

EASTMAN

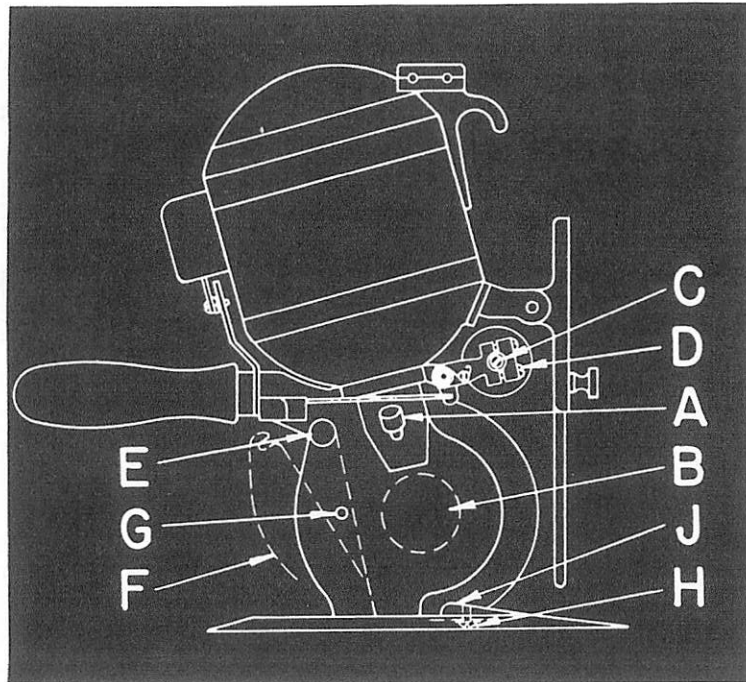
ROUND KNIFE CUTTING MACHINE



**LIGHTNING MODELS
334, 354, 355 and 356**

779 WASHINGTON STREET, BUFFALO 3, N. Y.

LUBRICATION AND CARE



EASTMAN LIGHTNING ROUND KNIFE MACHINE MODELS 334, 354, 355 and 356

LUBRICATION

To lubricate Gears, screw Grease Cup "A" down one-half turn once a day. Refill Cup with Eastman Gear Lubricant.

To grease Knife Gear Bearing at "B", remove Bearing Locknut with Spanner Wrench and add a small amount of Lubriko Grease from tube once a month.

Oil Emery Wheel Spindles at "C" twice daily.

Upper and Lower Motor Bearings are grease sealed and require no lubrication.

We recommend our Eastman Gear Lubricant for Gears and Eastman Lubriko Grease for Knife Gear Ball Bearing. Do not use Eastman Gear Lubricant for Ball Bearings or Eastman Lubriko Grease for Gears.

TO ADJUST EMERY WHEELS

When Emery Stones wear away so that they are too far apart (more than 1/32"), adjust together as follows:

Loosen Screws "D" and adjust Screws "C" until Emery Stones are as close together as possible without touching and central with Knife. Both Wheels should grind at the same time when pressed lightly against the Knife.

After adjustment has been made, tighten Screws "D".

TO ADJUST THROAT PLATE

It is important that edge of Knife be adjusted as close as possible to the end of slot in Throat Plate "J" without actually touching.

As Knife wears away, loosen Screws "H" and move Throat Plate towards Knife. Then tighten Screws "H".

TO REMOVE KNIFE

Loosen Thumb Screw "E" and swing Guard "F" to outward position as shown on dotted lines and remove. Turn Knife so that small hole lines up with hole "G" in Standard. Insert small Pin in hole "G" and remove Knife Locknut with Spanner Wrench.

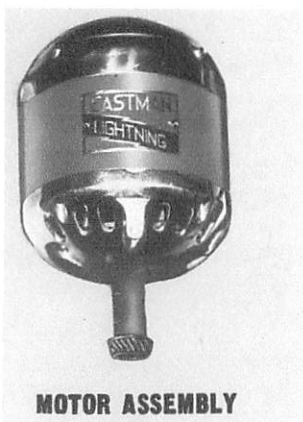
When installing a new Knife, remember to adjust Throat Plate.

THE SWITCH HAS TWO POSITIONS — ON AND OFF

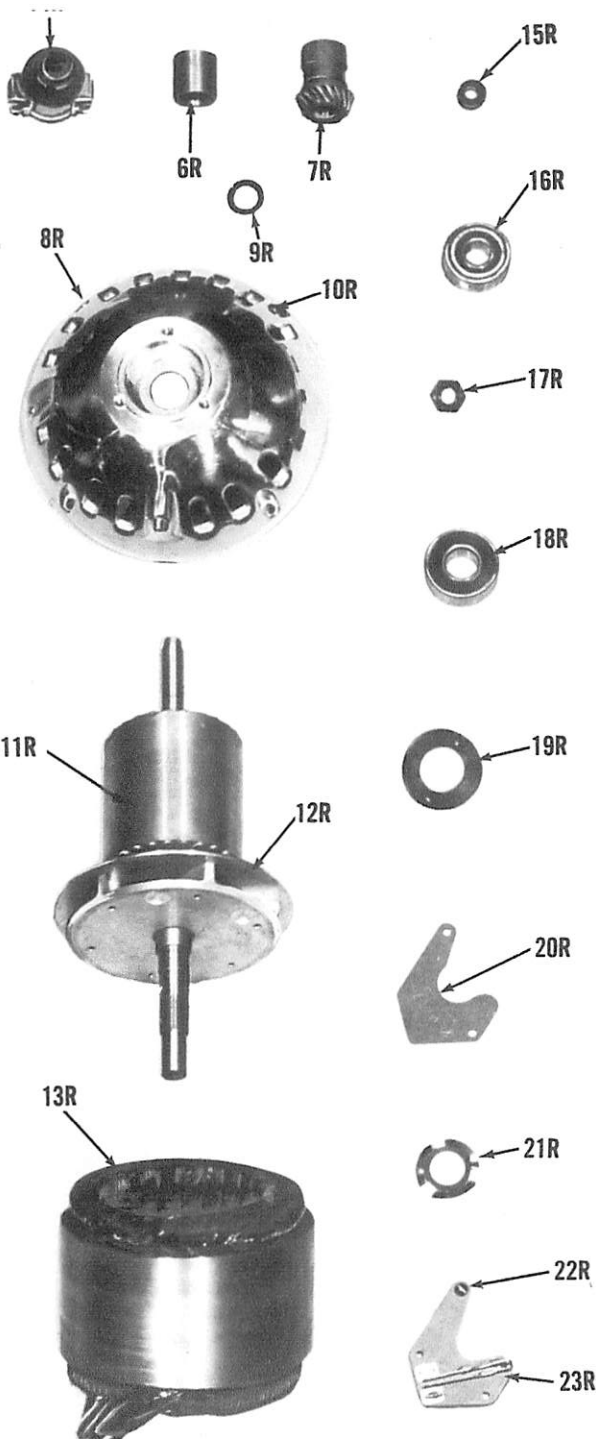
To start, throw Switch Lever to "On" position and let machine gather full speed before starting to cut.

Do not attempt to start machine while in cut.

Do not leave the current on if the cutter does not start or is stopped by any cause.



MOTOR ASSEMBLY



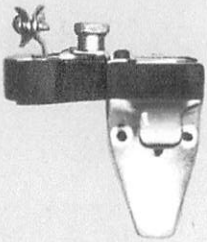
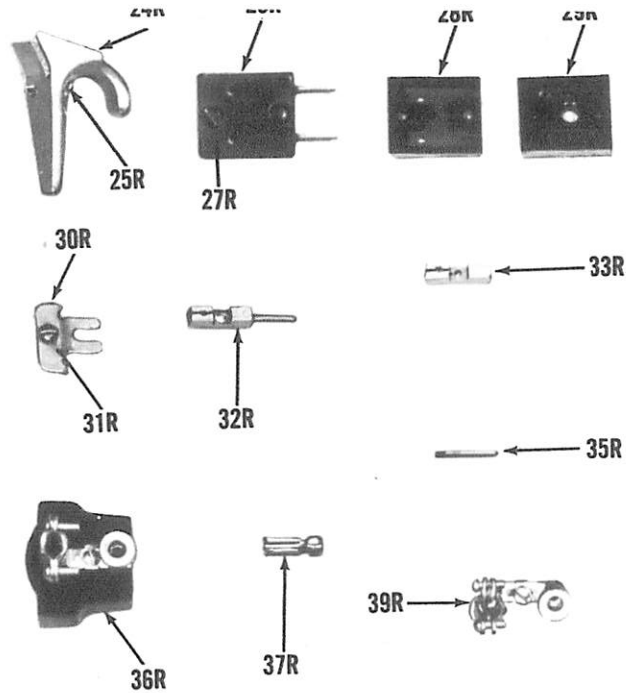
MOTOR ASSEMBLY

REFERENCE	PART NAME	PART NO.
1R	Cover, Rear Bearing	53C7X
2R	Screws, Round Head (3)	6-32 x 5/16R.H.
3R	Housing, Rear Bearing	90C1-13X
4R	Screws, Fillister Head (4)	10-32 x 3/4Fil.
5R	Stator Ring	18C2-5X
6R	Sleeve, Drive Gear Spacing	1C5-3X
7R	Gear, Drive	87C1X
8R	Housing, Front Bearing	90C2-1X
9R	Drive Gear Spacing Washer	12C11X
10R	Screws, Fillister Head (4)	10-32 x 3/4Fil.
11R	Rotor with Shaft (Specify Voltage)	513C3-1X
12R	Fan	614C1X
13R	Stator (Specify Voltage)	575C1X
14R	Switch, Cutout	597C2X
15R	Rubber Grommet	207C1
16R	Ball Bearing, Rear	90C6-28
17R	Locknut, Shaft	4C1-118
18R	Ball Bearing, Front	90C6-29
19R	Locknut, Front Ball Bearing	4C1-87
20R	Insulation, Cutout Block	8C13-37
21R	Washer, Spring	12C1-12
22R	Cutout Block	733C1
23R	Screws, Round Head (2)	6-32 x 1/4R.H.

IMPORTANT ORDERING INSTRUCTIONS

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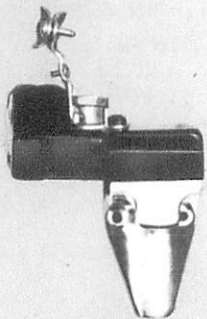
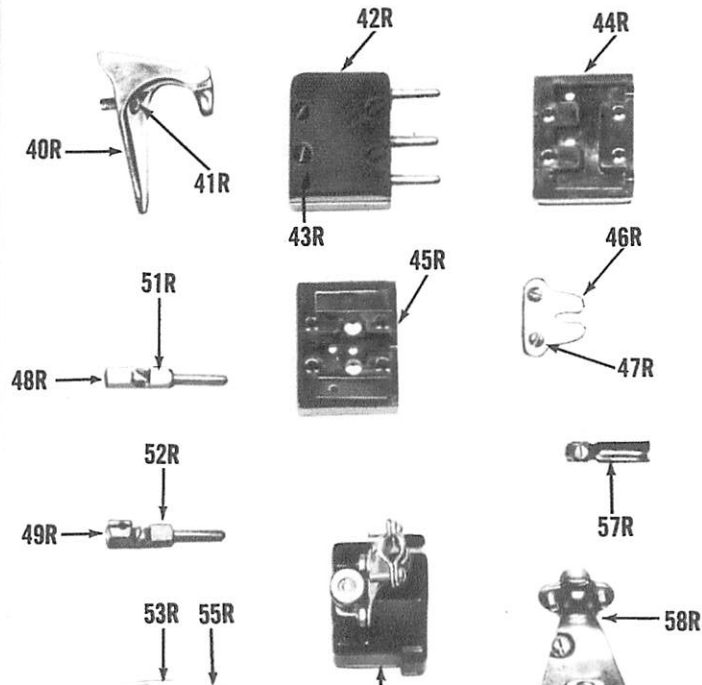
SINGLE PHASE


**TERMINAL BLOCK
BRACKET
AND
ATTACHMENT
PLUG ASSEMBLY**

TERMINAL BLOCK BRACKET & ATTACHMENT PLUG

SINGLE PHASE

REFERENCE	PART NAME	PART NO.
24R	Bracket, Terminal Block	62C10-6X
25R	Screws, Round Head (2)	10-24 x 7/16R.H.
26R	Terminal Block Complete	508C1-19
27R	Screw, Flat Head (1)	10-32 x 3/4 F.H.
28R	Top Half, Terminal Block	51C1-16
29R	Bottom Half, Terminal Block	51C1-17
30R	Ground Clip	79C12-107
31R	Screw, Fillister Head (1)	10-32 x 1 Fil.
32R	Contact with Pin (2)	667C1
33R	Contacts (2)	93C2-1
35R	Pins, Terminal (2)	47C2-4
36R	Plug, Attachment Complete	523C1-51
37R	Sleeves, Terminal (2)	47C3-16
39R	Clamp, Attachment Plug -	615C1-7

THREE PHASE


**TERMINAL BLOCK
BRACKET
AND
ATTACHMENT
PLUG ASSEMBLY**


THREE PHASE

40R	Bracket, Terminal Block	62C10-6X
41R	Screws, Round Head (2)	10-24 x 7/16R.H.
42R	Terminal Block Complete	508C1-22
43R	Screws, Flathead (2)	10-32 x 1-1/8 F.H.
44R	Top Half, Terminal Block	51C1-18
45R	Bottom Half, Terminal Block	51C1-19
46R	Ground Clip	79C12-106
47R	Screw, Fillister Head (2)	10-32 x 1-1/8 Fil.
48R	Contact Complete with Pin, Right Hand	667C1-1
49R	Contact Complete with Pin, Center	667C1-2
50R	Contact Complete with Pin, Left Hand	667C1-3
51R	Contact, Right Hand	93C2-2
52R	Contact, Center	93C2-3
53R	Contact, Left Hand	93C2-4
54R	Screws, Terminal (3)	20C12-2
55R	Pins, Terminal (3)	47C2-9
56R	Plug, Attachment Complete	523C1-38
57R	Sleeves, Terminal (3)	47C3-17
58R	Clamp, Attachment Plug	615C1-5

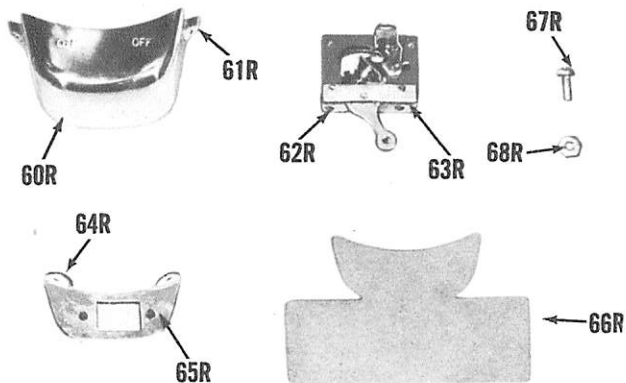
IMPORTANT ORDERING INSTRUCTIONS

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SINGLE PHASE



MOTOR SWITCH ASSEMBLY



MOTOR SWITCH ASSEMBLY

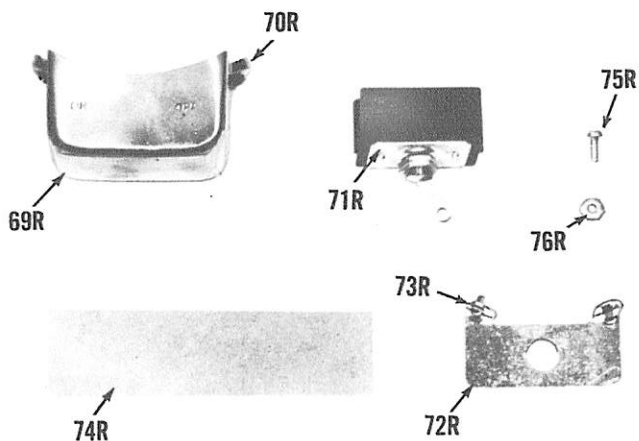
SINGLE PHASE

REFERENCE	PART NAME	PART NO.
60R	Cover, Switch	53C2X
61R	Screws, Round Head (2)	6-32 x 5/16R.H.
62R	Switch, Motor	580C1X
63R	Screws, Round Head (2)	4-36 x 1/4R.H.
64R	Base, Switch	52C5X
65R	Screws, Round Head (2)	6-32 x 1/4R.H.
66R	Insulation, Switch	8C4-1X
67R	Screw, Lever	20C12-64
68R	Nut, Lever	4C2-91

THREE PHASE



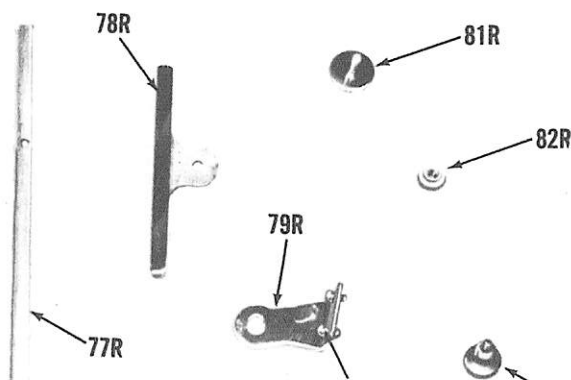
MOTOR SWITCH ASSEMBLY



THREE PHASE

69R	Cover, Switch	53C2X
70R	Screws, Round Head	6-32 x 5/16R.H.
71R	Switch, Motor	580C1X
72R	Base, Switch	52C5X
73R	Screws, Round Head (2)	6-32 x 1/4R.H.
74R	Insulation, Switch	8C4-41 X
75R	Screw, Lever	20C12-64
76R	Nut, Lever	4C2-91

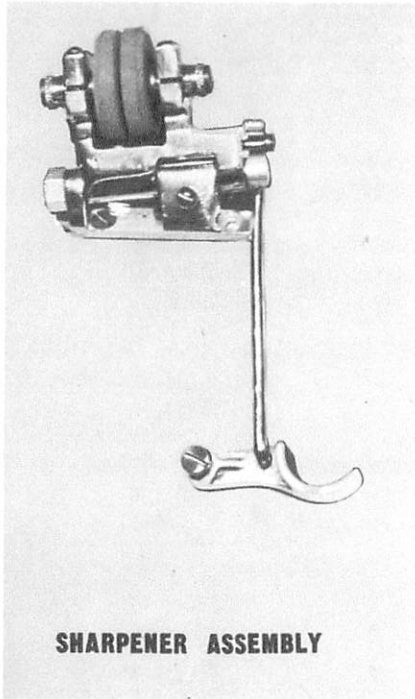
GUARD ASSEMBLY



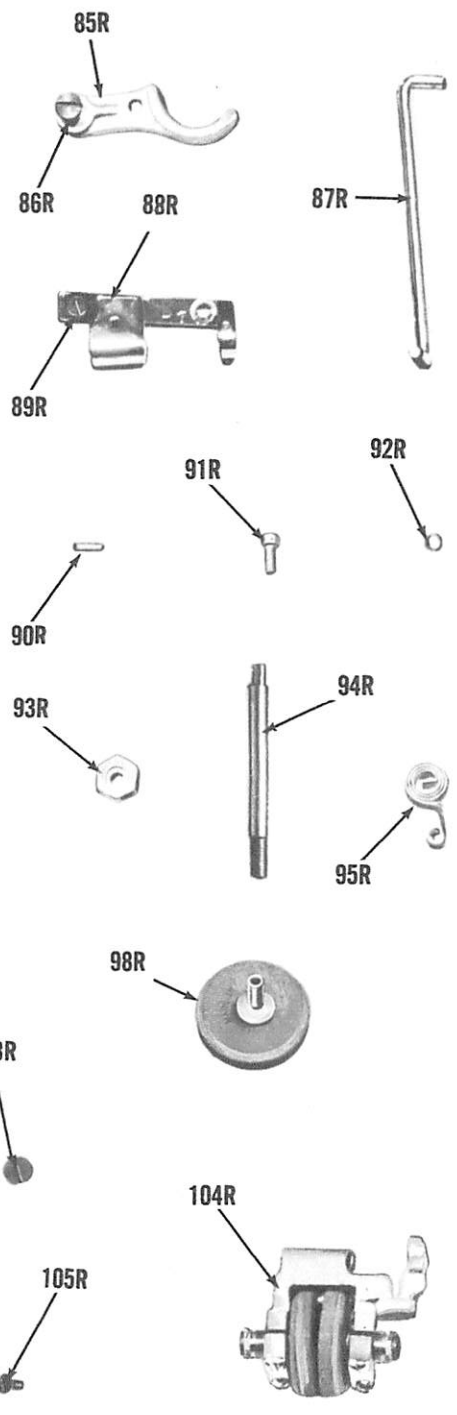
77R	Guard Rod	65C2X
78R	Holder, Guard Rod	33C4X
79R	Bracket, Guard Rod Holder	62C9X
80R	Screws, Round Head (2)	10-24 x 3/8R.H.
81R	Screw, Lock	20C4-33
82R	Nut	4C2-93
83R	Screw, Guard Rod	20C5-2

IMPORTANT ORDERING INSTRUCTIONS

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SHARPENER ASSEMBLY



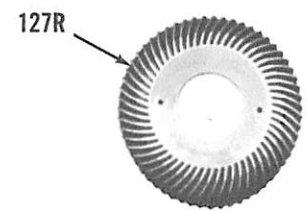
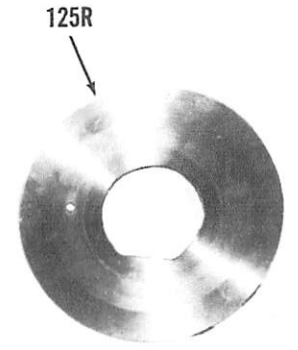
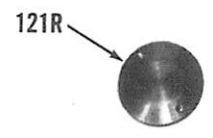
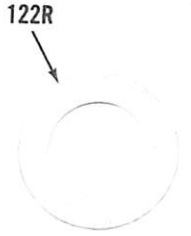
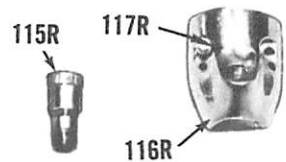
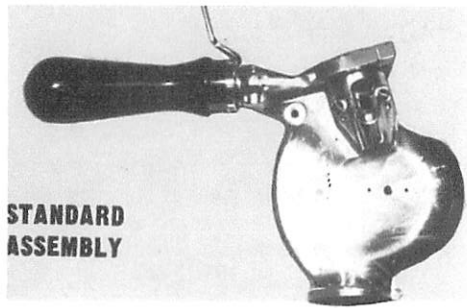
SHARPENER ASSEMBLY

REFERENCE	PART NAME	PART NO.
85R	Lever, Sharpener	57C2-17
86R	Screw, Sharpener Lever	20C8-2
87R	Link, Sharpener	77C1-67
88R	Bracket, Sharpener Arm	62C8X
89R	Screw, Flat Head	8-32x3/4F.H.
90R	Pin, Bracket	17C1-13
91R	Stop Screw, Fillister Head	8-32x3/8Fil.
92R	Stop, Sharpener	55C4-35
93R	Nut, Sharpener Shaft	4C1-139
94R	Shaft, Sharpener	11C10-10
95R	Spring, Sharpener	34C1-20
96R	Screw, Sharpener Spring	20C12-13
97R	Emery Wheel Arm	620C1-17
98R	Emery Wheel Mounted	
	120 grit, for 3-1/2" and 4" dia knife	541C1-10
	150 grit, for 3-1/2" and 4" dia knife	541C1-14
	120 grit, for 5" thru 7" dia knife	541C1-9
	150 grit, for 5" thru 7" dia knife	541C1-13
99R	Emery Wheel Unmounted	
	120 grit, for 3-1/2" and 4" dia knife	133C1-11
	150 grit, for 3-1/2" and 4" dia knife	133C1-13
	120 grit, for 5" thru 7" dia knife	133C1-12
	150 grit, for 5" thru 7" dia knife	133C1-14
100R	Bearing Caps, Sharpener Arm (2)	86C7-19
101R	Screws, Round Head (4)	6-32x3/4R.H.
102R	Screws, Adjusting (2)	20C6-11
103R	Screws, Spindle Lock (2)	20C5-12
104R	Sharpener Arm, Complete	540C1X
105R	Screw, Emery Wheel	20C13-20
106R	Washer, Emery Wheel Spring	12C1-26

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**STANDARD
ASSEMBLY**



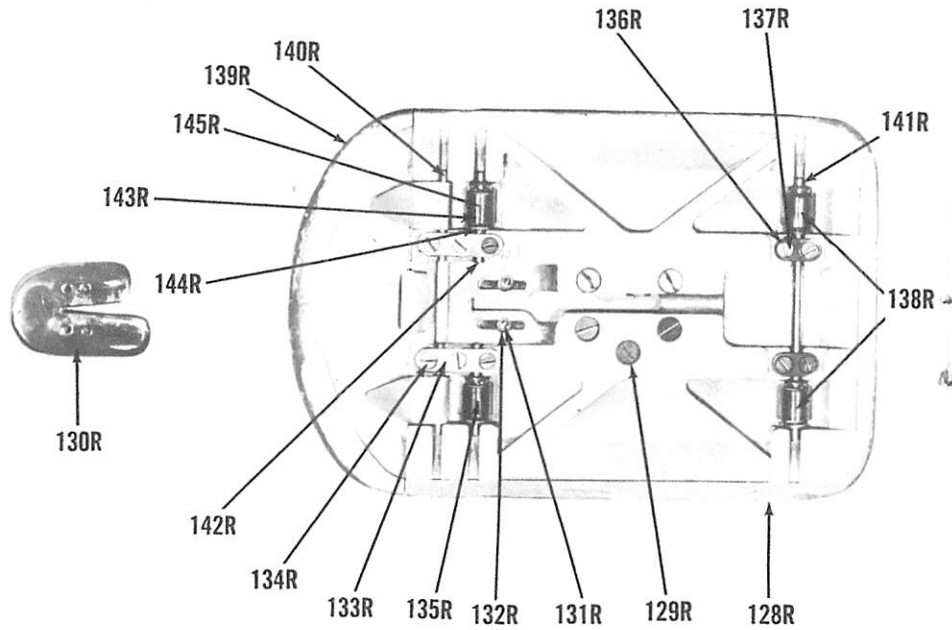
STANDARD ASSEMBLY

355
1161

REFERENCE	PART NAME	PART NO.
107R	Handle, Operating	531C1X
108R	Lever, Switch	57C1X
109R	Knob, Switch Lever	13C2-5
110R	Screw, Flat Head	8-32x5/8F.H.
111R	Standard, Complete	511C1X
112R	Screws, Fillister Head (3)	10-24x3/4Fil.
113R	Pins, Standard (2)	17C1-4
114R	Shims, Knife Gear (3)	12C9X
115R	Cup, Grease	72C4-20
116R	Cover, Gear	53C4X
117R	Screws, Round Head (2)	8-32x3/4R.H.
118R	Guard, Side	25C4-1X
119R	Screw, Side Guard	24C6
120R	Nut, Side Guard	4C4
121R	Locknut, Knife Gear Bearing	4C1-11X
122R	Seal, Bearing	216C1X
123R	Lock Screw, Knife Gear Bearing	20C4-2X
124R	Locknut, Knife	4C1-8X
125R	Knife, Carbon Steel	80C1X
	High Speed Steel	80C1X-HS
126R	Bearing, Knife Gear	90C6-9
	For 4" and 5" dia knife	90C6-33
	For 5-1/4", 6", and 7" dia knife	87C2X
127R	Gear, Knife	
	(For Drive Gear See Motor Assembly, Page 4, 7R. For Knife Gear Complete with 121R, 123R, 124R, 126R, and 127R, Order Part No. 521C1X)	

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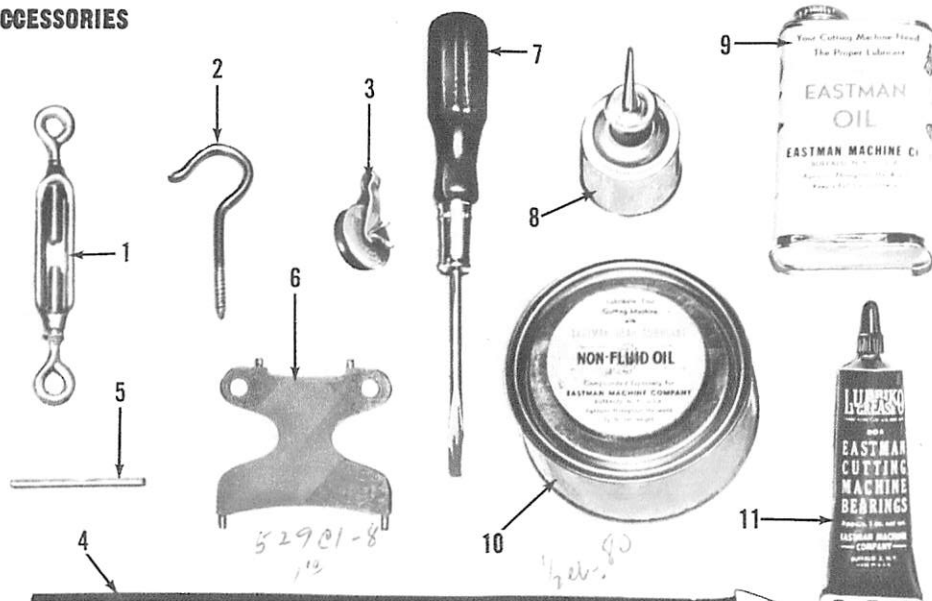


REFERENCE	PART NAME	PART NO.
128R	Base Plate, Complete	505C3-19X
129R	Screws, Flat Head (3)	10-24 x 3/8F.H.
130R	Plate, Throat	79C5-155
131R	Screws, Throat Plate, Round Head (2)	6-32 x 5/16R.H.
132R	Washers, Throat Plate (2)	12C15-3
133R	Clip, Long (2)	98C4-12
134R	Screws, Flat Head (6)	6-32 x 3/16F.H.
135R	Front Rollers, Complete (2)	622C1-2
136R	Clips, Short (2)	98C4-11
137R	Screws, Flat Head (4)	6-32 x 3/16F.H.
138R	Rear Rollers, Complete with Shaft	619C1-3
139R	Plate, Wing	60C1X
140R	Pins, Hinge (2)	17C6X
141R	Shaft, Rear Roller	11C2-3
142R	Shafts, Front Roller (2)	11C2-4
143R	Shells, Roller (4)	61C1-1
144R	Washers, Roller Shaft (8)	12C8-1
145R	Bearings, Roller (10 per roller)	41C2

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ACCESSORIES



ACCESSORIES

NO.	PART NAME
1	Turnbuckle
2	Trolley Hook
3	Trolley Pulley
4	Trolley Spring
5	Knife Removal Pin
6	Spanner Wrench
7	Screw Driver
8	Oil Can
9	Eastman Oil, 1/2 Pint
10	Eastman Gear Lubricant
11	Eastman Bearing Grease

GUARANTEE

We guarantee our machines for six months from date of invoice against defective parts and workmanship and will repair or replace any machine going wrong from these causes when returned to us carrying charges prepaid.

This guarantee does not contemplate making good damage caused by misuse or neglect.

EASTMAN MACHINE COMPANY