

**Eastman®**

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# **Marking Machines**



**Cloth Drill Marker**  
Model CD3, CD3H  
Hawk/Model CDL, CDLH



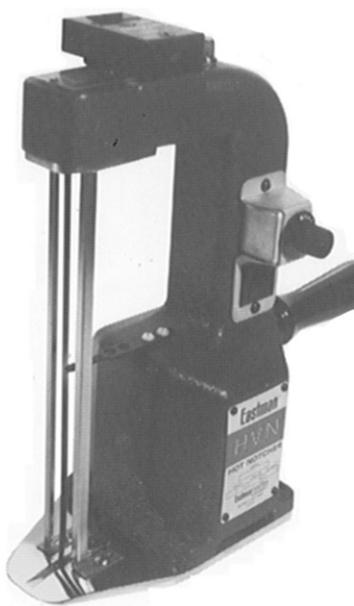
**Super Lite Drill**



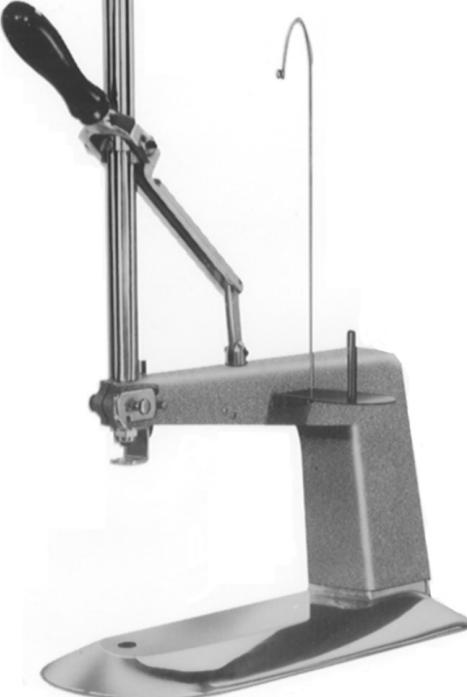
**Magnum  
Punch Perforator**  
Model MP2



**Thread Marker**  
Model LTM



**Hot Notcher**  
Model HVN



## **INSTRUCTIONS BOOK AND PARTS LIST**

**Eastman®**

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Manufacturers of Eastman Cloth Cutting and Cloth Spreading Machines

## Marking Machines



### CAUTION:

Safety glasses should be worn whenever operating this equipment.

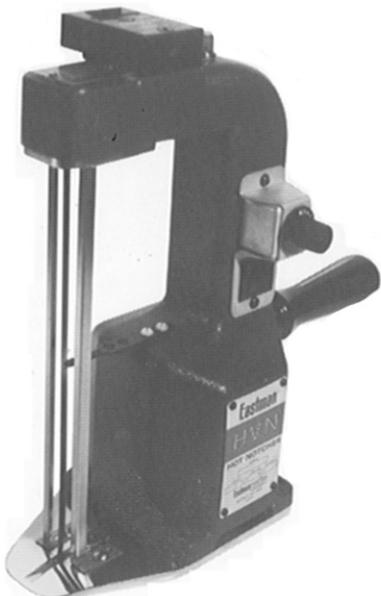


#### **Cloth Drill Marker**

**Model** CD3, CD3H

**Hawk/Model** CDL, CDLH

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#### **Hot Notcher**

**Model** HVN

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#### **Super Lite Drill**

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#### **Hot Notcher-Model HVN**

Especially useful when marking loose knit materials; the Hot Notcher sears a line that will not unravel or become lost in transit to the sewing room. Featuring a fully adjustable heating element for safe use with virtually any fabric, and a variable depth gauge for heavy or specialized material. The Eastman Hot Notcher marking machine is engineered to meet all domestic and international safety codes and is available for 110v/220v, 50/60 Hz and single or three phase power supplies.

#### **Hawk Drill Marker-Model CDL, CDLH**

With it's muscle magnifying lever action drill, the Hawk will mark faster and with less operator fatigue, through the hardest materials, than can any other drill marker available. These full-featured models will handle virtually any drill marking you may have. See page 3 for Drill/Awl options.

#### **Super Lite Drill Marker**

Engineered with superior durability and convenient servicing in mind, the Super Lite Drill Marker is ideal for the international market, where these requirements are paramount.

Available in cold or heated models and for use with 120v or 240v power supplies and fitted with an 8" or 9-1/2" baseplate, the Super Light Drill Marker is able to perform near the capabilities of our heavier duty models with the advantage of lower initial cost. The Super Lite Drill Marker is for use with 8" drill/ awls of 5/64", 3/32", 1/8", 5/32", 3/16", and 1/4" diameters only. See page 3 for drill/awl part numbers.

# Cloth Drill

## Model CD3, CD3H, CDL, AND CDLH OPERATING INSTRUCTIONS



### CAUTION:

Read instructions carefully before starting motor. Be sure that voltage is the same as stamped on nameplate.

### OPERATION

Set gauge as indicated on illustration for drilling proper height of material.

Position Drill Marker over mark on material with drill directly over mark.

To start, throw switch lever to "on" position and let motor gather full speed before starting to drill.

Enter Drill or Awl into the goods slowly. Do not force the drill thru the material with heavy pressure as this will cause the drill to burn or bend and break, or cause motor damage.

### LUBRICATION

The Upper and Lower Motor Ball Bearings as well as the Spindle Ball Bearing in the handle are grease sealed and require no lubrication.

### TO CHANGE DRILL

Lay Drill Marker on it's side, use Chuck Key to loosen drill. Remove the old Drill from the Chuck and pull down and thru Drill Guide Bushing.

Insert new Drill thru lower Drill Guide Bushing and up into Chuck. Tighten using the Chuck Key.

**NOTE:** Each diameter Drill or Awl requires a corresponding Guide Bushing. See chart below. List the serial numbers of your drilling machine on all orders for drills or parts.



### EASTMAN DRILL SELECTION TABLES

Eastman offers a wide selection of Drill Points and Awls for different type materials.

Make sure you get the type Drill you need. Avoid errors by using the Drill Number listed in the tables.

Drill and Awls for 4" Drills, actually measure 5-1/2" long.

Drill and Awls for 6" Drills, actually measure 7-1/2" long.

Drill and Awls for 8" Drills, actually measure 10" long.

Drill and Awls for 11-1/2" Drills, actually measure 13-1/2" long.

### DRILL OR AWL SELECTION TABLE

Drill or Awl Dia	3/64"	5/64"	3/32"	1/8"	5/32"	3/16"	1/4"	5/16"*	3/8"*	
Hole Size	•	•	•	•	•	•	•	•	•	
Diamond Point	4"	231C1-0	231C1-1	231C1-2	231C1-3	231C1-4	--	231C1-17	231C1-18	231C1-19
	6"	231C1-6	231C1-7	231C1-8	231C1-9	231C1-10	--	231C1-20	231C1-21	231C1-22
	8"	--	231C1-12	231C1-13	231C1-14	231C1-24	--	231C1-23	--	231C1-25
	11-1/2"	--	--	--	--	--	--	231C1-26	231C1-27	231C1-28
Taper Point	4"	231C2-1	231C2-2	231C2-3	231C2-4	--	--	231C2-31	231C2-32	231C2-33
	6"	231C2-7	231C2-8	231C2-10	231C2-12	231C2-13	--	231C2-15	231C2-34	231C2-35
	8"	231C2-17	231C2-19	231C2-20	231C2-21	231C2-24	--	231C2-36	231C2-37	231C2-38
	11-1/2"	231C2-42	231C2-43	231C2-27	231C2-26	231C2-28	231C2-29	231C2-39	231C2-40	--
Open End Awl	4"	--	231C3	231C3-1	231C3-2	231C3-3	231C3-4	231C3-5	231C3-10	231C3-7
	6"	--	231C3-18	231C3-11	231C3-12	231C3-13	231C3-14	231C3-15	231C3-16	231C3-17
	8"	--	231C3-20	231C3-22	231C3-21	231C3-24	231C3-23	231C3-32	--	231C3-29
	11-1/2"	--	231C3-26	231C3-25	231C3-27	231C3-28	--	231C3-33	231C3-30	231C3-31
Closed End Awl	4"	--	--	231C4	231C4-1	231C4-2	231C4-3	231C4-29	231C4-30	231C4-31
	6"	--	--	231C4-5	231C4-6	231C4-7	231C4-8	231C4-9	231C4-22	231C4-23
	8"	--	--	231C4-15	231C4-10	231C4-11	231C4-12	231C4-20	231C4-25	231C4-24
	11-1/2"	--	--	231C4-17	231C4-18	231C4-19	--	231C4-26	231C4-27	231C4-28
<b>DRILL GUIDE BUSHING SELECTION TABLE</b>										
Cold Drill Bushing	21C13-40	21C13-36	21C13-34	21C13-35	21C13-37	21C13-38	21C13-42	21C13-41	21C13-44	
Hot Drill Bushing	21C13-51	21C13-52	21C13-53	21C13-54	21C13-55	21C13-56	21C13-65	21C13-66	21C13-67	
*Multiple Size Bushing	21C13-59	21C13-59	21C13-59	21C13-63	21C13-63	--	--	--	--	

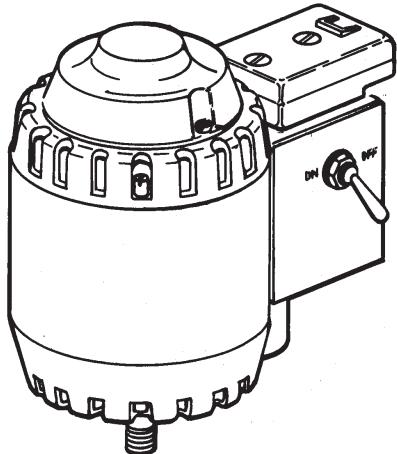
\*OPTIONAL Multiple size bushing, cold drills only.  
Bushing No. 2 21C13-59 for 3/64, 5/64, 3/32 & 1/8 hole sizes.  
Bushing No. 2 21C13-63 for 5/32 & 3/16 hole sizes.

\*For 1/4" dia. and larger, use chuck 229C1-6 & setscrew 309C20-1. For models CD3H and CDLH, 1/4" dia. and larger, use Guide Heat Bracket 728C1-10.

**Eastman®**

# Cloth Drill

## Model CD3, CD3H, AND CDLH Illustrated Parts List

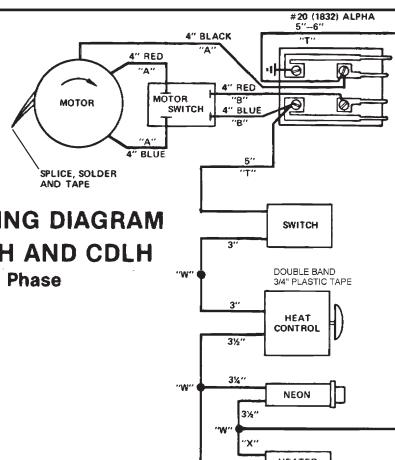


### Motor Assemblies

**NOTE:**

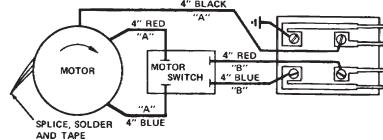
Please specify model and serial number of machine when ordering parts.

#### WIRING DIAGRAM CD3H AND CDLH Three Phase



#### SINGLE CD3 & CDL THREE CD3H & CDLH PHASE

PART NUMBER	CD3 & CDL			CD3H & CDLH PHASE			CD3 & CDL			CD3H & CDLH PHASE		
	CD3 & CDL	CD3H & CDLH PHASE	CD3 & CDL	CD3H & CDLH PHASE	CD3 & CDL	CD3H & CDLH PHASE	CD3 & CDL	CD3H & CDLH PHASE	CD3 & CDL	CD3H & CDLH PHASE	CD3 & CDL	CD3H & CDLH PHASE
1C4-11	0	0	1	1								
4C1-180	4	4	4	4								
4C1-191	1	1	1	1								
4C1-192	1	1	1	1								
4C2-101	0	1	0	1								
4C2-111	0	1	0	1								
8C5-10	1	1	1	1								
10C2-30	1	1	1	1								
12C1-34	0	2	0	2								
12C1-42	1	1	1	1								
12C15-90	0	1	0	1								



#### WIRING DIAGRAM CD3 AND CDL Three Phase

#### SINGLE CD3 & CDL CD3H & CDLH PHASE

#### CD3 & CDL CD3H & CDLH PHASE

**DESCRIPTION**

Tolerancing Ring  
Locating Ring Switch

Motor Screw

Motor Screw

Drive Screw

Switch Base

Control, Pilot Light, Switch

Switch Base

Switch Cover

Rear Bearing Cover

Rear Bearing Cover 11-1/2"

Tubing Insulation

Upper Bearing Housing

Lower Bearing Housing

Lower Ball Bearing

Upper Ball Bearing

Switch Cap

Dial Indicator

Pilot Light 110v

Pilot Light 220v

Extension for Cover 11-1/2"

Heat Control 220v

Heat Control 110v

Screw 6-32 x 5/16 Round Head

Screw 8-32 x 3/8 Round head

Screw 4-36 x 1/4 Fillister Head

Screw 6-32 x 3/8 Fillister Head

Screw 6-32 x 1/2 Fillister Head

Screw 10-24 x 1 Fillister Head

Rotor with Fan

Rotor with Fan

CD3/Stator w/Band 110v 60cy 3600rpm

CD3/Stator w/Band 110v 50cy 3000rpm

CD3/Stator w/Band 220v 60cy 3600rpm

CD3/Stator w/Band 220v 50cy 3000rpm

CDL/Stator w/Band 110v 60cy 3600rpm

CDL/Stator w/Band 110v 50cy 3000rpm

CDL/Stator w/Band 220v 60cy 3600rpm

CDL/Stator w/Band 220v 50cy 3000rpm

CDL/Stator w/Band 220v 60cy 3600rpm

CDL/Stator w/Band 220v 50cy 3000rpm

Rear Bearg Cover w/Extension 11-1/2"

Toggle Switch

Switch for Motor (Three phase)

Automatic Cut Out Switch

Switch for Motor (Single phase)

Automatic Cut Out 60 Cy 3600 rpm

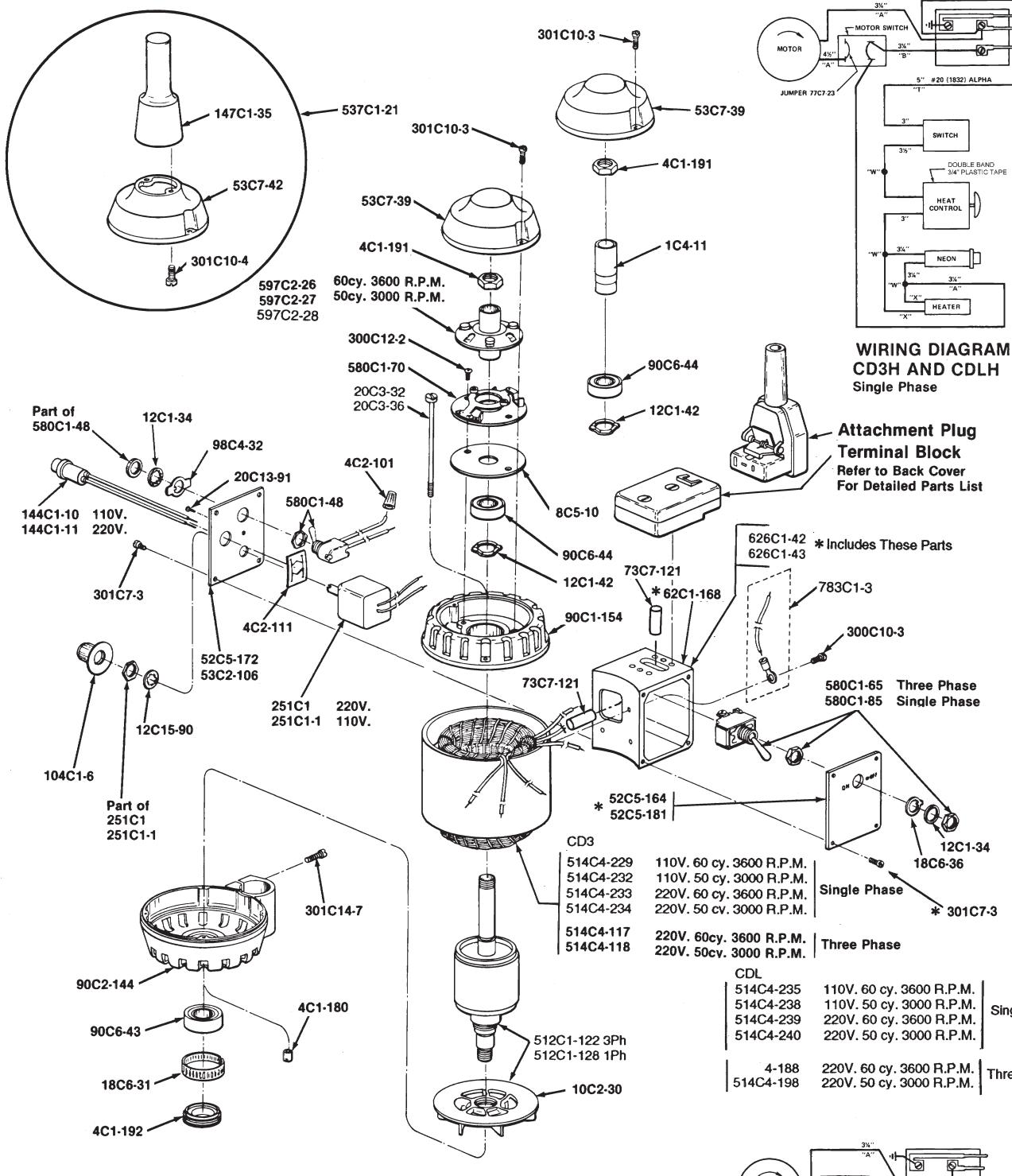
Automatic Cut Out 50 Cy 3000 rpm

Automatic Cut Out 50 Cy 1800 rpm

Switch Bracket w/Switch Base

Switch Bracket w/Switch Base

Ground Wire Assy.



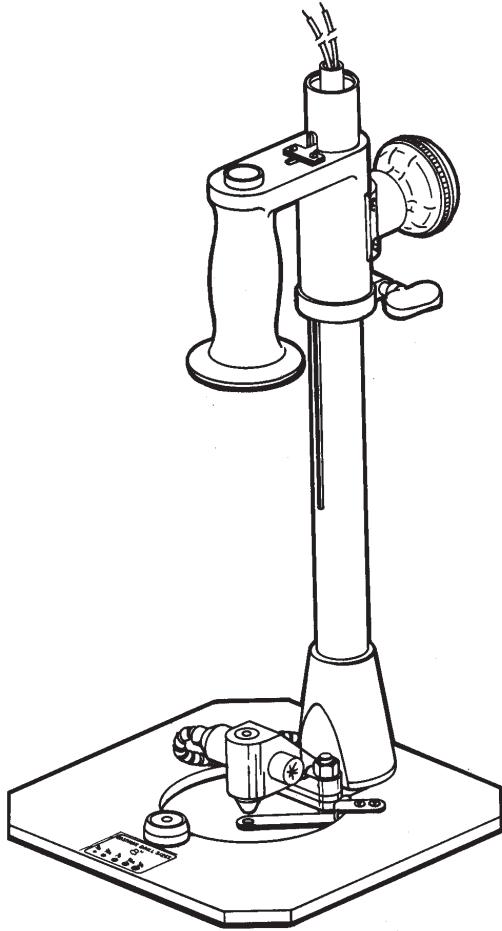
WIRING DIAGRAM CD3 AND CDL  
Single Phase

NOTE: When ordering Single Phase Stator & Bands for machines prior to 1989, part numbers 20C3-36 and 512C1-128 must also be ordered.

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# Cloth Drill

## Model CD3, and CD3H Illustrated Parts List

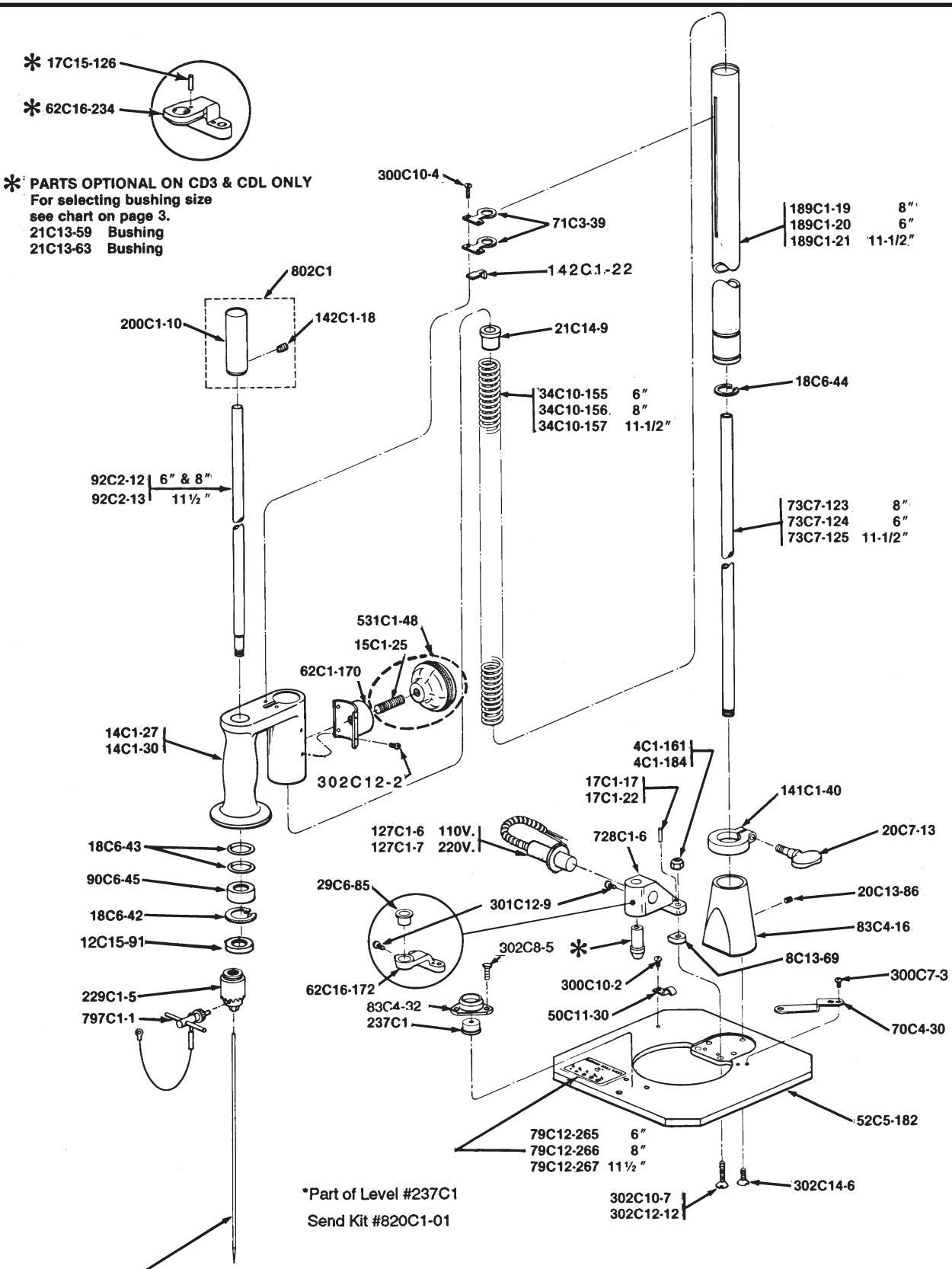


### Standard and Base Plate Assemblies

**NOTE:** Please specify model and serial number of machine when ordering parts.

PART NUMBER	No. Req'd		DESCRIPTION
	CD3	CD3H	
4C1-161	2	0	Flex Nut
4C1-184	0	2	Stop Nut
8C13-69	0	2	Heat Insulator
12C15-91	1	1	Spacing Washer
14C1-27	1	1	Handle Grip
14C1-30	1	1	Handle Grip
15C1-25	1	1	Machine Handle Stud
17C1-17	2	0	Dowel Pin

PART NUMBER	No. Req'd		DESCRIPTION
	CD3	CD3H	
17C1-22	0	2	Dowel Pin
17C15-126	1	1	Dowel Pin
18C6-42	1	1	Retaining Ring
18C6-43	2	2	Rubber "O" Ring
18C6-44	1	1	Retaining Ring
20C7-13	1	1	Thumb Screw
20C13-86	2	2	Set Screw
21C14-9	1	1	Bushing For Spring
29C6-85	1	0	Adaptor For Bushing
34C10-155	1	1	Spring For 6" Post
34C10-156	1	1	Spring For 8" Post
34C10-157	1	1	Spring For 11-1/2" Post
50C11-30	0	1	Cable Clamp
52C5-155	1	1	Level Base
52C5-182	1	1	Base Plate
55C4-95	0	1	Spacer For Heating Element
62C1-170	1	1	Handle Bracket
62C16-172	1	0	Lower Guide Bracket
62C16-234	1	1	Lower Guide Bracket
70C4-30	1	1	Locator Guide
70C3-39	2	2	Spring Retainer
73C7-123	0	1	8" Tube For Lead Wire
73C7-124	0	1	6" Tube For Lead Wire
73C7-125	0	1	11-1/2" Tube For Lead Wire
79C12-265	1	1	6" Drill Size Decal
79C12-266	1	1	8" Drill Size Decal
79C12-267	1	1	11-1/2" Drill Size Decal
83C4-32	1	1	Level Flange
83C4-16	1	1	Flange For Post
90C6-45	1	1	Spindle Ball Bearing
92C2-12	1	1	Spindle 6" and 8"
92C2-13	1	1	Spindle 11-1/2"
12TC1-6	0	1	Heat Element 110V.
12TC1-7	0	1	Heat Element 220V.
141C1-40	1	1	Gauge
142C1-18	1	1	Key For Driver
142C1-22	1	1	Key For Handle
189C1-19	1	1	8" Post
189C1-20	1	1	6" Post
189C1-21	1	1	11-1/2" Post
200C1-10	1	1	Driver Only
229C1-5	1	1	Chuck
237C1	1	1	Bullseye Vial
300C7-3	2	2	Screw, 4-36 x 1/4 Round Head
300C10-2	0	1	Screw, 6-32 x 1/4 Round Head
300C10-4	2	2	Screw, 6-32 x 3/8 Round Head
301C12-9	0	1	Screw, 8-32 x 1/4 Fillister Hd. (Stainless Steel)
302C12-2	4	4	Screw, 8-32 x 5/16 Flat Head
302C10-7	2	0	Screw, 6-32 x 5/8 Flat Head
302C12-12	0	2	Screw, 8-32 x 1 Flat Head
302C14-6	3	3	Screw, 10-24 x 5/8 Flat Head
531C1-48	1	1	Machine Handle
728C1-6	0	1	Guide Heat Bracket
797C1-1	1	1	Key for Chuck and Holder
802C1	1	1	Driver with Key
302C8-5	3	3	Screw, #4-40 x 1/4 Flat Head



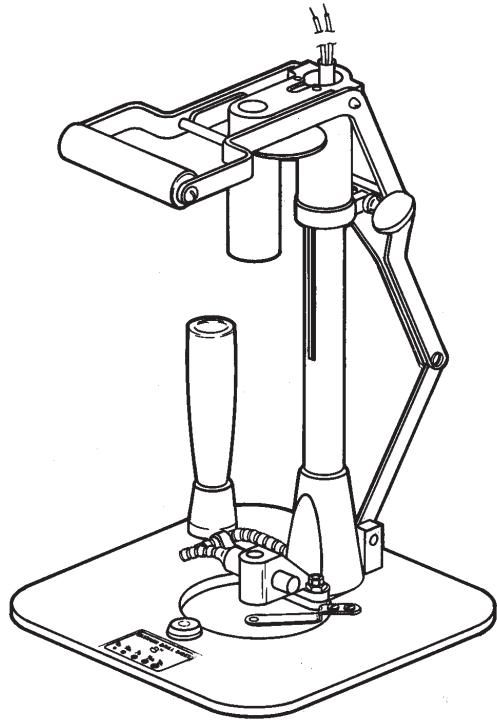
\* SEE PAGE 3  
 FOR DRILL OR AWL SELECTION TABLE  
 AND DRILL GUIDE BUSHING TABLE

**Eastman®**

# Cloth Drill

## Model CD3, and CD3H

### Illustrated Parts List



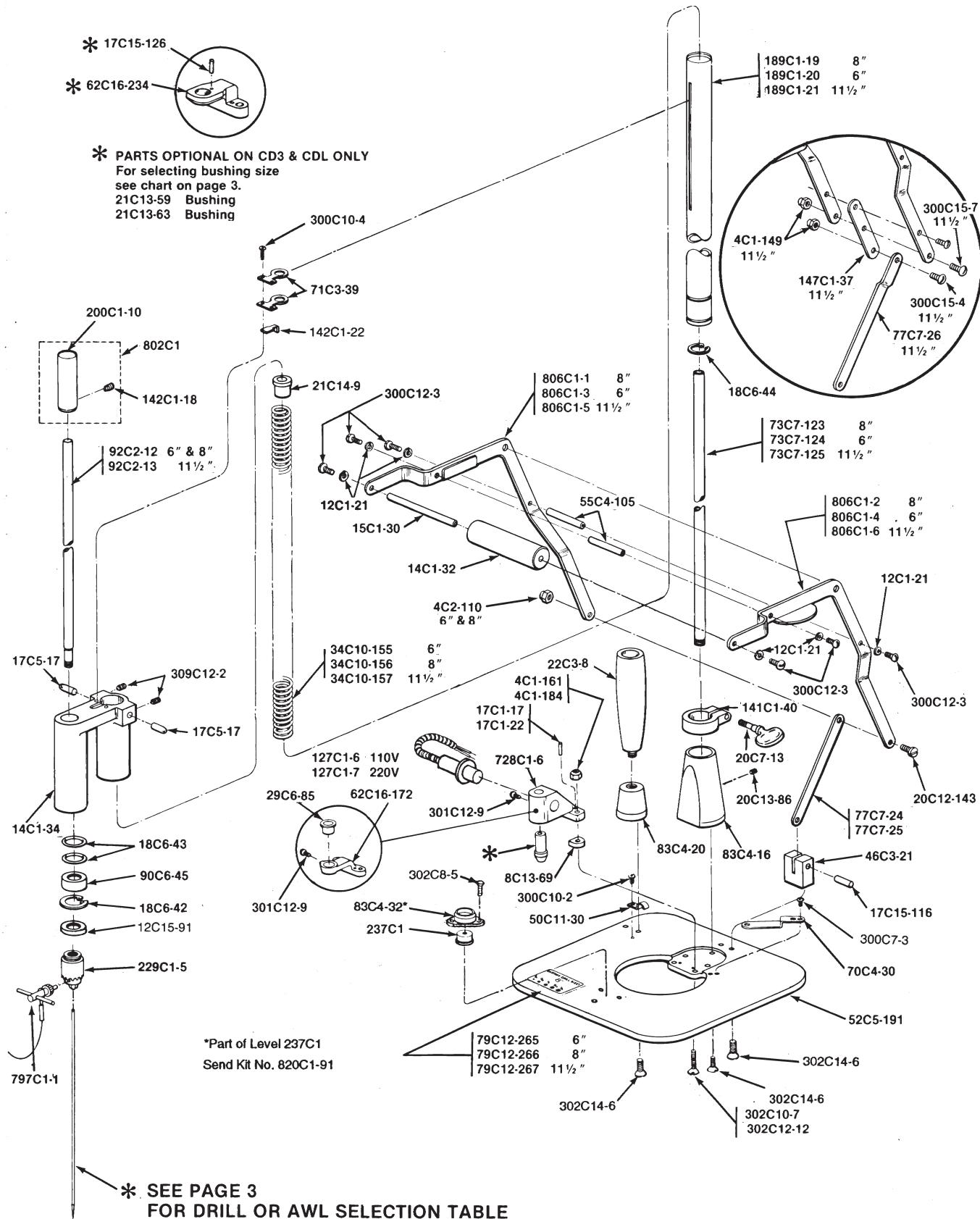
### Standard and Base Plate Assemblies

**NOTE:**

Please specify model and serial number of machine when ordering parts.

PART NUMBER	No. Req'd		DESCRIPTION
	CD3	CD3H	
4C1-149	3	3	Elastic Stop Nut
4C1-161	2	0	Flex Nut
4C1-184	0	2	Elastic Stop Nut
4C2-110	1	1	Elastic Stop Nut
8C13-69	0	1	Heat Insulator
12C1-21	6	6	Lock Washer
12C15-91	1	1	Spacing Washer
14C1-32	1	1	Operating Handle
14C1-34	1	1	Handle Grip w/Lugs
15C1-30	1	1	Stud For Handle
17C1-17	1	0	Dowel Pin
17C1-22	0	1	Dowel Pin
17C5-17	2	2	Pivot Point
17C15-116	1	1	Roll Pin
17C15-126	1	1	Dowel Pin
18C6-42	1	1	Retaining Ring
18C6-43	2	2	Rubber "O" Ring
18C6-44	1	1	Retaining Ring
20C7-13	1	1	Thumb Screw
20C12-143	1	1	Pivot Screw 6" & 8" Drills

PART NUMBER	No. Req'd		DESCRIPTION
	CD3	CD3H	
20C13-86	2	2	Set Screw
21C14-9	1	1	Bushing For Spring
22C3-8	1	1	Tapered Handle
29C6-85	1	0	Adaptor For Bushing
34C10-155	1	1	Spring 6" Drill
34C10-156	1	1	Spring 8" Drill
34C10-157	1	1	Spring 11-1/2" Drill
46C3-21	1	1	Block For Link
50C11-30	0	1	Cable Clamp
52C5-191	1	1	Base
55C4-95	0	1	Spacer For Heating Element
55C4-105	2	2	Spacer Lever Handle
62C16-172	1	0	Lower Guide Bracket
62C16-234	1	0	Lower Guide Bracket
70C4-30	1	1	Locator Guide
71C3-39	2	2	Spring Retainer
73C7-123	1	1	8" Tube For Lead Wire
73C7-124	1	1	6" Tube For Lead Wire
73C7-125	1	1	11-1/2" Tube For Lead Wire
77C7-24	1	1	8" Link
77C7-25	1	1	6" Link
77C7-26	1	1	11-1/2" Link
79C12-265	1	1	6" Drill Size Decal
79C12-266	1	1	8" Drill Size Decal
79C12-267	1	1	11-1/2" Drill Size Decal
83C4-32	1	1	Level Flange
83C4-16	1	1	Flange For Post
83C4-20	1	1	Flange For Handle
90C6-45	1	1	Spring Ball Bearing
92C2-12	1	1	6" & 8" Spindle
92C2-13	1	1	11-1/2" Spindle
127C1-6	0	1	110V Heating Element
127C1-7	0	1	220V Heating Element
141C1-40	1	1	Gauge
142C1-18	1	1	Key For Driver
142C1-22	1	1	Key For Handle
147C1-37	1	1	11-1/2" Extension For Handle Lever
189C1-19	1	1	8" Post
189C1-20	1	1	6" Post
189C1-21	1	1	11-1/2" Post
200C1-10	1	1	Driver Only
229C1-5	1	1	Chuck
237C1	1	1	Bullseye Vial
300C7-3	2	2	Screw, 4-36 x 1/4 Round Head
300C10-2	1	1	Screw, 6-32 x 1/4 Round Head
300C10-4	2	2	Screw, 6-32 x 3/8 Round Head
300C12-3	6	6	Screw, 8-32 x 3/8 Round Head
300C15-4	1	1	Screw 10-32 x 1/2 Round Head 11-1/2" only
300C15-7	2	2	Screw 10-32 x 5/8 Flat Head
302C12-12	2	2	Screw 8-32 x 1" Flat Head
302C14-6	7	7	Screw 10-24 x 5/8 Flat Head
301C12-9	1	1	Screw 8-32 x 9/16 Fillister Head (Stainless Stl.)
302C10-7	2	2	Screw 6-32 x 5/8 Flat Head
309C12-2	2	2	Screw 8-32 x 5/16 Socket Set Screw
728C1-6	1	1	Guide Heat Bracket
797C1-1	1	1	Key for Chuck and Holder
802C1	1	1	Driver with Key
806C1-1	1	1	L.H. Handle Lever Assembly 8" Drill
806C1-2	1	1	R.H. Handle Lever Assembly 8" Drill
806C1-3	1	1	L.H. Handle Lever Assembly 6" Drill
806C1-4	1	1	R.H. Handle Lever Assembly 6" Drill
806C1-5	1	1	L.H. Handle Lever Assembly 11-1/2" Drill
806C1-6	1	1	R.H. Handle Lever Assembly 11-1/2" Drill
302C8-5	3	3	Screw 4-40 x 1/4 Flat Head

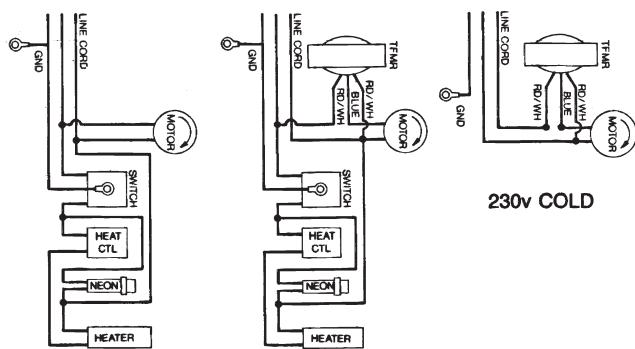


**SEE PAGE 3  
FOR DRILL OR AWL SELECTION TABLE  
AND DRILL GUIDE BUSHING TABLE**

**Eastman®**

# Super Lite Cloth Drill

## Illustrated Parts List

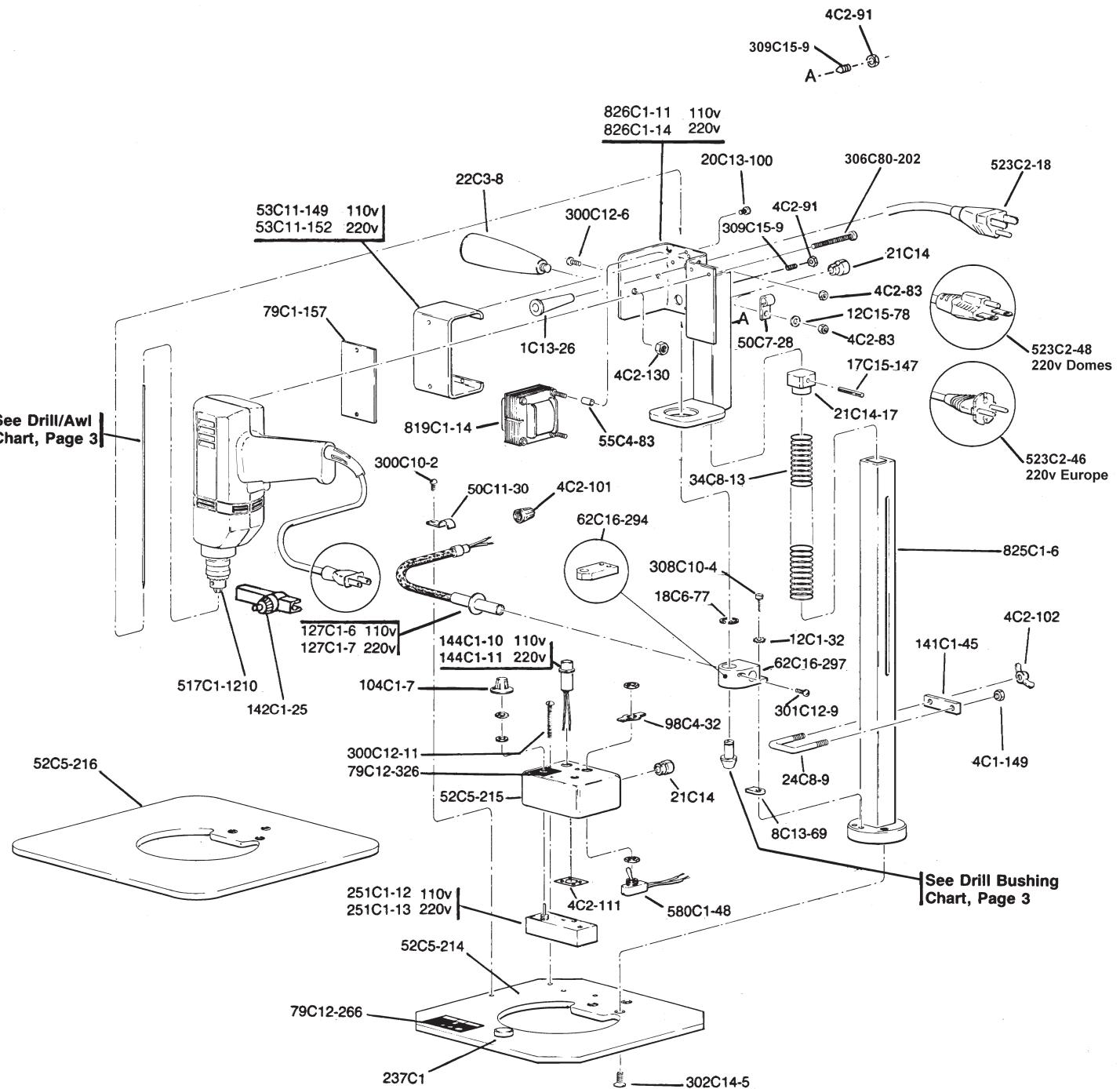

**CAUTION:**

Read instructions carefully before starting motor. Be sure that voltage is the same as stamped on nameplate.

No. Req'd

PART NUMBER	110C	110H	220V C	220V H	DESCRIPTION
1C13-26	0	1	1	1	Rubber Cord Restraint
4C1-149	1	1	1	1	10-32 Elastic Stop Nut
4C2-83	0	0	2	2	8-32 Hex Nut
4C2-91	1	1	1	1	Hex Nut
4C2-101	0	6	5	6	Wire Nut
4C2-102	1	1	1	1	10-32 Wing Nut

PART NUMBER	No. Req'd				DESCRIPTION
	110C	110H	220V C	220V H	
4C2-106	0	2	0	2	4-40 Hex Nut
4C2-111	0	1	0	1	Nut, Pilot Light
4C2-130	1	1	1	1	3/8-24 Hex Nut
8C13-69	0	2	0	2	Heat Insulator
12C1-32	2	2	2	2	Washer, External Lock #6
12C15-78	0	1	1	1	Washer Flat #8
17C15-147	1	1	1	1	Roll Pin
18C6-77	1	0	1	0	Ring, Retaining E-type
20C13-100	0	2	2	2	Screw, Binding Head
21C14	0	3	1	3	Cord Restraint
21C14-17	1	1	1	1	Spring, Bushing
22C3-8	1	1	1	1	Handle, Tapered
24C8-9	1	1	1	1	Bolt, "U"
34C8-13	1	1	1	1	Spring, Return #8
34C8-14	0	0	1	1	Spring, 220v
50C7-28	0	1	1	1	Clamp Cord 3/16" Dia.
50C11-30	0	1	0	1	Clamp, Cable
52C5-214	1	1	1	1	Plate Base 8"
52C5-215	0	1	0	1	Base, Control Switch
52C5-216				Optional	Base Plate 9-1/2"
53C11-149	0	1	0	0	Cover, Wiring 110v Hot
53C11-152	0	0	1	1	Cover, Transformer 220v
55C4-83	0	0	2	2	Spacer, Transformer
62C16-294	1	0	1	0	Lower Guide Bracket, Cold
62C16-297	0	1	0	1	Lower Guide Bracket, Hot
79C1-157	1	1	1	1	Plate, Name
79C12-266	1	1	1	1	Decal, Drill Size
79C12-326	0	1	0	1	Decal, Dial Indicator
98C4-32	0	1	0	1	Cap, Switch
104C1-7	0	1	0	1	Knob
127C1-6	0	1	0	0	Heat Element 110v
127C1-7	0	0	0	1	Heat Element 220v
141C1-45	1	1	1	1	Gage, Stop
142C1-25	1	1	1	1	Chuck Key
144C1-10	0	1	0	0	Pilot Light, 110v Hot
144C1-11	0	0	0	1	Pilot Light, 220v Hot
237C1	1	1	1	1	Vial Bullseye
251C1-12	0	1	0	0	Heat, Control, Variable 110v
251C1-13	0	0	0	1	Heat, Control, Variable 220v
251C2-1	0	0	1	1	Voltage, Reducer 220v
262C1-9	0	0	1	1	Fuse
300C10-2	0	1	0	1	Screw, 6-32 x 1/4, Round Head
300C12-6	0	1	1	1	Screw, 8-32 x 1/2, Round Head
300C12-11	0	2	0	2	Screw, 8-32 x 1-3/4, Round Head
301C12-9	0	1	0	1	Screw, 8-32 x 1/4, Fillister Head
302C14-5	3	3	3	3	Screw, 10-24 x 1/2 Flat Head
306C80-202	2	2	2	2	Screw, 6 x 2" Type AB
308C10-4	2	2	2	2	Screw, 6-32 x 5/8, Socket Head Cap
308C10-5	2	2	2	2	Screw 6-32 x 1 Socket Head Cap
309C15-9	1	1	1	1	Brass Tipped Setscrew
517C1-1210	1	1	1	1	Motor, Unit Drill
523C2-18	0	1	0	0	Cord, Hot, 110v
523C2-46	0	0	1	1	Cord, 220v Europe, Hot and Cold
523C2-48	0	0	1	1	Cord, 220V Domestic, Hot and Cold
580C1-48	0	1	0	1	Switch
819C1-14	0	0	1	1	Voltage Reducer, 220v
825C1-6	1	1	1	1	Post, Assembly
826C1-11	1	1	0	0	Motor Support Assembly, 110v
826C1-14	0	0	1	1	Motor Support Assembly, 220v



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# **Super Lite Cloth Drill Operating Instructions**

## **OPERATION**

Set U-Stop Gage to correspond to height of fabric, so that drill will not penetrate table. Be certain Gage is tightened firmly before operating drill.

Position Super Lite Drill Marker over mark, using drill point as indicator.

To start, press trigger and slowly push drill into fabric. DO NOT force drill or awl thru cloth; damage to drill or motor may result. Drill motor may be locked in the on position by engaging drill trigger and sliding lock mechanism forward (located behind trigger on drill handle). Drill lock may be disengaged by pressing and releasing drill trigger.



### **NOTE:**

Disconnect machine from power source before servicing.

## **MAINTENANCE**

Periodically check to make sure all mounting screws are securely tightened before operating machine.

## **TO CHANGE DRILL**

Lay drill marker on its side. Loosen drill chuck with key provided and slide drill down and out through guide bushing.

To remove cold drill guide bushing; snap out 'E' ring (18C6-77) and slide out bushing.

To remove hot drill guide bushing; loosen set screw (300C12-9) three turns and slide out bushing.

Select desired drill/awl and matching bushing. Replace guide bushing in reverse order as above. Slide new drill/awl up through bushing and securely tighten into chuck using the supplied chuck key.

Chuck key should be stored on power cord by snapping it into position near plug handle.



### **CAUTION:**

DO NOT operate drill marker with chuck key loose in drill. Serious physical injury may result.

## **Hot Drill**

Drill temperature is variable to accommodate all types of material requiring hot drill marking.

To increase temperature: turn heater dial clockwise.



### **CAUTION:**

Safety glasses should be worn at all times whenever operating or servicing this equipment, or serious physical injury may result.

# **Magnum Punch Perforator**

## **Model MP2**

# **Operating Instructions**

## **PREPARATION**

Eastman Machine Co. recommends 40-50 lb (.005"-.006" thick) NON-OILED Kraft paper be used for pattern making. Otherwise, operator may need to adjust punch depth for specific material being used.

For best results, table top must be flat and smooth. Cover table with hard rubber pad (191C1-36) to ensure long life of punch. Replace pad frequently to maintain ideal working surface.



### **CAUTION:**

Before operating perforator, make certain electrical power source is the same as that indicated on the number plate

## **OPERATION**

Magnum perforator is ready to operate when power attachment plug is connected; there is no "ON-OFF" switch.



### **NOTE:**

Use caution when connecting power supply to Perforator; even slight rotation of rubber wheel may cause perforator to punch.  
KEEP HANDS CLEAR OF RUBBER WHEEL AND PUNCH ROD AT ALL TIMES.

To move perforator into position, pull switch lever up with finger. This prevents punching when machine is moved.

For single punch, to set starting point, push switch lever down.

To start perforating; release switch lever and move Magnum along line to be marked. Use guide wire or spring guide to follow line. If desired, either guide wire or spring guide may be removed.

After pattern has been completely perforated and checked, place on top of lay and secure to prevent form shifting. Use pattern duster to spread marking powder along perforated line. Use marking powder sparingly; too much powder will distort the line, causing difficulty when following line with cutting machine.

# Magnum Punch Perforator

## Model MP2

## Operating Instructions

### SERVICE & ADJUSTMENTS

#### Replacing Punch

Remove punch by inserting small Drift Punch into punch, and tapping Drift Punch lightly to loosen punch.

Install punch by placing new punch on tip of punch rod. Insert Drift Punch (230C1) over tip and tap drift lightly to seat punch onto rod.

If punch becomes loose on punch rod, remove punch and tap lightly on it's side to reduce diameter of shaft opening causing it to fit more snugly on punch rod.

#### Adjust Depth of Punch

Remove top cover by removing fillister head screw (301C10-8). Loosen 1/2" hex nut (4C2-120) on top of solenoid. Turn adjusting screw clockwise to increase depth of punch, counterclockwise to decrease depth of punch. One complete turn of adjusting screw equals approx. 1/32" depth adjustment.

To test adjustment; place 1/2" nut driver over stop nut and strike end of nut driver with palm of hand. Punch should be set only deep enough to penetrate through material being punched, this allows for maximum speed of perforation.

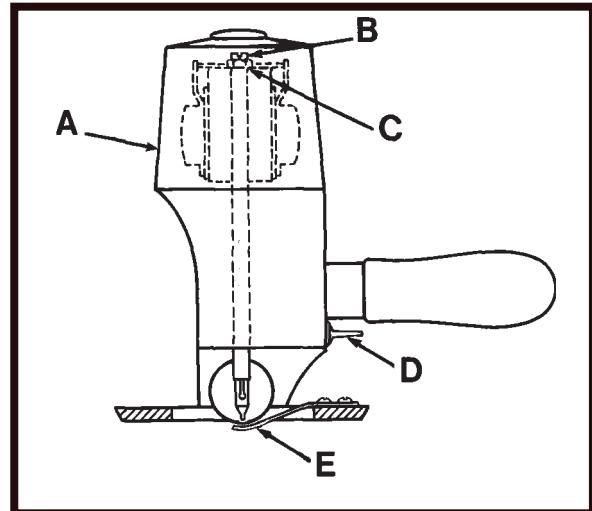
If your pattern paper is very thick, set punch depth deeper. This will provide maximum punching power but speed of punching will be reduced.

When adjustment is satisfactory; hold adjusting screw stationary and tighten 1/2" hex nut firmly.

#### TROUBLESHOOTING

1. Machine does not punch hard enough/Loss of power:
  - a. Screws holding solenoid to housing are loose causing misalignment of punch.
  - b. Punch depth set too shallow.
  - c. Punch dull; replace or sharpen punch.
  - d. Check line voltage: 105v minimum for 110v; 210v minimum for 220v rating.
2. Machine rocks on table surface/proper punch depth cannot be obtained/whenever operating on hard surface:
  - a. Retract rubber wheel into baseplate, as described.

Remove baseplate by loosening flathead screws (302C15-4) from bottom. Insert two washers (12C11-72) one at each screw, between baseplate and housing. Replace baseplate screws with socket head screws (302C15-8)

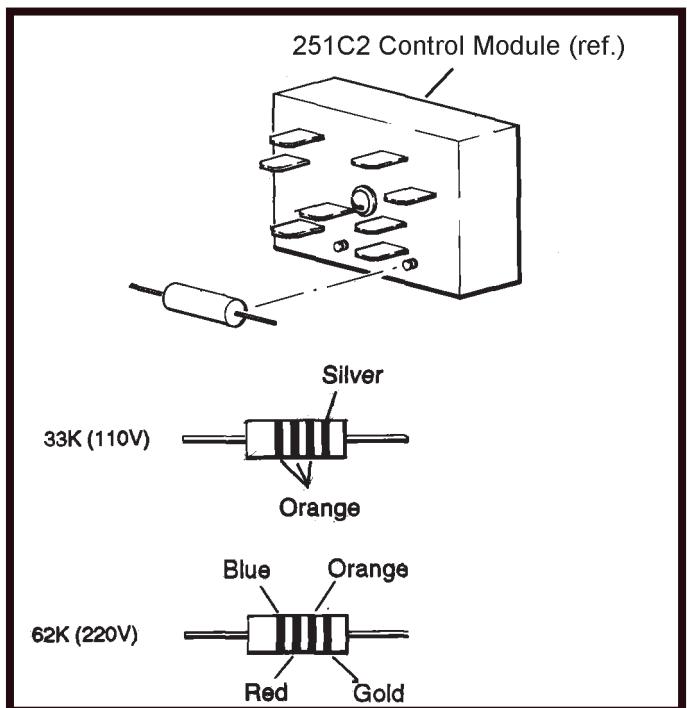


#### CAUTION:

DO NOT operate this equipment unless baseplate is flat on table surface. Serious personal injury may result.

#### CHANGING VOLTAGE OF CONTROL MODULE

Use low wattage soldering iron to desolder and remove old resistor and solder new resistor in it's place. Refer to illustration to confirm value of resistors.



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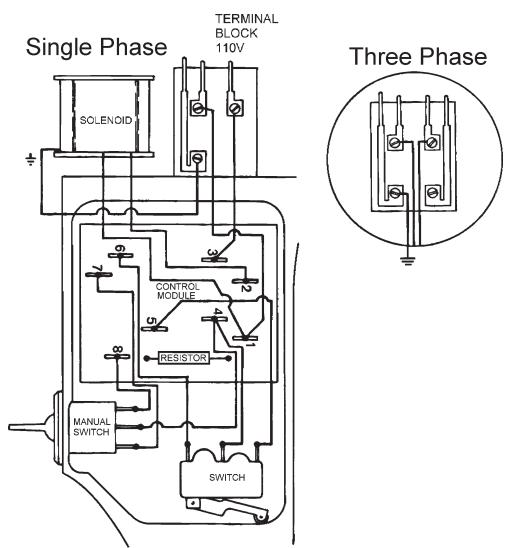
# Magnum Punch Perforator

Model MP2

## Illustrated Parts List

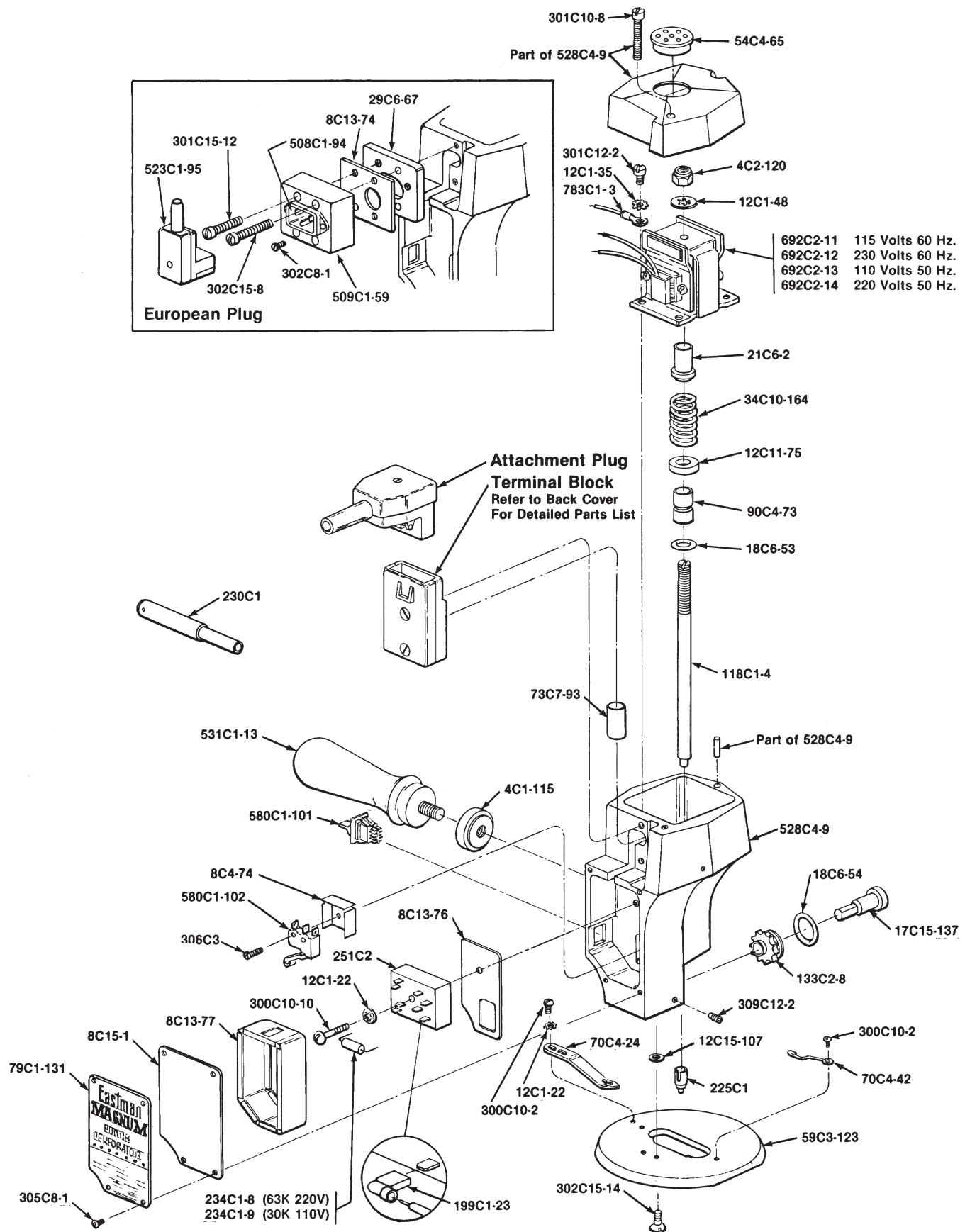


**NOTE:** Please specify model and serial number of machine when ordering parts.



Wiring Diagram

PART NUMBER	No. Req'd	DESCRIPTION
4C1-115	1	Locknut, Handle
4C2-120	1	Nut, Elastic, Stop, Hex 5/16 x 24
8C4-74	1	Switch, Insulation
8C13-76	1	Housing, Insulation
8C13-77	1	Housing, Insulation
8C15-1	1	Cover, Insulation
12C1-22	3	Lock Washer, Ext. Tooth #6
12C1-35	4	Lock Waher, Ext. Tooth #8
12C1-48	1	Lock Waher, Int. Tooth 5/16
12C11-75	1	Spring Washer
12C15-107	2 Opt	Spacer Washer
17C15-137	1	Wheel Pin
18C6-53	1	O'Ring, Style #2-205
18C6-54	1	Drive Ring 9/16 x 1-1/16 x 1/4
21C6-2	1	Shoulder Bushing
34C10-164	1	Spring
54C4-65	1	Vent Plug
59C3-123	1	Flat Plate
70C4-24	1	Guide Perforator
70C4-42	1	Guide Wire
73C7-93	1	Tubing Front Bearing
79C1-131	1	Number, Plate
90C4-73	1	Plunger, Bearing
118C1-4	1	Rod, Plunger
133C2-8	1	Wheel with Sprocket
199C1-23	8	Lug Terminal
225C1	1	Punch 1/16 Dia.
230C1	1	Drift Punch
234C1-8	1	Resistor, (63K 220V)
234C1-9	1	Resistor, (30K 110V)
251C2	1	Control Module
300C10-2	3	Screw, 6-32 x 1/4, Round Head
301C10-8	1	Screw, 6-32 x 1-1/4, Fillister Head
300C10-10	1	Screw, 6-32 x 1, Round Head
301C12-2	4	Set Screw, 8-32 x 5/16, Fillister Head
302C15-14	2	Screw, 10-32 x 7/16, Flat Head
305C8-1	4	Screw, 4-40 x 1/14, Binding Head
306C3	2	Screw, 2-56 x 3/8, Pan Head
309C12-2	1	Set Screw, 8-32 x 5/16, Flat Point
528C4-9	1	Standard and Cover
531C1-13	1	Handle
580C1-101	1	Switch, Paddle 2 Pole
580C1-102	1	Switch Micro Type 1052
692C2-11	1	Solenoid, 115V 60 Hz
692C2-12	1	Solenoid, 230V 60Hz
692C2-13	1	Solenoid, 110V 50Hz
692C2-14	1	Solenoid, 220V 50Hz
783C1-3	1	Ground Wire Assy
<b>European Plug</b>		
8C13-74	1	Insulation, Terminal Block
29C6-67	1	Adapter Plate
302C15-8	2	Screw, 10-32 x 1-1/8 Fillister Head
301C15-12	2	Screw, 10-32 x 1-1/8 Fillister Head
302C88-1	2	Screw, 4-40 x 3/8 Flat Head
508C1-94	1	Terminal Block, European, (Male Plug)
509C1-59	1	Terminal Block Adapter
523C1-95	1	90 deg Angle Attachment Plug



**Eastman®**

# **Threadmarker**

**Model LTM**

## **Operating Instructions**

### **Care And Operation**

The thread marking machines are intended to be used for marking pockets, etc. on lays of material such as woolens where the electric drilling machines are not practical due to the holes closing immediately after the drill is removed.

### **THREADING THE MACHINE**

Thread from spool through thread eye "C" to the thread hole "D" in the rear of the thread cutter; then to the needle eye "H". Thread needle from the spool side of the machine.

### **OPERATION OF THE MACHINE**

After the material has been cut and marked with chalk, slide the front beveled portion "F" on the threadmarker beneath the lay. Press looper locking latch (located on the opposite side) down to set the looper. The operation of setting the looper must be performed before every needle stroke. Pull handle "B" down until stop "J" makes contact with the threadmarker housing. This action releases the looper contained in the base of the machine. By slowly retracting the needle a loop is formed and caught by the looper. The end of the thread is held firmly by the looper and as the machine is withdrawn from the lay, about 15 to 18 inches of thread should be stripped from the spool and cut off with the thread cutter "E". This operation is continued until all marked positions have been completed. Each layer of cloth is clipped with shears between each layer, the operator leaving about 3/4 to 1 inch of thread in each layer of cloth. If the thread is clipped too short, it may fall out subsequent handling.

### **TO REMOVE NEEDLE**

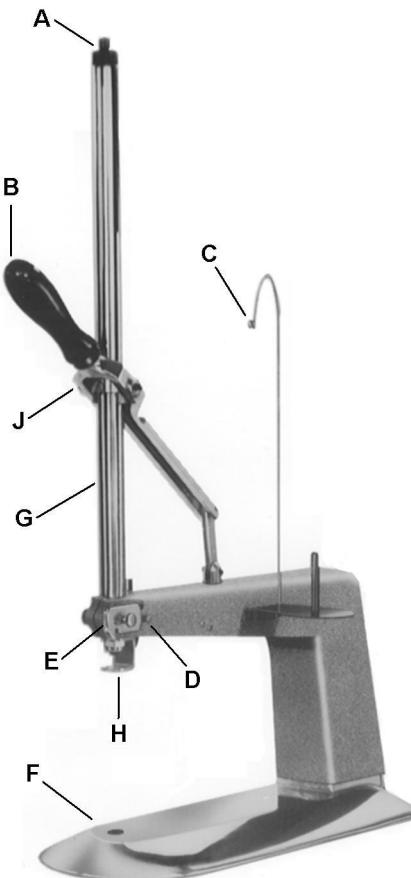
Remove knurled cap "A" from top of machine-turn counterclockwise to remove. Lift needle rod and needle assembly clear from the machine. Loosen bottom setscrew and remove the needle from rod.

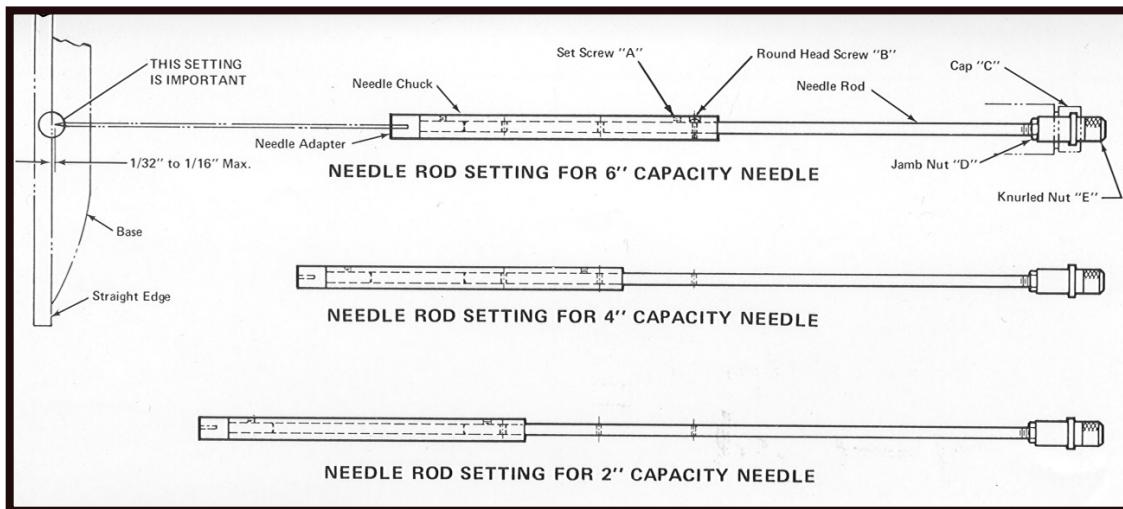
### **OILING**

Oil rod and tube at "G" twice a week.

### **THREAD**

It is suggested that a good grade of button hole gimp be used. It can readily be understood that if thread is too weak, forcing the needle through such a great thickness of material will result in thread breakage.





## SETTING ADJUSTABLE NEEDLE ROD

### TO CHANGE THE SETTING

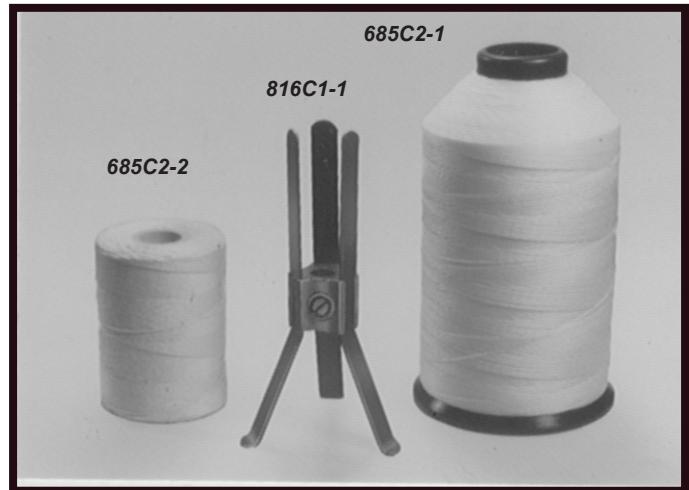
Loosen Allen Setscrew "A" and remove Round Head Screw "B". Then slide the Needle Chuck to the correct new setting for the Needle you wish to install; replace Round Head Screws "B" and tighten Allen Setscrew "A".

### CHECK LENGTH OF NEEDLE AFTER ASSEMBLY IN THREADMARKER

Due to slight variations in lengths of some Needles, it may be necessary to make a finer adjustment of the length of the Needle Rod. Pull Threadmarker Handle down to its lowest position. Hold Handle in this position and tilt Threadmarker back so that a straight edge can be placed across the bottom of Base where Needle extends thru Base. Needle should come within 1/32" to 1/16" of touching straight edge. If adjustment is necessary, remove Cap "C" and remove Needle Rod Assembly. Loosen Jamb Nut "D", turn Knurled Nut "E" to lengthen or shorten as needed. Re-tighten Jamb Nut "D", reassemble Needle Rod in machine and check again.

### WHEN CHANGING TO DIFFERENT DIAMETER NEEDLE

It is necessary to change the Needle Adapter and the Needle Bushing (located in Work Clamp Nut) for best results. See chart below for Part Numbers. NOTE: Needles are plain Needles without brass head.



PART NUMBER	DESCRIPTION
685C2-1	Nylon Thread 8 oz. Spool
685C2-2	Mercerized 20 oz. Spool
816C1-1	Thread Spool Holder for 8 oz. Spool

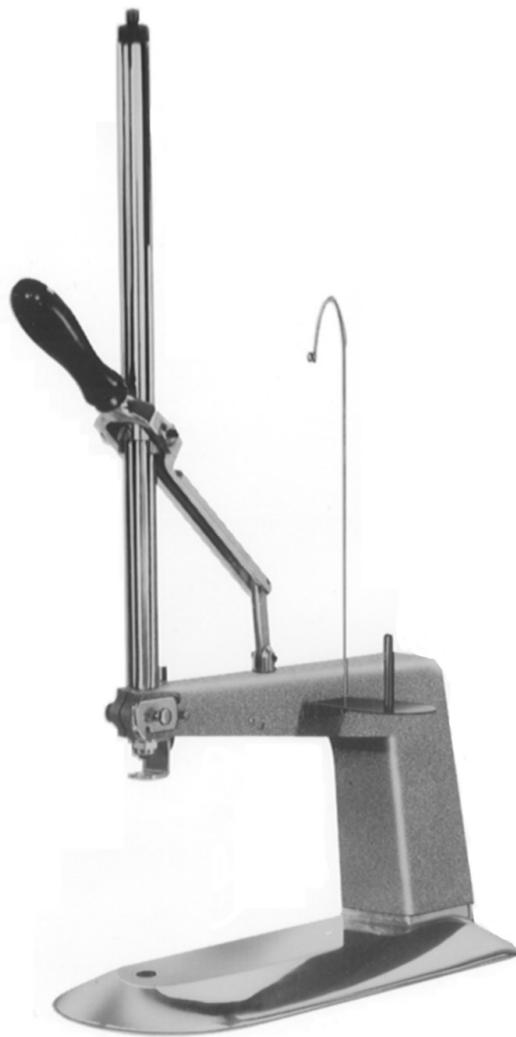
Capacity	Needle	Needle Diameter	Bushing	Adapter	Needle Length	Needle Point
6"	228C1-11	.078	21C13-50	29C6-104	7-7/8	Triangular
2"	228C1-13	.063	21C13-49	29C6-103	3-5/8	Taper
4"	228C1-15	.063	21C13-49	29C6-103	5-13/16	Taper
2"	228C1-16	.052	21C13-48	29C6-102	3-5/8	Taper
6"	228C1-18	.078	21C13-50	29C6-104	7-7/8	Taper

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# Threadmarker

Model LTM

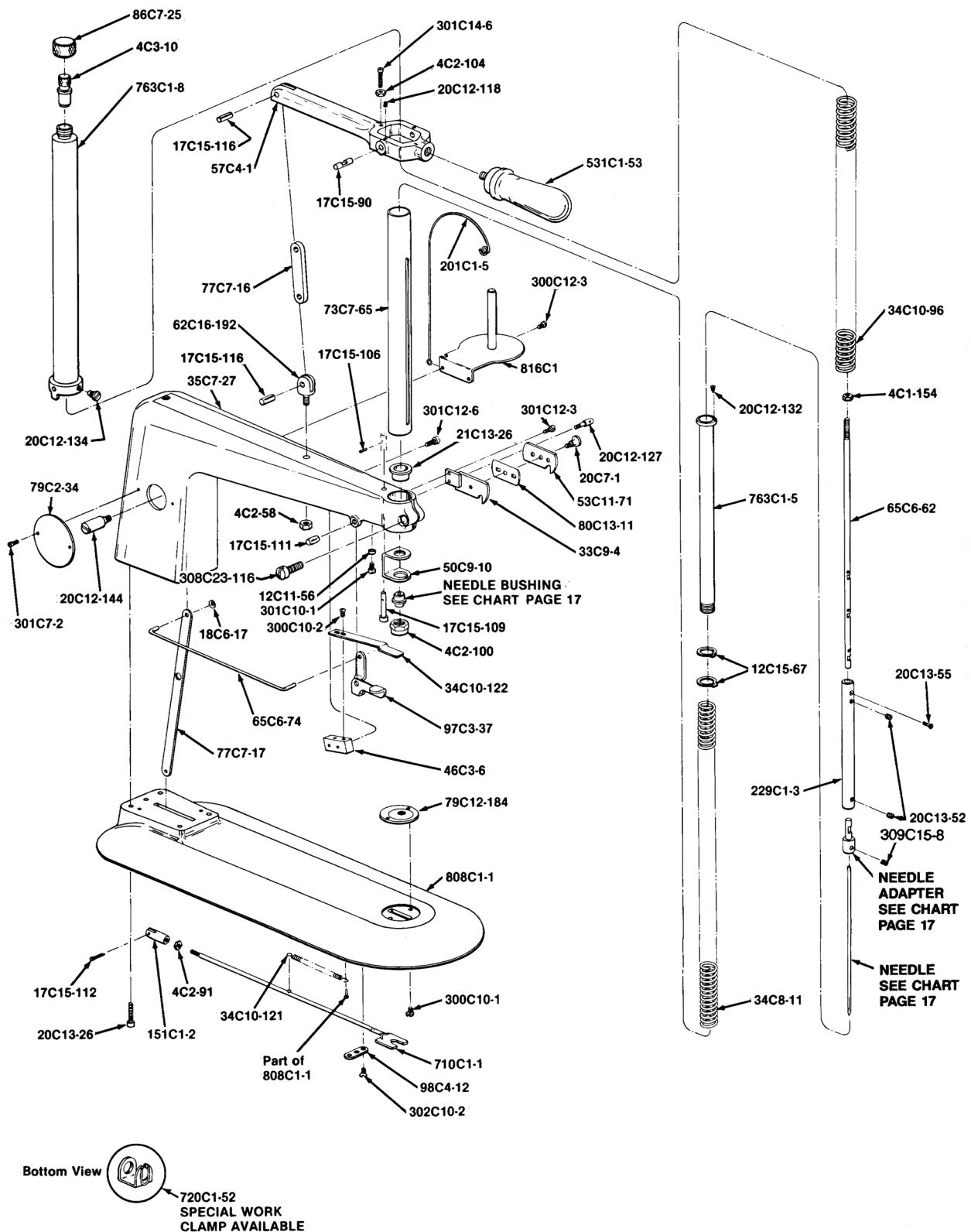
## Illustrated Parts List


**NOTE:**

Please specify model and serial number of machine when ordering parts.

PART NUMBER	No. Req'd	DESCRIPTION
17C15-109	1	Release Pin
17C15-111	1	Looper Locking Latch Pin
17C15-112	1	Cotter Pin
17C15-116	2	Pivot Pin
18C6-17	2	Snap Ring
20C7-1	1	Cover Screw
20C12-118	2	Setscrew 10-32 x 1/4
20C12-127	1	Cutter Holder Thread Guide Screw
20C12-132	1	Work Clamp Locating Screw
20C12-134	1	Handle Lever Tube Lock Screw
20C12-144	1	Looper Link Screw
20C13-26	4	Screw, Socket Hd. Cap 5/16-18 x 1
20C13-52	2	Setcrew 10-32 x 1/8
20C13-55	1	Screw 3-48 x 1 1/2 Round Head
21C13-26	1	Guide Bushing
33C9-4	1	Cutter Holder
34C8-11	1	Work Clamp Spring
34C10-96	1	Needle Lever Spring
34C10-121	1	Looper Spring
34C10-122	1	Looper Latch Spring
35C7-27	1	Thread Marker Arm
46C3-6	1	Spring Block
50C9-10	1	Work Clamp
53C11-71	1	Cutter Holder Cover
57C4-1	1	Handle Lever
62C16-192	1	Hinge Bracket
65C6-62	1	Needle Rod
65C6-74	1	Latch Rod
73C7-65	1	Slotted Steel Tube
77C7-16	1	Arm and Handle Lever Link
77C7-17	1	Looper Link
79C2-34	1	Number Plate
79C12-184	1	Needle Plate
80C13-11	1	Thread Cutter Knife
86C7-25	1	Cap
97C3-37	1	Looper Locking Latch
98C4-12	1	Looper Assembly Clip
151C1-2	1	Link and Looper Coupler
201C1-5	1	Thread Eye
229C1-3	1	Needle Chuck
300C10-1	2	Screw 6-32 x 3/16 Round Head
300C10-2	2	Screw 6-32 x 1/4 Round Head
300C12-3	2	Screw 8-32 x 3/8 Round Head
301C7-2	2	Screw, 4-36 x 3/16 Fillister Head
301C10-1	1	Screw 6-32 x 1/4 Fillister Head
301C12-3	1	Screw 8-32 x 3/8 Fillister Head
301C12-6	2	Screw 8-32 x 3/4 Fillister head
301C14-6	1	Screw 10-24 x 7/8 Fillister Head
302C10-2	2	Screw 6-32 x 1/4 Flat Head
308C23-116	1	Clamp Screw, Arm
309C15-8	1	Setscrew, 10-32 x 1/8
531C1-53	1	Operating Handle
710C1-1	1	Looper Assembly
720C1-52	1	Work Clamp
763C1-5	1	Work Clamp Tube and Head
763C1-8	1	Handle lever Tube Assembly
808C1-1	1	Thread Marker Base
816C1	1	Spool Holding Assembly

PART NUMBER	No. Req'd	DESCRIPTION
4C1-154	1	Needle Rod Jam Nut
4C2-58	1	Nut, Hex 1/4 x 20
4C2-91	1	Nut, Hex 10-32
4C2-100	1	Work Clamp Nut
4C2-104	1	Nut, Hex 10-24
4C3-10	1	Needle Rod Adjustment Nut
12C11-56	1	Washer Spacer
12C15-67	2	Work Clamp Locating Washer
17C15-90	2	Handle Lever Bearing Pin
17C15-106	1	Roll Pin

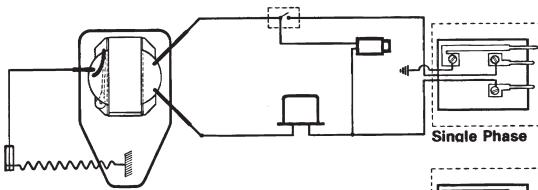
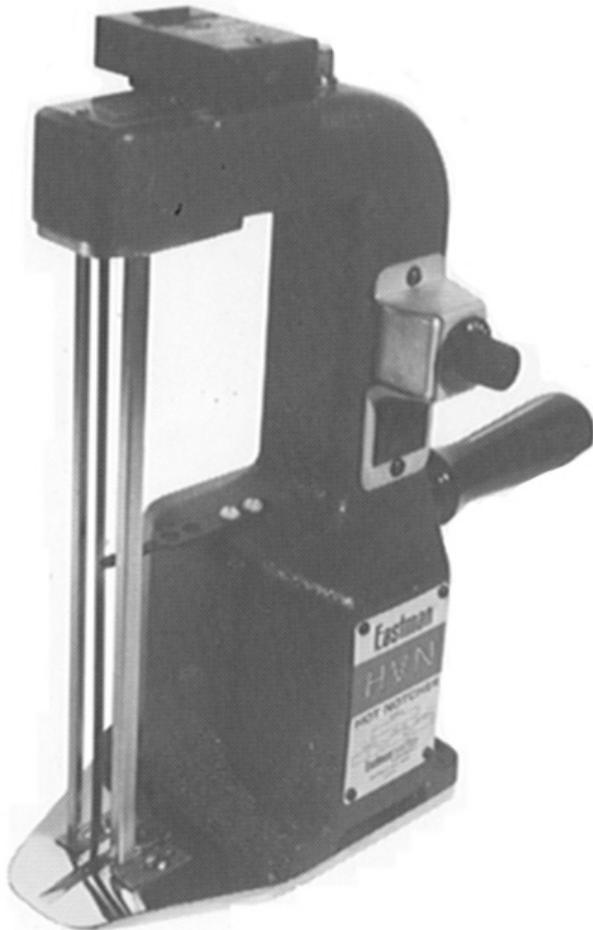


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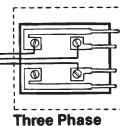
# Hot Notcher

Model HVN

## Illustrated Parts List



WIRING DIAGRAM

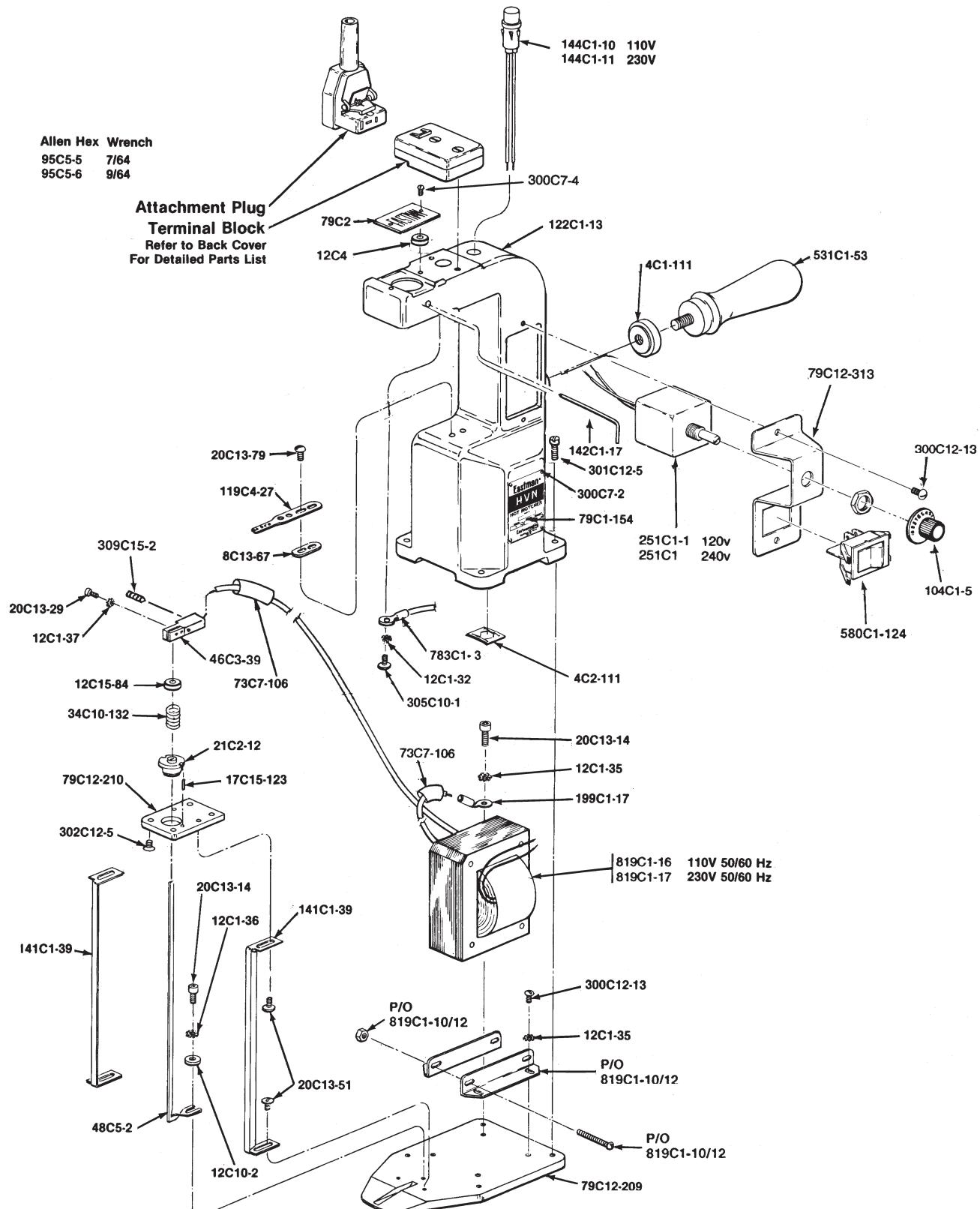


Three Phase

PART NUMBER	No. Req'd	DESCRIPTION
4C1-111	1	Locknut, Handle
4C2-111	1	Nut, Speed
8C13-67	1	Marking Wire Insulation
12C1-32	1	Washer, Lock
12C1-35	4	Washer, Shake Proof
12C1-36	1	Washer, Lock
12C1-37	2	Washer, Lock
12C4	2	Insulation Washer
12C10-2	1	Washer
12C15-84	1	Washer, Guide Spring
17C15-123	1	Pin, Roll
20C13-14	2	Screw, Cap
20C13-29	2	Screw, Cap
20C13-51	4	Screw, Truss Head Stnls
20C13-79	2	Screw, Nylon Round Head
21C2-12	1	Wire Insulation Bushing
34C10-132	1	Wire Straightener Spring
46C3-39	1	Block, Contact
48C5-2	1	Marking Wire
73C7-104	1	Vinylglass Tubing
73C7-106	2	Shrink Tubing
79C1-154	1	Number Plate
79C2	1	Name Plate
79C12-209	1	Base Plate
79C12-210	1	Plate, Gauge Support
79C12-313	1	Plate, Voltage Control
95C5-5	1	Wrench, Allen Hex 7/64
95C5-6	1	Wrench, Allen Hex 9/64
104C1-5	1	Dial Indicator
119C4-27	1	Support, Wire
122C1-13	1	Housing
141C1-39	2	Gauge Bar
142C1-17	1	Hey, Contact Block
144C1-10	1	Lamp, Pilot Lite 120v
144C1-11	1	Lamp, Pilot Lite 240v
199C1-17	1	Lug Cool
251C1	1	Control Heat 230v
251C1-1	1	Control Heat 110v
300C7-2	4	Screw, 4-36 x 3/16 Round Hd.
300C7-4	2	Screw, 4-36 x 5/16 Round Hd.
300C12-13	5	Screw, 8-32 x 5/16 Round Hd.
301C12-5	4	Screw, 8-32 x 5/8 Fillister Hd.
302C12-5	4	Screw, 8-32 x 1/2 Flat Hd.
305C10-1	1	Screw, 6-32 x 1/4 Binding Hd.
309C15-2	2	Setscrew, 10-32 x 1/4
531C1-53	1	Operating Handle, Long
580C1-124	1	Switch
783C1-3	1	Ground Wire Assembly
819C1-10	1	Transformer, 110v 50/60 Hz
819C1-12	1	Transformer, 230v 50/60 Hz

**NOTE:**

Please specify model and serial number of machine when ordering parts.

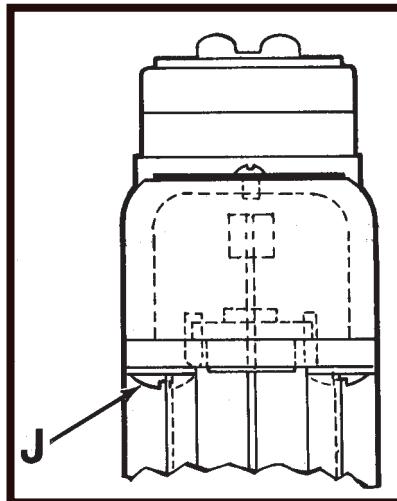
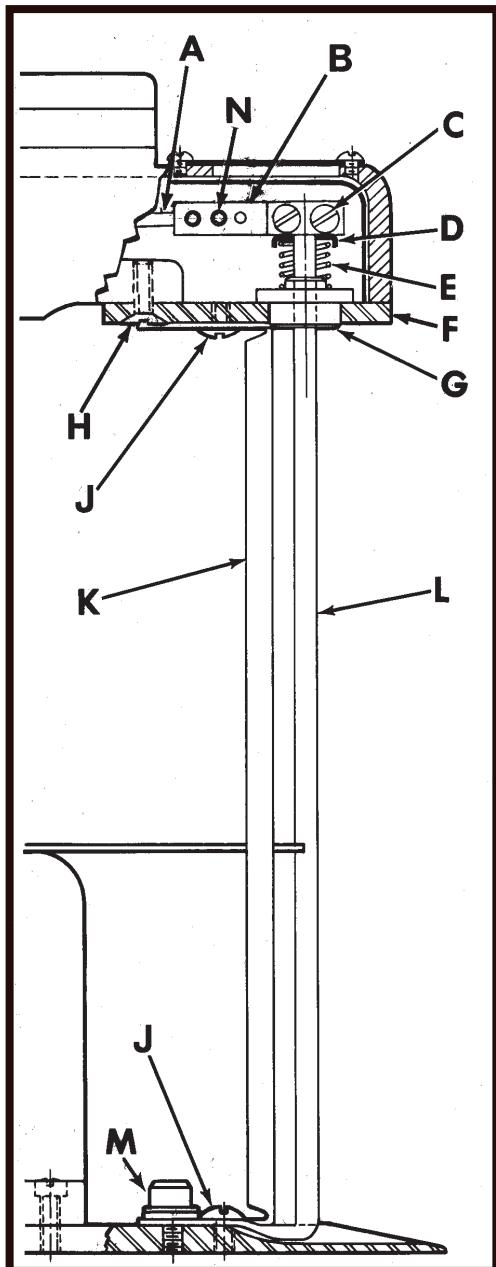


**Eastman®**

# **Hot Notcher**

**Model HVN**

## **Operations Instructions**

**WARNING:**

Before Performing any of the following procedures, make sure that the attachment plug has been disconnected from the power source.

**FOR CHANGING MARKING WIRE**

1. Remove four (4) Screws "J" and two (2) Gauges "K".
2. Remove Screw, Lockwasher and Washer "M".
3. Remove four (4) Screws "H".
4. Carefully remove Support Plate "F" and Marker Assembly from Housing.

NOTE: Transformer Wire "A" still engaged in Block "B" with adequate length for removal.

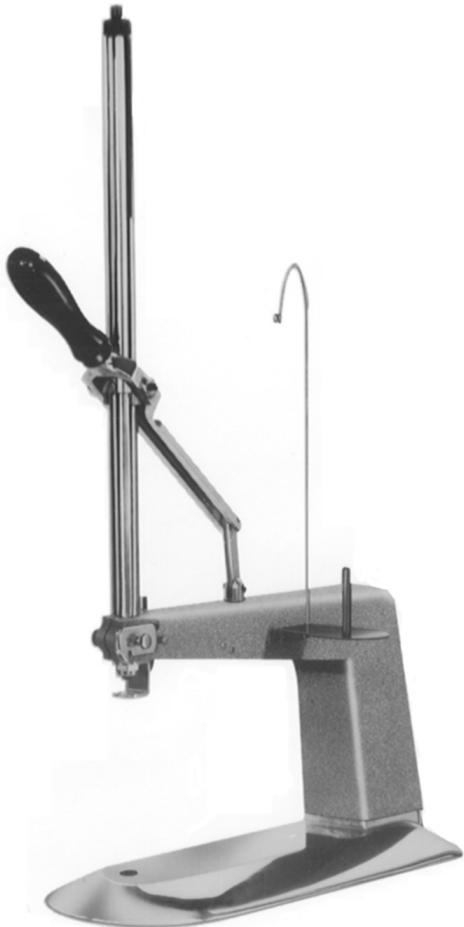
5. Remove two (2) Setscrews "N" from Block "B", so as to disconnect Transformer Wire "A".
6. Loosen two (2) Screws "C" and remove Marker Wire "L" from Block "B", Washer "D", Spring "E" and Bushing "G".
7. Exchange Wire and reverse procedure for completion of assembly.

**TO ADJUST DEPTH OF MARK**

1. Loosen four (4) Screws "J".
2. Adjust two (2) Gauges "K" to correct depth.
3. Check the squareness of Gauges and retighten four (4) Screws "J".

**Limited Warranty.** Eastman warrants to the buyer that the equipment shall be free from defects in materials or workmanship for a period of 180 days commencing on the date of invoice. Any goods or parts claimed by the buyer to be defective must be returned to Eastman, freight charges prepaid, within the 180 day warranty period. If Eastman determines that the goods or parts are defective in materials or workmanship, Eastman's sole obligation under this warranty shall be, at Eastman's sole option, to repair or replace the defective goods or parts or to provide the buyer a credit equal to the portion of the purchase price allocable to the defective goods or parts. This warranty shall not apply if defects are caused by product misuse or neglect, if the machine has been altered or modified by the buyer, or if other than genuine Eastman belts, emery wheels, knives or parts are used in the machine. THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THIS PURCHASE. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**Limitation of Liability.** Eastman's liability to the buyer, and the buyer's remedies from Eastman, whether in contract, negligence, tort, under any warranty or otherwise, shall be limited to the remedies provided in the foregoing Limited Warranty. In no event shall Eastman have any responsibility or liability to the buyer for (a) any special, indirect, incidental, or consequential damages, including, but not limited to, loss of use, revenue, or profit, even if Eastman has been advised of the possibility of such damages, or (b) any claim against the buyer by any third party. The price stated for the product sold is a consideration for limiting Eastman's liability.



#### Thread Marker-Model LTM

The model LTM Thread Marker is ideal for marking applications where a cloth drill is inappropriate. With a marking capacity of 2 inches to 6 inches in tapered or triangular needles, the Thread Marker is the economical alternative to drill marking for low production items. See page 17 for optional equipment information.



#### Cloth Drill Marker- Model CD3, CD3H

Quality engineered for economical operation with all but the heaviest materials. The CD3 and CD3H hot drill are available with all of the features of our top of the line equipment; 4 to 11-1/2 inch telescopic drive shaft, cold or solid state heated drills/awls with hole sizes of 3/64 to 3/8 inch, make this model appropriate for almost all drill marker applications.

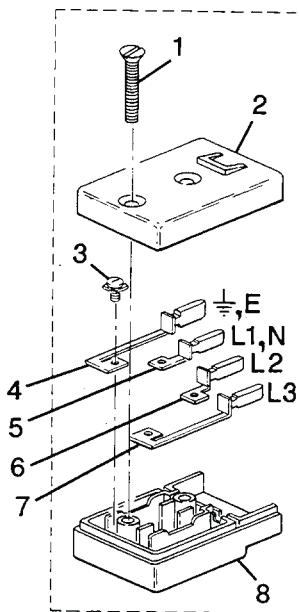
#### Magnum Punch-Model MP2

Capable of creating a pattern through as many as five thicknesses of paper, the Magnum Punch delivers four clean holes per inch and rugged dependability unmatched by its competitors. The Magnum is available with 1/16 inch (1.58 mm) standard and 3/32 inch (2.38 mm), 1/8 inch (3.18 mm) special ordered punches for any requirement. Optional equipment available includes a special hard rubber mat to prolong the life of your punches and your table.

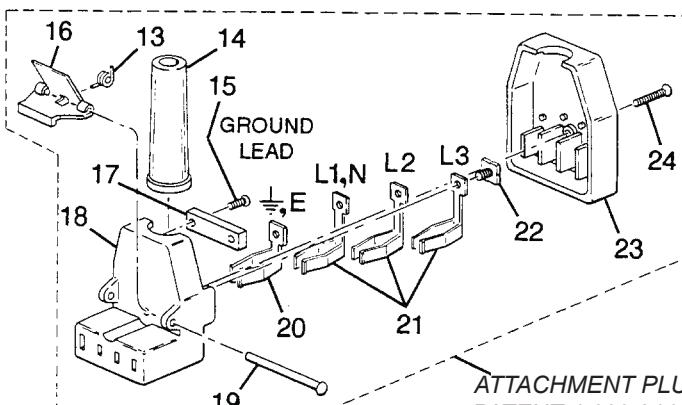
**Eastman®**

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## Electrical Connections



TERMINAL BLOCK  
PATENT 4,609,244  
508C1-100 SHOWN



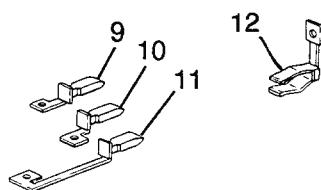
ATTACHMENT PLUG  
PATENT 4,609,244  
523C1-100 SHOWN



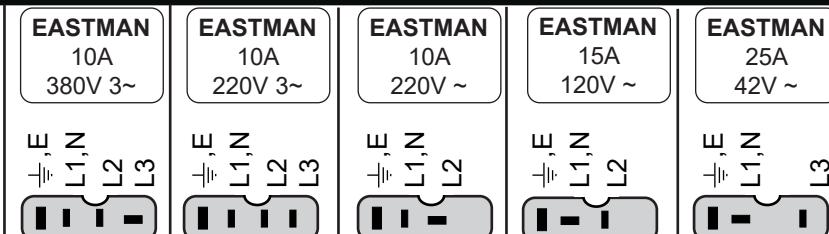
### WARNING

Wiring Instructions  
Eastman  
Attachment Plugs

Electrical connections to this device should be made by a qualified electrician who is familiar with applicable codes and regulations. To ensure operator safety, a ground lead must be connected to terminal "E" on the attachment plug. Disconnect this equipment from electrical power before proceeding with any disassembly for adjustment, inspection or repair.



ITEM	PART NO.	DESCRIPTION
1	302C15-8	Screw, 10-32 x 1 1/8 Flat Hd.
2	-----	Terminal Block Top
3	20C13-103	U-Lock Screw
4	667C1-22	Terminal Contact w/Pin E
5	667C1-23	Terminal Contact w/pin L1, N
6	667C1-24	Terminal Contact w/Pin L2
7	667C1-25	Terminal Contact w/Pin L3
8	51C1-61	Terminal Block Bottom
9	667C1-26	Terminal Contact w/Pin L1, N
10	667C1-27	Terminal Contact w/Pin L2
11	667C1-28	Terminal Contact w/Pin L3
12	47C3-21	Terminal Sleeve (current)
13	34C10-170	Spring
14	1C13-27	Cord Sleeve
15	300C8-2	Screw, 4-40 x 1/2 Round Hd.
16	98C4-37	Thumb Clip
17	50C7-27	Cord Clamp
18	-----	Attachment Plug Body
19	91C4-22	Rivet
20	47C3-19	Terminal Sleeve
21	47C3-20	Terminal Sleeve (current)
22	20C13-103	U-Lock Screw
23	-----	Attachment Plug Cover
24	302C8-8	Screw, 4-40 x 7/8 Flat Hd.
25	-----	Terminal Block Complete
26	-----	Attachment Plug Complete



779 Washington St., Buffalo, N.Y. 14203-1396 U.S.A. • (716) 856-2200 • Fax (716) 856-1140 or (716) 856-2068  
Manufacturers of Eastman Cloth Cutting and Cloth Spreading Machines

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