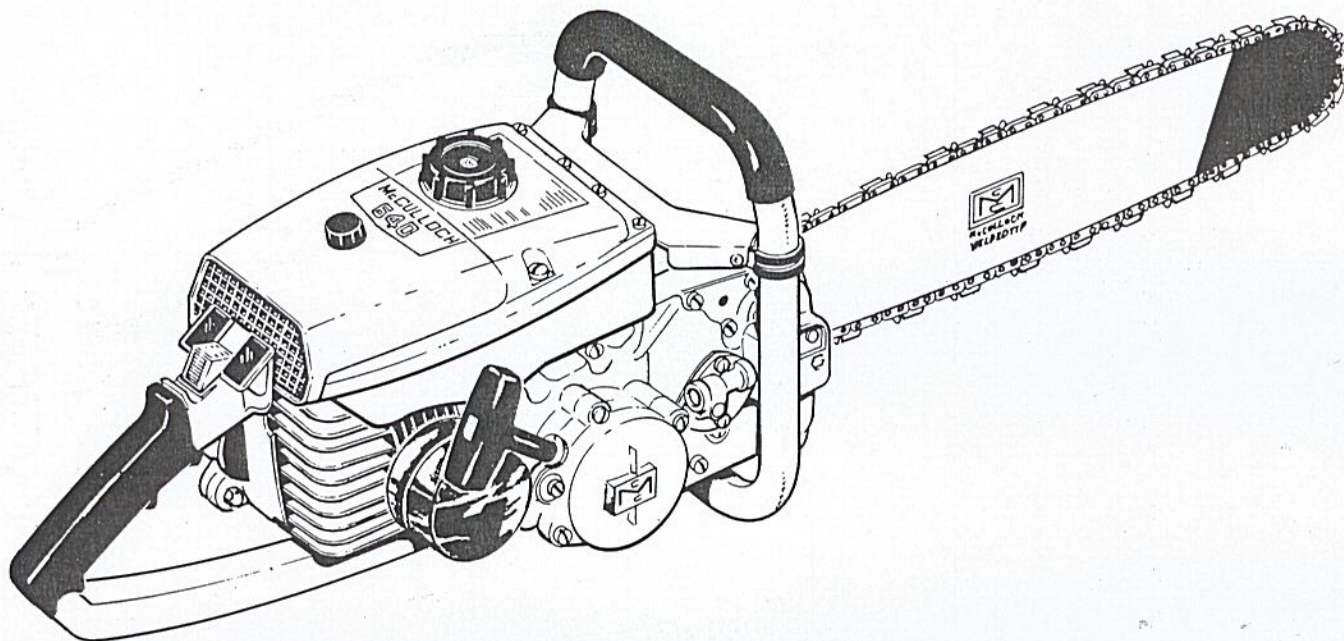


ILLUSTRATED PARTS LIST

JUNE 1963



The following pages contain an illustrated parts list for the Model 640 Chain Saw. Due to small differences between saws, it is important that the Serial Number of your saw be included whenever spare parts are ordered. This will assure receiving the proper parts from your dealer.

The McCulloch Corporation reserves the right to modify or change specifications without (1) prior notification or (2) obligation including the obligation to back-fit or supply back-fit components for units previously shipped from the factory.

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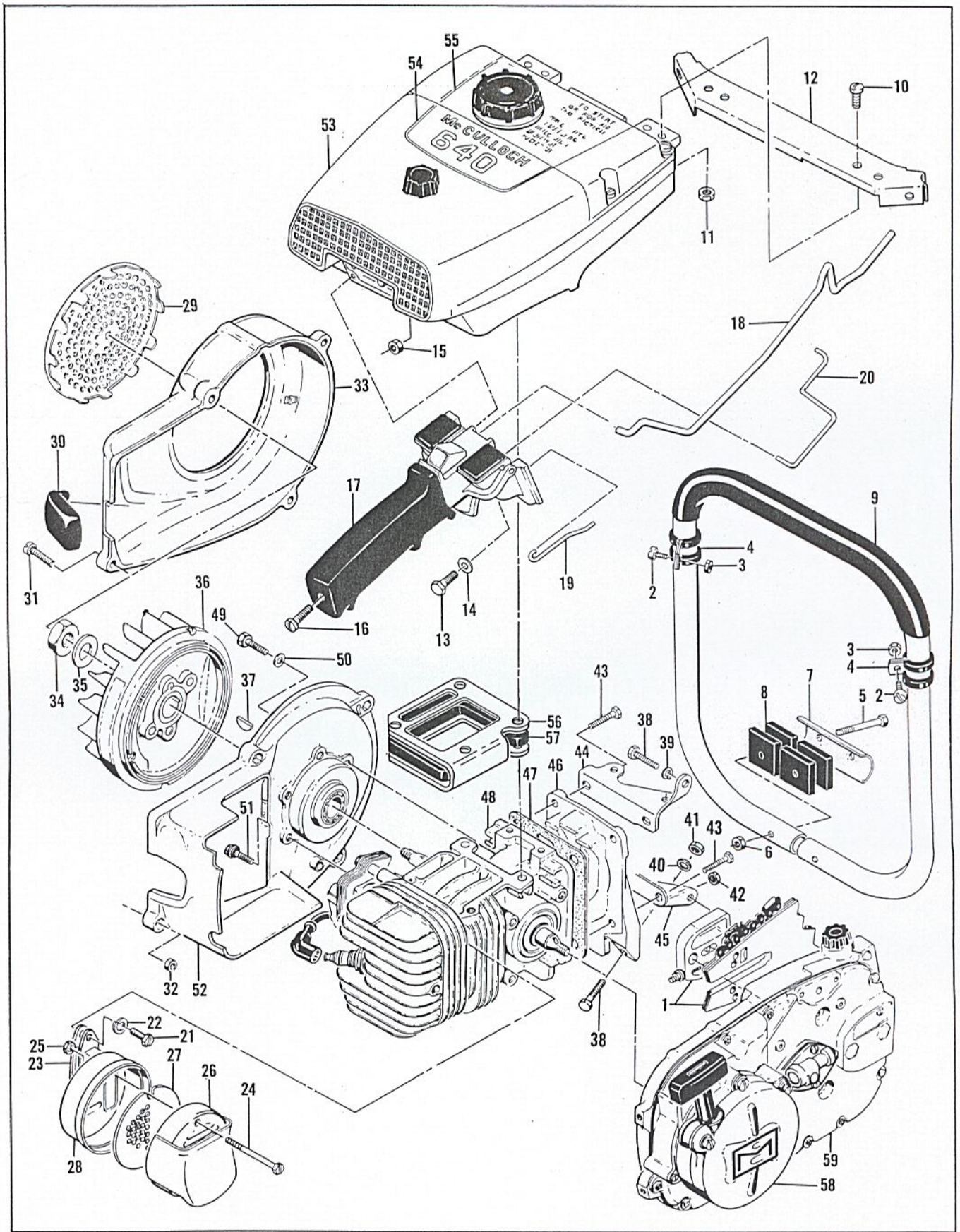


Figure 1. Engine Exploded View - General

FIGURE 1. ENGINE EXPLODED VIEW—GENERAL

Index No.	Part Number	Nomenclature	Units Per Assy
1		Bar, Chain and Lockplate Adjusting Assy (see figure 8)	1
2	102763	Screw - Hex hd 10-24 x 3/4 in. lg	2
3	100239	Nut - Hex 10-24	2
4	103923	Clamp	2
5	102125	Screw - Hex hd 1/4-20 x 1-3/4 in. lg	2
6	101143	Nut - Hex 1/4-20	2
7	51660	Clamp - Frame	1
8	50062	Insulator	4
9	60766	Frame and Grip Assy	1
10	104393	Screw - Pan hd 10-24 x 3/8 in. lg	4
11	101191	Nut - Hex 10-24	4
12	60770	Brace - Frame	1
13	102761	Screw - Hex hd 10-24 x 7/8 in. lg	2
14	102189	Washer - Plain #10	2
15	102067	Nut - Hex 10-24	2
16	104397	Screw - Pan hd 10-24 x 7/8 in. lg	1
17		Handle and Control Assy (see figure 7).	1
18	57719	Pushrod - Oiler	1
19	53583A	Pushrod - Primer	1
20	53590	Pushrod - Throttle	1
21	102388	Screw - Hex hd 10-24 x 5/8 in. lg	2
22	103100	Lockwasher	2
23	53652	Gasket - Muffler	1
	51966	Muffler Assy	1
24	103361	. Screw - Fil hd 10-24 x 1-5/8 in. lg	2
25	101191	. Nut - Hex 10-24	2
26	51979	. Top Assy	1
27	51968	. Baffle Assy	1
28	51975	. Bottom Assy	1
29	55615	Guard - Flywheel	1
30	57565	Cover Assy - Spark plug	1
31	104815	Screw - Hex hd 10-24 x 7/8 in. lg (SEMS).	4
32	101191	Nut - Hex 10-24	2
33	48796B	Housing - Fan	1
34	101179	Nut - Hex 7/16 in.	1
35	101270	Washer - Plain 7/16 in.	1
36	57825	Flywheel Assy	1
37	100199	Key - Woodruff #3	1
38	100882	Screw - Hex hd 1/4-20 x 3/4 in. lg	2
39	100153	Lochwasher - 1/4 in.	1
40	100005	Washer - 1/4 in.	1
41	101143	Nut - Hex 1/4-20	1
42	100640	Nut - Hex 1/4-28	1
43	101982	Screw - Hex hd 1/4-20 x 1 in. lg	4
44	51795A	Brace - Gearcase top	1
45	55537	Brace - Gearcase bottom	1
46	53473	Cover - Gearcase bottom.	1
47	58166A	Gasket - Bottom	1
48		Powerhead Assy (see figure 6)	1
49	102289	Screw - Hex hd 10-24 x 3/4 in. lg	4
50	102189	Washer - Plain #10	3
51	55494	Screw - Sealing 10-24 x 3/4 in. lg	2
52		Crankcase Cover Assy (see figure 6).	1
53		Fuel System Components (see figure 2)	1
54	60456	Nameplate	1
55	60425	Instruction Plate	1
56	53768	Gasket - Insulator	1
57	53684	Insulator	1
58		Starter and Clutch Assys (see figure 4)	1
59		Transmission Assy (see figure 5)	1

#60458
6-63 ①

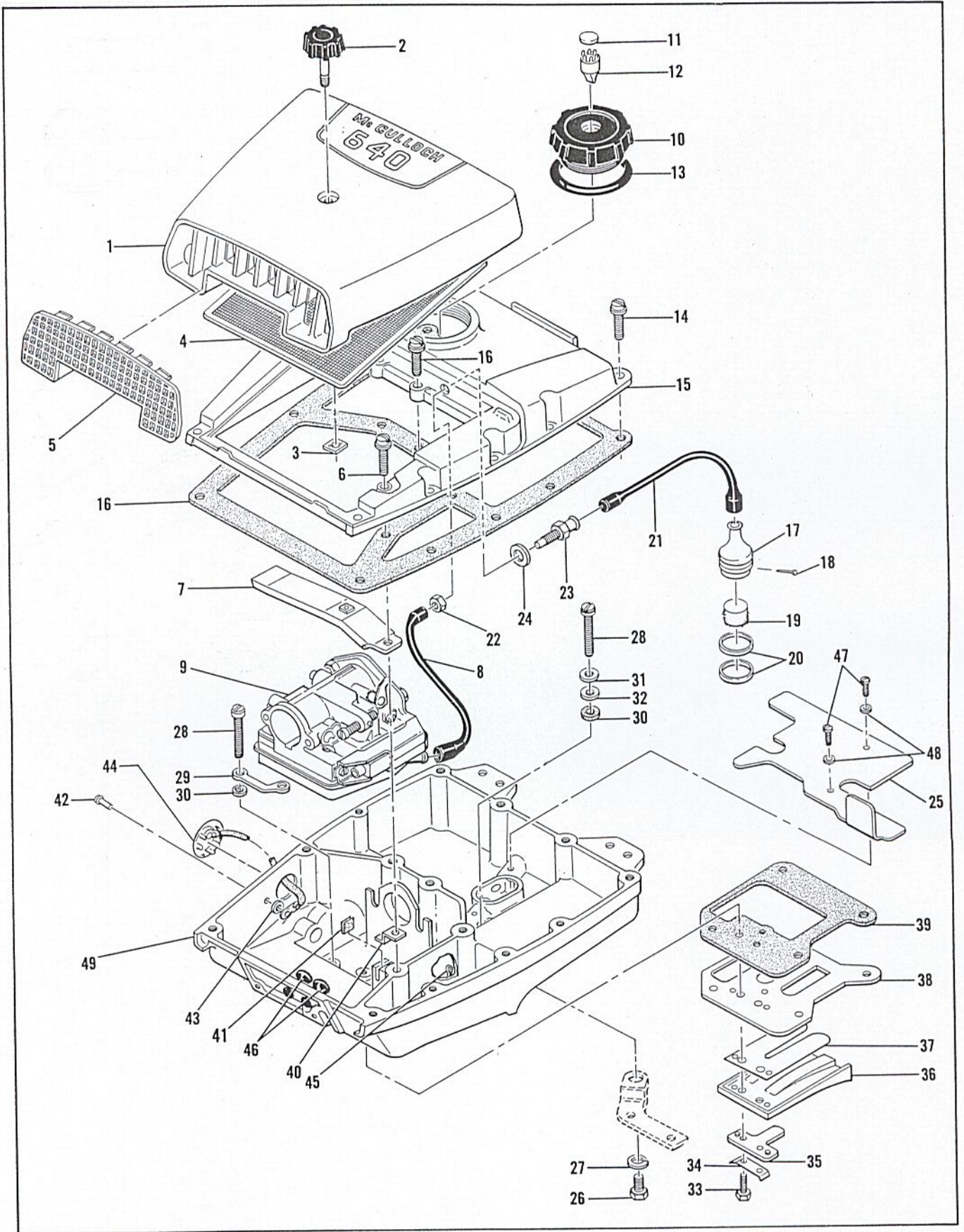


Figure 2. Fuel System Components

FIGURE 2. FUEL SYSTEM COMPONENTS

Index No.	Part Number	Nomenclature	Units Per Assy
1	60427	Cover Assy - Air cleaner	1
2	60243	. Knob - Air cleaner cover	1
3	103741	. Speednut	1
4	55497	Screen - Air cleaner	1
5	55659	Grill - Air cleaner cover	1
6	104396	Screw - Pan hd 10-24 x 3/4 in. lg	1
7	55634	Anchor Assy - Air cleaner	1
8	53678	Hose - Fuel line	1
9		McCulloch Carburetor Assy (see figure 3)	1
10	55934B	Cap Assy - Fuel	1
11	55063	. Filter - Fuel cap	1
12	53766	. Valve - Check	1
13	101348	"O" Ring - Fuel cap	1
14	104396	Screw - Pan hd 10-24 x 3/4 in. lg	14
15	53682	Cover - Fuel tank	1
16	55627A	Gasket - Fuel tank	1
17	53679A	Pickup Assy - Fuel	1
18	104959	. Pin - Fuel pickup	1
19	104958	. Filter - Fuel pickup	1
20	110065	. Ring - Fuel pickup	2
21	53678	Hose - Fuel pickup	1
22	100640	Nut - Hex 1/4-28	1
23	53675	Fitting - Fuel hose	1
24	50832A	Washer - Sealing	1
25	53837A	Liner - Fuel tank	1
26	102151	Screw - Hex hd 1/4-20 x 1/2 in. lg	1
27	100246	Lockwasher - 1/4 in.	1
28	55948A	Screw - Hex hd 10-24 x 1-1/8 in. lg	4
29	58376	Lockplate - Fuel tank	1
30	55636	Washer - Insulating	4
31	102189	Washer - Plain #10	2
32	103744	Washer - Sealing	2
33	103740	Screw - Hex hd 8-32 x 5/8 in. lg	2
34	51480	Lockplate	1
35	57658	Clamp - Reed	1
36	57654	Deflector - Fuel	1
37	58399	Valve - Reed	1
38	53685	Plate - Reed	1
39	58328A	Gasket - Fuel tank	1
40	55647	Retainer - Throttle rod	1
41	51394	Felt - Pushrod	1
	55805E	Bottom Assy - Fuel tank	1
42	104504	. Rivet	1
43	101871	. Washer - Plain 1/8 in.	1
44	51396A	. Cover Assy - Adjustment hole	1
45	104310	. Pin - Cotter	1
46	60237	. Grommet	2
47	104769	. Screw - Pan hd 6-32 x 3/8 in. lg	2
48	100296	. Washer - Plain #6	2
49		. Bottom - Fuel tank . . . (Order Fuel Tank Bottom Assy #55805E)	1

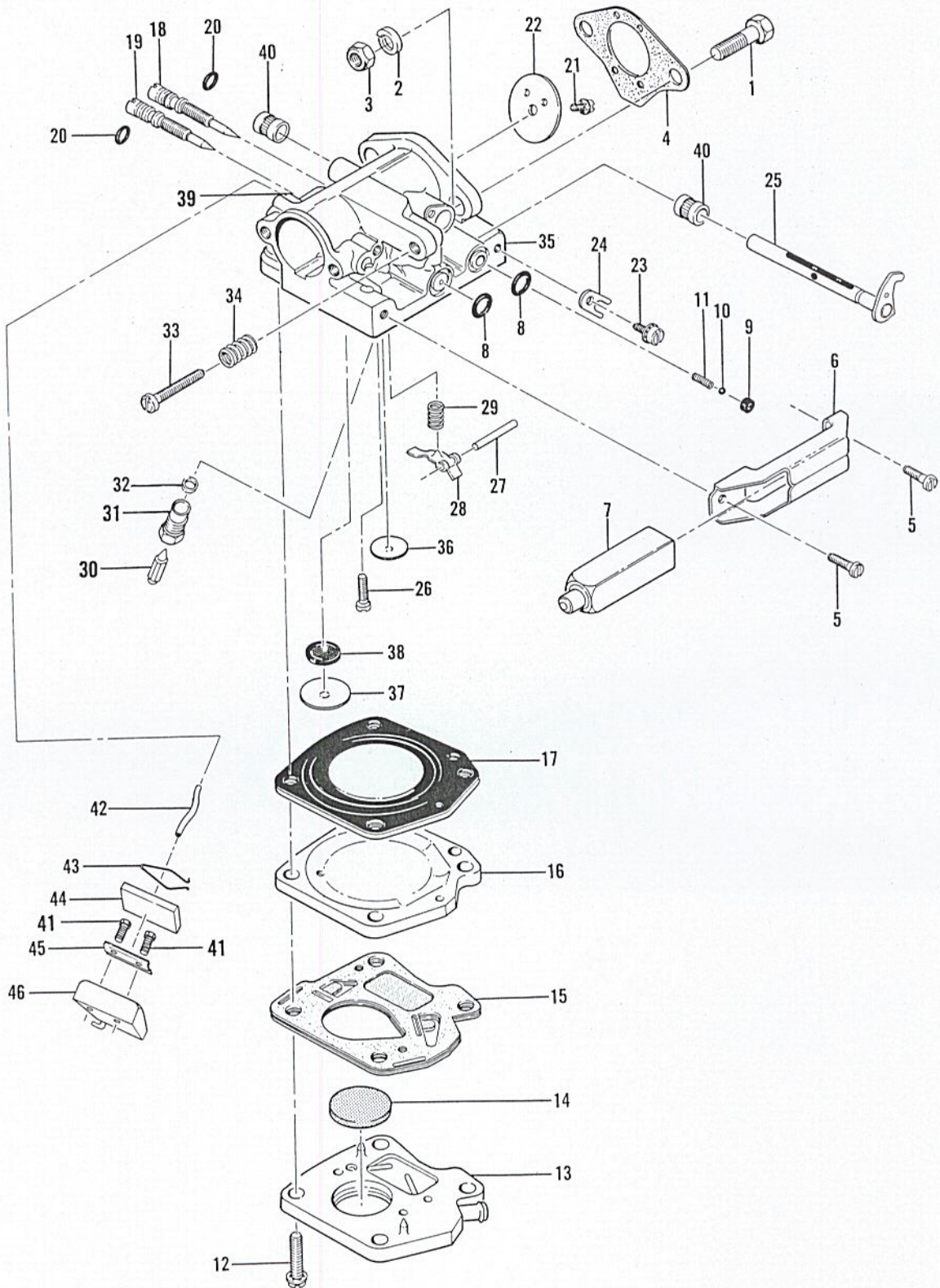


Figure 3. McCulloch Carburetor Assembly

FIGURE 3. McCULLOCH CARBURETOR ASSEMBLY

Index No.	Part Number	Nomenclature	Units Per Assy
1	100882	Screw - Hex hd 1/4-20 x 3/4 in. lg	2
2	101476	Lockwasher - 1/4 in.	2
3	103242	Nut - Hex 1/4-20	2
4	51161D	Gasket - Carburetor	1
	60743	Carburetor Assy - McCulloch.	1
5	110054	. Screw - Pan hd 6-32 x 3/8 in. lg	2
6	53440	. Bracket - Primer mounting	1
7	53449	. Primer Assy.	1
8	101056	. "O" Ring	2
9	59480	. Seat - Primer valve	1
10	100302	. Ball - Steel 1/4 in. dia	1
11	28754	. Spring - Primer.	1
12	104520	. Screw - 10-24 x 7/8 in. lg	4
13	58965	. Body Assy - Fuel pump	1
14	57277	. Filter - Fuel pump	1
15	57274A	. Diaphragm Assy - Fuel pump.	1
16	48901	. Plate - Carburetor diaphragm	1
17	55067C	. Diaphragm - Carburetor	1
18	53948	. Needle - Idle adjustment	1
19	53311	. Needle - Main adjustment	1
20	104001	. "O" Ring	2
21	104814	. Screw - Pan hd 4-40 x 1/4 in. lg	1
22	53309	. Plate - Throttle.	1
23	110055	. Screw - 8-32 x 3/8 in. lg (SEMS)	1
24	55082	. Clip - Shaft	1
25	53588A	. Shaft Assy - Throttle	1
26	104164	. Screw - Pan hd 4-40 x 1/4 in. lg	1
27	104305	. Pin - Lever	1
28	55688	. Lever - Inlet control	1
29	57172	. Spring - Inlet control	1
30	59710	. Needle - Inlet valve	1
31	58969	. Body - Inlet valve	1
32	55689	. Washer - valve	1
33	55397	. Screw - Fil hd 8-36 x 15/16 in. lg	1
34	51705	. Spring - Idle screw	1
35	58852	. Body Assy - Carburetor	1
36	102758	. Plug - Expansion 1/2 in.	1
37	104407	. Plug - Expansion 1 in.	1
38	55690B	. Seal - Capillary.	1
39	47523	. Tube - Fuel	1
40	55062A	. Bushing - Body	1
41	110061	Screw - Pan hd 8-32 x 3/8 in. lg	2
42	58869A	Hose - Fuel collector	1
43	58920A	Retainer - Fuel absorber	1
44	58865	Absorber - Fuel	1
45	58864	Plate - Retaining	1
46	58863A	Collector Assy - Fuel	1

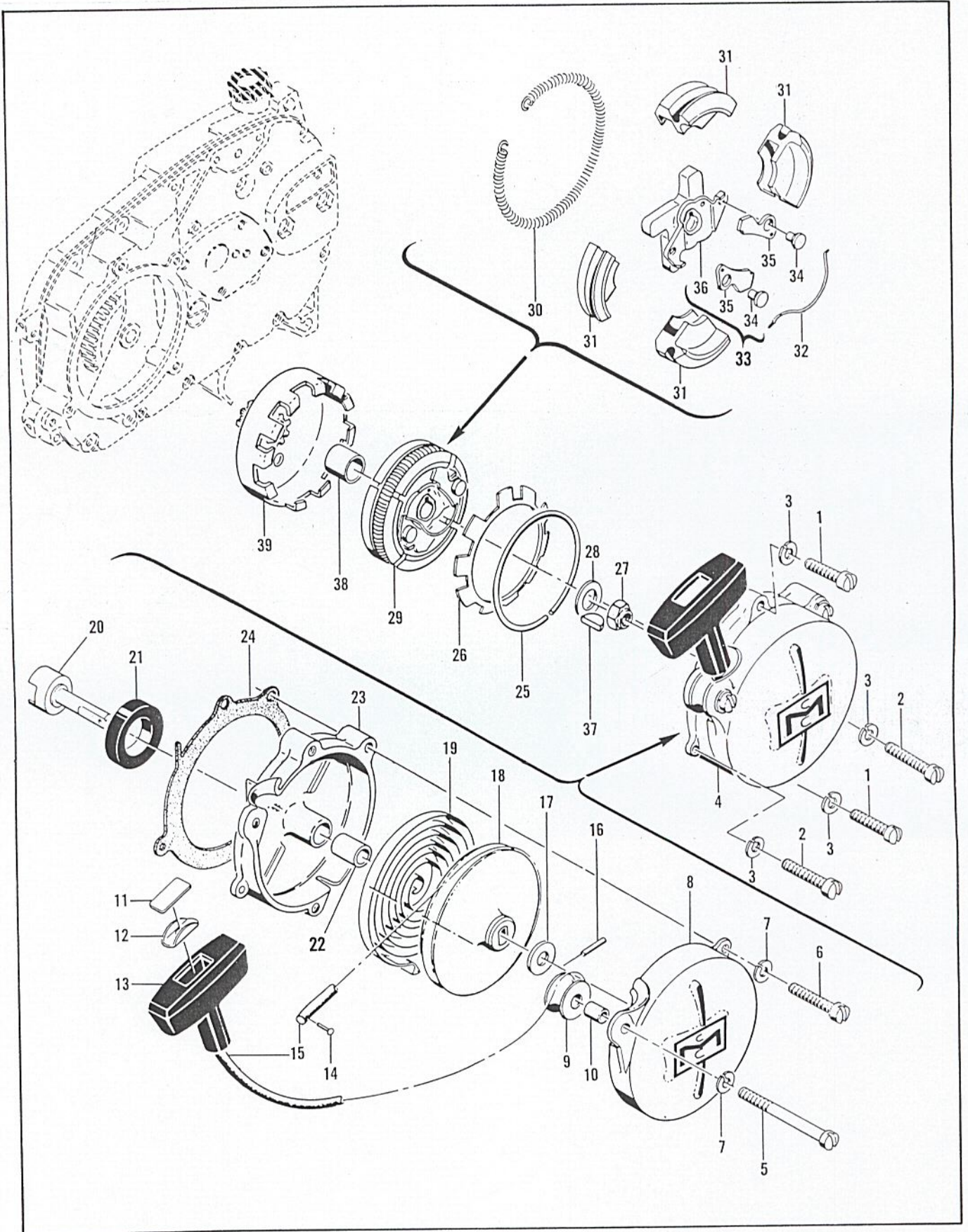


Figure 4. Starter and Clutch Assemblies

FIGURE 4. STARTER AND CLUTCH ASSEMBLIES

Index No.	Part Number	Nomenclature	Units Per Assy
1	102212	Screw - Fil hd 10-24 x 1-3/4 in. lg	2
2	102135	Screw - Fil hd 10-24 x 2 in. lg	2
3	101194	Lockwasher	4
4	55129C	Starter Assy	1
5	103840	. Screw - Fil hd 10-24 x 3-1/2 in. lg	1
6	102135	. Screw - Fil hd 10-24 x 2 in. lg	1
7	100240	. Lockwasher	2
8	55024B	. Cover - Starter	1
9	51138	. Pulley - Starter rope	1
10	103536	. Bearing - Pulley	1
11	57232	. Plate - Starter handle	1
12	57231	. Cup - Starter handle	1
13	57230	. Handle - Starter	1
14	101136	. Rivet	1
15	28716	. Rope	1
16	103047	. Pin	1
17	104457	. Washer - Plain 3/8 in.	1
18	55871	. Drum - Starter	1
19	51665	. Spring - Starter rewind	1
20	55110	. Shaft - Starter	1
21	104439	. Seal - Oil	1
	51649B	. Base Assy - Starter	1
22	55591	. . Bearing - Starter base	1
23		. . Base - Starter (Order Base Assy #51649B)	1
24	55983	Gasket - Starter base	1
25	53294	Ring - Retaining 0.040 in.	1
	53295	Ring - Retaining 0.047 in.	alternate
	53296	Ring - Retaining 0.055 in.	alternate
	53297	Ring - Retaining 0.063 in.	alternate
	53298	Ring - Retaining 0.071 in.	alternate
	53299	Ring - Retaining 0.080 in.	alternate
	53300	Ring - Retaining 0.090 in.	alternate
	53301	Ring - Retaining 0.106 in.	alternate
	53302	Ring - Retaining 0.118 in.	alternate
26	51645A	Disc - Clutch friction	1
27	103746	Nut - Flexloc	1
28	104349	Washer - 3/8 in.	1
29	55716D	Clutch Assy	1
30	51644B	. Spring - Clutch	1
31	55523B	. Shoe - Clutch (set of four)	1
32	28766	. Spring - Pawl	1
33	55717	. Rotor and Pawl Assy	1
34	28917	. . Pin - Starter pawl	2
35	28765	. . Pawl - Starter	2
36		. . Rotor Assy (Order Rotor and Pawl Assy #55717)	1
37	100199	Key - Woodruff	1
	51859	Clutch Drum Assy	1
38	51700	. Bearing	1
39		. Drum - Clutch (Order Clutch Drum Assy #51859)	1

FIGURE 5. POWER HEAD ASSEMBLY

Index No.	Part Number	Nomenclature	Units Per Assy
1	50671	Retainer - Breaker box cover.	1
2	50588	Cover - Breaker box	1
3	50589	Gasket - Breaker box cover	1
4	100251	Nut - Hex 8-32	1

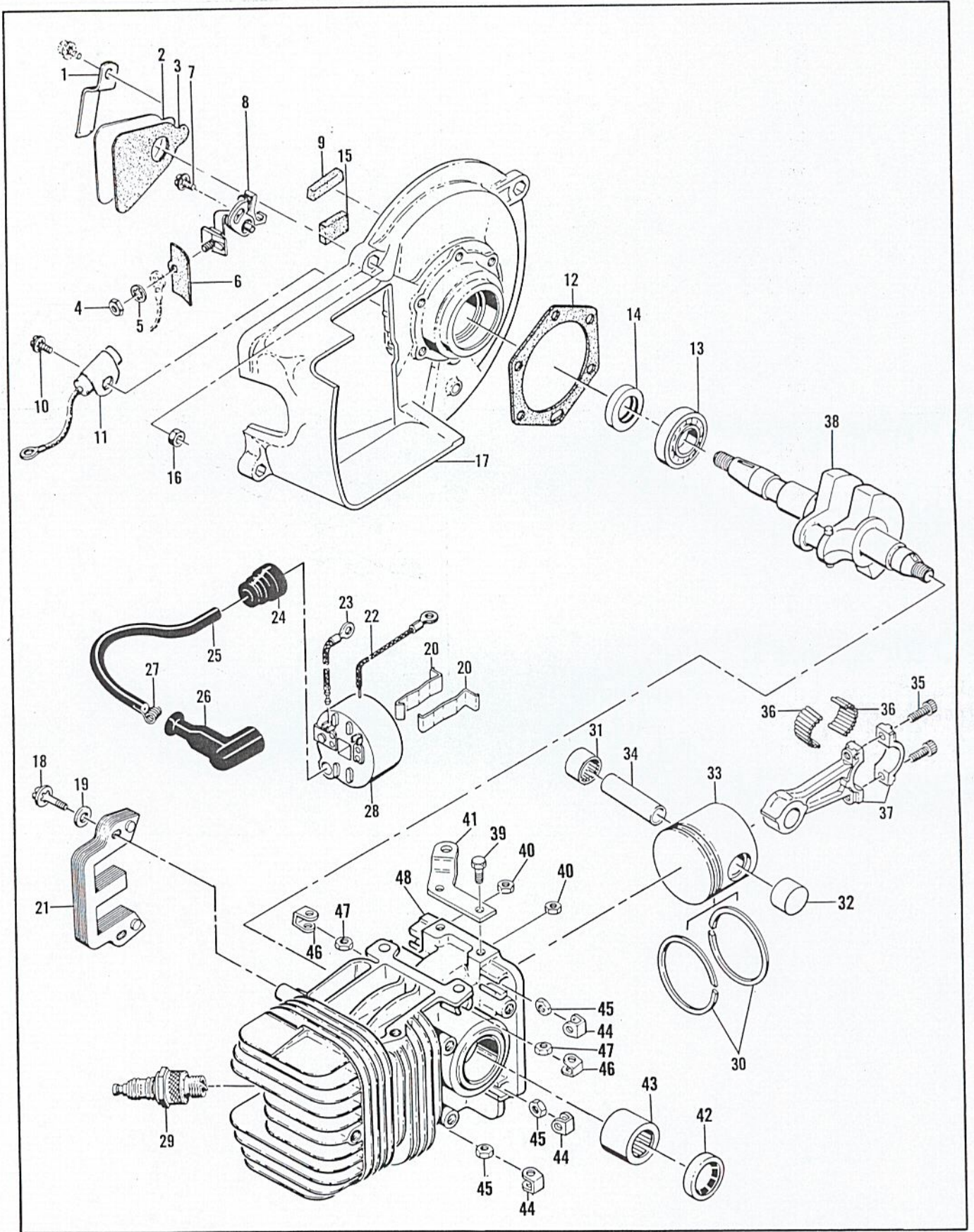


Figure 5. Powerhead Assembly

FIGURE 5. POWER HEAD ASSEMBLY (CONT)

Index No.	Part Number	Nomenclature	Units Per Assy
5	100057	Lockwasher #8 internal	1
6	50381A	Insulator - Breaker terminal	1
7	103672	Screw - 8-32 x 1/2 in. lg (SEMS)	1
8	50076A	Breaker Assy	1
9	50664	Felt - Breaker box	1
10	103672	Screw - 8-32 x 1/2 in. lg (SEMS)	1
11	50074	Condenser	1
12	51240	Gasket - Crankcase cover	1
13	100824	Bearing - Ball	1
	57126A	Cover Assy - Crankcase	1
14	50663	. Seal - Oil	1
15	54184	. Felt - Wiper	1
16	101326	. Nut - Hex 10-24	2
17		. Cover - Crankcase (Order Crankcase Cover Assy #57126A)	1
18	101965	Screw - 10-24 x 0.88 in. lg (SEMS)	2
19	100003	Washer - Plain #10	2
20	51253	Retainer - Coil	2
21	51251	Lamination Assy	1
22	57225	Wire Assy - Primary	1
	55949A	Coil and Terminal Assy	1
23	101883	. Wire Assy - Ground	1
24	55617	. Nipple - Spark plug wire	1
25	52547	. Wire Assy - Spark plug	1
26	55060	. Boot - Spark plug	1
27	55061	. Connector	1
28		. Coil Assy (Order Coil and Terminal Assy #55949A)	1
29		Spark Plug - 14 mm	1
	53941A	Piston Assy.	1
30	55123	. Ring Set - Piston (set of 2 rings)	1
31	101206	. Bearing - Needle	1
32	104378	. Bearing - Needle (closed end).	1
33		. Piston (Order Piston Assy #53941A)	1
34	58132	Pin - Piston	1
	47782	Connecting Rod Assy	1
35	60210	. Screw - Special	2
36	102742	. Roller - Needle	24
37		. Connecting Rod (Order Connecting Rod Assy #47782)	1
38	50756	Crankshaft	1
39	102762	Screw - Hex hd 10-24 x 1/2 in. lg	2
40	101326	Nut - Hex 10-24	2
41	53271	Bracket - Fuel tank	1
	53528A	Cylinder - Crankcase Assy	1
42	104128	. Seal - Oil	1
43	104129	. Bearing - Needle	1
44	18556A	. Retainer - Nut	6
45	101143	. Nut - Hex 1/4-20	6
46	28053	. Retainer - Nut	2
47	101326	. Nut - Hex 10-24	2
48		. Crankcase (Order Crankcase Assy #53528A)	1
	* 53942A	Piston Assy - 0.010 in. oversize	
	55124	. Ring Set - 0.010 in. oversize	
	* 53943A	Piston Assy - 0.020 in. oversize	
	55125	. Ring Set - 0.020 in. oversize	
	* 53944A	Piston Assy - 0.030 in. oversize	
	55126	. Ring Set - 0.030 in. oversize	

* Piston Assys include ring sets and bearings.

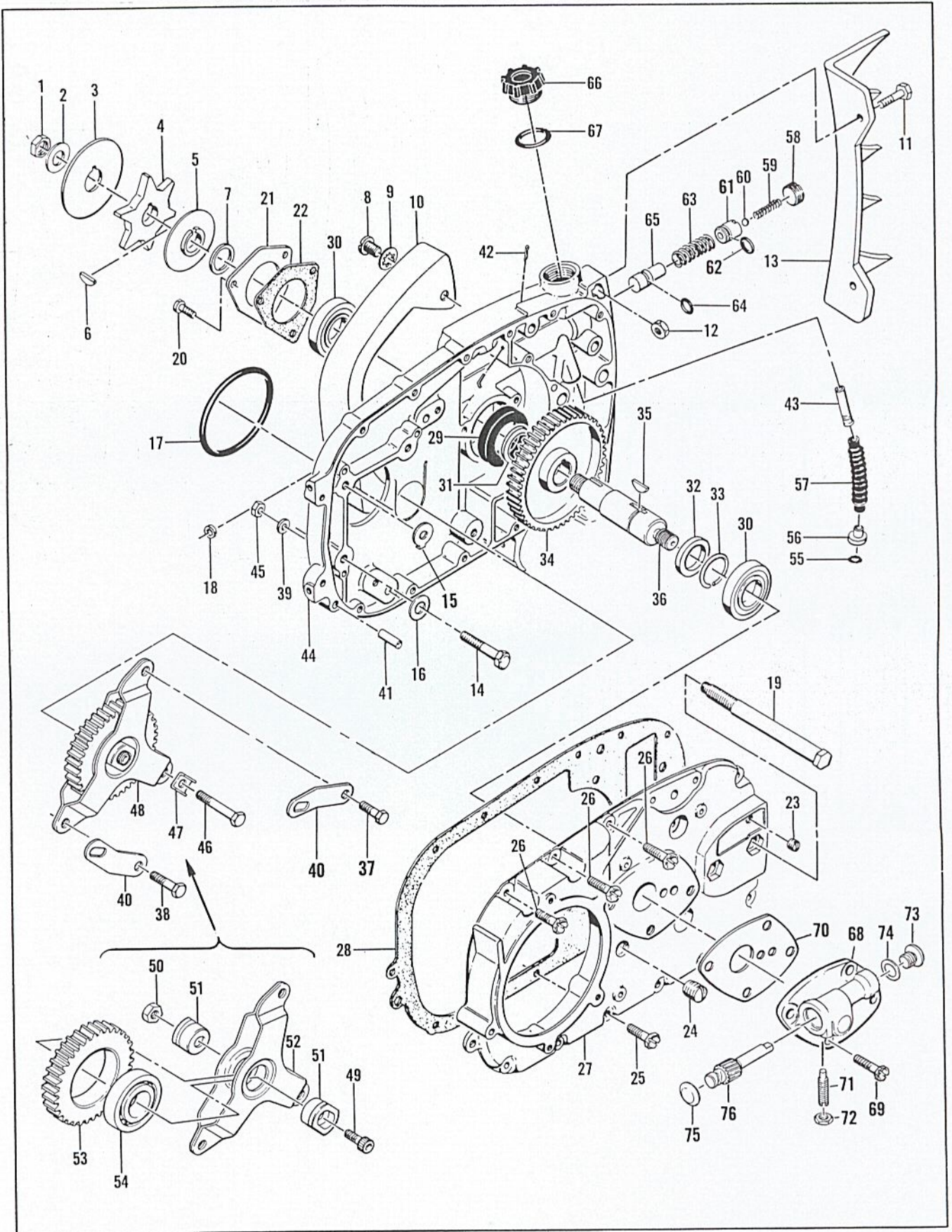


Figure 6. Transmission Assembly

FIGURE 6. TRANSMISSION ASSEMBLY

Index No.	Part Number	Nomenclature	Units Per Assy	Usable On Code
CODE				
"A" indicates parts used on 3:1 Transmission P/N 60464				
"B" indicates parts used on 2:1 Transmission P/N 60633				
1	60972	Nut - Special	1	A, B
2	100593	Washer - 7/16 in.	1	A, B
3	51627	Plate - Chain guide	1	A, B
4	36644A	Sprocket - 7 tooth, 1/2 in. pitch	1	A, B
	36020B	Sprocket - 6 tooth, 1/2 in. pitch	alternate	A, B
	52069A	Sprocket - 7 tooth, 0.404 in. pitch	alternate	A, B
	36790A	Sprocket - 6 tooth, 9/16 in. pitch	alternate	A, B
	36791A	Sprocket - 7 tooth, 9/16 in. pitch	alternate	A, B
5	36019A	Shroud - Sprocket	1	A, B
6	100256	Key - Woodruff #6	1	A, B
7	51726	Spacer - Sprocket	1	A, B
8	102415	Screw - Pan hd 10-24 x 3/8 in. lg	2	A, B
9	101194	Lockwasher	2	A, B
10	51634B	Guard - Chain	1	A, B
11	100882	Screw - Hex hd 1/4-20 x 3/4 in. lg	2	A, B
12	101143	Nut - Hex 1/4-20	2	A, B
13	51654	Spike	1	A, B
14	102128	Screw - Hex hd 1/4-20 x 1-1/4 in. lg	3	A, B
15	36306	Plate - Lock	1	A, B
16	100004	Washer - Plain 1/4 in.	2	A, B
17	104535	"O" Ring	1	A, B
18	55449A	Washer - Oiler rod felt	1	A, B
	60464	Transmission Assy 3-1.	1	A
	60633	Transmission Assy 2-1.	1	B
19	51631A	Bolt - Bar mounting	2	A, B
20	104835	Screw - Pan hd 10-24 x 1/2 in. lg	4	A, B
21	60408	Retainer - Bearing	1	A, B
22	60409	Gasket - Retainer	1	A, B
23	101864	Plug - Pipe 1/16-27	1	A, B
24	104218	Plug - Pipe 3/8-18	1	A, B
25	103464	Screw - Hex hd 10-24 x 3/4 in. lg (SEMS)	11	A, B
26	103947	Screw - Hex hd 10-24 x 1 in. lg (SEMS)	3	A, B
27	58779	Cover - Gearcase	1	A, B
28	55913B	Gasket - Gearcase cover	1	A, B
29	104298	Seal - Oil	1	A, B
30	101039	Bearing	2	A, B
31	55715	Spacer - Gear	1	A, B
32	60407	Spacer - Gear	1	A, B
	60419	Shaft and Sprocket Gear Assy	1	A
	60420	Shaft and Sprocket Gear Assy	1	B
33	104451	Ring - Retaining	1	A, B
34	55925	Gear - Sprocket drive	1	A
	57999	Gear - Sprocket drive	1	B
35	55953	Key - Sprocket gear	1	A, B
36	60470	Shaft - Sprocket	1	A, B
	60461	Gearcase Assy	1	A, B
37	102504	Screw - Hex hd 1/4-28 x 3/4 in. lg	1	A, B
38	102901	Screw - Hex hd 1/4-28 x 1 in. lg	1	A, B
39	100004	Washer - Plain 1/4 in.	2	A, B
40	60186	Strap - Idler yoke	2	A, B
41	100993	Pin - Dowel	1	A, B
42	100010	Pin - Cotter	1	A, B

This list is continued on page 14

FIGURE 6. TRANSMISSION ASSEMBLY (CONT)

Index No.	Part Number	Nomenclature	Units Per Assy	Usable On Code
43	60389	Valve Assy - Check	1	A, B
44		Gearcase (Order Gearcase Assy #60461)	1	A, B
45	100640	Nut - Hex 1/4-28	2	A, B
46	104351	Screw - Hex hd 1/4-28 x 1-13/32 in. lg	1	A, B
47	55539	Lockplate - Yoke	1	A, B
48	55928A	Gear and Yoke Assy	1	A
	55722	Gear and Yoke Assy	1	B
49	100201	Screw - Socket hd 1/4-28 x 1/2 in. lg	1	A, B
50	100640	Locknut - Hex 1/4-28	1	A, B
51	57493	Hub - Bearing	1	A, B
52	53842	Yoke Assy	1	A
	53820	Yoke Assy	1	B
53	53264	Gear - Idler	1	A
	55728	Gear - Idler	1	B
54	100824	Bearing - Ball	1	A, B
	51505	Weight Assy	1	A, B
55	51506	Screen - Pickup	1	A, B
56	51509	Weight - Pickup	1	A, B
57	28007	Hose - Pickup	1	A, B
58	51755	Plug - Oiler valve	1	A, B
59	51944	Spring	1	A, B
60	100549	Ball - Steel 0.188 in. dia	1	A, B
	60622A	Body Assy - Oiler	1	A, B
61	57721B	Body - Oiler	1	A, B
62	101056	"O" Ring	1	A, B
63	19236	Spring - Oiler	1	A, B
	51472	Piston Assy - Oiler	1	A, B
64	101056	"O" Ring	1	A, B
65	36126	Piston - Oiler	1	A, B
66	57129A	Cap - Filler	1	A, B
67	101148	"O" Ring	1	A, B
68	60914	Pump and Gasket Assy - Oiler 3-1	1	A
	60466	Pump and Gasket Assy - Oiler 2-1	1	B
69	110172	Screw - Special	4	A, B
70	60409	Gasket - Oiler pump	1	A, B
71	60962	Screw - Special	1	A, B
72	101075	Nut - Hex 10-32	1	A, B
73	60959	Plug - Special	1	A, B
74	60963	Shim - 0.005 in.	as required	A, B
	60964	Shim - 0.015 in.	as required	A, B
	60965	Shim - 0.025 in.	as required	A, B
75	104791	Plug - Expansion 5/8 in.	1	A, B
76	60960	Plunger - Oiler pump 3-1	1	A
	60958	Plunger - Oiler pump 2-1	1	B

TOOLS AND ACCESSORIES

Index No.	Part Number	Nomenclature	Units Per Assy
	* 51445A	Wrench and Screwdriver Combination	
	* 14168A	Wrench - Spark plug	
	* 60452	Owner's Manual	
	* 56625A	Chain Maintenance Manual	

* Items furnished with each saw

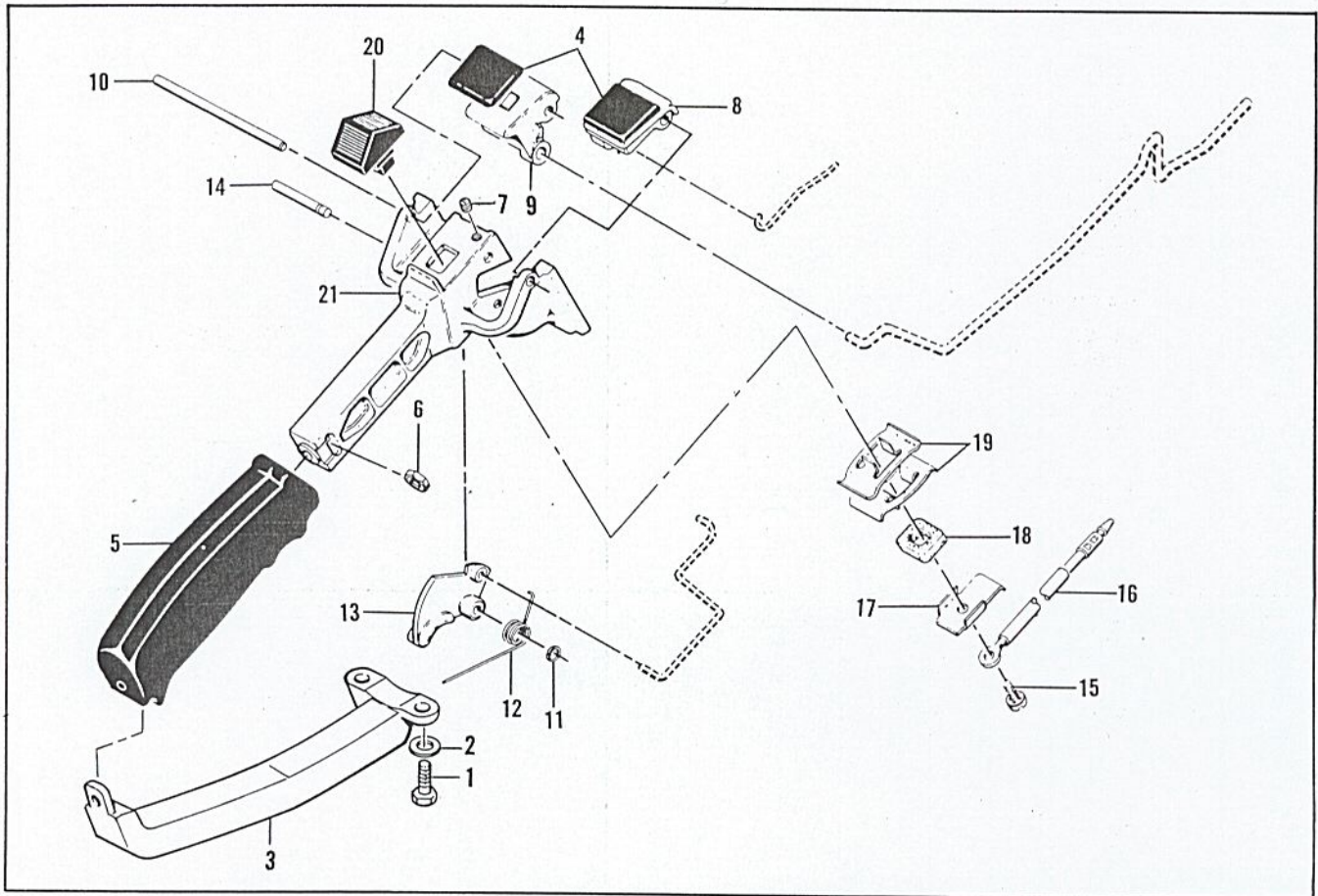


Figure 7. Handle and Control Assembly

FIGURE 7. HANDLE AND CONTROL ASSEMBLY

Index No.	Part Number	Nomenclature	Units Per Assy
1	102121	Screw - Hex hd 1/4-20 x 7/8 in. lg	2
2	100005	Washer - Plain 1/4 in.	2
3	60744	Brace - Handle	1
4	55670	Grommet - Control button	2
	53245	Handle and Control Assy	1
5	55624A	. Grip - Handle	1
6	101326	. Nut - Hex 10-24	1
7	104484	. Screw - Set 8-32 x 1/4 in. lg	1
8	55968A	. Buttons - Primer	1
9	55969A	. Button - Oiler	1
10	51344A	. Shaft - Oiler and primer	1
11	104501	. Retainer - Trigger pin	1
12	55674	. Spring - Trigger return	1
13	55616	. Trigger	1
14	51344A	. Shaft - Oiler and primer buttons	1
15	110055	. Screw - 8-32 x 3/8 in. lg (SEMS)	1
16	51492A	. Wire Assy - Primary	1
17	51279	. Contact - Switch	1
18	51555	. Insulator - Switch	1
19	51554A	. Detent - Switch	2
20	57718	. Button - Switch	1
21	55986	. Handle	1

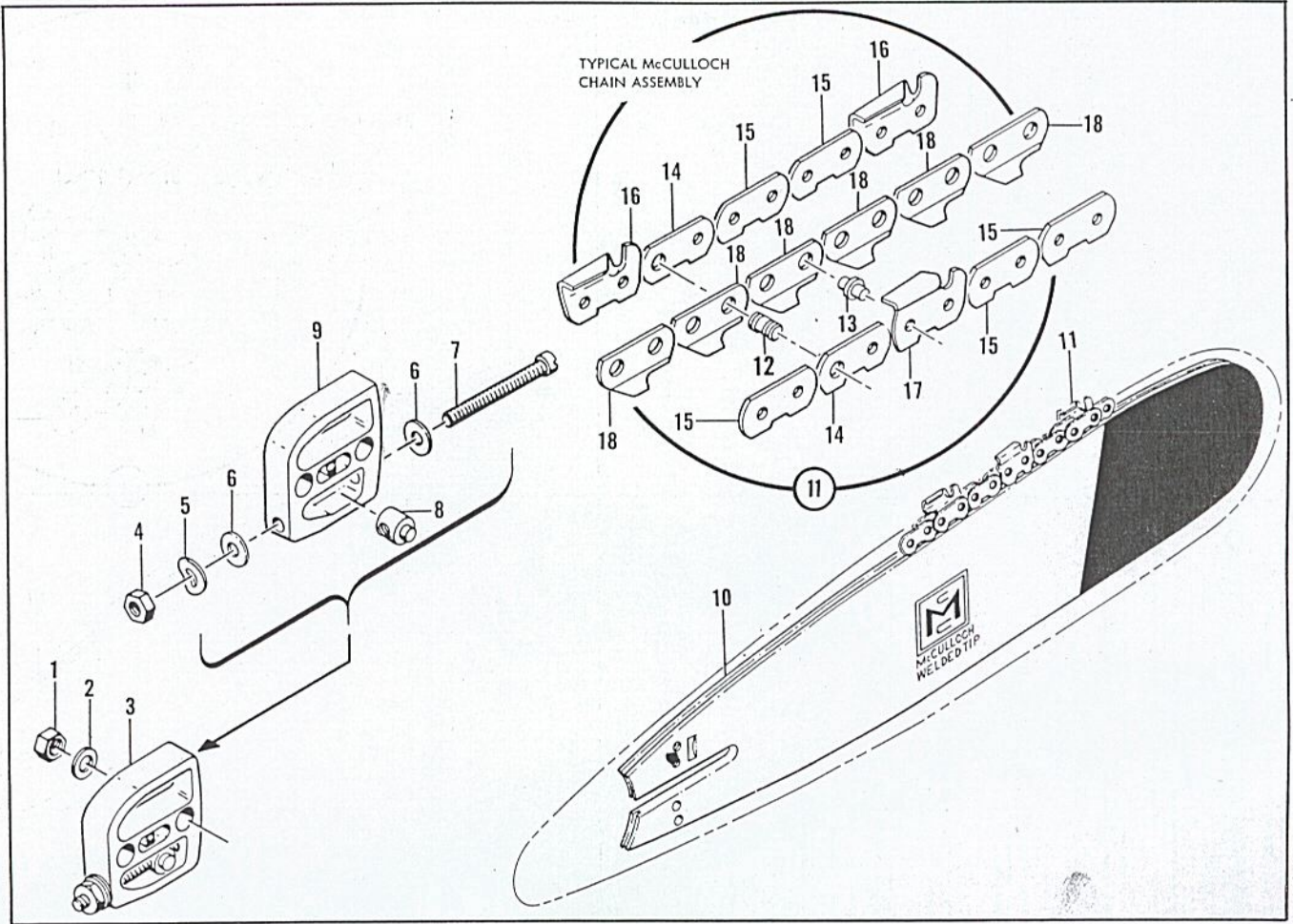


Figure 8. Lockplate Adjusting Assembly, Bar and Chain

FIGURE 8. LOCK PLATE ADJUSTING ASSEMBLY, BAR AND CHAIN

Index No.	Part Number	Nomenclature	Units Per Assy
1	103729	Nut - Hex 3/8-24	2
2	100393	Washer - Plain 3/8 in.	2
3	52211D	Lockplate Adjusting Assy	1
4	100640	. Nut - Hex 1/4-28	1
5	102813	. Washer - Spring	1
6	102843	. Washer - Plain 1/4 in.	1
7	103919	. Screw - Fil hd 1/4 - 20 x 2-1/2 in. lg	1
8	52207C	. Nut - Adjusting	1
9	52206B	. Lockplate	1
10		McCulloch Bar	1
11		Typical McCulloch Chain Assy	1
12		. Master Pin	
13		. Shoulder Rivet	
14		. Master Link	
15		. Side Link	
16		. Cutter - L. H.	
17		. Cutter - R. H.	
18		. Center Link	