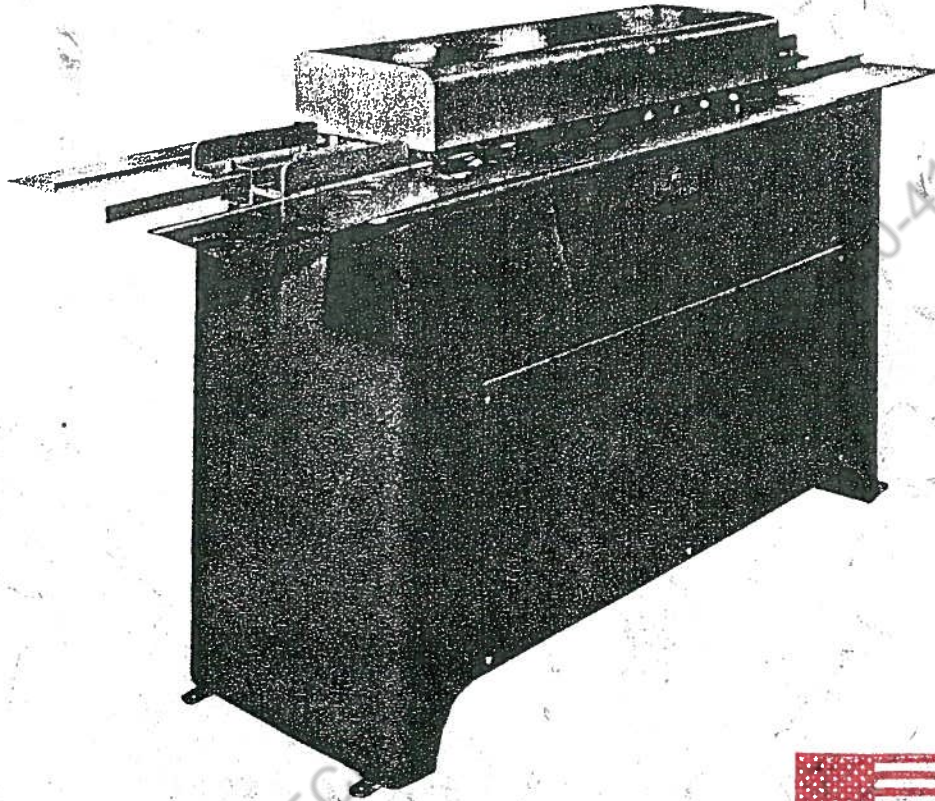


GENERAL OPERATING INSTRUCTIONS AND PARTS LIST



FLAGLER HIGH SPEED COMBINATION "L" BAR MACHINE

flagler

56513 PRECISION DRIVE, CHESTERFIELD, MICHIGAN 48051
TELEPHONE: (586) 749-6300 FAX: (586) 749-6363

FLAGLER HIGH SPEED COMBINATION "L" BAR MACHINE

ELECTRICALS:

5 H.P. 230/460/4/60 motor and controls. Standard machine wired for 230 volts unless otherwise specified.

OPERATION:

When machine has been wired to correct power source, check rotation. When rotation has been determined, place properly sheared blank between gage bars and feed material into the rolls. Check the end result and make changes accordingly.

ADJUSTMENTS:

Should the machine labor under load, the hold down studs are set too tight. To re-adjust, tighten the eight studs that pass through the machine plates and then loosen approximately one quarter of a turn (90°). Should the machine continue to labor, loosen the four studs on the lead end of the machine to three-eighths (135°) or one half turn (180°). Downward bow can be compensated for by adjusting the hold down studs located at the exit end of the machine. Side bow is caused by an unbalance in the stud adjustment.

LUBRICATION:

Lubrication fitting for the high speed shafts are located on the side panel through a central lubrication system. The high speed bearings should be lubricated every eight hours of operation. A coating of good open gear grease should be kept on the gears at all times.

NOTE: If the machine is to be used or stored out of doors, an oil or grease film will prevent rusting of all surfaces.

INSTRUCTIONS FOR MOUNTING AUXILIARY ROLLS:

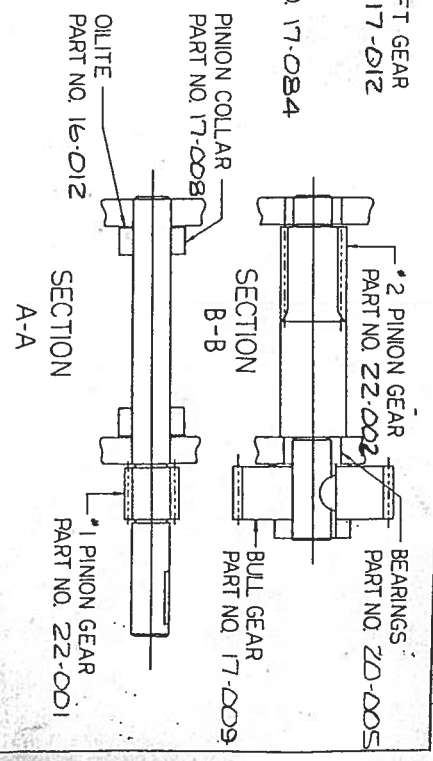
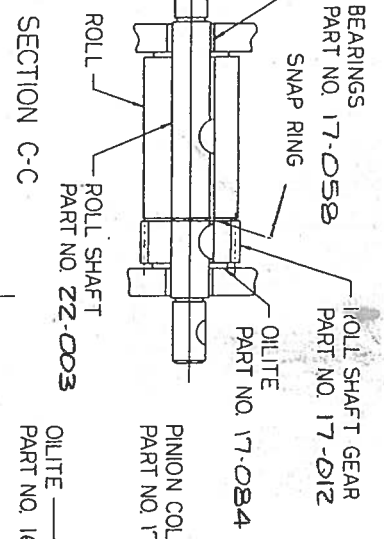
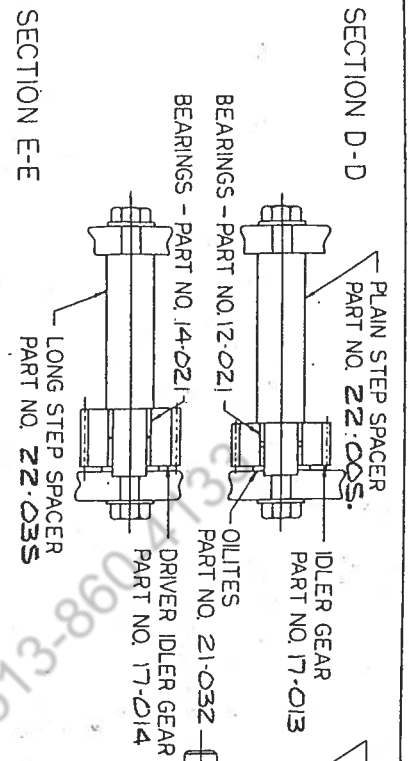
Machine auxiliary shafts are designed to accommodate various auxiliary rolls listed below. To install these rolls, proceed as follows:

1. Remove the section for the table top side plate on the side of the machine which the rolls are to be mounted.
2. If auxiliary rolls are now on the machine, remove the retaining bolts and washers. Remove all parts not pertaining to the set to be used.
3. Place all woodruff keys in proper location.
4. Select the first pair of rolls which are marked "T-1" and "B-1" and place them on the shaft at the entrance end of the machine. Place the "T-1" roll on the upper shaft and the "B-1" roll on the lower. Repeat procedure through all roll stations.
5. After the rolls are installed, fasten the rolls with retaining screws and washers.
6. Mount entrance and exit gages to the stand, using the slotted holes provided in the table top. Set entrance gages by placing a straight edge along the outer edge of the auxiliary rolls, measure to the required amount in from the straight edge to the extreme ends of the entrance gage.

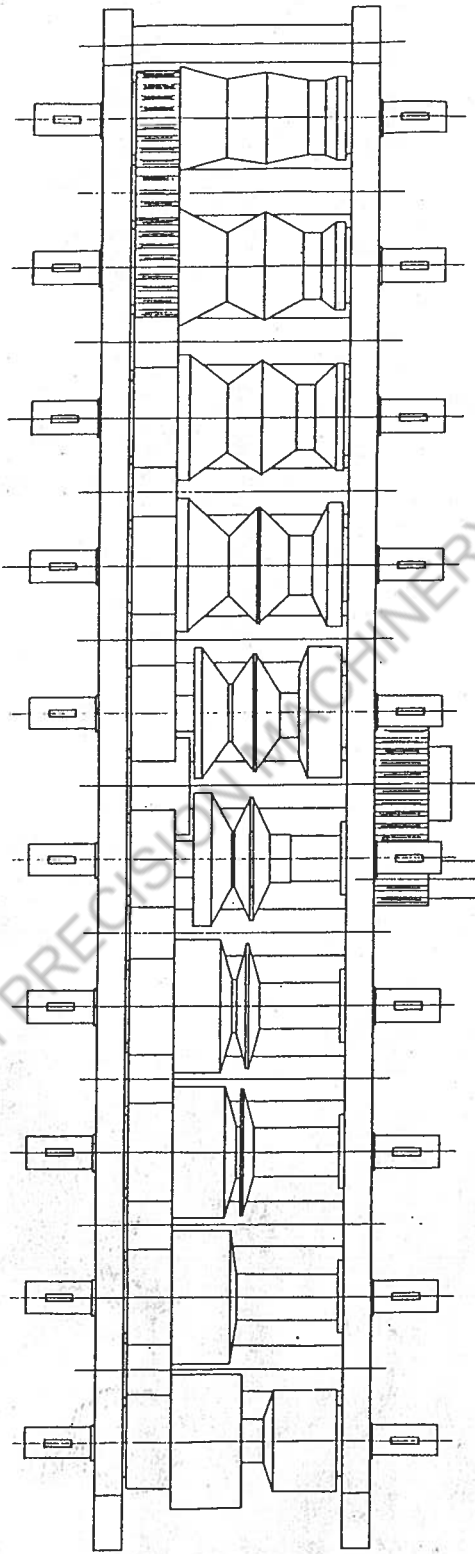
SUGGESTED PROCEDURE FOR REMOVING
FORMING HEAD FROM CABINET

1. Remove the cover, top side plate and grease lines from the machine.
2. Remove the top head by removing the lock nuts and washers on the 3/8" hold down studs.
3. Move the feed gages as to allow access to the 1/2" flat head screws, which hold the bottom head in the cabinet.
4. Support the weight of the bottom head before removing the 1/2" flat head screws.
5. Remove the 1/2" flat head screws, lower the bottom head, remove the belts from the pulley, tilt the head as to allow it to be raised up and out of the cabinet.
6. Lay the head on its side with the pulley side up. Remove the pulley, bull gear and the auxiliary rolls (if any) and all the 1/2" screws which will allow the removal of the top plate.
7. You will now be able to inspect for broken parts. See parts list and assembly print for ordering information. Please include serial number of machine when ordering parts.
8. For reassembly, reverse the above procedure, making sure all of the keys are up and in line.

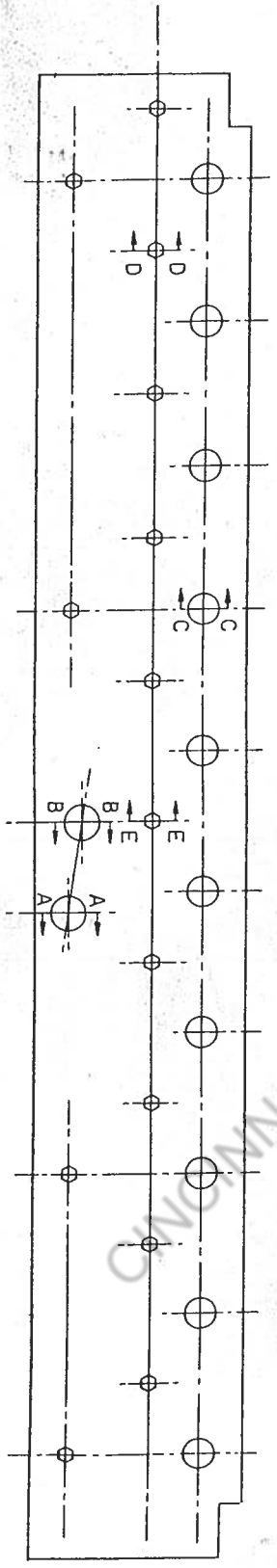
SECTION D-D



FEED
END



BOTTOM HEAD ASSY. FOR 'L' BAR MACHINE



MASTER PARTS LIST

FLAGLER HI-SPEED COMBINATION - "L" BAR

Part no.	Description	Quantity
21-001	Bottom Front Plate	1
21-002	Bottom Back Plate	1
21-003	Top Front Plate	1
21-004	Top Back Plate	1
22-001	#1 Pinion Gear	1
22-002	#2 Pinion Gear	1
17-062	Pinion Collar w/Keyway	1
20-040	Collar	2
17-009	Bull Gear	1
22-003	Roll Shaft	20
17-012	Roll Shaft Gear	20
17-013	Idler Gear	8
17-014	Driver Idler Gear	1
22-004	Plain Spacer	14
22-005	Plain Step Spacer	4
22-006	Plain Step Spacer	4
22-035	Long Step Spacer	1
14-054	Spring Washer # B-0750-040	96
17-058	Bearing 1612	40
12-021	Bearing 148	16
14-021	Bearing 1412	2
16-012	Oilite TT-1709-01	2
17-084	Oilite TT-1502	40
20-005	Bearing 162412	4
21-032	Oilite TT-1503	9
17-059	Hold Down Stud	8
17-025	Spacer Washers	8
17-031	Grease Bolt	1
22-007	Guide Block	1
22-008	--Vert. Straightener Assy.--	1
22-009	Mounting Block	1
22-010	Adjustable Block	1
22-011	-Horiz. Straightener Assy.-	1
22-012	Mounting Bracket Bar	1
22-013	End	2
22-014	Large Cam Block	1
22-015	Cam Follower-CF-7/8-B	1
22-016	Small Cam Block	1
22-017	Cam Follower CF-5/8-B	2
22-026	--Feed Gage Assy.--	1
22-027	Base	1
22-028	Side	1
12-215	Guide Rail	1
22-033	Strap	1
22-037	--Feed Gage Insert Assy.--	1
22-030	Base	1

FLAGLER HI-SPEED COMBINATION - "L" BAR

Part no.	Description	Quantity
22-031	Side	1
22-032	Stop	1
21-019	Riser	2
21-029	Riser	2
22-039	Stock Guide	1
22-025	Helper Block-Sta. #6	1
22-034	--Cover Assy.--	1
22-018	Top & Sides	1
22-019	End	2
21-013	--Cabinet Assy.--	1
17-037	Skirt	2
20-021	Upper Side Panel	2
20-022	Louver Panel	2
17-040	Feed Plate	1
21-014	Left Take-Off Plate	1
21-015	Right Take-Off Plate	1
21-016	Center Channel	1
21-017	Side Plate	2
17-063	Feet	2
21-018	Bottom Side Angle	2
14-040	Lag Screw Plate	4
17-050	Motor Support	2
14-048	--Motor Clamp Assembly--	4
14-049	Base	4
14-050	Spacer	4
17-046	Lube Tube: 19" w/14-053	3
14-041	Lube Lines: 12" w/14-053	2
14-053	Lube Line Fittings	10
21-026	Motor (BL-5-184T Ajax)	1
21-030	Starter	1
21-027	Heater	3
20-026	Sheave (Driver)	1
17-053	Sheave (Driven)	1
17-054	Bushing	1
22-036	"V" Belt	2
10-031	Label-Manufacturer	1
10-040	Label-OSHA	1
10-042	Warning Label	1
10-043	Made In USA Label	1
22-072	Top 1 "L" Bar Roll	1
22-073	Top 2 "L" Bar Roll	1
22-074	Top 3 "L" Bar Roll	1
22-075	Top 4 "L" Bar Roll	1
22-076	Top 5-2 "L" Bar Roll	1
22-077	Top 5-1 "L" Bar Roll	1
22-078	Top 6 "L" Bar Roll	1
22-079	Top 6 Spacer	1

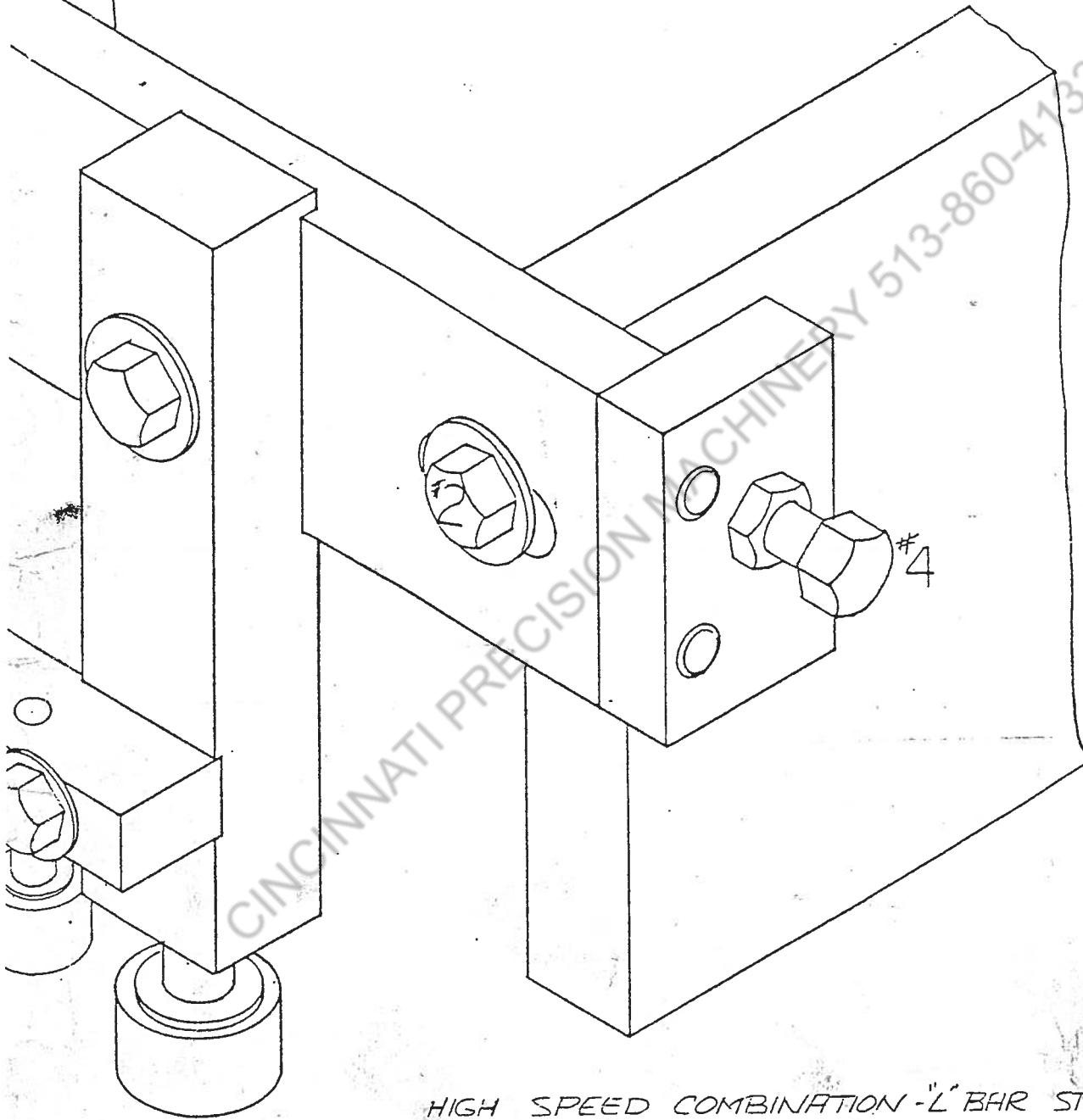
FLAGLER HI-SPEED COMBINATION - "L" BAR

Part no.	Description	Quantity
22-080	Top 7 "L" Bar Roll	1
22-081	Top 7 Spacer	1
22-082	Top 8 "L" Bar Roll	1
22-083	Top 8 Spacer	1
22-084	Top 9 "L" Bar Roll	1
22-085	Top 9 Spacer	1
22-086	Top 10 "L" Bar Roll	1
22-087	Top 10 Spacer	1
22-088	Bottom 1 "L" Bar Roll	1
22-089	Bottom 2 "L" Bar Roll	1
22-090	Bottom 3 "L" Bar Roll	1
22-091	Bottom 4 "L" Bar Roll	1
22-092	Bottom 5 "L" Bar Roll	1
22-093	Bottom 6-1 "L" Bar Roll	1
22-094	Bottom 6-2 "L" Bar Roll	1
22-095	Bottom 7-1 "L" Bar Roll	1
22-096	Bottom 7-2 "L" Bar Roll	1
22-097	Bottom 8-1 "L" Bar Roll	1
22-098	Bottom 8-2 "L" Bar Roll	1
22-099	Bottom 9-1 "L" Bar Roll	1
22-100	Bottom 9-2 "L" Bar Roll	1
22-101	Bottom 10 "L" Bar Roll	1

CINCINNATI PRECISION MACHINERY 513-860-4133

Because of the sensitivity of the finished part straightener of the "L" Bar, we suggest that you limit your production of the "L" Bar or Flat "S" to run production of one gage at a time.

"NO MIXTURE OF MATERIAL THICKNESS ON ANY PRODUCTION RUN"



HIGH SPEED COMBINATION "L" BAR STRAIGHTENER
1 ASSEMBLY REQUIRED PER MACHINE

5-6-76

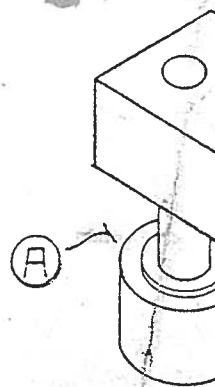
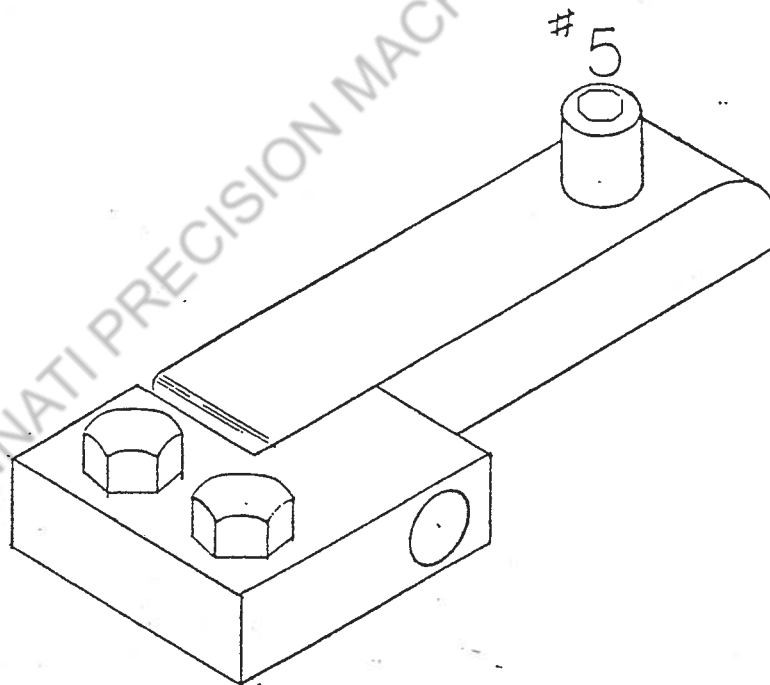
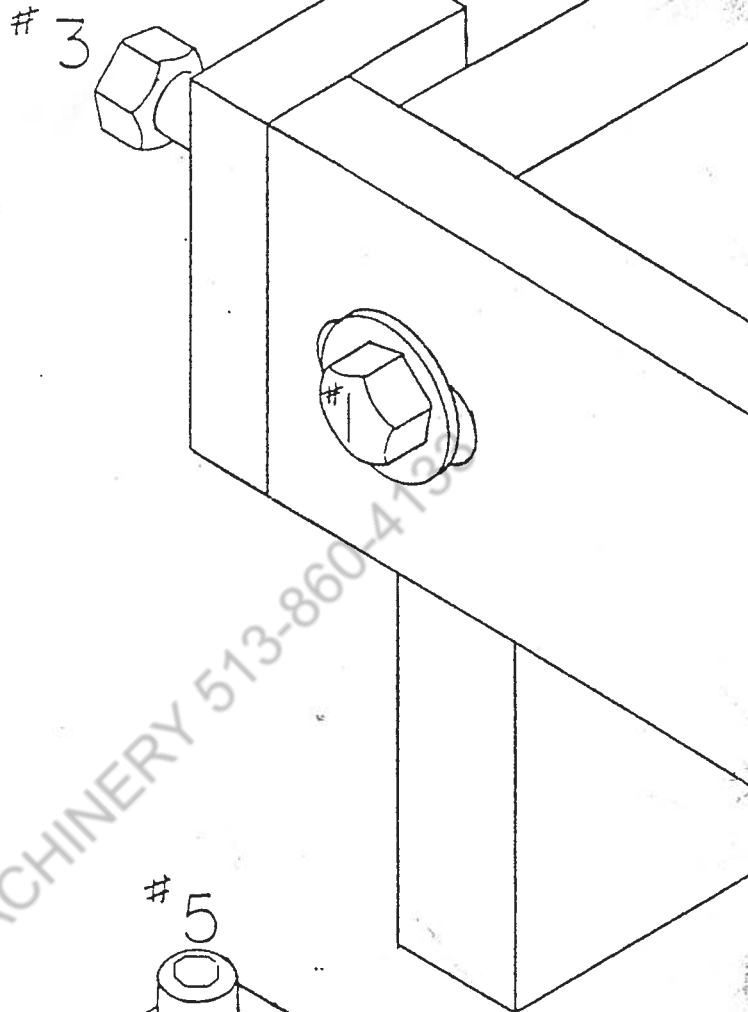
RJK

If the cleat is bowing to the right, loosen bolts #1 and #2 just enough to allow the whole assembly to slide. Now loosen bolt #4 slightly and tighten Bolt #3. This will move the entire assembly to the left. Tighten bolts #1 and #2.

If the cleat is bowing to the left, loosen bolts #1 and #2 just enough to allow the whole assembly to slide. Now loosen bolt #3 slightly and tighten bolt #4. This will move the entire assembly to the right. Tighten bolts #1 and #2.

If the cleat is bowing up, lower the bottom slide with set screw #5; if it is bowing down, raise the bottom slide with set screw #5.

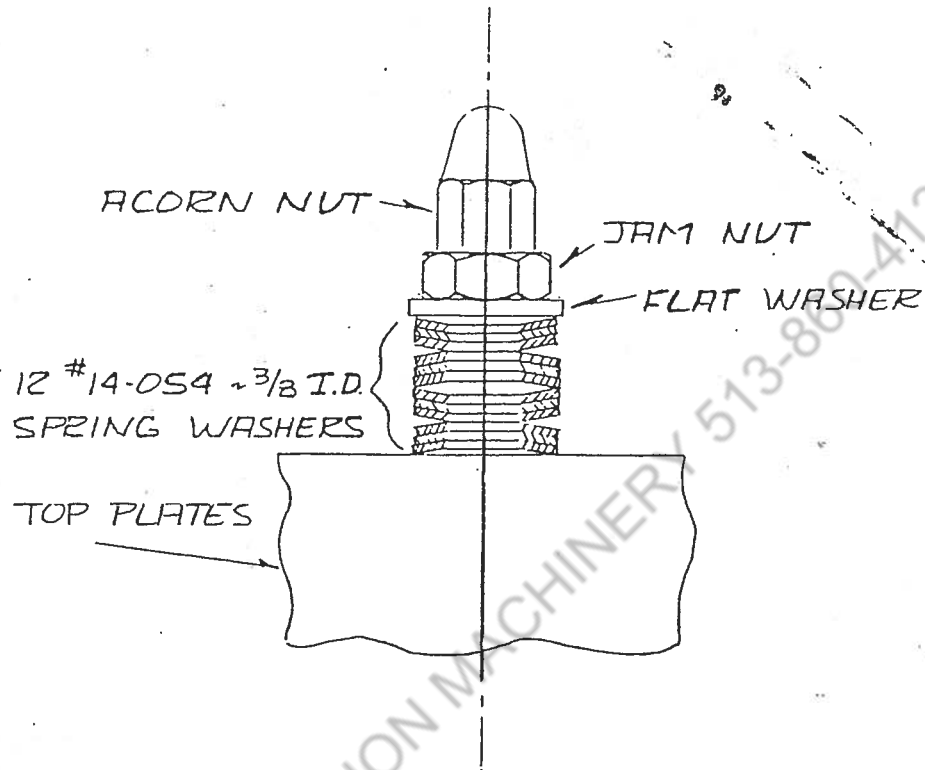
Material must be sheared accurately. Material that varies in width will also vary the straightness of the cleat.



Ⓐ 2ND CAM FOLLOWER ADDED 5/88

TEN STATION SPRING WASHER ASSY. INSTRUCTIONS

3/8 HOLD DOWN STUDS



WHEN INSTALLING TIGHTEN JAM NUT UNTIL SPRING WASHERS ARE FLAT THEN BACK OFF ONE TURN AND TIGHTEN ACORN NUT.

TO WORK PROPERLY SPRING WASHERS MUST BE STACKED AS SHOWN.

THE FLAGLER CORP.
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Mt. Clemens, Mich. 48045