3M

Instructions and Parts List

3M-Matic™

700r Type 29200

Random Case Sealer with AccuGlide™ II Taping Heads

Important Safeguards

Turn to page two for operating safety information.

Important

It is recommended you immediately order the spare parts listed on page 45. These parts are expected to wear through normal use and should be kept on hand to minimize production delays.

Serial No. _____

For Reference, record taping head(s) serial number(s) here.

3M Masking and Packaging Systems Division

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

Litho in U.S.A.

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

Instruction Manual

700r Adjustable Case Sealer
Type 29200

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Equipment Warranty and Limited Remedy: THE FOLLOWING WARRANTIES ARE 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 `AGE OF TRADE:

3M sells its **3M-Matic™ 700r Random Case Sealer, Type 29200** with the following warranties:

1. The Taping Head knife blades, 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. The gearmotor will be free from all defects for one (1) year after delivery.
4. All other parts will be free from all defects for ninety (90) days 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 ···itten agreement signed by authorized officers of 3M and seller.

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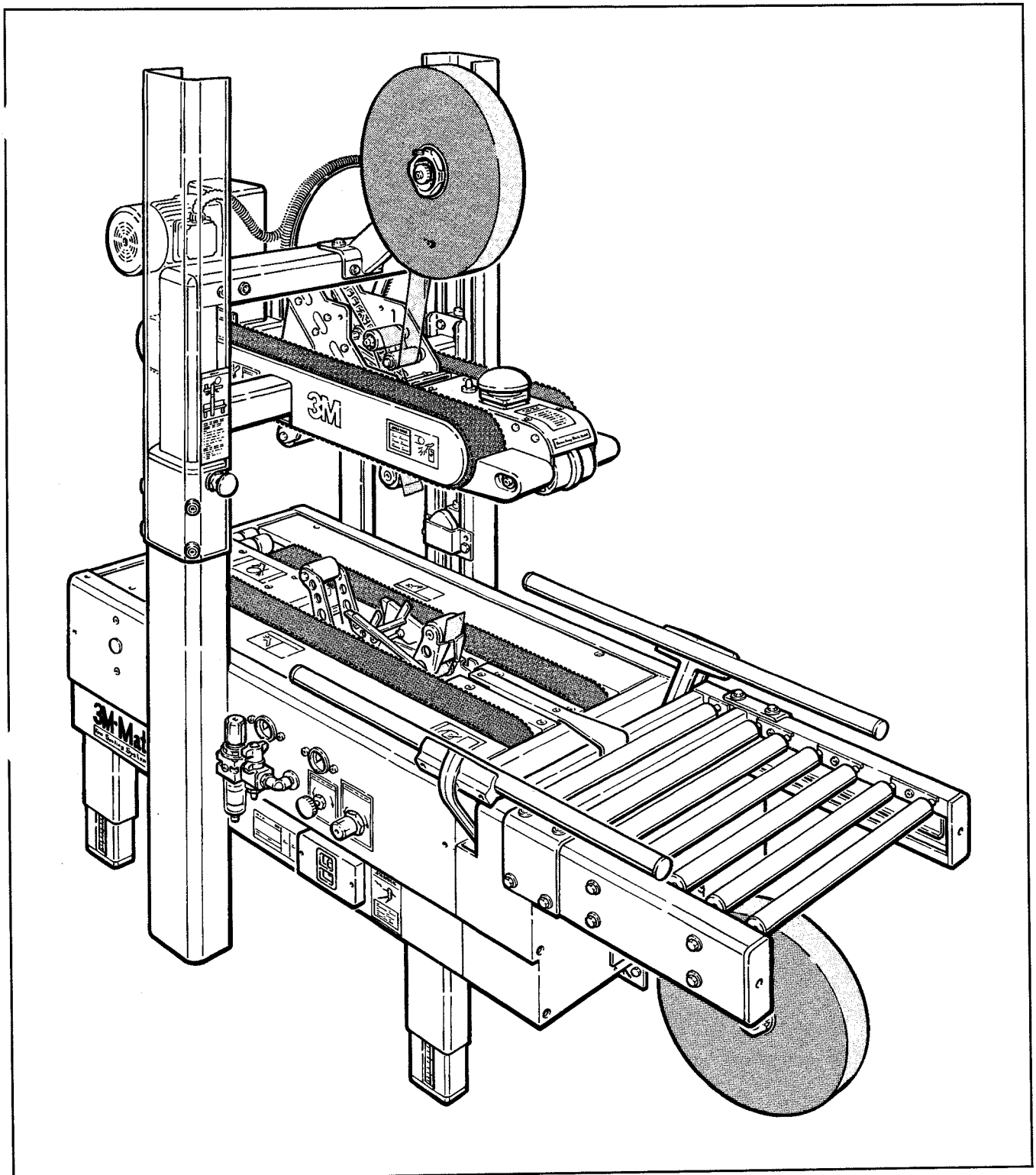


3M-Matic™ 700r Random Case Sealer, Type 29200 (Note – Lower tape supply roll and bracket assembly are shown in the alternate location)

Description

The **3M-Matic™ 700r Random Case Sealer** with **AccuGlide™ II** Taping Heads is designed 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 700r is manually adjustable to a wide range of box sizes (see "Specifications – Box Weight and Size Capacities", page 10).

Important Safeguards

NOTE: IN THE EVENT THESE SAFETY LABELS SHOWN ON PAGES 2-8 ARE DAMAGED OR DESTROYED, REPLACEMENTS ARE AVAILABLE. SEE PAGE 45.

There are three kinds of warning labels used on the case sealers.

The two illustrated labels **(A-B) "Warning Sharp Knife"**, shown in **Figure 1-1**, are attached to the sides of the upper frame at the location of the cut-off blade on the upper taping head. Two of the same labels are attached to the bed frame at the location of the cut-off blade on the lower tape head. The labels warn operators and service personnel of the very sharp knife used to cut the tape at the end of the tape application.

The **"Warning - Sharp Knife"** label **(C)** shown in **Figure 1-1**, is attached to the orange cut-off blade guard on both taping heads. The label warns the operator and service personnel of the very sharp knife located behind the guard and to keep hands out of this area except for tape loading and/or servicing the taping heads.

The taping heads are equipped with a orange blade guard that covers the blade. **The taping heads should never be operated with the blade guards removed.**

Turn air and electrical supplies off before servicing the taping heads.

The taping heads should not be washed down or subject to conditions causing moisture condensation on components.

The **"Warning - Hazardous Voltage"** label, shown in **Figure 1-2**, is attached to the frame next to the on/off switch control box. The label warns service personnel to unplug the power supply before attempting any service work on the case sealer.

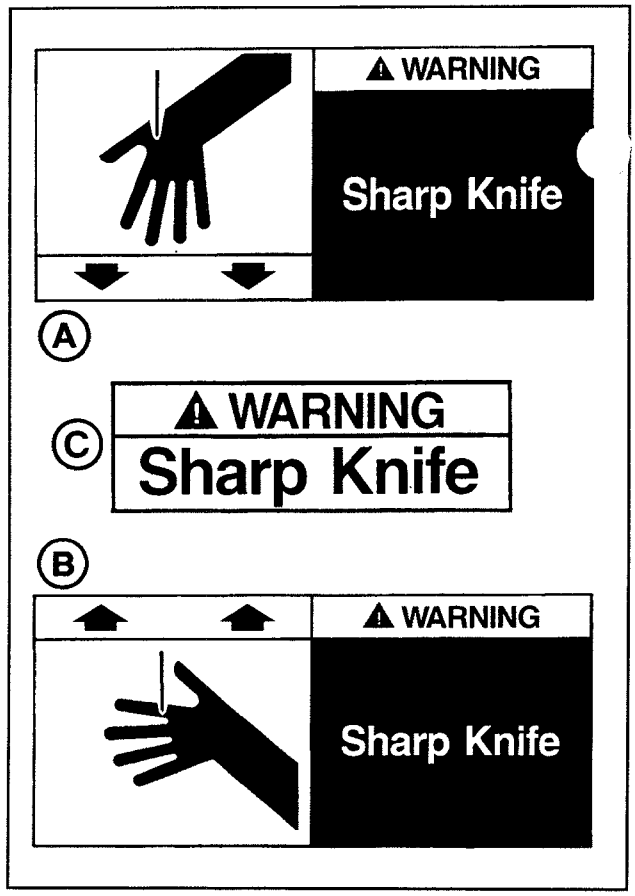


Figure 1-1 - Knife Warning Labels

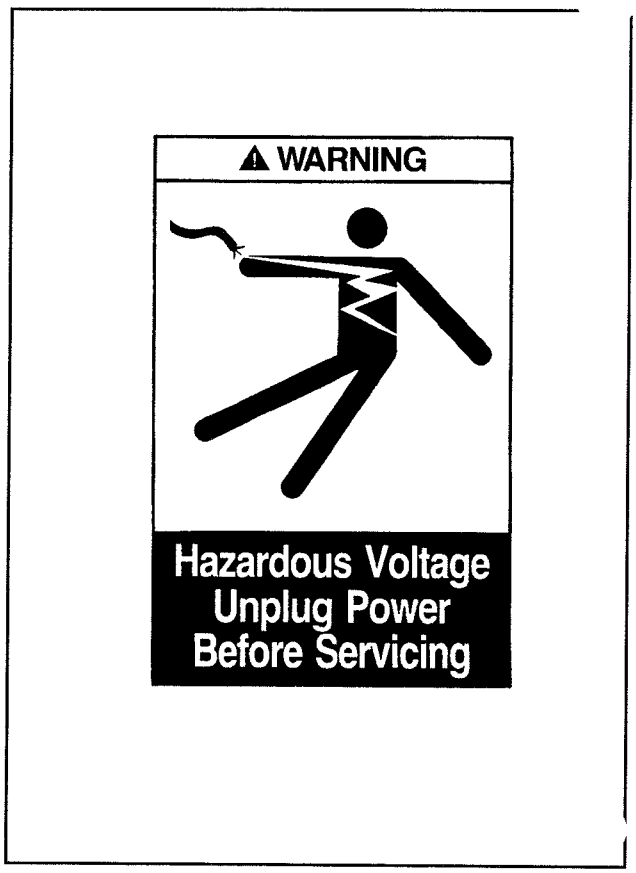


Figure 1-2 - Electrical Warning Label

Important Safeguards (Continued)

The two **"Warning - Keep Hands Away From Moving Belts"** labels, as shown in **Figure 1-3**, are ated on the right and left side panel of the upper head frame - infeed end. The labels warn operators and service personnel to keep hands away from this area when the drive belts are running.

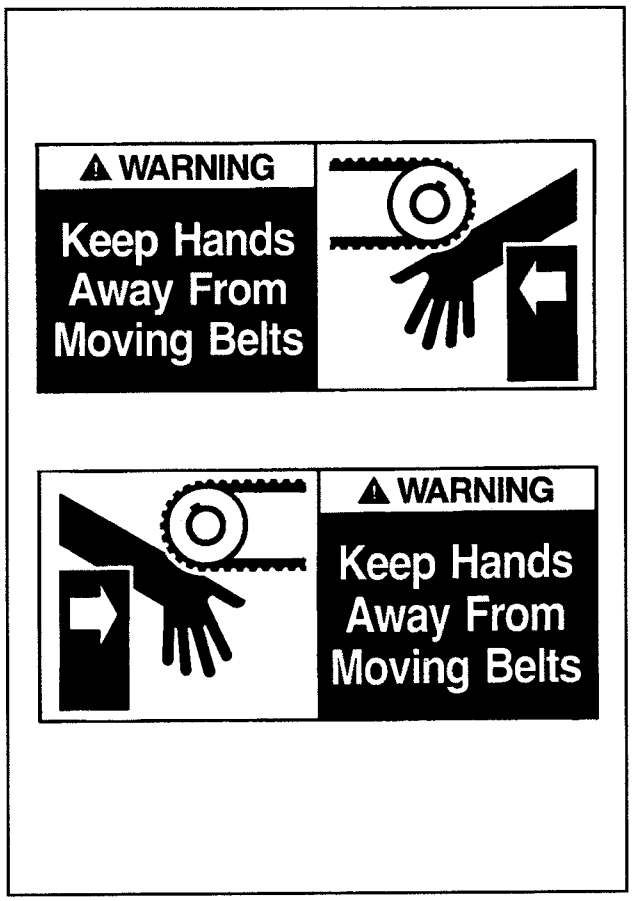


Figure 1-3 - Hands Warning Label

...e **"Caution - Keep Hands Out Of This Area"** label, shown in **Figure 1-4**, is attached to the center plate at the exit end of the bed frame. The label warns the operator to keep hands out of this area when the drive belts are running.

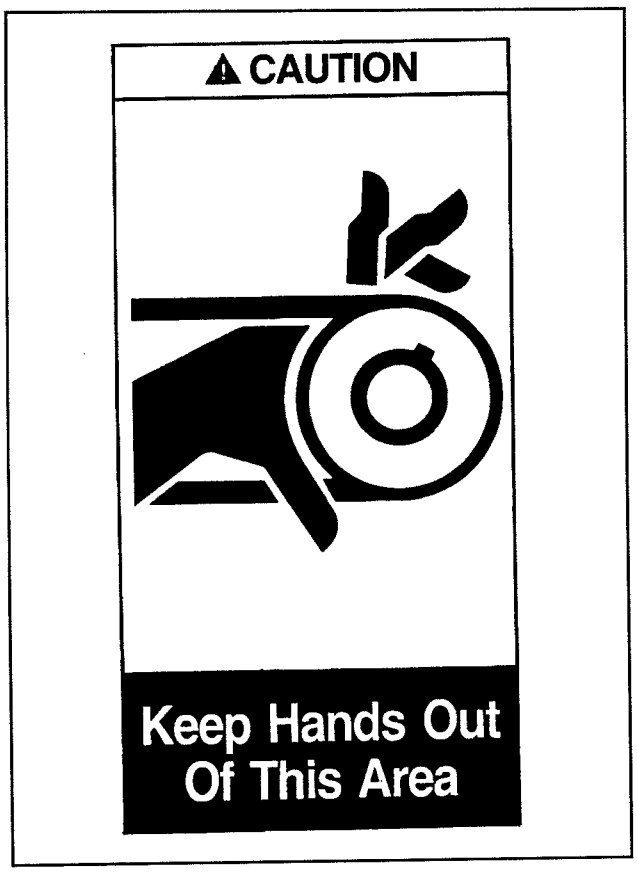


Figure 1-4 - Hands Caution Label

Important Safeguards (Continued)

The second **"Caution - Keep Hands Out of This Area"** label, shown in **Figure 1-5**, is attached to the gear motor at the rear of the upper frame. It warns the operator to keep hands out of this area when the upper taping head mechanism is in operation.

Figure 1-5 - Hands Caution Label

The **"Safety Instructions"** label, shown in **Figure 1-6**, is attached to the top front of the upper frame. The label provides convenient safeguard instructions for the operator and service personnel.

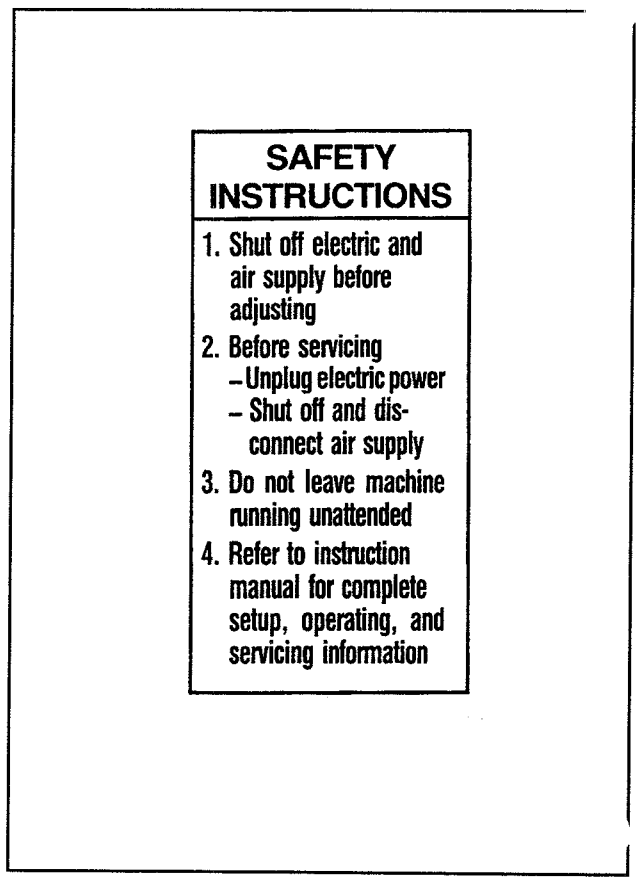


Figure 1-6 - Safety Instructions Label

Important Safeguards (Continued)

The **"Notice - Feed Box From This End"** label, shown in **Figure 1-7,** is attached to the right side ...e at the infeed end of the bed frame. It alerts the operator that this is the infeed end of the case sealer.

Figure 1-7 - Box Feed Label

The **"Notice - Raise and Lower Upper Drive Assembly"** label, shown in **Figure 1-8,** is attached to the left hand plastic column guard. The label provides instructions on raising and lowering the upper drive assembly.

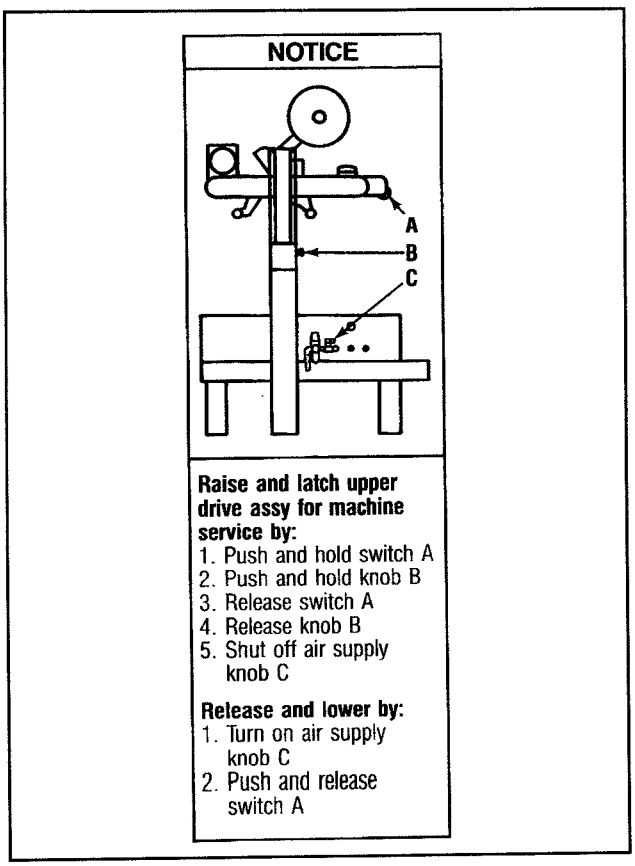


Figure 1-8 - Upper Drive Assembly Label

Important Safeguards (Continued)

The **"Centering Guide Force Adjust"** label, shown in **Figure 1-9,** is attached to the left side frame over the centering guide control knob. The label provides increase/decrease force information to the operator.

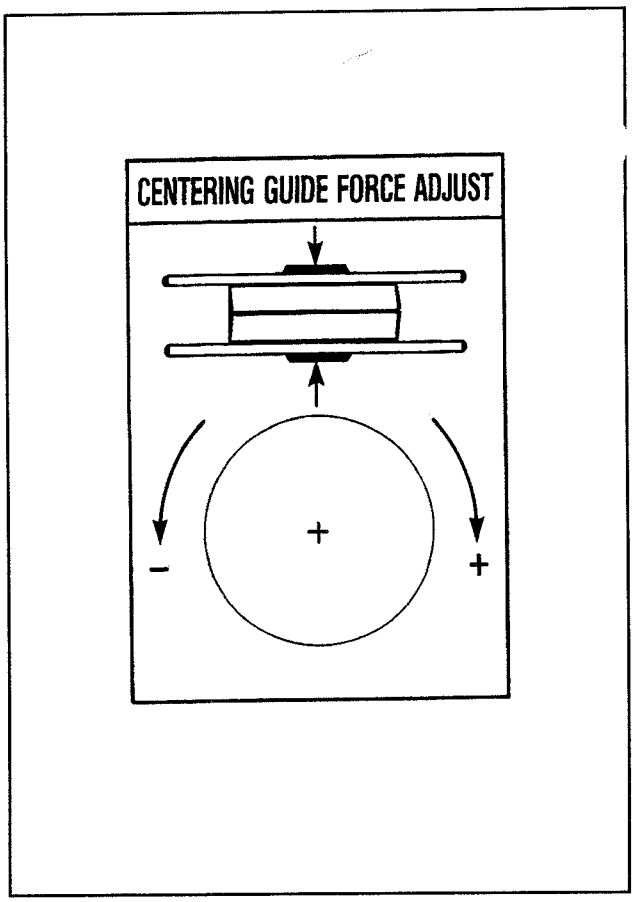


Figure 1-9 - Centering Guide Force Adjust Label

The **"Top Drive Assembly Force Adjust"** label, shown in **Figure 1-10,** is attached to the left side frame over the top drive assembly control knob. The label provides increase/decrease force information to the operator.

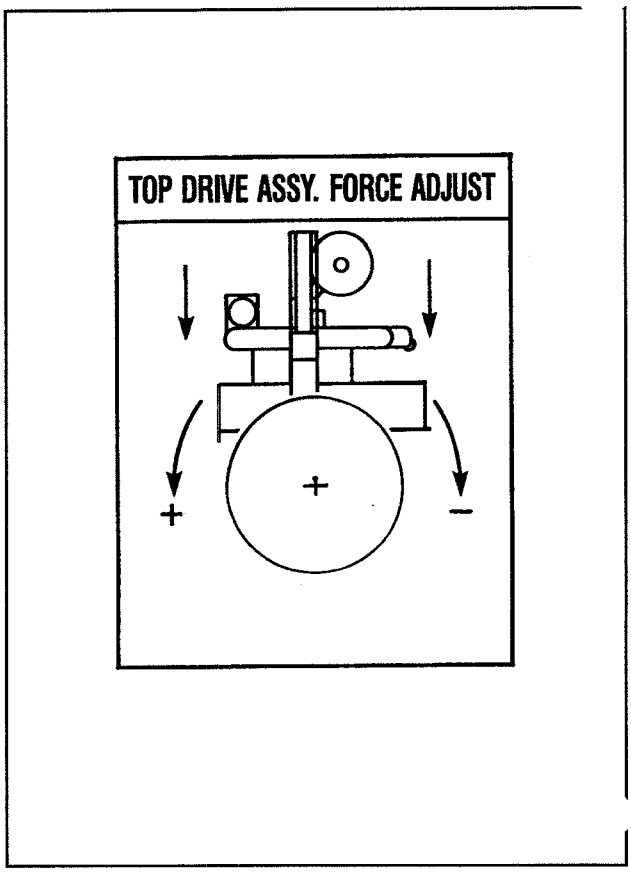


Figure 1-10 - Top Drive Assembly Force Adjust Label

Important Safeguards (Continued)

The **"Box Centering Switch"** label **(A)**, shown in **Figure 1-11,** is attached to the switch located in the center of the bed frame at the infeed end. The label identifies the box centering switch.

The **"Drive Assembly Raising Switch"** label **(B)**, shown in **Figure 1-11,** is located above the switch which is at the front of the upper frame. The label identifies the drive assembly raising switch.

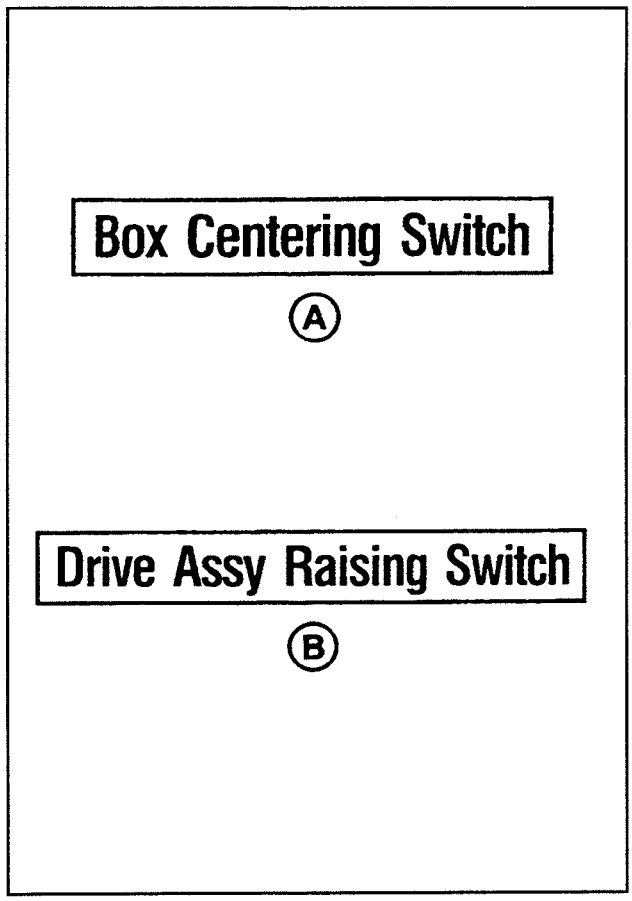


Figure 1-11 - Box Centering Switch/Drive Assembly Raising Switch

The **"Tape Threading Label",** shown in **Figure 1-12,** is attached to the left side of both the upper and lower taping heads. This label provides a convenient tape threading diagram. More detailed tape loading and threading information is provided in this manual in the set-up procedure section.

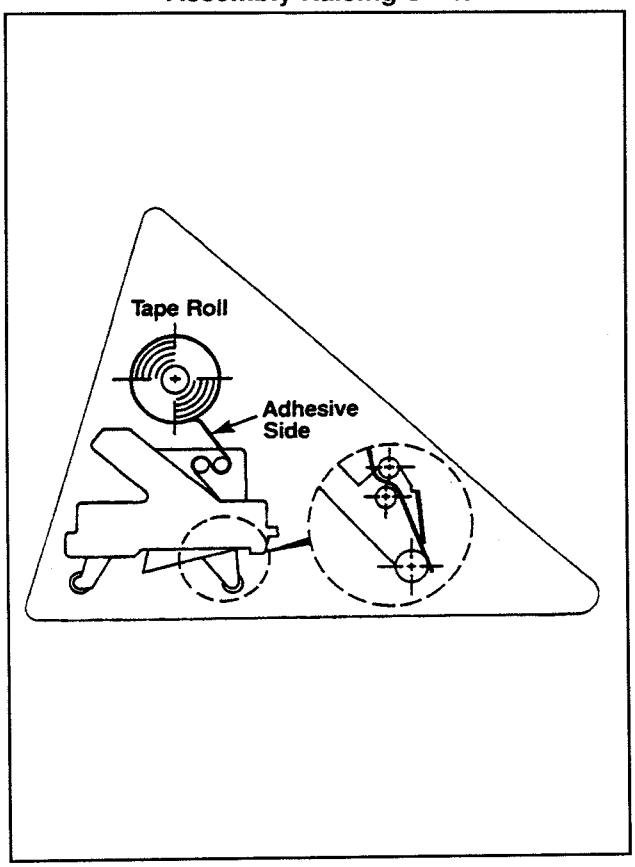


Figure 1-12 - Tape Threading Label

Important Safeguards (Continued)

The 700r is equipped with a centrally located stop switch, shown in **Figure 1-13.** This push-button switch is accessible from either side of the machine for operator convenience.

⚠ THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. READ AND UNDERSTAND THEM BEFORE INSTALLING OR OPERATING THIS EQUIPMENT.

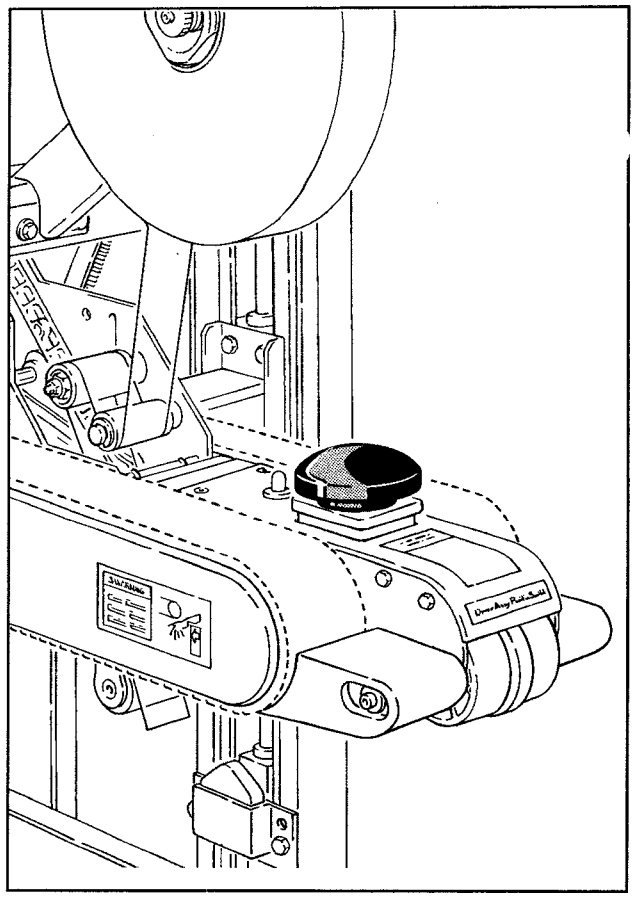


Figure 1-13 - Centrally Located Stop Switch

Specifications

1. **Power Requirements:**

   Electrical – 115 VAC, 60 Hz, 3.8 A (440 watts)
   Pneumatic – 70 PSIG [5 bar gauge pressure]
   3.75 SCFM [110 litre/min @ 21° C, 1.01 bar] at 15 boxes per minute
   A pressure regulator is included

   The machine is equipped with two 1/6 HP gearmotors and comes with an eight foot [2.4 m] standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above.

2. **Operating Rate:**

   Up to 15 boxes per minute. Actual production rate is dependent on box size, box size mix, and operator dexterity.

   Box drive belt speed is 75 FPM [0.38 m/s]

3. **Operating Conditions:**

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

   IMPORTANT SAFEGUARD

   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:**

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

6. **Tape Roll Diameter:**

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

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

   2 3/4 inches ±1/4 inch [70 mm ± 6 mm]

   Tape Application Leg Length – Optional:
   (See "Special Set-Up Procedure", page 34)
   2 inches ±1/4 inch [50 mm ± 6 mm]

(Specifications continued on next page)

Specifications (Continued)

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, up to 85 lbs. [38.6 kg] **maximum** – contents must support flaps.

   B. Box Size:

	Minimum	**Maximum**
Length -	6.0 inches [150 mm]	Unlimited
Width -	6.0 inches [150 mm]*	21.5 inches [550 mm]
Height -	4.75 inches [120 mm]** ***	24.5 inches [620 mm] ***

* Cartons narrower than 10 inches [250 mm] in width may require more frequent belt replacement because of limited contact area.

** 3.75 inches [95 mm] height with heads adjusted to apply 2 inch [50 mm] tape leg lengths. (See "Special Set-Up Procedure", page 34.)

*** 8.0 inches [200 mm] minimum to 28.5 inches [725 mm] maximum height with columns adjusted to upper position. (See "Special Set-Up Procedure", page 36.)

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

Note: 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 .5 or less, then several boxes should be test run to assure the proper machine performance.

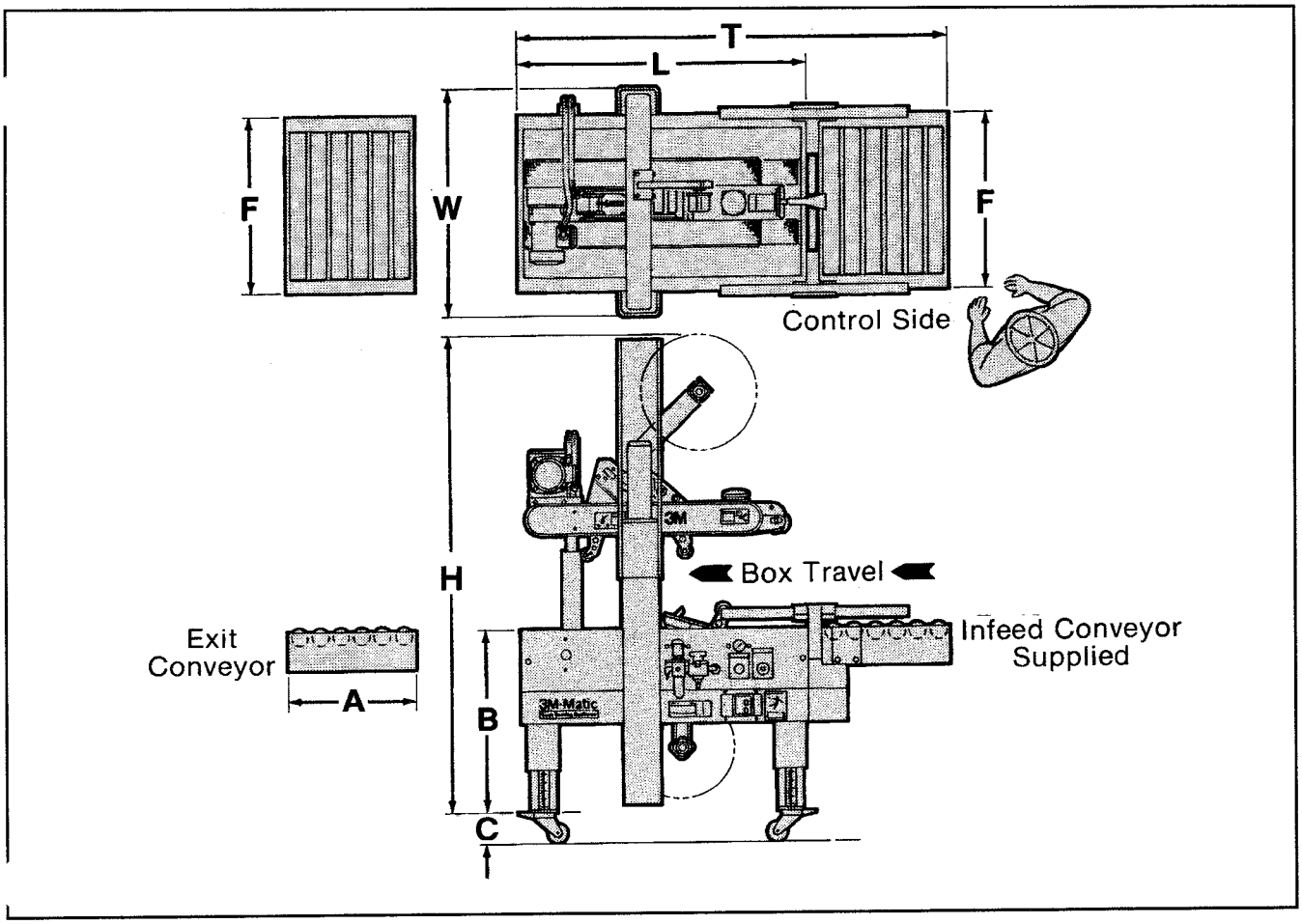
DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

$$\frac{\text{BOX LENGTH IN DIRECTION OF SEAL}}{\text{BOX HEIGHT}} \quad \text{SHOULD BE GREATER THAN .5}$$

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

(Specifications continued on next page.)

Specifications (Continued)



10. Machine Dimensions:

	W	L	H	A*	B	C**	F	T
Minimum Inches [mm]	31 [790]	40 1/2 [1180]	62 [1575]	18 [460]	24*** [610]	4 3/4 [120]	24 1/2 [625]	64 1/2 [1640]
Maximum Inches [mm]	--	--	86*** [2185]	--	35 [890]	--	--	--

* Exit conveyor is optional

** Casters are optional

*** When columns are adjusted to upper position, "B" minimum dimension is 20 inches [510 mm] and "H" maximum dimension is 90 inches [2285 mm]. (See "Special Set-Up Procedure", page 35)

Weight – 500 pounds [225 kg] crated (approximate)
430 pounds [200 kg] uncrated (approximate)

11. Set-Up Recommendations:

- Machine must be level.
- Customer supplied infeed and exit 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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Set-Up Procedure

It is recommended that the 700r 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 700r before subjecting id operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

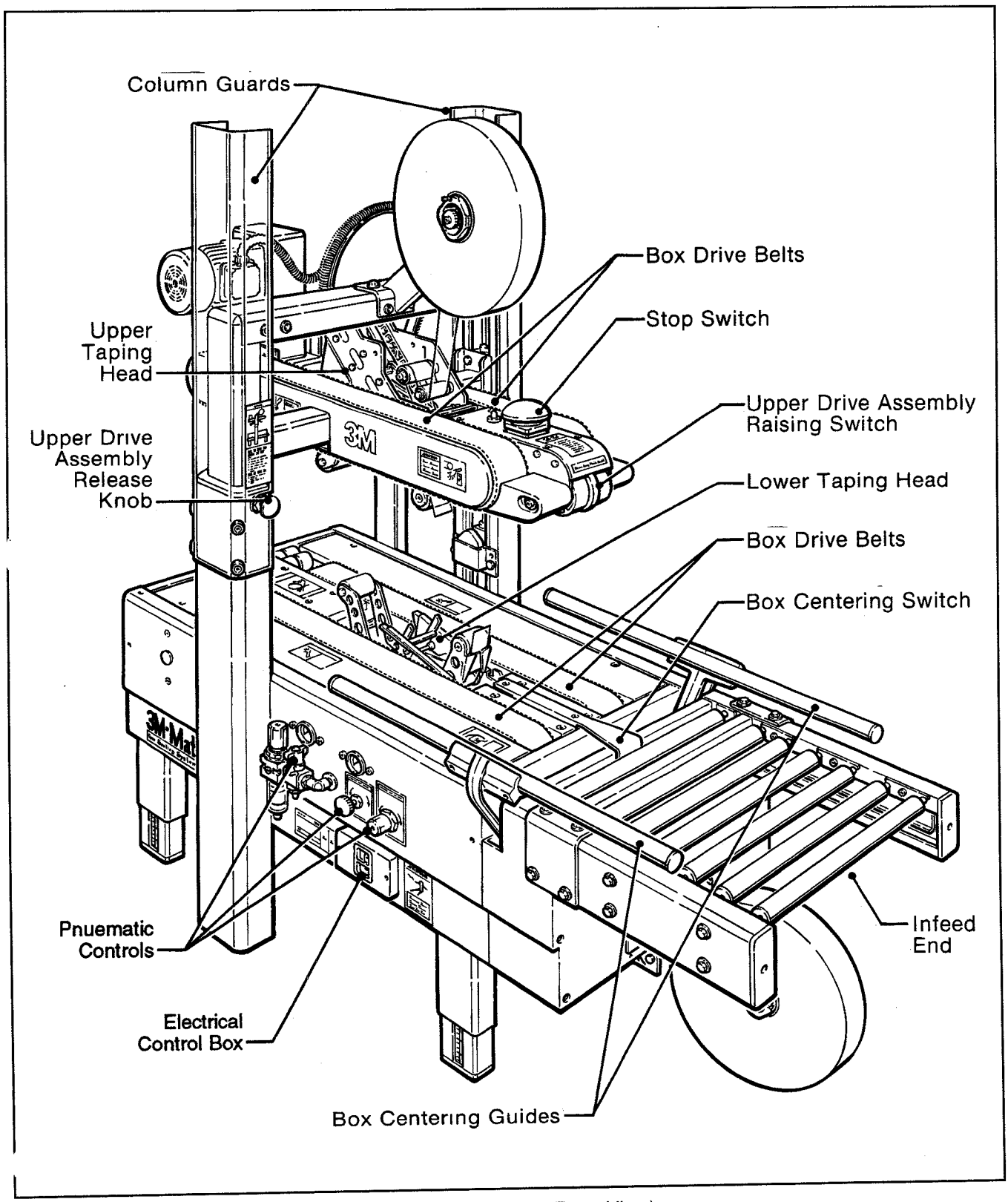


Figure 2-1 - 700r Random Case Sealer Components (Left Front View)

Set-Up Procedure (Continued)

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 y... 3M Representative.

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.

1. Lift off fiberboard cover from pallet after removing staples at bottom.

2. Remove the two "U" shaped hold down clamps from lower crossbar, as shown Figure 2-2A. These are sheet metal brackets that prevent the upper head assembly from bouncing during shipping.

3. Install the upper tape drum bracket on the top cross bar, as shown in Figure 2-2B.

4. The plastic column guards, shown in Figure 2-2, have been installed upside down for shipping. They must be reversed for safe operation of the machine. Remove and retain the screws and washers holding the plastic guards on the columns. Remove the protective plastic film from the guards. Rotate the guards 180° and install back on the columns as shown. Replace existing screws and washers to secure the guards in place.

5. Ensure that the tape drum bracket assembly, located on the lower taping head, is mounted straight down, as shown in Figure 2-3A. The tape drum bracket assembly can be pivoted to provide clearance or for retrofit in certain cases.

Lower Outboard Tape Roll Mount – Alternate

Remove the tape drum bracket assembly, stud spacer and fasteners from the lower taping head. Install and secure on the infeed end of the lower frame, as shown in Figure 2-3B.

Conveyor Bed Height

The case sealer is equipped with four adjustable legs that are located at the corners of the frame. The legs can be adjusted to obtain different machine conveyor bed heights from 24 inches [610 mm] minimum to 35 inches [890 mm] maximum.

> **Note** – Minimum conveyor bed height can be reduced to 20 inches [510 mm] by moving outer columns up one set of mounting holes. However, this change also reduces minimum box height of 4.8 inches [120 mm] to 7.9 inches [200 mm]. (See "Special Set-Up Procedure – Box and Conveyor Bed Height Range", page 36.)

Refer to Figure 2-3C and set the conveyor bed height as follows:

1. Block up the machine frame to allow adequate leg adjustment.

2. Loosen, but do not remove, two M8 x 1.25 mm socket head screws in one leg (use M6 hex wrench). Adjust the leg length for the desired conveyor bed height. Retighten the two screws to secure the leg. Adjust all four legs equally.

Set-Up Procedure (Continued)

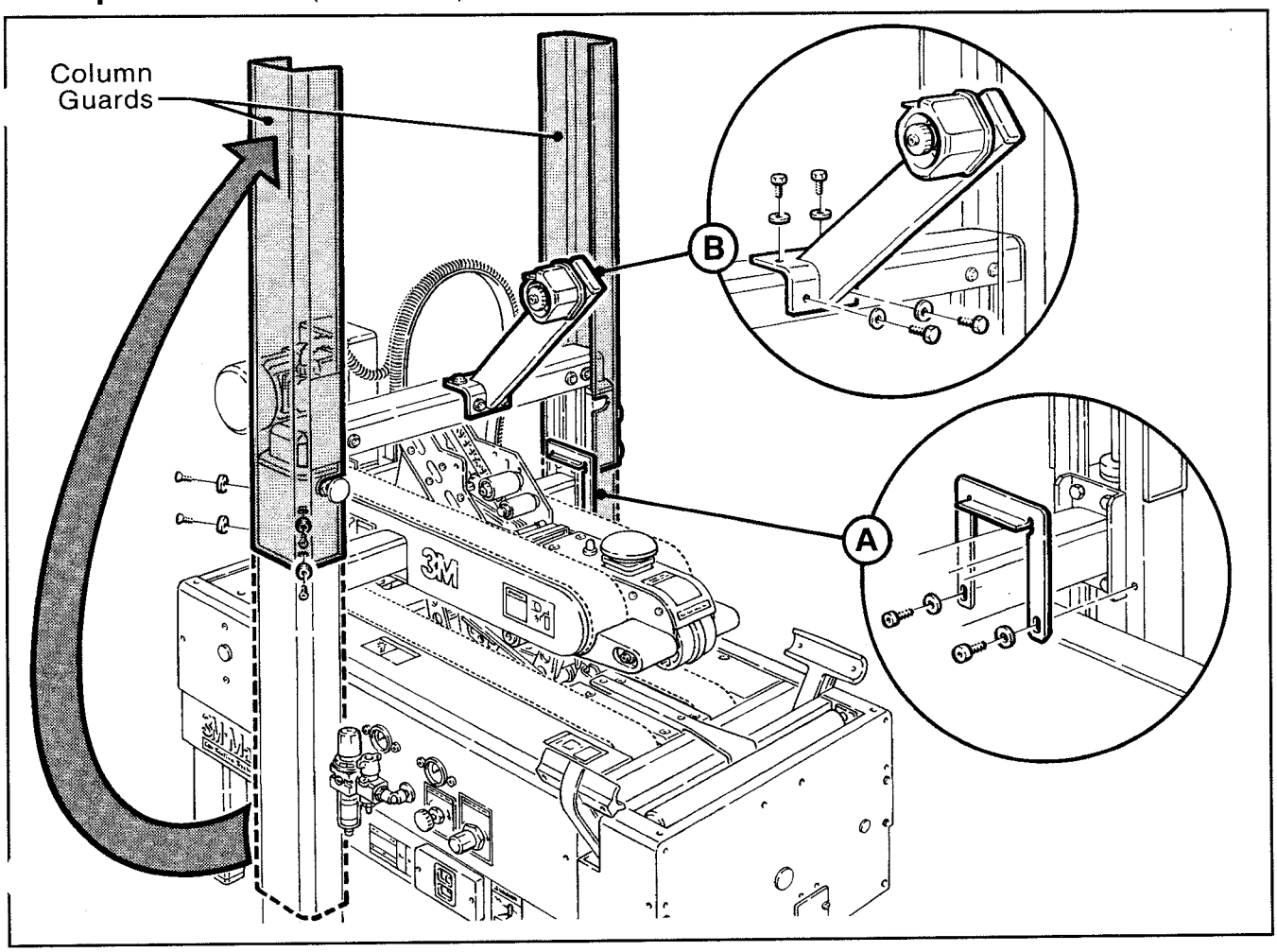


Figure 2-2 - 700r Frame Set-Up

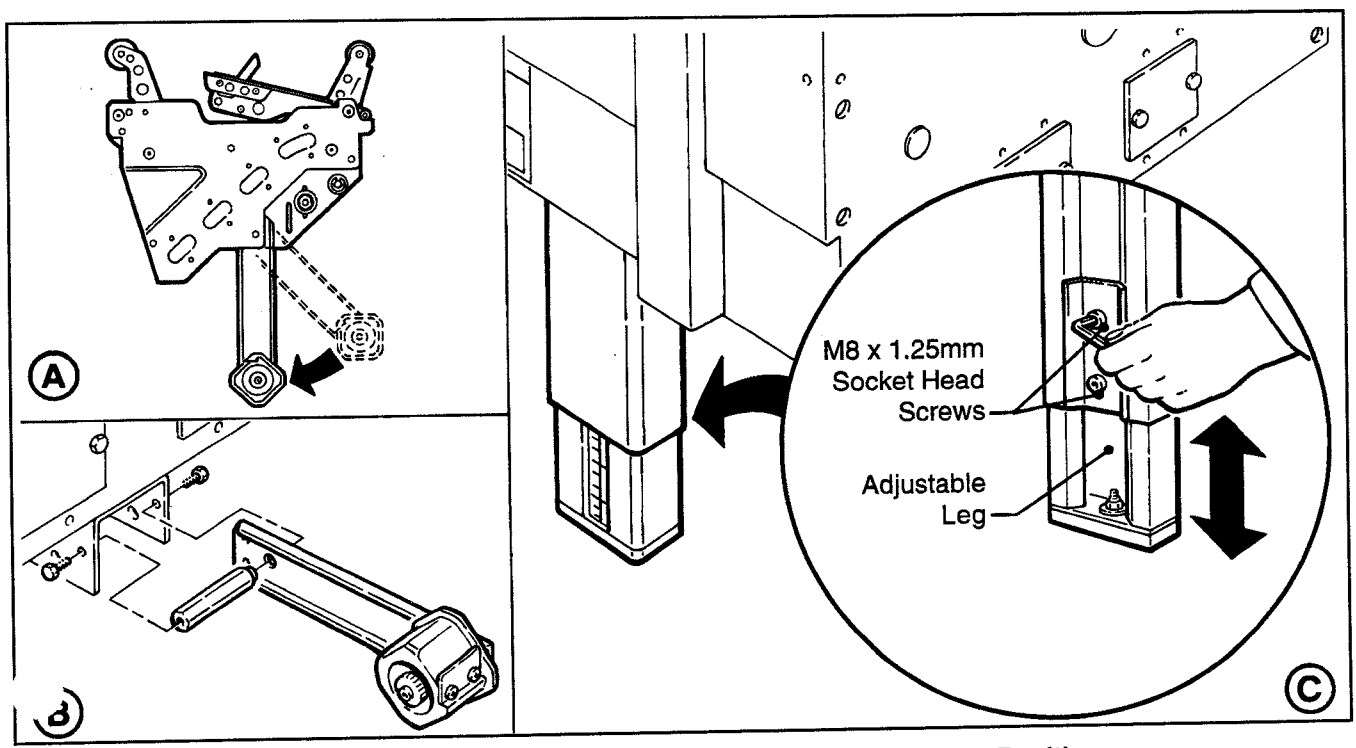


Figure 2-3 - Conveyor Bed Height Adjustment and Lower Tape Drum Bracket Position

Set-Up Procedure (Continued)

Infeed Conveyor Assembly

1. Remove the conveyor and the package of parts from the carton.

2. Verify that the package contains two right angled cover plates, twelve M8 x 15 hex head screws, and eight M8 flat washers.

3. To assemble the infeed conveyor, refer to Figure 2-4 and locate four bolt holes on the infeed end of the case sealer frame.

4. Insert a M8 x 15 screw in each hole so that only a few threads take hold. Do not use washers with these screws.

5. Attach the infeed conveyor over the screws using the inverted keyholes in the end of the conveyor. Tighten all four screws with a 13 mm wrench.

6. Refer to Figure 2-5. Set the cover plates over the joint between the conveyor and the frame on each side and secure them with four M8 x 15 screws and M8 washers.

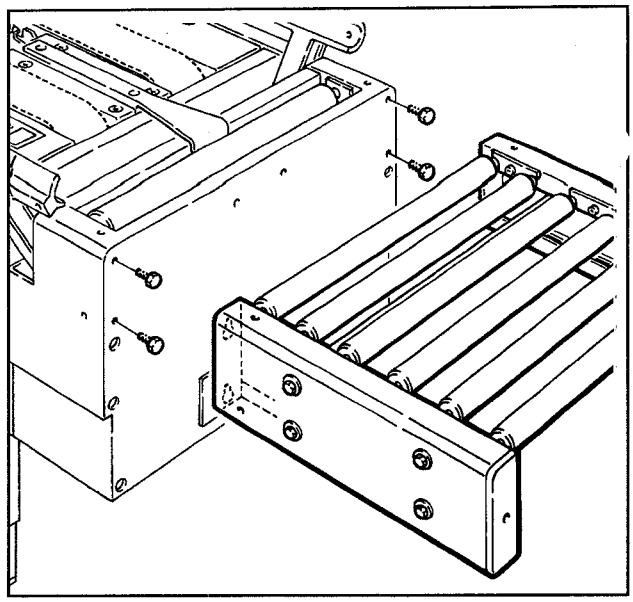


Figure 2-4 - Infeed Conveyor

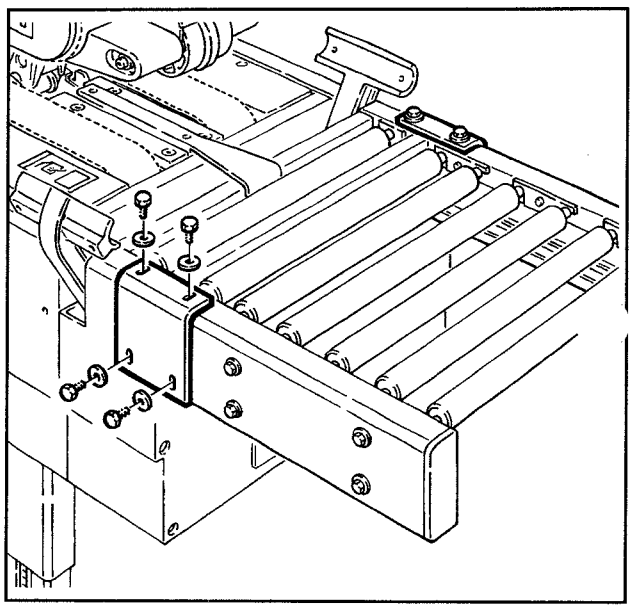


Figure 2-5 - Cover Plates

Centering Guides

1. Remove the two centering guides and four M6 x 20 socket head screws from the package.

2. Using a 5 mm hex key wrench, attach the centering guides to the rails with four M6 x 20 screws (two in each guide) as shown in Figure 2-6.

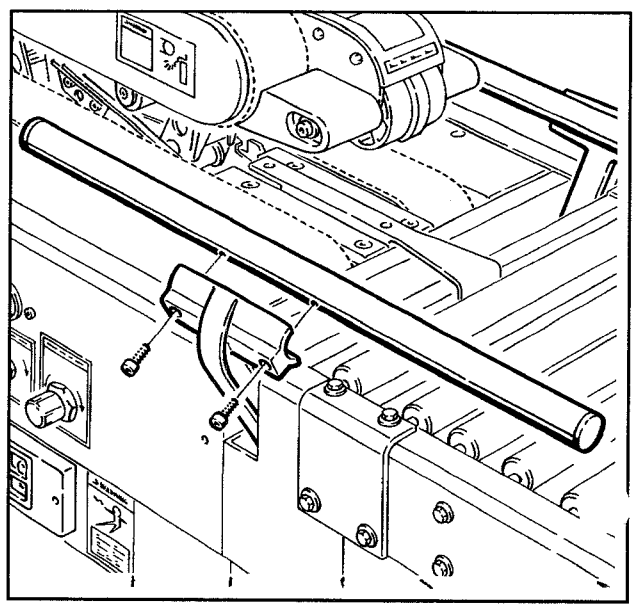
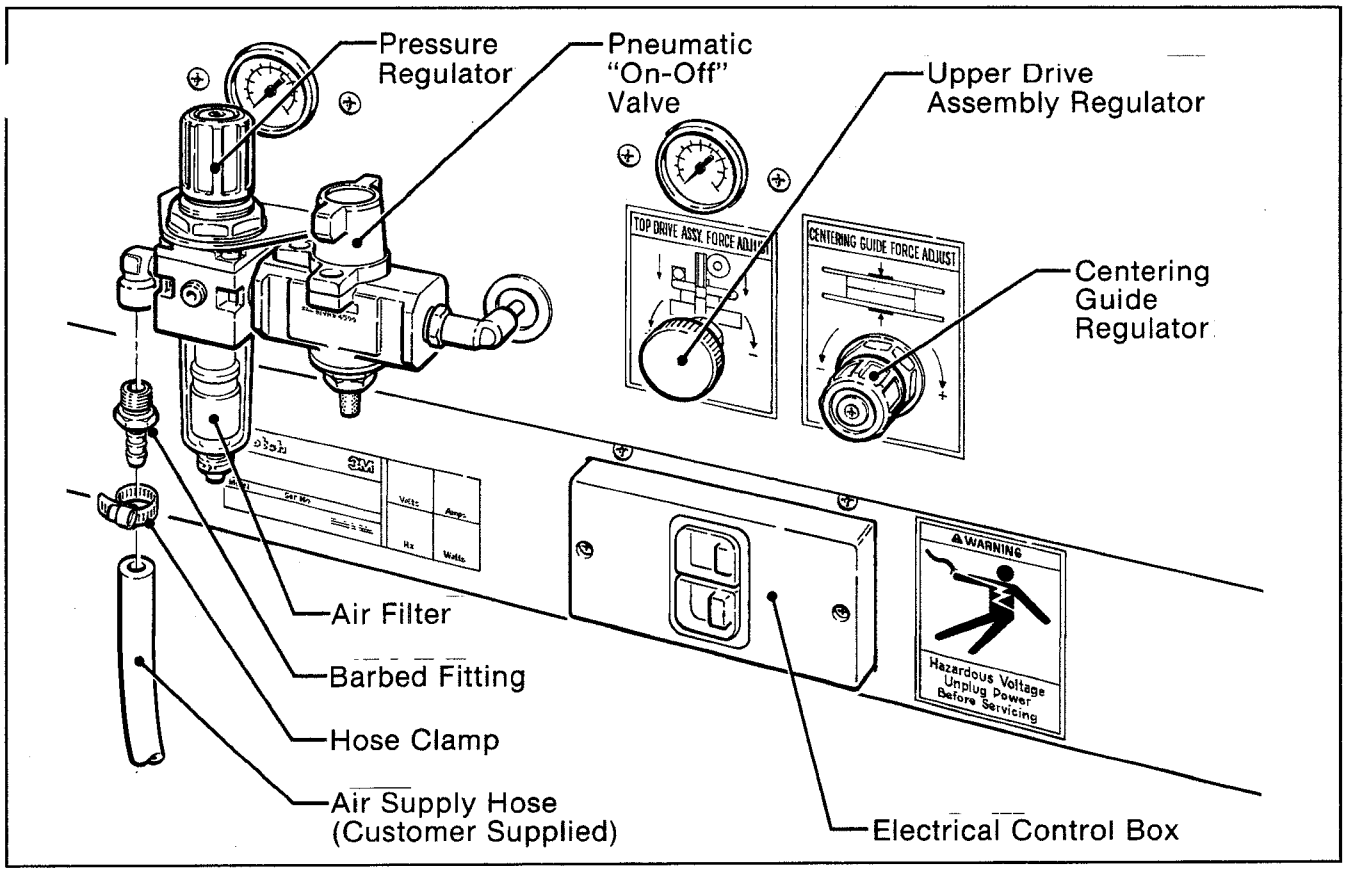


Figure 2-6 - Centering Guides

Set-Up Procedure (Continued)



ure 2-7 – Pneumatic Connections

Pneumatic Connection

⚠ WARNING – USE CARE WHEN WORKING WITH COMPRESSED AIR.

The case sealer requires a 70 PSIG [5 bar gauge pressure], 3.75 SCFM [110 litre/min @ 21° C, 1.01 bar] compressed air supply. As shown in Figure 2-7, an on/off valve, pressure regulator, and filter are provided to service the air supply.

Note – A precision regulator is used to balance the top drive assembly. Due to the self relieving feature of this regulator a small amount of air will continually vent to the atmosphere. This is normal and amounts to approximately 0.1 SCFM [3 litre/min.]

1. Connect the main air supply line to the inlet side of the air pressure regulator using the barbed fitting and hose clamp provided. See Figure 2-7. The customer supplied air hose (5/16 inch [8 mm] 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.

   Turn the air supply on by turning the air on/off valve to SUP. See Figure 2-8.

Note – The air valve has provisions for lock out/tag out according to plant regulations.

Set-Up Procedure (Continued)

Pneumatic Connection (Continued)

1. Check that air pressure is present and correct.

> **Note** - The air regulator is preset to 70 PSIG [5 bar]. If you do not read this pressure, turn the air regulator control adjustment knob to adjust the pressure to 70 PSIG [5 bar].

Mechanical Latch

Refer to Figure 2-9

The mechanical latch is provided to hold the upper drive assembly at the fully raised position for tape threading and maintenance.

To raise and latch the upper drive assembly:

1. Push and hold the drive assembly raising switch "**A**".
2. Push and hold latching knob "**B**".
3. Release switch "**A**".
4. Release knob "**B**".
5. Shut off air supply.

To release and lower the upper drive assembly:

1. Turn on air supply.
2. Push and release switch "**A**".

> **⚠ WARNING - DO NOT PUT HANDS BENEATH UPPER DRIVE ASSEMBLY WHEN UPPER DRIVE ASSEMBLY LOWERS TO ITS REST POSITION. SEVERE PERSONAL INJURY COULD RESULT.**

Bumper Supports

1. Raise and lock the upper drive assembly into its raised position.

2. Install the two bumper supports, one on each side column using **lower** holes in bracket as shown in Figure 2-10. (The upper set of holes allows the upper drive assembly to return to a lower position. However, this minimum position can only be used if the taping heads are adjusted to apply 2 inch [50 mm] long tape legs.)

> **⚠ CAUTION - INTERFERENCE AND DAMAGE TO THE TAPING HEADS MAY OCCUR IF THE UPPER MOUNTING BRACKET HOLES ARE USED WITH TAPING HEADS AT THE STANDARD SETTING.**

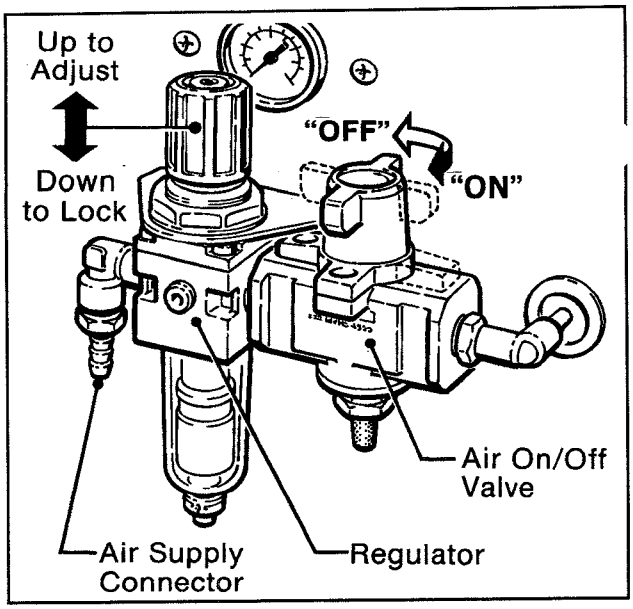


Figure 2-8 - Pressure Regulator and On/Off Valve

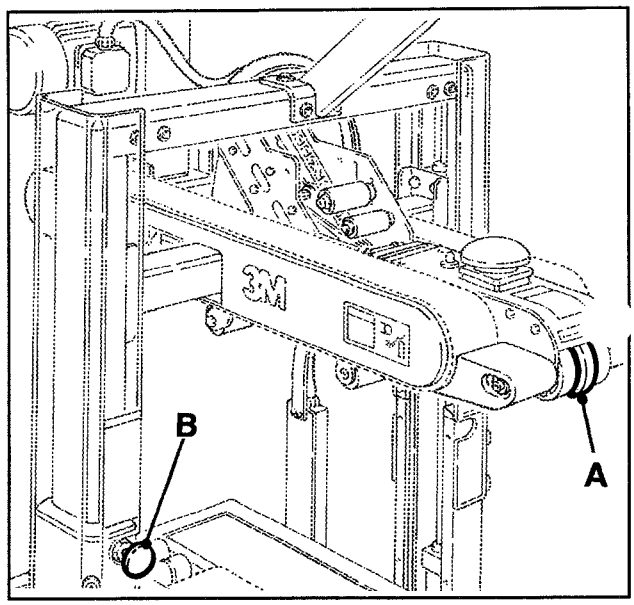


Figure 2-9 - Mechanical Latch

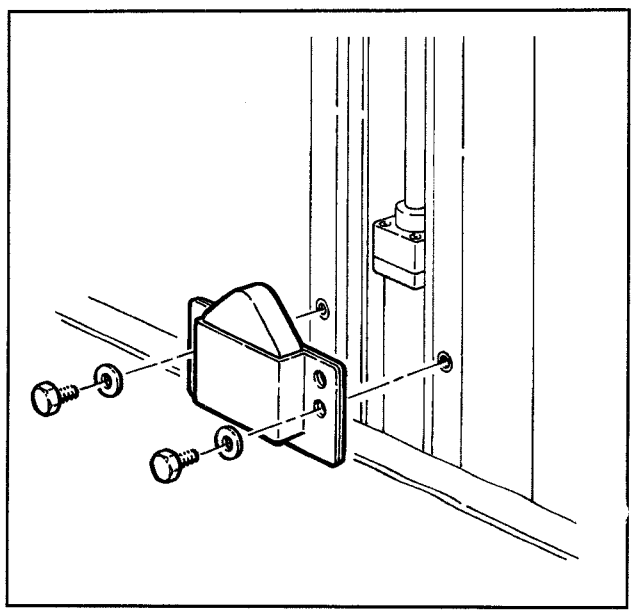


Figure 2-10 - Bumper Supports

Set-Up Procedure (Continued)

Pneumatic Component Controls

ddition to the on/off valve, shown in Figure 2-8, the pneumatic components have several controls and settings which will be covered in this section.

To provide independent adjustment of the centering guide and upper drive assembly movements, the air supply is routed through the main pressure regulator and filter assembly and then split into two separate circuits. Both centering guide and upper drive assembly circuits have controls and settings as follows:

Centering Guide Movement Circuit

Refer to Figure 2-11

This regulator is used to adjust centering guides according to weight of boxes. Pressure should be adequate to center boxes, but low enough to allow easy pushing of boxes under taping head. The regulator setting can be locked by tightening the phillips screw as shown.

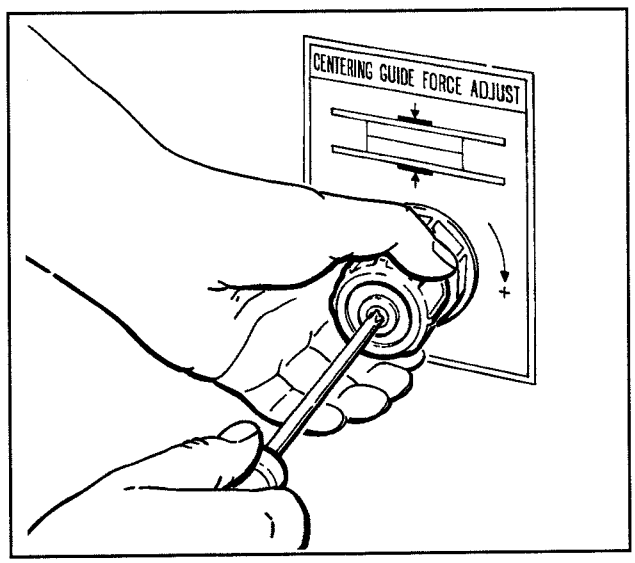


Figure 2-11 - Centering Guide Air Regulator

Upper Drive Assembly Movement Circuit

"Down" Movement Air Pressure Regulator
Refer to Figure 2-12

Set nominally to control "down" movement of upper drive assembly and its pressure exerted against the . The regulator setting is changed as necessary for the boxes being sealed to provide adequate drive assembly pressure against the box to positively convey the boxes through the machine. If the boxes stop or hesitate while being conveyed, decrease the regulator pressure which will increase the drive assembly force on the box for more friction between the box and drive belts. Adjust setting as necessary to get continuous movement of boxes through machine.

For boxes which are fully packed with products that support the top flaps, the adjustment of this regulator is not critical since the boxes can support the pressure of the drive assembly at a wide range of regulator settings. However, if under-filled or fragile boxes are sealed, this regulator can be used to set the upper drive assembly pressure to a minimum that is still adequate to positively convey the box and to prevent damage of boxes. The regulator setting can be locked by securing the lock nut on the regulator shaft as shown in Figure 2-12.

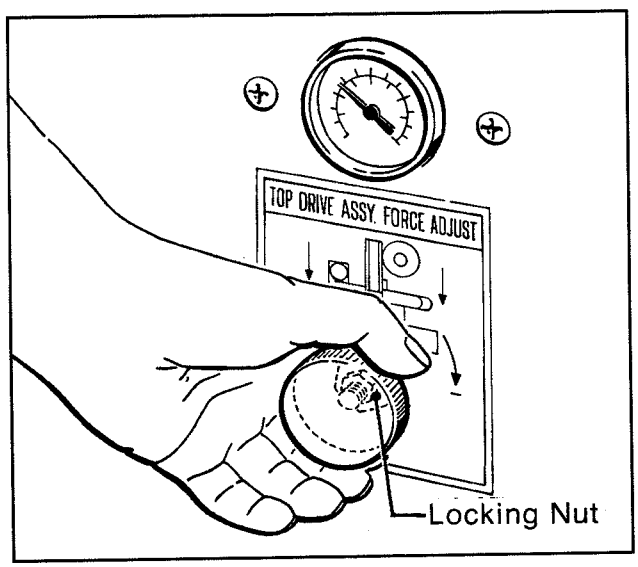


Figure 2-12 - Upper Drive Assembly Air Regulator

IMPORTANT SAFEGUARDS

1. **BOTH THE UPPER AND LOWER TAPING HEADS UTILIZE EXTREMELY SHARP KNIFE BLADES. THE BLADES ARE LOCATED UNDER THE ORANGE BLADE GUARD WHICH HAS THE "WARNING - SHARP KNIFE" LABEL. BEFORE WORKING WITH THE TAPING HEADS OR ATTEMPTING TO LOAD THE TAPE, REFER TO FIGURES 2-13 AND 2-14 AND IDENTIFY THE BLADE LOCATION. KEEP HANDS OUT OF THESE AREAS EXCEPT AS NECESSARY TO SERVICE THE TAPING HEADS.**

2. **NEVER ATTEMPT TO WORK ON THE TAPING HEADS OR LOAD TAPE WHEN THE BOX DRIVE BELTS ARE RUNNING.**

3. **BOX DRIVE MOTORS ARE DESIGNED TO RUN AT A MODERATE TEMPERATURE OF 120° F (50° C). IN SOME CASES THEY MAY FEEL WARM TO THE TOUCH.**

Tape Loading

The taping head accommodates up to 2 inch [50 mm] wide tape rolls. To apply 1 1/2 inch or 36 mm or 1 3/4 inch or 42 mm wide tapes, refer to "Adjustments - Tape Web Alignment", page 26 for set-up information.

The detailed instructions and sketches in this manual should be referred to the first few times the unit is loaded and until the operator becomes thoroughly familiar with the tape loading operation. A plastic threading needle is provided to facilitate tape threading of both the upper and lower taping heads.

Tape Loading - Upper Taping Head

1. Raise the upper drive assembly to its fully raised position and latch in place with mechanical latch.

⚠ WARNING - TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING WORK ON THE TAPING HEADS OR TO LOAD TAPE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

2. For tape loading operations, use the plastic threading needle and follow the loading procedures (Figures 2-15 to 2-17) to complete the tape threading.

Tape Loading - Lower Taping Head

1. Raise the upper drive assembly frame to its fully raised position and latch in place with mechanical latch.

⚠ WARNING - TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING WORK ON THE TAPING HEADS OR TO LOAD TAPE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

2. For ease in set-up loading, remove the lower taping head from the conveyor bed. Lift the head straight up from the conveyor bed.

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

4. Replace the lower taping head.

Set-Up Procedure (Continued)

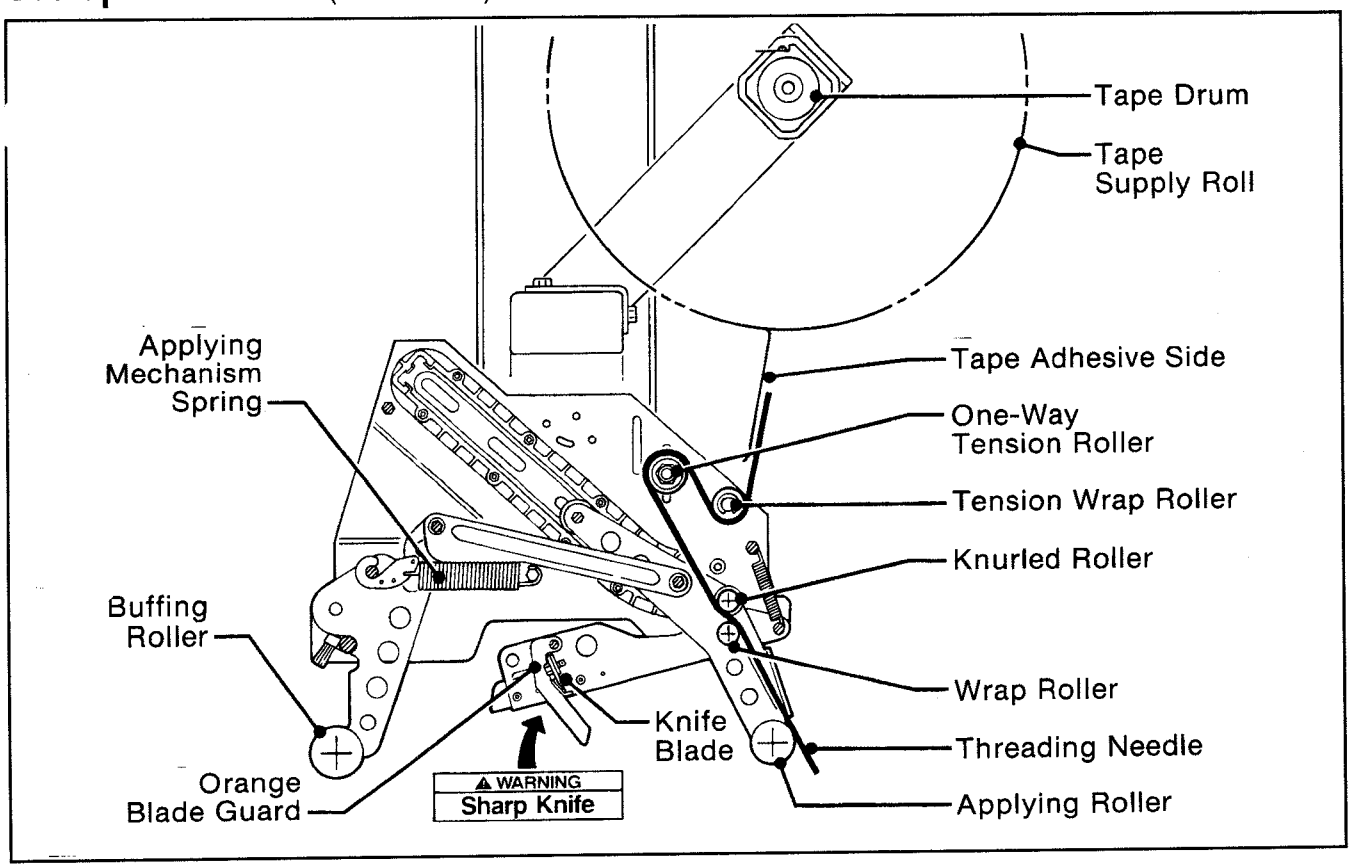


Figure 2-13 - Tape Threading Diagram, Upper Taping Head (Left Side View)

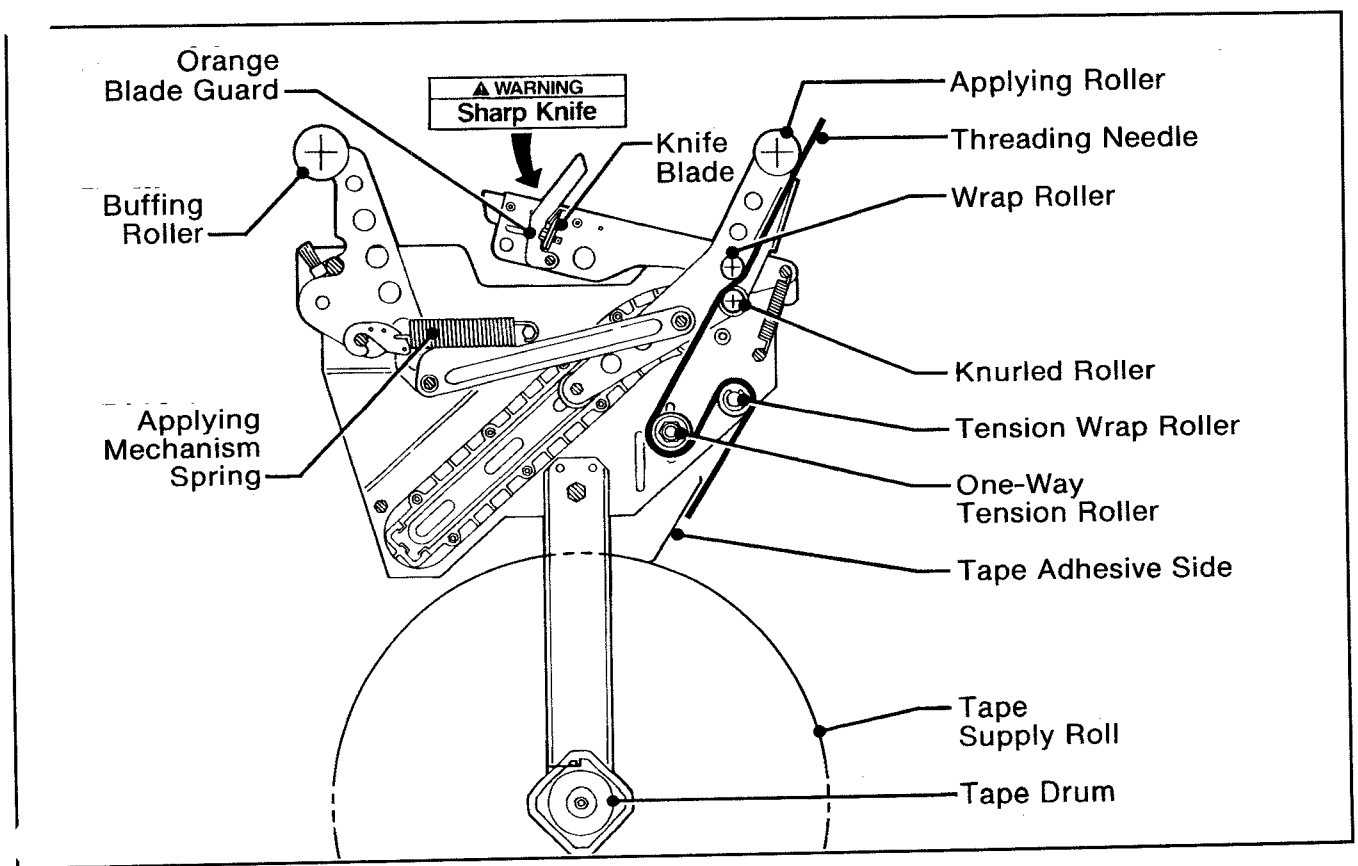


Figure 2-14 - Tape Threading Diagram, Lower Taping Head (Left Side View)

Set-Up Procedure (Continued)

Figure 2-15

Insert the plastic needle downward around rollers as illustrated.

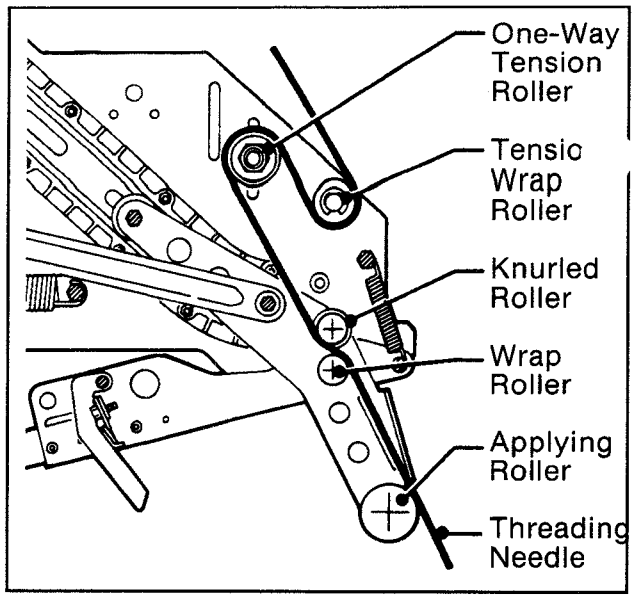


Figure 2-15 - Tape Loading

Figure 2-16

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

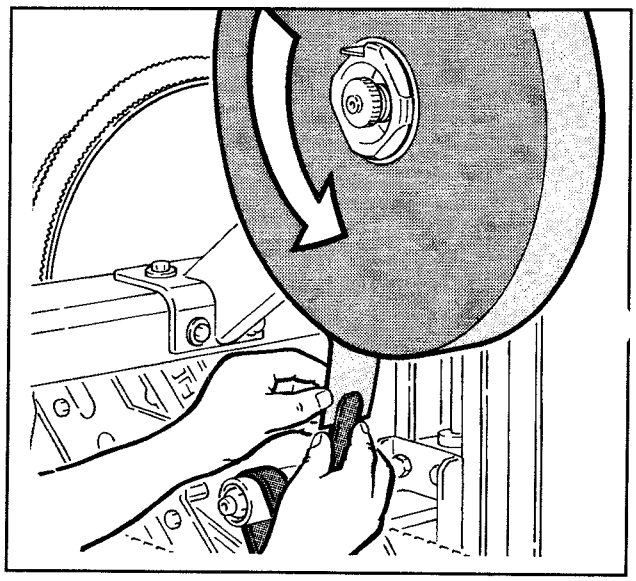


Figure 2-16 - Tape Loading

Figure 2-17

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

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

Excess tape can be cut with a scissors at applying roller.

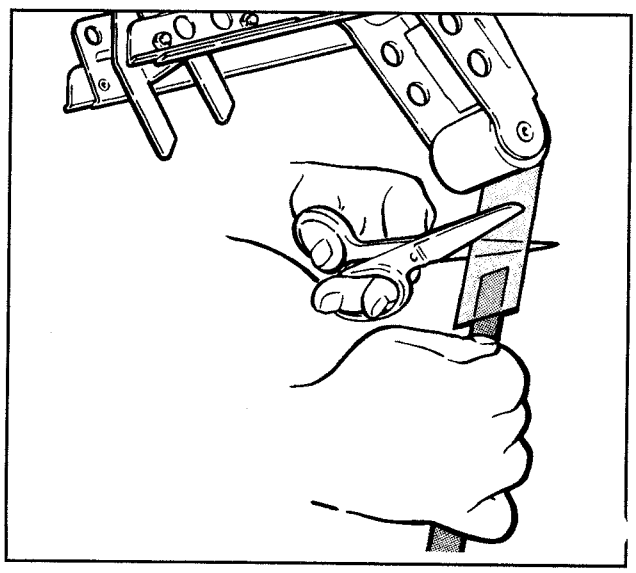


Figure 2-17 - Tape Loading

Set-Up Procedure (Continued)

Electrical Connection

electrical control box, shown in Figure 2-7, contains the "On-Off" switch with pre-set circuit breaker and can be located on either side of the main conveyor for customer operating convenience. An 8 foot [2.4 m] standard three conductor power cord with plug is provided at the back of the electrical control box for 115 Volt, 60 Hz, 3.8 Amp electrical service. The receptacle providing this service must be properly grounded. Before the power cord is plugged into 115 Volt, 60 Hz outlet, make sure the switch is "Off" and that all packaging materials and tools are removed from the machine.

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

Operation

Pneumatic Components Function

The air supply powers movement of the centering guides and upper drive assembly to automatically adjust the case sealer to the box size being sealed as follows:

1. A box centering switch in the center of the infeed roller conveyor actuates movement of the centering guides. When the operator pushes a box onto the infeed conveyor, as shown in Figure 2-18, the lever is depressed causing the air cylinder powered centering guides to move inward, thereby centering the box.

⚠ WARNING – KEEP HANDS AWAY FROM DRIVE BELTS WHEN FEEDING BOXES.

2. Once the box is centered by the guides, the operator pushes the box against the raising switch on the upper drive assembly, as shown in Figure 2-19, causing the upper taping head to be raised by two air cylinders. The upper taping head will continue to rise above the box height so the operator can insert the box underneath the upper drive belts.

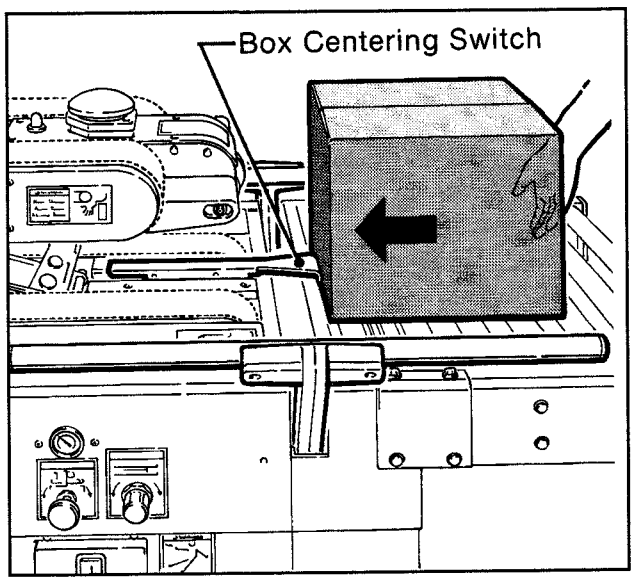


Figure 2-18 – Box Centering Switch

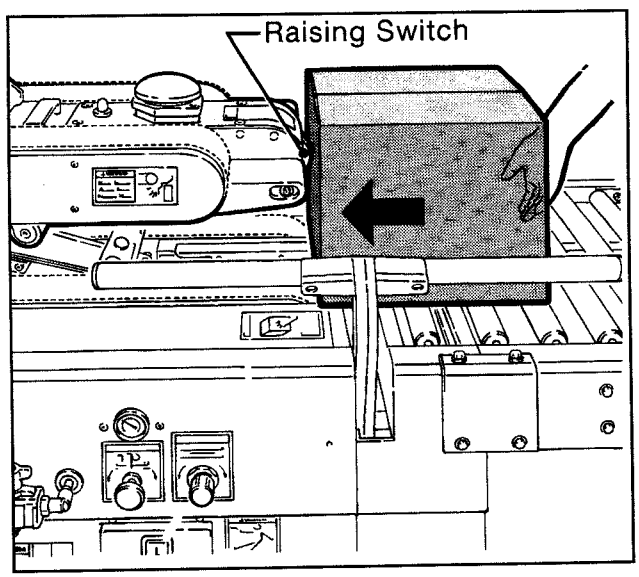


Figure 2-19 – Drive Assembly Raising Switch

⚠ WARNING - KEEP HANDS AWAY FROM DRIVE BELTS WHEN FEEDING BOXES.

3. Once the box is pushed under the upper taping head, the upper taping head valve lever is released causing the upper drive assembly to descend onto the box top, as shown in Figure 2-20, allowing the drive belts to convey the box through the upper and lower taping heads for application of the tape seals.
4. As the box is conveyed through the machine, the box centering switch is released causing the centering guides to return to their full open position, ready for insertion of the next box.

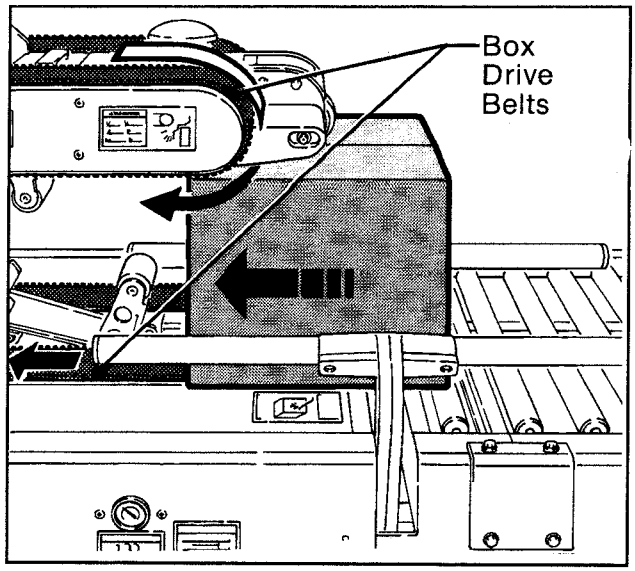


Figure 2-20 - Drive Belts

5. Once the box is conveyed from under the upper taping head, the upper drive assembly descends to its rest position, ready for insertion of the next box.

At this point it is recommended that the centering guides and upper valve levers be manually actuated to understand the functions described above. Depressing the guide valve lever causes the guides to close, releasing the valve lever causes the guides to open. Depressing the upper valve lever causes the upper drive assembly to rise, releasing the valve lever causes the drive assembly to descend.

⚠ WARNING - DO NOT PUT HANDS BENEATH UPPER DRIVE ASSEMBLY WHEN UPPER DRIVE ASSEMBLY LOWERS TO ITS REST POSITION. SEVERE PERSONAL INJURY COULD RESULT.

Once the pneumatic component functions are understood, it is recommended that the electrical supply also be turned on and pre-taped boxes fed through the case sealer following the pneumatic component sequence 1 through 5. This will insure that the operating sequence and powered component functions are understood.

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Adjustments

⚠ WARNING - TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING ADJUSTMENTS. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Tape Web Alignment

Figure 3-1

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

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

No other components require adjustment for tape web alignment.

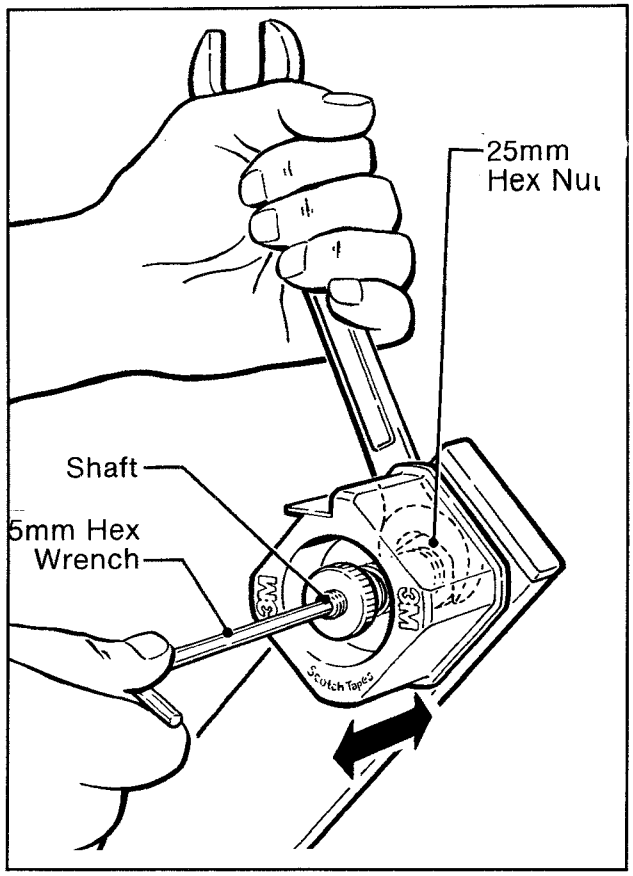


Figure 3-1 - Tape Web Alignment

Tape Drum Friction Brake

Figure 3-2

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

Note - Excessive braking force will cause poor tape application and lead to tape tabbing on the trailing tape leg.

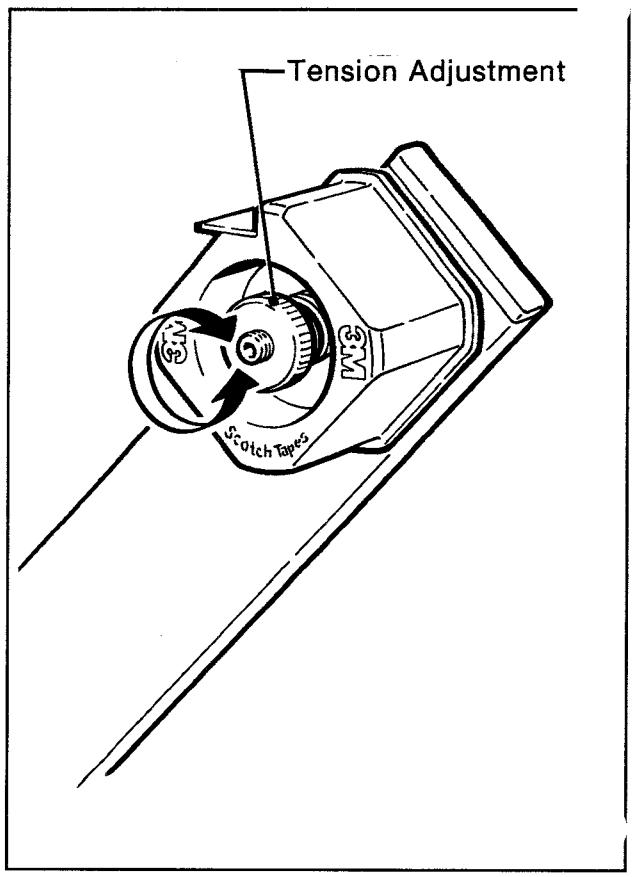


Figure 3-2 - Tape Drum Friction Brake

Adjustments (Continued)

⚠ WARNING – TURN OFF ELECTRICAL POWER & AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING ADJUSTMENTS. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Applying Mechanism Spring
Figure 3-3

The applying mechanism spring, shown in Figures 2-13 and 2-14, controls applying and buffing roller pressure on the box and returns the mechanism to the reset position. The spring pressure setting, as shown in Figure 3-3A, is for normal operation but is adjustable.

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

The spring pressure should be set to the minimum possible while maintaining good tape application.

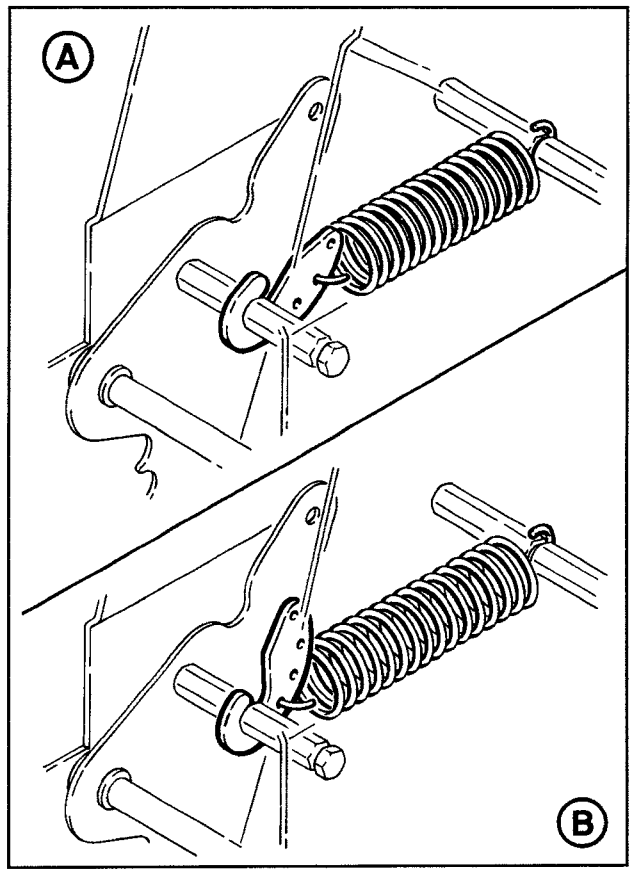


Figure 3-3 –Applying Mechanism Spring

One Way Tension Roller
Figure 3-4

The one-way tension roller is factory set. When replacing this assembly, the roller must have 1 lb. [0.5 kg] minimum tangential force when turning.

To Set Tension:

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

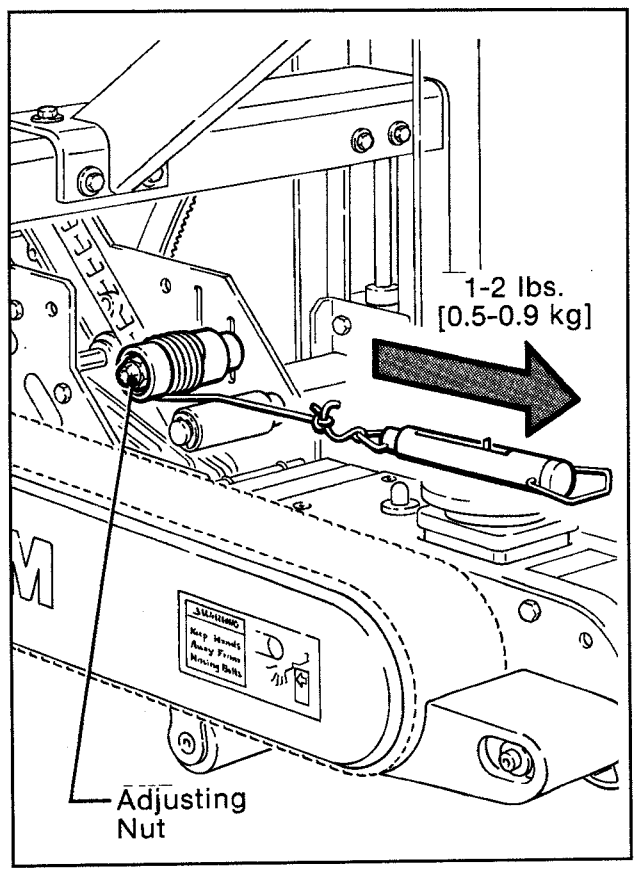


Figure 3-4 – One-Way Tension Roller

⚠ WARNING – TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING ADJUSTMENTS. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Box Drive Belt Tension

The four continuously moving box drive belts convey boxes through the tape applying mechanism. The box drive belts are powered by electric gear motors.

Tension adjustment of these belts may be required during normal operation. Belt tension must be adequate to positively move the box through the machine and they should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are 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 7 lbs. [3.5 kg] applied at the midspan, as shown in Figure 3-5, will deflect the belt 1 inch [25 mm]. This will assure positive contact between the belt and the drive pulley on the discharge end of the drive assembly. **Note - Figure 3-5 illustrates the lower drive belts, however, upper drive belts are adjusted in the same manner.**

Refer to Figure 3-6 & 3-7 and adjust belt tension as follows:

1. Remove and retain center plates/front cover and four screws.
2. Loosen, but do not remove, M10 lock nut with a 17 mm open end wrench.
3. Reset the tension on the drive belts as needed. Adjust the M8 tension screw in (clockwise) to increase tension, or out (counterclockwise) to decrease tension. Tighten lock nut to secure tension.
4. Replace two center plates/front cover and secure with original screws.

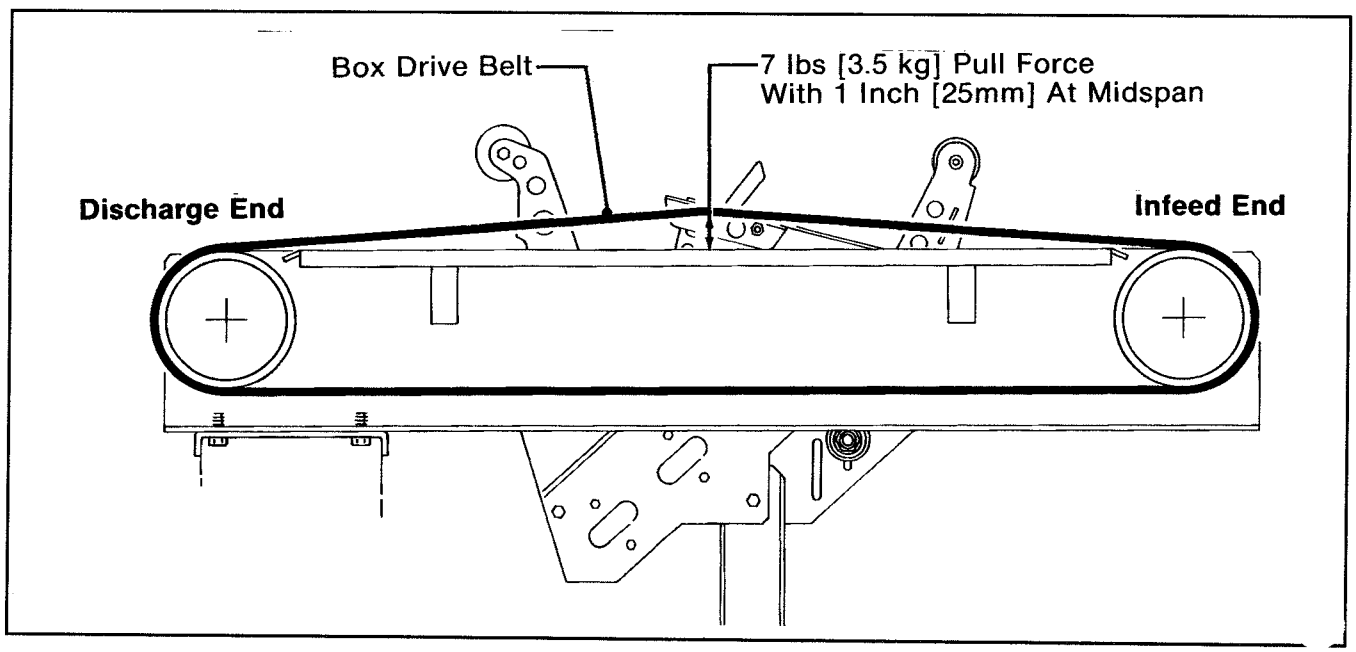


Figure 3-5 – Box Drive Belt Tension Adjustment, Lower Belts (Left Side View)

Adjustments (Continued)

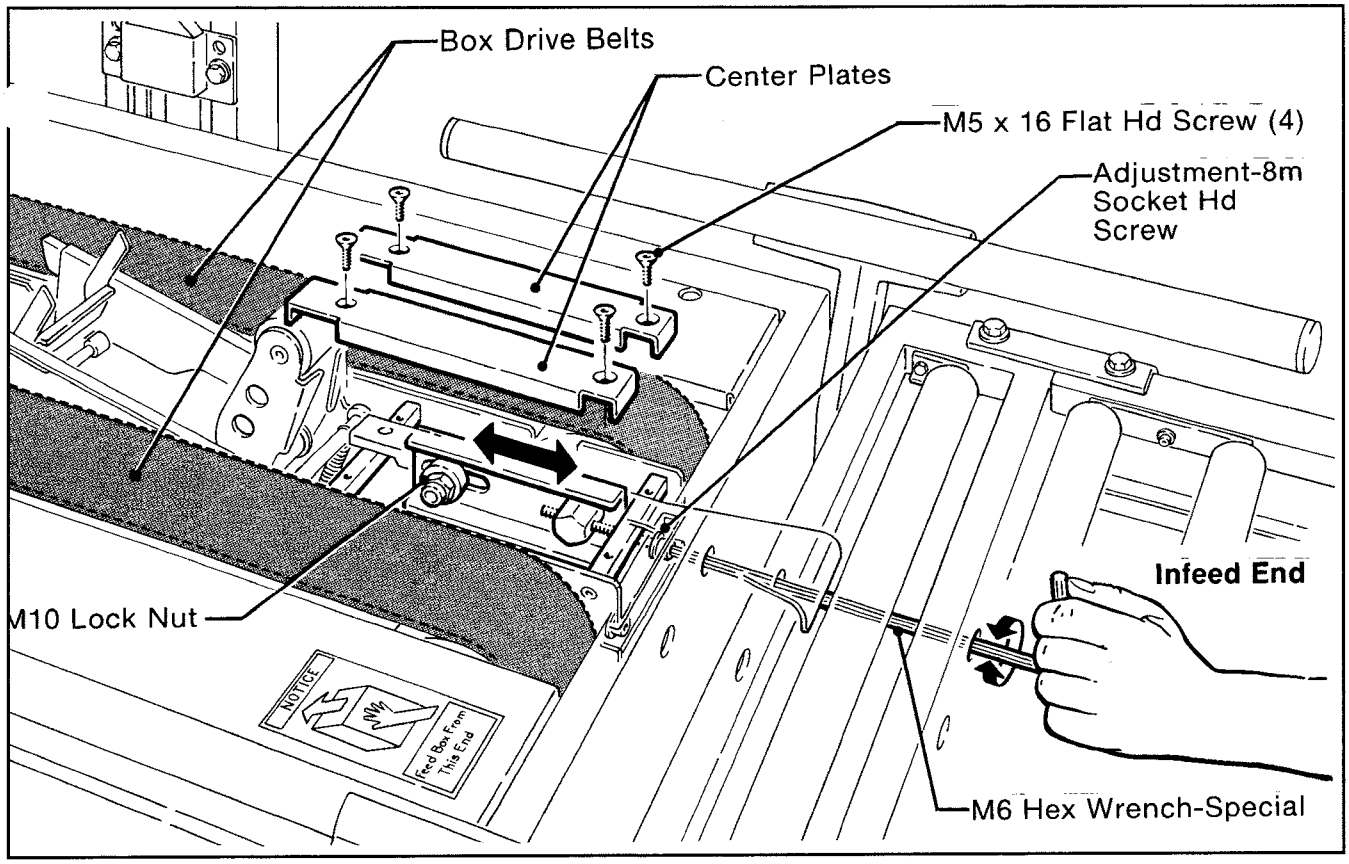


Figure 3-6 - Box Drive Belt Tension Adjustment, Lower Belts (Infeed End)

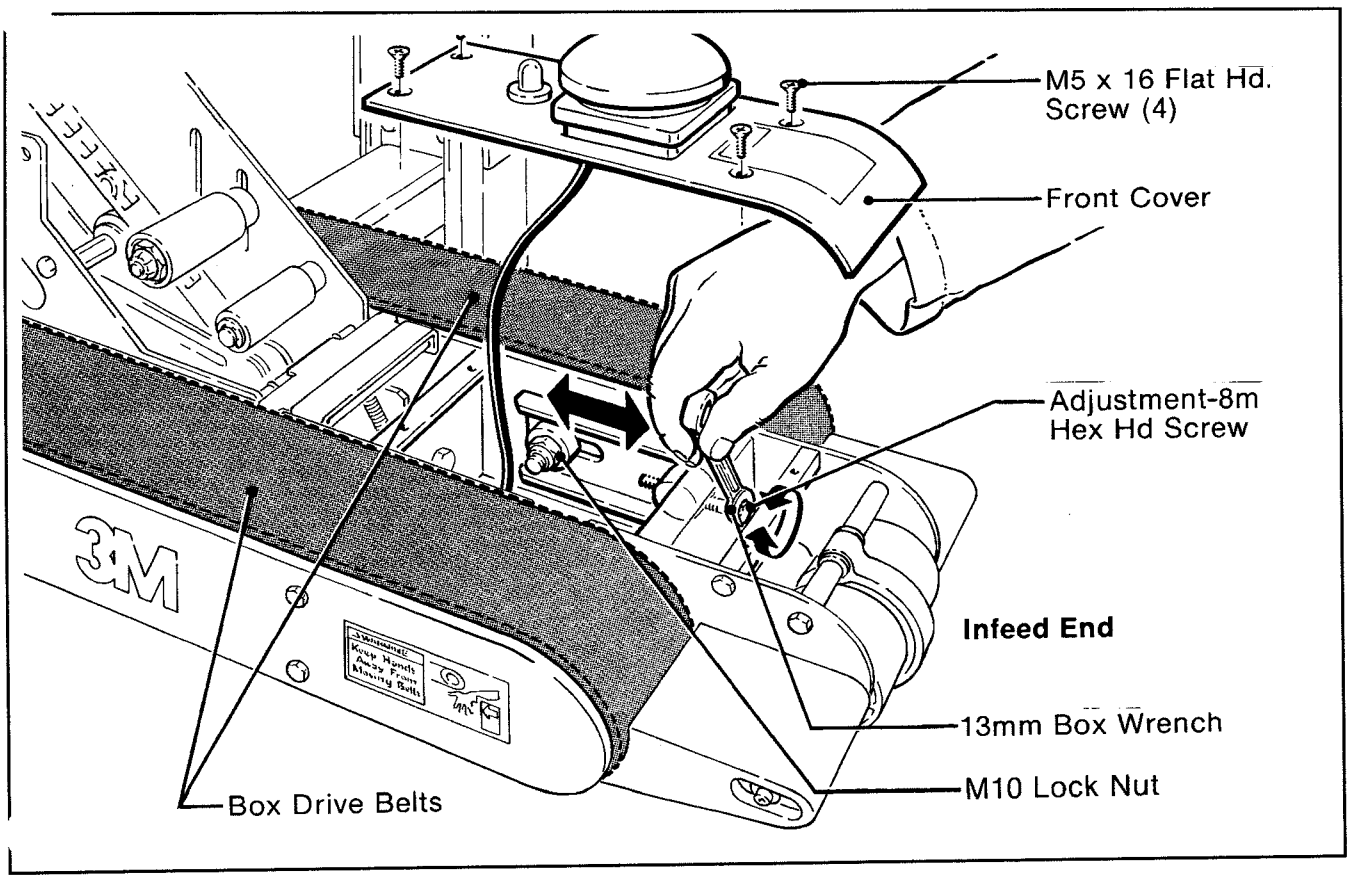


Figure 3-7 - Box Drive Belt Tension Adjustment, Upper Belts (Infeed End)

Adjustments (Continued)

⚠ WARNING - TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING ADJUSTMENTS. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Tape Application Leg Length
Figure 3-8

For best tape application performance, the taping heads should maintain tape leg lengths of 2 3/4 inch ± 1/4 inch [70 mm ± 6 mm].

The one-way tension roller position on the taping heads (Figure 2-15) is adjustable to control the leading tape leg length.

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

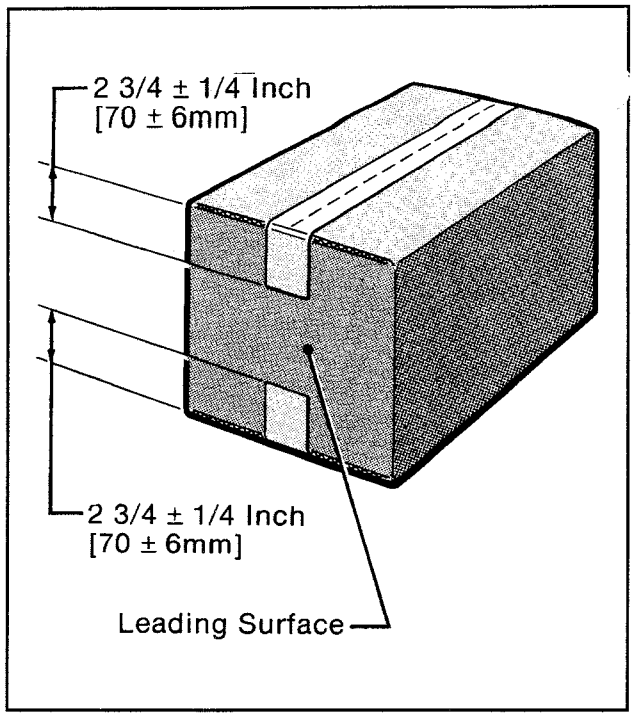


Figure 3-8 - Tape Application Leg Length

Maintenance

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

⚠ WARNING - TURN OFF ELECTRICAL POWER AND AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Blade Replacement Figure 4-1
(Upper and Lower Taping Heads)

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

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

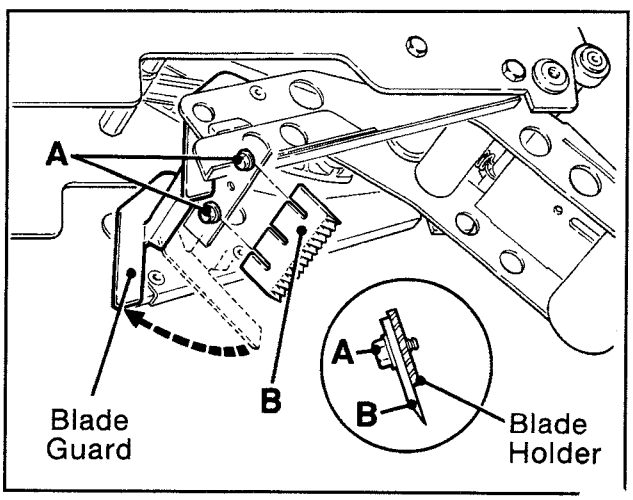


Figure 4-1 - Blade Replacement

Maintenance (Continued)

⚠ WARNING - TURN OFF ELECTRICAL POWER & AIR SUPPLY AND ISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Box Drive Belt Replacement

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

Lower Drive Belts Figure 4-2

1. Remove and retain center plates **(A)** and four screws.
2. Remove and retain side cover **(B)** and fasteners.
3. Loosen, but do not remove lock nut **(C)**.
4. Loosen tension screw **(D)** until all belt tension is removed.
5. Pull belt splicing pin **(E)** out and remove belt.
6. Place new belt over pulleys with laced splice at top. Insert splicing pin. **Note – Pin must not extend beyond edge of belt.**
7. Adjust belt tension as explained in "Adjustments-Box Drive Belt Tension". page 28.
8. Replace side cover and center plates and secure with original fasteners.

Upper Drive Belts Figure 4-3

1. Remove and retain center plate **(A)** and four screws.
2. Loosen, but do not remove lock nut **(C)**.
3. Loosen tension screw **(D)** until all tension is removed from belt.
4. Pull belt splicing pin **(E)** out and remove belt.
5. Place new belt over pulleys with laced splice at top. Insert splicing pin. **Note - Pin must not extend beyond edge of belt.**
6. Adjust belt tension as explained in "Adjustments-Box Drive Belt Tension", page 28.
7. Check clearance between belt guard **(F)** and belt. **Maximum allowed clearance is 1/4 inch [6mm].** To adjust clearance, loosen M8 socket head screw **(G)**, move guard forward or backward and tighten screw.

⚠ CAUTION - FAILURE TO ADJUST AND MAINTAIN PROPER BELT GUARD CLEARANCE COULD RESULT IN SEVERE INJURY TO PERSONNEL.

8. Replace front cover and secure with original fasteners.

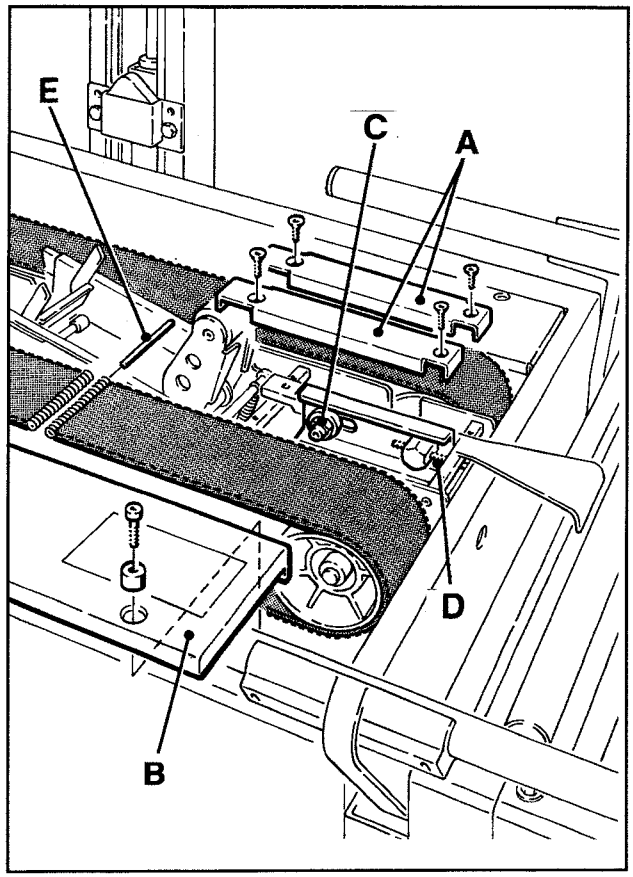


Figure 4-2 - Lower Drive Belt Replacement

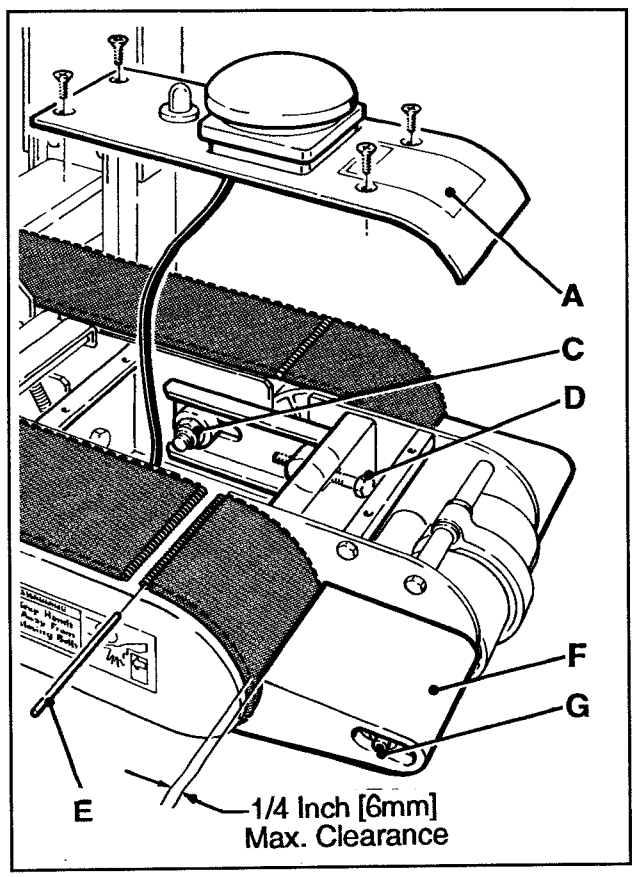


Figure 4-3 - Upper Drive Belt Replacement

⚠ WARNING - TURN OFF ELECTRICAL POWER & AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT.

Cleaning Of The Machine

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

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

Cut-Off Blade

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

Should tape adhesive build-up occur on cut-off blade carefully wipe clean with oily cloth.

Circuit Breaker

The case sealer is equipped with a circuit breaker which trips the "On/Off" switch to tripped position. If circuit is overloaded and circuit breaker trips, wait 2 minutes, move to **"Off"**, and turn **"On"**. Located inside the electrical control box on the side of the main frame just below the conveyor bed, the circuit breaker has been pre-set at 4.5 Amps and requires no further maintenance.

⚠ WARNING - TURN OFF ELECTRICAL POWER & AIR SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT. USE CARE WHEN WORKING NEAR TAPING HEAD BLADE AS BLADE IS EXTREMELY SHARP. IF CARE IS NOT TAKEN, SEVERE INJURY TO PERSONNEL COULD RESULT.

Lubrication - Mechanical

Like most other equipment, the case sealer must be properly lubricated to insure long, trouble free service. Most of the machine bearings are permanently lubricated and sealed and do not need to be greased. The drive motor is also permanently lubricated and does not require additional lubrication.

Figures 4-4 and 4-5 illustrate the taping head and frame points which should be lubricated every 250 hours of operation. Lubricate the rotating and pivoting points, noted by the arrows, (➡) with SAE #30 non-detergent oil. At the same time, a small amount of multipurpose grease should be applied to the end of each spring where the loop is secured at an eyelet, post, or hole noted by arrows (➡).

Note - Wipe off excess oil and grease; it will attract dust and dirt which can cause premature equipment wear and jamming. Take care that oil and grease are not left on the surface of rollers around which tape is threaded, as it can contaminate the tape's adhesive.

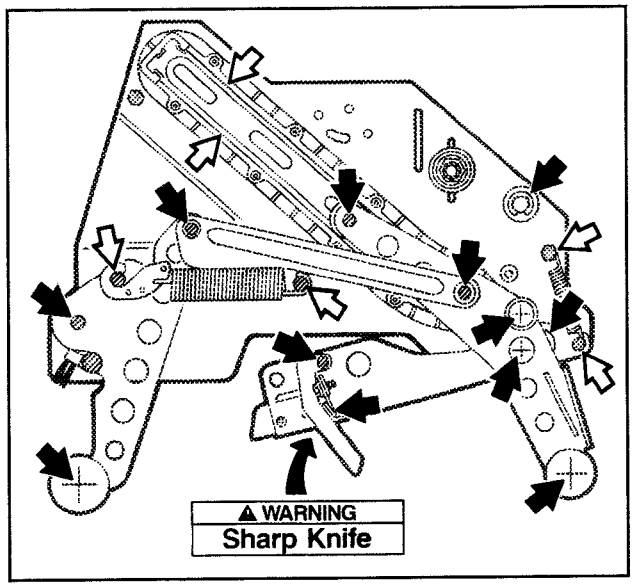


Figure 4-4 - Lubrication Points - Upper and Lower Taping Heads

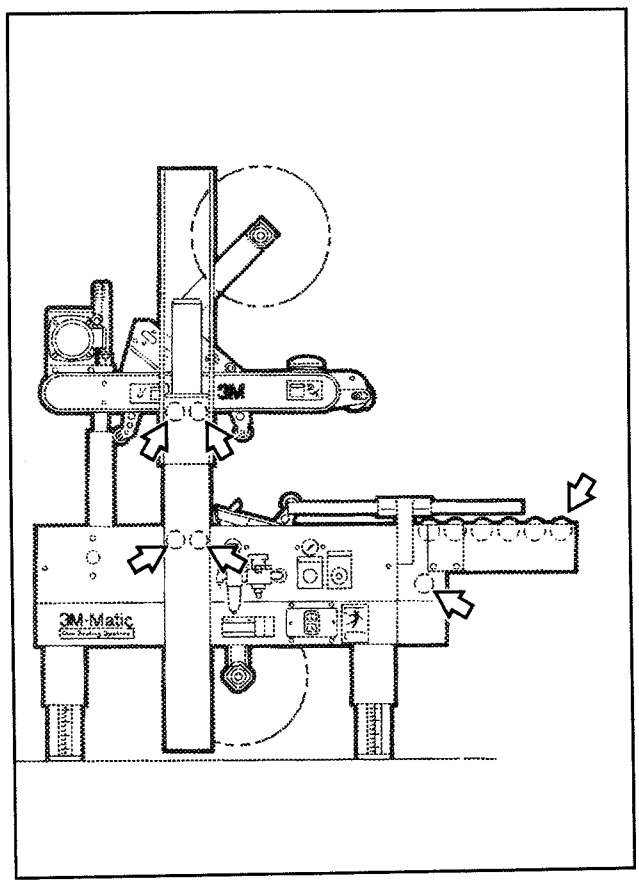


Figure 4-5 - Lubrication Points - Frame

Blade Oiler Pad

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

Special Set-Up Procedure

⚠ WARNING - TURN OFF ELECTRICAL POWER & 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 2-3/4 to 2 inches [70 to 50 mm])

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

Case Sealer Frame
(Refer to Figure 5-1A)

1. Latch upper drive assembly in upper position, turn off air supply and electric power. Remove and retain the screws, washers and bumper stop assembly on both side columns of the main frame.
2. Remount and secure the stop bumper assembly using the top holes and original fasteners.

Taping Heads

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

(Refer to Figures 5-1B and 5-1C)

1. Pivot up the clamp that secures the upper taping head as shown in Figure 5-1B.
2. Slide the head forward and straight down to remove it from the case sealer.
3. Lift the lower taping head, shown in Figure 5-1C, straight up to remove it from the case sealer bed.

(Refer to Figure 5-2)

4. Remove and retain the two hex screws to remove the brush from the normal position **"A"** on the taping head frame.
5. Remount and secure the brush in position **"A-A"** (forward of the normal location) using the original fasteners.
6. Remove and retain the two flat head screws to remove the blade cut-off bracket extension in normal position **"B".**
7. Remount and secure the bracket extension in the forward position **"B-B"** using the original fasteners. Relocate both the right and left extensions.
8. Remove and retain the hex head screw and washer to remove the one-way tension roller assembly from slot **"C"** in the taping head frame.
9. Remount and secure one-way tension roller assembly near the top of slot **"C-C"** in frame using original fasteners.

Note - The one-way tension roller position is adjustable to control the leading tape leg length. Moving this roller farther away from the box top (upper taping head) or bottom (lower taping head) surface, will decrease the leading leg length. Moving it closer to the box top or bottom surface will increase the leading leg length.

Figure 5-3
Illustrates a taped box after case sealer has been converted to 2 inch [50 mm] tape leg length.

Special Set-Up Procedure (Continued)

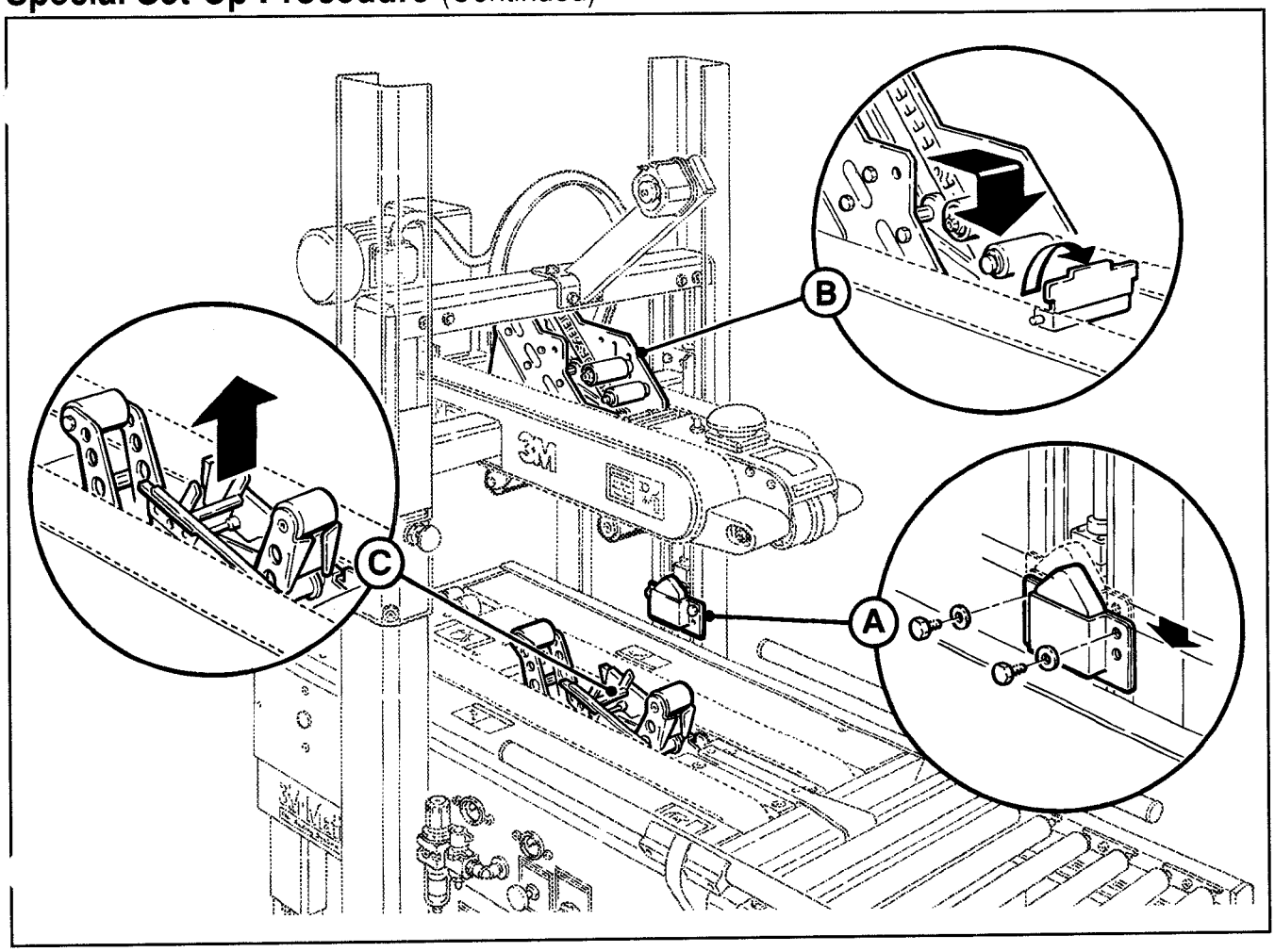


Figure 5-1 - Case Sealer Frame Changes

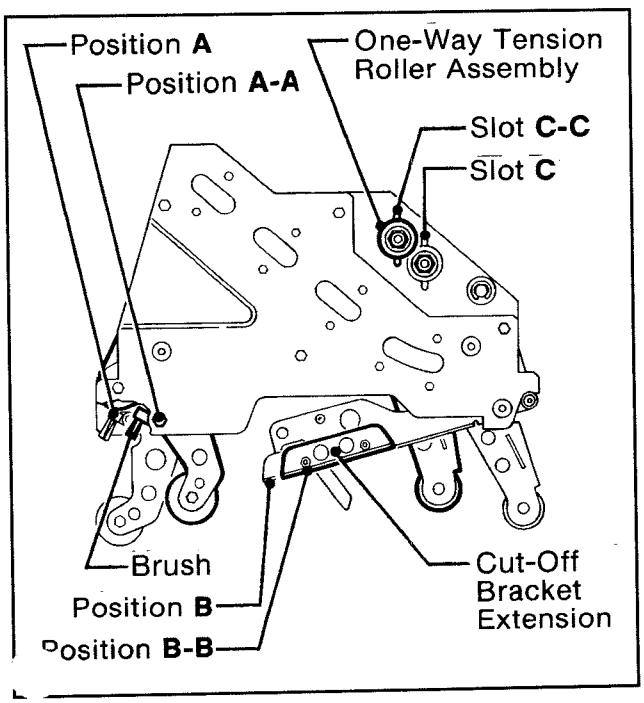


Figure 5-2 - Taping Head Changes, Upper/Lower

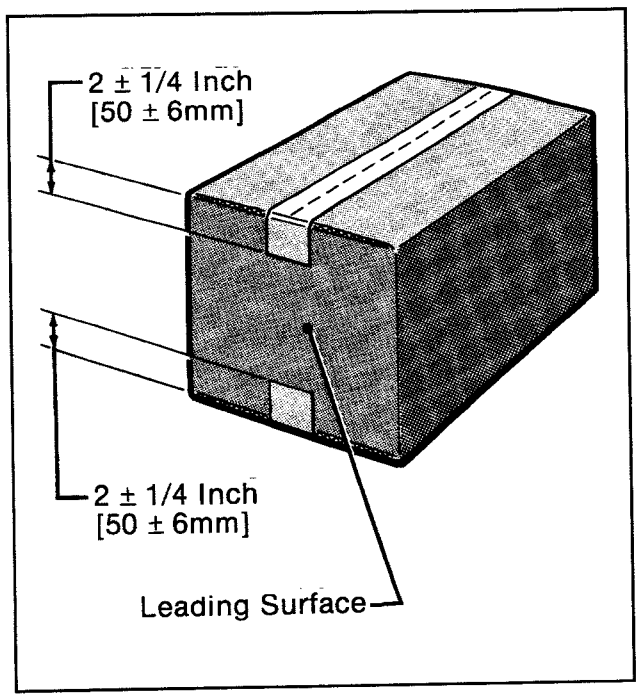


Figure 5-3 - 2 Inch [50 mm] Tape Leg Applied to Box

Special Set-Up Procedure (Continued)

⚠ WARNING – TURN OFF ELECTRICAL POWER & 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.

Box and Conveyor Bed Height Range (Refer to Figure 5-4)

Moving the outer columns up one set of mounting holes increases the maximum box size handled by the 700r case sealer and decreases the minimum conveyor bed height. **Note – This also increases the minimum box height from 4.75 inches [120 mm] to 8.0 inches [200 mm].**

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

1. Lift the upper taping head/drive assembly up and place an 8-10 inch [200-250mm] block at the front and rear of the upper drive assembly. Also, block both columns up with solid spacers between outer columns and floor. See Figure 5-4A.

2. Remove and retain the six screws and plain washers that fasten each column to the frame. Figure 5-4B.

3. Lift the outer columns up one set of mounting holes, (4 inches [100 mm]) and place 4 inch [100 mm] spacers between the blocks on the floor and each column. See Figure 5-4C.

⚠ WARNING – BLOCKS AND SPACERS MUST BE CAPABLE OF SUPPORTING THE 100 POUND [45,4 Kg] WEIGHT OF THE OUTER COLUMNS AND UPPER TAPING HEAD ASSEMBLY.

4. Install and tighten the six screws and plain washers in each column that were removed in Step 2. Turn o air supply, raise and lock upper drive assembly in fully raised position and remove all blocks and spacers.

If desired, the bed height can now be decreased to 20 inches [510 mm] by adjusting legs upward. (See "Set-Up Procedure – Conveyor Bed Height", page 14)

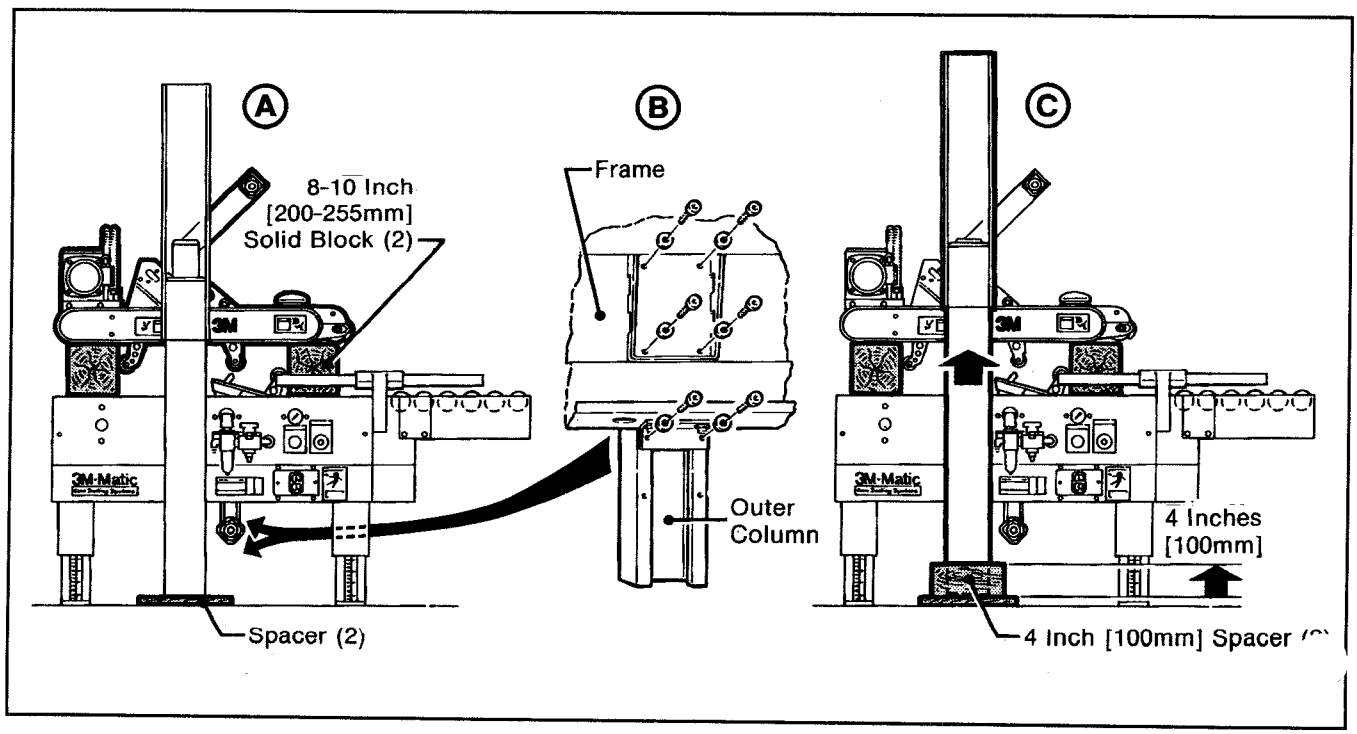


Figure 5-4 – Box and Conveyor Bed Height Range

Special Set-Up Procedure (Continued)

⚠ WARNING – TURN OFF ELECTRICAL POWER & 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.

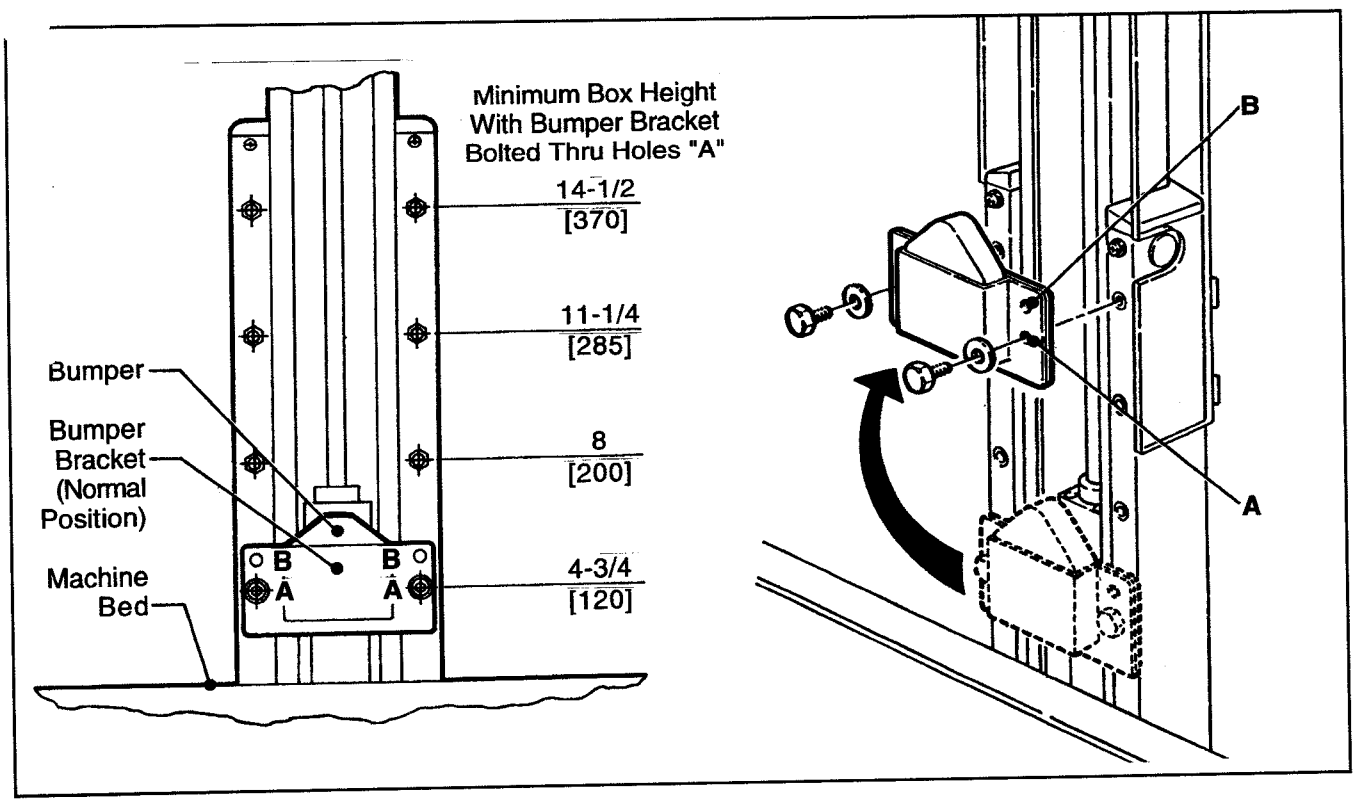
Box Height Range – (Refer to Figure 5-5)

The operating range of the upper drive assembly can be adjusted to minimize its movement to the range of box heights being sealed. Therefore, the operating speed can be increased. The range is established by limiting the lowest position of the drive assembly by positioning the stop bumpers at one of eight different levels on the side columns.

The illustration in Figure 5-5 shows minimum box height with stop bumpers fastened through lower holes (A) at different levels on the side columns. If bumpers are mounted with bolts through upper holes (B), the minimum height of box in each position **decreases** by 3/4 inch [20 mm].

After establishing the minimum box height to be sealed, position the stop bumpers as follows:

1. Latch upper drive assembly in upper position, **turn off air and electric.**
2. Remove and relocate the stop bumper assembly to the desired position on both side columns. Be sure that the stop bumpers are reassembled as shown and secure.
3. Turn on the air and electrical power to the case sealer. The upper taping head will now descend only part way thus increasing operating speed.



ure 5-5 – Stop Bumpers

Troubleshooting

Review Set-Up Procedure Section so that the operational components of the machine are understood. The Troubleshooting Guide lists some possible machine problems, causes and corrections.

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
	Top taping head does not apply enough pressure	Adjust the upper drive assembly force adjust regulator to increase the force against the top of the box. Turn air regulator counterclockwise.
	Taping head applying spring holder missing	Replace spring holder
	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	Evaluate problem and correct
Upper and lower applying mechanisms interfere with each other	Machine's minimum height stop does not match tape head leg length setting	Check manual to make sure taping heads match machine setting
Drive belts break	Worn belt	Replace belt
Squeaking noise as boxes pass through machine	Dry compression rollers	Lubricate compression rollers
	Dry column bearings	Lubricate column bearings
	Defective column bearings	Replace column bearings
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps not of equal length	Check box specifications

(Continued)

Troubleshooting (Continued)

Troubleshooting Guide

blem	Cause	Correction
Upper drive assembly does not move up or moves up slowly	Lower air pressure	Disconnect the air supply. Make sure main pressure regulator reads zero. Reconnect air supply and adjust regulator to read 70 PSIG [5 bar].
	Defective head raising valve	Clean or replace head raising valve
	Worn head raising valve actuator	Replace valve
	Clogged or damaged exhaust mufflers on the upper ends of the head raising cylinders	Clean or replace exhaust mufflers
	Defective head power valve	Clean or replace the head power valve
Upper taping head does not move down at the end of the taping cycle	Upper drive assembly force adjust regulator set too light	Adjust the upper drive assembly force adjust regulator to increase the force against the top of the box. Turn air regulator counterclockwise.
	Defective top drive assembly force adjust regulator	Replace regulator
	Defective one-way valve	Clean or replace valve
	Defective head power valve	Clean or replace valve
Upper drive assembly comes down too fast or too hard	Upper drive assembly force adjust regulator set too heavy	Adjust upper drive assembly force adjust regulator to decrease force against top of box. Turn regulator clockwise.
	Defective upper drive assembly force adjust regulator	Replace regulator
	Cushion screw misadjusted	Adjust cushion screw at base of cylinder
	Cushion screw missing	Replace screw
Centering guides move slower than normal	Centering guide force adjust regulator set too low	Adjust regulator
	Centering guide cylinder speed controls not in correct adjustment	Adjust speed controls mounted on centering guide cylinder
	Defective centering guide power valve	Clean or replace valve

(Continued)

Troubleshooting Guide

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

(Continued)

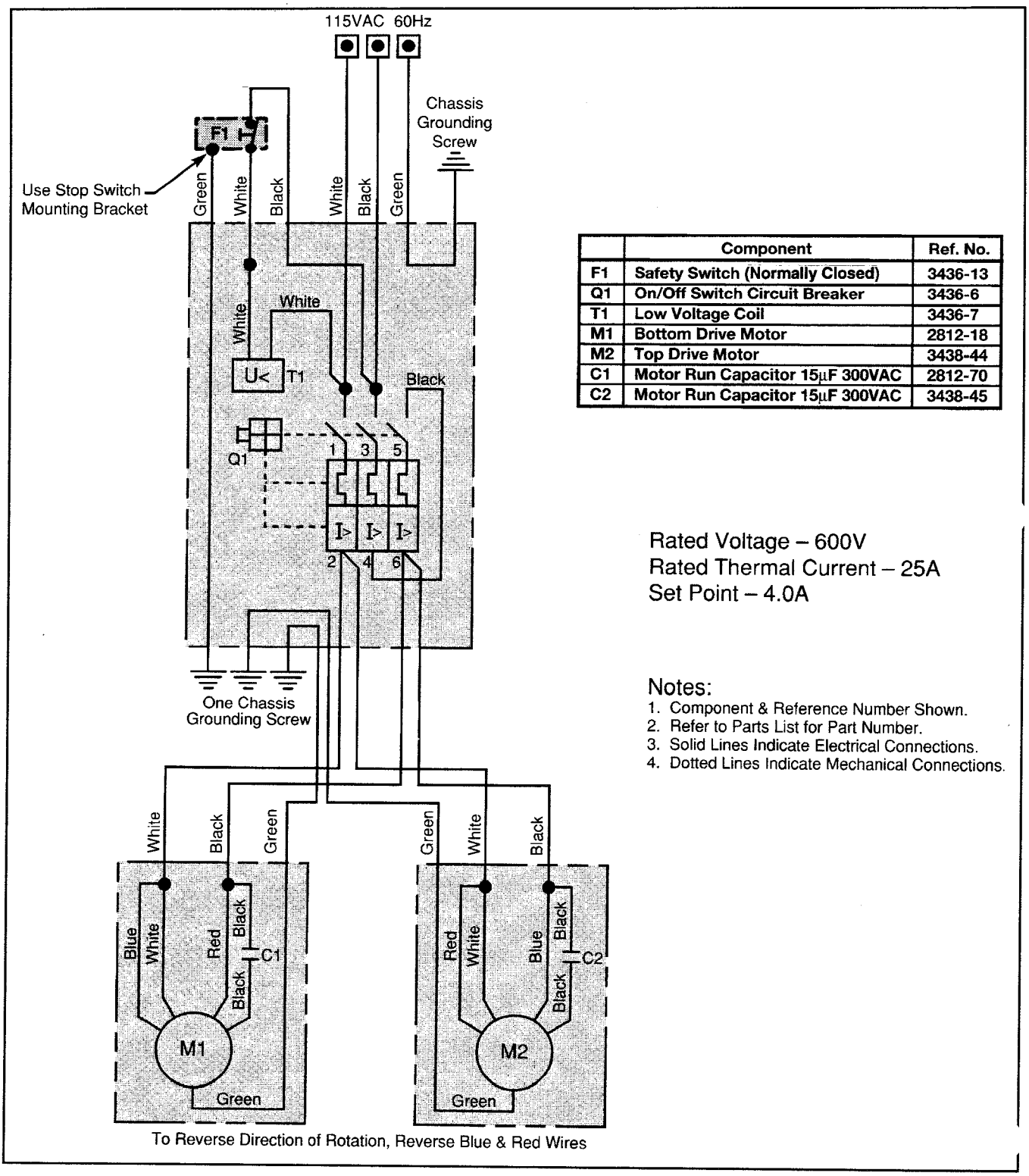
Troubleshooting (Continued)

Troubleshooting Guide

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

Electrical Diagram

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



	Component	Ref. No.
F1	Safety Switch (Normally Closed)	3436-13
Q1	On/Off Switch Circuit Breaker	3436-6
T1	Low Voltage Coil	3436-7
M1	Bottom Drive Motor	2812-18
M2	Top Drive Motor	3438-44
C1	Motor Run Capacitor 15µF 300VAC	2812-70
C2	Motor Run Capacitor 15µF 300VAC	3438-45

Rated Voltage – 600V
Rated Thermal Current – 25A
Set Point – 4.0A

Notes:
1. Component & Reference Number Shown.
2. Refer to Parts List for Part Number.
3. Solid Lines Indicate Electrical Connections.
4. Dotted Lines Indicate Mechanical Connections.

Figure 6-1 - Electrical Diagram

Pneumatic Diagram

WARNING - TURN OFF AND DISCONNECT AIR SUPPLY BEFORE BEGINNING SERVICE. IF AIR SUPPLY IS NOT DISCONNECTED, SEVERE INJURY OR EQUIPMENT DAMAGE COULD RESULT.

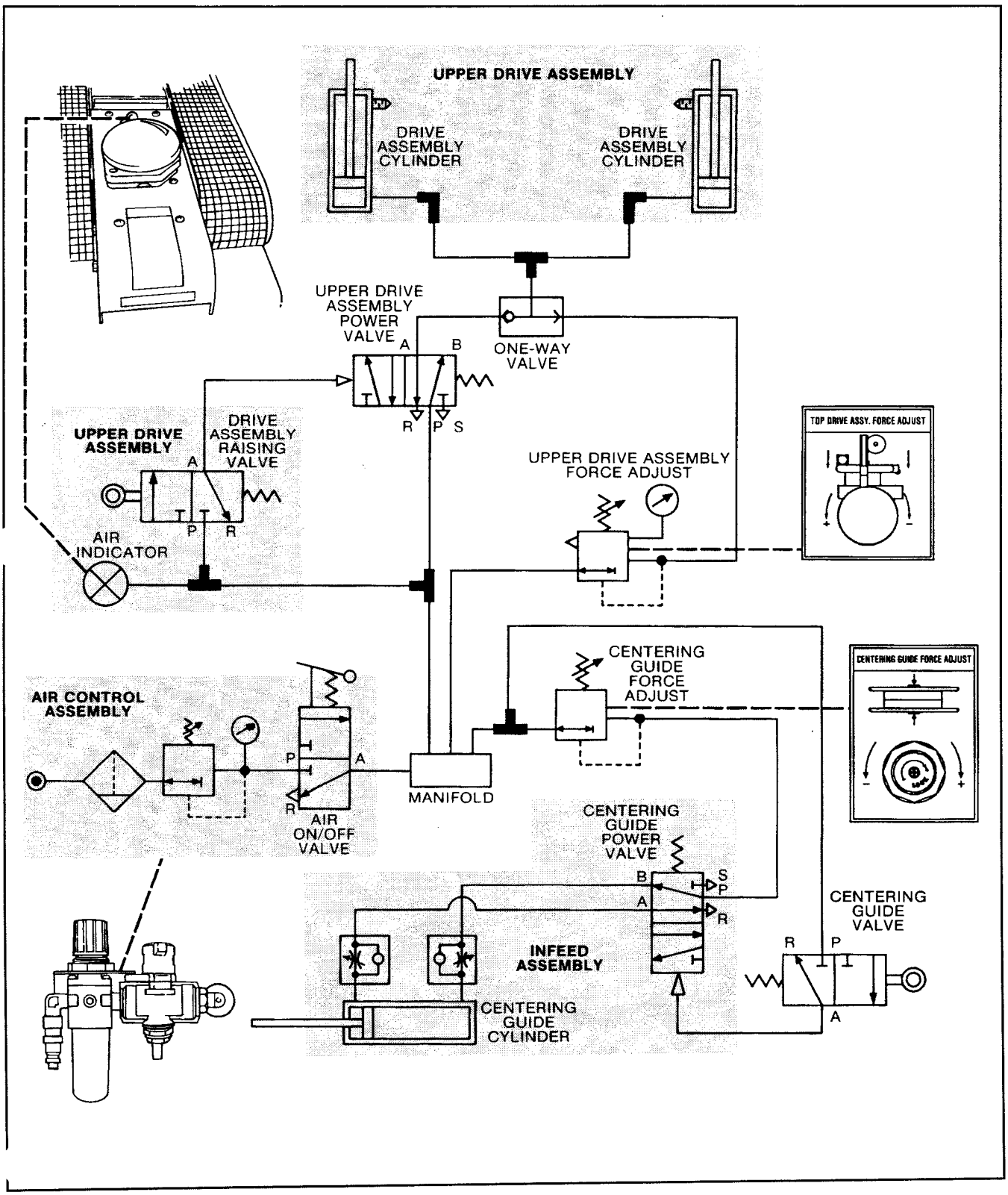


Figure 7-1 - Pneumatic Diagram

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Replacement Parts And Service Information

Spare Parts

s suggested that the following spare parts be ordered and kept on hand:

Qty.	Ref. No.	Part Number	Description
1	2880-15	78-8057-6179-4	Roller – Applying
1	2881-5	78-8057-6178-6	Roller – Buffing
1	2881-10	78-8070-1274-1	Spring – Upper Extension
1	2883-2	78-8017-9173-8	Blade – 2.56 Inch/65 mm
1	2883-6	78-8070-1390-5	Spring – Tension
2	2883-12	78-8052-6602-6	Spring – Cutter
1	2886-10	78-8070-1273-3	Spring – Lower Extension
4	2812-38 & 3438-55	78-8070-1531-4	Belt – Drive W/Hook

Label Kit

A label kit, part number 78-8070-1428-3, is available as a stock item. It contains all the safety labels used on the 700r Random Case Sealer.

Tool Kit

A tool kit, part number 78-8060-8476-6, is available as a stock item. 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 8076-4726-4, contained in above kit is also available as a replacement stock item. Refer to "How To Order Replacement Parts" for ordering information.

How To Order Replacement Parts

1. Order parts by **part number, part name, machine number, type number** and **part quantity** required. A parts order form is provided at the back of the manual.

Minimum billing on parts orders will be $25.00
Replacement part prices available on request.
$10.00 restocking charge per invoice on returned parts.

2. Replacement parts and part prices available direct from:

3M/Tape Dispenser Parts
241 Venture Drive
Amery, WI 54001-1325

800/344 9883
FAX #715/268 8153

Note – Outside the U.S. contact the local 3M subsidiary for parts order information.

ɔair Service

Refer to the first page of this instruction manual "Service Instructions", for information on repair service.

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
78-8069-3924-1	Conveyor Extension Attachment
78-8069-3926-6	Low Tape Sensor Kit
78-8079-5560-0	Tape Appliccation Sensor Kit

Replacement Parts – Illustrations and Parts Lists

700r Random Case Sealer, Type 29200

Frame Assemblies

1. Refer to **Frame Assemblies** Figure to find all the parts illustrations identified by **figure numbers.**

2. Refer to the **Figure or Figures** to determine the **individual parts** required and the **parts reference number.**

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

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

4. Refer to page 45 – "**Replacement Parts and Service Information**" for replacement parts ordering information.

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

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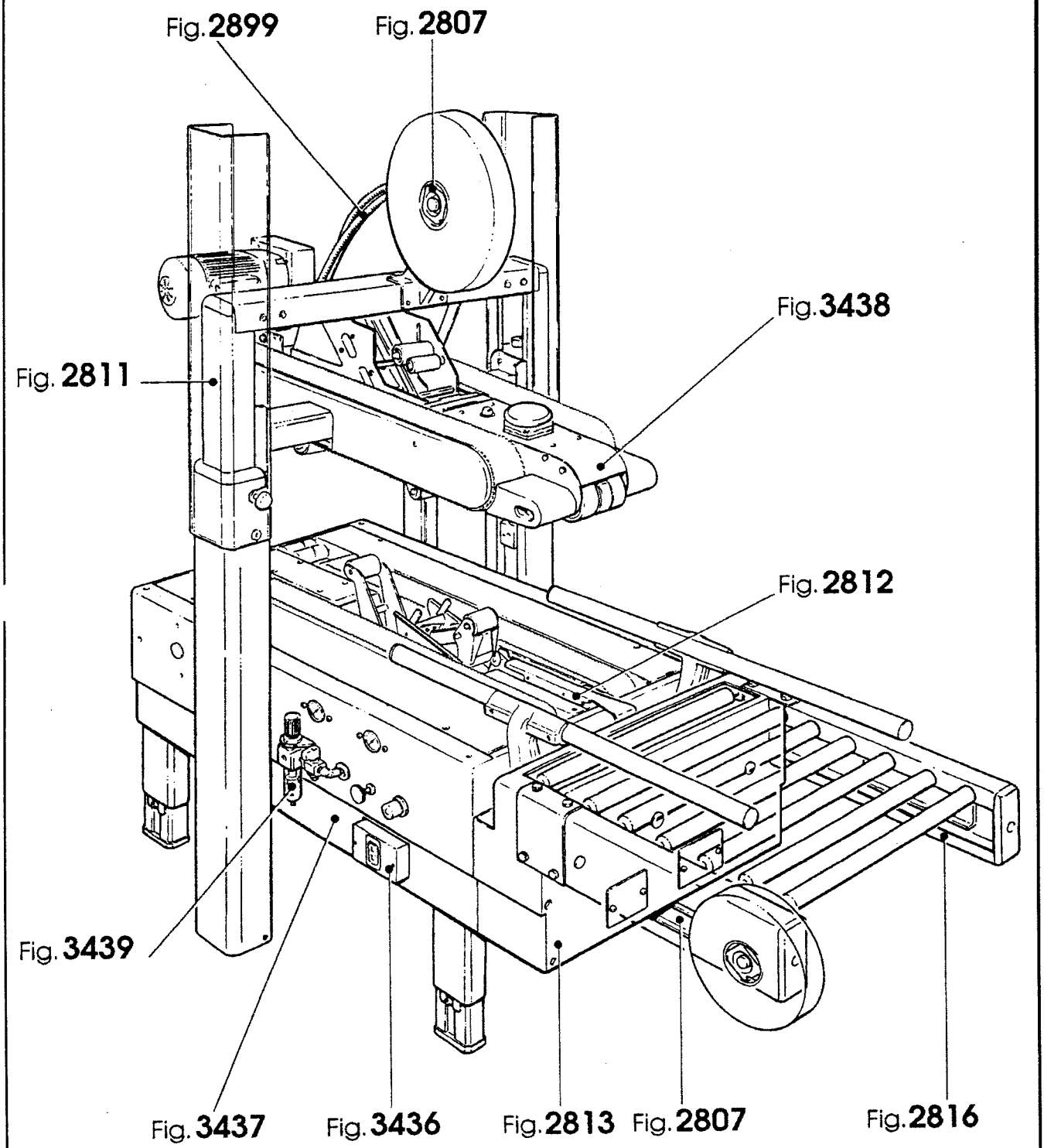
700r Random Case Sealer



Frame Assemblies

700r Random Case Sealer

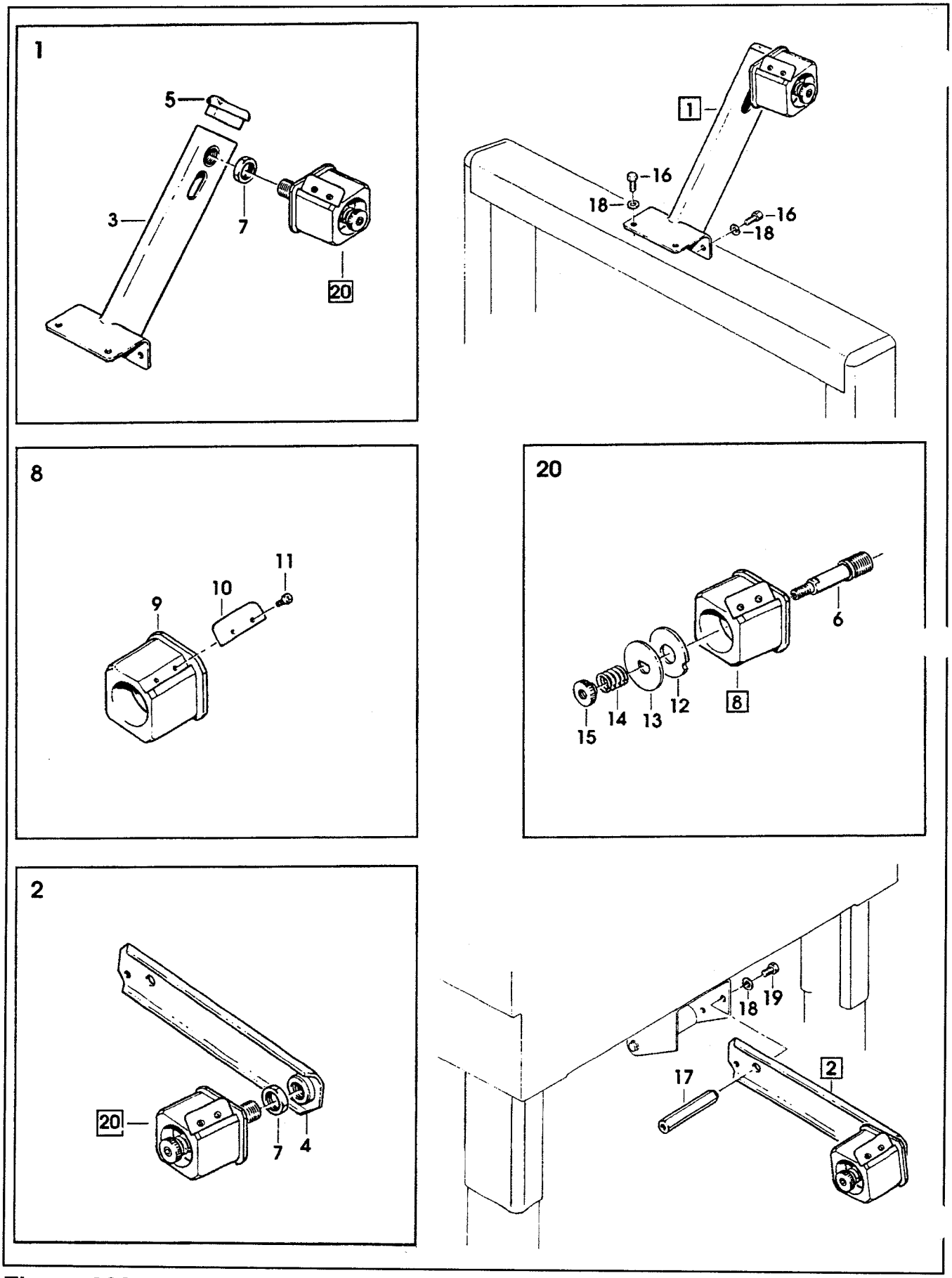


Figure 2807

Figure 2807

Ref. No.	3M Part No.	Description
2807-1	78-8076-4633-2	Tape Roll Bracket Assembly
2807-2	78-8070-1565-2	Tape Drum Bracket Assembly
2807-3	78-8070-1566-0	Bracket – Tape Drum
2807-4	78-8070-1395-4	Bracket – Bushing Assembly
2807-5	78-8070-1568-6	Cap – Bracket
2807-6	78-8076-4519-3	Shaft – Tape Drum
2807-7	78-8017-9169-6	Nut – M18 x 1
2807-8	78-8070-1569-4	Tape Drum Assembly - 2 Inch
2807-9	78-8052-6749-5	Tape Drum
2807-10	78-8052-6268-6	Leaf Spring
2807-11	26-1002-5753-9	Screw – Self Tapping
2807-12	78-8060-8172-1	Washer – Friction
2807-13	78-8052-6271-0	Washer – Tape Drum
2807-14	78-8054-8826-5	Spring
2807-15	78-8060-7851-1	Ring Nut – Adjusting
2807-16	78-8032-0375-7	Screw – Hex Hd M6 x 16
2807-17	78-8070-1215-4	Spacer – Stud
2807-18	26-1000-0010-3	Washer – Flat M6
2807-19	78-8010-7169-3	Screw – Hex Hd M6 x 12
2807-20	78-8060-8474-1	Tape Drum Assembly – 2 Inch Head

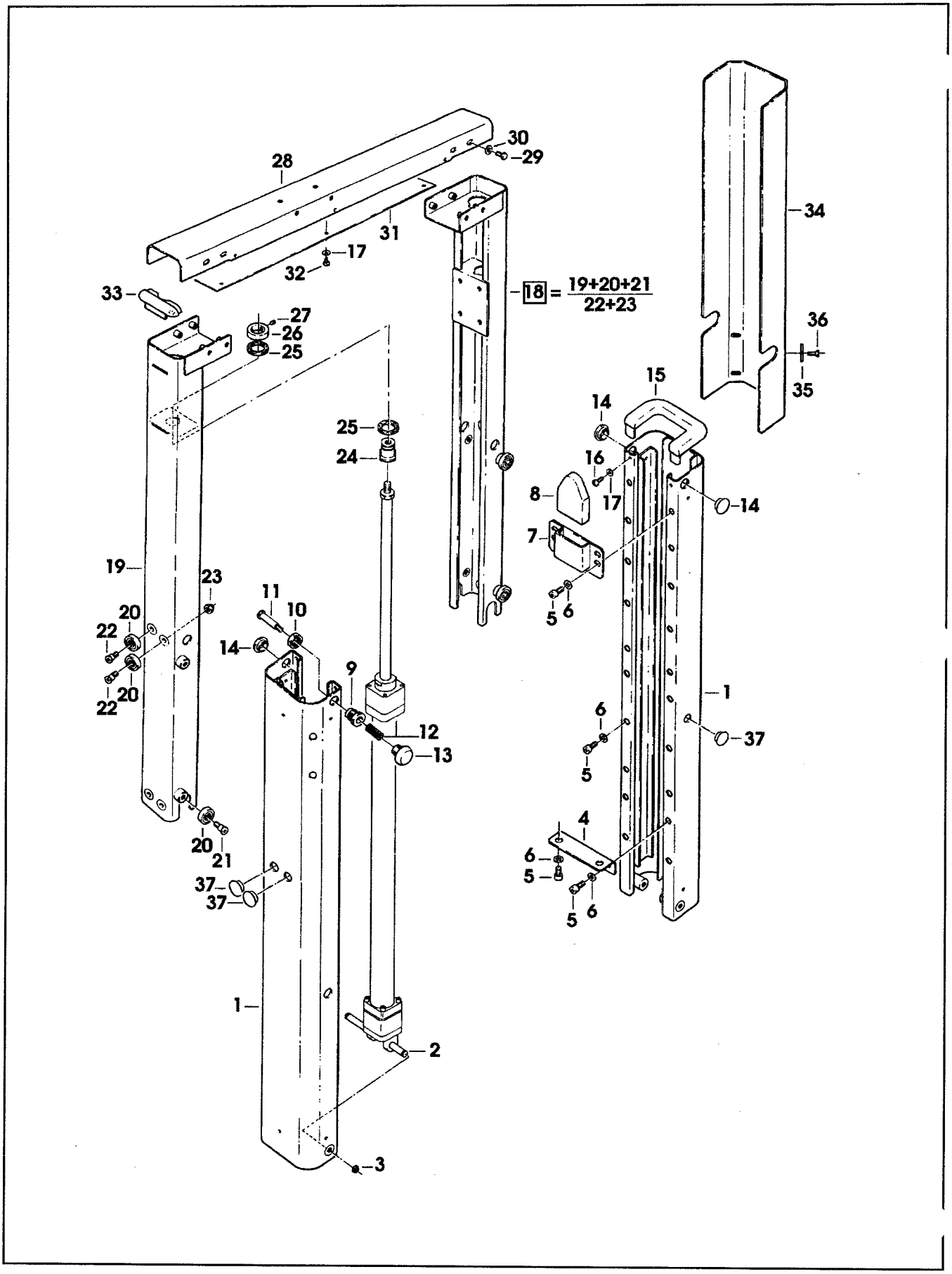

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Figure 2811

Figure 2811

Ref. No.	3M Part No.	Description
2811-1	78-8076-4539-1	Column – Outer
2811-2	78-8076-4540-9	Pin – Air Cylinder
2811-3	78-8060-8035-0	E-Ring – 7DIN6799
2811-4	78-8060-8490-7	Plate – Column Mounting
2811-5	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
2811-6	78-8017-9318-9	Washer – Plain 8 mm
2811-7	78-8076-4541-7	Plate – bumper Support
2811-8	78-8076-4542-5	Bumper
2811-9	78-8076-4543-3	Bushing – Height Stop
2811-10	78-8017-9169-6	Nut – M18 x 1
2811-11	78-8076-4544-1	Stud – Height Stop
2811-12	78-8076-4545-8	Spring
2811-13	78-8076-4546-6	Knob
2811-14	78-8076-4547-4	Cap – /18
2811-15	78-8060-8491-5	Cap – Column
2811-16	78-8076-4548-2	Screw – Self Tapping 8P x 16
2811-17	78-8005-5740-3	Washer – Plain 4 mm
1-18	78-8076-4549-0	Column Assembly – Inner
2811-19	78-8076-4550-8	Column – Inner
2811-20	78-8054-8617-8	Bearing – Special
2811-21	78-8017-9106-8	Screw – Bearing Shoulder
2811-22	78-8054-8589-9	Screw – Special
2811-23	26-1003-6916-9	Nut – Locking Plastic Insert M6
2811-24	78-8076-4551-6	Mounting – Rod
2811-25	78-8054-8823-2	Washer – Bumper
2811-26	78-8076-4552-4	Ring Nut – Rod
2811-27	78-8059-5617-0	Set Screw – M6 x 8
2811-28	78-8076-4553-2	Crossmember
2811-29	78-8060-7886-7	Screw – Hex Hd M6 x 16 Special
2811-30	26-1000-0010-3	Washer – Flat M6
2811-31	78-8070-1504-1	Cover
2811-32	78-8010-7157-8	Screw – Hex Hd M4 x 10
2811-33	78-8070-1505-8	Cap – Inner Column
2811-34	78-8076-4554-0	Guard – Column
2811-35	78-8076-5477-3	Washer – Special
1-36	26-1001-9843-6	Screw – Flat Soc Hd M6 x 16
2811-37	78-8054-8821-6	End – Cap

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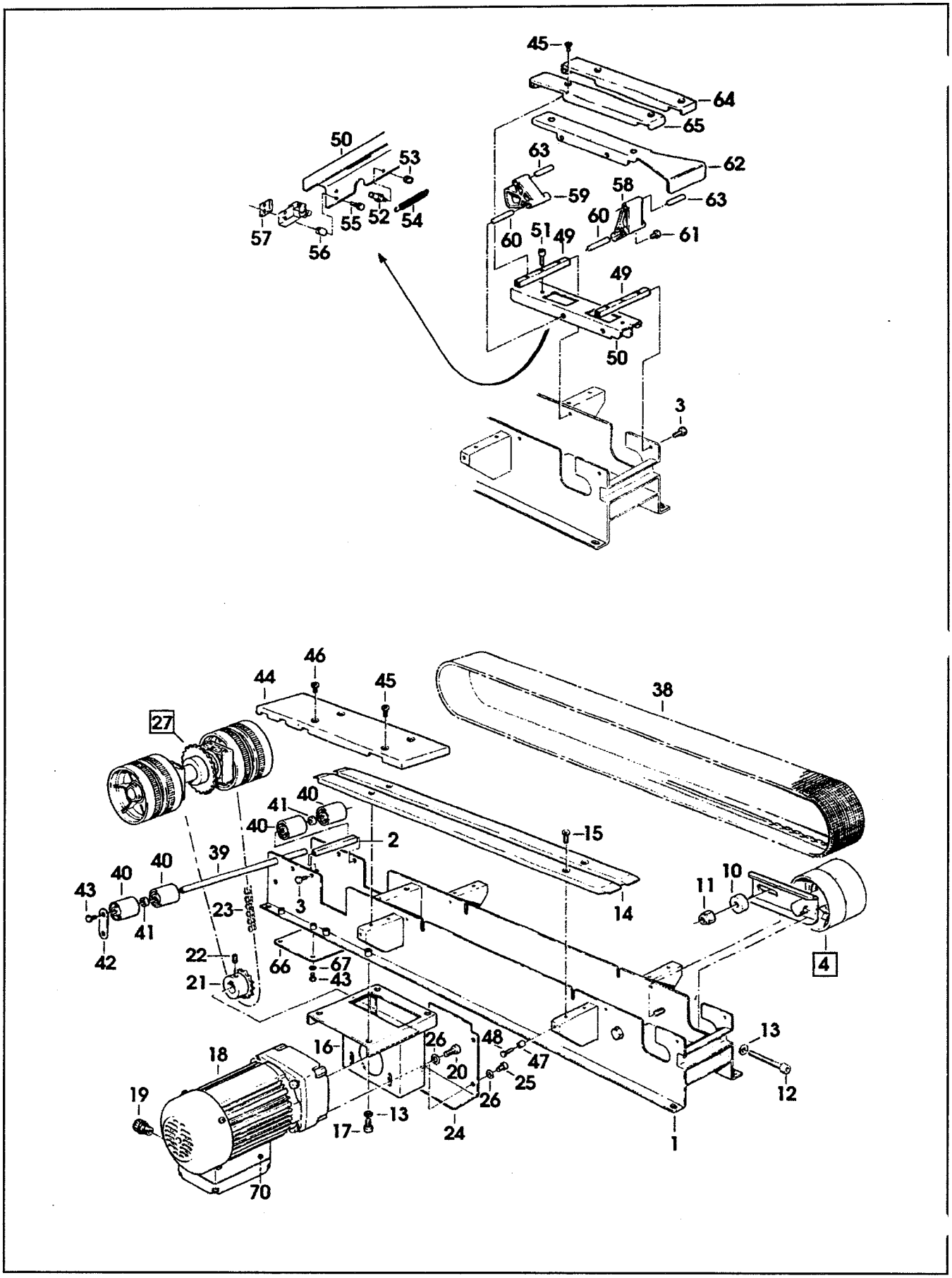

Figure 2812/1 of 2

Figure 2812 (Page 1 of 2)

Ref. No.	3M Part No.	Description
2812-1	78-8070-1580-1	Frame – Drive
2812-2	78-8070-1514-0	Spacer
2812-3	26-1003-5829-5	Screw – Hex Hd M6 x 12
2812-4	78-8070-1516-5	Belt Tensioning Assembly
2812-5	78-8070-1517-3	Tensioning – Belt
2812-6	78-8052-6710-7	Roller – Idler
2812-7	78-8052-6709-9	Washer – Special
2812-8	78-8010-7435-8	Washer – Lock M6
2812-9	26-1003-7957-2	Screw – Soc Hd Hex Hd M6 x 16
2812-10	78-8070-1518-1	Spacer – Shaft
2812-11	26-1003-6918-5	Nut – Plastic Insert Hex Flange M10
2812-12	78-8070-1519-9	Screw – Soc Hd Hex Hd M8 x 70
2812-13	78-8017-9318-9	Washer – Plain 8 mm
2812-14	78-8070-1520-7	Guide – Drive Belt
2812-15	26-1005-4758-2	Screw – Flat Hd M5 x 20
2812-16	78-8070-1521-5	Support – Gearbox
2-17	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr., M8 x 20
2812-18	78-8070-1522-3	Gearmotor – 115V, 60HZ
2812-19	78-8057-5807-1	Cord Grip
2812-20	78-8070-1523-1	Screw – 1/4 - 28 X 1/2 SHCS
2812-21	78-8070-1524-9	Sprocket – 3/8 Z=17
2812-22	78-8023-2479-4	Screw – Set W/End Cup M6 x 10
2812-23	78-8070-1525-6	Chain – 3/8 P=54
2812-24	78-8070-1526-4	Cover – Chain
2812-25	78-8010-7209-7	Screw – Soc Hd M6 x 12
2812-26	26-1000-0010-3	Washer – Flat M6
2812-27	78-8070-1527-2	Shaft With Drive Pulleys
2812-28	78-8070-1528-0	Shaft – Gearbox
2812-29	78-8057-5811-3	Key – 6 x 6 x 20 mm
2812-30	78-8054-8986-7	Sprocket – 3/8 Pitch, 28 Teeth
2812-31	78-8054-8984-2	Bushing
2812-32	78-8070-1529-8	Support – Shaft
2812-33	78-8070-1530-6	Bearing – 6205-2RS
2-34	78-8057-5739-6	Key – M5 x 5 x 30 mm
2812-35	78-8076-5105-0	Pulley Assembly – Drive

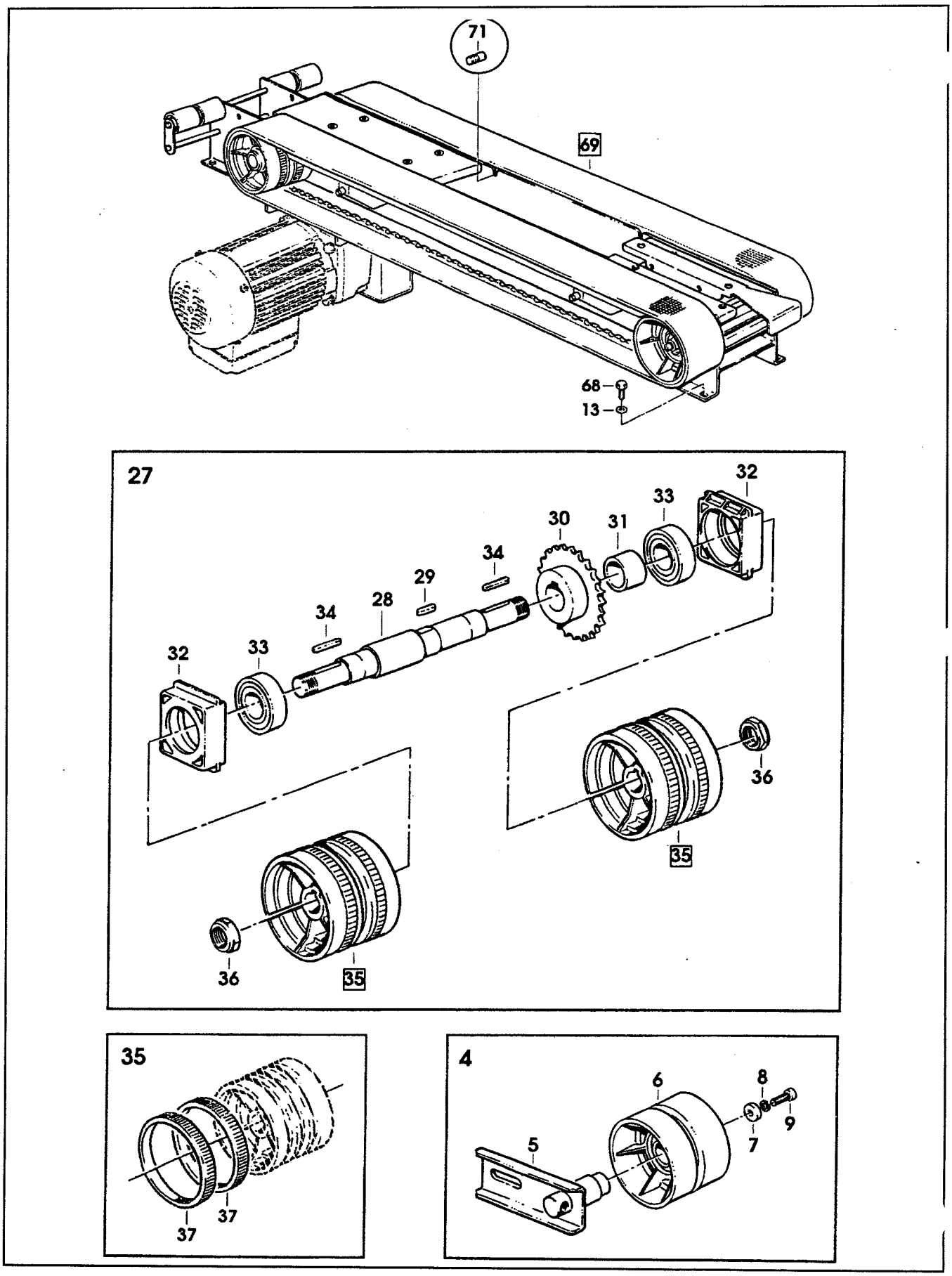

Figure 2812/2 of 2

Figure 2812 (Page 2 of 2)

Ref. No.	3M Part No.	Description
2812-36	78-8060-8416-2	Nut – Special M20 x 1
2812-37	78-8052-6713-1	Ring – Polyurethane
2812-38	78-8070-1531-4	Belt – Drive With Hook
2812-39	78-8070-1581-9	Shaft – Roller
2812-40	78-8060-7693-7	Roller – 32 x 38
2812-41	78-8070-1582-7	Spacer – Roller
2812-42	78-8070-1583-5	Plate – Drive
2812-43	26-1003-5820-4	Screw – Hex Hd M5 x 12
2812-44	78-8070-1585-0	Cover – Drive, Rear
2812-45	26-0001-5862-1	Screw – Flat Hd Soc M5 x 12
2812-46	26-1005-5316-8	Screw – Flat Hd Hex Dr M5 x 16
2812-47	78-8070-1534-8	Stud – Side Plate
2812-48	78-8060-8488-1	Screw – Hex Hd M5 x 20
2812-49	78-8076-4555-7	Spacer
2812-50	78-8076-4556-5	Support – Valve
2812-51	26-1003-7951-5	Screw – Soc Hd Hex Soc M5 x 20
2-52	78-8054-8757-2	Pin – Spring Holder
2812-53	26-1005-6859-6	Nut – Self Locking M5
2812-54	78-8076-4774-4	Spring
2812-55	26-1003-7947-3	Screw – Soc Hd Hex Soc M4 x 35
2812-56	78-8054-8758-0	Spacer – Valve Holder
2812-57	78-8059-5607-1	Plate – Threaded
2812-58	78-8076-4557-3	Lever – Front
2812-59	78-8076-4558-1	Cam – Valve
2812-60	78-8054-8756-4	Shaft – 6 x 46 mm
2812-61	26-1002-4955-1	Screw – Self Tapping 8P x 13
2812-62	78-8091-0323-3	Actuator – Side Guide
2812-63	78-8054-8752-3	Shaft – 6 x 33 mm
2812-64	78-8076-4560-7	Cover – Right
2812-65	78-8076-4561-5	Cover – Left
2812-66	78-8076-4562-3	Cover – Bottom
2812-67	78-8005-5741-1	Washer – Plain M5
2812-68	26-1003-5841-0	Screw – M8 x 16
2-69	78-8076-4563-1	Bottom Drive Assembly
2812-70	26-1011-8828-7	Capacitor – 115V Gearmotor
2812-71	78-8076-4500-3	Stud – Mounting

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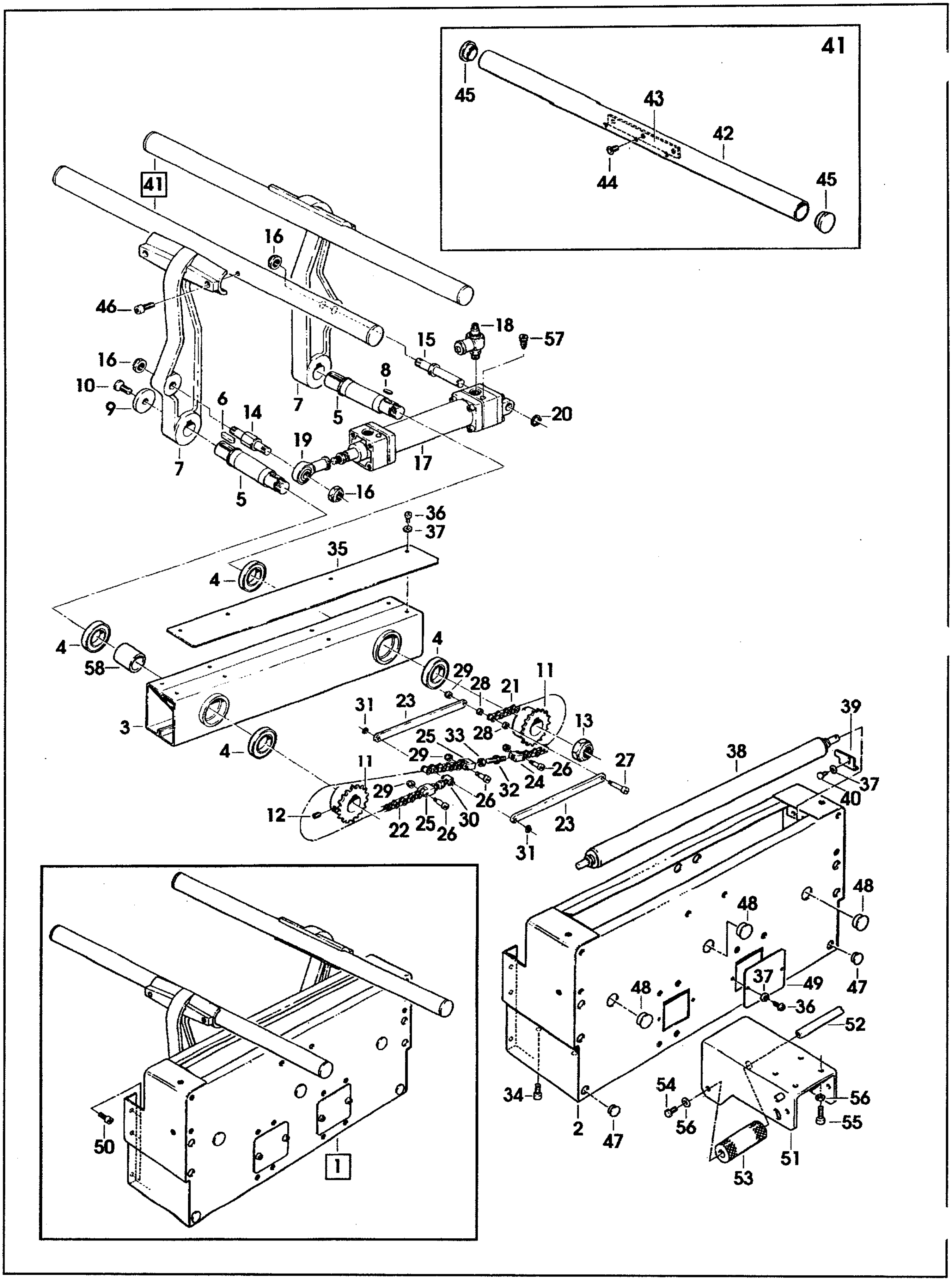
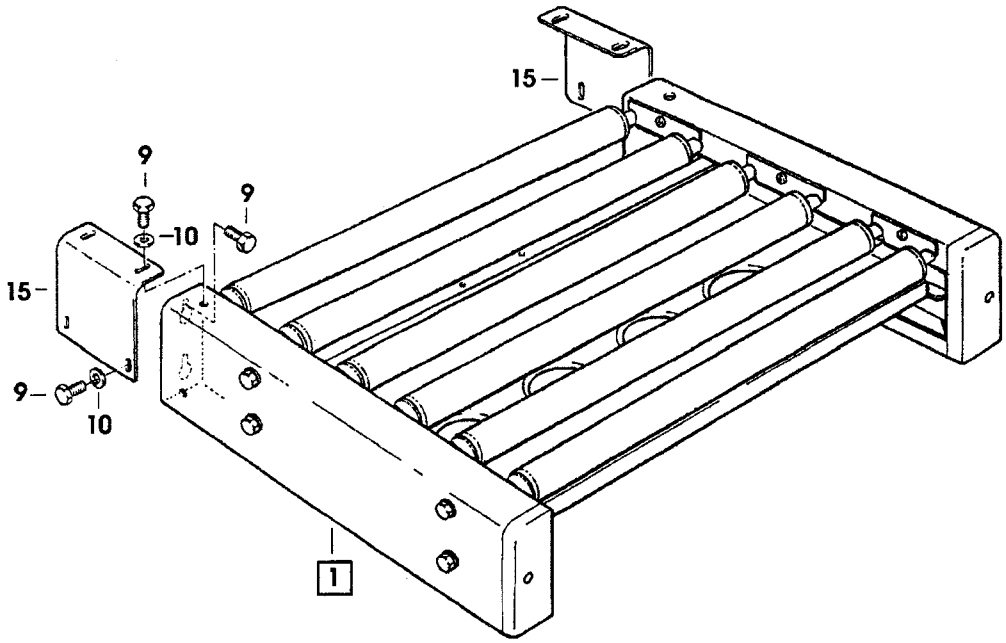


Figure 2813

Figure 2813

Ref. No.	3M Part No.	Description
2813-1	78-8076-4564-9	Infeed Conveyor Assembly
2813-2	78-8076-4565-6	Frame – Infeed
2813-3	78-8076-4566-4	Frame
2813-4	78-8023-2551-0	Bearing – 6005-2RS
2813-5	78-8076-4567-2	Pivot – Infeed
2813-6	78-8076-4568-0	Key – 7 x 8 x 25
2813-7	78-8076-4569-8	Lever – Infeed
2813-8	78-8076-4570-6	Key – 6 x 6 x 15
2813-9	78-8054-8588-1	Washer – 8,5/40 x 6
2813-10	78-8054-8567-5	Screw – Soc Hd Special
2813-11	78-8076-4571-4	Sprocket – Z = 20
2813-12	78-8023-2479-4	Screw – Set W/End Cup, M6 x 10
2813-13	78-8060-8416-2	Nut – Special M20 x 1
2813-14	78-8076-4572-2	Stud – Joint
2813-15	78-8076-4573-0	Pin – Air Cylinder
2813-16	78-8091-0555-0	Nut – Special, M12
2813-17	78-8076-4575-5	Cylinder – Air, /40 x 155
2813-18	78-8091-0510-5	Regulator– Speed
2813-19	78-8057-5747-9	Mount – Cylinder Rod End
2813-20	78-8656-3965-8	External Retaining Ring – M8
2813-21	78-8076-4576-3	Chain – 3/8 P=25
2813-22	78-8076-4577-1	Chain – 3/8 P=45
2813-23	78-8054-8787-9	Link – Chain
2813-24	78-8054-8788-7	Connector – Chain
2813-25	78-8054-8786-1	Connector – Chain
2813-26	78-8060-7520-2	Screw – M3 x 20
2813-27	78-8060-7519-4	Screw – M3 x 25
2813-28	78-8054-8783-8	Washer – Special
2813-29	78-8059-5517-2	Nut – Self Locking M3
2813-30	78-8054-8784-6	Block – Chain
2813-31	78-8656-3945-0	E-Ring – M4
2813-32	78-8054-8785-3	Rod – Threaded Right/Left
2813-33	78-8010-7418-4	Nut – Hex M6
2813-34	26-1003-7963-0	Screw – Soc Hd M8 x 16
2813-35	78-8076-4578-9	Cover – Chain
2813-36	26-1002-5753-9	Screw – Self Tapping
2813-37	78-8005-5740-3	Washer – Plain 4 mm
2813-38	78-8076-4579-7	Roller – /32 x 492
2813-39	78-8076-4647-2	Plate – Infeed
2813-40	78-8010-7157-8	Screw – Hex Hd M4 x 10
2813-41	78-8076-4648-0	Guide Assembly
2813-42	78-8076-4649-8	Guide – Infeed
2813-43	78-8076-4650-6	Plate – Guide
2813-44	26-1002-5830-5	Screw – Soc Hd M6 x 12
2813-45	78-8054-8779-6	End – Cap
2813-46	78-8010-7210-5	Screw – Soc Hd Hex Soc M6 x 20
2813-47	78-8054-8821-6	End – Cap
2813-48	78-8060-7885-9	End Cap – /25 x 1,2
2813-49	78-8076-4651-4	Plate – Infeed
2813-50	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr M8 x 20
2813-51	78-8076-4652-2	Support – Bracket
2813-52	78-8060-8484-0	Shaft – Roller
2813-53	78-8060-8485-7	Roller
2813-54	78-8032-0375-7	Screw – Hex Hd M6 x 16
2813-55	26-1003-7957-2	Screw – Soc Hd Hex Hd M6 x 16
2813-56	26-1000-0010-3	Washer – Flat M6
2813-57	78-8076-4653-0	Screw – Cushioning Cylinder/40
2813-58	78-8076-4518-5	Spacer – Bearing
2813	78-8060-8435-2	Repair Kit – Cylinder/40



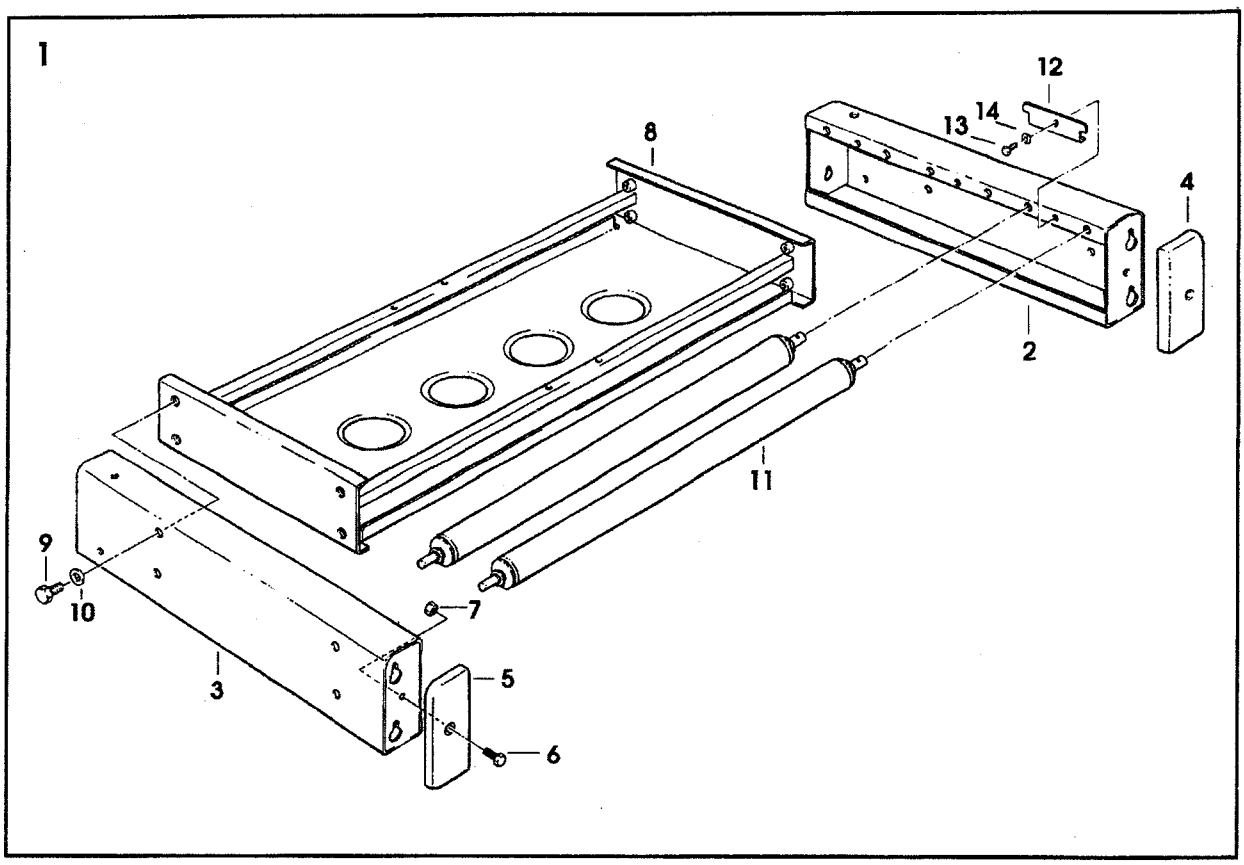


Figure 2816

Figure 2816

f. No.	3M Part No.	Description
2816-1	78-8076-4508-6	Conveyor – Infeed
2816-2	78-8076-4509-4	Frame – R/H
2816-3	78-8076-4510-2	Frame – L/H
2816-4	78-8076-4511-0	Cap – Front, R/H
2816-5	78-8076-4512-8	Cap – Front, L/H
2816-6	78-8032-0375-7	Screw – Hex Hd M6 x 16
2816-7	78-8010-7418-4	Nut – Hex M6
2816-8	78-8076-4513-6	Plate – Reinforcement
2816-9	26-1003-5841-0	Screw – M8 x 16
2816-10	78-8017-9318-9	Washer – Plain 8 mm
2816-11	78-8076-4579-7	Roller – /32 x 492
2816-12	78-8076-4507-8	Plate – Infeed
2816-13	78-8010-7157-8	Screw – Hex Hd M4 x 10
2816-14	78-8005-5740-3	Washer – Plain 4 mm
6-15	78-8076-4514-4	Bracket – Infeed Conveyor

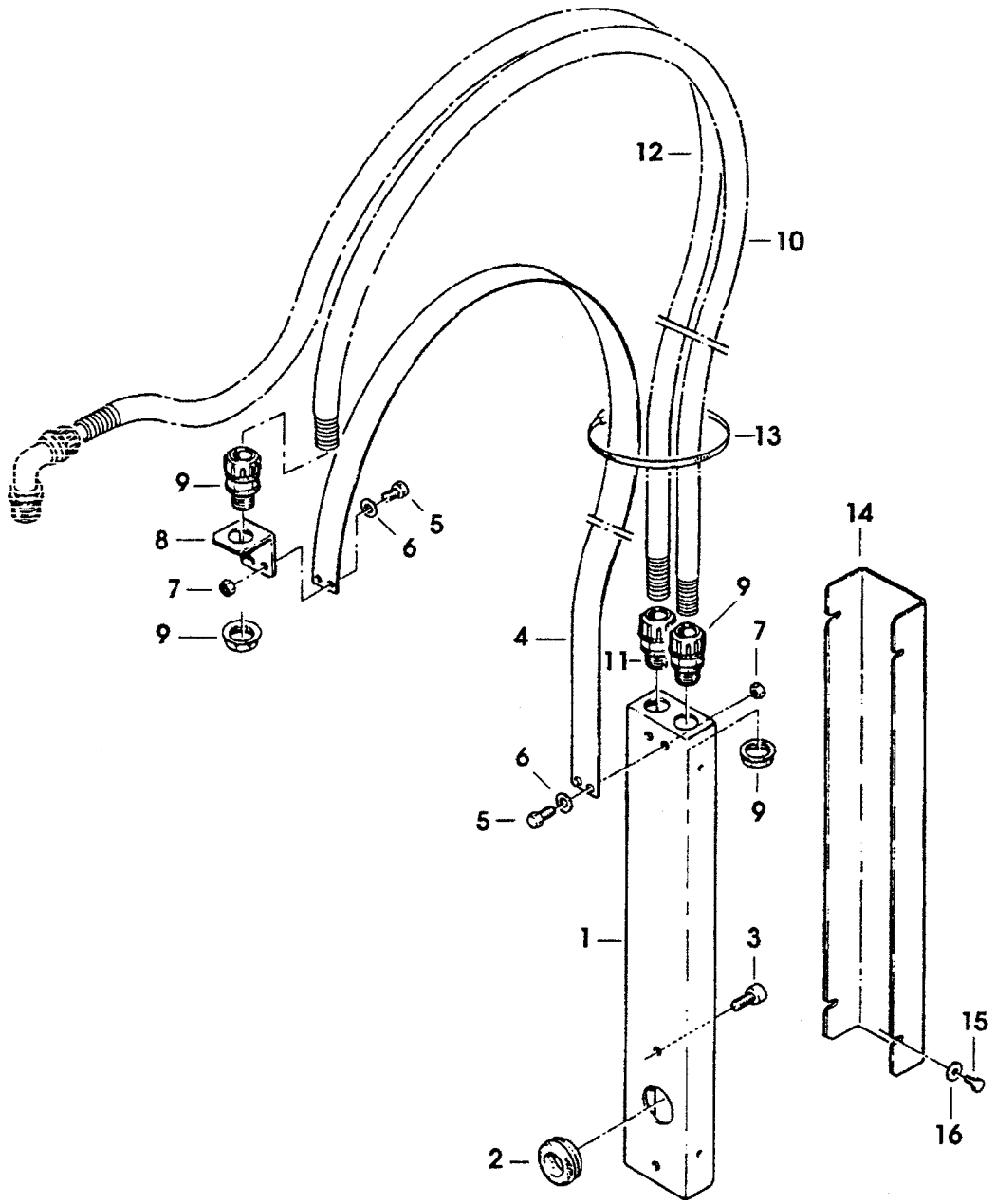


Figure 2899

Figure 2899

f. No.	3M Part No.	Description
2899-1	78-8091-0660-8	Housing – Wire
2899-2	78-8076-4702-5	Grommet – /28
2899-3	26-1003-7963-0	Screw – Soc Hd M8 x 16
2899-4	78-8076-4636-5	Strap – Wire
2899-5	78-8010-7163-6	Screw – Hex Hd M5 x 10
2899-6	78-8005-5741-1	Washer – Plain M5
2899-7	78-8010-7417-6	Nut – Hex M5
2899-8	78-8076-4637-3	Plate – Strap
2899-9	78-8076-4520-1	Union – PG13, Sleeve /16
2899-10	78-8076-4521-9	Sleeving – Wire, 900 mm /16
2899-11	78-8076-4638-1	Union – PG13.5, Sleeve /14
2899-12	78-8076-4640-7	Sleeving – Wire, 1100 mm /14
2899-13	78-8060-8029-3	Clamp – 140 x 3,5
2899-14	78-8076-4641-5	Cover
)9-15	78-8010-7157-8	Screw – Hex Hd M4 x 10
2899-16	78-8017-9018-5	Washer – Plain M4 Special

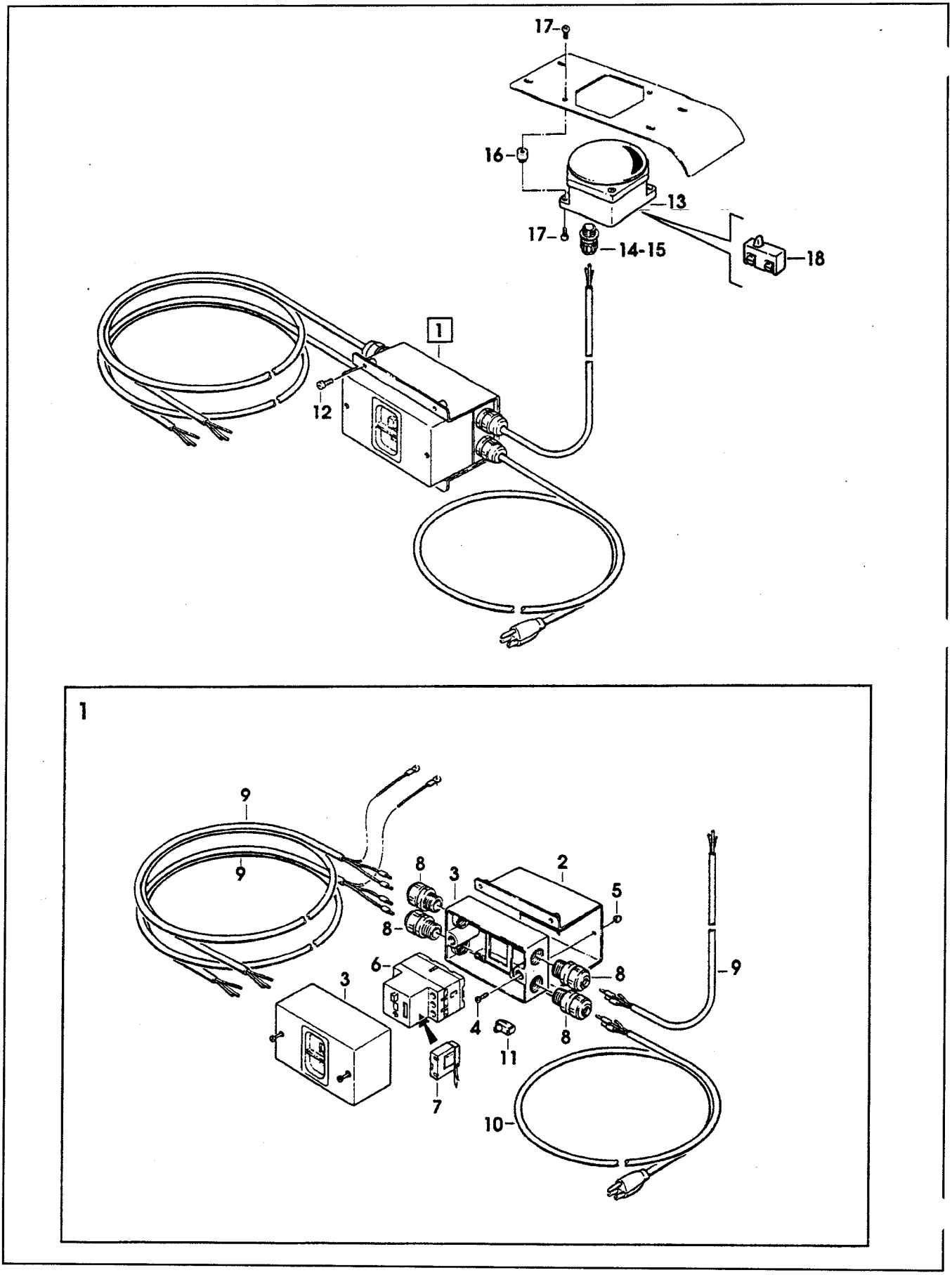


Figure 3436

Figure 3436

Ref. No.	3M Part No.	Description
3436-1	78-8091-0311-8	Switch – On / Off, W / Support
3436-2	78-8070-1572-8	Support – Switch
3436-3	78-8076-4879-1	Box – On/Off Switch
3436-4	26-1003-5707-3	Screw – Phillips Dr. M4 x 16
3436-5	26-1003-6914-4	Nut – Plastic Insert M4
3436-6	78-8091-0312-6	Switch – On/Off, W Coil, 4-6 A
3436-7	78-8076-4878-3	Coil – Low Tension 110/120/127V
3436-8	78-8057-5807-1	Cord Grip
3436-9	78-8060-8053-3	Wire – 3 - Pole, 5 meters Length
3436-10	78-8028-7909-4	Power Cord U.S.A.
3436-11	78-8076-4602-7	Terminal
3436-12	78-8060-8087-1	Screw – M5 x 10
3436-13	78-8060-7633-3	Safety Button
3436-14	78-8076-4532-6	Union
'6-15	78-8076-4645-6	Lock Nut – GMP11
3436-16	78-8076-4646-4	Bushing
3436-17	78-8060-7815-6	Screw – M4 x 8
3436-18	26-1011-8527-5	Contact Block – E-Stop, Normally Closed, S&S V-40

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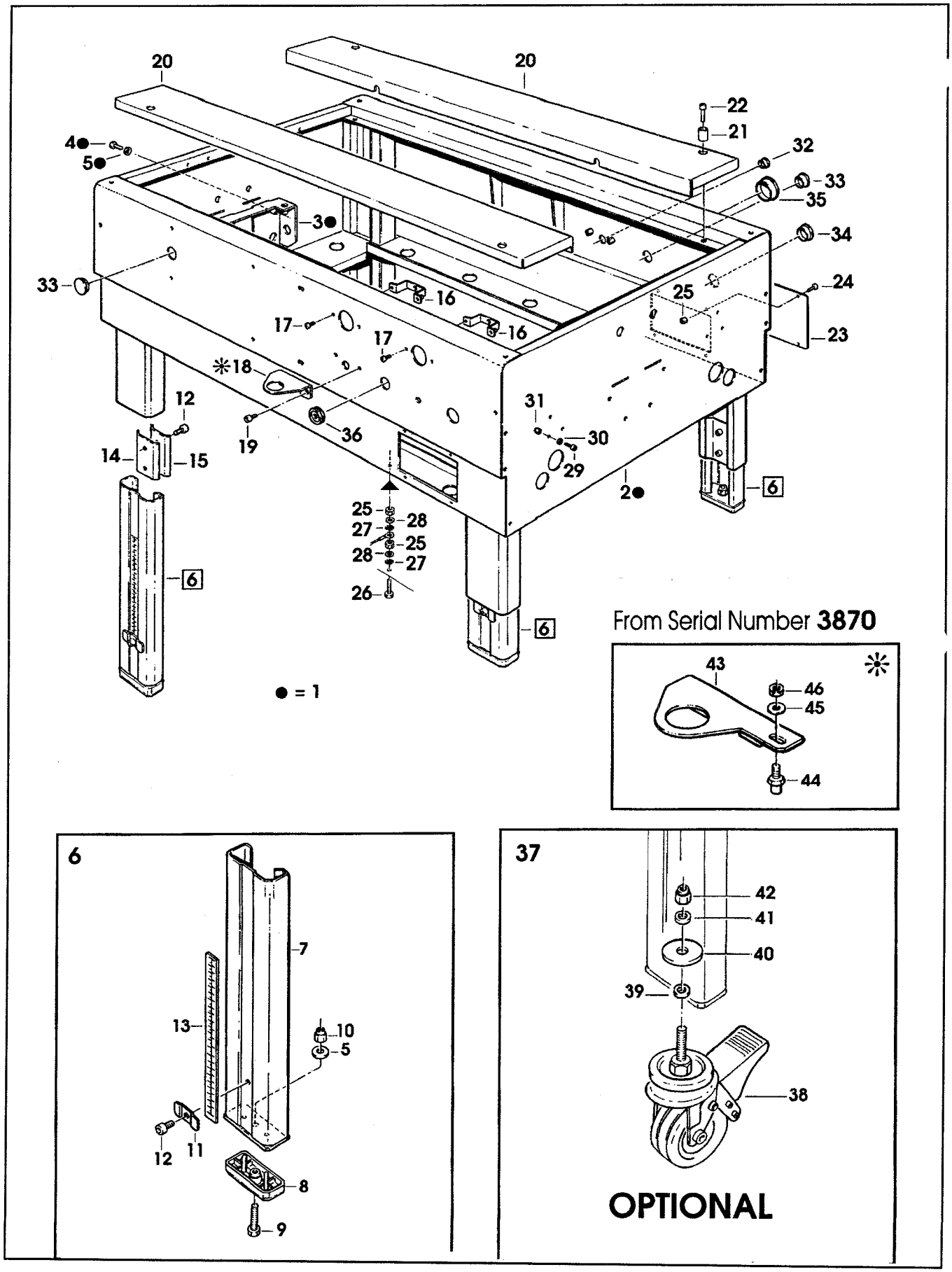


Figure 3437

Figure 3437

Ref. No.	3M Part No.	Description
3437-1	78-8091-0320-9	Conveyor Bed Assembly
3437-2	78-8091-0321-7	Bed – Conveyor
3437-3	78-8091-0307-6	Support – Drive
3437-4	26-1003-5842-8	Screw – Hex Hd M8 x 20
3437-5	78-8017-9318-9	Washer – Plain 8 mm
3437-6	78-8076-5381-7	Leg Assembly – Inner, W/Stop
3437-7	78-8076-5382-5	Leg – Inner
3437-8	78-8060-8480-8	Pad – Foot
3437-9	78-8055-0867-4	Screw – Hex Hd M8 x 30
3437-10	78-8017-9313-0	Nut – Self Locking M8
3437-11	78-8076-5383-3	Stop – Leg
3437-12	26-1003-7963-0	Screw – Soc. Hd. M8 x 16
3437-13	78-8060-8481-6	Label – Height
3437-14	78-8052-6677-8	Clamp – Inner
3437-15	78-8052-6676-0	Clamp – Outer
3437-16	78-8076-4535-9	Bracket
3437-17	78-8076-4625-8	Screw – Special M5 x 16
3437-18	78-8091-0322-5	Support – Filter Assembly
3437-19	78-8010-7209-7	Screw – Soc Hd M6 x 12
3437-20	78-8076-4620-9	Plane – Conveyor Bed
3437-21	78-8060-8486-5	Bushing
7-22	78-8010-7211-3	Screw – Soc Hd M6 x 25
3437-23	78-8060-8487-3	Cover – Switch
3437-24	78-8060-8087-1	Screw – M5 x 10
3437-25	78-8010-7417-6	Nut – M5
3437-26	78-8060-8488-1	Screw – Hex Hd M5 x 20
3437-27	78-8046-8217-3	Washer – Special
3437-28	78-8005-5741-1	Washer – Plain M5
3437-29	78-8076-4537-5	Screw – Soc Hd M3 x 25
3437-30	78-8076-4538-3	Washer – Flat M3
3437-31	78-8059-5517-2	Nut – Self Locking M3
3437-32	78-8076-4517-7	End Cap – /22 x 1
3437-33	78-8076-4701-7	Cap – /28
3437-34	78-8060-8184-6	Cap – /35 x 1,5
3437-35	78-8076-4536-7	Cap – /45 x 1,5
3437-36	78-8076-4702-5	Grommet – /28
3437-37	78-8060-8060-8	Caster Assembly – /80
3437-38	78-8060-8061-6	Caster – /80
3437-39	78-8060-8124-2	Spacer – Caster
3437-40	78-8060-7699-4	Washer – /12-45, 5 x 4
3437-41	78-8017-9059-9	Washer – Flat for M12 Screw
3437-42	78-8060-7532-7	Nut – Self-Locking, M12
3437-43	78-8091-0717-6	Support – R/H, Filter Assy
7-44	78-8091-0613-7	Shaft – Valve
3437-45	26-1000-0010-3	Washer – Flat M6
3437-46	78-8010-7418-4	Nut – Hex M6

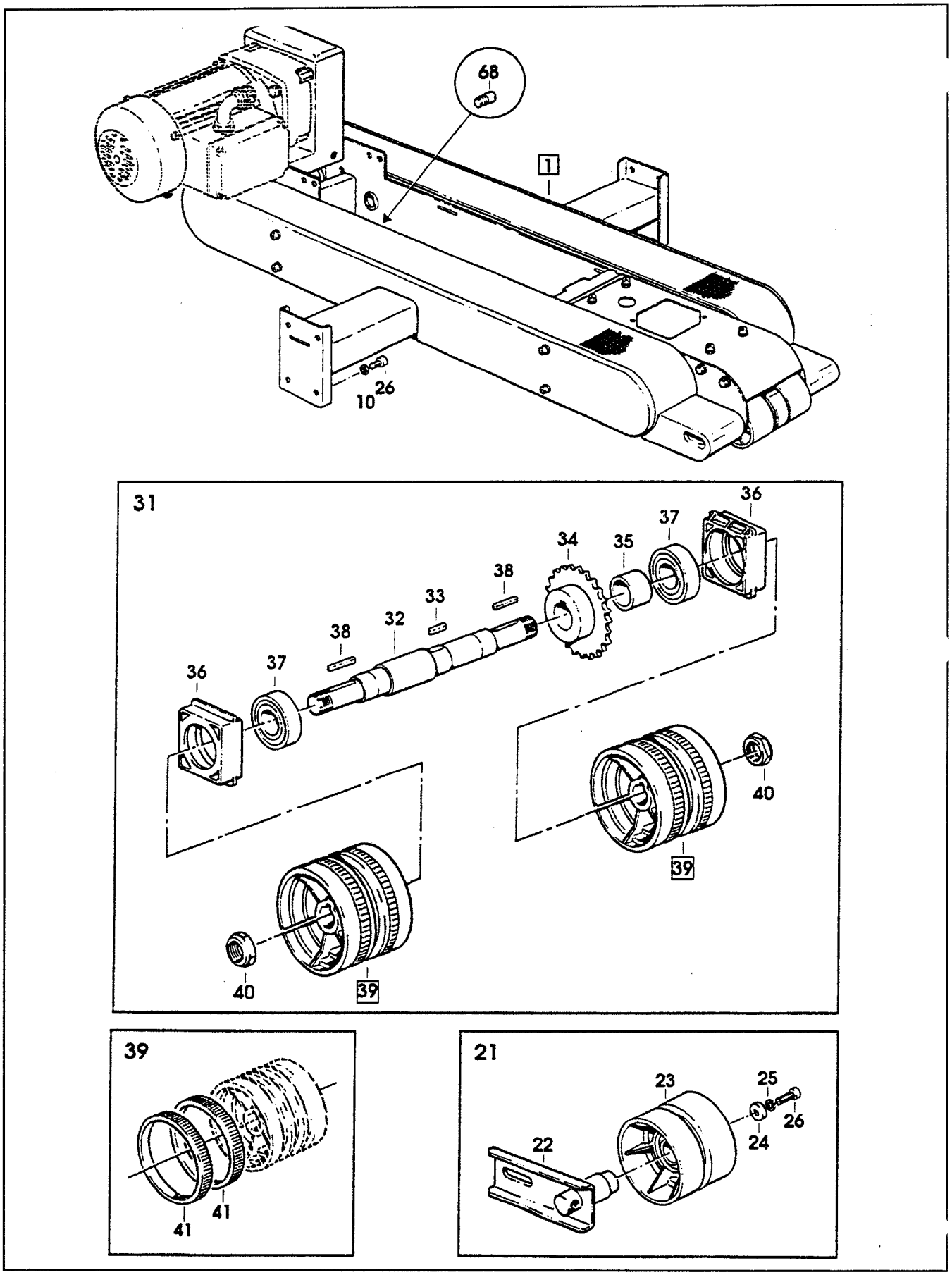
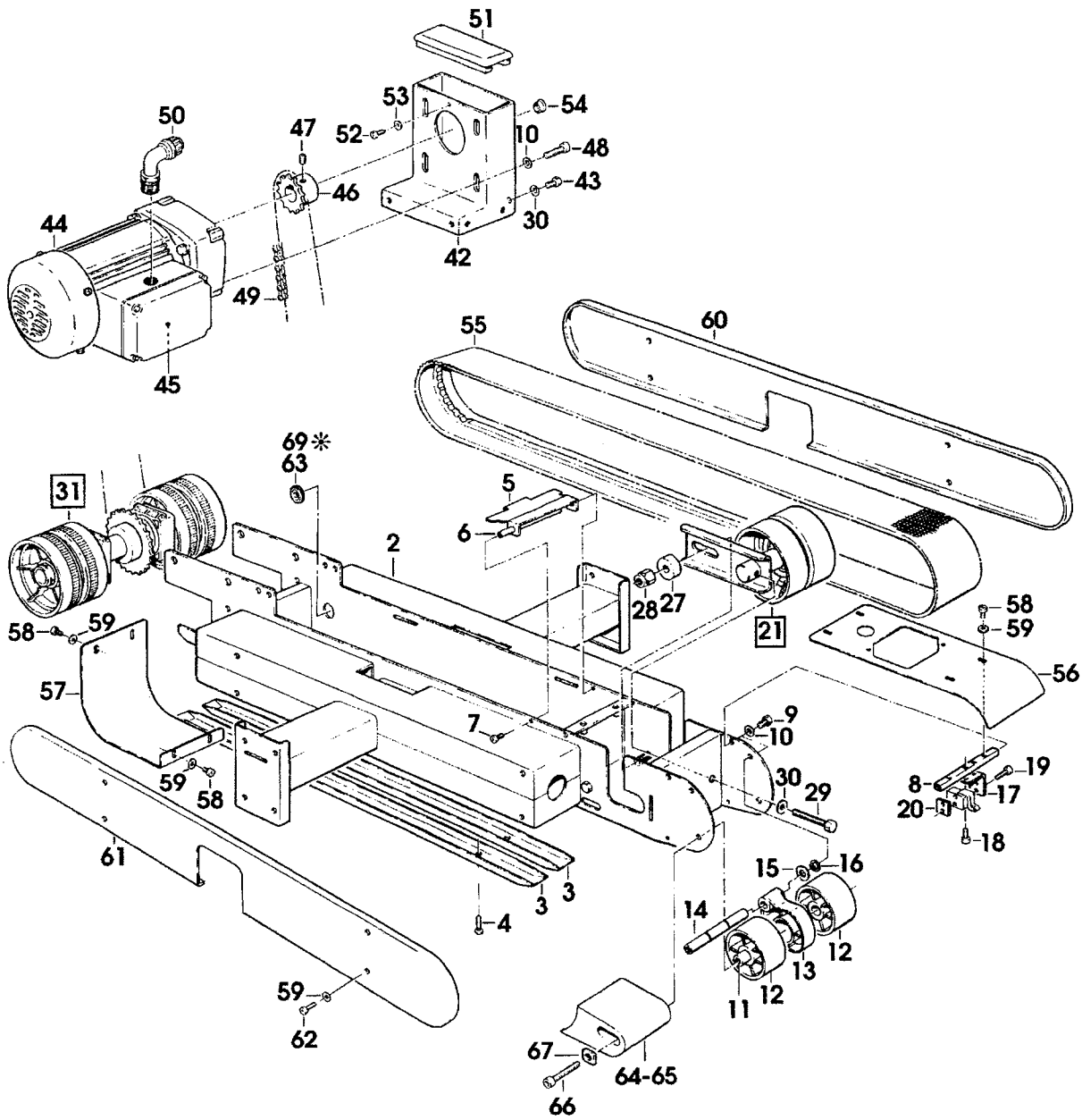


Figure 3438/ 1 of 2

Figure 3438 (Page 1 of 2)

Ref. No.	3M Part No.	Description
3438-1	78-8091-0319-1	Upper Drive Assembly – W/O Motor
3438-2	78-8070-1588-4	Frame – Drive, Upper
3438-3	78-8070-1520-7	Guide – Drive Belt
3438-4	26-1005-4757-4	Screw – Flat Hd M5 x 20
3438-5	78-8070-1589-2	Clamp – Upper Head
3438-6	78-8070-1590-0	Shaft – Roller
3438-7	26-1003-7948-1	Screw –Soc Hd M5 x 10
3438-8	78-8076-4655-5	Spacer – Valve
3438-9	78-8010-7169-3	Screw – Hex Hd M6 x 12
3438-10	26-1000-0010-3	Washer – Flat M6
3438-11	78-8100-0867-8	Shaft – Roller, /15x106
3438-12	78-8076-4656-3	Roller
3438-13	78-8076-4657-1	Link – Actuator, Valve
3438-14	78-8076-4658-9	Shaft
3438-15	78-8052-6566-3	Washer – Friction
3438-16	78-8016-5855-6	E-Ring – 10mm
3438-17	78-8076-4659-7	Plate – Valve
3438-18	78-8010-7163-6	Screw – Hex Hd M5 x 10
3438-19	26-1003-7946-5	Screw – Soc Hd M4 x 25
3438-20	78-8059-5607-1	Plate – Threaded
3438-21	78-8070-1516-5	Belt Tensioning Assembly
3438-22	78-8070-1517-3	Belt Tensioning
3438-23	78-8052-6710-7	Roller – Idler
3438-24	78-8052-6709-9	Washer – Special
3438-25	78-8010-7435-8	Washer – Lock M6
3438-26	26-1003-7957-2	Screw – Soc Hd M6 x 16
3438-27	78-8070-1518-1	Spacer – Shaft
3438-28	26-1003-6918-5	Nut – Hex Flange, Plastic Insert M10
3438-29	78-8070-1594-2	Screw – Hex Hd M8 x 60
3438-30	78-8017-9318-9	Washer – Plain 8 mm
3438-31	78-8070-1527-2	Shaft With Drive Pulleys
3438-32	78-8070-1528-0	Shaft – Gearbox
3438-33	78-8057-5811-3	Key – 6 x 6 x 20 mm
3438-34	78-8054-8986-7	Sprocket – 3/8 Pitch, 28 Teeth
3438-35	78-8054-8984-2	Bushing
3438-36	78-8070-1529-8	Support – Shaft
3438-37	78-8070-1530-6	Bearing – 6205-2RS
3438-38	78-8057-5739-6	Key – M5 x 5 x 30 mm
3438-39	78-8076-5105-0	Pulley Assembly – Drive
3438-40	78-8060-8416-2	Nut – Special M20 x 1



* From Serial Number **4144**

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Ref. No.	3M Part No.	Description
3438-41	78-8052-6713-1	Ring – Polyurethane
3438-42	78-8070-1595-9	Support – Drive
3438-43	26-1003-5842-8	Screw – Hex Hd M8 x 20
3438-44	78-8070-1522-3	Gearmotor – 115V 60HZ
3438-45	26-1011-8828-7	Capacitor – 115V Gearmotor
3438-46	78-8070-1524-9	Sprocket – 3/8 Z=17
3438-47	78-8023-2479-4	Screw – Set W/End Cup, M6 x 10
3438-48	78-8070-1523-1	Screw – 1/4-28 x 1/2 SHCS
3438-49	78-8070-1597-5	Chain – 3/8 P=62
3438-50	78-8070-1596-7	Union – Elbow, Pg 13,5
3438-51	78-8070-1598-3	Cover
3438-52	26-1002-4955-1	Screw – Self Tap 8P x 13
3438-53	78-8005-5740-3	Washer Plain – 4 mm
3438-54	78-8054-8821-6	End – Cap
3438-55	78-8070-1531-4	Belt – Drive, With Hook
3438-56	78-8076-4661-3	Cover – Upper, Front
3438-57	78-8076-4622-5	Cover – Rear, Upper
3438-58	78-8060-8087-1	Screw – M5 x 10
8-59	78-8005-5741-1	Washer – Plain, M5
3438-60	78-8076-4660-5	Cover – Upper, Right
3438-61	78-8076-4662-1	Cover – Upper, Left
3438-62	78-8076-4625-8	Screw – Special M5 x 16
3438-63	78-8060-7758-8	Fairlead – /20
3438-64	78-8076-4685-2	Cover – Top, Right
3438-65	78-8076-4684-5	Cover – Top, Left
3438-66	78-8076-5478-1	Screw – Hex Hd Soc Hd, M8 x 80
3438-67	78-8091-0355-5	Washer – Special
3438-68	78-8076-4500-3	Stud – Mounting
3438-69	78-8076-4702-5	Gommet – /28

700r Random Case Sealer

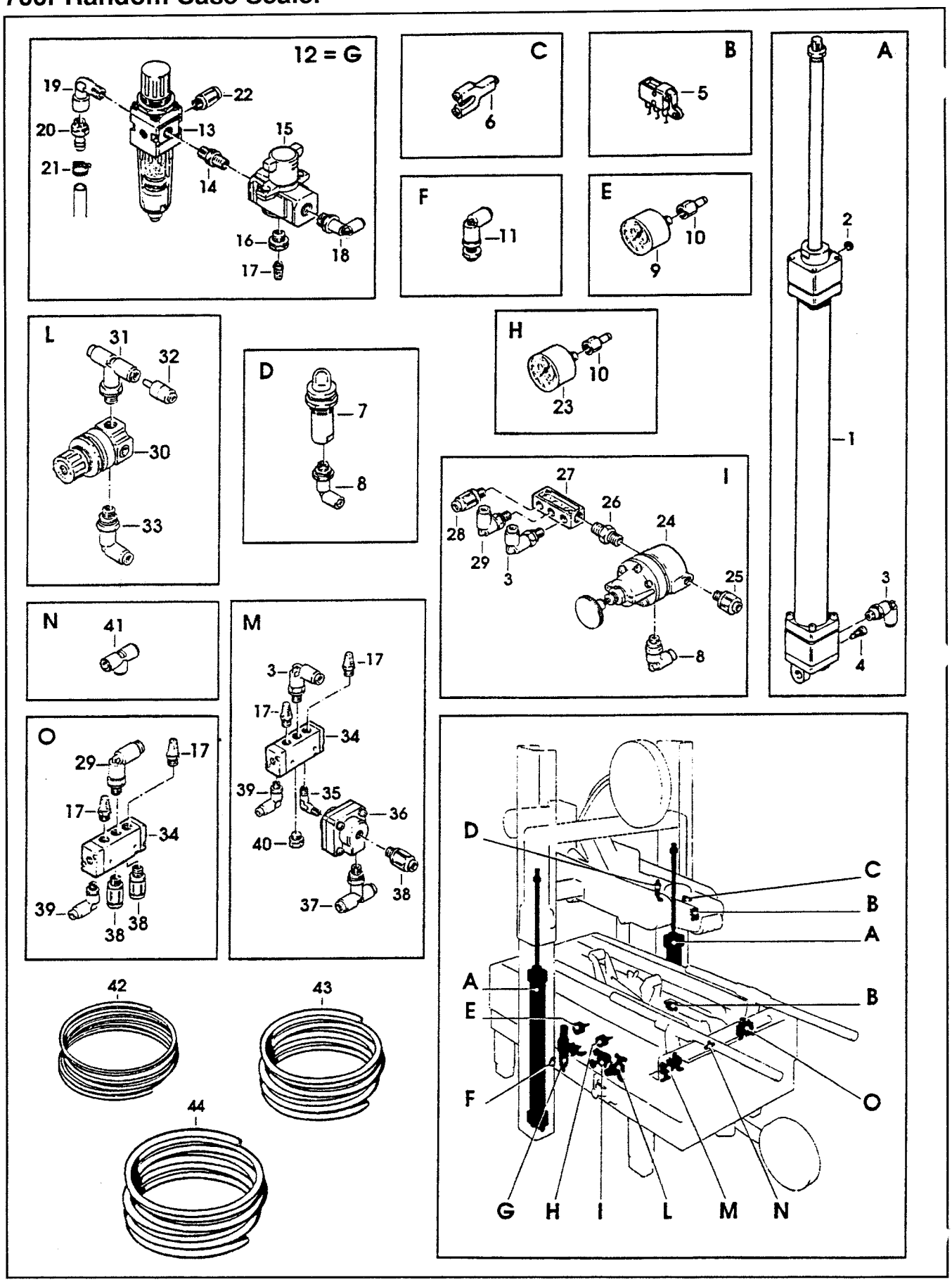

Figure 3439

Figure 3439

Ref. No.	3M Part No.	Description
3439-1	78-8076-4663-9	Cylinder – Air /32 x 580 + 20
3439-2	78-8094-6457-7	Cap – 1/8 Inch
3439-3	78-8091-0313-4	Elbow – 3199.08.10
3439-4	78-8076-4680-3	Screw – Cushioning, Cyl/32
3439-5	78-8060-8091-3	Valve – R/O-3-PK-3
3439-6	78-8076-4664-7	Union – Female
3439-7	78-8076-4665-4	Indicator – Visual
3439-8	26-1005-5909-0	Elbow
3439-9	78-8054-8838-0	Gauge – Air
3439-10	78-8076-4672-0	Union – Straight, Female
3439-11	78-8091-0350-6	Union – Special
3439-12	78-8091-0314-2	Filter – EAW 2000, W/O Gage
3439-13	~~78-8076-4668-8~~	Filter – Pressure Regulator 26-1014-4558-8
3439-14	78-8060-7899-0	Nipple – RA 012 1/4 - 1/4
3439-15	78-8076-4669-6	Valve – 3-Way
3439-16	78-8076-4670-4	Reduction – 3/8 - 1/8
3439-17	26-1005-6890-1	Muffler
3439-18	78-8091-0315-9	Elbow – 3199.08.13
3439-19	78-8060-7900-6	Union – RA 002 1/4 - 1/4
3439-20	26-1005-6897-6	Hose Connector
3439-21	78-8091-0430-6	Clamp – /14-24
3439-22	78-8060-7853-7	Union – Straight MR12-04-18
3439-23	78-8076-4671-2	Gauge – Pressure
3439-24	78-8076-4673-8	Regulator – Pressure
3439-25	26-1005-6901-6	Union – Straight
3439-26	78-8076-4674-6	Nipple – 1/4 - 1/8
3439-27	78-8059-5633-7	Air Distributor
3439-28	78-8091-0316-7	Union – Straight, 3101.08.10
3439-29	26-1005-6893-5	Elbow – 90°
3439-30	78-8076-4675-3	Regulator – 0,5-7 Bar
3439-31	78-8076-4676-1	Union
3439-32	78-8057-5735-4	Fitting – Reducer MR25-04-06
3439-33	78-8055-0756-9	Union – Rotating MR41-06-14
3439-34	78-8076-4677-9	Valve – V2A 5120-01
3439-35	78-8017-9426-0	Elbow – 90°, 1/8 M x 1/8 M
3439-36	78-8076-4678-7	Valve – Quick Exhaust
3439-37	78-8091-0317-5	Union – Tee, 3198.08.10
3439-38	26-1005-6910-7	Union – Straight
3439-39	78-8057-5732-1	Fitting – Elbow MR41-04-05
3439-40	78-8060-7690-3	Cap – B-1/8
3439-41	78-8076-4679-5	Union – Tee
3439-42	78-8060-8033-5	Skein Tubing – 5 m D4/3
3439-43	78-8060-8034-3	Skein Tubing – 5 m D6/4
3439-44	78-8076-4911-2	Tubing – D8 x 6, 5 Mt.
3439-45	78-8060-8175-4	Repair Kit for Cylinder /32

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Replacement Parts – Illustrations and Parts Lists

700r Random Case Sealer, Type 29200

Taping Head Assemblies

1. Refer to **Taping Head Assemblies** Figure to find all the parts illustrations identified by **figure numbers.**

2. Refer to the **Figure or Figures** to determine the **individual parts** required and the **parts reference number.**

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

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

4. Refer to page 45 - "**Replacement Parts and Service Information**" of this manual for replacement parts ordering information.

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

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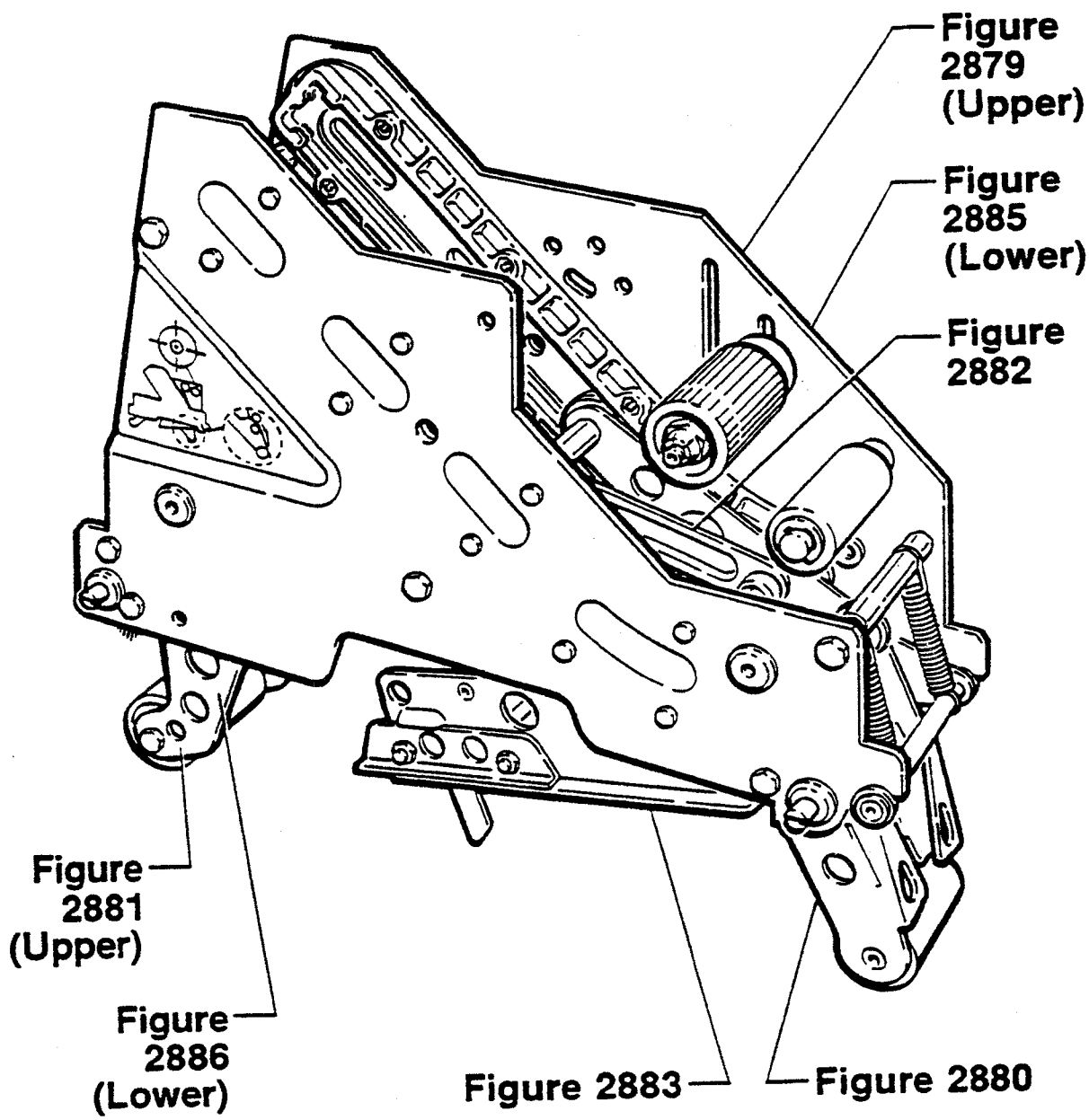
Taping Heads - 2 Inch, Upper and Lower



Taping Head Assemblies

Taping Head - 2 Inch

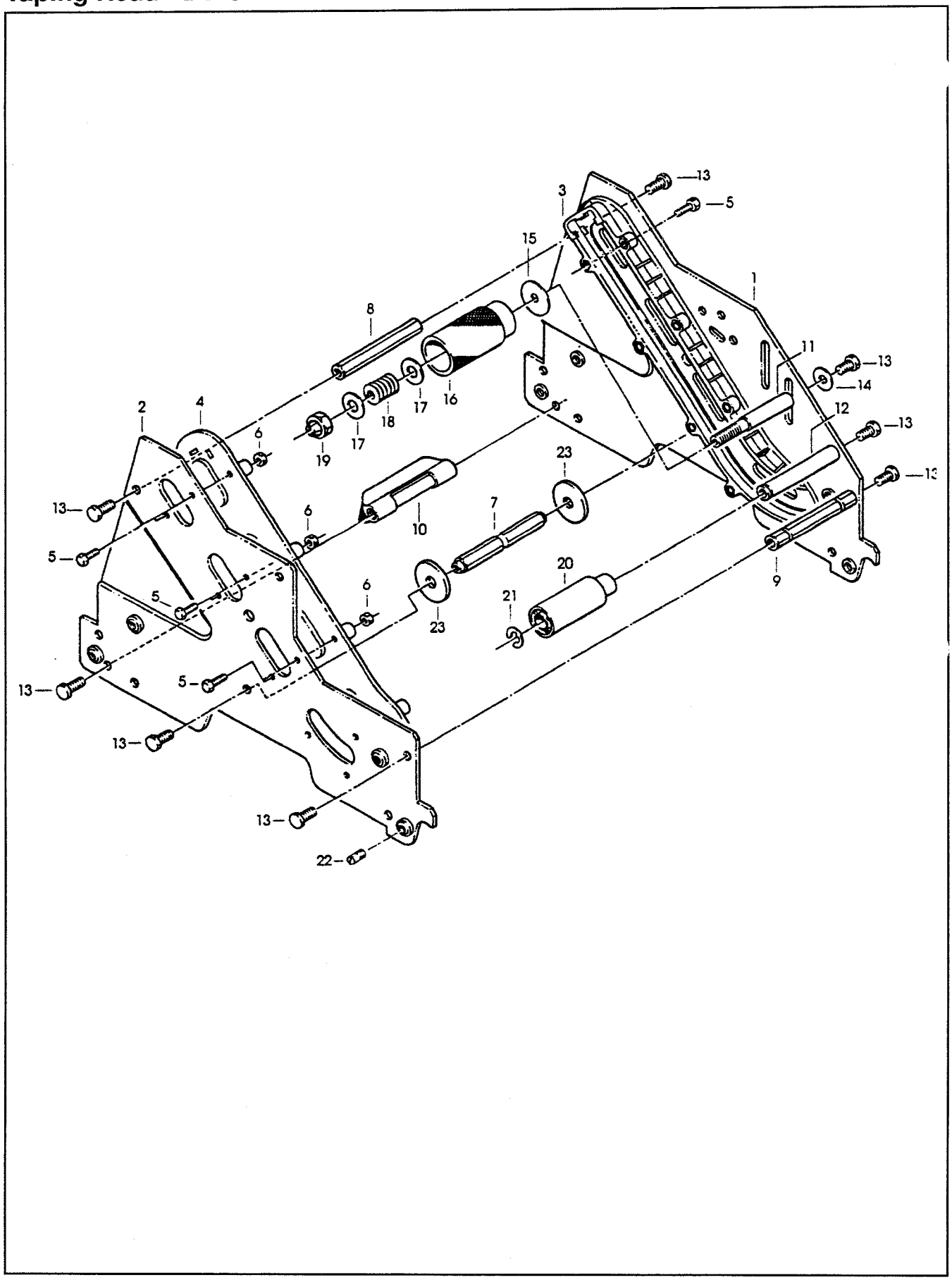


Figure 2879 Upper

Figure 2879 Upper

Ref. No.	3M Part No.	Description
2879-1	78-8070-1386-3	Frame – Tape Mount Upper Assembly
2879-2	78-8070-1387-1	Frame – Front Upper Assembly
2879-3	78-8068-4143-9	Guide – #1
2879-4	78-8068-4144-7	Guide – #2
2879-5	83-0002-7336-3	Screw – Hex Hd, M4 x 14
2879-6	78-8010-7416-8	Nut – Hex Jam, M4
2879-7	78-8070-1251-9	Spacer – Spring
2879-8	78-8052-6559-8	Spacer – Upper
2879-9	78-8052-6560-6	Spacer – Front
2879-10	78-8060-7936-0	Brush Assembly
2879-11	78-8052-6564-8	Shaft – Tension Roller
2879-12	78-8052-6568-9	Shaft – Wrap Roller
2879-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
2879-14	26-1000-0010-3	Washer – Plain, M6
2879-15	78-8070-1268-3	Washer – Roll Back Up
2879-16	78-8052-6565-5	Roller – Top Tension
2879-17	78-8052-6566-3	Washer – Friction
2879-18	78-8052-6567-1	Spring – Compression
2879-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
2879-20	78-8052-6569-7	Roller – Wrap
2879-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
2879-22	78-8076-4500-3	Stud – Mounting
2879-23	78-8076-5242-1	Stop – Cut-Off Frame

Taping Head - 2 Inch

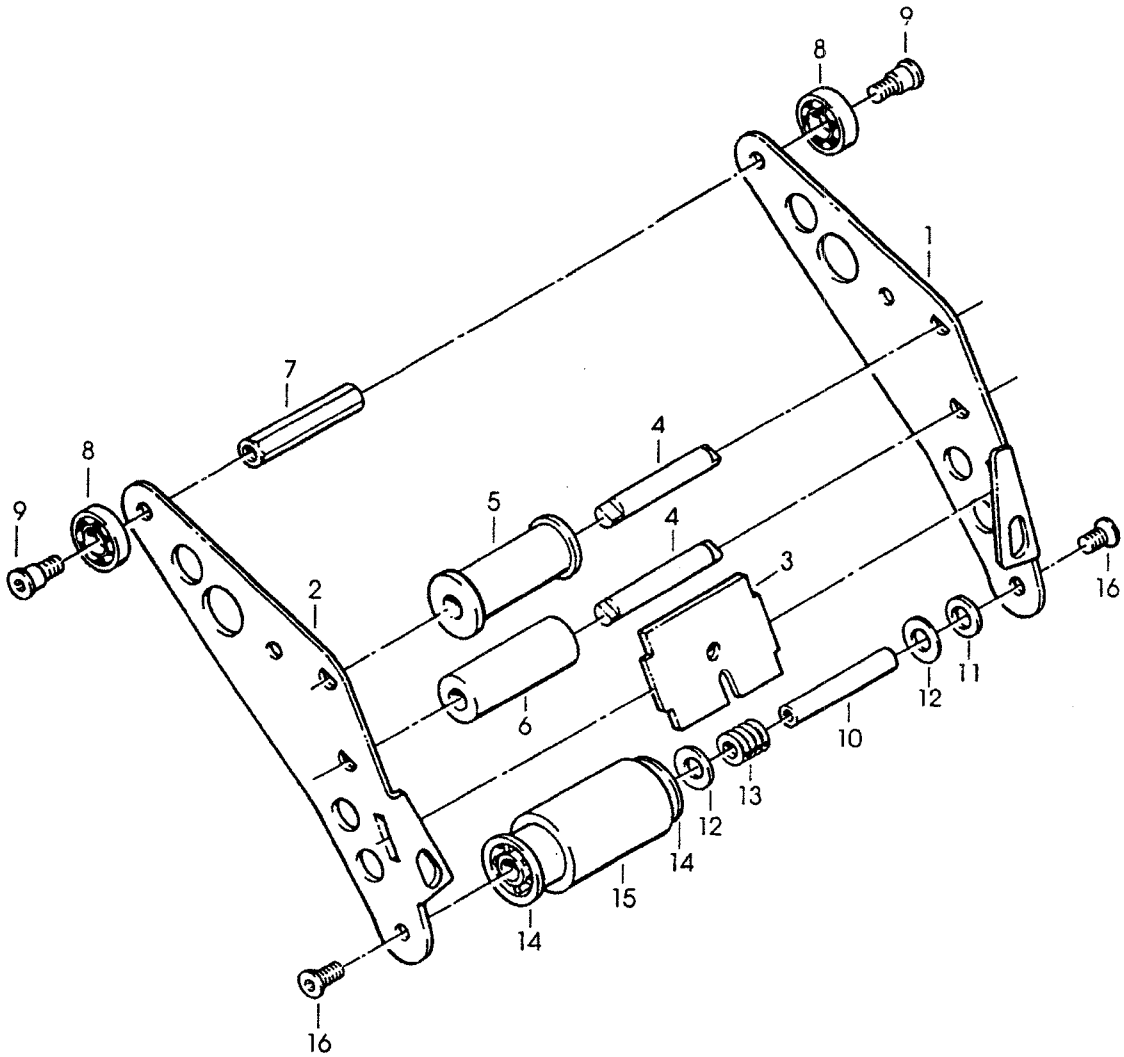


Figure 2880

Figure 2880

Ref. No.	3M Part No.	Description
2880-1	78-8070-1206-3	Applying Arm #1
2880-2	78-8070-1207-1	Applying Arm #2
2880-3	78-8070-1221-2	Plate – Tape
2880-4	78-8070-1309-5	Shaft Roller
2880-5	78-8070-1367-3	Roller – Knurled Assembly
2880-6	78-8070-1266-7	Roller – Wrap
2880-7	78-8052-6580-4	Spacer
2880-8	78-8017-9082-1	Bearing – Special, 30 mm
2880-9	78-8017-9106-8	Screw – Bearing Shoulder
2880-10	78-8052-6575-4	Shaft – Roller
2880-11	78-8017-9074-8	Washer – Nylon, 15 mm
2880-12	78-8052-6566-3	Washer – Friction
2880-13	78-8052-6567-1	Spring – Compression
2880-14	78-8060-8395-8	Bushing – Applying Roller
2880-15	78-8057-6179-4	Roller – Applying
2880-16	26-1005-4759-0	Screw – Flat Hd, M6 x 12

Taping Head - 2 Inch

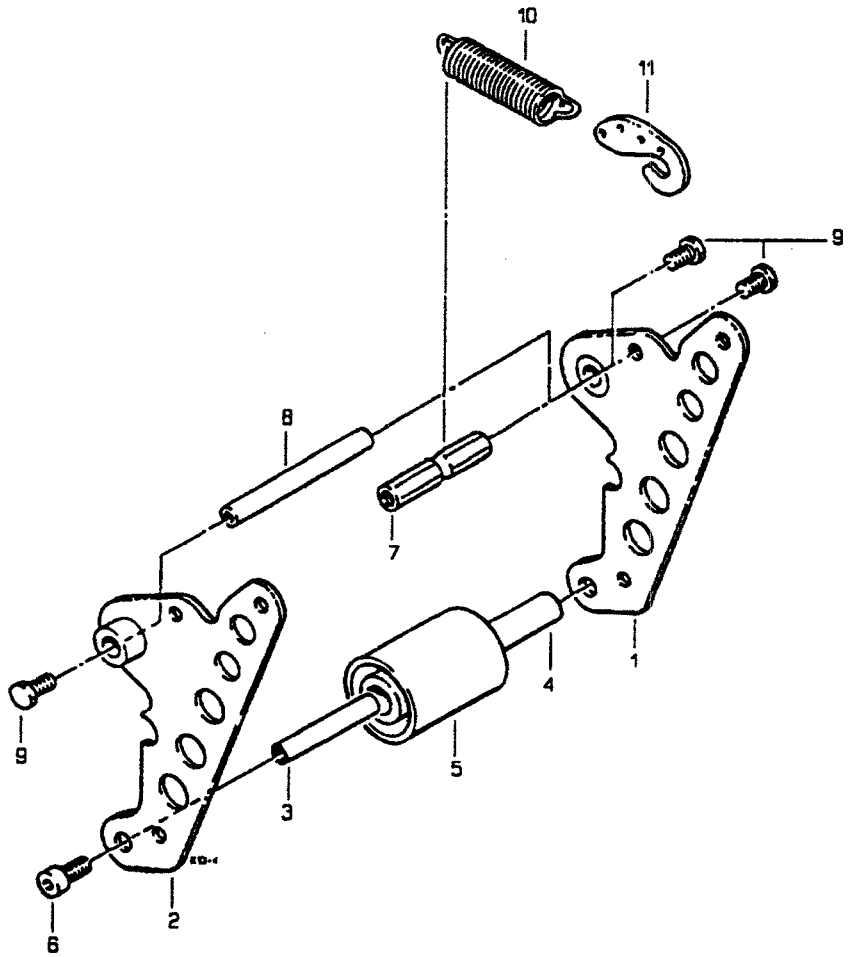


Figure 2881 Upper

Figure 2881 Upper

Ref. No.	3M Part No.	Description
2881-1	78-8070-1392-1	Buffing Arm – Sub Assembly
2881-2	78-8070-1391-3	Buffing Arm – Sub Assembly
2881-3	78-8052-6575-4	Shaft – Roller
2881-4	78-8052-6586-1	Bushing – Buffing Roller
2881-5	78-8057-6178-6	Roller – Buffing
2881-6	26-1003-5828-7	Screw – Hex Hd, M6 x 10
2881-7	78-8070-1220-4	Spacer – Spring
2881-8	78-8017-9109-2	Shaft – 10 x 90 mm
2881-9	26-1003-5829-5	Screw – Hex Hd, M6 x 12
2881-10	78-8070-1274-1	Spring – Upper (Silver)
2881-11	78-8070-1244-4	Holder – Spring

Taping Head - 2 Inch

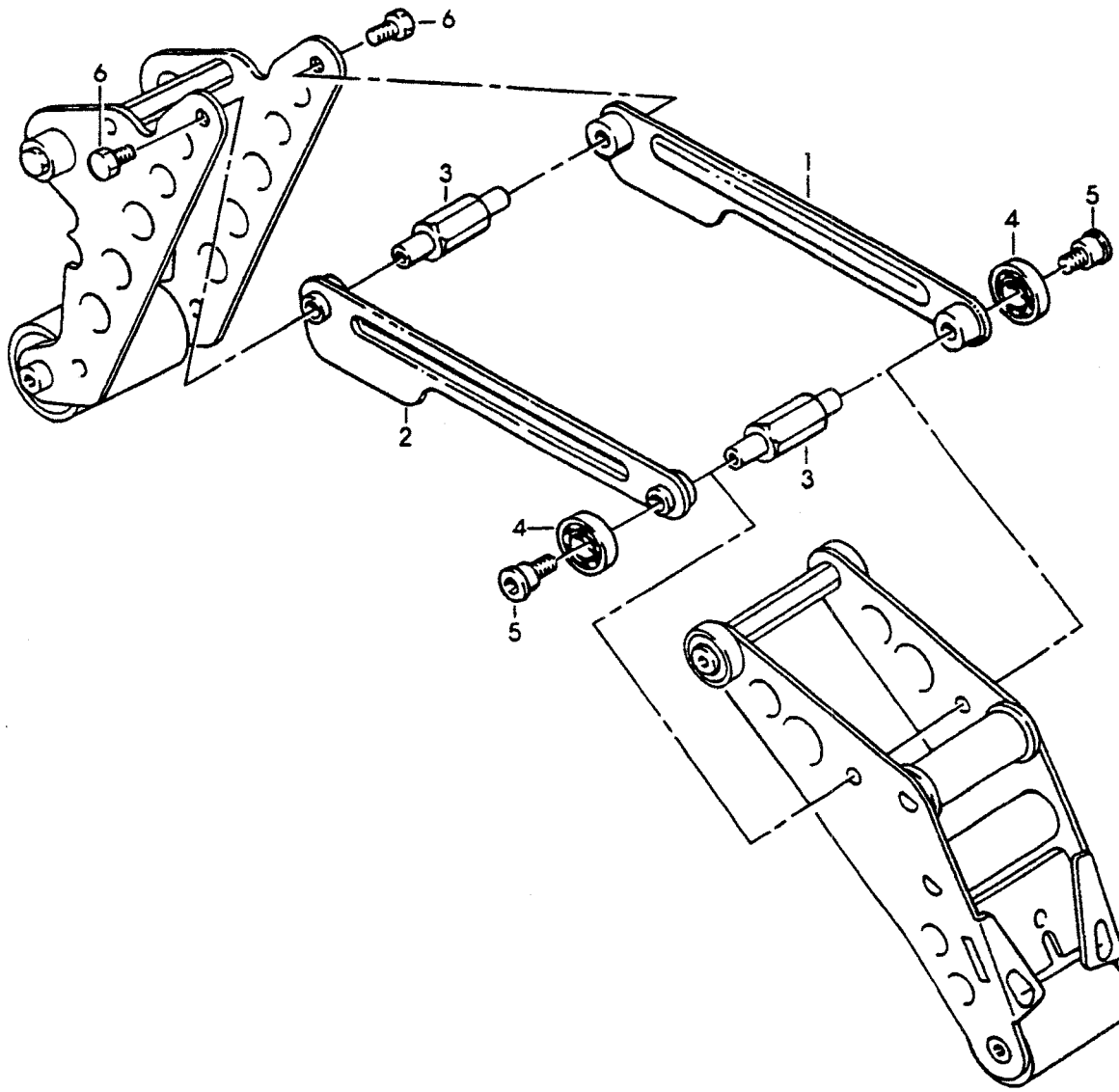


Figure 2882

Figure 2882

Ref. No.	3M Part No.	Description
2882-1	78-8070-1388-9	Link – Arm Bushing Assembly
2882-2	78-8070-1389-7	Link – Arm Bushing Assembly
2882-3	78-8070-1271-7	Shaft – Pivot
2882-4	78-8017-9082-1	Bearing – Special 30 mm
2882-5	78-8017-9106-8	Screw – Bearing Shoulder
2882-6	26-1003-5829-5	Screw – Hex Hd, M6 x 12

Taping Head - 2 Inch

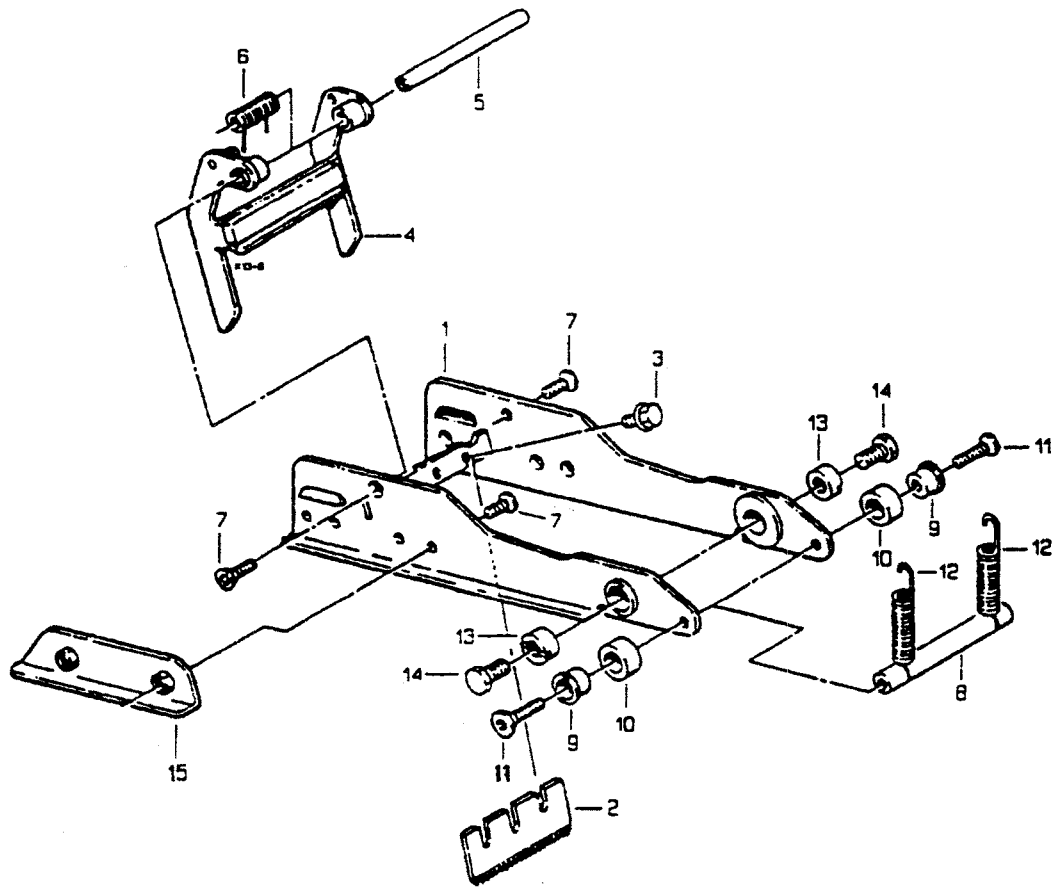


Figure 2883

Figure 2883

Ref. No.	3M Part No.	Description
2883-1	78-8070-1217-0	Frame – Cut-Off Weldment
2883-2	78-8017-9173-8	Blade – 65 mm/2.56 Inch
2883-3	26-1002-5817-2	Screw – Hex Hd, M5 x 8
2883-4	78-8070-1371-5	Guard – Blade Assembly
2883-5	78-8052-6597-8	Shaft – Blade Guard
2883-6	78-8070-1390-5	Spring – Torsion
2883-7	26-1005-4758-2	Screw – Flat Hd, Soc Dr, M4 x 10
2883-8	78-8017-9135-7	Shaft – Spacer
2883-9	78-8052-6600-0	Spacer
2883-10	78-8070-1269-1	Bumper
2883-11	26-1005-4757-4	Screw – Flat Hd, Soc Dr, M5 x 20
2883-12	78-8052-6602-6	Spring – Cutter
2883-13	78-8017-9132-4	Pivot – Cutter Lever
2883-14	26-1003-5828-7	Screw – Spec, Hex Hd, M6 x 10
2883-15	78-8070-1216-2	Slide – Extension
2883-16	26-1008-6574-5	Screw – Flat Hd, Phil Dr, M4 x 10

Taping Head - 2 Inch

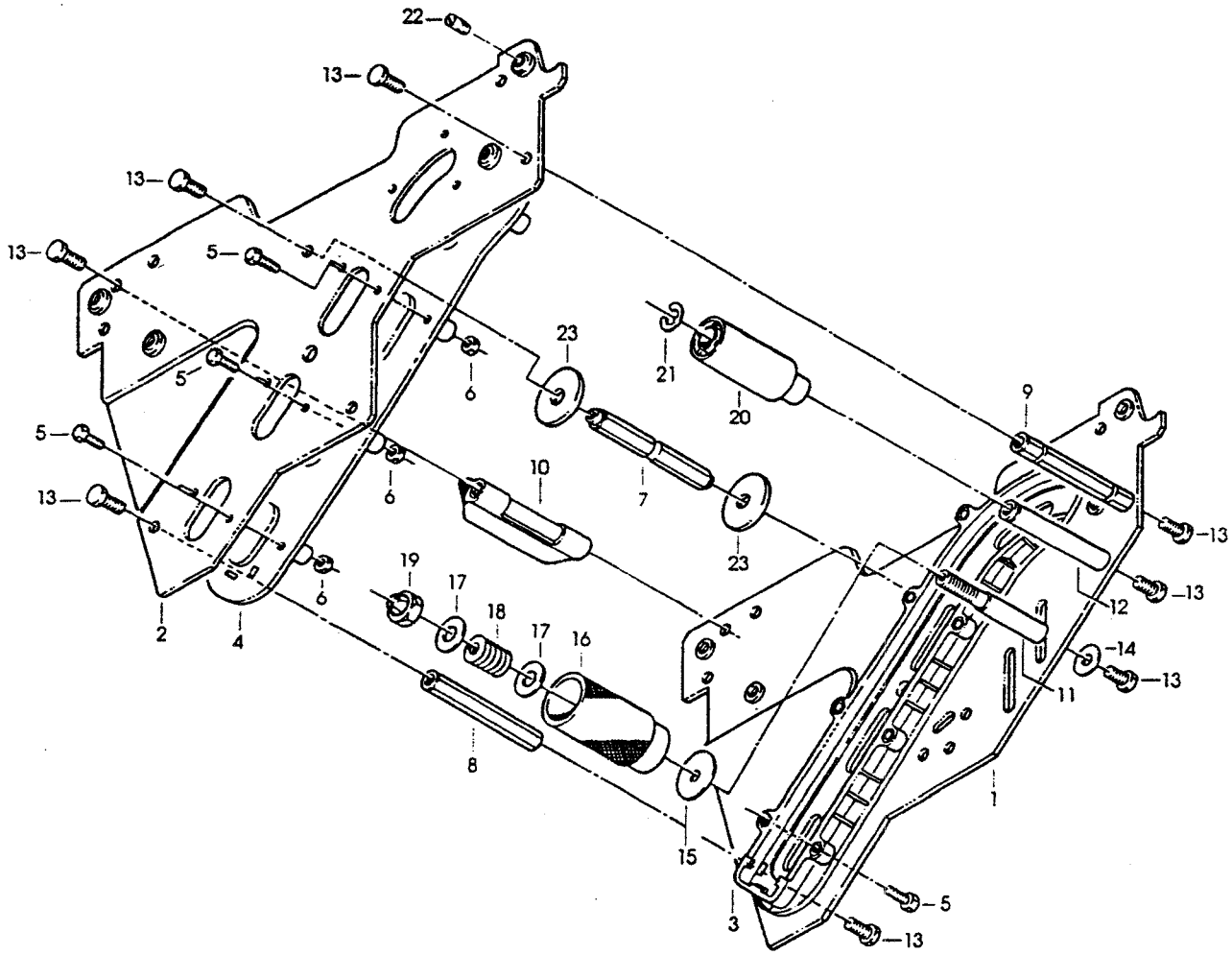


Figure 2885 Lower

Figure 2885 Lower

No.	3M Part No.	Description
2885-1	78-8070-1369-9	Frame – Tape Mount Lower Assembly
2885-2	78-8070-1370-7	Frame – Front Lower Assembly
2885-3	78-8068-4144-7	Guide – #2
2885-4	78-8068-4143-9	Guide – #1
2885-5	83-0002-7336-3	Screw – Hex Hd, M4 x 14
2885-6	78-8010-7416-8	Nut – Hex, M4
2885-7	78-8070-1251-9	Spacer – Spring
2885-8	78-8052-6559-8	Spacer – Upper
2885-9	78-8052-6560-6	Spacer – Front
2885-10	78-8060-7936-0	Brush Assembly
2885-11	78-8052-6564-8	Shaft – Tension Roller
2885-12	78-8052-6568-9	Shaft – Wrap Roller
2885-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
2885-14	26-1000-0010-3	Washer – Plain, M6
2885-15	78-8070-1268-3	Washer – Roll Back Up
2885-16	78-8052-6606-7	Roller – Tension Bottom
2885-17	78-8052-6566-3	Washer – Friction
2885-18	78-8052-6567-1	Spring – Compression
2885-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
2885-20	78-8052-6569-7	Roller – Wrap
2885-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
2885-22	78-8076-4500-3	Stud – Mounting
2885-23	78-8076-5242-1	Stop – Cut-Off Frame
2885-24	78-8076-4991-4	Spacer

Taping Head - 2 Inch

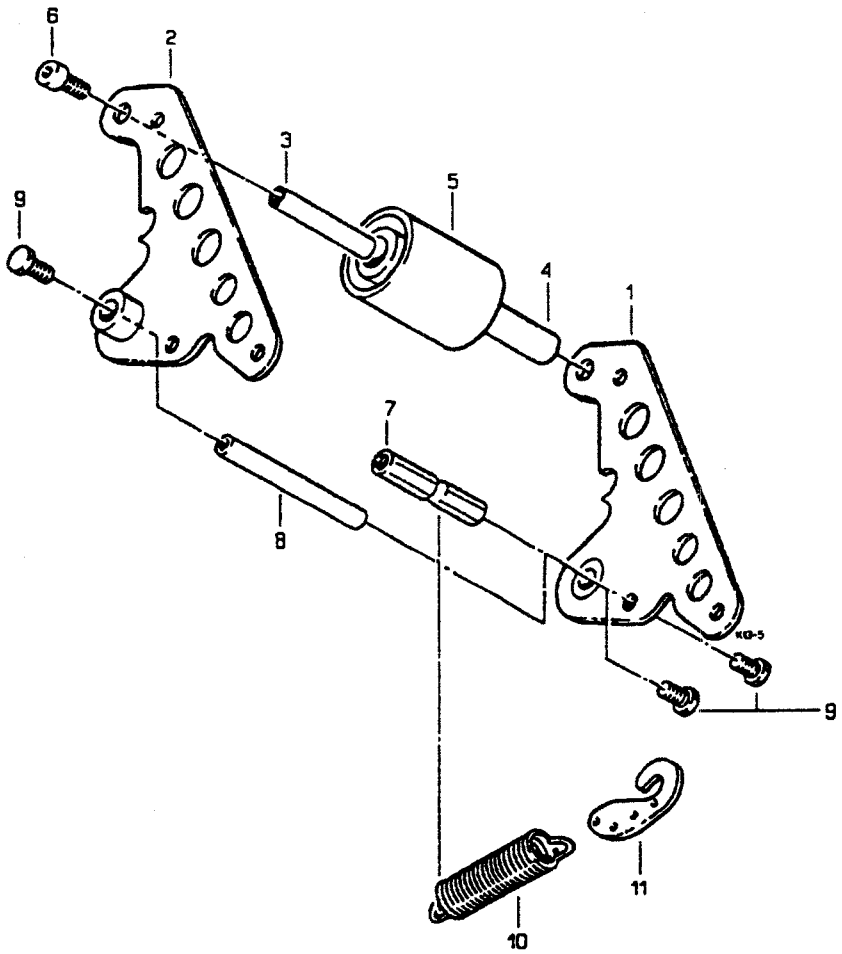


Figure 2886 Lower

Figure 2886 Lower

Item No.	3M Part No.	Description
2886-1	78-8070-1391-3	Buffing Arm Sub Assembly
2886-2	78-8070-1392-1	Buffing Arm Sub Assembly
2886-3	78-8052-6575-4	Shaft – Roller
2886-4	78-8052-6586-1	Bushing – Buffing Roller
2886-5	78-8057-6178-6	Roller – Buffing
2886-6	26-1003-5828-7	Screw – Hex Hd, M6 x 12
2886-7	78-8070-1220-4	Spacer – Spring
2886-8	78-8017-9109-2	Shaft – 10 x 90 mm
2886-9	26-1003-5829-5	Screw – Hex Hd, M6 x 12
2886-10	78-8070-1273-3	Spring – Lower (Black)
2886-11	78-8070-1244-4	Holder – Spring