**Instructions and Parts List** 

Scotch

## 3M-Matic 2A Adjustable Case Sealer

Model 18000

34-7004-7292-0(K36.015)R1

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Litho in U.S.A.



### To Our Customers:

This is the "AccuGlide"/"3M-Matic"/"Scotch" Brand Equipment you ordered. It has been set up and tested in the factory with "Scotch" Brand tapes. If any problems occur when operating this equipment, and you desire service, call the 3M Equipment Service and Support Division on 1+800-328-1360. Ask for the Service Dispatcher and specify that service is being requested for case sealing equipment. Please provide dispatcher with machine catalog number and serial number.

### "3M-Matic" Hot Line

For phone consultation when self servicing your "AccuGlide"/"3M-Matic"/"Scotch" Brand equipment, call 612-733-0895.

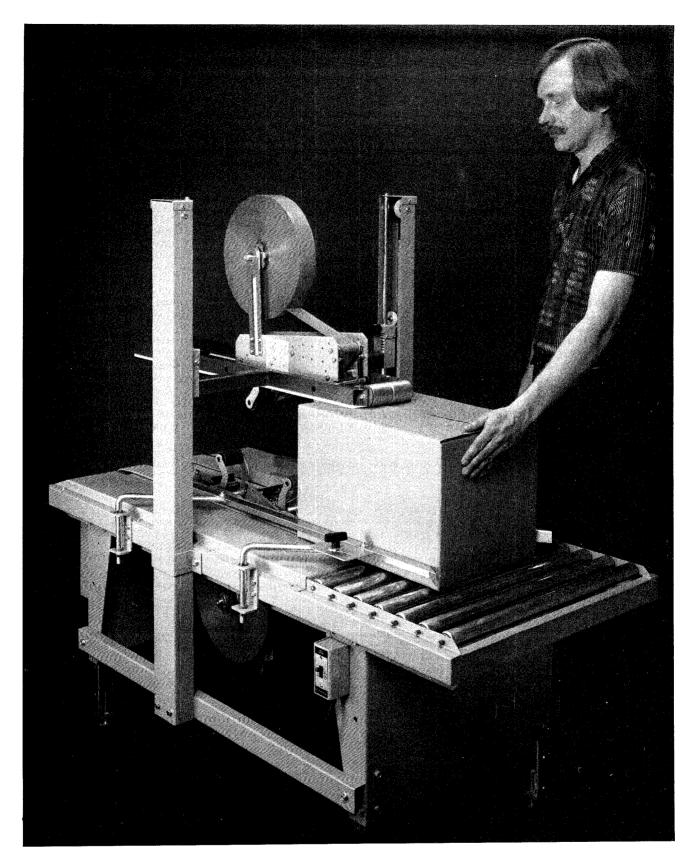
### **Replacement Parts**

Order parts by **part number**, **part name**, quantity required, **machine name**, **number** and **model number**. Replacement parts and parts prices available from:

Dispenser Parts 241 Venture Drive Amery, WI 54001 715-268-8126



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2A ADJUSTABLE CASE SEALER - MODEL 18000

### **DESCRIPTION**

The 2A Adjustable Case Sealer is designed to apply a "C" clip of pressure-sensitive tape to the top and bottom center seam of regular slotted containers. The machine is manually adjustable to a wide range of box sizes (see box size specifications).

### RECEIVING AND HANDLING

After the machine has been uncrated, examine the 2A Case Sealer for damage that might have occurred during transit. If damage is evident, file a damage claim immediately with the transportation company and also your 3M Representative.

Several machine components are tied down to prevent damage during transit. Remove these before proceeding with following set-up instructions. Retain the 5/16-18 hex head screws and nuts from the leg to skid brackets to be reused when adjusting conveyor bed height.

### WARRANTY

IMPORTANT NOTICE TO PURCHASER: The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: The only obligation of the seller and manufacturer of "Scotch" Brand equipment shall be to repair or replace any mechanical part proved to be defective, provided the defect occurs within 90 days after date of purchase, and the sopurchased item is returned immediately to the 3M factory or to an authorized service station designated by the manufacturer. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, ARISING OUT OF THE USE OF OR THE INABILITY TO USE THE "Scotch" BRAND EQUIPMENT. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

"Scotch", "Scotchpar" and "Scotchpro" are registered trademarks for the pressuresensitive tapes and dispensers of 3M St. Paul, Minnesota 55144.

### SPECIFICATIONS

### 1) Power Requirements:

115 VAC, 60 Hz, 6 A electrical power. The machine is equipped with a standard neoprene covered power cord and a grounded plug.

### Machine Dimensions: 2)

### Overall Dimensions

60 1/2 inches [1.535 m] Length 30 7/8 inches [0.785 m] Width 56 5/8 inches [1.440 m] Height Adjustable up and down from factory set Conveyor Bed Height height of 26 inches [660 mm]

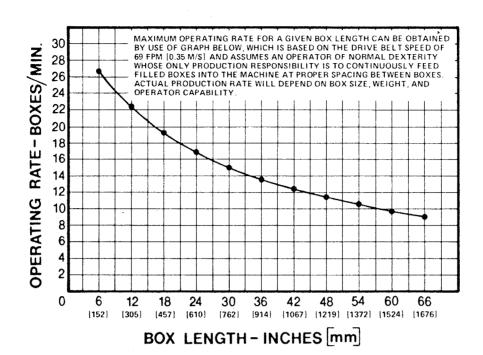
300 pounds [135 kg] uncrated

Weight 350 pounds [160 kg] crated

(Specifications continued on next page.)

### SPECIFICATIONS (CONTINUED)

### 3) Operating Rate:



### 4) Operating Conditions:

Use in dry, relatively clean environments at 40° to 105°F [5° to 40°C] with clean, dry boxes.

### IMPORTANT SAFEGUARD

Machine should not be washed down or subjected to conditions causing moisture condensation on components.

### 5) <u>Tape</u>:

"Scotch" Brand Pressure-sensitive Film Box Sealing tapes.

### 6) <u>Tape Width</u>:

1-1/2 inches or 36 mm minimum to 2 inches [50 mm] maximum.

### 7) Tape Roll Diameter:

Up to 14 inches [355 mm] maximum on a 3 inch [76.2] diameter core. (Accommodates "Scotch" Brand Film tapes - 1,000 yard rolls.)

### 8) Box Board:

125 to 275 P.S.I. bursting test, single wall A, B, or C flute.

(Specifications continued on next page.)

### SPECIFICATIONS (CONTINUED)

### 9) Box Weight and Size Capacities:

- A. Box weight, filled 5 lbs. [2.3 kg] minimum, 65 lbs. [30 kg] maximum
- B. Box size:

<u>Minimum</u>			Maximum
Length Width		OFO THEHES OF 100 min	unlimited 21 inches or 530 mm
Height		5.2 inches or 130 mm	20 inches or 500 mm

★ Cartons smaller than 8 inches or 200 mm in width may require more frequent belt replacement because of limited contact area.

NOTE: The 2A Case Sealer can accommodate most boxes within the size range listed above. However, if the box length (in direction of seal) to box height ratic is less than .5, several boxes should be test run to assure proper machine performance.

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

BOX LENGTH IN DIRECTION OF SEAL MUST BE GREATER THAN .5
BOX HEIGHT

Any box ratio approaching this limitation should be test run to assure performance.

### SET-UP INSTRUCTIONS

It is recommended that the 2A Case Sealer be set-up and tried before placing it in the production line. This approach will allow your thorough review and familiarization with the 2A before subjecting it and operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

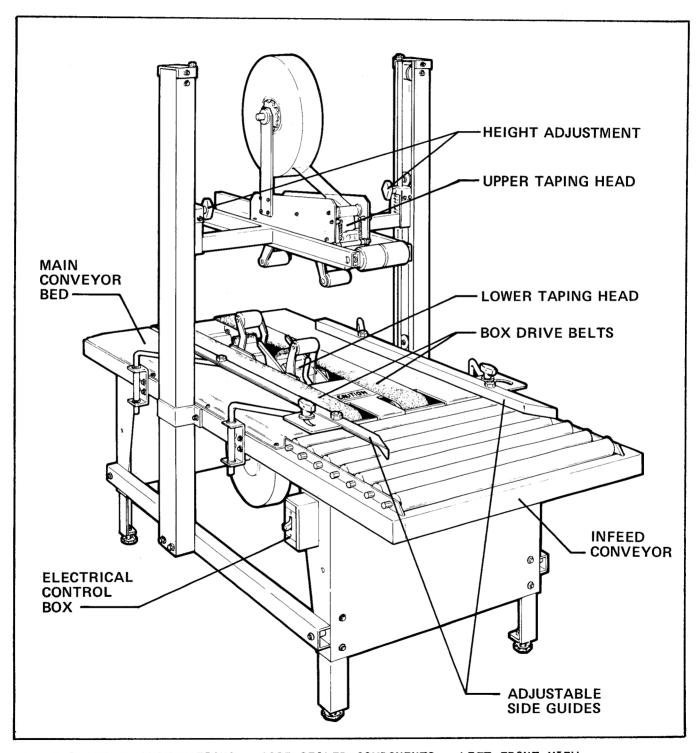


FIGURE 1 SET-UP INSTRUCTIONS - CASE SEALER COMPONENTS - LEFT FRONT VIEW

The following instructions are presented in the order recommended for setting up and installing the 2A Case Sealer, as well as for learning the operating functions and adjustments. Following them step by step will result in your thorough understanding of the machine and an installation in your production line that best utilizes the many features built into the 2A Case Sealer.

### Conveyor Bed Height:

The 2A Case Sealer is equipped with four adjustable legs that are located at the corners of the frame. The legs can be adjusted to achieve different machine conveyor bed heights from 19 inches [485 mm] minimum to 35 inches [890 mm] maximum. Three 5/16-18 hex head screws and nuts hold each leg in position on the machine frame. Leveling screws at the bottom of each leg are used to level the machine on uneven floor surfaces.

The height of the bed of the 2A Case Sealer can be set in the following way:

- 1) Block up the machine to the desired height.
- 2) Remove and retain the three 5/16-18 hex head screws and nuts in each leg, and locate the legs nearest the desired machine level where the holes in the legs (1-1/2 inch [40 mm] increments) and machine frame line up.
- 3) Reinstall and tighten the 5/16-18 hex head screws and nuts. For heights above shipping height, use the screws and nuts retained from leg to skid brackets. In addition, use one screw from each corner of the frame to secure the inner section of the leg to the outer section.
- 4) Loosen the lock nuts on the leveling screw at the bottom of each leg, and level the machine by extending or retracting each leveling screw. Retighten each of the lock nuts to secure the adjustment.

FOR MACHINE STABILITY - DO NOT set the leveling screws to extend farther than is necessary to level the machine. Allow a minimum of one screw thread to protrude from lock nut at maximum leveling screw adjustment.

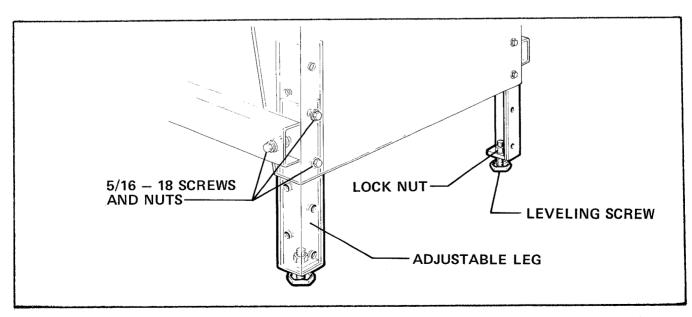


FIGURE 2 - CONVEYOR BED HEIGHT ADJUSTMENT

### Electrical Connection

The electrical control box, shown in figure 1, contains the "ON-OFF" switch with pre-set circuit breaker and can be located on either side of the main conveyor for customer operating convenience. A standard three conductor power cord with plug is provided at the back of the electrical control box for 115 Volt, 60 Hz electrical service. The receptacle providing this service shall be properly grounded. Before the power cord is plugged into 115 volt, 60 Hz outlet, make sure the unit is off and that all packaging materials and tools are removed from the machine.

### IMPORTANT SAFEGUARDS

- 1) BOTH THE TOP AND BOTTOM TAPING HEADS UTILIZE EXTREMELY SHARP KNIFE BLADES ON THE ORANGE CUTTER LEVER ASSEMBLY AND WHICH ARE LOCATED UNDER THE GREY PLASTIC BLADE GUARD WHICH HAS THE "CAUTION SHARP KNIFE" LABEL. BEFORE WORKING WITH THE TAPING HEADS OR ATTEMPTING TO LOAD THE TAPE, REFER TO FIGURE 3A AND IDENTIFY THE BLADE LOCATION. KEEP HANDS OUT OF THESE AREAS EXCEPT AS NECESSARY TO SERVICE THE TAPING HEADS.
- 2) NEVER MANUALLY PUSH THE APPLYING ROLLER ARM DOWN AS THIS WILL RETRACT THE BLADE GUARD AND PUT YOUR HAND IN MOTION TOWARDS THE TEETH OF THE SHARP KNIFE BLADES. REFER TO FIGURE 3A AND IDENTIFY THE APPLYING AND BUFFING ROLLERS. WHEN NECESSARY TO MANUALLY ACTUATE THE TAPE APPLYING MECHANISM, ALWAYS PUSH THE BUFFING ROLLER ARM AS IT WILL NOT DIRECT YOUR HAND TOWARDS THE KNIFE BLADE TEETH.
- 3) NEVER ATTEMPT TO WORK ON THE TAPING HEADS OR LOAD TAPE WHEN THE BOX DRIVE BELTS ARE RUNNING.

### Blade Oiler Pad

The taping heads are equipped with a blade oiler pad that provides a film of oil on the cut-off blade to reduce adhesive build-up. Locate the oiler pad attached to the blade guard assembly, shown in figure 3A, and apply SAE #30 non-detergent oil as needed. DO NOT SATURATE.

### Tape Loading

The taping heads have been pre-set to accommodate 2 inch [50 mm] wide tape rolls. To apply 1-1/2 inch or 36 mm or 1-3/4 inch or 42 mm wide tapes, refer to "Adjustments" Section for set-up information. Two temporary threading needles are shipped in threaded position for initial tape loading convenience.

Retain these for continued use in the tape loading operation. For operator assistance, a threading diagram has been applied to the taping heads. However, it is recommended that the more detailed instructions and sketches in this manual be referred to the first few times the unit is loaded until the operator becomes thoroughly familiar with the tape loading operation. The Lower Taping Head can be removed from unit by lifting out for convenience in tape loading.

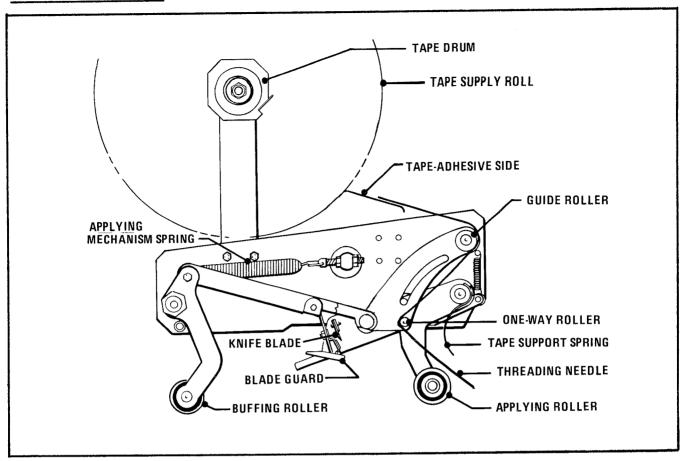


FIGURE 3A - TAPE THREADING DIAGRAM - TOP TAPING HEAD - LEFT SIDE VIEW

### Tape Loading - Top Taping Head

WARNING - NEVER ATTEMPT TO WORK ON THE TAPING HEADS OR LOAD TAPE WHEN THE BOX DRIVE BELTS ARE RUNNING. PERSONNEL INJURY OR EQUIPMENT DAMAGE CAN POTENTIALLY RESULT.

- 1) It is first necessary to raise the top taping head. Utilize the height adjustment knob and move the top taping head to the fully raised position.
- 2) With the temporary threading needle already in position, as shown in figure 3A, follow the tape loading procedure from figure 3C to complete the tape threading.
- 3) For subsequent tape loading operation, use the red plastic threading needle and follow the loading procedures from figure 3A to complete the tape threading.

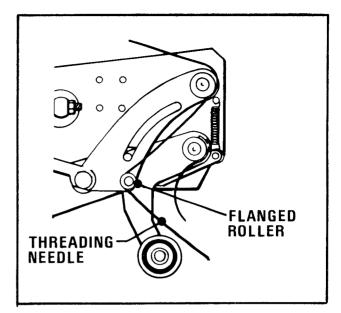
### Tape Loading - Bottom Taping Head

The bottom taping head is loaded and threaded in the same manner as the top taping head.

For ease in loading, first remove the bottom taping head from the conveyor bed and follow the top taping head tape loading procedure.

### Figure 3B

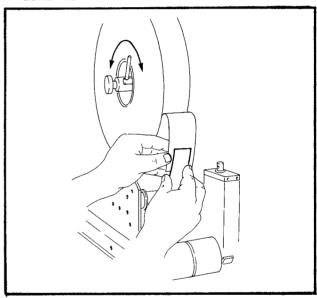
Insert the red plastic needle downward around one-way flanged roller as illustrated.



### Figure 3C

Turn eccentric roller lever inward to rest against tape drum shaft and place tape roll on drum to dispense tape from bottom of roll toward guide roller with tape adhesive side up. Seat tape roll fully against back flange of drum and turn roller lever outward to secure tape roll. Adhere tape lead end to upper end of threading needle as shown.





### Figure 3D

WARNING - USE CARE WHEN WORKING NEAR BLADES AS BLADES ARE EXTREMELY SHARP. IF CARE IS NOT TAKEN, SEVERE INJURY TO PERSONNEL COULD RESULT.

Manually turn tape roll to create slack tape while pulling threading needle through tape applying mechanism until needle is through and tape is in alignment with applying roller.

Excess tape can be cut with a scissors or knife at applying roller, or as shown, by manually depressing buffing roller arm to expose knife blade and then passing tape across knife blade. Allow buffing roller to slowly return to its rest position after cutting tape so that tape end will stay on applying roller.

FIGURE 3C

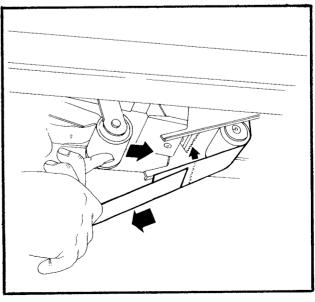


FIGURE 3D

### Figure 4

Once both taping heads are loaded with tape, the top taping head can be positioned for the box height being sealed by means of the height adjustment. Loosen but do not remove the knobs to adjust the top taping head.



Place box on infeed conveyor with both top and bottom flaps folded and insert under top head skis approximately 2 inches or 50 mm. Lower top head until all flaps are fully closed. Align box top flap center seam with groove in top head front roller. Tighten height adjustment knobs to secure the top head position.



Move side guides against each side of box to hold box in position, centered on groove in roller. Tighten hand knobs to secure side guides.

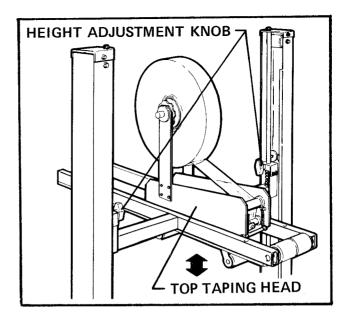


FIGURE 4

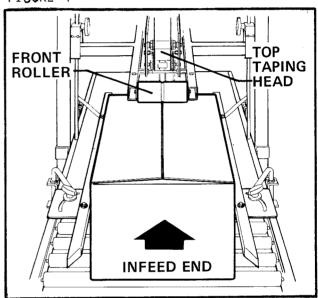


FIGURE 5

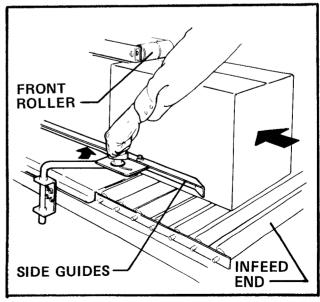


FIGURE 6

### Figure 7

Turn electrical switch to "ON" to start belts. Move box forward under top taping head until it is taken away by drive belts. If box is hard to move under head or is crushed, raise top head slightly. If box movement is jerky or stops under top head, lower top head slightly to add more pressure between box and drive belts.

Note: Top head has unique feature for overstuffed boxes. Top head will raise automatically for this type of condition.

CAUTION - IF DRIVE BELTS ARE ALLOWED TO SLIP ON BOX, EXCESSIVE BELT WEAR WILL OCCUR.

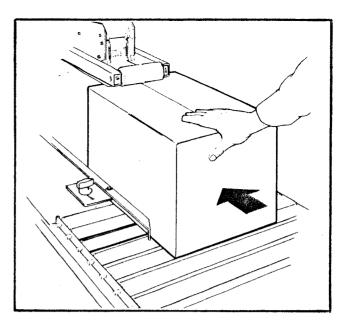


FIGURE 7

### ADJUSTMENT INSTRUCTIONS

### Tape Drum Assembly

In addition to holding the tape supply roll, the tape drum assembly provides adjustable friction brake to prevent tape roll over travel and provides adjustment for tape web alignment as follows:

1) Friction Brake - Refer to Figure 9.

Adjustable by turning the self-locking nut on the shaft to vary compression of the spring. Clockwise turning of nut increases braking force to prevent tape roll over travel, counter-clockwise turning decreased braking force.

Adjust to minimum drag that pre-

vents excessive tape roll over

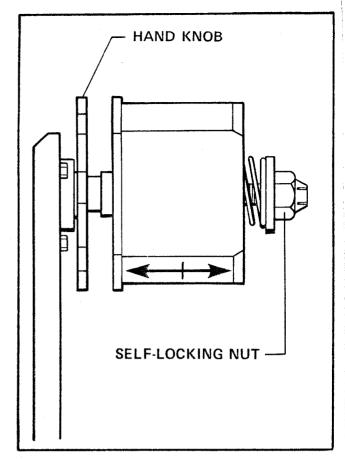


FIGURE 9

# HAND KNOB

FIGURE 10

## 2) <u>Tape Web Alignment</u> - Refer to Figure 10.

travel.

The tape drum assembly on each taping head is preset to accommodate 2 inch [50 mm] wide tape, but is adjustable to provide alignment of narrower tapes. If adjustment is necessary to center the tape width on the centerline of the taping head (and therefore box center seam), make adjustment as follows:

- a) Loosen hand knob behind tape drum on tape drum shaft.
- b) Turn tape drum shaft in or out to center the tape web.
- c) Tighten hand knob to secure the adjustment.

No other components require adjustment for tape web alignment.

### ADJUSTMENT INSTRUCTION (CONTINUED)

### Tape Support Spring

The S-shaped tape support spring, shown in figure 3A holds the lead end of tape in a controlled position at the applying roller. Its position is adjustable by loosening the phillips head screw on the mounting shaft, moving the spring by pivoting it around the shaft, and tightening the phillips head screw. The spring position should be adjusted so its tip is approximately 1/8 to 1/4 inch [3 to 6 mm] away from the tape when it is stretched straight between the oneway roller and applying roller.

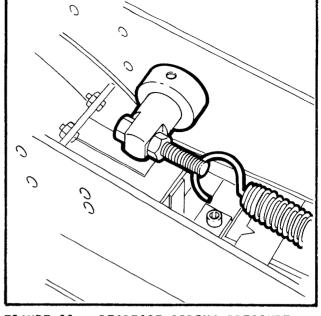


FIGURE 11 - DECREASE SPRING PRESSURE

### Applying Mechanism Spring

The applying mechanism spring, shown in figure 3A, controls applying and buffing roller pressure on the box and returns the mechanism to the rest position. The spring pressure is preset for normal operation but is adjustable by means of the mounting screw.

Decrease spring pressure by adjusting mounting screw as shown in figure 11.

Increase spring pressure by adjusting mounting screw as shown in figure 12.

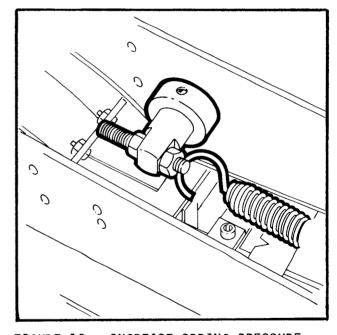


FIGURE 12 - INCREASE SPRING PRESSURE

### Box Drive Belts

The two continuously moving box drive belts provided convey boxes through the tape applying mechanism. The box drive belts are powered by the electric motor through roller chain.

Tension and tracking adjustments of these belts may be required during normal operation. Belt tension must be adequate to positively move the box through the machine and they should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are positioned by adjustment screws shown in figure 13. Adjustment of these screws can be made by using the following steps to provide proper tension and tracking. Each belt is adjusted separately.

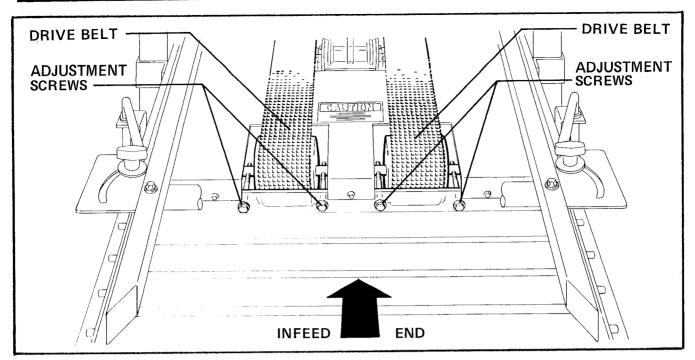


FIGURE 13 - BOX DRIVE BELT TRACKING ADJUSTMENT.

Step 1 - Tension is obtained by uniform tightening of the adjustment screws so that a moderate pulling force of 7 lbs. [3.5 kg] applied at the midspan will deflect the belt 1 inch [25 mm]. Refer to figure 14.

This will assure positive contact between the belt and the drive pulley on the discharge end of the taping head.

Note: For easy adjusting, remove conveyor roller by depressing one end of hex shaft in conveyor roller.

Step 2 - Belt tracking is adjusted by using the same adjustment screws. Start the drive motor and observe belt tracking. Tighten the belt adjustment screw on the side away from which the belt should move using a wrench. Tighten only 1/6 turn at a time and wait for the belt to walk to its new position before making a further adjustment. If the belt moves too far, loosen the adjustment screw slightly or tighten the other adjustment screw to bring it back. Avoid continued alternate tightening of screws or excessive belt tension can result.

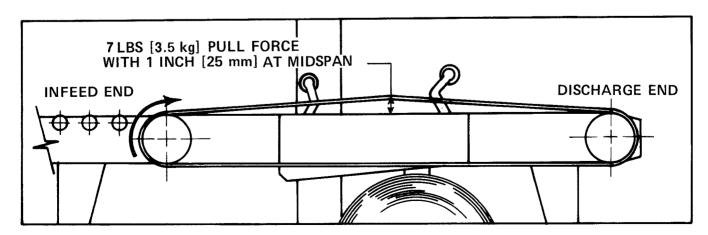


FIGURE 14 - BOX DRIVE BELT TENSION ADJUSTMENT

### **MAINTENANCE**

The 2A Case Sealer has been designed for long, trouble free service. The machine will perform best when it receives routine maintenance and cleaning. Machine components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the machine or to the product.

WARNING - TURN OFF ELECTRICAL POWER SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT. USE CARE WHEN REPLACING BLADES AS BLADES ARE EXTREMELY SHARP. IF CARE IS NOT TAKEN, SEVERE INJURY TO PERSONNEL COULD RESULT.

BLADE REPLACEMENT: Refer to yellow pages, Parts Illustrations, figure 14.

- 1) Loosen, but do not remove, the blade screws (14-13) and washers (14-14) holding the blade. Remove the old blade.
- Position the new blade with the beveled side AWAY FROM the blade holder as shown in Figure 14. Tighten the blade screws (with one washer next to the screw head as shown).

NOTE: Position blade at angle (one end of cutting edge 1/8 inch [3 mm] lower). Blade setting must not interfere with blade guard.

The same steps are followed on the Top and Bottom Taping Heads. Connect the main power supply.

WARNING - TURN OFF ELECTRICAL POWER SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE PERSONNEL IN-JURY OR EQUIPMENT DAMAGE COULD RESULT.

### Replacing Box Drive Belts

- 1) Loosen, but do not remove, the adjustment screws.
- 2) Remove lacing pin from belt lace to remove drive belt.
- 3) Remove and install new belt.
- 4) Replace lacing pin in new belt lace. Pin must not extend beyond edge of belt.
- 5) Tighten and adjust belt tracking as shown on page 14.

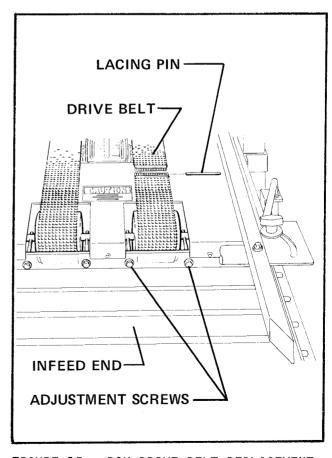


FIGURE 15 - BOX DRIVE BELT REPLACEMENT.

### Cleaning of the Machine

CAUTION - NEVER ATTEMPT TO REMOVE DIRT BY BLOWING IT OUT WITH COMPRESSED AIR. THIS CAN CAUSE THE DIRT TO BE BLOWN INSIDE THE MOTOR, AND SLIDING SURFACES. GRITTING DIRT IN THESE AREAS CAN CAUSE SERIOUS EQUIPMENT DAMAGE. NEVER WASH DOWN OR SUBJECT EQUIPMENT TO CONDITIONS CAUSING MOISTURE CONDENSATION ON COMPONENTS. SERIOUS EQUIPMENT DAMAGE COULD RESULT.

Regular slotted containers produce a great deal of dust and paper chips when processed or handled in equipment. If this dust is allowed to build up on machine components, it can cause component wear and overheating of drive motor. The dust build up can best be removed from the machine by a shop vacuum. Depending on the number and type of boxes sealed in the 2A Case Sealer, this cleaning should be done approximately once per month. If the boxes sealed are dirty, or if the environment in which the machine operates is dusty, cleaning on a more frequent basis may be necessary. Excessive dirt build up that cannot be removed by vacuuming should be wiped off with a damp cloth.

### Cut-Off Blade:

Should tape adhesive build-up occur, carefully wipe clean with oily cloth.

### Electrical Schematic

WARNING - TURN OFF ELECTRICAL POWER SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, PERSONNEL COULD BE EXPOSED TO DANGEROUS VOLTAGES. SEVERE INJURY OR EQUIPMENT DAMAGE COULD RESULT.

Figure 16 illustrates the electrical system of the 2A Case Sealer. No adjustments to the electrical systems are required.

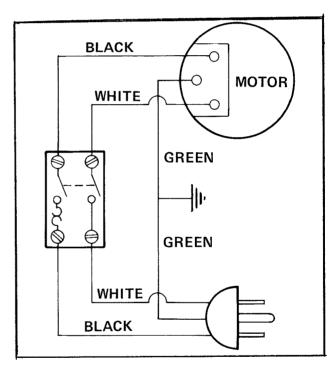


Figure 16

### Circuit Breaker

The 2A Case Sealer is equipped with a circuit breaker which trips the "ON-OFF" switch to tripped position. If circuit is overloaded and circuit breaker trips, wait 2 minutes, move to "OFF", then turn "ON". Located inside the electrical control box (shown in figure 1) on the side of the main frame just below the conveyor bed, the circuit breaker has been pre-set and requires no further maintenance. Should the circuit breaker be replaced, disconnect the power cord. Remove the front cover on the electrical box and replace heater element. Mounting holes are provided on the opposite leg for mounting the circuit breaker if needed.

### MAINTENANCE (CONTINUED)

### Lubrication

Like most other equipment, the Case Sealer must be properly lubricated to insure long, trouble/free service. Most of the machines bearings are permanently lubricated and should not require additional lubrication.

Figure 17 illustrates the taping head points which should be lubricated every 250 hours of operation. Lubricate the rotating and pivoting points noted by the arrows with SAE #30 non-detergent oil. Apply light coat of SAE #30 non-detergent oil to roller chain drive located under the chain cover by the drive motor. At the same time, a small amount of multipurpose grease should be applied to the end of each spring where the loop is secured at an eyelet, post, or hole.

CAUTION - WIPE OFF EXCESS OIL AND GREASE; IT WILL ATTRACT DUST AND DIRT WHICH CAN CAUSE PREMATURE EQUIPMENT WEAR AND JAMMING. TAKE CARE THAT OIL AND GREASE ARE NOT LEFT ON THE SURFACE OF ROLLERS AROUND WHICH TAPE IS THREADED, AS IT CAN CONTAMINATE THE TAPE'S ADHESIVE.

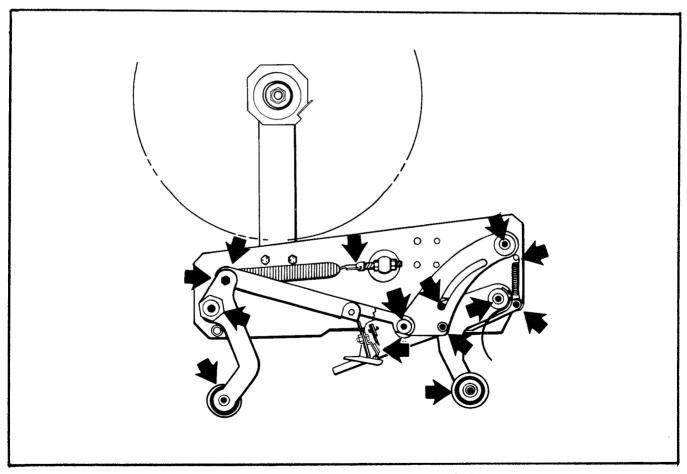


FIGURE 17 - LUBRICATION POINTS - TOP & BOTTOM TAPING HEADS

### REPLACEMENT PARTS & SERVICE INFORMATION

### Spare Parts

It is suggested that the following spare parts be maintained which will require replacement under normal wear of the 2A Case Sealer.

Quantity	Ref. No.	3M Part No.	Description
1	13-02	78-8017-9119-1	Spring-Main, Top Head, Zinc Pl.
1	13-20	78-8017-9424-5	Spring-Main, Bottom Head
4	14-10	78-8017-9136-5	Spring - Cutter
4	14-12	78-8017-9173-8	Blade - 2.56 inch/65 mm
1	11-11	78-8017-9101-9	Roller - Applying
1	11-19	78-8017-9272-8	Spring - Tape Support
1	15-08	78-8017-9140-7	Roller - Buffing
2	B-09A	26-1003-7723-8	Belt - Box Drive (Standard)

### Tool Kit For Taping Heads

A tool kit, P/N 78-8023-2604-7, is available. The kit contains the necessary wrenches, an oil can and the first four spare parts in the quantities listed above. (Threading tool also contained in above kit - Part No. 78-8017-9433-6.) Refer to "How To Order Replacement Parts" for ordering information.

### HOW TO ORDER REPLACEMENT PARTS

1) Order parts by PART NUMBER, PART NAME, MACHINE NAME, MODEL NUMBER and PART QUANTITY required.

Minimum billing on parts orders will be \$10.00.

Replacement part prices available on request.

2) Replacement parts and part prices available direct from:

Dispenser Parts Route 4, Box 5B Amery, WI 54001

3) Refer to the front of the instruction manual for branch repair service information.

### **ATTACHMENTS**

Additional information on the attachments listed below is included with the manual except where noted.

Part Number	Attachment Name
78-8028-7838-5	Box Hold Down Attachment
78-8028-7832-8	Top Flap Compression Roller Attachment
78-8028-7850-0	Caster Attachment (no additional information)

1)	Refer to Taping Head Assemblies figures to find all the parts illustrations identified by figure numbers.
2)	Refer to the figure or figures to determine the individual parts required and the parts reference number.
3)	The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.
	NOTE - The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, should the customer elect to do so.

4) Refer to page 18 - "Parts Orders and Service Information" of this manual for replacement parts ordering information.

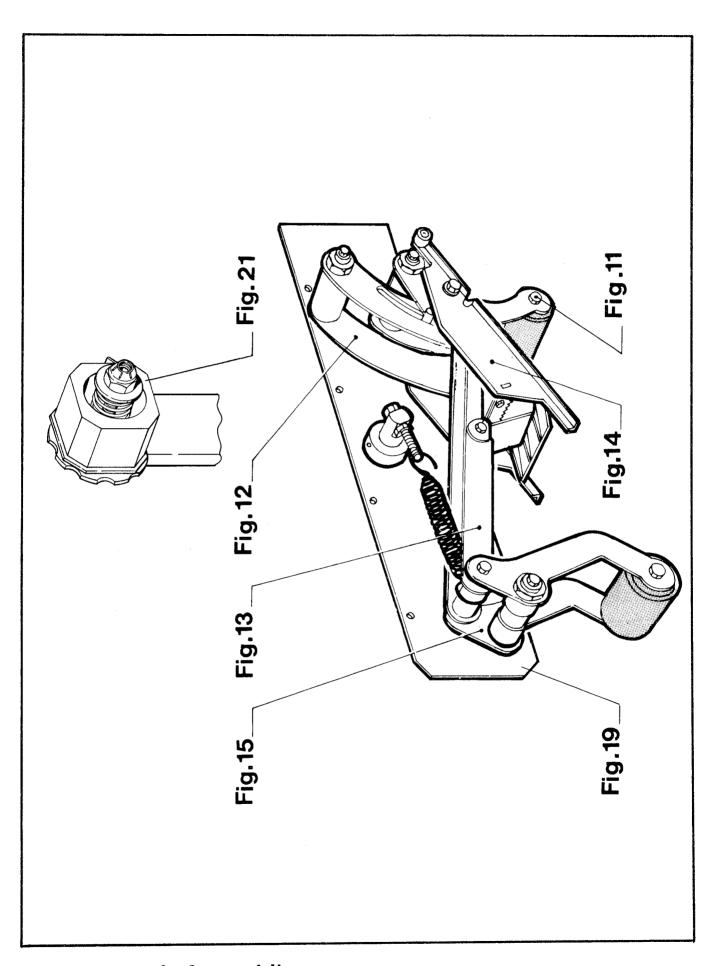
1)	Refer	to	Frame	Assemblies	figure	to	find	a11	parts	illustrations	bγ	figure
	identi	fic	cation.	,							•	

2) Refer to the figure or figures to determine the individual parts required and the parts reference number.

3) The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.

NOTE - The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, should the customer elect to do so.

4) Refer to page 18 - "Parts Orders and Service Information" of this manual for replacement parts ordering information.



Taping Head Assemblies 2A

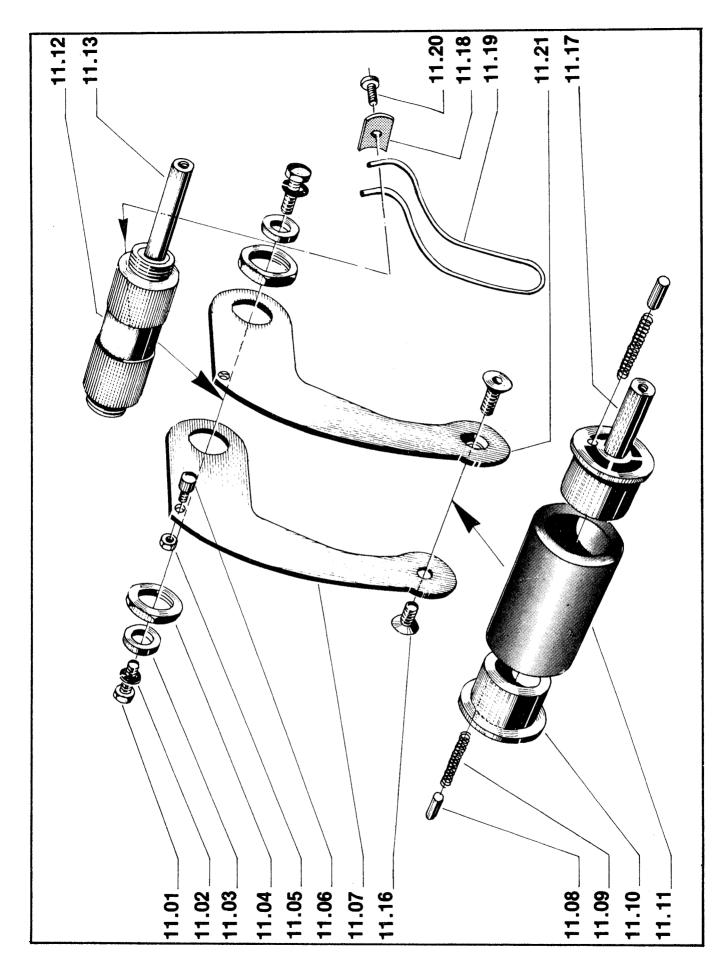


Figure 11

REF. NO.	3M PART NO.	DESCRIPTION
11-01	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-5.6
11-02	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel M6
11-03	78-8017-9095-3	Spacer
11-04	78-8017-9096-1	Nut - Special M18 x 1
11-05	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
11-06	78-8017-9097-9	Pin - Follower
11-07	78-8017-9076-3	Arm - Applying Roller, Right Side
11-08	78-8017-9098-7	Pin - Friction, 5mm
11-09	78-8017-9100-1	Spring - Friction
11-10	78-8017-9099-5	Bushing - Applying Roller
11-11	78-8017-9101-9	Roller - Applying
11-12	78-8017-9102-7	Spacer Assembly - Applying Roller Arms
11-13	78-8017-9109-2	Shaft - 10 x 90mm
11-16	78-8017-9162-1	Screw - Allen FH, M6 x 12
11-17	78-8017-9105-0	Shaft - 10 x 66mm
11-18	78-8017-9364-3	Clamp - Tape Support Spring
11-19	78-8017-9272-8	Spring - Tape Support
11-20	78-8017-9257-9	Screw - Phillips Head, M4 x 10
11-21	78-8017-9430-2	Arm - Applying Roller, Left Side

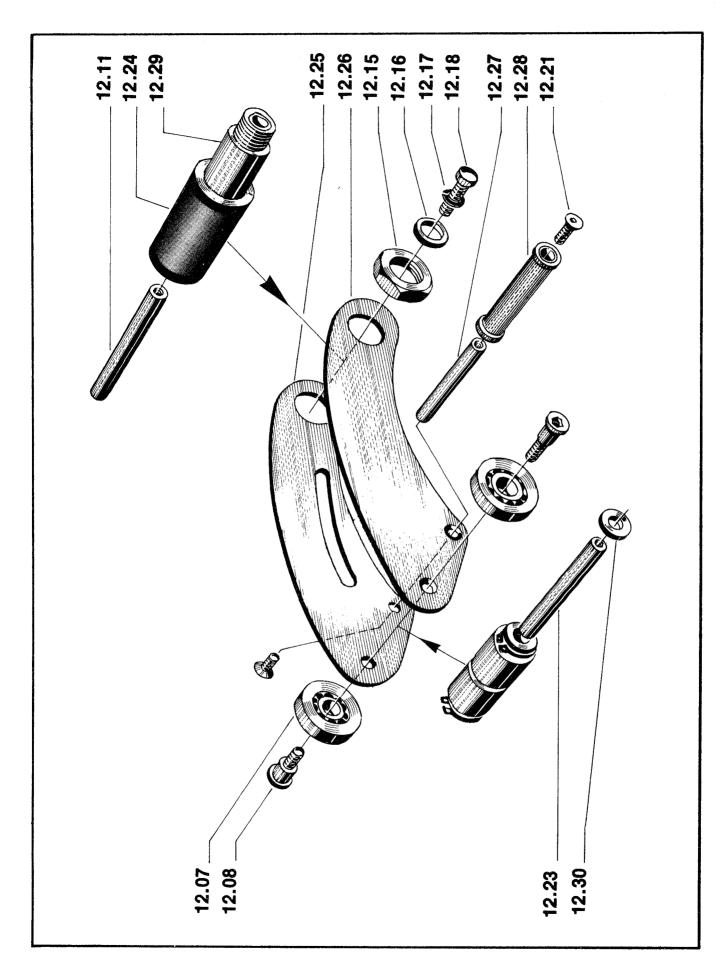


Figure 12

REF. NO.	3M PART NO.	DESCRIPTION
12-07	78-8017-9082-1	Bearing - Special 30mm
12-08	78-8017-9106-8	Screw - Bearing Shoulder
12-11	78-8017-9109-2	Shaft - 10 x 90mm
12-15	78-8017-9169-6	Nut - M18 x 1
12-16	78-8017-9095-3	Spacer
12-17	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel M6
12-18	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-5.6
12-21	78-8017-9170-4	Screw - Phillips FH, M4 x 8
12-23	78-8018-7847-7	Shaft - 10 x 57 mm.
12-24	78-8018-7848-5	Roller Assembly - Tape Guide
12-25	78-8018-7849-3	Side Plate - w/Slot - One Way Roller Right
12-26	78-8018-7850-1	Side Plate - One Way Roller Left
12-27	78-8018-7851-9	Shaft - 8 x 57 mm.
12-28	78-8018-7852-7	Roller Assembly - One Way - Knurled
12-29	78-8018-7853-5	Shaft Assembly - Tape Guide Roller
12-30	78-8018-7854-3	Spacer - 16ø/10,5øx1,5 mm thk.

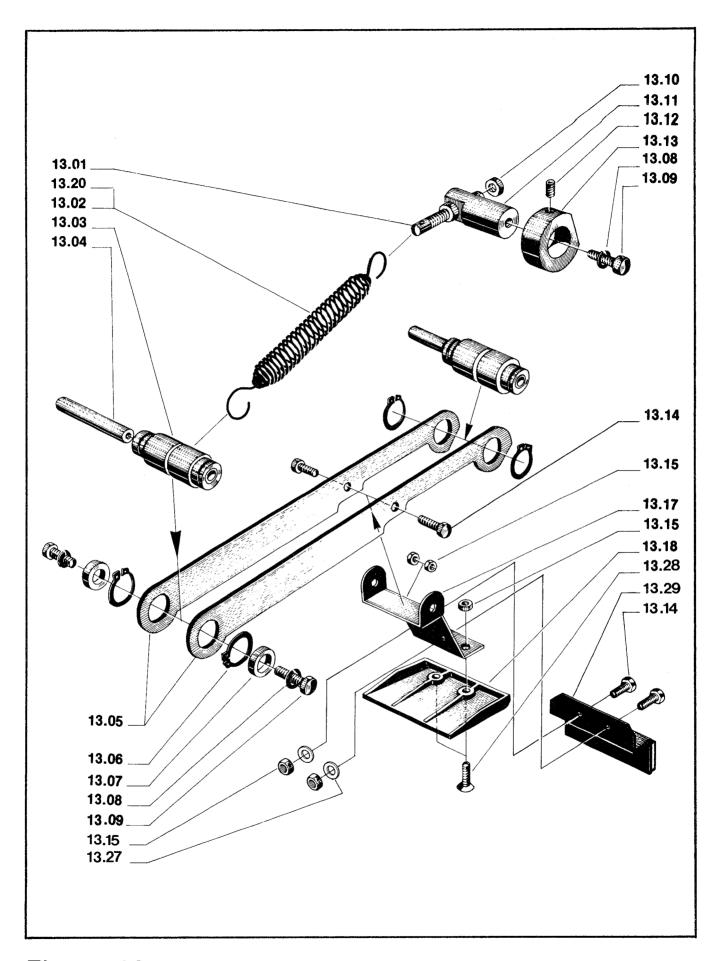


Figure 13

	DESCRIPTION	3M PART NO.	REF. NO.
	Screw - Spring Tensioner	78-8017-9118-3	13-01
	Spring - Main, Top Head, Zinc Pl.	78-8017-9119-1	13-02
	Roller Assembly - Grooved	78-8017-9120-9	13-03
	Shaft - 10 x 66mm	78-8017-9105-0	13-04
	Lever	78-8017-9122-5	13-05
	Ring - Snap for 18mm	78-8017-9171-2	13-06
	Spacer	78-8017-9123-3	13-07
	Washer - Metric, Lock, Spr., Steel M6	78-8010-7435-8	13-08
	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-5.6	78-8032-0375-7	13-09
	Nut - Metric Hex Stl., M8	26-1000-1347-8	13-10
	Holder - Main Spring	78-8017-9124-1	13-11
	Screw - Set, Allen M6 x 10	78-8005-4230-6	13-12
	Collar - Retainer	78-8017-9125-8	13-13
.8	Screw - Hex Head, M5 x 10, Nick. Pl. DIN 933-8.8	78-8010-7163-6	13-14
	Nut - Metric, Hex, Steel, M5, Nick. Pl.	78-8010-7417-6	13-15
	Washer - Metric, Lock, Spr., Steel M5	78-8005-5735-3	13-16
	Bracket - Blade guard	78-8017-9126-6	13-17
	Guard - Blade	78-8017-9127-4	13-18
	Spring, Main, Bottom Head	78-8017-9424-5	13-20
	Washer, Plain - M5	78-8005-5741-1	13-27
	Screw - Allen Fl. Hd. M5 x 12	26-0001-5862-1	13-28
	Blade - Oiler	78-8052-6285-0	13-29
•	Screw - Set, Allen M6 x 10  Collar - Retainer  Screw - Hex Head, M5 x 10, Nick. Pl. DIN 933-8.  Nut - Metric, Hex, Steel, M5, Nick. Pl.  Washer - Metric, Lock, Spr., Steel M5  Bracket - Blade guard  Guard - Blade  Spring, Main, Bottom Head  Washer, Plain - M5  Screw - Allen Fl. Hd. M5 x 12	78-8005-4230-6 78-8017-9125-8 78-8010-7163-6 78-8010-7417-6 78-8005-5735-3 78-8017-9126-6 78-8017-9127-4 78-8017-9424-5 78-8005-5741-1 26-0001-5862-1	13-12 13-13 13-14 13-15 13-16 13-17 13-18 13-20 13-27 13-28

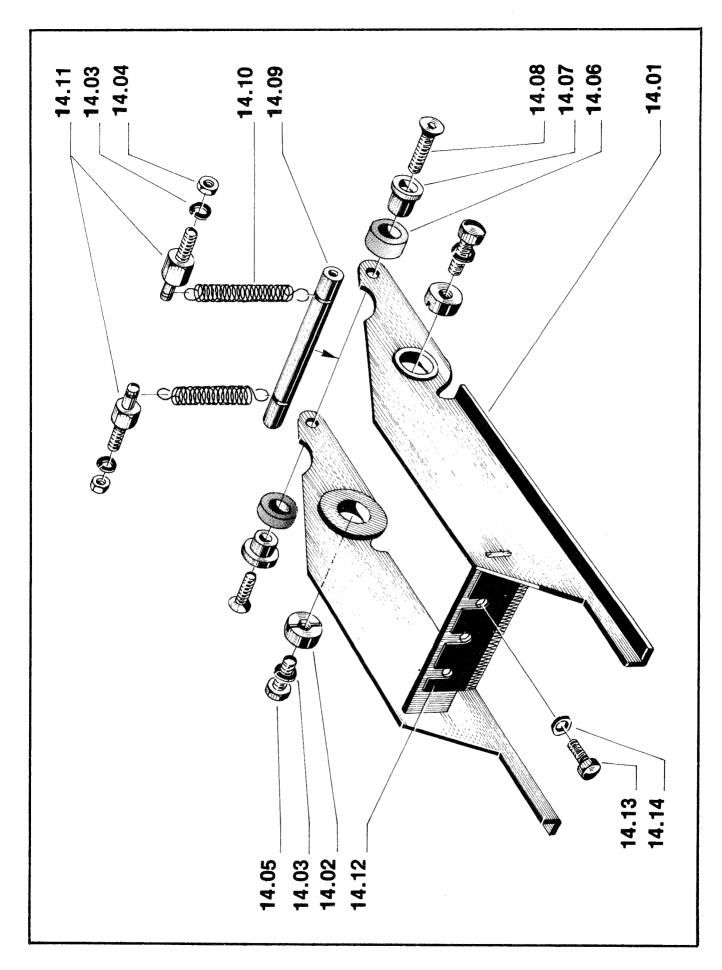


Figure 14

REF. NO.	3M PART NO.	DESCRIPTION
14-01	78-8017-9128-2	Lever Assembly - Cutter
14-02	78-8017-9132-4	Pivot - Cutter Lever
14-03	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel - M6
14-04	78-8010-7418-4	Nut - Metric, Hex, Steel, M6
14-05	78-8010-7169-3	Screw - Metric, M6 x 12, Hex Hd. Cap, Steel, Nick. Pl., DIN 933-8.8
14-06	78-8017-9133-2	Bumper
14-07	78-8017-9134-0	Bushing - Bumper
14-08	78-8017-9172-0	Screw - Allen FH, M5 x 20
14-09	78-8017-9135-7	Pin - Spring Holder
14-10	78-8017-9136-5	Spring - Cutter
14-11	78-8017-9137-3	Holder - Cutter Spring
14-12	78-8017-9173-8	Blade - 2.56 inch/65mm
14-13	78-8010-7163-6	Screw - Metric, M5 x 10, Hex Hd. Cap, Steel Nick. Pl., DIN 933-8.8
14-14	78-8005-5741-1	Washer - Metric, Plain, Steel, M5

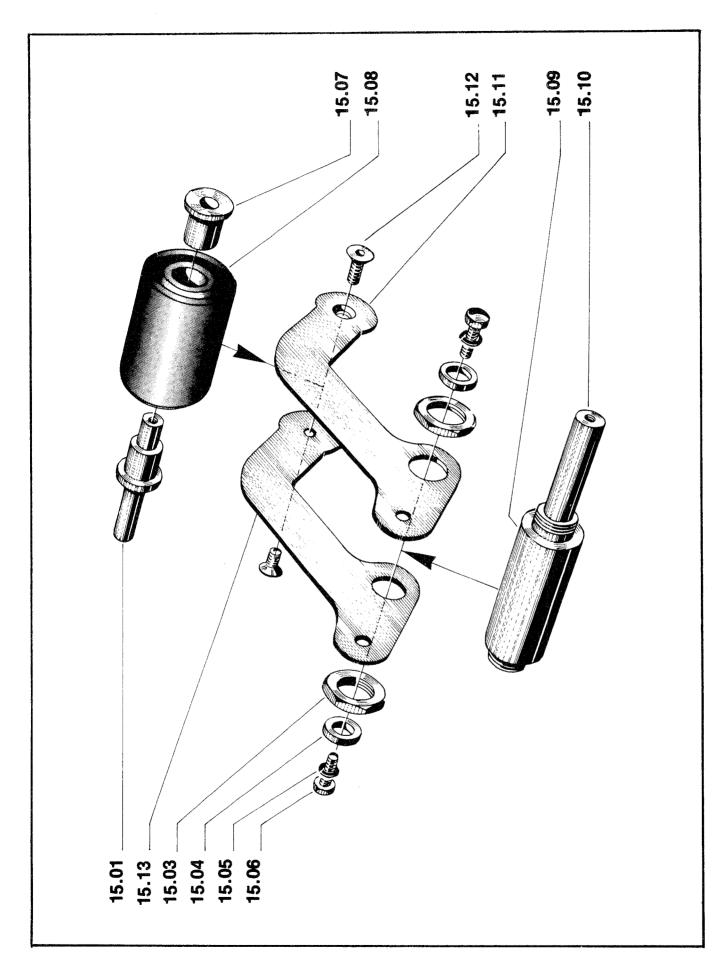


Figure 15

REF. NO.	3M PART NO.	DESCRIPTION
15-01	78-8017-9105-0	Shaft - 10 x 66mm
15-02	78-8017-9138-1	Arm - Buffing Roller
15-03	78-8017-9096-1	Nut - Special, M18 x 1
15-04	78-8017-9095-3	Spacer
15-05	78-8010-7435-8	Washer - Metric, Lock, Spr. Steel - M6
15-06	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap, Steel Nic. Pl., DIN 933-8.8
15-07	78-8017-9139-9	Bushing - Buffing Roller
15-08	78-8017-9140-7	Roller - Buffing
15-09	78-8017-9141-5	Spacer Assembly - Buffing Roller Arms
15-10	78-8017-9109-2	Shaft - 10 x 90mm
15-11	78-8018-7608-3	Arm - Buffing Roller, Right
15-12	78-8017-9162-1	Screw - Allen FH, M6 x 12
15-13	78-8018-7609-1	Arm - Buffing Roller, Left

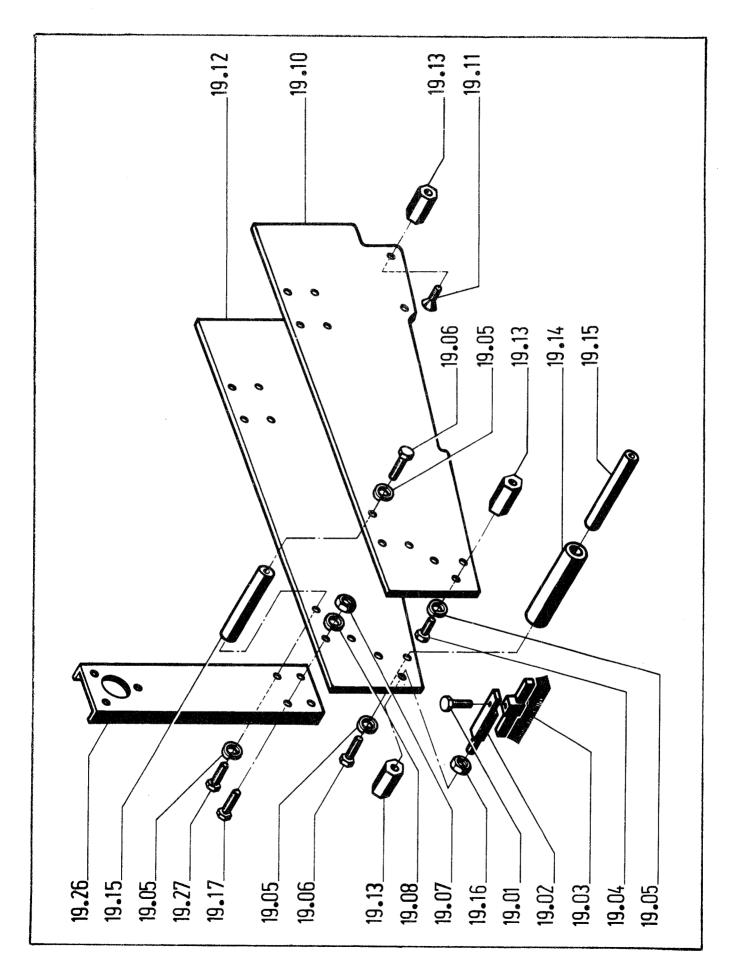


Figure 19 Top

REF. NO.	3M PART NO.	DESCRIPTION
19-01	78-8010-7163-6	Screw - Metric, M5 x 10, Hex Hd. Cap. Steel, Nick. Pl., DIN 933-8.8
19-02	78-8018-7746-1	Support - Brush
19-03	78-8018-7617-4	Brush - Assembly - Buffing
19-04	78-8010-7169-3	Screw - Metric, M6 x 12, Hex Hd. Cap. Steel, Nick. Pl., DIN 933-8.8
19-05	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel, M6
19-06	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap Steel, Nick. Pl., DIN 933-5.6
19-07	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
19-08	78-8005-5735-3	Washer - Metric, Lock, Spr. Steel, M5
19-10	78-8018-7721-4	Sideplate - Left
19-11	78-8017-9162-1	Screw - Allen FH, M6 x 12
19-12	78-8018-7722-2	Sideplate - Right
19-13	78-8018-7723-0	Spacer - Hexagonal
19-14	78-8017-9148-0	Bumper - Buffing Arm
19-15	78-8017-9109-2	Pin - 10-x 90 mm
19-16	78-8010-7418-4	Nut - Metric, Hex Steel, M6
19-17	78-8018-7798-2	Screw - Metric, M5 x 15, Hex Hd. Cap Nick. Pl.
19-26	78-8046-8301-5	Bracket - Tape Drum
19-27	78-8010-7193-3	Screw-Metric, M6 x 20, Hex Hd.

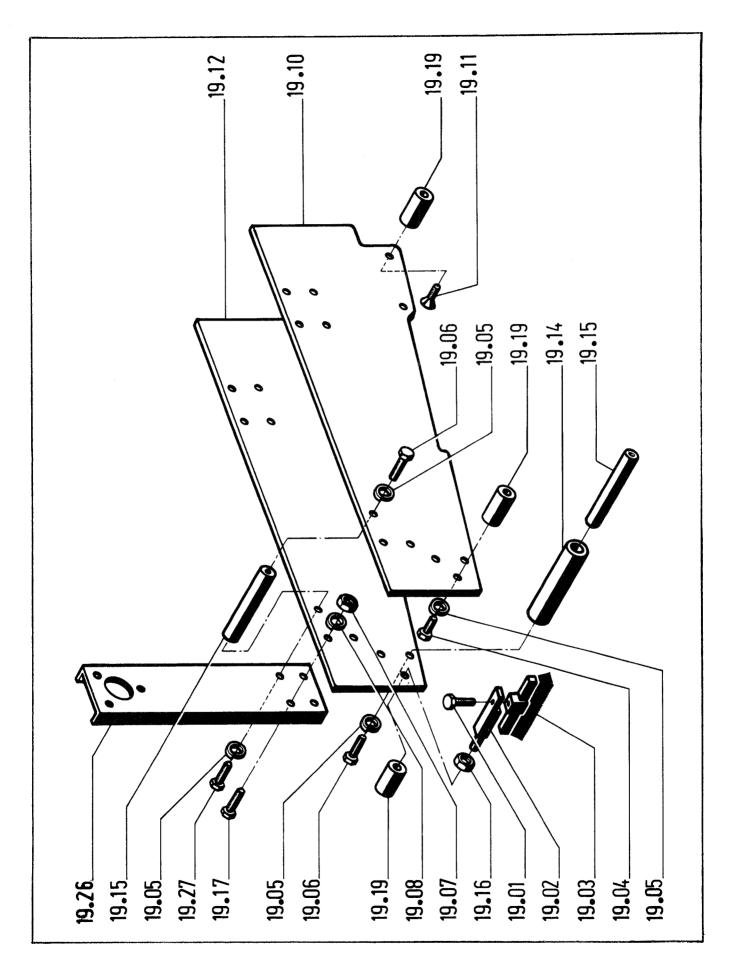


Figure 19 Bottom

REF. NO.	3M PART NO.	DESCRIPTION
19-01	78-8010-7163-6	Screw - Metric, M5 x 10, Hex Hd. Cap. Steel, Nick.Pl., DIN 933-8.8
19-02	78-8018-7746-1	Support - Brush
19-03	78-8018-7617-4	Brush - Assembly - Buffing
19-04	78-8010-7169-3	Screw - Metric, M6 x 12, Hex Hd. Cap. Steel, Nick. Pl., DIN 933-8.8
19-05	78-8010-7435-8	Washer - Metric, Lock, Spr., Steel, M6
19-06	78-8032-0375-7	Screw - Metric, M6 x 16, Hex Hd. Cap Steel, Nick. Pl., DIN 933-5.6
19-07	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
19-08	78-8005-5735-3	Washer - Metric, Lock, Spr. Steel, M5
19-10	78-8018-7721-4	Sideplate - Left
19-11	78-8017-9162-1	Screw -Allen FH, M6 x 12
19-12	78-8018-7722-2	Sideplate - Right
19-14	78-8017-9148-0	Bumper - Buffing Arm
19-15	78-8017-9109-2	Pin - 10 x 90 mm
19-16	78-8010-7418-4	Nut - Metric, Hex Steel, M6
19-17	78-8018-7798-2	Screw - Metric, M5 x 15, Hex Hd. Cap Nick. Pl.
19-19	78-8028-8069-6	Stud - Lower Mounting
19-26	78-8046-8301-5	Bracket - Tape Drum
19-27	78-8010-7193-3	Screw - Metric, M6 x 20, Hex Hd.

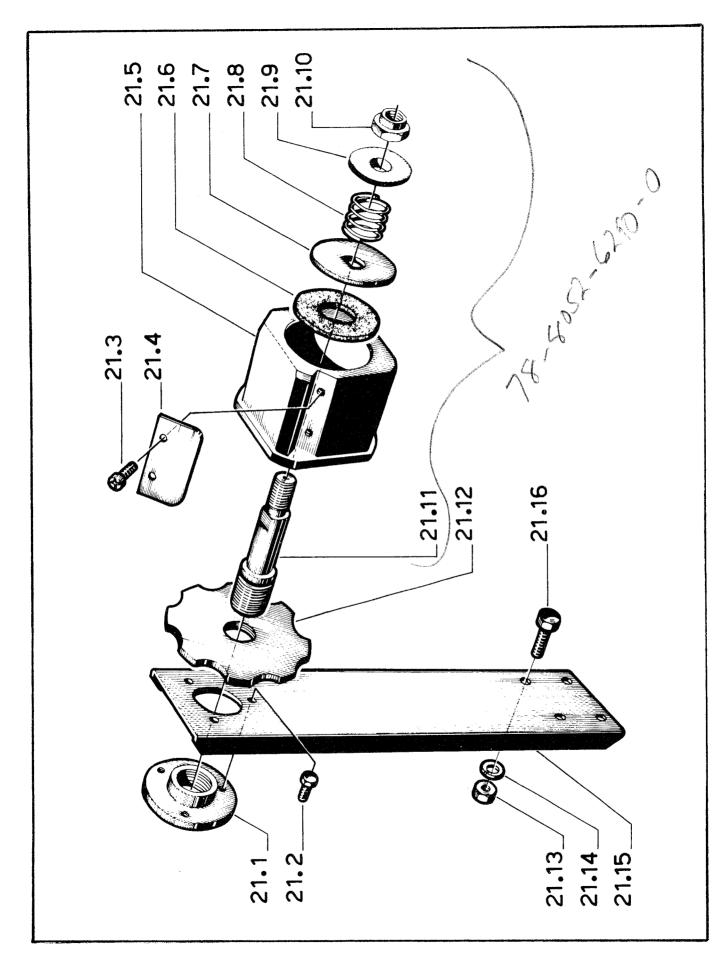
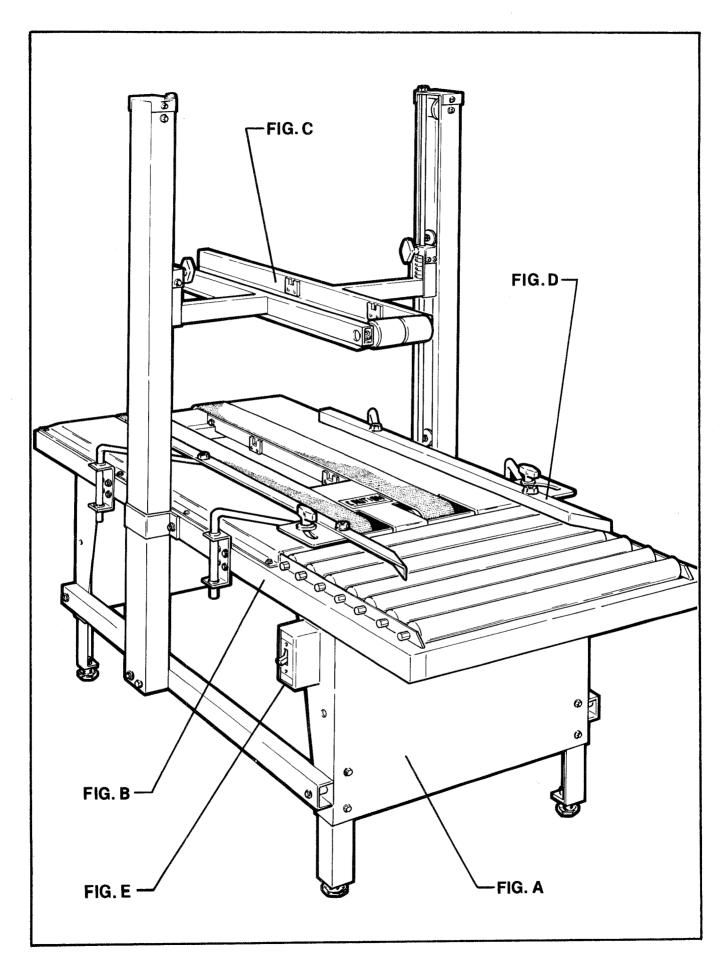


Figure 21

REF. NO.	3M PART NO.	DESCRIPTION
21-01	78-8017-9090-4	Flange - Tape Drum Shaft Support
21-02	78-8010-7157-8	Screw - Hex Head M4 x 10
21-03	26-1002-5753-9	Screw - Self Tapping
21-04	78-8052-6268-6	Leaf Spring
21-05	78-8052-6269-4	Tape Drum
21-06	78-8052-6270-2	Washer - Friction
21-07	78-8052-6271 <b>-</b> 0	Washer - Tape Drum
21-08	78-8017-9071-4	Spring
21-09	78-8017-9094-6	Washer - Spring Holder
21-10	78-8017-9077-1	Nut - Self Locking M10
21-11	78-8052-6272-8	Shaft - Tape Drum
21-12	78-8017-9091-2	Plate - Locking, Tape Drum Shaft
21-13	78-8010-7417-6	Nut - Metric, Hex, Steel, M5
21-14	78-8005-5735-3	Washer - Metric, Lock Spr. St., M5
21-15	78-8046-8301-5	Bracket - Tape Drum
21-16	78-8018-7798-2	Screw - Metric, M5 x 14, Zinc Pl.



Frame Assemblies

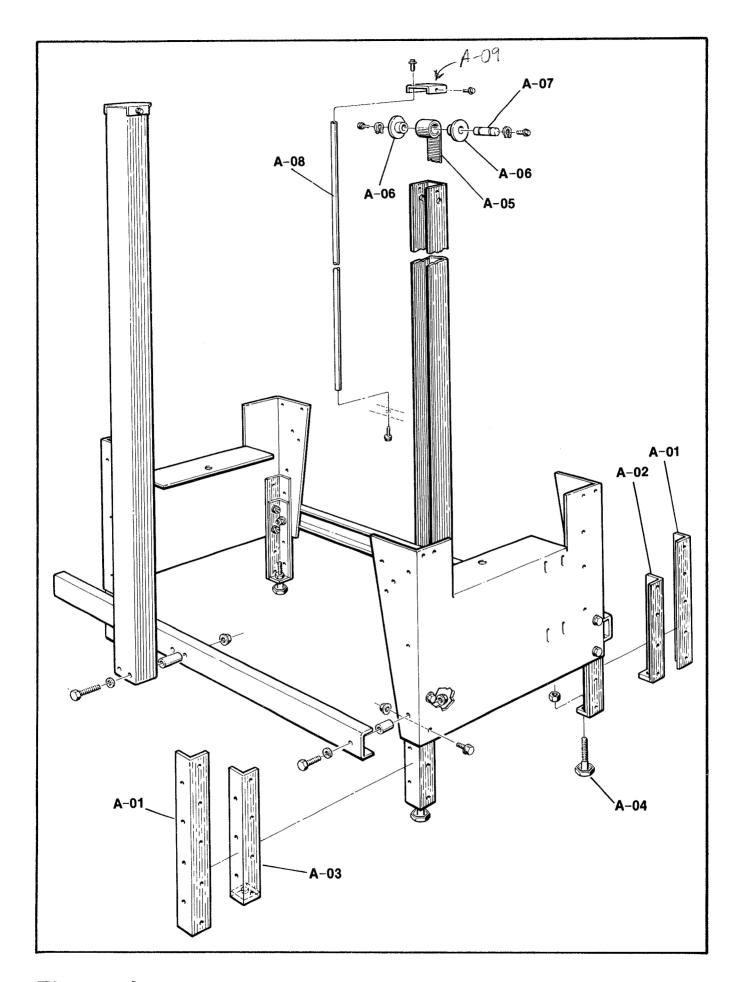


Figure A

REF. NO.	3M PART NO.	DESCRIPTION
A-01	78-8028-8282-5	Leg - Outer
A-02	78-8028-8286-6	Leg - Inner Right, Weldment
A-03	78-8028-8285-8	Leg - Inner Left, Weldment
A-04	26-1003-7366-6	Leveler - Fixed 1.50 Hex 1/2-13 x 3 Lg. Robert Miller #X-6C
A-05	26-1003-7746-9	Spring - Negator Constant Force 19.80 lbs. load, Hunter Spring #SH 20S47
A-06	78-8028-8314-6	Roller - Hub
A-07	78-8028-8315-3	Shaft - Spring Hub
A-08	78-8028-8322-9	Guide Bar - Upright

A-09 78-8028-8921-1 Cup - Uplight channel

(no longer available)

Both sides identical. Fabricate!

A-05- Installing Spring - See Service mangal Page 4-13

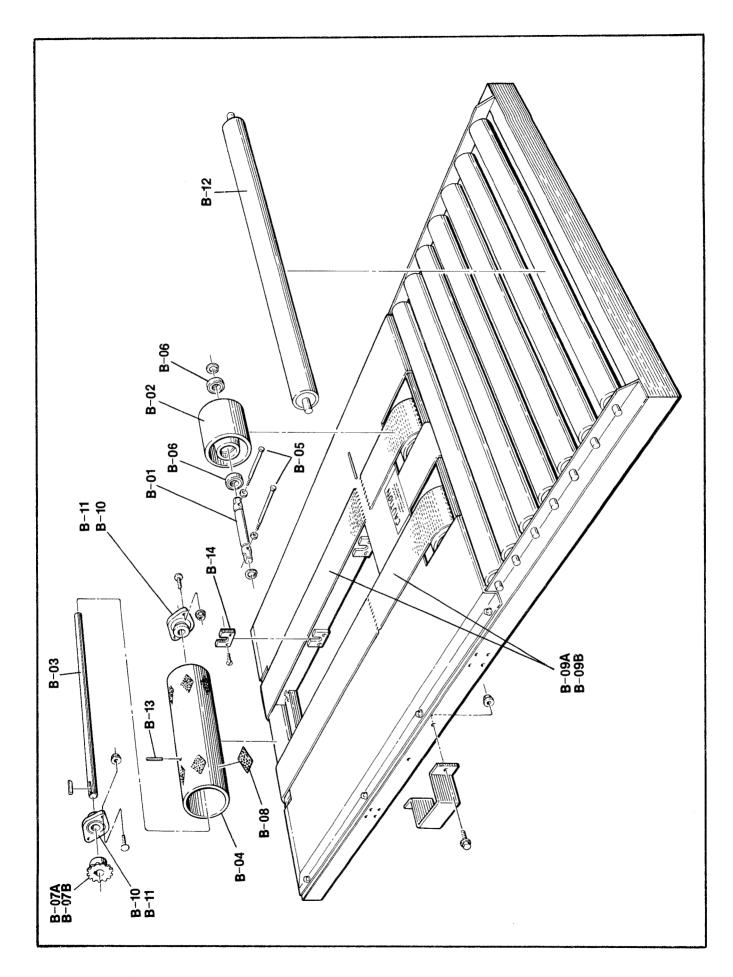


Figure B

REF. NO.	3M PART NO.	DESCRIPTION
B-01	78-8028-8307-0	Shaft - Idler
B-02	78-8028-8290-8	Roller - Idler
B-03	78-8028-8310-4	Shaft - Drive Roller
B-04	78-8028-8309-6	Roller - Drive
B-05	78-8028-7968-0	Screw
B-06	12-7995-1741-7	Bearing - Ball Sealed Fafnir #S8PP
B-07A (See note	26-1003-6479-8 below)	Sprocket - 3/8 Pitch, Type B 3/4 Finish Bore 3/16 Keyway #35B 16 (Serial #1001 thru #1435)
B-07B	26-1000-1760-2	Sprocket 1/2 Pitch, Type B, 3/4 Finish Bore, 3/16 Keyway. #40B 15. (Serial #1436 & Above)
B-08	78-8028-7967-2	Crown - Drive Pulley
B-09A	26-1003-7723-8	Belt - 3 Inch Wide x 2 ply Brown Rough Top, Clipper Laced 85.50 <u>+</u> .12 Center of Lacing Pin, Midwest Rubber - (Standard)
B-09B	26-1003-8250-1	Belt - 3 Inch W.D. x 3 Ply, Orange Ruff - Top Urethane Clipper Laced $85.50 \pm .12$ Center of Lacing Pins, Midwest Rubber ( $\overline{0}$ ptional -High Life)
B-10	26-1003-7710-5	Bearing - Ball Fafnir #RA-012-RRB
B-11	26-1003-7711-3	Housing - Bearing Fafnir #47MST
B-12	26-1003-7818-6	Roller - Conveyor 1-3/8 Dia. x 18 GA for 23.70 Frame Opening, 200F Bearing 5/16 Hex Shaft Standard Conveyor #R-2
B-13	26-1003-3707-5	Pin - Spring, Coiled, Med. Duty, 1/4 Dia. x 2 Lg.
B-14	78-8028-8337-7	Bracket - Tape Head Mounting

NOTE - For an improved driving system and extended sprocket life, B-07B is the recommended part for your machine. If the serial number on your machine is below 1435, you must order a quantity of (2) B-07B and also part E-01B. (Refer to Figure E.)

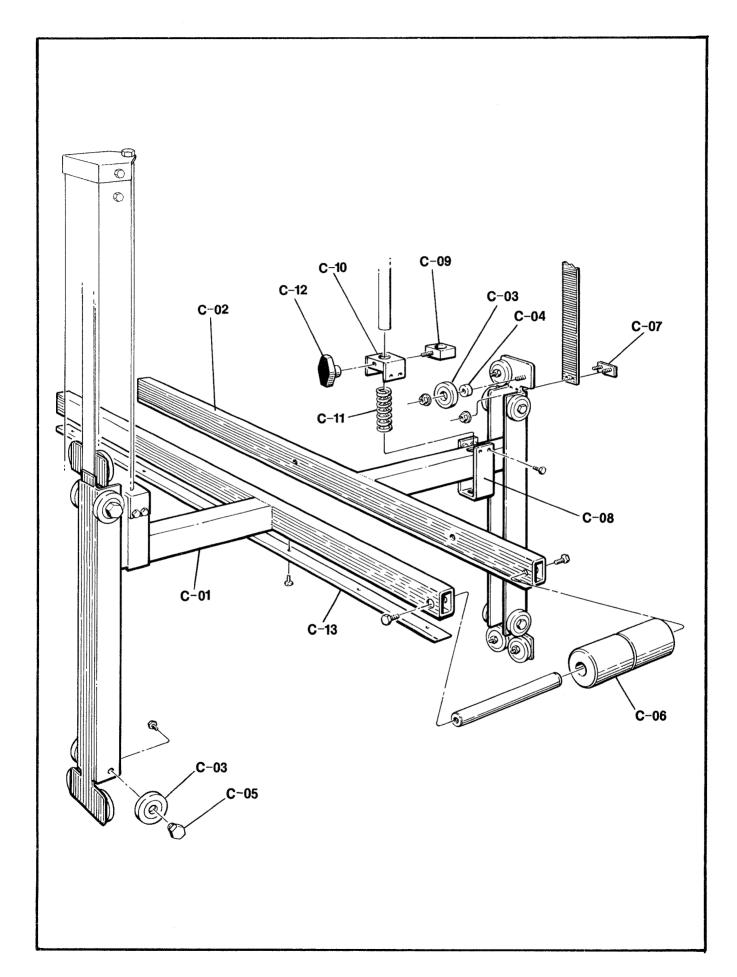


Figure C

REF. NO.	3M PART NO.	DESCRIPTION
C-01	78-8028-8311-2	Frame - Head, L.H. Weldment
C-02	78-8028-8312-0	Frame - Head, R. H. Weldment
C-03	78-8028-8304-7	Roller - Guide
C-04	78-8028-8303-9	Axle - Roller
C-05	78-8028-8302-1	Axle - Eccentric
C-06	78-8028-8104-1	Infeed Roller Assembly
C-07	78-8028-7816-1	Plate - Stud
C-08	78-8028-8325-2	Bracket - Clamp
C-09	78-8028-8326-0	Block - Clamping
C-10	78-8028-8324-5	Housing - Clamp
C-11	26-1003-7737-8	Spring - Compression Lee #LC-115L-2
C-12	26-1003-7356-7	Knob - 5/16-18 Threaded Female Insert Davies #3090
C-13	78-8028-8313-8	Plate - Head Frame Slide

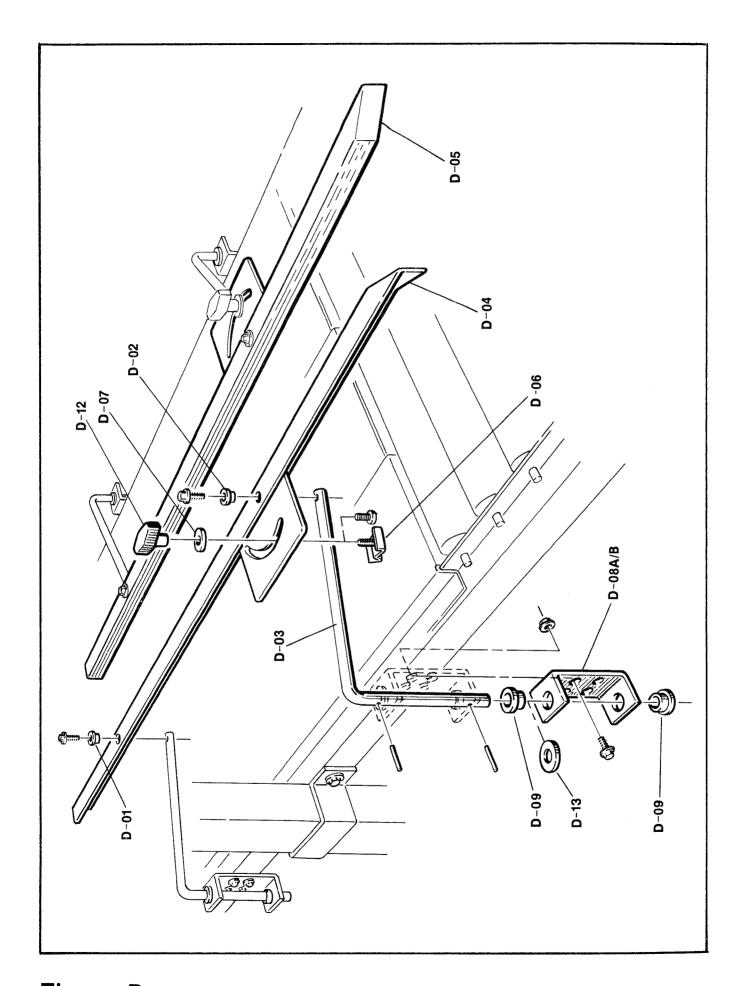


Figure D

REF. NO.	3M PART NO.	DESCRIPTION
D-01	78-8028-8300-5	Pivot - Rear
D-02	78-8028-8301-3	Pivot - Front
D-03	78-8028-8306-2	Arm - Pivot
D-04	78-8028-8298-1	Guide - Side, Left
D-05	78-8028-8297-3	Guide - Side, Right
D-06	78-8028-8342-7	Clamp - Side Guide (Serial #1001 thru #1025 only)
D-07	26-1003-3708-3	Washer - Fender, 1-1/4 O.D. x 21/64 I.D. x 16 GA C/Stl.
D-08A	78-8028-8274-2	Bracket - Side Guide (Serial #1001 thru #1435)
D-08B	78-8028-8161-1	Bracket - Side Guide (Serial #1436 & Above)
D-09	78-8003-7899-0	Bearing - Flange "OILITE" #FF-718-1 (Ser. #1001 thru #1435)
D-12	26-1003-7356-7	Knob - 5/16-18 Threaded Female Insert Davies #3090
D-13	12-7991-1753-1	Washer-Plain 5/8 Size C/Stl. (Serial #1436 & Above)

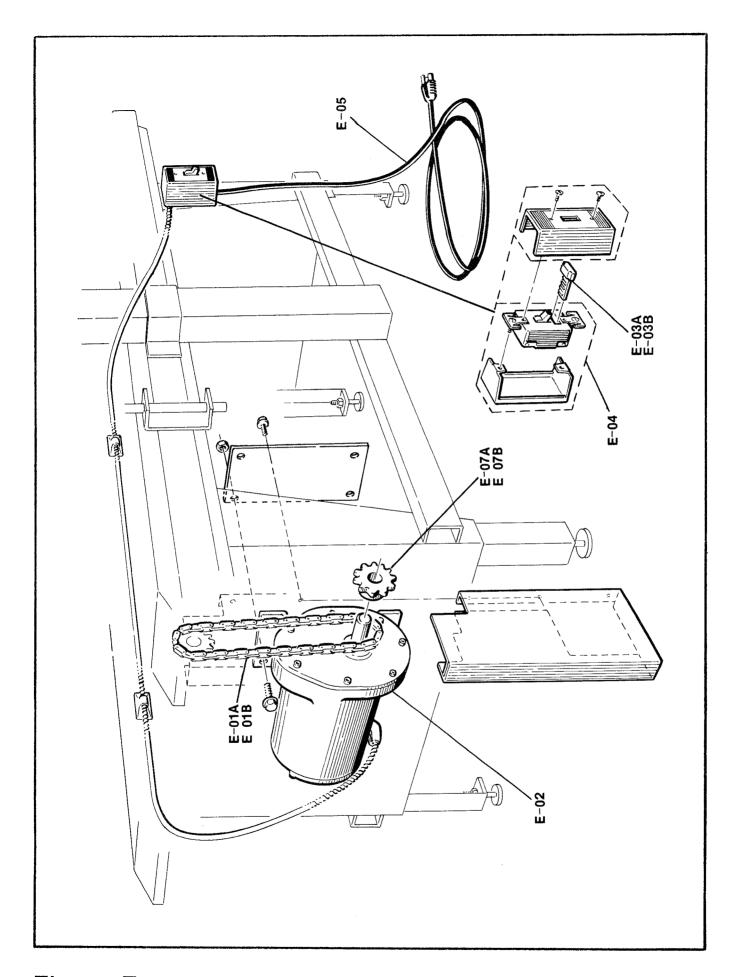


Figure E

REF. NO.	3M PART NO.	DESCRIPTION
E-01A (See note	78-8241-3316-5 1 below)	Chain - Roller Single Pitch, Single Strand 3/8 Pitch #35 w/Connecting Link, 65 Pitches (Serial #1001 thru 1435)
E-01B	26-1004-2495-6	Chain - Roller Single Pitch, Single Strand 1/2 Pitch #40 w/Connecting Link, 51 Pitches (Serial #1436 & Above)
E-02 (See note	*78-8028-8195-9 2 below)	Motor - Gear Nonweise BWIO GESKASSENI Dayfon 5 x 340
E-03A	26-1003-3583-0	Element - Heater 4.60 Amps GE #H529A (Serial #1001 thru 1580 or #1722 thru 1791)
E-03B	70-8414-5001-1	Element-Heater, 5.43 Amps, GE #CR123H625A (Serial #1581 thru 1721 or #1792 and above)
E-04	26-0000-2644-8	Starter - Motor, Overload Protected Double Pole Toggle Operated w/Hardware GE #CR101 H1
E-05	78-8028-7909-4	Power Cord Assembly
E-07A (See note	26-1003-6479-8 1 below)	Sprocket - 3/8 Pitch, Type B, 3/4 Finish Bore, 3/16 Keyway. #35B 16. (Serial #1001 thru 1435)
E-07B	26-1000-1760-2	Sprocket - 1/2 Pitch, Type B, 3/4 Finish Bore, 3/16 Keyway. #40B 15. (Serial #1436 & Above)

NOTE 1 - For an improved driving system and extended sprocket life, E-O1B is the recommended part for your machine. If the serial number on your machine is below 1435, you must order Part E-O1B and also a quantity of (2) E-O7B.

NOTE 2 - When ordering this motor, if the serial number on your machine is #1001 thru 1580 or #1722 thru 1791, you must also order Part E-03B to replace your heater element E-03A.