

# 3M

## Instructions and Parts List

# 3M-Matic™

## 120a3

Type 19700

# Adjustable Case Sealer

with

# AccuGlide™ II

# Taping Heads

Serial No. \_\_\_\_\_  
For reference, record machine serial number here.



## Important Safety Information

Read "Important Safeguards", pages 3-5 and also operating "Warnings", page 16 BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.

## Spare Parts

It is recommended you immediately order the spare parts listed on page 31, Section I and page 17, Section II. These parts are expected to wear through normal use and should be kept on hand to minimize production delays.

**3M Packaging Systems Division**

3M Center, Building 220-8W-01  
St. Paul, MN 55144-1000

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Litho in U.S.A.

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## To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch™ brand equipment you ordered. It has been set up and tested in the factory with "Scotch" brand tapes. If technical assistance or replacement parts are needed, call or Fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

### Technical Assistance:

3M-Matic™ Helpline – 1-800/328 1390. Please provide the customer support coordinator with the machine number, machine type/model and serial number. If you have a technical question that does not require an immediate response, you may Fax it to 715/381 0248.

### Replacement Parts and Additional Manuals

Order parts by part number, part description and quantity required. Also, when ordering parts and/or additional manuals, include machine name, number and type. A parts order form is provided at the back of this manual.

#### **3M/Tape Dispenser Parts**

**241 Venture Drive**

**Amery, WI 54001-1325**

**1-800/344 9883**

**FAX# 715/268 8153**

**Minimum billing on parts orders will be \$25.00. Replacement part prices available on request.**

**\$10.00 restocking charge per invoice on returned parts.**

Note : Outside the U.S., contact the local 3M subsidiary for parts ordering information.



#### **3M Packaging Systems Division**

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## To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch™ brand equipment you ordered. It has been set up and tested in the factory with "Scotch" brand tapes. If any problems occur when operating this equipment, and you desire a service call, or phone consultation, call, write or Fax the appropriate number listed below.

Included with each machine is an Instructions and Parts List manual.

**SERVICE, REPLACEMENT PARTS AND ADDITIONAL MANUALS  
AVAILABLE DIRECT FROM:**



Order parts by part number, part description and quantity required. Also, when ordering parts and/or additional manuals, include machine name, number and type.

**3M**

**3M Packaging Systems Division**

3M Center, Building 220-8W-01  
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# Instruction Manual

## 120a3 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 3 Inch Taping Heads.

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<b>Table of Contents</b>	<b>Page</b>
<b>Section I – 120a3 Adjustable Case Sealer</b>	
Intended Use .....	1
Equipment Warranty and Limited Remedy .....	2
120a3 Contents .....	2
Important Safeguards .....	3 - 5
Specifications .....	7 - 9
Installation and Set-Up .....	10 - 13
Receiving and Handling .....	10
Machine Set-Up .....	10 - 13
Packaging and Separate Parts .....	10 - 12
Taping Heads .....	13
Box Size Capacity of Case Sealer .....	13
Initial Start-Up of Case Sealer .....	13
Operation .....	15 - 19
Switches and Controls .....	16
Tape Loading/Threading .....	16
Operating "Warnings" .....	16
Machine Adjustments For Box Size .....	17 - 18
Box Sealing .....	19
Box Jams .....	19
Maintenance .....	21 - 23
Cleaning .....	21
Lubrication .....	21
Circuit Breaker .....	22
Drive Belts .....	22 - 23

(Table of Contents continued on next page)

<b>Table of Contents (Continued)</b>	<b>Page</b>
Adjustments .....	24
Drive Belt Tension .....	24
Taping Head Adjustments .....	24
Special Set-Up Procedure .....	25 - 27
Changing Tape Leg Length .....	25 - 26
Outer Column Re-Positioning .....	26 - 27
Troubleshooting .....	29
Electrical Diagram .....	30
Replacement Parts and Service Information .....	31
Spare Parts .....	31
Label Kit .....	31
Tool Kit .....	31
Options/Accessories .....	32
Replacement Parts Illustrations and Parts Lists ..... (Yellow Section)	33 - 57

## **Section II – AccuGlide™ II STD 3 Inch Taping Heads**

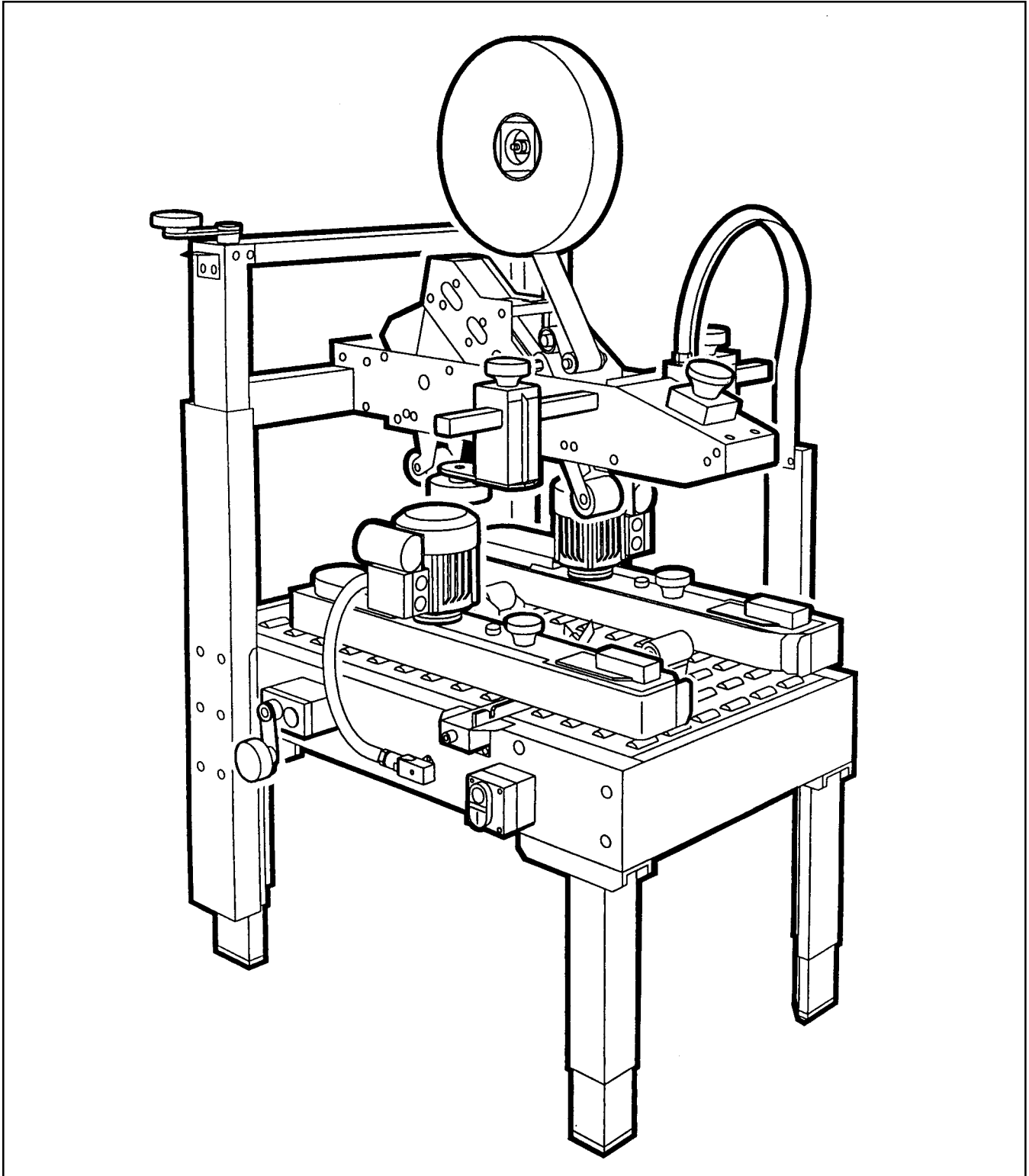
(See Section II for Table of Contents)

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## Intended Use

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The intended use of the **3M-Matic™ 120a3 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™ 120a3 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™ 120a3 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 – 120a3 Adjustable Case Sealer**

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- (1) 120a3 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.

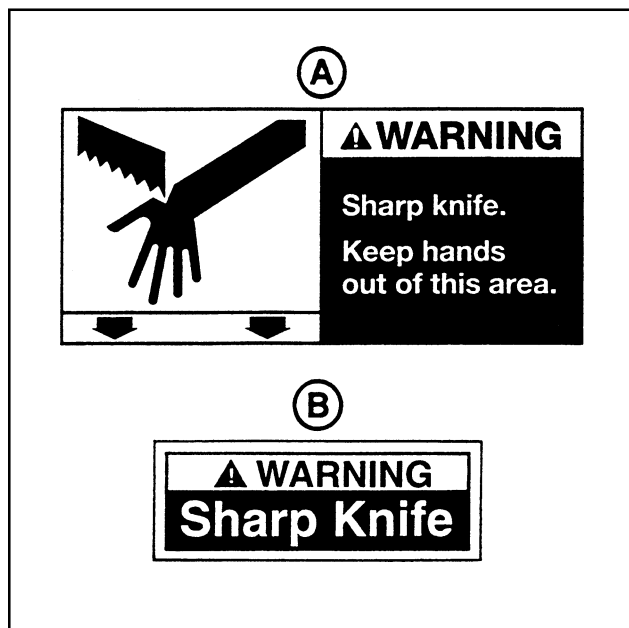


Figure 1-1 – Knife Warning Labels

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 "**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.

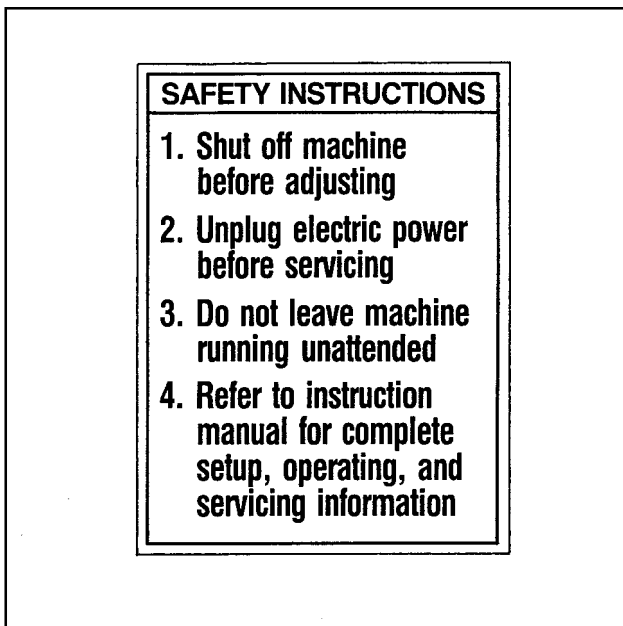


Figure 1-5 – Safety Instructions Label

The 120a3 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.

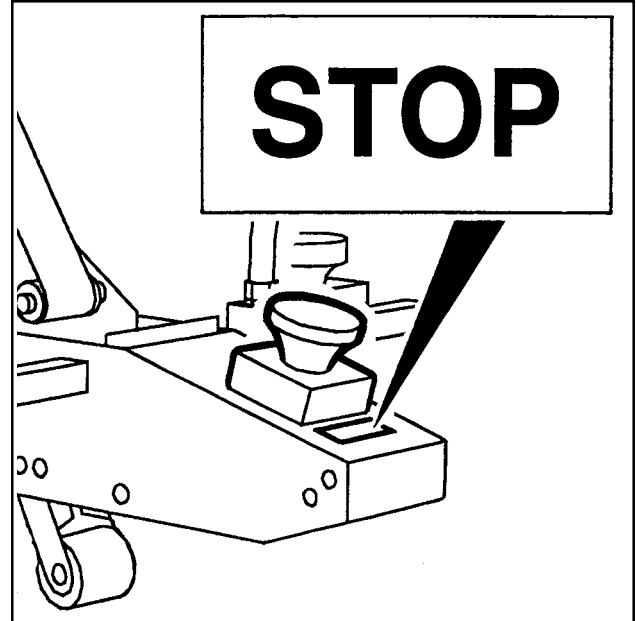


Figure 1-6 – Stop Label

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.

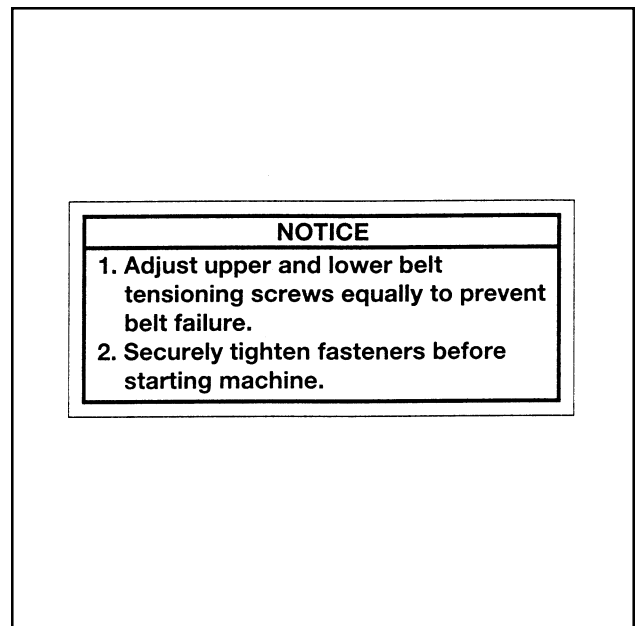
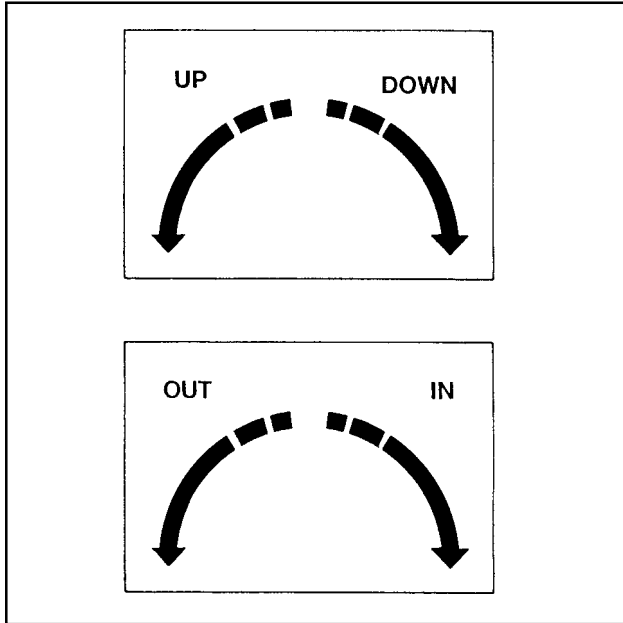


Figure 1-7 – Operating Notice Label

## 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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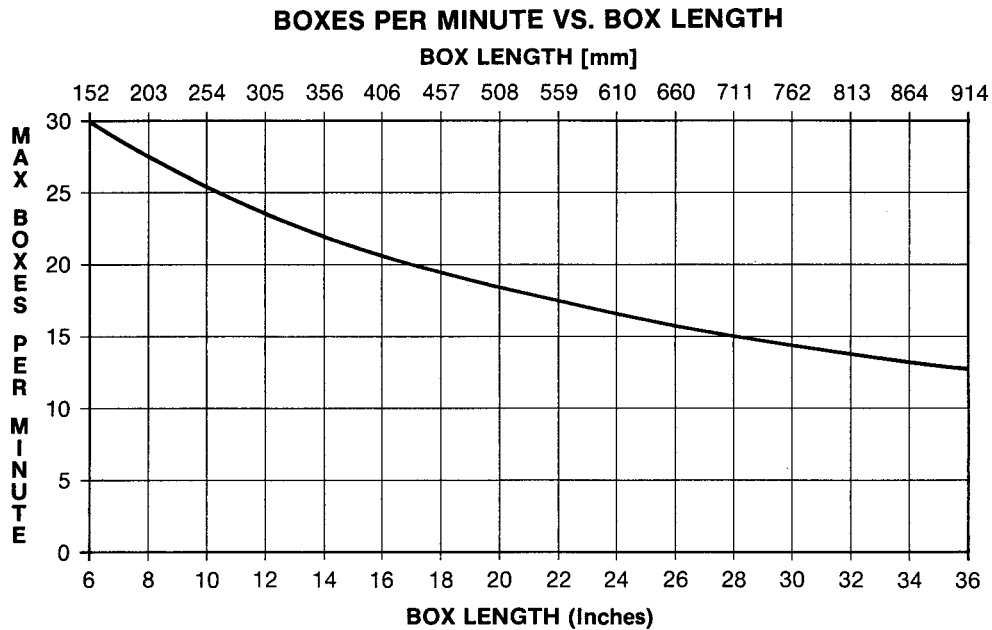
### 1. Power Requirements:

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:

48 mm [2 inch] minimum to 72 mm [3 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 ± 6 mm [2-3/4 inch ±1/4 inch]

### Tape Application Leg Length – Optional:

50 mm ± 6 mm [2 inch ±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 23 kg [50 lbs].

B. Box Size:	Minimum	Maximum
Length –	150 mm [6.0 inch]	Unlimited
Width –	140 mm [5.50 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:

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

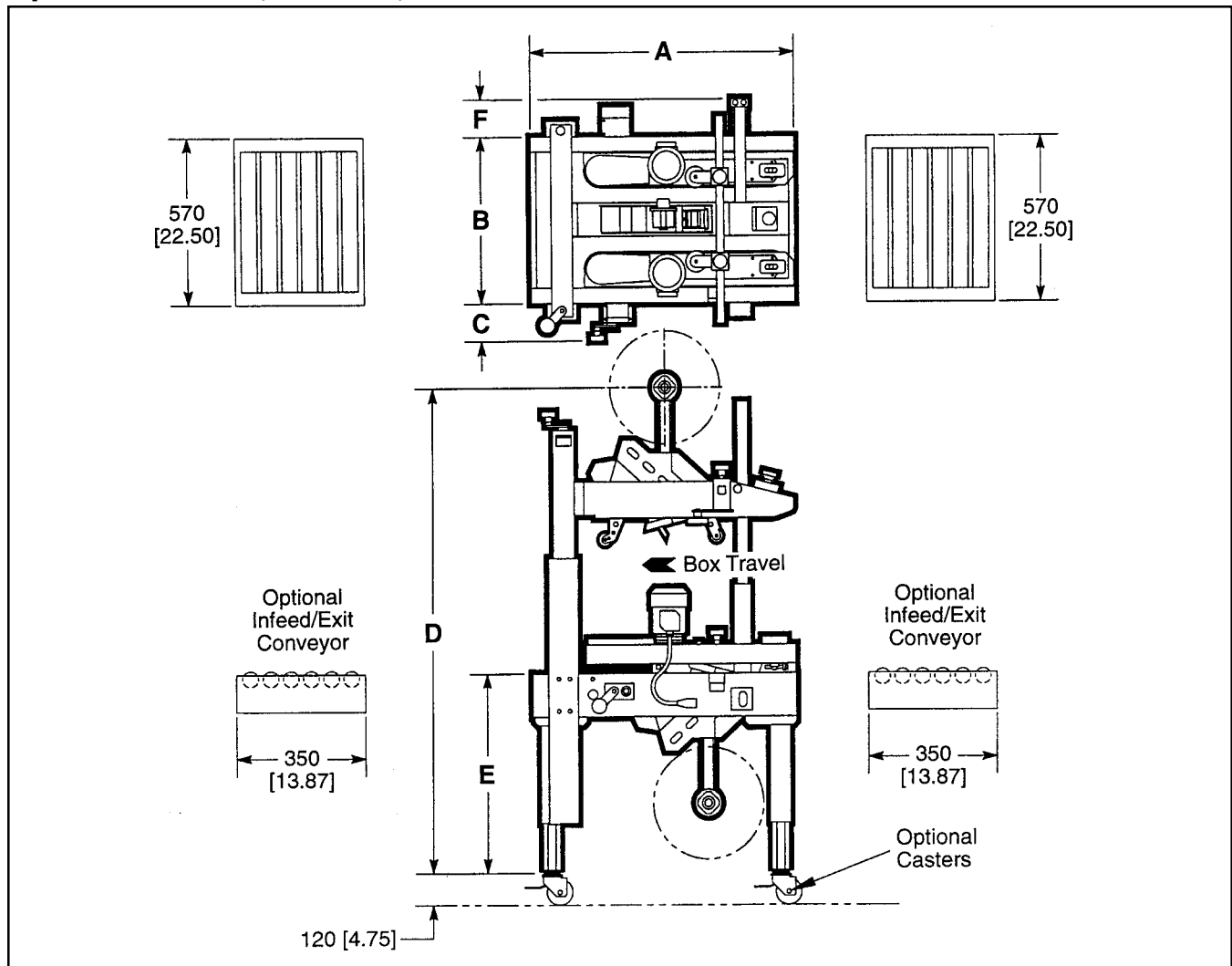
If any of the above criteria are not met boxes should be test run to assure performance.

### 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.

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## Installation and Set-Up

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### 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 2-1B 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)

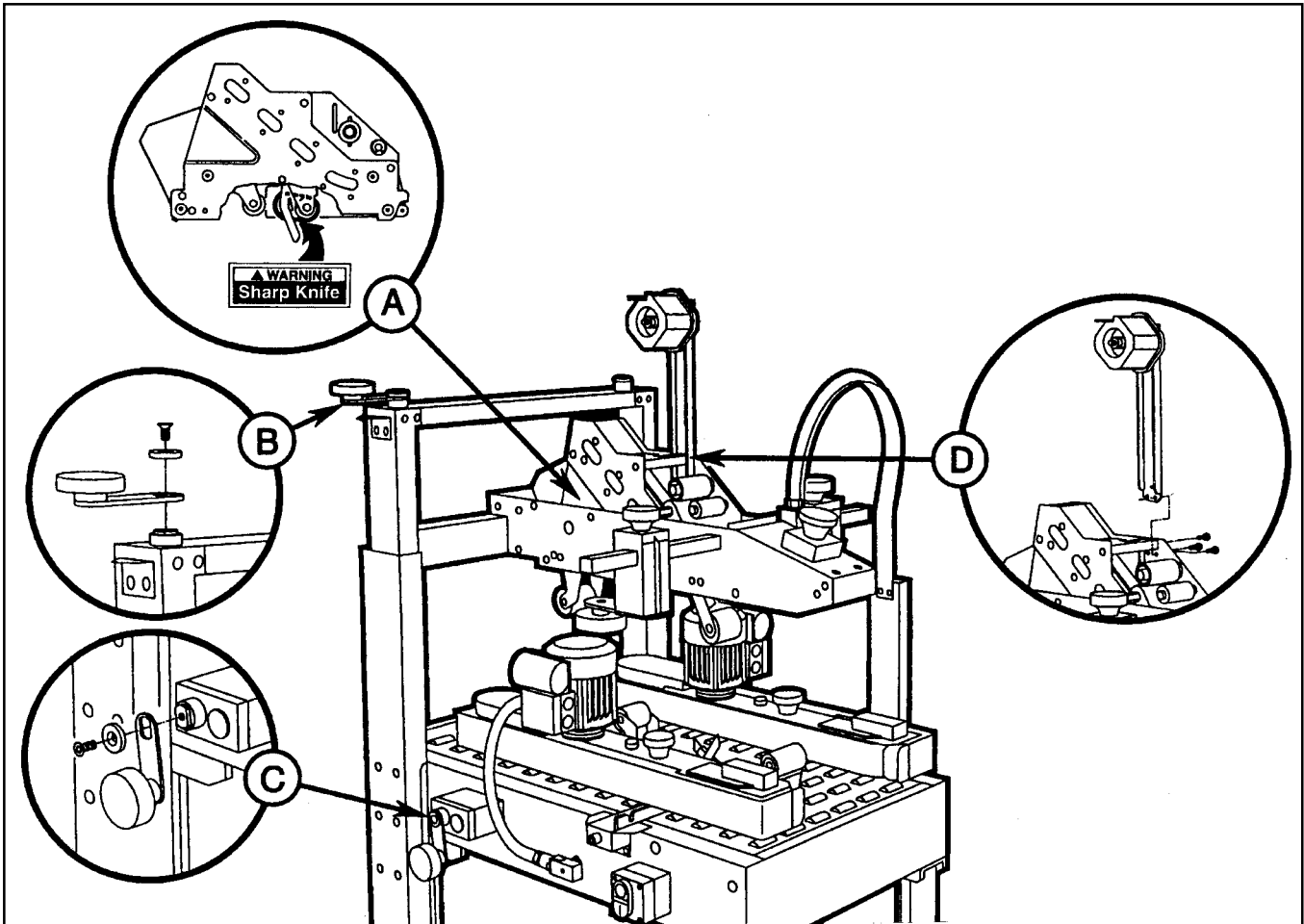


Figure 2-1 – Machine Set-Up

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

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.



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

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

- a. Use appropriate material handling equipment and blocking techniques to raise the machine frame to allow adequate leg adjustment.
- b. 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)

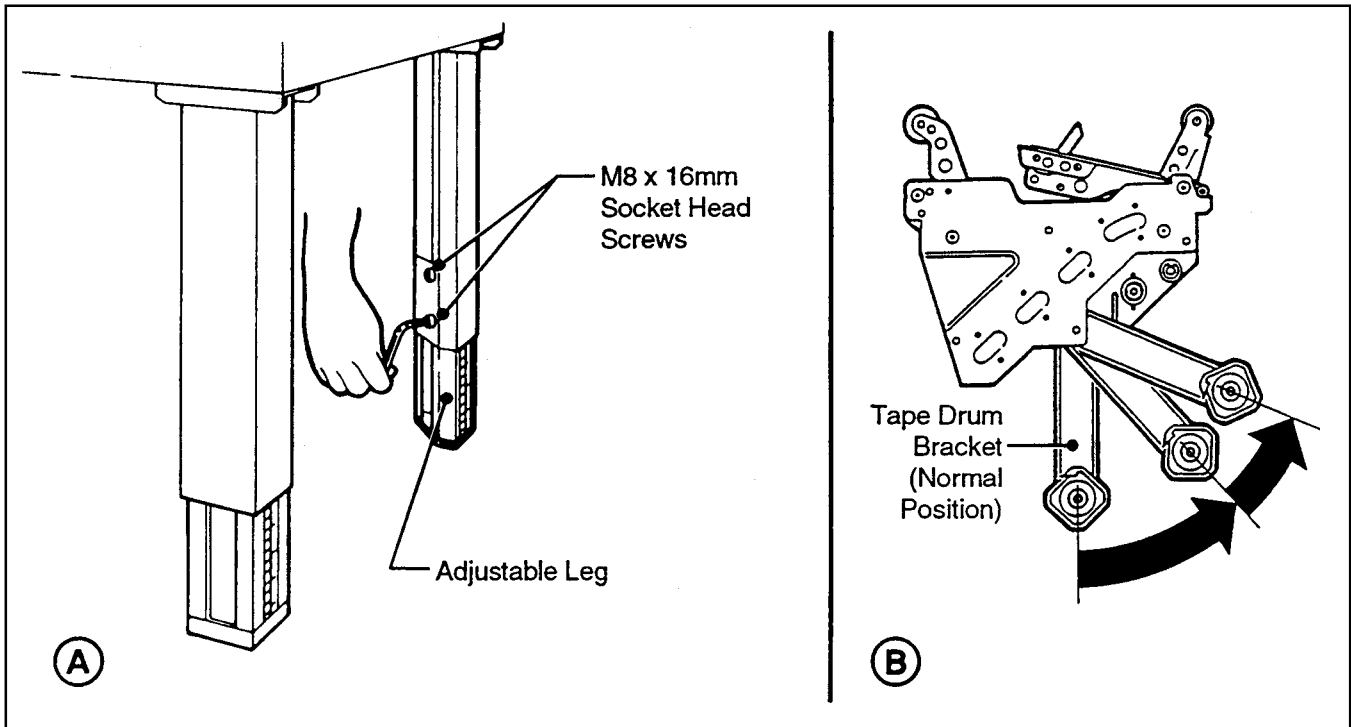


Figure 2-2 – Machine Bed Height Adjustment and Lower Tape Drum Bracket Position

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 72 mm [3 inch] wide tape rolls. To apply 48 mm [2 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

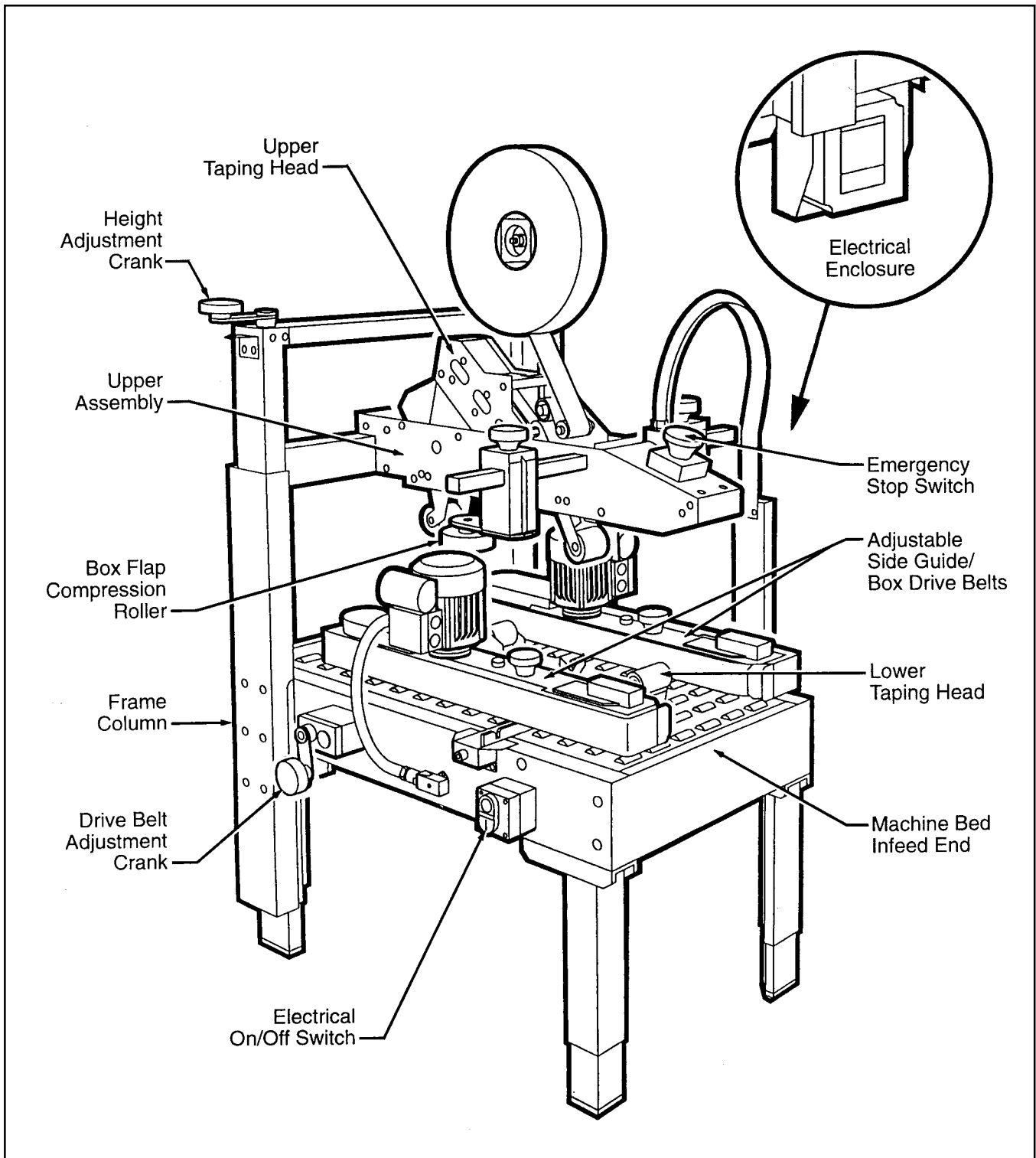
After completing the "Installation and Set-Up" procedure, continue through "Operation" for tape loading and start-up to be sure case sealer is properly adjusted to run boxes

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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

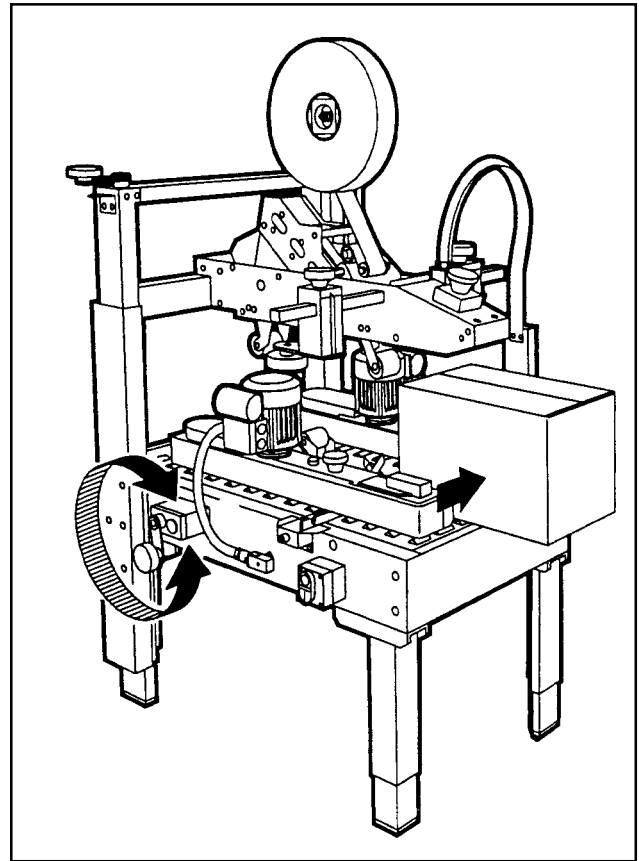
Refer to Figures 3-2 through 3-5

**! 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.

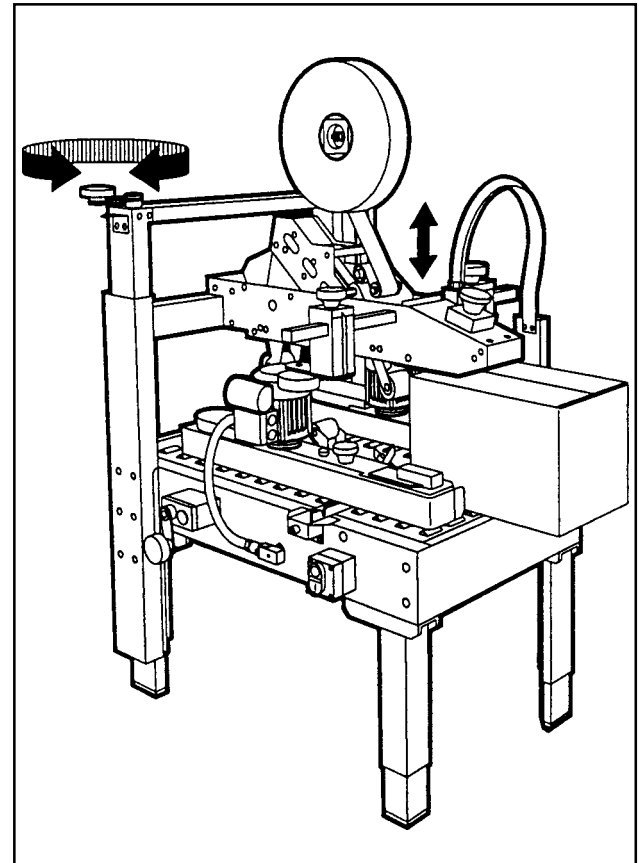
Turn drive belt adjustment crank to position both side drive belts against sides of box. Tighten knobs located on top of both side drive belts to secure in operating position.



**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**

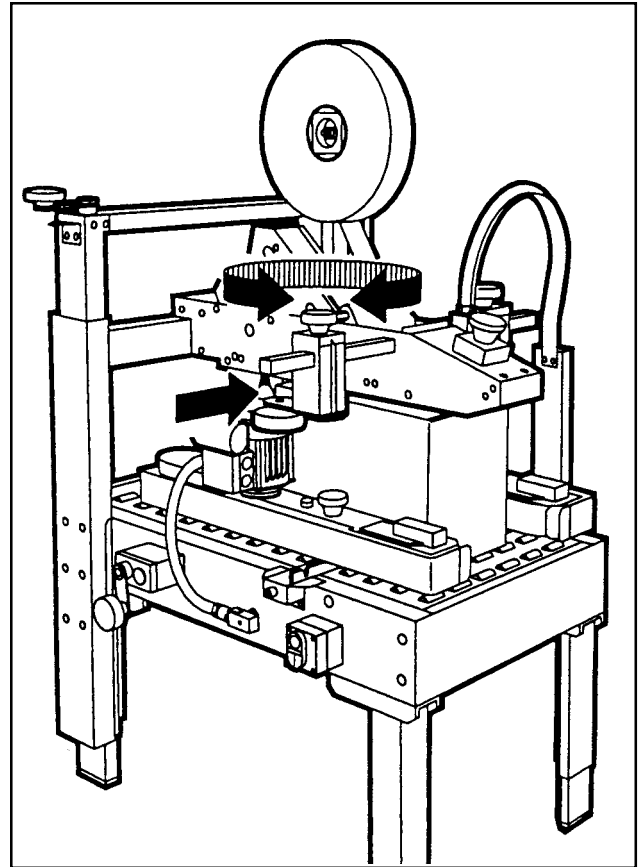
## Operation (Continued)

**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**

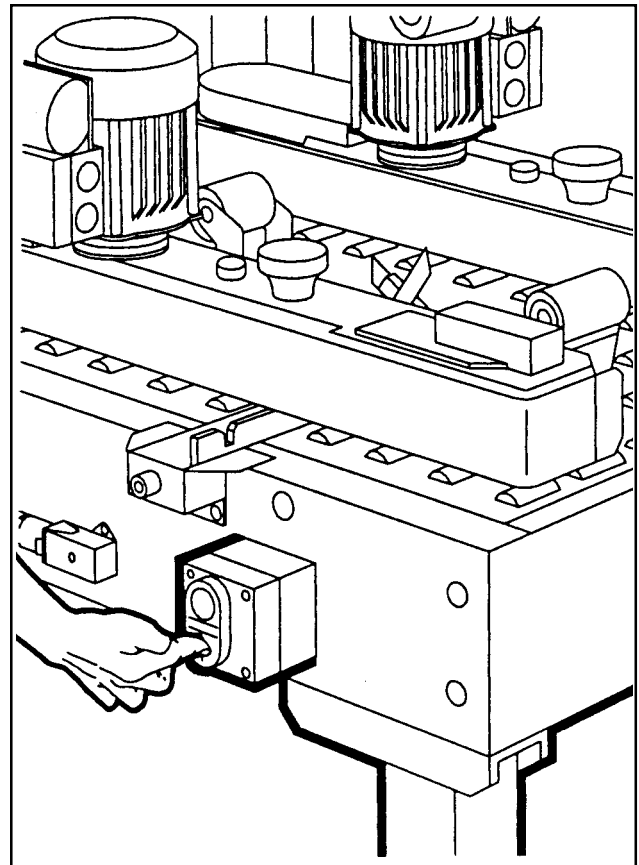
**! WARNING – Be sure all packaging materials and tools are removed from the machine before operating.**

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.

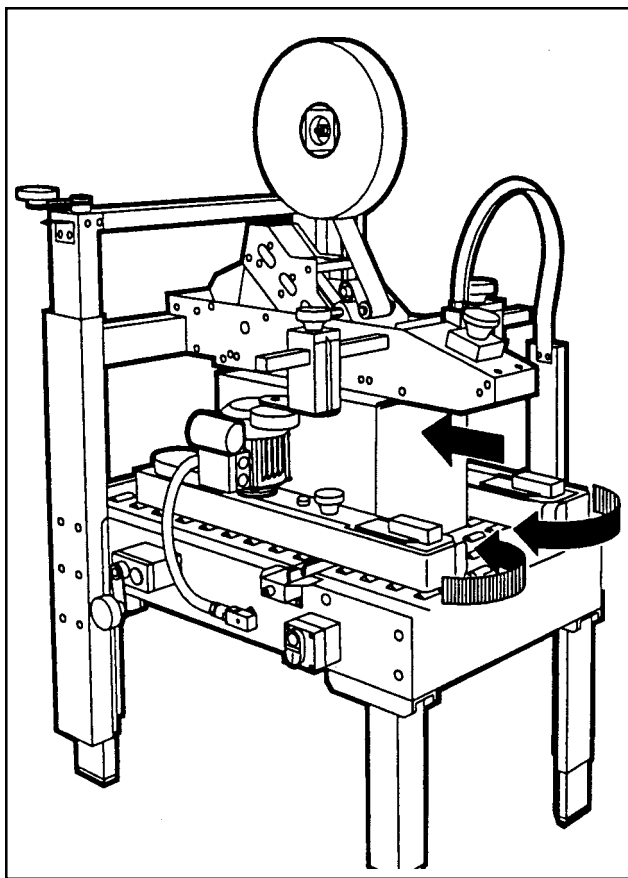


Figure 3-6 – Box Sealing

### 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
<b>Lubricant</b>	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.

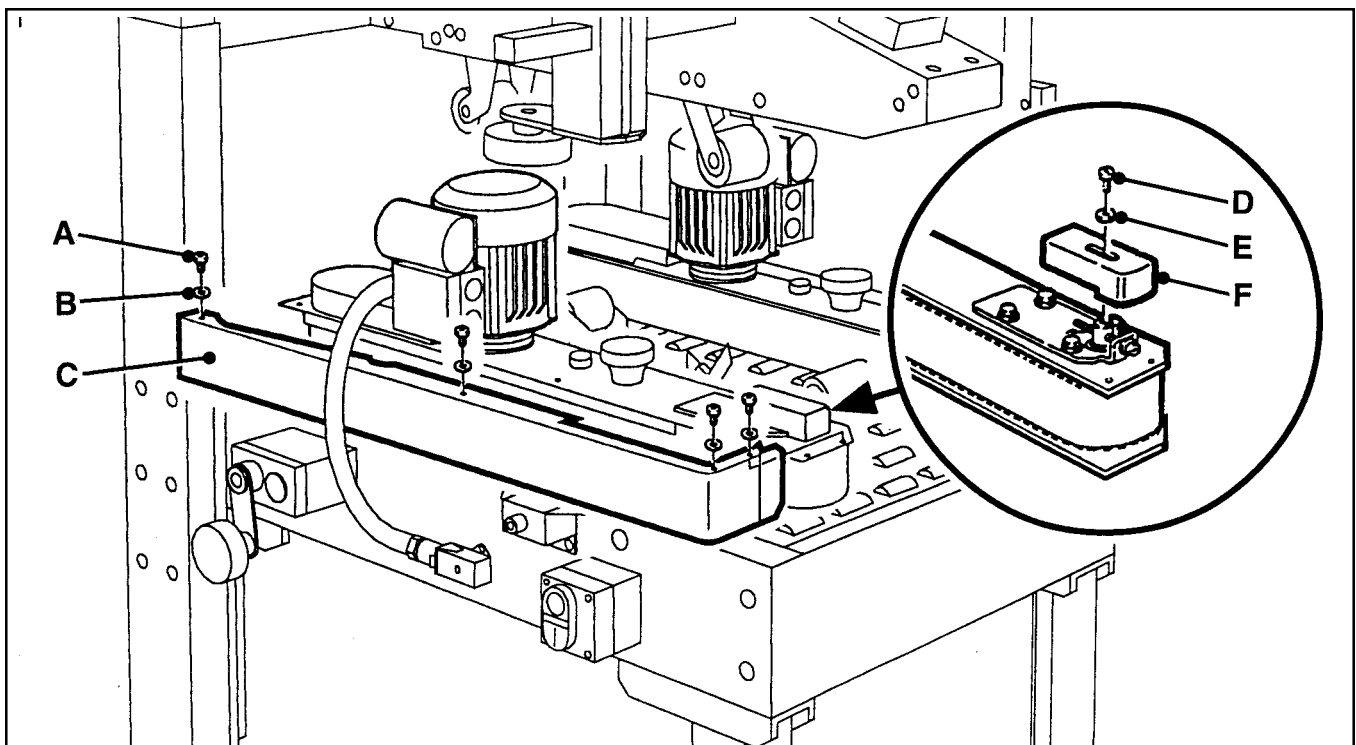
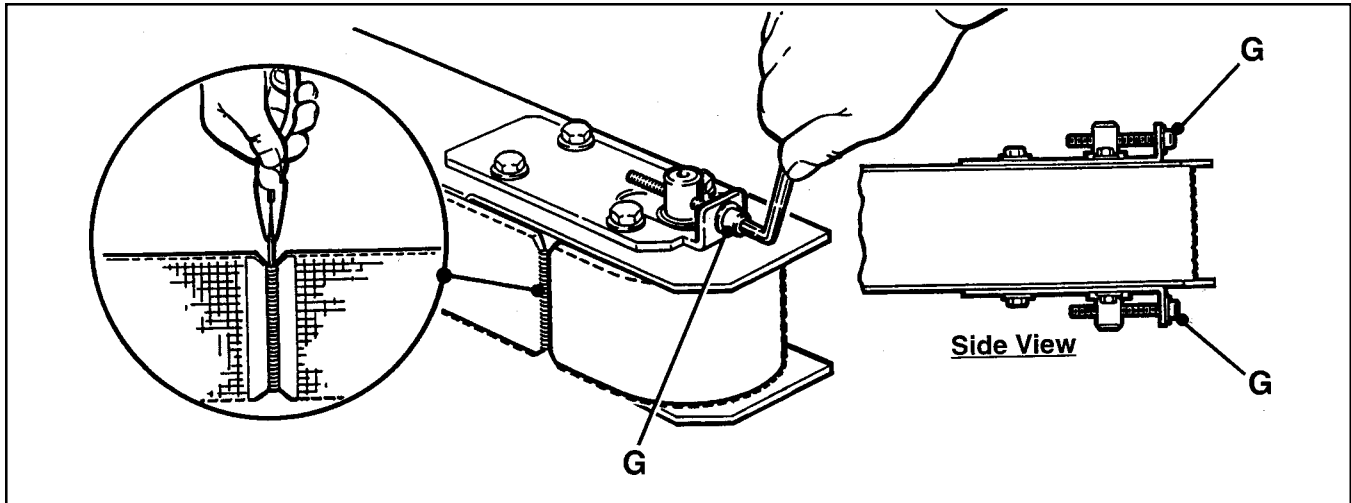


Figure 4-2 – Box Drive Belt (Left Side View – Infeed End)

## Maintenance (Continued)



**Figure 4-3 – Drive Assembly – Infeed End**

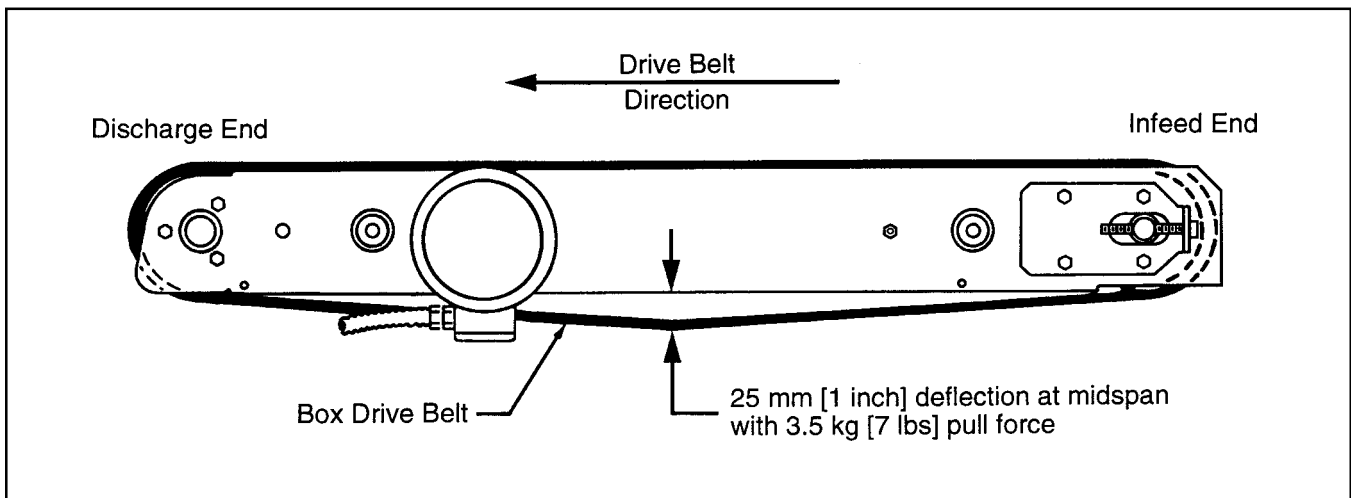
6. Install new drive belt around drive rollers and insert new pin. Pin must not extend beyond edge of belt.

**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.

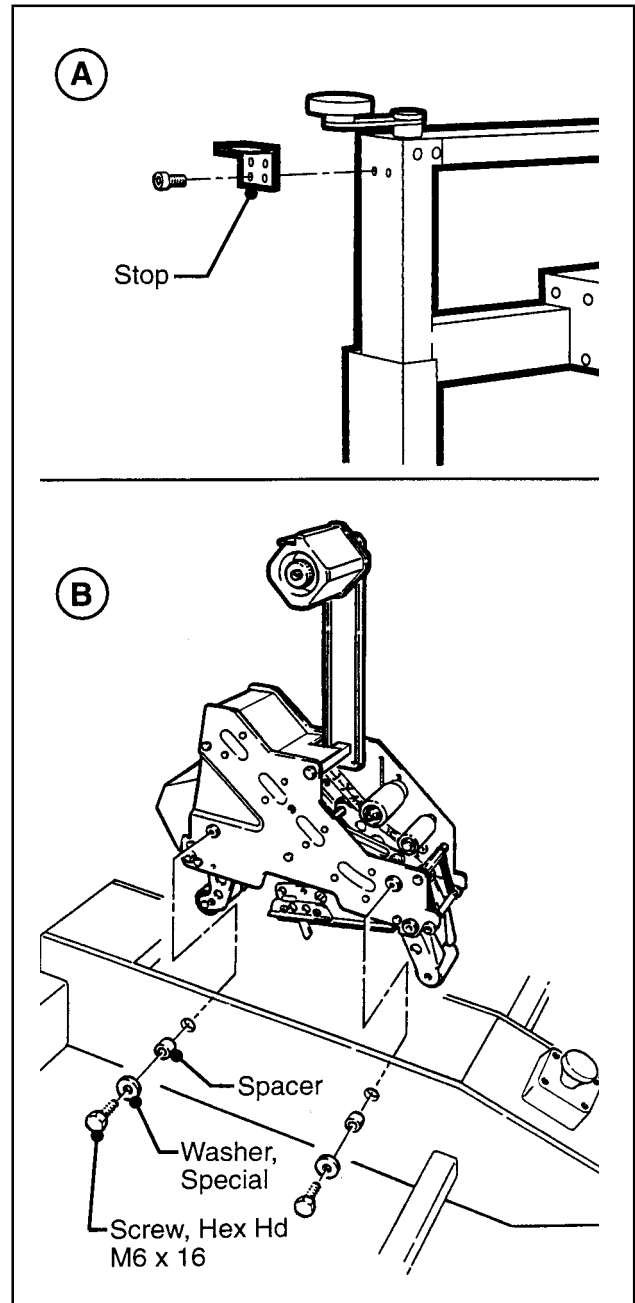


Figure 5-1 – Stops/Upper Taping Head

## Special Set-Up Procedure (Continued)

- 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.

- Refer to Section II, "Adjustments – Changing Tape Leg Length", page 13 for taping head set-up.
- 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.

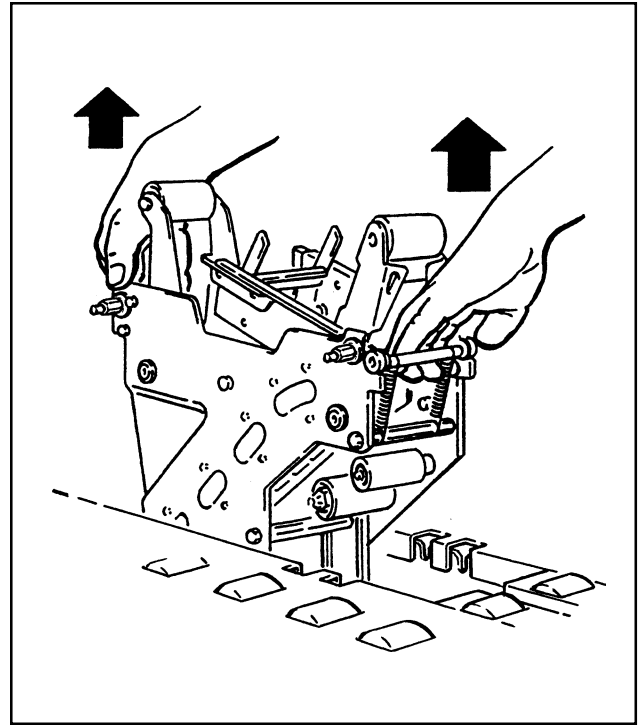


Figure 5-2 – Remove Lower Taping Head

### 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:

- Crank side drive belts to full open position.
- 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]).
- 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.

- Remove and retain four mounting screws in each column.

**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.

- 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.)
- Re-install and tighten four screws in each column.
- Crank upper assembly up and remove blocks, or remove overhead crane.

## Special Set-Up Procedure (Continued)

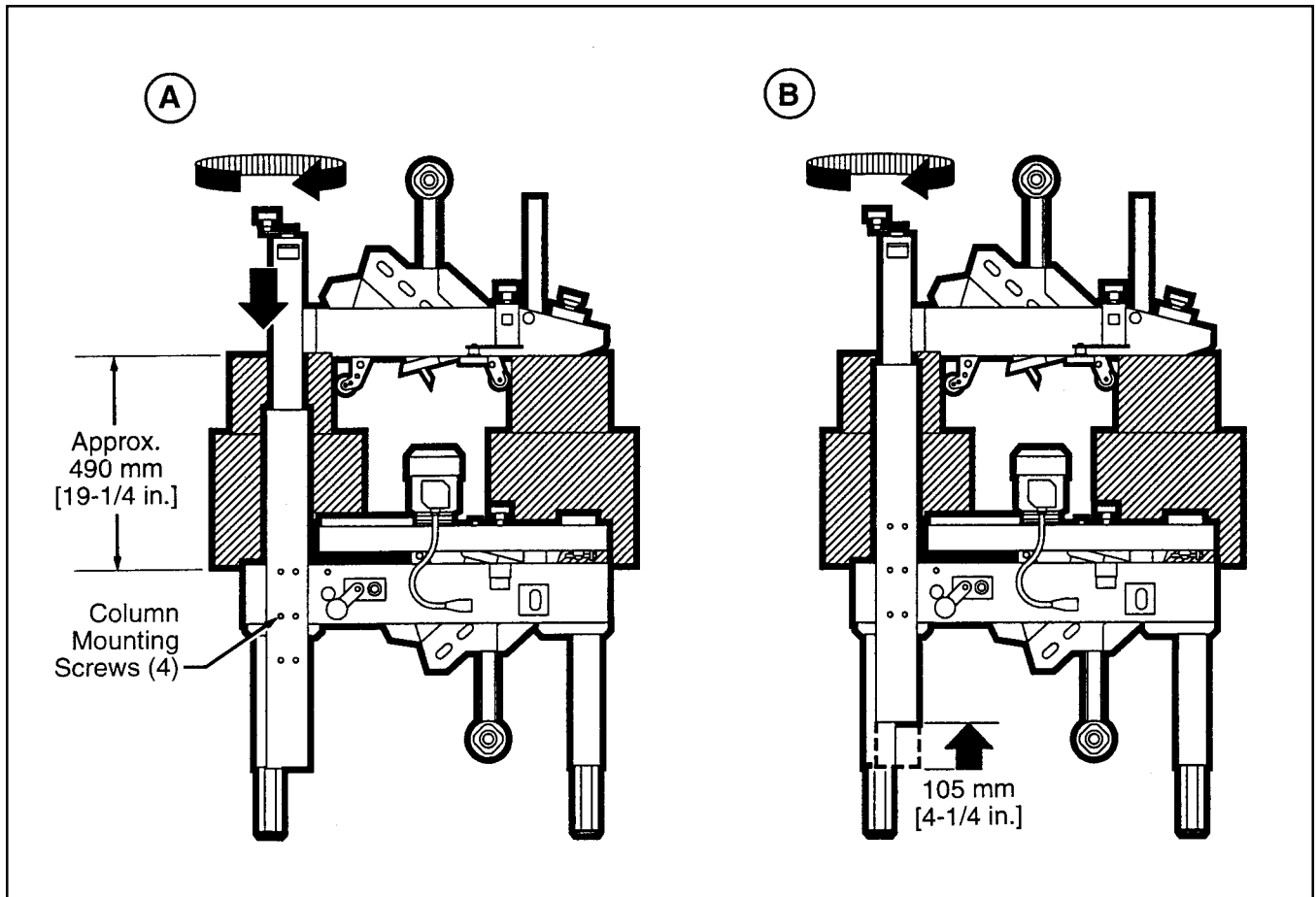


Figure 5-3 – Outer Column Re-Positioning



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## Troubleshooting

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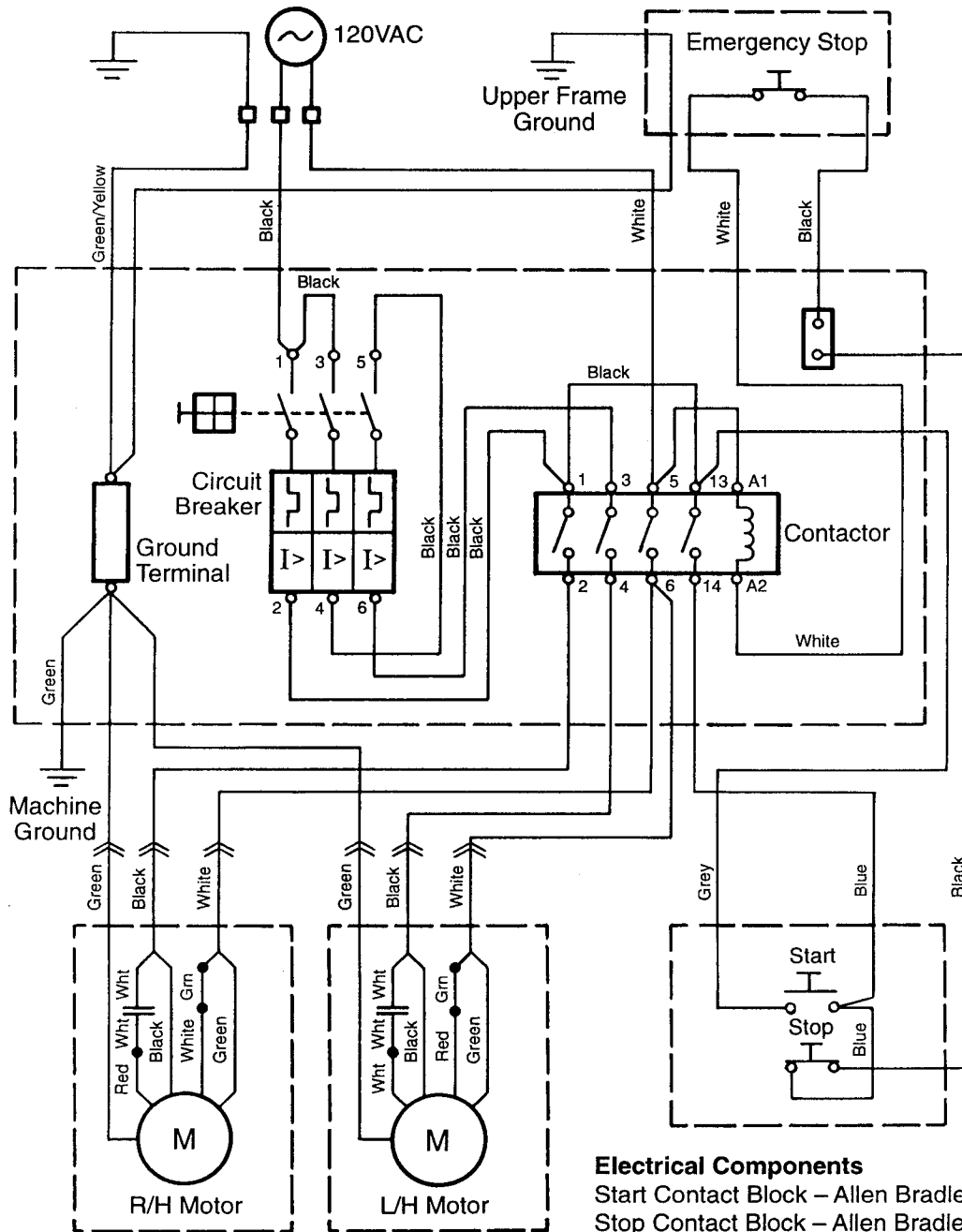
The Troubleshooting Guide lists some possible machine problems, causes and corrections. Also see Section II "Troubleshooting", pages 15 and 16 for taping head problems.

### Troubleshooting Guide

<b>Problem</b>	<b>Cause</b>	<b>Correction</b>
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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# Electrical Diagram



## Electrical Components

- Start Contact Block – Allen Bradley 800E-3x10
- Stop Contact Block – Allen Bradley 800E-3x01
- Start/Stop Housing – Allen Bradley 800E-IPY
- E-Stop Housing – Allen Bradley 800E-IPY
- E-Stop Contact Block – Allen Bradley 800E-3x01
- Circuit Breaker – Sprecher & Schuh KTA 3-25
- Contactor – Sprecher & Schuh CA4-5-10
- Motors – Coel MH 5684

Figure 6-1 – Electrical Diagram

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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 120a3 Adjustable Case Sealer contains the following spare parts:

Qty.	Ref. No.	Part Number	Description
1	2950-10 (Sec. II)	78-8070-1274-1	Spring – Upper Extension (Silver)
1	2955-10 (Sec. II)	78-8070-1273-3	Spring – Lower Extension (Black)
2	2952-2 (Sec. II)	78-8028-7899-7	Knife – 89 mm/3.5 Inch
4	2952-12 (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 taping 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 120a3 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.

<b>Part Number</b>	<b>Option/Accessory</b>
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
78-8095-4852-8	3-Inch Tape Edge Fold Attachment, Upper Head
78-8095-4853-6	3-Inch Tape Edge Fold Attachment, Lower Head
78-8114-0830-7	AccuGlide II STD 3 Inch Upper Taping Head, Type 39600
78-8114-0831-5	AccuGlide II STD 3 Inch Lower Taping Head, Type 39600

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## Replacement Parts – Illustrations and Parts Lists

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### 120a3 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.

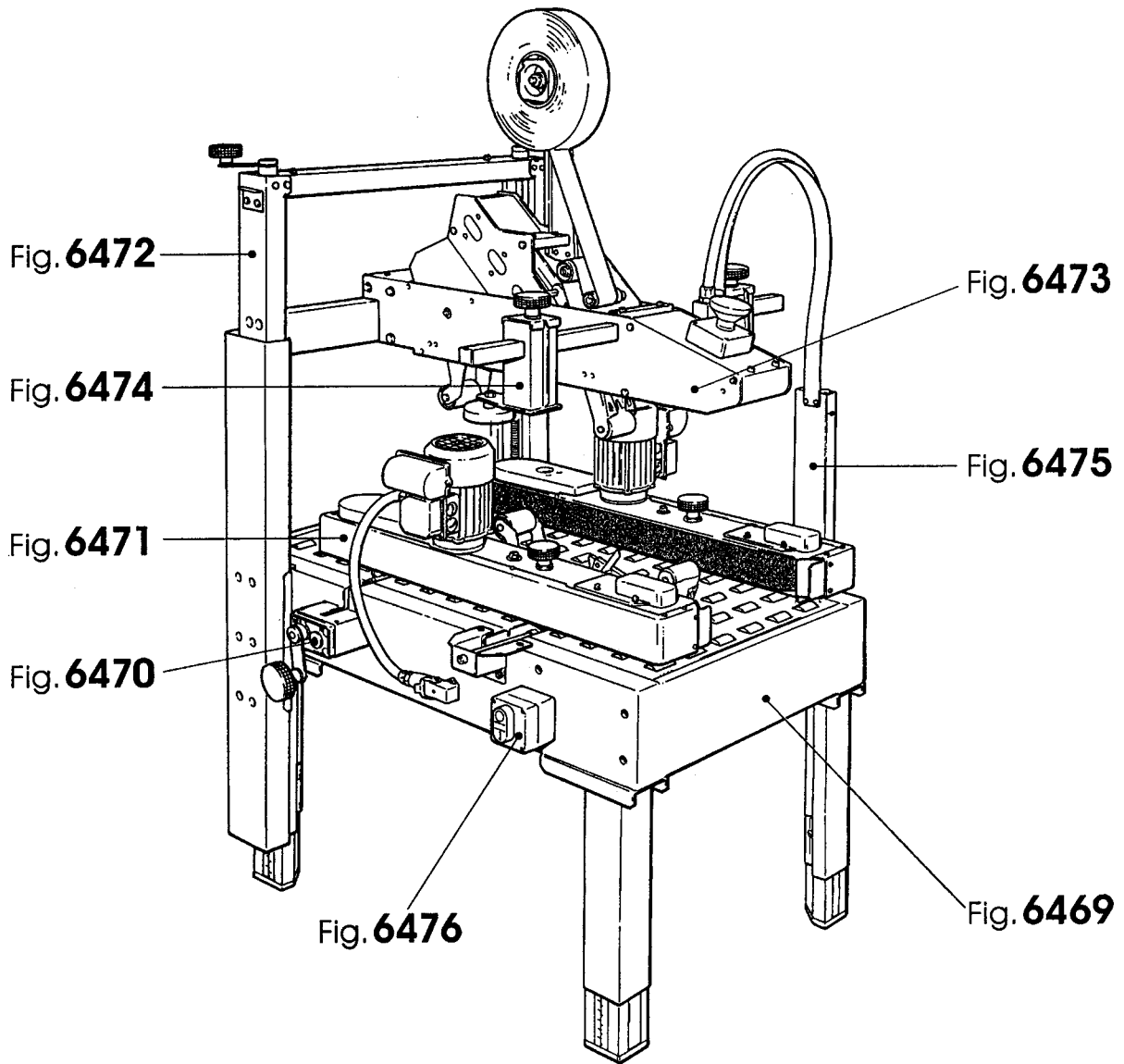
**Note** – The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, if desired.

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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# 120a3 Adjustable Case Sealer



## Frame Assemblies



# 120a3 Adjustable Case Sealer

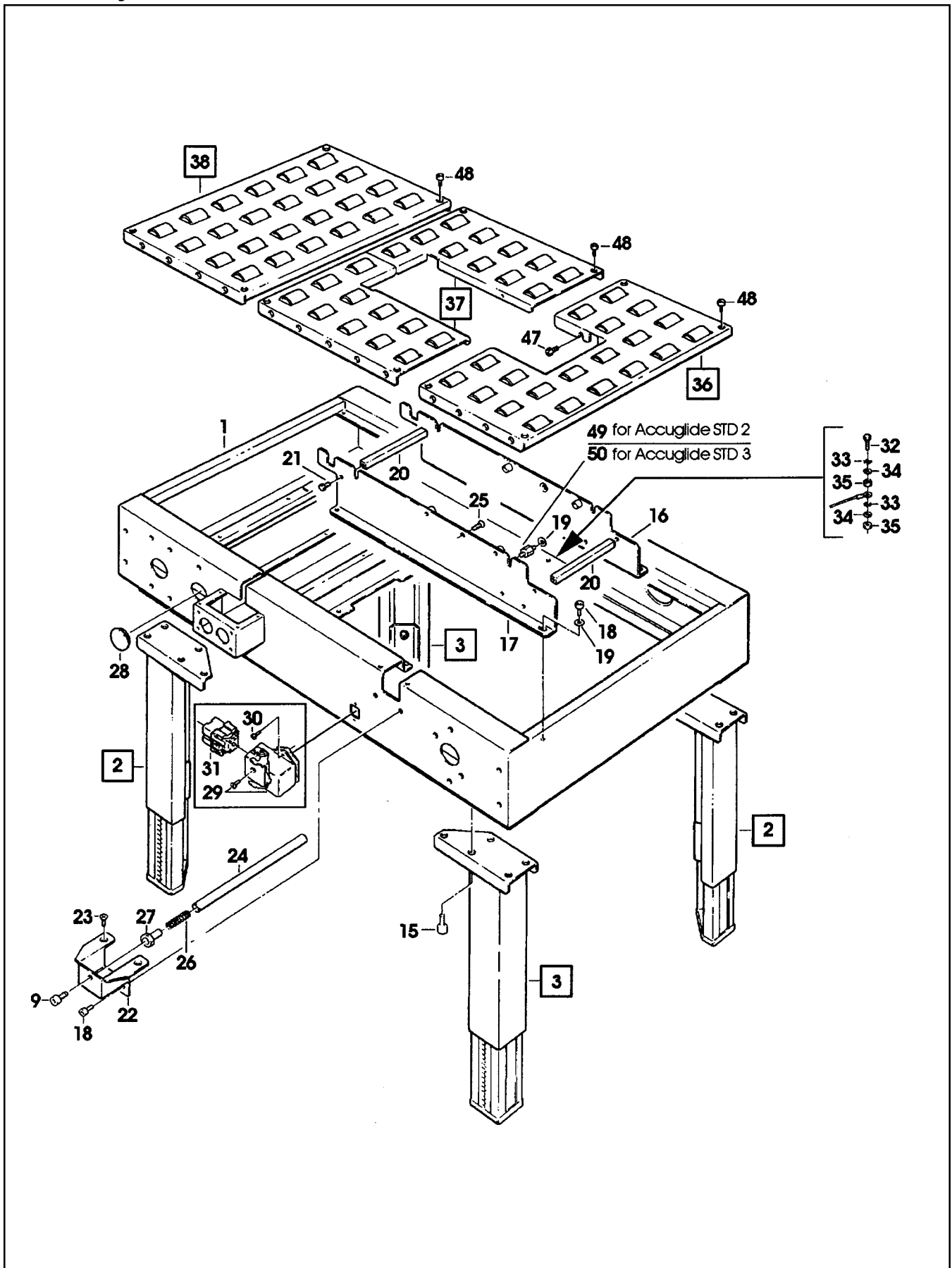


Figure 6469/1 of 2

**Figure 6469** (page 1 of 2)

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
6469-1	78-8100-1136-7	Bed Conveyor
6469-2	78-8114-4666-1	Leg Assembly – R/H
6469-3	78-8114-4665-3	Leg Assembly – L/H
6469-4	78-8076-5040-9	Leg – Right
6469-5	78-8076-5041-7	Leg – Left
6469-6	78-8052-6678-6	Leg – Inner
6469-7	78-8052-6677-8	Clamp – Inner
6469-8	78-8052-6676-0	Clamp – Outer
6469-9	26-1003-7963-0	Screw – Soc Hd, M8 x 16
6469-10	78-8052-6679-4	Pad – Foot
6469-11	26-1003-5842-8	Screw – Hex Hd, M8 x 20
6469-12	26-1004-5507-5	Washer – M8
6469-13	78-8017-9313-0	Nut – Self-Locking, M8
6469-14	78-8052-6680-2	Label – Height
6469-15	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
6469-16	78-8114-4925-1	Frame – Upper, R/H
6469-17	78-8114-4926-9	Frame – Upper, L/H
6469-18	26-1003-7957-2	Screw – Soc Hd Hex Hd, M6 x 16
6469-19	26-1000-0010-3	Washer – Flat, M6
6469-20	78-8054-8862-0	Spacer – 12 x 12 x 140 mm
6469-21	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6469-22	78-8114-4927-7	Support – Guide
6469-23	26-1001-9843-6	Screw – Flat Soc Hd, M6 x 16
6469-24	78-8054-8831-5	Shaft – 14 x 255 mm
6469-25	26-1003-5841-0	Screw – M8 x 16
6469-26	78-8054-8999-0	Spring
6469-27	78-8054-8998-2	Bushing
6469-28	78-8060-8184-6	Cap – 35 x 1.6
6469-29	78-8060-7876-8	Cover – Plug, Lateral
6469-30	78-8028-8208-0	Screw – 6P x 9.5

# 120a3 Adjustable Case Sealer

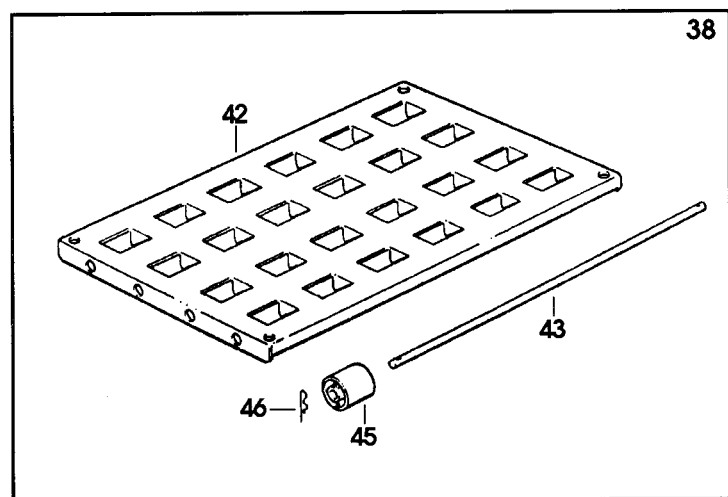
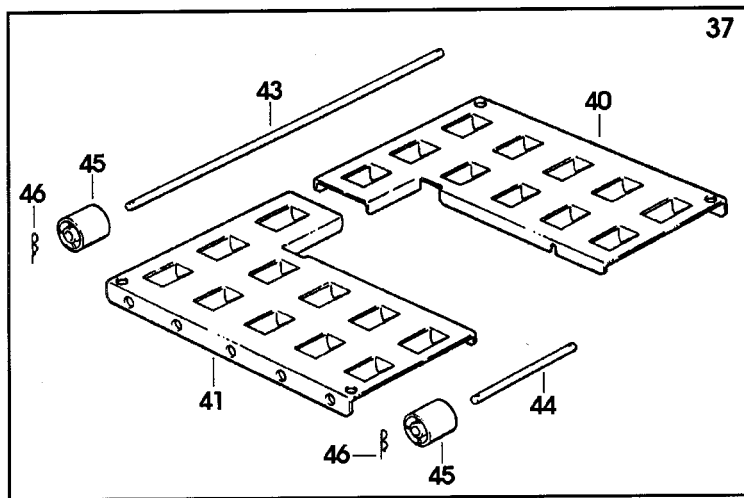
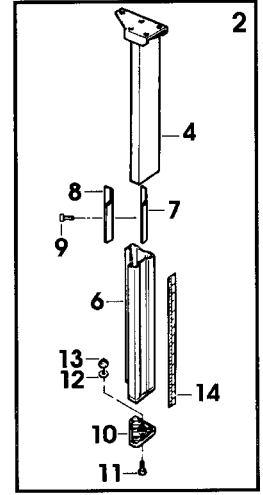
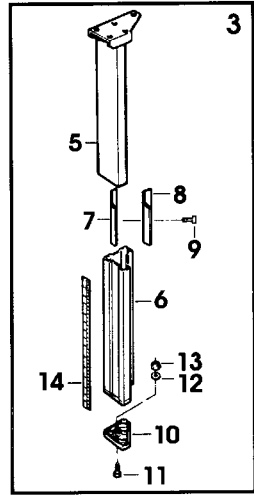
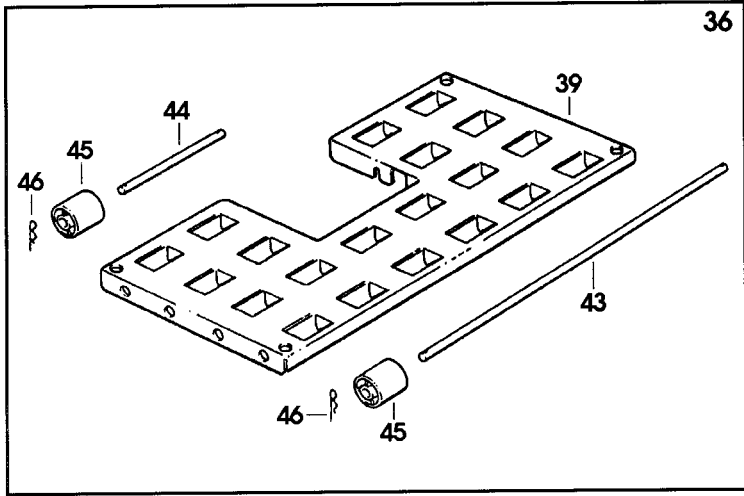


Figure 6469/2 of 2

**Figure 6469** (page 2 of 2)

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
6469-31	78-8060-7873-5	Plug – Female
6469-32	78-8060-8488-1	Screw – Hex Hd, M5 x 20
6469-33	78-8046-8217-3	Washer – Special
6469-34	78-8005-5741-1	Washer – Flat, M5
6469-35	78-8010-7417-6	Nut – Hex, M5
6469-36	78-8114-4928-5	Conveyor Assembly – Front
6469-37	78-8114-4929-3	Conveyor Assembly – Center
6469-38	78-8114-4930-1	Conveyor Assembly – Rear
6469-39	78-8114-4931-9	Conveyor – Front
6469-40	78-8114-4932-7	Conveyor – Center, R/H
6469-41	78-8114-4933-5	Conveyor – Center, L/H
6469-42	78-8114-4934-3	Conveyor – Rear
6469-43	78-8114-4935-0	Shaft – Roller, L=420 mm
6469-44	78-8114-4936-8	Shaft – Roller, L=128 mm
6469-45	78-8060-7693-7	Roller – 32 x 38
6469-46	78-8076-5385-8	Spring
6469-47	78-8060-8087-1	Screw – M5 x 10
6469-48	26-1003-7949-9	Screw – Soc Hd Hex Soc, M5 x 12
6469-49	78-8070-1456-4	Stud – Hex, for AccuGlide™ II STD 2 Inch Taping Head
6469-50	78-8114-4702-4	Spacer – for AccuGlide™ II STD 3 Inch Taping Head
6469-51	78-8114-4937-6	Grommet – /20
6469-52	78-8114-4938-4	Support – On/Off
6469-53	78-8017-9318-9	Washer – Plain, 8 mm
6469-54	78-8119-6847-4	Cover – Support W/English Labels

# 120a3 Adjustable Case Sealer

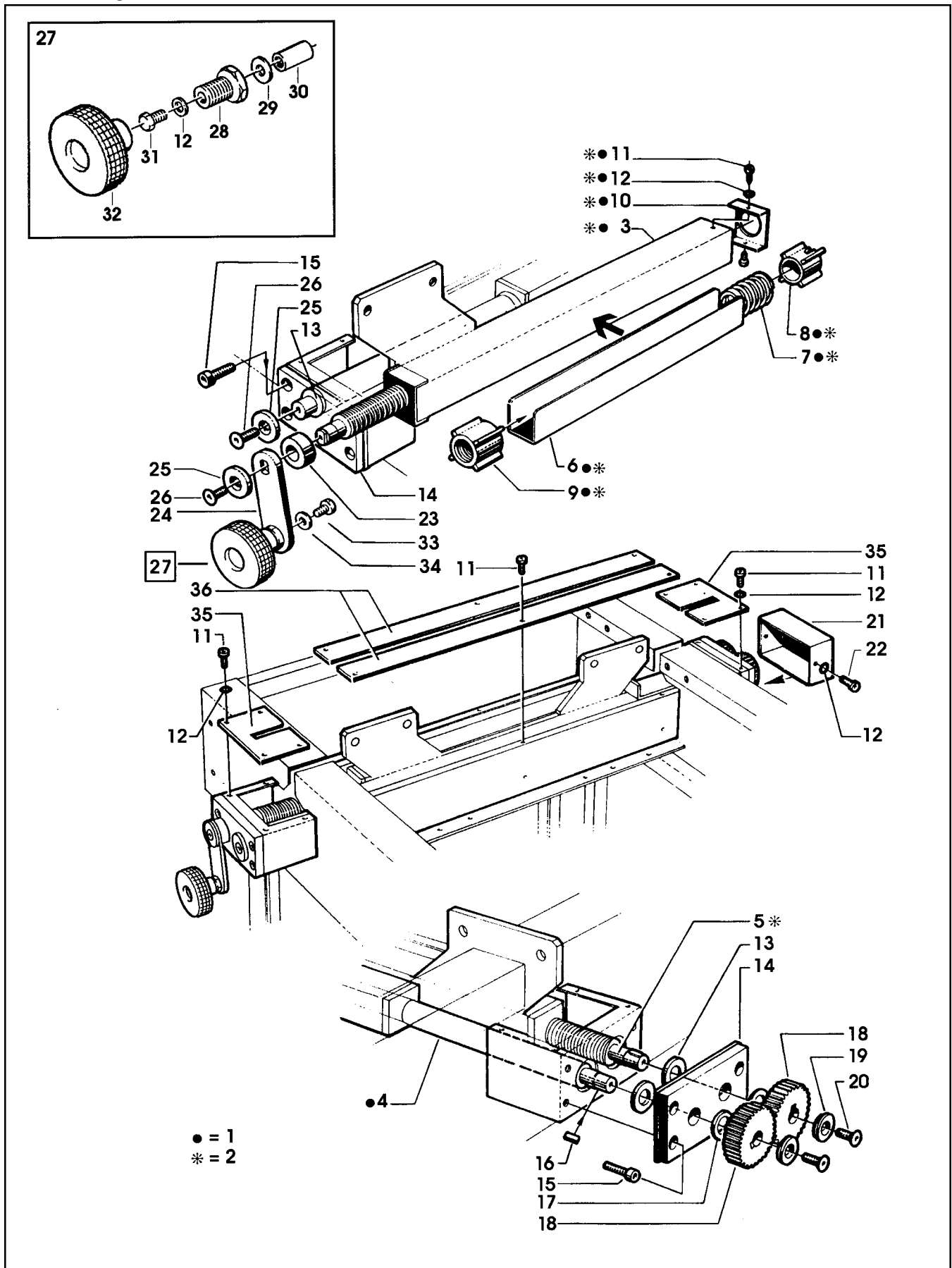


Figure 6470

## Figure 6470

Ref. No.	3M Part No.	Description
6470-1	78-8060-8119-2	Support – Side Guide
6470-2	78-8060-8120-0	Support – Side Guide
6470-3	78-8114-4940-0	Support – Guide
6470-4	78-8054-8917-2	Conductor Screw
6470-5	78-8054-8923-0	Side Guide Screw
6470-6	78-8055-0624-9	Spacer
6470-7	78-8055-0623-1	Spring
6470-8	78-8054-8926-3	Collar
6470-9	78-8054-8922-2	Plastic Nut
6470-10	78-8055-0625-6	End Cap
6470-11	26-1002-5753-9	Screw – Self-Tapping
6470-12	78-8005-5740-3	Washer – Plain, 4 mm
6470-13	78-8054-8919-8	Washer – 15/25 x 5 mm
6470-14	78-8054-8918-0	Plate For Screws
6470-15	26-1003-7951-5	Screw – Soc Hd Hex Soc, M5 x 20
6470-16	78-8028-8244-5	Key – 4 x 4 x 10 mm
6470-17	78-8054-8925-5	Washer – 12/25 x 3 mm
6470-18	78-8054-8924-8	Gear – 28 Teeth, 1.5 mm Pitch
6470-19	78-8054-8877-8	Washer – 5,5/20 x 4
6470-20	26-0001-5862-1	Screw – Flat Hd Soc, M5 x 12
6470-21	78-8094-6024-5	Gear Cover
6470-22	26-1002-4955-1	Screw – Self-Tap, 8P x 13
6470-23	78-8054-8920-6	Spacer – 15,5/30 x 10 mm
6470-24	78-8060-8065-7	Lever – Knob
6470-25	78-8054-8577-4	Washer – Special
6470-26	78-8057-5726-3	Screw – F.H. Soc Hd, M6 x 15
6470-27	78-8114-4941-8	Handle Assembly
6470-28	78-8070-1511-6	Bushing
6470-29	78-8070-1510-8	Washer – Nylon, /7 x 15 x 1
6470-30	78-8070-1509-0	Shaft – Crank
6470-31	78-8010-7157-8	Screw – Hex Hd, M4 x 10
6470-32	78-8114-4942-6	Knob – MBT .60, B-M12
6470-33	26-1003-5820-4	Screw – Hex Hd, M5 x 12
6470-34	78-8028-8214-8	Washer
6470-35	78-8094-6023-7	Side Cover
6470-36	78-8054-8914-9	Rear Guide Guard

# 120a3 Adjustable Case Sealer

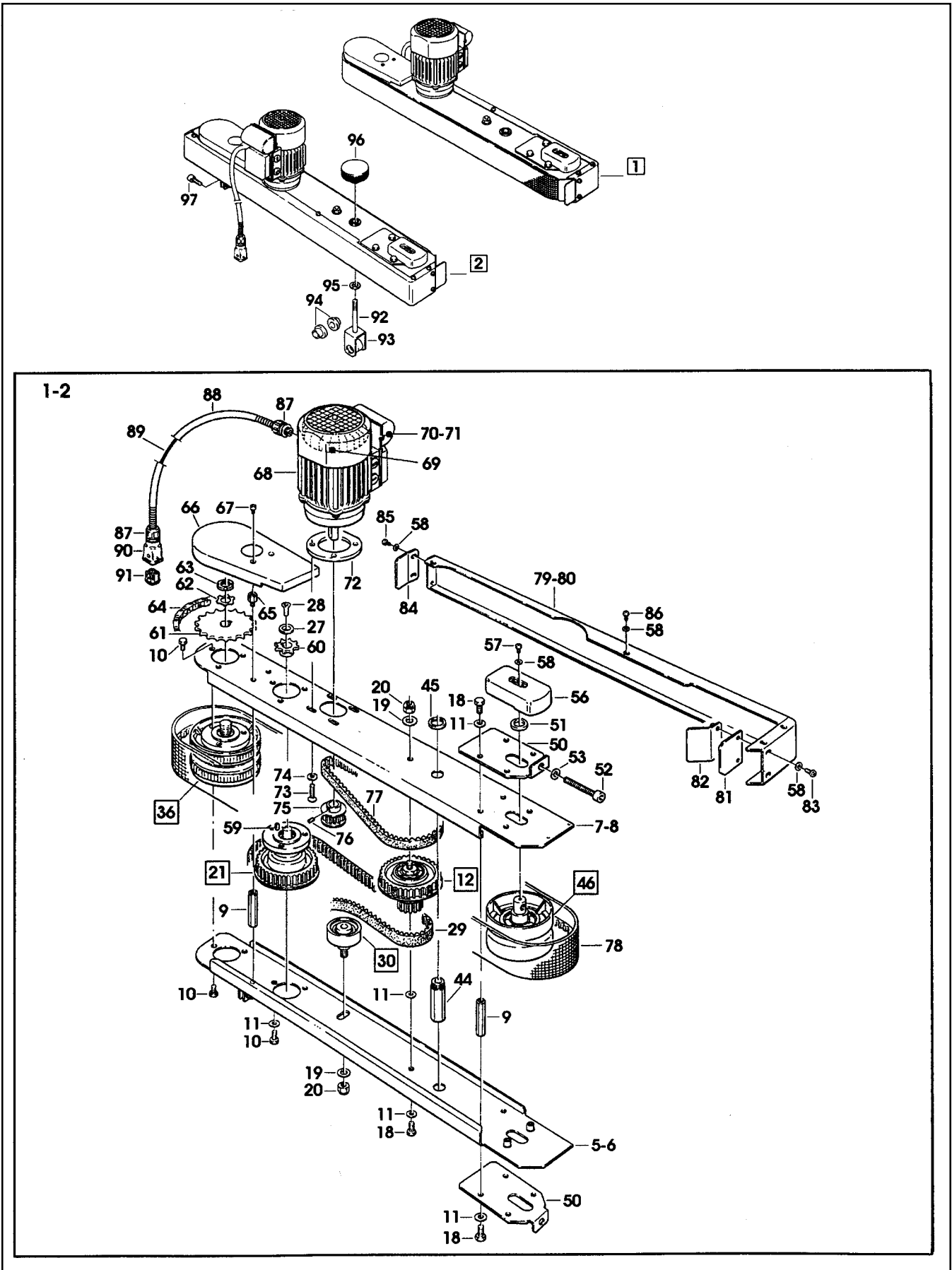


Figure 6471/1 of 2

**Figure 6471** (page 1 of 2)

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
6471-1	78-8119-6848-2	Side Drive Assembly – R/H, W/O Motor, W/English Labels
6471-2	78-8119-6849-0	Side Drive Assembly – L/H, W/O Motor, W/English Labels
6471-5	78-8114-4948-3	Guide – Lower, R/H
6471-6	78-8114-4947-5	Guide – Lower, L/H
6471-7	78-8114-4950-9	Guide – Upper, R/H
6471-8	78-8114-4949-1	Guide – Upper, L/H
6471-9	78-8055-0661-1	Spacer
6471-10	26-1003-5829-5	Screw – Hex Hd, M6 x 12
6471-11	26-1000-0010-3	Washer – Flat, M6
6471-12	78-8060-8134-1	Wrap Pulley Assembly
6471-13	78-8060-8135-8	Pulley Wrap
6471-14	78-8023-2410-9	Bearing – 6000-2RS
6471-15	78-8023-2544-5	Bearing – 6203-2RS
6471-16	78-8055-0665-2	Shaft – Pulley Wrap
6471-17	78-8016-5855-6	E-Ring – 10 mm
6471-18	78-8032-0375-7	Screw – Hex Hd, M6 x 16
6471-19	26-1004-5507-5	Washer – M8
6471-20	78-8017-9313-0	Nut – Self-Locking, M8
6471-21	78-8114-4951-7	Drive Pulley Assembly
6471-22	78-8114-4857-6	Shaft – Drive Pulley
6471-23	78-8046-8135-7	Key – 5 x 5 12 mm
6471-24	78-8114-4952-5	Pulley – Drive
6471-25	78-8114-4859-2	Spacer – Drive Pulley
6471-26	78-8060-7648-1	Bearing – Flanged
6471-27	78-8054-8877-8	Washer – 5, 5/20 x 4
6471-28	26-0001-5862-1	Screw – Flat Hd Soc, M5 x 12
6471-29	78-8114-4953-3	Belt – Toothed, 240L050
6471-30	78-8091-0523-8	Pulley Assembly – Jockey
6471-31	78-8091-0524-6	Pulley – Jockey
6471-32	78-8060-8008-7	Bearing – 6004-2RS
6471-33	78-8060-8010-3	Snap Ring – 42 mm Shaft
6471-34	78-8091-0525-3	Shaft – Pulley
6471-35	78-8017-9061-5	Snap Ring For 20 mm Shaft
6471-36	78-8091-0714-3	Roller – Drive, 800a-E
6471-37	78-8076-5441-9	Roller – Drive
6471-38	78-8052-6713-1	Ring – Polyurethane
6471-39	78-8055-0669-4	Shaft – Pulley Keyed
6471-40	78-8057-5739-6	Key – M5 x 5 x 30 mm
6471-41	78-8055-0668-6	Washer – 15/26 x 1
6471-42	78-8091-0382-9	Washer – /16
6471-43	78-8076-5442-7	Flange Assembly
6471-44	78-8060-8100-2	Bushing – Threaded
6471-45	78-8017-9096-1	Nut – Special, M18 x 1
6471-46	78-8076-5443-5	Pulley Assembly – Idler
6471-47	78-8055-0660-3	Roller – Idler
6471-48	78-8076-5444-3	Shaft – Idler Pulley
6471-49	12-7997-0272-0	E-Ring – M25



# 120a3 Adjustable Case Sealer

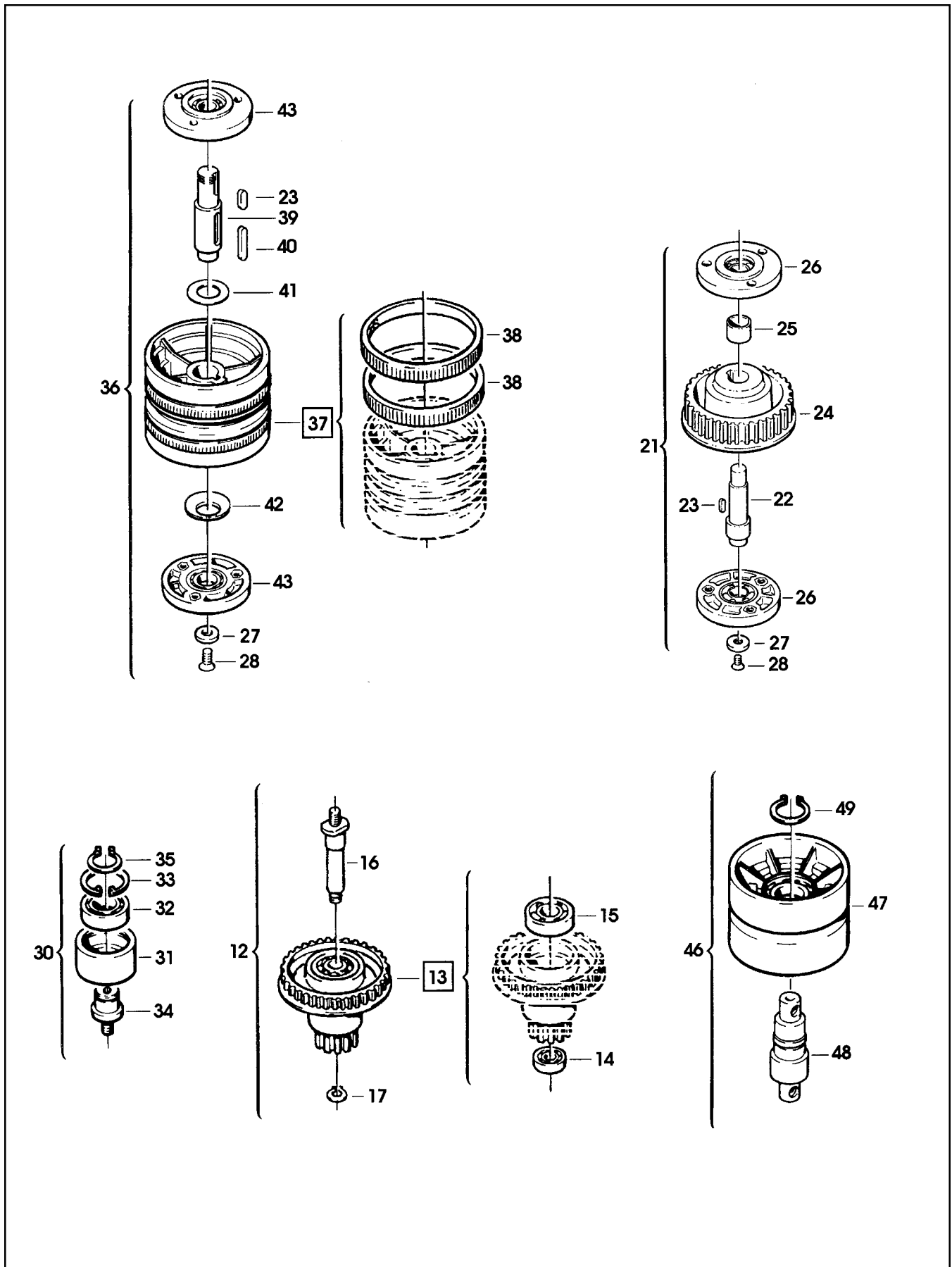


Figure 6471/2 of 2

**Figure 6471** (page 2 of 2)

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
6471-50	78-8076-5445-0	Tensioner – Belt
6471-51	78-8076-5446-8	Washer – Shaft
6471-52	78-8070-1519-9	Screw – Soc Hd Hex Hd, M8 x 70
6471-53	78-8017-9318-9	Washer – Plain, 8 mm
6471-56	78-8076-5448-4	Cover – Belt Tensioner
6471-57	78-8055-0850-0	Screw – Cap, M4 x 6
6471-58	78-8005-5740-3	Washer – Plain, 4 mm
6471-59	78-8114-4860-0	Key – 4 x 4 x 12
6471-60	78-8060-8005-3	Sprocket – 3/8 Inch, 11 Teeth
6471-61	78-8060-8019-4	Sprocket – 3/8 Inch, 28 Teeth
6471-62	78-8057-5834-5	Tab Washer
6471-63	78-8057-5835-2	Centering Washer
6471-64	78-8060-8020-2	Chain – 3/8 Inch Pitch, L=50
6471-65	78-8054-8891-9	Screw – Special
6471-66	78-8114-4954-1	Cover – Chain
6471-67	26-1003-7948-1	Screw – Soc Hd Hex Soc, M5 x 10
6471-68	78-8114-4915-2	Motor – 110/115V, 60HZ, 1-Phase
6471-69	78-8091-0383-7	Fan – Motor
6471-70	78-8114-4916-0	Housing – Capacitor For Motor, MH56
6471-71	78-8114-4918-6	Capacitor – 20MF, 250V
6471-72	78-8094-6050-0	Spacer – Motor
6471-73	26-1005-4757-4	Screw – Flat Hd, Soc Dr, M5 x 20
6471-74	78-8060-8073-1	Washer – Motor
6471-75	78-8054-8885-1	Pulley –Timing, 14 Teeth For 60 HZ Motor
6471-76	26-1003-8816-9	Screw – Set, M5 x 6
6471-77	78-8091-0399-3	Belt – Toothed, 156XL050
6471-78	78-8114-4955-8	Belt – Drive, With Hook
6471-79	78-8119-6852-4	Cover – Drive, R/H, W/English Labels
6471-80	78-8119-6853-2	Cover – Drive, L/H, W/English Labels
6471-81	78-8100-1214-2	Guard – Rubber
6471-82	78-8100-1215-9	Guard – Metal
6471-83	78-8076-5255-3	Screw – Phillips Hd, M4 x 12
6471-84	78-8100-1213-4	Guard – Belt
6471-85	26-1002-4955-1	Screw – Self-Tap, 8PX13
6471-86	26-1002-5753-9	Screw – Self-Tapping
6471-87	78-8060-7626-7	Connector
6471-88	78-8114-4958-2	Conduit – 1/2, 4500 mm
6471-89	78-8060-8053-3	Wire – 3-Pole, 5 Meters Length
6471-90	78-8060-7877-6	Plug Housing – Vertical
6471-91	78-8060-7875-0	Plug – Male
6471-92	78-8055-0666-0	Screw – Special
6471-93	78-8054-8901-6	Bracket – Guide
6471-94	78-8054-8902-4	Bushing – Flanged
6471-95	78-8052-6566-3	Washer – Friction
6471-96	78-8114-4959-0	Knob – MBT.50 B-M10
6471-97	26-1003-7965-5	Screw – Soc Hd Hex Soc, M8 x 25

# 120a3 Adjustable Case Sealer

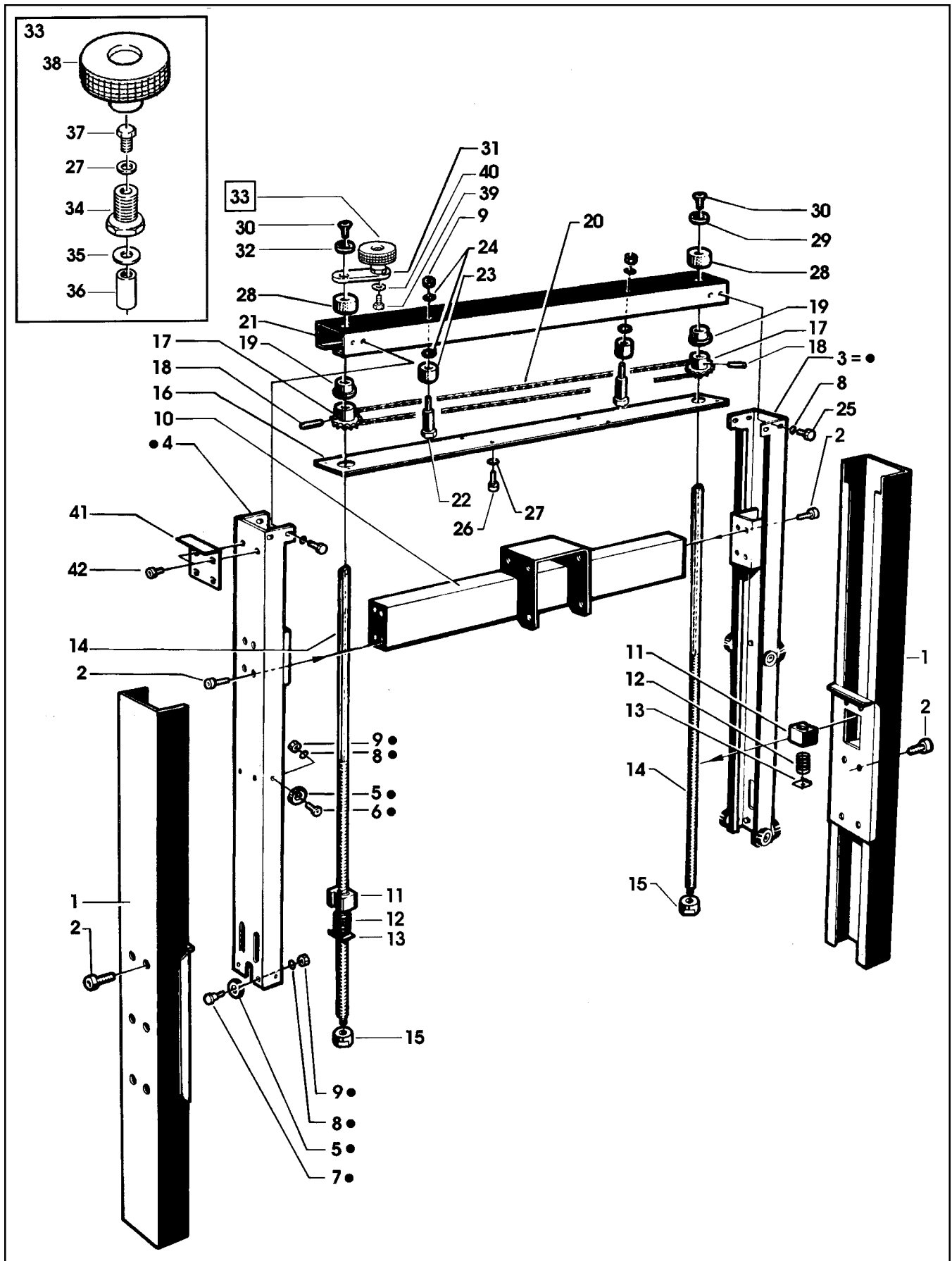


Figure 6472

## Figure 6472

Ref. No.	3M Part No.	Description
6472-1	78-8119-6854-0	Column, W/English Labels
6472-2	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
6472-3	78-8094-6030-2	Column Assembly – Inner
6472-4	78-8094-6028-6	Column – Inner
6472-5	78-8055-0637-1	Caster – /45
6472-6	78-8017-9106-8	Screw – Bearing Shoulder
6472-7	78-8054-8589-9	Screw – Special
6472-8	26-1000-0010-3	Washer – Flat, M6
6472-9	26-1003-6916-9	Nut – Locking, Plastic Insert, M6
6472-10	78-8094-6027-8	Support – Head
6472-11	78-8054-8571-7	Nut – Plastic
6472-12	78-8054-8969-3	Spring
6472-13	78-8054-8970-1	Bed Plate For Spring
6472-14	78-8054-8573-3	Lead Screw
6472-15	78-8054-8968-5	Nut – Special
6472-16	78-8094-6026-0	Cover – Crossmember
6472-17	78-8055-0731-2	Sprocket – 3/8 Inch Pitch, 13 Teeth
6472-18	78-8054-8586-5	Pin
6472-19	78-8060-8125-9	Bushing
6472-20	78-8055-0728-8	Chain – 3/8 Inch Pitch, 139 Pitch Long
6472-21	78-8119-6855-7	Crossmember, W/English Labels
6472-22	78-8060-7878-4	Idler Screw
6472-23	78-8054-8575-8	Idler Roller
6472-24	78-8042-2919-9	Washer – Triple, M6
6472-25	78-8032-0375-7	Screw – Hex Hd, M6 x 16
6472-26	26-1002-5753-9	Screw – Self-Tapping
6472-27	78-8005-5740-3	Washer – Plain, 4 mm
6472-28	78-8054-8581-6	Spacer
6472-29	78-8055-0732-0	Washer – Special
6472-30	26-1001-9843-6	Screw – Flat Soc Hd, M6 x 16
6472-31	78-8060-8065-7	Lever – Knob
6472-32	78-8054-8577-4	Washer – Special
6472-33	78-8114-4941-8	Handle Assembly
6472-34	78-8070-1511-6	Bushing
6472-35	78-8070-1510-8	Washer – Nylon, /7 x 15 x 1
6472-36	78-8070-1509-0	Shaft – Crank
6472-37	78-8010-7157-8	Screw – Hex Hd, M4 x 10
6472-38	78-8114-4942-6	Knob – MBT.60 B-M12
6472-39	26-1003-5820-4	Screw – Hex Hd, M5 x 12
6472-40	78-8028-8214-8	Washer
6472-41	78-8114-4960-8	Bracket – Column
6472-42	78-8076-4503-7	Screw – M6 x 12

# 120a3 Adjustable Case Sealer

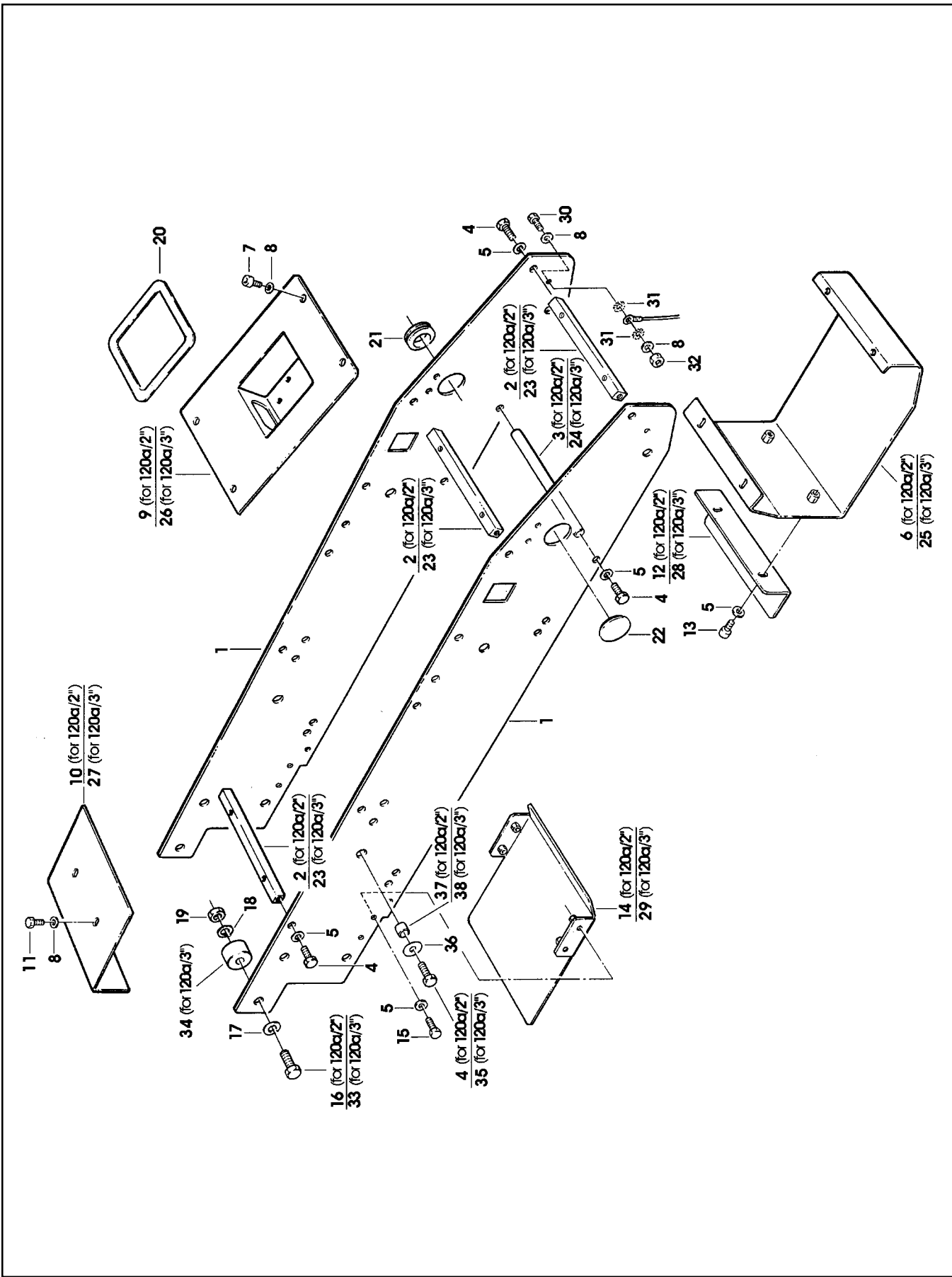


Figure 6473

**Figure 6473**

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>
6473-1	78-8119-6856-5	Frame – Support, Upper Head, W/English Labels
6473-2	78-8055-0645-4	Spacer – (120a)
6473-3	78-8055-0643-9	Spacer – (120a)
6473-4	78-8032-0375-7	Screw – Hex Hd, M6 x 16
6473-5	26-1000-0010-3	Washer – Flat, M6
6473-6	78-8114-4962-4	Holder – (120a)
6473-7	26-1003-7948-1	Screw – Soc Hd Hex Soc, M5 x 10
6473-8	78-8005-5741-1	Washer – Flat, M5
6473-9	78-8119-6857-3	Cover – Holder, W/English Labels (120a)
6473-10	78-8094-6039-3	Cover – Rear (120a)
6473-11	78-8010-7163-6	Screw – Hex Hd, M5 x 10
6473-12	78-8114-4964-0	Corner – Holder (120a)
6473-13	78-8010-7209-7	Screw – Soc Hd, M6 x 12
6473-14	78-8114-4965-7	Slide – Rear (120a)
6473-15	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6473-16	26-1003-5842-8	Screw – Hex Hd, M8 x 20 (120a)
6473-17	78-8017-9318-9	Washer – Plain, 8 mm
6473-18	78-8005-5736-1	Lockwasher For M8 Screw
6473-19	26-1000-1347-8	Nut – Hex, M8
6473-20	78-8100-1234-0	Collar
6473-21	78-8114-4937-6	Grommet
6473-22	78-8114-4966-5	Cap
6473-23	78-8054-8931-3	Spacer – 10 x 10 x 140 mm (120a3)
6473-24	78-8054-8929-7	Spacer – 10 x 140 mm (120a3)
6473-25	78-8114-4967-3	Holder – (120a3)
6473-26	78-8119-6858-1	Cover – Holder, W/English Labels (120a3)
6473-27	78-8094-6040-1	Cover – Rear (120a3)
6473-28	78-8114-4969-9	Corner – Holder (120a3)
6473-29	78-8114-4970-7	Slide – Rear (120a3)
6473-30	78-8060-8488-1	Screw – Hex Hd, M5 x 20
6473-31	78-8046-8217-3	Washer – Special
6473-32	78-8010-7417-6	Nut – Hex, M5
6473-33	26-1002-4176-4	Screw – Hex Hd, M8 x 35 (120a3)
6473-34	78-8055-0733-8	Spacer – (120a3)
6473-35	78-8010-7193-3	Screw – Hex Hd, M6 x 20 (120a3)
6473-36	78-8042-2919-9	Washer – Triple, M6
6473-37	78-8070-1454-9	Spacer – Collar (120a)
6473-38	78-8114-4971-5	Support – (120a3)

# 120a3 Adjustable Case Sealer

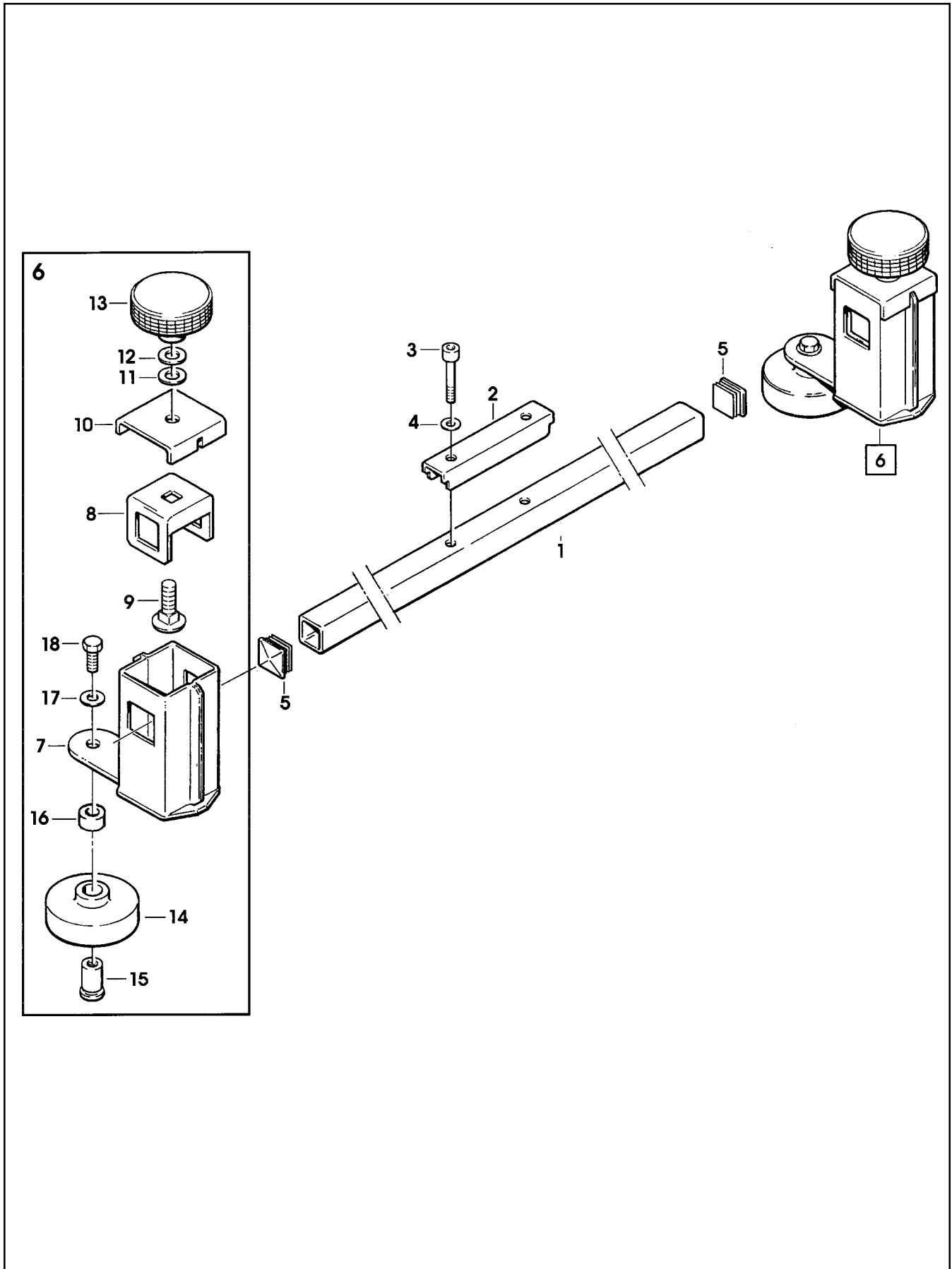


Figure 6474

## Figure 6474

Ref. No.	3M Part No.	Description
6474-1	78-8114-4972-3	Support – Compression Roller
6474-2	78-8114-4973-1	Bracket – Support
6474-3	26-1003-7962-2	Screw – Soc Hd, M6 x 40
6474-4	26-1000-0010-3	Washer – Flat, M6
6474-5	78-8052-6652-1	Cap – End
6474-6	78-8114-4974-9	Compression Roller Assembly
6474-7	78-8119-6859-9	Compression Roller Bracket, W/English Labels
6474-8	78-8076-4630-8	Plate – Tube, Roller
6474-9	78-8076-4631-6	Screw – M10 x 35
6474-10	78-8114-4976-4	Cover
6474-11	78-8017-9074-8	Washer – Nylon, 15 mm
6474-12	78-8052-6566-3	Washer – Friction
6474-13	78-8114-4959-0	Knob – MBT.50 B-M10
6474-14	78-8114-4977-2	Roller – Compression
6474-15	78-8076-4629-0	Shaft – Roller
6474-16	78-8114-4993-9	Spacer
6474-17	78-8017-9318-9	Washer – Plain, 8 mm
6474-18	78-8017-9301-5	Screw – Hex Hd, M8 x 25



# 120a3 Adjustable Case Sealer

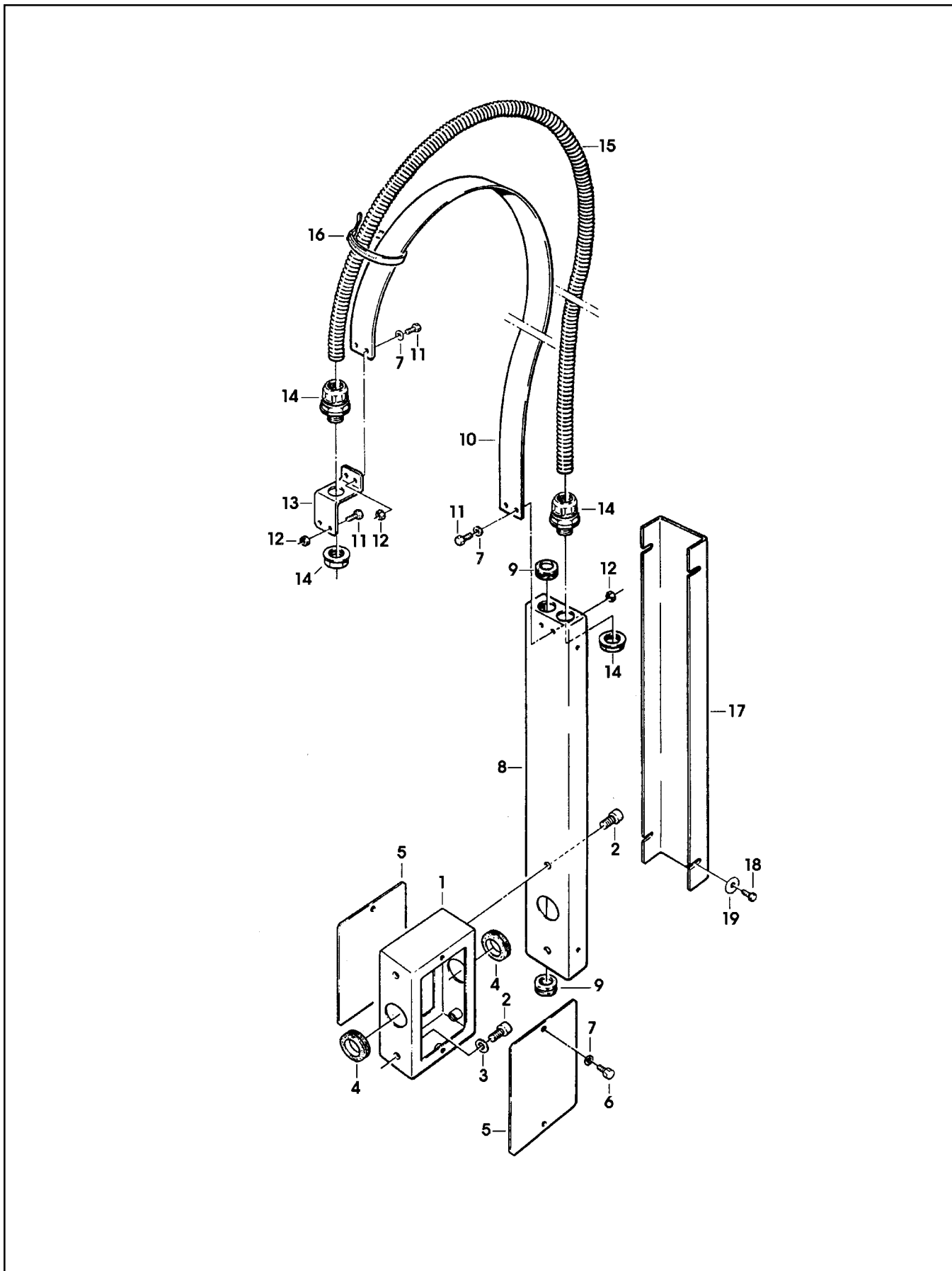


Figure 6475

## Figure 6475

Ref. No.	3M Part No.	Description
6475-1	78-8114-4978-0	Spacer
6475-2	26-1003-7963-0	Screw – Soc Hd, M8 x 16
6475-3	78-8017-9318-9	Washer – Plain, 8 mm
6475-4	78-8114-4937-6	Grommet – /20
6475-5	78-8114-4979-8	Cover
6475-6	26-1003-5820-4	Screw – Hex Hd, M5 x 12
6475-7	78-8005-5741-1	Washer – Flat, M5
6475-8	78-8052-6657-0	Housing – Wire
6475-9	78-8052-6659-6	Grommet
6475-10	78-8114-4980-6	Strap – Wire
6475-11	78-8010-7163-6	Screw – Hex Hd, M5 x 10
6475-12	78-8010-7417-6	Nut – Hex, M5
6475-13	78-8054-8955-2	Clamp – Bracket
6475-14	78-8060-7631-7	Connector – 3/8 Inch
6475-15	78-8114-4981-4	Conduit – /12, 730 mm
6475-16	78-8060-8029-3	Clamp
6475-17	78-8091-0603-8	Cover – Housing
6475-18	26-1003-5810-5	Screw – Hex Hd, M4 x 8
6475-19	78-8017-9018-5	Washer – Plain, M4 Special

# 120a3 Adjustable Case Sealer

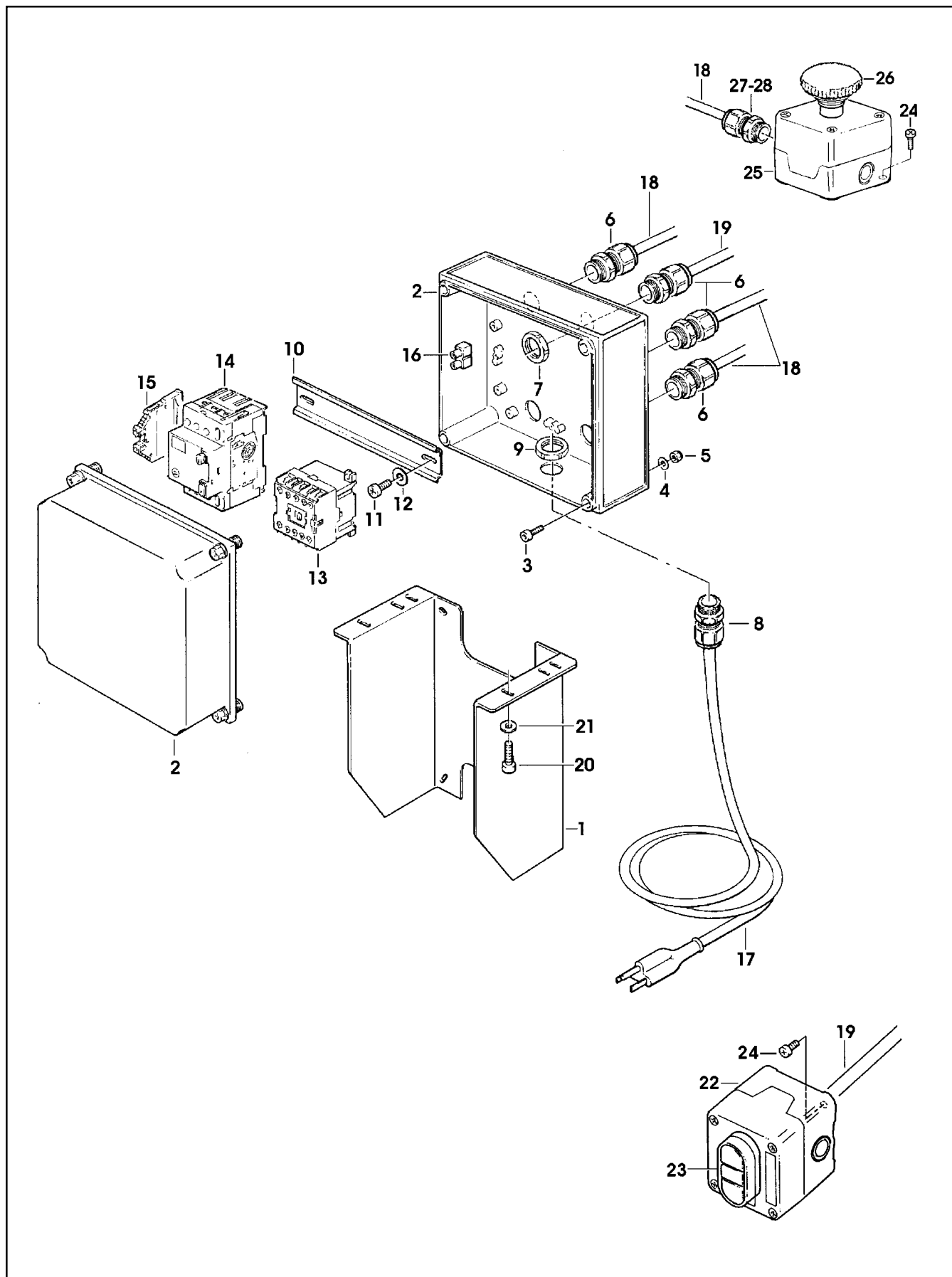
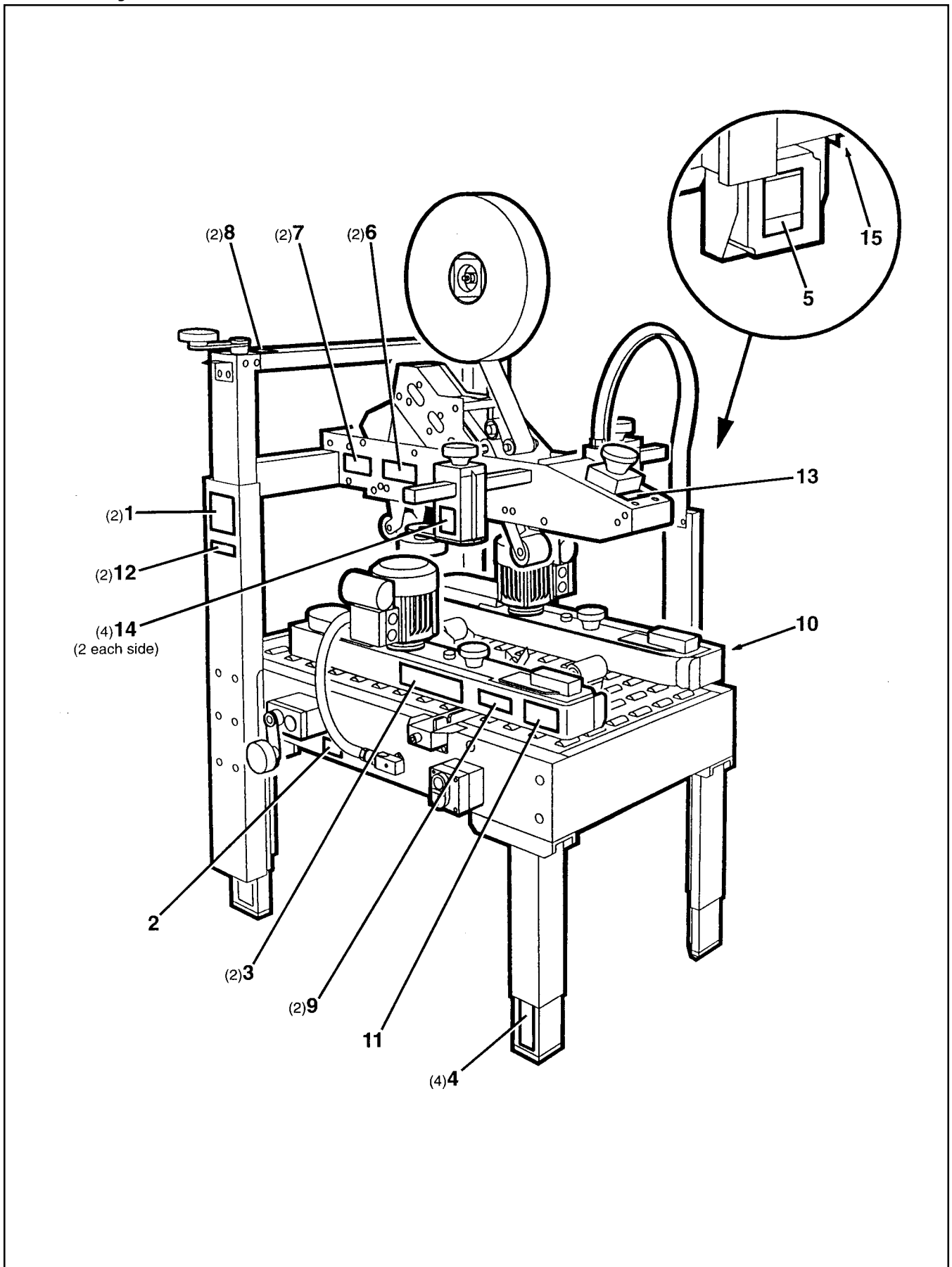


Figure 6476

## Figure 6476

Ref. No.	3M Part No.	Description
6476-1	78-8094-6379-3	Support – Box
6476-2	78-8113-6759-4	Box, W/English Label
6476-3	26-1003-7945-7	Screw – Soc Hd, M4 x 20
6476-4	78-8005-5740-3	Washer – Plain, 4 mm
6476-5	26-1003-6914-4	Nut – Plastic Insert, M4
6476-6	78-8076-4715-7	Cord Grip
6476-7	78-8076-5211-6	Set Nut – GMP13.5
6476-8	78-8057-5807-1	Cord Grip – ST 16
6476-9	78-8100-1202-7	Lock Nut – GMP 16
6476-10	78-8094-6382-7	Guide – Mounting
6476-11	78-8028-8208-0	Screw – 6PX9.5
6476-12	78-8017-9018-5	Washer – Plain, M4 Special
6476-13	78-8094-6383-5	Contactora – Sprecher & Schuh, CA4-5-10, 110V, 60HZ
6476-14	78-8076-5378-3	Switch – Thermal, Sprecher & Schuh, KTA 3-25
6476-15	78-8094-6384-3	Clamp
6476-16	78-8076-4968-2	Terminal
6476-17	78-8028-7909-4	Power Cord – U.S.A.
6476-18	78-8060-8053-3	Wire – 3-Pole, 5 Meters Length
6476-19	78-8100-1038-5	Cable – 3X20 AWG, 5 MT
6476-20	26-1003-7957-2	Screw – Soc Hd Hex Hd, M6 x 16
6476-21	26-1000-0010-3	Washer – Flat, M6
6476-22	78-8114-4896-4	Box – On/Off, Grey, Allen Bradley
6476-23	78-8094-6386-8	Switch – On/Off, DM3N-C-01/10, Allen Bradley
6476-24	78-8017-9257-9	Screw – Phillis Head, M4 x 10
6476-25	78-8076-5194-4	Box – E-Stop, Yellow, Allen Bradley
6476-26	26-1014-5845-8	E-Stop – 800EM-MTS44-3LX01, Allen Bradley
6476-27	78-8076-4532-6	Cord Grip
6476-28	78-8076-4645-6	Lock Nut

# 120a3 Adjustable Case Sealer



## Safety and Information Labels

A label kit, part number 78-8098-9043-3, is available as a stock item. It contains all the safety and information labels used on the case sealer, or labels can be ordered separately from the following list.

<b>Ref. No.</b>	<b>3M Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	78-8070-1366-5	Label – Safety Instructions	2
2	78-8070-1622-1	Label – In/Out	2
3	78-8119-6838-3	Label – Product	2
4	78-8052-6680-2	Label – Leg	4
5	78-8070-1329-3	Label – Warning, Hazardous Voltage	1
6	78-8070-1336-8	Label – Warning, Sharp Knife	2
7	78-8070-1339-2	Label – 3M Logo	2
8	78-8070-1423-4	Label – Up/Down	2
9	78-8070-1629-6	Label – Belt Tensioning	2
10	78-8070-1331-9	Label – Warning, Moving Belts	1
11	78-8070-1330-1	Label – Warning, Moving Belts	1
12	78-8068-3859-1	Label – Service and Spares	2
13	78-8095-1141-9	Label – Stop	1
14	78-8119-6751-8	Label – Caution, Pinch Point	4
15	78-8095-1154-2	Label – Ground	1