

ILLUSTRATED PARTS LIST

PM 310		PM 320		PM 330	
MODELS	SERIAL NUMBER PREFIX	MODELS	SERIAL NUMBER PREFIX	MODELS	SERIAL NUMBER PREFIX
600042-01	16-	600021-03	16-	600043-05	16-
600042-02	16-	600021-05	16-	600043-07	16-
600042-03	16-	600021-06	16-	600043-10	16-
600042-04	16-	600021-07	16-	600043-16	16-
600042-05	16-	600021-08	16-	600043-21	16-
600042-06	16-	600021-09	16-		
600042-07	16-	600021-10	16-		
600042-08	16-	600021-11	16-		
600042-10	16-	600021-16	16-		
600042-11	16-	600021-21	16-		
EB 2.1					
				600132-02	11-
				600132-03	11-

EAGER BEAVER™ 2.1 and POWER MAC™ 310, 320, 330



McCulloch Chain Saws are identified by a model number (600042, 600021, etc.) followed by a suffix number (01, 03, 04, etc.). 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 ② or numbers preceding the description, are used only on the model or models identified by a circled number ② 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).

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.

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OCTOBER 1987


McCULLOCH
 CORPORATION

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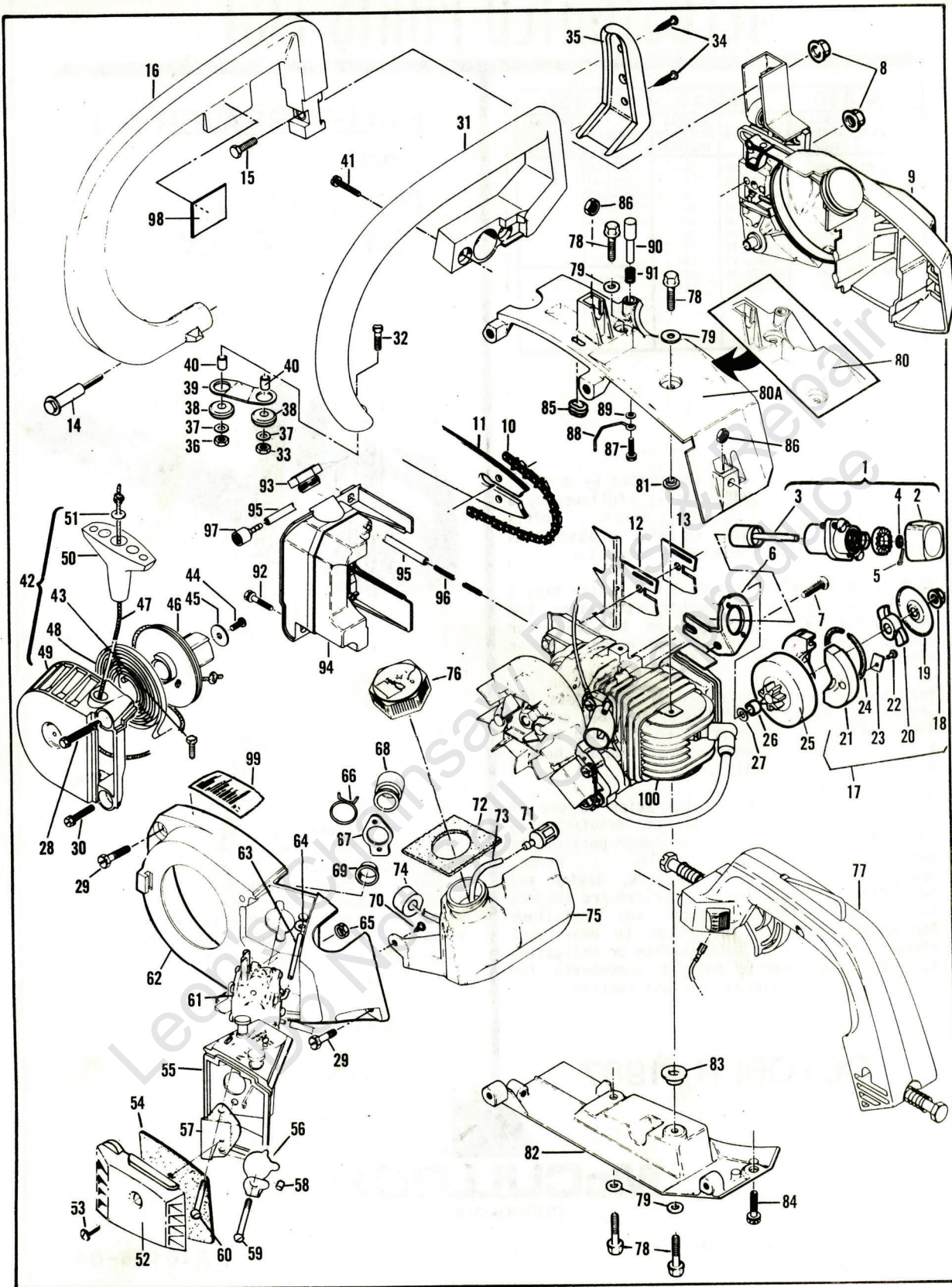
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216186-01

This IPL Supersedes and replaces IPL, Part Number 219143.

Figure 1

GENERAL ASSEMBLY



ITEM NO
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FIGURE 1 GENERAL ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	① 216132	Kit-Auto Sharp	1
2	① 215447	. Knob	1
3	① 218294	. Wheel Asy-Grinding	1
4	① 216134	.. Washer	1
5	① 216133	.. Pin-Cotter	1
6	① 215208	. Bracket-Auto Sharp	1
7	120025	Screw-M5x10 (35-40 in. lb. torque)	2
8	120029	Nut-Flange M6.3x1.0	2
9	Fig. 2	Chain Brake Asy	1
10	② Fig. 6	Chain	1
11	② Fig. 6	Bar	1
12	③ 214207	Spike	1
13	③ 93148	Spacer-Bar Pad	1
14	215695	Screw-M5x50	1
15	120028	Screw-M6.3x20	1
16	93021-01	Lever-Wraparound	1
17	213278	Kit-Clutch	1
18	94244	. Nut-Clutch (160-170 in. lb. torque)	1
19	94243	. Plate-Dust	1
20	-- --	. Rotor-Clutch	1
21	213277	. Clutch Asy	1
22	-- --	.. Rivet-1/8x.547	2
23	-- --	.. Plate-Clutch Shoe	2
24	-- --	.. Spring Asy-Clutch	1
25	② 215252	Drum/Sprocket/Bearing Asy	1
26	91222	. Bearing-Needle	1
27	④ 67650	. Bearing	1
27	④ 215259	. Washer-Sprocket	1
28	④ 67303	. Washer	1
28	120096	Screw-M5x55 (35-40 in. lb. torque)	1
29	120095	Screw-M5x20 (40-50 in. lb. torque)	2
30	120098	Screw-M5x18 (35-40 in. lb. torque)	1
31	216816	Frame Asy	1
32	216064	. Screw-M5 T-Head	1
33	216585	. Nut-M5 (35-40 in. lb. torque)	1
31	⑤ 216504	Frame Asy-Weighted	1
32	⑤ 216064	. Screw-M5 T-Head	1
33	⑤ 216585	. Nut-M5 (35-40 in. lb. torque)	1
34	⑤ 111011	. Screw-10-16x.875	2
35	⑤ 95141	. Weight-Frame	1
36	216585	Nut-M5 (35-40 in. lb. torque)	1
37	120045	Washer-M5	2
38	110989	Grommet	2
39	93152	Link	2
40	93057	Spacer-Mount	1
41	120036	Screw-M4x25 (15-20 in. lb. torque)	2
42	216491	Starter Asy	1
43	216064	. Bolt-M5 T-Head	1
44	110041	. Screw-8-32x.50	1
45	68497	. Washer	1
46	⑥ 213257	. Drum/Rope Asy	1
47	83203	.. Rope-Starter	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
48	83078	. Spring-Rewind	1
49	216485	. Housing-Starter	1
50	91255	. Handle/Washer Asy	1
51	105490	.. Washer-Handle	1
52	215481	Cover/Screw Asy-Air Filter	1
53	213118	. Screw-Air Filter Cover	1
54	215456	Filter-Air	1
55	215482	Box Asy-Air	1
56	213411	Plate-Choke	1
57	215455	Bracket-Choke	1
58	213420	Spacer	1
59	213105	Screw-M5x55 (30-40 in. lb. torque)	1
60	213104	Screw-M5x50 (30-40 in. lb. torque)	1
61	Fig. 3	Carburetor Asy	1
62	215563	Housing Asy-Fan	1
63	213542	. Hose-Pulse	1
64	215562	. Grommet	1
65	94501	. Nut-M5x0.8 Thin	1
66	94302	Clip-Spring	1
67	92747	Flange-Carburetor Mounting	1
68	213211	Boot/Eyelet Asy	1
69	95656	. Eyelet	1
70	111002	Screw-10-16x1/2	1
71	93720	Pickup-Fuel	1
72	94491	Seal-Fuel Vent	1
73	93997	Hose-Fuel	1
74	90869	Insert-Cushion	1
75	216666	Fuel Tank/Cap Asy	1
76	216157	. Cap Asy-Fuel W/Retainer	1
77	Fig. 5	Handle Asy	1
78	⑦ 213172	Screw-M6x17 (90-100 in. lb. torque)	4
⑦	213166	Screw-M6x16 (90-100 in. lb. torque)	4
79	213021	Washer-Ramp Conical	4
80	⑧ 219319	Top Shroud (without Recess)	1
80A	⑧ 214152	Kit-Top Shroud (with Recess)	1
81	214350	. Insulator	1
82	214154	Kit-Bottom Shroud	1
83	214350	. Insulator	1
84	120095	Screw-M5x20 (40-50 in. lb. torque)	1
85	94192	Grommet	1
86	120034	Nut-M6x1.0	2
87	110999	Screw-6-20x5/8 (8-10 in. lb. torque)	1
88	94540	Rod-Oiler	1
89	100001	Washer-Plain	1
90	217782	Knob-Oiler	1
91	93634-01	Spring-Compression	1
92	120095	Screw-M5x20 (35-40 in. lb. torque)	2
93	216095	Cap-Oil	1
94	216696	Tank Asy-Oil	1
95	94405	. Hose-Oil Pickup	1
96	93998	. Spring-Oil Hose	1
97	92465	. Pickup-Oil	1
98	219058	Label-Safety	1
99	218558	Label-Instruction	1
100	Fig. 4	Powerhead	1

① Used on PM 320 models.

② Models with a suffix number 10 were originally equipped with a .250 pitch bar. Chain and Drum/Sprocket Assembly which is no longer available. Should replacement become necessary, order item number 25 as well as Bar and Chain as shown in Figure 6.

③ The Spike and Bar Pad Spacer are interchangeable.

④ Used on PM 310 and PM 330 models with the suffix number 10 only.

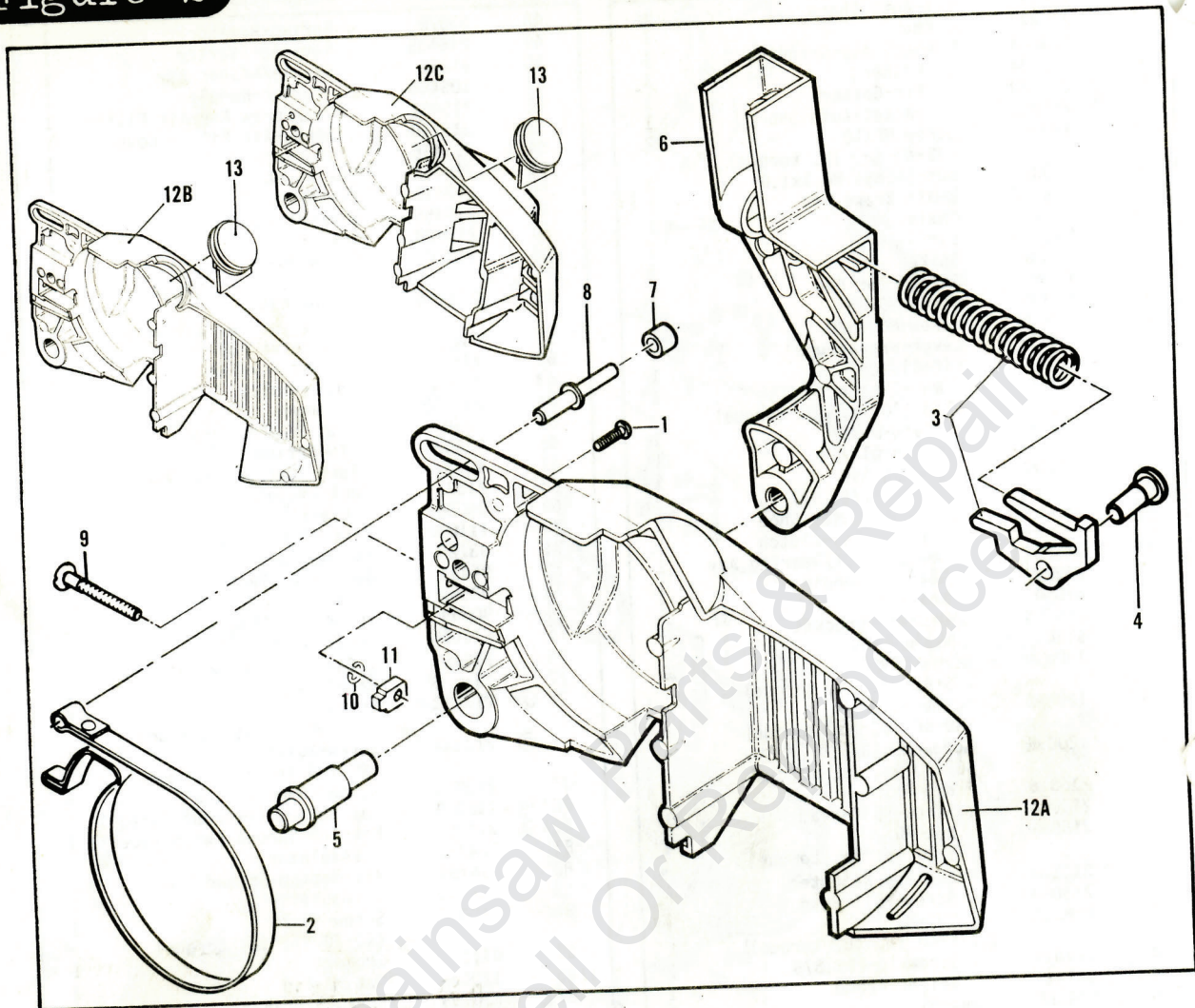
⑤ Used on PM 330 models with suffix number 10.

⑥ See Service Bulletin 1833

⑦ P/N 213172 for use in Cylinders currently manufactured without threaded inserts.
P/N 213166 for use in Cylinders with threaded inserts.

⑧ Identify, by sight, which Top Shroud you have before ordering replacement parts.

Figure 2 CHAIN BRAKE ASSEMBLIES



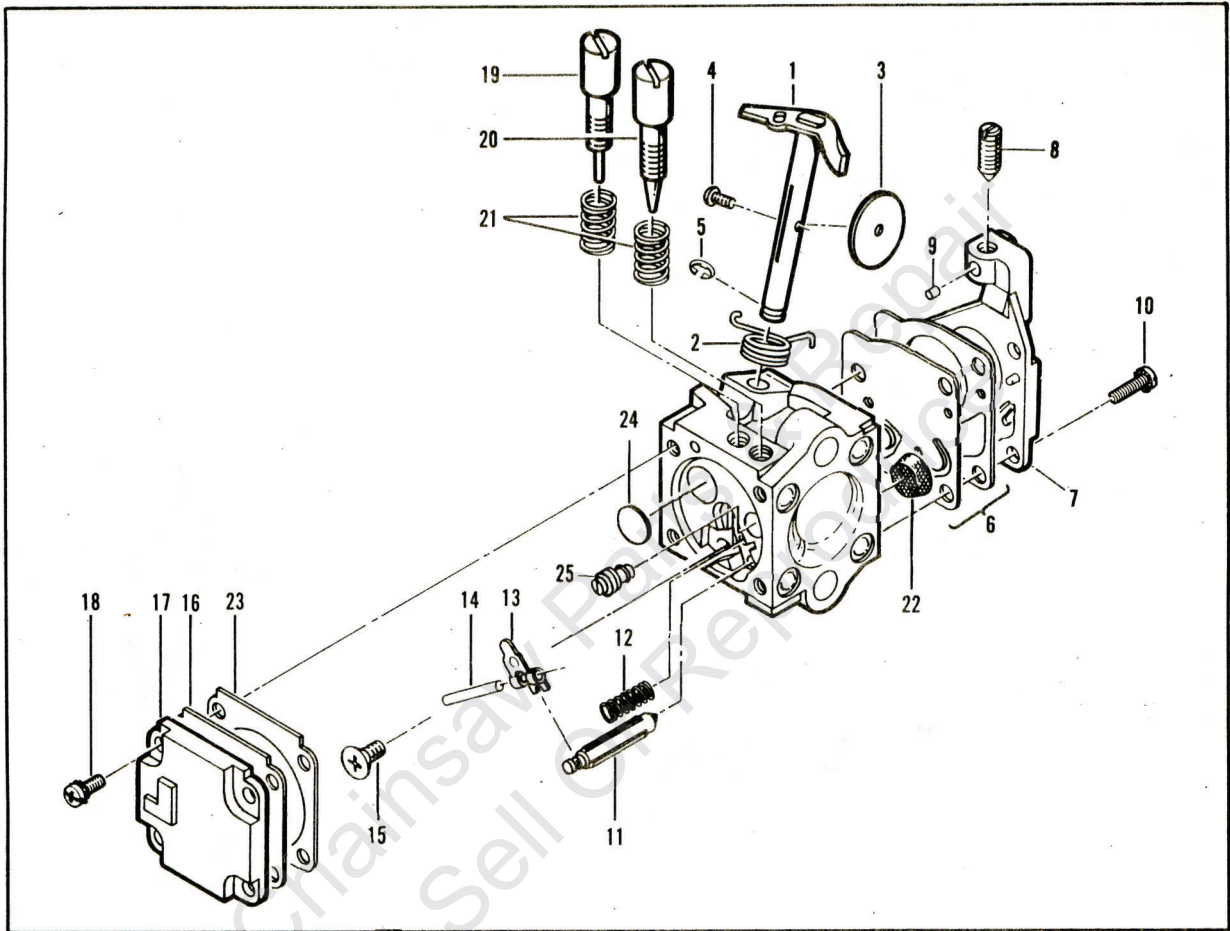
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
A ①	219323	Brake Asy-Chain	1
B ①	216409	Brake Asy-Chain	1
C ①	216552	Brake Asy-Chain	1
1	111047	• Screw-8-32x.625	1
2	94709	• Band-Brake	1
3	215758	• Latch/Spring Kit	1
4	93602	• Pivot-Latch	1
5	216549	• Pivot-Lever	1
6	93159	• Lever-Actuating	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
7	214368	• Bearing-Roller	1
8	213907	• Pin-Roller	1
9	90658	• Screw-Adjusting	1
10	110907	• Ring-Retaining	1
11	84929	• Nut-Bar Adjusting	1
12A ①	219321	• Housing-Brake	1
12B ①	216411	• Housing-Brake	1
12C ①	216270	• Housing-Brake	1
13 ②	93528-01	Cover-Auto Sharp	1

① Prior to ordering replacement parts, identify, by sight, which Brake Housing you need.

② Used on PM 310 and 330 Models.

CARBURETOR ASSEMBLY Figure 3



UNITS PER ASY.
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ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	94496	Carburetor Assembly (Zama)	1
1	-	Shaft Asy - Throttle	1
2	-	Spring - Throttle Return	1
3	-	Plate - Throttle	1
4	-	Screw - Plate (M3)*	1
5	-	"E" Ring	1
6	-	Kit - diaphragm & Gaskets	1
7	-	Cover Asy - Pump	1
8	-	Screw - Idle Speed	1
9	-	Insert - Friction	1
10	-	Screw - Pump Cover (M4)*	4
11	-	Needle - Inlet	1
12	-	Spring - Lever	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
13	-	①. Lever - Inlet Needle	1
14	-	①. Pin - Lever	1
15	-	①. Screw - Lever Pin (M3)*	1
16	-	②①. Diaphragm Asy - Metering	1
17	-	Cover - Diaphragm	1
18	-	Screw - Diaphragm Cover(M3)*	4
19	-	③. Screw - Idle Adjust	1
20	-	③. Screw - Main Adjust	1
21	-	③. Spring - Needle	2
22	-	①. Screen - Filter	1
23	-	①. Gasket - Metering Diaphragm	1
24	-	①. Welch Plug	1
25	-	①. Orifice - Main Fuel	1

* The "M" denotes metric screw size.

① Contained in Repair Kit, P/N 217081.

② Contained in Gasket/Diaphragm Kit, P/N 217089.

③ Contained in Needle Kit, P/N 216804.

Figure 4

POWERHEAD ASSEMBLY

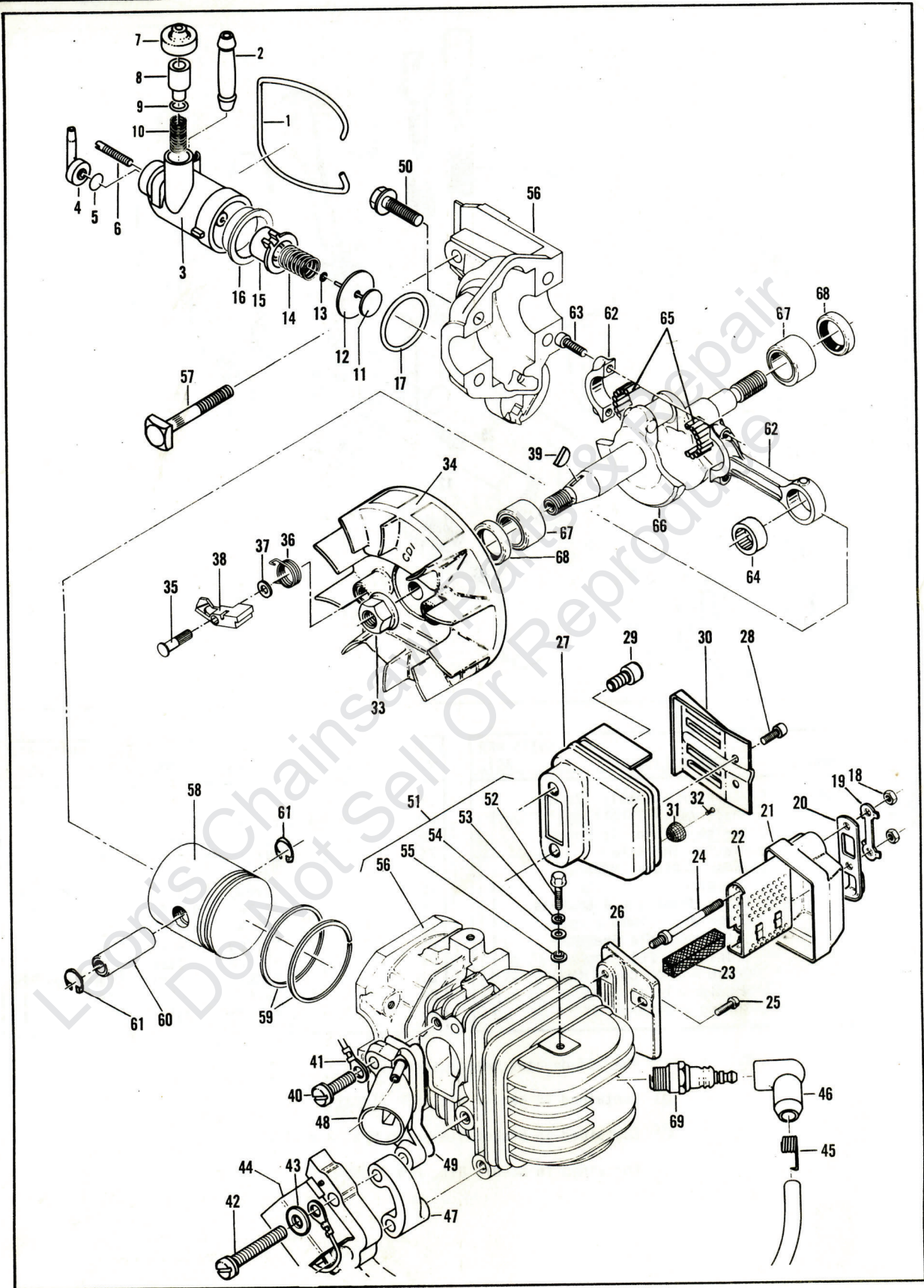


FIGURE 4 POWERHEAD ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	93150	Bail	1
2	217168	Connector-Outlet	1
3	① -- --	Pump Asy-Oiler (W/Output Adjustment Screw)	1
	219990	Pump Asy-Oiler (Non-Adjustable)	1
4	② 215196	. Connector-Hose	1
5	② 94115	. Valve-Oiler	1
6	④ 217765	. Screw-6-40x.800	1
7	② 215151	. Cap-Oil Pump	1
8	② 93301	. Plunger-Oil Pump	1
9	② 105614	. "O" Ring-.239x.070	1
10	② 93632	. Spring	1
11	④ 216425	. Piston Asy-Oiler	1
	③ 219566	. Piston Asy-Oiler	1
12	-- --	.. Ring-Oil Pump Piston	1
13	② 105603	.. "O" Ring-.114x.070	1
14	④ 83891	. Spring-Return	1
	③ 219525	. Spring-Return	1
15	② 216423	. Sleeve-Oil Pump	1
16	② 216422	. Eyelet	1
17	110653	"O" Ring	1
18	⑤ 215871	Nut-Muffler	2
19	⑤ 215471	Plate-Lock	1
20	⑤ 215472	Deflector-Exhaust	1
21	⑤ 215774	Cover	1
22	⑤ 215776	Baffle	1
23	⑤ 216805	Screen-Spark Arrestor	1
24	⑤ 215757	Bolt-Shoulder (65-85 in. lb. torque)	2
25	⑤ 213369	Bolt-M6 (70-85 in. lb. torque)	1
26	⑤ 215773	Base	1
27	⑤ 215411	Kit-Muffler	1
28	⑤ 110681	. Screw-Skt. Hd. 10-24x1/4 (40-45 in. lb. torque)	2
29	⑤ 215394	. Screw-Special M6 (70-80 in. lb. torque)	2
30	⑤ 92961	. Deflector-Exhaust	1
31	⑤ 214204	Kit-Spark Arrestor	1
32	⑤ 101987	. Screw-6-32x.25 (25 in. lb. torque)	1
33	216645	Nut-Flange M8 (200-220 in. lb. torque)	1
34	⑨ 94737	Flywheel W/The Letters IGN Molded in Casting	1
34A	⑥ 219211	Flywheel W/The Letters CDI Molded in Casting	1

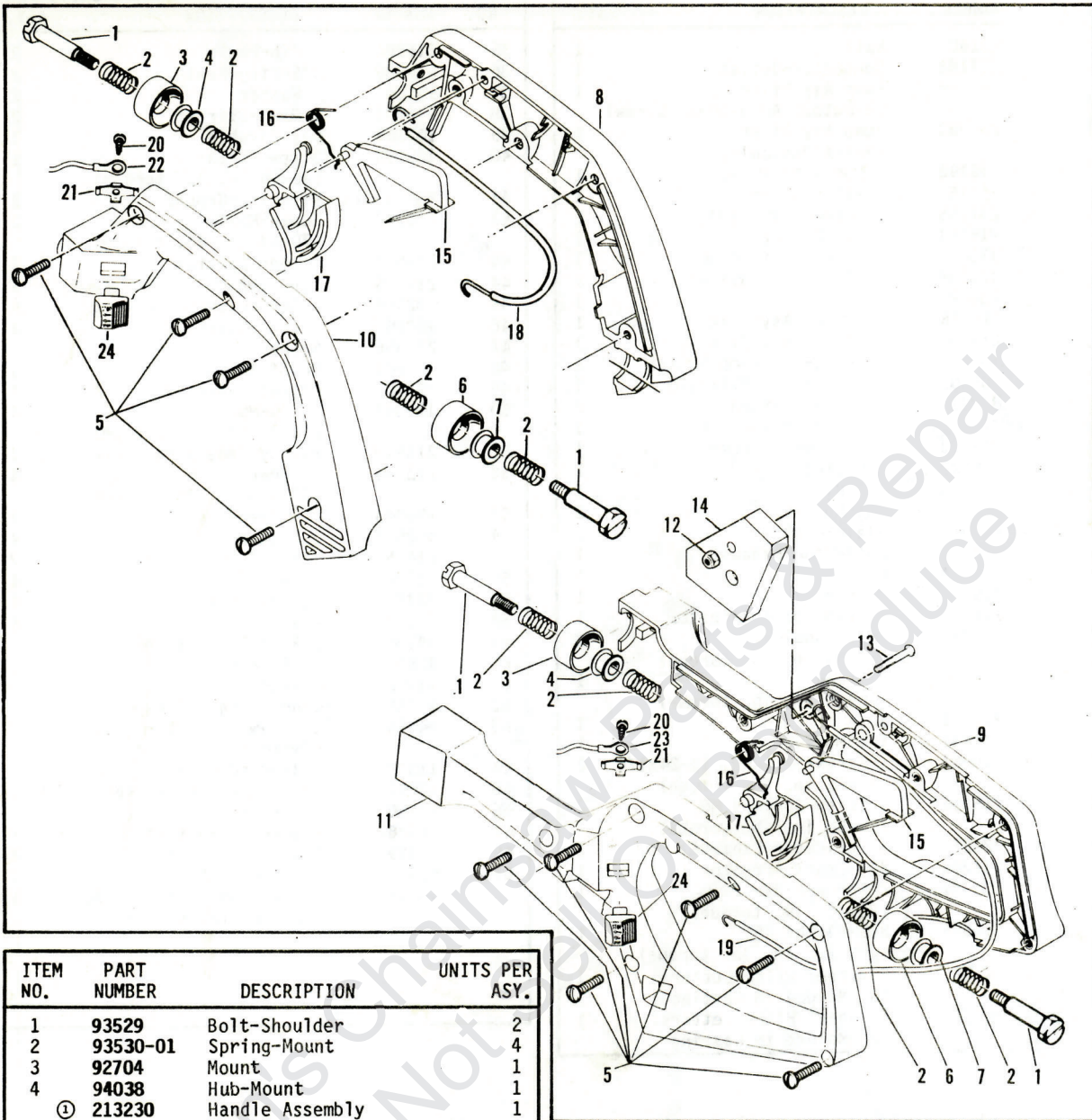
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
35	216984	. Pin-Pawl	2
36	216982	. Spring-Pawl	2
37	93469	. Washer	2
38	216983	. Pawl-Starter	2
39	102164	Key-Flywheel	1
40	120098	Screw-M5x18 (40-50 in. lb. torque)	1
41	93514-01	Wire Asy-Ground	1
42	120112	Screw-M5x40 (70-80 in. lb. torque)	2
43	216683	Washer-Special	2
44	⑩ 219215	Ignition-CDI (Black Sems)	1
45	102556	. Connector-Spark Plug	1
46	95266	. Boot-Spark Plug	1
47	214356	Spacer	1
48	215601	Manifold-Carburetor	1
49	92778	Gasket-Manifold	1
50	120097	Screw-M5x25 (70-80 in. lb. torque)	4
51	⑦ 215943	Kit-Cylinder/Crankcase	1
52	213166	. Screw-M6x16 (90-100 in. lb. torque)	4
53	105043	. Washer-Lock	4
54	102523	. Washer-1/4 Plain	4
55	214350	. Insulator	2
56	⑧ 215762	. Cylinder Asy	1
57	92777	.. Bolt-Bar	1
58	94660	Piston Asy	1
59	94136	. Ring Set-Piston	1
60	92836	. Pin-Piston	1
61	111026	. Ring-Snap	2
62	94135	Connecting Rod Asy	1
63	94654	. Screw-Connecting Rod (35-40 in. lb. torque)	2
64	110984	. Bearing-Needle	1
65	68095	. Bearing-Needle (set of 20)	1
66	92750	Crankshaft	1
67	213282	Bearing-Crankshaft	1
68	83859	Seal-Crankshaft	2
69	62345	Spark Plug-AC-CS45T	1
	93018	Spark Plug-Champion RDJ8 (120 in. lb. torque)	1

- ① The adjustable output oil pump is no longer available. Should replacement become necessary, order part number 219990.
- ② Components are interchangeable with both pumps.
- ③ For use on part number 219990 pump only.
- ④ For use on adjustable pressure pump only.
- ⑤ Before ordering replacement parts, identify by sight, which muffler was used on your unit.

- ⑥ Flywheel marked "CDI" will function only with black (Sems) ignition.
- ⑦ For use as service replacement for Cylinders with threaded inserts for Top and Bottom Shroud mounting.
- ⑧ For use as service replacement for Cylinders currently manufactured without threaded inserts for Top and Bottom Shroud mounting.
- ⑨ Flywheel marked "Ing." will function only with white colored ignition.
- ⑩ If replacing white colored ignition (no longer available) with black (Sems) ignition, you must also order flywheel marked "CDI" part number, 219211.

Figure 5

HANDLE ASSEMBLIES



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	93529	Bolt-Shoulder	2
2	93530-01	Spring-Mount	4
3	92704	Mount	1
4	94038	Hub-Mount	1
	① 213230	Handle Assembly	1
	② 213231	Handle Assembly	1
	③ 213235	Handle Assembly weighted	1
5	111032	Screw-Ph Hd 10-16x.625	*6
6	92704	Mount	1
7	94038	Hub-Mount	1
8	① 213229	Handle-Right Half	1
	②③ 213224	Handle-Long Right	1
10	① 213228	Handle-Left Half	1
11	②③ 213226	Handle-Long Left	1
12	③ 216649	Nut-Hx Lock 10-24	1
13	③ 216632	Screw-Pan Hd 10-24x1	1
14	③ 95042	Weight-Handle	1
15	93310	Trigger-Safety	1
16	93515	Spring-Trigger	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
17	213232	Trigger-Throttle	1
18	① 213234	Wire Asy-Throttle	1
19	② 213233	Wire Asy-Throttle	1
20	110706	Screw-Pan Hd 8-18x.50	1
21	62451	Contact-Ignition Switch	1
22	93505-01	Wire-Switch (310/320/E.B.)	1
23	94039	Wire-Stop Switch(330/340)	1
24	68846	Button-Stop Switch	1

① Used on PM 310 and PM 320 models, as well as Eager Beaver™ 2.1.

② Used on PM 330 models.

③ Used on PM 330 models with suffix number 10.

* Four used on Handle Assembly, P/N 213230. Six used on Handle Assemblies, P/N 213231 and P/N 213235.

BAR & CHAIN COMBINATIONS

Figure 6

Bar Number	Bar Description	Chain Number	Chain Description	File Plate Number	Round File Size	Part Number
214235	14" Mini Pro	214919-12	MP370GLX 49CL	219131	5/32"	214217 * 62648-23 **
214236	16" Mini Pro	214925-12	MP370GLX 54CL	219131	5/32"	214217 * 62648-23 **

* TWIN PACK ** DOZEN PACK

NOTE:

The .250 pitch Bars and Chains as used on models with suffix number 10 are no longer available. You **MUST** order the Bar and Chain combinations as shown above as well as Drum/Sprocket/Bearing Assembly, P/N 215252.

TOOLS / ACCESSORIES / LUBRICANTS

Figure 7

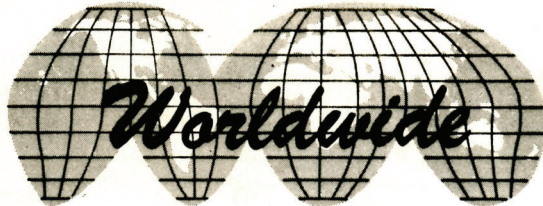
<p>93797 Wrench - Screwdriver 216063 Key-Socket 5/32" 214194 Lubri - Gun 91226 Tool - Flywheel Holder 110706 Tool - Handle/Throttle Trigger Screw 94415 Adaptor - Pressure Test Intake (Cyl) 94416 Adaptor - Pressure Test Intake (Airbox) 68917 Plate - Block - Off Exhaust 85229 Kit - Pressure Test 215432 Gauge/Bulb - Pressure Test 63094 Driver - Piston Pin 67537 Loctite - 10cc Bottle 69794 Locquic - 6oz.</p>	<p>110083 R.T.V. Sealant - Tube 94364 Kit - Carrying Case (16") 214202 . Scabbard (16")</p> <p style="text-align: center;">40:1 2-Cycle Custom Lubricant:</p> <p>93770 6 Oz. Can (Case of 48) 85707 16 Oz. Can (Case of 24) 85709 1 Qt. Bottle (Case of 12)</p> <p style="text-align: center;">Bar and Chain Oil:</p> <p>87885 1 Qt. Bottle (Case of 12) 94818 1 Gal. Bottle (Case of 6)</p>
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SPECIFICATIONS

Figure 8

Cylinder	Aluminum with Chrome Bore
Displacement	2.1 Cu. In. (35cc)
Bore And Stroke	1.5 In. (38mm) x 1.2 In. (30.5mm)
Piston Rings	2 Cast Iron Compression
Main Bearings	Needle
Fuel Capacity	11.2 Oz. (330cc)
Fuel Type	Regular Grade Leaded or Unleaded
Fuel/Oil Mixture	40:1 Using McCulloch 2-Cycle Custom Lubricant
Idle Speed	2700 to 2900 R.P.M.
Clutch Engagement Speed	3800 R.P.M.
Ignition	Electronic
Carburetor	Diaphragm Type with 2-needle Adjustment
Fuel Filtering	Enclosed Felt
Air Filter	Felt
Lamination Gap011 (0.3mm) to .015 (0.4mm)
Weight(Power Unit Only):	
PM 310 and Eager Beaver™2.1	9.9 Lbs.
PM 320	10 Lbs.
PM 330	10.4 Lbs.

McCULLOCH **CORPORATION**



● **MANUFACTURING** ● **SALES** ● **SERVICE** ●

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