3M

Instructions and Parts List

3M-Matic™

120af Type 19600 Adjustable Case Sealer with AccuGlide™ II Taping Heads

Important Safety Information

Read "Important Safeguards", pages 3-5 and also operating "Warnings", page 20 BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.

Spare Parts

It is recommended you immediately order the spare parts listed on page 41, 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.

Serial No. _____

For reference, record machine serial number here.

3M Packaging Systems Division

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

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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 **1-800/344 9883**
Amery, WI 54001-1325 **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.

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St. Paul, MN 55144-1000

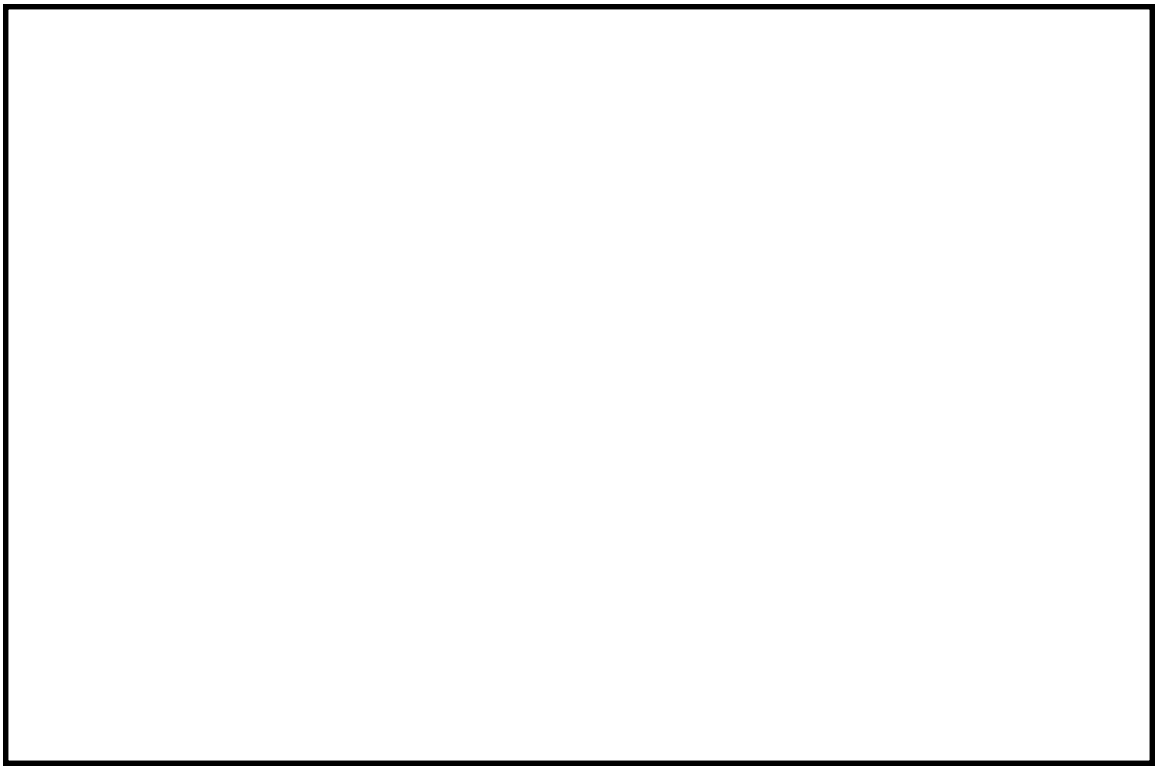
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To Our Customers:

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.

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Instruction Manual

120af Adjustable Case Sealer, Type 19600

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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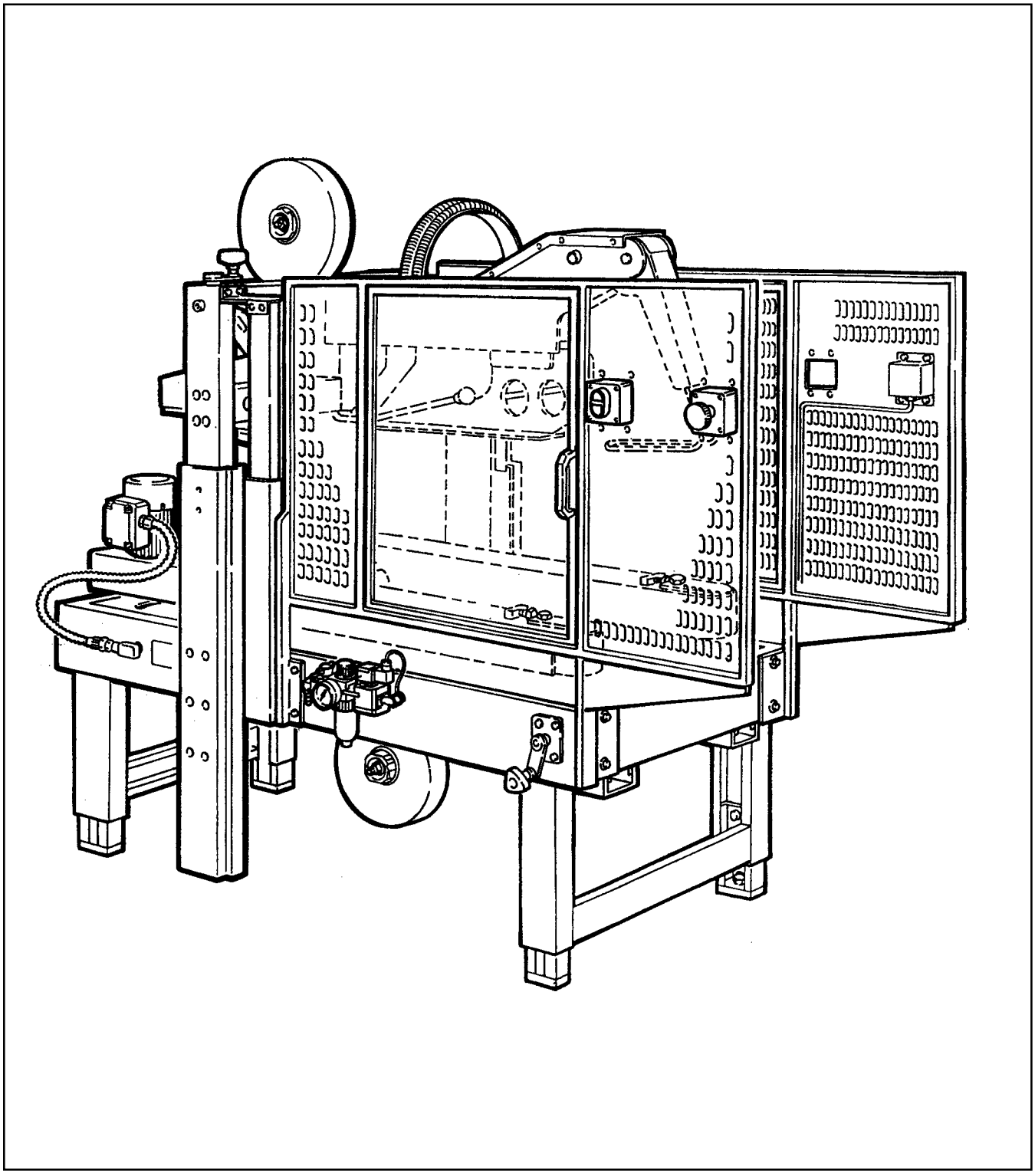
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Section II – AccuGlide™ II STD 2 Inch Taping Heads

(See Section II for Table of Contents)

Description

The **3M-Matic™ 120af Adjustable Case Sealer** with **AccuGlide™ II** Taping Heads is designed to accept filled regular slotted containers from an existing conveyor, fold the top flaps and apply a “C” clip of **Scotch™** brand pressure-sensitive film box sealing tape to the top and bottom center seam of the box. The 120af is manually adjustable to a wide range of box sizes (see "Specifications – Box Weight and Size Capacities", Page 8).



3M-Matic™ 120af Adjustable Case Sealer, Type 19600

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™ 120af Adjustable Case Sealer, Type 19600** 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.

Contents – 120af Adjustable Case Sealer

(1) 120af Adjustable Case Sealer, Type 19600
(1) Tool/Spare Parts Kit
(1) Instruction and Parts Manual

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

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 78-8113-6779-2 is available as a stock item or individual labels can be ordered. See Parts Illustration/List, Section I, pages 76 & 77.

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.

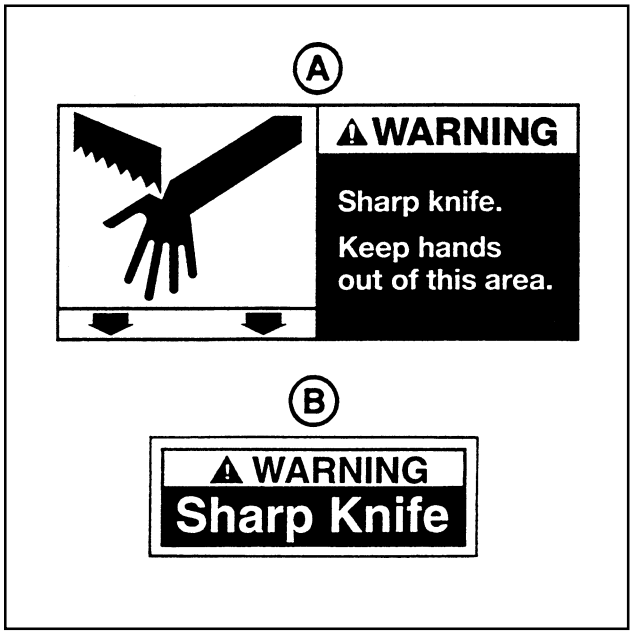


Figure 1-1 – Knife Warning Label

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 infeed end of the machine bed on each side. 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 **"Warning – Moving Flap Kicker"** labels, shown in **Figure 1-4,** are attached to the machine guards on the infeed end, close to the top. These labels remind the operator and service personnel to keep away from flap kicker when machine is running.

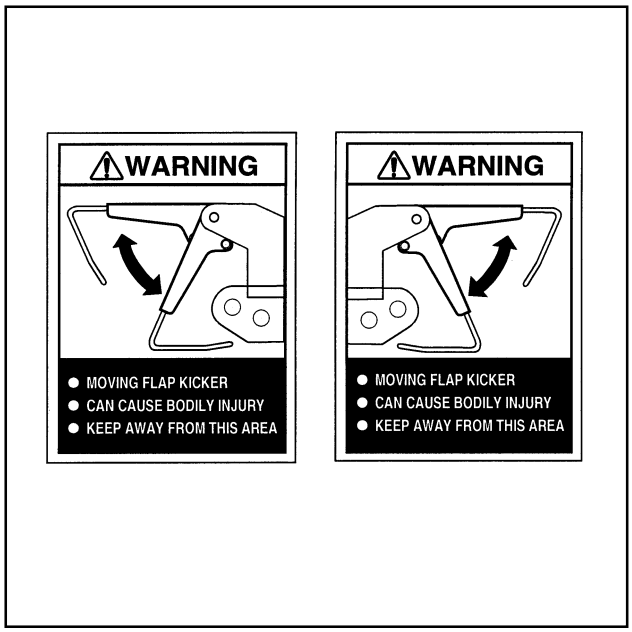


Figure 1-4 – Moving Flap Kicker

The **"Caution – Pinch Point"** label, shown in **Figure 1-5**, is attached to the top of 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 1-5 – Pinch Point Caution Label

Two emergency stop switches are located, one on each side of the machine, on the guard at the infeed end of the machine. The **"Stop"** label, shown in **Figure 1-6**, is located near these switches and remind operators and other personnel of the function of these switches. In addition, an **"On/Off"** label is attached next to the electrical On/Off switch on the infeed side guard.

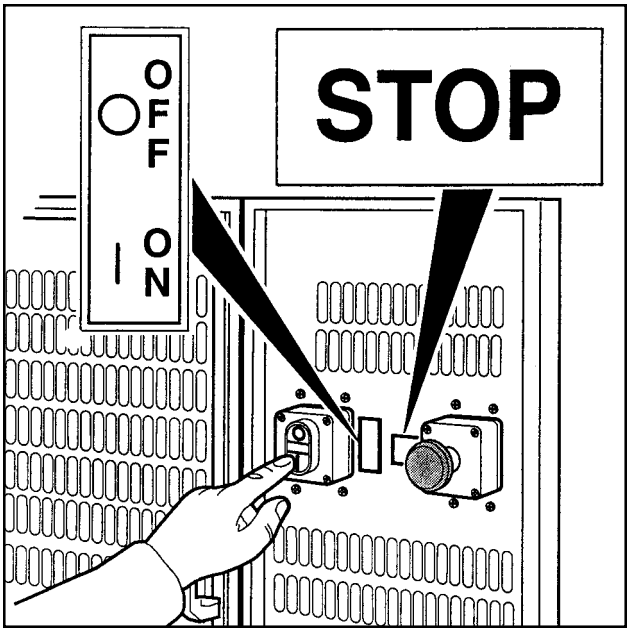


Figure 1-6 – Stop and On/Off Labels

The **"Safety Instructions"** label, shown in **Figure 1-7,** is attached to both side columns. The label provides convenient safeguard instructions for the operator and service personnel.

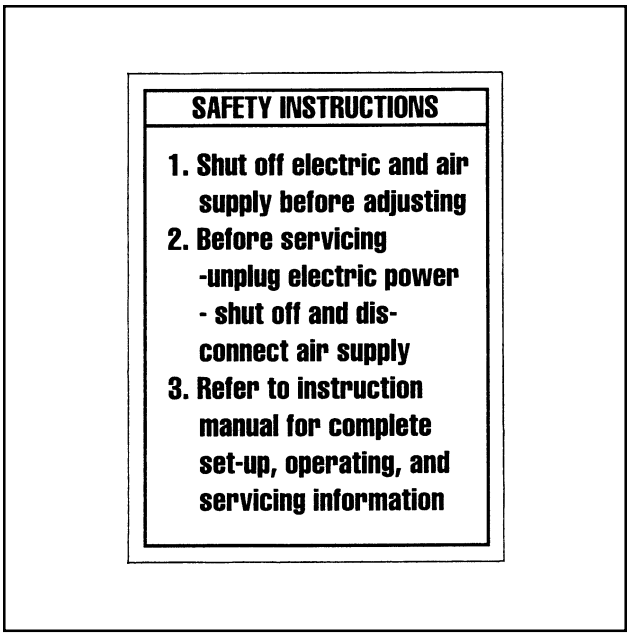


Figure 1-7 – Safety Instructions Label

Important Safeguards (Continued)

The **"Safety Instructions"** label, shown in **Figure 1-8,** is attached to the frame next to the air valve/regulator and reminds operator of the correct air pressure to use. The **"On/Off"** label reminds operators of the location of the pneumatic On/Off valve.



Figure 1-8 – Pneumatic Labels

Two **"Operating Notice"** labels, shown in **Figure 1-9**, are located on the top, infeed end of both drive belt assemblies. The labels remind operators of correct belt adjustment procedures.

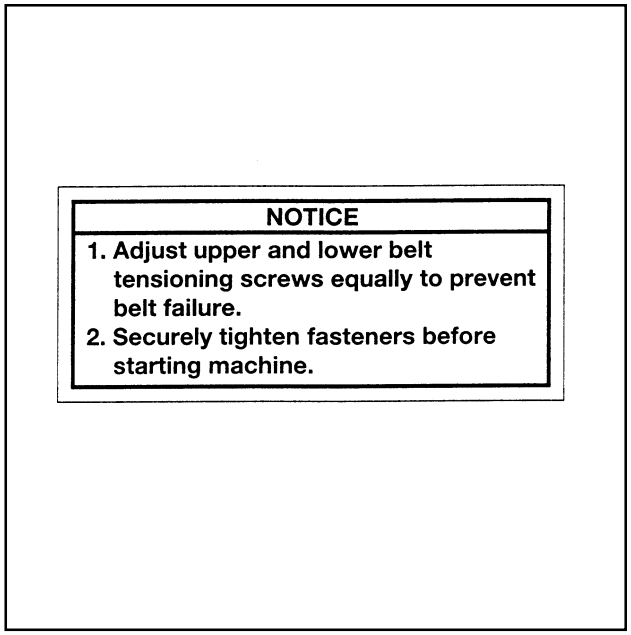


Figure 1-9 – Operating Notice Label

The **"Up/Down"** label, shown in **Figure 1-10**, 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.

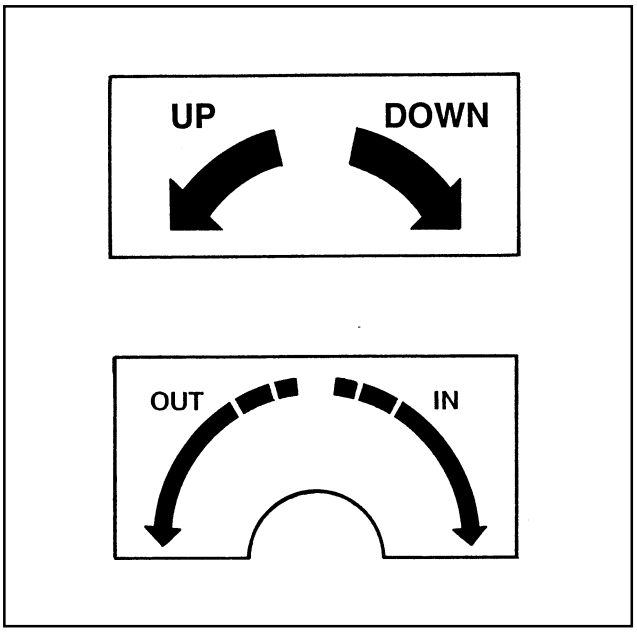


Figure 1-10 – Up/Down, In/Out Labels

The **"In/Out"** label, shown in **Figure 1-10,** 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

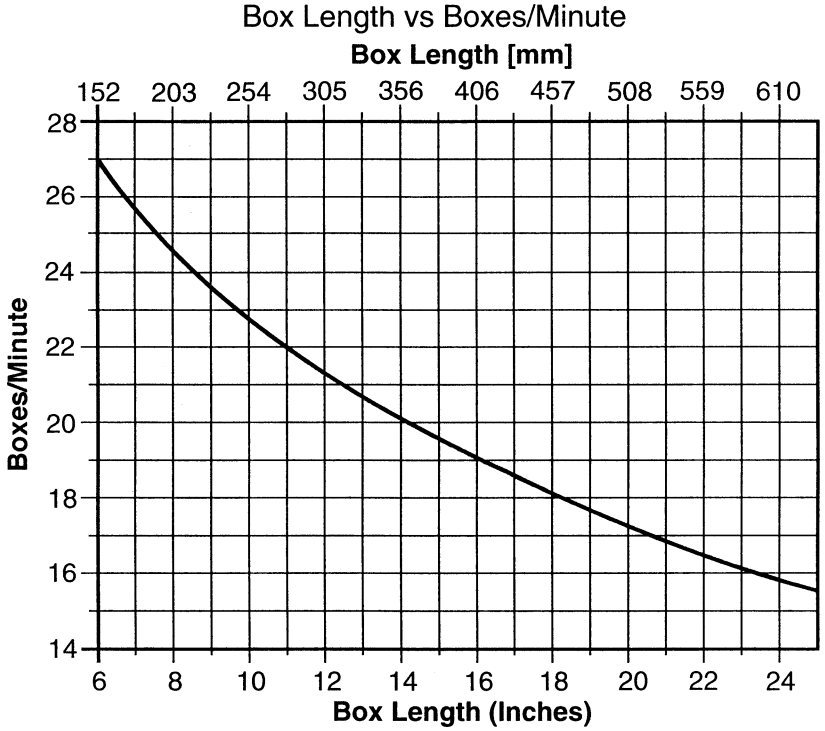
1. **Power Requirements:**

   Electrical – 115 VAC, 60 Hz, 2.8 Amp
   Pneumatic – 5.2 bar gauge pressure [75 PSIG]
   42 litre/min @ 21° C, 1.01 bar [1.5 SCFM] at 27 boxes per minute
   An air regulator/filter is included.

   The machine is equipped with two 1/9 HP motors and comes with a PVC covered power cord and a grounded plug.

2. **Operating Rate:**

   Box drive belt speed is 23 m/min [75 ft/min]



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.

(Specifications continued on next page)

Specifications (Continued)

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

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:

   (See "Special Set-Up Procedure", page 33.)
   50 mm ± 6 mm [2 inch ±1/4 inch]

8. **Box Board:**

   Style – regular slotted containers – RSC
   125 to 275 P.S.I. bursting test, single wall B or C flute.

9. **Box Weight and Size Capacities:**

   A. Box Weight:

      Minimum – contents must support top flaps and weight must be sufficient to hold carton on the conveyor bed with bottom flaps fully closed (4 lbs minimum).

      Maximum – 29 kg [65 lbs.]

(Specifications continued on next page)

Specifications (Continued)

B. Box Size:	**Minimum**	**Maximum**
Length –	150 mm [6.0 inch]	635 mm [25.0 inch]
Width –	120 mm [4.75 inch]	510 mm [20.0 inch]
Height –	120 mm [4.75 inch]*	510 mm [20.0 inch]

* 100 mm [4 inch] with tape application leg length set at 50 mm [2 inch]. (See "Special Set-Up Procedure, page 33). Boxes less than 120 mm [4.75 inch] in height must be wider than 170 mm [6.75 inch].

Note – The maximum width box is 495 mm [19.5 inch] with optional 120af-if Infeed Conveyor.

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

Notes:

1. Boxes lower than 165 mm [6.5 inch] and wider than 300 mm [11.75 inch] require removal of compression rollers.

2. With columns adjusted to upper position, maximum box height increases to 615 mm [24.25 inch] and minimum box height increases to 205 mm [8.00 inch]. See "Special Set-Up Procedure – Outer Column Re-Positioning", page 34.

3. 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.

   In addition, the box score lines must be sufficient to facilitate automatic flap folding. Certain environmental conditions, such as high humidity, can be detrimental to automatic flap folding.

4. A minimum spacing, equal to 405 mm [16 inch] between boxes at a maximum conveyor speed of 0,30 m/s [60 F.P.M.], must be maintained for boxes entering the case sealer.

5. The case sealer can accommodate most boxes within the size range listed above. However, if the box length (in direction of seal) to box height ratio is .6 or less, then several boxes should be test run to assure proper machine performance.

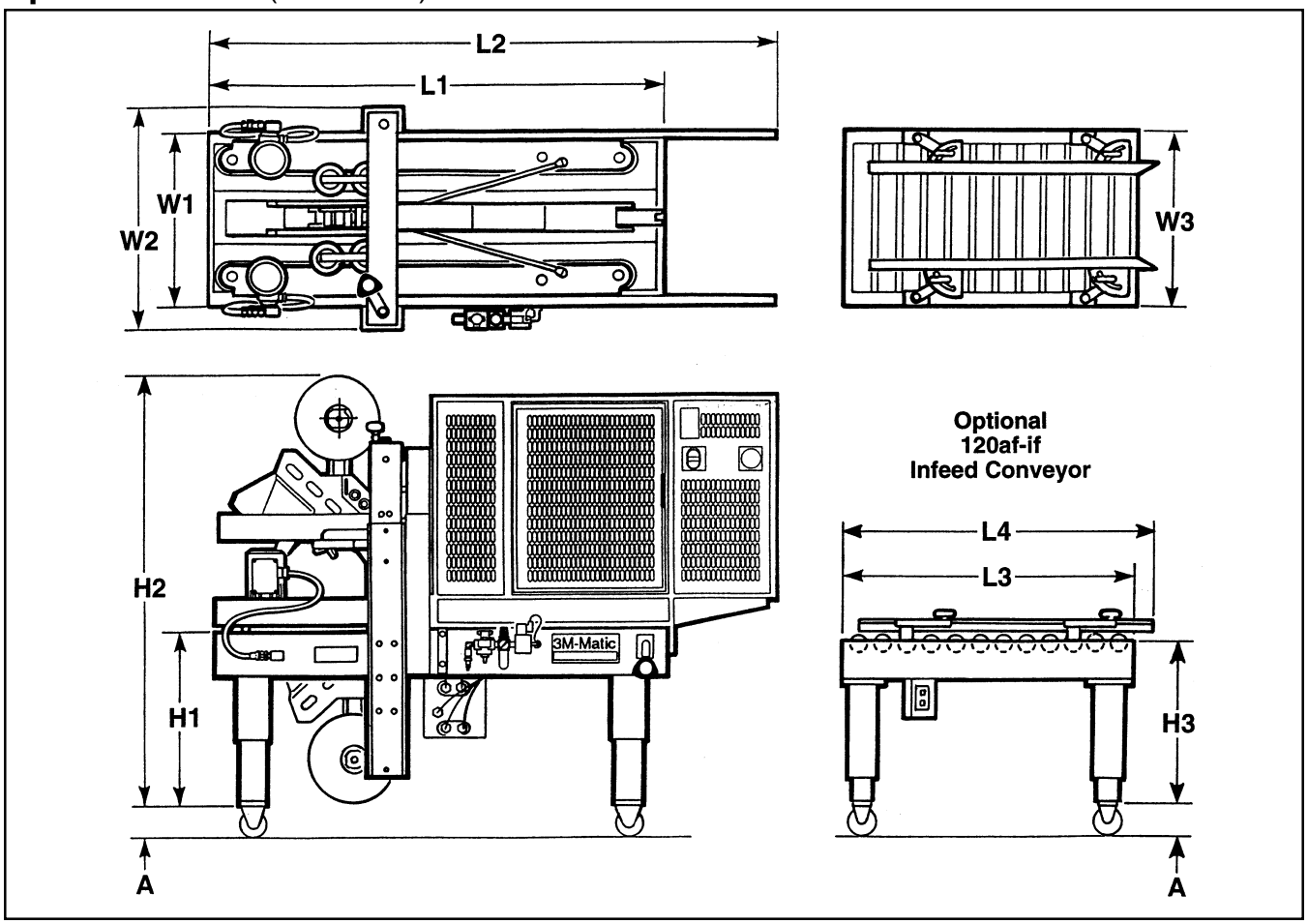
   DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

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

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

(Specifications continued on next page.)

Specifications (Continued)



10. Machine Dimensions:

	A*	H1**	H2**	H3	W1	W2	W3	L1	L2	L3	L4
Minimum											
mm	120	585	1355	585	770	900	570	1525	1920	955	955
[Inches]	[4.81]	[23]	[53.38]	[23]	[30.25]	[35.38]	[22.5]	[60]	[75.5]	[37.5]	[37.5]
Maximum											
mm	120	715	1880	715	770	900	570	1525	1920	955	1150
[Inches]	[4.81]	[28.13]	[74]	[28.13]	[30.25]	[35.38]	[22.5]	[60]	[75.5]	[37.5]	[45.25]

* Casters are optional

** Includes the height of a plastic foot, which is removed if casters are used. Minimum dimension assumes a 405 mm [16 in] diameter tape roll.

Weight – 290 kg [631 lbs] crated (approximate)
250 kg [545 lbs] uncrated (approximate)

11. **Set-Up Recommendations:**

- Machine must be level.
- Customer supplied infeed conveyors (if used) should provide straight and level box entry.
- 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 20, 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 and 3-2 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. Height adjustment crank is shipped in upside down position. Remove the crank and install right side up as shown in Figure 2-1A. **Note: Height adjustment crank can be installed on either column for operator convenience.**
3. Cut and remove tie down straps that secure upper assembly to machine bed on each side of machine at vertical columns.
4. Crank the upper assembly up and remove the 2 x 4 wood frame that supports the flap folder assembly.
5. Secure pneumatic controls to side frame as shown in Figure 2-1B.
6. Install the tape drum bracket on the upper taping head as shown in Figure 2-1C.
7. Hold taping head BUFFING ROLLER and cut and remove cable tie that holds applying/buffing arms retracted on both taping heads. See Figure 2-1D. Allow buffing/applying arms to extend slowly. Also cut and remove cable ties that secure lower taping head in place.

> **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.**

8. Push buffing 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.**

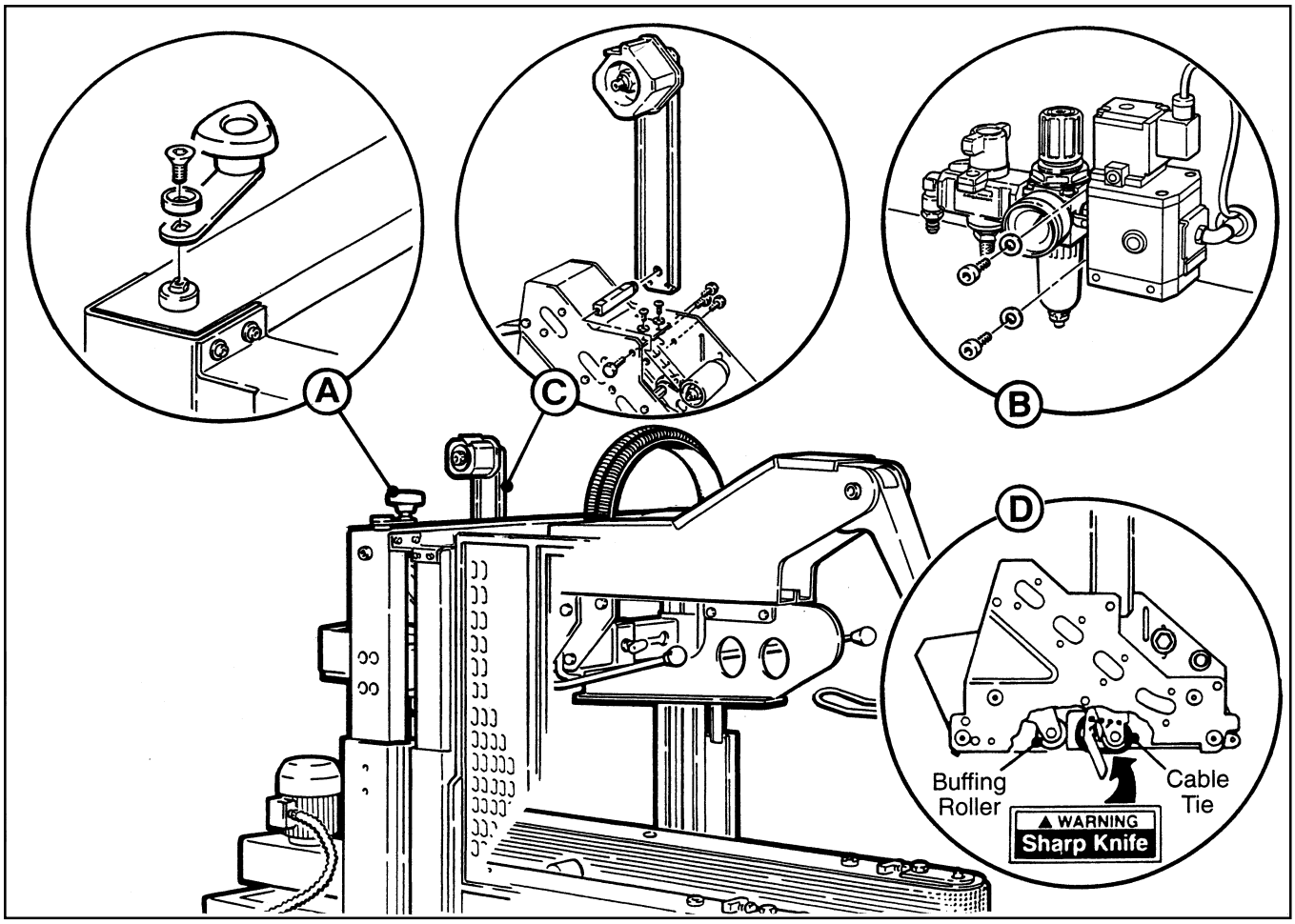


Figure 2-1 – Machine Set-Up

9. 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. **Remove lower taping head by lifting head straight up out of machine bed.** Also make certain to have one side of the fork on each side of the vertical column and electrical control box as shown in Figure 2-3.

CAUTION – Machine weighs approximately 250 kg [545 lbs] uncrated.

10. 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 585 mm [23 inch] minimum to 715 mm [28-1/8 inch] maximum.

    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)

11. The lower taping head tape drum bracket has two mounting positions to allow maximum tape roll capacity.

    For machine bed height 650 mm [25.63 inch] and above, use mounting position shown in Figure 2-2B.

    For machine bed heights below 585 - 650 mm [23.00 - 25.63 inch], use mounting position shown in Figure 2-2C.

12. Install case sealer in production line.

> **Note** – Case sealer must be installed level, it is not designed to convey boxes uphill.

Refer to Figure 2-3 for suggested conveyor types that can be used in production line.

> **Note** – A minimum spacing, equal to 405 mm [16 inch] between boxes at a maximum conveyor speed of 0.30 m/s [60 F.P.M.] must be maintained for boxes entering the case sealer.

Contact your 3M Representative for assistance in selecting conveyor requirements and speed that will comply with your box capability.

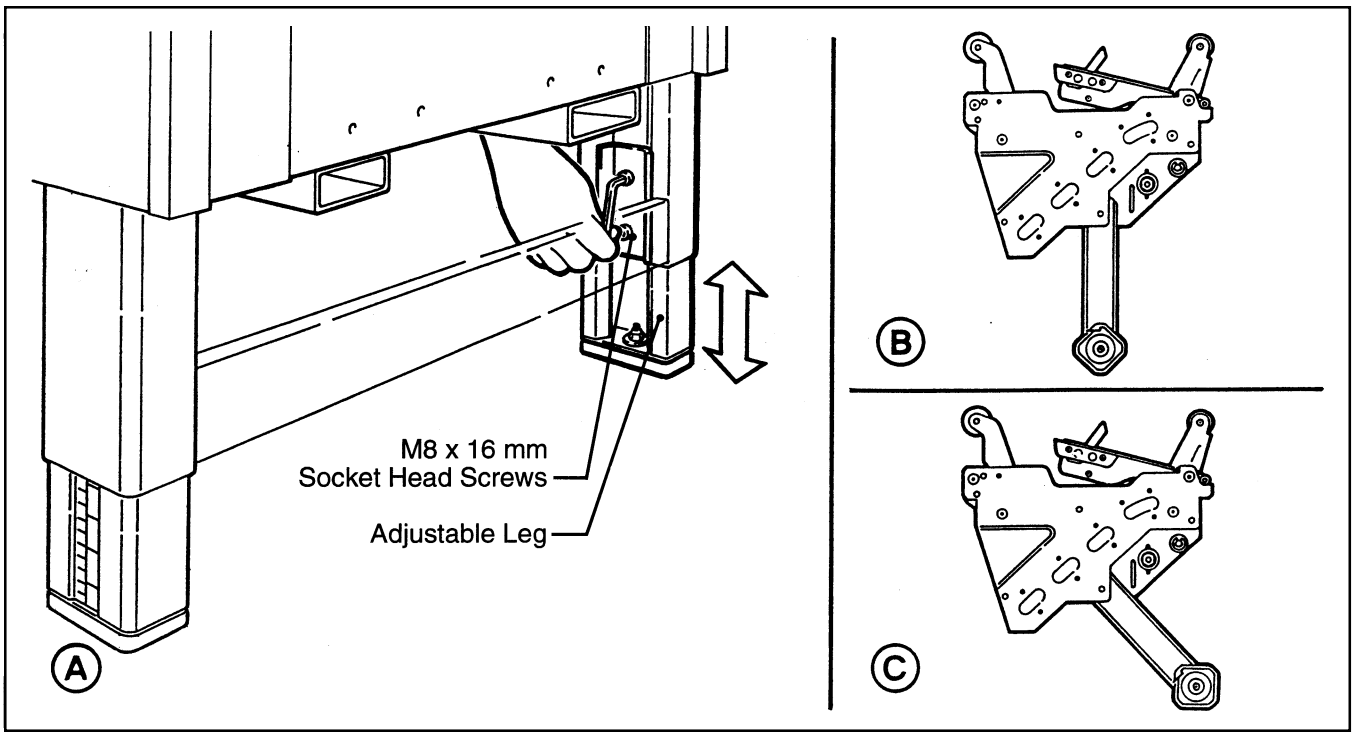


Figure 2-2 – Machine Bed Height Adjustment and Lower Tape Drum Bracket

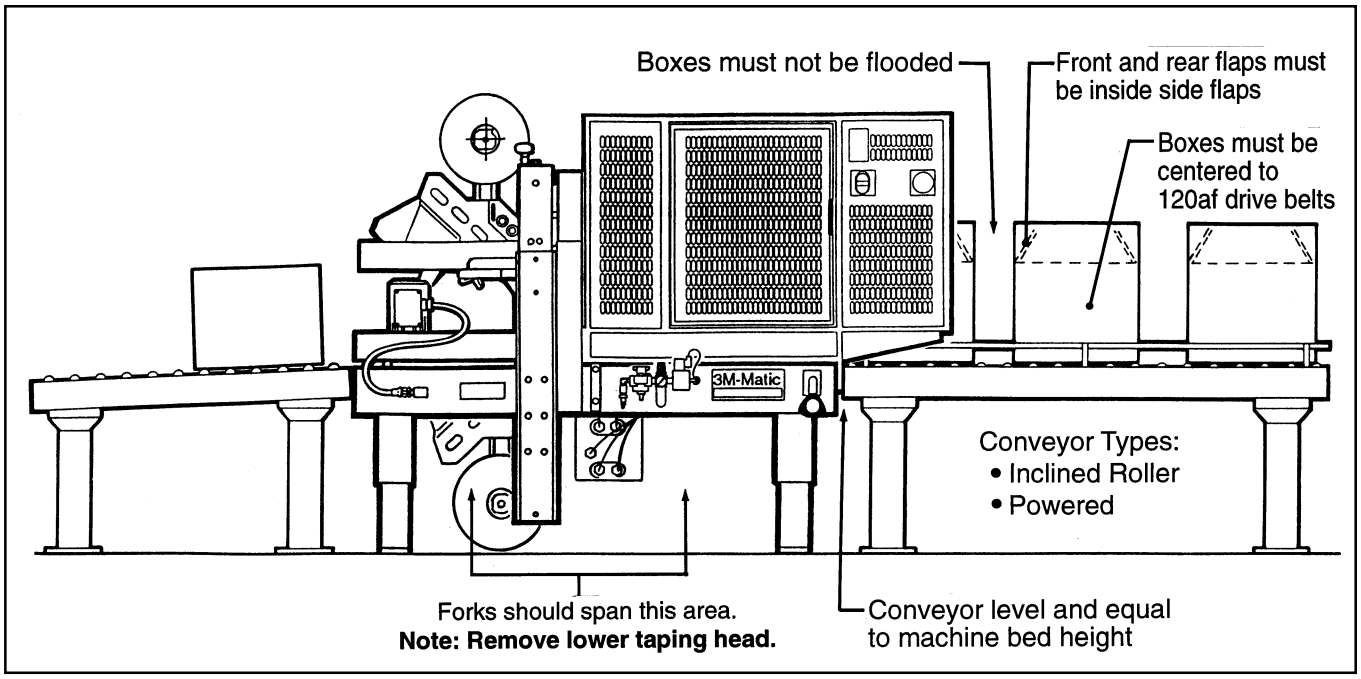


Figure 2-3 – Conveyor Systems

13. Pneumatic connection

WARNING – Use care when working with compressed air.

The case sealer requires a 5.2 bar gauge pressure [75 psig] 42 litre/min, @21°C, 1.01 bar [1.5 SCFM] compressed air supply at 27 boxes per minute. As shown in Figure 2-4, an on/off valve, pressure regulator, and filter are provided to service the air supply.

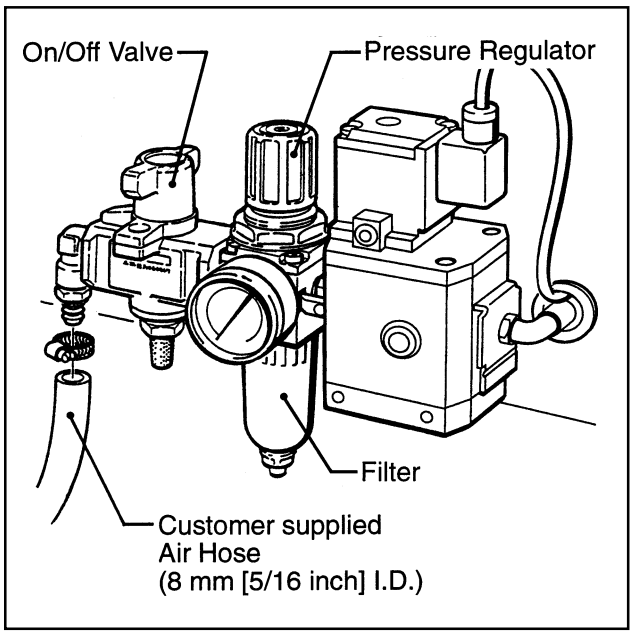


Figure 2-4 – Air Connection

a. Read and remove safety tag from pneumatic "On/Off" valve. Make sure the valve is in the "EXH" (off) position.

b. Connect the main air supply line to the inlet side of the on/off valve using the barbed fitting and hose clamp provided. See Figure 2-4. The customer supplied air hose (8 mm [5/16 inch] ID) must be clamped tightly to the barbed fitting.

   If another type of connector is desired, the barbed fitting can be removed and replaced with the desired 1/4-18 NPT threaded connector.

   Always turn the air valve **"off"** when the air supply line is being connected or disconnected.

Installation and Set-Up (Continued)

14. 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, 2.8 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.

15. Continue with the remainder of the Installation and Set-Up procedure on this page.

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 Section II, "Adjustments – Changing Tape Leg Length", page 13.

BOX SIZE CAPACITY OF CASE SEALER

At its factory setting, the case sealer handles box sizes up to 508 mm [20 inch] maximum height. If larger capacity is needed, the machine can be adjusted to accommodate boxes up to 615 mm [24.25 inch] high. Refer to "Special Set-Up Procedure – Outer Column Re-Positioning", page 34. **Note – Adjusting machine to accommodate 615 mm 24.25 inch] high boxes also increases minimum box size to 205 mm [8.0 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 20 as well as all of the "Operation" instructions.

Refer to Figure 3-1 and 3-2 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.

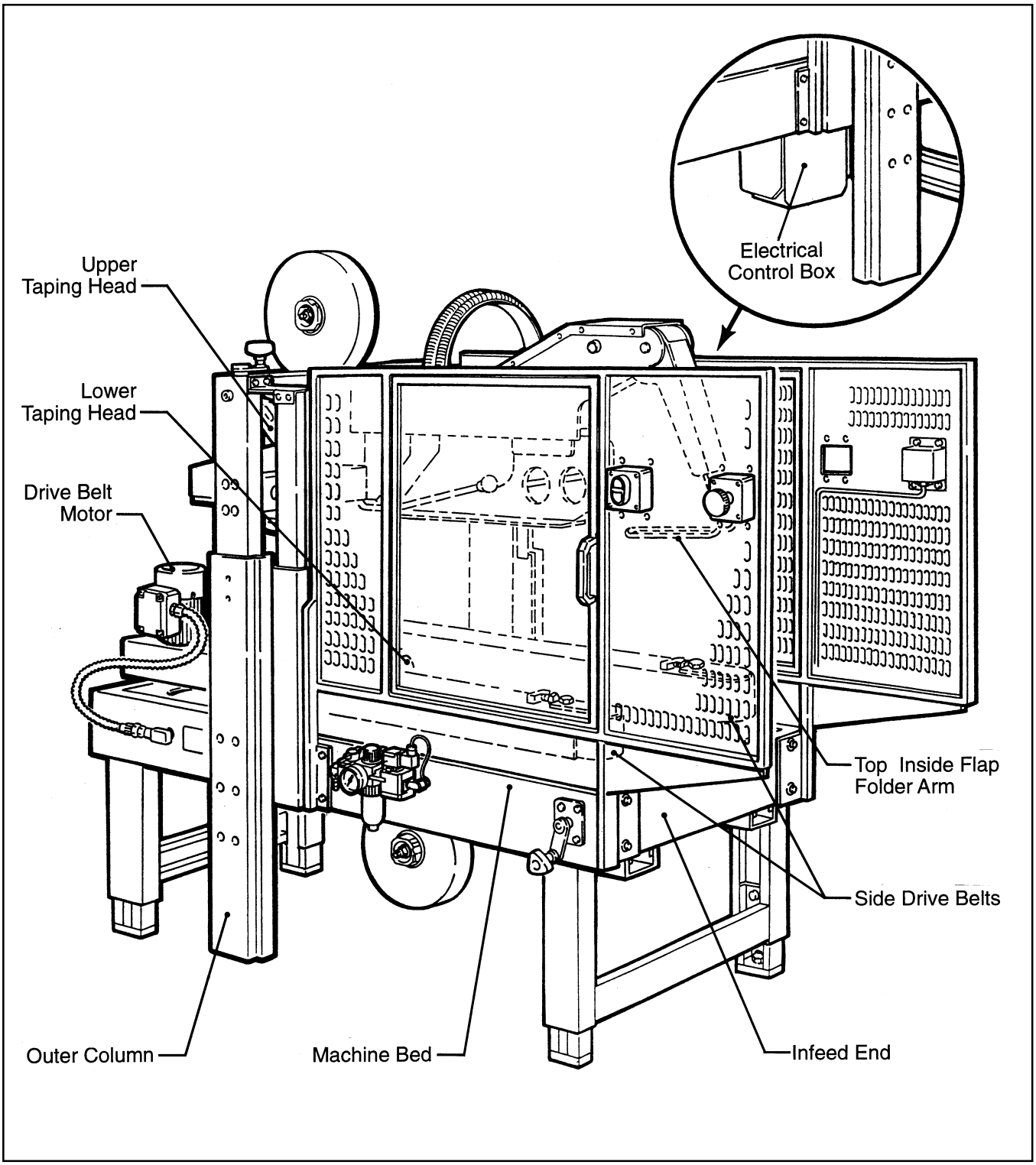


Figure 3-1 – 120af Case Sealer Components (Left Front View)

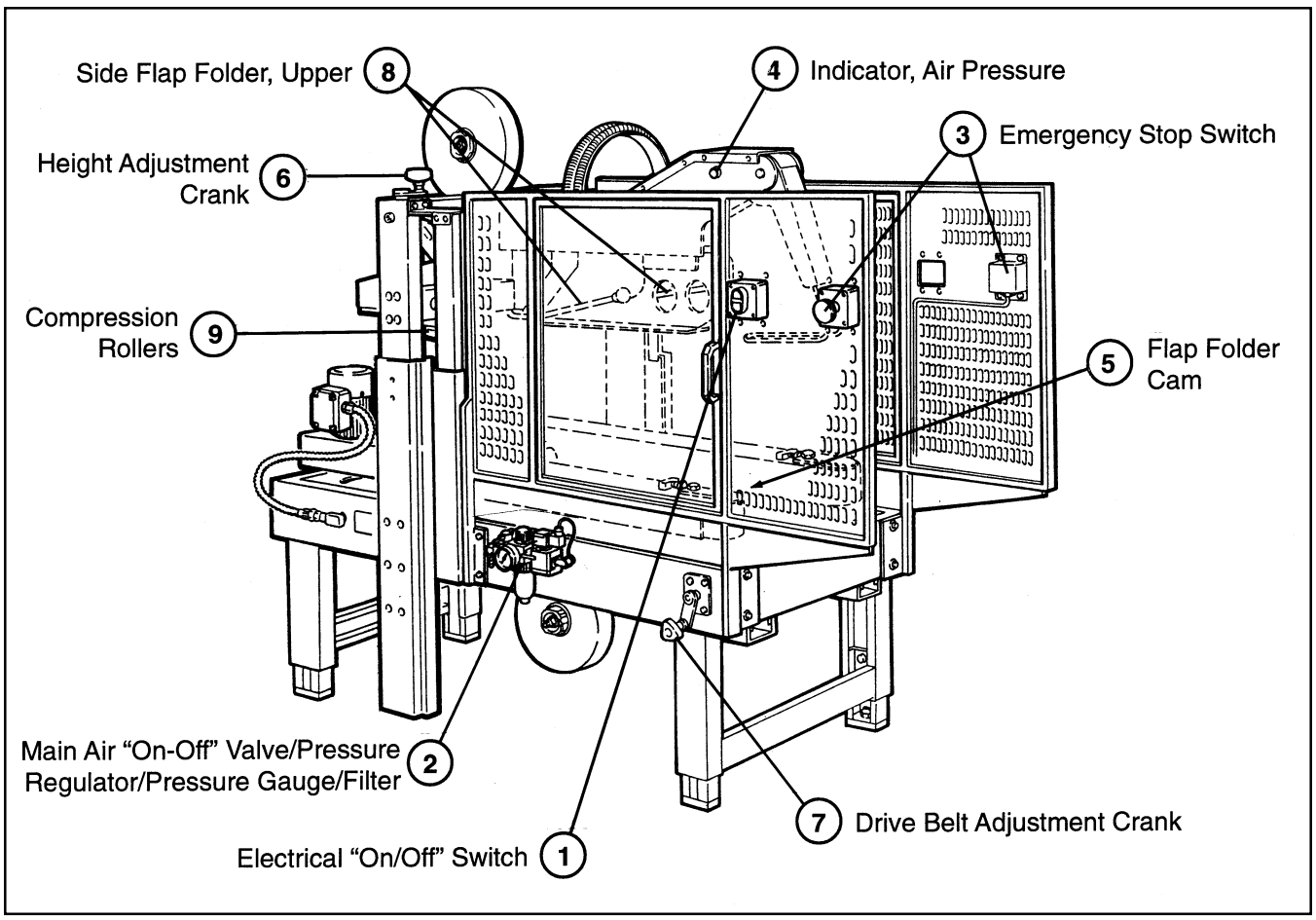


Figure 3-2 – Controls, Valves and Switches

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 guard on the infeed end of the machine.

> **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 30.

2 Main Air "On/Off" Valve/Pressure Regulator/ Pressure Gauge/Filter – Figure 3-3
This set of pneumatic components controls, regulates and filters plant air supply to the pneumatic circuit of the case sealer.

"On/Off" Valve – "On" turn to "SUP" – "Off" turn to "EXH". **Note – Turning air supply "Off" automatically bleeds air pressure from the case sealer air circuits.**

Always turn the air "Off" when machine is not in use, when servicing the machine, or when connecting or disconnecting air supply line.

> **Note** – The air valve has provisions for lockout/ tagout according to plant regulations.

Pressure Regulator regulates main air pressure to the machine. To adjust pressure, pull knob up and turn. Push down to lock setting.

Pressure Gauge indicates main air regulator pressure setting. Air regulator should be adjusted so gauge reads 6.2 bar [90 psig].

Filter removes dirt and moisture from plant air before it enters the case sealer pneumatic circuits. If water collects in bottom of bowl, lift up on the valve on the bottom of bowl to drain.

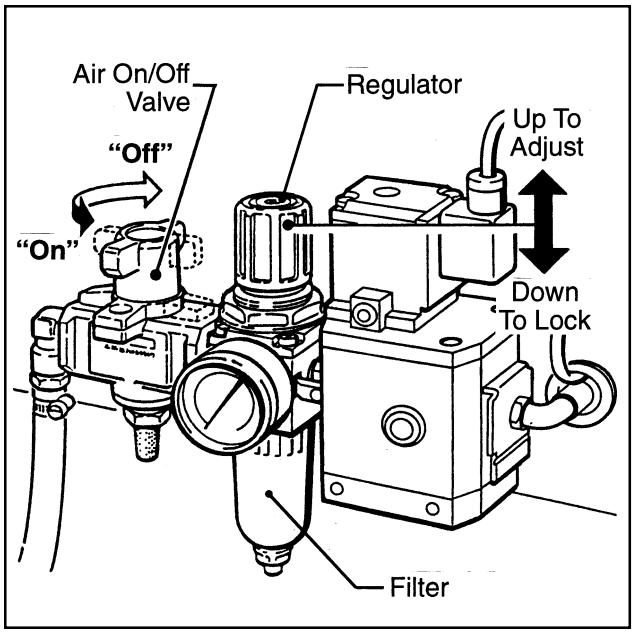


Figure 3-3 – "On/Off" Valve/Regulator/Filter

3 Emergency Stop Switch
The 120af is provided with two emergency stop switches, one on each side of the machine. The machine electrical supply can be turned off by pressing the latching emergency stop switch. To restart machine, rotate emergency stop switch (releases switch latch) and then restart machine by pressing green "On" button on infeed guard.

4 Indicator, Air Pressure
An optical warning indicator for the compressed air circuit of the machine indicates "red" when air circuit is on.

5 Flap Folder Cam
The flap folder cam, when depressed by a box passing over it, actuates the flap folder to fold the trailing box flap down. The cam is adjusted by the operator for the size of box being sealed.

6 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.

7 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.

8 Side Flap Folder, Upper
The side flap folder guides fold the upper side flaps of the box down to a closed position prior to box sealing. The guides are adjusted in or out to accommodate the width of the box being sealed.

9 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.

⚠ WARNINGS

1. **Turn electrical and air supply off and disconnect before servicing taping heads or performing any adjustments or maintenance on the machine. Turn electrical and air supplies off when machine is not in use.**
2. **Do not leave machine running unattended.**
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 flap folder.**
5. **Keep away from flap folder. Flap folder is controlled by air and can be activated (if air supply is "On") by depressing flap folder cam. See Figure 3-4. Be sure flap folder is in the down position before servicing.**
6. **Never attempt to remove jammed boxes from the machine while machine is running. Always raise upper assembly and spread drive belts before removing jammed boxes.**
7. **Machine access door must be closed when drive belts are running Do not attempt to override door interlock switch.**
8. **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.**
9. **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.**
10. **Failure to comply with these warnings could result in severe personal injury and/or equipment damage.**

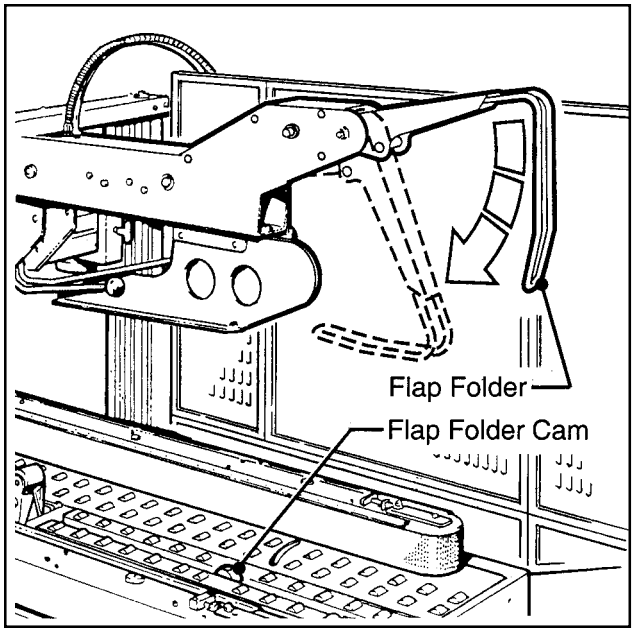


Figure 3-4 – Flap Folder

Tape Loading/Threading

See Section II, Pages 7 and 8

Box Size Set-Up

1. REAR FLAP FOLDER (Figure 3-5)

   Open the side drive belts wide enough to accommodate the desired box width. The side drive belts are positioned by means of the drive belt adjustment crank. Place a product filled box on the infeed conveyor bed with the top flaps folded as shown. Move the box into the machine until the box is even with the end of the flap folder.

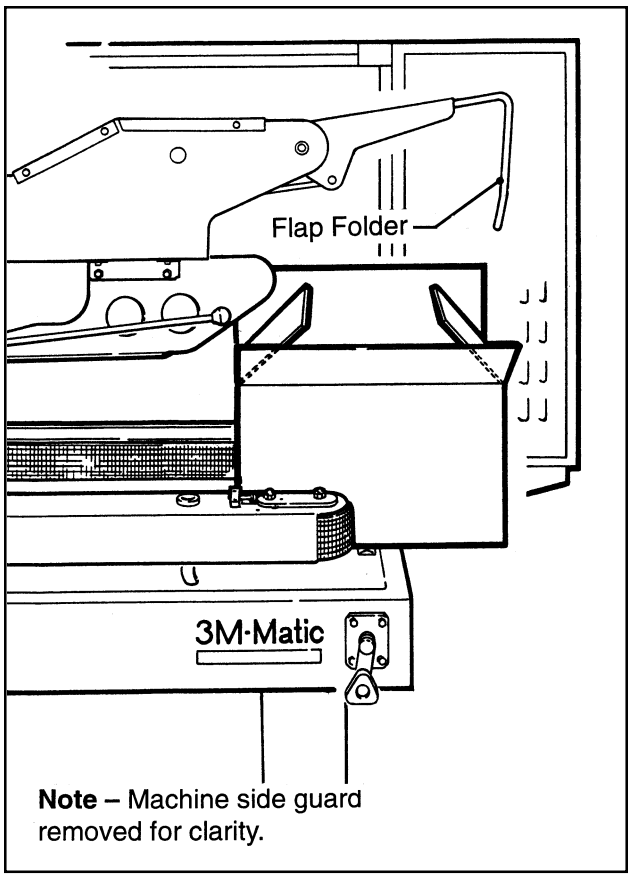


Figure 3-5 – Box Size

2. FLAP FOLDER CAM (Figure 3-6)

   When loosened, the flap folder cam will slide backward and forward. Position the cam so it just touches the lower front edge of the box and then secure the cam in position.

Note – Small boxes, adjust cam to end of travel (towards infeed end) and secure in place.

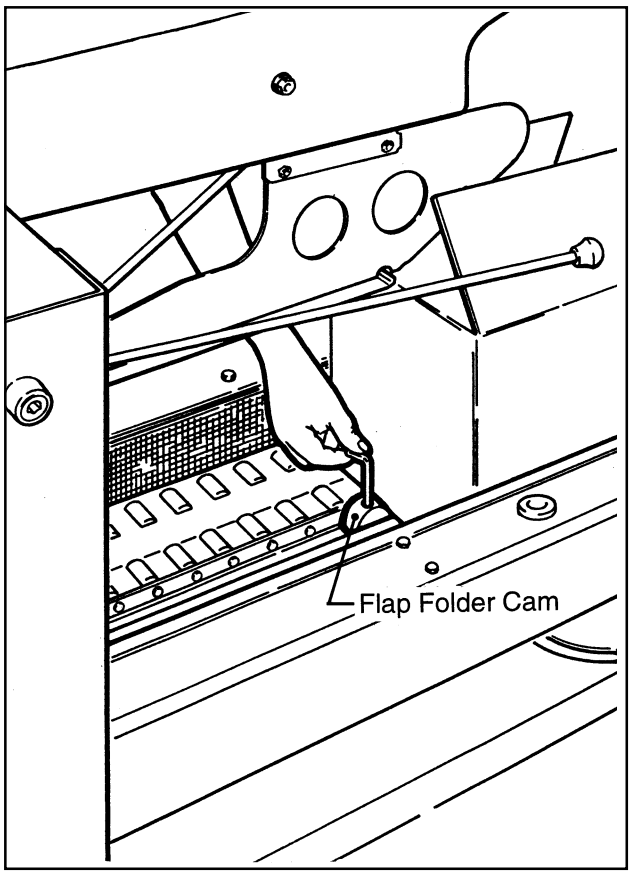


Figure 3-6 – Box Size

Operation (Continued)

3. UPPER SIDE FLAP FOLDER

The upper side flap folders can be adjusted in or out to accommodate the width of the box as shown in Figure 3-7. For optimum performance, the side flap folders should be adjusted to the narrowest position which allows them to catch any side flaps that may be bent outward past vertical.

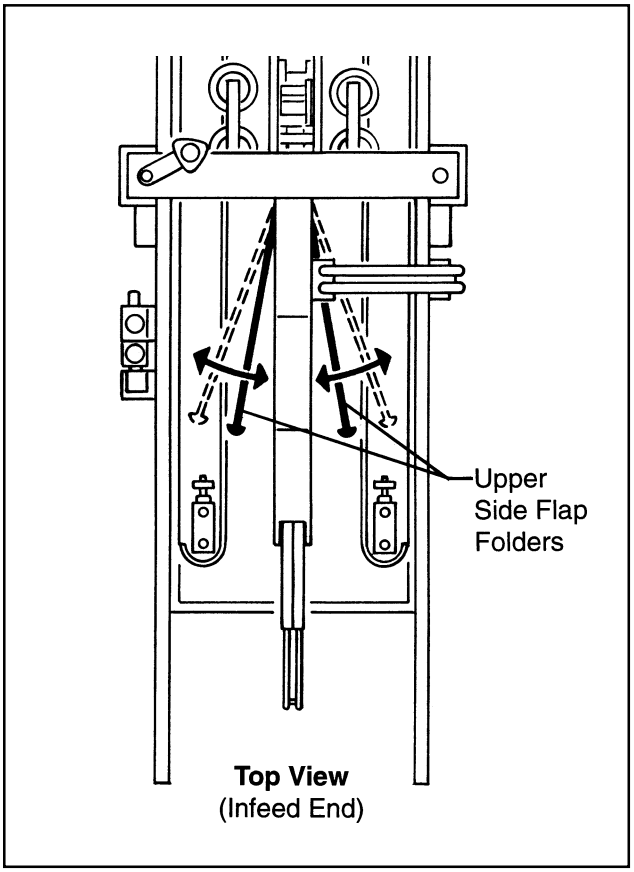


Figure 3-7 – Box Size

4. HEIGHT ADJUSTMENT (FIGURE 3-8)

Manually move the box forward on the machine bed to contact the lower taping head applying roller. With the box reasonably centered, lower the top flap folding assembly by means of the height adjustment crank as shown The flap separator must contact and hold the minor box flaps fully closed.

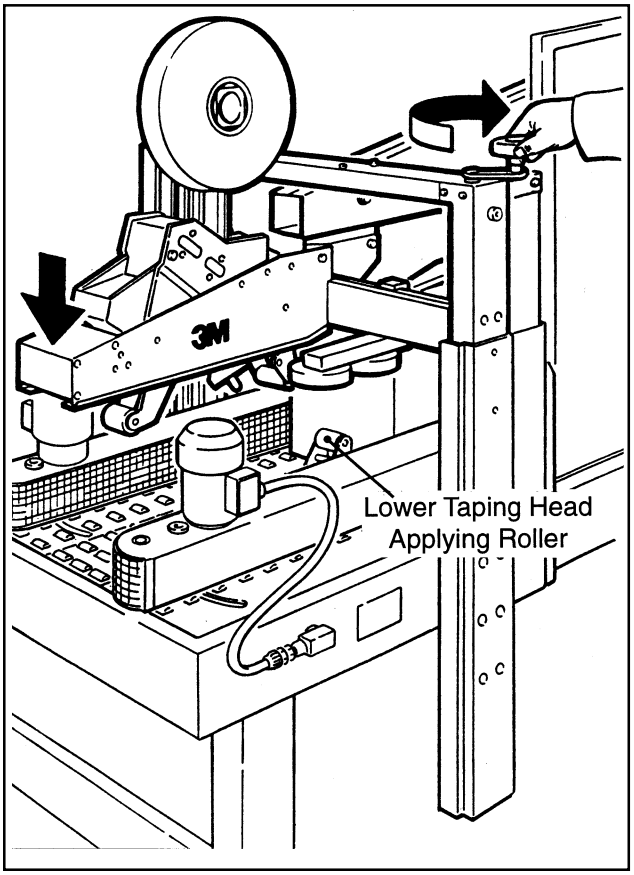


Figure 3-8 – Box Size

Operation (Continued)

5. WIDTH ADJUSTMENT (Figure 3-9)

   Position both side drive belts against the sides of the box to fully center the box on the machine bed. The side drive belts are positioned as shown by means of the side adjustment crank.

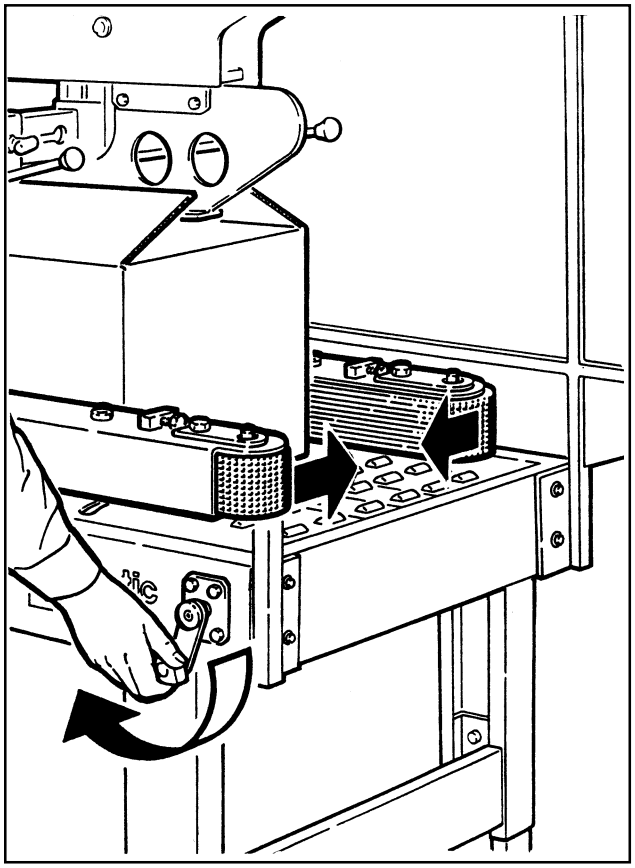


Figure 3-9 – Box Size

6. COMPRESSION ROLLERS (Figure 3-10)

   Manually move the box forward until the upper taping head applying roller is in contact with the front of the box. Loosen the compression roller locking knob and locate the compression rollers on both sides of the top taping head against the top edge of the box. Tighten the locking knob to secure the compression rollers setting.

> **Note –** Standard position of rollers accommodates box widths down to 145 mm [5-3/4 inch] minimum. To accommodate narrower boxes, see "Adjustments Compression Rollers", page 31.

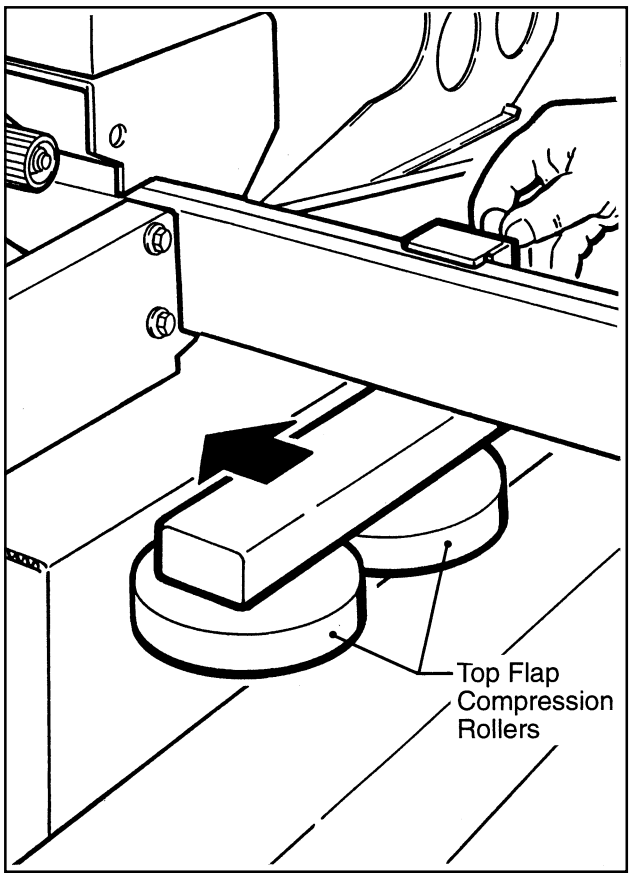


Figure 3-10 – Box Size

7. REMOVE BOX (Figure 3-11)

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

Connect electrical supply and press the electrical switch to "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.

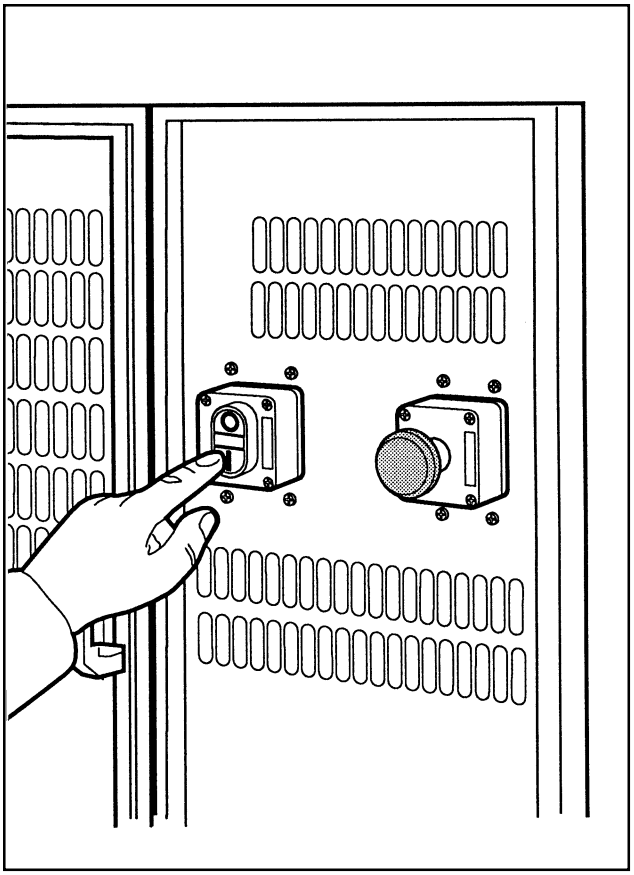


Figure 3-11 – Box Size

Box Sealing

1. Connect electrical and air supplies.
2. Turn air valve to "SUP" (On) to energize pneumatic components.
3. Press electrical "On" button to start drive belts.
4. Feed boxes to machine at minimum 405 mm [16 inch] intervals at a maximum conveyor speed of 60 ft/min.
5. Turn air and electrical supplies "Off" when machine is not in use.
6. Reload and thread tape as necessary.
7. 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.

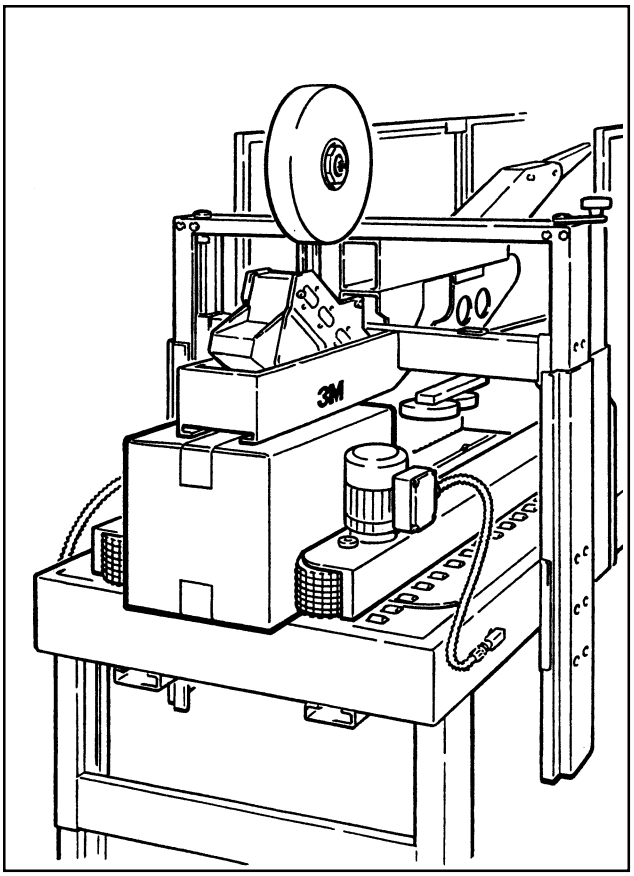


Figure 3-12 – Box Sealing

Box Jams

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 reoccurrence.

2. Turn off machine.

WARNINGS

1. **Turn off and disconnect air and electrical supplies before attempting to remove jammed box or serious injury could occur.**

2. **Wait for flap folder to reach down position as shown in Figure 3-4, to avoid being hit or startled by its movement**

3. Crank upper assembly up and drive belts out until box is free.

4. Carefully pull box out of machine.

WARNINGS

1. **Keep hands away from upper and lower taping head cut-off knives as knives are extremely sharp and could cause severe injury**

2. **When reaching into the machine to remove a jammed box, use proper posture to prevent back or other injuries.**

5. Readjust upper assembly (taping head) and drive belts according to "Box Size Set-Up" instructions, pages 21-24.

6. Connect air and electrical supplies.

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 air and electrical supplies 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 45-77.)

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
Spring (Ref. No. 6227-40)	2	Lightly Coat Spring Hook
Spacer (Ref. No. 6227-45)	1	Lightly Coat Surface
Arm Assembly – Front Right (Ref. No. 6228-1)	2	Lightly Coat Vertical Shaft
Arm Assembly – Rear, Right (Ref No. 6228-2)	2	Lightly Coat Vertical Shaft
Arm Assembly – Front, Left (Ref. No. 6228-3)	2	Lightly Coat Vertical Shaft
Arm Assembly – Rear, Left (Ref. No. 6228-4)	2	Lightly Coat Vertical Shaft
Pin – Join, Front (Ref. No. 6228-12)	2	Lightly Coat Surface
Pin – Eccentric (Ref. No. 6228-13)	2	Lightly Coat Surface
Chain – Roller (Ref. No. 6228-18)	2	Lightly Coat Chain Pitches
Chain – Roller (Ref. No. 6228-19)	2	Lightly Coat Chain Pitches
Screw – Centering (Ref. No. 6228-31)	2	Lightly Coat Lead Screw Threads
Lead Screw (Ref. No. 6229-12)	1	Lightly Coat Lead Screw Threads
Idler Screw (Ref. No. 6229-22)	1	Lightly Coat Outside Surface
Chain Roller (Ref. No. 6229-23)	2	Lightly Coat Chain Pitches
Stud (Ref. No. 6230-18)	2	Lightly Coat Surface
Shaft – 12 x 100 mm (Ref. No. 6230-21)	2	Lightly Coat Surface
Pressure Roller (Ref. No. 6232-4)	1	Lightly Coat Roller Inside Dia.
Pin – Roller (Ref. No. 6233-7)	1	Lightly Coat Outside Surfaces
Chain Roller (Ref. No. 6233-83)	2	Lightly Coat Chain Pitches

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

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

Drive Belt Replacement

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

Figure 4-2

1. Crank the upper taping head to the fully raised position.
2. Disconnect the motor plug (A).
3. Remove and retain the five screws (B) and side cover (C).
4. Remove and retain the screw (D), cap washer (E) and spacer washer (F) from the front and rear arm assembly pivots.
5. Lift belt drive assembly (G) up off the arm assembly pivots.

CAUTION – Drive belt assembly weighs approximately 21 kg [47 lbs.]. A minimum of two people should lift drive assembly using proper body mechanics to prevent injury.

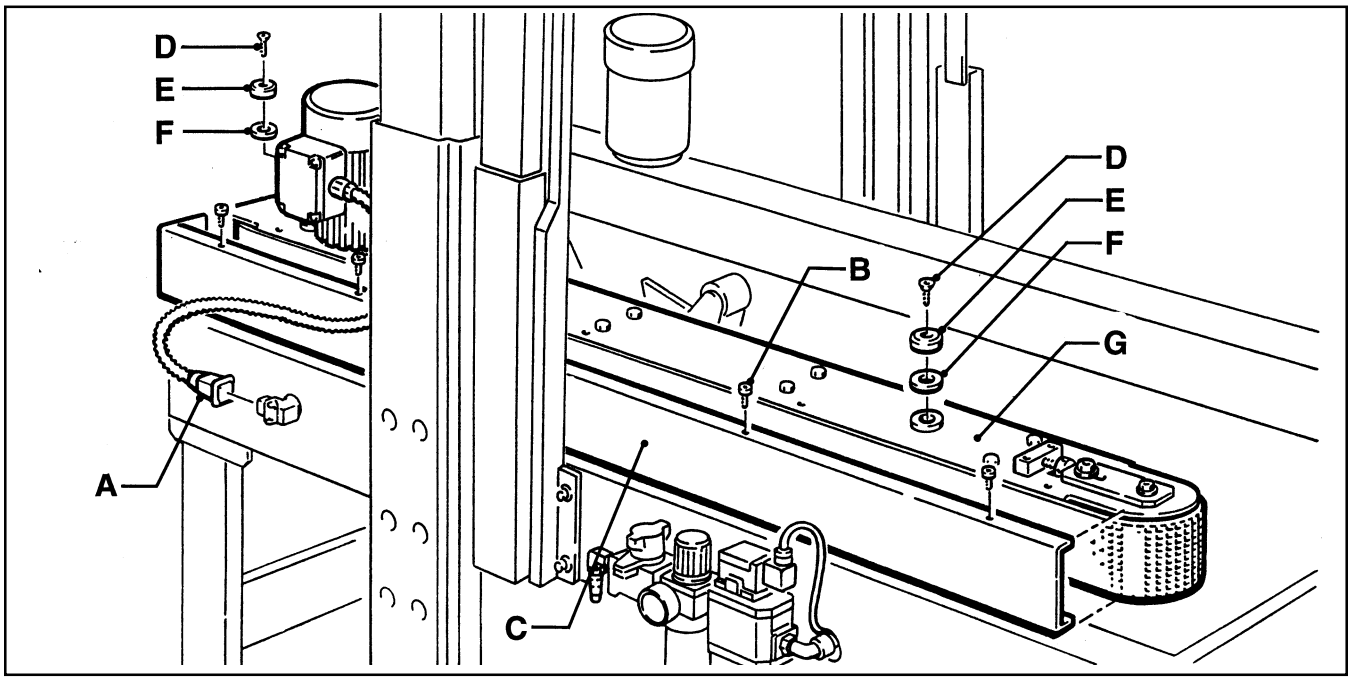


Figure 4-2 – Drive Belt Replacement

Figure 4-3

6. Loosen, but do not remove the lock nut (H) on both the upper and lower belt tension assemblies.
7. Turn the belt adjustment screws (J) clockwise to end of adjustment on both the upper and lower tension assemblies.
8. Remove and discard old drive belt.

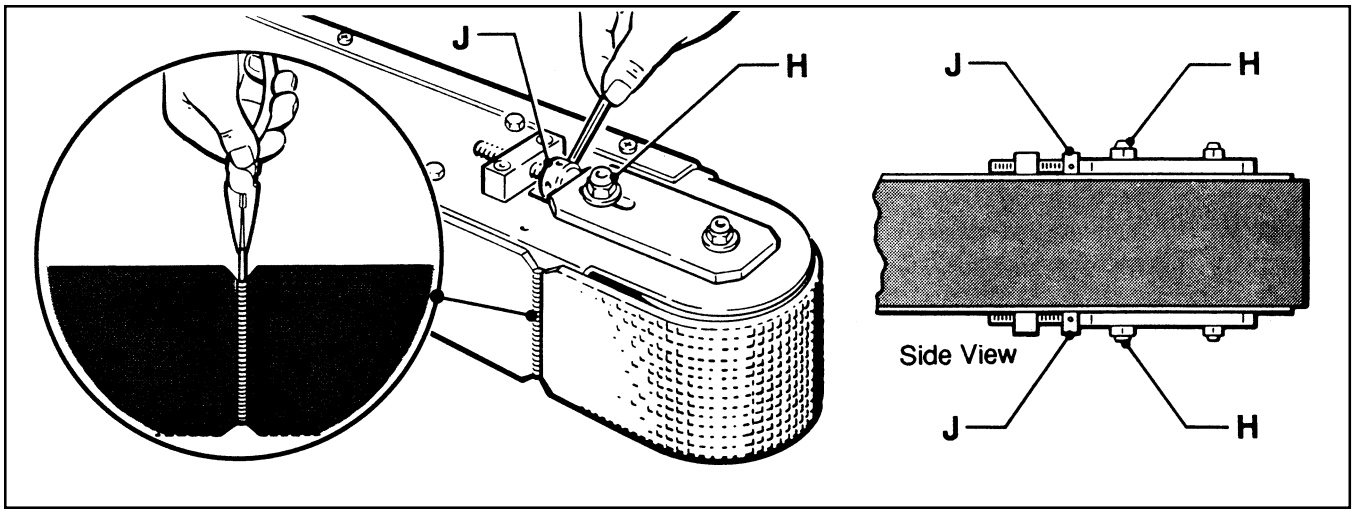


Figure 4-3 – Drive Assembly – Infeed End

9. Install new drive belt around drive rollers and insert new pin. **Pin must not extend beyond edge of belt.** See Figure 4-3.

   IMPORTANT – 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.

10. Drive Belt Tension (Refer to Figures 4-3 and 4-4)
    To set drive belt tension – turn the adjustment screws (J) equally on both the upper and lower tension assemblies. Turn the screws clockwise to reduce belt tension counterclockwise to increase belt tension.

    Use a force gauge to pull the belt outward 25 mm [one inch] at the midspan, as shown with a moderate pulling force of 3.2 kg [7 lbs]. Tighten the lock nut (H) on both tension assemblies to secure the tension setting.

11. Reverse procedures in items 1-5 above to reassemble the drive belt assembly.

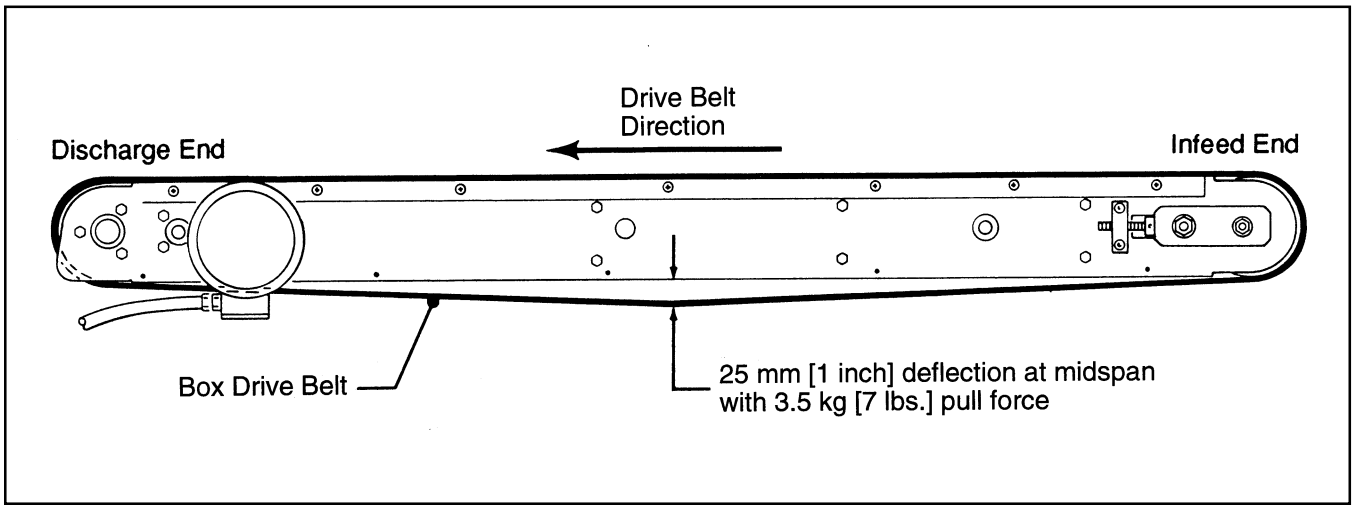


Figure 4-4 – Tension Adjustment, Drive Belt (Top View)

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

Air Line Filter – Figure 4-5

Periodically unscrew the filter bowl on the air regulator and clean the air filter. Any water that collects in the filter bowl is drained by the automatic condensate valve and requires no maintenance.

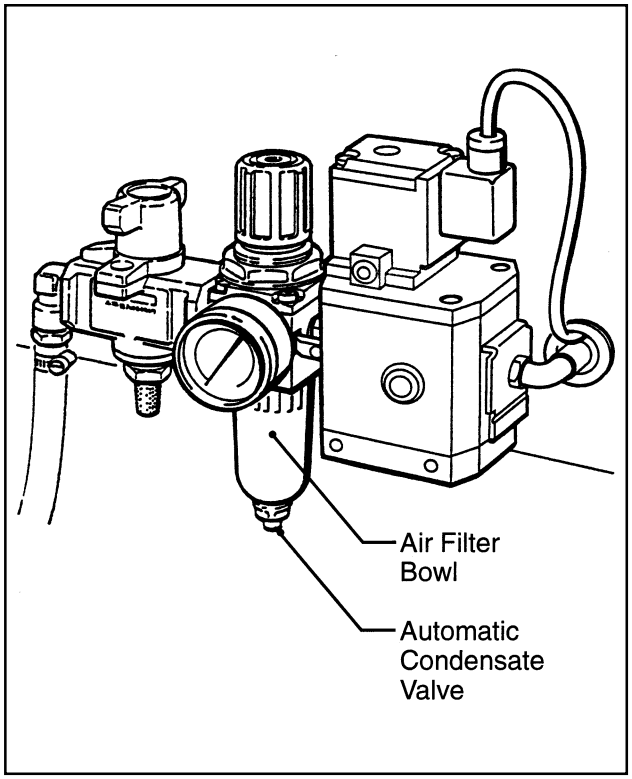


Figure 4-5 – Air Line Filter

Circuit Breaker

The case sealer is equipped with a circuit breaker which trips if the motors are overloaded. Located inside the electrical control box on the side of the machine, the circuit breaker has been pre-set at 1.4 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 "Stop/Reset" button and then the green "Start" button.
4. Replace cover.
5. Plug in machine. Wait two minutes.
6. Press machine "On" button, on the side guard, to resume case sealing.

Knife Replacement, Taping Head

See Section II, "Maintenance – Blade (Knife) Replacement", page 9.

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 or equipment damage.

Air Pressure Regulator – Figure 5-1

The pressure regulator regulates main air pressure to the machine. To adjust pressure, pull knob up and turn – push down to lock setting. Normal setting is 6.2 bar [90 PSIG].

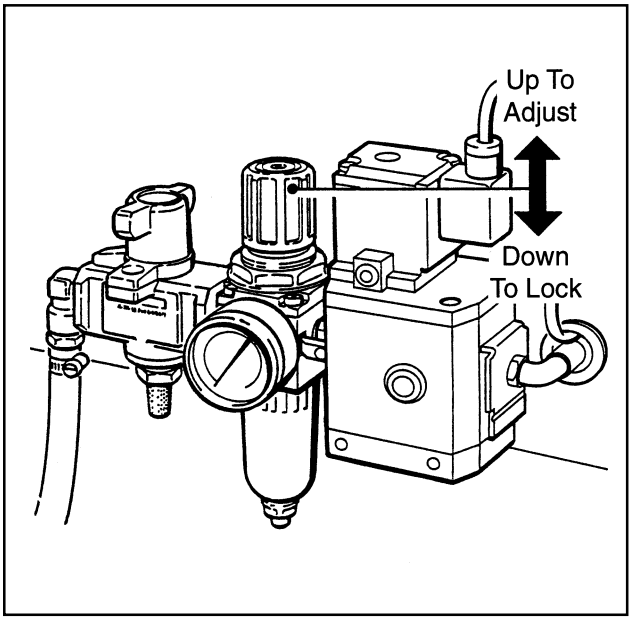


Figure 5-1 – Air Pressure Regulator

Compression Rollers – Figure 5-2

The top flap compression rollers, have two mounting positions to provide side compression through the full range of box widths.

The rollers have been pre-assembled in position "A" to accommodate box widths from 145 mm [5-3/4 inch] to 500 mm [20 inch] maximum.
To accommodate box widths less than 145 mm [5-3/4 inch] to 110 mm [4-3/8 inch] minimum, move all rollers to position "B".

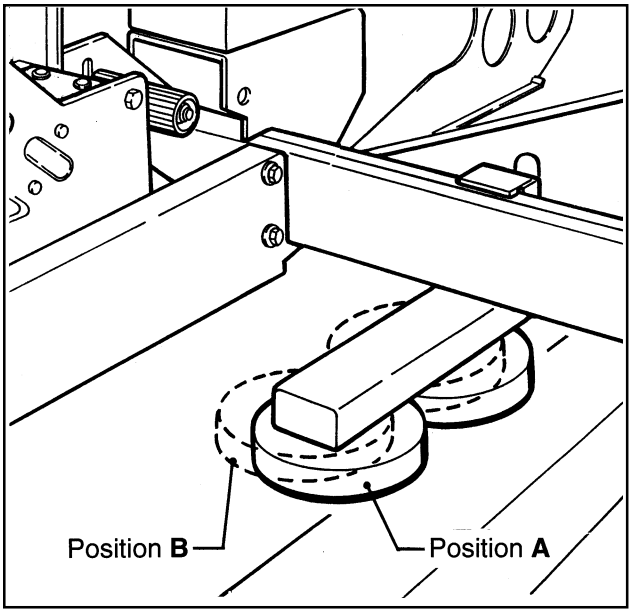


Figure 5-2 – Compression Rollers

Drive Belt Tension

To adjust drive belt tension, refer to "Maintenance – Drive Belt Replacement", page 29, item 10.

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 ADJUSTMENT – Section II, Page 13

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Special Set-Up Procedure

WARNING – Turn off electrical power and air 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 100 mm [4 inch] minimum height.

CASE SEALER FRAME

Remove upper frame height limiting stops from both columns as shown in Figure 6-1A.

TAPING HEADS

WARNING – Use care when working near 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 6-1B.

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.

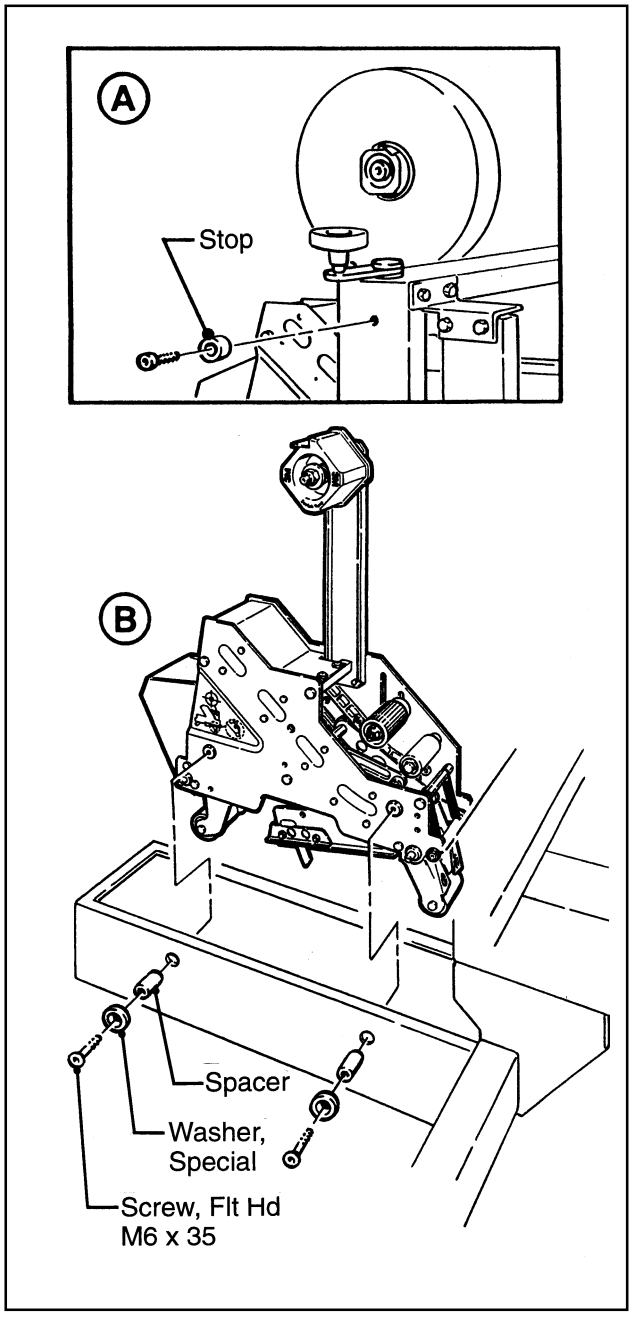


Figure 6-1 – Stops/Upper Taping Head

Special Set-Up Procedure (Continued)

4. Lift the lower taping head as shown in Figure 6-2 and remove it from the machine bed.

> **CAUTION – Holding taping head in another way 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. Replace taping heads 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.

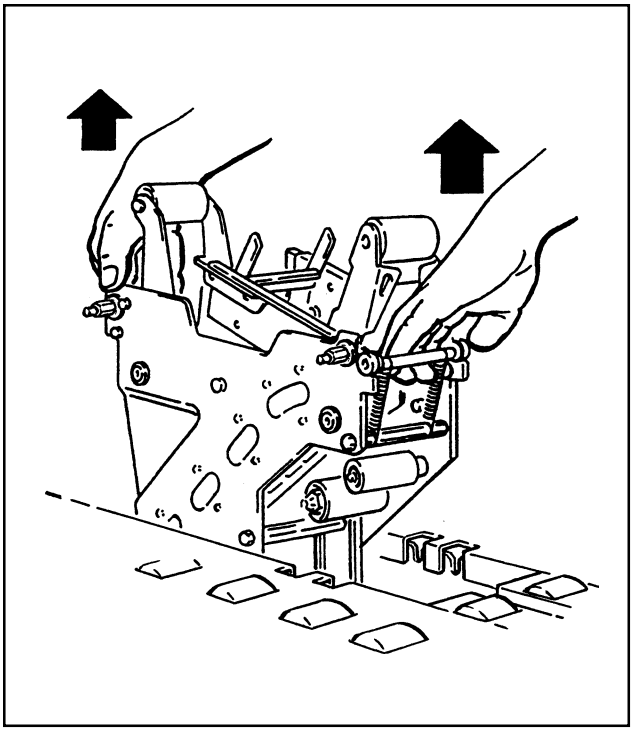


Figure 6-2 – Remove Lower Taping Head

Outer Column Re-Positioning
Refer to Figure 6-3

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 615 mm [24.25 inch].

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

1. Crank side drive belts to full open position.

2. Crank upper assembly up approximately 510 mm [20 inch] from machine bed.

3. Place solid blocks approximately 485 mm [19 inch] high beneath upper assembly at front and rear.

4. Crank upper assembly down until upper assembly touches blocks at front and rear. **Important – Shim blocks as necessary to keep upper assembly parallel with machine bed.**

5. Remove and retain four mounting screws in each outer column.

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

6. Crank outer columns up 100 mm [4 inch]. Check to see that upper head is aligned horizontally with the bed of the machine. Re-install four screws in each column.

7. Crank upper assembly up and remove blocks.

Special Set-Up Procedure (Continued)

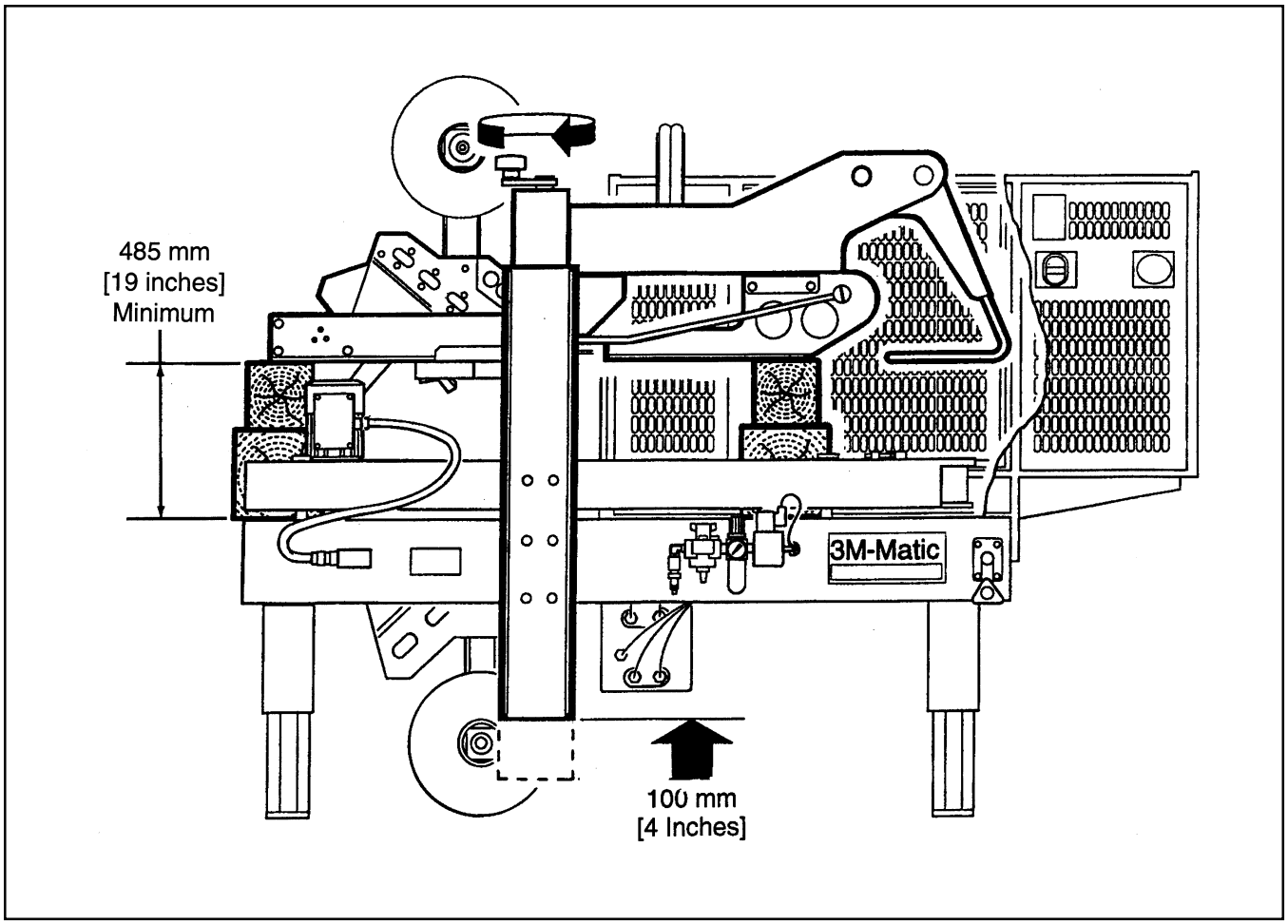


Figure 6-3 – Outer Column Re-Positioning

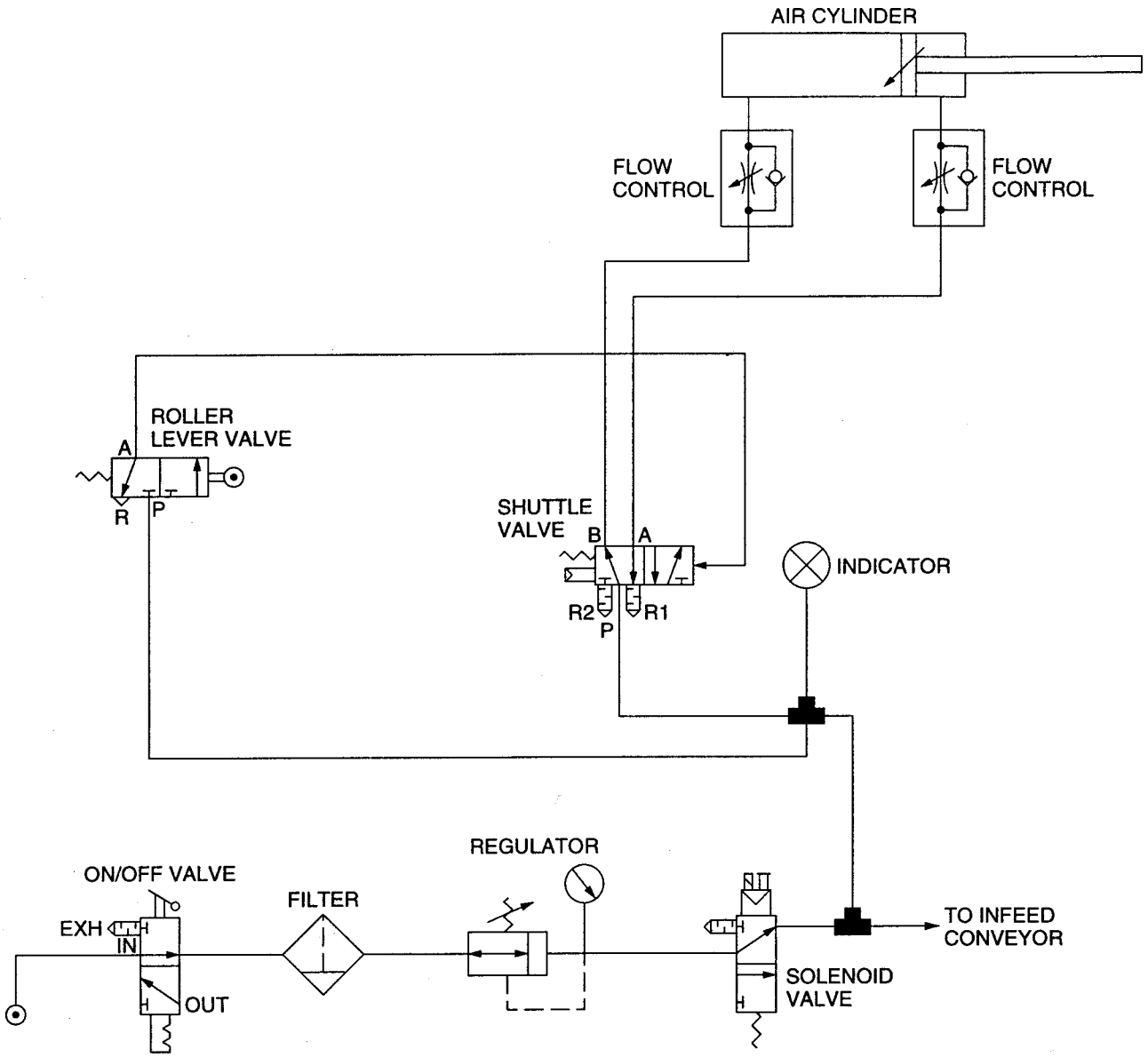
Troubleshooting

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
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Box flaps not of equal length	Check box specifications

Electrical/Pneumatic Diagrams



ON/OFF VALVE: SMC EVHS2500
FILTER/REGULATOR: SMC EAW-2000
SOLENOID VALVE: SMC AV2000
INDICATOR: SMC VR-3100-1
SHUTTLE VALVE: SMC EVFA3130
ROLLER LEVER VALVE: TELEMECANIQUE PXC-M52
FLOW CONTROL: LEGRIS 7760-06-13
AIR CYLINDER: MEGLIANI 3.8.00663

Figure 7-1 – Pneumatic Diagram

ELECTRICAL COMPONENTS

START CONTACT BLOCK: ALLEN BRADLEY 800E-3X01
STOP CONTACT BLOCK: ALLEN BRADLEY 800E-3X01
START/STOP HOUSING: ALLEN BRADLEY 800E1-PY
E-STOP HOUSING: ALLEN BRADLEY 800E1-PY
E-STOP CONTACT BLOCK: ALLEN BRADLEY 800E-3X01
CIRCUIT BREAKER: SPRECHER & SCHUH KTA3-25-1.6
CONTACTOR: SPRECHER & SCHUH CA4-5-10
MOTORS: BODINE 34R6BFCI
TERMINAL STRIP: MOBER M094
DOOR INTERLOCK: BERNSTEIN D32457
CAPACITOR: AMERICAN SHIZUKI X349U-12.5-±5%-250 VAC
SOLENOID VALVE: SMC AV2000
AUXILIARY CONTACT: SPRECHER & SCHUH CA4-P
GROUNDING TERMINAL: SPRECHER & SCHUH VUPE 4-6
SOLENOID VALVE ELECTRICAL CONNECTOR (PLUG): SMC AC94-138V
SOLENOID VALVE ELECTRICAL CONNECTOR (SOCKET): SMC DIN S/LED 2009636

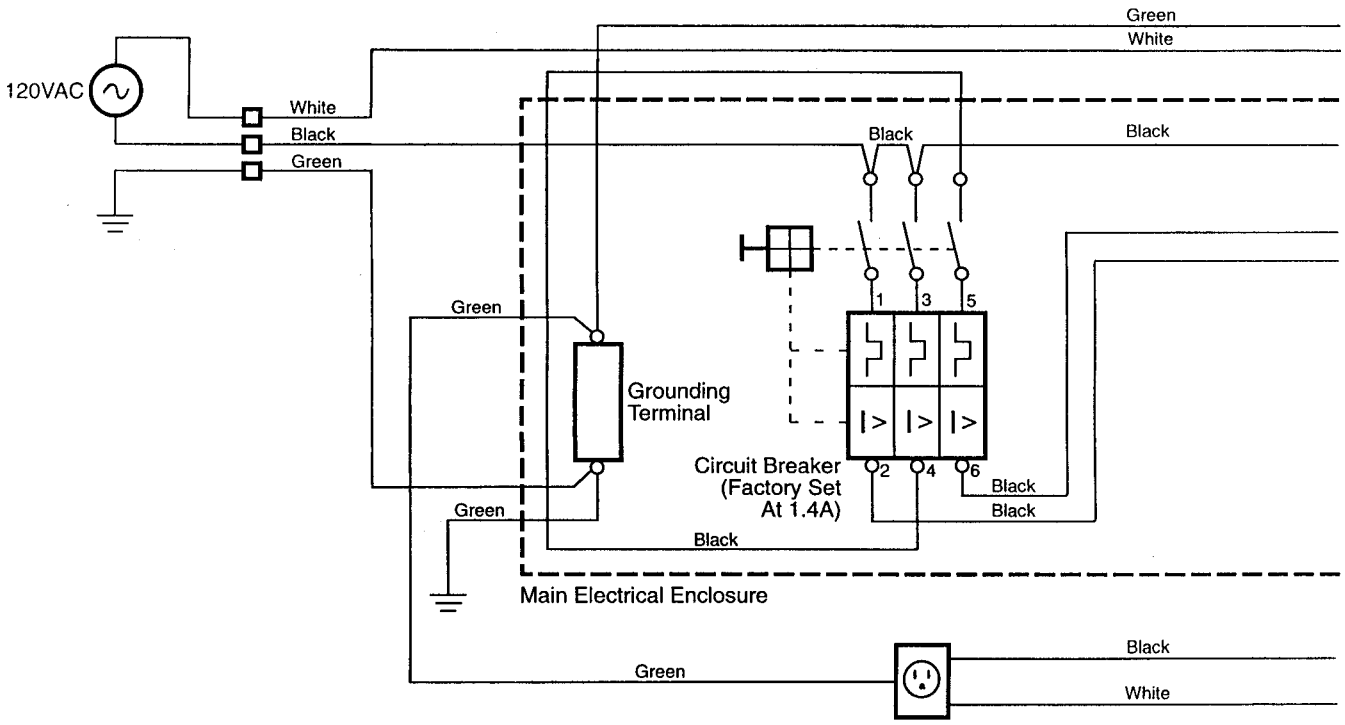
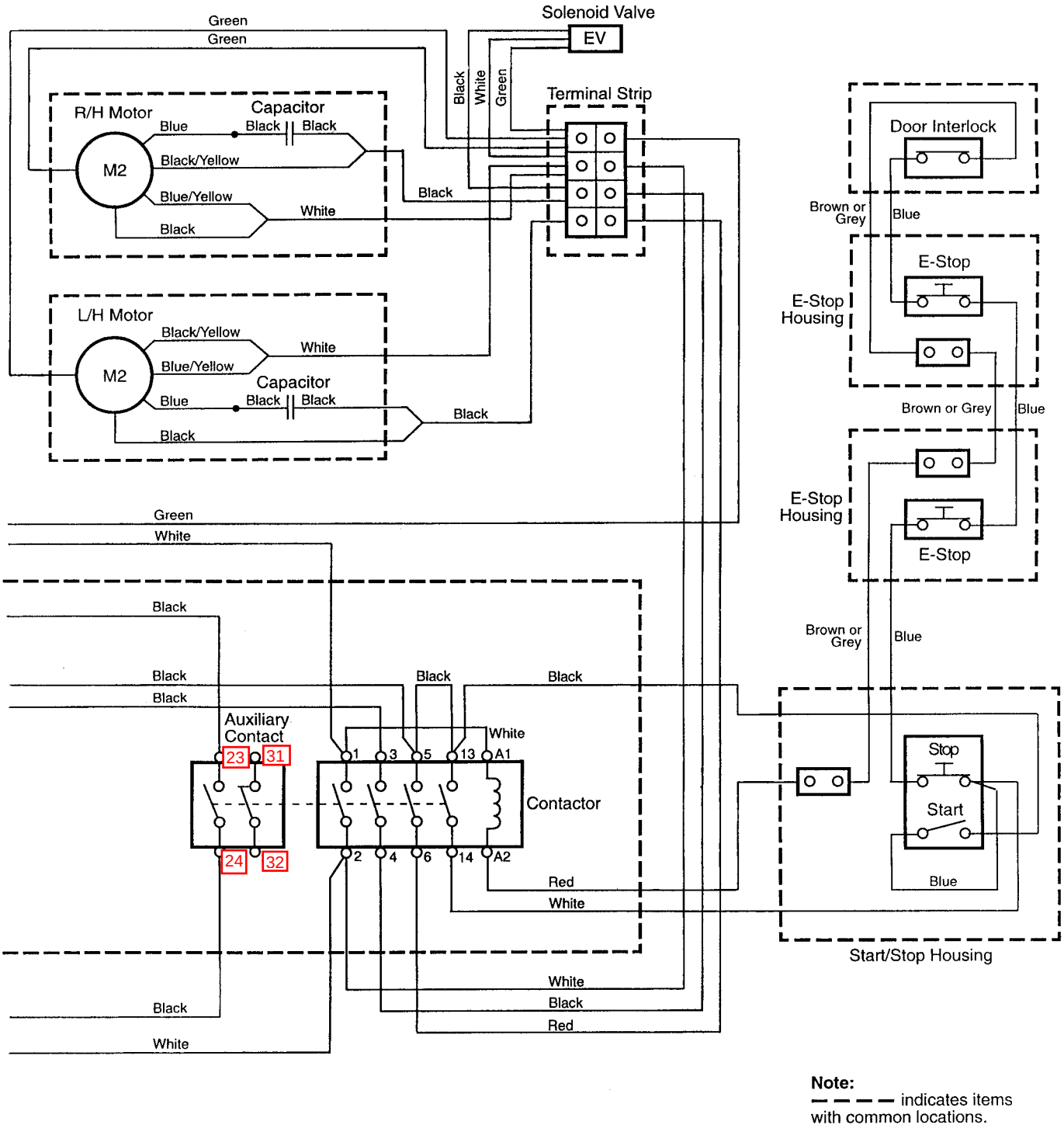


Figure 7-2 – Electrical Diagram



Note:
– – – – indicates items with common locations.

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Replacement Parts And Service Information

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	6233-59 (Sec. I)	78-8100-0859-5	Belt – Drive W/Pin

In addition, a tool/spare parts kit supplied with the 120af 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 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 78-8113-6779-2 is available as a stock item. It contains all the safety labels used on the 120af Adjustable Case Sealer. Labels can also be purchased separately. See Parts Drawing/List, pages 74 and 75.

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".

Options/Accessories

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

Part Number	Option/Accessory
78-8069-3983-7	Caster Kit Attachment
78-8114-0841-4	120af-if Infeed Conveyor
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
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

120af Adjustable Case Sealer, Type 19600
Frame Assemblies

To Order Parts:

1. Refer to first illustration, **Frame Assemblies,** page 45 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.

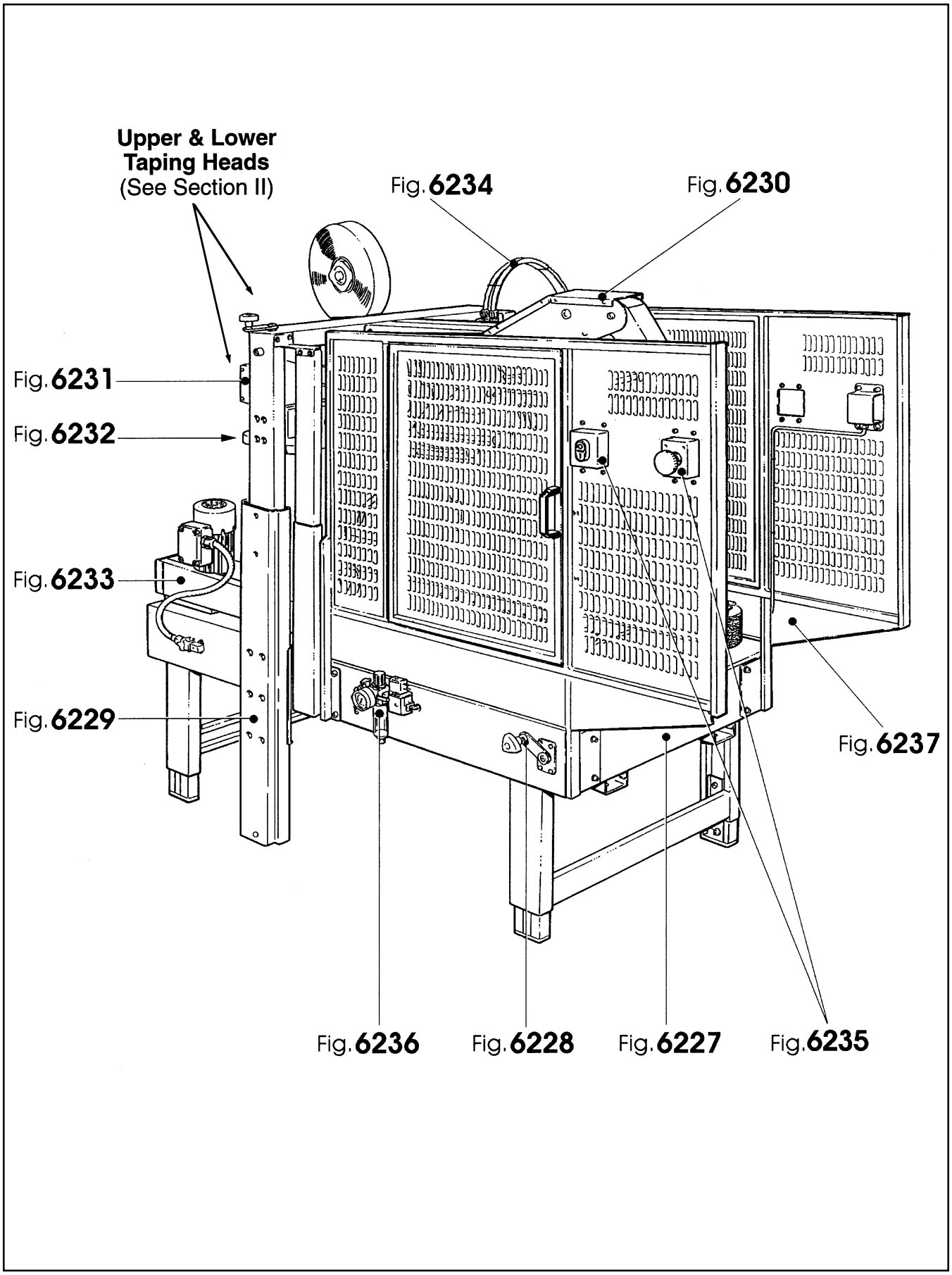
4. Order parts by **Part Number, Part Description** and **Quantity** required. Also include machine name, number and type.

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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120af Adjustable Case Sealer



Frame Assemblies

120af Adjustable Case Sealer

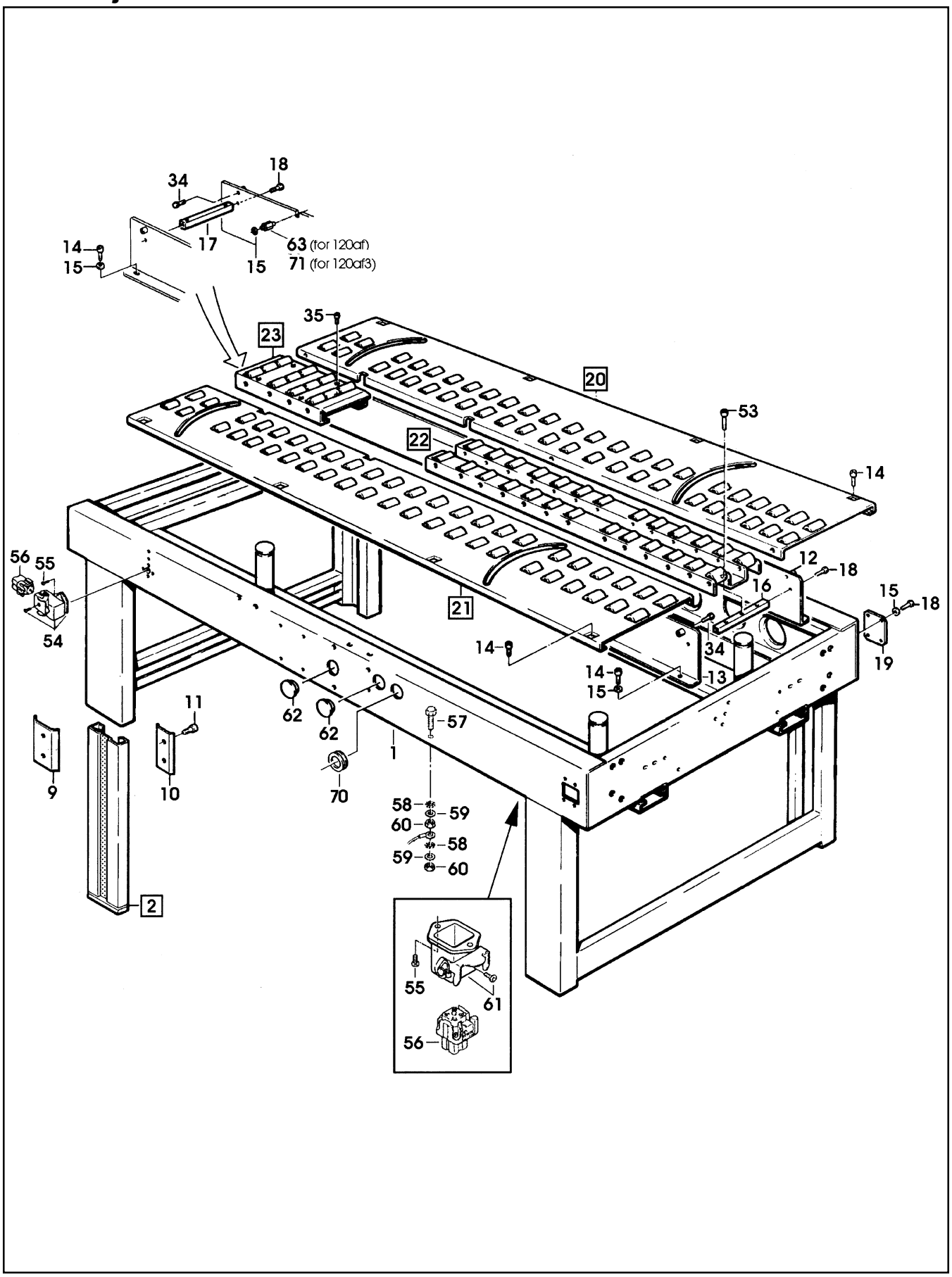


Figure 6227/1 of 3

Figure 6227 (page 1 of 3)

Ref. No.	3M Part No.	Description
6227-1	78-8100-1245-6	Bed Conveyor
6227-2	78-8094-6389-2	Leg Assembly – Inner
6227-3	78-8100-1246-4	Leg – Inner
6227-4	78-8060-8480-8	Pad – Foot
6227-5	78-8055-0867-4	Screw – Hex Hd, M8 x 30
6227-6	26-1004-5507-5	Washer – M8
6227-7	78-8017-9313-0	Nut – Self Locking, M8
6227-8	78-8100-1247-2	Label – Height
6227-9	78-8052-6677-8	Clamp – Inner
6227-10	78-8052-6676-0	Clamp – Outer
6227-11	26-1003-7963-0	Screw – Soc Hd, M8 x 16
6227-12	78-8060-7953-5	Center Frame – Right
6227-13	78-8060-7954-3	Center Frame – Left
6227-14	78-8010-7209-7	Screw – Soc Hd, M6 x 12
6227-15	26-1000-0010-3	Washer – Flat, M6
6227-16	78-8054-8867-9	Spacer – Valve Holder
6227-17	78-8060-7955-0	Spacer – Center Frame
6227-18	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6227-19	78-8076-4761-1	Plate
6227-20	78-8119-6502-5	Conveyor Assembly – Right, W/English Labels
6227-21	78-8119-6503-3	Conveyor Assembly – Left, W/English Labels
6227-22	78-8100-1248-0	Conveyor Assembly – Center
6227-23	78-8060-7959-2	Conveyor Assembly – Rear
6227-24	78-8119-6469-7	Conveyor – R/H, W/English Labels

120af Adjustable Case Sealer

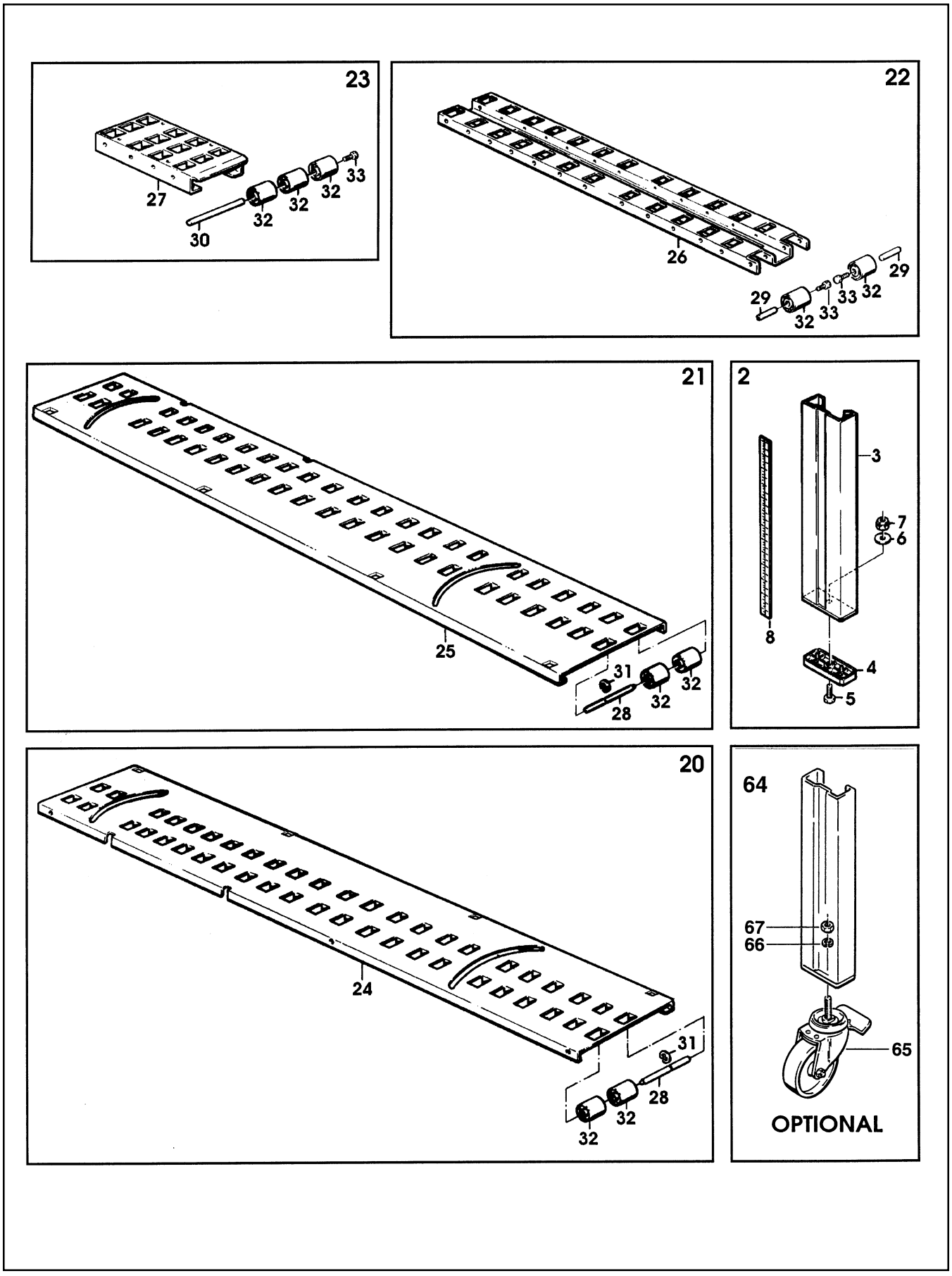
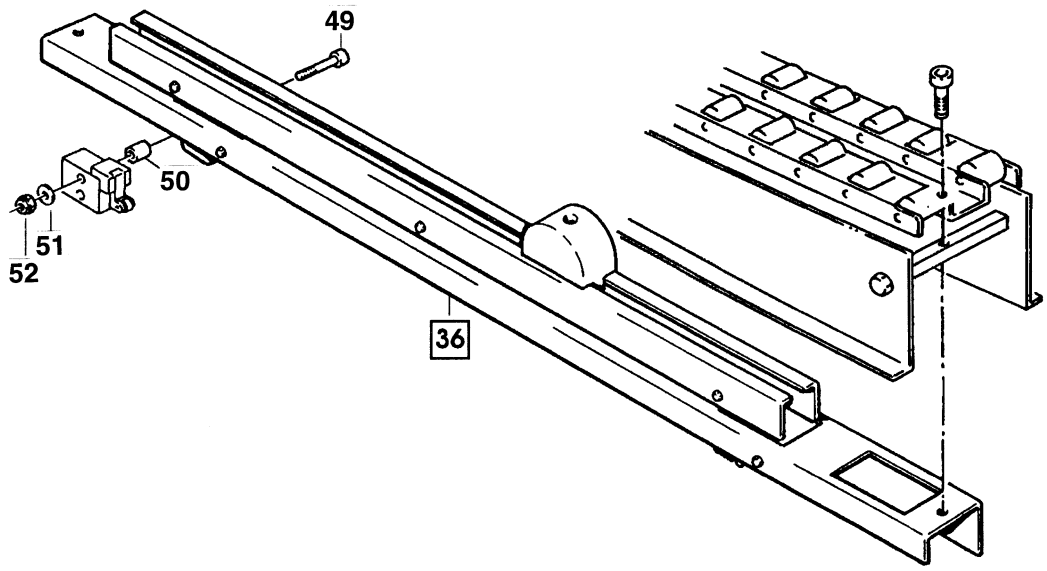


Figure 6227/2 of 3

Figure 6227 (page 2 of 3)

Ref. No.	3M Part No.	Description
6227-25	78-8119-6470-5	Conveyor – L/H, W/English Labels
6227-26	78-8100-1249-8	Conveyor – Center
6227-27	78-8100-1065-8	Conveyor – Rear
6227-28	78-8060-7965-9	Shaft – Hex Hd, /8 x 120
6227-29	78-8054-8857-0	Shaft – 8 x 43 mm
6227-30	78-8052-6694-3	Shaft – /8 x 128
6227-31	78-8060-8035-0	E-Ring – 7DIN6799
6227-32	78-8060-7693-7	Roller – 32 x 38
6227-33	78-8010-7163-6	Screw – Hex Hd, M5 x 10
6227-34	26-1003-5829-5	Screw – Hex Hd, M6 x 12
6227-35	26-1003-7948-1	Screw – Soc Hd Hex Soc, M5 x 10
6227-36	78-8114-4619-0	Valves Assembly
6227-37	78-8060-8059-0	Support – Valve
6227-38	78-8054-8757-2	Pin – Spring Holder
6227-39	26-1005-6859-6	Nut – Self-Locking, M5
6227-40	78-8076-4774-4	Spring
6227-41	78-8055-0746-0	Front Actuator Link – 12AF Black
6227-42	26-1002-4955-1	Screw – Self-Tap – 8P x 13
6227-43	78-8055-0747-8	Link – Rear Actuator – 12AF Black
6227-44	78-8054-8872-9	Guide – Cam
6227-45	78-8054-8858-8	Spacer – 8 x 26, 5 mm
6227-46	78-8054-8871-1	Cam
6227-47	78-8010-7165-1	Screw – Flat Hd Soc, M5 x 25
6227-48	78-8054-8859-6	Clamp – Cam

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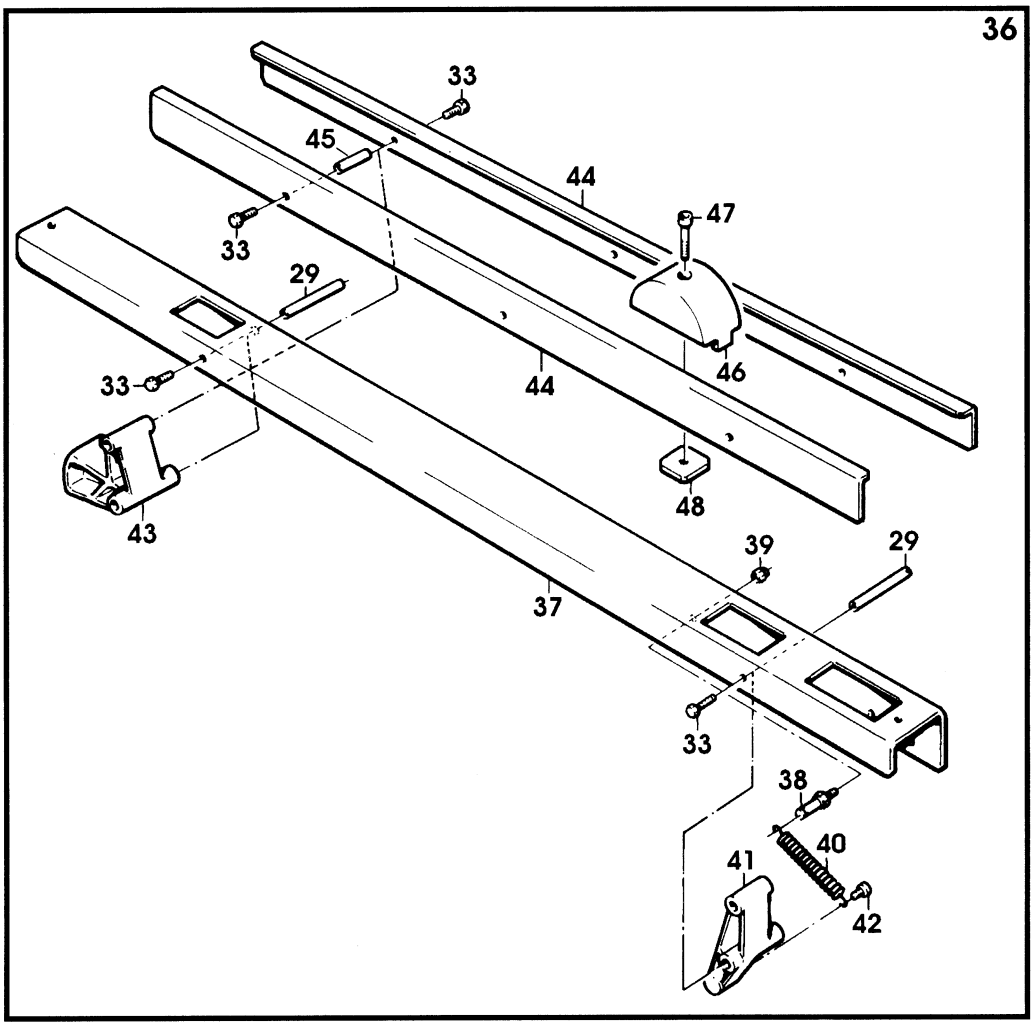


Figure 6227/3 of 3

Figure 6227 (page 3 of 3)

Ref. No.	3M Part No.	Description
6227-49	26-1003-7947-3	Screw – Soc Hd Hex Soc, M4 x 35
6227-50	78-8054-8758-0	Spacer – Valve Holder
6227-51	78-8005-5740-3	Washer – Plain, 4 mm
6227-52	26-1003-6914-4	Nut – Plastic Insert, M4
6227-53	78-8023-2334-1	Screw – Soc Hd Hex Soc, M6 x 25
6227-54	78-8060-7876-8	Plug Cover
6227-55	78-8028-8208-0	Screw – 6PX9,5
6227-56	78-8060-7873-5	Plug – Female
6227-57	78-8060-8488-1	Screw – Hex Hd, M5 x 20
6227-58	78-8046-8217-3	Washer – Special
6227-59	78-8005-5741-1	Washer – Flat, M5
6227-60	78-8010-7417-6	Nut – Hex, M5
6227-61	78-8060-7872-7	Cover Plug – Straight
6227-62	78-8060-8184-6	Cap – /35 x 1,5
6227-63	78-8070-1456-4	Stud – Hex
6227-64	78-8098-9076-3	Caster Assembly
6227-65	26-1009-9096-4	Caster – Dual Locking
6227-66	26-1009-9094-9	Washer – Spring, Helical, M12
6227-67	26-1009-9095-6	Nut – M12
6227-70	78-8076-4635-7	Grommet – /32
6227-71	78-8114-4702-4	Spacer

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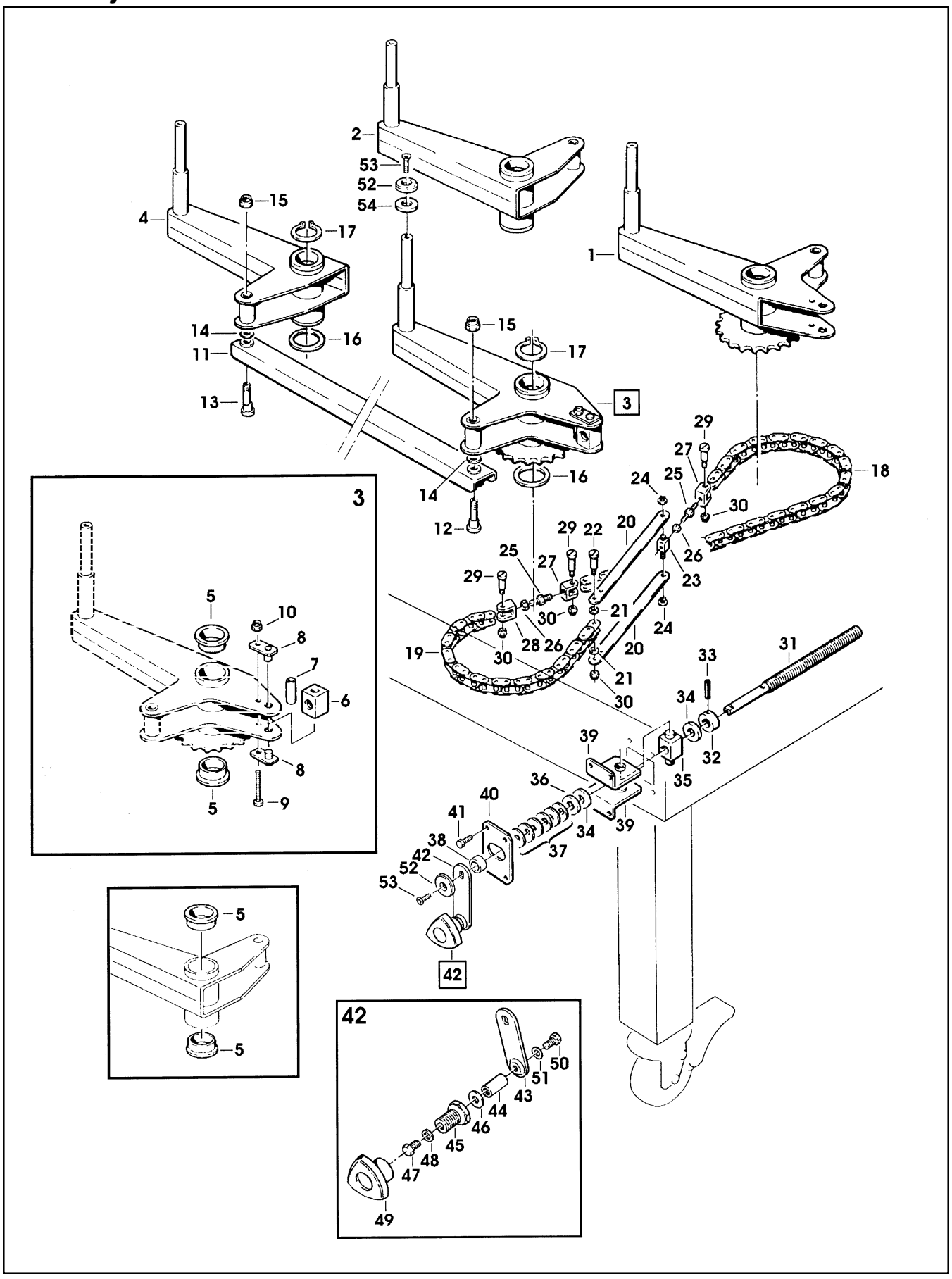


Figure 6228

Figure 6228

Ref. No.	3M Part No.	Description
6228-1	78-8076-5232-2	Arm Assembly – Front, Right
6228-2	78-8076-5062-3	Arm Assembly – Rear, Right
6228-3	78-8076-5233-0	Arm Assembly – Front Left
6228-4	78-8076-5063-1	Arm Assembly – Rear, Left
6228-5	78-8076-4791-8	Bushing
6228-6	78-8076-5236-3	Nut - Arm
6228-7	78-8076-5237-1	Spacer – Arm
6228-8	78-8076-5238-9	Plate – W/Pin
6228-9	78-8076-5239-7	Screw – Hex Hd, M6 x 50
6228-10	26-1003-6916-9	Nut – Locking Plastic Insert, M6
6228-11	78-8060-7976-6	Bar – Coupling
6228-12	78-8076-5234-8	Pin – Join, Front
6228-13	78-8076-5235-5	Pin – Eccentric
6228-14	78-8052-6566-3	Washer – Friction
6228-15	26-1003-6918-5	Nut – Plastic Insert, Hex Flange, M10
6228-16	78-8060-7534-3	Washer
6228-17	78-8060-7521-0	Lock Ring
6228-18	78-8060-7518-6	Chain – 3/8 Inch, 60 Pitch Long
6228-19	78-8054-8777-0	Chain – 3/8 Inch Pitch, 41 Pitch Long
6228-20	78-8054-8787-9	Chain Link
6228-21	78-8054-8783-8	Washer – Special
6228-22	78-8060-7519-4	Screw – M3 x 25
6228-23	78-8054-8784-6	Block – Chain
6228-24	78-8056-3945-3	E-Ring – M4
6228-25	78-8054-8785-3	Rod – Threaded Right/Left
6228-26	78-8010-7418-4	Nut – Hex, M6
6228-27	78-8054-8786-1	Chain Connector
6228-28	78-8054-8788-7	Chain Connector
6228-29	78-8060-7520-2	Screw – M3 x 20
6228-30	78-8059-5517-2	Nut – Self-Locking, M3
6228-31	78-8060-7980-8	Screw – Centering
6228-32	78-8060-7981-6	Bushing – Dowel
6228-33	78-8054-8586-5	Pin
6228-34	78-8060-8036-8	Washer – Nylon
6228-35	78-8060-8436-0	Nut – Plastic
6228-36	78-8060-7983-2	Washer
6228-37	78-8060-7984-0	Washer – Belleville
6228-38	78-8060-7985-7	Spacer
6228-39	78-8060-8437-8	Plate – W/Bushing
6228-40	78-8114-4672-9	Plate
6228-41	78-8060-7886-7	Screw – Special, Hex Hd, M6 x 16
6228-42	78-8091-0577-4	Knob Assembly
6228-43	78-8060-8065-7	Lever – Knob
6228-44	78-8070-1509-0	Shaft – Crank
6228-45	78-8070-1511-6	Bushing
6228-46	78-8070-1510-8	Washer – Nylon, /7 x 15 x 1
6228-47	78-8010-7157-8	Screw – Hex Hd, M4 x 10
6228-48	78-8005-5740-3	Washer – Plain, 4 mm
6228-49	78-8070-1512-4	Knob – VTR-B-M12
6228-50	26-1003-5820-4	Screw – Hex Hd, M5 x 12
6228-51	78-8028-8214-8	Washer
6228-52	78-8054-8577-4	Washer – Special
6228-53	26-1001-9843-6	Screw – Flat Soc Hd, M6 x 16
6228-54	78-8060-7541-8	Washer

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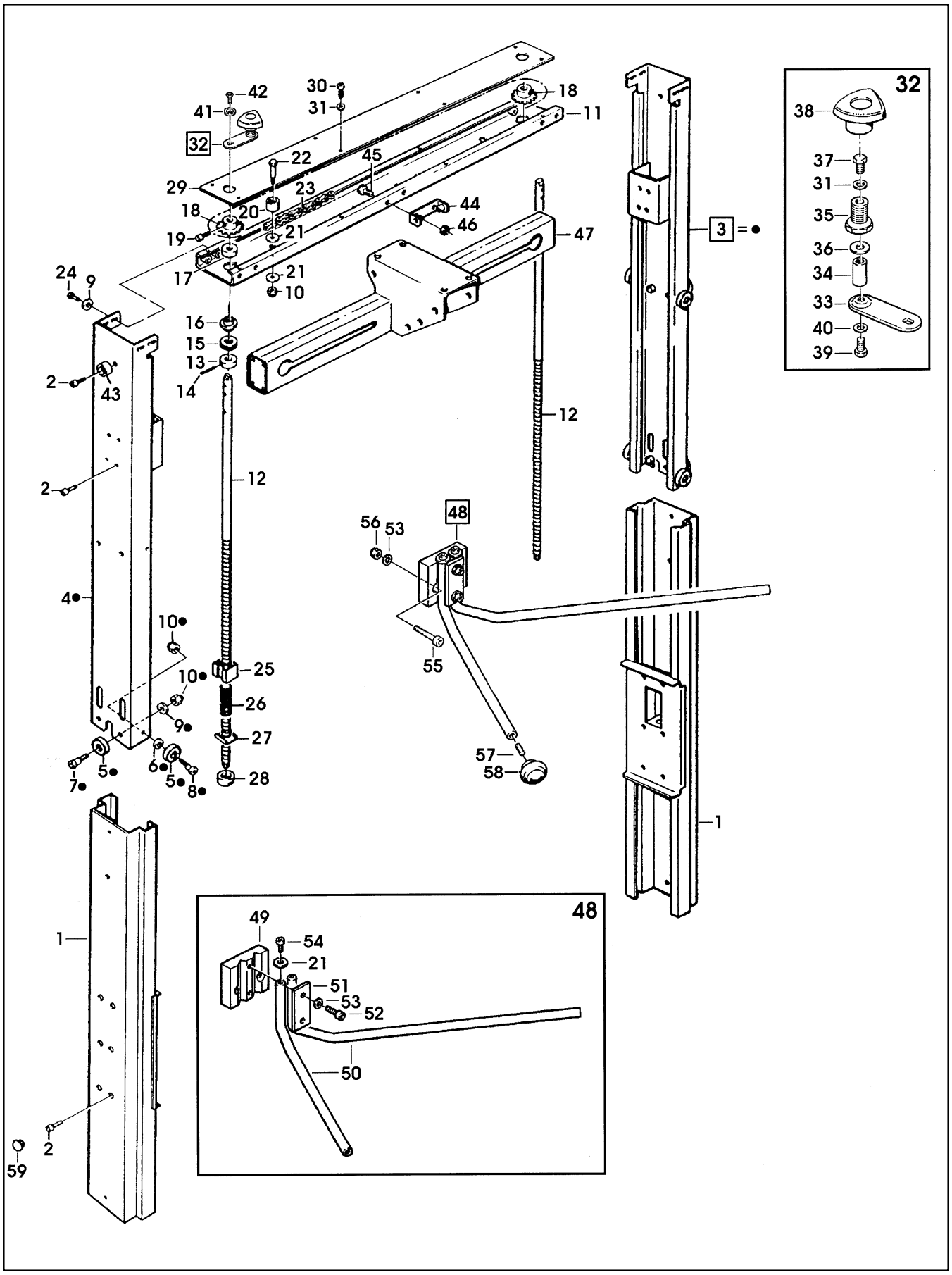


Figure 6229

Figure 6229

Ref. No.	3M Part No.	Description
6229-1	78-8119-6463-0	Outer Column Assembly, W/English Labels
6229-2	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
6229-3	78-8114-4623-2	Inner Column Assembly
6229-4	78-8100-1072-4	Column – Inner
6229-5	78-8054-8617-8	Bearing – Special
6229-6	78-8054-8576-6	Spacer
6229-7	78-8054-8589-9	Screw – Special
6229-8	78-8017-9106-8	Screw – Bearing Shoulder
6229-9	26-1000-0010-3	Washer – Flat, M6
6229-10	26-1003-6916-9	Nut – Locking, Plastic Insert, M6
6229-11	78-8114-4624-0	Cross Bar
6229-12	78-8054-8573-3	Lead Screw
6229-13	78-8054-8585-7	Collar
6229-14	78-8054-8586-5	Pin
6229-15	78-8054-8584-0	Spacer
6229-16	78-8054-8583-2	Bushing
6229-17	78-8054-8581-6	Spacer
6229-18	78-8054-8580-8	Sprocket
6229-19	26-1003-7946-5	Screw – Soc Hd, M4 x 25
6229-20	78-8054-8575-8	Idler Roller
6229-21	78-8042-2919-9	Washer – Triple, M6
6229-22	78-8060-7878-4	Idler Screw
6229-23	78-8054-8965-1	Chain – 3/8 Inch Pitch, L=184
6229-24	78-8032-0375-7	Screw – Hex Hd, M6 x 16
6229-25	78-8054-8571-7	Plastic Nut
6229-26	78-8054-8997-4	Spring
6229-27	78-8054-8970-1	Bed Plate For Spring
6229-28	78-8054-8968-5	Special Nut
6229-29	78-8119-6466-3	Cover, W/English Labels
6229-30	26-1002-5753-9	Screw – Self-Tapping
6229-31	78-8005-5740-3	Washer – Plain, 4 mm
6229-32	78-8091-0577-4	Knob Assembly
6229-33	78-8060-8065-7	Lever – Knob
6229-34	78-8070-1509-0	Shaft – Crank
6229-35	78-8070-1511-6	Bushing
6229-36	78-8070-1510-8	Washer – Nylon, /7 x 15 x 1
6229-37	78-8010-7157-8	Screw – Hex Hd, M4 x 10
6229-38	78-8070-1512-4	Knob – VTR-B-M12
6229-39	26-1003-5820-4	Screw – Hex Hd, M5 x 12
6229-40	78-8028-8214-8	Washer
6229-41	78-8054-8577-4	Washer – Special
6229-42	26-1001-9843-6	Screw – Flat Soc Hd, M6 x 16
6229-43	78-8054-8587-3	Stop
6229-44	78-8114-4625-7	Bracket
6229-45	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6229-46	78-8010-7418-4	Nut – Hex, M6
6229-47	78-8114-4626-5	Support – Head
6229-48	78-8114-4627-3	Side Flap Folder Assembly
6229-49	78-8100-1077-3	Block
6229-50	78-8100-1079-9	Side Flap Folder
6229-51	78-8100-1080-7	Plate – Flap Folder
6229-52	78-8060-7895-8	Screw – M8 x 35
6229-53	78-8017-9318-9	Washer – Plain, 8 mm
6229-54	78-8010-7209-7	Screw – Soc Hd, M6 x 12
6229-55	78-8076-4686-0	Screw – Soc Hex Hd, M8 x 70
6229-56	78-8017-9313-0	Nut – Self-Locking, M8
6229-57	78-8060-7863-6	Grain – M6 x 20
6229-58	78-8076-4546-6	Knob
6229-59	78-8054-8821-6	End – Cap

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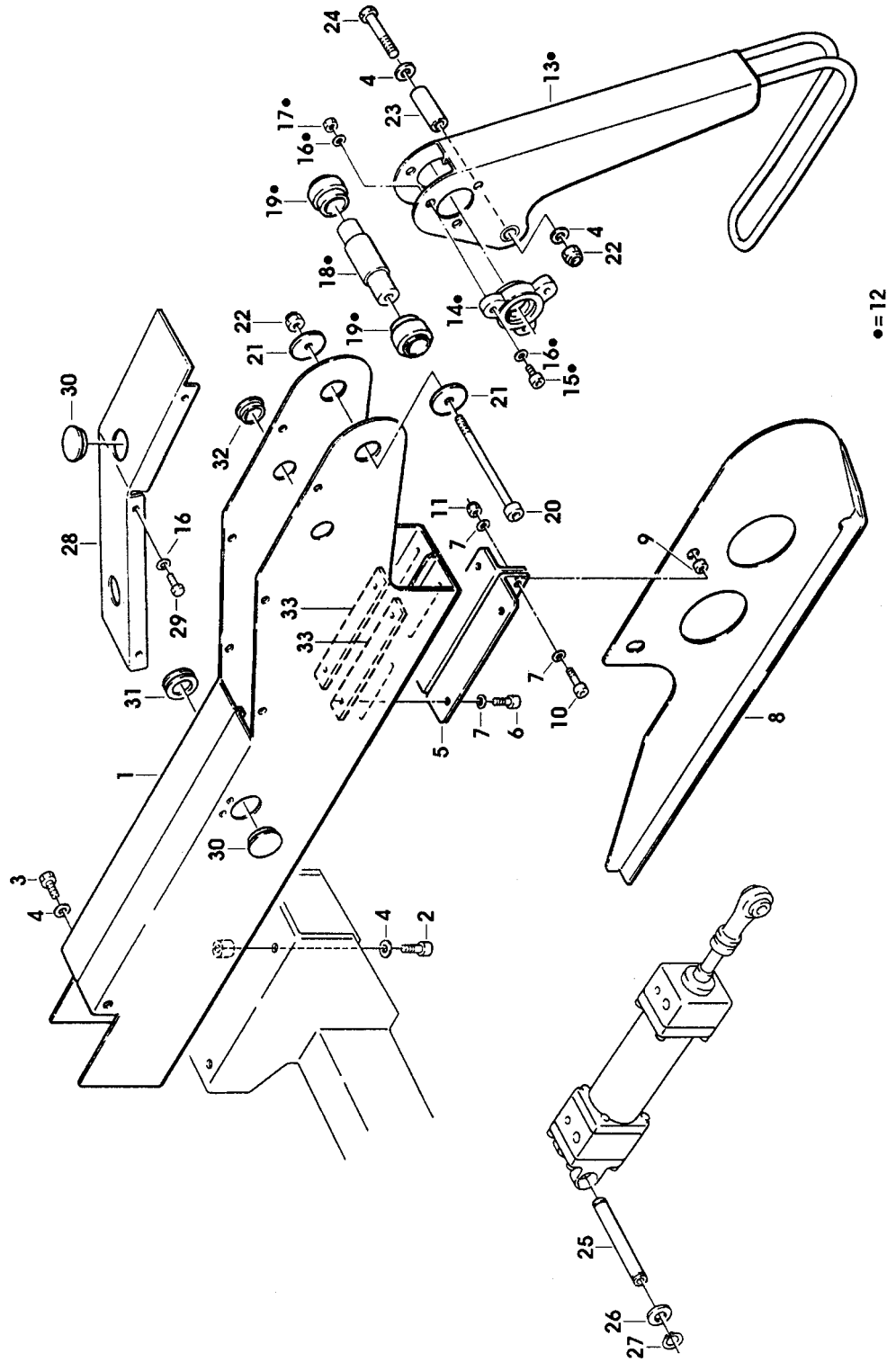


Figure 6230

Figure 6230

Ref. No.	3M Part No.	Description
6230-1	78-8114-4628-1	Support – Flap Folder
6230-2	26-1003-7963-0	Screw – Soc Hd, M8 x 16
6230-3	26-1003-5842-8	Screw – Hex Hd, M8 x 20
6230-4	78-8017-9318-9	Washer – Plain, 8 mm
6230-5	78-8100-1084-9	Bracket
6230-6	78-8010-7209-7	Screw – Soc Hd, M6 x 12
6230-7	26-1000-0010-3	Washer – Flat, M6
6230-8	78-8114-4629-9	Flap Folder – Front
6230-9	78-8054-8942-0	Washer
6230-10	78-8010-7210-5	Screw – Soc Hd Hex Soc, M6 x 20
6230-11	26-1003-6916-9	Nut – Locking, Plastic Insert, M6
6230-12	78-8114-4630-7	Rear Flap Folder Assembly
6230-13	78-8114-4631-5	Flap Folder – Rear
6230-14	78-8091-0731-7	Flange
6230-15	78-8100-0952-8	Screw – Soc Hd Hex Hd, M5 x 14
6230-16	78-8005-5741-1	Washer – Flat, M5
6230-17	78-8010-7417-6	Nut – Hex, M5
6230-18	78-8114-4632-3	Stud
6230-19	78-8114-4693-5	Spacer – Bearing
6230-20	78-8114-4633-1	Screw – Soc Hd Hex Hd, M8 x 100
6230-21	78-8114-4694-3	Washer – Special
6230-22	78-8017-9313-0	Nut – Self-Locking
6230-23	78-8114-4695-0	Spacer – Cylinder
6230-24	26-1002-5949-3	Screw – Hex Hd, M8 x 60
6230-25	78-8054-8937-0	Shaft – 12 x 100 mm
6230-26	78-8017-9059-9	Washer – Flat For M12 Screw
6230-27	78-8056-3965-1	Ring – 8 DIN 6799
6230-28	78-8114-4634-9	Cover
6230-29	78-8010-7163-6	Screw – Hex Hd, M5 x 10
6230-30	78-8060-8184-6	Cap – /35 x 1,5
6230-31	78-8094-6489-0	Snap Bushing
6230-32	78-8114-4703-2	Cap
6230-33	78-8054-8938-8	Bracket

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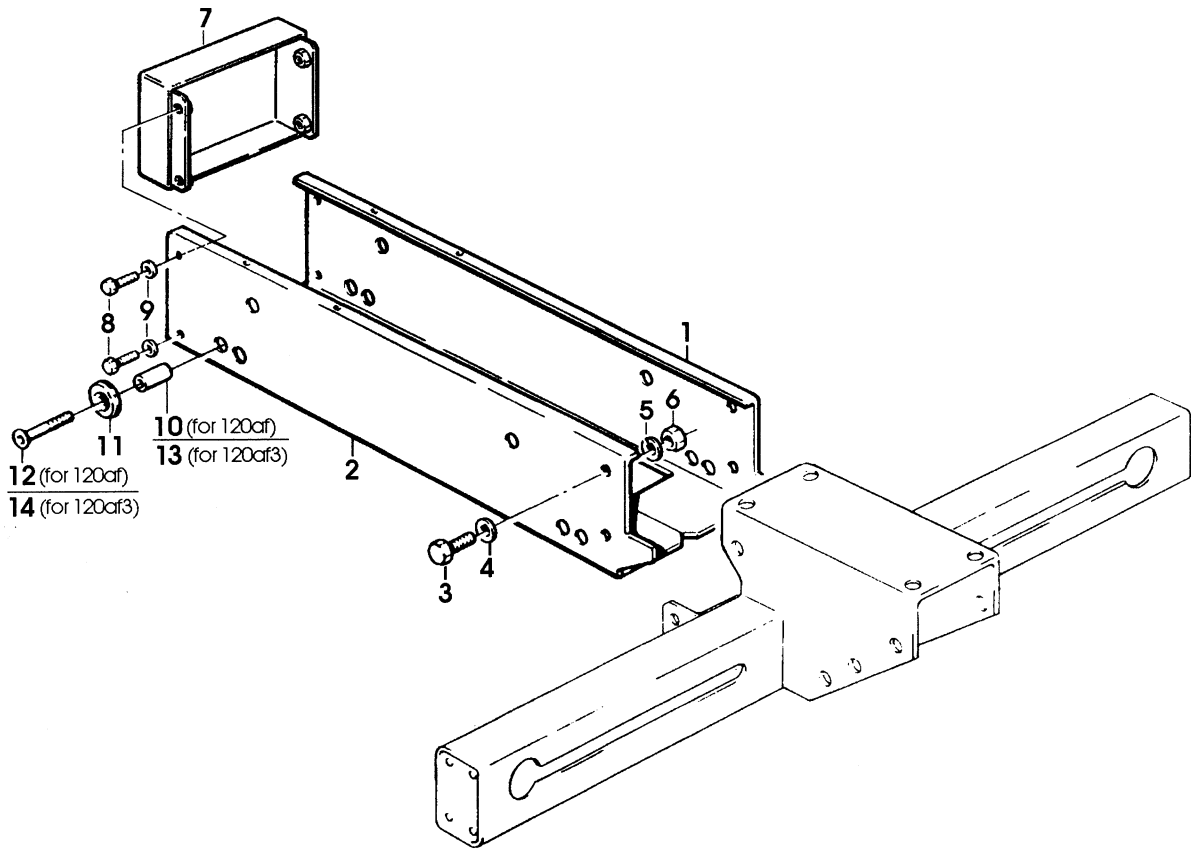


Figure 6231

Figure 6231

Ref. No.	3M Part No.	Description
6231-1	78-8119-6464-8	Frame – Upper Head, R/H, W/English Labels
6231-2	78-8119-6465-5	Frame – Upper Head, L/H, W/English Labels
6231-3	26-1003-5842-8	Screw – Hex Hd, M8 x 20
6231-4	78-8017-9318-9	Washer – Plain, 8 mm
6231-5	78-8005-5736-1	Lockwasher – For M8 Screw
6231-6	26-1000-1347-8	Nut – Hex, M8
6231-7	78-8114-4637-2	Cover – Upper Frame
6231-8	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6231-9	26-1000-0010-3	Washer – Flat, M6
6231-10	78-8114-4638-0	Stud – Mounting
6231-11	78-8076-5477-3	Washer – Special, /6.5 x 20 x 4
6231-12	78-8114-4639-8	Screw – Allen, Flat Hd, M6 x 35
6231-13	78-8052-6700-8	Spacer
6231-14	78-8060-7918-8	Screw – Flat, Soc Hd, M6 x 25

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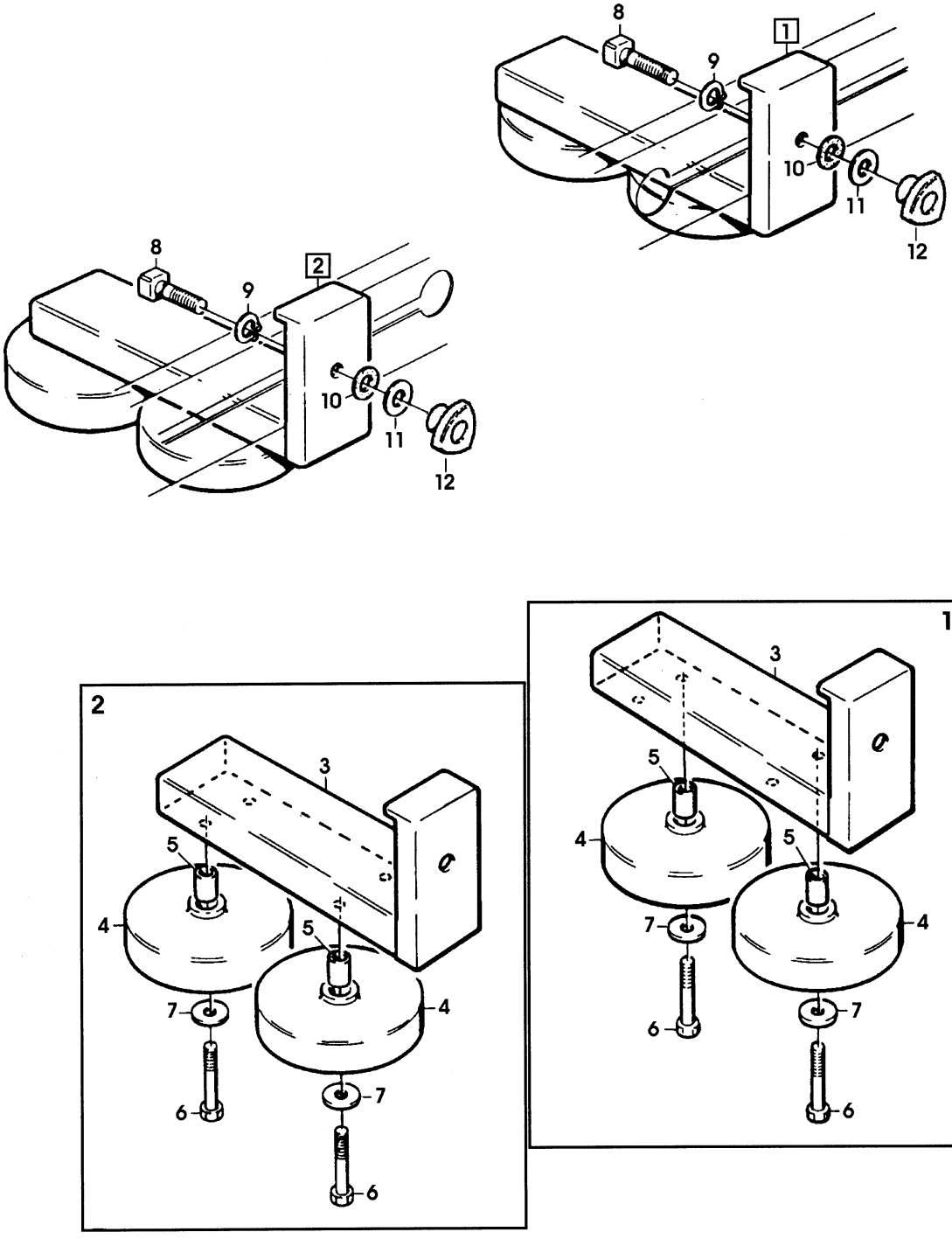


Figure 6232

Figure 6232

Ref. No.	3M Part No.	Description
6232-1	78-8060-8056-6	Side Roller Assembly – Right
6232-2	78-8060-8057-4	Side Roller Assembly – Left
6232-3	78-8119-6473-9	Mount – Side Roller, W/English Labels
6232-4	78-8054-8648-3	Roller – Pressure
6232-5	78-8055-0622-3	Bushing
6232-6	26-1003-5845-1	Screw – Hex Hd, M8 x 40
6232-7	78-8052-6703-2	Washer – Special
6232-8	78-8057-5740-4	Screw – Special
6232-9	78-8056-3965-1	Ring – 8 DIN 6799
6232-10	78-8017-9074-8	Washer – Nylon, 15 mm
6232-11	78-8052-6566-3	Washer – Friction
6232-12	78-8070-1549-6	Knob – VTR-B-M10

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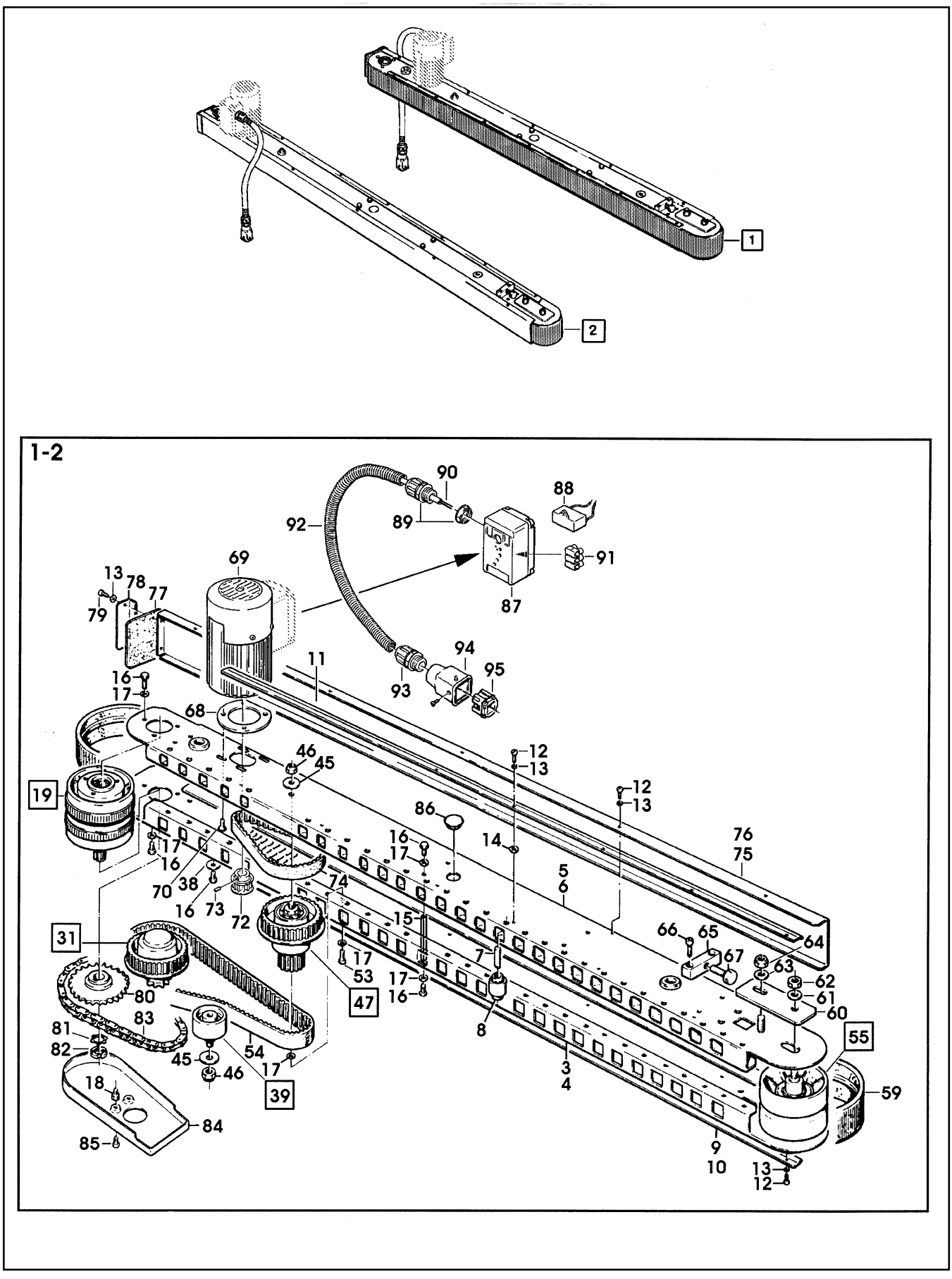


Figure 6233/1 of 2

Figure 6233 (Page 1 of 2)

Ref. No.	3M Part No.	Description
6233-1	78-8119-6500-9	Drive Assembly – R/H, W/O Motor, W/English Labels
6233-2	78-8119-6501-7	Drive Assembly – L/H, W/O Motor, W/English Labels
6233-3	78-8076-5100-1	Guide – Lower, Right
6233-4	78-8076-5101-9	Guide – Lower, Left
6233-5	78-8119-6467-1	Guide – Upper, R/H, W/English Labels
6233-6	78-8119-6468-9	Guide – Upper, L/H, W/English Labels
6233-7	78-8060-7995-6	Pin – Roller
6233-8	78-8060-7996-4	Roller
6233-9	78-8076-5107-6	Plate – Roller, Right
6233-10	78-8076-5108-4	Plate – Roller, Left
6233-11	78-8076-5108-4	Plate – Roller
6233-12	26-1002-5753-9	Screw – Self-Tapping
6233-13	78-8005-5740-3	Washer – Plain, 4 mm
6233-14	78-8076-4855-1	Washer – Special, /4.5-9 x 1.5
6233-15	78-8054-8910-7	Spacer – Hexagonal
6233-16	78-8010-7169-3	Screw – Hex Hd, M6 x 12
6233-17	26-1000-0010-3	Washer – Flat, M6
6233-18	78-8054-8891-9	Screw – Special
6233-19	78-8060-8000-4	Drive Pulley Assembly
6233-20	78-8054-8878-6	Shaft – Pulley Keyed
6233-21	78-8057-5739-6	Key – M5 x 5 x 30 mm
6233-22	78-8076-5105-0	Pulley Assembly – Drive
6233-23	78-8052-6713-1	Ring – Polyurethane
6233-24	78-8054-8879-4	Washer – /20,5 mm
6233-25	78-8017-9096-1	Nut – Special, M18 x 1
6233-26	78-8060-7648-1	Bearing – Flanged
6233-27	78-8054-8877-8	Washer – 5,5/20 x 4
6233-28	26-0001-5862-1	Screw – Flat Hd Soc, M5 x 12
6233-29	78-8060-8037-6	Cap – Flange
6233-30	78-8046-8135-7	Key – 5 x 5 x 12 mm
6233-31	78-8060-8003-8	Drive Pulley Assembly – Keyed
6233-32	78-8055-0825-2	Pulley – Keyed
6233-33	26-1000-6036-2	Bearing – 6003-2RS
6233-34	78-8060-7547-5	Spacer
6233-35	78-8054-8889-3	Support – Pulley Keyed
6233-36	78-8028-8244-5	Key – 4 x 4 x 10 mm
6233-37	78-8060-8005-3	Sprocket – 3/8 Inch, 11 Teeth
6233-38	78-8042-2919-9	Washer – Triple, M6
6233-39	78-8060-8006-1	Jockey Pulley Assembly
6233-40	78-8060-8007-9	Pin – Jockey Pulley
6233-41	78-8060-8009-5	Jockey Pulley
6233-42	78-8060-8008-7	Bearing – 6004-2RS
6233-43	78-8060-8010-3	Snap Ring – 42 mm Shaft
6233-44	78-8017-9061-5	Snap Ring – For 20 mm Shaft
6233-45	26-1004-5507-5	Washer – M8
6233-46	78-8017-9313-0	Nut – Self-Locking, M8
6233-47	78-8060-8011-1	Wrap Pulley Assembly
6233-48	78-8054-8887-7	Shaft – Pulley Wrap

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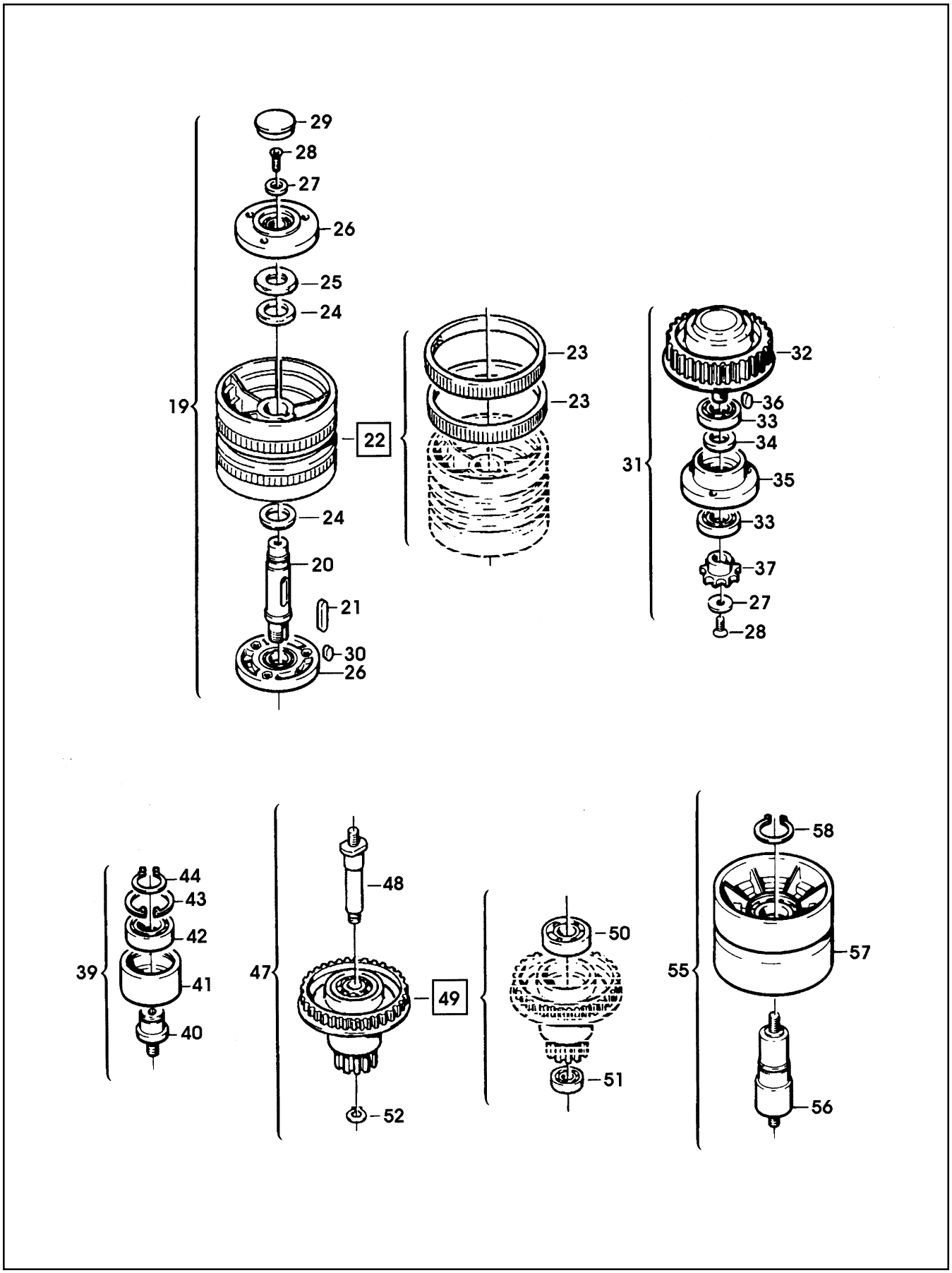


Figure 6233/2 of 2

Figure 6233 (page 2 of 2)

Ref. No.	3M Part No.	Description
6233-49	78-8076-5106-8	Pulley Assembly – Idler
6233-50	78-8023-2544-5	Bearing – 6203-2RS
6233-51	78-8023-2410-9	Bearing – 6000-2RS
6233-52	78-8016-5855-6	E-Ring – 10 mm
6233-53	78-8032-0375-7	Screw – Hex Hd. M6 x 16
6233-54	78-8060-8013-7	Belt – Timing 210 L 075
6233-55	78-8060-8014-5	Idler Roller Assembly
6233-56	78-8054-8913-1	Shaft – Roller
6233-57	78-8052-6710-7	Roller – Idler
6233-58	12-7997-0272-0	E-Ring – M-25
6233-59	78-8100-0859-5	Belt – Box Drive
6233-60	78-8076-4864-3	Tensioning – Belt
6233-61	78-8017-9318-9	Washer – Plain, 8 mm
6233-62	26-1000-1347-8	Nut – Hex, M8
6233-63	78-8052-6566-3	Washer – Friction
6233-64	26-1003-6918-5	Nut – Plastic Insert, Hex Flange, M10
6233-65	78-8054-8903-2	Block – Belt
6233-66	78-8010-7210-5	Screw – Soc Hd Hex Soc, M6 x 20
6233-67	78-8054-8904-0	Screw – Belt Adjustment
6233-68	78-8114-4644-8	Plate
6233-69	26-1014-3281-8	Motor – 1/9 HP, TEFC, 1700 RP, Bodine 34R6BFCI
6233-70	26-1014-4049-8	Screw – Button Head, 1/4 - 20 x 1/2
6233-72	78-8114-4646-3	Pulley – Motor, PD14-XL050-F
6233-73	26-1003-8816-9	Screw – Set, M5 x 6
6233-74	78-8114-4909-5	Belt – Timing, 188XL050
6233-75	78-8076-5110-0	Cover – Right
6233-76	78-8076-5111-8	Cover – Left
6233-77	78-8054-8897-6	Guard – Belt
6233-78	78-8076-4870-0	Plate
6233-79	26-1002-4955-1	Screw – Self-Tap, 8P x 13
6233-80	78-8060-8019-4	Sprocket – 3/8 Inch, 28 Teeth
6233-81	78-8057-5834-5	Tab Washer
6233-82	78-8057-5835-2	Centering Washer
6233-83	78-8060-8020-2	Chain – 3/8 Inch Pitch, L=50
6233-84	78-8076-5112-6	Cover - Chain
6233-85	26-1003-7948-1	Screw – Soc Hd Hex Soc, M5 x 10
6233-86	78-8060-7885-9	End Cap – /25 x 1,2
6233-87	26-1014-3282-6	Junction Box – Bodine 984
6233-88	26-1014-3283-4	Capacitor – 12.5 UF, 250V
6233-89	78-8076-4954-2	Union – PG 13.5
6233-90	78-8060-8053-3	Wire – 3-Pole, 5 Meters Length
6233-91	78-8076-4968-2	Terminal
6233-92	78-8060-8038-4	Sleeving – /12 0,45 M
6233-93	78-8060-7626-7	Connector – PG 11/12
6233-94	78-8060-7877-6	Plug Housing – Vertical
6233-95	78-8060-7875-0	Plug – Male

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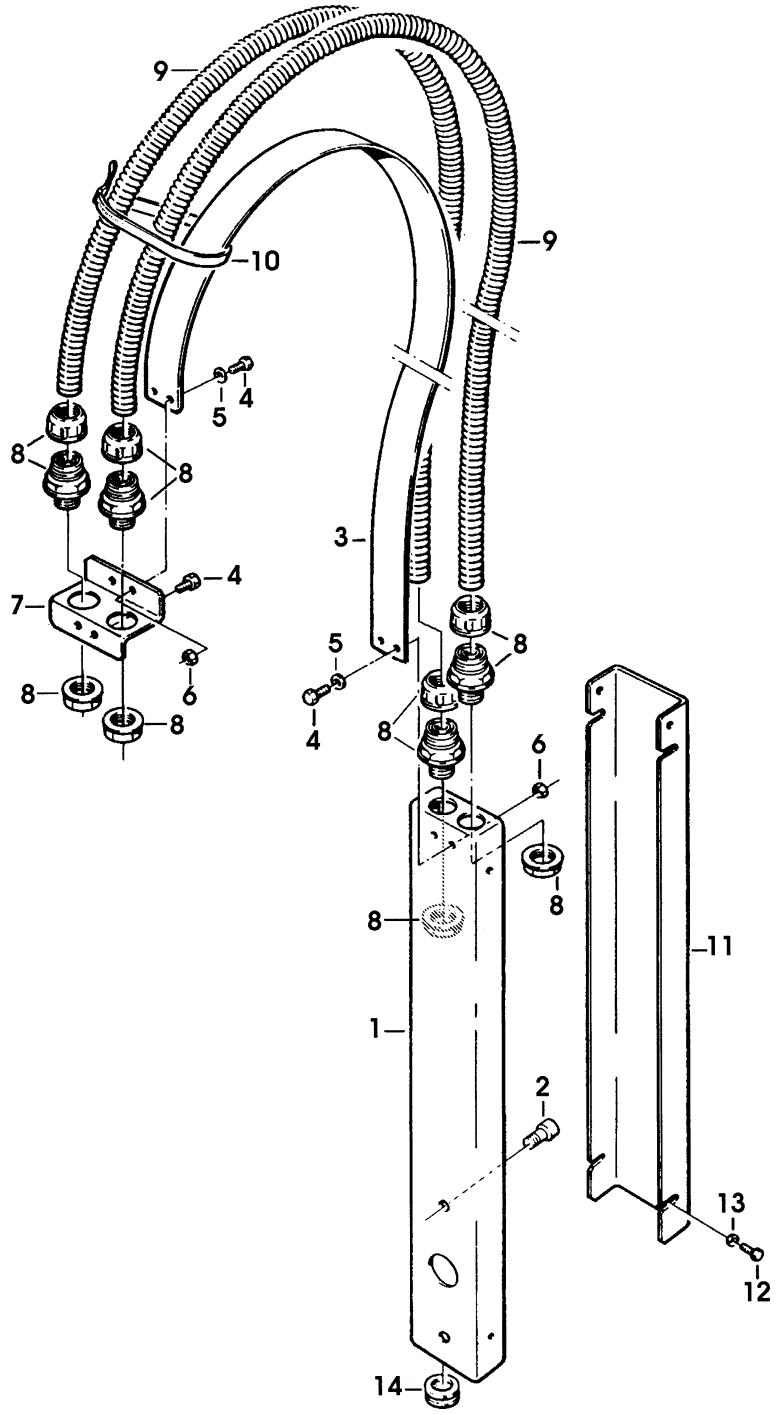


Figure 6234

Figure 6234

Ref. No.	3M Part No.	Description
6234-1	78-8091-0600-4	Housing – Wire
6234-2	26-1003-7963-0	Screw – Soc Hd, M8 x 16
6234-3	78-8076-4872-6	Strap – Wire
6234-4	78-8010-7163-6	Screw – Hex Hd, M5 x 10
6234-5	78-8005-5741-1	Washer – Flat, M5
6234-6	78-8010-7417-6	Nut – Hex, M5
6234-7	78-8076-4873-4	Plate – Strap
6234-8	78-8076-4638-1	Union – PG13.5, Sleeve /14
6234-9	78-8091-0601-2	Conduit – /14, 1120 MM
6234-10	78-8060-8029-3	Clamp – 140X3,5
6234-11	78-8076-5118-3	Cover – Channel
6234-12	26-1003-5810-5	Screw – Hex Hd, M4 x 8
6234-13	78-8017-9018-5	Washer – Plain, M4 SPEC
6234-14	78-8060-7785-1	Fairlead – /22

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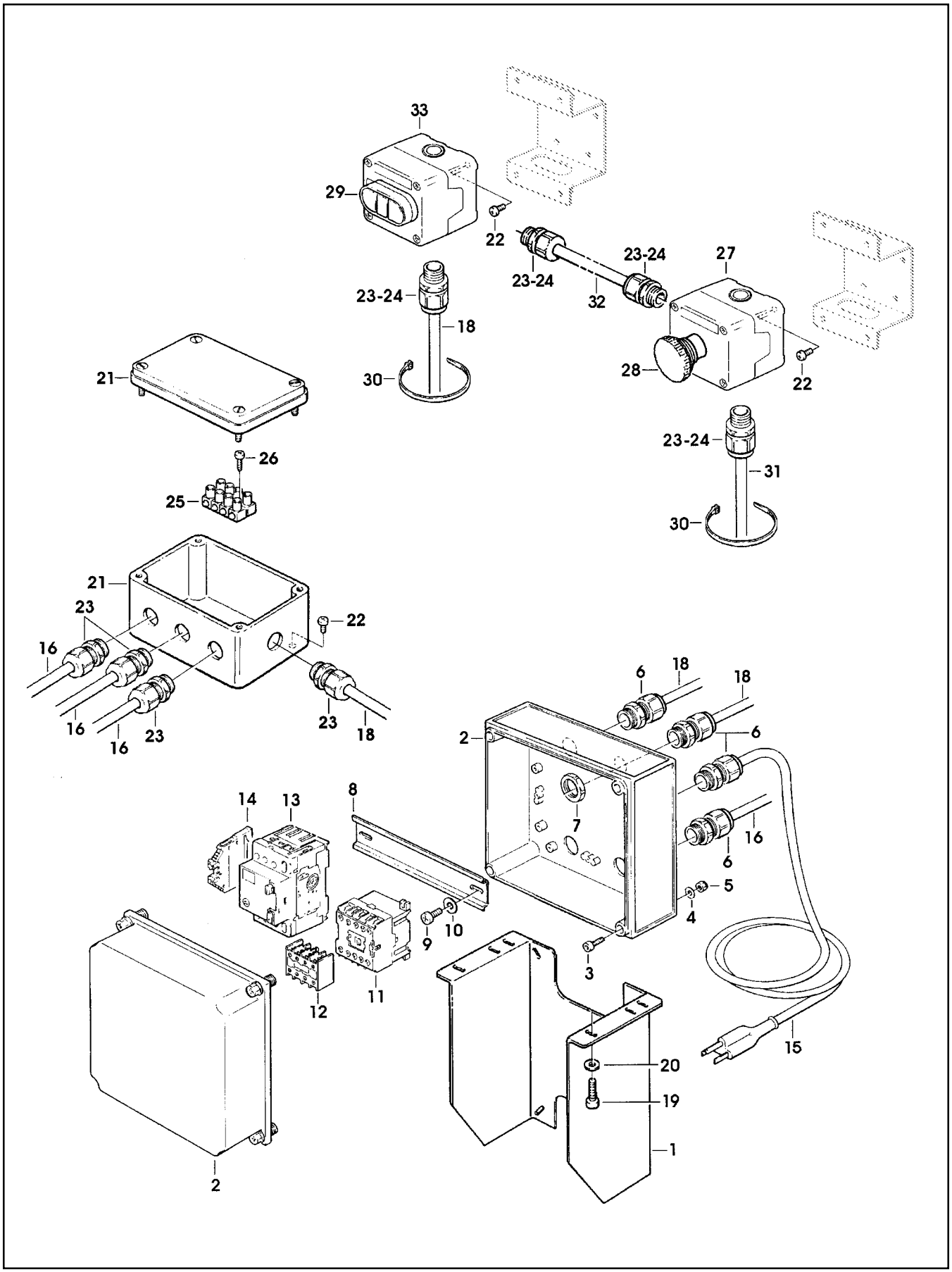


Figure 6235

Figure 6235

Ref. No.	3M Part No.	Description
6235-1	78-8094-6379-3	Support – Box
6235-2	78-8113-6759-4	Enclosure – W/English Labels
6235-3	78-8094-6381-9	Screw – Soc Hd, Hex Hd, M4 x 15
6235-4	78-8005-5740-3	Washer – Plain, 4 mm
6235-5	26-1003-6914-4	Nut – Plastic Insert, M4
6235-6	78-8076-4715-7	Cord Grip
6235-7	78-8076-5211-6	Set Nut – GMP 13.5
6235-8	78-8094-6382-7	Guide – Mounting
6235-9	78-8028-8208-0	Screw – 6P x 9,5
6235-10	78-8017-9018-5	Washer – Plain, M4 SPEC
6235-11	78-8094-6383-5	Contactor – CA4-5-10, 110V, 60HZ
6235-12	78-8114-4647-1	Auxiliary Contacts
6235-13	78-8076-5223-1	Switch – Thermal, KTA 3-25
6235-14	78-8094-6384-3	Clamp – VGPE 4/6
6235-15	78-8028-7909-4	Power Cord U.S.A.
6235-16	78-8060-8053-3	Wire – 3 Pole, 5 Meters Length
6235-18	78-8119-6511-6	Cable –SJTO 16/4
6235-19	78-8010-7210-5	Screw – Soc Hd Hex Soc, M6 x 20
6235-20	26-1000-0010-3	Washer – Flat, M6
6235-21	78-8076-4881-7	Pull Box
6235-22	78-8017-9257-9	Screw – Phillip Hd, M4 x 10
6235-23	78-8076-4532-6	Cord Grip – ST11
6235-24	78-8076-4645-6	Lock Nut – GMP11
6235-25	78-8076-4968-2	Terminal
6235-26	78-8091-0434-8	Screw – Self-Tapping, 4.2 x 19
6235-27	78-8076-5194-4	Box – E-Stop
6235-28	26-1014-5845-8	E-Stop – /40, W/Latch + Contact
6235-29	78-8094-6386-8	Switch – On/Off, DM3N-C-01/10
6235-30	78-8060-8029-3	Clamp – 140 x 3,5
6235-31	78-8119-6507-4	Cable – 2-Pole
6235-32	78-8119-6512-4	Cable – 2-Pole
6235-33	78-8114-4896-4	Box – On/Off, Grey, Allen Bradley

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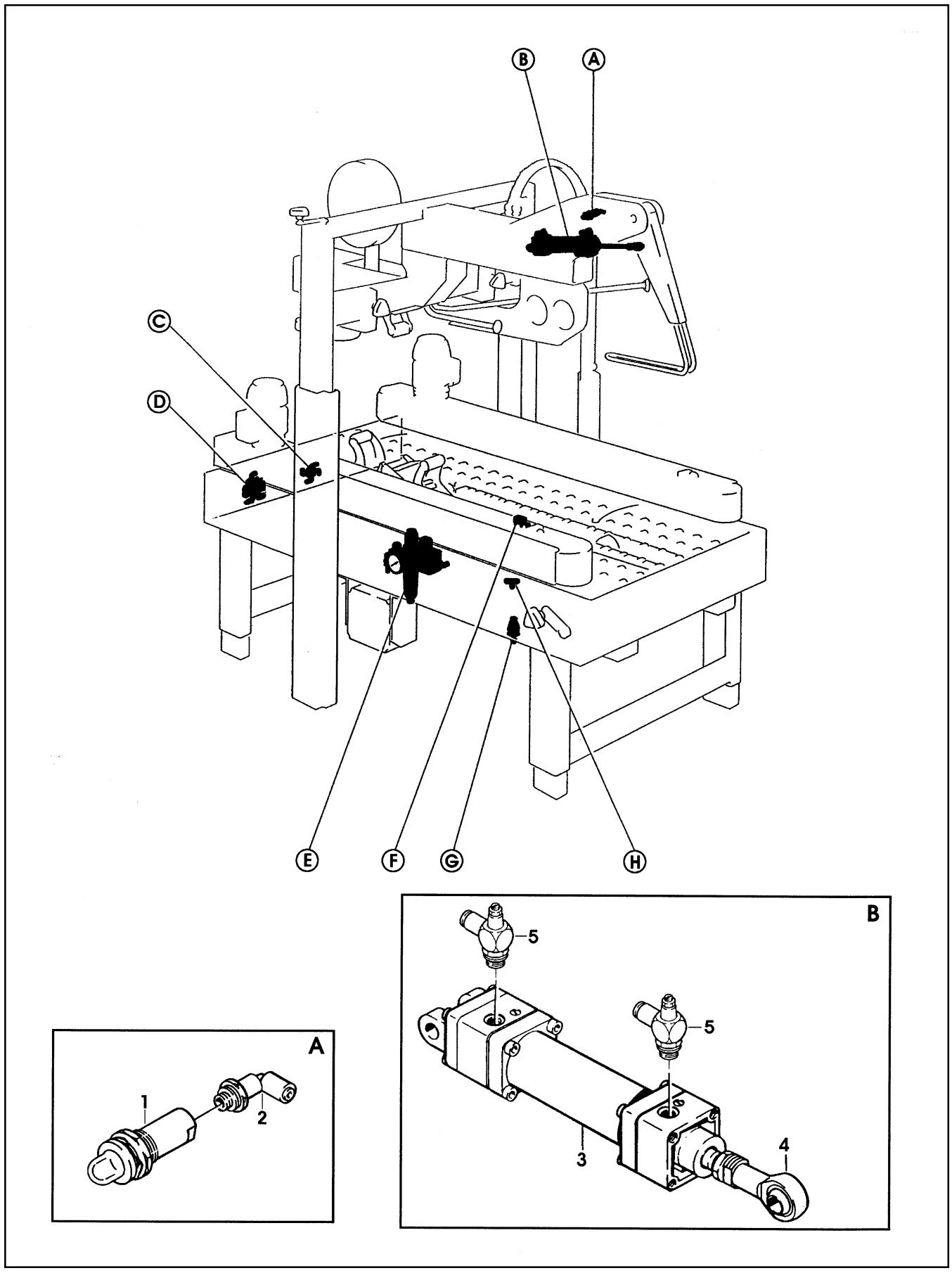


Figure 6236/1 of 2

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Ref. No.	3M Part No.	Description
6236-1	78-8076-4665-4	Indicator – Visual
6236-2	26-1005-5909-0	Elbow
6236-3	78-8057-5738-8	Cylinder – SIRI, 40 mm x 100 mm
6236-4	78-8057-5747-9	Mount – Cylinder Mount End
6236-5	78-8091-0510-5	Regulator – Speed
6236-6	78-8114-4648-9	Junction Block – 1/8 Inch 3033
6236-7	78-8091-0313-4	Elbow – 90 Degree
6236-8	78-8114-4649-7	Valve – Shuttle, EVFA 3130
6236-9	78-8055-0756-9	Union – Rotating MR41-06-14
6236-10	26-1005-6890-1	Muffler
6236-11	78-8114-4650-5	Filter/Regulator Assembly
6236-12	26-1014-4558-8	Filter/Regulator – W/Metal Bowl, SMC EAW2000-F02D-2
6236-13	78-8100-0958-5	Block
6236-14	78-8114-4651-3	Block – Assembly, Y20
6236-15	78-8054-8838-0	Gauge – Air
6236-16	78-8100-0957-7	Valve – EVHS 2500-F02-X116
6236-17	78-8060-7900-6	Union – RA 022 1/4 Inch - 1/4 Inch

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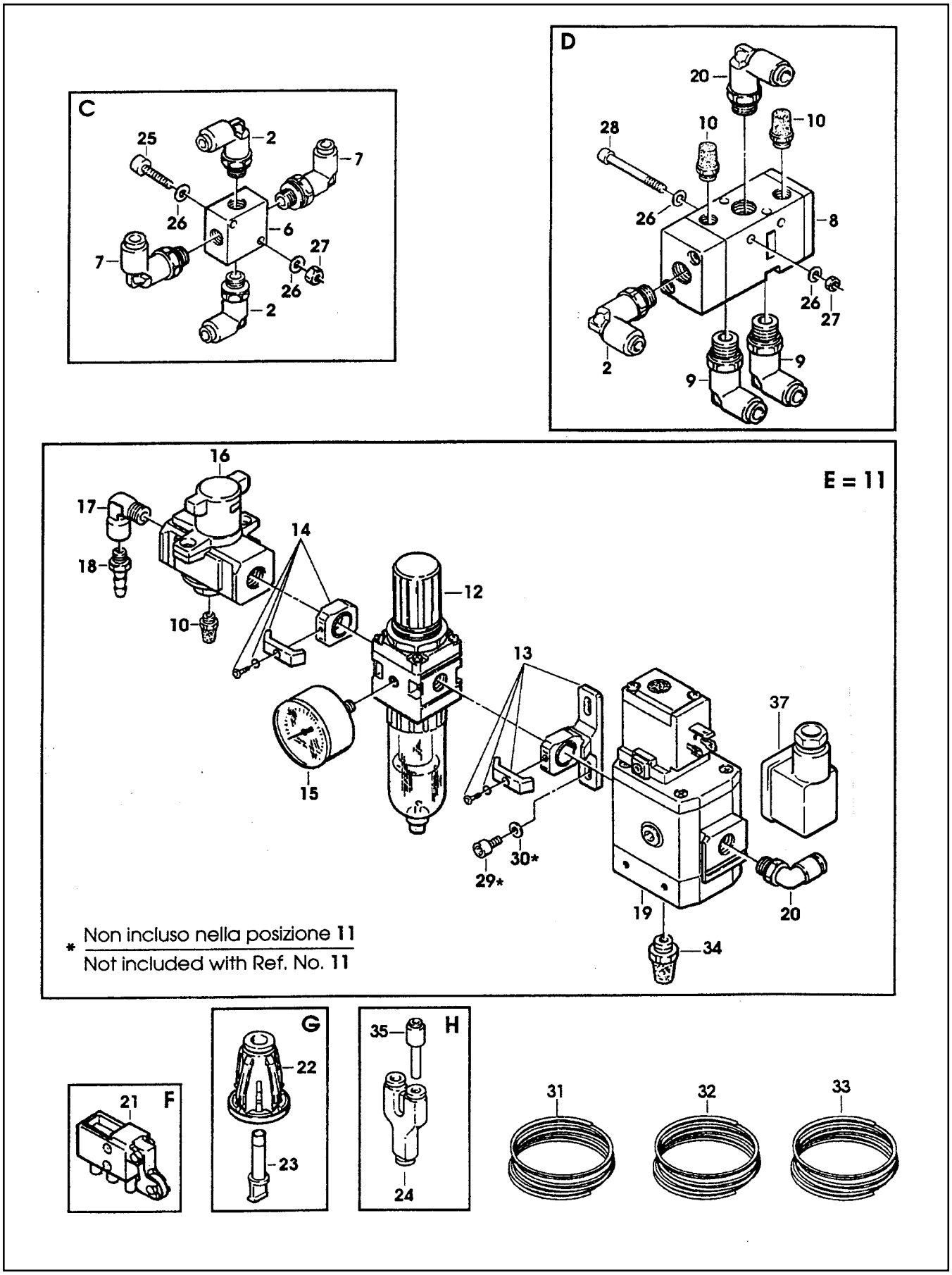


Figure 6236/2 of 2

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Ref. No.	3M Part No.	Description
6236-18	26-1005-6897-6	Hose Connector – RA030 9-1/4 Inch
6236-19	78-8114-4652-1	Starter – EAV2000
6236-20	78-8091-0315-9	Elbow
6236-21	78-8094-6084-9	Limit Switch – PXC-M521
6236-22	78-8114-4653-9	Joint – 31560600
6236-23	78-8060-7861-0	End Cap
6236-24	78-8114-4704-0	Union – 3140A0800
6236-25	26-1003-7946-5	Screw – Soc Hd, M4 x 25
6236-26	78-8005-5740-3	Washer – Plain, 4 mm
6236-27	78-8010-7416-8	Nut – Hex, M4
6236-28	26-1003-7947-3	Screw – Soc Hd Hex Soc, M4 x 35
6236-29	26-1003-7951-5	Screw – Soc Hd Hex Soc, M5 x 20
6236-30	78-8028-8214-8	Washer
6236-31	78-8119-8666-6	Tube – Air, 4 mm O.D. x 2.5 mm I.D.
6236-32	78-8119-8667-4	Tube – Air, 6 mm O.D. x 4 mm I.D.
6236-33	78-8119-8668-2	Tube – Air, 8 mm O.D. x 5 mm I.D.
6236-34	78-8076-4886-6	Muffler – 1/4 Inch
6236-35	78-8114-4705-7	Union – KQR 06-08
6236-37	78-8114-4809-7	Connector

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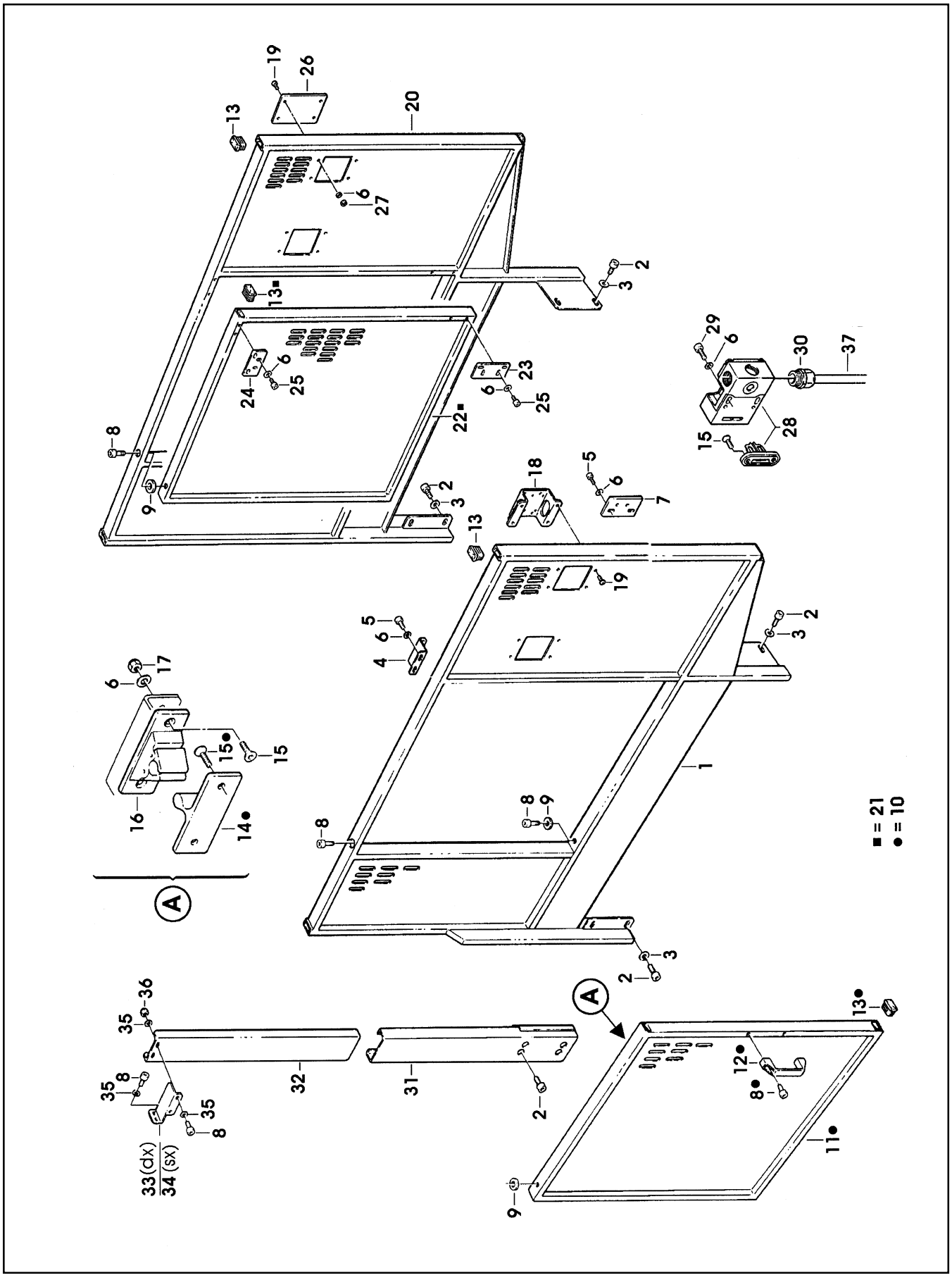
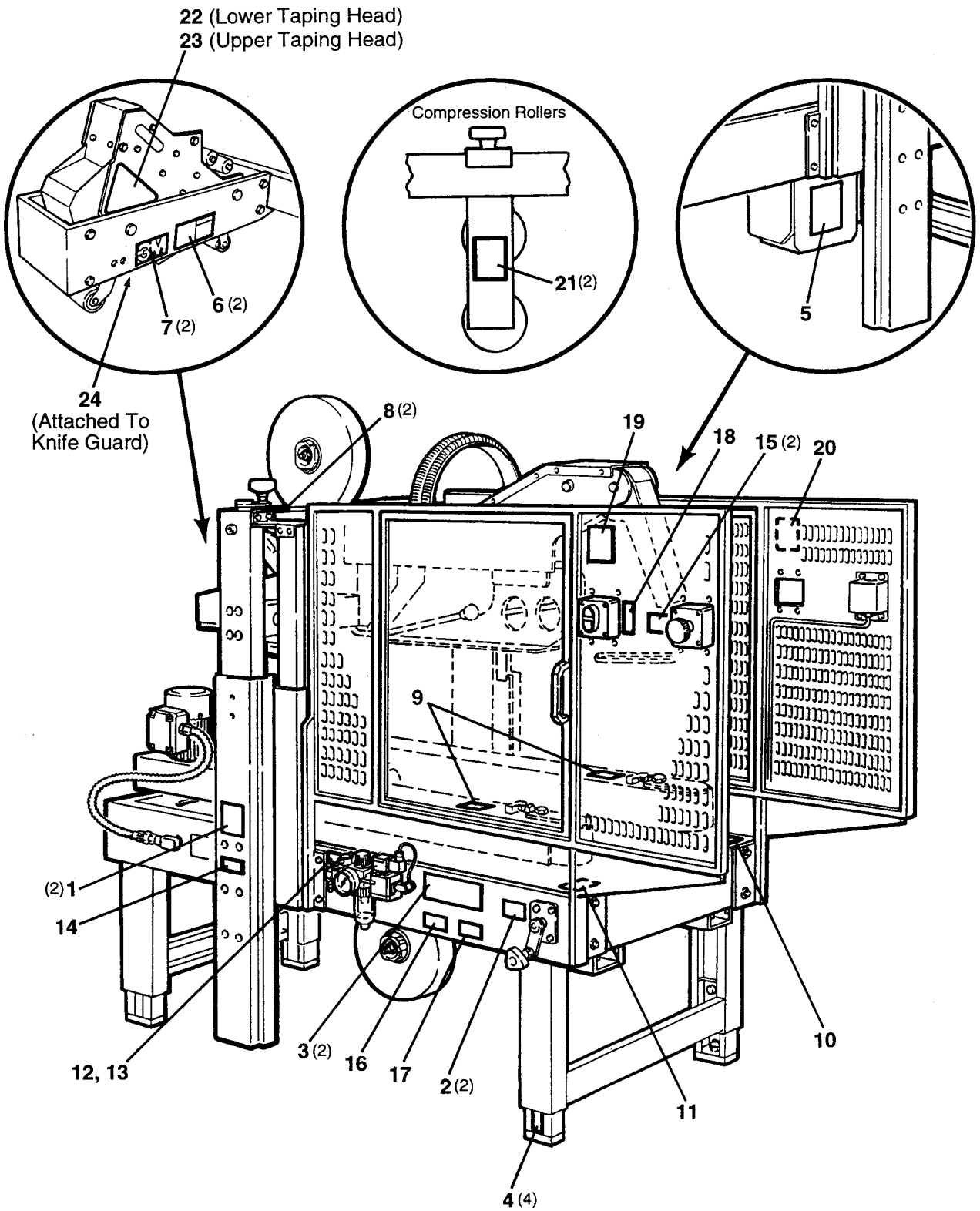


Figure 6237

Figure 6237

Ref. No.	3M Part No.	Description
6237-1	78-8119-6471-3	Guard – L/H, W/English Labels
6237-2	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
6237-3	78-8017-9318-9	Washer – Plain, 8 mm
6237-4	78-8094-6461-9	Bracket
6237-5	78-8032-0382-3	Screw – Soc Hex Hd, M5 x 16
6237-6	78-8005-5741-1	Washer – Flat, M5
6237-7	78-8094-6471-8	Plate – Switch Mounting
6237-8	26-1003-7957-2	Screw – Soc Hd Hex Hd, M6 x 16
6237-9	78-8094-6464-3	Spacer
6237-10	78-8114-4655-4	Door Assembly – Guard, L/H
6237-11	78-8114-4656-2	Door – Guard, L/H
6237-12	78-8060-7807-3	Handle
6237-13	78-8094-6195-3	Cap
6237-14	78-8076-4931-0	Drawbar – Lock
6237-15	26-0001-5862-1	Screw – Flat Hd Soc, M5 x 12
6237-16	78-8076-4932-8	Lock – Wing
6237-17	26-1005-6859-6	Nut – Self-Locking, M5
6237-18	78-8094-6387-6	Support – Switch
6237-19	78-8060-8087-1	Screw – M5 x 10
6237-20	78-8119-6472-1	Guard – R/H, W/English Labels
6237-21	78-8114-4658-8	Door Assembly – Guard, R/H
6237-22	78-8114-4659-6	Door – Guard, R/H
6237-23	78-8094-6467-6	Plate – Lower
6237-24	78-8094-6468-4	Plate – Upper
6237-25	26-1003-7949-9	Screw – Soc Hd Hex Soc, M5 x 12
6237-26	78-8094-6470-0	Plate
6237-27	78-8010-7417-6	Nut – Hex, M5
6237-28	78-8076-4929-4	Security Switch – AZ15ZVR
6237-29	26-1003-7951-5	Screw – Soc Hd Hex Soc, M5 x 20
6237-30	78-8076-4532-6	Cord Grip – ST11
6237-31	78-8114-4660-4	Jamb – Guard
6237-32	78-8114-4661-2	Guard
6237-33	78-8114-4662-0	Bracket
6237-34	78-8114-4663-8	Bracket
6237-35	26-1000-0010-3	Washer – Flat, M6
6237-36	78-8091-0418-1	Nut – Self-Locking, M6
6237-37	78-8119-6508-2	Cable – 2 Pole

120af Adjustable Case Sealer



Safety and Information Labels

Safety and Information Labels

A label kit, part number 78-8113-6779-2, 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.

Ref. No.	3M Part No.	Description	Qty.
1	78-8070-1621-3	Label – Safety Instructions	2
2	78-8070-1622-1	Label – In/Out	2
3	78-8062-4266-1	Label – Product	2
4	78-8060-8481-6	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	78-8113-6750-3	Label – Air Pressure 95 PSI Max	1
13	78-8111-1496-2	Label – Air Pressure, On/Off	1
14	78-8068-3859-1	Label – Service and Spares	1
15	78-8095-1141-9	Label – Stop	2
16	78-8111-1287-5	Label – Electrical Supply, Infeed Conveyor	1
17	78-8111-1430-1	Label – Air Supply, Infeed Conveyor	1
18	78-8113-6775-0	Label – Electrical, On/Off	1
19	78-8113-6882-4	Label – Warning, Flap Kicker, L/H	1
20	78-8113-6883-2	Label – Warning, Flap Kicker, R/H	1
21	78-8113-6912-9	Label – Caution, Pinch Point	2
22	78-8070-1364-0	Label – Tape Threading (Lower)	1
23	78-8070-1365-7	Label – Tape Threading (Upper)	1
24	78-8070-1335-0	Label – Warning, Sharp Knife	2