

USERGUIDE
UGE036/0597

T3500 Strand Pelletizer

Table of Contents

	PAGE
SAFETY.....	1
INTRODUCTION/SPECIAL FEATURES.....	1
GUARANTEE/SERVICE POLICY	3
AIR SUPPLY/SPEED CONTROL VALVE.....	4
LUBRICATION.....	5
CUTTING CHAMBER COMPONENTS	6
PELLETIZER DRIVE MECHANISMS.....	7
OPENING THE CUTTING CHAMBER.....	8
UPPER & LOWER FEEDROLL REPLACEMENT-ADJUSTMENT	9
REMOVING THE DOCTOR BLADE.....	16
REMOVING THE BED KNIFE	17
GAPPING THE ROTOR, BED KNIFE, LOWER AND UPPER FEEDROLL.....	19
TROUBLE SHOOTING CHECKLIST	22
SPARE PARTS LIST	23
PURCHASED PART INFORMATION	24

SAFETY

These pelletizers should not be installed, operated or worked upon without compliance with the warning signs affixed to them, and a thorough understanding of these instructions.

PRECAUTIONS

1. Always disconnect power completely before attempting any service to the unit.
2. Never operate the unit with the cutting chamber cover removed, or in poor condition.
3. Never operate the unit with the guards or discharge chute removed.
4. Do not attempt to over-ride safety switches or overloads.
5. Always allow the unit to "clean out" before shutting it down; avoid feeding material to it when it is not operating.
6. Prevent all metal and other foreign material from entering the cutting chamber; this pelletizer is intended to cut plastic material only.
7. No persons should operate this machine without proper training.
8. **WARNING! Hot Strands!**

INTRODUCTION

This maintenance manual is to assist you in the care and maintenance of your **Heavy Duty Plastic Cutter**. Pelletizers from concept to field are especially engineered for ease of operation and maintenance. Consequently, Conair has developed a pelletizer that meets the toughest requirements of all resin producers and compounders in the Thermo Plastics field. Satisfactory continued performance depends upon periodic checks and planned preventive maintenance.

SPECIAL FEATURES

1. A Helical Rotor that has been dynamically balanced to five uniform cuts, less noise and vibration, and lower power requirements.
2. A special alloy tipped rotor and bed knife gives extremely long life and cleaner cuts.
3. Special eccentric bearing arrangement which allows ultra close adjustment of rotor to bed knife.
4. A rugged one piece stainless steel housing that contains and holds alignment of rotor, bed knife and feedrolls.
5. A special elastomer covered feedroll provides maximum traction and long life.
6. Two lip plastic and metallic labyrinth seals are provided on all inboard bearings to eliminate contamination of material being processed and protect bearings from processing corrosives. Because of the cutting arrangement, there are less than 1% overs.
7. All bearings are packed in high temperature grease.
8. All chutes, guides, rolls, rotor and housings which come in contact with the material being processed are stainless steel to eliminate contamination.

The features listed above and many others will make you a satisfied owner of a Pelletizer. With proper care and maintenance, your Pelletizer will give you many years of reliable service.

INSTALLATION

ELECTRICAL

Remove the pelletizer and related peripherals from their shipping skids and place near the area of desired operation.

Connect a power cord through the fused disconnect switch located on the main control panel. (See chart below.)

10 HP \ 230 Volt, 10-20 HP \ 460 Volt = 6 Gauge, 4 Conductor

30 HP \ 460 Volt = 4 Gauge, 4 Conductor

20-30 HP \ 230 Volt, 50 HP \ 460 Volt = 2 Gauge, 4 Conductor

Note: These ratings apply to pelletizers with standard peripherals installed. (Pump stations, Blowers, Dryers, etc.)

INSTALLATION (Continued)

ELECTRICAL (Continued)

Referring to the electrical schematics and wiring diagrams supplied, connect the main control enclosure to the pelletizer junction box, make similar connections to all peripherals supplied with your system. Make all connections in compliance with local electrical codes, and be sure the unit is properly grounded. When peripheral equipment is electrically tied to the control enclosure, all sets of horsepower and amperage ratings should be considered in sizing schematics supplied with your system for total ratings. If your installation includes your own method of automatic material conveying, the rate of material throughput should never exceed the rate of removal, or jam-ups within the pelletizer will occur.

Upon completion of all electrical connections, the direction of the pelletizer rotor, and associated peripherals must be checked before putting the unit into operation. Jog the start-stop buttons once, and observe the direction of the drive motors through the fax housing at the rear of the motors. **PROPER DIRECTION IS:** The top of the drive motor shaft rotating towards the direction indicated by arrows. To change direction, switch any two fused wire leads at the disconnect switch. **NOTE: Do not use ground wire!**

GUARANTEE

All Pelletizers are guaranteed against defective workmanship for a period of one year from date of shipment.

SERVICE POLICY

It is the expressed policy of Conair to give its customers the utmost in service. A field representative is available at all times to assist you with problems arising from the operation of the pelletizer.

SERVICE POLICY (Continued)

To facilitate prompt efficient service, we suggest that you follow these recommendations:

1. Before calling to request service, have all the details ready. If possible, have your maintenance man on the telephone also. We may be able to give you the necessary information over the telephone and thus save the time required for a field representative to reach your plant.
2. Whenever possible, advise us in advance when you will require a field representative.
3. Before requesting a field representative to start a new installation, please be sure all necessary wiring and air piping has been or will be completed before his arrival.
4. Please do not return any parts or materials to us without a "Return Material Tag". This will enable us to identify the part when we receive it.
5. When our field representative arrives, please see that the proper individuals (those concerned with the operation and maintenance of the machine) work with the field representative so that they can become familiar with its operation and maintenance.

PLACEMENT

Place machine square with flow of strands and lock securely to the floor. Attach air service and set gage pressure at a minimum of forty (40) pounds. This pressure will vary with number of strands that are processed. Attach power receptacle.

AIR SUPPLY

A clean, dry air supply must be supplied to the pelletizer. The air inlet on the pelletizer is labeled. The pipe size required will vary with the size of the machine and the size and number of air cylinders involved. We recommend that you use at least the same size pipe.

Every precaution should be taken to keep dirt, fillings, and chips out of the air line. Allow the air to blow free for several seconds before final connection is made to the pelletizer. This will allow the normal accumulation of foreign matter in a new pipe to blow out. A shut-off valve should be provided just ahead of the connection to the pelletizer.

AIR SUPPLY (Continued)

The air line filter is installed in the line ahead of all other air circuit apparatus. It is used to eliminate particles of grit, pipe scale and other impurities from the air stream as well as moisture and emulsified oil. Solutions and foreign particles are deposited in the bottom of the filter where they may be blown out at intervals by opening the waste cock. The cylindrical filter screen may be removed for cleaning.

SPEED CONTROL VALVE

In each line that feeds a chamber of an air cylinder, there are air speed control valves. These are connected so that they allow free flow of air into the cylinder and controlled flow out. The speed of cylinder operation is controlled by limiting the flow of exhaust air from the cylinder. To retard speed, turn the regulating screw inward. All valves should be set so that operation is smooth with a minimum of shock at the end of the stroke.

HAND VALVE

To operate the upper feedroll, a 4-way hand valve is used. For remote operation, a solenoid operated 4-way valve is furnished.

LUBRICATION

Feedrolls - All feedroll bearings are provided with grease fittings and should be greased periodically with high temperature silicone grease.

Rotor - Grease fittings for the rotor bearings are remotely located so that the rotor bearings can be greased with a standard pressure gun. Hi-temp silicone grease is recommended. Although safety fittings and bleed holes have been provided on bearing blocks, care should be taken that the bearing seals will not be pushed out from over greasing.

Cutting Chamber Components

Conair T-Series Pelletizers have an improved cutting chamber. A pivotable frame allows tool-less access to the inside of the cutting chamber to facilitate cleaning, service adjustments, and maintenance of the rotor, feedrolls, and knives. See *Figure 1*.

Stock is pulled through the feedtable by an upper feedroll and a lower feedroll, to the rotor, a helical milling cutter, which cuts against the bed knife. The lower feedroll is kept clean by a doctor blade, or scraper, which also supports the strand being cut.

The hinged cutting chamber cover is locked in place by a cover latching hand knob. Two locking hand knobs secure the upper feedroll bearing blocks. The lower feedroll bearing blocks are held in place by a pivot frame. The frame is secured with two positioning dowels, or clevis pins, and two locking hand knobs.

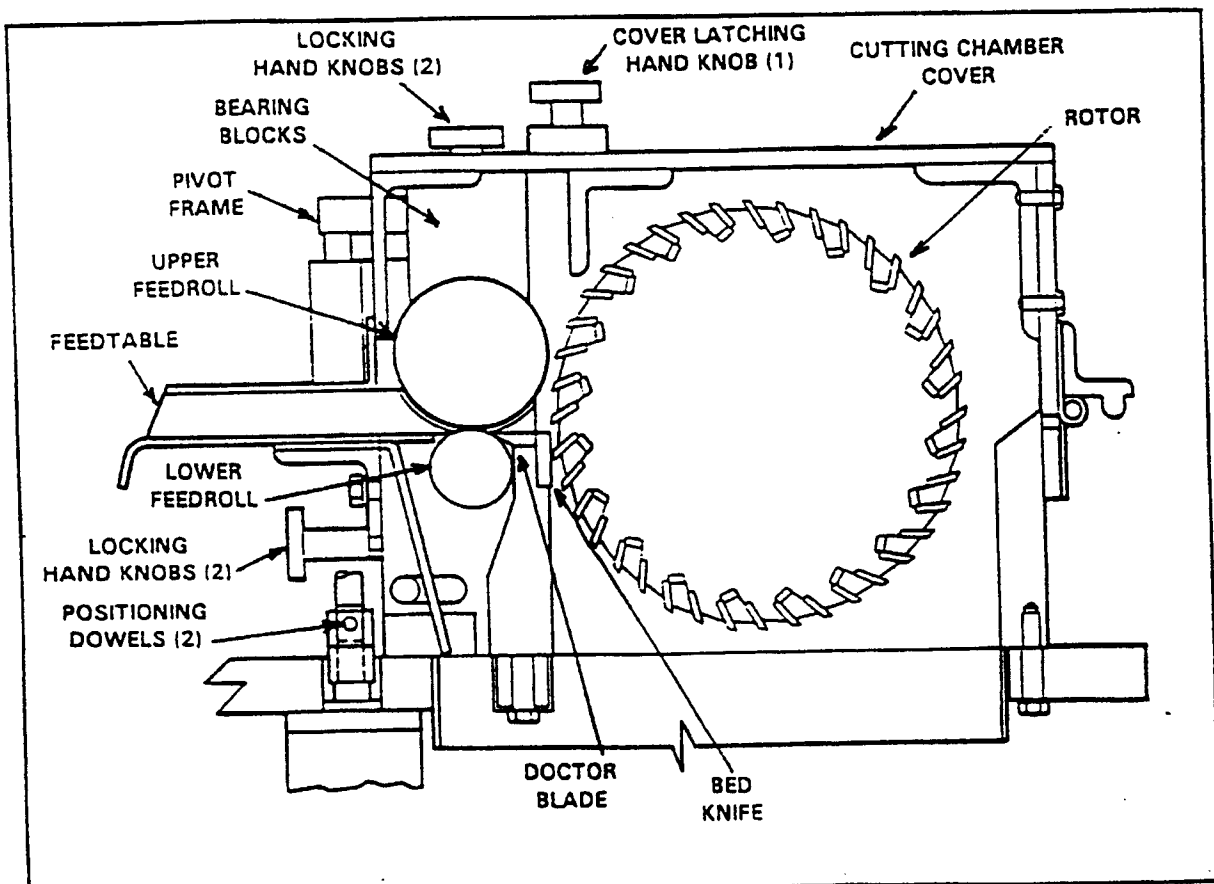


Figure 1, Cutting Chamber Components -- Sectional View

Pelletizer Drive Mechanisms

Two basic drive systems are used on Conair T-Series Pelletizers. As shown in *Figure 2*, the rotor is belt-driven by the pelletizer drive motor and the upper and lower feedrolls may be driven either by a belt-and-pulley arrangement or through couplings with universal joints to a gearbox.

With each drive system, feedroll speeds can be precisely controlled and matched to process needs by properly sizing the drive pulleys or gears. The belt-and-pulley drive mechanism features a spring-loaded belt-tensioning pulley for easy belt removal. The gearbox drive mechanism features quick-disconnect splined or keyed couplings.

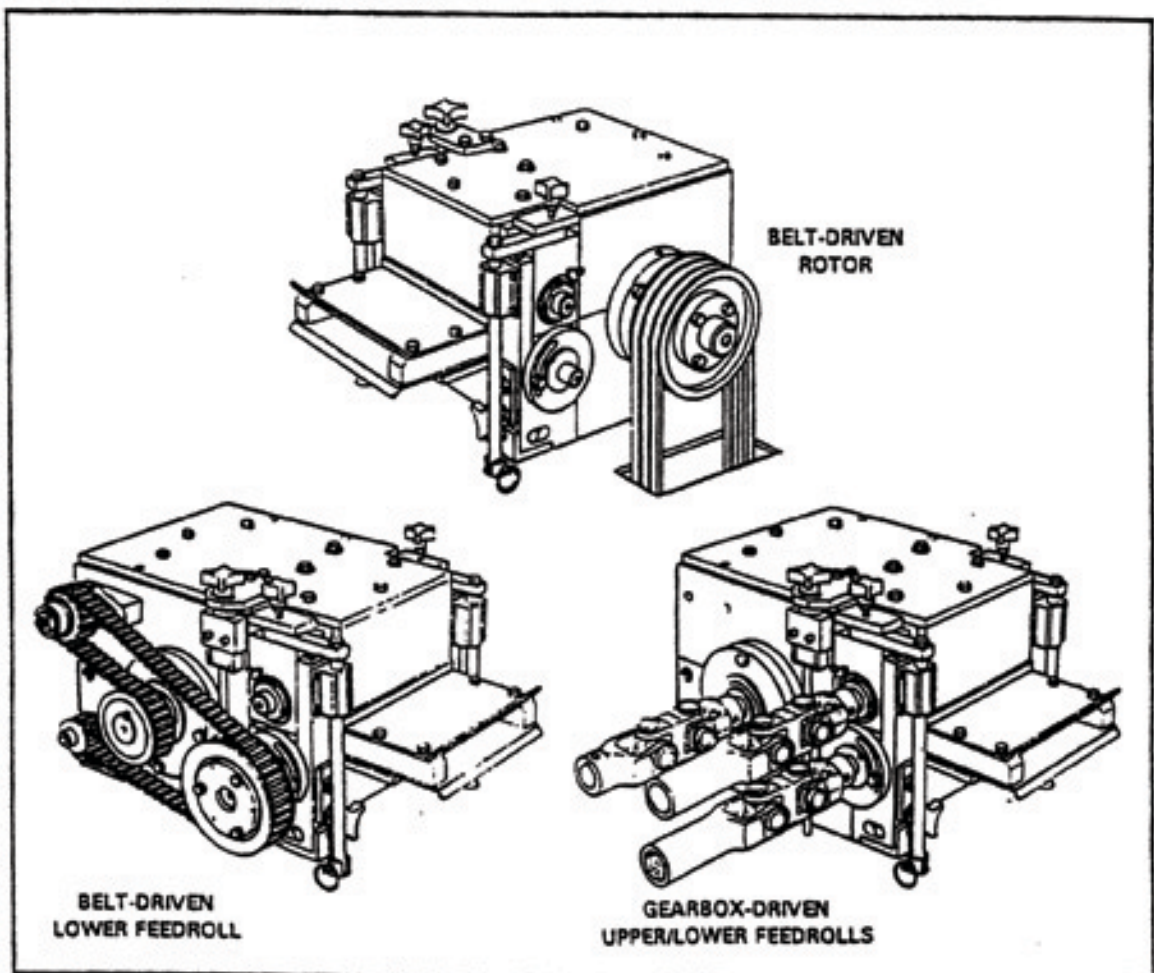


Figure 2, T-Series Pelletizer Drive Mechanisms

Opening The Cutting Chamber

Procedures for servicing cutting chamber components on Conair T-Series Pelletizers are basically the same, regardless of the type of drive mechanism used.

To open the cutting chamber, refer to *Figure 3*. Turn the cover latching hand knob counter-clockwise to disconnect the limit switch and release the cutting chamber cover. This shuts off all power to the chamber, and the hinged cover can then be rotated up and back until it rests on its stop at the rear of the chamber.

The upper and lower feedrolls, doctor blade, bed knife, and rotor (cutter) are now accessible for cleaning, gapping, and other service or maintenance requirements.

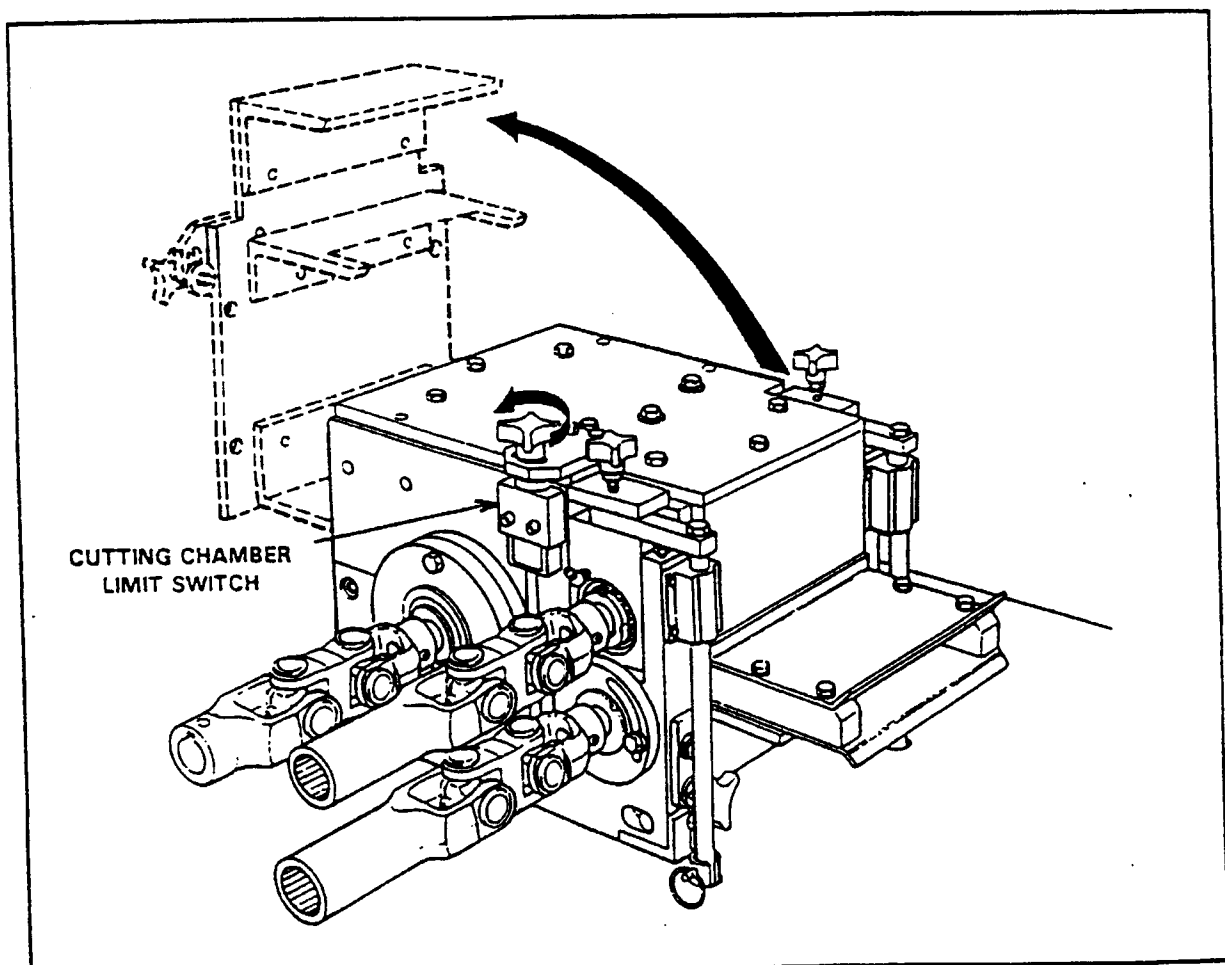


Figure 3, Opening The Cutting Chamber

Removing The Upper Feedroll

To remove the upper feedroll assembly, refer to *Figures 4, 5, and 6.*

In *Figure 4*, the two locking hand knobs on the upper feedroll bearing blocks are loosened by turning each counter-clockwise. Complete removal is unnecessary.

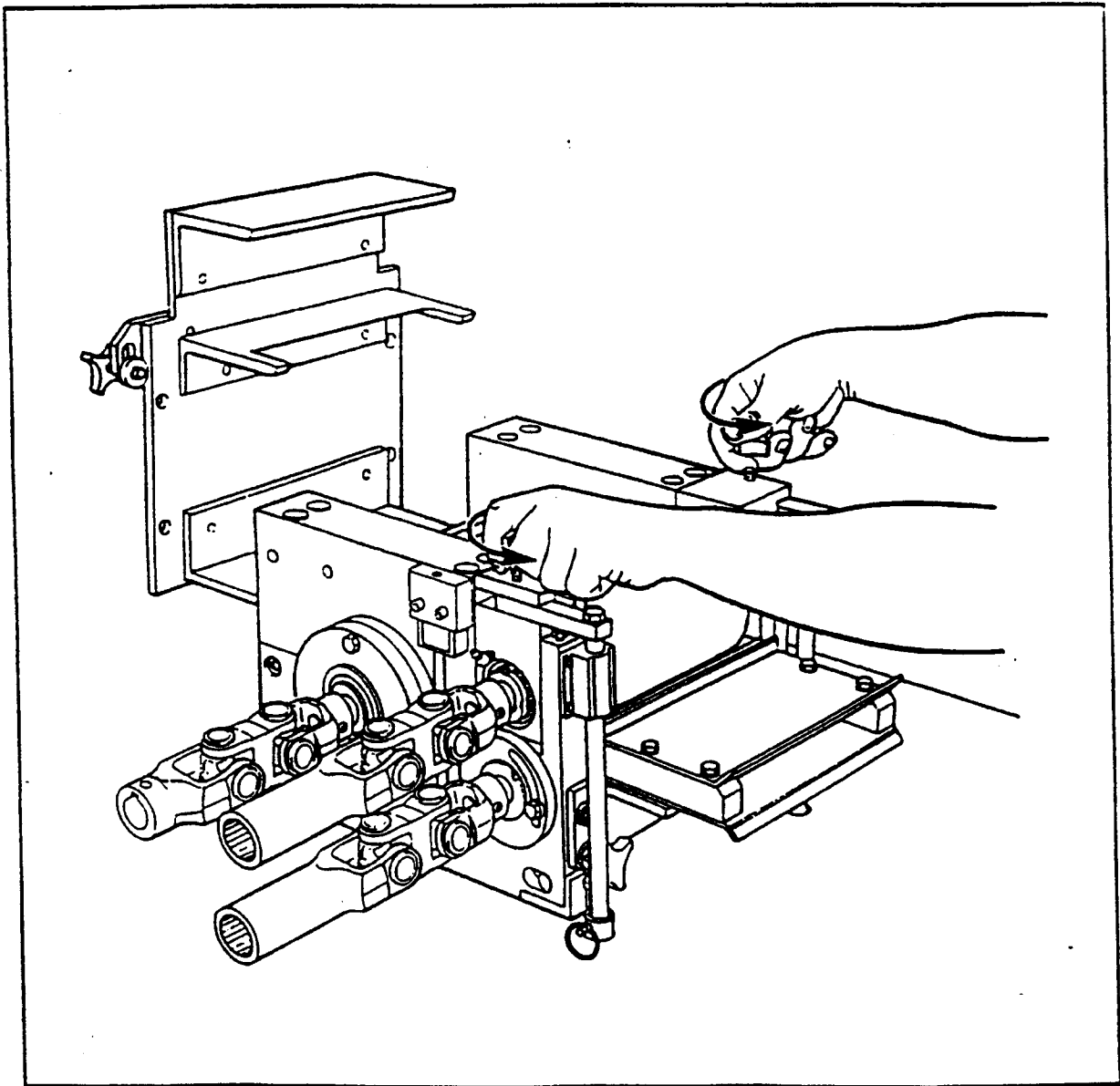


Figure 4, Removing The Upper Feedroll (1 of 3)

Removing The Upper Feedroll. (Continued)

To remove the upper feedroll assembly, refer to *Figures 4, 5, and 6.*

In *Figure 5*, the two pressure arms on the upper feedroll bearing blocks are rotated outward and away from each bearing block.

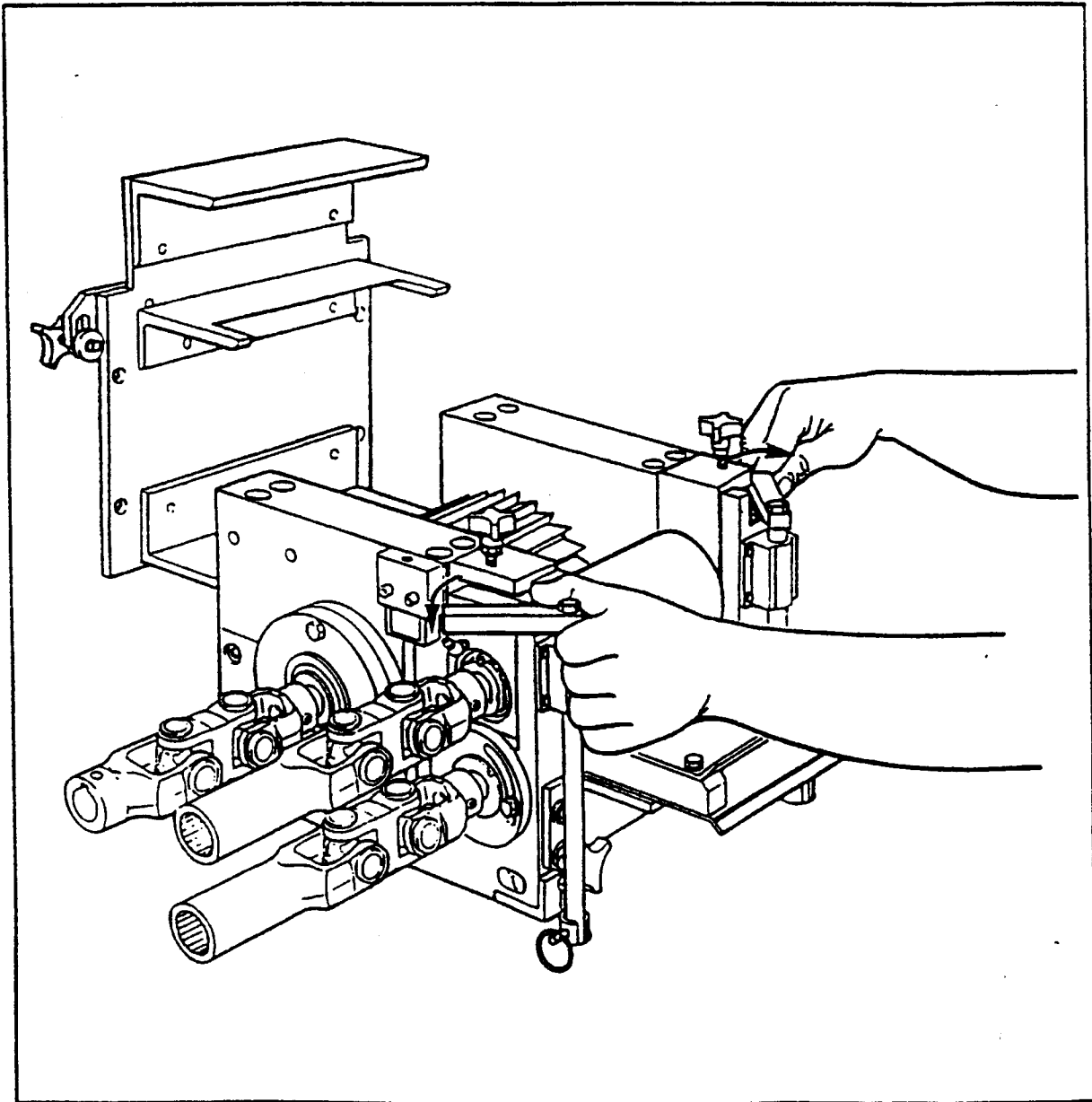


Figure 5, Removing The Upper Feedroll (2 of 3)

Removing The Upper Feedroll (Continued)

To remove the upper feedroll assembly, refer to *Figures 4, 5, and 6*.

In *Figure 6*, the upper feedroll, its bearing blocks, and splined drive coupling have been removed from the cutting chamber. Removal requires lifting upward on the feedroll assembly, while pulling its splined coupling away from and off the gearbox driveshaft. On belt-driven designs, the assembly can be simply lifted upward and out of the cutting chamber. Place the removed upper feedroll on a clean, stable surface.

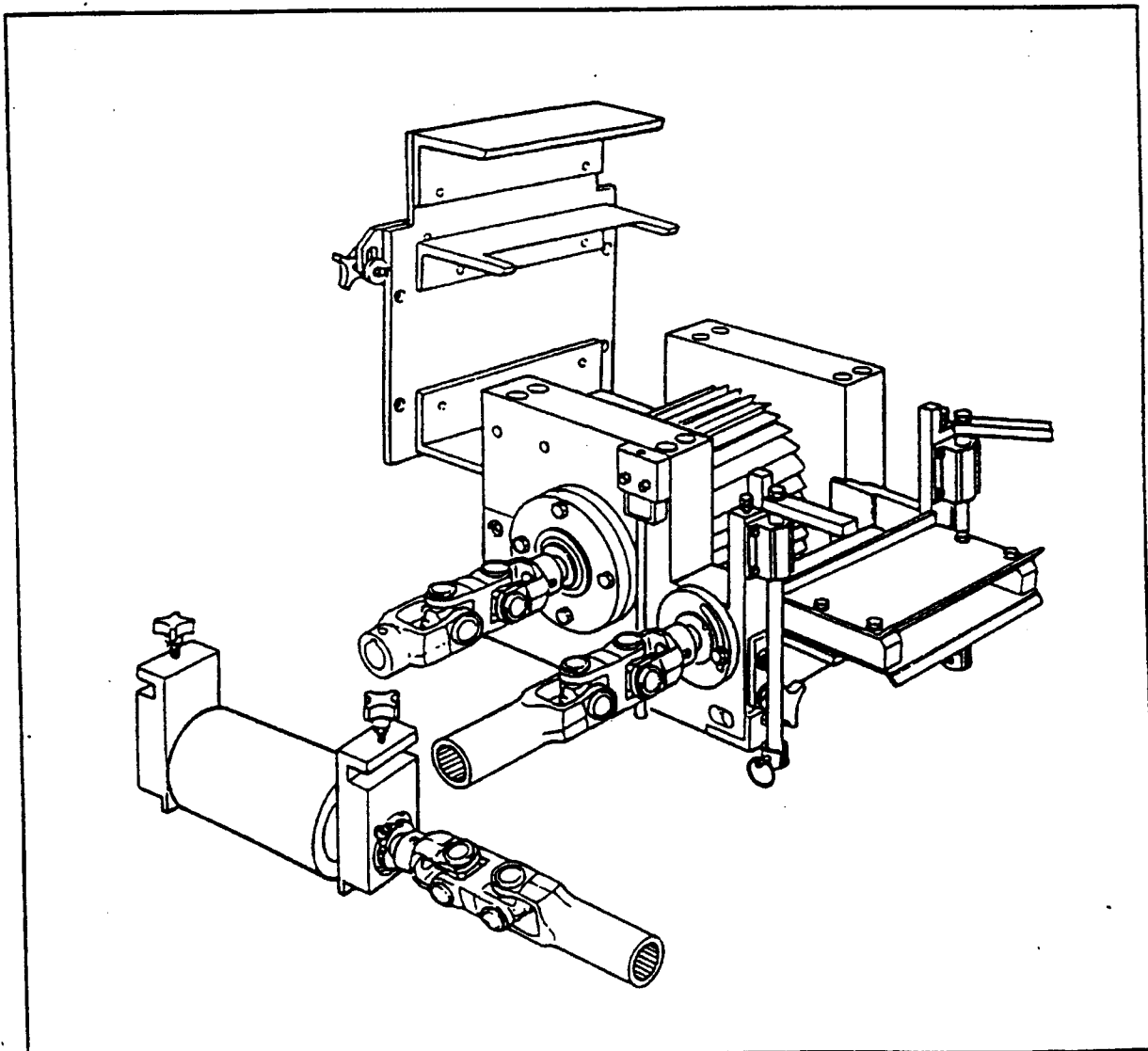


Figure 6, Removing The Upper Feedroll (3 of 3)

Removing The Lower Feedroll

On Conair T-Series Pelletizers with a belt-and-pulley arrangement for the drive mechanism, the cleated drive belt must be removed prior to proceeding with the lower-feedroll removal procedure.

As shown in *Figure 7*, the belt tension is released with a spring-loaded lever connected to the belt-tensioning pulley at the rear left-hand side of the cutting chamber. Simply loosen the locknut and move the lever up and toward the front of the chamber. Then, lift the slackened drive belt from the pulleys and set it aside.

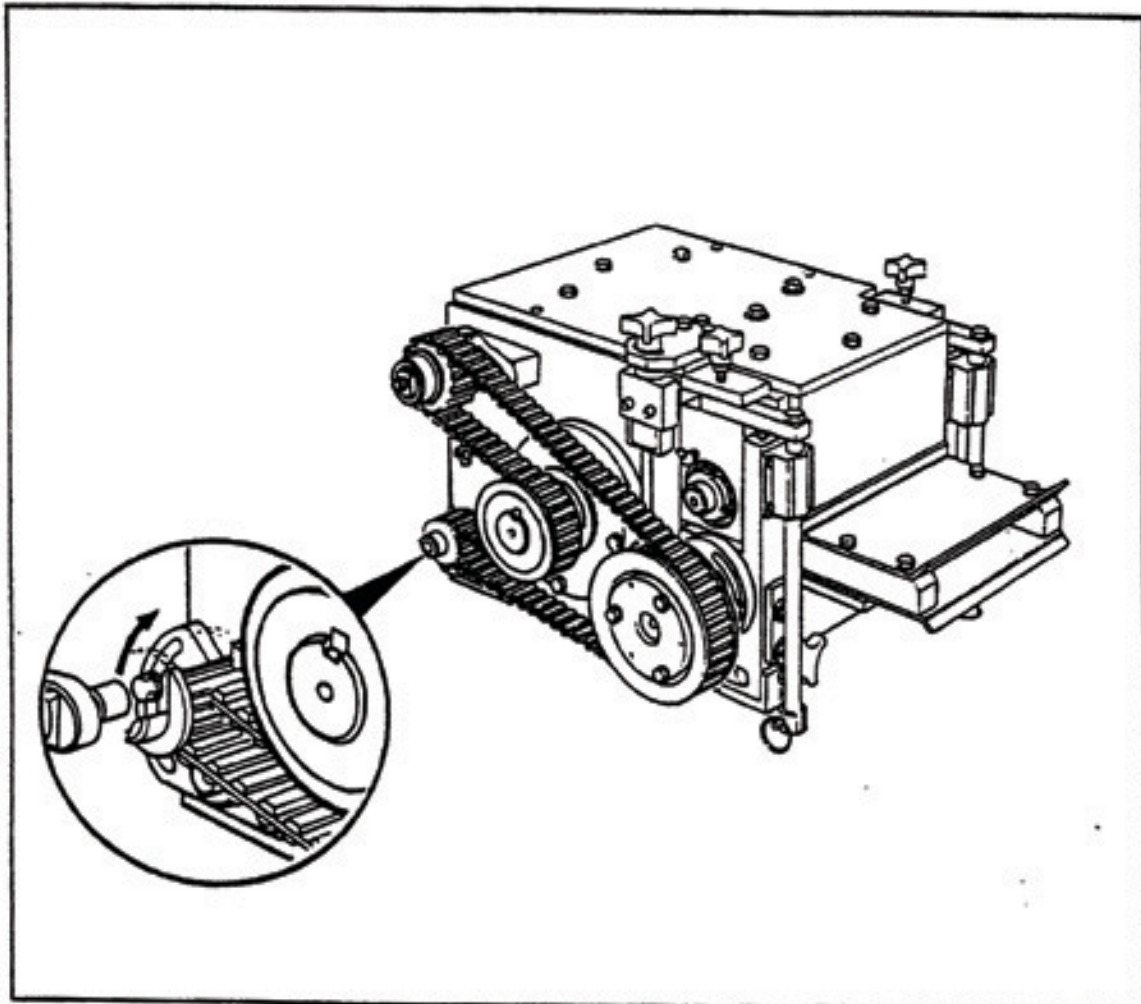


Figure 7, Removing The Drive Belt (on units so equipped)

Removing The Lower Feedroll (Continued)

To remove the lower feedroll assembly, refer to *Figures 8, 9, and 10.*

In *Figure 8*, the initial steps for removing the lower feedroll assembly are shown. First, remove the two positioning dowels, or clevis pins, from the air cylinder rods at either side of the pivot frame. Then, turn the two pivot frame locking hand knobs counter-clockwise until each is removed from the frame. Both clevis pins and both hand knobs should be set aside and ready for re-assembly when needed.

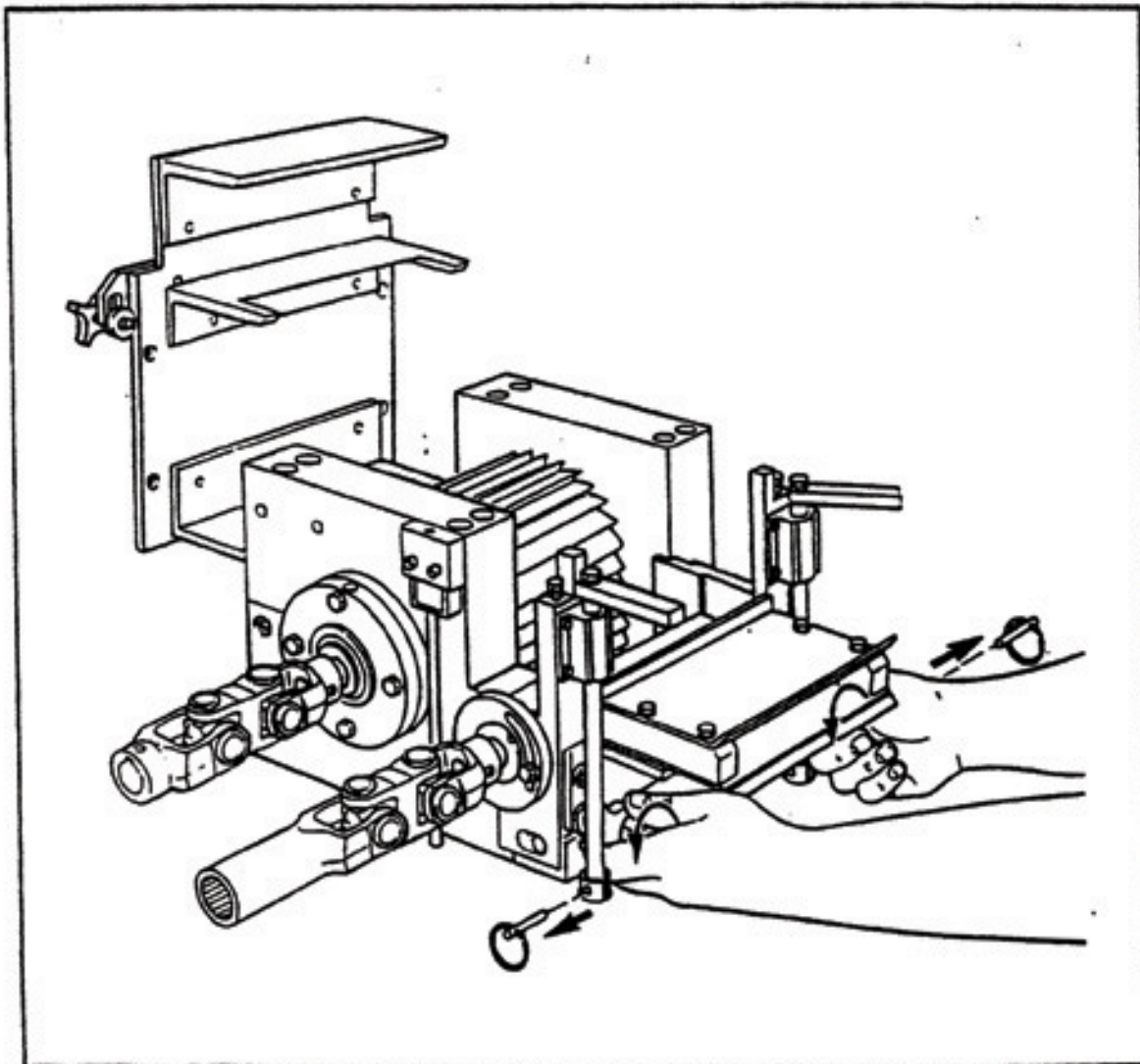


Figure 8, Removing The Lower Feedroll (1 of 3)

Removing The Lower Feedroll (Continued)

To remove the lower feedroll assembly, refer to *Figures 8, 9, and 10.*

In *Figure 9*, the next steps for removing the lower feedroll assembly are shown. First, loosen and free the lockbolts (one or two) that position the lower feedroll eccentrics on the supporting bearing blocks at either side of the cutting chamber. Then, rotate the pivot frame forward and down until the feed table rests on the isolation plate.

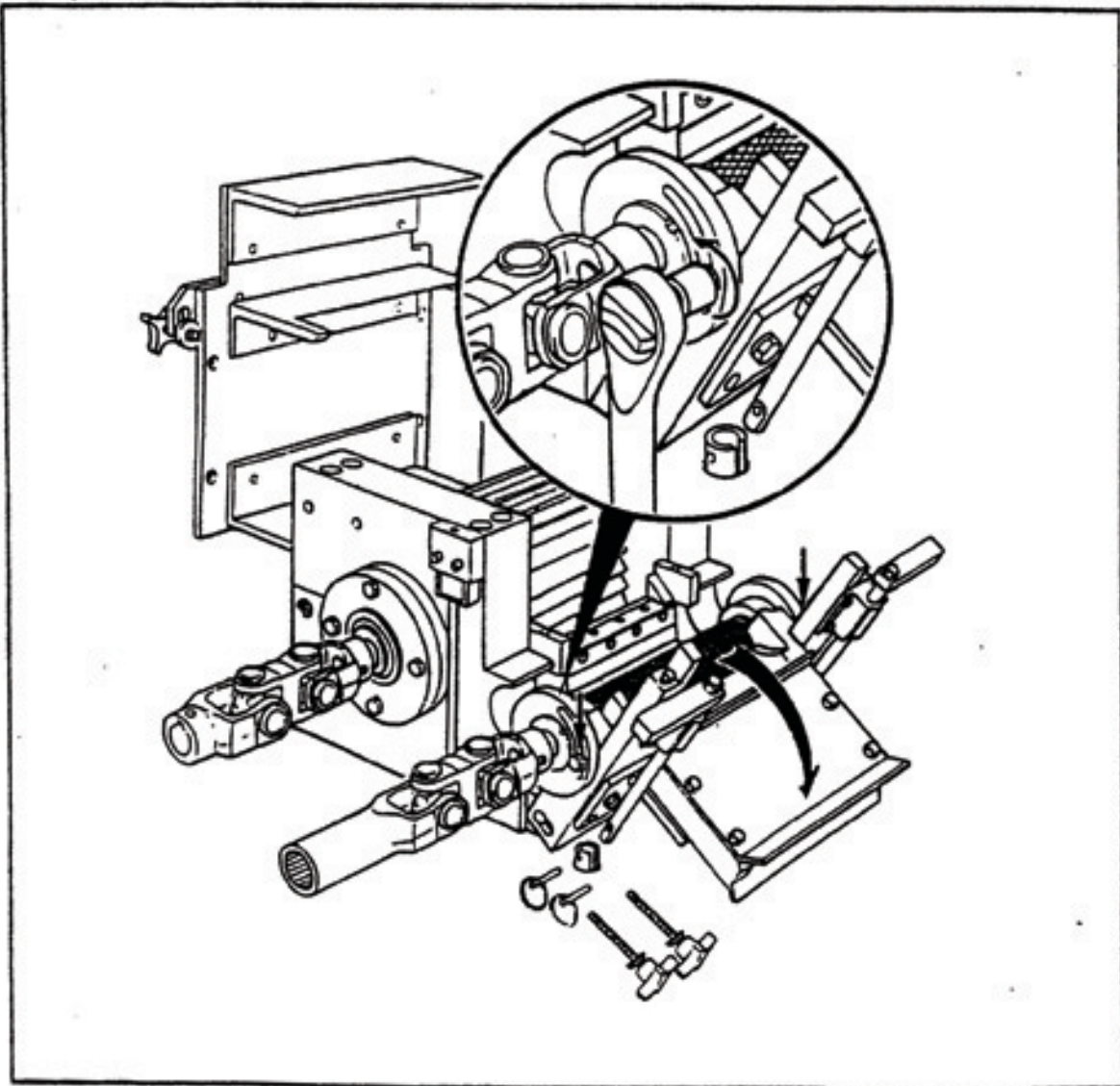


Figure 9, Removing The Lower Feedroll (2 of 3)

Removing The Lower Feedroll (Continued)

To remove the lower feedroll assembly, refer to *Figures 8, 9, and 10*.

In *Figure 10*, the lower feedroll, its eccentrics, and splined drive coupling have been removed from the cutting chamber. The removal procedure is the same as that used for the upper feedroll assembly. Simply lift the lower feedroll assembly upward, while pulling the splined coupling away from and off the gearbox driveshaft. On belt-driven designs, once the drive belt has been removed, simply lift the lower feedroll assembly from the cutting chamber. Place the removed assembly on a clean, stable surface.

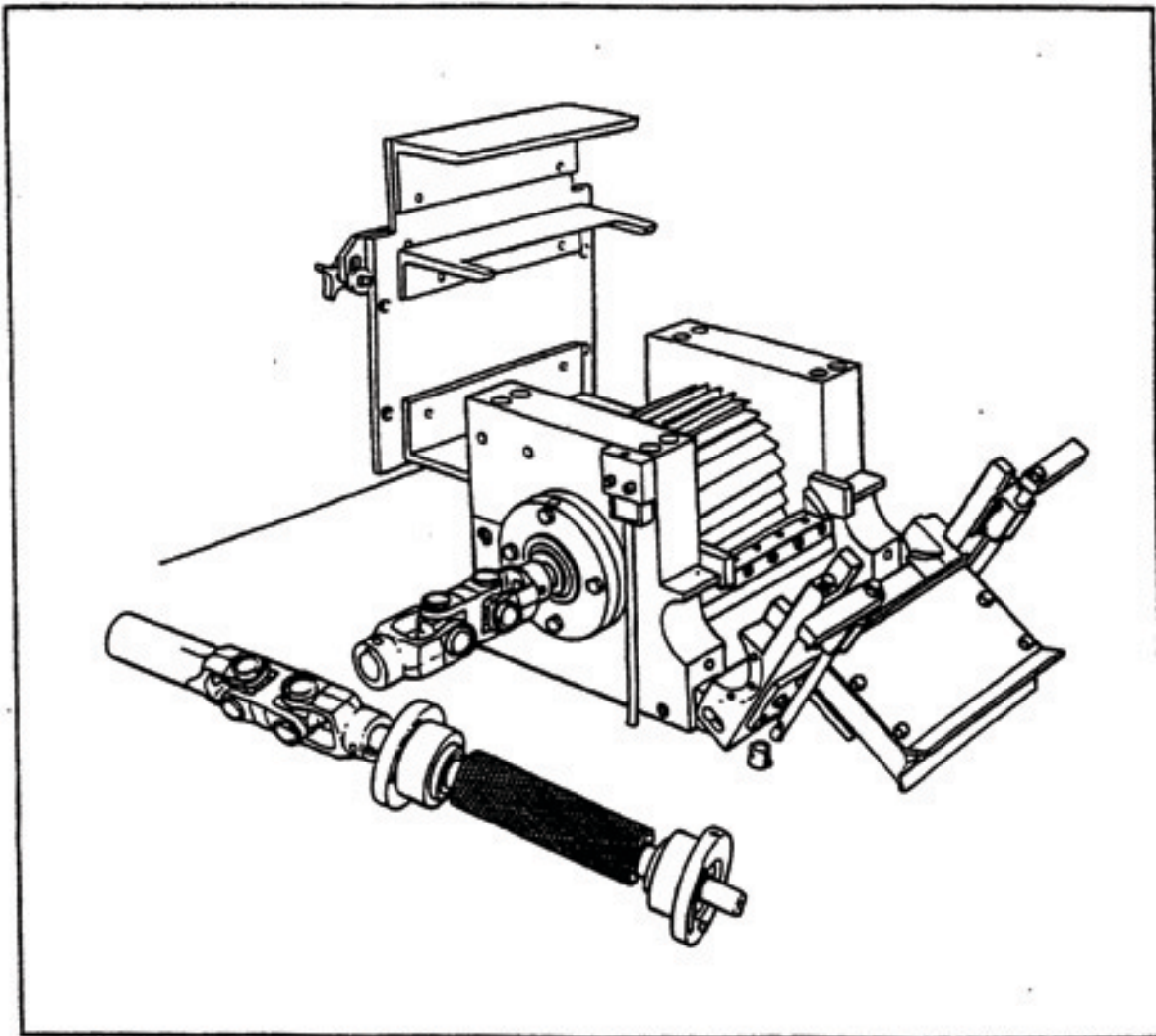


Figure 10, Removing The Lower Feedroll (3 of 3)

Removing The Doctor Blade

To remove the doctor blade, used to keep the lower feedroll clean, refer to *Figure 11*.

First, remove the single Allen screw holding each strand deflector in place at the ends of the doctor blade. Set these deflectors aside, then remove the sockethead countersink screws that hold the doctor blade in place atop the bed knife holder. With these screws removed, grasp the doctor blade by its over-hanging scraper edge and lift it up and off its seat on the bed knife holder. The backside of the bed knife will now be exposed.

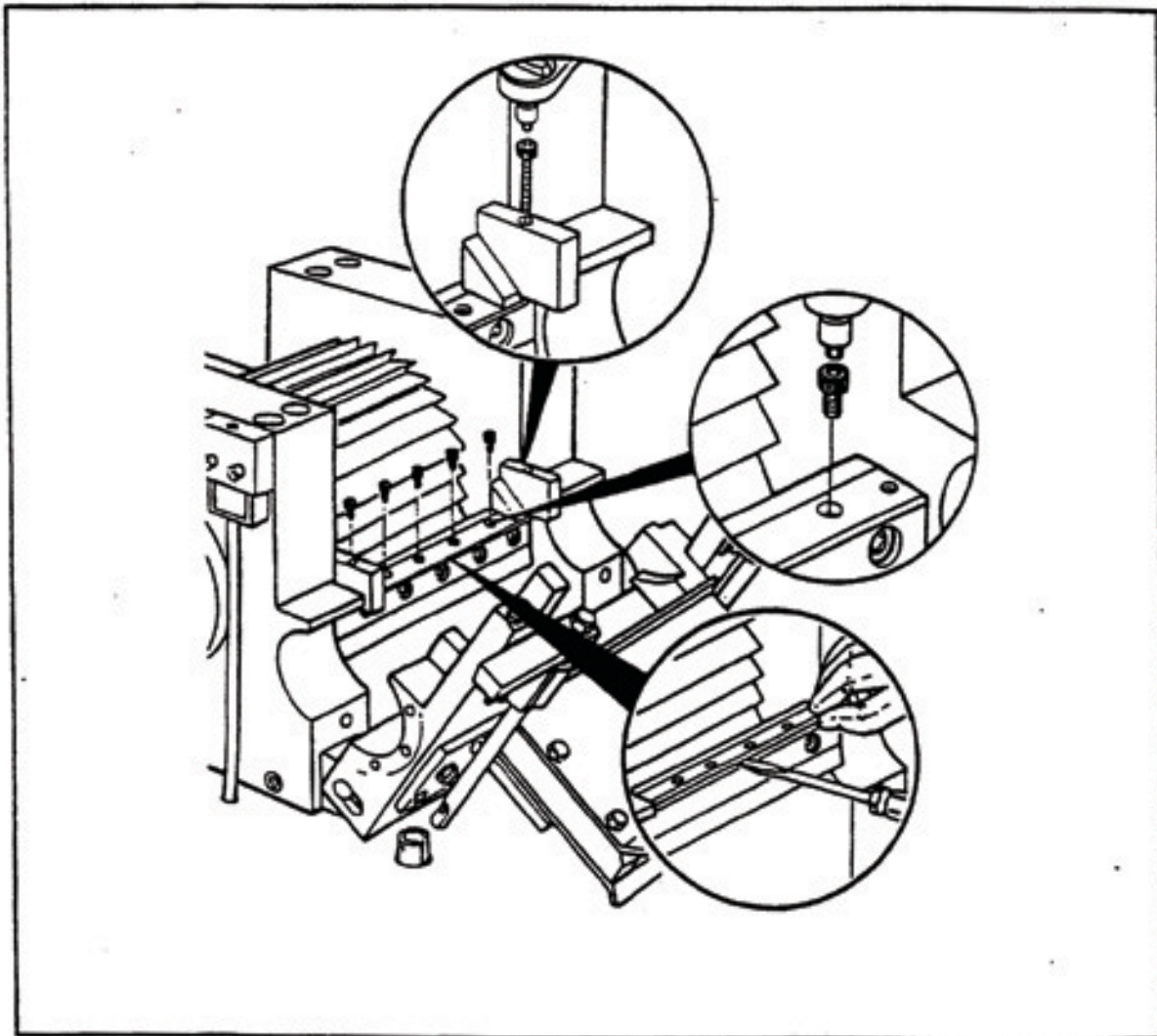


Figure 11, Removing The Doctor Blade

Removing The Bed Knife

To remove the bed knife, refer to *Figures 12 and 13*.

In *Figure 12*, the removal procedure begins with moving the rotor away from the bed knife. First, loosen each of the Allen capscrews in the cutting chamber sideframes. Then, using a pry bar or similar tool on *both* sides, rotate the eccentrics on the rotor bearing holders toward the rear of the cutting chamber until the maximum gap is achieved between the rotor and bed knife. Avoid touching the especially sharp bed knife or rotor knives, without wearing gloves or other protective clothing.

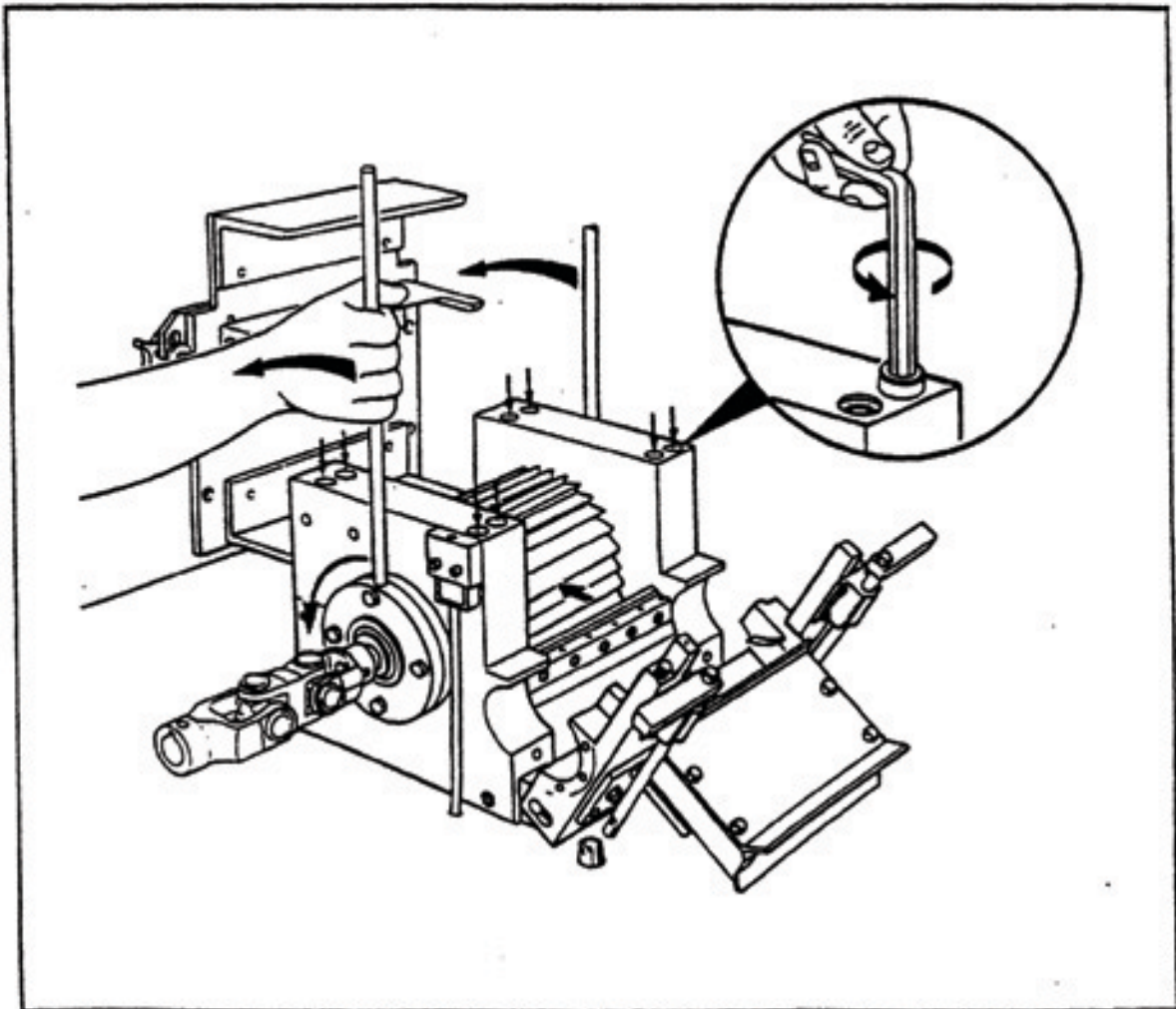


Figure 12, Removing The Bed Knife (1 of 2)

Removing The Bed Knife (Continued)

To remove the bed knife, refer to *Figures 12 and 13*.

In *Figure 13*, with adequate clearance between the rotor and bed knife, the removal procedure continues. First, remove the sockethead capscrews from the face of the bed knife holder using a properly sized tool. These screws are located just below the overhanging scraper edge of the doctor blade (when in place). With the screws removed and set aside, simply lift the bed knife from its holder using a small pry tool or by grasping each end of the knife. The sharp knife edge should be handled with care.

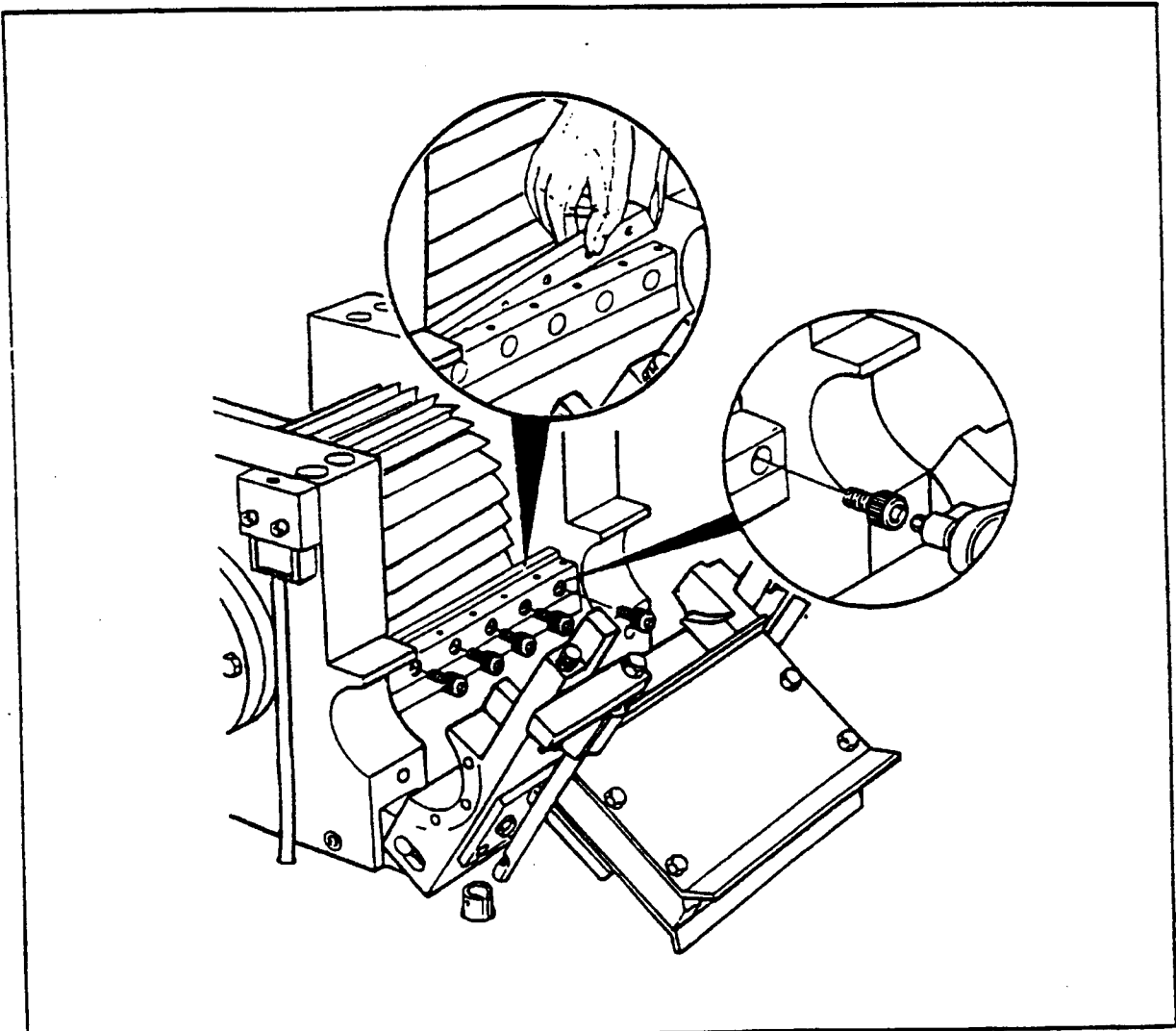


Figure 13, Removing The Bed Knife (2 of 2)

Gapping The Rotor And Bed Knife

To set the proper gap between the rotor and bed knife, refer to *Figure 14*.

First, the bed knife must be installed if it was removed for service or replacement. Reverse the removal procedures by placing the knife onto its holder and installing the sockethead screws to the specified torque. Then, using a pry bar or similar tool on both sides, rotate the rotor eccentrics toward the front of the cutting chamber.

Next, using a feeler gauge and moving the eccentrics as needed, obtain a uniform gap from side-to-side between the rotor knives and bed knife edge. The rotor should be cold for setting the proper gap. Stellite rotors are gapped at 0.003" for brittle materials and 0.001" for soft materials. Carbide rotors are normally gapped at 0.002" for most materials. Once the gap is set, tighten each of the Allen capscrews in the sideframes.

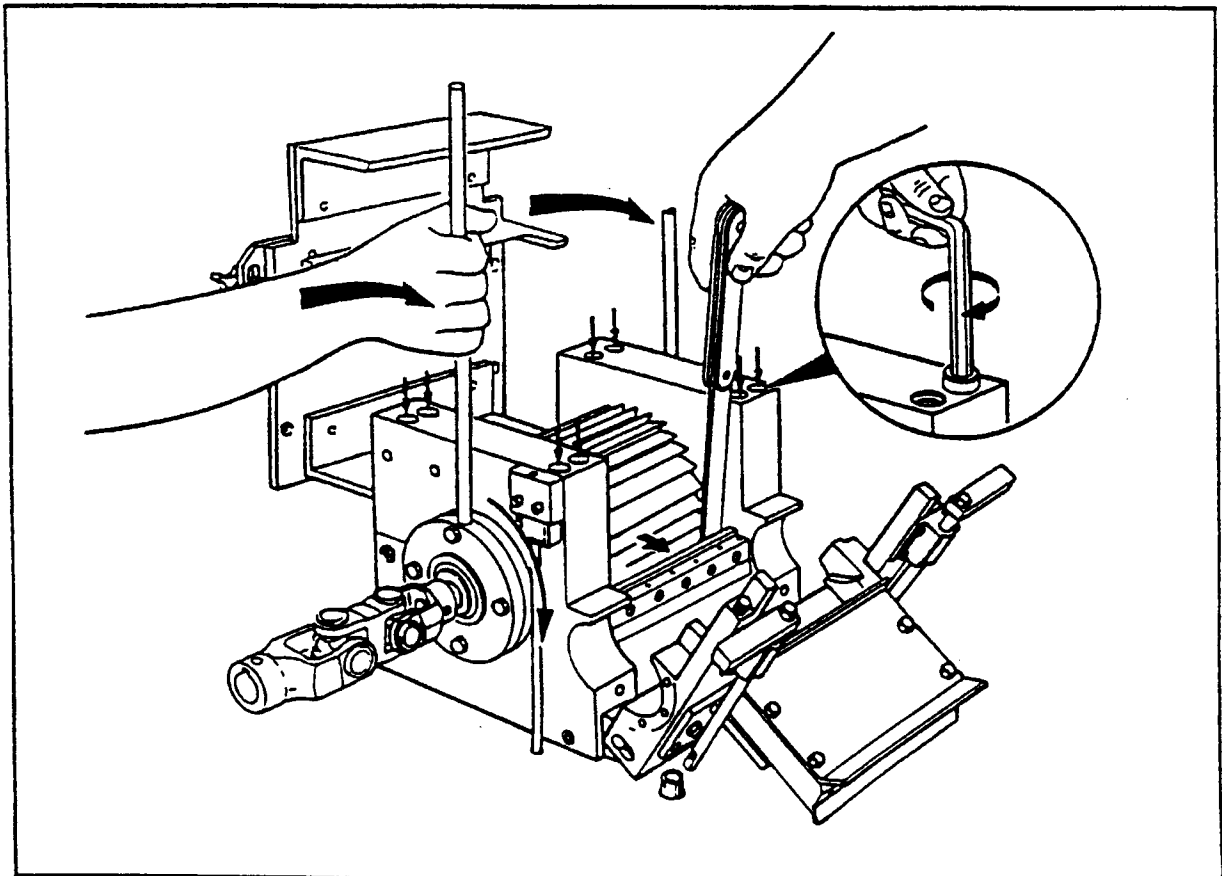


Figure 14, Gapping The Rotor And Bed Knife

Gapping The Lower Feedroll And Doctor Blade

To set the proper gap between the lower feedroll and doctor blade, refer to *Figure 15*.

With the bed knife installed and the proper gap to the rotor set, the doctor blade, strand deflectors, lower feedroll, and pivot frame must be installed if needed. Simply reverse the disassembly steps. But, *do not tighten* the bearing block bolts on the lower feedroll eccentrics. They should remain loose during the gapping procedure.

With a feeler gauge inserted between the lower feedroll and doctor blade, rotate the eccentrics until a uniform spacing of 0.002" to 0.004" is achieved across the full length of the lower feedroll. Then, tighten the bolts on the eccentrics. And, always re-check the spacing to insure that the correct gap is maintained after the bolts are tightened.

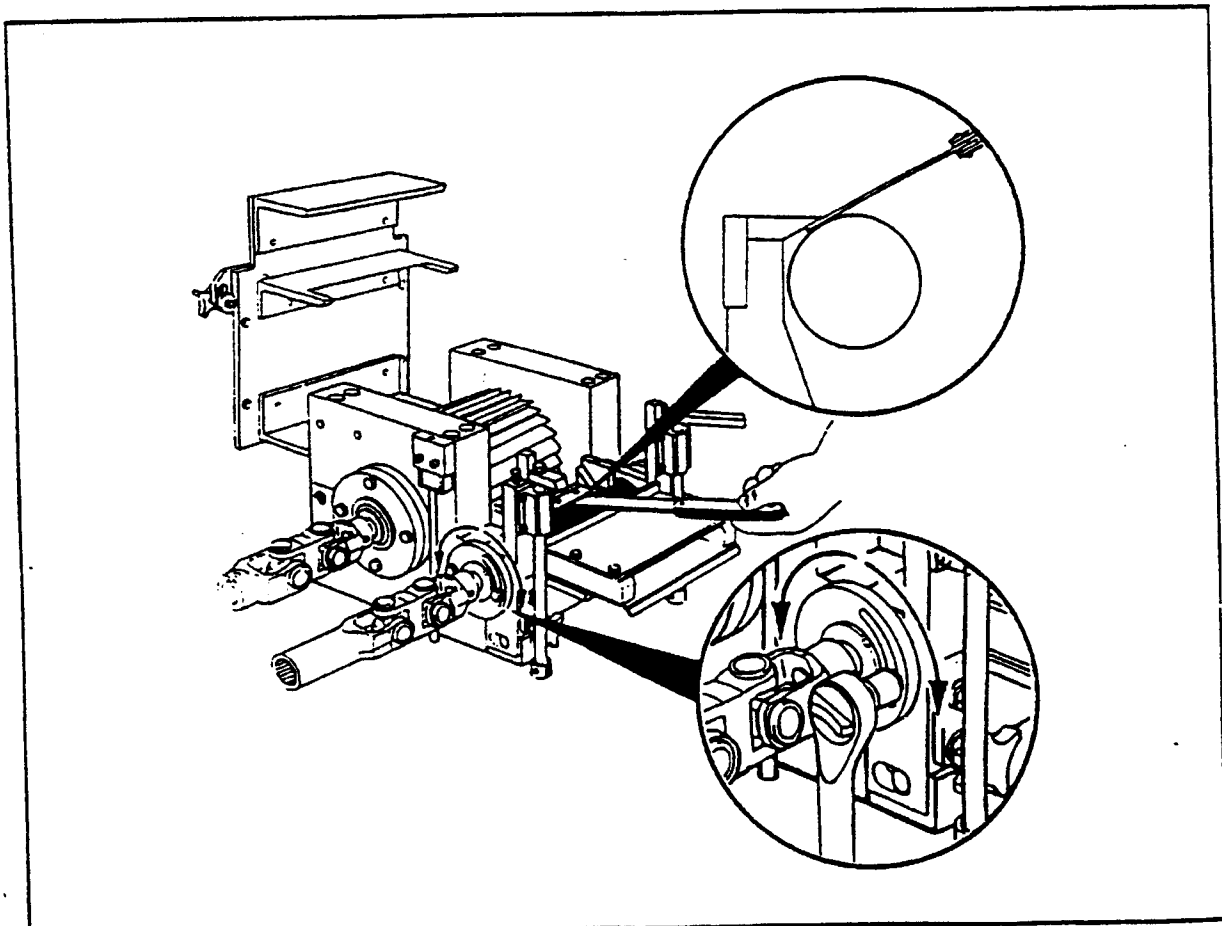


Figure 15, Gapping The Lower Feedroll And Doctor Blade

Gapping The Upper And Lower Feedrolls

To set the proper gap between the upper feedroll and lower feedroll, refer to *Figure 16*. The upper feedroll assembly must be installed, with its bearing block pressure arms in place and two hand knobs tightened. Again, if needed, reverse the disassembly steps.

With a feeler gauge inserted through the feedtable opening, measure the gap between the upper and lower feedrolls. An adjustment bolt and locknut assembly is located just below each pressure arm on the upper feedroll bearing blocks. Loosen the locknut, and then move the bolt upwards to increase the gap or downwards to decrease the gap.

NOTE: If the upper feedroll *is driven*, the gap should be set at 0.010." The same gap is recommended for an upper feedroll which *is steel and not driven*. However, if the upper feedroll *is rubber-covered and not driven*, the feedrolls should be allowed to touch so that both rotate to insure easier start-up.

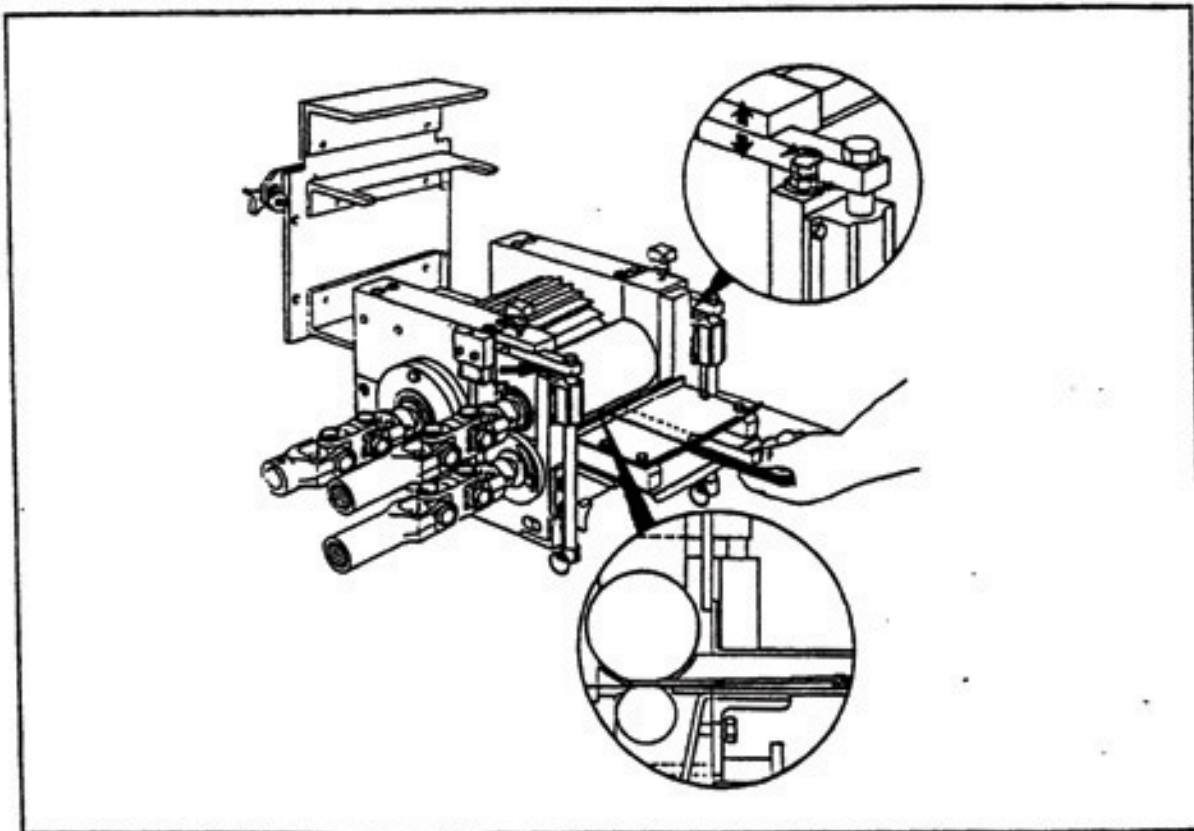


Figure 16, Gapping The Upper And Lower Feedrolls

TROUBLE SHOOTING CHECK LIST

Difficulty	Probable Cause	Corrective Action
1. Pelletizer will not start.	A. Power is not connected.	Disconnect switch must be in "up" position. Confirm voltage at power source.
	B. Wrong supply voltage.	Check Serial Number tag for power source.
	C. Cover not fully closed-limit switches not engaged.	Check for obstructions in cutting chamber contact area. Check limit switch bolt.
	D. Overload tripped fuse blown.	Examine reason for overload and reset, or replace fuse.
2. Rotor will not turn.	A. Stopped too soon at previous shutdown-should allow to clean out before stopping.	Open cover - remove pieces that block knife motion.
3. Clicking sound when empty.	A. Knives not adjusted properly.	Readjust knives.
4. Pelletizer jams easily.	A. Knives are dull.	Sharpen or replace knives.
	B. Belts slipping.	Adjust belt tension.
5. Excessive fines or poor cut.	A. Dull knives.	Sharpen or replace.
	B. Improper knife setting.	Readjust knives.

Warning - Do not perform any maintenance without first disconnecting power, and locking the machine out.

ADDENDUM



Guidelines for different applications on torque specs for the various components on the pelletizers.

	<u>300 series</u>	<u>200 series</u>	<u>3000 series</u>
Doctor Blade	90 in-lbs.	90 in-lbs.	90 in-lbs.
Bed Knife	150 in-lbs.	150 in-lbs.	225 in-lbs.
Side Frame Caps	90 ft-lbs.	90 ft-lbs.	90 ft-lbs.

Typical Torques for Stainless Steel Bolts

<u>Size</u>	<u>In-lbs.</u>	<u>Ft-lbs.</u>
1/4-20	84	7
5/16-18	168	14
3/8-16	288	24
1/2-13	708	59

(note: S.S. bolts similar in torque to grade 2 bolt)

QTY	DESCRIPTION	QTY	DESCRIPTION
129	3	3000-418	ROTOR ECCENTRIC
119	2	64376	DL. S.E. RING
116	2	3000-443	ROTOR SEAL RING
117	1	3530-1210-C	SMOOTH CERAMIC COATED U.F.A.
118	1	3512-2218-C	SMOOTH CERAMIC COATED U.F.A.
119	1	3512-2218-C	SMOOTH CERAMIC COATED U.F.A.
120	1	3508-2218-C	SMOOTH CERAMIC COATED U.F.A.
121	1	3520-2218-1	SMOOTH CERAMIC COATED U.F.A.
122	1	3516-2218-1	SMOOTH CERAMIC COATED U.F.A.
110	1	3512-2218-1	SMOOTH CERAMIC COATED U.F.A.
109	1	3508-2218-1	SMOOTH CERAMIC COATED U.F.A.
108	1	3530-1218	SMOOTH LOWER FLEETROLL
107	1	3512-1218	SMOOTH LOWER FLEETROLL
106	1	3508-1218	SMOOTH LOWER FLEETROLL
105	1	3528-1144-C	SMOOTH LOWER FLEETROLL
104	1	3512-1144-C	SMOOTH LOWER FLEETROLL
103	1	3518-1144-C	SMOOTH LOWER FLEETROLL
102	1	3508-1144-C	SMOOTH LOWER FLEETROLL
101	1	3512-1144-1	SMOOTH LOWER FLEETROLL
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50	1	3512-1144-1	SMOOTH LOWER FLEETROLL
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48	1	3512-1144-1	SMOOTH LOWER FLEETROLL
47	1	3512-1144-1	SMOOTH LOWER FLEETROLL
46	1	3512-1144-1	SMOOTH LOWER FLEETROLL
45	1	3512-1144-1	SMOOTH LOWER FLEETROLL
44	1	3512-1144-1	SMOOTH LOWER FLEETROLL
43	1	3512-1144-1	SMOOTH LOWER FLEETROLL
42	1	3512-1144-1	SMOOTH LOWER FLEETROLL
41	1	3512-1144-1	SMOOTH LOWER FLEETROLL
40	1	3512-1144-1	SMOOTH LOWER FLEETROLL
39	1	3512-1144-1	SMOOTH LOWER FLEETROLL
38	1	3512-1144-1	SMOOTH LOWER FLEETROLL
37	1	3512-1144-1	SMOOTH LOWER FLEETROLL
36	1	3512-1144-1	SMOOTH LOWER FLEETROLL
35	1	3512-1144-1	SMOOTH LOWER FLEETROLL
34	1	3512-1144-1	SMOOTH LOWER FLEETROLL
33	1	3512-1144-1	SMOOTH LOWER FLEETROLL
32	1	3512-1144-1	SMOOTH LOWER FLEETROLL
31	1	3512-1144-1	SMOOTH LOWER FLEETROLL
30	1	3512-1144-1	SMOOTH LOWER FLEETROLL
29	1	3512-1144-1	SMOOTH LOWER FLEETROLL
28	1	3512-1144-1	SMOOTH LOWER FLEETROLL
27	1	3512-1144-1	SMOOTH LOWER FLEETROLL
26	1	3512-1144-1	SMOOTH LOWER FLEETROLL
25	1	3512-1144-1	SMOOTH LOWER FLEETROLL
24	1	3512-1144-1	SMOOTH LOWER FLEETROLL
23	1	3512-1144-1	SMOOTH LOWER FLEETROLL
22	1	3512-1144-1	SMOOTH LOWER FLEETROLL
21	1	3512-1144-1	SMOOTH LOWER FLEETROLL
20	1	3512-1144-1	SMOOTH LOWER FLEETROLL
19	1	3512-1144-1	SMOOTH LOWER FLEETROLL
18	1	3512-1144-1	SMOOTH LOWER FLEETROLL
17	1	3512-1144-1	SMOOTH LOWER FLEETROLL
16	1	3512-1144-1	SMOOTH LOWER FLEETROLL
15	1	3512-1144-1	SMOOTH LOWER FLEETROLL
14	1	3512-1144-1	SMOOTH LOWER FLEETROLL
13	1	3512-1144-1	SMOOTH LOWER FLEETROLL
12	1	3512-1144-1	SMOOTH LOWER FLEETROLL
11	1	3512-1144-1	SMOOTH LOWER FLEETROLL
10	1	3512-1144-1	SMOOTH LOWER FLEETROLL
9	1	3512-1144-1	SMOOTH LOWER FLEETROLL
8	1	3512-1144-1	SMOOTH LOWER FLEETROLL
7	1	3512-1144-1	SMOOTH LOWER FLEETROLL
6	1	3512-1144-1	SMOOTH LOWER FLEETROLL
5	1	3512-1144-1	SMOOTH LOWER FLEETROLL
4	1	3512-1144-1	SMOOTH LOWER FLEETROLL
3	1	3512-1144-1	SMOOTH LOWER FLEETROLL
2	1	3512-1144-1	SMOOTH LOWER FLEETROLL
1	1	3512-1144-1	SMOOTH LOWER FLEETROLL

QTY	DESCRIPTION	QTY	DESCRIPTION
123	2	4217-0008	LYE BOLT
124	4	65453	LOCKWASHER FOR FLEETROLLS
125	4	65181	BEARING FOR FLEETROLLS
126	4	65455	WAS LOCKWASHER
127	3	3500-1842	L.A. ECCENTRIC WRE. BLOCK
128	4	61300	OL. SEAL RING
129	1	3512-2818	L.A. WRE. FRAME. CAP. 8 PWOV. RING
130	1	3512-2850	L.A. WRE. FRAME. CAP. 8 PWOV. RING
131	3	65452	WAS LOCKWASHER
132	3	65453	WAS LOCKWASHER
133	3	3000-412	WINDWARD SEAL RING
134	2	3000-82	OUTWARD SEAL RING
135	2	64277	OL. SEAL RING
136	2	3000-441	ECCENTRIC CAP
137	2	64453	WAS BEARING ROLLER BEARING
138	2	WAS LOCKWASHER	DESCRIPTION

CONAIR
 BAR ENT. WASHINGTON
 4870M

NAME: 3500 I-SERIES TIPPED
 WATERSLIDE

QTY: 1773
 PRICE: 112.13-11.81
 TOTAL: 198,851.61

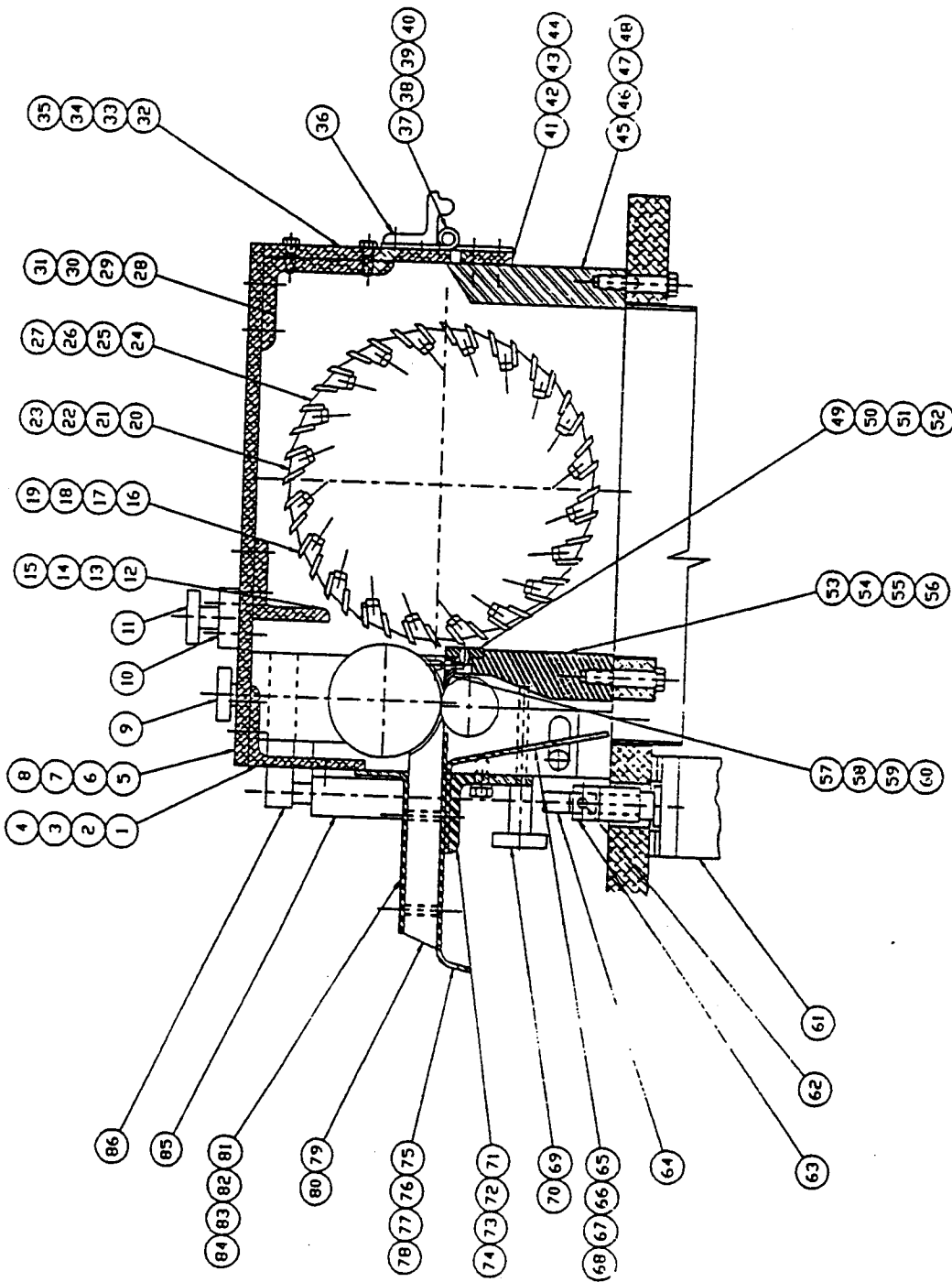
DATE: 10/1/77
 BY: J.A. LORR
 CHECK NO.: 1500-2800

CONAIR
 BAR ENT. WASHINGTON
 4870M

NAME: 3500 I-SERIES TIPPED
 WATERSLIDE

QTY: 1773
 PRICE: 112.13-11.81
 TOTAL: 198,851.61

DATE: 10/1/77
 BY: J.A. LORR
 CHECK NO.: 1500-2800



TYPE	QTY	MATERIAL	DESCRIPTION
			CONAIR
			BAY CITY, MICHIGAN 48704
NAME: 3500 T-SERIES TIPPED			
WAEARSLIDE			
DRAWN BY: [Signature]			
CHECKED BY: [Signature]			
DATE: [Date]			
SCALE: [Scale]			
PROJECT: [Project Name]			
JOB NO. [Job Number]			
REV. [Revision]			

