

Models	Serial Number Prefix
600077A	11-
600077B	11-
600077D	11-
600077J	11-

# SP 105 CHAIN SAW

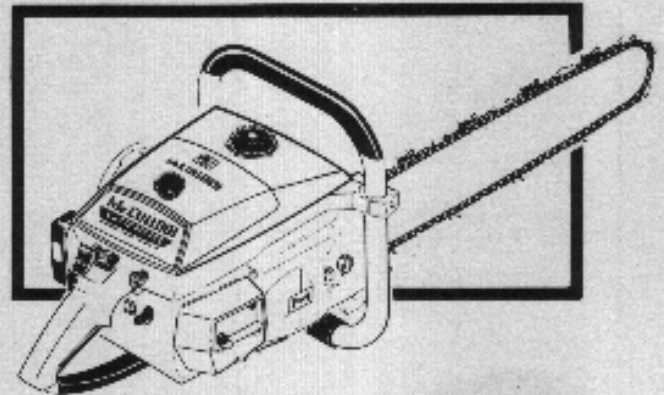
## ILLUSTRATED PARTS LIST

SP 105 chain saws are identified by a model number (600077) followed by a suffix letter (A, B, D, etc.) stamped on the identification plate attached to the saw. Suffix letters denote variations in parts or assemblies in 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 identified by that letter or letters.

Part numbers and descriptions without suffix letter or letters apply to all models of the SP 105 saw unless specifically noted otherwise.

The policy of McCulloch Corporation 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 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.



### August 1973

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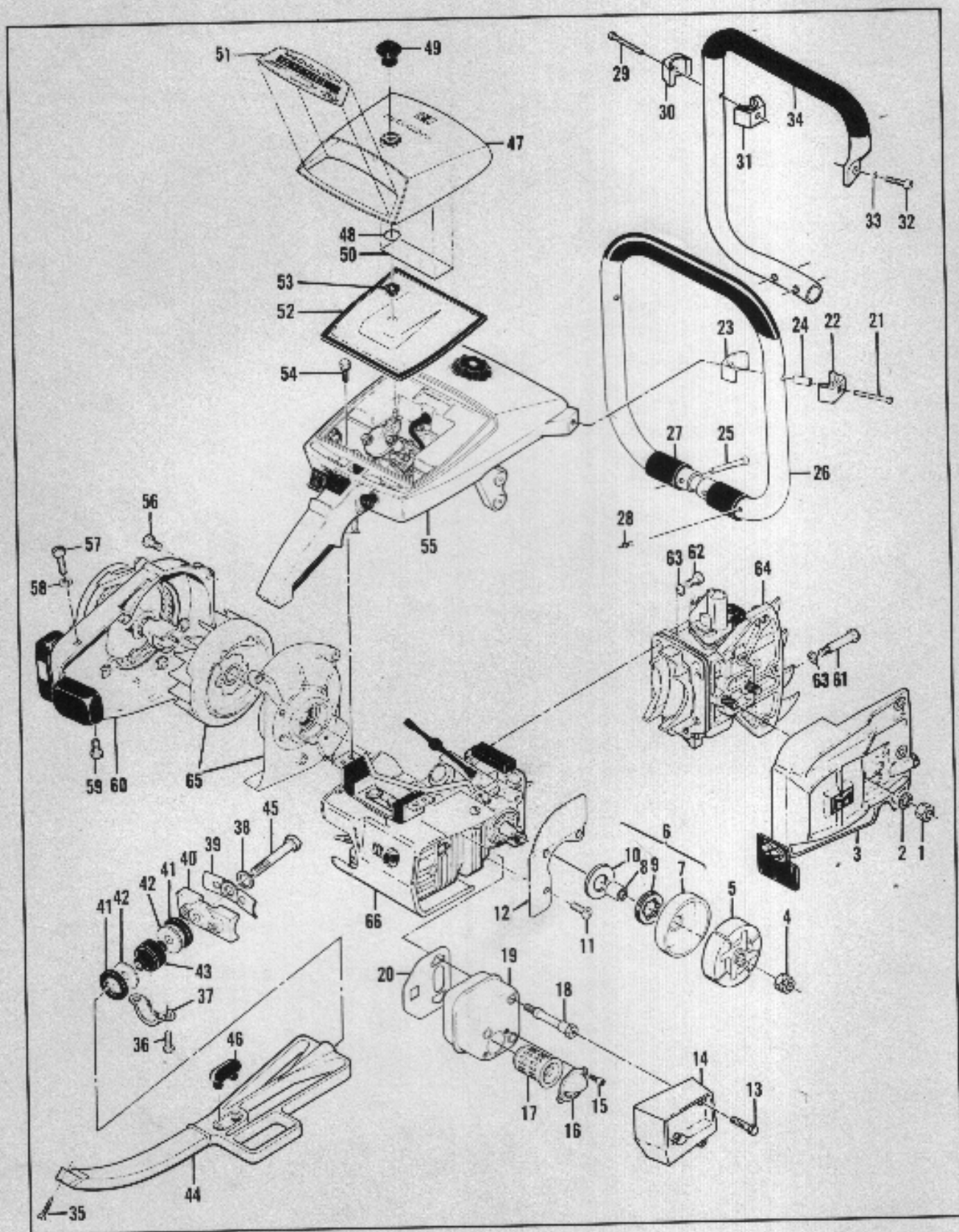


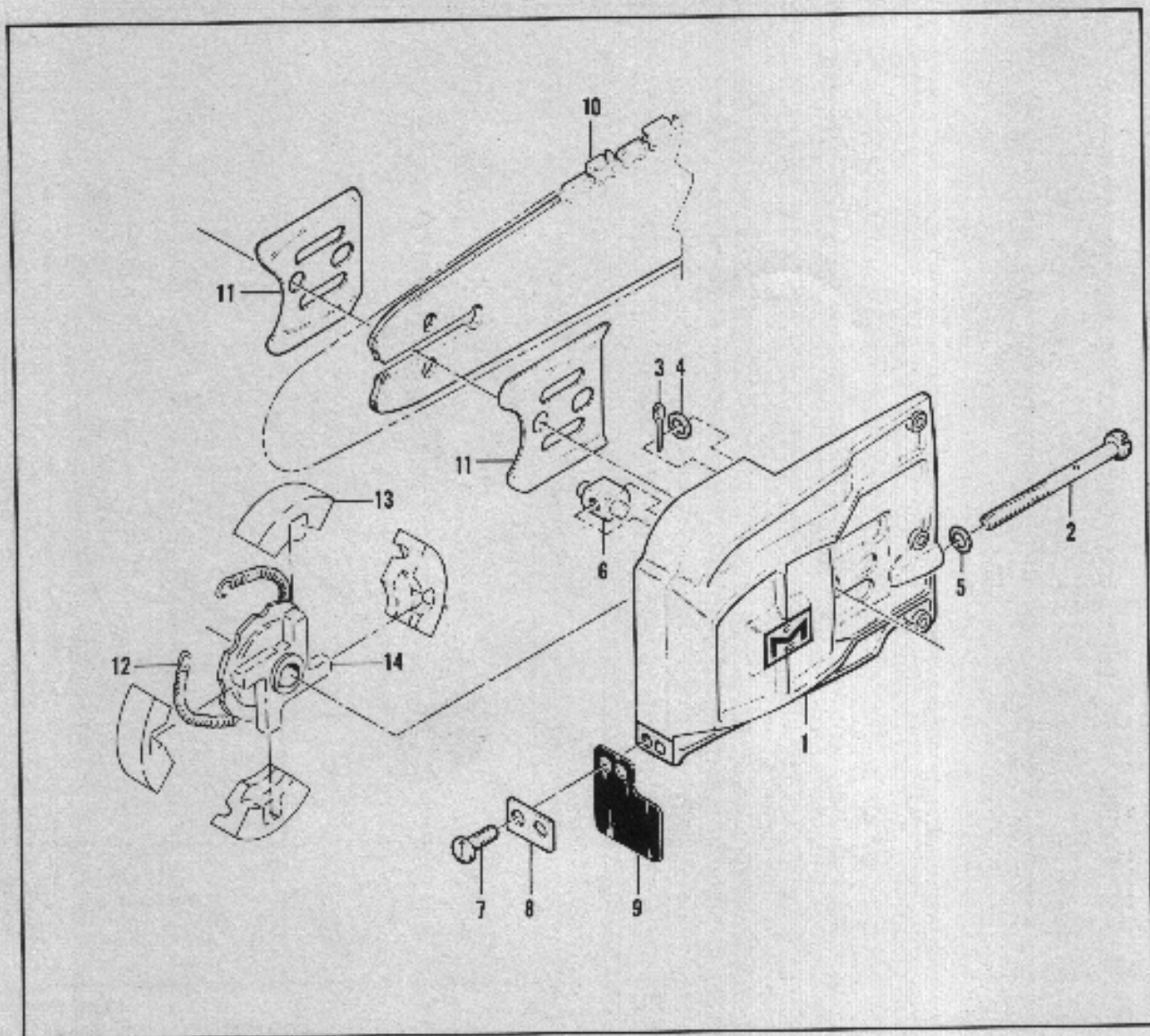
Figure 1. General

FIGURE 1. GENERAL

Item No.	Part Number	Description	Units Per Assy
1	110625	Nut - Hex 3/8-24	2
2	84623	Washer - Special	2
3		Clutch Guard Assy (See Figure 2)	
4	86113	Nut - Hex 3/8-24 (L. H.)	1
5		Clutch Assy (See Figure 2)	1
6	86350	Kit - Drum, Sprocket, Bearing (A)	1
	86340	Kit - Drum, Sprocket, Bearing (B, D, J)	1
7	86343	Drum & Bearing Assy	1
8	87111	Bearing - Sprocket	1
9	86342	Sprocket - 7-T .404 (A)	1
	86341	Sprocket - 8-T .404 (B, D, J)	1
10	86386	Washer - Sprocket	1
11	104133	Screw - Pan hd 1/4-20 x 5/8 (SEMS)	3
12	69464	Jacket - Cylinder	1
13	110717	Screw - Hex hd 10-32 x 3/4	3
14	85459	Guard - Muffler	1
	85388	Kit - Muffler	1
15	110664	Screw - Skt hd 10-24 x 3/8	2
16	84203	Deflector - Exhaust	1
17	84690	Baffle - Muffler	1
18	85121	Screw - Shoulder	3
19	85117	Muffler Assy	1
20	89224	Gasket - Muffler	1
21	110605	Screw - Oval hd 10-24 x 2 (A, D, J)	2
22	69994	Collar - Frame (A, D, J)	2
23	69995	Collar - Frame (A, D, J)	2
24	69524	Bushing - Frame (A, D, J)	2
25	110606	Screw - Oval hd 10-24 x 1-1/4 (A, D, J)	2
26	69466	Frame & Grip Assy (A, D, J)	1
27	69885	Protector - Frame (A, D, J)	2
28	84795	Rivet - Stop (A, D, J)	2
29	110605	Screw - Oval hd 10-24 x 2 (B)	1
30	69994	Collar - Frame (B)	1
31	69995	Collar - Frame (B)	1

Item No.	Part Number	Description	Units Per Assy
32	110714	Screw - Skt hd 10-24 x 3/4 (B)	1
33	24236	Washer - Special (B)	1
34	86106	Frame & Grip Assy (B)	1
35	101986	Screw - Oval hd 10-24 x 1	1
36	104950	Screw - Hex hd 10-24 x 5/8	2
37	83819	Clamp - Lower mount	1
38	102115	Washer - 1/4	1
39	85561	Lockplate	1
40	85220	Bracket - Lower mount	1
41	84661	Grommet	2
42	110845	Washer - Grommet	2
43	85698	Mount - Lower	1
44	86302	Kit - Handle brace	1
45	86301	Bolt - Handle brace	1
46	69883	Bumper - Brace	1
47	85092	Cover Assy - Air cleaner	1
48	110565	Ring - Retaining	1
49	66529	Knob - Cover	1
50	86198	Plate - Instruction	1
51	89269	Nameplate	1
52	69100	Filter - Air	1
53	68528	Grommet - Filter	1
54	104950	Screw - Hex hd 10-24 x 5/8 (SEMS)	4
55		Fuel Tank Assy (See Figure 4)	
56	104816	Screw - Hex hd 10-24 x 1-1/4 (SEMS)	3
57	104849	Screw - Skt hd 10-24 x 1/2	1
58	110264	Washer - #10	1
59	102500	Screw - Pan hd 10-24 x 1/2	1
60		Fan Housing & Starter Assy (See figure 3)	
61	102127	Screw - Hex hd 1/4-20 x 3-1/4	2
62	103258	Screw - Hex hd 1/4-20 x 1-1/8	2
63	100005	Washer - 1/4	4
64		Oiler Housing Assy (See Figure 6)	
65		Crankcase Cover & Ignition Assys (See Figure 7)	
66		Powerhead & Shroud Assys (See Figure 8)	

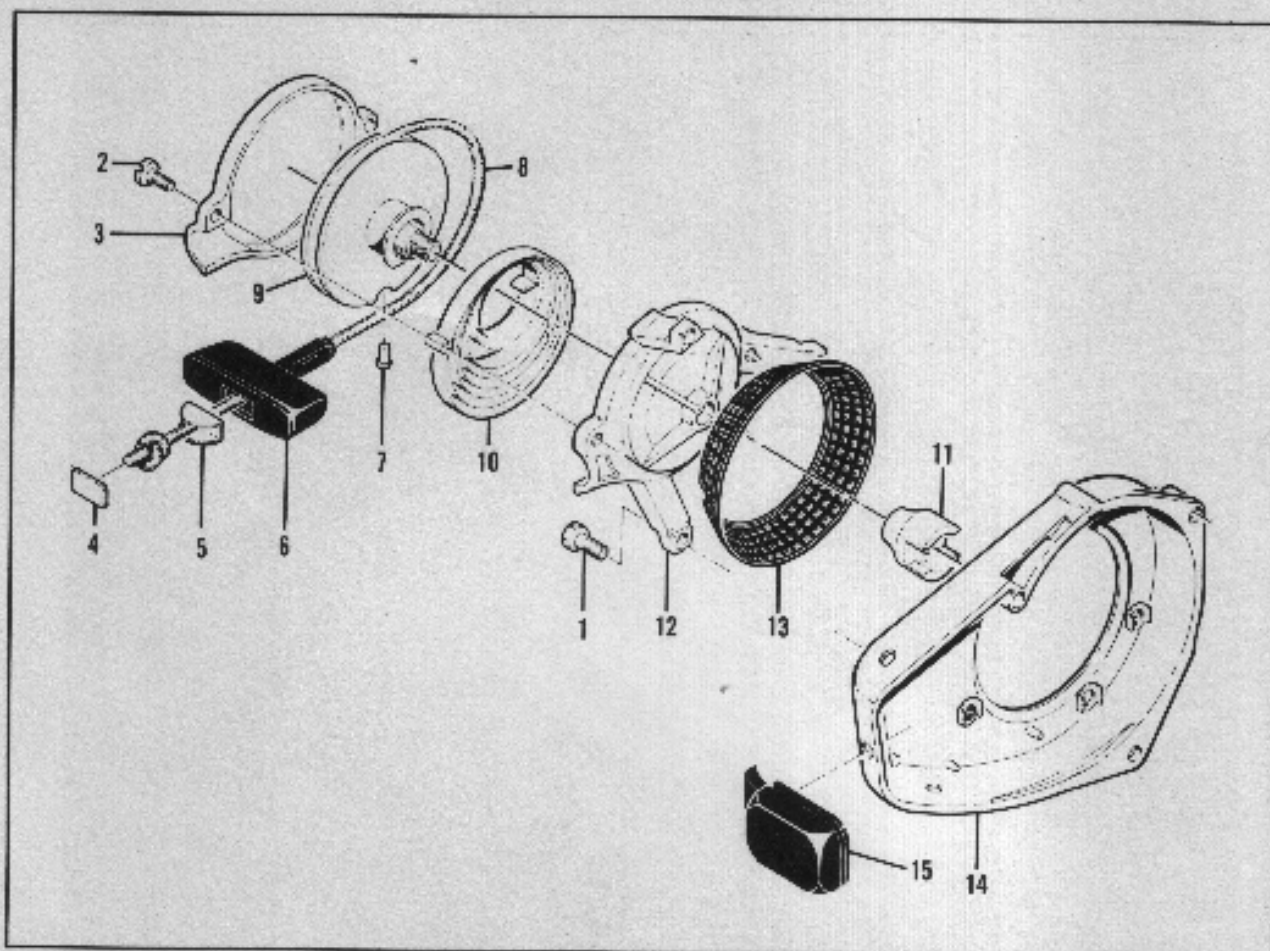
FIGURE 2. CLUTCH GUARD AND CLUTCH ASSEMBLIES



Item No.	Part Number	Description	Units Per Assy
1	85547	Clutch Guard Assy	1
2	82057	. Screw - Adjustment	1
3	105686	. Pin - Cotter	1
4	100004	. Washer - 1/4	1
5	100005	. Washer - 1/4	1
6	52207C	. Nut - Bar adjustment	1
7	110041	Screw - Pan hd B-32 x 1/2	2
8	69492	Retainer - Deflector	1

Item No.	Part Number	Description	Units Per Assy
9	69477	Deflector - Saw dust	1
10		Bar & Chain Assys	1
11	64935	Plate - Bar	2
	89227	Clutch Assy	1
12	85042	. Spring - Clutch	1
13	51464A	. Shoe - Clutch	4
14	89226	. Rotor Assy	1

FIGURE 3. FAN HOUSING AND STARTER ASSEMBLY



Item No.	Part Number	Description	Units Per Assy
1	104815	Screw - Hex hd 10-24 x 7/8 (SEMS)	3
	84211	Starter Assy	1
2	104396	Screw - Pan hd 10-24 x 3/4	2
3	80647	Cover - Starter	1
4	57232	Plate - Starter handle	1
5	57231	Cup - Handle	1
6	57230	Handle - Starter	1

Item No.	Part Number	Description	Units Per Assy
7	101138	Rivet - Rope	1
8	28716	Rope - Starter	1
9	57792	Drum - Starter	1
10	51665	Spring - Rewind	1
11	57790	Ratchet - Starter	1
12	84212	Base - Starter	1
13	84629	Guard - Sawdust	1
14	89242	Housing - Fan	1
15	85376	Cover - Spark plug	1

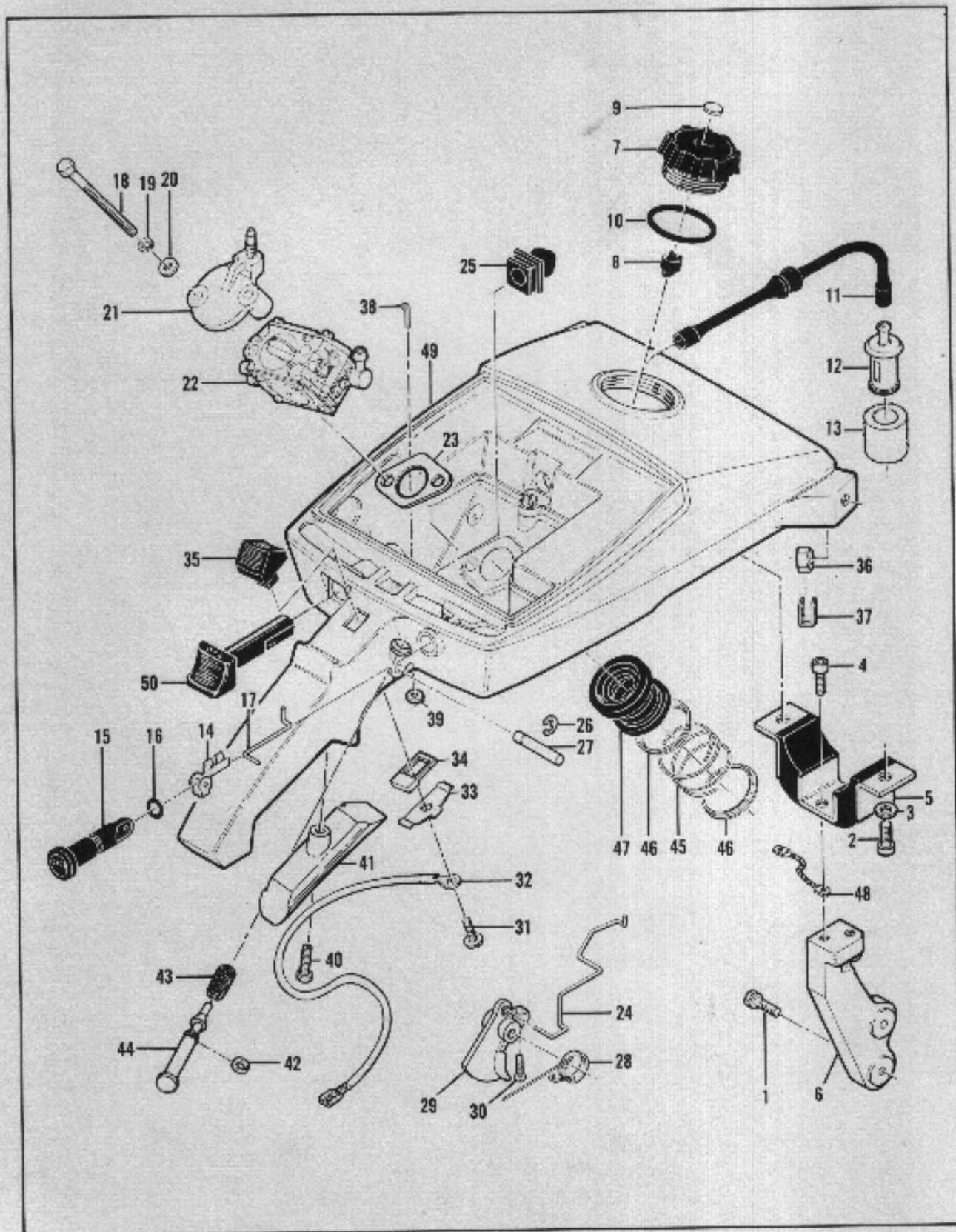


Figure 4. Fuel Tank Assembly

FIGURE 4. FUEL TANK ASSEMBLY

Item No.	Part Number	Description	Units Per Assy
1	110621	Screw - Hex hd 10-24 x 3/4 (SEMS)	2
2	104895	Screw - Skt hd 10-24 x 5/8	2
3	83745	Washer - Special	2
4	104695	Screw - Skt hd 10-24 x 5/8	2
5	85897	Mount - Front	1
6	69422	Bracket - Mount	1
7	55934B	Cap Assy - Fuel	1
8	53788A	. Valve Assy - Check	1
9	55063	. Seal - Capillary	1
10	101348	"O" Ring	1
11	69312	Hose - Fuel	1
12	53679B	Pickup Assy - Fuel	1
13	61159	. Filter - Fuel	1
14	69442	Retainer - Choke rod	1
15	69471	Button - Choke	1
16	101056	"O" Ring	1
17	69443	Rod - Choke	1
18	110814	Screw - Hex hd 10-24 x 2-3/8	2
19	103174	Lockwasher - #10	2
20	24236	Washer - Special	2
21	69152	Anchor Assy - Air cleaner	1
22		Carburetor Assy (See Figure 5)	
23	86189	Gasket - Carburetor	1
24	86149	Rod - Throttle	1

Item No.	Part Number	Description	Units Per Assy
25	69525	Grommet - Throttle rod	1
26	104501	Retainer - Trigger pin	1
27	69465	Pin - Trigger	1
28	69466	Spring - Trigger	1
29	86150	Trigger	1
30	110537	Screw - Fil hd 8-36 x 1/2	1
31	110597	Screw - Pan hd 8-32 x 1/2 (SEMS)	1
32	83861	Wire Assy - Stop switch	1
33	62451	Contact - Switch	1
34	62950A	Base - Switch	1
35	68846	Button - Switch	1
36	101326	Nut - Hex 10-24	2
37	28053	Retainer - Nut	2
38	104310	Pin - Cotter	1
39	69352	Washer - Fell	1
40	110724	Screw - Fil hd 10-24 x 1	1
41	85660	Insert - Handle	1
42	101269	Ring - Retaining	1
43	84214	Spring - Throttle latch	1
44	86151	Button - Throttle latch	1
45	69565	Spring - Connector	1
46	69371	Ferrule - Connector	2
47	69889	Connector	1
48	86365	Strap - Ground	1
49	87879	Tank Assy	1
50	87285	Button - Oiler	1

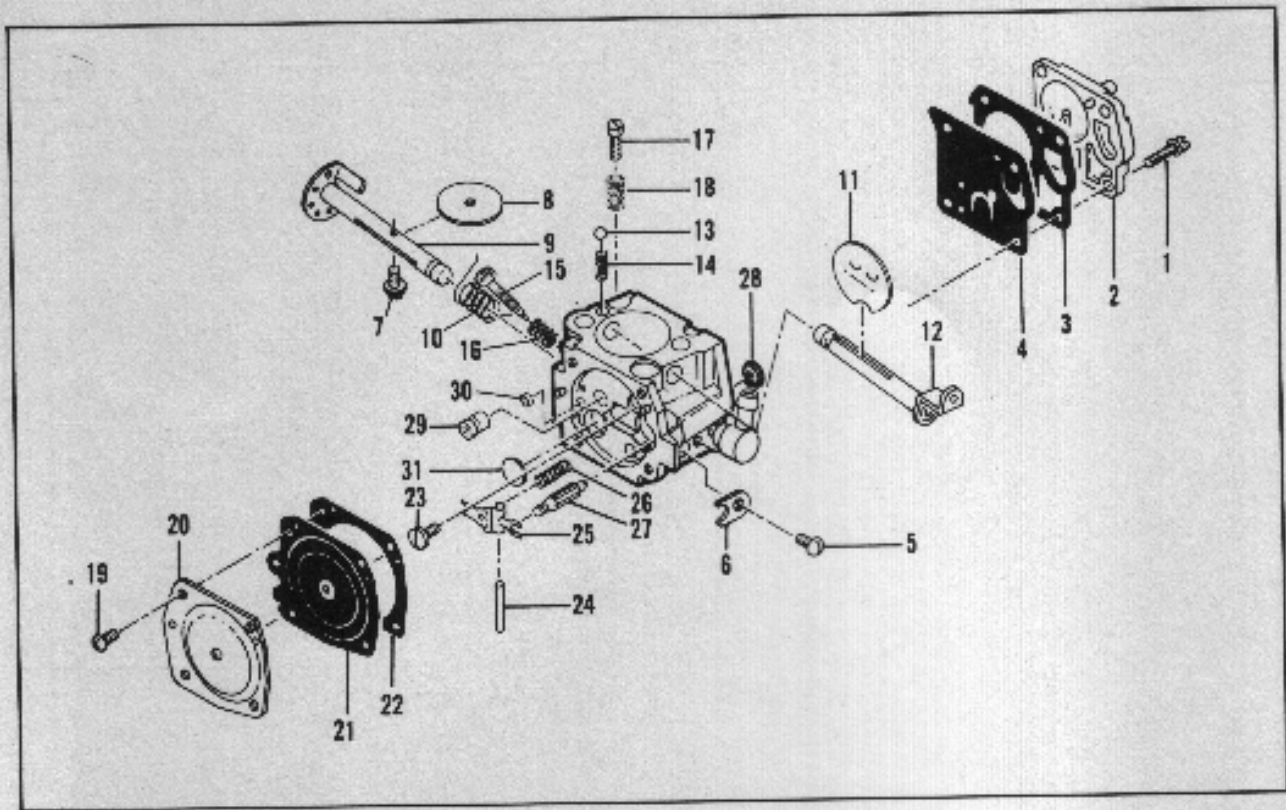


Figure 5. Carburetor Assembly



FIGURE 5. CARBURETOR ASSEMBLY

Item No.	Part Number	Description	Units Per Assy
	87288	Carburetor Assy	1
1	52933	. Screw - Pump cover	4
2	83731	. Cover - Pump	1
3	66629	. Gasket - Pump cover	1
4	*66630	. Diaphragm - Fuel pump	1
5	48780	. Screw - Throttle shaft clip	1
6	66646	. Clip - Throttle shaft	1
7	*48780	. Screw - Throttle plate	1
8	51720	. Plate - Throttle	1
9	88773	. Shaft Assy - Throttle	1
10	*67138	. Spring - Throttle shaft	1
11	66639	. Plate - Choke	1
12	83717	. Shaft Assy - Choke	1
13	100071	. Ball - Choke friction	1
14	48759	. Spring - Choke friction	1
15	88768	. Needle - Idle mixture	1
16	*66626	. Spring - Idle mixture needle	1
17	*66625	. Screw - Idle speed	1
18	*66624	. Spring - Idle speed screw	1

Item No.	Part Number	Description	Units Per Assy
19	51721	. Screw - Diaphragm cover	4
20	66631	. Cover - Diaphragm	1
21	*66632	. Diaphragm - Metering	1
22	66633	. Gasket - Diaphragm	1
23	*66644	. Screw - Inlet lever pin	1
24	*66636	. Pin - Inlet lever	1
25	*66638	. Lever - Inlet	1
26	*66404	. Spring - Inlet lever	1
27	66637	. Needle - Inlet	1
28	*66623	. Screen - Fuel inlet	1
29	88771	. Jet - High speed fuel (029)	1
	88772	Jet - H/S fuel (028)	Alt.
	88781	Jet - H/S fuel (027)	Alt.
	88780	Jet - H/S fuel (026)	Alt.
30	52928	. Plug - Cup	1
31	*66622	. Plug - Welch	1
	*88774	Gasket Set	
	88775	Repair Kit	
	88776	Gasket & Diaphragm Set	

\*Indicates parts included in Repair Kit, P/N 88775.

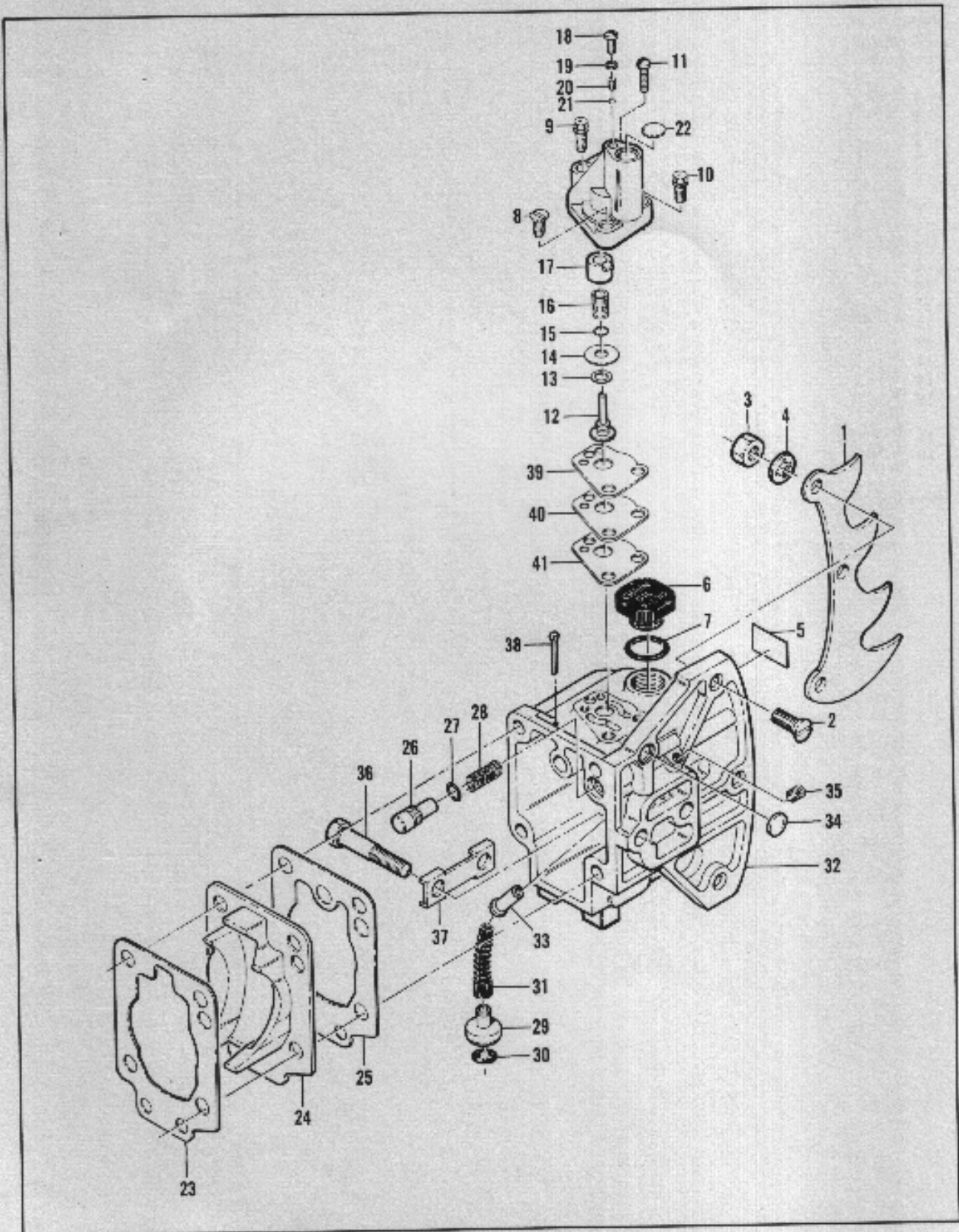


Figure 6. Oiler Tank & Pump Assemblies

FIGURE 6. OILER TANK AND PUMP ASSEMBLIES

Item No.	Part Number	Description	Units Per Assy
1	61331	Kit - Spike	1
2	102088	. Screw - Fl hd 1/4-20 x 3/4	3
3	100152	. Nut - Hex 1/4-20	3
4	100153	. Lockwasher	3
5	59445	Decal - Oiler	1
6	57129A	Cap - Oil	1
7	101148	"O" Ring	1
8	110245	Screw - Fl hd 10-24 x 3/4	1
9	110257	Screw - Hex hd 10-24 x 1-3/4	1
10	110127	Screw - Hex hd 10-24 x 7/8 (SEMS)	1
	83135	Pump Assy - Pulse	1
11	110890	. Screw - Fl hd 10-24 x 7/8	1
12	80260A	. Piston Assy	1
13	60937	. Washer - Piston	1
14	86182	. Ring - Piston	1
15	104001	. "O" Ring	1
16	86183	. Spring - Piston	1
17	67918	. Sleeve - Adjustment	1
18	60397A	. Screw - Special	1
19	80398B	. Washer - Special	1

Item No.	Part Number	Description	Units Per Assy
20	60398B	. Spring - Ball check	1
21	102609	. Ball - Check	1
22	110157	. Plug - Expansion	1
23	65654	Gasket - Crankcase bottom cover	1
24	80251A	Cover - Crankcase bottom	1
25	86125	Gasket - Oiler housing	1
26	63643	Piston - Oiler	1
27	103198	"O" Ring	1
28	51946	Spring - Piston	1
29	51505	Weight Assy - Oil line	1
30	51506	. Screen - Oil	1
31	28007	Hose - Oil pickup	1
32	85892	Housing Assy - Oil	1
33	51962A	. Valve Assy - Check	1
34	105677	. Plug - Expansion	1
35	104869	. Plug - Pipe	1
36	51423B	. Bolt - Bar	2
37	51439	. Lockplate	1
38	104062	. Pin - Cotter	1
39	86186	. Gasket - Pump	1
40	87471	. Spacer - Pump	1
41	68794	. Gasket - Spacer	1

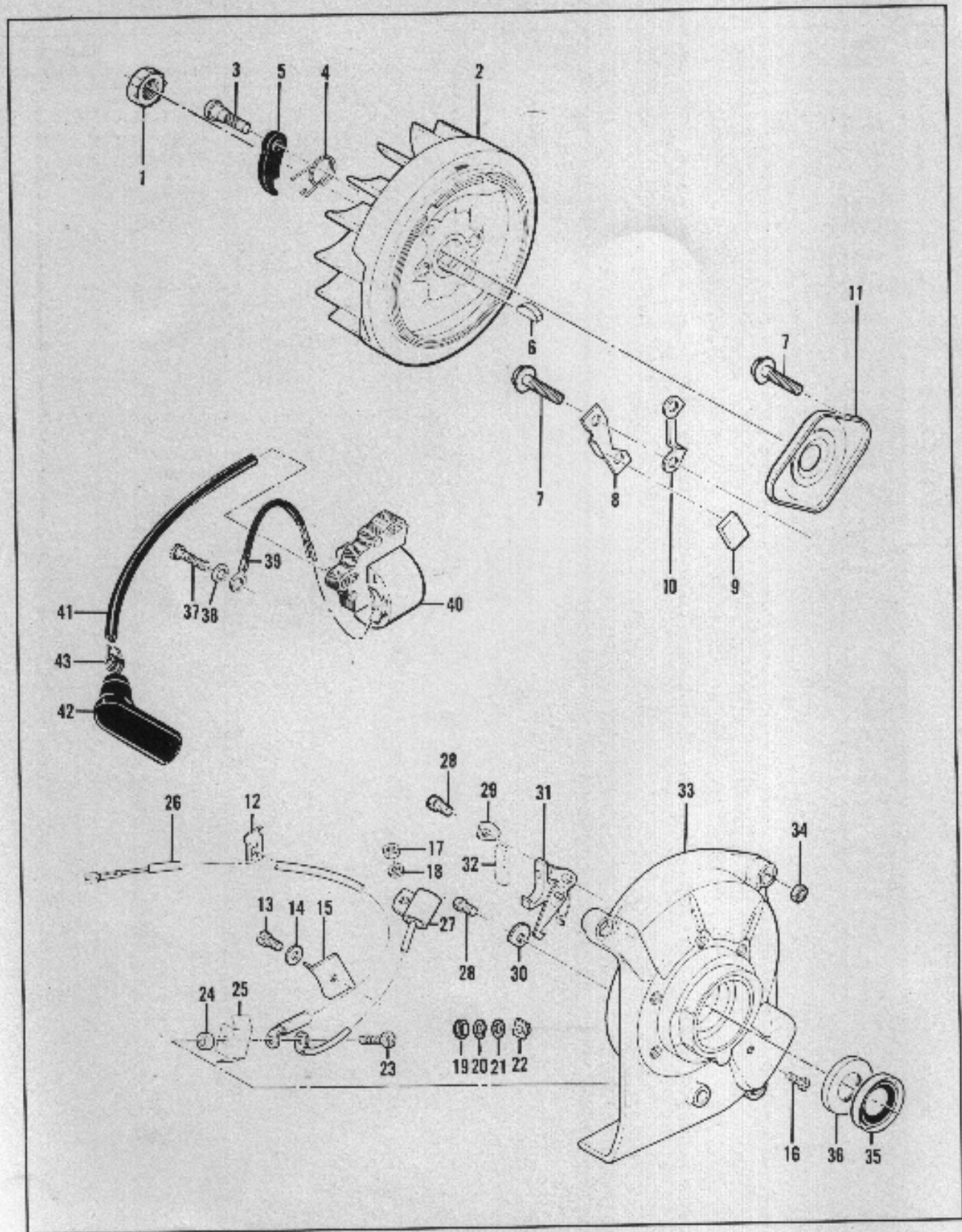


Figure 7. Crankcase Cover & Ignition Assemblies

FIGURE 7. CRANKCASE COVER AND IGNITION ASSEMBLIES

Item No.	Part Number	Description	Units Per Assy
1	110655	Nut - Hex 7/16-30	1
2	68282	Flywheel & Pawl Assy	1
3	36144B	. Pin - Pawl	2
4	66351	. Spring - Pawl	2
5	24093	. Pawl - Starter	2
6	103679	Key - Woodruff	1
7	110866	Screw - Hex hd 10-24 x 3/4 (SEMS)	6
8	57815	Strap - Seal	1
9	50664	Seal - Breaker box	1
10	55977	Clip - Cover	2
11	55766B	Cover - Breaker box	1
12	104230	Nut - Speed	1
13	110055	Screw - Fil hd 8-32 x 3/8 (SEMS)	1
14	100080	Washer - #8	1
15	57829	Clamp - Ignition wire	1
16	103748	Screw - Hex hd 8-32 x 1/2	1
17	100251	Nut - Hex 8-32	1
18	100057	Lockwasher - #8	1
19	104551	Nut - Hex 8-32	1
20	104553	Lockwasher - #8	1
21	100080	Washer - #8	1
22	57770A	Insulator - Breaker spring	1

Item No.	Part Number	Description	Units Per Assy
23	110336	Screw - Hex hd 8-32 x 9/16	1
24	57789	Insulator - Ignition screw	1
25	55762A	Insulator - Breaker terminal	1
26	83628	Wire Assy - Primary	1
27	85358	Condenser	1
28	104733	Screw - Fil hd 8-32 x 1/2 (SEMS)	2
29	57767A	Lockplate	1
30	55778E	Washer - Breaker retainer	1
31	88807	Breaker Assy	1
32	54184	Wiper - Oil	1
33	84193	Cover Assy - Crankcase	1
34	101326	. Nut - Hex 10-24	3
35	57808	. Seal - Oil	1
36	57897	. Seal - Oil	1
37	110713	Screw - Skt hd 10-24 x 7/8	2
38	83745	Washer - Special	2
39	83839	Wire Assy - Ground	1
40	85243	Coil & Lamination Assy	1
41	50120	. Wire Assy - Spark plug	1
42	55060	. . . Boot - Spark plug	1
43	55061	. . . Connector - Spark plug	1

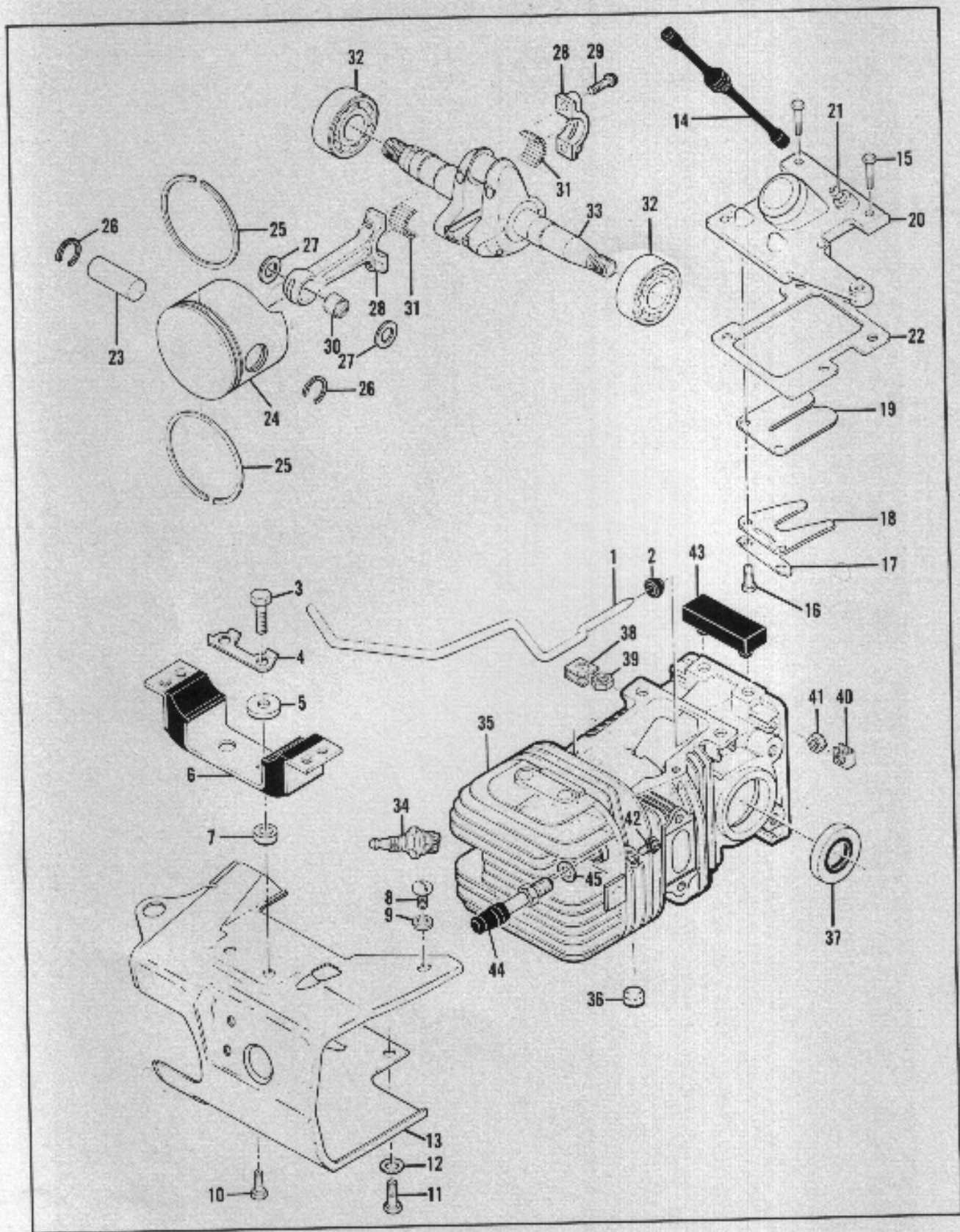


Figure 3. Powerhead & Shroud Assemblies

## Service Specifications

Spark Plug - AC CS 42T (Standard)  
AC CS 41T (colder)  
Spark Plug Gap - .025 inch (.63 mm)  
Lamination Gap - .007 to .012 inch (.18 to .30 mm)  
Breaker Point Gap - .018 inch (.46 mm)  
Timing - 26° BTDC  
Carburetor Adjustment  
Idle mixture needle - 1 turn open (preliminary)  
Main mixture - Fixed high speed jet  
0 to 4000 feet - Jet No. 029  
3000 to 3500 feet - Jet No. 028  
4500 to 8000 feet - Jet No. 027  
7000 feet and above - Jet No. 028  
Clutch Engagement Speed - 2400 to 2800 R.P.M.

### Torques

Connecting Rod Screws - 105 to 110 inch/pounds (121 to 127 cm/kg)  
Clutch Nut - 340 to 360 inch/pounds (392 to 416 cm/kg)  
Flywheel Nut - 375 to 425 inch/pounds (432 to 490 cm/kg)