

ILLUSTRATED PARTS LIST

MODELS	SERIAL NUMBER PREFIX	MODELS	SERIAL NUMBER PREFIX
400018B	11-		

McCulloch Pro Mac 690 Cuts-All saws are identified by a model number (in this instance, 400018) followed by a suffix letter (A, B, C, etc.) stamped on the identification plate attached to the saw. Suffix letters denote variations in parts or assemblies in the manufacture of the saw.

Part numbers listed in this I.P.L. which have a suffix letter or letters following the description, indicate the part is used only on the model(s) identified by the letter or letters.

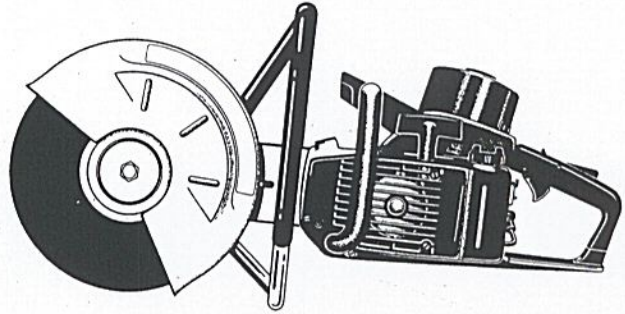
Part numbers and descriptions without suffix letter or letters apply to all versions of the chain saw model.

Part numbers which have one or more dots (.) preceding their descriptions may be ordered individually, but they are also included in the kit or assembly whose description begins directly above the dot(s).

Part numbers in this IPL which were not in the previous IPL covering these saws, are indicated by a dash (-) preceding the new part number.

The policy of McCulloch is one of continual improvement in design, manufacturing and engineering advancement wherever possible to assure still finer two-cycle power tools. Hence, specifications, equipment, colors, design and manufacturer's suggested list prices are subject to change without notice and McCulloch reserves the right to make such changes without prior notification or obligation to backfit or supply backfit components for units previously shipped from the factory.

PRO MAC 690 CUTS-ALL SAW



April 1983

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McCULLOCH

PRO MAC 690
CUTS-ALL SAW

Figure 1. General

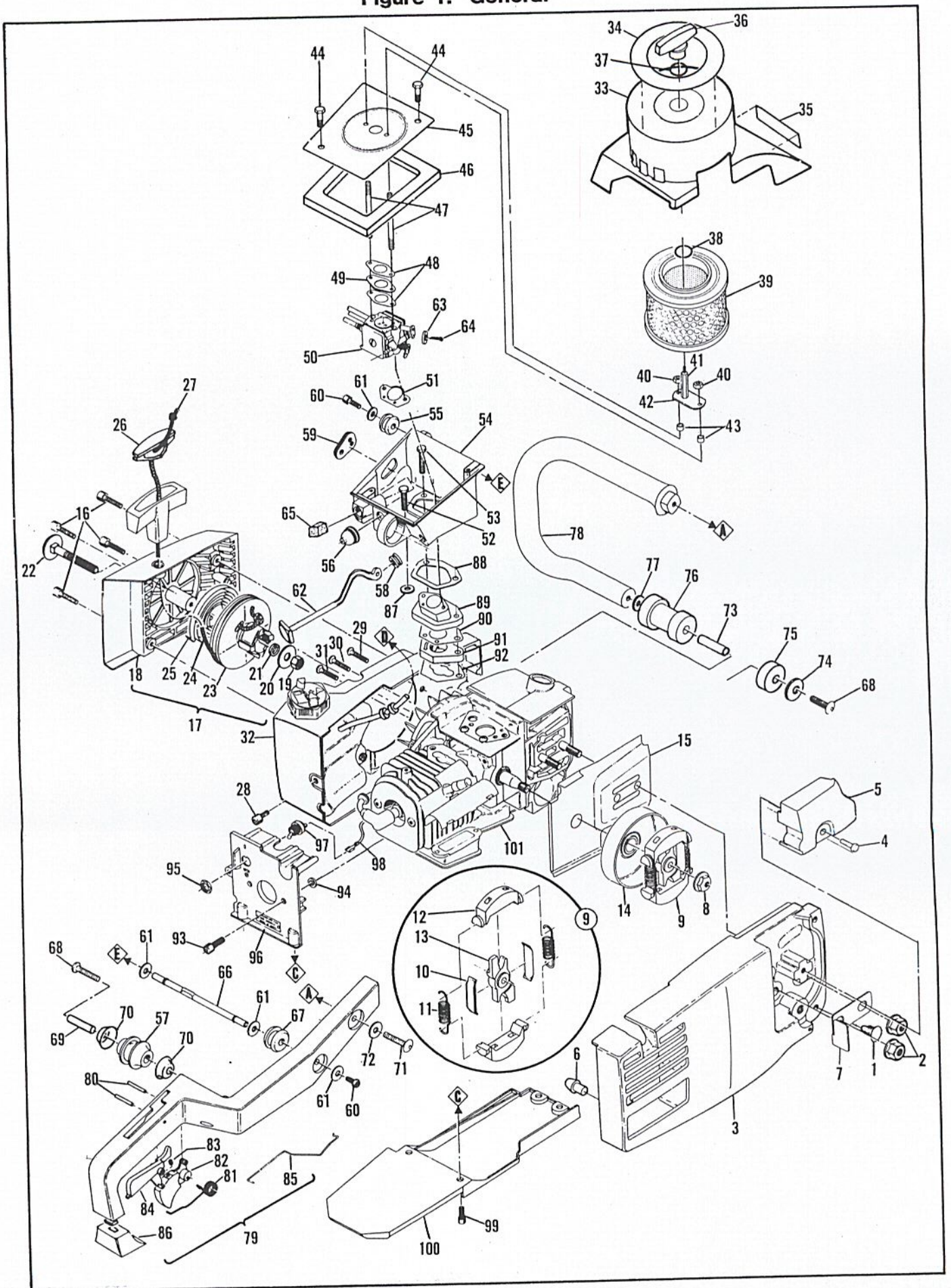


FIGURE 1. GENERAL

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	216316	Plug - Push	1
2	213169	Nut - Hx Flange	2
3	216260	Housing Assembly - Clutch	1
4	120019	. Screw - Hx hd M5 x 13	1
5	95071	. Cover - Brake Boss	1
6	92086	. Snubber - Brake Housing	1
7	216045	Guard - Clutch	1
8	92457	Nut - Hx flg M10 x 1.25	1
9	214301	Clutch Assembly	1
10	64583	. Retainer - Clutch Shoe	2
11	83223	. Spring - Clutch	2
12	67233	. Kit - Clutch Shoe	1
13	214300	. Rotor - Clutch	1
14	216814	Drum/Bearing Assembly	1
15	92354	Jacket - Cylinder	1
16	216210	Screw - Skt hd M4 x 16(SEMS)	4
17	95358	Starter Assembly	1
18	95353	. Kit - Starter Housing	1
19	111038	.. Nut - 1/4-20	1
20	95401	.. Washer - Starter	1
21	95402	.. Spacer - Starter	1
22	215848	.. Step Bolt - Starter	1
23	214293	. Drum Assembly - Starter	1
24	213236	.. Rope - Starter	1
25	87680	. Spring - Starter Rewind	1
26	214699	. Insert - Handle	1
27	93137	. Handle - Starter	1
28	216673	Screw - Skt hd M5 x 14 1/4	1
29	216663	Screw - Fan Housing (M5 x 40)	1
30	216662	Screw - Fan Housing (M5 x 35)	1
31	216661	Screw - Fan Housing (M5 x 20)	1
32		Fan Housing & Fuel Tank Asy (Figure 4)	1
33	216266	Cover Asy - Air Box	1
34	216376	. Decal - Caution	1
35	216380	. Decal - Logo	1
36	91991	. Knob - Air Cleaner Cover	1
37	216708	. "O" Ring	1
38	110565	. Ring - Retaining	1
39	216014	Filter - Air	1
40	216626	Nut - Hx M5 Lock	2
41	216264	Stud - Bracket	1
42	216228	Bracket Asy - Air Cleaner	1
43	216773	Spacer - Bracket	2
44	110746	Screw - Hx 10-24 x 1/2	2
45	216128	Plate Asy - Carburetor	1
46	216116	Gasket - Air Box	1
47	216265	Stud - Carburetor	2
48	216117	Gasket - Carburetor	2
49	216118	Spacer - Carburetor	1
50		Carburetor Asy (Figure 3)	1
51	91924	Gasket - Carburetor	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
52	120037	Screw - Hx hd M5 x 25(SEMS)	1
53	120039	Screw - Hx hd M5 x 30(SEMS)	2
54	216261	Air Box Assembly	1
55	93253	. Grommet - Strut	1
56	69597	. Boot - Control Rod	1
57	92065	. Isolator	1
58	93261	. Grommet - Choke	1
59	91995A	Grommet - Carburetor Needle	1
60	216681	Screw - Skt hd M5 x 13	2
61	110990	Washer	4
62	216263	Rod - Choke	1
63	101861	Washer - Plain	1
64	101901	Pin - Cotter	1
65	216774	Filter - Vent	1
66	93252A	Strut - Handle	1
67	93253	Grommet - Strut	1
68	213059	Screw - Btn hd 1/4-14 x 2.5	2
69	92071	Spacer	1
70	92066	Cup - Isolator	2
71	213058	Screw - Btn hd 1/4-14 x 1.75	1
72	111027	Washer - Plain	1
73	92071	Spacer	1
74	111027	Washer - Plain	1
75	93913	Isolator	1
76	94140	Isolator	1
77	216694	Washer - Plain	1
78	91951	Frame	1
79	94255	Handle/Boot Assembly	1
80	110994	. Pin - Roll	2
81	93771	. Spring - Trigger	1
82	91953A	. Trigger	1
83	111013	. Screw - Set	1
84	91955	. Release - Trigger	1
85	214504	. Rod - Throttle	1
86	93459	. Boot - Handle	1
87	93460	Washer - Insulator	1
88	94018	Gasket - Air Box	1
89	94017A	Insulator - Carburetor	1
90	91933	Gasket - Air Box	1
91	91934	Insulator - Air Box	1
92	92038	Gasket - Insulator	1
93	216674	Screw - Skt hd M5 x 24	2
94	93460	Washer - Insulator	2
95	104810	Nut - Hx 15/32 - 32	1
96	92004	Shroud - Cylinder	1
97	93890	Switch - Ignition	1
98	92466	Wire Assembly - Switch	1
99	216673	Screw - Skt hd M5 x 14 1/4	4
100	214670	Shroud - Bottom	1
101		Powerhead Assembly (Figure 5)	1

Figure 2. Cut-Off Assembly

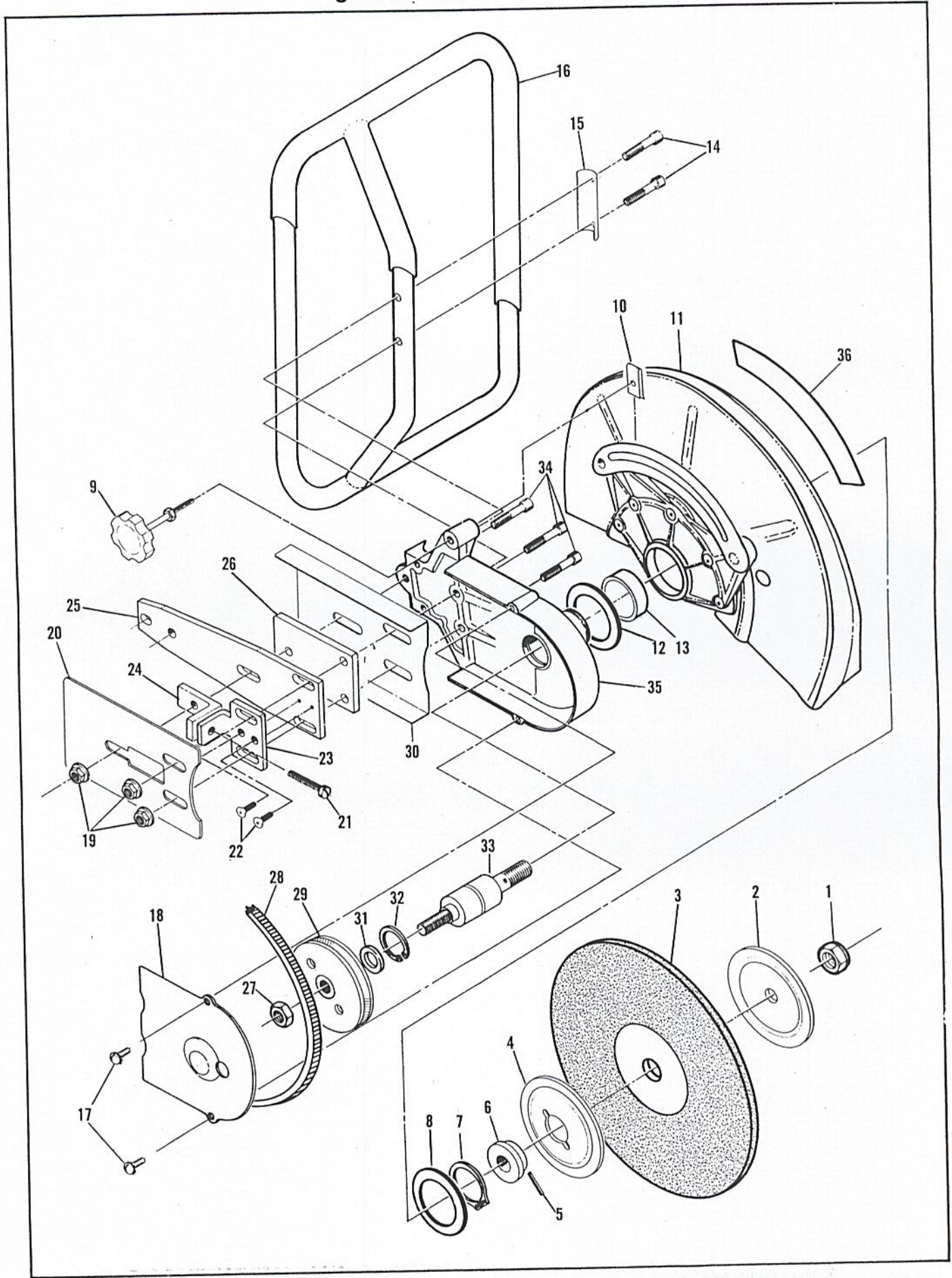
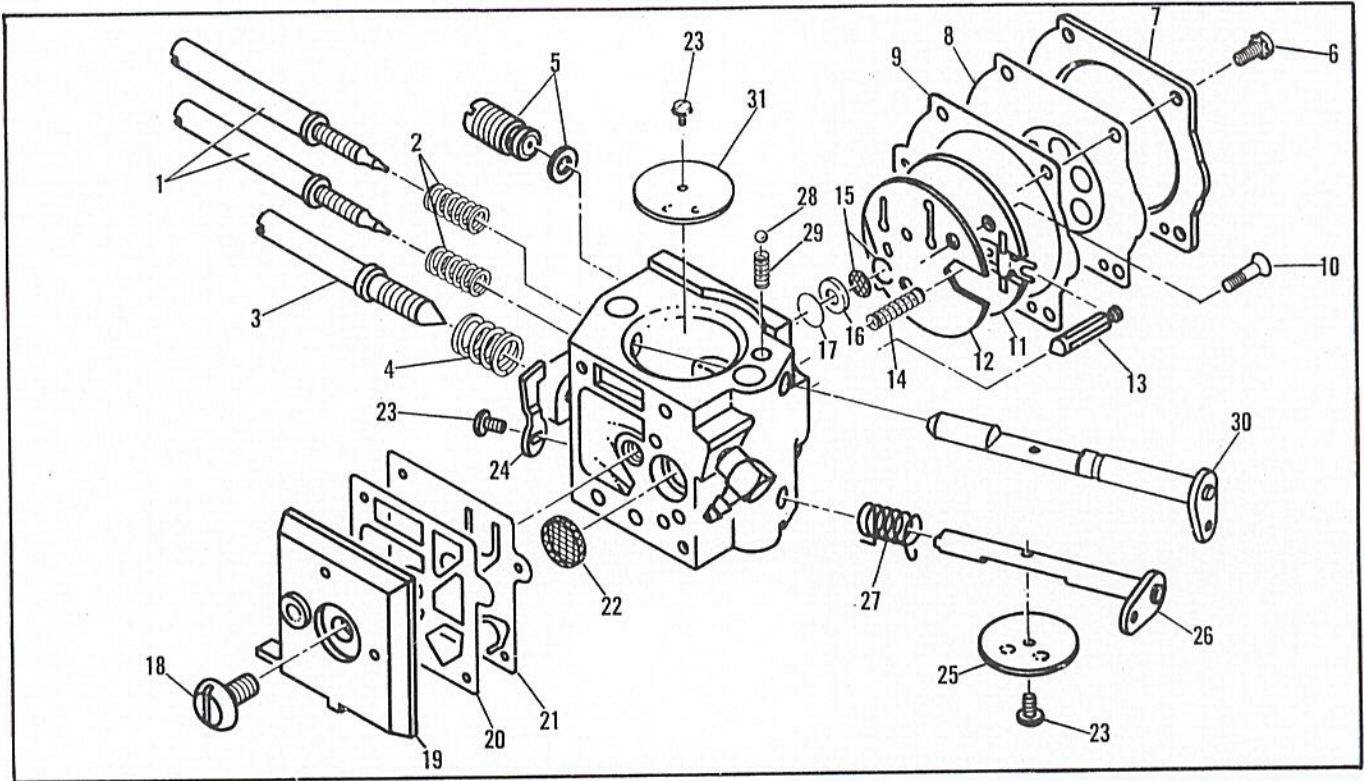


Figure 2. Cut-Off Assembly.

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	216298	Nut - Jam	1
2	216297	Collar - Outside	1
3	216120	Wheel - Abrasive Masonry	1
4	216296	Collar - Inside	1
5	216760	Pin - Roll	1
6	216286	Adaptor - Mounting	1
7	216288	Ring - Retaining	1
8	213069	Washer - Flat	1
9	216101	Knob/Nut Assembly	1
10	213060	Nut - Retainer	1
11	216278	Guard Assembly	1
12	213069	Washer - Flat	1
13	216294	Bushing - Guard	1
14	213063	Screw - Skt hd 1/4-20x1 1/4	2
15	216080	Clamp - Frame	1
16	216757	Frame/Grip Assembly	1
17	216319	Screw (SEMS)	2
18	216306	Guard - Pulley	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
19	216318	Nut - Hx Flg	3
20	216304	Guard - Belt	1
21	105722	Screw - Fil hd 1/4-20x1.38	1
22	216313	Screw - Flat Skt	2
23	216312	Plate - Tension	1
24	216303	Bracket - Tension	1
25	216311	Bar - Mount	1
26	216301	Spacer	1
27	100836	Nut - Jam Hx 1/2-20	1
28	216230	Belt - V	1
29	216290	Pulley - Arbor	1
30	216299	Guard - "U" Form	1
31	213070	Washer	1
32	216295	Ring - Retaining	1
33	216284	Bearing/Shaft Asy	1
34	216293	Screw - Skt	3
35	216281	Arm - Support	1
36	216377	Decal - Caution	1

Figure 3. Carburetor Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	216262	Carburetor - Walbro HDB-13	1
1	- - ③	Needle - Hi Speed & idle	2
2	- - ③	Spring - Needle Adjust	2
3	- - ③	Screw - Idle	1
4	- - ③	Spring - Idle Adjust	1
5	- -	Governor Assembly	1
6	- -	Screw - Metering Cover	4
7	- -	Cover - Metering Diaphragm	1
8	- - ②①	Diaphragm Asy - Metering	1
9	- - ②①	Gasket - Metering Diaphragm	1
10	- -	Screw - Circuit Plate	2
11	- -	Plate Assembly - Circuit	1
12	- - ②①	Gasket - Circuit Plate	1
13	- - ①	Valve - Inlet Needle	1
14	- - ①	Spring - Metering Lever	1
15	- - ①	Seat Asy - Check Valve	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
16	- - ①	Washer - Check Valve	1
17	- -	Valve - Check	1
18	- -	Screw - Fuel Pump Cover	1
19	- -	Cover - Fuel Pump	1
20	- - ②①	Gasket - Fuel Pump	1
21	- - ②①	Diaphragm - Fuel Pump	1
22	- - ①	Screen - Inlet	1
23	- -	Screw - Valve	3
24	- -	Stop - Throttle	1
25	- -	Valve - Throttle	1
26	- -	Shaft Asy - Throttle	1
27	- -	Spring - Throttle return	1
28	- -	Ball - Choke Friction	1
29	- -	Spring - Choke Friction	1
30	- -	Shaft Asy - Choke	1
31	- -	Valve - Choke	1

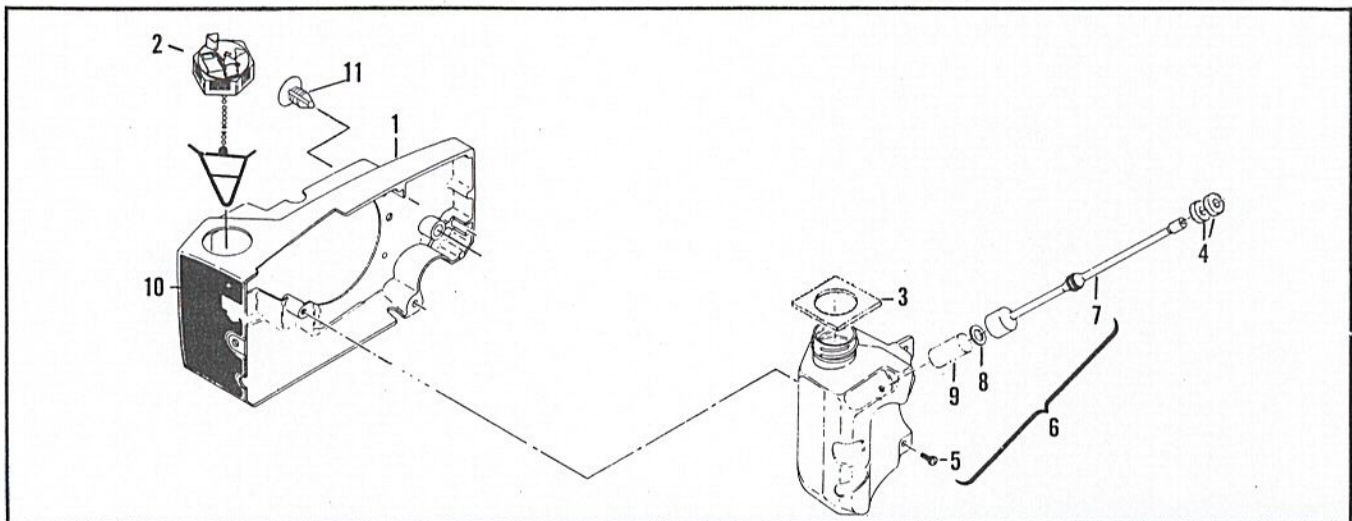
① Contained in Repair Kit, P/N 217091.

② Contained in Diaphragm/Gasket Kit, P/N 217092.

③ Contained in Needle Kit, P/N 217090.

NOTE: Items are listed for identification and disassembly sequence purposes only. They are NOT available individually. Kits listed are the ONLY service parts available for this carburetor.

Figure 4. Fan Housing & Fuel Tank Assembly.



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	216154	Housing - Fan	1
2	216157	Cap Assembly - Fuel	1
3	93251	Seal - Fuel Vent	1
4	92161	Seal - Air Box	2
5	120068	Screw - Pn hd M4 x 12(SEMS)	2
6	94901	Tank Assembly - Fuel	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
7	94899	. Hose Assembly - Fuel	1
8	100440	..Washer - 5/16	1
9	63932	..Filter - Fuel	1
10	216375	Plate - Name	1
11	216316	Plug - Push	1

Tools & Accessories.

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
215432	Pressure Test Tool	94962	Scrench	- -	. Lubricant - Custom, 6-oz
63137	Adaptor - Exhaust	85702	Lubricant - Custom, 6-oz.	- -	Cans, 6-pack
94415	Adaptor - Intake	- -	Can	- -	. Helmet
110761	Plug - D.S.P	85703	Lubricant - Custom, 6-oz.	- -	. Goggles
501334	Ignition Tester	- -	Cans, 6-pack	216567	Deluxe Metal Carrying
84223	Kit - Piston Tools	216568	Workman's Kit	- -	Case
501222	Piston Stop Tool	- -	. Deluxe Metal Carrying	67537	Loctite
214205	Kit - Spk. Arr. Screen	- -	Case	69794	Locquic
216374	Wrench - 15/16	- -	. Replacement Drive Belt	216120	Masonry/Concrete Abrasive
216148	Key - Socket 3/16	- -	. Heavy Duty Air Filter	- -	Wheel
216063	Key - Socket 5/32	- -	. Metal/Steel Abrasive	216121	Metal/Steel Abrasive
216107	Key - Socket 4mm	- -	Wheel	- -	Wheel
216113	Key - Socket 3mm	- -	. Masonry/Concrete	216122	Ductile Cast Iron
110083	R.T.V. Sealant	- -	Abrasive Wheel	- -	Abrasive Wheel

Figure 5. Powerhead Assembly.

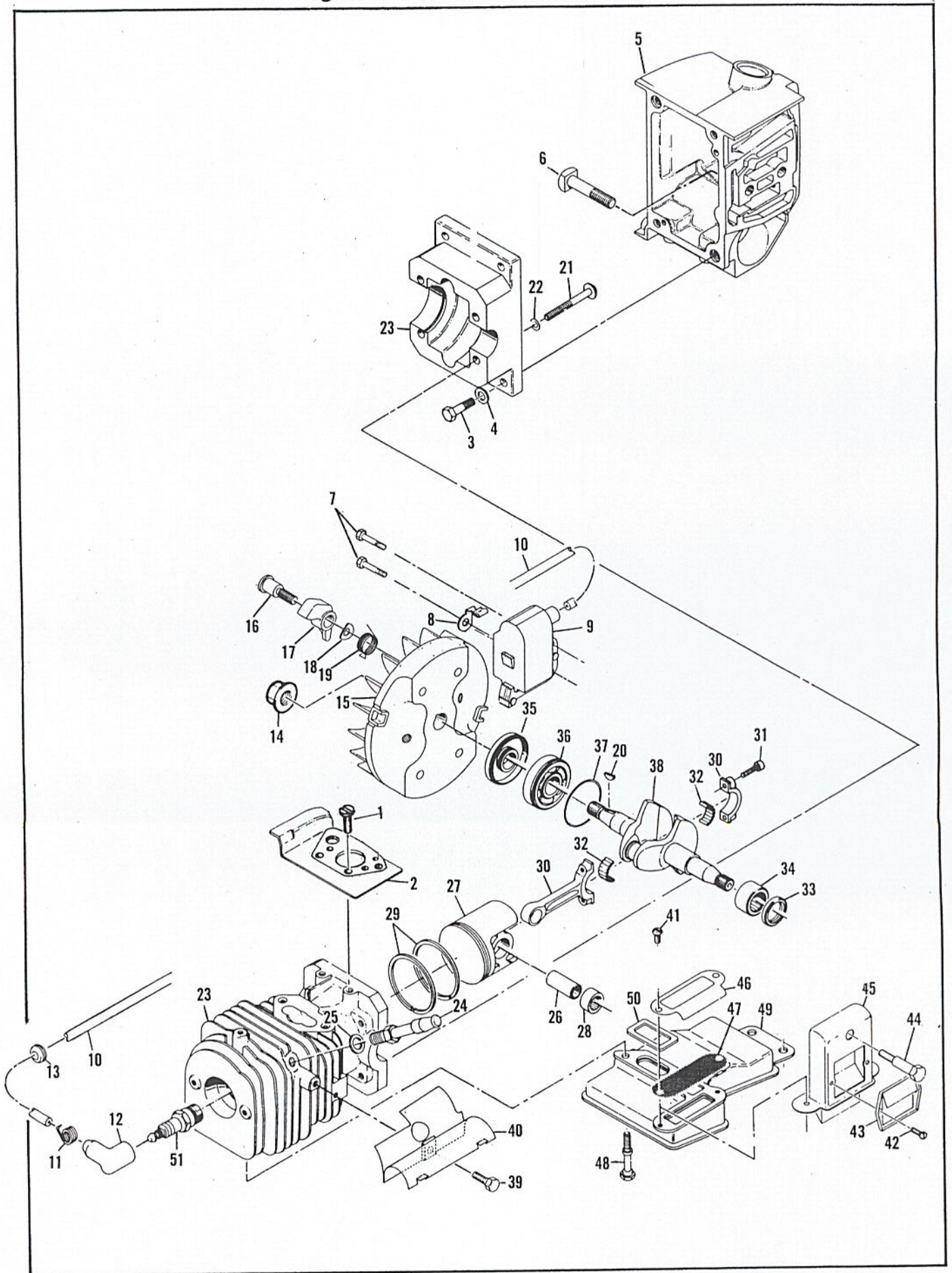


Figure 5. Powerhead Assembly.

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.	ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	120068	Screw - Pn hd M4 x 12(SEMS)	2	27	94130	Piston Assembly	1
2	94727	Cover - Diaphragm	1	28	111021	. Bearing - Needle	2
3	120006	Screw - Hx hd M6.3 x 24	4	29	94132	. Ring Set - Piston	1
4	100004	Washer - Plain	4	30	85352	Rod Asy - Connecting	1
5	216272	Tank Assembly - Oil	1	31	61627A	. Screw - Connecting Rod	2
6	92459	. Bolt - Bar	2	32	63225	. Roller - Needle(set of 20)	1
7	120037	Screw - Hx hd M5 x 25(SEMS)	2	33	110260	Seal - Oil	1
8	84686A	Strap -Ground	1	34	104357	Bearing - Needle	1
9	95553	Ignition Asy - Electronic	1	35	67906	Seal - Oil	1
10	95270	. Wire Asy - Spark Plug	1	36	67905	Bearing - Ball	1
11	102556	.. Connector - Spark Plug	1	37	63464	Ring - Snap	1
12	95266	.. Boot - Spark Plug	1	38	92027	Crankshaft	1
13	110995	. Grommet - Spark Plug Wire	1	39	102762	Screw - Hx hd 10-24 x 1/2	1
14	94500	Nut - Hx flg M10	1	40	95439	Deflector Asy - Exhaust	1
15	216739	Flywheel/Pawl Asy	1	41	120038	Screw - Pn hd M4 x 8	2
16	95362	. Screw - Starter Pawl	2	42	216627	Screw - Pn hd 6-32 x 1/4TAP	2
17	95361	. Pawl - Starter	2	43	93482	Cover - Muffler Chamber	1
18	213253	. Washer - Spring	2	44	93897	Screw - Muffler	1
19	93144	. Spring - Starter Pawl	2	45	93896	Chamber Asy - Muffler	1
20	100106	Key - Woodruff	1	46	93481	Plate - Deflector	1
21	62106	Screw - Wsh hd 12-24 x 1 3/4	4	47	214205	Kit - Spark Arrester Screen	1
22	111025	Washer -Sealing	4	48	92458	Screw - Muffler	2
23	216706	Kit - Cyl/C'Case	1	49	93603	Body - Cover Asy - Muffler	1
24	214304	. Valve - DSP	1	50	84007	Gasket - Muffler	1
25	214765	. Washer - Valve	1	51	214223	Spark Plug - AC CS 45 T	1
26	87710	Pin - Piston	1				

Specifications

Spark Plug Gap	.025 Inch (.63mm)
Lamination Gap	.011 to .015 inch (.28 to .38 mm)
Timing	26° BTDC
Clutch Engagement Speed	2800 to 3000 rpm
Idle Speed	1800 to 2000 rpm
Torques:	
Connecting Rod Screws	65 to 70 pound x inches (7.3 to 7.9 N.m.)
Clutch Nut	160 to 170 pound x inches (18.1 to 19.2 N.m.)
Flywheel Nut	265 to 325 pound x inches (29.9 to 36.7 N.m.)