

# 3M-Matic™ 120a-I Type 19700

## Adjustable Case Sealer

S300151300A.1 Gen. 2007





# Instruction Manual

## 120a Adjustable Case Sealer, Type 19700

This instruction manual is divided into two sections as follows:

- Section I** Includes all information related to installation, operation and parts for the case sealer.  
**Section II** Includes specific information regarding the AccuGlide™ II STD 2 Inch Taping Heads.

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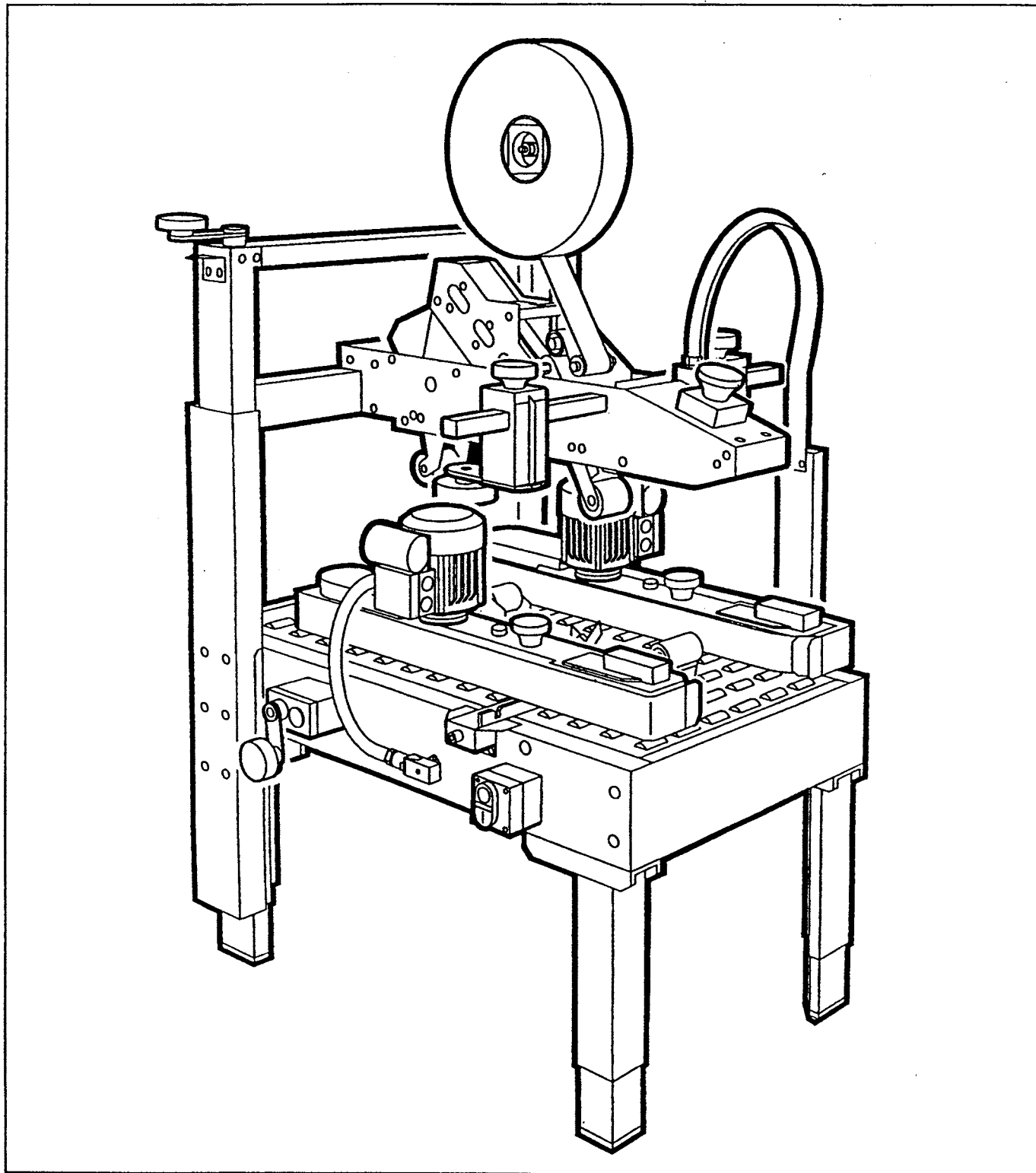
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## **Section II – AccuGlide™ II STD 2 Inch Taping Heads**

(See Section II for Table of Contents)

## Intended Use

The intended use of the **3M-Matic™ 120a Adjustable Case Sealer** with **AccuGlide™ II** Taping Heads is to apply a "C" clip of **Scotch™** brand pressure-sensitive film box sealing tape to the top and bottom center seam of regular slotted containers. The case sealer is manually adjustable to a wide range of box sizes (see "Specifications – Box Weight and Size Capacities", Page 8).



**3M-Matic™ 120a Adjustable Case Sealer, Type 19700**

**Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE:**

3M sells its **3M-Matic™ 120a Adjustable Case Sealer, Type 19700** with the following warranties:

1. The drive belts and the taping head knives, springs and rollers will be free from all defects for ninety (90) days after delivery.
2. All other taping head parts will be free from all defects for three (3) years after delivery.
3. All other parts will be free from all defects for two (2) years after delivery.

If any part is proved to be defective within its warranty period, then the exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part, provided the defective part is returned immediately to 3M's factory or an authorized service station designated by 3M. A part will be presumed to have become defective after its warranty period unless the part is received or 3M is notified of the problem no later than five (5) calendar days after the warranty period. If 3M is unable to repair or replace the part within a reasonable time, then 3M at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. 3M shall have no obligation to repair or replace (1) those parts failing due to operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) parts failing due to non-lubrication, inadequate cleaning, improper operating environment, improper utilities or operator error.

**Limitation of Liability:** 3M and seller shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized officers of 3M and seller.


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## **Contents – 120a Adjustable Case Sealer**

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- (1) 120a Adjustable Case Sealer, Type 19700
- (1) Tool/Spare Parts Kit
- (1) Instruction and Parts Manual

## Important Safeguards

 This safety alert symbol identifies important messages in this manual. **READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.**

**Important** – In the event the following safety labels are damaged or destroyed, **they must be replaced to ensure operator safety.** A label kit, part number 78-8098-9043-3 is available as a stock item or individual labels can be ordered. See Parts Illustration/List, Section I, pages 56 & 57.

The "Warning – Sharp Knife" label (A), shown in Figure 1-1, is attached to both sides of the upper frame at the location of the cut-off knife on the upper taping heads. The "Warning – Sharp Knife" label (B), shown in Figure 1-1, is attached to the orange cut-off knife guard on both taping heads. The labels warn operators and service personnel of the very sharp knife used to cut the tape at the end of the tape application.

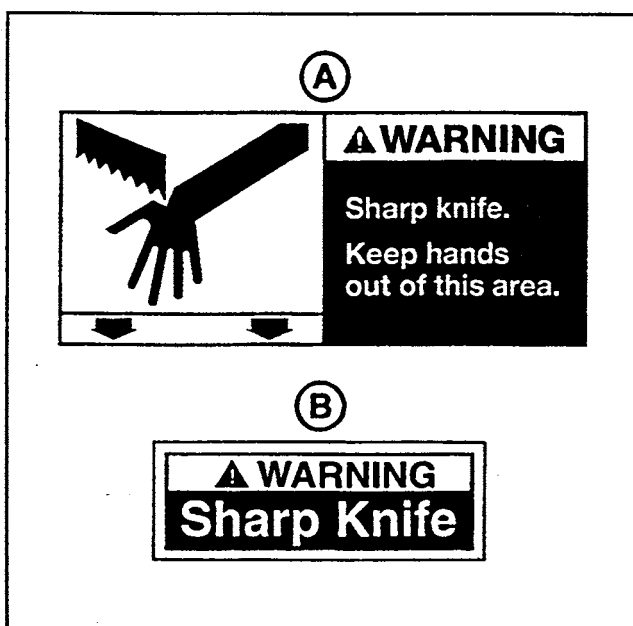


Figure 1-1 – Knife Warning Labels

The "Warning – Hazardous Voltage" label, shown in Figure 1-2, is attached to the cover of the electrical control box. The label warns service personnel to unplug the power supply before attempting any service work on the case sealer.



Figure 1-2 – Electrical Warning Label

The "Warning – Keep Hands Away From Moving Belts" labels, shown in Figure 1-3, are located on the side of both drive belt assemblies at the infeed end of the machine. The labels warn operators to keep hands away from this area when drive belts are running.

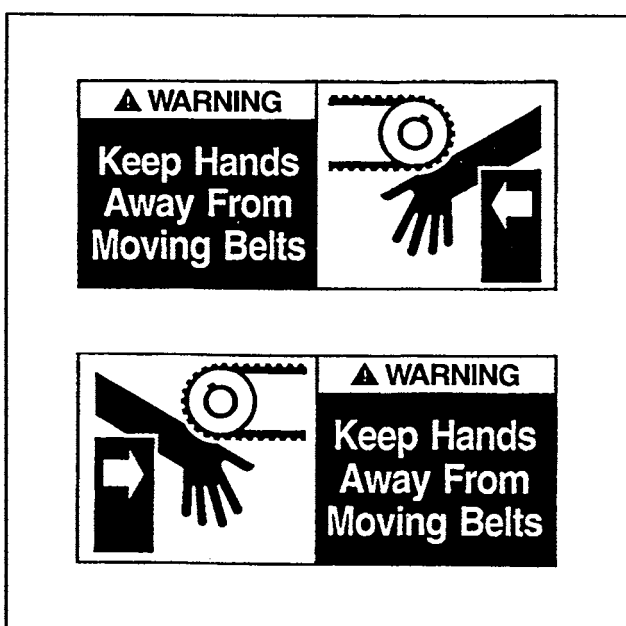


Figure 1-3 – Box Drive Belt Warning Label

## Important Safeguards (Continued)

The "**Caution – Pinch Point**" label, shown in **Figure 1-4**, is attached to the compression roller brackets on both sides of the machine. The label reminds operator to keep hands away from compression rollers when machine is running.



Figure 1-4 – Pinch Point Caution Label

The 120a is equipped with a "Red" emergency stop switch located on the top/front of the upper assembly. The "**Stop**" label, shown in **Figure 1-6** is located near the switch and reminds operators and casual personnel of the function of this switch.

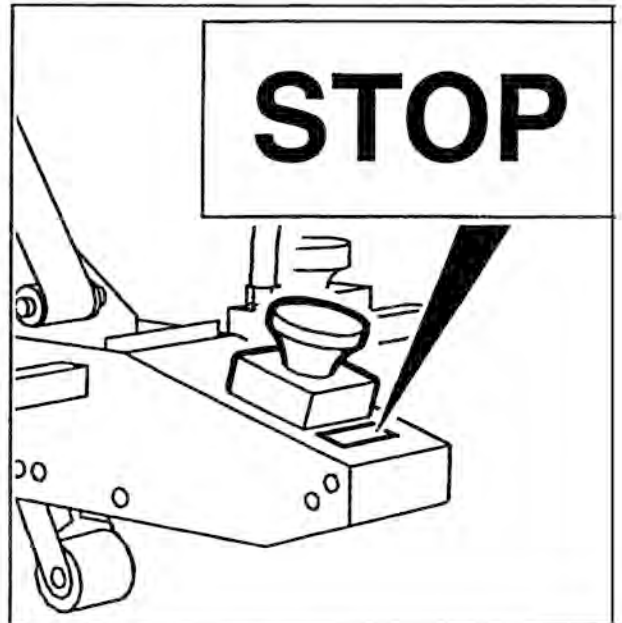


Figure 1-6 – Stop Label

The "**Safety Instructions**" label, shown in **Figure 1-5**, is attached to both side columns. The label provides convenient safeguard instructions for the operator and service personnel.

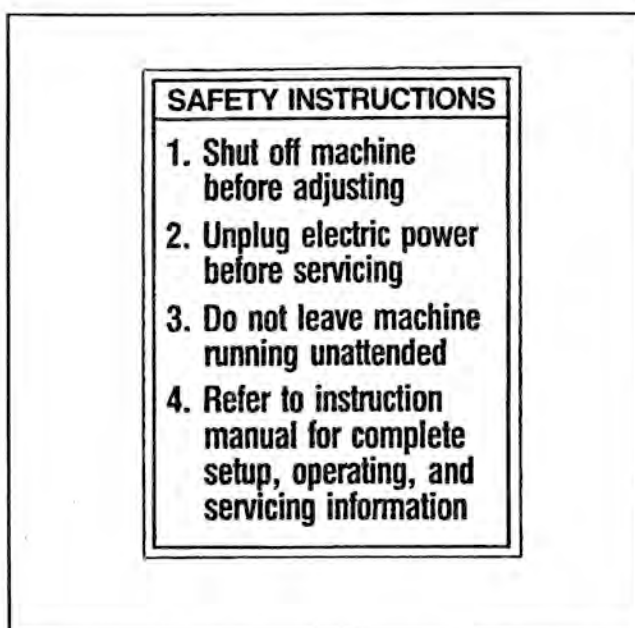


Figure 1-5 – Safety Instructions Label

Two "**Operating Notice**" labels, shown in **Figure 1-7**, are located on the top, infeed end of both drive belt assemblies. The labels remind operators of correct belt adjustment procedures.

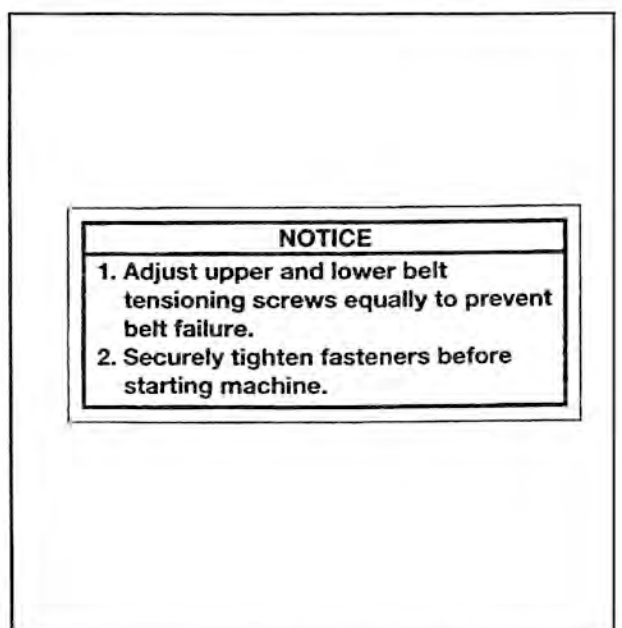
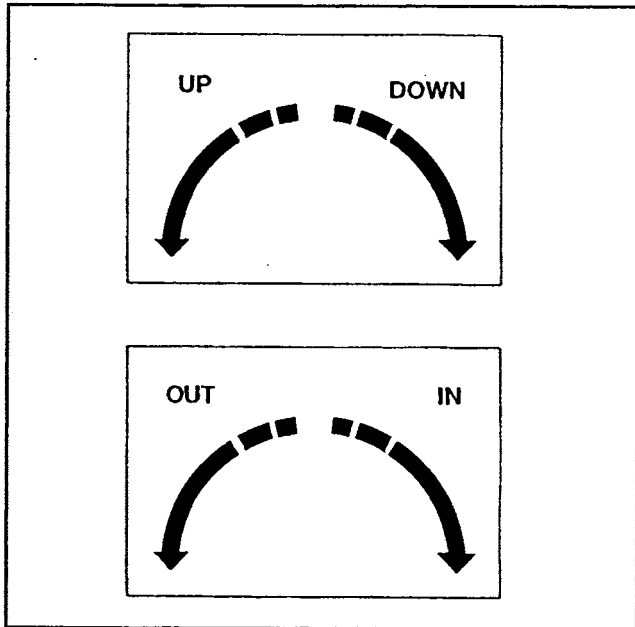


Figure 1-7 – Operating Notice Label



## Important Safeguards (Continued)

The "Up/Down" label, shown in **Figure 1-8**, is located on the top surface, on each side, of the upper column assembly. The label reminds the operator of the direction to turn the height adjustment crank to raise and lower the upper assembly/taping head.



**Figure 1-8 – Up/Down, In/Out Labels**

The "In/Out" label, shown in **Figure 1-8**, is attached to the side of the machine frame, next to the drive belt width adjusting crank. It reminds the operator of direction to turn crank to adjust belts for box width.

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## Specifications

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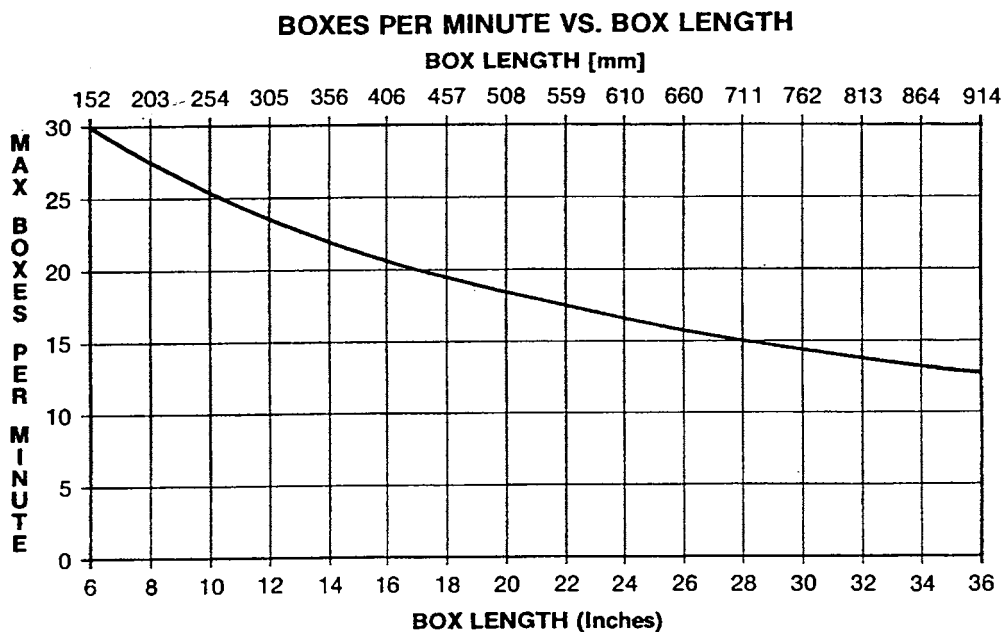
### 1. Power Requirements:

Electrical – 115 VAC, 60 Hz, 3.6 Amp

The machine is equipped with a 2.4 m [8 foot] standard neoprene covered power cord and a grounded plug.

### 2. Operating Rate:

Box drive belt speed is .4 m/s [76 ft/min].



Actual production rate is dependent on operator's dexterity.  
Boxes must be 18 inches [455mm] apart minimum.

### 3. Operating Conditions:

Use in dry, relatively clean environments at 4° to 50° C [40° to 120° F] with clean, dry, boxes.

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

### 4. Tape:

Scotch™ brand pressure-sensitive film box sealing tapes.

### 5. Tape Width:

36 mm [1-1/2 inch] minimum to 48 mm [2 inch] maximum

(Specifications continued on next page)

## Specifications (Continued)

### 6. Tape Roll Diameter:

Up to 405 mm [16 inch] maximum on a 76.2 mm [3 inch] diameter core.  
(Accommodates all system roll lengths of **Scotch™** brand film tapes.)

### 7. Tape Application Leg Length – Standard:

70 mm  $\pm$  6 mm [2-3/4 inch  $\pm$  1/4 inch]

### Tape Application Leg Length – Optional:

50 mm  $\pm$  6 mm [2 inch  $\pm$  1/4 inch]

(See "Special Set-Up Procedure – Changing the Tape Leg Length", page 25.)

### 8. Box Board:

Style – regular slotted containers – RSC

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

### 9. Box Weight and Size Capacities:

A. Box Weight, filled – minimum weight must be sufficient to hold carton on the machine bed with bottom flaps fully closed, maximum 50 lbs. [23 kg].

B. Box Size:	Minimum	Maximum
Length –	150 mm [6.0 inch]	Unlimited
Width –	120 mm [4.75 inch]	510 mm [20.0 inch]
Height –	120 mm [4.75 inch]	510 mm [20.0 inch]

**Special modifications may be available for carton sizes not listed above.  
Contact your 3M Representative for information.**

**Note:** The case sealer is designed to accommodate most boxes complying with the 1976 FBA and PMMI voluntary standard "Tolerances for Top Opening" regular slotted containers (RSC).

Two of the requirements of the standard are the following:

1. The box length is not more than twice the box width.
2. The box length is not more than four times the box height.

### DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

$$\frac{\text{BOX LENGTH IN DIRECTION OF SEAL}}{\text{BOX HEIGHT}} \quad \text{SHOULD BE GREATER THAN .6}$$

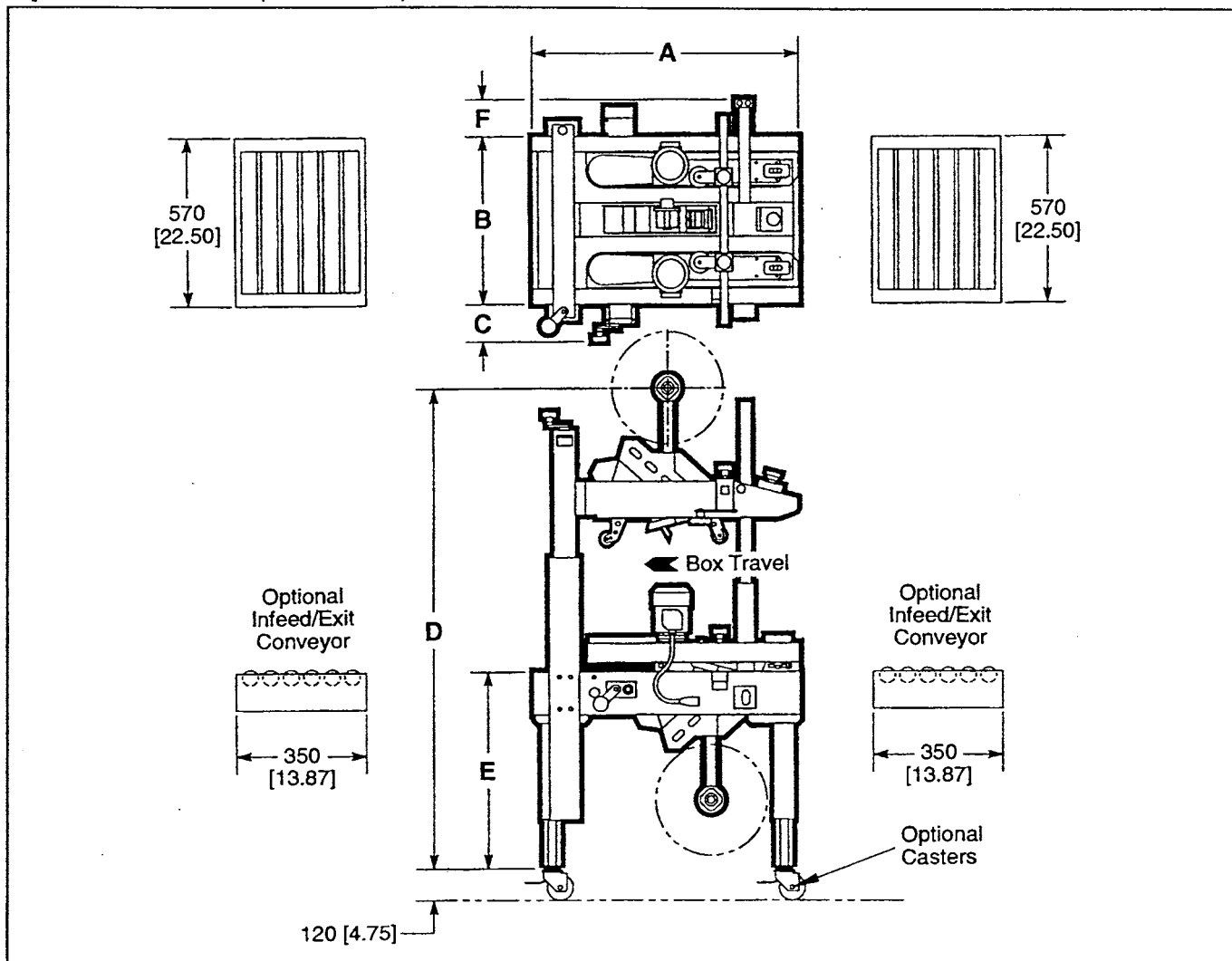
If any of the above criteria are not met boxes should be test run to assure performance.

### Notes:

1. Minimum box height can be reduced to 90 mm (3.5 inch) by adjusting taping heads to apply 50 mm (2 inch) tape legs.
2. Boxes less than 120 mm [4.75 inch] and greater than 335 mm [13.25 inch] in width require removal of compression rollers.
3. Compression rollers are not used with boxes less than 120 mm (4.75 inch) in height.
4. Maximum box height can be increased to 630 mm [24.75 inch] by relocating machine columns to upper position (see "Special Set-Up Procedure", page 26). (Raising columns to upper position also increases the minimum box height to 195 mm [7.75 inch].)

(Specifications continued on next page)

## Specifications (Continued)



### 10. Machine Dimensions:

	A	B	C	D	E	F
<b>Minimum</b>						
mm	920	570	135	1130	580	125
[Inches]	[36.25]	[22.50]	[5.25]	[44.40]	[22.75]	[5.00]
<b>Maximum</b>						
mm	920	570	135	1760	785	125
[Inches]	[36.25]	[22.50]	[5.25]	[69.30]	[31.00]	[5.00]

Weight – 130 kg [290 lbs] crated  
115 kg [250 lbs] uncrated

### 11. Set-Up Recommendations:

- Machine must be level.
- Customer supplied infeed conveyors (if used) should provide straight and level box entry and exit.
- Exit conveyors (powered or gravity) must convey sealed boxes away from machine.

## Installation and Set-Up

### Receiving And Handling

After the machine has been uncrated, examine the 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 notify your 3M Representative.

### Machine Set-Up

**Important** – Read "Warnings", on page 16, before attempting to set-up the case sealer for operation.

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

For future reference, record machine serial number on front cover of this manual in the space provided.

The following instructions are presented in **the order recommended** for setting up and installing the 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 case sealer. Refer to Figure 3-1, page 15, to identify the various components of the case sealer.

**Note** – A tool kit consisting of metric open end and hex socket wrenches is provided with the machine. These tools should be adequate to set-up the machine, however, other tools supplied by the customer will be required for machine maintenance.

### PACKAGING AND SEPARATE PARTS

1. Follow "Unpacking Instructions" label attached to corrugated packing cover.
2. Remove fasteners that secure case sealer legs to pallet.

Use appropriate material handling equipment to remove the machine from the pallet and move it into position.

Whenever the machine is lifted with a fork truck, insure that the forks span completely across the machine frame and do not contact any wiring or mechanism under the machine frame.



**CAUTION** – Machine weighs approximately 115 kg [250 lbs] uncrated.

3. Cut and remove tie down straps that secure upper assembly to machine bed on each side of machine at vertical columns.
4. Height and width adjustment cranks are shipped in upside down position. Remove both cranks and install right side up as shown in Figure 2-1E and 2-1C.
5. Install the tape drum bracket on the upper taping head as shown in Figure 2-1D
6. Remove the plastic ties that secure the lower taping head in place.
7. Hold taping head BUFFING ROLLER and cut and remove cable tie that holds applying/buffing arms retracted on both taping heads. See Figure 2-1A. Allow buffing/applying arms to extend slowly.



**WARNING** – Follow this step carefully as spring pressure is applied to applying and buffing arms when cable tie is removed. Keep hands/fingers away from tape cut-off knife under orange knife guard. Knife is extremely sharp and can cause severe injury.

## Installation and Set-Up (Continued)

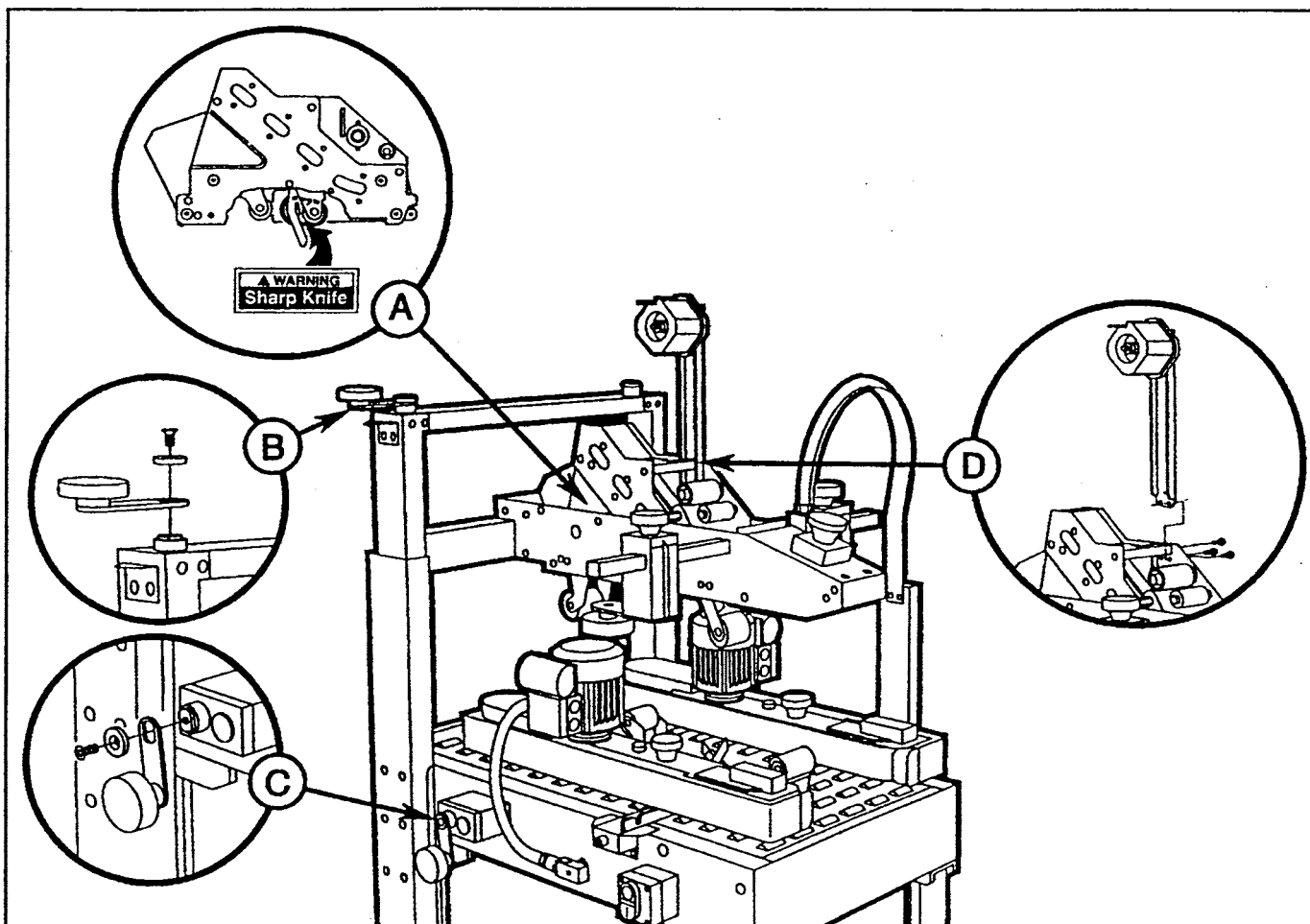


Figure 2-1 – Machine Set-Up

8. Push buffering roller into head to check for free, smooth action of upper and lower taping heads.



**WARNING – Keep hands/fingers away from tape cut-off knife under orange knife guard. Knife is extremely sharp and can cause severe injury.**

9. Adjust machine bed height. The case sealer is equipped with four adjustable legs that are located at the corners of the machine frame. The legs can be adjusted to obtain different machine bed heights from 580 mm [22.75 inch] minimum to 785 mm [31 inch] maximum.

Refer to Figure 2-2A and set the machine bed height as follows:

- Use appropriate material handling equipment and blocking techniques to raise the machine frame to allow adequate leg adjustment.
- Loosen, but do not remove, two M8 x 16 socket head screws in one leg (use M6 hex wrench). Adjust the leg length for the desired machine bed height. Retighten the two screws to secure the leg. Adjust all four legs equally.

## Installation and Set-Up (Continued)

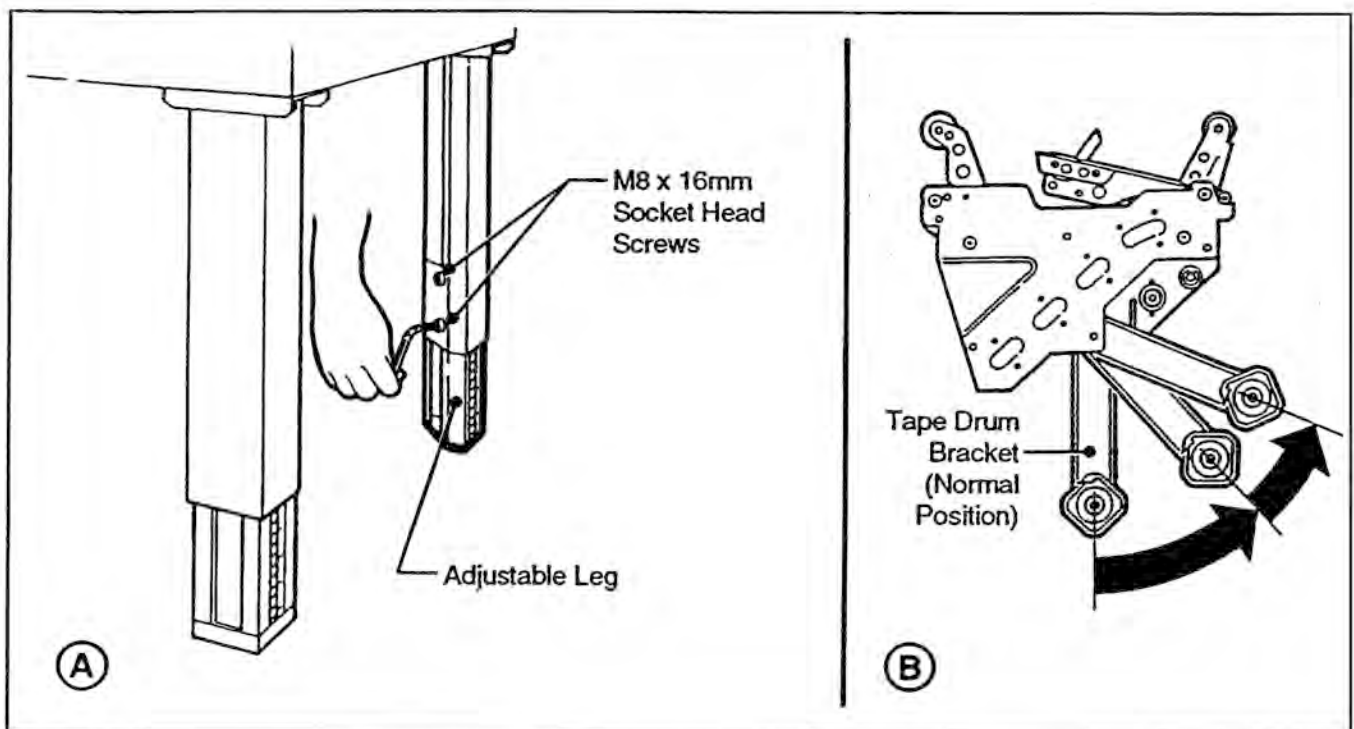


Figure 2-2 – Machine Bed Height Adjustment and Lower Tape Drum Bracket Position

10. Tape drum bracket assembly (lower taping head).

The normal position for the tape drum bracket assembly is straight down. For lower machine bed heights, the tape drum bracket may be pivoted forward. See Figure 2-2B.

**Note** – With bracket in forward position, only one mounting bolt and the pivot bolt are used for mounting tape drum bracket to taping head.

11. Electrical Connection

The electrical control box (mounted on the lower right side of the machine frame), contains the pre-set circuit breaker. The box can be relocated to the other side of the machine if desired. A standard three conductor power cord with plug is provided at the back of the electrical control box for 115 V , 60 Hz, 3.6 Amp 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 that all packaging materials and tools are removed from the machine. **Do not plug electrical cord into outlet until ready to run machine.**

Use of an extension cord is not recommended. However, if one is needed for temporary use, it must have a wire size of 1.5 mm diameter [AWG 16 ], have a maximum length of 30.5 m [100 ft], and must be properly grounded.



**WARNING** – To prevent shock and fire hazard: Position extension cord where it will be out of the way of foot or vehicle traffic. Extension cord is only for temporary use – do not use for a permanent installation.

**Note** – Machines outside the U.S. may be equipped with 220/240 Volt, 50 Hz systems or other electrical requirements compatible with local practice.

12. Continue with the remainder of the installation and set-up procedure on next page.



## Installation and Set-Up (Continued)

### TAPING HEADS

Tape Width – the taping heads have been pre-set to accommodate 48 mm [2 inch] wide tape rolls. To apply 36 mm [1.5 inch] or 42 mm [1.75 inch] wide tapes, refer to Section II, "Adjustments – Tape Web Alignment", page 11.

Tape Leg Length – taping heads are pre-set to apply 70 mm [2.75 inch] long tape legs. To change tape legs to 50 mm [2.0 inch], refer to "Special Set-Up Procedure – Changing Tape Leg Length", page 25.

### BOX SIZE CAPACITY OF CASE SEALER

At its factory setting, the case sealer handles box sizes up to 510 mm [20 inch] maximum height. If larger capacity is needed, the machine can be adjusted to accommodate boxes up to 630 mm [24.75 inch] high. Refer to "Special Set-Up Procedure – Outer Column Re-Positioning", page 26. **Note –** *Adjusting machine to accommodate 630 mm [24.75 inch] high boxes also increases minimum box size to 195 mm [7.75 inch].*

### INITIAL START-UP OF CASE SEALER

After completing the "Installation and Set-Up" procedure, continue through "Operation" for tape loading and start-up to be sure case sealer is properly adjusted to run boxes

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## Operation

**IMPORTANT** – Before operating the case sealer, read the "Important Safeguards", pages 3-5 and "Warnings" on page 16 as well as all of the "Operation" instructions.

Refer to Figure 3-1 to acquaint yourself with the various components and controls of the case sealer. Also see Figures 3-1 and 3-2 in Section II for taping head components.

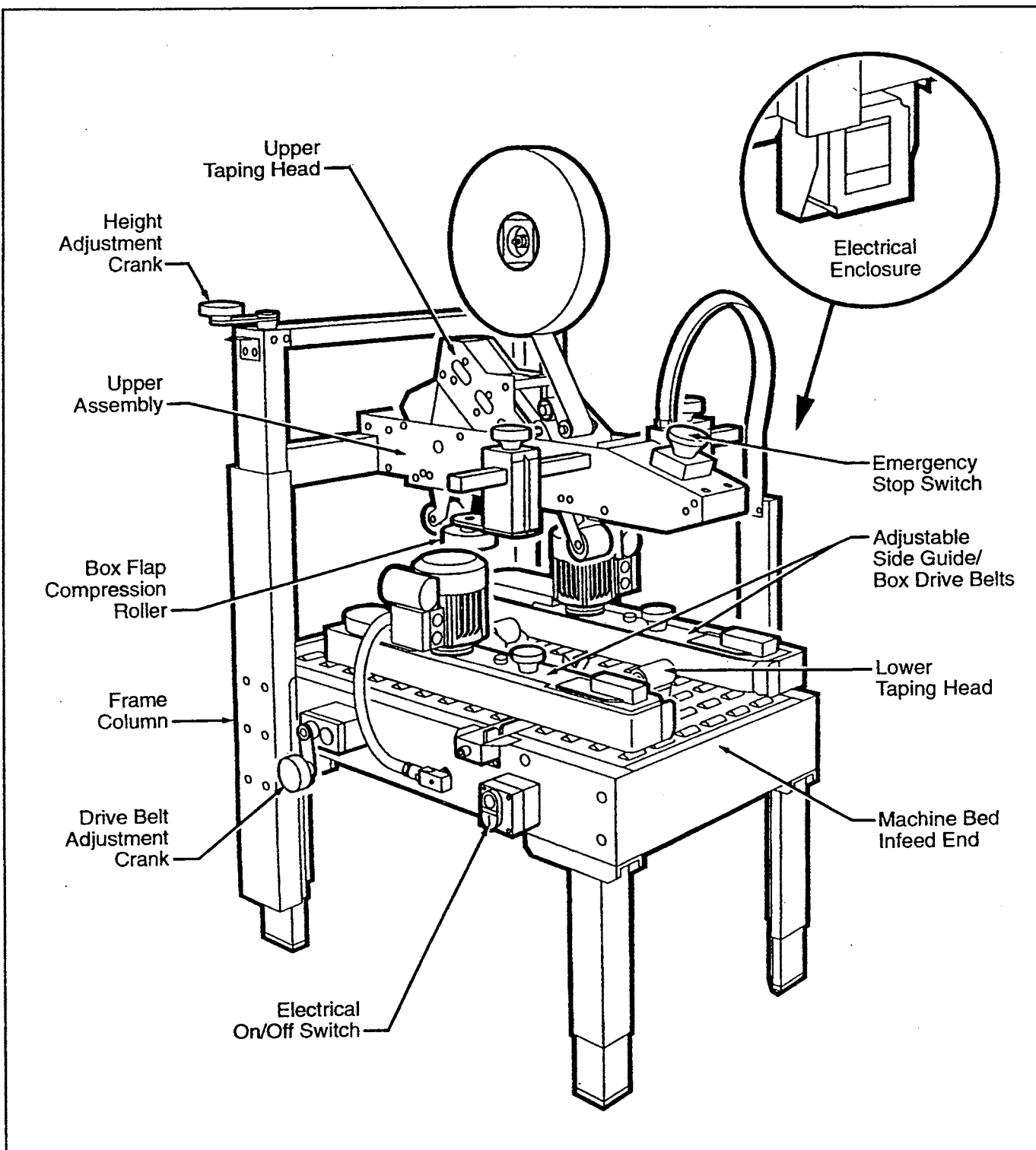


Figure 3-1 – Case Sealer Components

## Operation (Continued)

### Switches and Controls (Refer to Figure 3-1)

#### Electrical "On/Off" Switch

The box drive belts are turned on and off ("Off" button is red) with the electrical switch on the left side of the machine frame.

**Note** – The case sealer has a circuit breaker located in the electrical control box on the lower right side of the machine frame. If circuit becomes overloaded and circuit breaker trips, see "Maintenance – Circuit Breaker", page 22.

#### Emergency Stop Switch

The machine electrical supply can be turned off by pressing the latching emergency stop switch on the top/front of the upper assembly. To restart machine, rotate emergency stop switch (releases switch latch) and then restart machine by pressing "I" (On) button on side of machine frame.

#### Height Adjustment Crank

The height adjustment crank moves the upper assembly (upper taping head) up or down to adjust for the height of the box being sealed.

#### Drive Belt Adjustment Crank

The drive belt adjustment crank moves the side drive belts in or out to adjust for the width of the box being sealed.

#### Compression Rollers

The compression rollers push the box side flaps together for tape sealing. The rollers are adjusted in or out to accommodate the width of the box being sealed.

### Tape Loading/Threading

See Section II, Pages 7 and 8



### WARNINGS

1. Turn electrical supply off and disconnect before servicing taping heads or performing any adjustments or maintenance on the machine.
2. Turn electrical supply off when machine is not in use.
3. Before turning drive belts on, be sure no tools or other objects are on the machine bed.
4. Keep hands and loose clothing away from moving belts and box compression rollers.
5. Never attempt to remove jammed boxes from the machine while machine is running.
6. When feeding boxes to the machine by hand, push box in from end only – DO NOT PUSH WITH HANDS ON ANY CORNER OF THE BOX.
7. Both the upper and lower taping heads utilize extremely sharp tape cut-off knives. The knife is located under the orange knife guard which has the "WARNING – SHARP KNIFE" label. Before loading tape, refer to Figures 3-1 and 3-2 in Section II to identify the knife location. Keep hands out of these areas except as necessary to service the taping heads.
8. Failure to comply with these warnings could result in severe personal injury and/or equipment damage.

## Operation (Continued)

### Machine Adjustments For Box Size

Refer to Figures 3-2 through 3-5

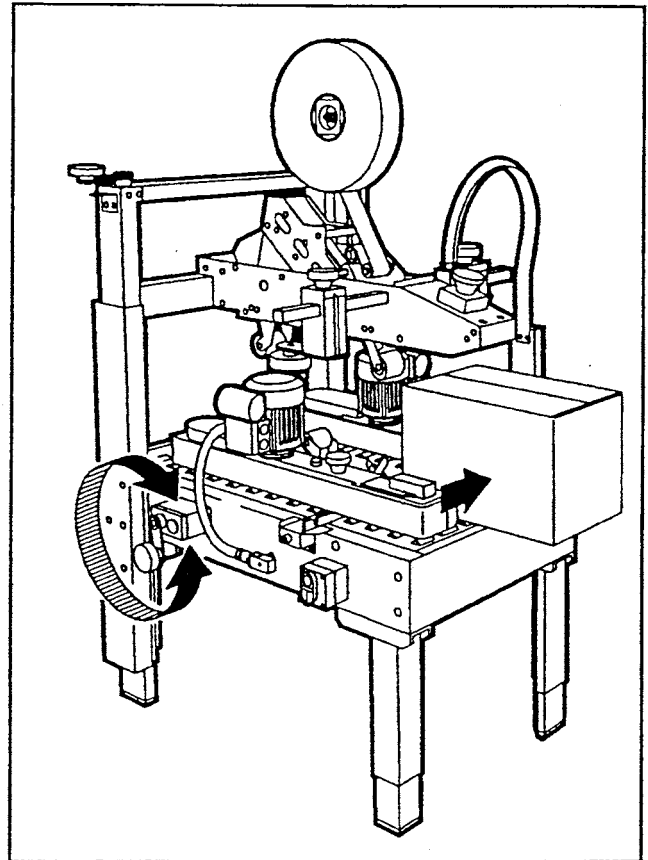


**WARNING** – Turn electrical supply off before beginning adjustments. Failure to comply with this warning could result in severe personal injury or equipment damage.

**Figure 3-2**

Place a product filled box on infeed end of machine bed with top flaps folded as shown and manually move box forward to contact lower taping head applying roller.

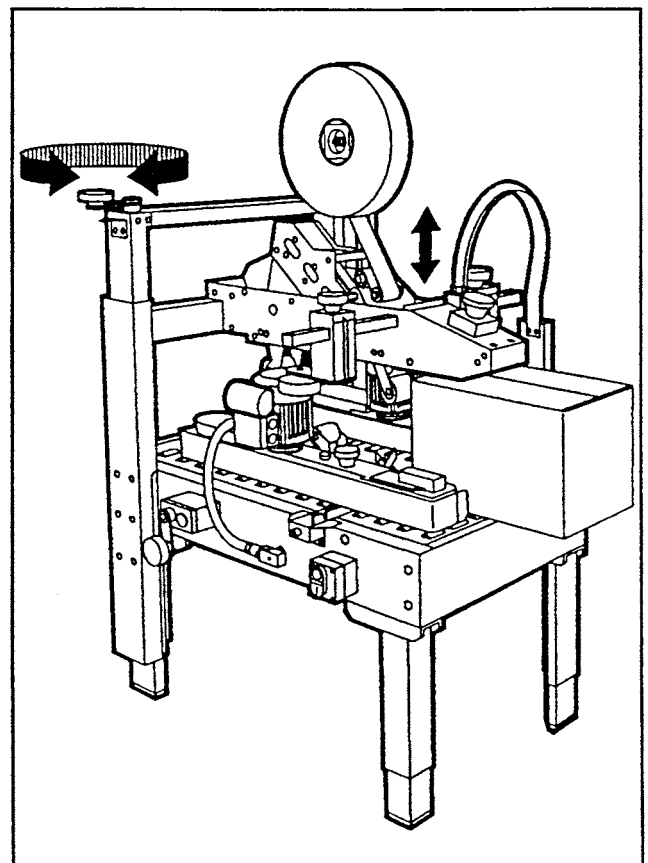
Turn drive belt adjustment crank to position both side drive belts against sides of box. Tighten knobs located on top of both side drive belts to secure in operating position.



**Figure 3-2 – Box Size**

**Figure 3-3**

Turn height adjustment crank to position upper taping head assembly onto box. Upper taping head must contact and hold top box flaps fully closed.



**Figure 3-3 – Box Size**

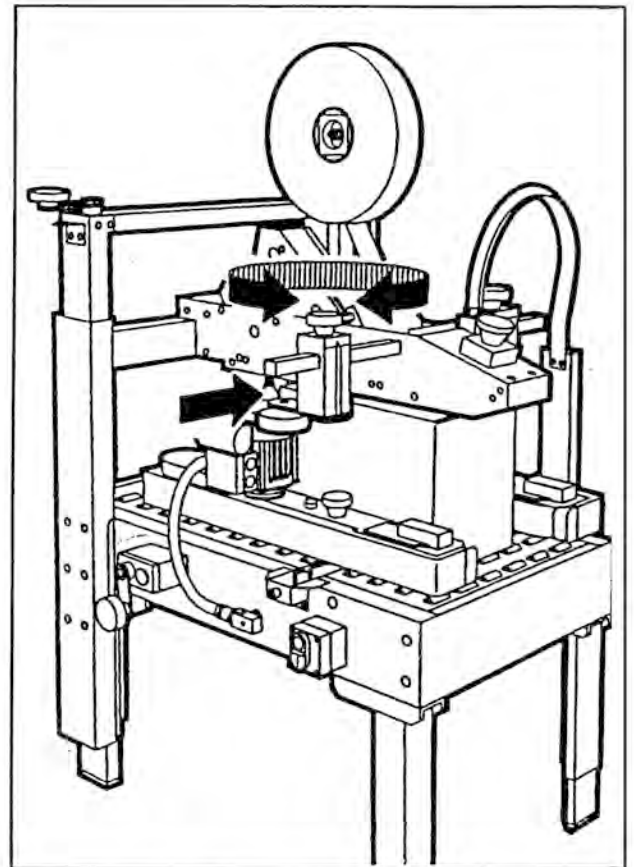
## Operation (Continued)

**Figure 3-4**

The top flap compression rollers have an adjustable slide mounting to provide side compression through the full range of box widths.

Manually move box forward so front of box is aligned with top flap compression rollers.

Adjust the compression rollers against top edge of box and tighten knobs to secure rollers in operating position.



**Figure 3-4 – Box Size**

**Figure 3-5**

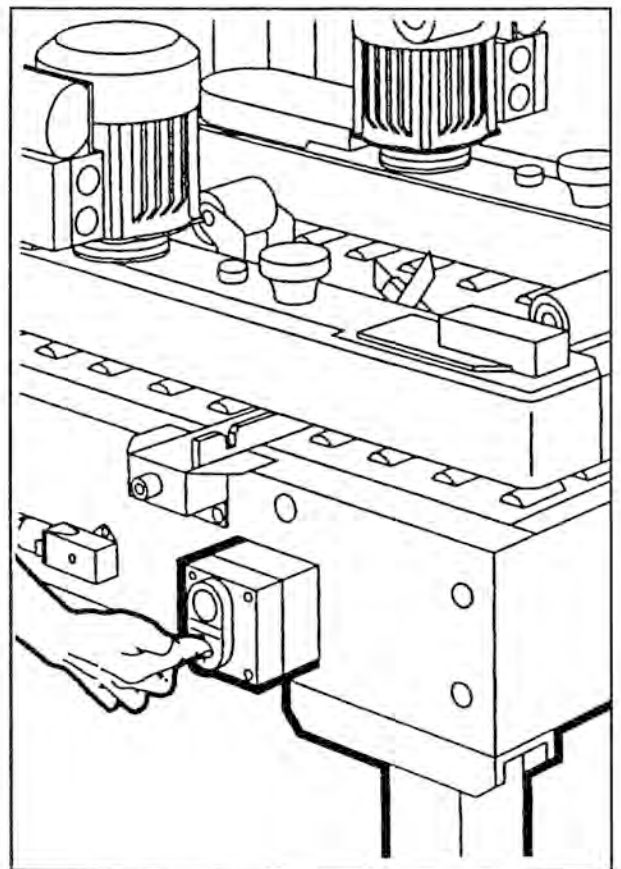
**WARNING** – Be sure all packaging materials and tools are removed from the machine before operating.

Connect electrical supply and press the electrical switch "On" to start the side drive belts to remove the set-up box from the case sealer.

If the box is hard to move under the upper head or is crushed, raise the top head slightly.

If the box movement is jerky or stops under the upper head, move the side drive belts in slightly to add more pressure between the box and drive belts.

**CAUTION** – If drive belts are allowed to slip on box, excessive belt wear will occur.



**Figure 3-5 – Box Size**

## Operation (Continued)

### Box Sealing – Figure 3-6

1. Press electrical "On" button to start the drive belts.
2. Feed boxes to machine at minimum 460 mm [18 inch] intervals.
3. Turn electrical supply "Off" when machine is not in use.
4. Reload and thread tape as necessary.
5. Be sure machine is cleaned and lubricated according to recommendations in "Maintenance" section of this manual.

**Note** – Box drive motors are designed to run at a moderate temperature of 40°C [104°F]. In some cases, they may feel hot to the touch.

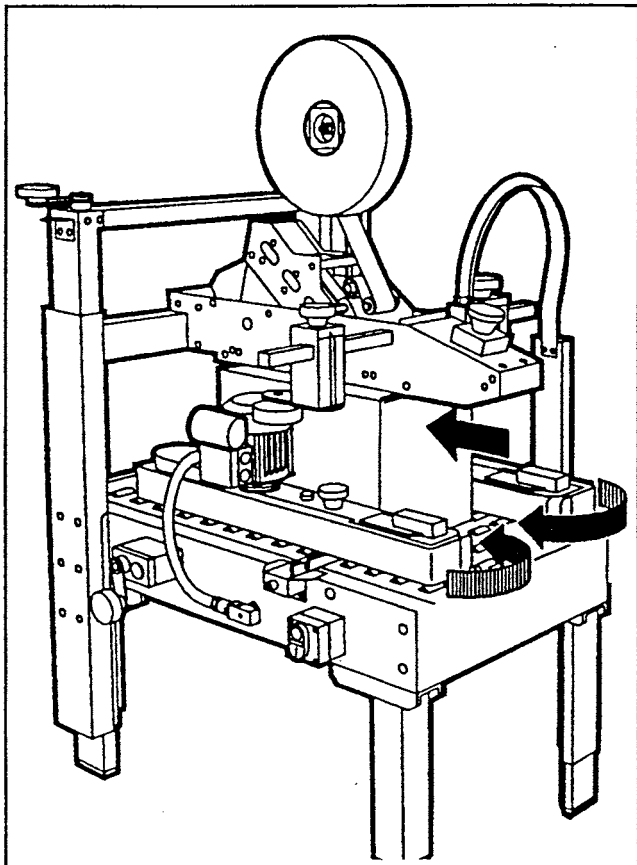


Figure 3-6 – Box Sealing

### Box Jams



#### WARNINGS

1. Turn off and disconnect electrical supply before attempting to remove jammed box or serious injury could occur.
2. Keep hands away from upper and lower taping head cut-off knives as knives are extremely sharp and could cause severe injury
3. When reaching into the machine to remove a jammed box, use proper posture to prevent back or other injuries.

If a box is improperly fabricated or filled, if the machine is not adjusted correctly for the box being run, or if boxes enter the machine incorrectly, a box jam may occur. To clear a box jam, follow these steps:

1. Determine cause of box jam so corrective action can be taken to prevent re-occurrence.
2. Turn off machine.
3. Crank upper assembly up and drive belts out until box is free.
4. Carefully pull box out of machine.
5. Readjust upper assembly (taping head) and drive belts according to "Machine Adjustments for Box Size" instructions, pages 17-18.
6. Connect electrical supply.
7. Turn machine "On" only when it is safe to do so!

**Note** – Machine or taping head adjustments are described in "Adjustment" Section I for machine or Section II for taping heads.

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## Maintenance

The 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 electrical supply off and disconnect before beginning maintenance. Failure to comply with this warning could result in severe personal injury or equipment damage.**

### Cleaning

**Note** – Never attempt to remove dirt from the machine by blowing it out with compressed air. This can cause the dirt to be blown inside the motor and onto sliding surfaces which may cause premature equipment wear. 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 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.

### Lubrication

Most of the machine bearings, including the drive motor, are permanently lubricated and sealed and do not require additional lubricant.

The Lubrication Chart shown in Figure 4-1 indicates the machine points that do require lubrication every 250 hours of operation. (The Reference Number in the chart refers to parts drawings, pages 35-57.)

**Note** – Wipe off excess oil and grease. It will attract dust 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.

**TAPING HEAD LUBRICATION** – See Section II, "Maintenance – Lubrication", page 10.

Description (Parts Drawing Reference/Item Number)	Lubricant	Instructions
Shaft (Ref. No. 6469-24)	1	Lightly coat outside diameter of shaft
Side Guide Screw (Ref. No. 6470-5)	2	Lightly coat lead screw threads
Gear (Ref. No. 6470-18)	2	Lightly coat gear teeth
Chain (Ref. No. 6471-64)	2	Lightly coat chain pitches
Lead Screw (Ref. No. 6472-14)	1	Lightly coat lead screw threads
Chain (Ref. No. 6472-20)	2	Lightly coat chain pitches
Compression Roller (Ref. No. 6474-14)	1	Lightly coat inside diameter of roller

**Lubricant**

1. White Moly Grease With Liquilon, Plate Master #177L
2. NLGI Grade 2 Multi-purpose Film Forming With Liquilon, Polymere #400

**Figure 4-1 – Lubrication Chart**

## Maintenance (Continued)



**WARNING** – Turn off electrical power and disconnect power cord from electrical supply before beginning maintenance. If power cord is not disconnected, severe injury to personnel could result.

### Circuit Breaker

The case sealer is equipped with a circuit breaker which trips if the motors are overloaded. Located inside the electrical enclosure on the side of the machine frame just below the machine bed, the circuit breaker has been pre-set at 1.8 amps and requires no further maintenance.



**WARNING** – The following procedure must be performed by trained service personnel because of the high voltage electrical hazard within the control box.

If circuit is overloaded and circuit breaker trips, unplug machine from electrical power:

1. Determine cause of overload and correct.
2. Remove electrical enclosure cover.
3. Press the red "Reset" button and then the green "Start" button.
4. Replace cover.
5. Plug in machine.
6. Press machine "On" button, to resume case sealing.

### Drive Belts

**Note** – 3M recommends the replacement of drive belts in pairs, especially if belts are unevenly worn.

REPLACEMENT – SEE STEPS 1 THRU 8

TENSION ADJUSTMENT – SEE STEPS 3 AND 7

1. Crank the upper taping head to the fully raised position.
2. Remove and retain the four screws (A), four washers (B) and side cover (C). See Figure 4-2
3. Remove and retain the screw (D), washer (E) and belt tensioner cover (F).
4. Turn belt adjustment screws (G) counterclockwise on both the upper and lower tension assemblies until belt is loose. See Figure 4-3.
5. Locate the belt lacing (joint) by turning the belt manually. Remove the pin with pliers. Remove and discard old belt.

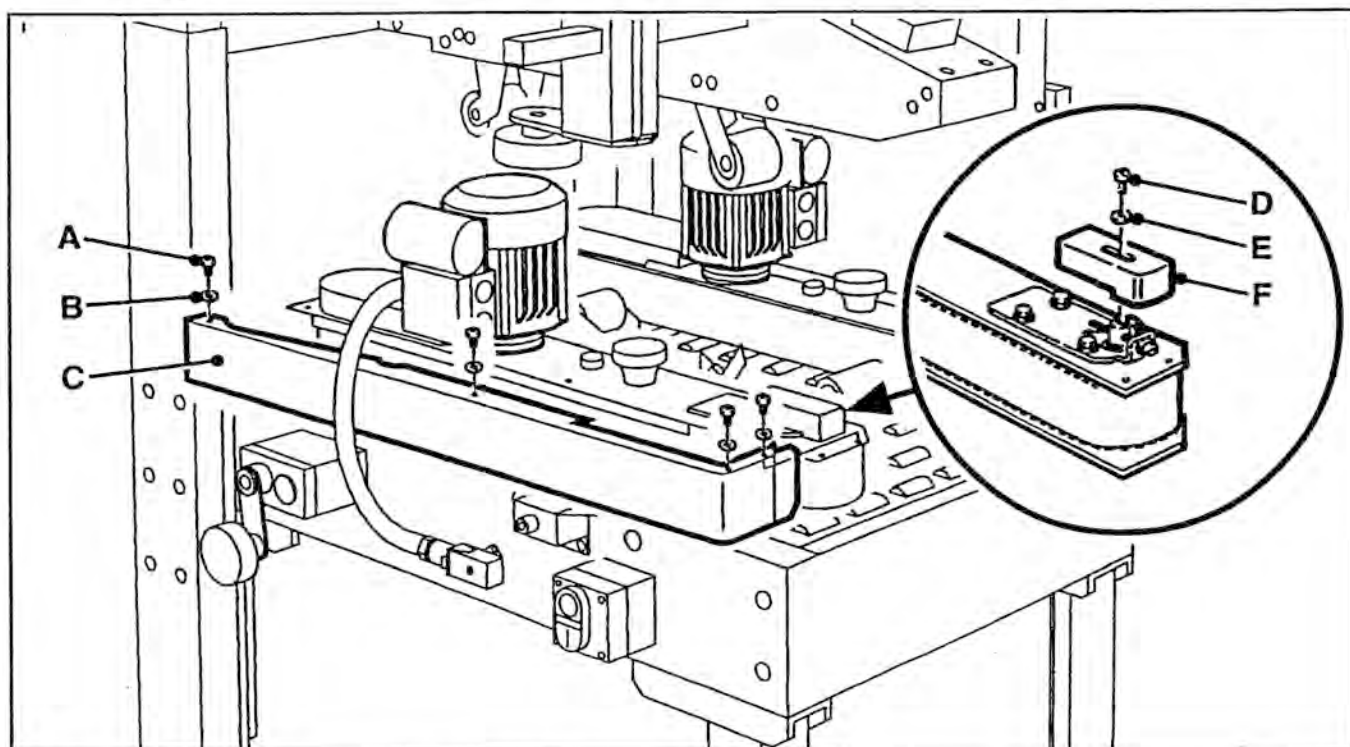


Figure 4-2 – Box Drive Belt (Left Side View – Infeed End)

## Maintenance (Continued)

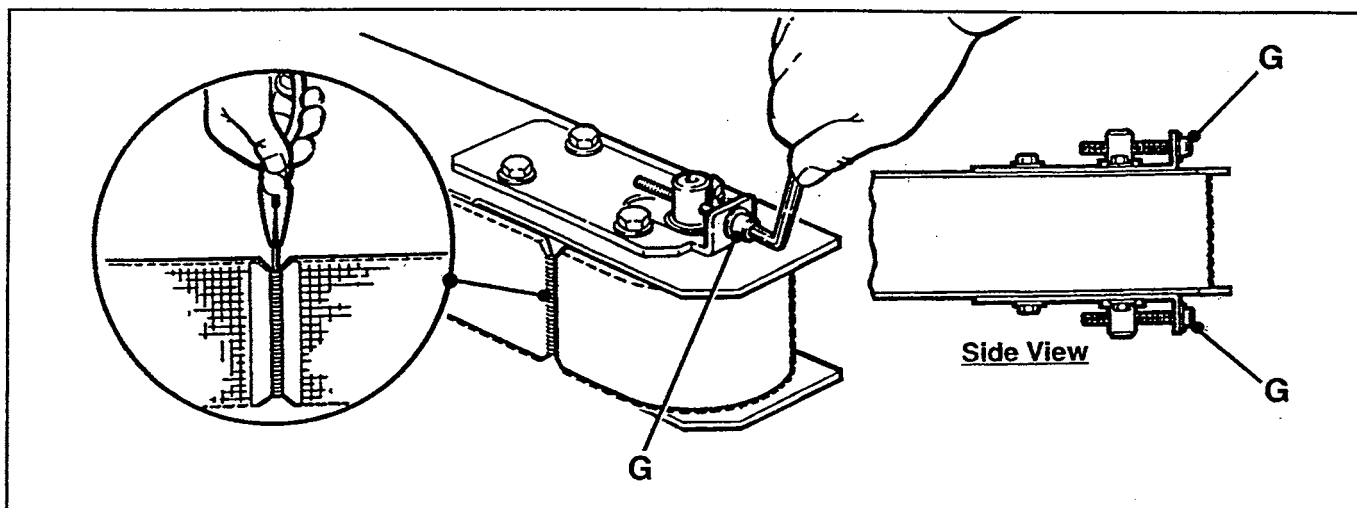


Figure 4-3 – Drive Assembly – Infeed End

6. Install new drive belt around drive rollers and insert new pin. Pin must not extend beyond edge of belt.

**Note** – Before installing new drive belt, check inside surface of belt for drive direction arrow and install the belt accordingly. If no arrow is present, the belt may be installed either way.

7. To set drive belt tension – turn adjustment screws (G) equally on both the upper and lower tension assemblies. Turn the screws clockwise to increase tension or counterclockwise to decrease tension. See Figure 4-3.

Use a force gauge to pull the belt outward at midspan, as shown in Figure 4-4. The correct tension is achieved when a 3.5 kg [7 lbs] force produces a 25 mm [1 inch] deflection.

8. Reverse procedures in Steps 1-3 to reassemble the drive belt assembly.

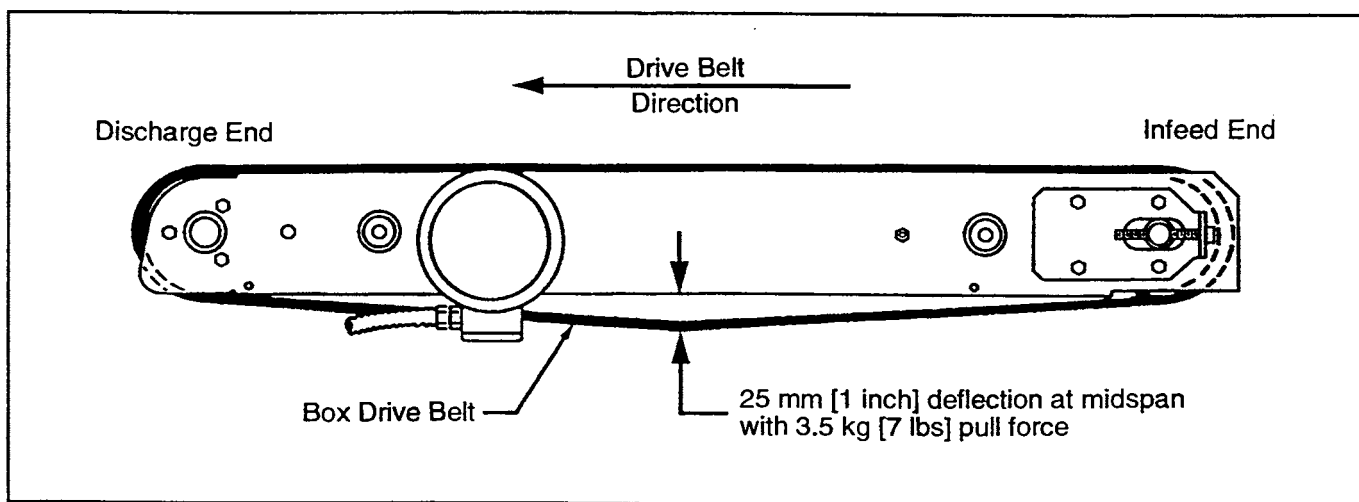


Figure 4-4 – Tension Adjustment, Drive Belt (Top View)

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## Adjustments

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**WARNING** – Turn off electrical power supply and disconnect power cord from electrical supply before beginning adjustments. If power cord is not disconnected, severe injury to personnel could result.

### Drive Belt Tension

Tension adjustment of the drive belts may be required during normal operation. Belt tension must be adequate to positively move boxes through the machine and the belts should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end of the machine are adjusted in or out to provide proper belt tension. Each belt is adjusted separately.

Belt tension is obtained by tightening the adjustment screws so that a moderate pulling force of 3.5 kg [7 lbs] applied at midspan, as shown in Figure 4-4, will deflect the belt 25 mm [1 inch].

To adjust belts, see "Maintenance – Drive Belts", page 22, steps 3 and 7.

### Taping Head Adjustments – Refer to Section II

TAPE WEB ALIGNMENT – Section II, Page 11

TAPE DRUM FRICTION BRAKE – Section II, Page 11

APPLYING MECHANISM SPRING – Section II, Page 12

ONE-WAY TENSION ROLLER – Section II, Page 12

### TAPE LEG LENGTH

Leading Tape Leg Length Adjustment – Section II, Page 13

Changing Tape Leg Length from 70 to 50 mm [2-3/4 to 2 inches] – Section II, page 13

**Note** – Changing tape leg to 50 mm [2 inches] requires machine adjustment as well as taping head adjustment. See "Special Set-Up Procedure – Changing Tape Leg Length", page 25.

## Special Set-Up Procedure



**WARNING** – Turn off electrical power supply and disconnect power cord from electrical supply before beginning Special Set-Up Procedure. If power cord is not disconnected, severe injury to personnel could result.

### Changing the Tape Leg Length

(From 70 to 50 mm [2-3/4 to 2 inch])

The following changes to the case sealer frame and upper/lower taping heads will allow taping boxes 90 mm [3.5 inch] minimum height.

#### CASE SEALER FRAME

1. Remove the inner column height limiting stops from both columns and replace with screws through **lower** holes in stops as shown in Figure 5-1A. (Relocate stops higher on both columns.)

#### TAPING HEADS



**WARNING** – Use care when working near tape cut-off knives as knives are extremely sharp. If care is not taken, severe injury to personnel could result.

1. Remove tape from upper taping head and raise upper assembly to a convenient working height.
2. Remove and retain four mounting screws, and related hardware from upper taping head and lift taping head up out of upper assembly as shown in Figure 5-1B.



#### CAUTIONS

1. Support or hold taping head when removing screws to prevent taping head from falling.
  2. Taping head weighs approximately 7.2 kg [16 lbs]. Use proper body mechanics when lifting or holding taping head.
3. Raise upper assembly to provide working room around lower taping head and remove tape from lower taping head.

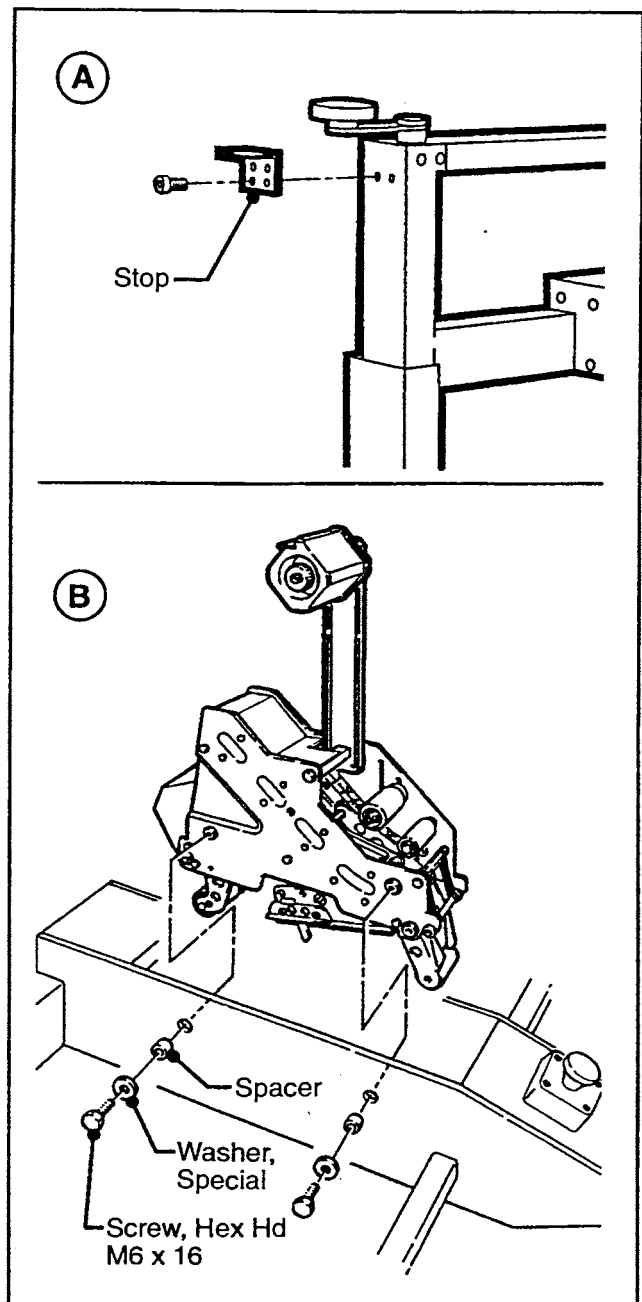


Figure 5-1 – Stops/Upper Taping Head

## Special Set-Up Procedure (Continued)

4. Lift the lower taping head as shown in Figure 5-2 and remove it from the machine bed.

**CAUTION** – Holding taping head in another way than shown in Figure 5-2 may increase the danger of being injured by the tape cut-off knife.

5. Refer to Section II, "Adjustments – Changing Tape Leg Length", page 13 for taping head set-up.
6. Replacing the taping heads is the reverse of disassembly.

**Note** – The one-way tension roller position is adjustable to control the leading tape leg length. Refer to Section II, "Adjustments – Leading Tape Leg Length, page 13.

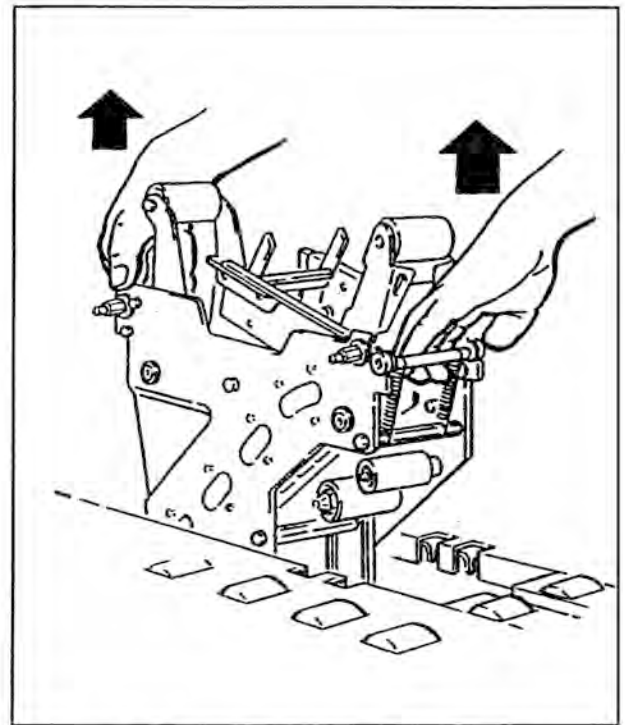


Figure 5-2 – Remove Lower Taping Head

## Outer Column Re-Positioning

Refer to Figure 5-3

Moving the outer columns up one set of mounting holes increases the maximum box size handled by the case sealer from 510 mm [20 inch] to 630 mm [24.75 inch]. **Note** – This also increases the minimum box height from 120 mm [4-3/4 inch] to 195 mm [7-3/4 inch]

To move the outer columns up one set of mounting holes:

1. Crank side drive belts to full open position.
2. Crank the upper assembly up until the four column mounting screws in each column can be seen through the outer column clearance holes, Figure 5-3A. (Machine bed to upper assembly dimension approximately 490 mm [19-1/4 inch]).
3. Place blocks and shims at the front and rear of the upper assembly to support it in this position as shown in Figure 5-3A or support the upper assembly with an overhead crane.
4. Remove and retain four mounting screws in each column.
5. Turn height adjustment crank clockwise and crank outer columns up 105 mm [4-1/4 inch], Figure 5-3B. (This will move the lower set of mounting holes in the outer columns up into position.)
6. Re-install and tighten four screws in each column.
7. Crank upper assembly up and remove blocks, remove overhead crane.

**WARNING** – A second person must assist with this part of set-up to hold (steady) upper assembly until columns are re-positioned and column screws are installed and tightened.

## Special Set-Up Procedure (Continued)

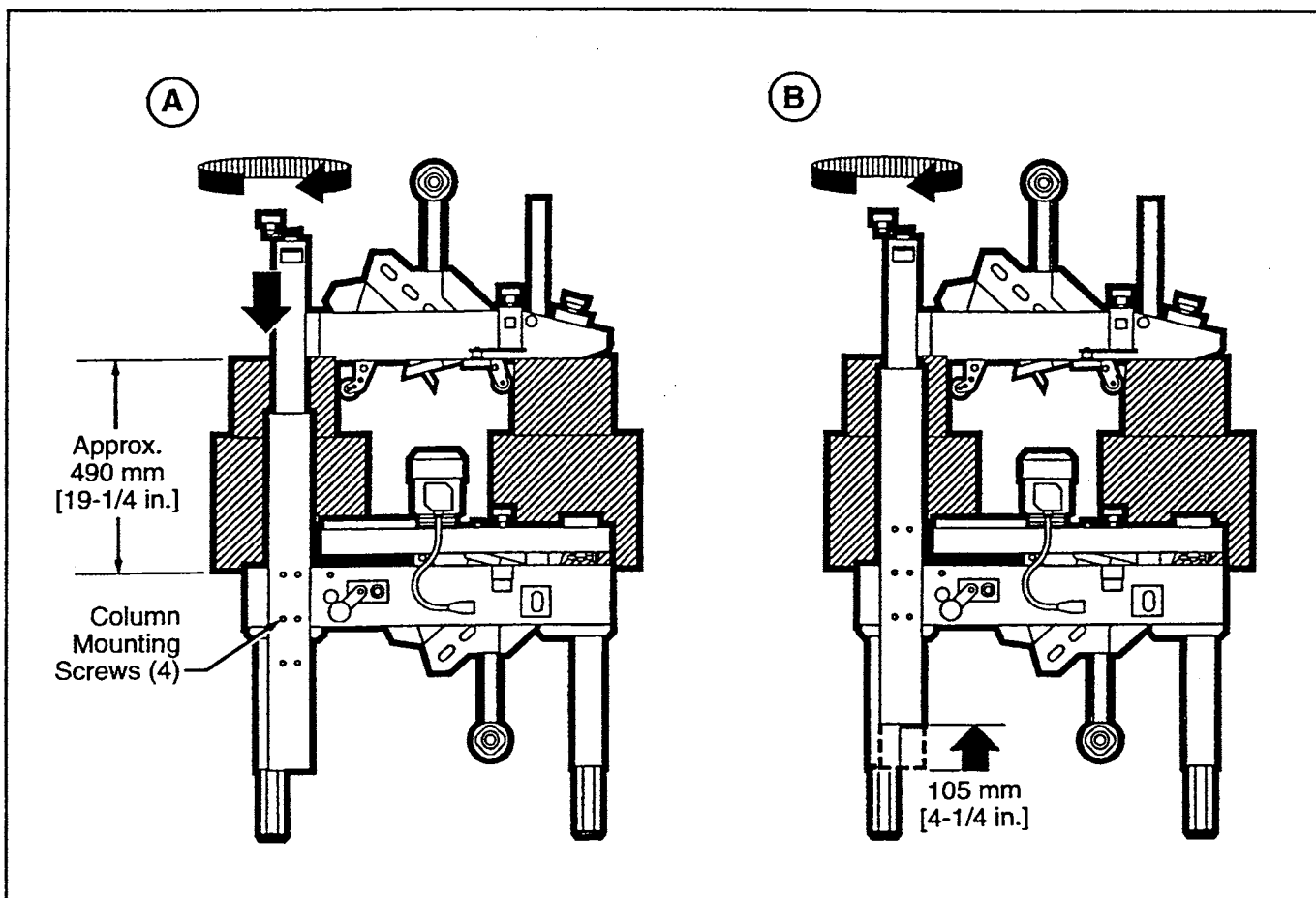


Figure 5-3 – Outer Column Re-Positioning

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## Troubleshooting

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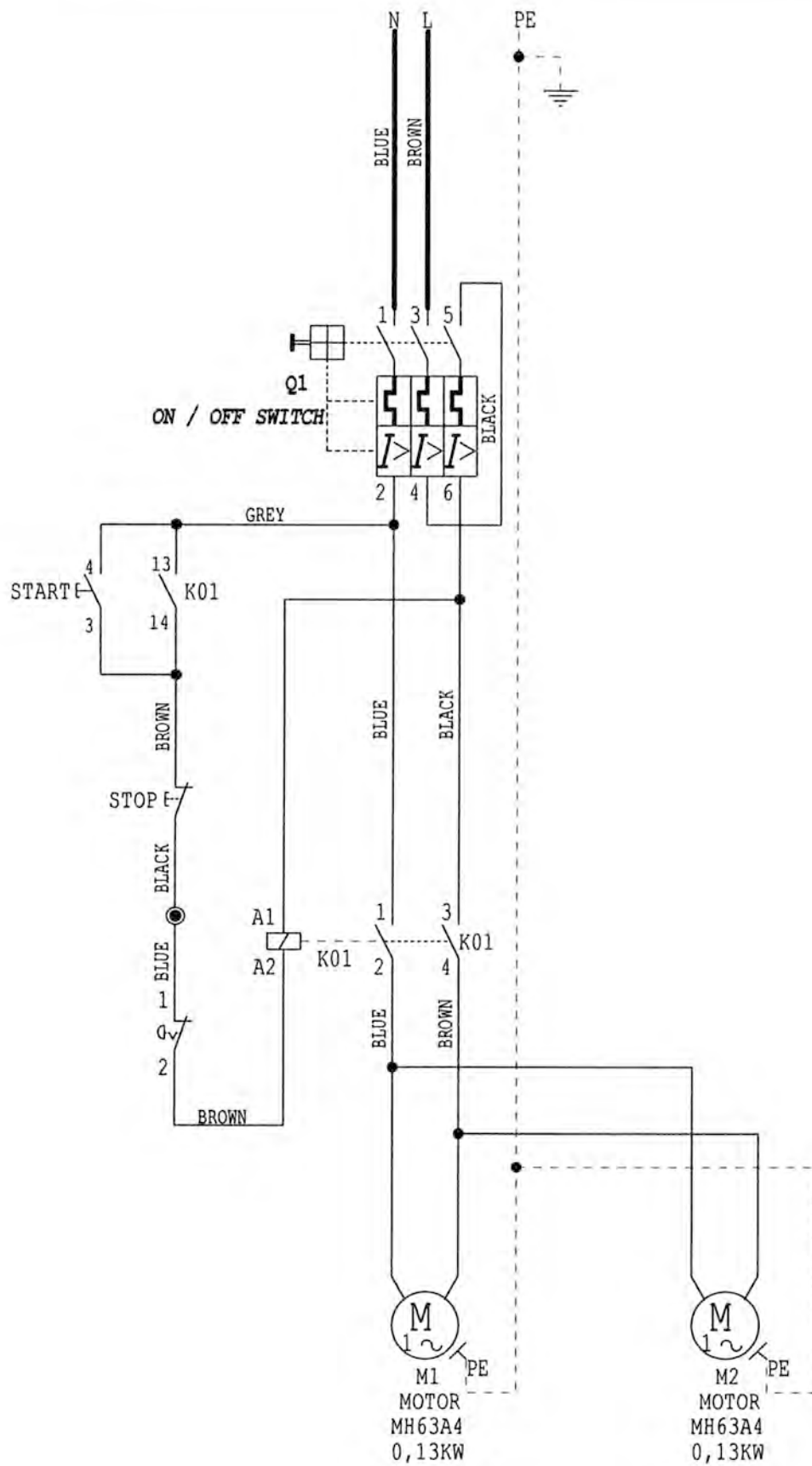
The Troubleshooting Guide lists some possible machine problems, causes and corrections. Also see Section II "Troubleshooting", pages 15 and 16 for taping head problems.

### Troubleshooting Guide

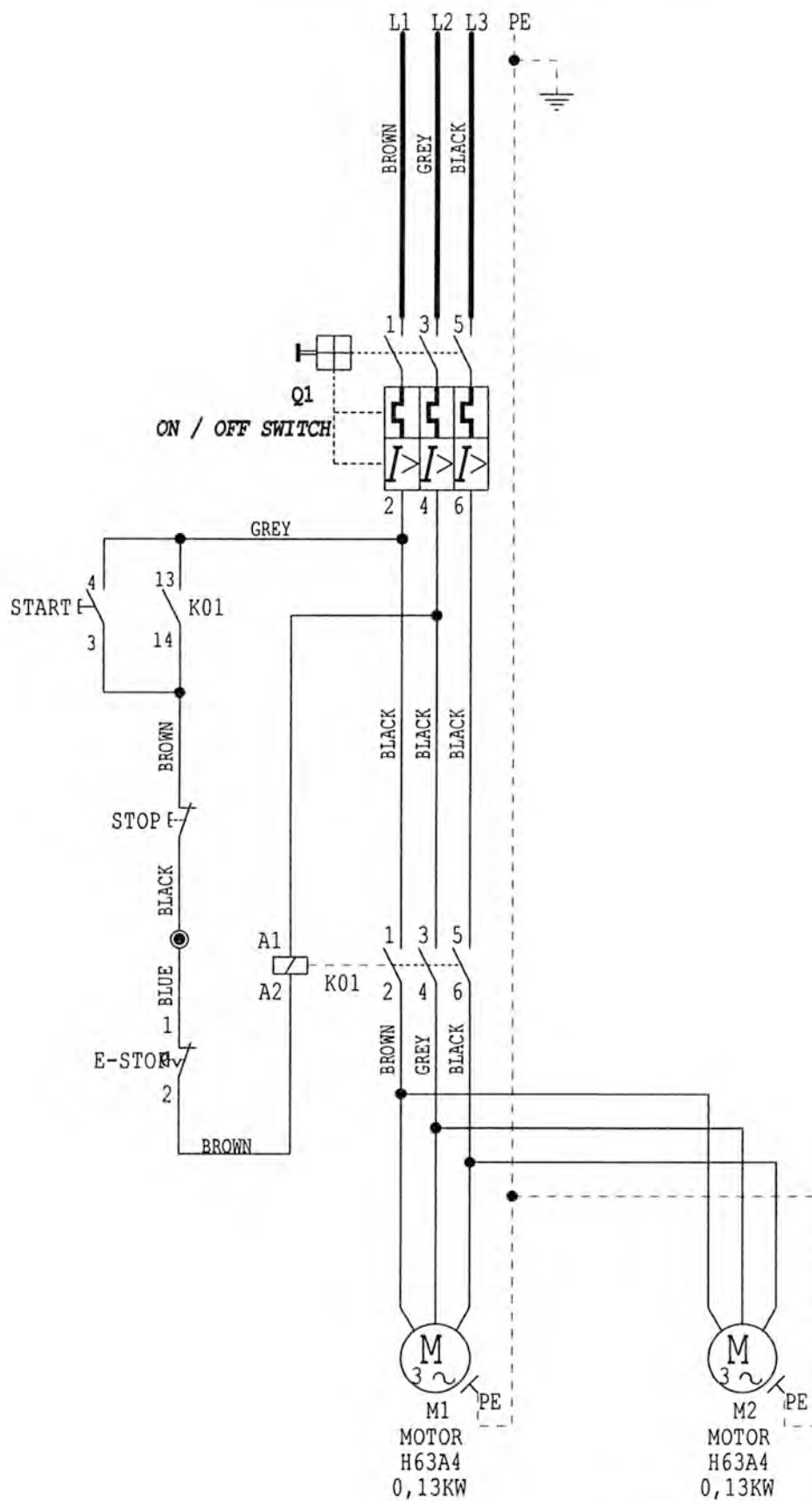
Problem	Cause	Correction
Drive belts do not convey boxes	Narrow boxes	Check machine specifications. Boxes are narrower than recommended, causing slippage and premature belt wear.
	Worn drive belts	Replace drive belts
	Too much tape tension	Check the threading path , tension adjustments and free operation of the rollers
	Top flap compression rollers in too tight	Readjust compression rollers
	Taping head applying spring set too high	Reduce spring pressure
Drive belts do not turn	Worn or missing friction rings	Replace friction rings
	Drive belt tension too low	Adjust belt tension
	Electrical disconnect	Check power and electrical plug
	Circuit breaker not at correct setting	Set to correct current value
	Motor not turning	Verify motor is receiving electrical power
	Timing belt stripped or broken	Replace timing belt
Drive belts break	Defective belt	Replace belt

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## Replacement Parts And Service Information

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### Spare Parts

The following parts are normal wear items and should be ordered and kept on hand as used.

Qty.	Ref. No.	Part Number	Description
2	6471-78 (Sec. I)	78-8114-4955-8	Belt – Drive W/Pin

In addition, a tool/spare parts kit supplied with the 120a Adjustable Case Sealer contains the following spare parts:

Qty.	Ref. No.	Part Number	Description
1	2881-10 (Sec. II)	78-8070-1274-1	Spring – Upper Extension (Silver)
1	2886-10 (Sec. II)	78-8070-1273-3	Spring – Lower Extension (Black)
2	2883-2 (Sec. II)	78-8017-9173-8	Knife – 65 mm/2.56 Inch
4	2883-12 (Sec. II)	78-8052-6602-6	Spring – Cutter

All the above listed parts can be ordered separately and when used should be ordered and kept on hand for spares.

Also see Section II, page 17 for recommended tapping head spare parts.

### Label Kit

In the event that any labels are damaged or destroyed, **they must be replaced to ensure operator safety**. A label kit, part number 78-8098-9043-3 is available as a stock item. It contains all the safety labels used on the 120a Adjustable Case Sealer. Labels can also be purchased separately. See Parts Drawing/List, pages 56 and 57.

### Tool Kit

A tool kit, part number 78-8060-8476-6, is supplied with the machine. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 78-8076-4726-4, contained in above kit is also available as a replacement stock item.

### Replacement Parts Ordering Information and Service

Refer to the first page of this instruction manual "Replacement Parts and Service Information".

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## Options/Accessories

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For additional information on the options/accessories listed below, contact your 3M Representative.

Part Number	Option/Accessory
78-8052-6553-1	Box Hold Down Attachment
78-8069-3983-7	Caster Kit Attachment
78-8114-0949-5	Conveyor Extension
78-8114-0940-4	Three Flap Folder, Type 19700
78-8079-5560-0	Tape Application Sensor
78-8095-4854-4	2-Inch Tape Edge Fold Attachment, Upper Head
78-8095-4855-1	2-Inch Tape Edge Fold Attachment, Lower Head
78-8114-0828-1	AccuGlide II STD 2 Inch Upper Taping Head, Type 39600
78-8114-0829-9	AccuGlide II STD 2 Inch Lower Taping Head, Type 39600

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## Replacement Parts – Illustrations and Parts Lists

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### 120a Adjustable Case Sealer, Type 19700 Frame Assemblies

#### To Order Parts:

1. Refer to first illustration, **Frame Assemblies**, page 35 for the **Figure Number** that identifies a specific portion of the machine.
2. Refer to the appropriate **Figure or Figures** to determine the parts required and the parts reference number.
3. The Parts List that follows each illustration, includes the **Reference Number, Part Number** and **Part Description** for the parts on that illustration.

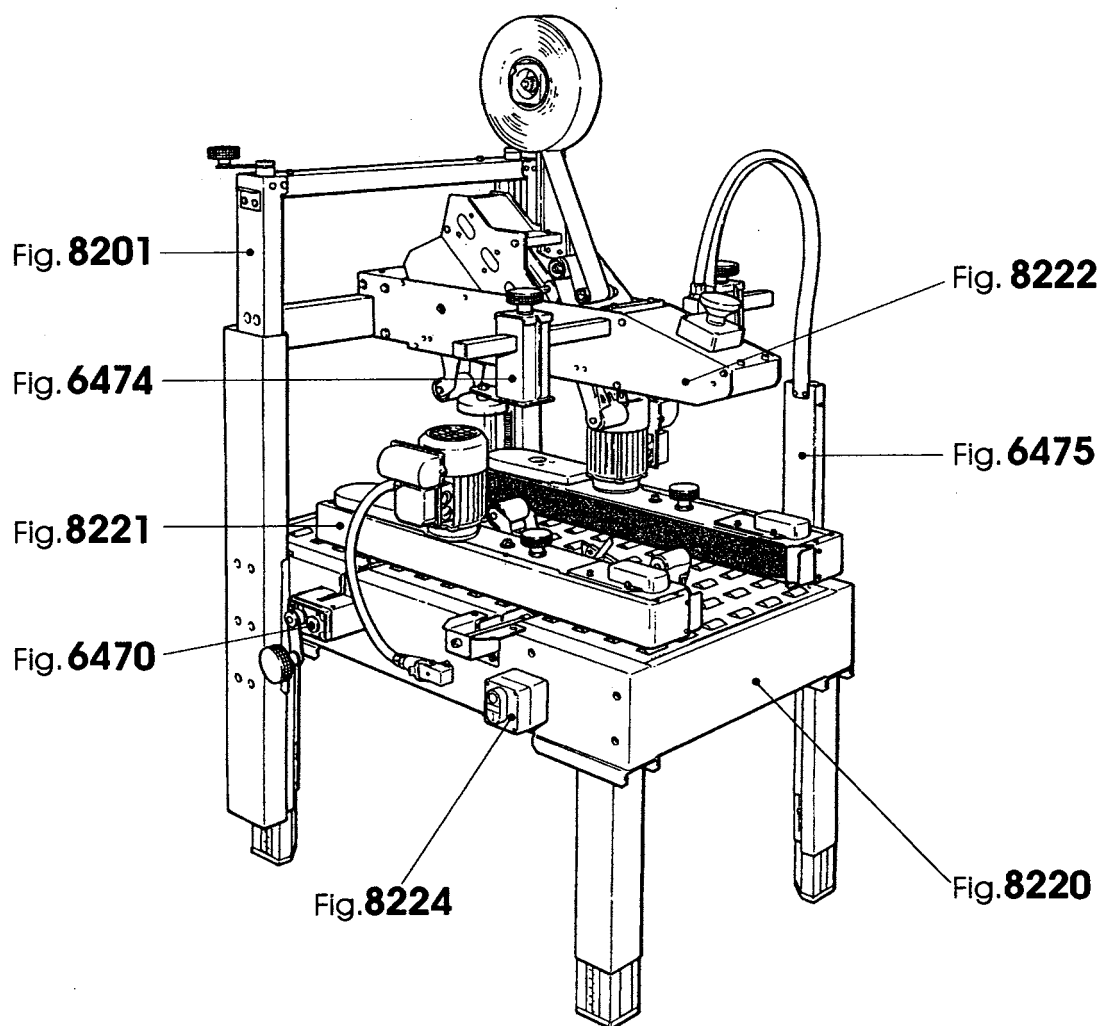
**Note** – The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, if desired.

4. Order parts by **Part Number, Part Description** and **Quantity** required. Also include machine name, number and type.
- 5.. Refer to the first page of this instruction manual “**Replacement Parts and Service Information**” for replacement parts ordering information.

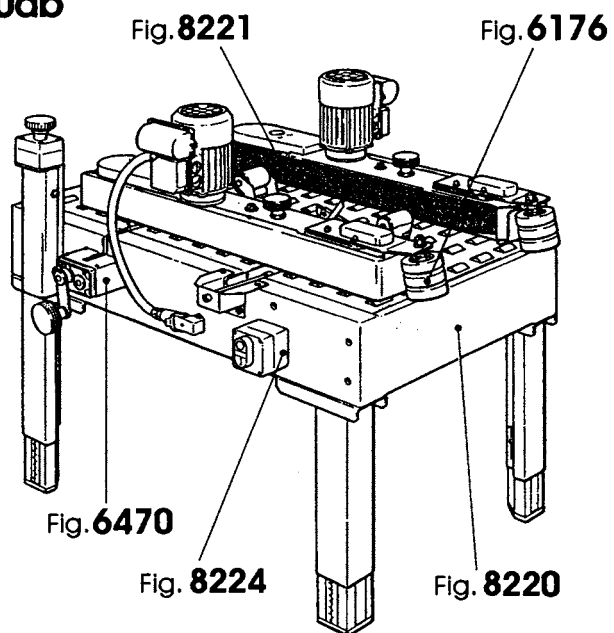
**IMPORTANT** – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on special order. Contact 3M/Tape Dispenser Parts to confirm item availability.

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**120ab**



120a-2"/3M Part Number 78-8114-0896-8

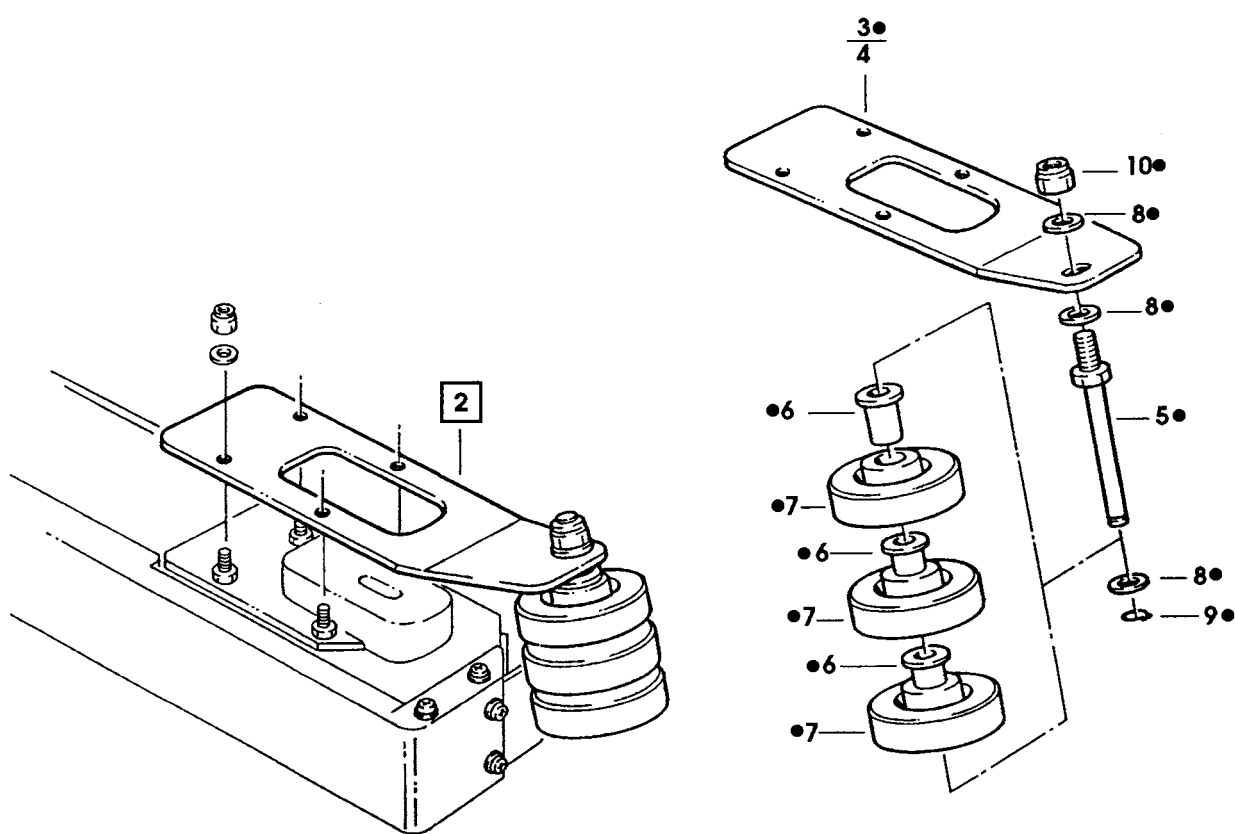
120a-3"/3M Part Number 78-8114-0985-9

120ab-2"/3M Part Number 78-8114-0897-6

Figura	Descrizione figura	Magaz.	Codice	Descrizione
6176	RULLI PRESSATORI	0	78811408976	120ab-I BOTTOM CASE SEALER Type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78810012258	SIDE COMPRESSION ROLLER, R/H	PZ	1
2	78810012266	SIDE COMPRESSION ROLLER - L/H	PZ	1
3	78810012274	BRACKET - ROLLER, R/H	PZ	1
4	78810012282	BRACKET - ROLLER, L/H	PZ	1
5	78807654914	SHAFT - ROLLER	PZ	2
6	78806081069	BUSHING - NYLON	PZ	6
7	78805508211	RUBBER ROLLER	PZ	6
8	26100455109	WASHER - PLAIN, M10	PZ	6
9	78801658556	E - RING 10MM	PZ	2
10	26100369185	NUT, PLASTIC INSERT M10 HEX FLANGE	PZ	2

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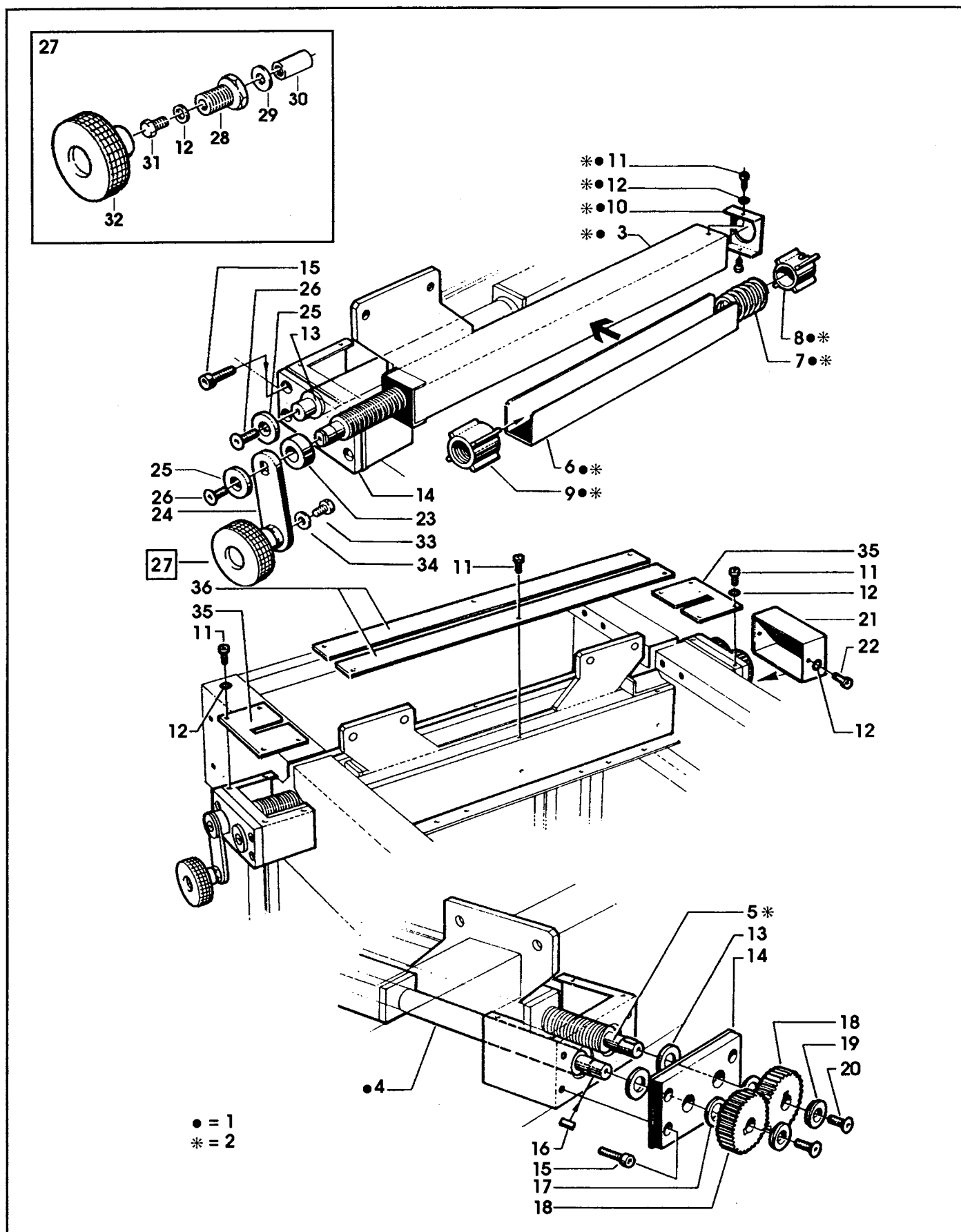


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Figura	Descrizione figura	Magaz.	Codice	Descrizione
6470	REGOLAZ. MOTORIZZAZIONI	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78806081192	SUPPORT-SIDE GUIDE	PZ	1
2	78806081200	SUPPORT-SIDE GUIDE	PZ	1
3	78811449400	SUPPORT - GUIDE	PZ	2
4	78805489172	CONDUCTOR SCREW	PZ	1
5	78805489230	SIDE GUIDE SCREW	PZ	1
6	78805506249	SPACER	PZ	2
7	78805506231	SPRING	PZ	2
8	78805489263	COLLAR	PZ	2
9	78805489222	PLASTIC NUT	PZ	2
10	78805506256	END CAP	PZ	2
11	26100257539	SCREW-SELF TAPPING	PZ	18
12	78800557403	WASHER PLAIN-METRIC 4MM NICK.	PZ	15
13	78805489198	WASHER, 15/25X5MM	PZ	4
14	78805489180	PLATE FOR SCREWS	PZ	2
15	26100379515	SCREW,SOC HD HEX SOC M5X20	PZ	8
16	78802882445	KEY - 4 X 4 X 10MM	PZ	2
17	78805489255	WASHER, 12/25X3MM	PZ	2
18	78805489248	GEAR - 28 TEETH, 1,5MM PITCH	PZ	2
19	78805488778	WASHER, 5,5/20X4	PZ	2
20	26000158621	SCREW, FLAT HD SOC.M5X12	PZ	2
21	78809460245	GEAR COVER	PZ	1
22	26100249551	SCREW-SELF TAP 8PX13	PZ	2
23	78805489206	SPACER - 15,5/30X10MM	PZ	1
24	78806080657	LEVER, KNOB	PZ	1
25	78805485774	WASHER - SPECIAL	PZ	2
26	78805757263	SCREW,F.H.SOC HD M6X15	PZ	2
27	78811449418	HANDLE ASSY	PZ	1
28	78807015116	BUSHING	PZ	1
29	78807015108	WASHER - NYLON, /7X15X1	PZ	1
30	78807015090	SHAFT - CRANK	PZ	1
31	78801071578	SCREW-HEX.HD. M4X10	PZ	1
32	78811449426	KNOB - MBT.60 B-M12	PZ	1
33	26100358204	SCREW - HEX HD.M-5X12	PZ	1
34	78802882148	WASHER	PZ	1
35	78809460237	SIDE COVER	PZ	2
36	78805489149	REAR GUIDE GUARD	PZ	2

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Fig. 6470

Figura	Descrizione figura	Magaz.	Codice	Descrizione
6475	CANALINA	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78811449780	SPACER	PZ	1
2	26100379630	SCREW - SOC. HD. M8X16	PZ	4
3	78801793189	WASHER-PLAIN-METRIC 8MM	PZ	2
4	78811449376	GROMMET /20	PZ	2
5	78811449798	COVER	PZ	2
6	26100358204	SCREW - HEX HD.M-5X12	PZ	4
7	78800557411	WASHER - FLAT, M5	PZ	8
8	78805266570	HOUSING - WIRE	PZ	1
9	78805266596	GROMMET	PZ	3
10	78811449806	STRAP - WIRE	PZ	1
11	78801071636	SCREW-METRIC, M5X10, HEX.HD.	PZ	6
12	78801074176	NUT - METRIC, HEX STL. M5	PZ	6
13	78805489552	CLAMP,BRACKET	PZ	1
14	78806076317	CONNECTOR, 3/8"	PZ	2
15	78811449814	CONDUIT - /12, 730 mm	PZ	1
16	78806080293	CLAMP	PZ	4
17	78809106038	COVER - HOUSING	PZ	1
18	26100358105	SCREW - HEX HD. M4X8	PZ	4
19	78801790185	WASHER-METRIC, PLAIN, M4 SPEC.	PZ	4

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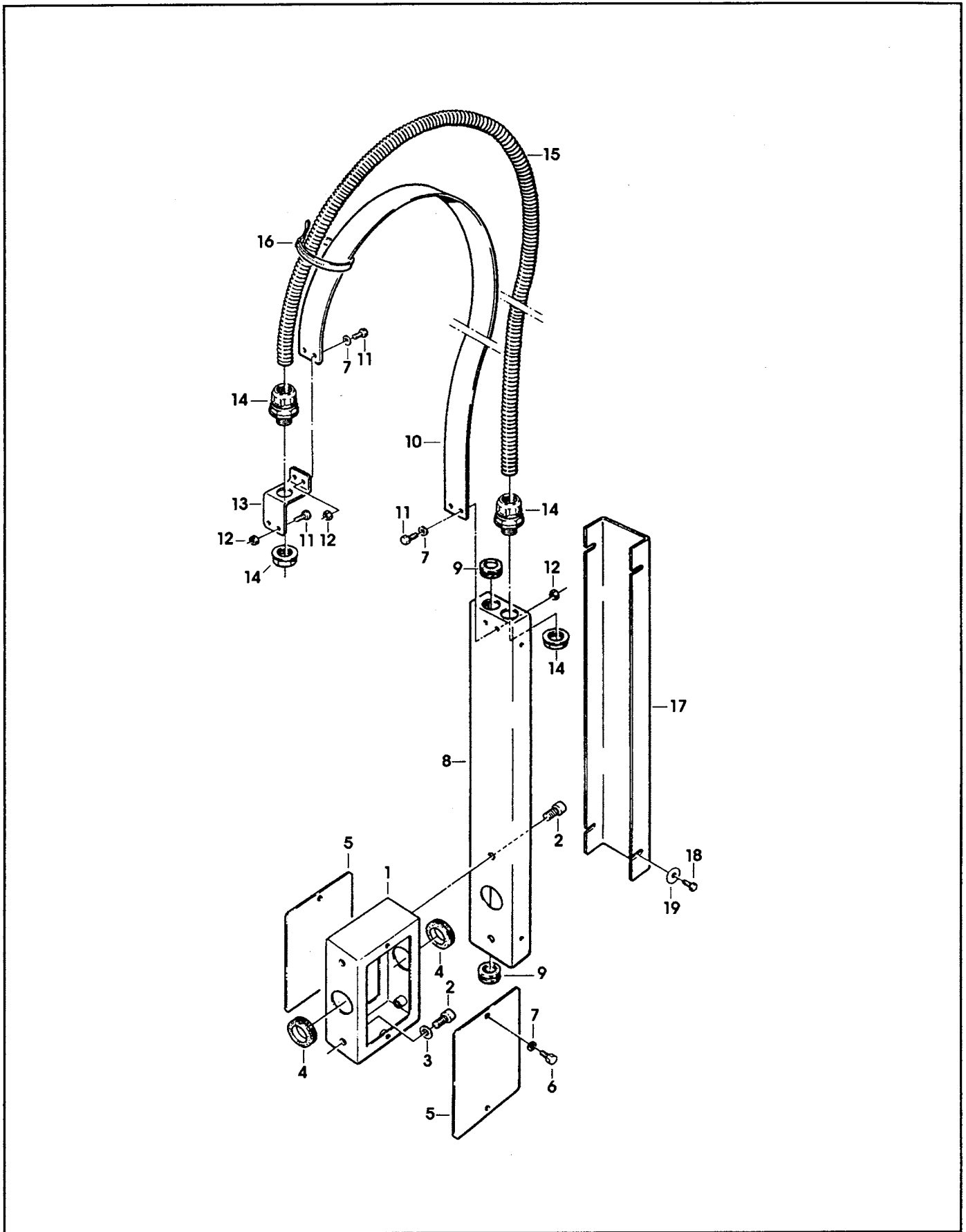
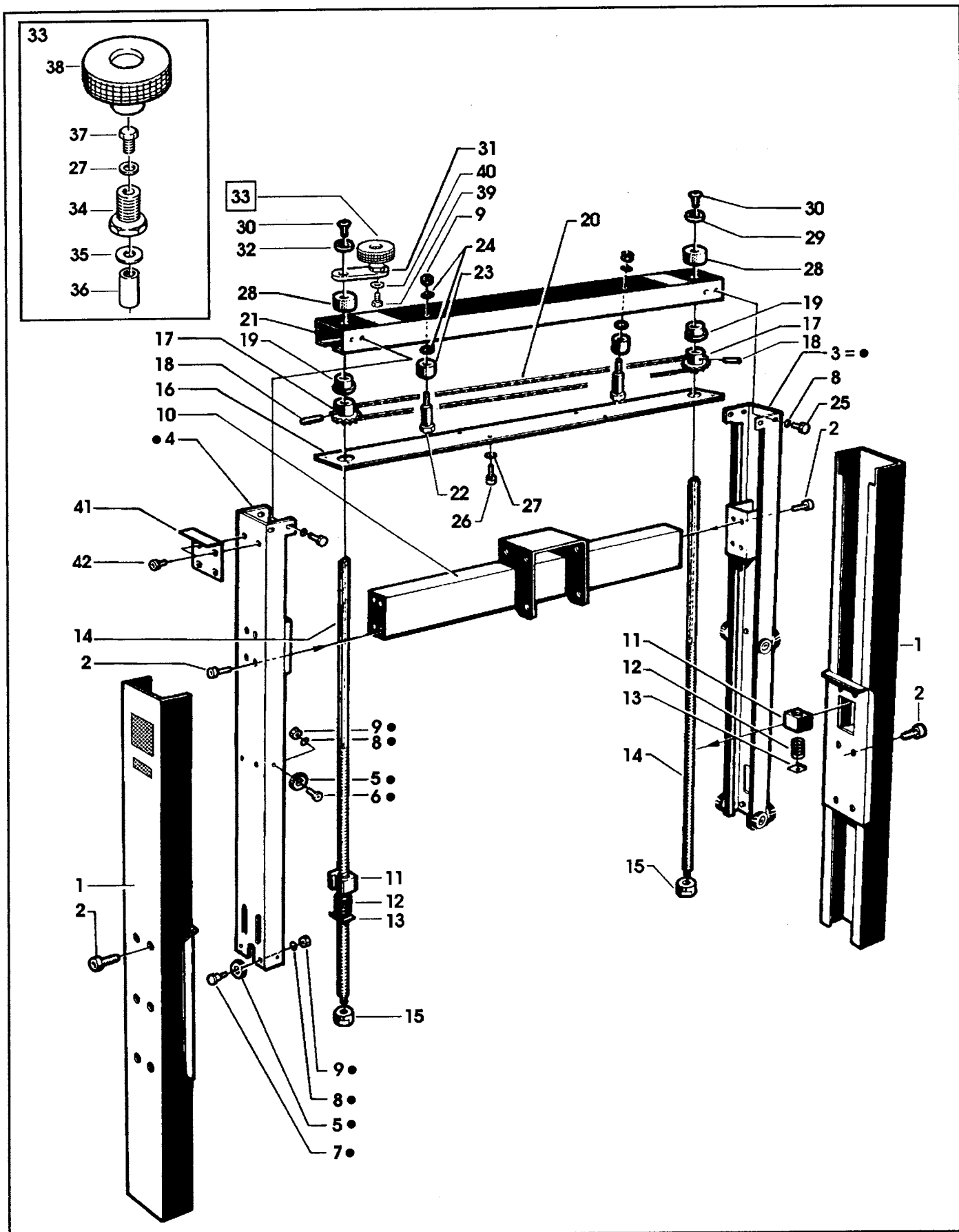


Figura	Descrizione figura	Magaz.	Codice	Descrizione
8201	COLONNE	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78809460294	COLUMN	PZ	2
2	26100379648	SCREW SOC.HD.HEX SOC.DR.,M8X20	PZ	16
3	78809460302	COLUMN ASSEMBLY - INNER	PZ	2
4	78809460286	COLUMN - INNER	PZ	2
5	78805506371	CASTER /45	PZ	16
6	78801791068	SCREW-BEARING SHOULDER	PZ	12
7	78805485899	SCREW SPECIAL	PZ	4
8	26100000103	WASHER - FLAT M6	PZ	24
9	26100369169	NUT LOCKING PLASTIC INSERT M6	PZ	18
10	78809460278	SUPPORT - HEAD	PZ	1
11	78805485717	PLASTIC NUT	PZ	2
12	78805489693	SPRING	PZ	2
13	78805489701	BED PLATE FOR SPRING	PZ	2
14	78805485733	LEAD SCREW	PZ	2
15	78805489685	SPECIAL NUT	PZ	2
16	78809460260	COVER - CROSSMEMBER	PZ	1
17	78805507312	SPROCKET-3/8 PITCH, 13 TEETH	PZ	2
18	78805485865	PIN	PZ	2
19	78806081259	BUSHING	PZ	2
20	78805507288	CHAIN-3/8" PITCH,139 PITCH LONG	PZ	1
21	78809460252	CROSSMEMBER	PZ	1
22	78806078784	IDLER SCREW	PZ	2
23	78805485758	IDLER ROLLER	PZ	2
24	78804229199	WASHER - TRIPLE, M6	PZ	4
25	78803203757	SCREW METRIC M6X16 HEX.HD.	PZ	8
26	26100257539	SCREW-SELF TAPPING	PZ	6
27	78800557403	WASHER PLAIN-METRIC 4MM NICK.	PZ	7
28	78805485816	SPACER	PZ	2
29	78805507320	WASHER-SPECIAL	PZ	1
30	26100198436	SCREW FLAT SOC.HD.M6X16	PZ	2
31	78806080657	LEVER, KNOB	PZ	1
32	78805485774	WASHER - SPECIAL	PZ	1
33	78811449418	HANDLE ASSY	PZ	1
34	78807015116	BUSHING	PZ	1
35	78807015108	WASHER - NYLON, /7X15X1	PZ	1
36	78807015090	SHAFT - CRANK	PZ	1
37	78801071578	SCREW-HEX.HD. M4X10	PZ	1
38	78811449426	KNOB - MBT.60 B-M12	PZ	1
39	26100358204	SCREW - HEX HD.M-5X12	PZ	1
40	78802882148	WASHER	PZ	1
41	78811449608	BRACKET - COLUMN	PZ	2
42	78807645037	SCREW - M6X12	PZ	4

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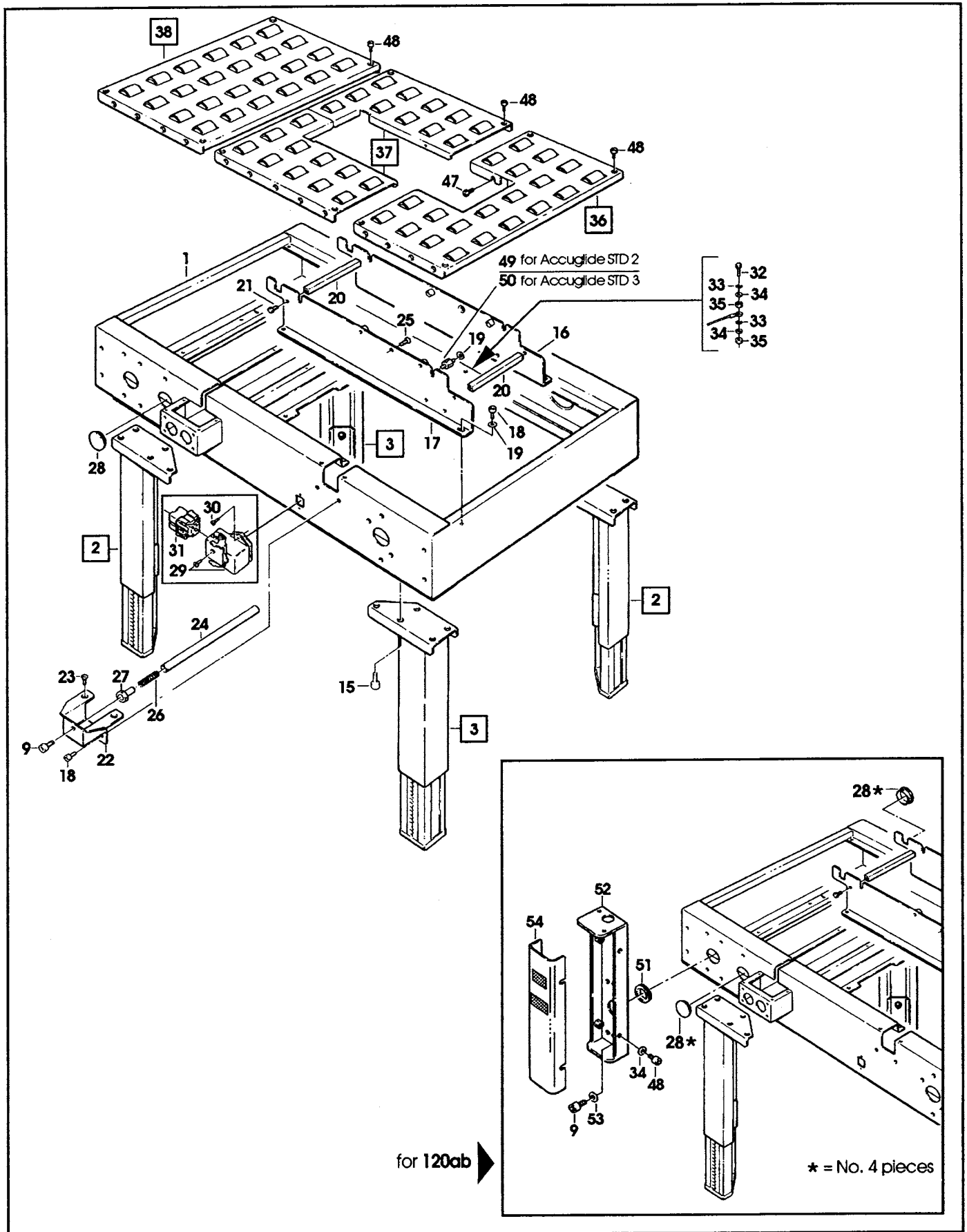
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Fig. 8201

Figura	Descrizione figura	Magaz.	Codice	Descrizione
8220	BANCALE	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78810011367	BED - CONVEYOR	PZ	1
2	78811446661	LEG ASSY - R/H	PZ	2
3	78811446653	LEG ASSY - L/H	PZ	2
4	78807650409	LEG - RIGHT	PZ	2
5	78807650417	LEG - LEFT	PZ	2
6	78805266786	LEG - INNER	PZ	4
7	78805266778	CLAMP - INNER	PZ	4
8	78805266760	CLAMP - OUTER	PZ	4
9	26100379630	SCREW - SOC. HD. M8X16	PZ	12
10	78805266794	PAD - FOOT	PZ	4
11	26100358428	SCREW HEX.HD.M8X20	PZ	4
12	26100455075	WASHER M8	PZ	4
13	78801793130	NUT SELF LOCKING M8 NICK.PL.	PZ	4
14	78805266802	LABEL - HEIGHT	PZ	4
15	26100379648	SCREW SOC.HD.HEX SOC.DR.,M8X20	PZ	28
16	78811449251	FRAME - UPPER, R/H	PZ	1
17	78811449269	FRAME - UPPER, L/H	PZ	1
18	26100379572	SCREW SOC. HD. HEX HD. M6X16	PZ	8
19	26100000103	WASHER - FLAT M6	PZ	8
20	78805488620	SPACER - 12X12X140MM	PZ	2
21	78801071693	SCREW-METRIC, M6X12, HEX HD.	PZ	4
22	78811449277	SUPPORT - GUIDE	PZ	2
23	26100198436	SCREW FLAT SOC.HD.M6X16	PZ	4
24	78805488315	SHAFT- 14 X 255MM	PZ	2
25	26100358410	SCREW M8X16	PZ	2
26	78805489990	SPRING	PZ	2
27	78805489982	BUSHING	PZ	4
28	78806081846	CAP /35X1,5	PZ	2
29	78806078768	COVER PLUG LATERAL	PZ	2
30	78802882080	SCREW - 6PX9,5	PZ	4
31	78806078735	PLUG FEMALE	PZ	2
32	78806084881	SCREW - HEX.HD. M5X20	PZ	1
33	78804682173	WASHER - SPECIAL	PZ	2
34	78800557411	WASHER - FLAT, M5	PZ	6
35	78801074176	NUT - METRIC, HEX STL. M5	PZ	2
36	78811449285	CONVEYOR ASSY - FRONT	PZ	1
37	78811449293	CONVEYOR ASSY - CENTER	PZ	1
38	78811449301	CONVEYOR ASSY - REAR	PZ	1
39	78811449319	CONVEYOR - FRONT	PZ	1
40	78811449327	CONVEYOR - CENTER, R/H	PZ	1
41	78811449335	CONVEYOR - CENTER, L/H	PZ	1
42	78811449343	CONVEYOR - REAR	PZ	1
43	78811449350	SHAFT - ROLLER, L=420 mm	PZ	7
44	78811449368	SHAFT - ROLLER, L=128 mm	PZ	12
45	78806076937	ROLLER 32X38	PZ	66
46	78807653858	SPRING	PZ	66
47	78801790664	SCREW - METRIC, M5X12	PZ	4
48	26100379499	SCREW SOC. HD. HEX SOC. M5X12	PZ	16
49	78807014564	STUD- HEX., ACCUGLIDE II BTM ON 12A/12AB	PZ	4
50	78811447024	SPACER	PZ	4
51	78811449376	GROMMET /20	PZ	1



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Fig. 8220/1

Figura	Descrizione figura	Magaz.	Codice	Descrizione
8220	BANCALE	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
52	78811449384	SUPPORT - ON/OFF	PZ	1
53	78801793189	WASHER-PLAIN-METRIC 8MM	PZ	2
54	78811449392	COVER - SUPPORT	PZ	1
55	78806080608	CASTER ASSY	PZ	4
56	78806080616	CASTER	PZ	4
57	78806081242	SPACER - CASTER	PZ	4
58	78809460641	SPACER	PZ	4
59	78801790599	WASHER-FLAT FOR M12 SCREW	PZ	4
60	78806075327	NUT M12 SELF-LOCKING	PZ	4

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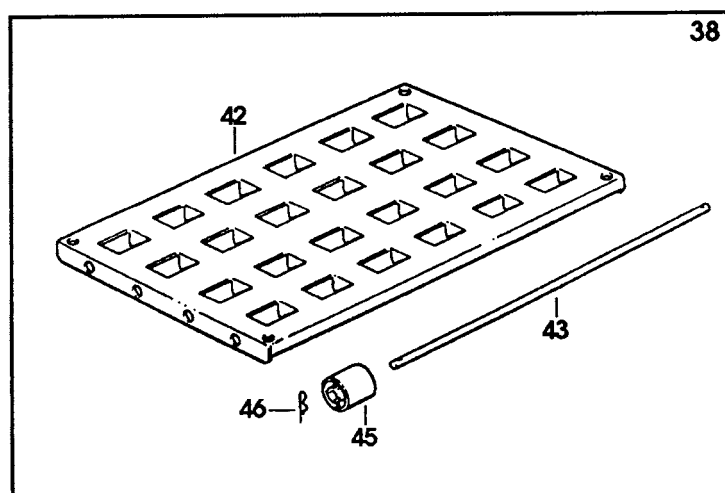
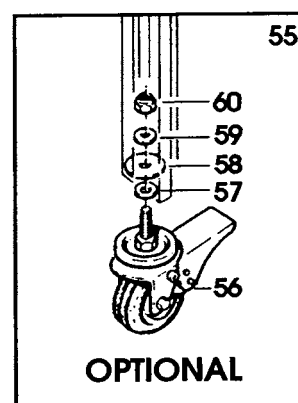
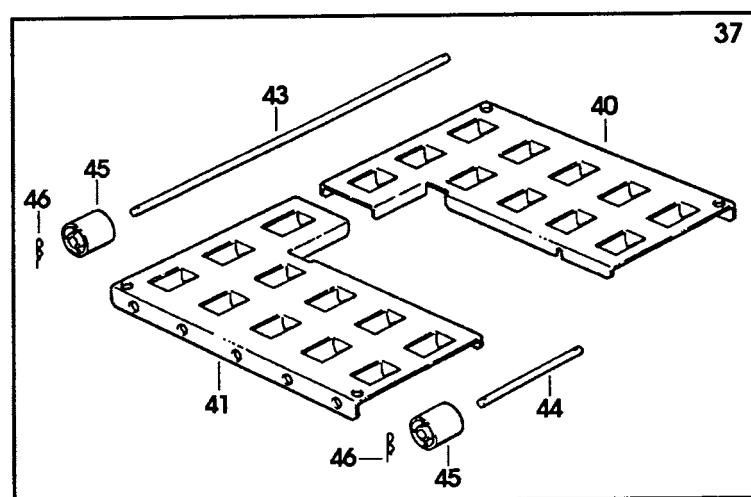
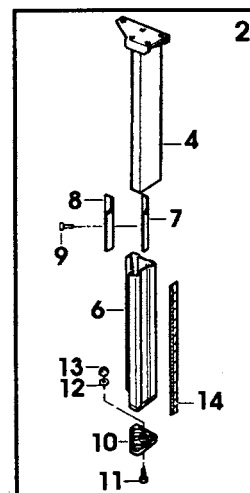
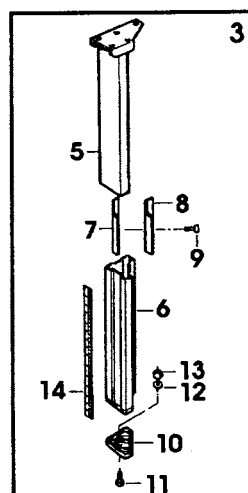
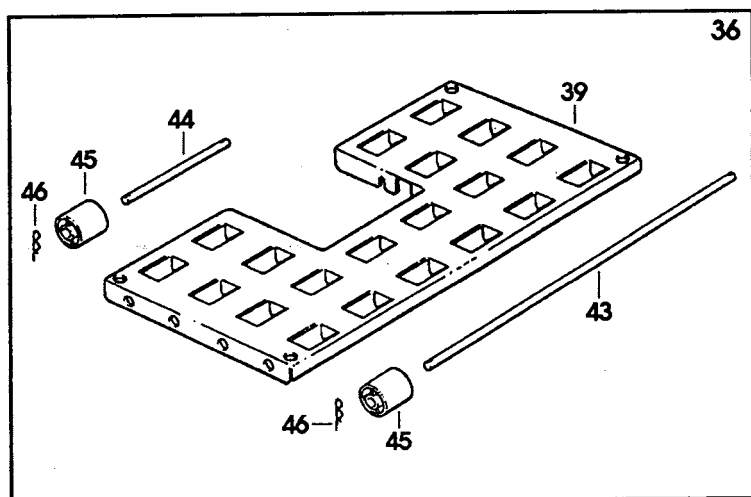
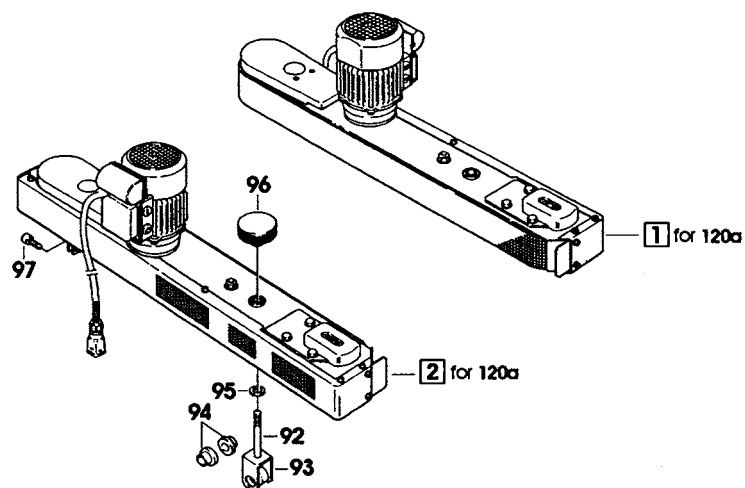
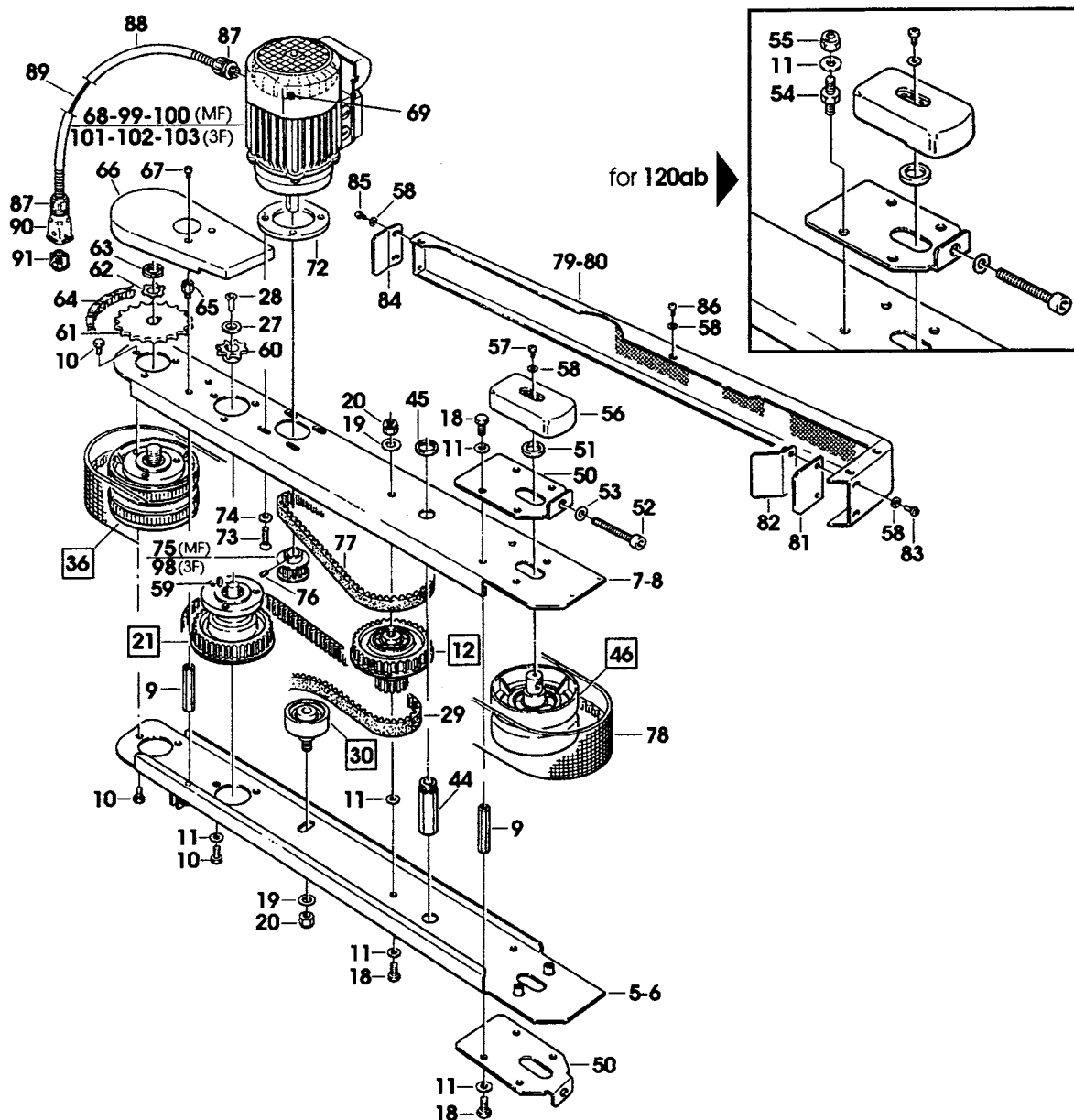


Figura	Descrizione figura	Magaz.	Codice	Descrizione
8221	MOTORIZZAZIONI	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78811987631	SIDE DRIVE ASSY - R/H	PZ	1
2	78811987649	SIDE DRIVE ASSY - L/H	PZ	1
5	78811449483	GUIDE - LOWER, R/H	PZ	1
6	78811449475	GUIDE - LOWER, L/H	PZ	1
7	78811449509	GUIDE - UPPER, R/H	PZ	1
8	78811449491	GUIDE - UPPER, L/H	PZ	1
9	78805506611	SPACER	PZ	8
10	78806078867	SCREW-HEX.HD.M6X16 SPECIAL	PZ	38
11	26100000103	WASHER - FLAT M6	PZ	34
12	78806081341	WRAP PULLEY ASS.Y	PZ	2
13	78806081358	PULLEY-WRAP 12A	PZ	2
14	78802324109	BEARING - 6000-2RS	PZ	2
15	78802325445	BEARING-6203-2RS	PZ	2
16	78805506652	SHAFT-PULLEY WRAP	PZ	2
17	78801658556	E - RING 10MM	PZ	2
18	78803203757	SCREW METRIC M6X16 HEX.HD.	PZ	10
19	26100455075	WASHER M8	PZ	4
20	78801793130	NUT SELF LOCKING M8 NICK.PL.	PZ	4
21	78811449517	DRIVE PULLEY ASSY	PZ	2
22	78811448576	SHAFT - DRIVE PULLEY	PZ	2
23	78804681357	KEY - 5 X 5 12MM	PZ	4
24	78811449525	PULLEY - DRIVE	PZ	2
25	78811448592	SPACER - DRIVE PULLEY	PZ	2
27	78805488778	WASHER, 5,5/20X4	PZ	6
28	26000158621	SCREW, FLAT HD SOC.M5X12	PZ	6
29	78811449533	BELT - TOOTHED, 240L050	PZ	2
30	78809105238	PULLEY ASSY - JOCKEY	PZ	2
31	78809105246	PULLEY - JOCKEY	PZ	2
32	78806080087	BEARING 6004-2RS	PZ	2
33	78806080103	SNAP RING-42MM SHAFT	PZ	2
34	78809105253	SHAFT - PULLEY	PZ	2
35	78801790615	SNAP RING-FOR 20MM SHAFT	PZ	2
36	78809107143	ROLLER - DRIVE, 800a-E	PZ	2
37	78807654419	ROLLER - DRIVE	PZ	2
38	78805267131	RING - POLYURETHANE	PZ	4
39	78805506694	SHAFT-PULLEY KEYED	PZ	2
40	78805757396	KEY, M5X5X30 MM	PZ	2
41	78805506686	WASHER,15/26X1	PZ	2
42	78809103829	BELLEVILLE WASHER /16	PZ	2
43	78807654427	FLANGE ASS.Y	PZ	8
44	78806081002	BUSHING - THREADED	PZ	2
45	78801790961	NUT-SPECIAL M18X1	PZ	2
46	78807654435	PULLEY ASS.Y - IDLER	PZ	2
47	78805506603	ROLLER-IDLER	PZ	2
48	78807654443	SHAFT - IDLER PULLEY	PZ	2
49	12799702720	E-RING, M-25	PZ	2
50	78807654450	TENSIONER - BELT	PZ	4
51	78807654468	WASHER - SHAFT	PZ	4
52	78807015199	SCREW - SOC.HD. HEX.HD. M8X70	PZ	4
53	78801793189	WASHER-PLAIN-METRIC 8MM	PZ	4
54	78807654864	SCREW - SPECIAL, M6	PZ	8
55	26100369169	NUT LOCKING PLASTIC INSERT M6	PZ	8



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Fig. 8221/1

Figura	Descrizione figura	Magaz.	Codice	Descrizione
8221	MOTORIZZAZIONI	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
56	78807654484	COVER - BELT TENSIONER	PZ	2
57	78805508500	SCREW-CAP M4X6	PZ	2
58	78800557403	WASHER PLAIN-METRIC 4MM NICK.	PZ	14
59	78811448600	KEY - 4x4x12	PZ	2
60	78806080053	SPROCKET - 3/8", 11 TEETH	PZ	2
61	78806080194	SPROCKET - 3/8" 28 TEETH	PZ	2
62	78805758345	TAB WASHER	PZ	2
63	78805758352	CENTERING WASHER	PZ	2
64	78806080202	CHAIN, 3/8"PITCH L=50	PZ	2
65	78805488919	SCREW SPECIAL	PZ	4
66	78811449541	COVER - CHAIN	PZ	2
67	26100379481	SCREW,SOC.HD HEX SOC.M5X10	PZ	4
68	78811449152	MOTOR - 110/115V 60HZ 1-PHASE	PZ	2
69	78809103837	FAN - MOTOR	PZ	2
70	78811449160	HOUSING - CAPACITOR FOR MOTOR MH56	PZ	2
71	78811449186	CAPACITOR - 20MF, 250V	PZ	2
72	78809460500	SPACER - MOTOR	PZ	2
73	26100547574	SCREW - FLAT HD, SOC.DR. M5X20	PZ	8
74	78806080731	WASHER - MOTOR	PZ	8
75	78805488851	PULLEY-TIMING 14 TEETH FOR 60HZ MOTOR	PZ	2
76	26100388169	SCREW, SET M5X6	PZ	2
77	78809103993	BELT - TOOTHED, 156XL050	PZ	2
78	78811449558	BELT - DRIVE, WITH HOOK	PZ	2
79	78811449566	COVER - DRIVE, R/H	PZ	1
80	78811449574	COVER - DRIVE, L/H	PZ	1
81	78810012142	GUARD - RUBBER	PZ	2
82	78810012159	GUARD - METAL	PZ	2
83	78807652553	SCREW - PHILLIPS HD, M4X12	PZ	4
84	78810012134	GUARD - BELT	PZ	2
85	26100249551	SCREW-SELF TAP 8PX13	PZ	4
86	26100257539	SCREW-SELF TAPPING	PZ	6
87	78806076267	CONNECTOR	PZ	4
88	78806080384	SLEEVING /12 0,45 M.	PZ	2
89	78806080533	WIRE - 3-POLE, 5 METERS LENGTH	PZ	1
90	78806078776	PLUG HOUSING VERTICAL	PZ	2
91	78806078750	PLUG MALE	PZ	2
92	78805506660	SCREW, SPECIAL	PZ	2
93	78805489016	BRACKET - GUIDE	PZ	2
94	78805489024	BUSHING - FLANGED	PZ	4
95	26100455109	WASHER - PLAIN, M10	PZ	2
96	78811449590	KNOB - MBT.50 B-M10	PZ	2
97	26100379655	SCREW - SOC.HD.HX.SOC.M8X25	PZ	4
98	78806080152	PULLEY 17XL050	PZ	2
99	78810012001	MOTOR - 220/240V 50HZ 1-PH	PZ	1
100	78809103811	MOTOR 220V 60HZ S-PH	PZ	1
101	78811449145	MOTOR - 200/220V 50/60HZ 3-PHASE	PZ	1
102	78809463769	MOTOR - 3PH, 220/440V, 50/60HZ H56 B4 KW 0.08 B14	PZ	1
103	78805757180	COEL MOTOR 260/440V 50HZ 3 PHASE	PZ	1



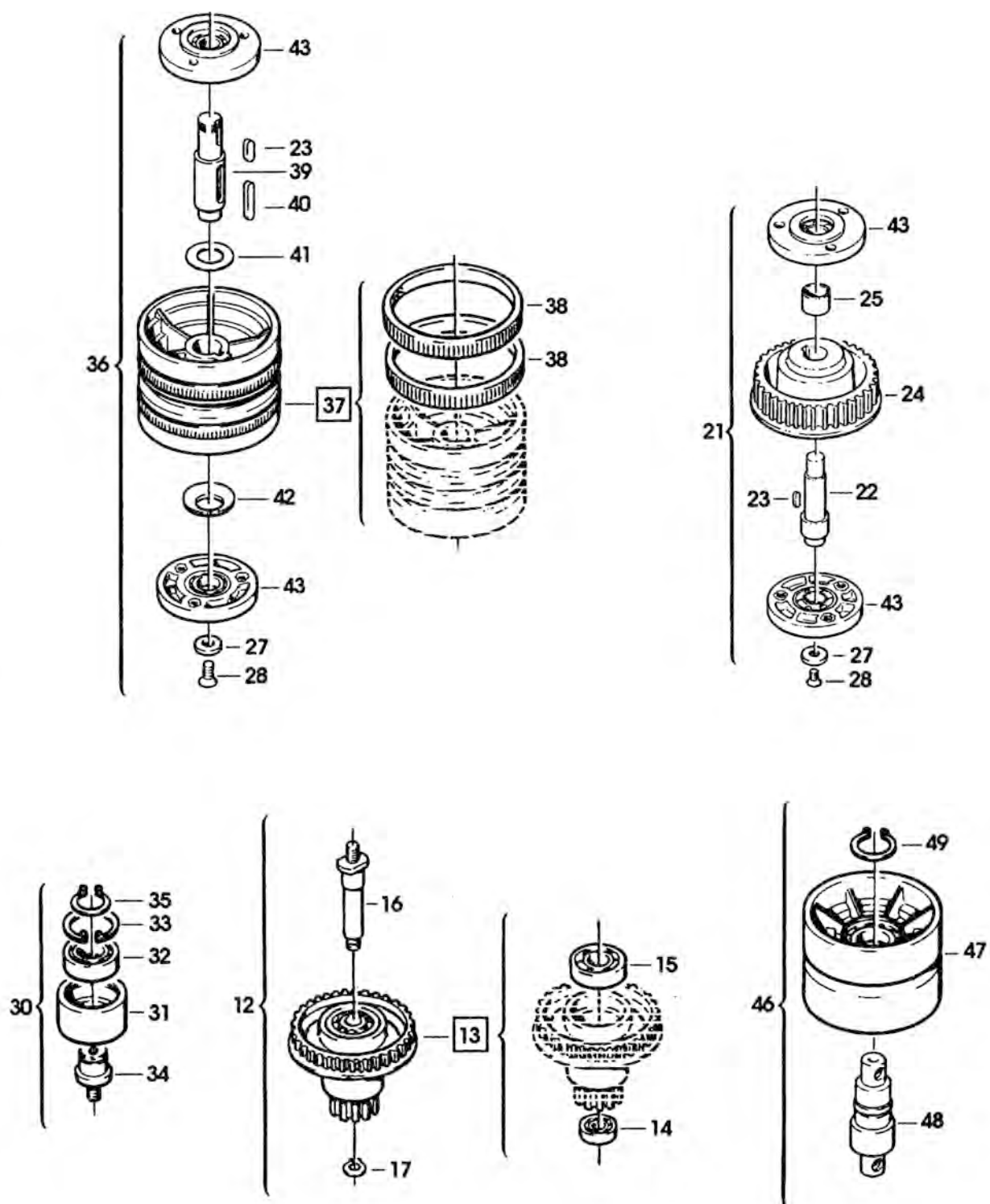
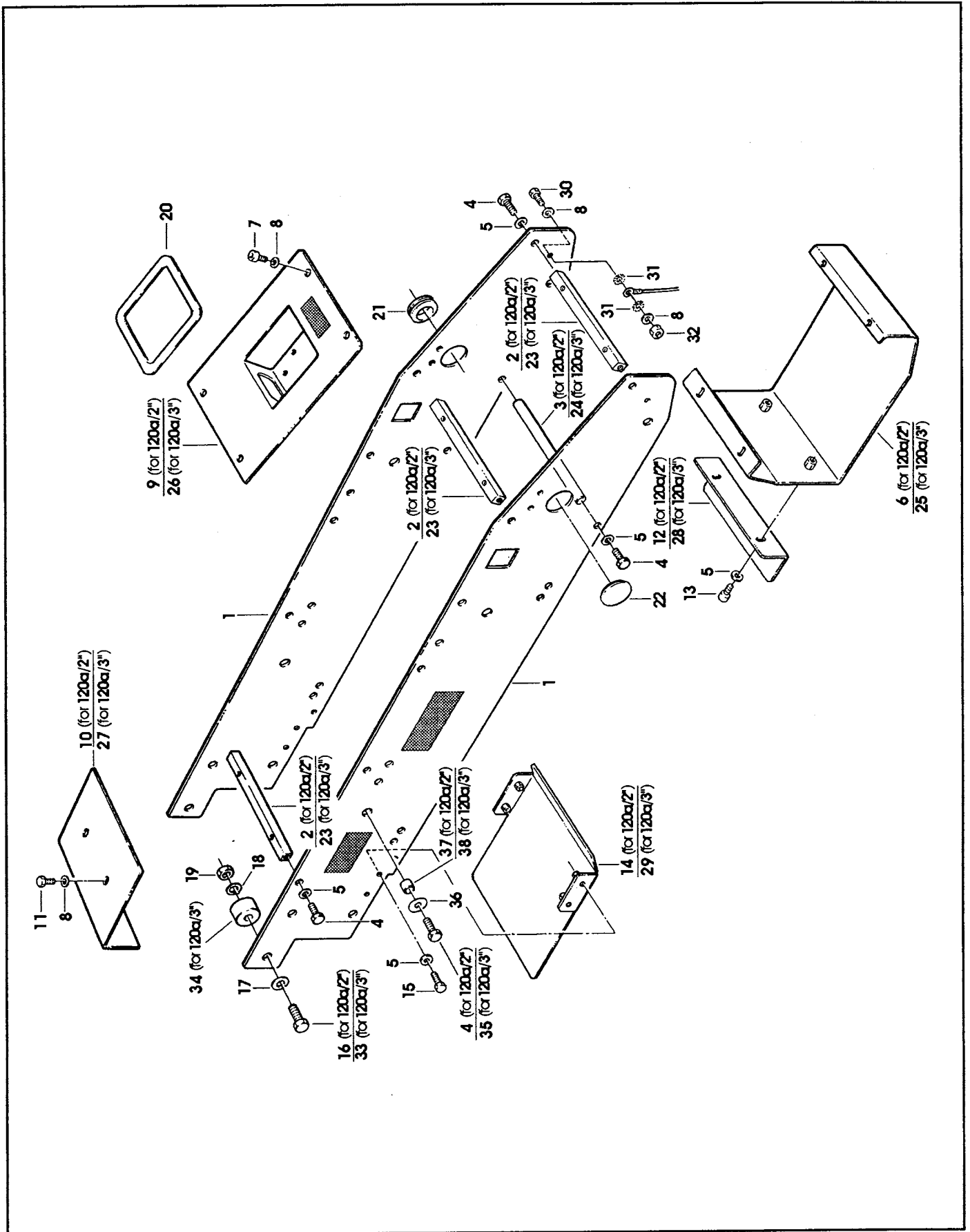


Figura	Descrizione figura	Magaz.	Codice	Descrizione
8222	PORTA UNITA' SUPERIORE	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78811449616	FRAME - SUPPORT, UPPER HEAD	PZ	2
2	78805506454	SPACER	PZ	4
3	78805506439	SPACER	PZ	1
4	78803203757	SCREW METRIC M6X16 HEX.HD.	PZ	16
5	26100000103	WASHER - FLAT M6	PZ	18
6	78811449624	HOLDER	PZ	1
7	26100379481	SCREW,SOC.HD HEX SOC.M5X10	PZ	4
8	78800557411	WASHER - FLAT, M5	PZ	8
9	78811449632	COVER - HOLDER	PZ	1
10	78809460393	COVER REAR	PZ	1
11	78801071636	SCREW-METRIC, M5X10, HEX.HD.	PZ	2
12	78811449640	CORNER - HOLDER	PZ	1
13	78801072097	SCREW. SOC.HD.M6X12	PZ	2
14	78811449657	SLIDE - REAR	PZ	1
15	78801071693	SCREW-METRIC, M6X12, HEX HD.	PZ	4
16	26100358428	SCREW HEX.HD.M8X20	PZ	6
17	78801793189	WASHER-PLAIN-METRIC 8MM	PZ	6
18	78800557361	LOCKWASHER-FOR M8 SCREW	PZ	6
19	26100369045	NUT - HEX, M8	PZ	6
20	78810012340	COLLAR	PZ	1
21	78811449376	GROMMET /20	PZ	1
22	78811449665	CAP - DP-1093 /28	PZ	1
23	78805489313	SPACER - 10X10X140MM	PZ	4
24	78805489297	SPACER - /10X140MM	PZ	1
25	78811449673	HOLDER - 120a3	PZ	1
26	78811449681	COVER - HOLDER 120a3	PZ	1
27	78809460401	COVER REAR	PZ	1
28	78811449699	CORNER - HOLDER 120a3	PZ	1
29	78811449707	SLIDE - REAR 120a3	PZ	1
30	78806084881	SCREW - HEX.HD. M5X20	PZ	1
31	78804682173	WASHER - SPECIAL	PZ	2
32	78801074176	NUT - METRIC, HEX STL. M5	PZ	1
33	26100241764	SCREW - HEX HD.M8X35	PZ	6
34	78805507338	SPACER	PZ	6
35	78801071933	SCREW-METRIC, M6X20, HEX.HD.	PZ	4
36	78804229199	WASHER - TRIPLE, M6	PZ	4
37	78807014549	SPACER - COLLAR	PZ	4
38	78811449715	SUPPORT - 3" HEAD	PZ	4

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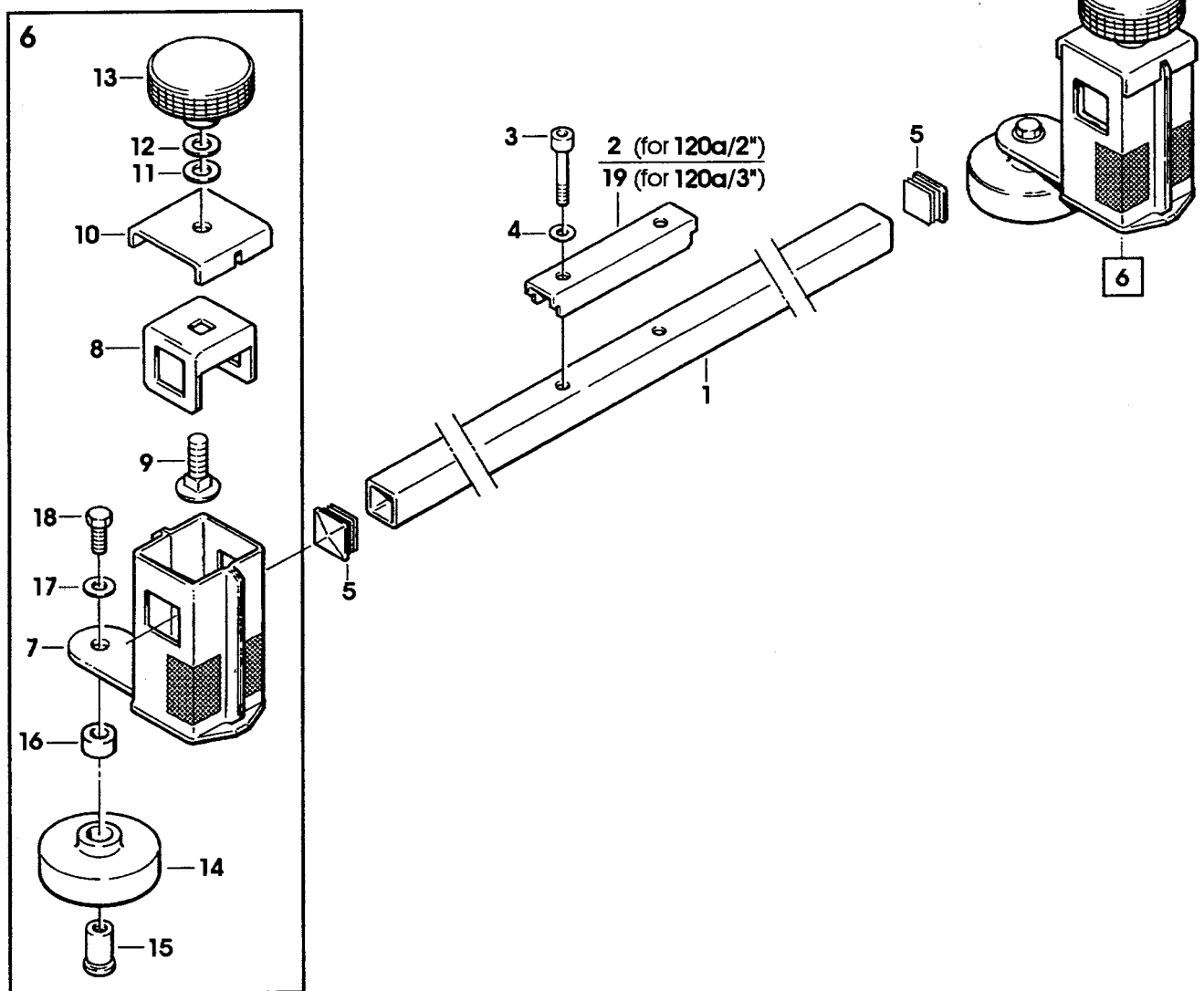
Dic. 1999

Fig. 8222

Figura	Descrizione figura	Magaz.	Codice	Descrizione
8223	PRESSATORI LATERALI	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78811449723	SUPPORT - COMPRESSION ROLLER	PZ	1
2	78811449731	BRACKET - SUPPORT	PZ	1
3	26100379622	SCREW,SOC.HD.M6X40	PZ	2
4	26100000103	WASHER - FLAT M6	PZ	2
5	78805266521	CAP - END	PZ	2
6	78811449749	COMPRESSION ROLLER ASSY	PZ	2
7	78811449756	COMPRESSION ROLLER	PZ	2
8	78807646308	PLATE - TUBE, ROLLER	PZ	2
9	78807646316	SCREW - M10X35	PZ	2
10	78811449764	COVER	PZ	2
11	78801790748	WASHER-NYLON 15MM	PZ	2
12	26100455109	WASHER - PLAIN, M10	PZ	2
13	78811449590	KNOB - MBT.50 B-M10	PZ	2
14	78811449772	ROLLER - COMPRESSION	PZ	2
15	78807646290	SHAFT - ROLLER	PZ	2
16	78811449939	SPACER	PZ	2
17	78801793189	WASHER-PLAIN-METRIC 8MM	PZ	2
18	78801793015	SCREW-HEX HEAD M8X25	PZ	2
19	78811987243	BRACKET - SUPPORT	PZ	1

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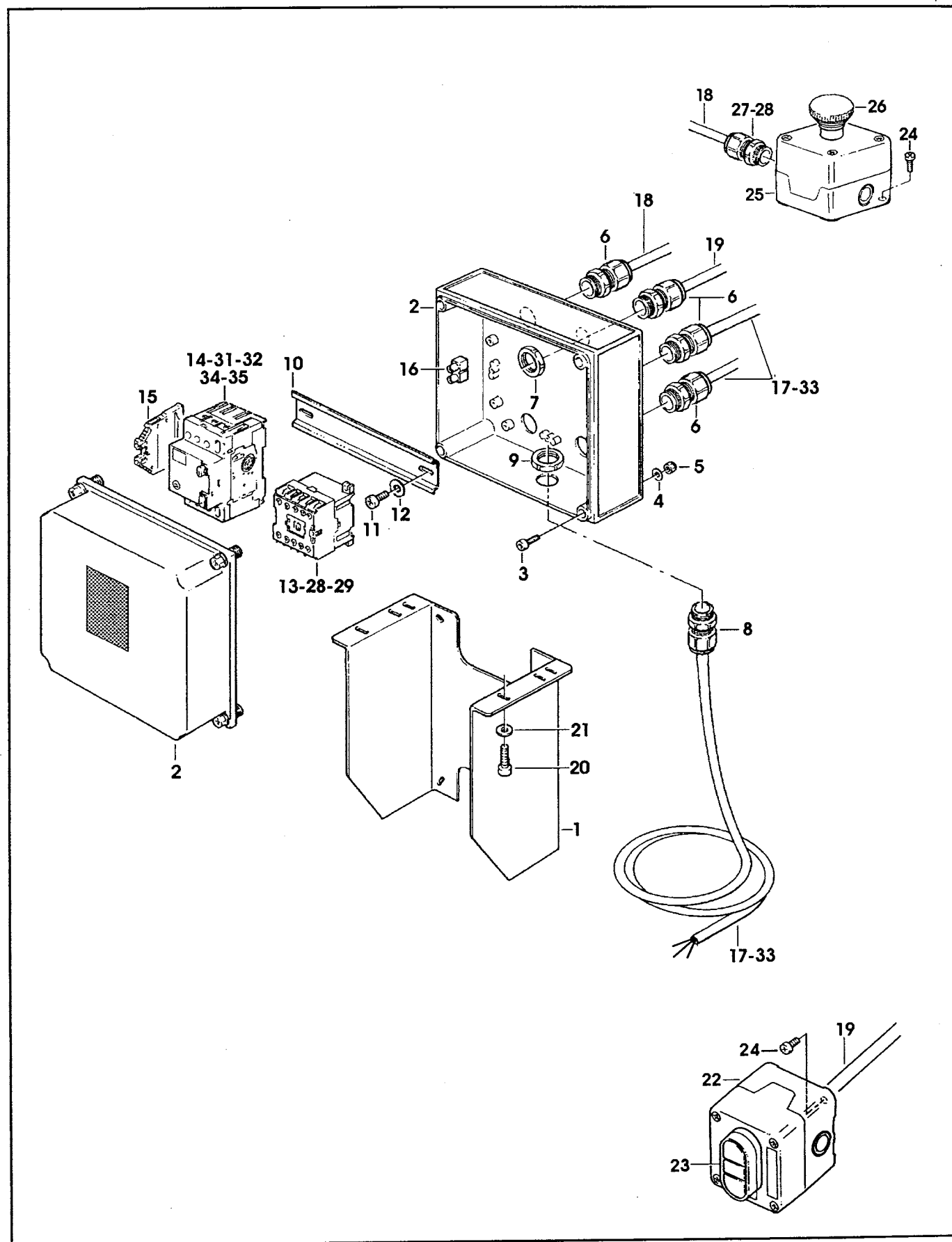
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Fig. 8223

Figura	Descrizione figura	Magaz.	Codice	Descrizione
8224	IMPIANTO ELETTRICO	0	78811408968	120a-I ADJUSTABLE CASE SEALER type 19700

Posizione	Codice	Descrizione	U.M.	Quantita'
1	78809463793	SUPPORT - BOX	PZ	1
2	78809463801	BOX	PZ	1
3	26100379457	SCREW - SOC.HD. M4X20	PZ	4
4	78800557403	WASHER PLAIN-METRIC 4MM NICK.	PZ	4
5	26100369144	NUT, PLASTIC INSERT M4	PZ	4
6	78807647157	CORD GRIP	PZ	4
7	78807652116	SET NUT GMP13.5	PZ	5
8	78805758071	CORD GRIP - ST 16	PZ	1
9	78810012027	LOCK NUT - GMP 16	PZ	1
10	78809463827	GUIDE - MOUNTING	PZ	1
11	78802882080	SCREW - 6PX9,5	PZ	2
12	78801790185	WASHER-METRIC, PLAIN, M4 SPEC.	PZ	2
13	78809463835	CONTACTOR - SPRECHER+ SCHUH CA4-5-10 110V 60HZ	PZ	1
14	78810007555	SWITCH - KTA 3-25, 2.5-4 A	PZ	1
15	78811448907	CLAMP	PZ	1
16	78807649682	TERMINAL	PZ	0,08
17	10000000130	CORD 4X1,5	MT	7,2
18	78811987656	CABLE 3x1	MT	3
19	78811987664	CABLE 3x0.75 FROR	MT	3
20	26100379572	SCREW SOC. HD. HEX HD. M6X16	PZ	4
21	26100000103	WASHER - FLAT M6	PZ	4
22	78811448964	BOX - ON/OFF, GREY ALLEN BRADLEY	PZ	1
23	78809463868	SWITCH - ON/OFF, DM3N-C-01/10 ALLEN BRADLEY	PZ	1
24	78801792579	SCREW-PHILLIS HEAD, M4X10	PZ	4
25	78807651944	BOX - E-STOP, YELLOW ALLEN BRADLEY	PZ	1
26	26101458458	E-STOP - /40, W/ LATCH+CONTACT BLOCK, 800EM-MTS44-3LX01	PZ	1
27	78807645326	CORD GRIP	PZ	1
28	78807646456	LOCK NUT	PZ	1
29	78810008306	CONTACTOR - CA4-5-10 220V 50HZ	PZ	1
30	78810008314	CONTACTOR - CA4-5-10 380V 50HZ	PZ	1
31	78807653783	SWITCH - THERMAL, SPRECHER + SCHUH KTA 3-25 1.6-2.5A	PZ	1
32	78807652231	SWITCH - THERMAL, KTA 3-25 1-1.6A	PZ	1
33	78807646035	CABLE FROR 07 3X1,5 MM GREY	MT	7,2
34	78811989652	SWITCH - KTA 3-25, 4-6.3 A.	PZ	1
35	78811446000	SWITCH - THERMAL, KTA3-25 6.3-10A	PZ	1

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# Instruction Manual

AccuGlide™ II STD 2 Inch  
Upper and Lower Taping Heads  
Type 39600

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**Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OF IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE:**

3M sells its **AccuGlide™ II STD 2 Inch Upper and Lower Taping Heads, Type 39600** with the following warranties:

1. The Taping Head knife, springs, and rollers will be free from all defects for ninety (90) days after delivery.
2. All other Taping Head parts will be free from all defects for three (3) years after delivery.

If any part is proved to be defective within its warranty period, then the exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part, provided the defective part is returned immediately to 3M's factory or an authorized service station designated by 3M. A part will be presumed to have become defective after the warranty period unless the part is received or 3M is notified of the problem no later than five (5) calendar days after the warranty period. If 3M is unable to repair or replace the part within a reasonable time, then 3M, at its option, will replace the equipment or refund the purchase price. 3M shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. 3M shall have no obligation to repair or replace (1) those parts failing due to operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) parts failing due to non-lubrication, inadequate cleaning, improper operating environment, improper utilities, or operator error.

**Limitation of Liability:** 3M and seller shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized officers of 3M and seller.

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## **Taping Head Contents**

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**AccuGlide™ II STD 2 Inch Upper and Lower Taping Heads consist of:**

<b>Qty.</b>	<b>Part Name</b>
1	Taping Head Assembly
1	Tape Drum and Bracket Assembly
1	Hardware and Spare Parts Kit
1	Threading Tool

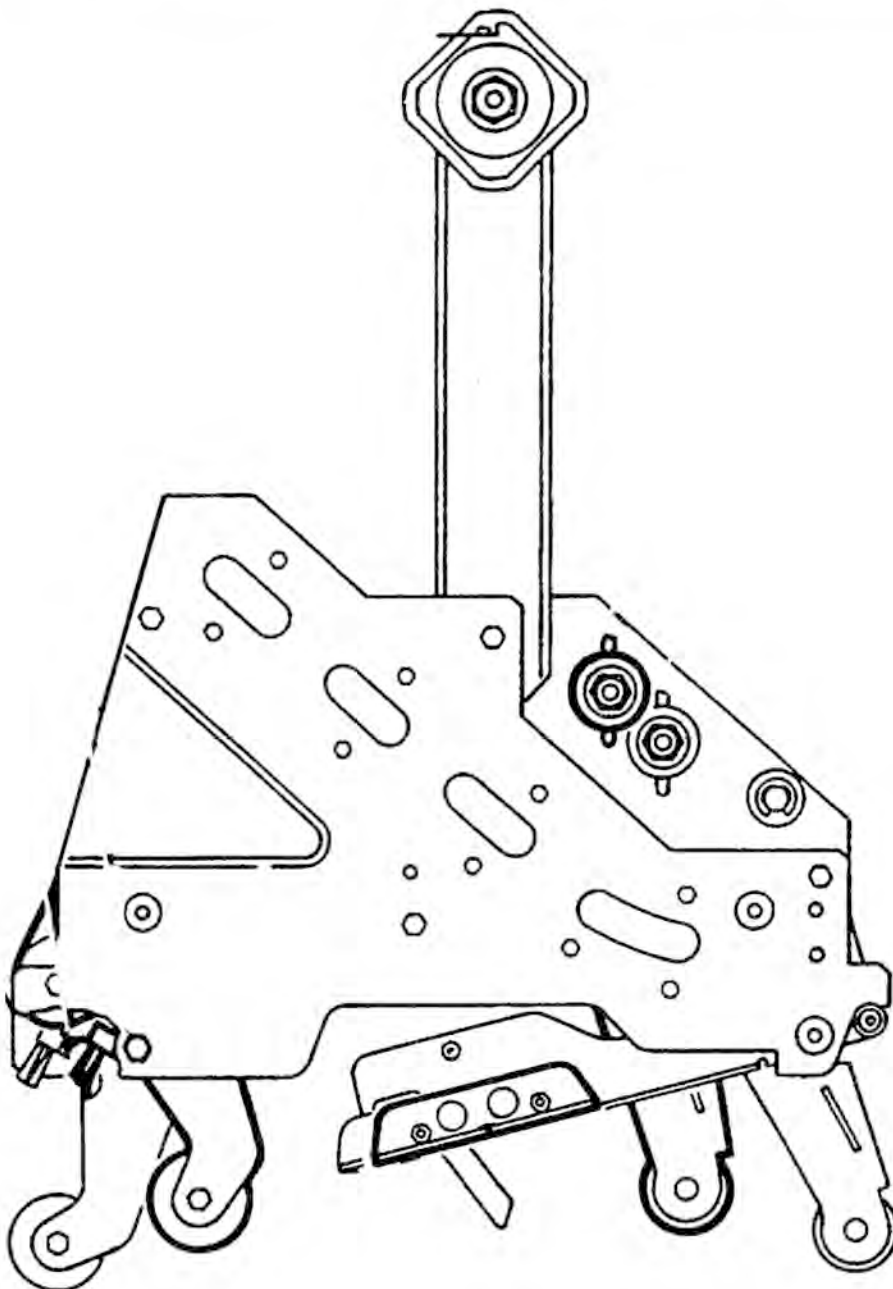
**AccuGlide™, Scotch™, and 3M-Matic™** are Trademarks of 3M, St. Paul, Minnesota 55144-1000

## Intended Use

The intended use of the **AccuGlide™ II STD 2 Inch Upper and Lower Taping Heads** is to apply a "C" clip of **Scotch™** brand pressure-sensitive film box sealing tape to the top and/or bottom center seam of regular slotted containers.

These taping heads are incorporated into most standard **3M-Matic™** case sealers. The compact

size and simplicity of the taping head also makes it suitable for mounting in box conveying systems other than **3M-Matic™** case sealers. This includes replacement of other types of taping, gluing or stapling heads in existing case sealing machines. The **AccuGlide™ II STD Taping Heads** have been designed and tested for use with **Scotch™** brand pressure-sensitive film box sealing tape.



**AccuGlide™ II STD 2 Inch Upper Taping Head, Type 39600**

## Important Safeguards



This safety alert symbol identifies important safety messages in this manual. **READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.**

**Important** – In the event the following safety labels are damaged or destroyed, **they must be replaced to ensure operator safety.** See Parts Drawing/Lists, pages 18-35 for label part numbers.

The **“Warning-Sharp Knife”** label warns operators and service personnel of the extremely sharp knife used to cut the tape at the end of the box sealing operation. The label shown in Figure 1-1 is located on the orange knife guard between the applying roller assembly and the buffing roller assembly. **Never operate taping heads with knife guard removed.**

Before working with the taping heads or loading/threading tape, refer to Figures 3-1 and 3-2 (page 6) to identify the knife location. **Keep hands out of these areas except as necessary to service the taping heads or to load/thread tape.**

The **“Tape Threading Label”**, shown in Figure 1-2, is attached to the left side of both the upper and lower taping heads. This label provides a convenient tape threading diagram. More detailed tape loading and threading information is provided in the “Operation” section this manual.

**Turn air and electrical supplies “Off” before servicing the taping heads.**



Figure 1-1 – Knife Warning Label

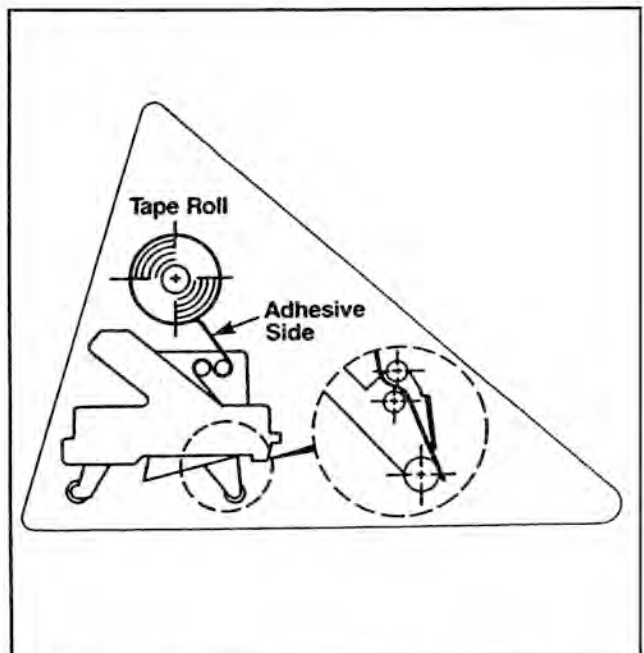


Figure 1-2 – Tape Threading Label

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## Specifications

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1. **Tape:**

For use with “**Scotch**” brand pressure-sensitive film box sealing tapes.

2. **Tape Width:**

36 mm or 1-1/2 inches minimum to 48 mm [2 inches] maximum.

3. **Tape Roll Diameter:**

Up to 405 mm [16 inches] maximum on a 76.2 mm [3 inch] diameter core.  
(Accommodates all system roll lengths of “**Scotch**” brand film tapes.)

4. **Tape Application Leg Length - Standard:**


70 mm  $\pm$  6 mm [2-3/4 inches  $\pm$  1/4 inch]

**Tape Application Leg Length - Optional:**

50 mm  $\pm$  6 mm [2 inches  $\pm$  1/4 inch] (See “Adjustments – Tape Leg Length”, page 13.)

5. **Box Size Capacities:**

For use with center seam regular slotted containers.

Minimum		Maximum	
Length –	150 mm [6 inches]		Unlimited
Height –	120 mm [4-3/4 inches] (most “3M-Matic” Case Sealers) 90 mm [3-1/2 inches] (with optional 2 inch leg length)		Limited by Case Sealer
Width –	115 mm [4-1/2 inches]		

When upper and lower taping heads are used on “**3M-Matic**” case sealers, refer to the respective instruction manual specifications for box weight and size capacities.

6. **Operating Rate:**

Conveyor speeds up to 0.40 m/s [80 FPM] maximum.

7. **Operating Conditions:**

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

**Important** – Taping heads should not be washed down or subjected to conditions causing moisture condensation on components.

7. **Taping Head Dimensions:**

Length	–	457 mm [18 inches]
Height	–	560 mm [22 inches] (with tape drum)
Width	–	105 mm [4-1/8 inches] (without mounting spacers)
Weight	–	Packaged: 8.2 kg [18 lbs.] Unpackaged: 7.2 kg [16 lbs.]

## Specifications (Continued)

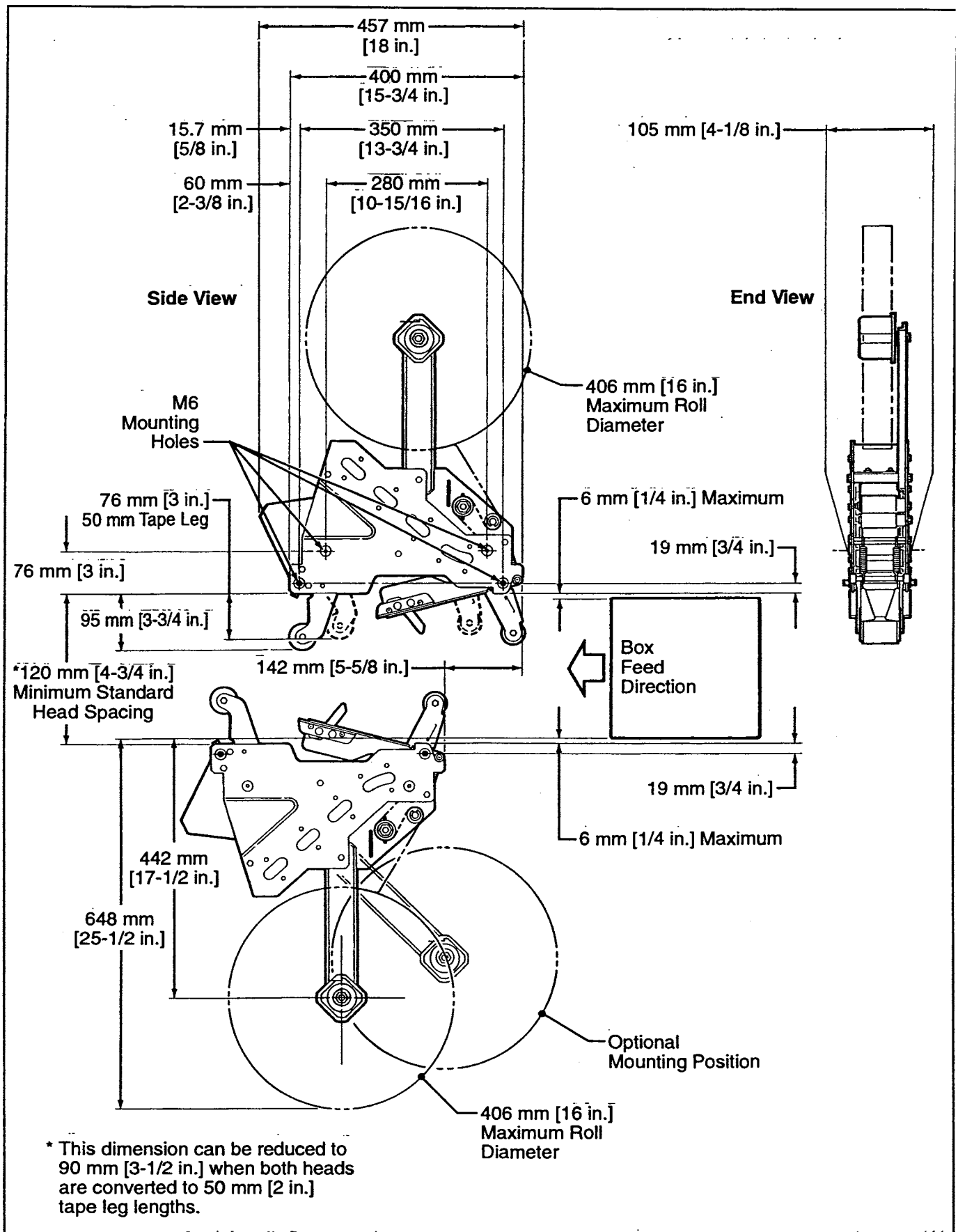


Figure 2-1 – Dimensional Drawing

## Installation



**WARNING** – Taping heads are equipped with an extremely sharp tape cut-off knife. The knife is located under the orange knife guard which has the "Warning – Sharp Knife" label. Before working with the taping heads or loading tape, refer to Figures 3-1 and 3-2 on page 6 and identify the knife location. Keep hands out of these areas except as necessary to service the taping heads.

### Receiving And Handling

After the taping head assembly has been unpackaged, examine the unit for damage that might have occurred during transit. **If damage is evident, file a damage claim immediately** with the transportation company and also notify your 3M Representative.

### Installation Guidelines

The taping head assembly can be used in converting existing or in custom made machinery. It can be mounted for top taping or bottom taping. Refer to box size specifications on page 3, and Figure 2-1 on page 4, for the following points in making such installations:



**CAUTION** – Taping head weighs approximately 7.2 kg [16 lbs] without tape. Remove tape roll before removing taping head from machine to minimize weight. Use proper body mechanics when installing or removing taping head.

1. The box conveying system must positively propel the box in a continuous motion, **not exceeding 0.40 m/s [80 feet per minute]**, past the taping head assembly since the box motion actuates the taping mechanism.
2. If a pusher or cleated conveyor is being used, steps should be taken in the conveyor design to **prevent the pusher from contacting the applying or buffing roller arms resulting in damage to the taping head.**

3. Figure 2-1 illustrates the typical mounting relationship for opposing taping head assemblies to allow taping of box heights down to 90 mm [3-1/2 inches]. **To tape box heights down to 70 mm [2-3/4 inches], the taping heads must be completely staggered so only one tape seal is being applied at one time.**

**Note** – AccuGlide™ II STD taping Heads are supplied with a buffing arm guard. This guard may have to be removed to install the taping head into some older design 3M-Matic™ case sealers. If this is the case, remove the four guard mounting screws, remove the guard and then install the taping head.

4. Mounting studs are provided with the taping head, but special installations may require alternate means for mounting.
5. Box hold-down or guide skis should be provided and the taping head mounted so that the side plates are 6 mm [1/4 inch] maximum away from the ski surface on which the box rides.

### Tape Leg Length

Taping heads are factory set to apply standard 70 mm [2-3/4 inch] tape legs. The heads can be converted to apply 50 mm [2 inch] tape legs if desired but both upper and lower heads must be set to apply the same tape leg length. See "Adjustments – Changing Tape Leg Length From 70 to 50 mm [2-3/4 to 2 Inches]", page 13.

Also, the conveyor speed at which the product moves through the taping heads, affects the leading and trailing tape leg length. See, "Adjustments – Leading Tape Leg Length Adjustment", page 13.

### Tape Width Adjustment

Taping heads are factory set to apply 48 mm [2 inch] wide tape. If it is necessary to align the tape or to apply narrower tapes, refer to "Adjustments – Tape Web Alignment", page 11 for set-up procedure.

## Operation

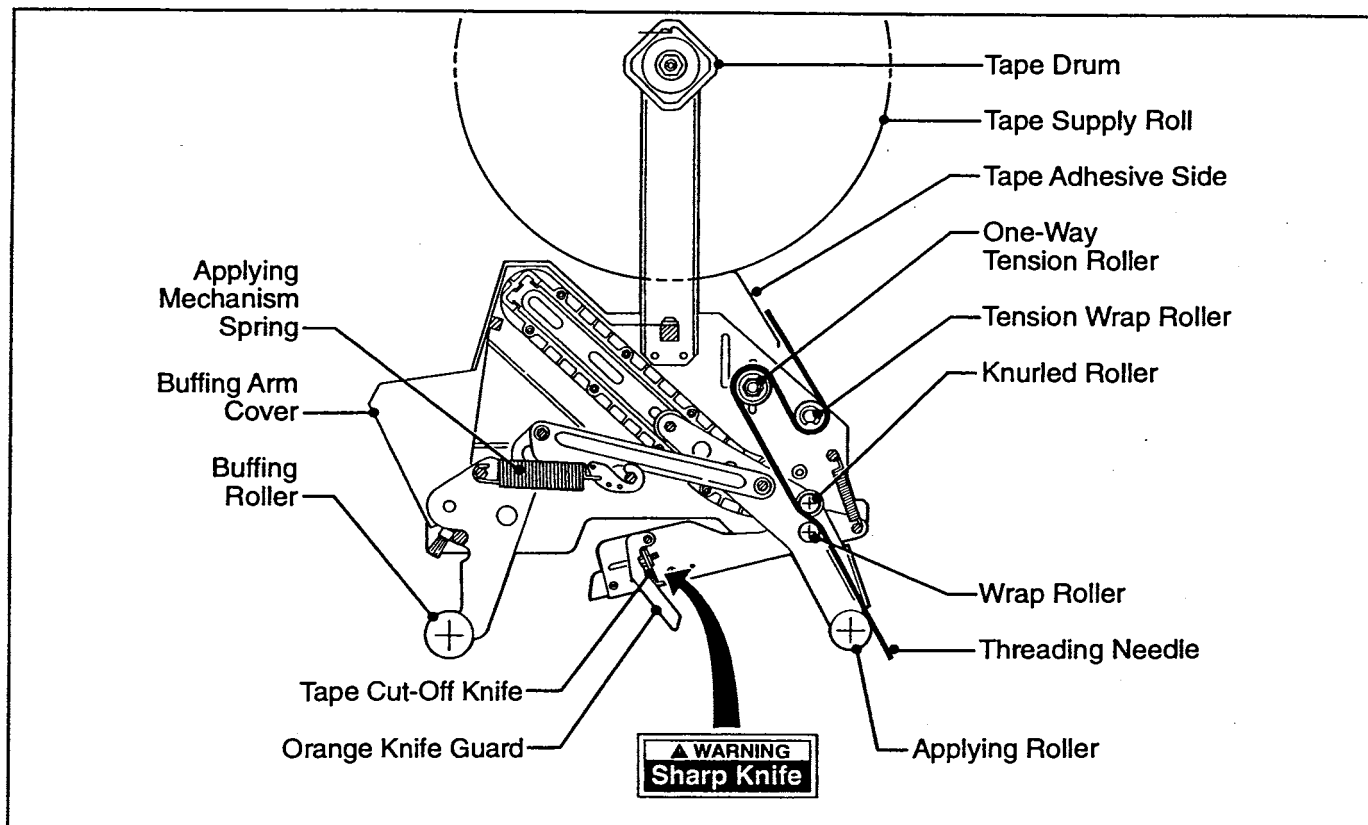


Figure 3-1 – Taping Head Components/Threading Diagram, Upper Head (Left Side View)

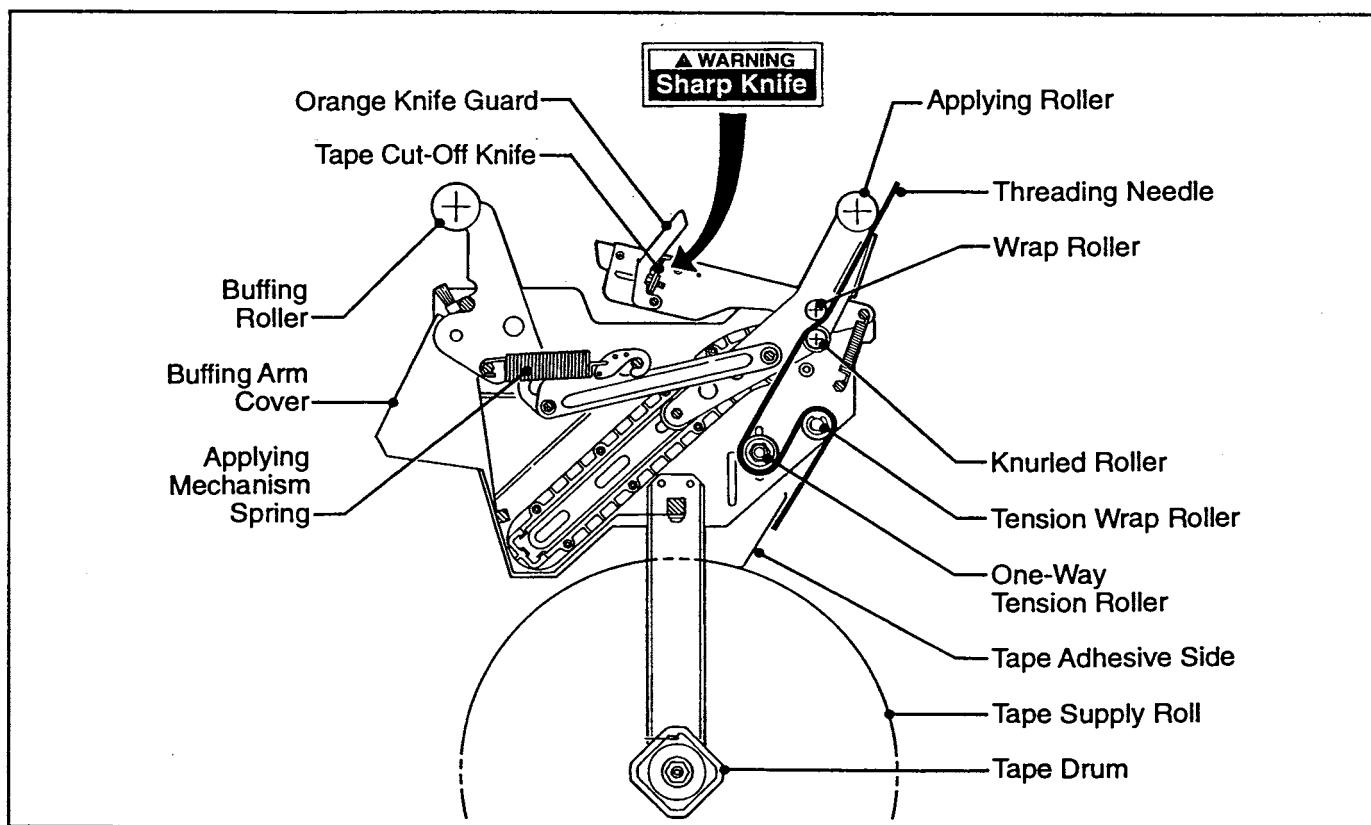


Figure 3-2 – Taping Head Components/Threading Diagram – Lower Head (Left Side View)



## Operation (Continued)



### WARNINGS

1. Turn air and electrical supplies off and disconnect before servicing taping heads.
2. Never attempt to work on the taping heads or load tape when the box drive system is running.
3. The taping heads are equipped with an extremely sharp cut-off knife. Before working with the taping heads or attempting to load/thread tape, refer to Figures 3-1 and 3-2 and identify the knife location. Keep hands out of these areas except as necessary to service the taping heads.
4. Failure to comply with these warnings can result in severe personal injury and/or equipment damage.

It is recommended that the detailed instructions and sketches in this manual be referred to the first few times the taping head is loaded/threaded until the operator becomes thoroughly familiar with the tape loading operation.



**CAUTION – Taping head weighs approximately 7.2 kg [16 pounds] without tape. Use proper body mechanics when removing or installing taping head.**

### Tape Loading – Upper Taping Head

1. Raise the upper taping head to a convenient working position.
2. Use the plastic threading needle (provided) and follow the loading procedures (Figures 3-3 to 3-5) to complete the tape threading.

If threading needle is not available, install tape roll and fold a tape tab approximately 455 mm [18 in] long on leading edge of tape for threading.

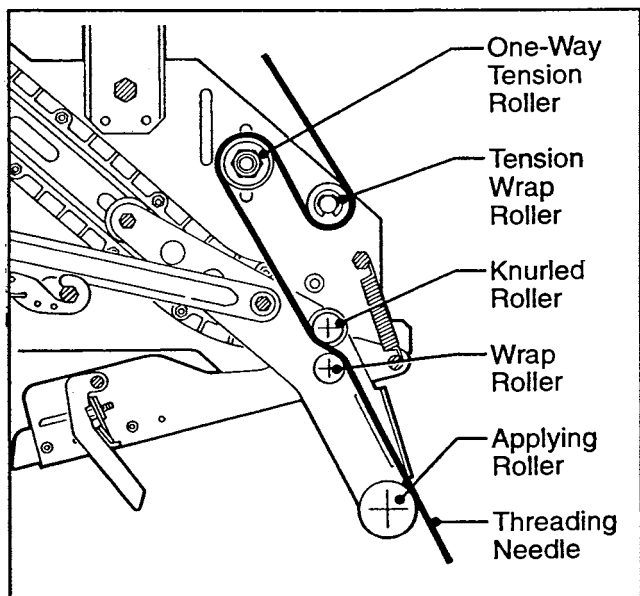
### Tape Loading – Lower Taping Head

1. For ease in loading, first remove the lower taping head from the conveyor bed.

2. The lower taping head is loaded and threaded in the same manner as the upper head. Follow the upper taping head tape loading/threading procedure.

**Figure 3-3**

Insert threading needle through rollers in direction indicated by arrows.

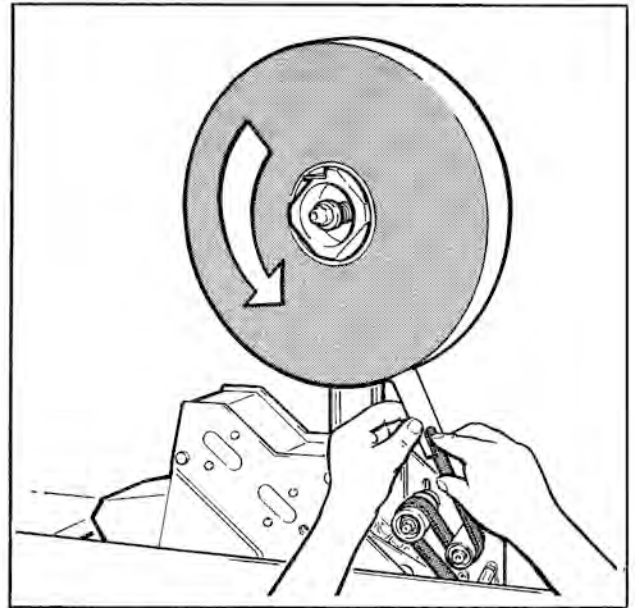


**Figure 3-3 – Tape Loading/Threading**

## Operation (Continued)

**Figure 3-4**

Place tape roll on tape drum to dispense tape with adhesive side forward. Seat tape roll fully against back flange of drum. Adhere tape lead end to threading needle as shown.



**Figure 3-4 – Tape Loading/Threading**

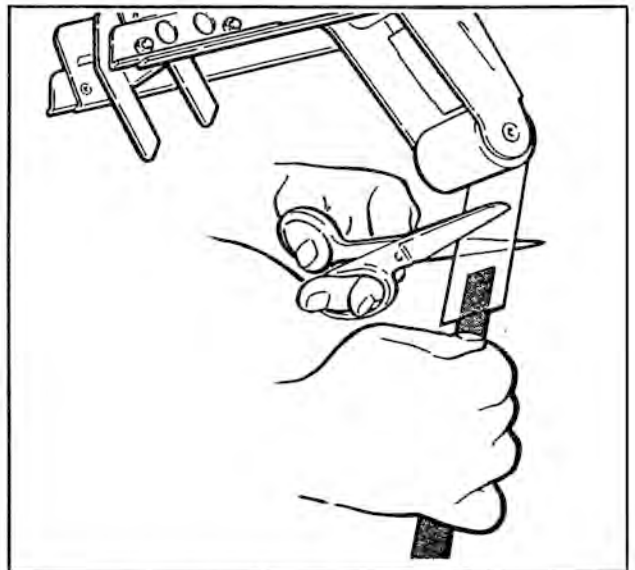
**Figure 3-5**



**WARNING** – Use care when working near tape cut-off knife as knife is extremely sharp. If care is not taken, severe personal injury 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 at applying roller.



**Figure 3-5 – Tape Loading/Threading**

## Maintenance



### WARNINGS

1. Turn air and electrical supplies off and disconnect before beginning maintenance.
2. Use care when working near tape cut-off knife as knife is extremely sharp.
3. Failure to comply with these warnings could result in severe personal injury or equipment damage.

The AccuGlide™ STD II 2 Inch Taping Head has been designed for long, trouble free service. The taping head will perform best when it receives routine maintenance and cleaning. Taping head components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the head or to the product.

#### Knife Replacement, Upper and Lower Taping Heads – Figure 4-1

1. Loosen, but do not remove, the knife screws (A). Remove and discard old knife.
2. Mount the new knife (B) with the **beveled side away** from the knife holder.
3. Bottom the knife slots against the screws. (This will position the knife at the correct angle.) Tighten the knife screws to secure the knife.

**Note** – Check the knife position to insure proper clearance between knife and guard by slowly pivoting the knife guard back.

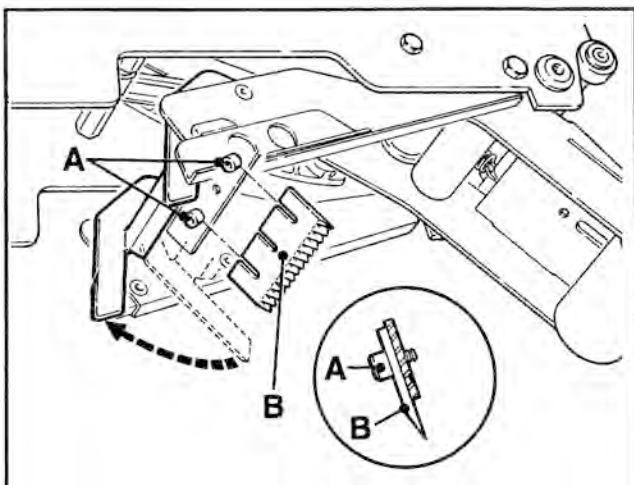


Figure 4-1 – Knife Replacement

#### Knife Guard

The knife guard covers the knife whenever a box is not being taped. Periodically check to be sure the knife guard is functioning properly and returning to cover the knife. Replace any defective parts.

#### Knife Oiler Pad

The taping heads are equipped with a felt oiler pad that has been pre-lubricated at the factory to provide a film of oil on the cutting edge of the knife to reduce adhesive build-up. Apply SAE #30 non-detergent oil as needed. **Saturate felt oiler pad.**

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

#### Cleaning

Regular slotted containers produce a great deal of dust and paper chips when conveyed through taping heads. If this dust is allowed to build-up on the heads, it can cause wear on the moving parts. Excessive dirt build-up should be wiped off with a damp cloth. Cleaning should be done **once per month**, depending on the number and type of boxes used. If the boxes used are dirty, or if the environment in which the heads operate is dusty, cleaning on a more frequent basis may be necessary.

**Note** – Never attempt to remove dirt from taping heads by blowing it out with compressed air. This can cause the dirt to be blown inside the components onto sliding surfaces. Dirt in these areas can cause serious equipment damage. Never wash down or subject taping heads to conditions causing moisture condensation on components. Serious equipment damage could result.

## Maintenance (Continued)



### WARNINGS

1. Turn air and electrical supplies off and disconnect before beginning maintenance.
2. Use care when working near tape cut-off knife as knife is extremely sharp.
3. Failure to comply with these warnings could result in severe personal injury or equipment damage.

### Lubrication

Like most other equipment, the taping head must be properly lubricated to insure long, trouble free service.

Figure 4-2 illustrates points which should be lubricated **every 3 months or 150,000 machine cycles**, whichever comes first. Lubricate the rotating and pivoting points noted by the arrows (➡) with SAE #30 non-detergent oil. At the same time, a small amount of multipurpose grease should be applied to the guides and to the end of each spring where the loop is secured at an eyelet, post, or hole noted by arrows (⇨).

**Note** – 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 4-2 – Lubrication Points, Upper and Lower Taping Heads

### Applying/Buffering Roller Replacement

Replacing roller requires removal of shaft and mounting screws. With no area on the shaft to grip, the shaft often turns when attempting to remove the second screw.

To ease removal of second screw, a 4 mm hex socket has been provided at the bottom of the threads in both ends of the shaft. Insert a 4 mm hex key wrench into this socket after removing one screw to hold the shaft for removal of the second screw. See Figure 4-3.

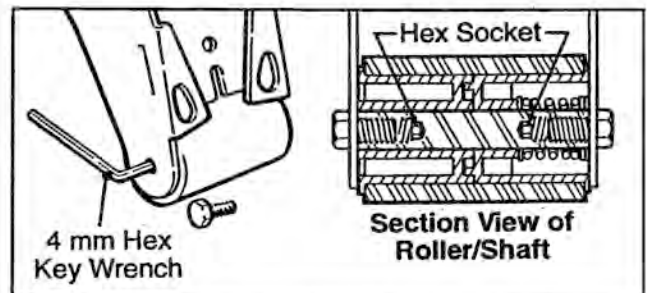


Figure 4-3 – Section View of Roller Shaft

## Adjustments



**WARNING** – Turn air and electrical supplies off and disconnect before beginning adjustments. Failure to comply with this warning could result in severe personal injury and/or equipment damage.

### Tape Web Alignment – Figure 5-1

The STD tape drum assembly is pre-set to accommodate 48 mm [2 inch] wide tape. The tape drum assembly 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:

1. Loosen the locking hex nut behind tape drum bracket on tape drum shaft. Use an adjustable wrench or 25 mm open end wrench.
2. Turn tape drum shaft in or out to center the tape web (use 5 mm hex wrench).
3. Tighten locking hex nut to secure the adjustment.

No other components require adjustment for tape web alignment.

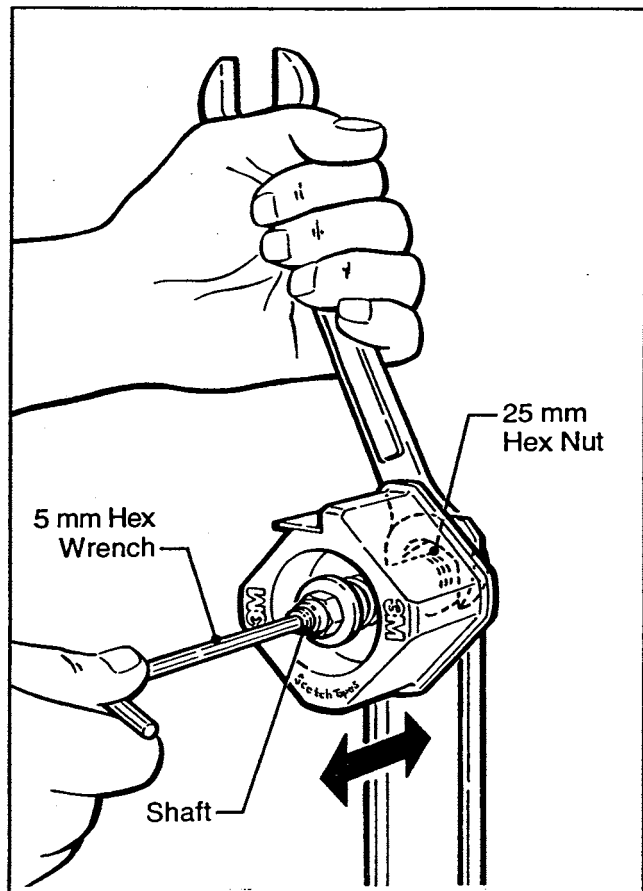


Figure 5-1 – Tape Web Alignment

### Tape Drum Friction Brake – Figure 5-2

The tape drum friction brake on each taping head is **pre-set** for normal operation to prevent tape roll over travel. Should tension adjustment be required, **turn the self-locking nut on the shaft to vary compression of the spring**. Turn the nut **clockwise to increase** the braking force, and **counterclockwise to decrease** the braking force. Adjust brake to minimum tension to prevent excessive tape roll over travel.

**Note** – Excess braking force will cause poor tape application and may lead to tape tabbing on the trailing tape leg.

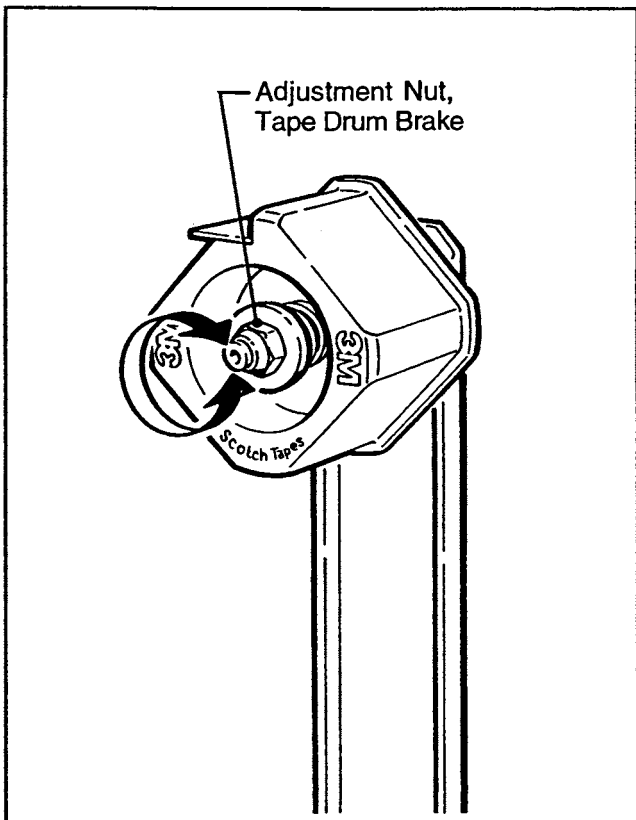


Figure 5-2 – Tape Drum Friction Brake

## Adjustments (Continued)



**WARNING** – Turn air and electrical supplies off and disconnect before beginning adjustments. Failure to comply with this warning could result in severe personal injury and/or equipment damage.

### Applying Mechanism Spring

To obtain access to the spring, remove the taping head cover (four mounting screws). Replace cover when finished.

The applying mechanism spring, shown in Figures 3-1 and 3-2, controls applying and buffing roller pressure on the box and returns the mechanism to the reset position. The spring pressure is pre-set, as shown in Figure 5-3A for normal operation, but is adjustable.

If a tape gap appears on the trailing surface of the box increase spring pressure. If the front of the box is being crushed by the applying roller decrease spring pressure.

Removing the spring end loop from the spring holder and placing loop in other holes provided, as shown in Figure 5-3B, will adjust the spring pressure.

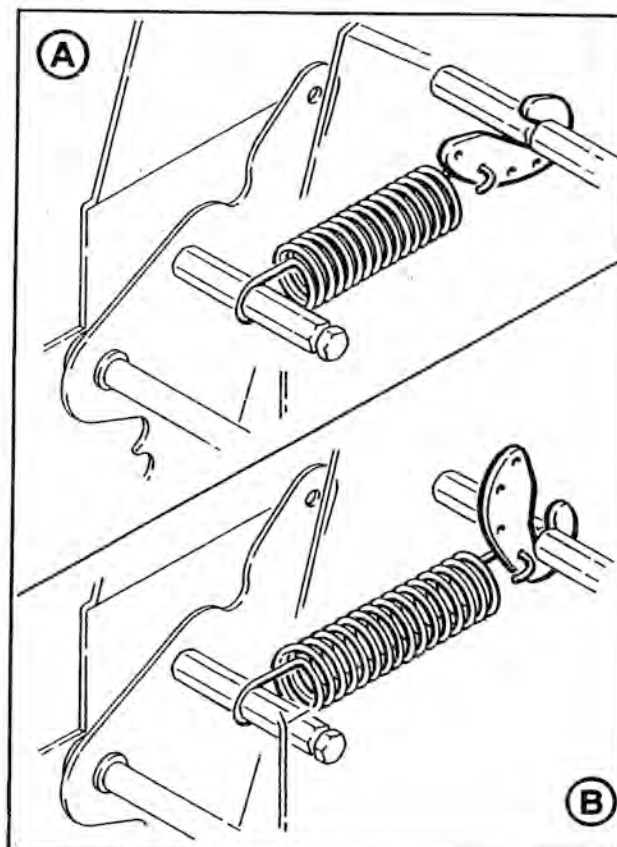


Figure 5-3 – Applying Mechanism Spring

### One-Way Tension Roller

Figure 5-4

The one-way tension roller is factory set. When replacing this assembly, the roller must have 0,5 kg [1 lb.] minimum tangential force when turning.

To Adjust Tension:

1. Wrap a cord or small strap (non-adhesive) 4-6 turns around the tension roller.
2. Attach a spring scale to the end of the cord or strap.
3. Turn the adjusting nut with the socket wrench provided, until a force of approximately 0.5 kg to 0.9 kg [1 to 2 lbs.] is required to turn the roller by pulling on the spring scale.

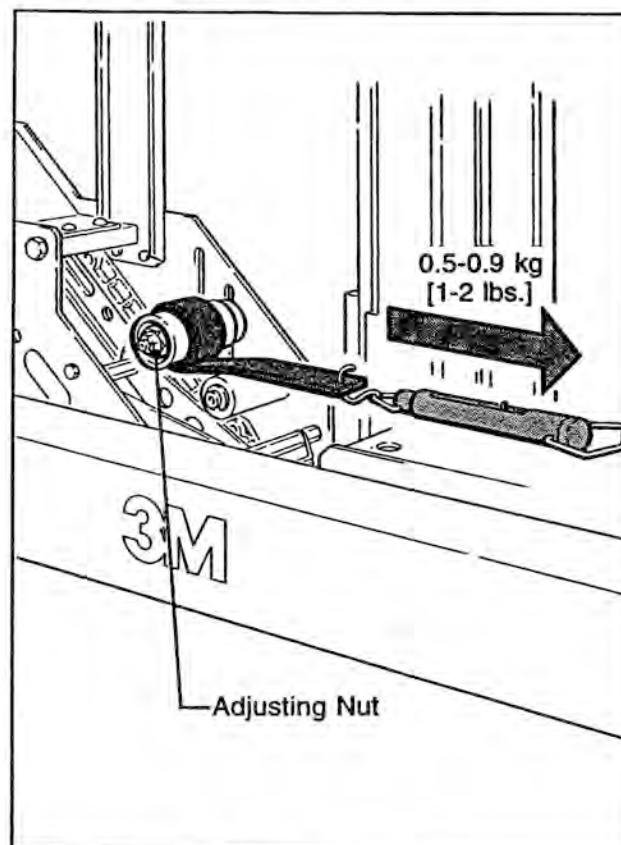


Figure 5-4 – One-Way Tension Roller



## Adjustments (Continued)



**WARNING** – Turn air and electrical supplies off and disconnect before beginning adjustments. Failure to comply with this warning could result in severe personal injury and/or equipment damage.

### Tape Leg Length



**WARNING** – Use care when working near tape cut-off knife as knife is extremely sharp. If care is not taken, severe injury could result.

#### LEADING TAPE LEG LENGTH ADJUSTMENT – Figure 5-5

The one-way tension roller position is adjustable to control the leading tape leg length.

Moving this roller farther away from the box top or bottom surface will decrease the leading leg length. Moving it closer to the box top or bottom surface will increase the leading leg length.

#### CHANGING TAPE LEG LENGTH FROM 70 to 50 mm [2-3/4 TO 2 INCHES] – Figure 5-6

**Note** – When changing tape leg length, both upper and lower heads must be adjusted to apply the same leg lengths.

1. Remove and retain two hex head screws and remove the brush from normal position "A" on side frame.
2. Remount and secure brush in position "A-A" on side frame forward of normal location using original fasteners.
3. Remove cut-off bracket extensions from position "B".
4. Remount cut-off bracket extensions in forward position "B-B".
5. Remove and retain the one-way tension roller assembly from slot "C" in frame.
6. Remount tension roller assembly near top of slot "C-C" in frame using original fasteners.
7. Adjust tension roller according to "Leading Tape Leg Length Adjustment" above.

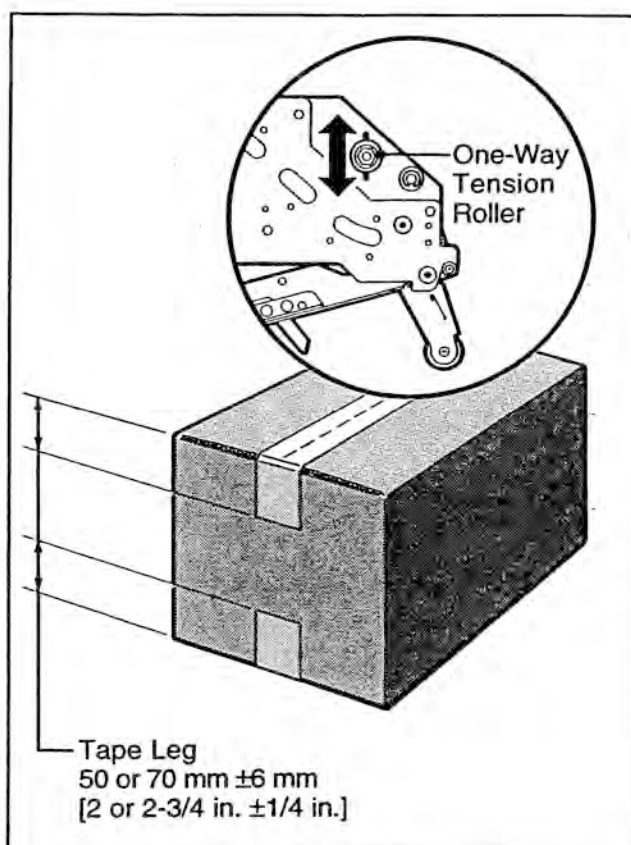


Figure 5-5 – Leading Tape Leg Length

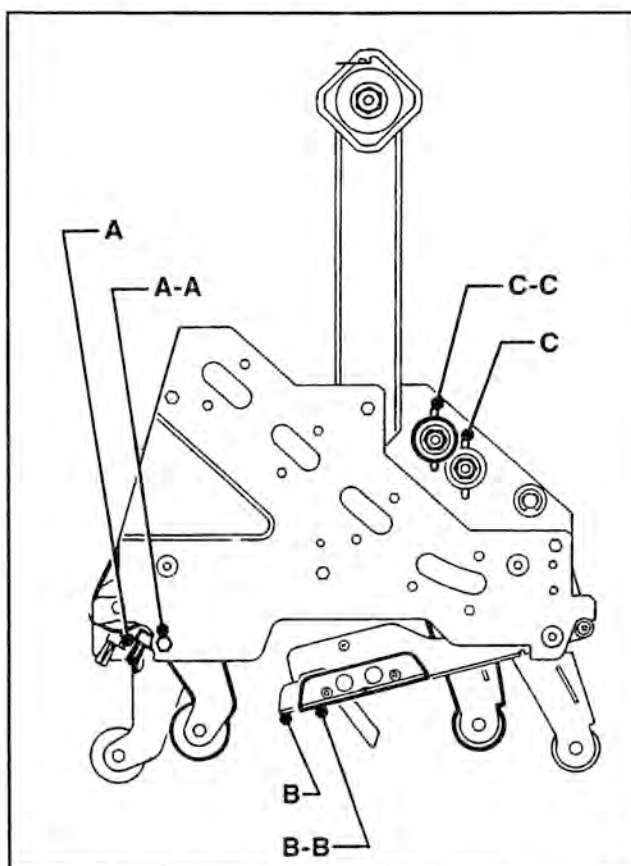


Figure 5-6 – Changing Tape Leg Length

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## Troubleshooting

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### Troubleshooting Guide

Problem	Cause	Correction
The tape leg on the front of the case is too long	The tape is threaded incorrectly	The tape must go around the wrap roller before going around the one-way tension roller
	The tape tension is too low	Adjust the one-way tension roller
	The knurled roller drags	Check for adhesive build-up between the knurled roller and its shaft. Clean and lubricate shaft. Remove all lubricant from roller surfaces.
	Tape tracks to one side or drags on the support tabs of applying frame	Adjust the tape web alignments
	The one-way tension roller is not correctly positioned	Position the roller in its mounting slot so that the tape extends just beyond the centerline of the applying roller
	Taping head is not set up properly	Check leg length adjustments
The knife does not cut tape or the tape end is jagged or shredded	The knife is dull and/or has broken teeth	Replace the knife
	Tape tension is insufficient	Increase tape tension by adjusting the one-way tension roller
	Adhesive has built up on the knife	Clean and adjust the knife
	The knife is not positioned properly	Make sure the knife is bottomed out against the mounting bolts
	The knife is dry	Lubricate the knife oiler pad on the knife guard
	The knife is in backwards	Mount the knife so that the beveled edge is away from the entrance of the head
	One or both cutter springs are missing or stretched	Replace the defective spring(s)
	Tension roller surface is not fully contacting the taping head frame	Make sure one-way bearing is below the surface of the tension roller. If not, press bearing further into roller or replace roller.

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(Continued)

## Troubleshooting (Continued)

### Troubleshooting Guide

Problem	Cause	Correction
Tape is tabbing on the trailing leg on the back of the box	There is excess tension on the tape drum assembly and/or the one-way tension roller assembly	Adjust the one-way tension roller and/or the tape drum assembly
	Rollers in the tape path do not rotate freely	Clean adhesive deposits from the surface, ends, and shafts of the rollers. Then lubricate roller shafts. Remove all lubricant from roller surfaces.
	The knife is not cutting tape properly	Refer to tape cutting problems
	The tape is threaded incorrectly	Rethread the tape
	Applying mechanism spring has too little tension	Move spring hook to next tighter hole
The tape end does not stay in application position in front of the applying roller	The tape is incorrectly threaded	Rethread the tape
	Flanged knurled roller overruns on return of applying mechanism to its rest position	Adjust tension roller position in mounting slot to lengthen tape leg
	Applying roller overruns on return of applying mechanism to its rest position	There should be a slight drag when rotating the applying roller. If not, check friction springs and/o friction pins and replace if necessary
	The one-way tension roller is not correctly positioned	Position roller in its mounting slot so that tape end extends beyond centerline of applying roller
	The one-way tension roller is defective	Replace the one-way tension roller
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps not of equal length	Check box specifications

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## Spare Parts/Service Information

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### Recommended Spare Parts

A set of spare parts that will periodically require replacement due to normal wear is supplied with the taping heads. The set includes the following which should be reordered when used to keep the taping heads in production:

#### AccuGlide™ II STD 2 Inch Upper Taping Head

Qty.	Ref. No.	Part Number	Description
4	2879-22	78-8076-4500-3	Stud – Mounting
1	2881-10	78-8070-1274-1	Spring – Upper Extension (Silver)
1	2883-2	78-8017-9173-8	Knife – 65 mm/2.56 Inch
2	2883-12	78-8052-6602-6	Spring – Cutter
1	–	78-8076-4726-4	Tool – Tape Threading

#### AccuGlide™ II STD 2 Inch Lower Taping Head

Qty.	Ref. No.	Part Number	Description
1	2883-2	78-8017-9173-8	Knife – 65 mm/2.56 Inch
2	2883-12	78-8052-6602-6	Spring – Cutter
4	2885-22	78-8076-4500-3	Stud – Mounting
1	2886-10	78-8070-1273-3	Spring – Lower Extension (Black)
1	–	78-8076-4726-4	Tool – Tape Threading

In addition to the above set of spare parts supplied with the taping head, it is suggested that the following spare parts be maintained which will require replacement under normal wear of the taping head.

Qty.	Ref. No.	Part Number	Description
1	2880-15	78-8057-6179-4	Roller – Applying
1	2881/2886-5	78-8057-6178-6	Roller – Buffing
1	2883-18	78-8113-7030-9	Spring – Torsion

### Replacement Parts and Service

Refer to the first page of this instruction manual “**Replacement Parts and Service Information**”.

## Replacement Parts Illustrations and Parts Lists

### AccuGlide™ II STD 2 Inch Upper Taping Head, Type 39600

### AccuGlide™ II STD 2 Inch Lower Taping Head, Type 39600

1. Refer to **Taping Head Assemblies** Figure, page 19 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 the first page of this instruction manual "**Replacement Parts and Service Information**" for replacement parts ordering information.

**IMPORTANT** – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on a special order basis. Contact 3M/Tape Dispenser Parts to confirm item availability.