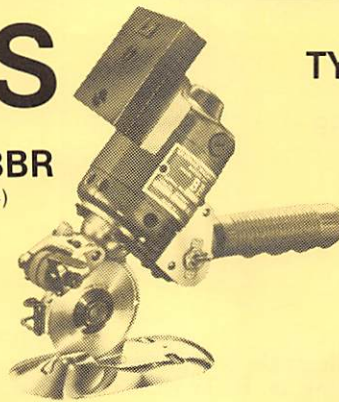


EASTMAN LIGHT WEIGHT ROUND KNIVES

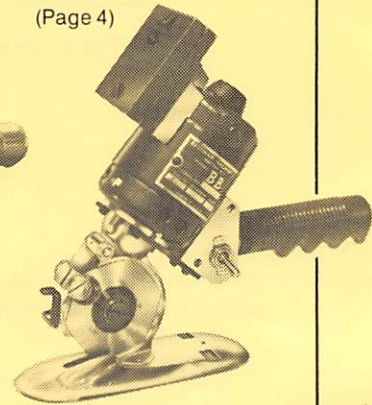
**TYPE
BB32**
(Page 6)



TYPE BBR
(Page 4)



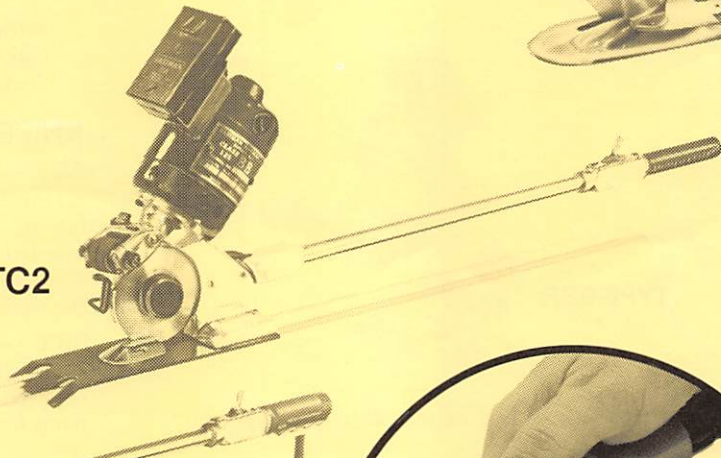
TYPE BBB
(Page 4)



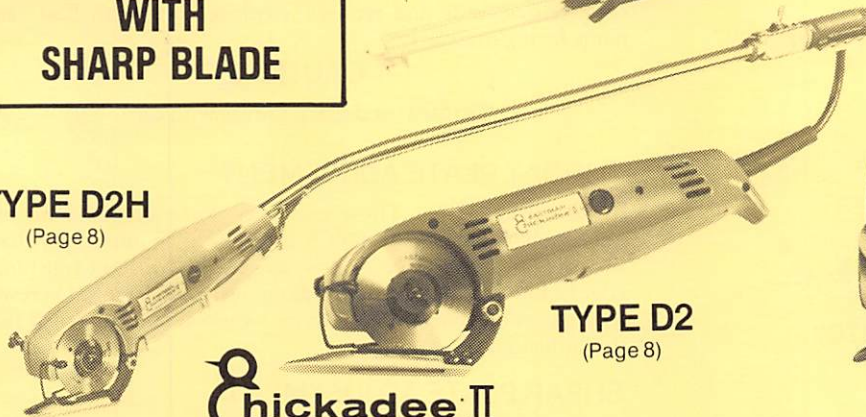
CAUTION

MACHINE EQUIPPED
WITH
SHARP BLADE

TYPE BBTC2
(Page 4)



TYPE D2H
(Page 8)



TYPE D2
(Page 8)



INSTRUCTION BOOK AND PARTS LIST

**Eastmanmachine
COMPANY**

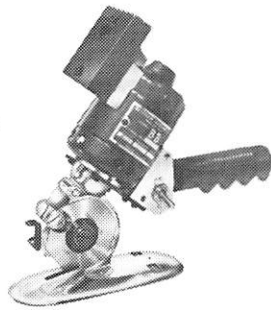
779 WASHINGTON STREET
BUFFALO, NEW YORK 14203
AREA CODE: 716, 856-2200

EASTMAN DEPENDABILITY, EASTMAN QUALITY AND EASTMAN SERVICE ARE YOUR GUARANTEE
THAT EASTMAN CUTTERS CUT CUTTING COSTS. THERE'S AN EASTMAN FOR EVERY CUTTING NEED.

DESCRIPTION

TYPE BBB

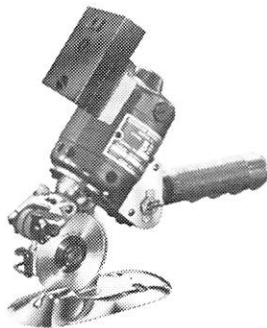
(Page 4)



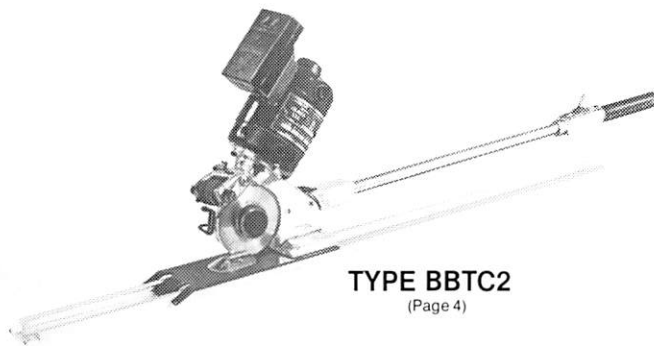
BBB — Equipped with single Sharpener and Shear Plate where continuous honing of Knife edge is desired. 2½" Hexagon Knife.

TYPE BBR

(Page 4)



BBR — Our basic light duty Round Knife with a 2½" Knife.



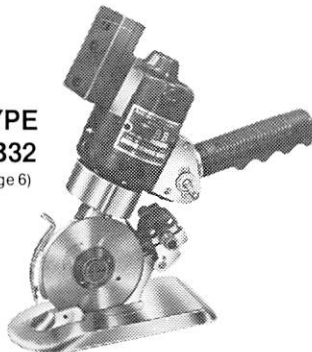
TYPE BBTC2

(Page 4)

BBTC2 — Used with a track where accurate and square cutting is required. Equipped with 2½" Knife.

TYPE BB32

(Page 6)



BB32 — Has a 3¼" Knife for increased capacity and an adjustable Throat Plate.

CAUTION

Read instructions carefully before starting motor. Be sure that voltage and current are the same as stamped on nameplate. All Eastman machines shown in this catalogue are equipped with sharp blades and extreme caution should be used when this machine is put into use. When this equipment is not being utilized, the power supply should be disconnected from the equipment.

TO OPERATE MACHINE

Turn machine to ON position; if cutter does not start immediately return switch to OFF position. Check line output and be sure that the unit is plugged in properly and is making full contact. Do not attempt to start this unit while it is in the material to be cut.

WARNING

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

KNIFE REPLACEMENT

BBR — BBB — BBTC2 (Page 5) — To remove knife, lay machine on side and carefully insert blade of screwdriver into fan of the motor and using Spanner Wrench (95C1-19) inserted into Locknut (4C1-175) or (4C1-182), turn counter-clockwise and remove Locknut — replace knife making sure the word "Eastman" faces outward.

BB32 — To remove knife, line up hole in knife and hole in standard, insert pin and use Spanner Wrench (95C1-21). Turn counter-clockwise and remove. Replace knife with Eastman name facing outward.

CAUTION

Discard used sharp knives with care.

THROAT PLATE ADJUSTMENT

BB32 (Page 7) — These machines are equipped with an adjustable Throat Plate (79C5-249) and it is important that the edge of the knife be as close as possible without touching edge of knife and equally straddling the blade. Two (2) Screws located on bottom of base can be loosened and tightened for this adjustment.

SHEAR PLATE ADJUSTMENT

BBB (Page 5) — When adjusting the shear plate on the Model BBB, adjusting screw (20C6-26) in a clockwise manner will increase the spring tension on the shear plate; adjusting the screw in a counter-clockwise manner will reduce the spring tension.

LUBRICATION

BBR — BBB — BBTC2 — BB32

OIL — Fill oil cup (72C4-2) daily and a small drop of SAE 30 non-detergent motor oil at each end of Sharpener Adjusting Bushing.

GREASE — To lubricate, remove Plug (54C4-35) page 5 or page 7 and inject small quantity of Eastman Gear Lubricant Special Formula (242C2) at 90 day intervals for intermittent use. Every six months the (20C12-145) (BBB, BBR, BBTC2) and (20C12-165) (BB32) screws that retain the knife gear should be removed and the knife gear taken out and inspected thoroughly to insure that no thread or lint build-up is in or around the gear area.

CAUTION

Do not use sewing machine oil or detergent oil. It is entirely too light for cutting machine lubrication. For best results use specially compounded Eastman Oil or at least a good grade SAE 30 motor oil. Do not oil base plate rollers.

Do not overload with grease as machine will run hot at gear assembly. Remove knife and gear and remove excessive grease.

MAINTENANCE PROCEDURES

1. Keep rollers of the base plate free of lint. Motor should be blown clear of lint and dust weekly using air hose at 90 P.S.I.
2. Periodically check terminal pins on the terminal block and the terminals in the attachment plug to insure full contact.
3. When replacing the knife on your cutting unit be sure to clean out any lint build-up between knife and standard.
4. If the cutting unit seems to lag or run hot when not cutting, run machine with knife removed to check for over-greasing or any obstructions.
5. When changing knife or cleaning machine check all screws and nuts for tightness.
6. Carefully remove spring loaded brushes - replace brushes when worn to less than .165 inches (4.2mm) or if springs are less than .350 inches (9.0mm).
7. When your machine performance does not appear to be up to par, contact your Eastman Machine authorized dealer.

MOTOR BRUSH REPLACEMENT

When replacing brushes (36C1-13) in the motor, carefully remove the (54C4-43) brush caps, remove the (34C1-58) brush with springs and replace brushes accordingly.

KNIFE SHARPENING

BBR — BBB — BBTC2 — BB32 — Connect power cord and switch motor on. To obtain a fine, keen edge on the blade, press lightly on sharpener lever or button with a constant pressure.

KNIFE SHARPENER REPLACEMENT

BBR - BBTC2

CAUTION

Disconnect from electric power source when servicing.

As the emery wheels wear away and become farther apart, they must be adjusted. Proceed as follows:

1. Slightly loosen four (4) slotted screws (300C8-2) holding adjusting bushings in place.
2. With fingers, turn adjusting bushings (20C6-23) until emery wheels are as close together as possible, without touching and centered over knife. Both wheels should grind at the same time when pressed lightly against knife with a maximum 1/32 inch clearance between wheels. The sharpened edge (bevel) should be no more than 1/16 inch
3. Tighten four (4) screws.

TO REPLACE EMERY WHEELS

BBB — BBTC2

1. Remove left hand cap — 2 screws (300C8-2) — lift out emery wheel with bushing.

2. Remove screw (20C13-30).

3. Coat new emery wheel spindle with oil and re-assemble to arm (620C1-21).

4. Repeat above steps for right hand emery wheel.

NOTE

Left and Right caps must be replaced in the same manner that they were removed.

BB32

1. Remove cap (35C5-45) and lift out emery wheel and bushing. Then remove screw (304C10-3) from left hand emery wheel and pull out emery wheel (541C1-10). Replace wheels and re-assemble.
2. Adjust wheels as outlined for BBR.

BBB

Remove sharpener (637C1-23) from machine and disassemble as shown in diagram page 5 — replace emery wheel (541C1-22). Lubricate — re-assemble — re-install.

220 VOLT MACHINES

When using the 220 volt machine on three phase outlets, use adaptor (509C1-54) by simply mounting this adaptor on the (25C5-49) single phase attachment plug. The two live leads of the (615C1-5) three phase attachment plug can be utilized for the power this machine requires.

OPTIONS

The BBTC2 long handled 2½" round knife cutter can be equipped with a (62C16-222) bracket that allows for a handle to be mounted in front of the cutting operation to pull this machine through the width of a cut rather than push it.

KNIFE GUARD ADJUSTMENT

Knife guards (25C4-144) and (25C4-106) should be regulated in a manner that only allows the material to pass through the material to be cut.

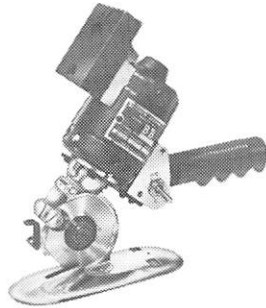
REPLACEMENT BLADES

Machine Type	Size	Part Number Carbon	High Speed	Blade Type
BBR BBTC2	2½"	80C1-114*	80C1-114HS	Round
BBB	2½"	80C1-114 80C1-138*	80C1-114HS —	Round Hex
BB32	3¼"	80C1-84*	80C1-84HS	Round
D2 D2H	2¼"	—	80C1-147HS* 80C1-149HS	Round Hex
BUZZ	2-1/32"	—	80C1-123HS* 80C1-133HS	Semi Square Octagon

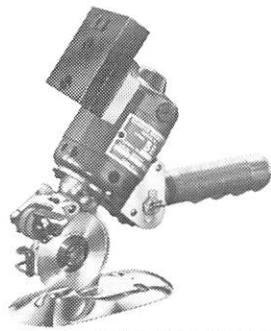
*Standard Blade

**PLEASE SPECIFY
MACHINE NAME
AND SERIAL NUMBER
WHEN ORDERING PARTS.**

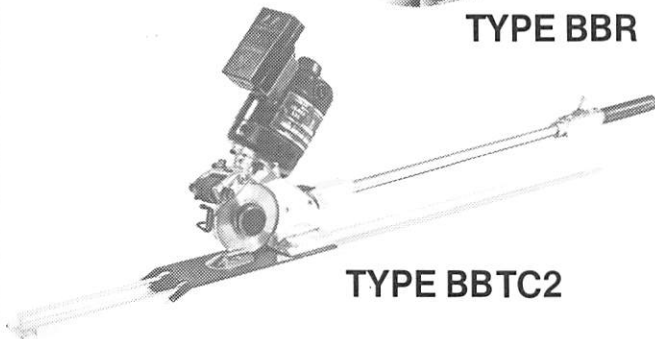
ILLUSTRATED PARTS LIST



TYPE BBB



TYPE BBR



TYPE BBTC2

PLEASE SPECIFY
MACHINE TYPE
AND SERIAL NUMBER
WHEN ORDERING PARTS.

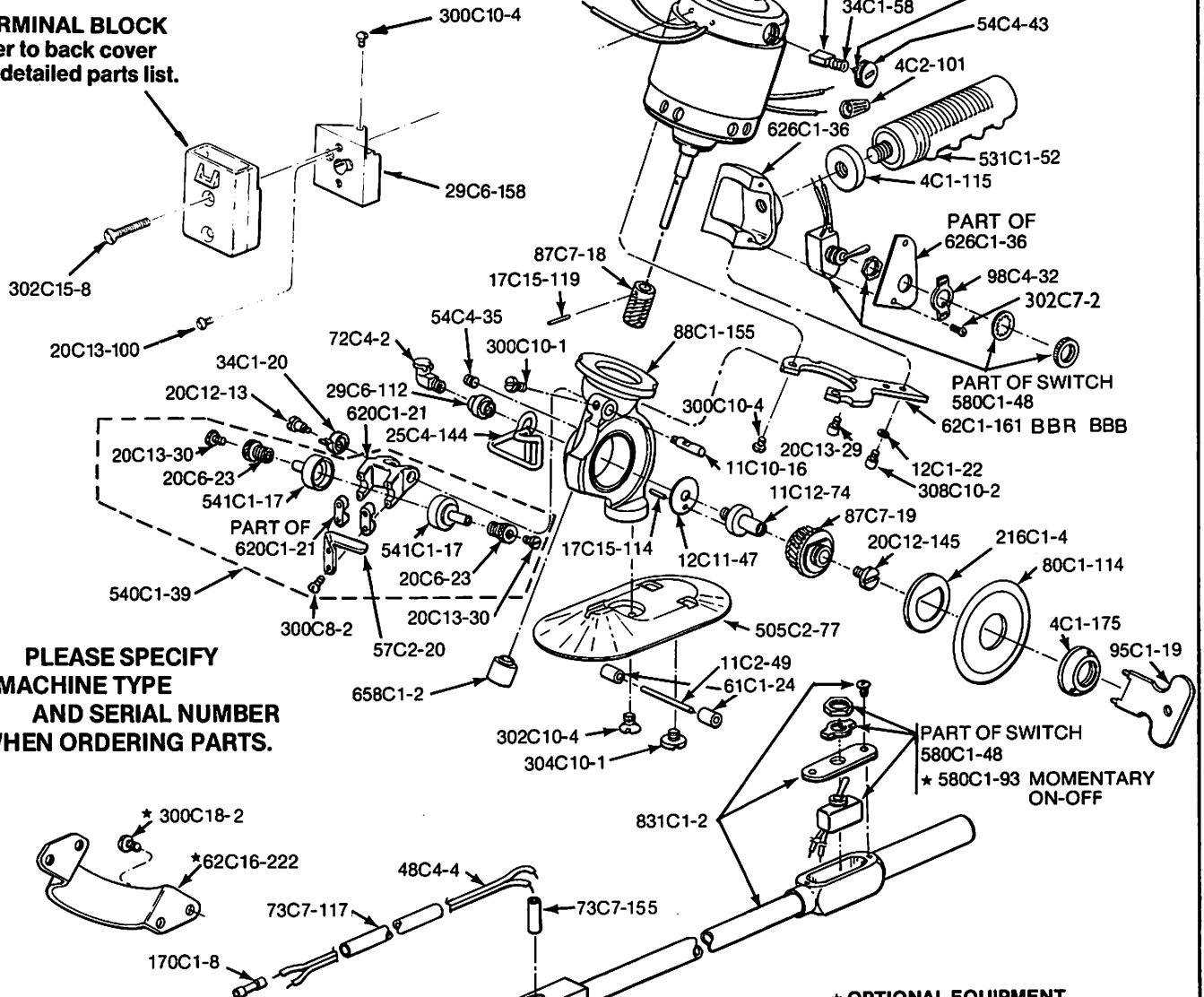
BBB	BBTC2	BBR	Part No.	Description
1	0	1	4C1-115	HANDLE LOCKNUT
1	0	0	4C1-149	SHARPENER STOP NUT
1	0	1	4C1-175	KNIFE LOCKNUT
0	1	0	4C1-182	KNIFE LOCKNUT
2	0	2	4C2-101	WIRE NUT
1	1	1	8C13-54	INSULATION FOR TERMINAL BLOCK
1	1	1	8C13-55	INSULATION
1	0	1	11C2-49	PLATE ROLLER SHAFT
0	1	1	11C10-16	SHARPENER SHAFT
1	1	1	11C12-74	WORM GEAR SHAFT
2	0	2	12C1-22	LOCK WASHER
1	0	0	12C1-29	LOADING SPRING
2	2	2	12C11-47	SPACING WASHER
1	0	0	12C15-57	SPRING WASHER
1	1	1	17C15-114	PIN FOR STANDARD
1	1	1	17C15-119	PIN FOR WORM
1	0	0	18C6-23	RETAINING RING
0	2	2	20C6-23	WHEEL ADJUSTING SCREW
1	0	0	20C6-26	SPRING ADJUSTING SCREW
0	1	1	20C12-13	SHARPENER SPRING SCREW
1	1	1	20C12-145	SCREW FOR WORM GEAR SHAFT
1	0	0	20C12-155	SCREW, SHEAR PLATE
1	0	0	20C12-157	SCREW, SHEAR PLATE
1	0	1	20C13-29	SCREW 6-32 x 3/8 SOC. HD. CAP
2	2	2	20C13-41	SCREW 6 x 1/4 SELF TAPPING BINDING HD.

BBB	BBTC2	BBR	Part No.	Description
0	2	2	20C13-30	SCREW 6-32 x 3/16 BINDING HD.
2	2	2	20C13-100	SCREW, 6 x 3/8 ROUND HD.
1	0	0	21C5-4	SHARPENER BUSHING
1	1	1	25C4-144	GUARD, KNIFE
1	1	1	29C6-112	OIL CUP ADAPTER
1	1	1	29C6-158	TERMINAL BLOCK ADAPTER
0	1	1	34C1-20	SHARPENER SPRING
2	2	2	34C1-58	BRUSH SPRING
1	0	0	34C10-131	SHARPENER SPRING
1	0	0	34C10-154	SHEAR PLATE SPRING
2	2	2	36C1-13	BRUSH
0	2	0	48C4-4	MOTOR LEAD WIRE
1	1	1	51C1-48	TERMINAL BLOCK
1	1	1	54C4-35	GREASE PLUG
2	2	2	54C4-43	BRUSH PLUG
0	1	0	55C4-94	SPACER FOR BASE PLATE
0	1	1	57C2-20	SHARPENER LEVER
1	0	0	59C3-114	PLATE FLAT
1	0	2	61C1-24	PLATE ROLLER SHELL
1	0	1	62C1-161	HANDLE BRACKET
0	1	0	62C16-222	FRONT HANDLE BRACKET
1	0	0	63C3-21	SHARPENER BUTTON
1	1	1	72C4-2	OIL CUP
0	1	0	73C7-117	TUBING FOR INSULATION
0	2	0	73C7-155	SHRINKABLE TUBE
0	1	0	79C5-227	THROAT PLATE
0	1	0	79C12-239	BASE PLATE
0	1	0	79C12-240	FRICTION PLATE
1	0	0	79C12-246	SHEAR PLATE
0	1	1	80C1-114	KNIFE, ROUND 2-1/2 DIA.
1	0	0	80C1-138	KNIFE, 6 SIDED 2-1/4 DIA.
1	1	1	87C7-18	WORM GEAR
1	1	1	87C7-19	KNIFE GEAR
1	0	1	88C1-155	STANDARD
0	1	0	88C1-176	STANDARD
1	1	1	98C4-32	ON/OFF CLIP
0	2	0	170C1-8	CONNECTOR
0	1	0	193C1-11	TRACK 72" LONG
2	2	2	201C1-7	BRASS EYELET
1	1	1	216C1-4	THREAD SEAL
4	4	4	300C8-2	SCREW, 4-40 x 1/2 ROUND HD.
1	1	1	300C10-1	SCREW, 6-32 x 3/16 ROUND HD.
0	2	0	300C10-3	SCREW, 6-32 x 5/16 ROUND HD.
2	0	2	300C10-4	SCREW, 6-32 x 3/8 ROUND HD.
0	2	0	300C18-1	SCREW, 1/4-20 x 3/4 ROUND HD.
0	2	0	300C18-2	SCREW, 1/4-20 x 3/8 ROUND HD.
1	0	2	302C10-4	SCREW, 6-32 x 5/16 FLAT HD.
0	2	0	302C10-7	SCREW, 6-32 x 5/8 FLAT HD.
0	2	0	302C12-3	SCREW, 8-32 x 3/8 FLAT HD.
0	2	0	302C12-7	SCREW, 8-32 x 3/4 FLAT HD.
2	0	2	302C7-2	SCREW, 4-36 x 1/4 FLAT HD.
1	0	1	304C10-1	SCREW, 6-32 x 1/8 TRUSS HD.
0	1	0	308C10-1	SCREW, 6-32 x 5/16 SOC. HD. CAP
2	0	2	308C10-2	SCREW, 6-32 x 1/2 SOC. HD. CAP
0	0	1	505C2-77	FLAT PLATE
1	0	0	505C2-79	PLATE WITH ROLLERS & SHEAR PLATE
•	•	•	517C1-455	MOTOR 115 VOLT
•	•	•	517C1-508	MOTOR 230 VOLT
1	0	1	531C1-52	HANDLE
0	1	1	540C1-39	EMERY WHEEL ARM WITH WHEELS
0	2	2	541C1-17	EMERY WHEEL ASSEMBLY
1	0	0	541C1-22	EMERY WHEEL ASSEMBLY
1	1	1	580C1-48	SWITCH ON/OFF
0	•	0	580C1-93	SWITCH MOMENTARY ON/OFF
0	1	1	620C1-21	EMERY WHEEL ARM
1	0	1	626C1-36	SWITCH BRACKET WITH COVER
1	0	0	636C1-5	SHARPENER BRACKET
1	0	0	637C1-23	SHARPENER ASSEMBLY
1	1	1	658C1-2	LOWER BEARING FOR WORM
1	0	0	831C1-2	HANDLE & TUBE ASSEMBLY

- 517C1-455 115V
- 517C1-508 230V

TYPE BBR

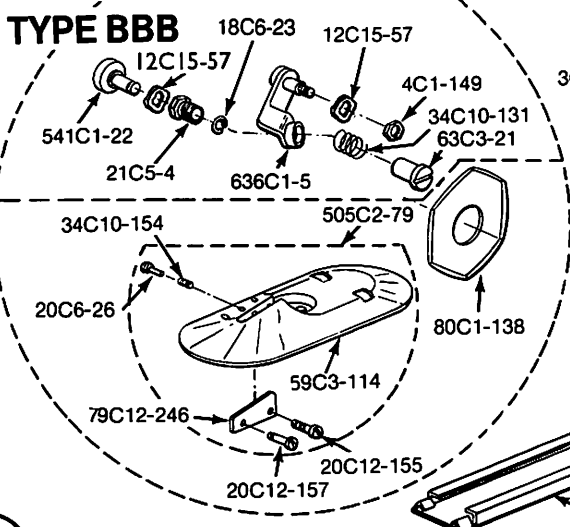
TERMINAL BLOCK
refer to back cover
for detailed parts list.



**PLEASE SPECIFY
MACHINE TYPE
AND SERIAL NUMBER
WHEN ORDERING PARTS.**

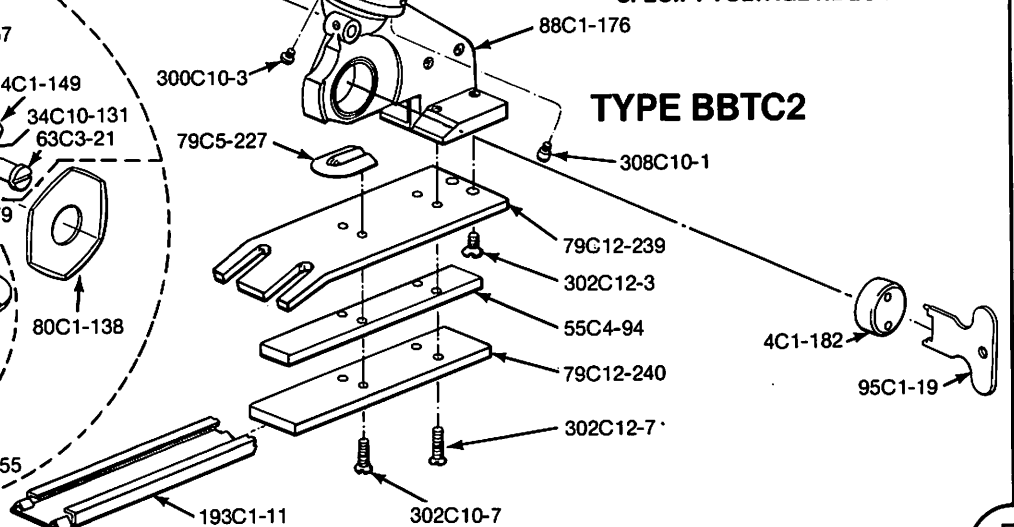
TYPE BBB

**637C1-23
SHARPENER ASSEMBLY**



*** OPTIONAL EQUIPMENT
DOES NOT COME WITH
REGULAR MACHINE.
• SPECIFY VOLTAGE REQUIRED**

TYPE BBTC2



ILLUSTRATED PARTS LIST



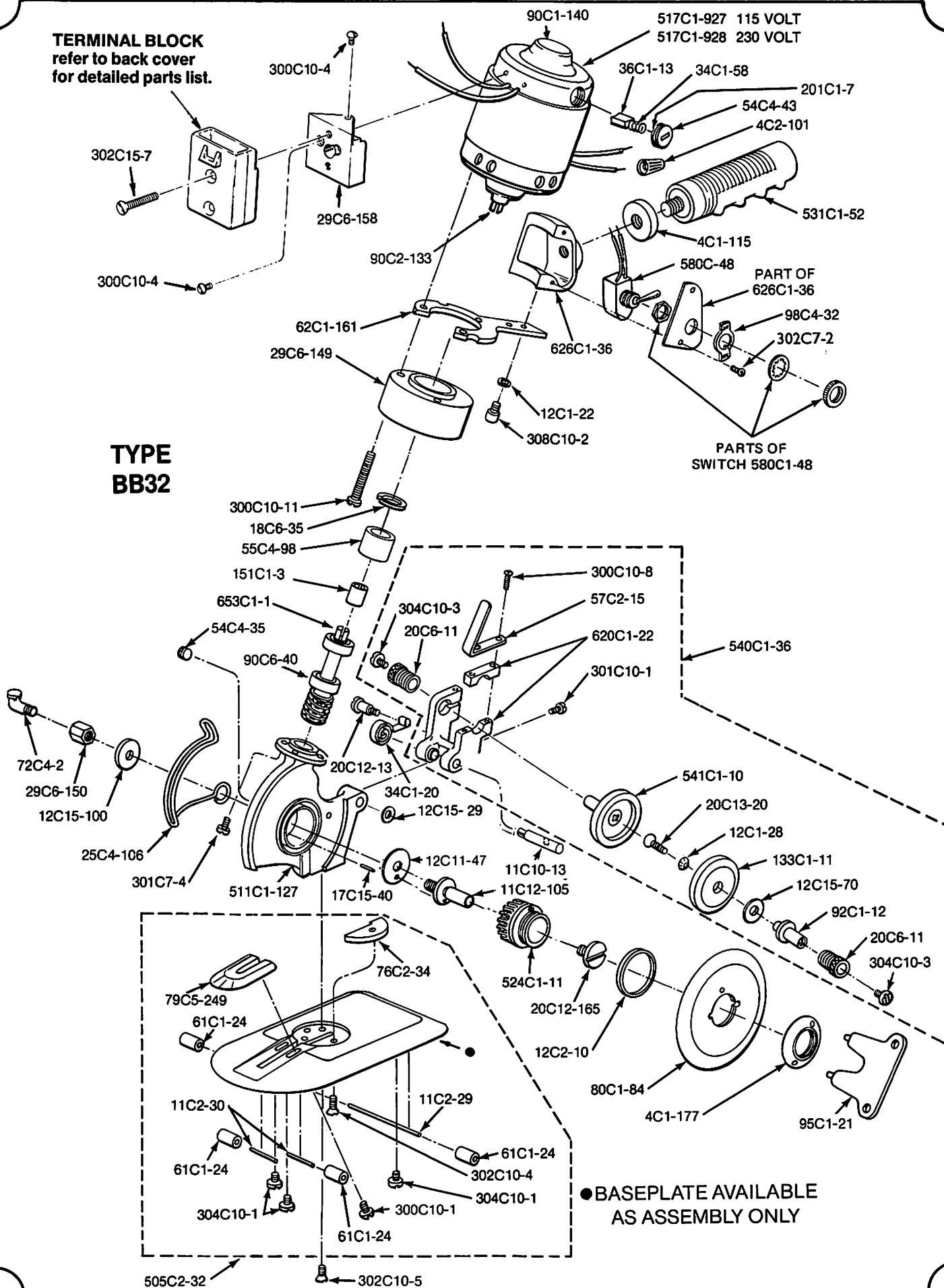
TYPE BB32

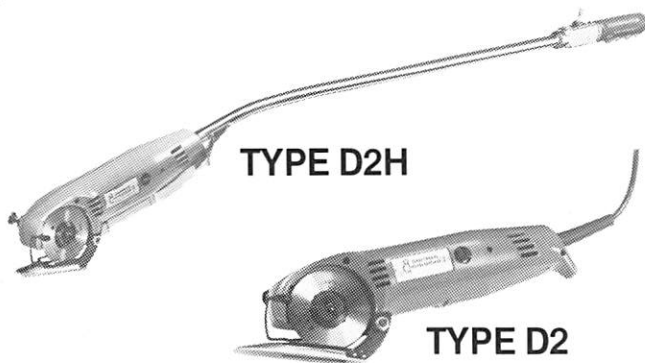
PLEASE SPECIFY
MACHINE TYPE
AND SERIAL NUMBER
WHEN ORDERING PARTS.

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BUFFALO, NEW YORK 14203

Part No.	Description
4C1-115	HANDLE LOCKNUT
4C1-177	KNIFE LOCKNUT
4C2-101	WIRE NUT (2 Req'd)
11C2-29	REAR ROLLER SHAFT
11C2-30	FRONT ROLLER SHAFT (2 Req'd)
11C10-13	SHARPENER SHAFT
11C12-105	KNIFE GEAR SHAFT
12C1-22	WASHER SHAKE PROOF (2 Req'd)
12C1-28	LOCK WASHER (2 Req'd)
12C2-10	FELT WASHER FOR STAND
12C11-74	SPACING WASHER
12C15-29	FLAT WASHER
12C15-70	PAPER WASHER
12C15-100	WASHER FOR WORM GEAR SHAFT
17C15-40	PIN IN STANDARD
18C6-35	RETAINING RING
20C6-11	WHEEL ADJUSTING SCREW (2 Req'd)
20C12-13	SHARPENER SPRING SCREW
20C12-165	THRUST SCREW
20C13-20	SCREW SHARPENER (2 Req'd)
25C4-106	KNIFE GUARD
29C6-149	MOTOR ADAPTER
29C6-150	OIL CUP ADAPTER
29C6-158	TERMINAL BLOCK ADAPTER
34C1-20	SHARPENER SPRING
34C1-58	BRUSH SPRING (2 Req'd)
36C1-13	BRUSH (2 Req'd)
54C4-35	GREASE PLUG
54C4-43	BRUSH PLUG (2 Req'd)
55C4-98	SPACER BEARING
57C2-15	SHARPENER LEVER
61C1-24	PLATE ROLLER SHELL (4 Req'd)
62C1-161	HANDLE BRACKET
72C4-2	OIL CUP
76C2-34	PLATE FILLER
79C5-249	THROAT PLATE
80C1-84	KNIFE
90C1-140	BEARING HOUSING REAR
90C2-133	BEARING HOUSING FRONT
90C6-40	BALL BEARING, WORMSHAFT
92C1-12	SPINDLE
95C1-21	WRENCH
98C4-32	ON/OFF CLIP
133C1-11	UNMOUNTED EMERY WHEEL (2 Req'd)
151C1-3	COUPLING MOTOR
201C1-7	BRASS EYELET (2 Req'd)
300C10-1	SCREW, 6-32 x 3/16 ROUND HEAD (2 Req'd)
300C10-4	SCREW, 6-32 x 3/8 ROUND HEAD (4 Req'd)
300C10-8	SCREW, 6-32 x 3/4 ROUND HEAD (3 Req'd)
300C10-11	SCREW, 6-32 x 11/16 ROUND HEAD (3 Req'd)
301C7-4	SCREW, 4-36 x 5/16 FILLISTER HEAD (4 Req'd)
301C10-1	SCREW, 6-32 x 1/4 FILLISTER HEAD
302C10-4	SCREW, 6-32 x 5/16 FLAT HEAD (2 Req'd)
302C10-5	SCREW, 6-32 x 3/8 FLAT HEAD (3 Req'd)
302C15-7	SCREW, 10-32 x 1 FLAT HEAD (2 Req'd)
302C7-2	SCREW, 4-36 x 1/4 FLAT HEAD (2 Req'd)
304C10-1	SCREW, 6-32 x 1/8 TRUSS HEAD (4 Req'd)
304C10-3	SCREW, 6-32 x 1/4 TRUSS HEAD (2 Req'd)
308C10-2	SCREW, 6-32 x 1/2 SOCKET HEAD (2 Req'd)
505C2-32	FLAT PLATE - ROLLER
511C1-127	STANDARD
517C1-927	MOTOR 115 VOLT
517C1-928	MOTOR 230 VOLT
524C1-11	KNIFE GEAR
531C1-52	HANDLE
540C1-36	EMERY WHEEL ARM WITH WHEELS
541C1-10	EMERY WHEEL ASSEMBLY (2 Req'd)
542C1-99	ARMATURE 115 VOLT
542C1-100	ARMATURE 230 VOLT
580C1-48	SWITCH
620C1-22	EMERY WHEEL ARM
626C1-36	SWITCH BASE & BRACKET ASSEMBLY
653C1-1	WORMSHAFT

TERMINAL BLOCK
refer to back cover
for detailed parts list.





DESCRIPTION

Your new Chickadee D2 or D2H is designed for increased performance and capacity, with a minimum of maintenance and service when not subjected to abnormal use.

CAUTION

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

TO OPERATE MACHINE

Turn machine to on position; if cutter does not perform properly check line output and be sure the unit is plugged in properly making full contact. Do not attempt to start this unit while it is in material to be cut.

WARNING

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

REMOVE AND REPLACE THE KNIFE

Insert a pin thru knife against bottom of machine housing and with a large screwdriver, remove screw (300C12-3) and flange (53C11-112). DISCARD WORN SHARP KNIFE WITH CARE and install new blade with the Eastman facing outward.

To obtain a fine keen edge on the blade, press lightly on sharpener button with a constant pressure.

LUBRICATION

Follow this procedure yearly for intermittent use, or every six months for continuous use. Remove knife, remove retainer plate (79C12-276) (2 screws) with gear intact. Then remove screw (20C13-99) emery wheel (541C1-24) and wipe away any grit deposits. Apply a light coat of Eastman Lubricko Grease (242C2-2) to parts and reassemble. Then add small quantity of Eastman Lubricko Grease to gears and shaft. Saturate wick (191C1-37) with good quality SAE 30 non-detergent motor oil when changing blade.

DISASSEMBLY

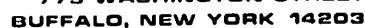
Remove knife. Remove two (2) flat head screws (302C8-2) and gear retaining plate (79C12-276) from housing.

Note it is not necessary to loosen two fillister head screws (301C3-1) from knife flange.

Remove brush caps and brushes. Completely remove three fillister head screws (308C1-1, 308C1-4, 308C1-5) from housing and lift off left side motor housing, leaving motor parts in right side housing. Clean lint and dirt from motor housing and grease from gear cavity.

ILLUSTRATED PARTS LIST

Part No.	Description
1C13-21	SLEEVE
1C13-26	CORD SLEEVE
4C1-149	HEX NUT
4C2-106	HEX NUT
10C1-45	FAN
12C15-14	WASHER, FLAT #10
12C15-89	WASHER
12C15-124	WASHER, BLADE RETAINER
14C1-23	HANDLE GRIP
17C15-133	ARMATURE PIN
17C15-136	PIN LABEL (4 Req'd)
18C6-71	FRONT "O" RING HALF 2 Req'd
18C6-72	BACK "O" RING HALF (2 Req'd)
20C13-99	PAN HEAD SCREW
21C6-3	SHARPENER BUSHING
25C4-169	KNIFE GUARD
34C8-12	SPRING
34C10-165	SHARPENER SPRING
50C7-25	CORD CLAMP D-2H
50C7-26	CORD CLAMP D-2
52C5-176	BASE SWITCH
53C11-112	KNIFE COVER FLANGE
57C1-61	SWITCH LEVER
63C3-22	SHARPENER BUTTON
68C3-6	PRESSURE FOOT
79C1-151	PLATE, NO. 120V
79C1-152	PLATE, NO. 230V
79C2-61	CAUTION PLATE
79C2-77	NAME PLATE
79C12-276	GEAR RETAINING PLATE
80C1-147	ROUND KNIFE, 2-1/4"
80C1-149	HEX KNIFE, 2-1/4"
83C4-25	KNIFE FLANGE
86C7-42	BRUSH CAP (2 Req'd)
87C7-43	KNIFE GEAR
87C7-44	WORM GEAR
90C6-42	REAR BEARING
90C6-48	FRONT BEARING
95C5-7	ALLEN KEY
98C4-32	ON/OFF PLATE
109C5-1	TIP SHEAR PLATE
190C1-2	ARMATURE 120V
190C1-3	ARMATURE 230V
191C1-37	WICKING FELT
199C1-29	LUG
300C8-1	SCREW, 4-40 x 3/8 ROUND HEAD (2 Req'd)
300C8-9	SCREW, 4-40 x 3/16 ROUND HEAD
300C12-3	SCREW, 8-32 x 3/8 ROUND HEAD
301C3-1	SCREW, 2-56 x 1/2 FILLISTER HEAD (2 Req'd)
301C8-1	SCREW, 4-40 x 1/2 FILLISTER HEAD
301C8-4	SCREW, 4-40 x 3/4 FILLISTER HEAD
301C8-5	SCREW, 4-40 x 1 1/2 FILLISTER HEAD
301C8-6	SCREW, 4-40 x 3/16 FILLISTER HEAD
301C15-6	SCREW, 10-32 x 1 FILLISTER HEAD
302C8-2	SCREW, 4-40 x 3/4 FLAT HEAD (2 Req'd)
305C8-4	SCREW, 4-40 x 1/8 BINDING HEAD (2 Req'd)
309C8-3	SCREW, 4-40 x 1/8 SOCKET HEAD
523C1-91	ATTACHMENT PLUG 120V MALE
523C1-92	ATTACHMENT PLUG 120V FEMALE
523C1-93	ATTACHMENT PLUG 230V MALE
523C1-94	ATTACHMENT PLUG 230V FEMALE
523C2-25	CORD 120V
523C2-41	CORD 230V
523C2-46	CORD 230V EUROPE
523C2-47	CORD ASSEMBLY 120V DOMESTIC
523C2-48	CORD ASSEMBLY 230V DOMESTIC
541C1-24	EMERY WHEEL ASSEMBLY
542C1-102	ARMATURE ASSEMBLY 120V
542C1-103	ARMATURE ASSEMBLY 230V
580C1-48	SWITCH, D-2H
580C1-103	SWITCH, D-2
614C1-31	FAN & BEARING
632C1-8	HOUSING, COMPLETE W/ SWITCH LEVER
708C1-15	BRUSH W/ SPRING (2 Req'd)
726C1-17	SHEAR PLATE W/ CARBIDE
831C1-4	24" HANDLE & TUBE ASSEMBLY
831C1-5	30" HANDLE & TUBE ASSEMBLY
831C1-6	VARIABLE LENGTH (SPECIFY) HAND. & T. ASS'Y
829C1-4	MAGNET ASSEMBLY
830C1-10	CIRCUIT BOARD ASSEMBLY 230V
830C1-11	CIRCUIT BOARD ASSEMBLY 120V



ASSEMBLY

Install circuit board in right motor housing. Place armature of correct voltage into magnet ring (829C1-1). Insert armature and magnet by passing rear end of armature between brush holders on circuit board.

Note that notch in magnet ring must mate with stud in right housing for proper fit. Rotate magnet ring until slot "clicks" into stud.

Fit switch lever into recess at bottom of right housing. Check functioning of switch by squeezing lever when in place. Place left housing over right housing with slight pressure. Replace three screws into left housing. Pack gear cavity $\frac{3}{4}$ full of Eastman grease. Replace gear retaining plate. Squeeze one drop of oil into knife screw hole. Replace knife with Eastman facing outward. Insert brushes and brush caps.

Repairs to these machines should be made by a qualified person familiar with safe repairs of electrical devices. Exercise extreme caution when working with, or near the blade as the cutting edge is extremely sharp. Be sure to disconnect machine from power supply and remove knife before continuing with adjustments or repairs.

To sharpen knife, press lightly on sharpener button with constant pressure, while machine is running. Lubricate wick (191C1-37) with Eastman oil when replacing blade or once each month.

REPLACE MOTOR BRUSHES

Remove black brush caps (86C7-42) from sides of housing with a large bladed screwdriver. Gently pull on springs to remove brushes. If brushes are stuck, tap machine gently on padded surface to loosen brushes.

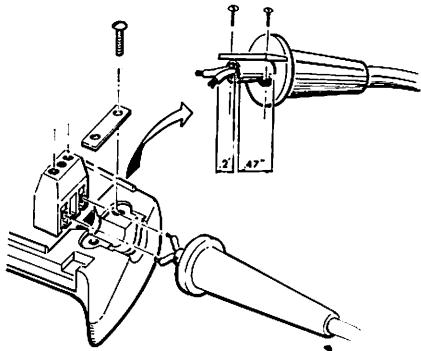
Replace brushes if worn to less than $\frac{5}{32}$ " (4.2mm) or if spring is less than $\frac{11}{32}$ " (9.0mm). Replace brush caps and tighten gently.

ADJUSTMENT OF SHEAR PLATE

Shear plate (726C1-17) should contact knife at sharpened edge *only*. Clearance of back of shear plate is .010" (.25mm) and can be checked with feeler gage.

REPLACE CORD

Disassemble machine per instructions. Loosen two screws in terminal block and remove two screws (300C8-1) in cord clamp. Gently pull cord from terminal block. Strip outer jacket on new cord to .4" (12mm). Strip insulation on wires to .2" (5mm). Insert wire leads into terminal block and tighten two screws. Replace and secure cord clamp (50C7-26), making sure clamp bears on outer jacket of wires as shown. Reassemble per instructions.



FAN AND FRONT BEARING REMOVAL

Measure and record distance of fan and front bearing from rear bearing. Position armature assembly in collar jig, as shown. Lightly heat gear (87C7-44) at pin (17C15-133) to release adhesive.

CAUTION

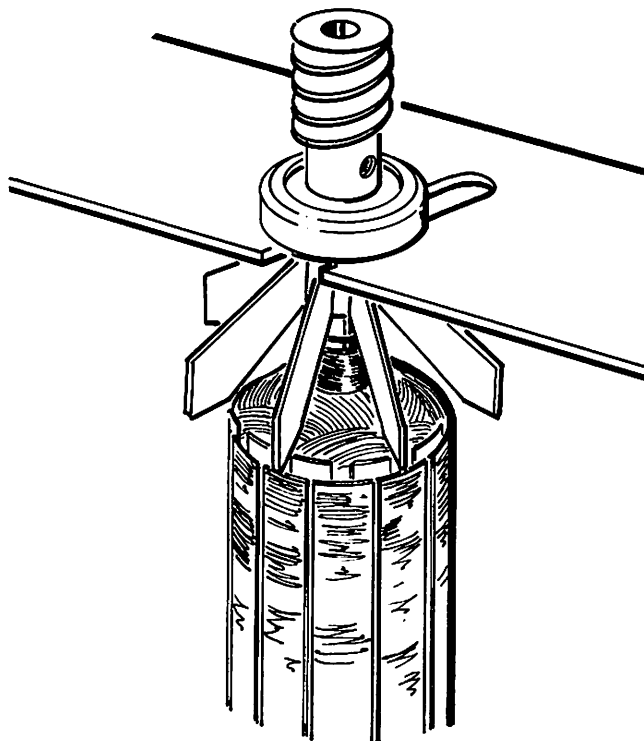
Do not heat entire armature.

Press worm from armature shaft with drift pin. Remove front bearing from armature shaft.

CAUTION

Do not allow armature to fall from collar jig.

Remove fan by gently twisting and pulling fan from armature shaft.



INSTALLATION OF FAN, FRONT BEARING AND WORM GEAR

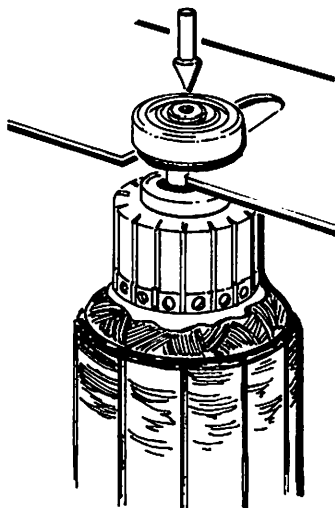
Apply adhesive (Loctite 242 recommended) to inside diameter of fan, (10C1-45) bearing (90C6-48) and worm (87C7-44). Use steel tube with 1/4" I.D. to press fan, bearing and worm onto armature shaft. Make sure parts are returned to original position as recorded in FAN AND BEARING REMOVAL, above.

Pin in worm must be aligned with slot in armature shaft for proper assembly.

REAR BEARING REMOVAL

Position armature in collar jig as shown. Use steel rod to press armature shaft through bore of bearing.

Do not allow armature to fall from jig.



INSTALLATION OF REAR BEARING

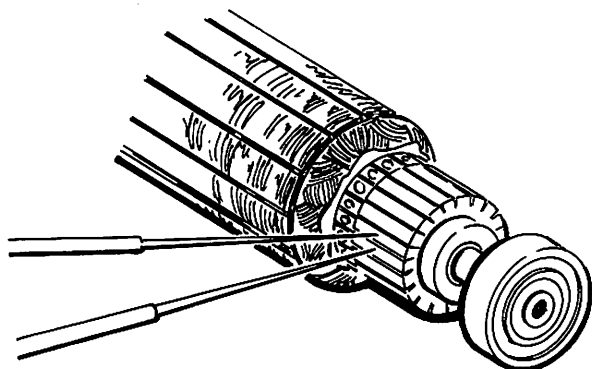
Lubricate armature shaft. Use 1/4" I.D. steel tube to press rear bearing down to shoulder on armature shaft.

Support armature at front end and protect shaft from bending during reassembly.

ELECTRICAL TESTS OF ARMATURE

Repeated blown fuses or burned resistor may indicate failed armature.

Use multimeter to check adjacent bar to bar resistance of commutator as shown. Check each bar around entire commutator.



Voltage

230v
115v

Resistance

20 ohms
10 ohms

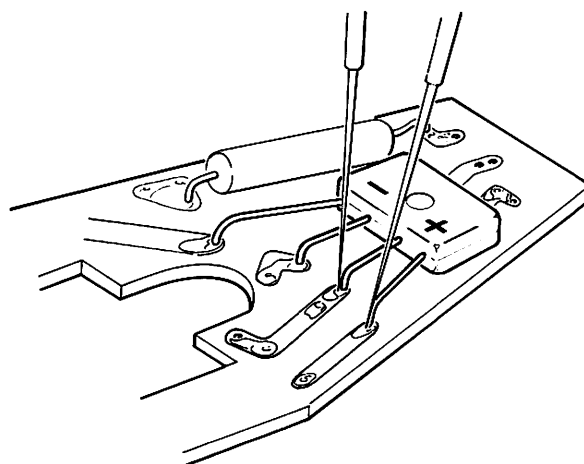
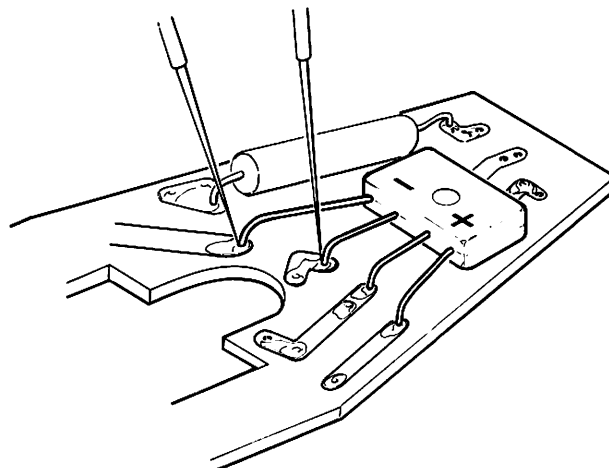
IF READINGS ARE 10% ABOVE OR BELOW STANDARDS, REPLACE ARMATURE.

ELECTRICAL TESTS OF RECTIFIER

Set multimeter to 1,000 ohm scale. Measure resistance between negative and adjacent lead as shown. Reading should be 5-50 ohms. Reverse multimeter probes. Reading should be 1,000,000 (1 million) ohms minimum.

Repeat above procedure on remaining leads as shown. Readings should be identical to above.

Any readings other than above indicate failed rectifier and circuit board must be replaced.



the **EASTMAN** **Chickadee**® **ROTARY SHEAR**



MAINTENANCE, INSTRUCTIONS

AND PARTS LIST

The Chickadee Rotary Shear has been carefully designed by Eastman Machine Company to efficiently cut a variety of fabrics and provide many years of trouble-free service. Among its many important features are cool running motor design that permits easy removal of carbon motor brushes, for inspection or replacement, and on/off switch moved forward on the motor housing for easy thumbing while the machine is in use. Important: Do not cover ring of vent openings on motor housing. Sealing these vent holes will cause excessive heat rise in motor. Keep this machine free of lint and dirt. For best results, blow-out frequently with compressed air while the motor is running. Always disconnect electric cord before adjusting or disassembling machine.

TO LUBRICATE

A few drops of 30 weight, non-detergent machine oil once a day while operating are all that is required to keep the Chickadee lubricated. The parts illustration indicates the four recommended lubrication points.

Once A Day Lubrication — Remove "Tension Nut" from standard housing and insert a few drops of oil inside back end of shaft "A". Replace "Tension Nut". Insert a few drops of oil at points "B", "C", and "D".

TO SHARPEN KNIFE

Press sharpener (541C1-22) lightly against the knife edge. For clean cutting sharpen frequently with a light touch.

TO REMOVE KNIFE

Remove lock nut (4C1-194) with a large blade screwdriver, or coin, by turning counter-clockwise. Lift knife (80C1-123) from gear. When replacing knife, be sure the knife is installed so that the Eastman name is in the outward position.

TO REPLACE MOTOR BRUSHES

It is recommended that carbon motor brushes be inspected after every 200 hrs. of operation. These brushes may be easily removed by following this simple procedure. Remove plastic cap (86C7-36) from rear of motor. Cap is held in place by two (2) machine screws (301C8-2). Remove brush cap screw

(86C7-37) and brush and spring may be easily extracted. Note: when inserting brush and spring (708C1-13) position spring into extension of brush cap screw (86C7-37).

TO CLEAN SHARPENING STONE

Sharpening stone (541C1-22) may be easily cleaned using cleaning fluid and a stiff bristled brush.

TO REPLACE SHARPENING STONE

Sharpening stone may be replaced as required without disassembling cutting head. Remove knife lock nut (4C1-194) and knife (80C1-123). Remove sharpener button (63C3-21) and sharpener spring (34C10-131) from rear of sharpener assembly. Sharpening stone and bushing assembly can then be removed from front of sharpener bracket (636C1-3). Remove retaining ring (18C6-23) from shaft of sharpening stone (541C1-22) and remove stone. Note: This procedure is reversed when reassembling.

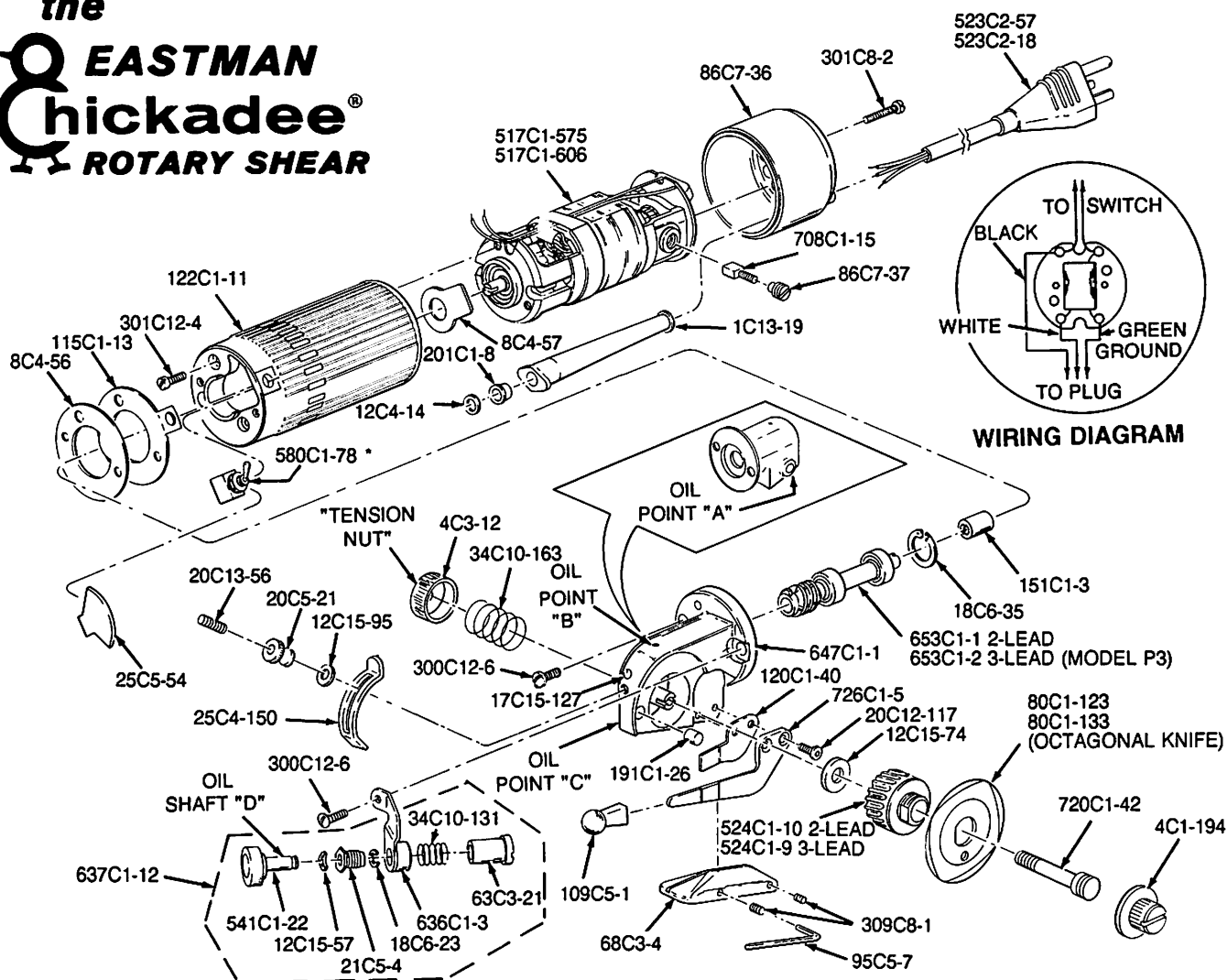
TO REPLACE SWITCH

Remove two (2) screws (300C12-6) and separate cutting head assembly from motor housing (122C1-11). Remove switch locknut and guard (25C5-54) from exterior switch assembly (580C1-78). Remove switch from motor housing (122C1-11) and unsolder wires. Carefully solder wires to new switch with rosin core solder only (do not use paste or acid). Replace switch in motor housing (122C1-11) and complete reassembly.

BALL TIP AND SHEAR PLATE FOOT FURNISHED

A ball tip (109C5-1) for cutting knit and other loosely woven materials and shear plate foot (68C3-4) for additional support and cutting accuracy are furnished as standard. To attach shear plate foot to shear plate (726C1-5) use allen key (95C5-7) as illustrated.

the EASTMAN Chickadee® ROTARY SHEAR



Part No.	Description
1C13-19	LINE CORD SLEEVE
4C1-194	KNIFE LOCK NUT
4C3-12	ADJUSTING NUT
8C4-56	SWITCH INSULATION
8C4-57	SWITCH INSULATION
12C4-14	INSULATING WASHER
12C15-57	SPRING WASHER
12C15-74	SPACING WASHER
12C15-95	WASHER FOR KNIFE GUARD
17C15-127	PIN
18C6-23	RETAINING RING
18C6-35	RETAINING RING
20C5-21	CLAMP SCREW
20C12-117	SCREW, 6-32 x 3/8 FLAT HEAD (2 Req'd)
20C13-56	SCREW, 6-32 x 3/4 SOCKET SET
21C5-4	SHARPENER BUSHING
25C4-150	KNIFE GUARD
25C5-54	GUARD FOR SWITCH
34C10-131	SHARPENER SPRING
34C10-163	KNIFE SPRING
63C3-21	SHARPENER BUTTON
68C3-4	SHEAR PLATE FOOT
80C1-123	KNIFE
80C1-133 (Optional)	OCTAGONAL KNIFE
86C7-36	MOTOR CAP
86C7-37	BRUSH CAP
95C5-7	ALLEN KEY
109C5-1	BALL TIP

Part No.	Description
115C1-13	DISC SWITCH, GROUNDING
120C1-40	KNIFE PLOW
122C1-11	MOTOR HOUSING
151C1-3	MOTOR COUPLING
191C1-26	OIL FELT
201C1-8	LINE CORD EYELET
300C12-6	SCREW, 8-32 x 1/2 ROUND HEAD (2 Req'd)
301C8-2	SCREW, 4-40 x 7/8 FILLISTER HEAD (2 Req'd)
301C12-4	SCREW, 8-32 x 1/2 FILLISTER HEAD (3 Req'd)
309C8-1	SCREW, 4-40 x 1/2 SOCKET SET (2 Req'd)
517C1-575	MOTOR, COMPLETE, 110 VOLT
517C1-606	MOTOR, COMPLETE, 220 VOLT
523C2-18	MOTOR LINE CORD
523C2-57	LINE CORD WITH PLUG
524C1-9	3 LEAD KNIFE GEAR
524C1-10	KNIFE GEAR
541C1-22	SHARPENING STONE
* 580C1-35	SWITCH, LONG HANDLE CHICKADEE
* 580C1-78	SWITCH, COMPLETE
636C1-3	SHARPENER BRACKET
637C1-12	SHARPENER, COMPLETE
647C1-1	STANDARD HOUSING
653C1-1	WORM, COMPLETE
653C1-2	3 LEAD WORM, COMPLETE
708C1-15	BRUSH WITH SPRING
720C1-42	KNIFE ROD, COMPLETE
726C1-5	SHEAR PLATE



EASTMAN'S NEW buzzaird PNEUMATIC ROTARY SHEAR

DESCRIPTION

The Buzzaird Rotary Shear has been carefully designed by the Eastman Machine Company to efficiently cut a variety of fabrics and provide many years of trouble free service. This pneumatic cutter is equipped with a heavy duty pneumatic motor and can be used primarily for heavier types of material that cannot be cut with our now world-famous Chickadee Machine. The maximum output is 1/3 horsepower and should run at 90 psi with a 20,000 rpm motor speed. This machine should not be run with less than 60 psi.

BALL TIP AND SHEAR PLATE FOOT OPTIONAL*

A ball tip (109C5-1) for cutting loosely woven materials and shear plate foot (68C3-4) for additional support and cutting accuracy are optional. To attach shear plate foot to shear plate (726C1-5) use allen key (95C5-7) as illustrated.

WARNING

Before performing any of the following procedures, make sure the air line has been disengaged.

TO LUBRICATE

A few drops of 30 weight, non-detergent machine oil twice a day while operating are all that is required to keep the buzzaird lubricated. The parts illustration (page 15) clearly indicates the three recommended lubrication points. To lubricate gears, remove plug (point C)- inject grease once a day. Eastman Gear Lubricant Special Formula (242C2) is recommended. Be sure oil felt (191C1-26) is kept clean and moist with oil.

TO REMOVE KNIFE

Remove lock nut (4C1-194) turn counter-clockwise and lift knife from the gear. When replacing knife (80C1-123) be sure the knife is installed so that the Eastman name is in the outward position.

ILLUSTRATED PARTS LIST

Part No.	Description
4C1-194	KNIFE LOCK NUT
4C3-12	ADJUSTING NUT
12C15-57	SPRING WASHER
12C15-74	THRUST WASHER
12C15-95	WASHER FOR KNIFE GUARD
17C15-127	PIN
18C6-23	RETAINING RING
18C6-35	RETAINING RING
20C5-21	CLAMP SCREW
20C12-117	SCREW, 6-32 x 3/8 FLAT HEAD
20C13-56	SCREW, 6-32 x 3/4 SOCKET SET
20C13-63	SET SCREW
21C5-4	SHARPENER BUSHING
25C4-150	KNIFE GUARD
29C6-142	MOTOR ADAPTER
34C10-131	SHARPENER SPRING
34C10-163	KNIFE SPRING
54C4-35	PLUG
63C3-21	SHARPENER BUTTON
* 68C3-4	SHEAR FOOT
80C1-123	KNIFE
* 95C5-7	ALLEN KEY
* 109C5-1	BALL TIP
120C1-40	KNIFE PLOW
191C1-26	OIL FELT
200C1-11	DRIVER FOR MOTOR SHAFT
300C12-6	SCREW, 8-32 x 1/2 ROUND HEAD (2 Req'd)
* 309C8-1	SCREW, 4-40 x 1/4 (2 Req'd)
517C1-842	AIR MOTOR
524C1-21	KNIFE GEAR
541C1-22	SHARPENING STONE
636C1-3	SHARPENER BRACKET
637C1-12	SHARPENER, COMPLETE
647C1-1	STANDARD HOUSING
653C1-1	WORM, COMPLETE
720C1-42	KNIFE ROD, COMPLETE
726C1-5	SHEAR PLATE
817C1-1	EXHAUST OVER HOSE
817C1-2	AIR INTAKE HOSE
822C1	MOTOR COUPLING

*These parts furnished on special order.

TO REPLACE SHARPENING STONE

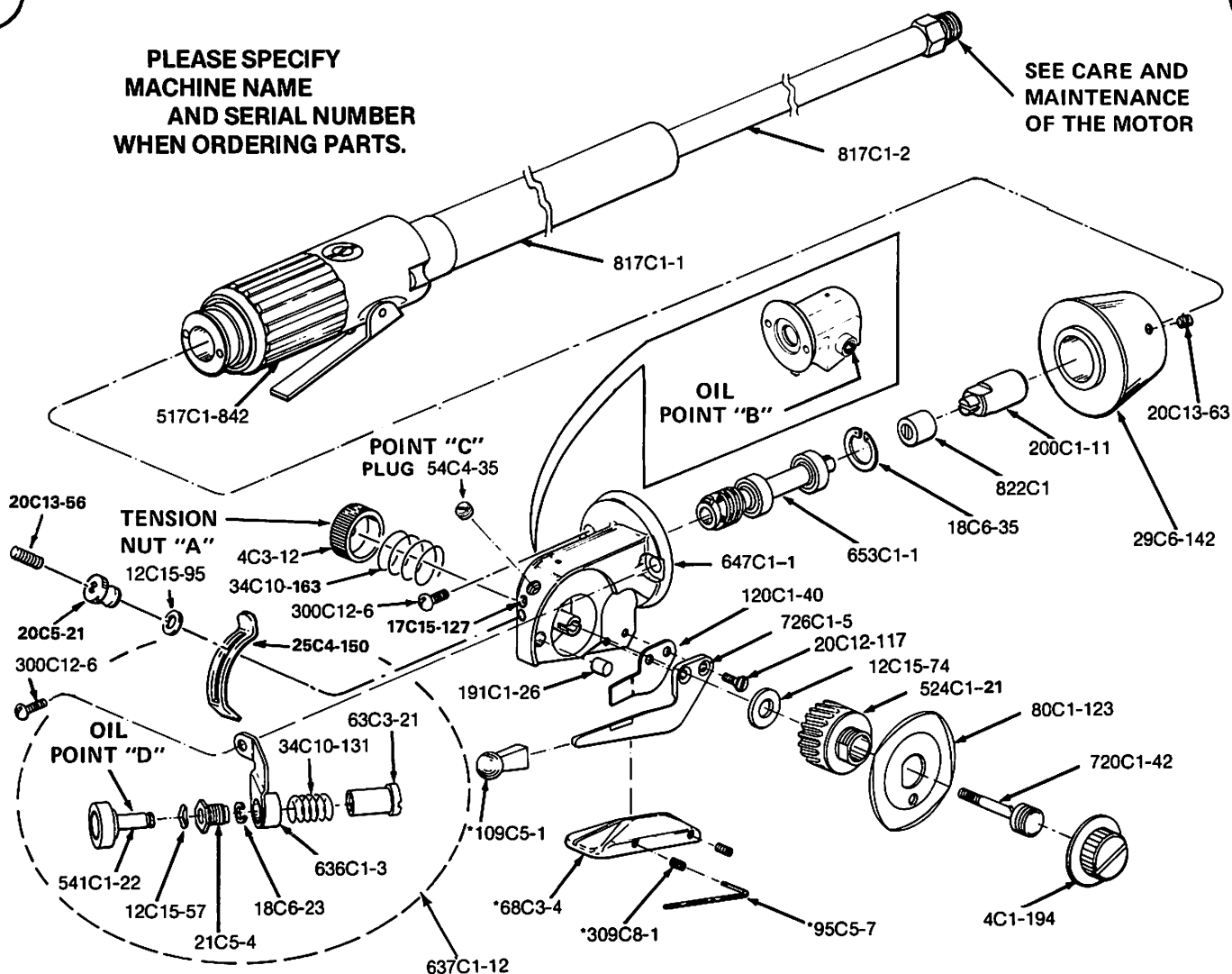
Sharpening stone may be replaced as required without disassembling cutting head. Remove knife lock nut (4C1-194) and knife (80C1-123). Remove sharpener button (63C3-21) and sharpener spring (34C10-131) from rear of sharpener assembly. Sharpening stone and bushing assembly can then be removed from front of sharpener bracket (636C1-3). Remove retaining ring (18C6-23) from shaft of sharpening stone (541C1-22) and remove stone. Note: This procedure is reversed when reassembling.

CARE AND MAINTENANCE OF THE MOTOR

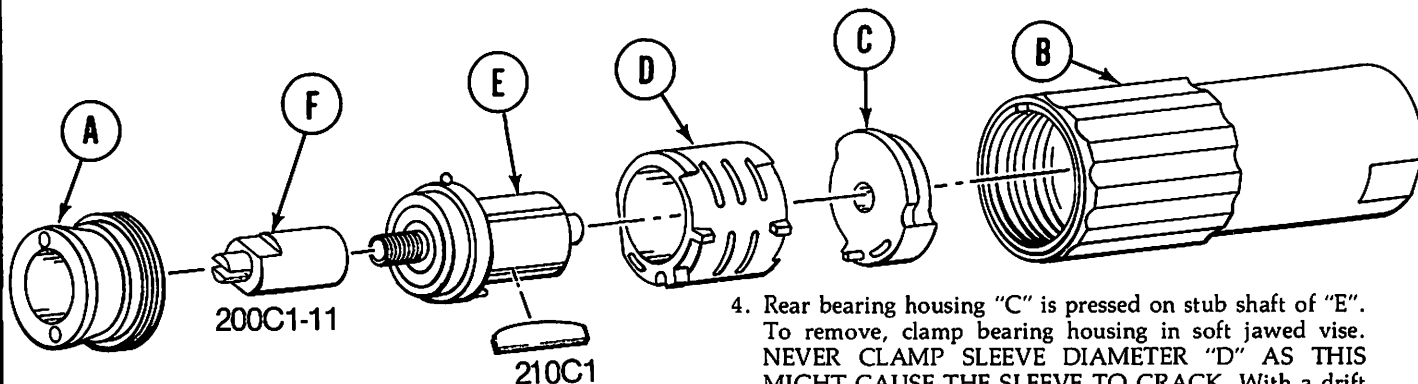
An air line oiler and filter should be used for the best performance of this pneumatic motor. The motor must be lubricated and free of moisture. If an air line oiler and filter is not available, a few drops of SAE 5 spindle oil should be used several times a day in the air input line,

**PLEASE SPECIFY
MACHINE NAME
AND SERIAL NUMBER
WHEN ORDERING PARTS.**

**SEE CARE AND
MAINTENANCE
OF THE MOTOR**



INSTRUCTIONS FOR REPLACING DRIVER 200C1-11



1. Remove retaining nut "A" from housing "B", while holding housing in a soft jawed vise by the flats. Insert spanner wrench and turn counter clockwise to remove nut.
2. Slide driver assembly "C", "D", "E" and "F" out of housing.
3. BEFORE PROCEEDING FURTHER — Note the orientation of the pins in the bearing housings "C" and "E", with respect to the pockets in the sleeves "D". THESE PARTS MUST BE ASSEMBLED IN EXACTLY THE SAME WAY.

4. Rear bearing housing "C" is pressed on stub shaft of "E". To remove, clamp bearing housing in soft jawed vise. NEVER CLAMP SLEEVE DIAMETER "D" AS THIS MIGHT CAUSE THE SLEEVE TO CRACK. With a drift pin slightly smaller than the shaft diameter, lightly tap shaft out of the bearing housing.
5. The sleeve "D" will now slide off assembly "E" and "F".
6. Remove the driver "F" by clamping rotor at the vane diameter "E" in a soft jawed vise and turn counter clockwise with a wrench on the flats of driver "F".
7. Re-assemble in reverse of the above procedure. After completing assembly, check for free rotation of driver "F". Remedy any binding or chatter caused by the rear bearing housing being too tight by inserting a drift pin and tap end of stub shaft on "E" lightly to loosen assembly.

