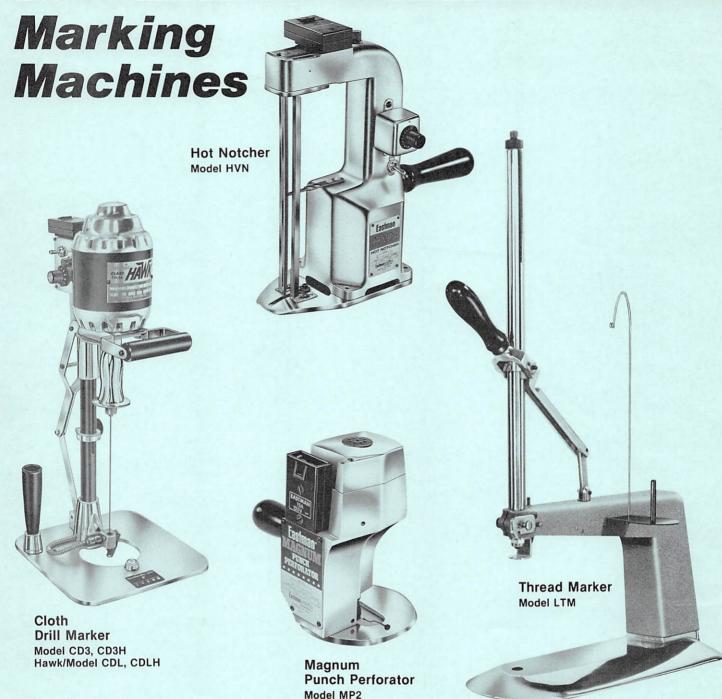


## **INSTRUCTION BOOK AND PARTS LIST**





Eastman Machine Company manufactures a complete line of marking machines, carefully designed to save time and eliminate costly errors. Parts for these machines are readily available and Eastman Marking Machines are serviced by the same sales and service network that has made Eastman Cutting Machines so popular.

HOT NOTCHER—Model HVN—Burns a perfectly true mark in knit goods without costly raveling. No lost marks between cutting and sewing rooms.

CLOTH DRILL MARKERS—Available with or without needle heating attachment, 6, 8 or 11½ inch drilling capacity and drill sizes 3/64 to 3/8 inch diameter. The solid state needle heater heats faster, hotter and holds heat longer...completely enclosed for operator safety.

Model CD3—The Drill Markers low profile design and telescopic drive shaft allow accurate drilling straight down through high layers of all types of material. The powerful motor is built to provide many years of trouble-free operation.

Model CDL—The Hawk is a lever-action cloth drill engineered by Eastman to drill faster and better than any marking machine made. This drill is manufactured for tough, thick cloth like denim, corduroy, cotton duck, broadcloth, canvas and sailcloth.

MAGNUM PUNCH PERFORATOR—The Model MP2 Magnum Punch Perforator makes four crisp, clean holes to an inch through as many as five thicknesses of average weight pattern paper. The punching mechanism is adjustable to accommodate various thicknesses of paper. This powerful machine never misses one of the punches. A single control lets the operator free-wheel or single perforate.

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 in the goods slowly—Do not force the drill thru the goods with too much pressure as this will cause the drill to burn and possibly bend and snap off.

#### 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

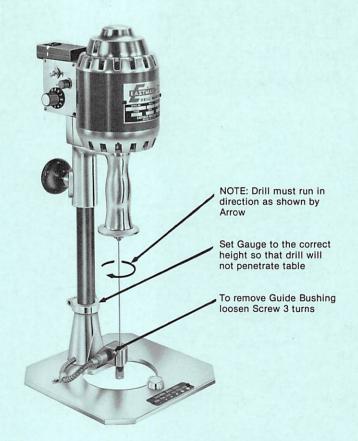
Lay Drill Marker on its side, use Chuck Key to loosen drill. Remove old drill from Chuck and pull down and thru Drill Guide Bushing. Insert new Drill thru lower Drill Guide Bushing and up into Chuck. Tighten Drill using Chuck Key.

NOTE:

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

21C13-59

21C13-59



### **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.

Drills and Awls for 4" Drills, actually measure  $5\frac{1}{2}$ " Long.

Drills and Awls for 6" Drills, actually measure 71/2" Long.

Drills and Awls for 8" Drills, actually measure 10" Long.

Drills and Awls for 111/2 " Drills, actually measure 131/2 " 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	Drill	•	•	•	•	•	•	•		
Diamond Point	4" 6" 8" 11½"	231C1 231C1-6	231C1-1 231C1-7 231C1-12	231C1-2 231C1-8 231C1-13	231C1-3 231C1-9 231C1-14	231C1-4 231C1-10	Ē	Ξ	=	=
Faper Point	4" 6" 8" 11½"	231C2-1 231C2-7 —	231C2-2 231C2-8 231C2-19	231C2-3 231C2-10 231C2-20 231C2-27	231C2-4 231C2-12 231C2-21 231C2-26	231C2-5 231C2-13 231C2-24 231C2-28		=	=	
Open End Awl	4" 6" 8" 11½"		231C3 231C3-18 231C3-19	231C3-1 231C3-11 231C3-20 231C3-25	231C3-2 231C3-12 231C3-21 231C3-27	231C3-3 231C3-13 231C3-24 231C3-28	231C3-4 231C3-14 —	231C3-5 231C3-15 —	231C3-10 231C3-16 —	231C3-7 — —
Closed End Awl	4" 6" 8" 11½"			231C4 231C4-5 231C4-15 231C4-17	231C4-1 231C4-6 231C4-10 231C4-18	231C4-2 231C4-7 231C4-11 231C4-19	231C4-3 231C4-8 231C4-12	231C4-9 —	= =	=
ILL GUIDE BUSHI Cold Drill Bushing Hot Drill Bushing	NGS SEL	21C13-40 21C13-51	ABLE 21C13-36 21C13-52	21C13-34 21C13-53	21C13-35 21C13-54	21C13-37 21C13-55	21C13-38 21C13-56	21C13-42	21C13-41	21C13-4

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

\*Multiple Size Bushing

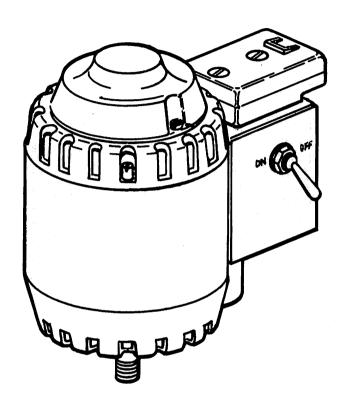


21C13-59

21C13-63

21C13-59

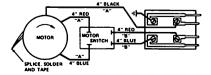
Model CD3, CD3H, CDL, and CDLH



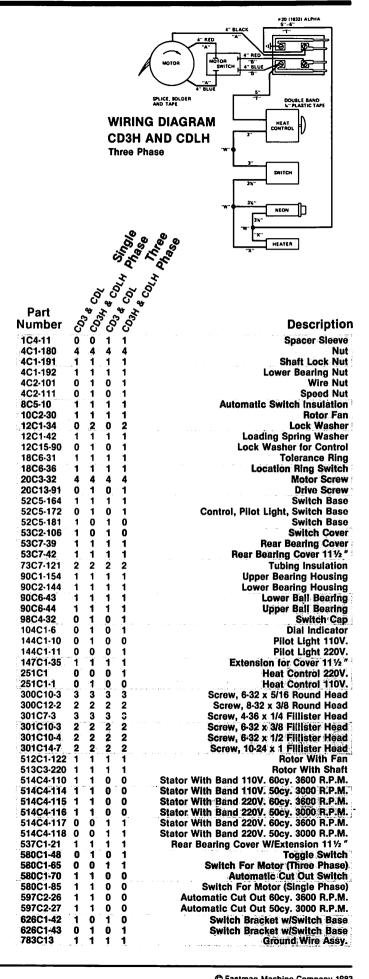
### **Motor Assemblies**

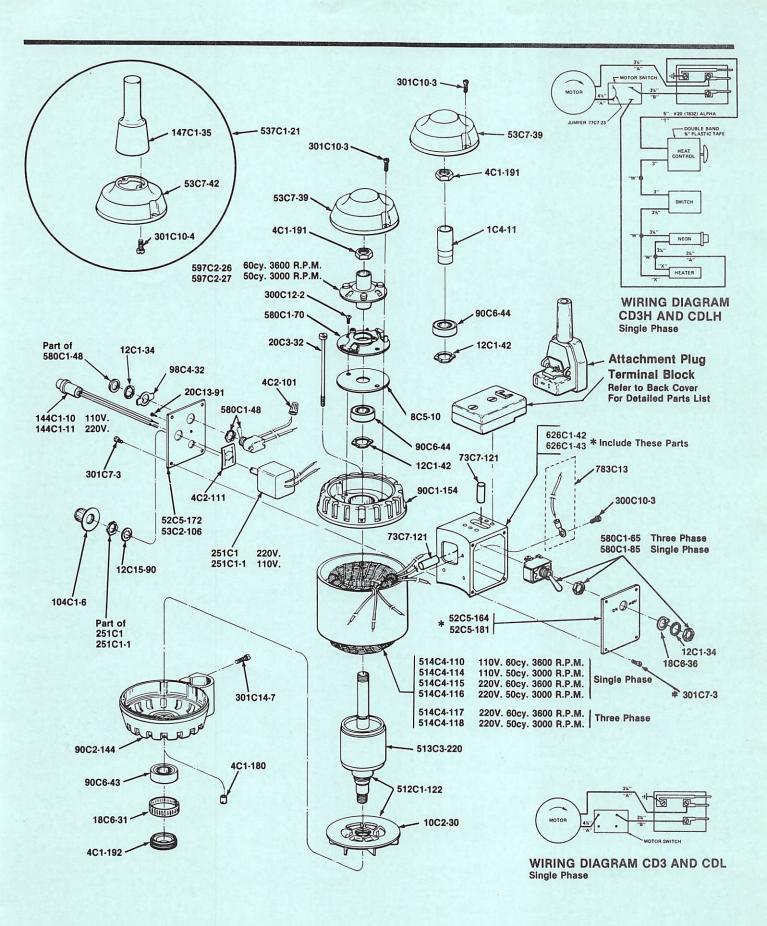
NOTE:

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



WIRING DIAGRAM CD3 AND CDL Three Phase





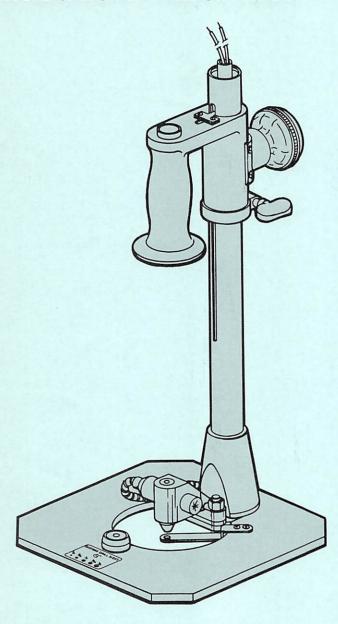
CONVERSION KITS—Change 6" CD3 to CD3H and 6" CDL to CDLH

Part No. 820C1-9 110V. 60 cy. Single Phase 820C1-10 220V. 60 cy. Three Phase



Model CD3 and CD3H

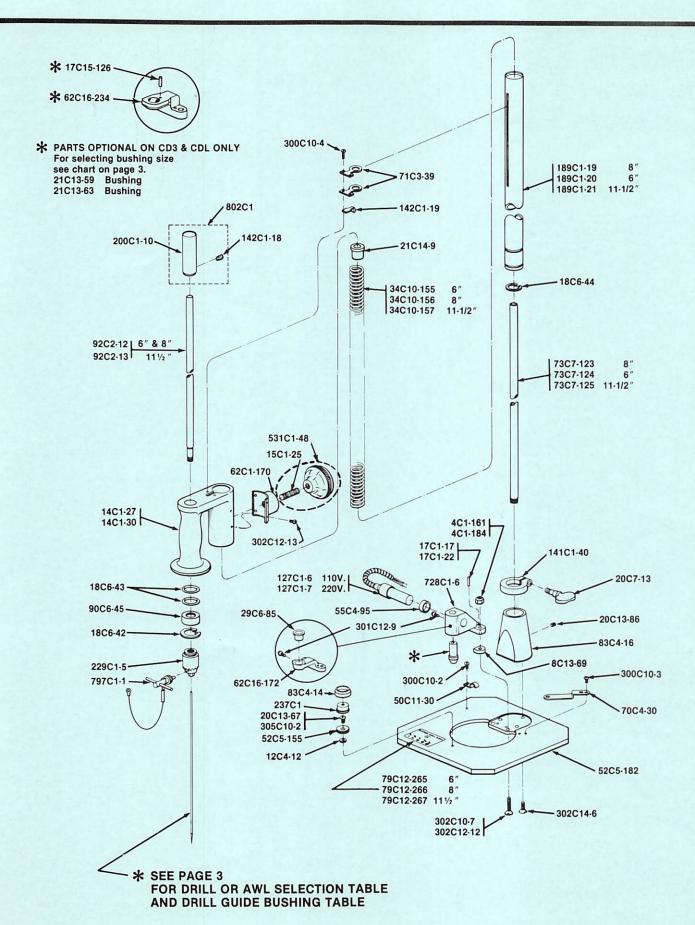
### **Illustrated Parts List**



# Standard, and Base Plate Assembly

NOTE:

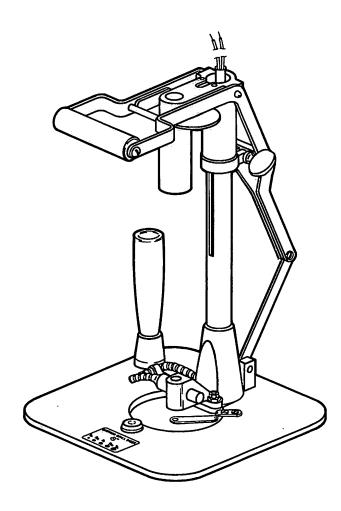
Part Number	Ne	- 000	Description
	S	7600	
4C1-161	2	0	Flex Nut
4C1-184 8C13-69	0	2 2	Stop Nut Heat Insulator
12C4-12	ō	1	Nylon Washer
14C1-27	1	1	Handle Grip
14C1-30 15C1-25	1	1	Handle Grip Machine Handle Stud
17C1-17	2	0	Dowel Pin
17C1-22	0	2	Dowel Pin
17C15-126 18C6-42	1	1	Dowel Pin Retaining Ring
18C6-42	2	2	Rubber "O" Ring
18C6-44	1	1	Retaining Ring
2007-13	1	1	Thumb Screw Screw, 6-32 x 5/16 Round Head Nylon
20C13-67 20C13-86	2	2	Set Screw
21C14-9	1	1	Bushing For Spring
29C6-85	1	0	Adaptor For Bushing
34C10-155 34C10-156	1	1	Spring For 6" Post Spring For 8" Post
34C10-157	1	1	Spring For 11-1/2" Post
50C11-30	0	1	Cable Clamp Level Base
52C5-155 52C5-182	1	1	Base Plate
55C4-95	0	1	Spacer For Heating Element
62C1-170	1	1	Handle Bracket Lower Guide Bracket
62C16-172 62C16-234	1	0	Lower Guide Bracket
70C4-30	1	1	Locator Guide
71C3-39	2	2	Spring Retainer
73C7-123 73C7-124	0	1	8" Tube For Lead Wire 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 79C12-267	1	1	8" Drill Size Decal
83C4-14	1	1	Level Flange
83C4-16	1	1	Flange For Post
90C6-45 92C2-12	1	1	Spindle Ball Bearing Spindle 6" and 8"
92C2-13	1	1	Spindle 11-1/2"
127C1-6	0	1	Heat Element 110V.
127C1-7 141C1-40	0	1	Heat Element 220V. Gauge
142C1-18	1	1	Key For Driver
142C1-19	1	1	Key For Handle
189C1-19 189C1-20	1	1	8" Post 6" Post
189C1-21	1	1	11-1/2" Post
200C1-10	1	1	Driver Only
229C1-5 237C1	1	1	Chuck Bullseye Vial
300C10-2	o	1	Screw, 6-32 x 1/4 Round Head
300C10-3	3	3	Screw, 6-32 x 5/16 Round Head
300C10-4 301C12-9	2	2	Screw, 6-32 x 3/8 Round Head Screw, 8-32 x 1/4 Fillister Hd. (Stainless Steel)
302C12-13	4	4	Screw, 8-32 x 3/8 Flat Head
302C10-7 302C12-12	0	0	Screw, 6-32 x 5/8 Flat Head
302C12-12 302C14-6	3	3	Screw, 8-32 x 1 Flat Head Screw, 10-24 x 5/16 Flat Head
305C10-2	1	1	Screw No. 6 x 1/4 Phillips;
531C1-48	1	1	Self Tapping, Binding Hd. Machine Handle
728C1-46	0	1	Guide Heat Bracket
797C1-1	1	1	Key for Chuck and Holder
802C1	1	1	Driver With Key





Model CDL and CDLH

Illustrated Parts List

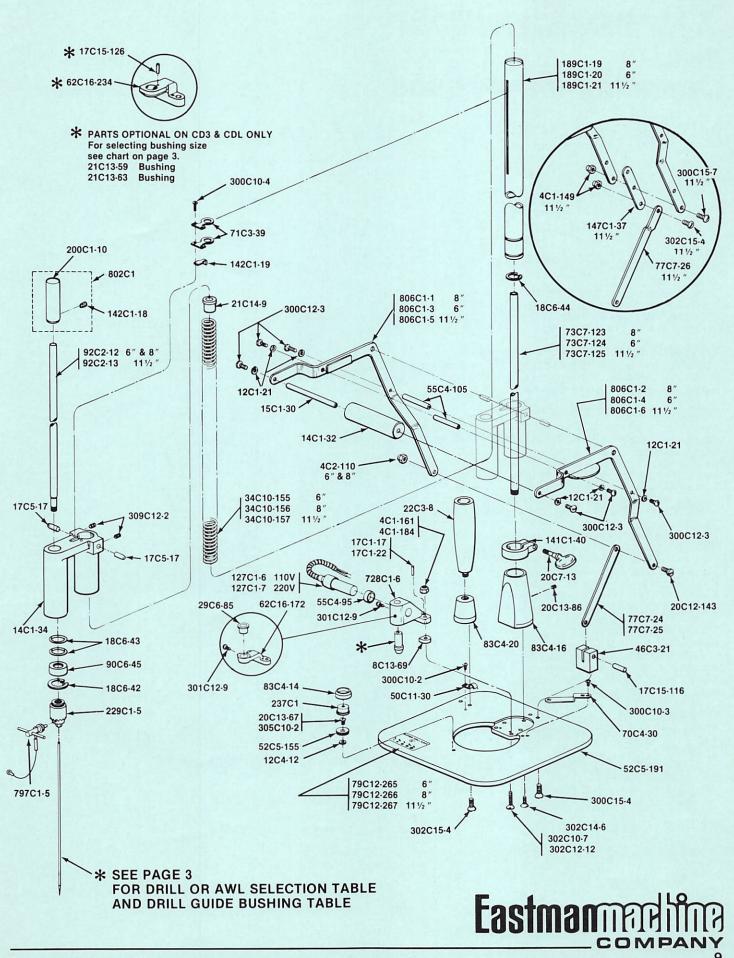


### Standard, and Base Plate Assembly

NOTE:

Part Number	No. Req'd.	Description
	<i>8</i> 8	
	0 0	
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
12C4-12	0 1	Nylon Washer
14C1-32	i i	Operating Handle
14C1-34	4.4.	Handle Grip w/Lugs

Part Number	No. Req'd.	Descriptio
	70,00	
15C1-30	1 1	Stud For Handle
17C1-17	iò	Dowel Pin
17C1-22	0 1	Dowel Pin Plyot Point
17C5-17 17C15-116	2 2	Roll Pin
17C15-126	1 1	Dowel Pin
18C6-42 18C6-43	1 1 2 2	Retaining Ring Rubber "O" Ring
18C6-44	īī	Retaining Ring
20C7-13	1 1	Thumb Screw Pivot Screw 6" & 8" Drills
20C12-143 20C13-67	1 1	Screw, 6-32 x 5/16 Round Head Nylon
20C13-86	2 2	Set Screw
21C14-9 22C3-8	1 1	Bushing For Spring Tapered Handle
29C6-85	i 0	Adaptor For Bushing
34C10-155	1.1	Spring 6" Drill
34C10-156 34C10-157	1 1	Spring 8" Drill Spring 11½" Drill
46C3-21	1 1	Block For Link
50C11-30 52C5-155	0 1 1 1	Cable Clamp Level Base
52C5-185 52C5-191	11	Base
55C4-95	0 1	Spacer For Heating Element
55C4-105 62C16-172	2 2 1 0	Spacer Lever Handle Lower Guide Bracket
62C16-234	1 0	Lower Guide Bracket
70C4-30 71C3-39	1 1 2 2	Locator Guide Spring Retainer
73C7-123	1 1	8" Tube For Lead Wire
73C7-124	1 1	6" Tube For Lead Wire
73C7-125 77C7-24	1 1	8" Link
77C7-25	1 1	6" Link
77C7-26 79C12-265	1 1	11½″ Link 6″ Drill-Size Decal
79C12-266	1 1	8" Drill Size Deca
79C12-267 83C4-14	1 1	11½ " Drill Size Decal Level Flange
83C4-16	ii	Flange For Post
83C4-20	1 1	Flange For Handle
90C6-45 92C2-12	1 1	Spring Ball Bearing 6" & 8"—Spindle
92C2-13	1 1	11½ "—Spindle
127C1-6 127C1-7	0 1 0 1	110V Heating Element 220V Heating Element
141C1-40	1 1	Gauge
142C1-18	1 1	Key For Drive
142C1-19 147C1-37	1 1	Key For Handle 11½ " Extension For Handle Level
189C1-19	1 1	8" Post
189C1-20 189C1-21	1 1	6" Posi 11½ " Posi
200C1-10	i i	Driver Only
229C1-5	1 1	Chuck Bullseye Via
237C1 300C10-2	1 1	Screw, 6-32 x 1/4 Round Head
300C10-3	3 3	Screw, 6-32 x 5/16 Round Head
300C10-4 300C12-3	2 2 6 6	Screw, 6-32 x 3/8 Round Head Screw, 8-32 x 3/8 Round Head
300C15-4	1 1	Screw, 10-32 x 1/2 Round Head 111/2 " Only
300C15-7 301C12-9	2 2 1 1	Screw, 10-32 x 5/8 Round Head Screw, 8-32 x 9/16 Fillister Head (Stainless Steel)
302C10-7	2 2	Screw 6-32 x 5/8 Flat Head
302C12-12	2 2	Screw, 8-32 x 1" Flat Head Screw, 10-32 x 5/16 Flat Head
302C14-6 302C15-4	3 3	Screw, 10-24 x 5/8 Flat Head
305C10-2	1 1	Screw No. 6 x 1/4 Phillips
309C12-2 728C1-6	2 2	Screw, 8-32 x 5/16 Socket Set Screw Gulde Heat Bracket
797C1-1	1 1	Key for Chuck and Holde
802C1 806C1-1	1 1	Driver with Key L.H. Handle Lever Assembly 8" Dril
806C1-1	11	R.H. Handle Lever Assembly 8" Drii
806C1-3	1 1	L.H. Handle Lever Assembly 6" Dril
808C1-4 806C1-5	1 1	R.H. Handle Lever Assembly 6" Dril L.H. Handle Lever Assembly 111/2" Dril
808C1-6	1 1	R.H. Handle Lever Assembly 111/2" Dril



## **Threadmarker**

Model LTM

### **Operating Instructions**

### **Care And Operation**

The threadmarking machines are intended to be used for marking pockets, etc., on lays of material such as woolens where the electric drilling machines are not practicable 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**

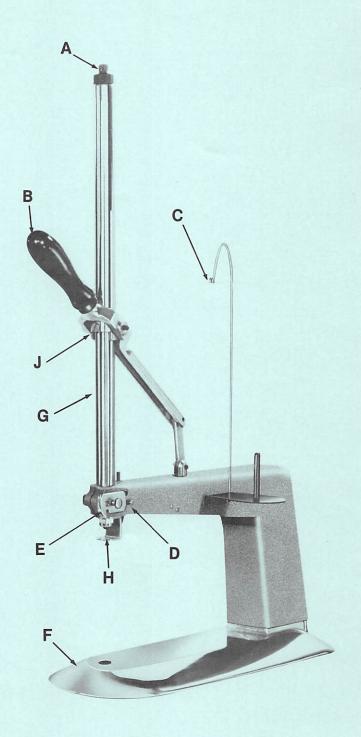
After the material has been cut and marked with chalk, slide the front beveled portion "F" on the threadmarker beneath the lay. Press looper locking latch (located on opposite side) down to set the looper. The operation of setting the looper must be performed before every needle stroke. Pull handle "B" 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 fifteen to eighteen 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 34 to 1 inch of thread in each layer of cloth. If the thread is clipped too short, it may fall out in subsequent handling.

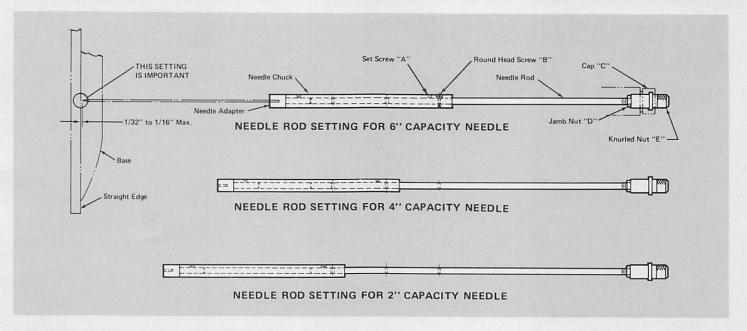
#### TO REMOVE NEEDLE

Remove knurled cap "A" from top of machine-turn counterclockwise to remove. Lift needle rod and needle assembly clear from the machine. Loosen bottom set screw and remove the needle from rod. When replacing needle and re-assembling needle rod in machine, refer to instruction sheet #672C1-110.

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

It is suggested that a good grade of button hole gimp be used. It can readily be understood that, if the 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 Set Screw "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 Screw "B" and tighten Allen Set Screw "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.

### Thread for Threadmarker



Part Number		Description
685C2-1		Nylon Thread 8 oz. Spool
685C2-2		Mercerized 2 oz. Spool
685C2-3	Not Shown	Glo-Notch Thread
816C1-1		Thread Spool Holder for 8 oz. Spool

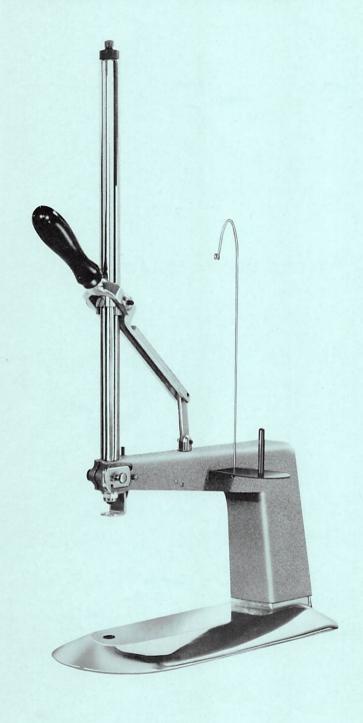
Capacity	Needle	Needle Diameter	Bushing	Adapter	Needle Length	Needle Point
6"	228C1-11	.078	21C13-50	29C6-104	7-7/8	Triangular
2"	228C1-13	.063	21C13-49	29C6-103	3-5/8	Taper
4"	228C1-15	.063	21C13-49	29C6-103	5-13/16	Taper
2"	228C1-16	.052	21C13-48	29C6-102	3-5/8	Taper
6"	228C1-18	.078	21C13-50	29C6-104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



## **Threadmarker**

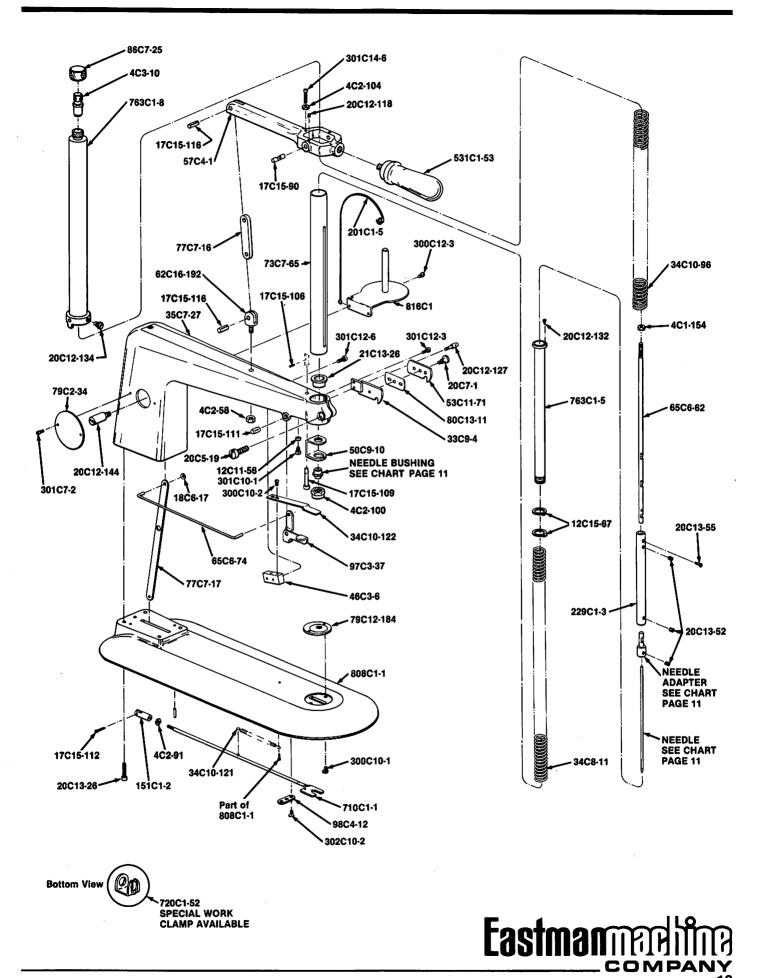
Model LTM

Illustrated Parts List



NOTE

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 Adjusting Nut
12C11-56 12C15-67	1 2	Washer Spacer Work Clamp Locating Washer
17C15-90	2	Handle Lever Bearing Pin
17C15-106	1	Roll Pin
17C15-109	1	Release Pin
17C15-111	1	Looper Locking Latch Pin
17C15-112	1	Cotter Pin
17C15-116	2 2	Pivot Pin
18C6-17 20C5-19	1	Snap Ring Clamp Screw, Arm
20C7-1		Cover Screw
20C12-118	2	Screw, Allen Set 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 Looper Link Screw
20C12-144 20C13-26	1 4	Screw, Socket Hd. Cap 5/16-18 x 1
20C13-20	3	Screw, Allen Set 10-32 x 1/8
20C13-55	1	Screw, 3-48 x 1/2 Round Head
21C13-26	1	Guide Bushing
33C9-4	1	Cutter Holder
34C8-11	1	Work Clamp Spring
34C10-96 34C10-121	1	Needle Lever Tube Spring Looper Spring
34C10-122	i	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 62C16-192	1	Handle Lever 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 Number Plate
79C2-34 79C12-184	1	Needle Plate
80C13-11	1	Thread Cutter Knife
86C7-25	1	Сар
97C3-37	1	Looper Locking Latch
98C4-12	1	Looper Assembly Clip
151C1-2 201C1-5	1	Link and Looper Coupling 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 301C12-3	1	Screw, 6-32 x 1/4 Fillister Head Screw, 8-32 x 3/8 Fillister Head
301C12-5	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
531C1-53	1	Operating Handle
710C1-1 720C1-52	1	Looper Assembly Work Clamp
763C1-52	1	Work Clamp Tube and Head
763C1-8	i	Handle Lever Tube Assembly
808C1-1	1	Thread Marker Base
816C1	1	Spool Holding Assembly



## Magnum Punch Perforator

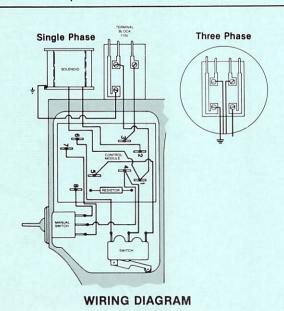
Model MP2

Illustrated Parts List



NOTE:

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



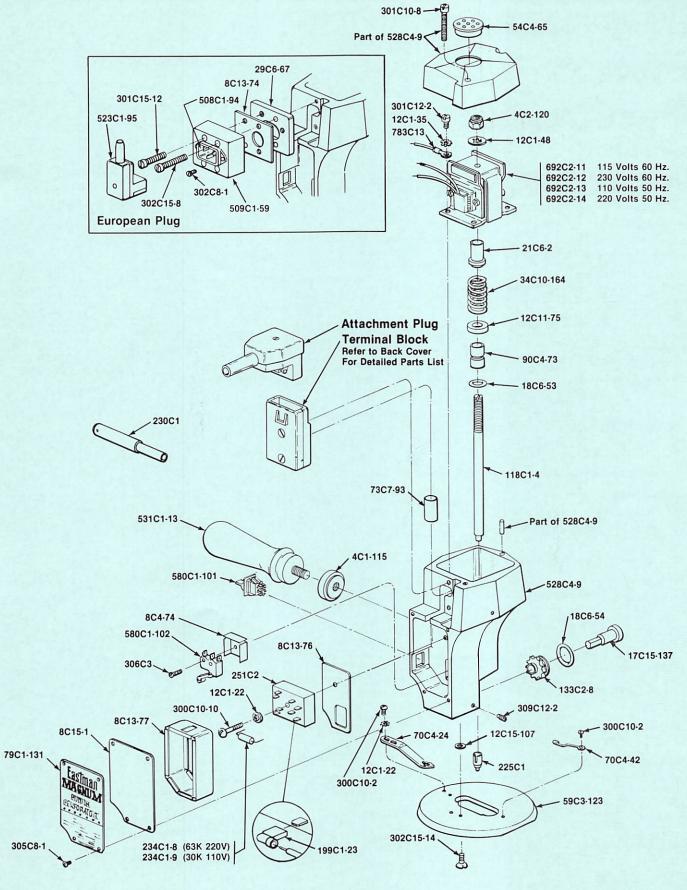
Part	No.	
Number	Req'd.	Description
4C1-115	1	Locknut Handle
4C2-120	1	Nut, Elastic Stop, Hex. 5/16 x 24
8C4-74		Switch Insulation
8C13-76	1	Housing Insulation Housing Insulation
8C13-77 8C15-1		Cover Insulation
12C1-22	3	Lockwasher, Ext. Tooth #6
12C1-35	4	Lockwasher, Ext. Tooth #8
12C1-48	1	Lockwasher Int. Tooth 5/16
12C11-75	1	Spring Washer
12C15-107	2 (Optional)	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 Shoulder Bushing
21C6-2 34C10-164	1	Spring
54C4-65	1	Vent Plug
59C3-123		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 Punch 1/16 dia.
225C1 230C1		Drift Punch
234C1-8		Resistor (63K 220V)
234C1-9	1	Resistor (30K 110V)
251C2	1	Control Module
300C10-2	3	Screw 6-32 x 1/4 Round Hd.
301C10-8	1	Screw, 6-32 x 1-1/4 Fillister Hd.
300C10-10	1	Screw 6-32 x 1 Round Hd.
301C12-2	4	Set Screw 8-32 x 5/16 Fillister Hd.
302C15-14	2	Screw 10-32 x 7/16 Flat Hd.
305C8-1 306C3	4 2	Screw 4-40 x 1/4 Binding Hd. Screw 2-56 x 3/8 Pan Hd.
309C12-2	1	Set Screw 8-32 x 5/16 Flat Point
528C4-9	ALCOHOLD STREET	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 115 Volts 60 Hz.
692C2-12	1	Solenoid 230 Volts 60 Hz.
692C2-13	1	Solenoid 110 Volts 50 Hz.
692C2-14	1	Solenoid 220 Volts 50 Hz.
783C13	1	Ground Wire Assy.
European	Plug	
8C13-74	1	Insulation, Terminal Block
29C6-67	1	Adapter Plate
302C15-8	2	Screw 10-32 x 1-3/8 Fillister Hd.
301C15-12	2	Screw 10-32 x 1-1/8 Fillister Hd.
302C8-1	2	Screw 4-40 x 3/8 Flat Hd.

Terminal Block European (Male Plug)

Terminal Block Adapter

90° Angle Attachment Plug

302C8-1 508C1-94 509C1-59 523C1-95



## Magnum Punch Perforator

Model MP2

### **Operating Instructions**

#### **PREPARATION**

Select the proper pattern paper. We recommend 40 to 50 pound kraft paper measuring .005' to .006' thick. If thicker paper is to be used, the Perforator will have to be adjusted for increased power—see Power Adjustment below.

Do not use oiled paper, as it will clog the punch and the perforating powder will stick to the paper and eventually close up the perforated holes.

To prepare the operating surface for perforating, we recommend Rubber Pad (191C1-36) placed on a solid, perfectly flat and smooth table top. Replace the Rubber Pad periodically to insure a clear surface for clean cut perforations.

WARNING:

Before operating your Perforator, make sure that your electrical current is the same as indicated on the perforating machine. Disconnect from power source before servicing.

#### **OPERATION**

Your Perforator is ready to go as soon as you connect the attachment plug; it does not have an "on—off" switch. It will start perforating instantly as you move it forward or backward over the table top.

To push the Perforator into position to start perforating, press the Free-Wheeling Lever "D" up with your index finger. To start perforating, push the same Lever "D" downward with

To start perforating, push the same Lever "D" downward with your index finger and release it. This action will cause the Perforator to make a single punch, or a starting point.

After making the initial punch, push the Perforator forward or backward along the line to be perforated as required. Use the Line Guide "E" to follow the line.

After the pattern has been completely perforated and readied for use by checking to insure that all the perforations are clear, place it on top of the material to be marked and use weights on top of the pattern to prevent it from shifting. Then, using the Pattern Duster, dust the pattern lightly with Pattern Powder. This will leave a line on top of the material ready to be cut. Do not over-dust the pattern, as this will distort the cutting line and make it difficult to follow when cutting.

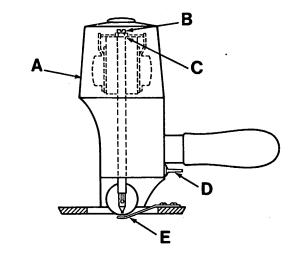
#### REPLACING PUNCHES

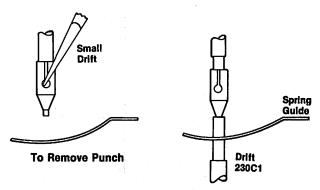
Your Perforator will make four perforations to the inch. There are various size Punches available for different operations. 1/16" diameter Punch is the standard size furnished with your machine, but 3/32" diameter, Pin Point, and Dash or Spade Punches are available on special order.

To remove a Punch, insert a small Drift in the hole in the Punch, as shown, and tap the Drift lightly until it comes loose.

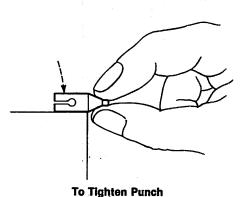
To install a new Punch, place the Punch on the end of the Plunger Shaft, and place Drift (230C1) over the tip of the Punch. Then gently tap the Drift to seat the Punch on the Plunger Shaft.

If the Punch becomes loose on the Plunger Shaft, remove the Punch and tap it lightly on the side, as shown, to reduce its size and cause it to fit more tightly on the Plunger Shaft.





To Reassemble Punch



#### **POWER ADJUSTMENT**

To increase or decrease power—remove from power source. Remove Machine Cover A. Hold Plunger Shaft B with screwdriver and loosen Nut C. Turn Shaft B clockwise to increase punch power—counterclockwise to decrease power. Tighten Locknut securely and check that required punching depth has been obtained. Replace cover.

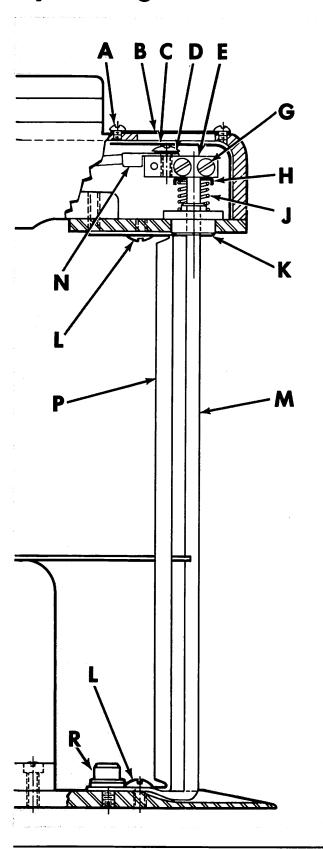
### **OPTIONAL SUPPLIES**

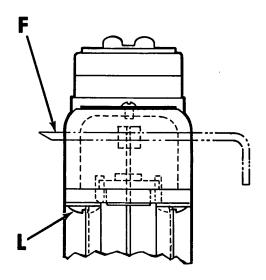
- 1 Pattern Duster
- 2 Marking Powder—available in 5 lb. cans or 50 lb. drums in white, red, blue, yellow and black.
- 3 25 Ft. Cord—with attachment plug and male connection.

## Hot Notcher

Model HVN

### **Operating Instructions**





**WARNING:** 

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

### THIS APPLIES TO SERIAL #253 AND ABOVE

### FOR CHANGING MARKING WIRE

- 1 Remove two (2) Screws—"A".
- 2 Remove Name Plate—"B".
- 3 Remove Insulation—"C".
- 4 Loosen Screw-"R".
- 5 Disengage Wire "M" from Screw "R".
- 6 Insert Key "F" thru hole in Housing and hole in Block "E". This is to prevent the twisting of the Marking Wire.
- 7 Remove Screw "D" from Block "E", so as to disconnect Wire with Lug "N".
- 8 Remove Key "F" and lift Marking Wire Assembly out of Housing.
- 9 Loosen Screws "G" and remove Wire "M" from Block "E", Washer "H", Spring "J" and Bushing "K".
- 10 Exchange Wire and reverse procedure to completion of assembly.

### TO ADJUST DEPTH OF MARK

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

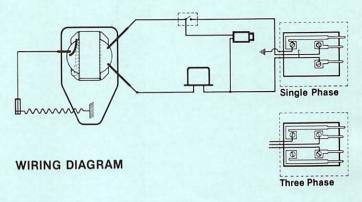


## **Hot Notcher**

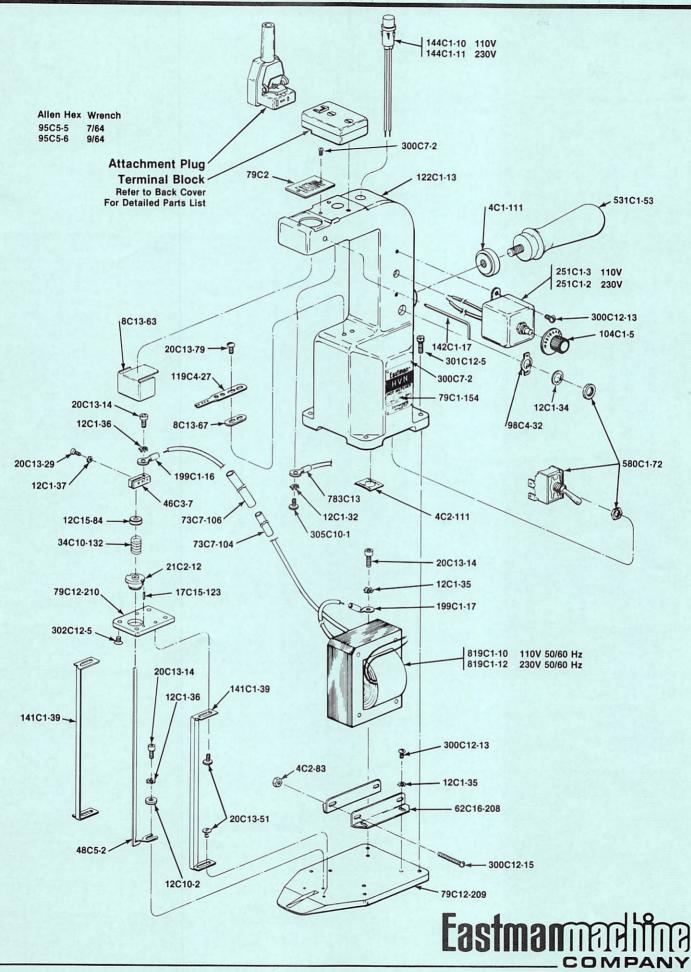
Model HVN
Illustrated Parts List

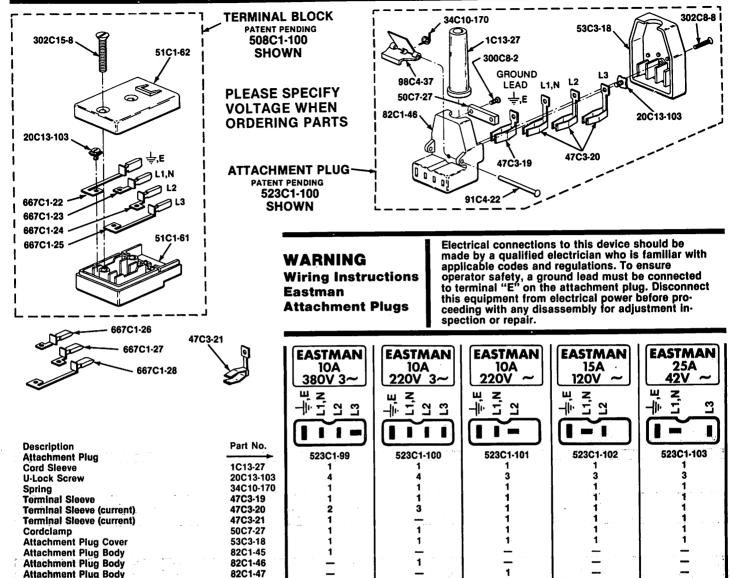


NOTE:



Part Number	No. Req'd.	Description
4C1-111	1	Locknut, Handle
4C2-83	2	Nut Hex 8-32
4C2-111	1	Nut, Speed
8C13-63	1	Control Block Insulation
8C13-67	1	Marking Wire Insulation Washer, Lock
12C1-32	1 2	Washer, Lock Switch
12C1-34 12C1-35	4	Washer, Shake Proof
12C1-36	2	Washer, Lock
12C1-37	2	Washer, Lock
12C10-2	1	Washer
12C15-84	1	Washer, Guide Spring
17C15-123	1	Pin, Roll
20C13-14	3	Screw, Cap
20C13-29	2	Screw, Cap
20C13-51	4	Screw, Truss Hd. Stnls
20C13-79	2	Screw, Nylon Round Hd.
21C2-12	1	Wire Insulation Bushing
34C10-132	1	Wire Straightener Spring Block, Contact
46C3-7 48C5-2	1	Marking Wire
62C16-208	2	Bracket Transformer
73C7-104	1	VinyIglas Tubing
73C7-106	1	Shrink Tubing
79C1-154	THE RESERVE THE PERSON	Number Plate
79C2	1	Name Plate
79C12-209	1	Base Plate
79C12-210	1	Plate, Gauge Support
95C5-5	1	Wrench, Allen Hex 7/64
95C5-6	1	Wrench, Allen Hex 9/64
98C4-32	1	Clip, Switch
104C1-5	1	Dial Indicator
119C4-27	1	Support, Wire Housing
122C1-13 141C1-39	1 2	Gauge Bar
142C1-17	1	Key, Contact Block
144C1-10	1	Lamp, Pilot Lite 110V
144C1-11	1	Lamp, Pilot Lite 230V Lug High Heat
199C1-16 199C1-17		Lug Cool
251C1-2		Control Heat 230V
251C1-3		Control Heat 110V
300C7-2	6	Screw 4-36 x 3/16 Round Hd.
300C12-13	5	Screw 8-32 x 5/16 Round Hd.
300C12-15	2	Screw 8-32 x 2-1/4 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.
531C1-53	1	Operating Handle, Long
580C1-72	1	Switch
783C13	1	Ground Wire Assy. Transformer 110V 50/60 Hz
819C1-10 819C1-12		Transformer 230V 50/60 Hz
01301-12		Transformer 2007 0000 TIE





Cold Sieane	1010-27		· · · · · · · · · · · · · · · · · · ·		_	
U-Lock Screw	20C13-103	4	4	3	3	3
Spring	34C10-170	1	1	1	1 1	. 1
Terminal Sleeve	47C3-19	1	1	1	1	1
Terminal Sleeve (current)	47C3-20	2	3	1	1	1 1
Terminal Sleeve (current)	47C3-21	1	-	1	1	
Cordclamp	50C7-27	1	1	1	1	1
Attachment Plug Cover	53C3-18	1	1	1	1	1
Attachment Plug Body	82C1-45	1	- 1			.     .   .   .   .
Attachment Plug Body	82C1-46	_	1	-	_	- :
Attachment Plug Body	82C1-47	-	- 1	1	_	- 1
Attachment Plug Body	82C1-48	- I				
Attachment Plug Body	82C1-49	<b>–</b>	-	-	-	1 1
Rivet	91C4-22	1	1	1	1 1	1 1
Thumb Clip	98C4-37	1	1	1	1	1
Screw #4-40 x 3/8 Round Hd	300C8-1	_	-	, 2	2	T
Screw #4-40 x 1/2 Round Hd	300C8-2	2	2	- <del>-</del>	<u>-</u>	2
Screw #4-40 x 7/8 Flat Hd	302C8-8	1	1	. 1	1	
Terminal Block		508C1-99	508C1-100	508C1-101	508C1-102	508C1-103
U-Lock Screw	20C13-103	4	4	3	3	3
Terminal Block Bottom	51C1-61	1	1	1	1	1
Terminal Block Top	51C1-62	1 1 1	1 1	1	1 1	1
Terminal Block Top Screw #10-32 x 1-1/8 Flat Hd	51C1-62 302C15-8	1 2	1 2	1 2	1 2	1 2
Screw #10-32 x 1-1/8 Flat Hd		1 2 1	1 2 1	1 2 1	1 2 1	1 2 1
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E	302C15-8	1 2 1	1 2 1 1	1 2 1 1	1 2 1	1 2 1
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E Terminal Contact w/pin L1,N	302C15-8 667C1-22	1 2 1 1	1 1 1 1	1 2 1	1 2 1	1 2 1
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E	302C15-8 667C1-22 667C1-23	1 2 1 1 1	1 1	1 2 1 1 -	1 2 1 -	1 2 1
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E Terminal Contact w/pin L1,N Terminal Contact w/pin L2 Terminal Contact w/pin L3	302C15-8 667C1-22 667C1-23 667C1-24	1 2 1 1 - -	1	1 2 1 1 —	1 1 1 1	1 2 1 -
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E Terminal Contact w/pin L1,N Terminal Contact w/pin L2	302C15-8 667C1-22 667C1-23 667C1-24 667C1-25	1 2 1 1 1 1 -	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 1 - -	1 1 1 - 1	1 1 1 1 1
Screw #10-32 x 1-1/8 Flat Hd Terminal Contact w/pin E Terminal Contact w/pin L1,N Terminal Contact w/pin L2 Terminal Contact w/pin L3 Terminal Contact w/pin L1,N	302C15-8 667C1-22 667C1-23 667C1-24 667C1-25 667C1-26	1 2 1 1 - - 1	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 1 - -	1 2 1 1 - 1	1 2 1 - - 1 1

### **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; and is void if other than genuine Eastman knives, emery wheels and parts are used in the machine.

