

# ILLUSTRATED PARTS LIST 4/88

MODEL NAMES	SERIAL NUMBER PREFIX	MODELS
Mac <sup>™</sup> 60-SX	14-	400028-02
Mac <sup>™</sup> 80-SX	14-	400029-02
Mac <sup>™</sup> 80-SX	14-	400029-12
Mac <sup>™</sup> 85-SX	14-	400029-09
Eager Beaver <sup>®</sup> I-SX	14-	400031-02
Eager Beaver <sup>®</sup> I-SX	14-	400031-04
Super Eager Beaver <sup>®</sup> I-SX Special	14-	400031-03
Eager Beaver <sup>®</sup> II-SX	14-	400032-02
Eager Beaver <sup>®</sup> II-SX	14-	400032-07
Eager Beaver <sup>®</sup> III-SX	14-	400032-06
Eager Beaver <sup>®</sup> III-SX	14-	400032-08
Pro Scaper <sup>™</sup> I-SX	14-	400029-08

McCulloch String Trimmers/Brush Cutters are identified by a model number (in this instance 400028) followed by a suffix number (02, 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 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).

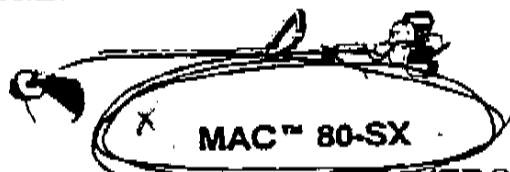
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## TRIMMERS & BRUSH CUTTERS

MAC<sup>™</sup> 60-SX  
EAGER BEAVER<sup>®</sup> I-SX



MAC<sup>™</sup> 80-SX  
SUPER EAGER BEAVER<sup>®</sup>  
I-SX SPECIAL

EAGER BEAVER<sup>®</sup> II-SX



MAC<sup>™</sup> 85-SX  
EAGER BEAVER<sup>®</sup> III-SX



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CORPORATION

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2. R. R. ~~16-1665~~ ~~Figure~~

**Figure 6** Debris Shield/String Head Cutter/  
Blade Guard/Blade Assemblies MAC 805X

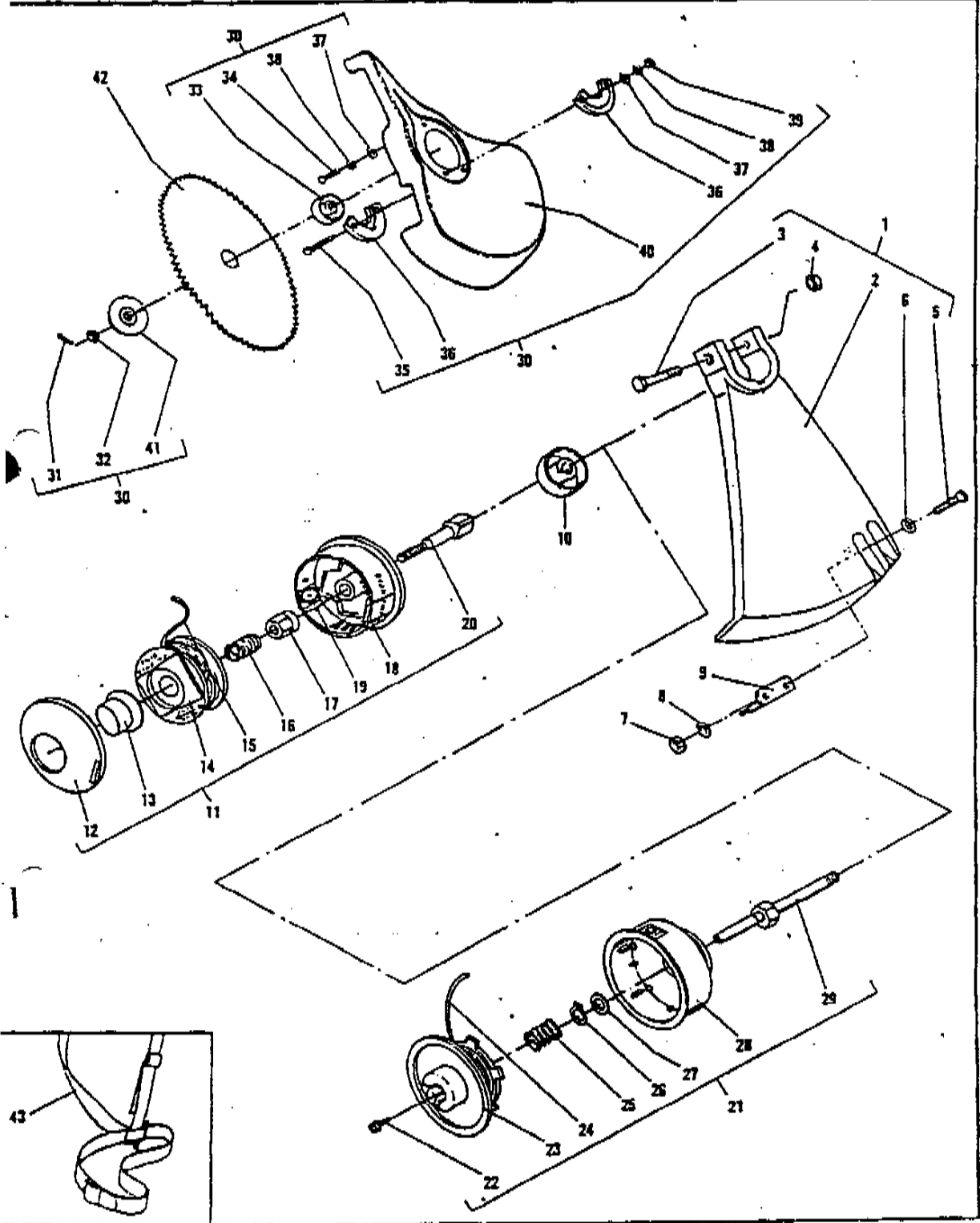


FIGURE 6 Debris Shield/String Head Cutter/Blade Guard/Blade Assemblies

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	217869	Kit-Shield Grass	1
2	218314	• Shield-Grass	1
3	216595	• Screw-Hex M6x50	1
4	218871	• Nut-Hex M6x1 (18-26 in. lb. torque)	1
5	217936	• Screw-10-25x.75 TORX	2
6	110582	• Washer-Flat	2
7	218315	• Nut-Hex	2
8	103174	• Washer-Lock	2
9	216587	• Knife	1
10	218214 ①	Collar (String Head Use Only)	1
11	219784 ②	Head Asy-String (.095)	1
12	219765	• Cover	1
13	219764	• Button	1
14	219786	• Spool With Line (.095) (Line Replacement)	1
15	Fig. 9	• Spring	1
16	219761	• Nut	1
17	219760	• Housing	1
18	219758	• Eyelet	1
19	219759	• Bolt-Shaft	1
20	219767	• Bolt-Shaft	1
21	222315 ③	String Head Assembly (.095)	1
22	222494	• Screw-Hex Head Slotted	1
23	222409	• Spool/Line Assembly (.095) (Line Replacement)	1
24	Fig. 9	• Spring	1
25	219826	• Ring-Retaining	1
26	222403	• Washer-Plain	1
27	222401	• Housing/Eyelet Assembly	1
28	222410	• Spindle	1
29	222400	• Spindle	1

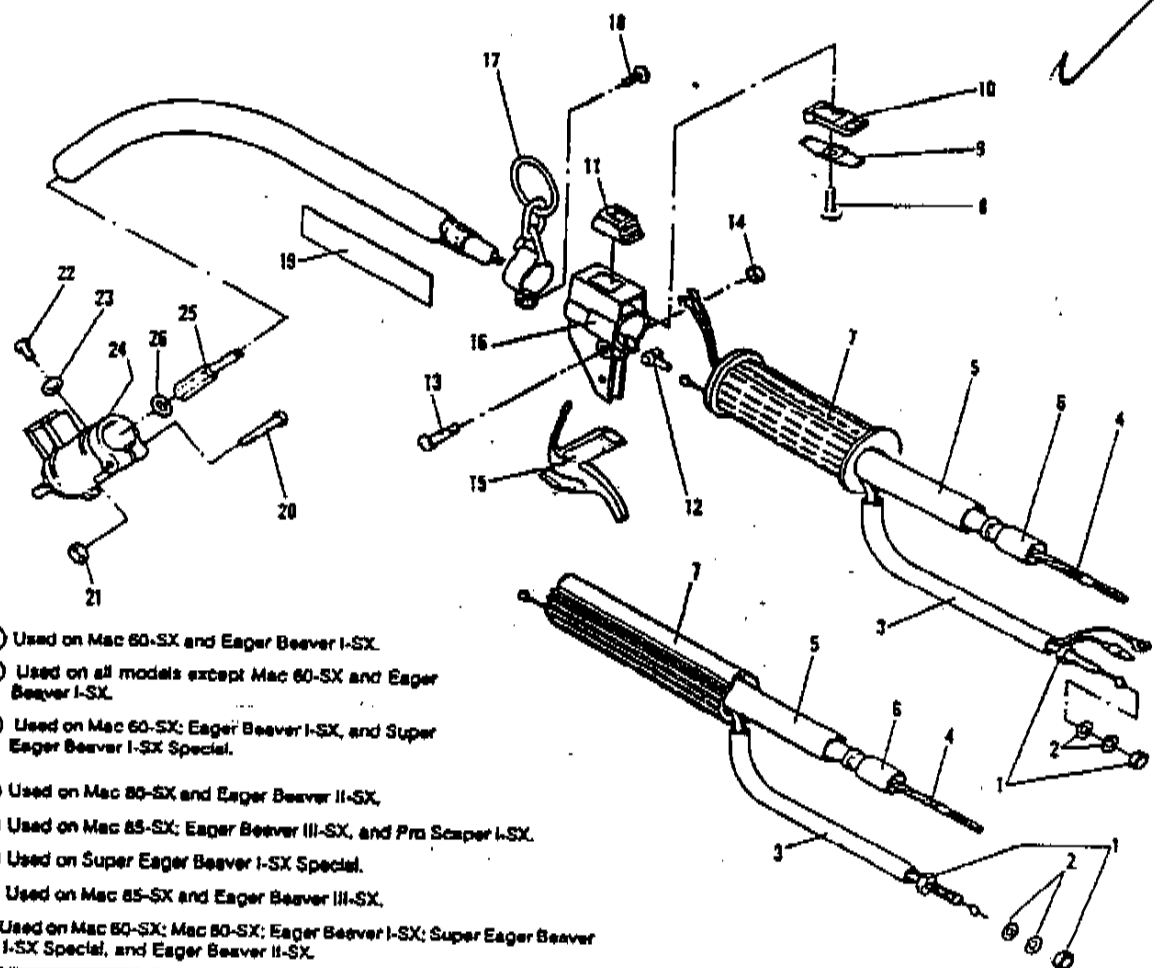
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
30	218200 ④	Kit-Blade Guard	1
31	218159	• Pin-Cotter	1
32	218330	• Nut-Blade Retaining (260 inch pounds torque)	1
33	218094	• Collar (For Use With Blade)	1
34	217935	• Screw-10-24x.50 Torx (18-26 inch pounds torque)	1
35	217936	• Screw-10-24x.75 Torx (18-26 inch pounds torque)	2
36	218165	• Clamp-Guard	2
37	110582	• Washer-Flat	3
38	103174	• Washer-Lock	2
39	218315	• Nut	2
40	218329	• Guard-Blade (Right Hand)	1
41	218075	• Flange (Brush Cutter Only)	1
42	216514-01 ④	Blade-Brush 80 Tooth	1
43	218158 ④	Harness	1

① Used on Mac 85-SX; Eager Beaver III-SX, and Pro Scaper I-SX.

② Used on Mac 60-SX and Eager Beaver I-SX.

③ Used on Mac 80-SX; Super Eager Beaver I-SX Special, and Eager Beaver II-SX.

④ Used on Mac 85-SX and Eager Beaver III-SX.

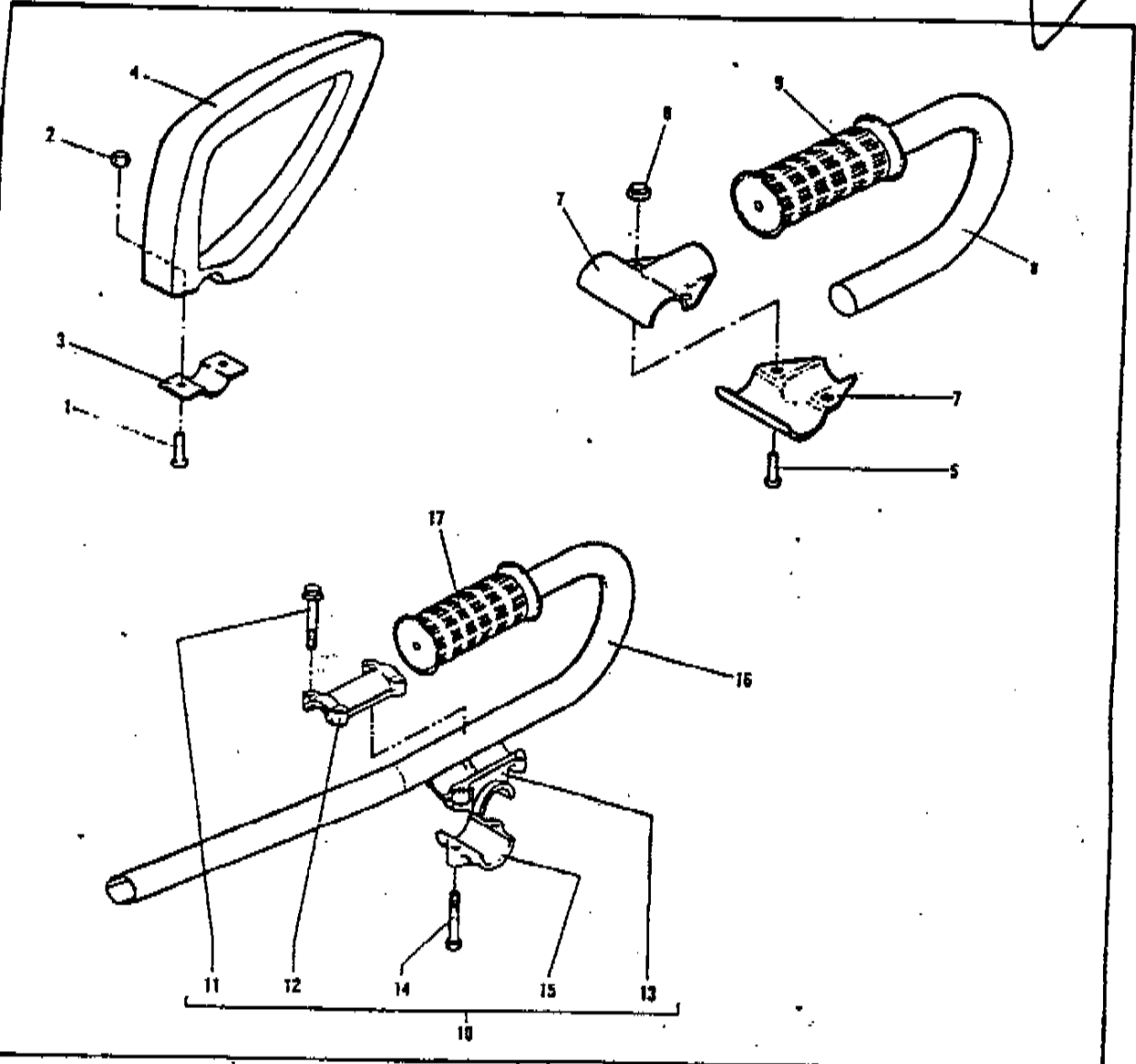


- ① Used on Mac 60-SX and Eager Beaver I-SX.
- ② Used on all models except Mac 60-SX and Eager Beaver I-SX.
- ③ Used on Mac 60-SX; Eager Beaver I-SX, and Super Eager Beaver I-SX Special.
- ④ Used on Mac 80-SX and Eager Beaver II-SX.
- ⑤ Used on Mac 85-SX; Eager Beaver III-SX, and Pro Scaper I-SX.
- ⑥ Used on Super Eager Beaver I-SX Special.
- ⑦ Used on Mac 85-SX and Eager Beaver III-SX.
- ⑧ Used on Mac 60-SX; Mac 80-SX; Eager Beaver I-SX; Super Eager Beaver I-SX Special, and Eager Beaver II-SX.

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	217403	Nut-M6 (18-26 inch pounds torque)	2
2	216596	Washer-Throttle Cable	2
3	217360 ①	Cable-Throttle	1
	215306 ②	Harness-Throttle Cable/Wire Assembly	1
4	218285 ③	Shaft-Flexible Drive 44"	1
5	222304 ④	Housing Assy-Outer 44"	1
6	218282 ⑤	Sleeve (For 44" Shaft)	1
7	215324 ⑥	Shaft-Flexible Drive 48"	1
8	222313 ⑦	Housing Assy-Outer 48"	1
9	217366 ⑧	Sleeve (For 48" Shaft)	1
10	218326 ⑨	Shaft-Flexible Drive 54"	1
11	217362 ⑩	Housing Assy-Outer 54"	1
12	217367 ⑪	Sleeve (For 54" Shaft)	1
13	218376 ⑫	Grip-Solid Rubber	1
14	215322 ⑬	Grip-Muffle Design	1
15	110706 ⑭	Screw-8-18x.50	1
16	215320 ⑮	Contact-Switch	1
17	215319 ⑯	Base-Switch	1
18	68846 ⑰	Button-Switch	1
19	215323	Guide-Throttle Cable	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
20	216027	Screw-M5x28.5	1
21	217159	Nut-Hex M5	1
22	215318	Trigger-Throttle	1
23	217337 ⑱	Hsg-Trigger(W/O Switch Hole)	1
24	215317 ⑲	Hsg-Trigger(W/Switch Hole)	1
25	218001 ⑳	Ring Assy-Harness	1
26	—	Bolt-Ring	1
27	218295	Decal-Warning (For String Trimmer Only)	1
28	219030	Decal-Warning (For String Trimmer/Brush Cutter Only)	1
29	20 217937	Screw-10-24x1	1
30	21 218315	Nut	1
31	22 215874	Screw-M4x9.5	1
32	23 217672	Washer-M4 Flat	1
33	24 218841 ㉑	Spindle Assy	1
34	25 217477	Coupling (70 Inch Pounds Torque)	1
35	24 222468 ㉒	Kit-Spindle Housing Assembly	1
36	25 217477 ㉓	Coupling (70 Inch Pounds Torque)	1
37	26 222402 ㉔	Washer-Thrust	1

# Figure 4 HANDLE ASSEMBLIES



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	120041 ①	Screw-Hex M5x22 (18-26 inch pounds torque)	2
2	217159 ①	Nut-Hex M5	2
3	217442 ①	Clamp-Delta Handle	1
4	217444 ①	Handle-Delta	1
5	217935 ③	Screw-10-24x.50 (26-35 inch pounds torque)	2
6	218315 ③	Nut- "J" Handle	2
7	215337 ③	Clamp- "J" Handle	2
8	217856 ③	"J" Handle/Grip Asy	1
9	94212	. Grip	1

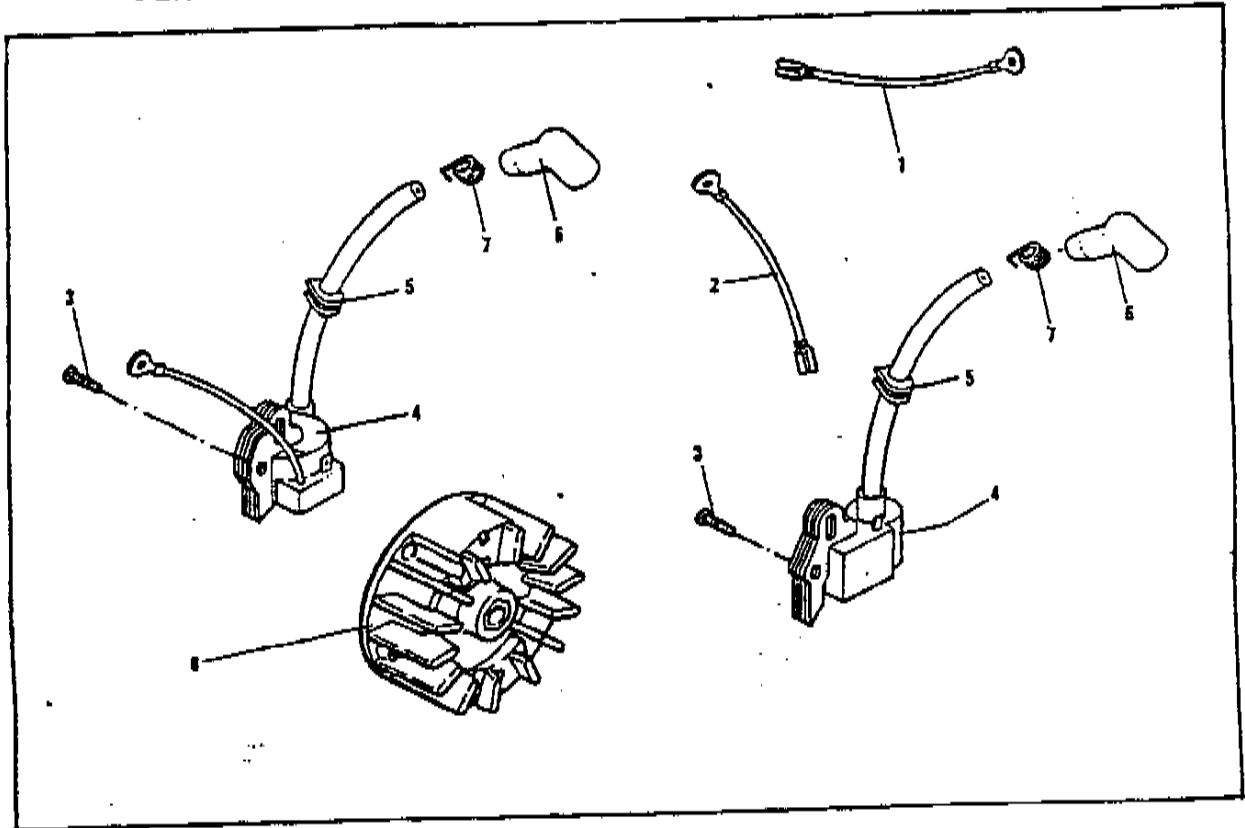
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
10	218391 ②	Clamp Asy.	1
11	---	. Screw-M5x.8 (26-35 inch pounds torque)	4
12	---	. Clamp-Top	1
13	---	. Clamp-Centerpiece	1
14	---	. Screw-M6x1 (44-52 inch pounds torque)	2
15	---	. Clamp-Bottom	1
16	218327 ③	"J" Handle/Barrier/Grip Asy	1
17	94212	. Grip	1

① Used on Mac™ 60-SX and Eager Beaver® I-SX.

③ Used on Mac™ 85-SX and Eager Beaver® III-SX.

② Used on Mac™ 80-SX, Pro Scaper® I-SX, Super Eager Beaver® I-SX Special, and Eager Beaver® II-SX.

# IGNITION & FLYWHEEL ASSEMBLIES **Figure 3**



ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	218649 ①	Wire Asy-Ground	1
2	219383	Wire Asy-Switch	1
3	216022	Screw-M4x18.9 (12-16 in. lb. torque)	2
4	219386 ②	Ignition Asy (Black)	1
	219782 ③	Ignition Asy (Cream)	1
5	215533	• Grommet	1
6	95266	• Boot-Spark Plug	1
7	102556	• Connector-Spark	1
8	219951 ④	Flywheel	1
	222308 ⑤	Flywheel	1

① Used on Mac 60-SX and Esger Beaver I-SX models only.

② Units are being manufactured with one of two Ignition/Flywheel combinations. Identify components before ordering service replacement parts. If replacing black color Ignition, order part number 219386. If replacing Flywheel on a unit equipped with a black Ignition, order Flywheel, part number, 219951.

③ Units are being manufactured with one of two Ignition/Flywheel combinations. Identify components before ordering service replacement parts. If replacing cream color Ignition, order part number 219782. If replacing Flywheel on a unit equipped with a cream Ignition, order Flywheel, part number, 222308.

Figure 1 ENGINE ASSEMBLY

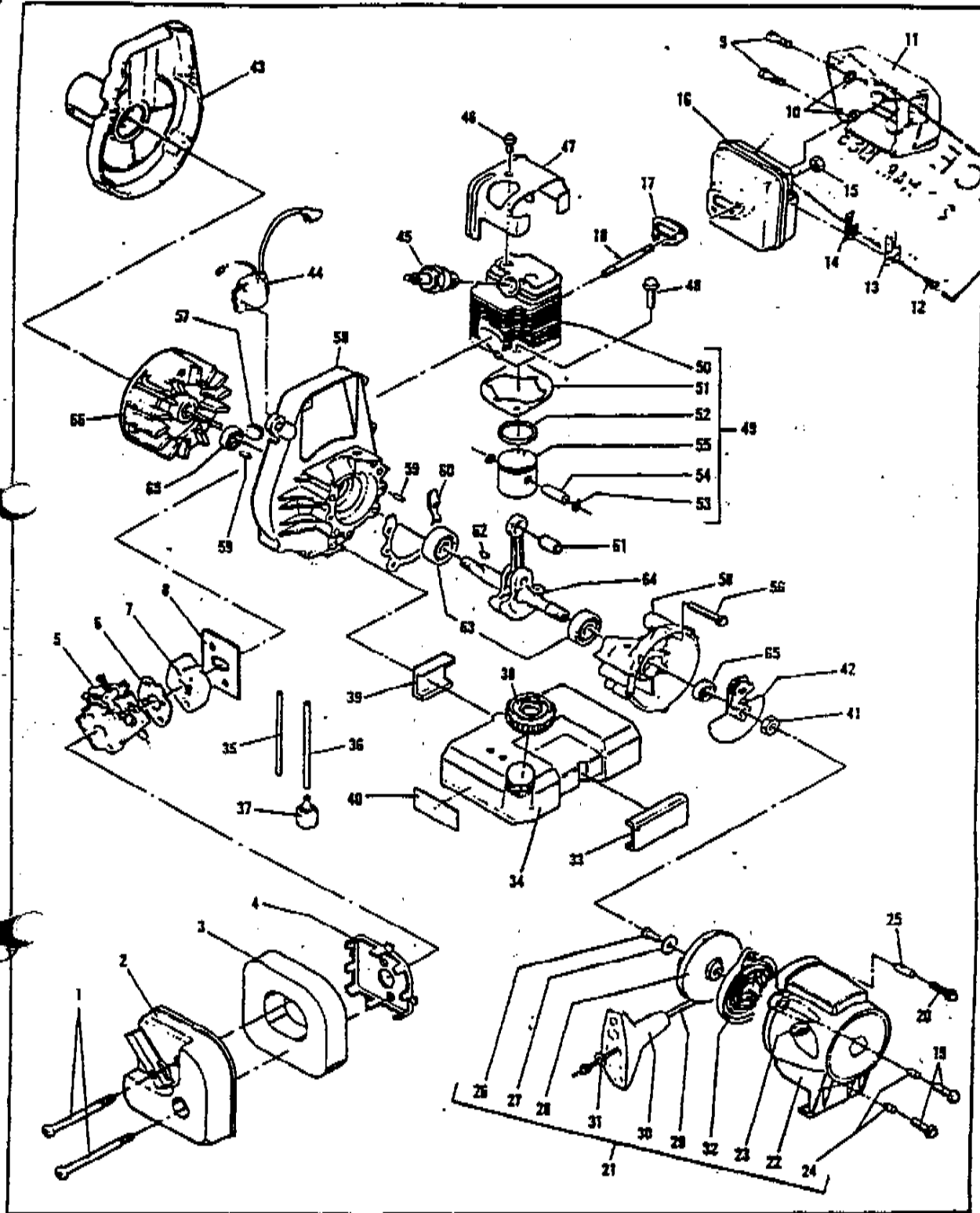


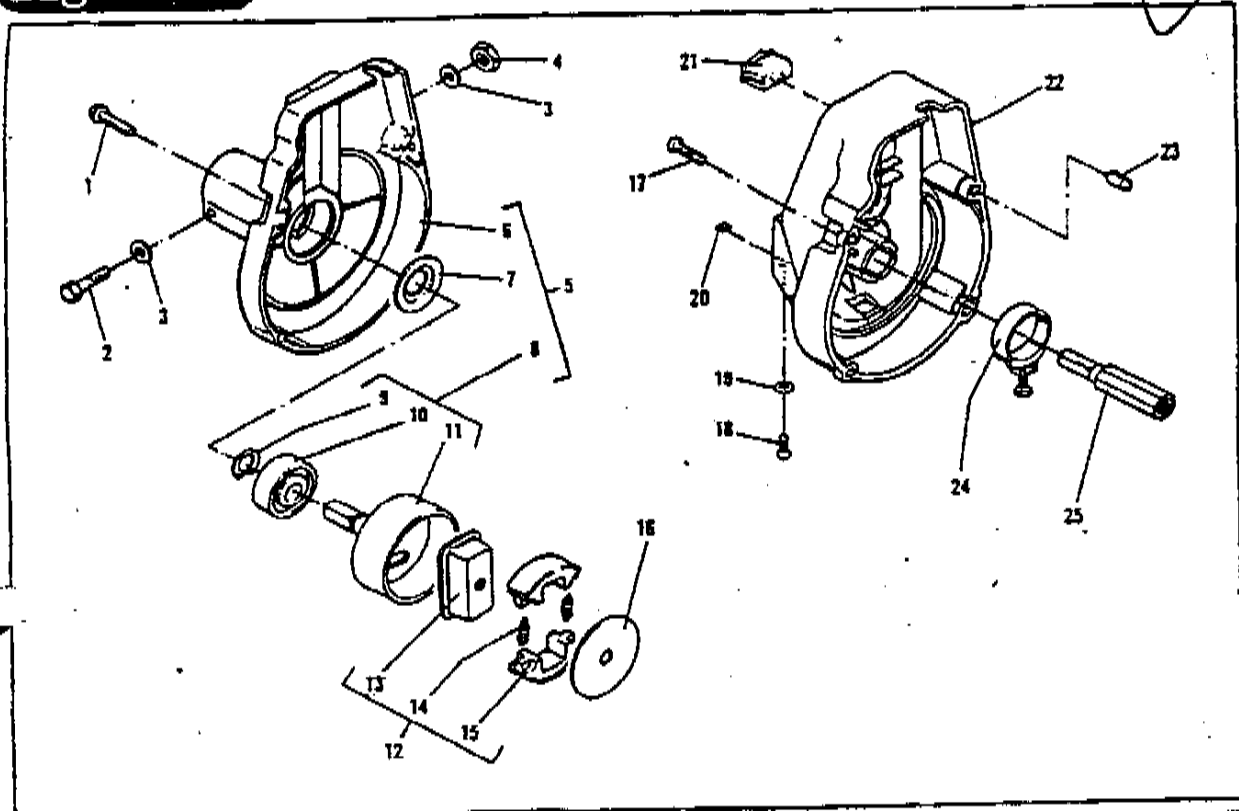
FIGURE 1 ENGINE ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.	ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	219078	Screw-Choke Cover (18-23 in. lb. torque)	2	38	222347	Cap-Fuel	1
2	219098	Cover Asy-Choke	1	39	217390	Cushion-Fuel Tank	1
3	219145	Filter-Air (Foam)	1	40	217383	Decal-40:1	1
4	219144	Box-Air	1	41	216583	Nut-Hex M8 (149-176 in. lb. torque)	1
5	Fig. 8, 9	Carburetor	1	42	215525	Ratchet Asy (Hand Tighten Only)	1
6	218933	Gasket-Carb/Insulator	1	43	Fig. 2	Fan Housing Assemblies	1
7	219070	Insulator-Carb/C' Case	1	44	Fig. 3	Ignition Assemblies	1
8	216575	Gasket-Insulator/C' Case	1	45	62345	Plug-Spark 0.38J (105-130 in. lb. torque)	1
9	219508	Screw-M4x17 (13-15 in. lb. Torque)	2	46	213178	Screw-M5x8.5 (15-25 in. lb. torque)	1
10	219079	Spacer-Muffler Shield	2	47	215540	Cover-Cylinder	1
11	218962	Shield-Muffler (Plastic)	1	48	217320	Screw-M6x18 (70-80 in. lb. torque)	2
12	219194	Screw-5-20x.438 (12-16 in. lb. Torque)	2	49	222593 ②	Kit-Cylinder/Piston	1
13	219150	Cover-Screen	1	50	222759	. Kit-Cyl(Plated)/Gasket	1
14	219149	Screen-Spark Arrester	1	51	215642	. . Gasket-Cylinder/C' Case	1
15	217275	Nut-Muffler M5 (41-50 in. lb. Torque)	2	52	217475	. Ring-Piston	1
16	219152	Muffler Asy	1	53	111026	. Ring-Snap	2
17	215515	Gasket-Muffler	1	54	218275	. Pin-Wrist	1
18	215517	Stud-Muffler	2	55	218264	. Piston(Non-Plated)	1
19	216022	Screw-M4x21.40 (13-15 in. lb. Torque)	2	49	222594 ③	Kit-Cylinder/Piston	1
20	217669	Screw-M4x25 (12-16 in. lb. torque)	1	50	219084	. Kit-Cyl(Plated)/Gasket	1
21	217388	Starter Asy (W/Steel Center Post)	1	51	215542	. . Gasket-Cylinder/C' Case	1
22	217389	. Housing/Guide Asy	1	52	217475	. Ring-Piston	1
23	218932	. . Guide-Rope	1	53	111026	. Ring-Snap	2
24	219585	. . Spacer-Housing Starter	2	54	218275	. Pin-Wrist	1
25	219584	. . Spacer-Muffler Shield	1	55	218264	. Piston(Non-Plated)	1
26	215674 ①	. Screw-M4x9.50 (18-21 in. lb. torque)	1	56	213179	Screw-M5x28.5 (35-40 in. lb. torque)	4
27	216590	. Washer-M4 Flat	1	57	215541	Grommet	1
28	216092	. Drum/Rope Asy	1	58	218185	Crankcase Asy	1
29	216093	. . Rope-Starter	1	59	213191	Pin	4
30	216792	. Handle-Starter	1	60	215545	Gasket-Crankcase	1
31	218941	. Washer-Nylon	1	61	110984	Bearing-Needle	1
32	217482	. Spring-Starter	1	62	102164	Key-Flywheel	1
33	217382	Cushion-Fuel Tank	1	63	213282	Bearing-C' Shaft(Roller)	2
34	222239	Tank/Hose Asy-Fuel	1	64	218106-01	Crankshaft/Con Rod Asy	1
35	222238	. Hose-Fuel Return	1	65	83859	Seal-Crankshaft	2
36	217264	. Hose-Fuel	1	66	Fig. 3	Flywheel Assemblies	1
37	216985	. Pickup-Fuel	1				

- ① Used only with Starter Housing equipped with steel drum mounting posts. The plastic Drum/Rope mounting post which is original equipment on Mac 60-SX; Mac 80-SX; Eager Beaver I-SX; Super Eager Beaver I-SX Special, and Eager Beaver II-SX models, requires use of service replacement screw, part number, 218568.
- ② The LIMITED SPEED Aluminum Cylinder and Chrome-Plated Piston furnished as original equipment on Mac 60-SX; Eager Beaver I-SX, and Super Eager Beaver I-SX Special models are not available as service replacement parts. If replacing either the cylinder or piston on these models, Kit-Cylinder/Piston, part number, 222593, MUST be ordered as service replacement. Both the cylinder and piston must be changed even if only one of the original parts fails. Since the limited speed chrome Cylinder and the non-plated Piston are original equipment on the Mac 80-SX and Eager Beaver II-SX models, individual components listed under Kit-Cylinder/Piston, part number, 222593, may be ordered as service replacement parts for these models.
- ③ Used on Mac 65-SX; Eager Beaver III-SX, and Pro Scaper I-SX models only.



# Figure 2 FAN HOUSING ASSEMBLIES



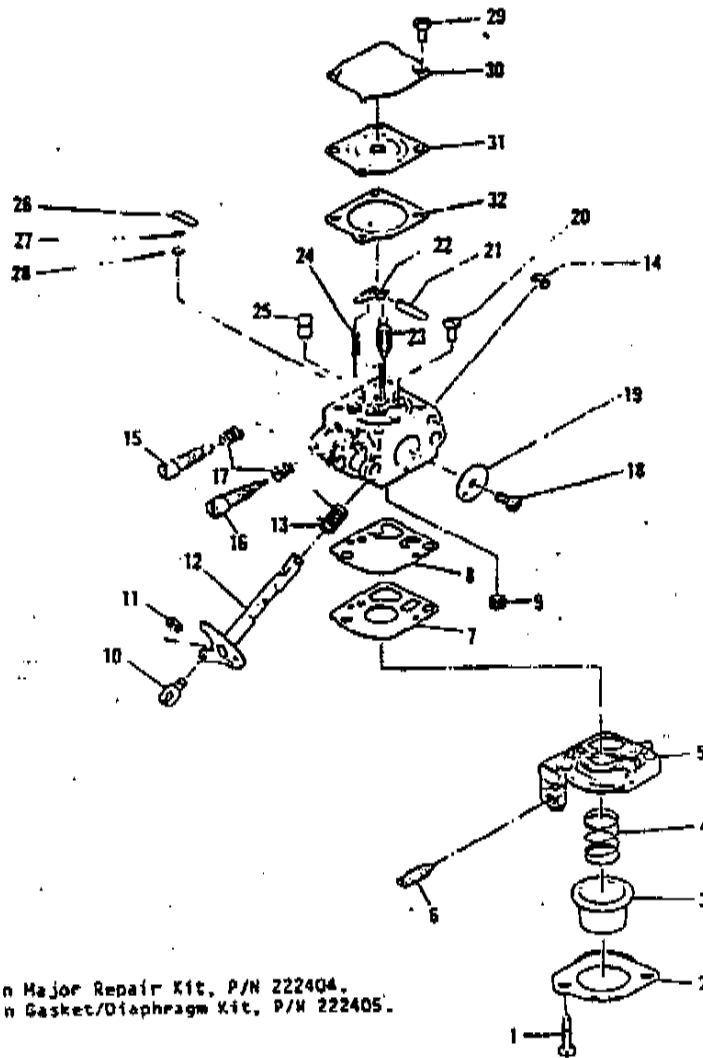
ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
1	213177 ①	Screw-M4x18.50 (12-16 in. lb. torque)	4
2	217158 ①	Screw-Hex M5x35 (35-43 in. lb. torque)	1
3	216591 ①	Washer-Flat M5	2
4	217159 ①	Nut-Hex M5 (35-43 in. lb. torque)	1
5	218057 ②	Housing-Asy-Fan	1
6	217533	- Housing-Fan	1
7	215534	- Plate-Thrust	1
8	218065	- Drum-Asy-Clutch	1
9	213186	- Ring-Retaining	1
10	213187	- Bearing-Ball	1
11	218063	- Drum-Clutch	1
12	216060 ①	Clutch Asy	1
13	215536	- Rotor	1
14	215537	- Spring	2
15	--	- Shoe	2

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
16	215539	Plate-Side	1
17	219508 ②	Screw-M4x17 (12-16 in. lb. torque)	4
18	215874 ③	Screw-M4x9.5 Torx (10-13 in. lb. torque)	1
19	217672 ③	Washer-M4 Flat	1
20	219558 ③	Nut-Square	1
21	218648 ③	Switch	1
22	219595 ②	Housing-Fan (W/Switch Hole)	1
23	219024	- Spacer-Fan Housing	4
24	219025	- Clamp-Drive Shaft Asy (25-30 in. lb. torque)	1
22	219596 ③	Housing-Fan (W/O Switch Hole)	1
23	219024	- Spacer-Fan Housing	4
24	219025	- Clamp-Drive Shaft Asy (25-30 in. lb. torque)	1
25	217477 ②③	Coupling	1

① Used on Mac 80-SX; Mac 85-SX; Eager Beaver II-SX; Eager Beaver III-SX, and Pro Scaper I-SX.  
 ② Used on Mac 60-SX and Eager Beaver I-SX.  
 ③ Used on Super Eager Beaver I-SX Special.

# CARBURETOR ASSEMBLY

## Figure 8



- ① Included in Major Repair Kit, P/N 222404.
- ② Included in Gasket/Diaphragm Kit, P/N 222405.

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
	<u>222209</u>	Carburetor-Zama M16	
1		Screw-Pump Cover	2
2		Retainer-Primer	1
3		Primer	1
4		Spring-Primer	1
5		Base Asy-Primer	1
6		Screw-Idle Adjustment	1
7	②	Gasket-Pump	1
8	②	Diaphragm-Pump	1
9	①	Strainer	1
10		Post	1
11		Ring-"E"	1
12		Shaft Asy-Throttle	1
13		Spring-Throttle Return	1
14		Ring-"E"	1
15	①	Screw-High Speed Adj.	1
16	①	Screw-Low Speed Adj.	1

ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASY.
17		① Spring-Adj. Screws	2
18		Screw-Throttle Valve	1
19		Valve-Throttle	1
20		Screw-Pin Retaining	1
21		① Pin-Metering Lever	1
22		① Lever-Metering	1
23		① Valve-Inlet	1
24		① Spring-Metering Lever	1
25		① Nozzle Asy-Check Valve	1
26		① Plug-Welch	1
27		Retainer-Check Valve	1
28		Valve-Check	1
29		Screw-Metering Cover	1
30		Cover-Metering Chamber	1
31		② Diaphragm Asy-Metering	1
32		② Gasket-Metering Cover	1

Used on all models except Mac 85-SX and Eager Beaver III-SX.

**Figure 9**

**ACCESSORIES & REPLACEMENT PARTS**

STRING TRIMMER AND BRUSH CUTTER	DESCRIPTION	PART NUMBER	MC-90SX	MC-80SX	MC-85SX	EDGE MARKER 1.5'	EDGE MARKER 2.0'	EDGE MARKER 2.5'	EDGE MARKER 3.0'	EDGE MARKER 3.5'	PRO LOWER 1.5'
	Semi-Auto Head .095	222468	*	*		*	*	*	*	*	
	14' Line on Spool .095	222467	*	*		*	*	*	*	*	
	1-Lb. Bulk Line .090	217351-01	*	*		*	*	*	*	*	
	5-Lb. Bulk Line .090	217363-01	*	*		*	*	*	*	*	
	Semi-Auto Head .095	219784				*					*
	12' Line .095	219786				*					*
	12' Line on Spool .095	219788				*					*
	1-Lb. Bulk Line .095	216899-01	*	*	*			*	*	*	*
	5-Lb. Bulk Line .095	216900-01	*	*	*			*	*	*	*
	Harness Kit	218201				*					*
	Debris Shield Kit	217899	*	*		*	*	*	*	*	*
	4-Tooth Weed/Grass Blade	216213				*					*
	3-Point Plastic Grass Blade	216212				*					*
	3-Point Plastic Blade/Guard Kit	218211				*					*
	Blade Guard Kit	216200				*					*
	6-Tooth Weed/Grass Blade	216513-01				*					*
	80-tooth Metal Brush Blade	216514-01				*					*

**Figure 10**

**SPECIFICATIONS/TOOLS/LUBRICANTS**

SPECIFICATIONS	
ENGINE TYPE	Air-cooled, Two Cycle, Single Cylinder
BORE	1.268 inches (32.21mm)
STROKE	1.023 inches (26mm)
DISPLACEMENT	1.29 cubic inches (21.2cc)
CYLINDER	Chrome/Aluminum
IGNITION	Solid State
SPARK PLUG	.025 INCHES (.63mm) Champion D38J or Equivalent
GASOLINE	Regular Grade Leaded or Unleaded
GASOLINE/OIL RATIO	40:1 McCulloch Custom Lubricant 20:1 Using Any Other Two-Cycle Oil
FUEL TANK CAPACITY	14.6 Fluid Ounces
RUNNING TIME	.35 to 45 minutes
IGNITION	Electronic
LAMINATION TO FLYWHEEL AIR GAP	.010 inches (.25mm)
HANDLE	Delta/J Handle/J With Barrier Pole
STRING HEAD CUTTER	Semi-Automatic
LINE	Nylon .080/.095"
CUTTING SWATH	15" .080 Line/17" .095"
CARBURETOR	Diaphragm/Primer Type

SERVICE TOOLS	
DESCRIPTION	PART #
Tool-Piston Driving	.215439
Tool-Clutch Puller	.215441
Plate-Pressure Test	.215443
Gasket-Intake Plate	.215444
Gasket-Exhaust	.215445
Wrench-8/10mm	.217355
Lock-Spindle	.216767
Wrench-9/16" Socket	.218175
Torx Drive T-25 (cylinder)	.222785

CUSTOM LUBRICANTS	
DESCRIPTION	PART #
McCulloch Two-Cycle 40:1	
Case 6 ounce Cans (48)	83770
Case 1 quart Bottles (12)	85709