTROL PANEL	1	
8	0601802651	CIRCUIT BREAKER, 15 AMP	1	
9	4341817004	BRACKET, CIRCUIT BREAKER	1	
10	0021004010	MACHINE SCREW	2	
11	0601806819	AC VOLTMETER, 0 ~ 120/240V	1	
12	0601812598	RECEPTACLE, 5-20R : 125V, 20A	1	
13	0601812592	RECEPTACLE, L5-20R : 125V, 20A	1	
14	0601811035	RECEPTACLE, L5-30R : 125V, 30A	1	
15	0601814010	RECEPTACLE, L14-20R :125/250V, 30A	1	
16	0021004010	MACHINE SCREW	8	
16A	0207004000	HEX NUT	8	
17	0601830737	SWITCH, FULL POWER	1	
18	0601831620	SWITCH, IDLE CONTROL	1	
19	0601831620	SWITCH, OPERATION	1	
20	0021004015	MACHINE SCREW	1	
20A	0207004000	HEX NUT	1	
21	A3262800004	CONDENSER ASSY. 50V @ 1000 μ F	1	
22	0017106016	HEX. HEAD BOLT	4	
23	0017105010	HEX. HEAD BOLT	4	
24	0601842426	RESISTOR, 40W 400 OHMS	1	
25	0027104010	MACHINE SCREW	2	

GA-4.5R/GA-4.5RA — PIPE FRAME ASSY.

PIPE FRAME ASSY.



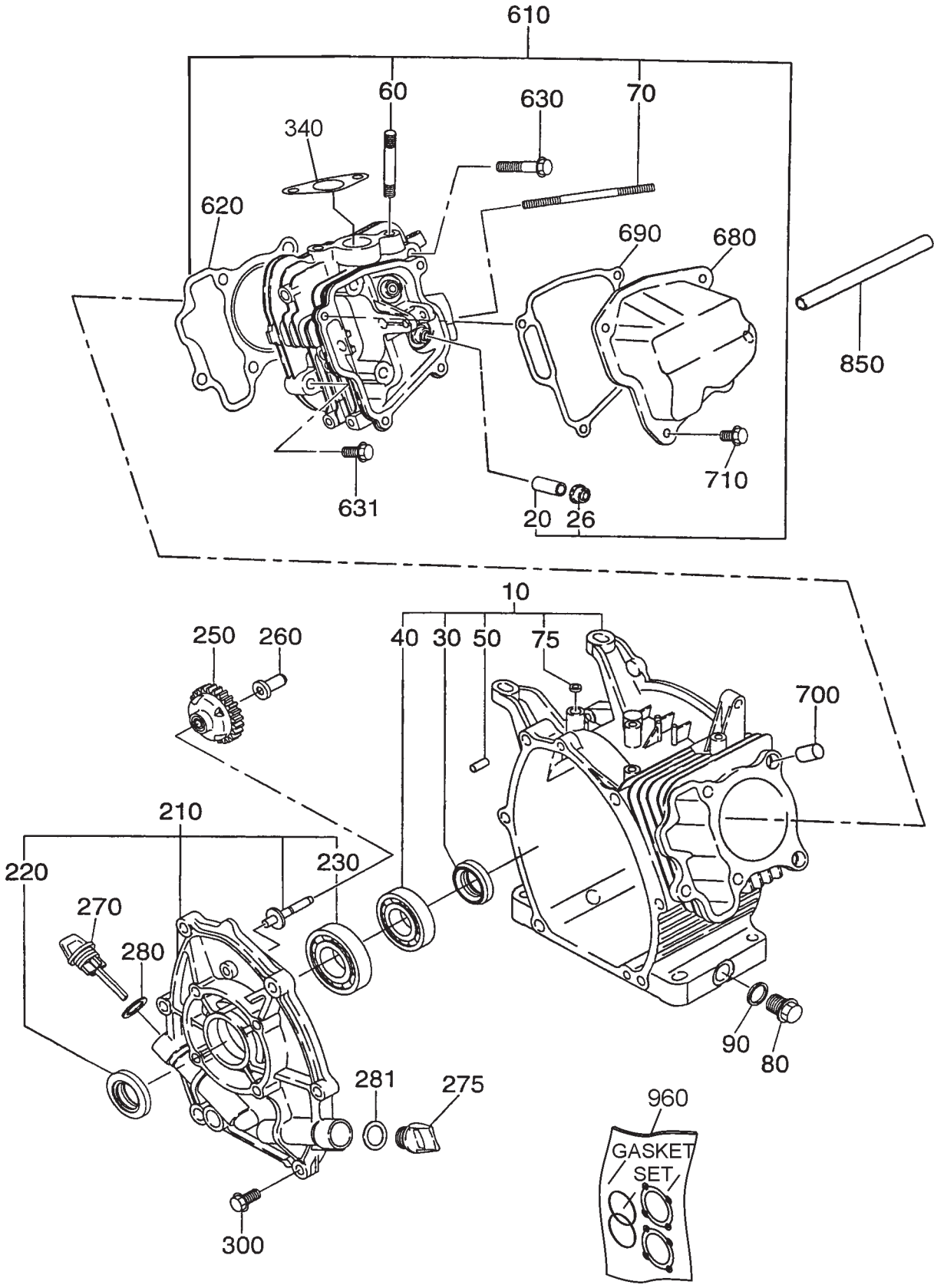
MQ GA-4.5R/GA-4.5RA — PIPE FRAME ASSY.

PIPE FRAME ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A4417000002	PIPE FRAME	1	GA-4.5R ONLY
1	A4417000202	PIPE FRAME	1	GA-4.5RA ONLY
2	A3417100004	BRACKET	1	
3	0017106016	HEX. HEAD BOLT	4	
4	A3304100003	ENGINE BASE	1	
5	A9312601704	RUBBER SUSPENSION	2	
6	7935416004	RUBBER SUSPENSION	2	
7	0207008000	HEX. NUT	8	
8	0207008000	HEX. NUT	2	
9	0017108040	HEX. HEAD BOLT	2	
9A	0207008000	HEX. NUT	2	
10	A4364000002	FUEL TANK	1	
11	A9924800014	CAP, FUEL TANK	1	
12	A9924800004	FUEL FILTER	1	
13	0602125034	FUEL GUAGE	1	
14	0605510026	FUEL STRAINER	1	
14-1	0642007810	CUP, FILTER FUEL STRAINER	1	
14-2	0642006410	PACKING, FUEL STRAINER CUP	1	
15	0605513194	HOSE	1	
16	0605515062	HOSE BAND	2	
17	7855525514	RUBBER CUSION	2	
18	7855525604	COLLAR	2	
19	0017108030	HEX. HEAD BOLT	2	
20	0017108020	HEX. HEAD BOLT	2	
21	A9117200103	HANGER	1	
22	0601850097	STOPPER	1	
23	0021008025	MACHINE SCREW	1	
23A	0207008000	HEX NUT	1	
24	A9311100004	PLASTIC WASHER	2	GA-4.5R ONLY
24	0601851116	PLASTIC WASHER	2	GA-4.5RA ONLY
25	0011308025	HEX HEAD BOLT	2	
25A	0037908000	HEX NUT	2	
25B	0042108000	WASHER, FLAT	2	
26	0019206016	HEX HEAD BOLT	1	
27	A3305200104	STOPPER	1	
28	0017106016	HEX HEAD BOLT	2	
29	A3414500004	COVER	1	
30	A4924200004	ROBIN ENGINE, EX27D	1	

ROBIN EX270D20220 — CRANKCASE ASSY.

CRANKCASE ASSY..



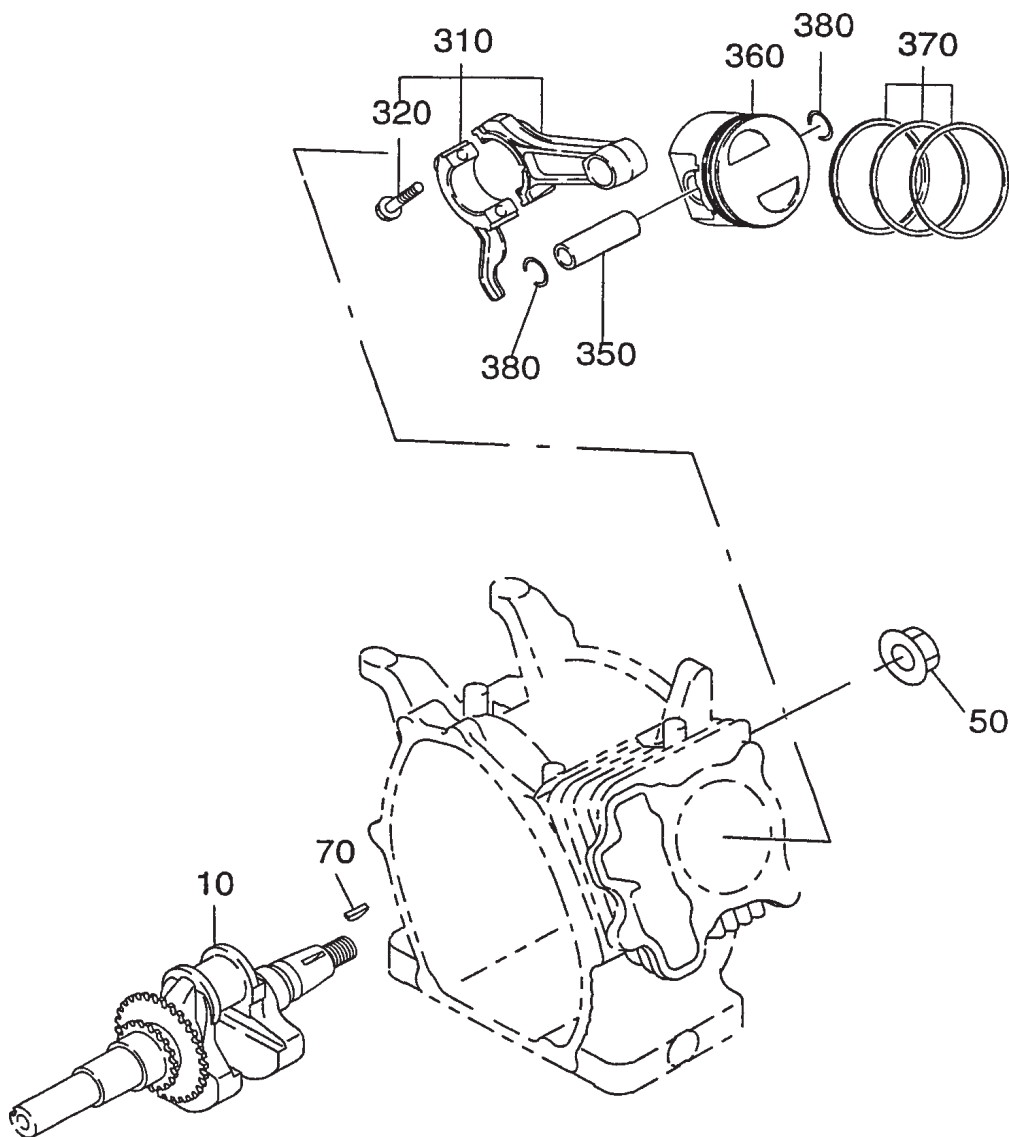
ROBIN EX270D20220 — CRANKCASE ASSY.

CRANKCASE ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2791010121	CRANKCASE ASSY.	1	INCLUDES ITEMS W/*
20%	2371420203	VALVE GUIDE	2	
26%	2771601001	STEM SEAL	1	
30*	0440300160	OIL SEAL	1	
46*	0600300340	BALL BEARING	1	
50*	2771501103	PIPE KNOCK	2	
60%	0105080250	STUD	2	
70%	0105060410	STUD	2	
75	0440060020	OIL SEAL	1	
80	0401140020	PLUG	2	
90	0211140020	GASKET	2	
210	2791100111	MAIN BEARING COVER	1	INCLUDES ITEMS W/+
220+	0440300160	OIL SEAL	1	
230+	0600300020	BALL BEARING	1	
250	2774500421	GOVERNOR GEAR	1	
260	2774190103	GOVERNOR SLEEVE	1	
275	2796500103	FILLER PLUG	1	
280\$	0213200050	GASKET	1	
281	0213200050	GASKET	1	
300	0010408350	FLANGE BOLT	7	
340\$	2773520103	GASKET, MUFFLER 26D 9DX58P 0.2T	1	
610	2791300111	CYLINDER HEAD ASSY	1	INCLUDES ITEMS W/%
620\$	2791500113	GASKET HEAD	1	
630	0110080240	FLANGE BOLT	4	
631	0010408350	FLANGE BOLT	1	
680	2771550101	ROCKER COVER	1	
690\$	2771600103	GASKET, ROCKET COVER	1	
700	2771501103	PIPE KNOCK	2	
710	0110060020	FLANGE BOLT	4	
850	0851080000	RUBBER PIPE	1	
960	2799900107	GASKET SET	1	INCLUDES ITEMS W/\$

ROBIN EX270D20110/EX270D20220 — CRANKSHAFT AND PISTON ASSY.

CRANKSHAFT AND PISTON ASSY.



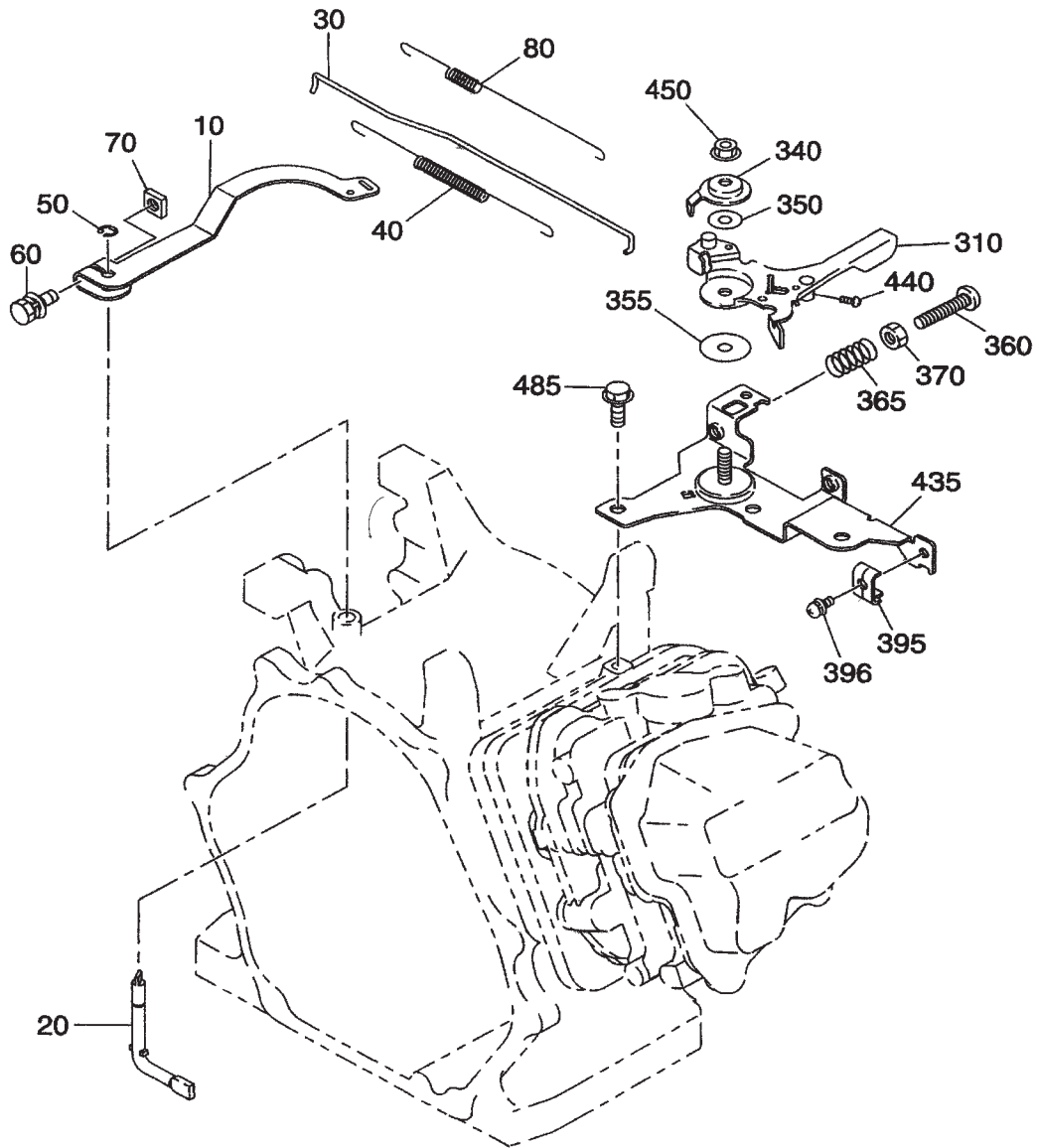
ROBIN EX270D20110/EX270D20220 — CRANKSHAFT AND PISTON ASSY.

CRANKSHAFT AND PISTON ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2792020121	CRANKSHAFT CP	1	
50	0180180010	FLANGE NUT	1	
70	0323030010	WOODRUFF KEY	1	
310	2792250120	CONNECTING ROD ASSY.	1	INCLUDES ITEM W/*
320*	2792300103	CONNECTING ROD BOLT	2	
350	2792330103	PISTON PIN	1	
360	2792340103	PISTON, STANDARD	1	
360	2792340303	PISTON OVERSIZE 0.25 MM	1	
360	2792340403	PISTON OVERSIZE 0.50 MM	1	
370	2792351107	PISTON RING SET, STANDARD	1	
370	2792351207	PISTON RING SET, 0.25 MM	1	
370	2792351107	PISTON RING SET, STANDARD	1	
380	0565180010	CLIP	2	

ROBIN EX270D20110/EX270D20220 — GOVERNOR ASSY.

GOVERNOR ASSY.



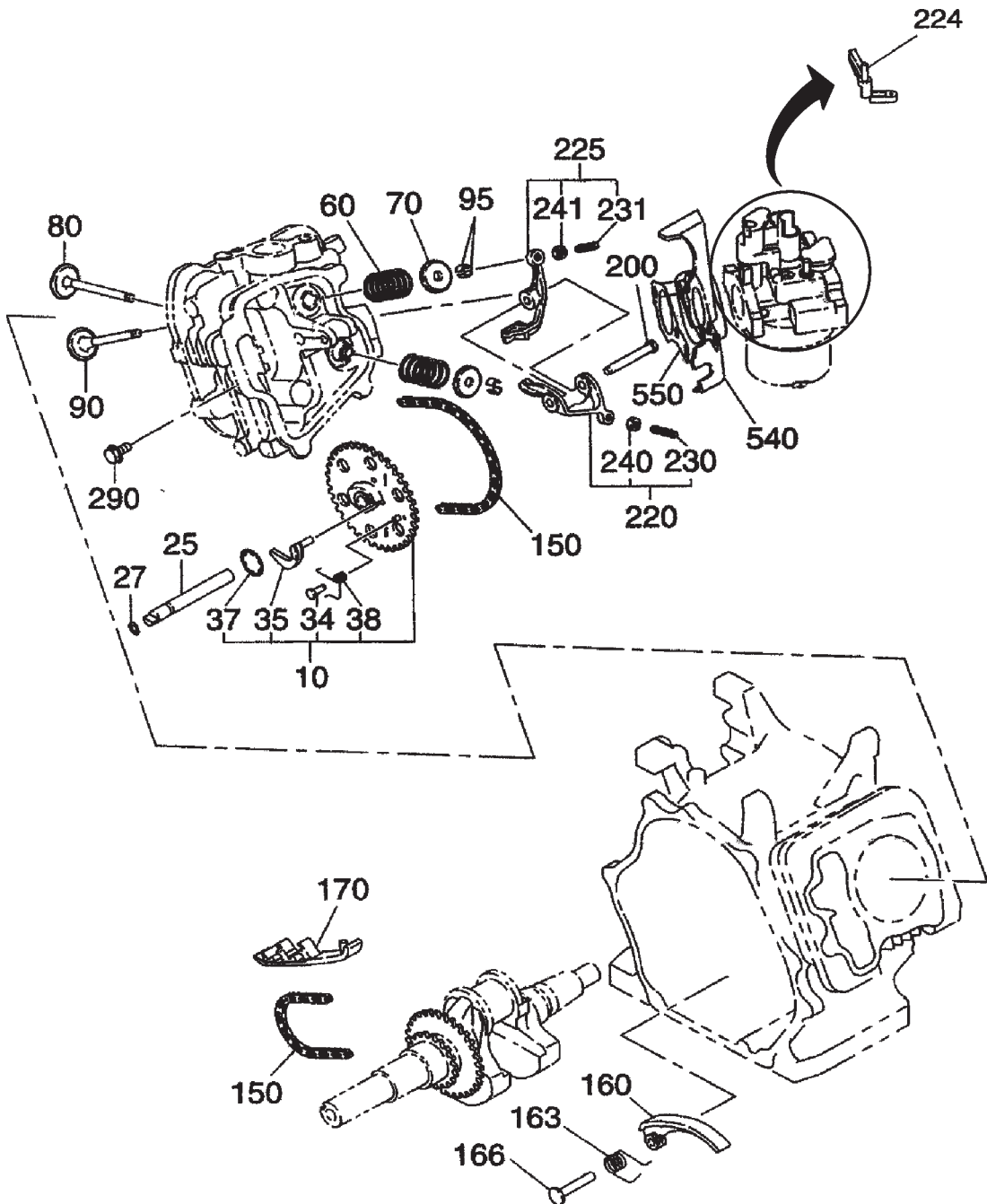
ROBIN EX270D20110/EX270D20220 — GOVERNOR ASSY.

GOVERNOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2794230113	GOVERNOR LEVER	1	
20	2774220113	GOVERNOR SHAFT	1	
30	2794270101	GOVERNOR ROD CP	1	
40	2774280113	ROD SPRING	1	
50	0031305000	CLIP	1	
60	0130060240	BOLT AND WASHER ASSY.	1	
70	0186060020	NUT	1	
80	2794250223	GOVERNOR SPRING	1	
310	2774330113	SPEED CONTROL LEVER	1	
340	2774350103	STOP PLATE	1	
350	0200060170	WASHER	1	
355	0217060070	FRICTION WASHER	1	
360	0140060180	SCREW	1	
365	2374500423	SPRING, ADJUST	1	
370	0021706000	NUT	1	
435	2774600101	SPEED CONT. BRKT CP	1	
395	2774390203	CLAMP	1	
396	0131050030	SCREW AND WASHER ASSY.	1	
440	0043104080	SCREW	1	
450	0023506000	SELF LOCK NUT	1	
480	2774510103	RETURN SPRING	1	
485	0110060020	FLANGE BOLT	2	

ROBIN EX270D20110/EX270D20220 — INTAKE AND EXHAUST ASSY.

INTAKE AND EXHAUST ASSY.



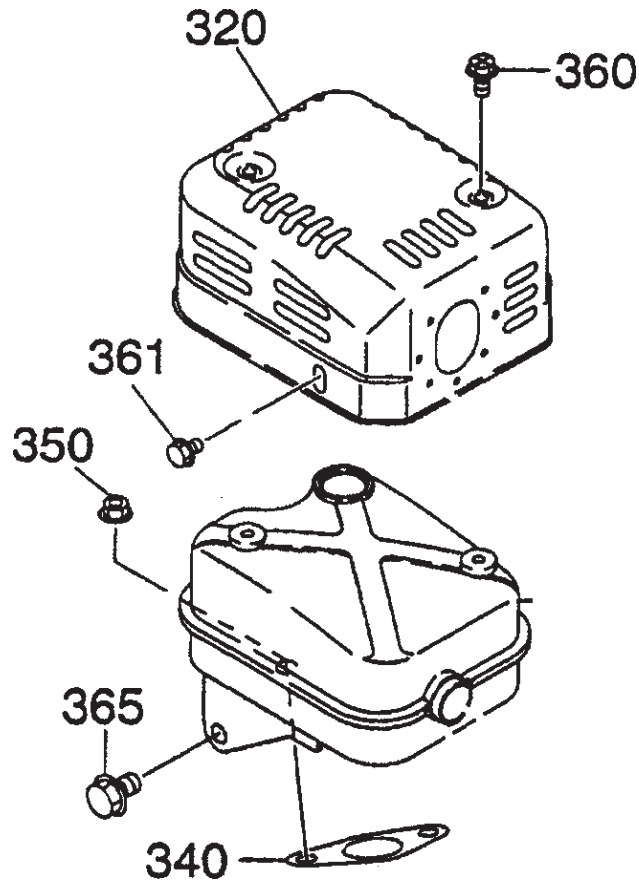
ROBIN EX270D20110/EX270D20220 — INTAKE AND EXHAUST ASSY.

INTAKE AND EXHAUST ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2793160101	CAMSHAFT CP	1	INCLUDES ITEMS W/*
25	2773510103	PIN, CAMSHAFT, 9DX78.5L	1	
27	0240060010	O RING, 5.8DX9.6DX1.9T	1	
34*	2773860103	SPRING PIN, 4DX7.5DX11L	1	
35*	2793640103	RELEASE LEVER	1	
37*	2773650103	CLIP, 13.8DX20.3DX0.4T	1	
38*	2773870103	RETURN SPRING	1	
60	2793360103	VALVE SPRING, 17DX2.3DX27L N=5.8	2	
70	2693370103	SPRING RETAINER	2	
80	2793340113	INTAKE VALVE, 28.5DX5.5DX67.8L	1	
90	2793350113	EXHAUST VALVE, 26.5DX5.5DX67.8L	1	
95	13210KA031	COLLET VALVE	4	
150	2793560111	TIMING CHAIN CP, 100 LINK	1	
160	2773691103	TENTIONER	1	
163	2773710103	SPRING, TENTIONER	1	
166	2773690203	PIN, TENTIONER, 6DX13DX34L	1	
170	2773691313	CHAIN GUIDE	1	
200	2773500123	PIN, ROCKER, 6DX9DX41L	1	
210	0031305000	CLIP	1	
220	2773620100	ROCKER ARM ASSY. IN	1	INCLUDES ITEMS W/#
224	2774380101	CHOKE LEVER CP	1	
225	2773620200	ROCKER ARM ASSY. EX	1	INCLUDES ITEMS W/#
230#	0149050020	ADJUST SCREW, M5X0.5X23L	1	
240#	0170050030	NUT, M5X0.5X4.1H	1	
290	0110060020	FLANGE BOLT, M6X1.0X12L	1	
540	2793290113	INSULATOR	1	
550	2793590123	GASKET, INSULATOR	1	

ROBIN EX270D20110/EX270D20220 — MUFFLER ASSY.

MUFFLER ASSY.



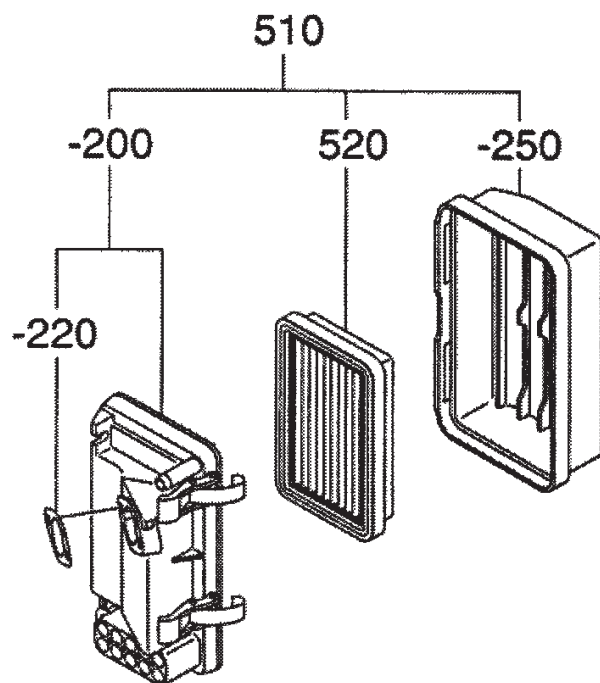
ROBIN EX270D20110/EX270D20220 — MUFFLER ASSY.

MUFFLER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
310	2793010121	MUFFLER, CP	1	
320	2793420111	MUFFLER COVER CP	1	
340	2773520103	GASKET, MUFFLER 26D 9DX58P 0.2T	1	
350	9802008280	FLANGE NUT	2	
360	0152060090	TAPPING BOLT, M6X1.0X10L	2	
361	0110060010	FLANGE BOLT, M6X1.0X8L	1	
365	0110080150	FLANGE BOLT, M8X1.25X12L	1	

ROBIN EX270D20110/EX270D20220 — AIR CLEANER ASSY.

AIR CLEANER ASSY.



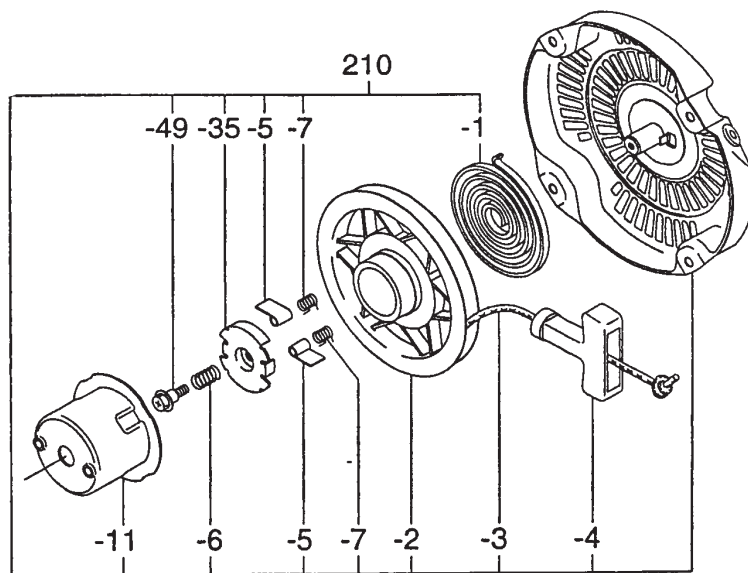
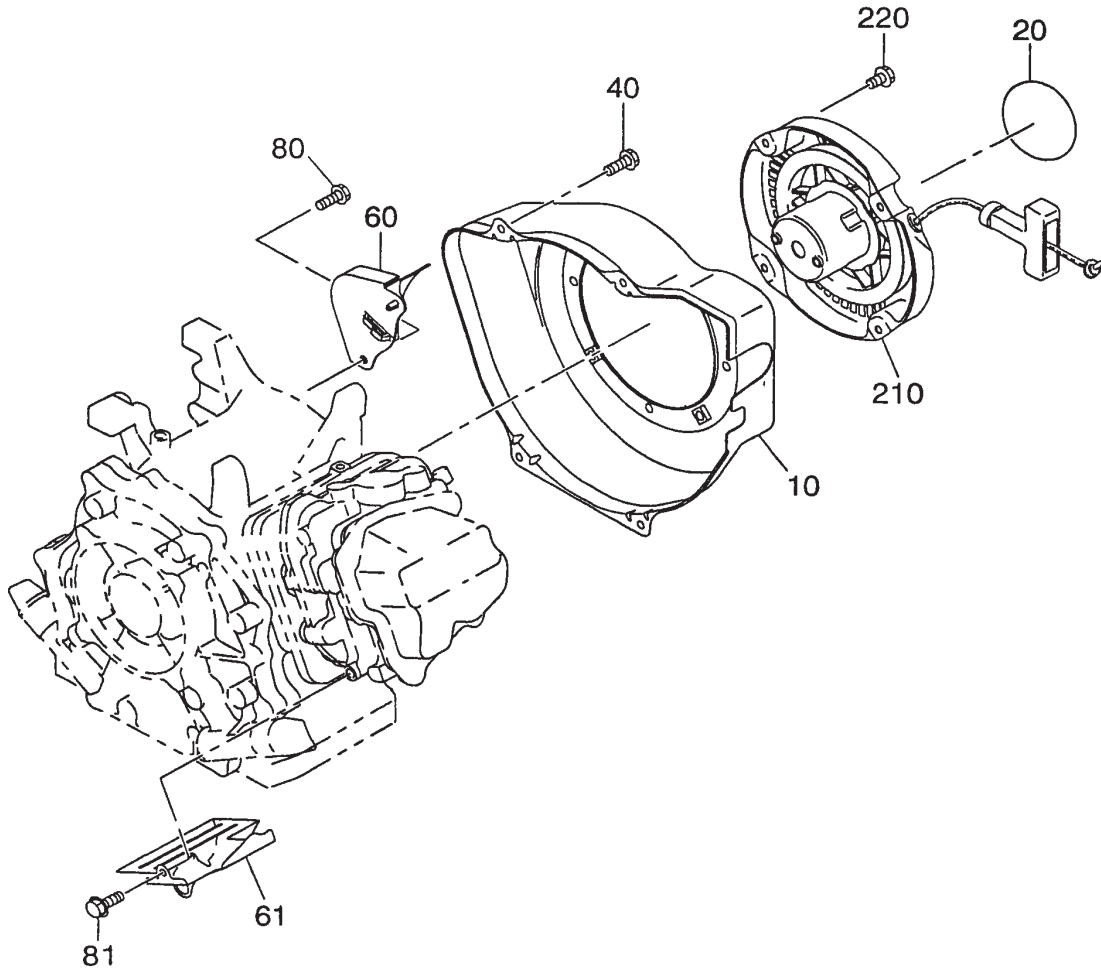
ROBIN EX270D20110/EX270D20220 — AIR CLEANER ASSY.

AIR CLEANER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
510	2793262030	AIR CLEANER ASSY. LOW PROFILE	1	INCLUDES ITEMS W/*
510-200*	2793263308	BODY CP	1	
510-220*	2793265008	GASKET	1	
510-250*	2793264508	COVER, LOW PROFILE	1	
520*	2793260907	ELEMENT ASSY.	1	

ROBIN EX270D20110/EX270D20220 — RECOIL STARTER ASSY.

RECOIL STARTER ASSY.



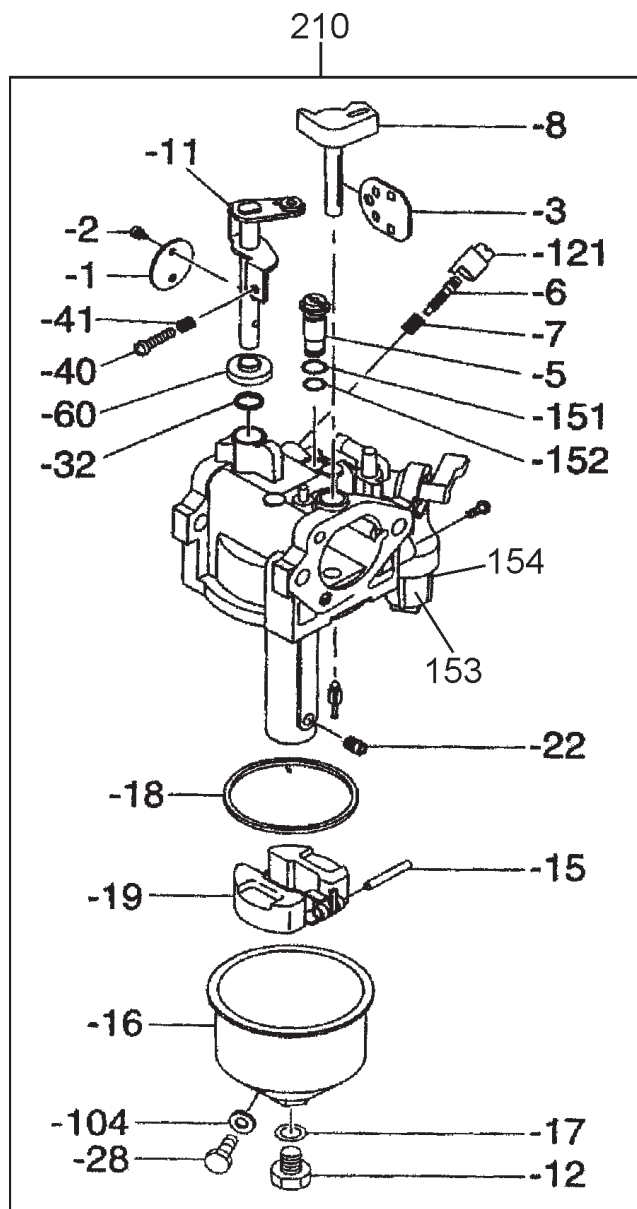
ROBIN EX270D20110/EX270D20220 — RECOIL STARTER ASSY.

RECOIL STARTER ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2795120101	BLOWER HOUSING CP	1	
20	0732005140	LABEL, TRADEMARK 64D	1	
40	0110060030	FLANGE BOLT	4	
60	2795271111	BAFFLE 1, CASE CP	1	
61	2795270203	BAFFLE 2, HEAD	1	
80	0016508120	BOLT	1	
81	0110060020	FLANGE BOLT	1	
210	2795020200	RECOIL STARTER ASSY.	1	INCLUDES ITEM W/*
210-1*	2265071608	SPIRAL SPRING	1	
210-2*	2795012008	REEL	1	
210-3*	2795011008	STARTER ROPE	1	
210-4*	2265070108	STARTER KNOB	1	
210-5*	2795012508	RATCHET	2	
210-6*	2265073108	FRICTION SPRING	1	
210-7*	2265075208	RATCHET SPRING	2	
210-11*	2795014508	STARTER PULLEY	1	
210-35*	2265074108	FRICTION PLATE	1	
210-49*	2265075318	CENTER SCREW	1	
220	0110060010	FLANGE BOLT	4	

ROBIN EX270D20110/EX270D20220 — CARBURETOR ASSY.

CARBURETOR ASSY.



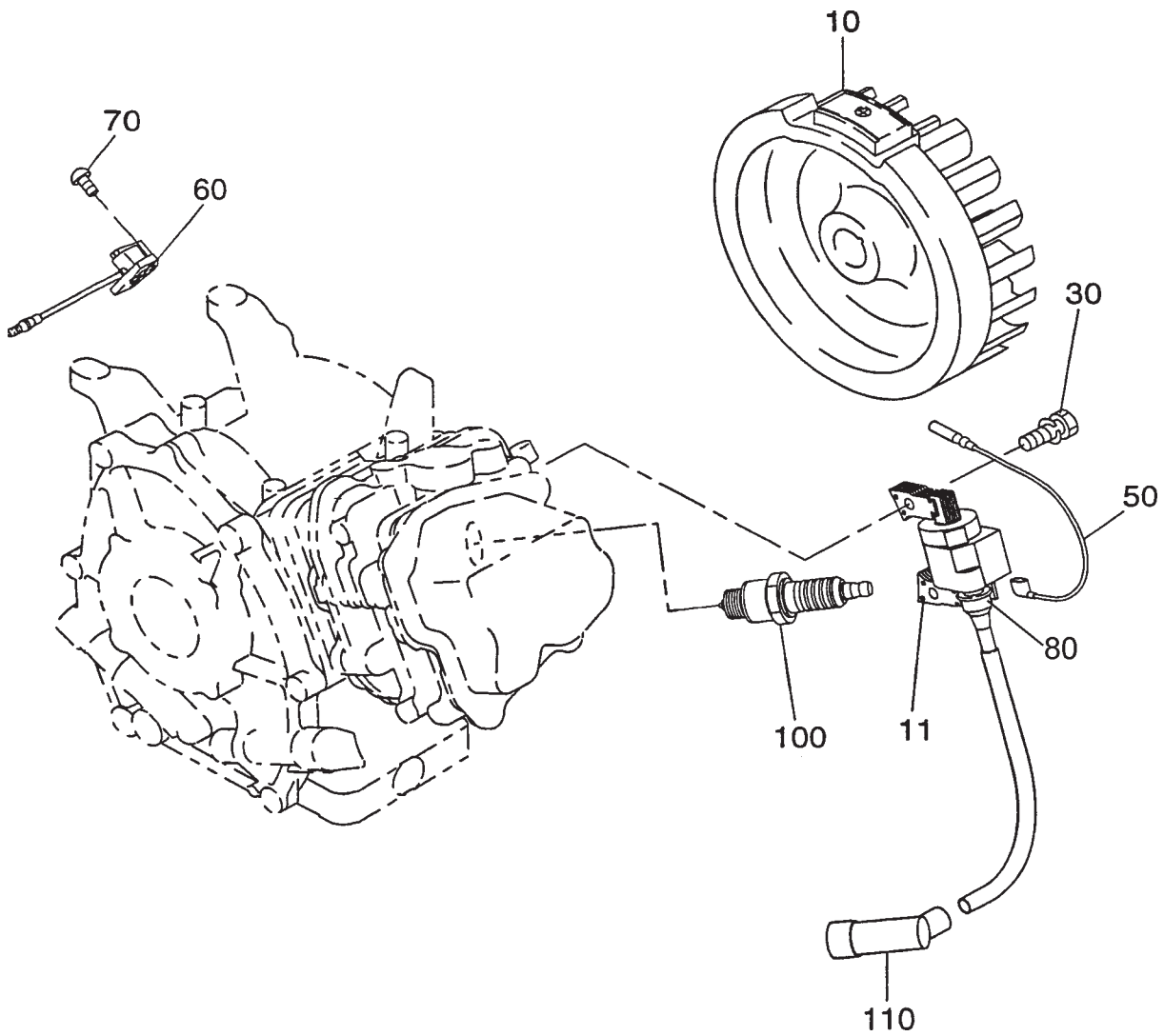
ROBIN EX270D20110/EX270D20220 — CARBURETOR ASSY.

CARBURETOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
210	2796230210	CARBURETOR ASSY.	1	INCLUDES ITEM W/*
210-1*	2796253508	VALVE THROTTLE	1	
210-2*	2516245008	SCREW	2	
210-3*	2796252508	VALVE CHOKE	1	
210-5*	2796242008	JET SLOW	1	
210-6*	2796235408	SCRE IDLE ADJUSTING	1	
210-7*	2796252008	SPRING	1	
210-8*	2796252008	SHAFT CHOKE	1	
210-11*	2796253008	SHAFT SUB ASSY., THROTTLE	1	
210-12*	2516245308	SCREW	1	
210-15*	2796251508	PIN FLOAT LEVER	1	
210-16*	2796255008	CHAMBER FLOAT	1	
210-17*	2796235008	GASKET	1	
210-18*	2796254008	GASKET CHAMBER	1	
210-19*	2796250508	FLOAT SUB ASSY.	1	
210-22*	2796240008	JET MAIN	1	
210-22*	2796240108	JET MAIN	1	
210-28*	2796235508	SCREW DRAIN	1	
210-32*	2796256108	BUSH	1	
210-40*	2796235308	SCREW ADJUSTING	1	
210-41*	2796244508	SPRING	1	
210-60*	2796256208	COLLAR	1	
210-104*	2796255208	GASKET	1	
210-121*	2516248008	CAP	1	
210-151*	2796245208	O-RING	1	
210-152*	2796245108	O-RING	1	
210-153*	0652007810	FILTER CUP	1	
210-154*	0642006410	PACKING, FILTER CUP	1	

ROBIN EX270D20110/EX270D20220 — FLYWHEEL ASSY.

FLYWHEEL ASSY.



ROBIN EX270D20110/EX270D20220 — FLYWHEEL ASSY.

FLYWHEEL ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	2797923001	FLYWHEEL CP	1	
11	2797943001	IGNITION COIL CP	1	
30	0011406250	BOLT & WASHER ASSY.	2	
50	2777310101	WIRE 2 CP, W/OIL SENSOR	1	
60	X660000420	SWITCH ASSY.	1	
70	0150040090	TAPPING SCREW	2	
100	0650140150	SPARK PLUG, NGK BR6HS	1	
110	0655000270	SPARK PLUG CAP	1	