

PARTS MANUAL



Mikasa **SERIES**
MODEL MTX80SD
TAMPING RAMMER
(ROBIN ER120D45000 GASOLINE ENGINE)

Revision #2 (11/15/21)

THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

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NOTICE

Specifications and part numbers are subject to change without notice.

EXPLANATION OF CODE IN REMARKS COLUMN

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

NOTICE

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

SAMPLE PARTS LIST

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	12345	BOLT	1	INCLUDES ITEMS W/%
2%		WASHER, 1/4 IN.		NOT SOLD SEPARATELY
2%	12347	WASHER, 3/8 IN. ...	1	MQ-45T ONLY
3	12348	HOSE	A/R	MAKE LOCALLY
4	12349	BEARING	1	S/N 2345B AND ABOVE

NO. Column

Unique Symbols — All items with same unique symbol (@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

Duplicate Item Numbers — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

NOTICE

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

PART NO. Column

Numbers Used — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

QTY. Column

Numbers Used — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

Assembly/Kit — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

Serial Number Break — Used to list an effective serial number range where a particular part is used.

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

Specific Model Number Use — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

“Make/Obtain Locally” — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

“Not Sold Separately” — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

SUGGESTED SPARE PARTS

MTX80SD TAMPING RAMMER WITH ROBIN ER120D45000 ENGINE

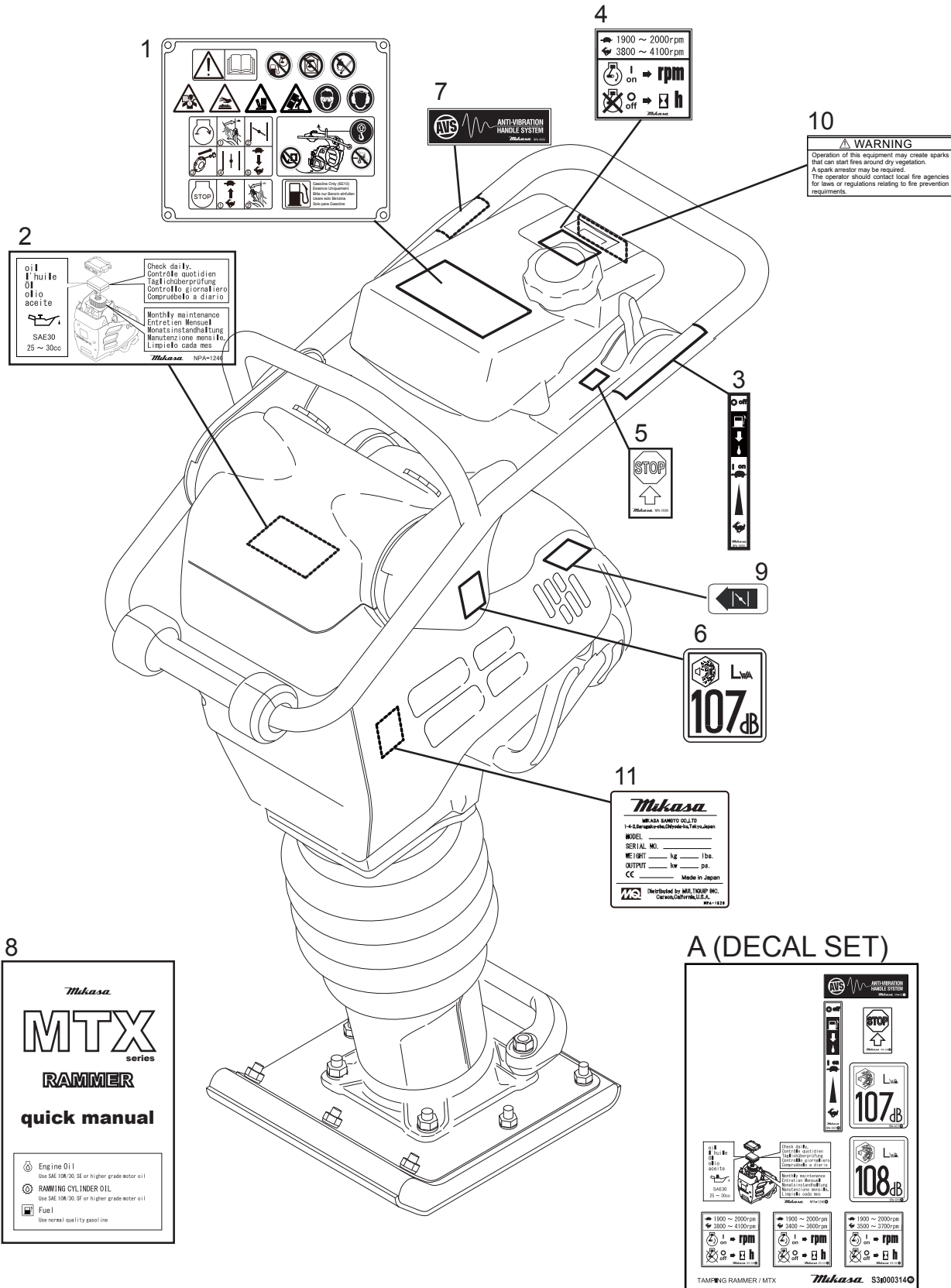
1 to 3 units

Qty.	P/N	Description
1.....	956100062.....	THROTTLE WIRE
3.....	366010070.....	PRIMARY ELEMENT, AIR CLEANER
3.....	366010080.....	SECONDARY ELEMENT, AIR CLEANER
1.....	366350460.....	CAP, FUEL TANK WITH STRAP
2.....	26365012A3.....	FILTER, IN-LINE FUEL
3.....	0650140860.....	SPARK PLUG
1.....	954406010.....	STRAINER, #110 FUEL TANK
1.....	21E5011008.....	ROPE, RECOIL STARTER
1.....	956200110.....	COMBINATION LEVER
1.....	366900170.....	CUP AND PACKING SET
1.....	366348550.....	CLUTCH ASSY.

NOTICE

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

NAMEPLATE AND DECALS



1

2

oil
huile
öl
olio
aceite

Check daily.
Contrôle quotidien
Tägliche Überprüfung
Controllo giornaliero
Compruebo a diario

Monthly maintenance
Entretien Mensuel
Monats- und wöchentliche
Manutenzione mensile
Limpieza cada mes

Makasa NPA-1246

7

4

1900 ~ 2000rpm
3800 ~ 4100rpm

on → rpm
off → h

10

WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

3

5

STOP

6

107dB

9

11

Makasa

MITSUBISHI BANGHO GOLF TO
1-4 Sanjo-cho, Chiyoda-ku, Tokyo, Japan

MODEL _____

SERIAL NO. _____

WEIGHT _____ kg _____ lbs.

OUTPUT _____ hp _____ ps.

CE _____ Made in Japan

Distributed by M&L TOOLS INC.
100 W. Center Rd., U.S.A.
MPS-1232

8

Makasa

MTX
series

RAMMER

quick manual

Engine Oil
Use SAE 100, 30, SE or higher grade motor oil

RAMMING CYLINDER OIL
Use SAE 100, 30, SE or higher grade motor oil

Fuel
Use normal quality gasoline

A (DECAL SET)

TAMPING RAMMER / MTX

Makasa S3000314

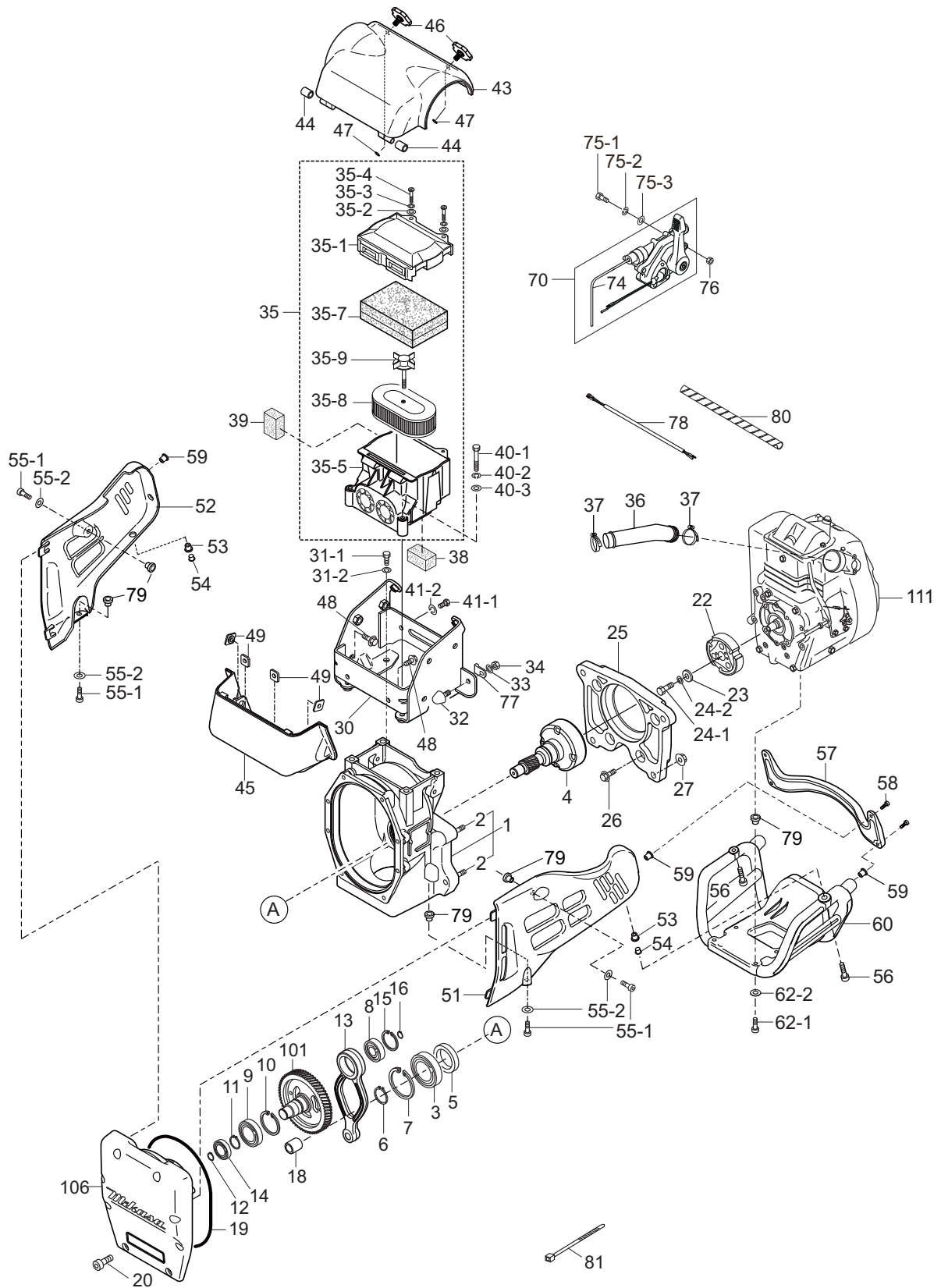
NAMEPLATE AND DECALS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	920215440	DECAL: OPERATION	1	
2#		DECAL: AIR CLEANER	1	
3#		DECAL: LEVER OPERATION	1	
4#		DECAL: MAX SPEED	1	
5#		DECAL: MACHINE STOP	1	
6#		DECAL: EC NOISE REQ Lwa 107 dB	1	
7#		DECAL: ANTI-VIB HANDLE	1	
8	920212540	QUICK MANUAL	1	
9	0732004430	DECAL: CHOKE OPERATION	1	
10	920214100	DECAL: E/G FIRE WARNING	1	
11		DECAL: NAMEPLATE	1.....	CONTACT MQ PARTS DEPT. W/ SERIAL NO.
A	920900040	DECAL SET	1.....	INCLUDES ITEMS W/ #

CRANKCASE AND ENGINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	366910010	CRANKCASE	1.....	INCLUDES ITEMS W/\$
2\$	009120204	STUD BOLT 10 X 30	2	
3	041006007	BEARING 6007Z	1	
4	366345170	PINION, DRUM	1	
5	060404010	OIL SEAL TC-40528	1	
6	080200350	STOP RING S-35	1	
7	080100620	STOP RING R-62	1	
8	040006304	BEARING 6304	1	
9	040006207	BEARING 6207	1	
10	080100720	STOP RING R-72	1	
11	080200350	STOP RING S-35	1	
12	JISB2804C	STOP RING S-25	1	
13	366345230	CONNECTING ROD	1	
14	040006305	BEARING 6305	1	
15	080100520	STOP RING R-52	1	
16	080200200	STOP RING S-20	1	
18	047940060	NEEDLE BEARING FJ-1816	1	
19	050710080	O-RING AS568-267	1	
20	009110025	SOCKET HEAD BOLT 8X25 ZN	8	
22	366348550	CLUTCH ASSY.	1	
23	952401450	WASHER 8.5X22X3	1	
24-1	001220825	BOLT 8X25 T	1	
24-2	030208200	WASHER, LOCK M8	1	
25	366217180	FLANGE, ENGINE	1	
26	001710830	FLANGE BOLT 8X30	4	
27	022611010	FLANGE NUT M10 H	4	
30	366346280	BRACKET, SHOCK ABSORBER	1	
31-1	012010030	BOLT 10X30 H	4	
31-2	030210250	WASHER, LOCK M10	4	
32	939010270	STOPPER RUBBER (70)	1	
33	030208200	WASHER, LOCK M8	1	
34	020108060	NUT M8	1	
35	366900010	AIR CLEANER ASSY.....	1.....	INCLUDES ITEMS W/#
35-1#	366010010	AIR CLEANER COVER	1	
35-2#	366010020	WASHER, FLAT M6	2	
35-3#	366010030	WASHER, LOCK M6	2	
35-4#	366010040	COIN BOLT M6	2	
35-5#	366010050	BASE CP, AIR CLEANER	1	
35-7#	366010070	PRIMARY ELEMENT CP	1	
35-8#	366010080	SECONDARY ELEMENT	1	
35-9#	362030040	GRIP BOLT CP, AIR CLEANER	1	
36	366350540	PIPE, INTAKE	1	
37	954407682	CYCLONE CLAMP (CY-1) 38	2	
38	366460160	SEALING FORM, UNDER	1	
39	366460150	SEALING FORM, SIDE	1	

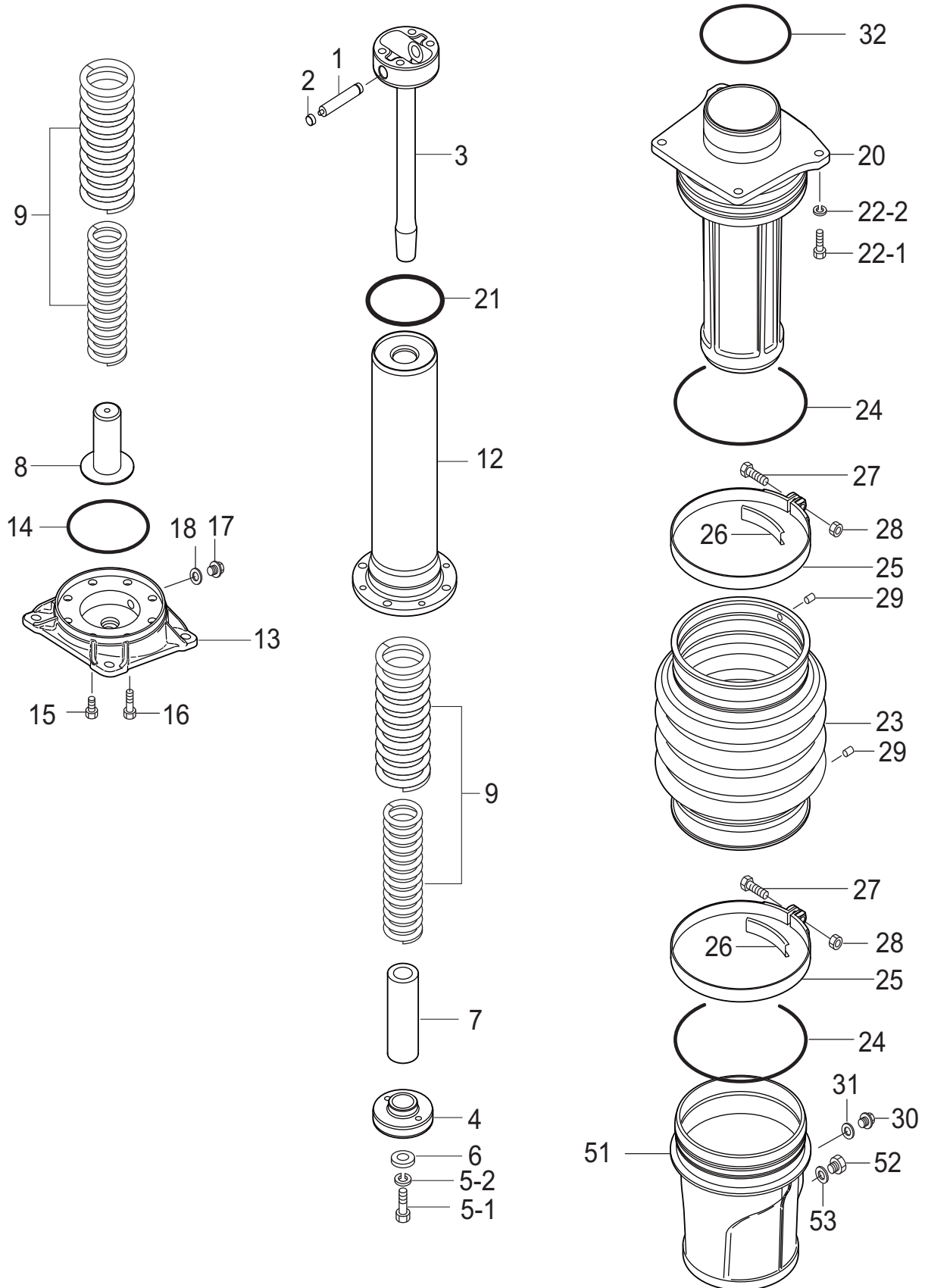
CRANKCASE AND ENGINE ASSY. (CONT'D.)



CRANKCASE AND ENGINE ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
40-1	001220851	BOLT 8X55 T	2	
40-2	030208200	WASHER, LOCK M8	2	
40-3	0401450080	WASHER, FLAT M8	2	
41-1	011008015	BOLT 8X15 H	2	
41-2	030208200	WASHER, LOCK M8	2	
43	366217340	COVER, CLEANER ASSY. (UPPER)	1	
44	366460140	RUBBER BUSH (10X16X17)	2	
45	366217350	COVER, CLEANER ASSY. (UNDER)	1	
46	366345980	KNOB, CLEANER COVER	2	
47	050200060	O-RING P6	2	
48	009110040	FLANGE BOLT 8X20	4	
49	959407670	SQUARE NUT M8	4	
51	366120410	GUARD, LINK	1	
52	366120420	GUARD, MUFFLER	1	
53	022910260	WELL NUT M8	2	
54	366460170	FLANGE COLLAR 8	2	
55-1	009110024	SOCKET HEAD BOLT 8X20 ZN	4	
55-2	0401450080	WASHER, FLAT M8	4	
56	009110038	SOCKET HEAD BOLT 8X30 ZN	2	
57	368217770	CROSS BAR	1	
58	009110039	SOCKET HEAD BOLT 6X25 ZN	4	
59	022910250	WELL NUT M6	4	
60	366120430	GUARD, ENGINE	1	
62-1	009110025	SOCKET HEAD BOLT 8X25ZN	4	
62-2	0401450080	WASHER FLAT M8	4	
70	366900042	COMBINATION LEVER ASSY. W/WIRE.....	1	INCLUDES ITEMS W/@
74@	956100062	THROTTLE WIRE	1	
75-1	001220620	BOLT 6X20 T	2	
75-2	030206150	WASHER, LOCK M6	2	
75-3	031106100	WASHER, FLAT M6	2	
76	020106050	NUT M6	2	
77	959006120	CLIP (TCP2-10509B)	1	
78	367460120	WIRE HARNESS	1	
79	366461050	COLLAR, GUARD	8	
80	959021814	SPIRAL TUBE KEP6/L=200	1	
101	366345190	CRANK GEAR	1	
106	366010121	FRONT COVER	1	
111	911231201	ENGINE ASSY., ER120D45000	1	

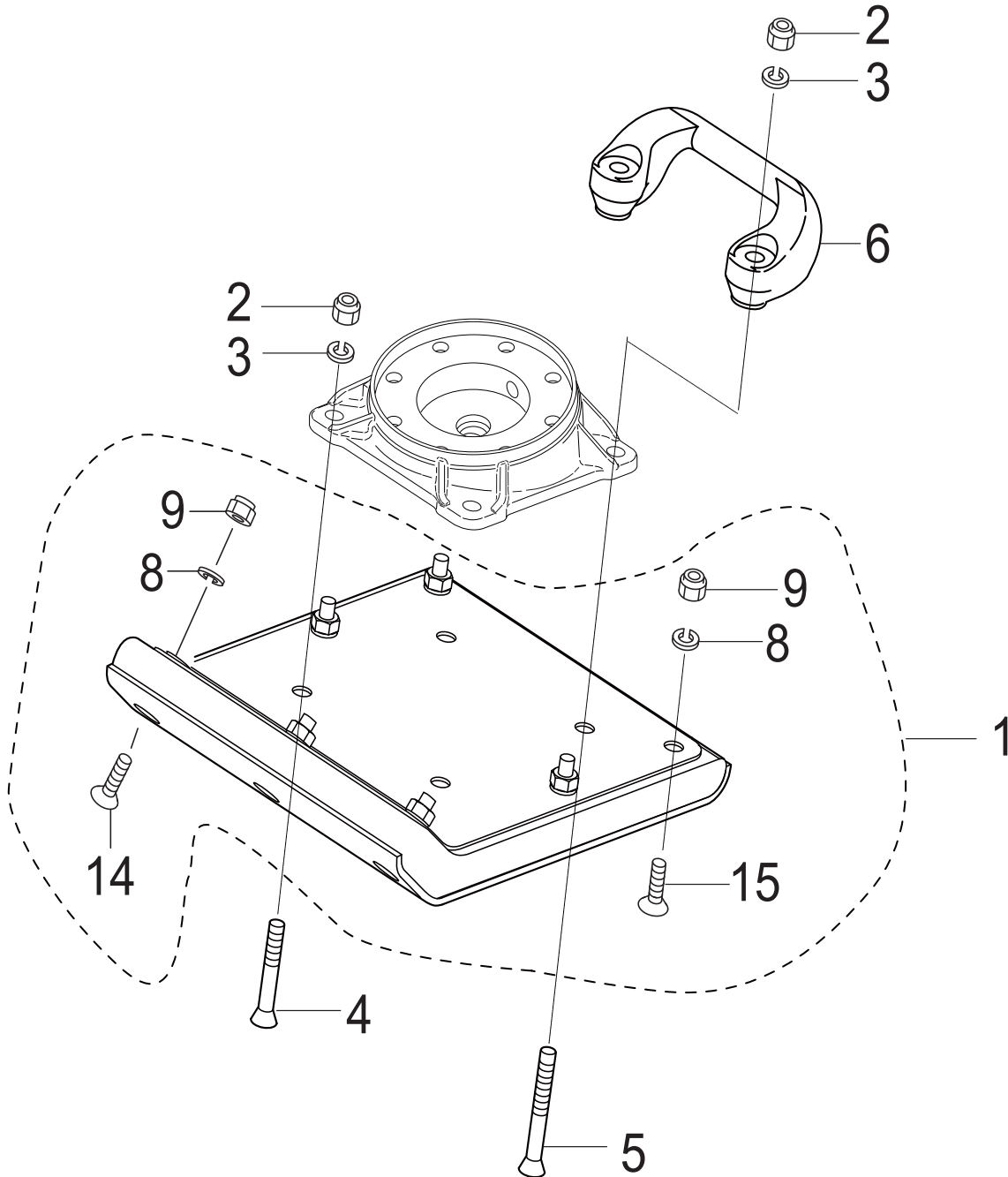
GUIDE CYLINDER ASSY.



GUIDE CYLINDER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	366460100	PISTON PIN	1	
2	366459910	PLUG, PISTON PIN	2	
3	366346000	PISTON ROD	1	
4	371459690	PISTON END	1	
5-1	001121230	BOLT 12X30 T P1.5	1	
5-2	030212300	WASHER, LOCK M12	1	
6	952404790	WASHER 13306	1	
7	355447260	STOPPER, LOWER	1	
8	366459900	STOPPER, BOTTOM	1	
9	366459730	MAIN SPRING	2	
12	366345990	SPRING CYLINDER	1	
13	366217210	FOOT PLATE 12	1	
14	050100900	O-RING G-90	1	
15	001521020	SOCKET HEAD BOLT 10X20 T	4	
16	001521040	SOCKET HEAD BOLT 10X40 T	4	
17	953405270	PLUG 1/4X14 13L	1	
18	953405260	PACKING 1/4 (CU)	1	
20	367217450	GUIDE CYLINDER	1	
21	050710070	O-RING AS568-344	1	
22-1	0105051045	BOLT 10X45 H	4	
22-2	030210250	WASHER, LOCK M10	4	
23	354010010	BELLOWS, ORANGE	1	
24	050931500	O-RING JASO3150	2	
25	354336352	BELLOWS CLAMP (1.6T) 171D	2	
26	354442340	BAND GUIDE, BELLOWS	2	
27	001220840	BOLT 8X40 T	2	
28	020308060	NUT M8	2	
29	354446170	PIN 6D-8.5L	2	
30	953405270	PLUG 1/4X14 13L	1	
31	953405260	PACKING 1/4 (CU)	1	
32	050200950	O-RING P-95	1	
51	366118590	PROTECTION SLEEVE	1	
52	366460300	OIL GAUGE ASSY.	1	
53	953404670	COPPER PACKING 17X25.5X1	1	

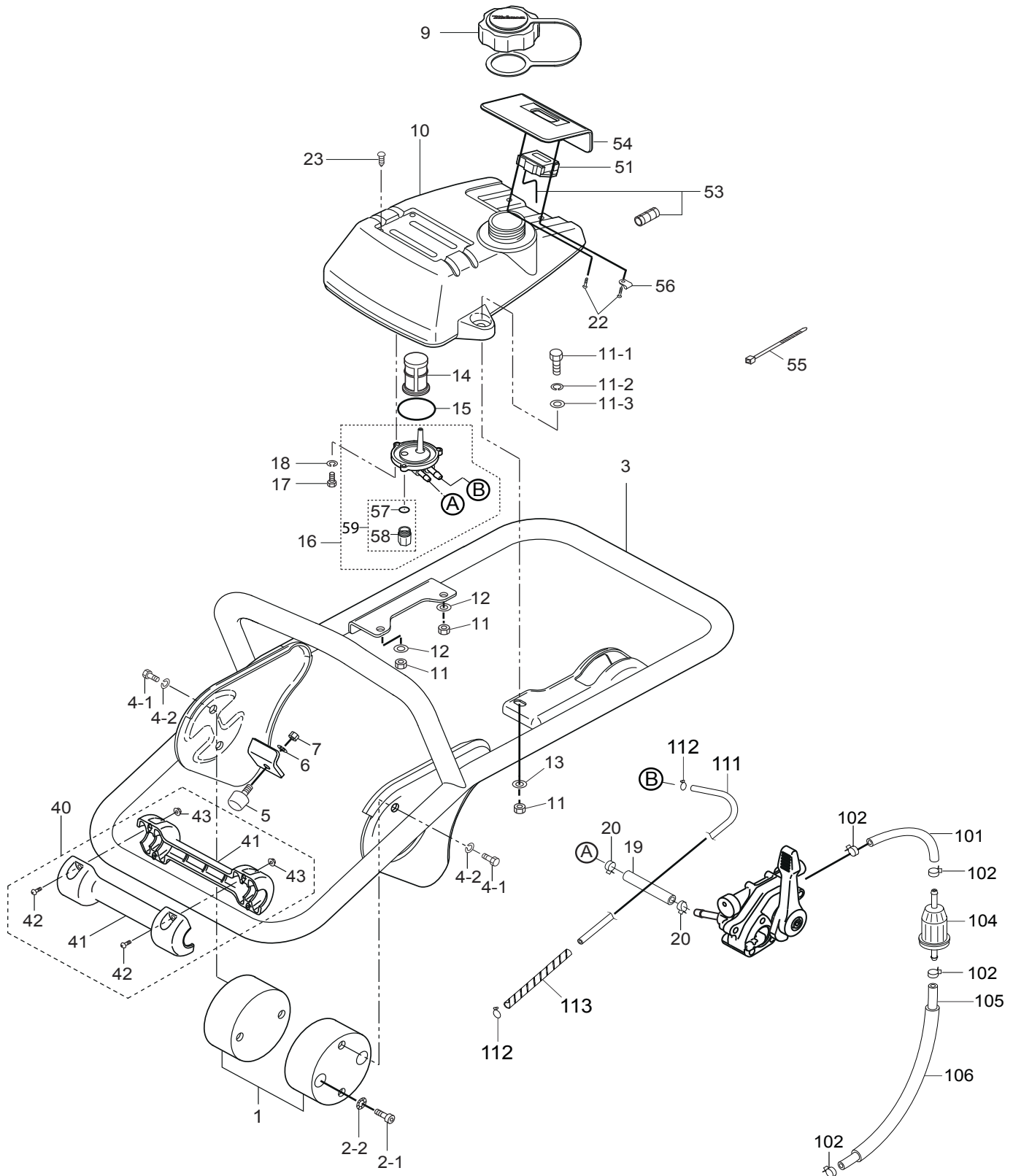
FOOT ASSY.



FOOT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	8511S	FOOT ASSY 285	1.....	INCLUDES ITEMS W/ #
2	0227-11214	NYLON NUT M12	4	
3	030212300	WASHER, LOCK M12	4	
4	009110034	BOLT, SQUARE NECK 12X65	2	
5	009110035	BOLT, SQUARE NECK 12X95	2	
6	363343390	GRIP HANDLEBAR	1	
8#	030210250	WASHER, LOCK M10	7	
9#	022711012	NYLON NUT M10	7	
14#	009110036	BOLT, SQUARE NECK 10X55	3	
15#	009110033	BOLT, SQUARE NECK 10X50	4	

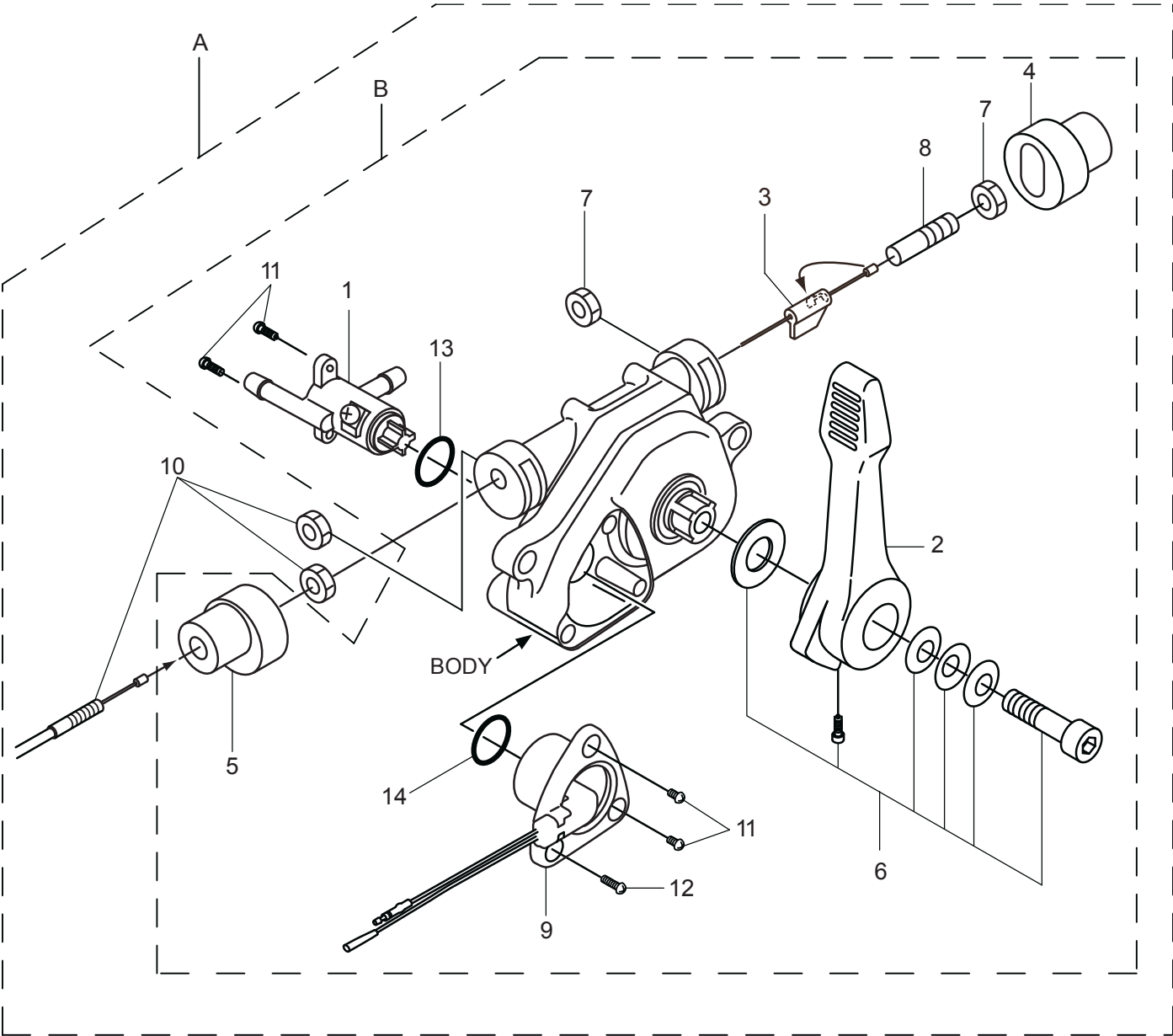
FUEL TANK AND HANDLE ASSY.



FUEL TANK AND HANDLE ASSY.

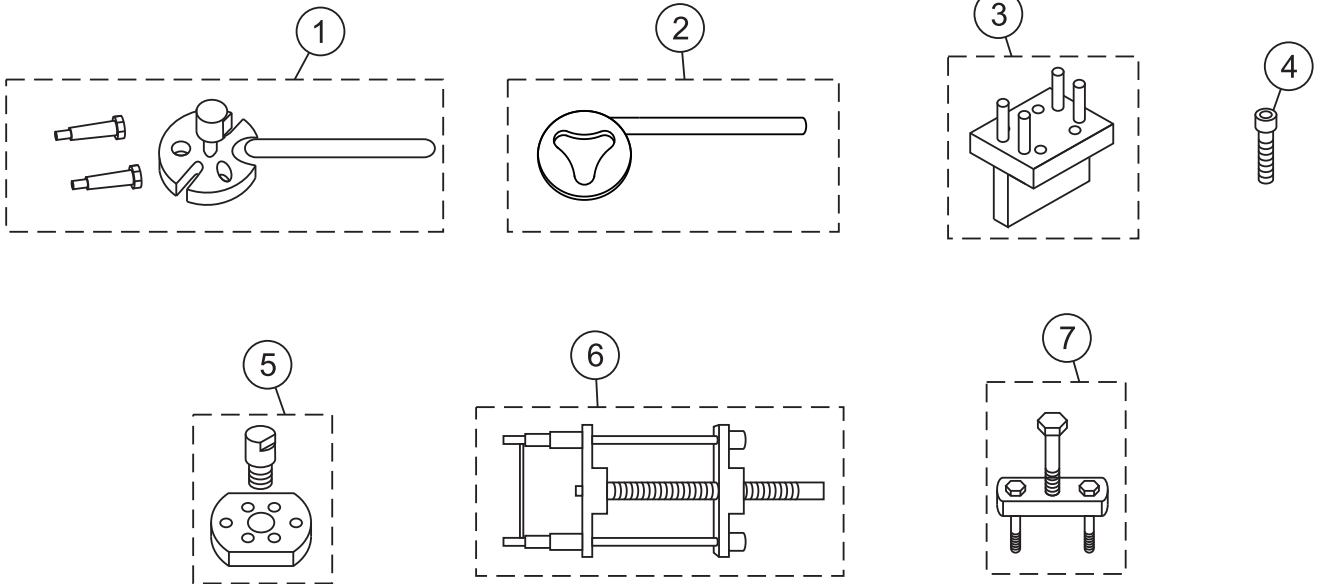
<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	366346270	SHOCK ABSORBER W/PIN	2	
2-1	014210020	SOCKET HEAD BOLT 10 X 20 T	4	
2-2	033121009	TOOTHED LOCK WASHER B M10	4	
3	367119052	HANDLE	1	
4-1	001211020	BOLT 10X20 H	4	
4-2	030210250	WASHER, LOCK M10	4	
5	939010270	STOPPER RUBBER (70)	1	
6	030208200	WASHER, LOCK M8	1	
7	020108060	NUT M8	1	
9	366350460	CAP ASSY., FUEL TANK	1	
10	366120250	FUEL TANK/MTX70	1	
11	022710809	NYLON NUT M8	3	
11-1	011208025	BOLT 8X25 H	3	
11-2	030208200	WASHER, LOCK M8	3	
11-3	0401450080	WASHER, FLAT M8	3	
12	952401450	WASHER, 8.5X22X3	2	
13	0401450080	WASHER, FLAT M8	1	
14	954406010	STRAINER #508	1	
15	050250420	PACKING, FUEL TANK	1	
16	366350580	HOLDER, FILTER.....	1	INCLUDES ITEMS W/ \$
17	001200515	BOLT 5X15 H	3	
18	030205130	WASHER, LOCK M5	3	
19	959328406	FUEL HOSE L=90	1	
20	0561080020	HOSE CLAMP	2	
22	009110037	TAPPING SCREW 5X20	2	
23	094010053	PAN HEAD SCREW 4X8	4	
41	366217170	ROLLER	2	
42	0017105020	SCREW 5X20	4	
43	022610505	FLANGE NUT M5 H	4	
44#	366464260	CUP, HOLDER FILTER	1	
45#	366464270	PACKING, HOLDER FILTER	1	
51	955010311	TP22 TACHO/HOUR METER	1	
53	980010400	CURL CORD	1	
54	366345620	FINISHER, METER	1	
55	454010020	CLAMP TC100	5	
56	954010270	CLIP AB-3N	1	
57&\$	366464260	CUP, HOLDER FILTER	1	
58&\$	366464270	PACKING, HOLDER FILTER	1	
59\$	366900170	CUP AND PACKING SET	1	INCLUDES ITEMS W/ &
101	959328402	FUEL HOSE 5.5X8.5X170	1	
102	0561080020	HOSE BAND	4	
104	26365012A3	FILTER, IN-LINE FUEL	1	
105	959328403	FUEL HOSE 5.5X8.5X260	1	
106	954407720	TUBE, VINYL L180	1	
107	959021824	SPIRAL TUBE D=6, L=200	1	
111	959028301	RETURN HOSE 3X6X600	1	
112	954408170	HOSE CLIP 5	2	
113	959021814	SPIRAL TUBE 6D-200L	1	

COMBINATION LEVER ASSY.



COMBINATION LEVER ASSY.

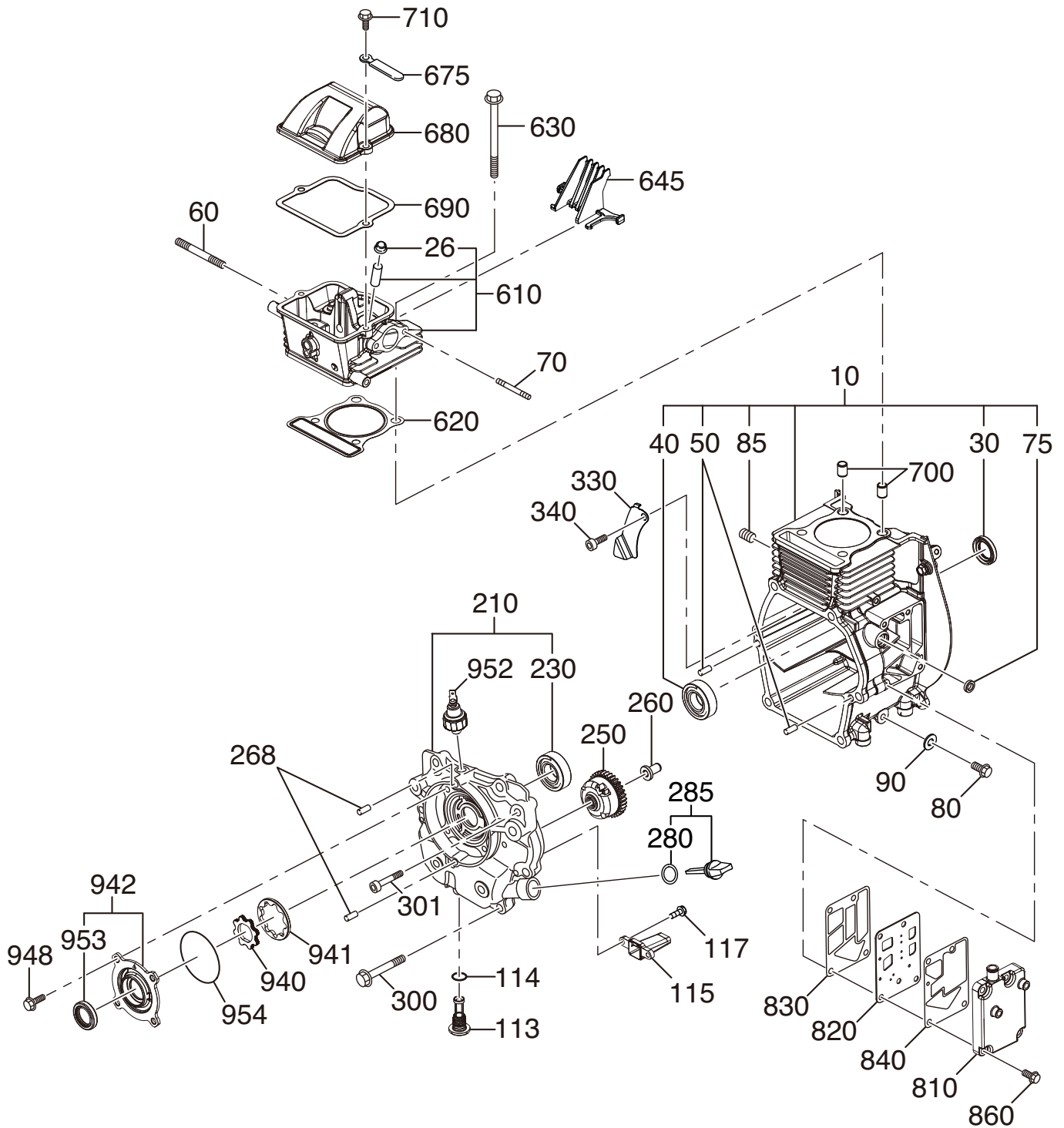
<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
A	366900032	COMB. LEVER W/ THROTTLE WIRE.....	1.....	INCLUDES ITEMS W/@
B	956200110	COMB. LEVER W/OUT THROTTLE WIRE.....	1.....	INCLUDES ITEMS W/#
1@#	366349430	FUEL COCK	1	
2@#	366010310	LEVER	1	
3@#	366010190	SLIDER	1	
4@#	366010200	END CAP	1	
5@#	366010210	WIRE CAP	1	
6@#	366010220	BOLT AND WASHER SET	1	
7@#	020408050	NUT M8, H=5	2	
8@#	959407650	SOCKET HEAD SCREW/THROTTLE WIRE	1	
9@#	366010320	STOP SWITCH	1	
10@	956100062	THROTTLE WIRE	1	
11@#	094010051	TAPPING SCREW B1 4X12	4	
12@#	094010052	TAPPING SCREW B1 4X30	1	
13@#	050200150	O-RING, P15	1	
14@#	050200110	O-RING, P11	1	



TOOLS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	981010400	CLUTCH PULLER A	1	
2	983010060	CLUTCH MOUNTER	1	
3	983910030	PISTON ROD HOLDER	1	
4	009110044	SOCKET HEAD BOLT 8X50 (FULL THREAD)		
		CRANK GEAR REMOVER	2	
5	983910021	CLUTCH PULLER B	1	
6	983010042	SPRING CYLINDER REMOVER	1	
7	983910010	PISTON END REMOVER	1	

ROBIN ER120D45000 ENGINE — CRANKCASE ASSY.

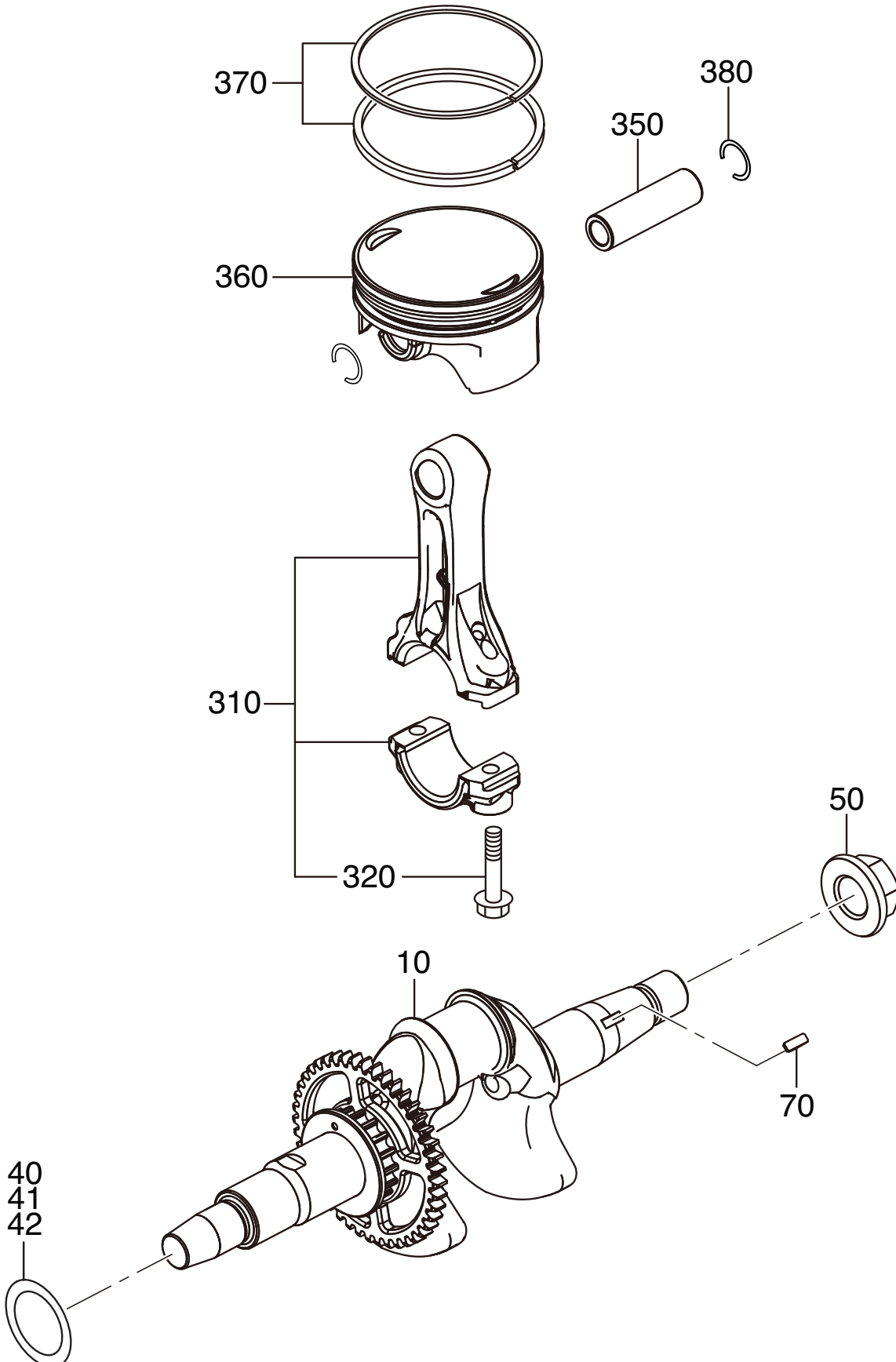


960 — GASKET SET

ROBIN ER120D45000 ENGINE — CRANKCASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	21E10101M1	CRANKCASE CP	1.....	INCLUDES ITEMS W/#
26@	20F1601001	STEM SEAL	1	
30#	0440200070	OIL SEAL	1	
40#	X600200200	BALL BEARING	1	
50#	20F0060023	DOWEL PIN	2	
60	X105080550	STUD	2	
70	X105060470	STUD	2	
75#	X440080010	OIL SEAL	1	
80	0110080150	FLANGE BOLT	1	
85#	0403140010	PLUG	1	
90	X211080050	GASKET(ALUMINIUM)	1	
113	21E65001H2	PLUG	1	
114	0240110020	O-RING	1	
115	21E64201J3	SUCTION PIPE	1	
117	X110050030	FLANGE BOLT	2	
210	21E11001L1	MAIN BEARING COVER CP	1.....	INCLUDES ITEMSW/\$
230\$	X600220030	BALL BEARING	1	
250	21E45001J1	GOVERNOR GEAR CP	1	
260	21E41901H3	GOVERNOR SLEEVE	1	
268	20F0060023	DOWEL PIN	2	
280	X213160030	GASKET	1	
285	21E63601H1	OIL GAUGE CP	1	
300	0110080160	FLANGE BOLT	6	
301	X119060110	BOLT (SOCKET HEAD)	1	
330	21E17001H3	OIL SHELTER PLATE	1	
340	0011305100	BOLT AND WASHER ASSY	1	
610	21E13001L0	CYLINDER HEAD ASSY	1.....	INCLUDES ITEMS W/@
620	21E1500113	GASKET(HEAD)	1	
630	X110080460	FLANGE BOLT	4	
645	21E18001H3	GUIDE (S.PLUG)	1	
680	21E15501H3	ROCKER COVER	1	
690	21E1600101	GASKET CP (R.COVER)	1	
700	20F1501103	PIPE KNOCK	2	
710	X110060610	FLANGE BOLT	2	
810	21E14301H3	BREATHER COVER	1	
820	21E14401H1	BREATHER PLATE CP	1	
830	21E16002H3	GASKET (B.PLATE)	1	
840	21E16003H3	GASKET (B.COVER)	1	
860	0110060230	FLANGE BOLT	4	
940	21E63901H3	INNER ROTOR	1	
941	21E63902H3	OUTER ROTOR	1	
942	21E64001L1	OIL PUMP COVER CP	1.....	INCLUDES ITEMS W/%
948	0110060440	FLANGE BOLT	4	
952	21E76301H1	SWITCH OIL PRESSURE	1	
953%	0440200070	OIL SEAL	1	
954	0240590020	O-RING	1	
960	21E9900117	GASKET SET	1	

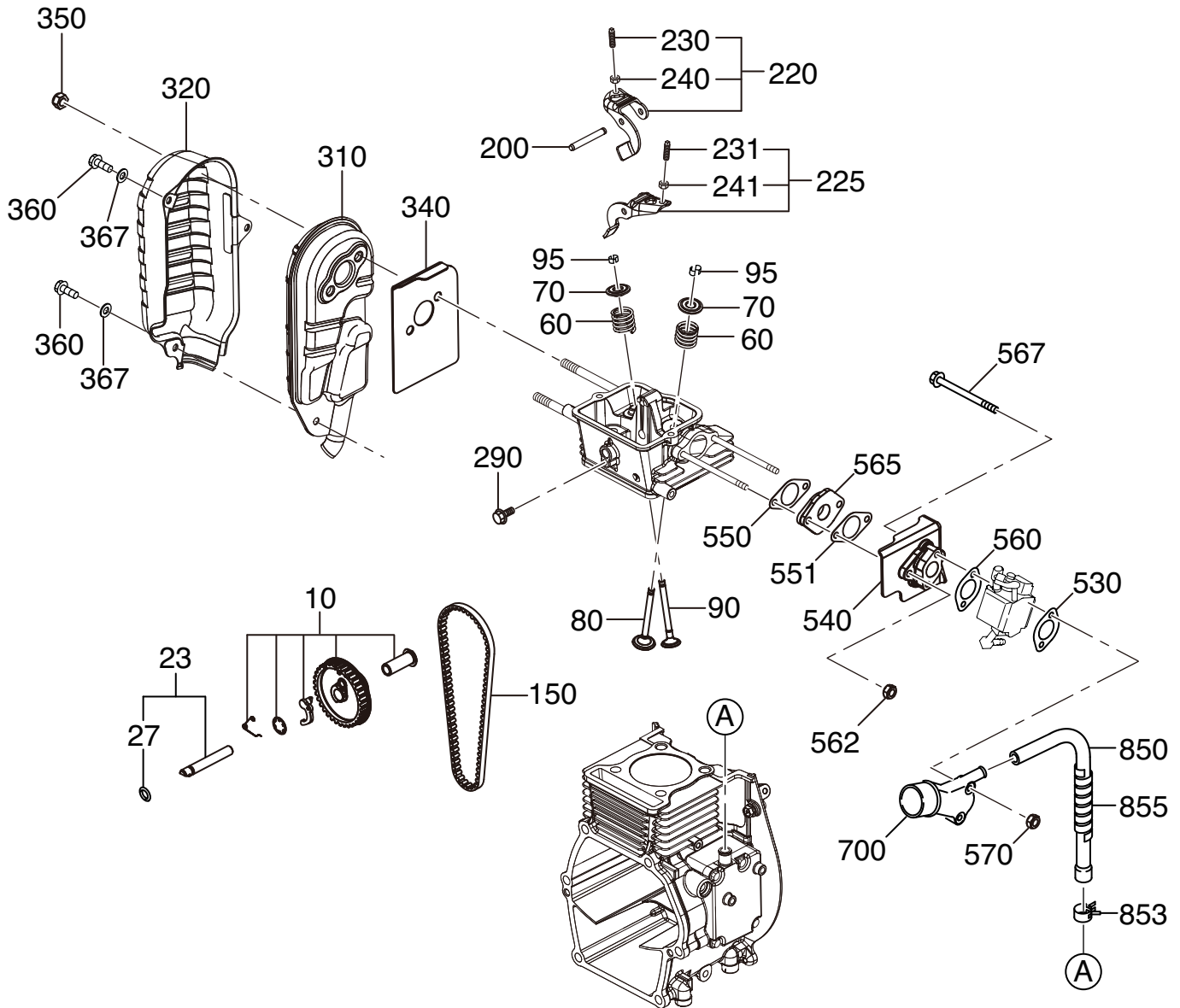
ROBIN ER120D45000 ENGINE — CRANKSHAFT, PISTON ASSY.



ROBIN ER120D45000 ENGINE — CRANKSHAFT, PISTON ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	21E20201K1	CRANKSHAFT CP	1	
40	X230220100	SPACER	1	
41	X230220110	SPACER	1	
42	X230220120	SPACER	1	
50	0180140020	FLANGE NUT	1	
70	0053203101	WOODRUFF KEY	1	
310	21E22501J0	CONNECTING ROD ASSY	1.....	INCLUDES ITEMS W/ #
320#	20F2300103	CONNECTING ROD BOLT	2	
350	21E23301H3	PISTON PIN	1	
360	21E23401H3	PISTON STD	1	
360	21E23403H3	PISTON O.S. 0.25	1	
360	21E23404H3	PISTON O.S. 0.50	1	
370	21E23501H7	PISTON RING SET, STD	1	
370	21E23502H7	PISTON RING SET, 0.25 O.S	1	
370	21E23503H7	PISTON RING SET, 0.50 O.S.	1	
380	21E2500103	CLIP	2	

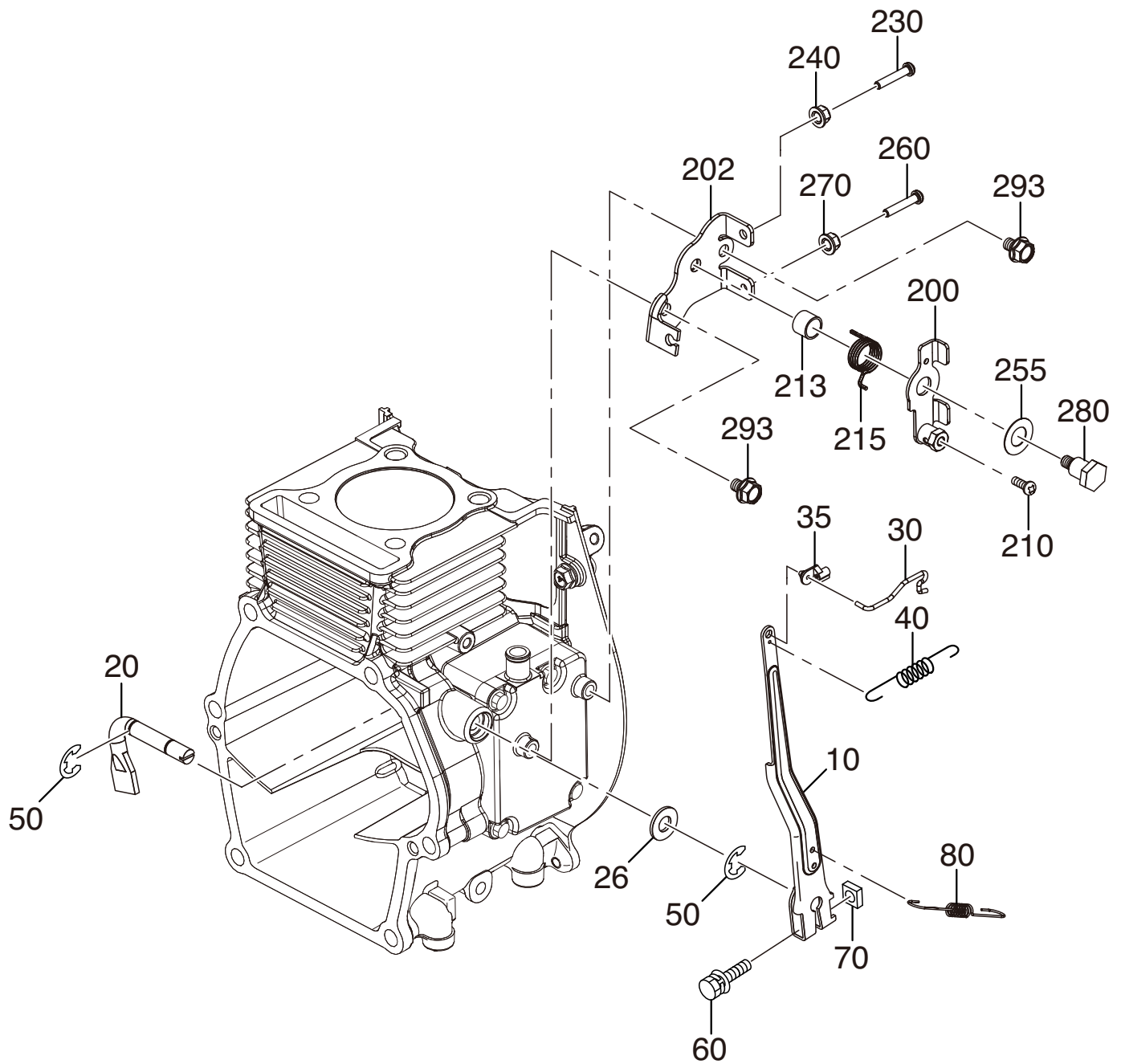
ROBIN ER120D45000 ENGINE — INTAKE, EXHAUST ASSY.



ROBIN ER120D45000 ENGINE — INTAKE, EXHAUST ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	21E31601L1	CAM PULLEYCP	1	
23	21E35101H1	PIN (CAM PULLEY) CP	1	INCLUDES ITEMS W/ #
27#	0240060010	O-RING	1	
60	2793360103	VALVE SPRING	2	
70	2693370103	SPRING RETAINER	2	
80	27633401H3	INTAKE VALVE	1	
90	27633501H3	EXHAUST VALVE	1	
95	20F10KA031	COLLET VALVE	4	
150	21E3560103	TIMING BELT	1	
200	2773500403	PIN (ROCKER)	1	
220	21E36101H0	ROCKER ARM INTAKE ASSY	1	INCLUDES ITEMS W/ \$
225	21E36102H0	ROCKER ARM EXHAUST ASSY	1	INCLUDES ITEMS W/ @
230\$	20A0140100	ADJUST SCREW	1	
231@	20A0140100	ADJUST SCREW	1	
240\$	20A0180100	NUT	1	
241@	20A0180100	NUT	1	
290	20F0060010	FLANGE BOLT	1	
310	21E30101K2	MUFFLER UN	1	
320	21E34201L2	MUFFLER COVER UN	1	
360	X130060330	BOLT AND WASHER ASSY	2	
367	0200060120	WASHER	2	
340	21E35201H3	GASKET (MUFFLER)	1	
350	0176080020	SELF LOCK NUT	2	
530	1066500203	GASKET (CARB.)	1	
540	21E32902J3	INSULATOR 2	1	
550	2823590103	GASKET (INSULATOR)	1	
551	21E35001H3	GASKET (INSULATOR)	1	
560	21E35002H3	GASKET (CARB)	1	
562	20F6060020	SELF LOCK NUT	2	
565	21E32901H3	INSULATOR 1	1	
567	0100050110	BOLT	2	
570	0176050010	SELF LOCK NUT	2	
700	21E33001H3	INTAKE PIPE (D)	1	
850	21E16103H3	RUBBER PIPE	1	
853	0561130010	HOSE CLAMP	1	
855	21E19001H3	SPIRAL TUBE	1	

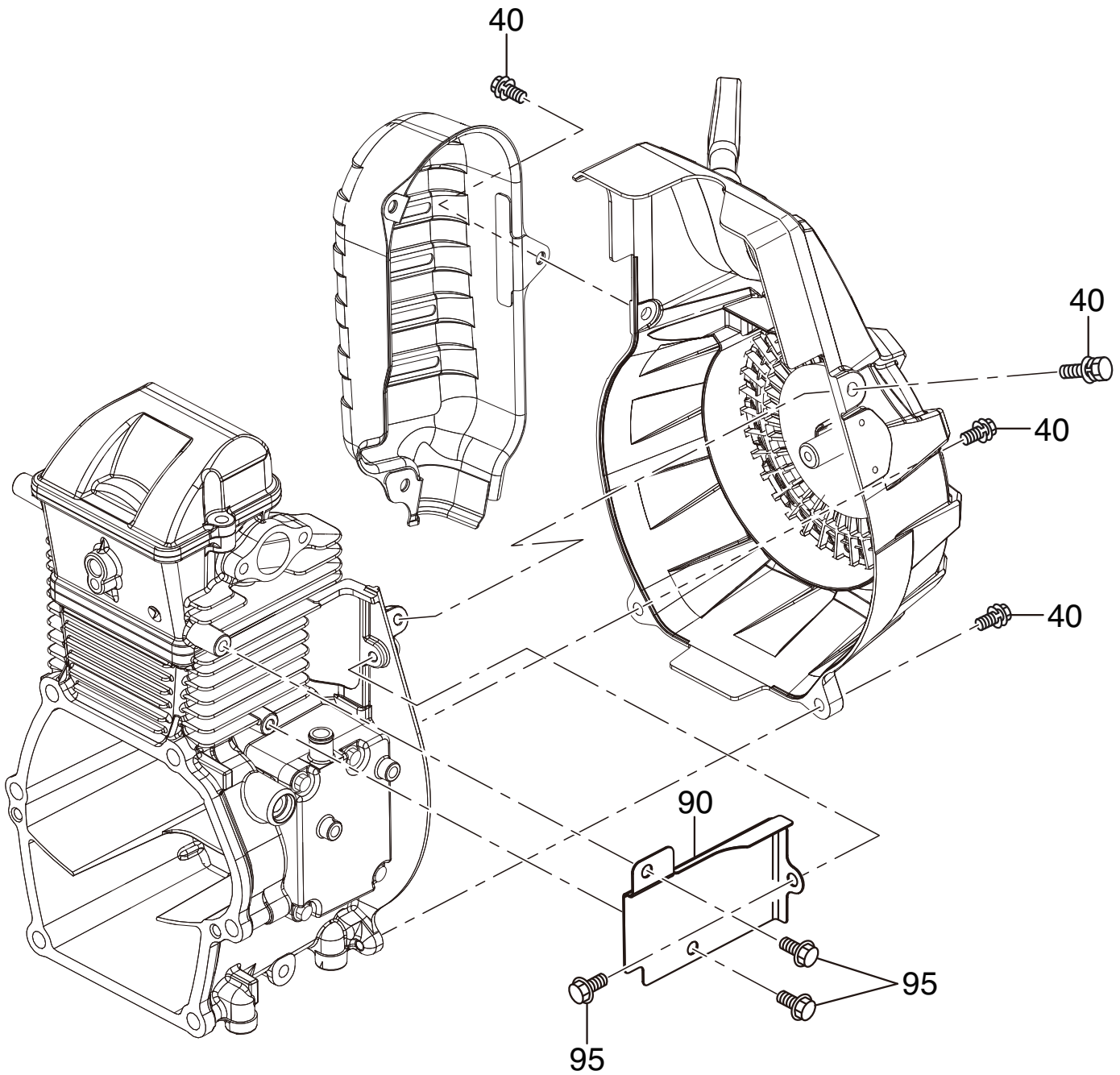
ROBIN ER120D45000 ENGINE — GOVERNOR, OPERATION ASSY.



ROBIN ER120D45000 ENGINE — GOVERNOR, OPERATION ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	21E42301H3	GOVERNOR LEVER	1	
20	21E42201J3	GOVERNOR SHAFT	1	
26	20F1108000	WASHER	1	
30	21E42701J1	GOVERNOR ROD CP	1	
35	2844560103	LINKAGE BUSHING	1	
40	21E4280103	ROD SPRING	1	
50	0031306000	CLIP	2	
60	20F1406300	BOLT AND WASHER ASSY	1	
70	0186060020	NUT	1	
80	21E4250113	GOVERNOR SPRING	1	
200	21E43301J0	SPEED CONT. LEVER ASSY	1	
202	21E46002J1	BASE PLATE CP	1	
210	0043104140	SCREW, PANHEAD	1	
213	0230100040	SPACER	1	
215	2264500313	RETURN SPRING	1	
230	X140050110	SCREW	1	
240	0021705000	NUT	1	
255	0217100020	FRICTION WASHER	1	
260	X140050110	SCREW	1	
270	0021705000	NUT	1	
280	2264310301	LINK PIVOT CP	1	
293	20F0060010	FLANGE BOLT	2	

ROBIN ER120D45000 ENGINE — COOLING ASSY.



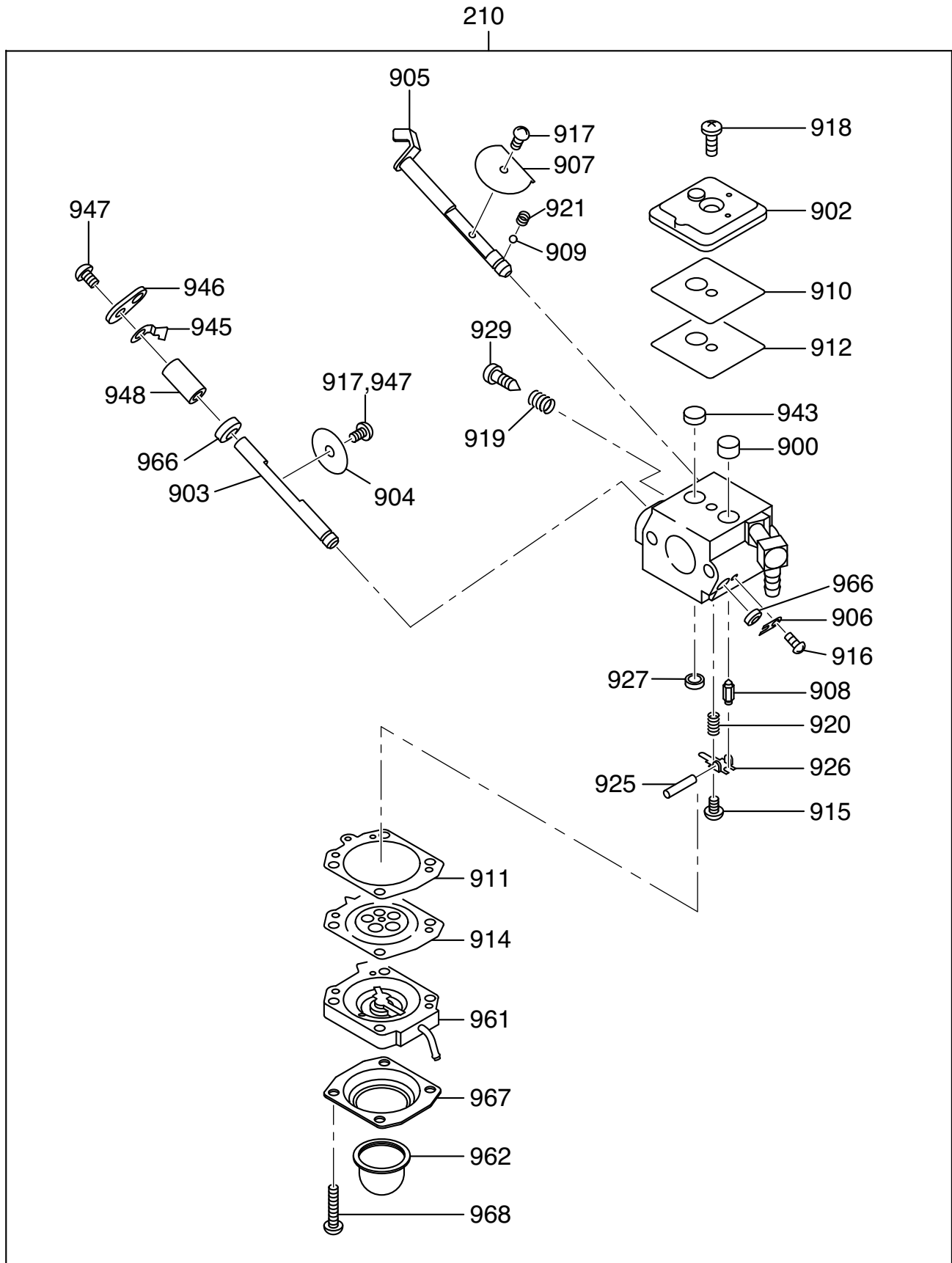
ROBIN ER120D45000 ENGINE — COOLING ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
40	X130060340	BOLT AND WASHER ASSY	4	
90	21E52601H3	CYLINDER BAFFLE	1	
95	20F0060010	FLANGE BOLT	3	

ROBIN ER120D45000 ENGINE — STARTING ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
210	21E50201L0	RECOIL STARTER ASSY	1.....	INCLUDES ITEMS W/ #
211#	20F5011508	SPIRAL SPRING	1	
212#	21ES022008	REEL	1	
213#	21E5011008	STARTER ROPE	1	
214#	20F5010018	STARTER KNOB	1	
215#	20F5022508	RATCHET	2	
216#	2745013108	FRICTION SPRING	1	
217#	2275013508	RETURN SPRING	2	
218#	21E5026008	RATCHET GUIDE	1	
249#	20B5010108	SET SCREW	1	
280#	21E5015018	STARTER CASE CP	1	

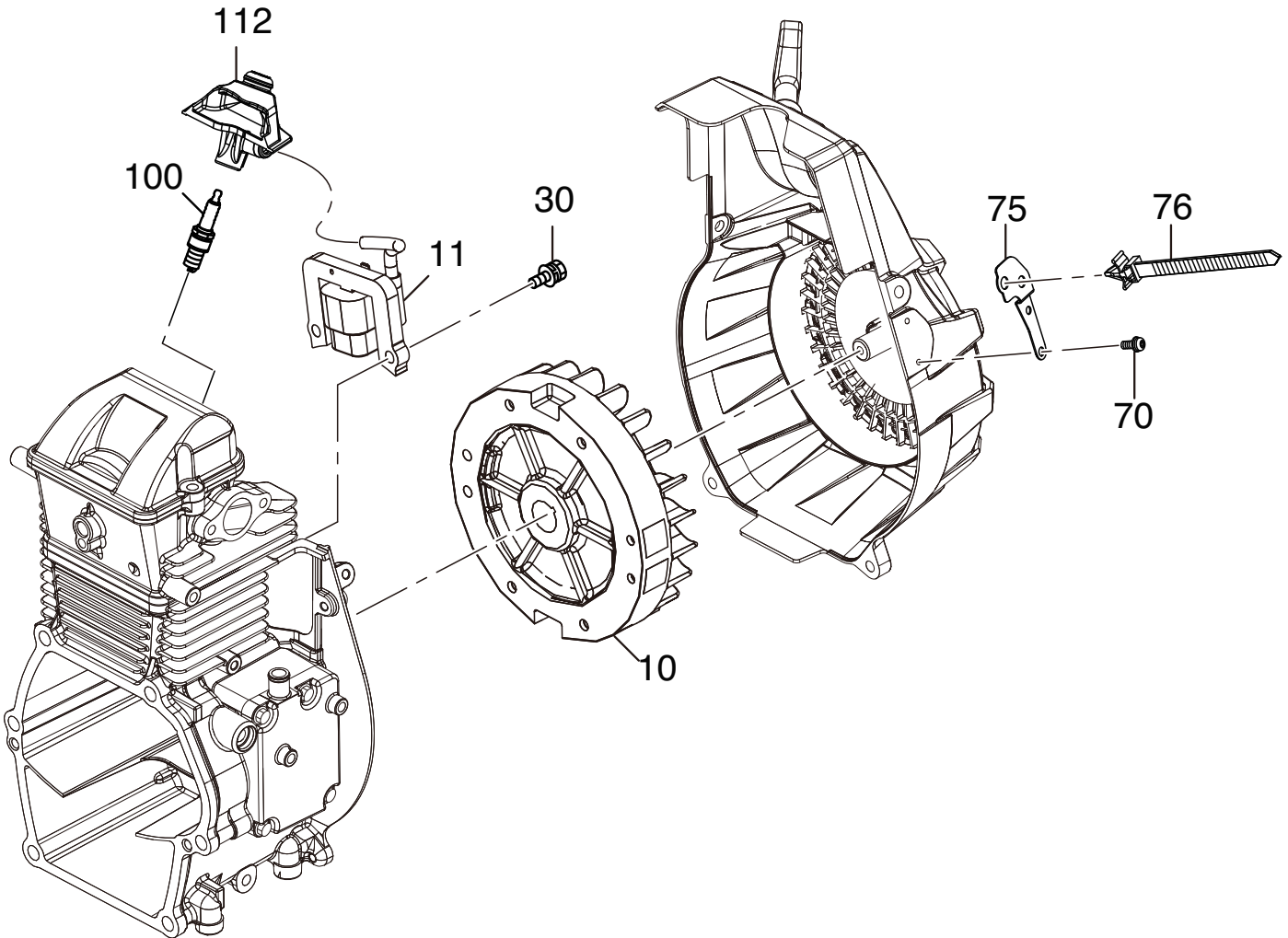
ROBIN ER120D45000 ENGINE — FUEL LUBRICANT ASSY.



ROBIN ER120D45000 ENGINE — FUEL LUBRICANT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
210	21E6240100	CARBURETOR ASSY	1.....	INCLUDES ITEMS W/#
900#	5016004010	SCREEN INLET	1	
902#	2526261308	COVER PUMP	1	
903#	2526261208	SHAFT THROTTLE	1	
904#	1616233508	VALVE THROTTLE	1	
905#	2846260308	SHAFT ASSY CHOKE	1	
906#	5106045040	CLIP THROTTLE SHAFT	1	
907#	2846260408	VALVE CHOKE	1	
908#	1616255208	VALVE, INLET NEEDLE	1	
909#	1476258408	BALL	1	
910#	1616238008	GASKET, PUMP	1	
911#	2526261808	GASKET, METERING DIA.	1	
912#	2526261008	DIAPHRAGM PUMP	1	
914#	2526261708	DIAPHRAGM ASSY,METERING	1	
915#	2526261908	SCREW	1	
916#	1066257608	SCREW ASSY	1	
917#	1476257308	SCREW VALVE	1	
918#	2846260008	SCREW	1	
919#	1616245408	SPRING	1	
920#	1616245108	SPRING, METERING LEVER	1	
921#	1476258308	SPRING CHOKE	1	
925#	1616236808	PIN, METERING LEVER	1	
926#	1616236908	LEVER, METERING	1	
927#	1476257508	PLUG WELCH	1	
929#	1616238508	SCREW, IDLE ADJ.	1	
943#	2526261108	SPRING PUMP	1	
945#	1616255108	STOP THROTTLE	1	
946#	2526260308	LEVER THROTTLE	1	
947#	1616255308	SCREW	2	
948#	2526260208	SPACER THROTTLE LEVER	1	
961#	2526261408	BODY ASSY AIR PURGE	1	
962#	2526261508	PUMP PRIMER	1	
966#	1476258608	SEAL	2	
967#	2526261608	COVER PRIMER PUMP	1	
968#	2526262008	SCREW ASSY	4	

ROBIN ER120D45000 ENGINE — ELECTRIC DEVICE ASSY.



ROBIN ER120D45000 ENGINE — ELECTRIC DEVICE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
10	21E79230J1	FLY WHEEL CP	1	
11	21E79430J1	IGNITION COIL CP	1	
30	20F1406250	BOLT AND WASHER ASSY	2	
70	X131040130	SCREW AND WASHER ASSY	2	
75	21E76501H3	PLATE	1	
76	0563000100	WIRE BAND	1	
100	0650140860	SPARK PLUG	1	
112	21E75001J3	SPARK PLUG RUBBER CAP	1	