

# ILLUSTRATED PARTS LIST

MODELS	SERIAL NUMBER PREFIX
600116-02	11-
600116-03	11-
600116-04	11-

McCulloch Chain Saws are identified by a model number (in this instance 600116) followed by a suffix number (02). Suffix numbers denote variations in parts or assemblies used in the manufacture of this product.

Part numbers listed in this I.P.L. which have a circled number ① or numbers preceding the description, are used only on the model or models identified by a circled number ① or numbers.

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).

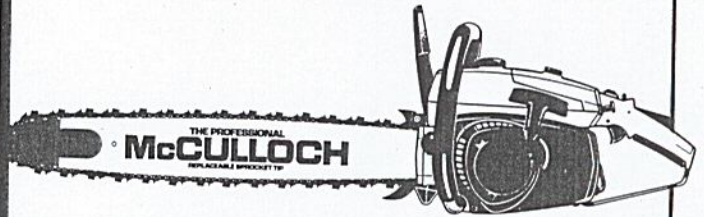
Part numbers in this IPL which were not in the previous IPL covering these saws, are indicated by a (-) preceding the new part number.

The policy of McCulloch Corporation is one of continual improvement in design, manufacturing and engineering advancement wherever possible to assure still finer power tools. Hence, specifications, equipment, colors, design and manufacturer's suggested list prices are subject to change without notice and McCulloch Corporation 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.

APRIL 1987

THE PROFESSIONAL

## Pro Mac™ 700 CHAIN SAW



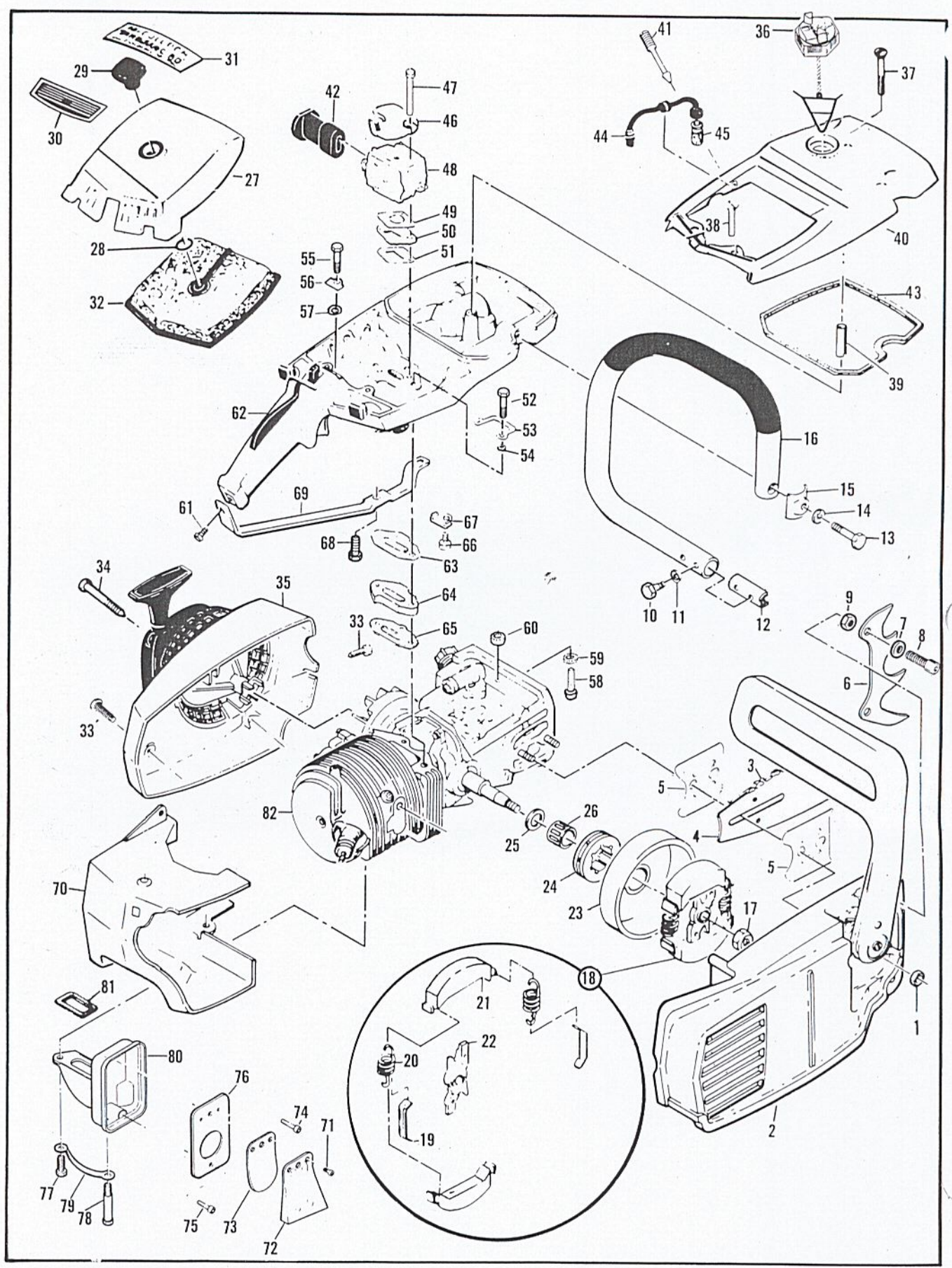
- CONTENTS -

	Page
Figure 1. General Assembly .....	2
Figure 2. Bar/Chain/Chain Sharpening Tools .....	3
Figure 3. CHAIN BRAKE® Assembly .....	4
Figure 4. Fan Housing/Starter Assembly ....	4
Figure 5. Specifications .....	5
Figure 6. Carburetor Assembly .....	6
Figure 7. Fuel Tank Assembly .....	6
Figure 8. Tools And Accessories .....	7
Figure 9. Powerhead Assembly .....	8

**McCULLOCH**  
**CORPORATION**

Figure 1

# GENERAL ASSEMBLY



**FIGURE 1 GENERAL ASSEMBLY**

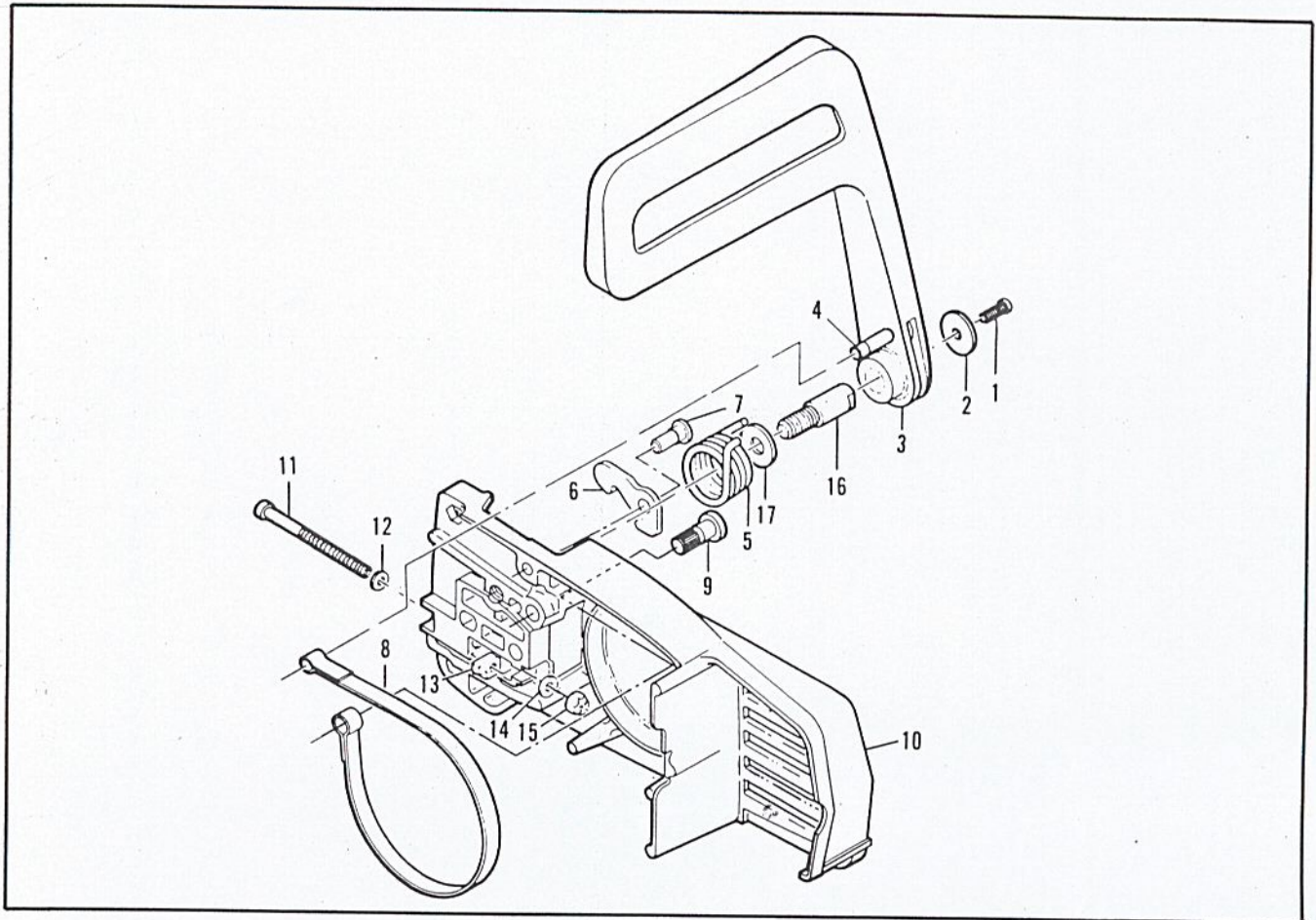
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.	ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	216640	Nut-Hx 5/16-24	2	43	69345	Gasket-Cover	1
2	Fig. 3	CHAIN BRAKE	1	44	215708	Hose Asy-Fuel	1
3	Fig. 2	Chain Assembly	1	45	215714	.Pickup Asy-Fuel	1
4	Fig. 2	Bar Assembly	1	46	69952	Bracket-Air Cleaner	1
5	64330	Set-Bar Plates (2)	1	47	103357	Bolt-Hx Hd 10-24x2-1/4	2
6	93668	Spike	1	48	Fig. 6	Carburetor Asy	1
7	216683	Washer-Special	2	49	86189	Gasket-Carburetor	1
8	213042	Screw-Skt Hd 10-24x5/8	2	50	84078	Spacer-Carburetor	1
9	216682	Nut-Hx Lock 10-24	2	51	84081	Gasket-Spacer	1
10	-216677	Screw-Hx Hd 10-24x7/8	2	52	110567	Screw-Hx Hd 12-24x1-1/4	2
11	100352	Washer-#10	2	53	68582	Plate-Lock	1
12	89727	Retainer-Frame	1	54	102115	Washer-#12	2
13	-216638	Screw-Hx Hd 1/4-20x1-1/2	1	55	110568	Screw-Hx Hd 12-24x1-1/8	1
14	100153	Washer-Lock 1/4	1	56	69516	Plate-Lock	1
15	216639	Clamp-Frame	1	57	100352	Washer-Special	1
16	214549	Frame & Grip Assembly	1	58	110713	Screw-Skt Hd 10-24x7/8	1
17	86113	Nut-Hx 3/8-24 (L.H.)	1	59	100003	Washer-#10	1
18	214301	Clutch Assembly	1	60	69772	Spacer-Fuel Tank	1
19	64583	.Retainer-Spring	2	61	216632	Screw-Pn Hd 10-24x1-1/4	1
20	83223	.Spring-Clutch	2	62	Fig. 7	Fuel Tank Asy	1
21	67233	.Kit-Clutch Shoe	1	63	84082	Gasket-Fuel Tank	1
22	214300	.Rotor-Clutch	1	64	84080	Insulator-Fuel Tank	1
23	95165	Drum & Sprocket Asy 7T .375P	1	65	68594	Gasket-Insulator	1
24	86951	.Sprocket-7T .375P	1	66	-216679	Screw-Hx Hd 10-24x5/8	1
25	86958 ①	.Washer-Sprocket	1	67	68508	Plate-Lock	1
26	-110971 ①	Bearing-Sprocket	1	68	-216679	Screw-Hx Hd 10-24x5/8	1
27	91543	Cover Asy-Air Cleaner	1	69	85007	Brace-Handle	1
28	110565	.Ring-Retaining	1	70	214702	Shroud	1
29	68529	.Knob-Cover	1	71	110563	Screw-Skt Hd 8-32x1/4	2
30	216138	Plate-Name	1	72	92996-01	Stop-Reed	1
31	216054	Plate-Instruction	1	73	85585-01	Valve-Reed	1
32	69922	Filter-Air	1	74	101563	Screw-Skt Hd 10-24x1-1/4	1
33	110741	Screw-Pan Hd 10-24x1/2	2	75	110439	Screw-Skt Hd 10-24x1	1
34	87871	Screw-Special	3	76	92995	Cover-Spark Arrestor	1
35	Fig. 4	Fan Housing/Starter Asy	1	77	110529	Screw-Hx Hd 10-24x1/2	1
36	216053	Cap Asy-Fuel W/Retainer	1	78	68187	Screw-Special	1
37	216678	Screw-Oval Hd 10-24x2-3/8	1	79	67922	Plate-Lock	1
38	101986	Screw-Oval Hd 10-24x1	2	80	92989	Body Muffler	1
39	87840	Spacer	1	81	84007	Gasket-Muffler	1
40	88650	Cover-Fuel Tank	1	82	Fig. 9	Powerhead Asy	1
41	87932	Screw-Idle Adjustment	1				
42	87665	Boot-Carburetor Adjustment	1				

① Whenever Needle Bearing, P/N 110971, is used as service replacement, Washer, P/N 86958, MUST be used. Both components are available by ordering Bearing Kit, P/N 215720.

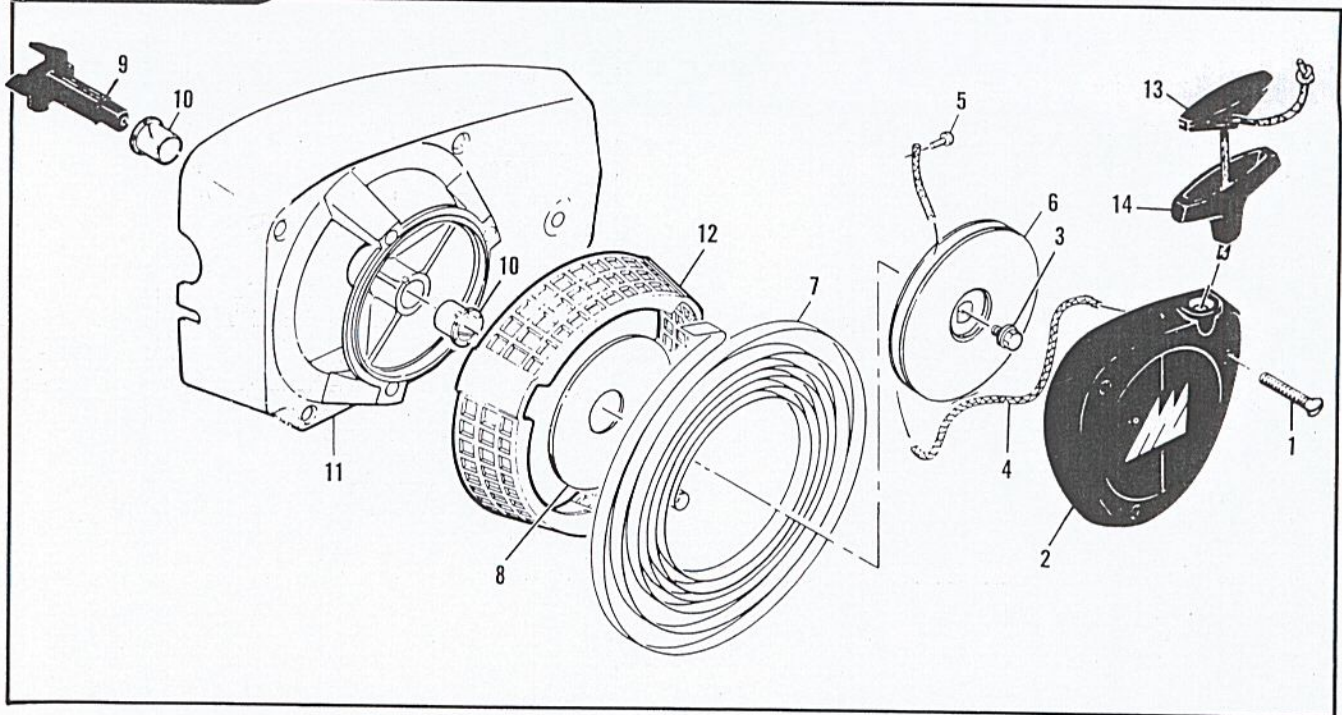
## Bar/Chain/Chain Sharpening Tools Figure 2

BAR NO.	BAR DESCRIPTION	CHAIN NO.	CHAIN DESCRIPTION	FILE PLATE NO.	7/32 ROUND 1 DOZ. Pak	FILE NO. TWIN PAK
94074 89502	16" Speed Mac 16" Mac 10	88167-12 89974-12	16" PM370GX 60 C.L. 16" SPR370GX 60 C.L.	218739 218738	56698-23	219161
93778 89503	20" Speed Mac 20" Mac 10	88173-12 89979-12	20" PM370GX 71 C.L. 20" SPR370GX 71 C.L.	218739 218738	56698-23	219161
86846 89504	24" Speed Mac 24" Mac 10	88175-12 89981-12	24" PM370GX 81 C.L. 24" SPR370GX 81 C.L.	218739 218738	56698-23	219161
86847 89505	28" Speed Mac 28" Mac 10	93552-12 89984-12	28" PM370GX 93 C.L. 28" SPR370GX 93 C.L.	218739 218738	56698-23	219161

**Figure 3** CHAIN BRAKE ASSEMBLY



**Figure 4** FAN HOUSING / STARTER ASSEMBLY



**FIGURE 3 CHAIN BRAKE ASSEMBLY**

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	217694	CHAIN BRAKE <sup>®</sup> Asy	1
1	-216634	.Screw-Pan Hd 10-24x1/2	1
2	-216633	.Washer-Special	1
3	215911	.Lever Asy	1
4	214366	..Pin Asy-Roller	1
5	93085	.Spring-Brake	1
6	217235	.Latch	1
7	93669	.Pivot-Latch	1
8	93081	.Band-Brake	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
9	93082	.Pin-Band Anchor	1
10	216771	.Housing Asy-Brake	1
11	216636	..Screw-Fil Hd 10-24x2-3/4	1
12	-110582	..Washer-#10	1
13	61705	..Nut-Bar Adjusting	1
14	100002	..Washer-#10	1
15	102067	..Nut-Hx 10-24	1
16	91246	..Pin-Lever Pivot	1
17	91245	..Washer-Thrust	1

**FIGURE 4 FAN HOUSING / STARTER ASSEMBLY**

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	216050	FAN HOUSING/STARTER ASY	1
1	110646	.Screw-Oval Hd 8-32x1-1/8	3
2	91084	.Cover-Starter	1
3	110928	.Screw-Hx Hd 10-24x1/2	1
4	68162	.Rope-Starter	1
5	110470	.Rivet-Rope	1
6	83959	.Drum-Starter	1
7	87680	.Spring-Rewind	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
8	86053	.Shield-Spring	1
9	83748	.Shaft-Starter	1
10	57535	.Bushing-Starter	2
11	216051	.Housing-Fan	1
12	214192	.Guard-Sawdust	1
13	214699	Insert-Handle	1
14	93137	Handle-Starter	1

**SPECIFICATIONS**

**Figure 5**

DISPLACEMENT	.....PM 700.....	4.3 Cu. In. (70cc)
SPARK PLUG	.....	Champion - DJ6 or AC-C542T
DRY WEIGHT	.....PM 700.....	15.6 Lb.
BAR LENGTH	.....PM 700.....	16" - 28"
SPROCKET TYPE	.....	7 Tooth .375 Pitch Floating Rim
OIL TANK CAPACITY	.....	9.6 Oz.
FUEL TANK CAPACITY	.....PM 700.....	24.0 Oz.
IGNITION	.....PM 700.....	Electronic
CYLINDER TYPE	.....	Aluminum-With Hard Chrome Bore
SPARK PLUG GAP	.....	.025 Inch (.63mm)
LAMINATION GAP	.....	.011 to .015 (.40 to .40mm)
TIMING	.....	26 BTDC
CLUTCH ENGAGEMENT SPEED	.....	2800 to 3000 R.P.M.
TORQUES	.....	CONNECTING ROD SCREWS: 65 to 70 Inch Pounds CLUTCH NUT: 160 to 170 Inch Pounds FLYWHEEL NUT: 265 to 325 Inch Pounds

Figure 6

# CARBURETOR ASSEMBLY

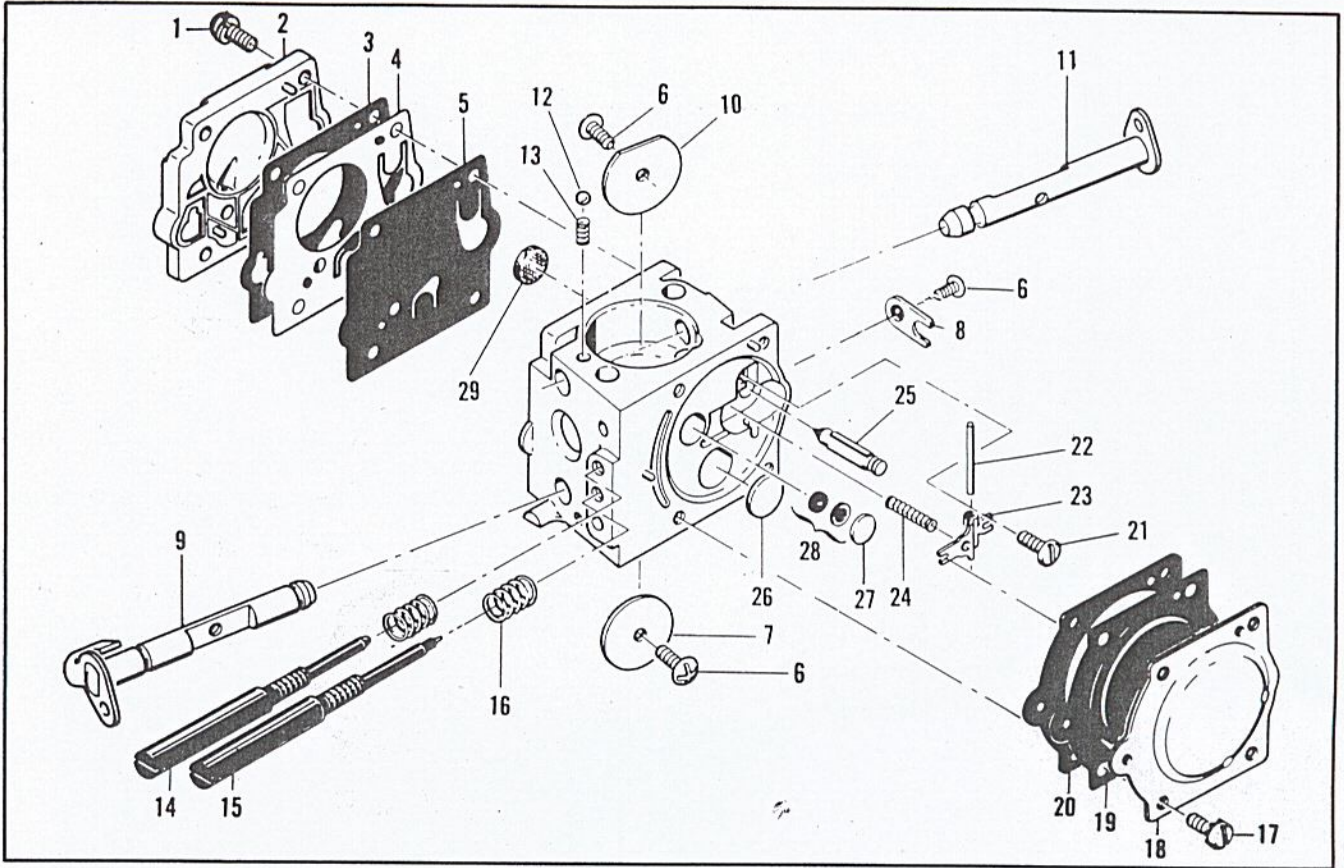
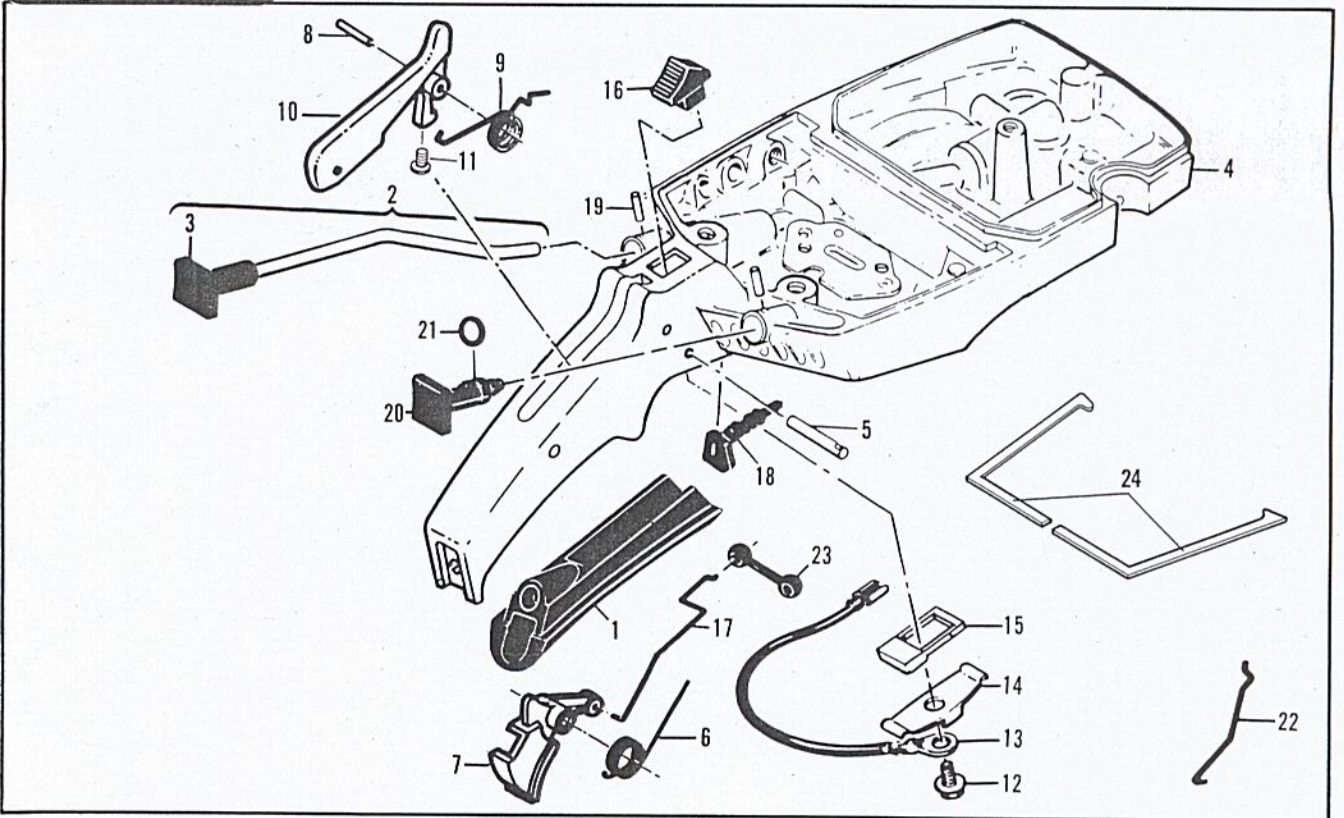


Figure 7

# FUEL TANK ASSEMBLY



### FIGURE 6 CARBURETOR ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	87666	CARBURETOR ASY (WALBRO)	1
2	---	.Screw-Pump Cover	1
3	---	.Cover-Pump	4
4	---	.Gasket-Cover	1
5	---	.Diaphragm-Check Valve	1
6	---	.Diaphragm-Fuel Pump	1
7	---	.Screw-Plate	3
8	---	.Plate-Throttle	1
9	---	.Clip-Shaft	1
10	---	.Shaft Asy-Throttle	1
11	---	.Plate-Choke	1
12	---	.Shaft Asy-Choke	1
13	---	.Ball-Choke Friction	1
14	---	.Spring-Choke	1
15	---	.Needle-High Speed	1
	---	.Needle-Idle	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
16	---	① .Spring-Needle	2
17	---	.Screw-Diaphragm Cover	4
18	---	.Cover-Diaphragm	1
19	---	①② .Diaphragm-Metering	1
20	---	①② .Gasket-Diaphragm	1
21	---	① .Screw-Lever Pin	1
22	---	① .Pin-Lever	1
23	---	① .Lever-Metering	1
24	---	① .Spring-Lever	1
25	---	① .Valve-Needle	1
26	---	① .Plug-3/8	1
27	---	① .Plug-5/16	1
28	---	① .Kit-Valve & Seat Asy	1
29	---	① .Screen-Fuel	1

① Contained in Major Repair Kit, P/N 217080

② Contained in Gasket/Diaphragm Kit, P/N 217078

### FIGURE 7 FUEL TANK ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	89320	Insert-Handle Grip	1
2	216126	Button & Rod Assembly	1
3	95615	.Button-Oiler	1
4	-216127	Kit-Fuel Tank/Control	1
5	110378	.Pin-Roll 3/16x15/16	1
6	92152	.Spring-Trigger	1
7	214679	.Trigger-Throttle	1
8	105654	.Pin-Roll 1/8x7/8	1
9	92154	.Spring-Trigger Release	1
10	-214680	.Release Asy-Trigger	1
11	111012	.Screw-Pn Hd 4-40x5/16	1
12	110706	.Screw-Pn Hd 8-18x1/2	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
13	214692	.Wire Asy-Stop Switch	1
14	62451	.Control-Switch	1
15	214691	.Base-Switch	1
16	68846	.Button-Switch	1
17	85107	.Rod-Throttle	1
18	214701	.Seal-Throttle Rod	1
19	105673	.Pin-Roll 3/32x9/16	2
20	69041	.Button-Choke	1
21	105614	. "0" Ring	1
22	69042	Rod-Choke	1
23	69043	Snubber-Rod	1
24	-219280	Set-Gaskets (L.H. and R.H.)	1

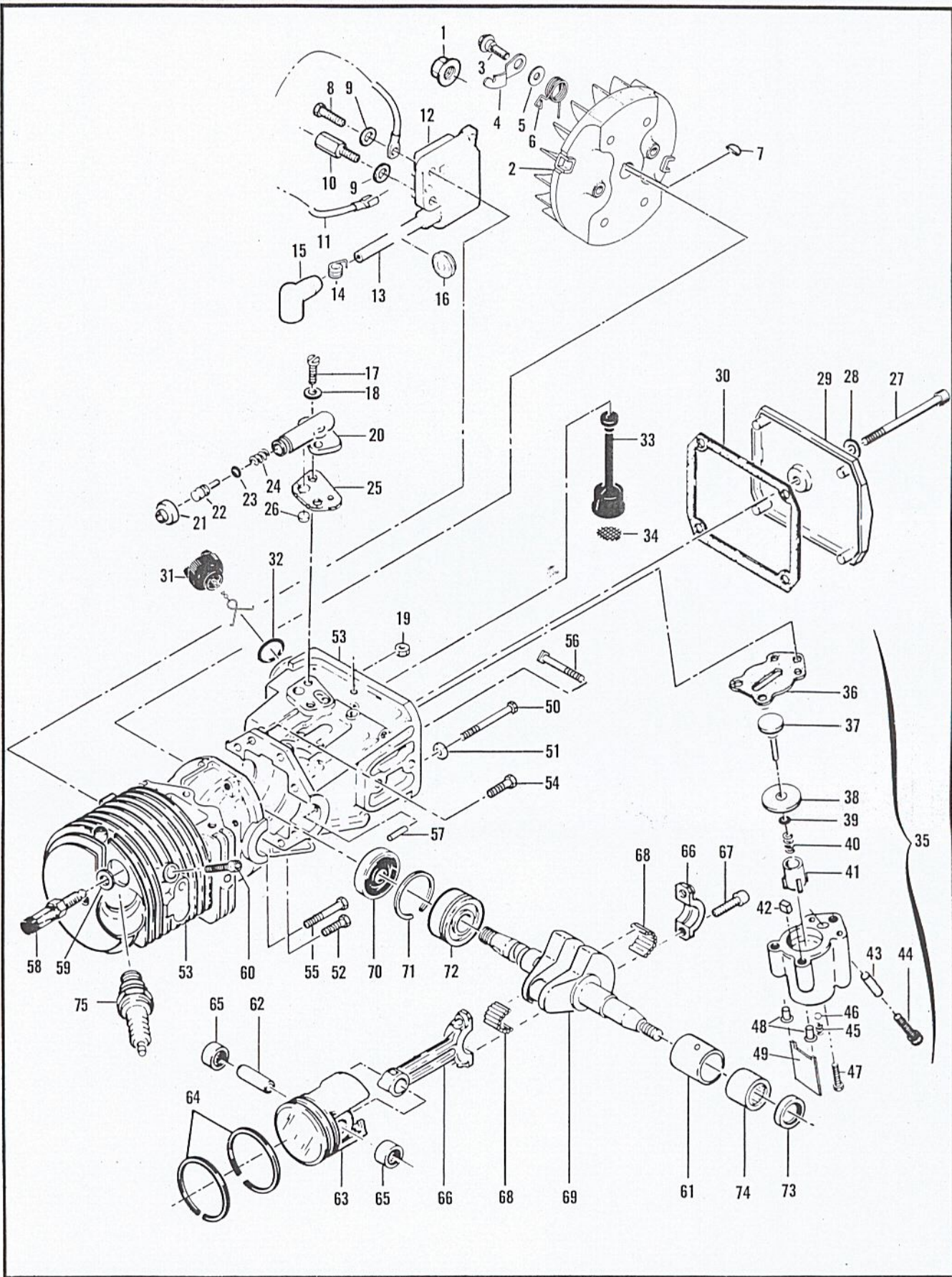
## TOOLS AND ACCESSORIES

Figure 8

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
216058	Key-Socket-9/64	62827	Wrench/Screwdriver
216063	Key-Socket-5/32	-214221	Scrench
84453	Kit-Piston Tool	91226	Wrench-Clutch/Flywheel
69191	Kit-Pressure Test Adaptor	86419	Guide-Timing
214223	Spark Plug (Standard)	92993	Spark Arrester Screen
63432	Spark Plug (Cooler)		

Figure 9

# POWERHEAD ASSEMBLY





**FIGURE 9 POWERHEAD ASSEMBLY**

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	110703	Nut-Hx 3/8-24	1
2	216739	Flywheel Assembly	1
3	93464	.Screw-Pawl	2
4	93198	.Pawl-Starter	2
5	93469	.Washer-Pawl	2
6	214102	.Spring-Pawl	2
7	100106	Key-Woodruff	1
8	110127	Screw-Hx Hd 10-24x7/8 (Sems)	1
9	100002	Washer-#10	2
10	83512	Stud-Special	1
11	84686-01	Wire Assembly-Ground	1
12	95553	Ignition-Electronic	1
13	95269	.Wire Asy-Spark Plug	1
14	102556	..Connector	1
15	95266	..Boot	1
16	110995	.Grommet	1
17	110338	Screw-Pn Hd 8-32x1/2	2
18	110613	Washer-#8	2
19	100955	Nut-Hx 8-32	1
20	84156	Housing-Pump	1
21	215151	Cap-Housing	1
22	62266	Plunger-Pump	1
23	105614	"O" Ring	1
24	66687	Spring-Pump	1
25	91669	Gasket-Pump	1
26	91668	Valve-Pump	1
27	110291	Screw-Pn Hd 10-24x2-5/8	1
28	110921	Washer-Sealing	1
29	-218707	Cover-Oil Tank	1
30	86306	Gasket-Cover	1
31	216052	Cap-Oil Tank	1
32	101148	"O" Ring	1
33	91672	Hose Assembly-Oil	1
34	51506	.Screen-Hose	1
35	215339	Kit-Pulse Pump	1
36	92874	.Seal-Pulse Pump	1
37	214278	.Piston Assembly-Pump	1
38	86182	.Ring-Piston	1
39	105603	."O" Ring	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
40	60259	.Spring-Piston	1
41	62227	.Sleeve-Adjustment	1
42	91259	.Pad-Pump	1
43	91774	.Sleeve	1
44	-216677	.Screw-Hx Hd 10-24 x 7/8	1
45	-- --	.Spring-Outlet Valve	1
46	-- --	.Ball	1
47	110386	.Screw-Hx Hd 8-32x1	1
48	-- --	① .Eyelets	2
49	-- --	① Clip-Sealing	
50	62106	Screw-Sealing	4
51	111025	Washer-Sealing	4
52	110288	Screw-Hx Hd 8-32x3/4	1
53	214671	Cylinder/C'Case Assembly	1
54	110288	.Screw-Hx Hd 8-32x3/4	2
55	110618	.Screw-Hx Hd 8-32x1-3/8	1
56	62065	.Bolt-Bar Mounting	2
57	110851	.Pin-Dowel	1
58	94273	Valve-DSP	1
59	214765	Washer-Valve	1
60	110681	Screw-Skt Hd 10-24x1/4	1
61	87152	Insert-Bearing	1
62	69020	Pin-Piston	1
63	85239	Piston Assembly	1
64	89732	.Ring Set-Piston	1
65	-111021	.Bearing-Needle	2
66	85352	Rod Assembly-Connecting	1
67	61627-01	.Screw-Skt Hd Special	2
68	63225	.Roller-Needle (Set of 20)	1
69	216909	② Crankshaft Assembly	1
70	61618	.Seal-Oil	1
71	63464	.Ring-Snap	1
72	63429-02	.Bearing-Ball	1
73	110260	Seal-Oil	1
74	104357	Bearing-Needle	1
75	214223	Spark Plug	1

① Included in Kit-Oil Pump Clip, P/N 215246.

② If replacing a crankshaft with a right hand thread on clutch side, order Crankshaft Kit, P/N 216910. This kit includes a crankshaft with a left hand thread on clutch end. A left hand nut, P/N 86113, is included with this kit.