Instructions and Parts List

3M-Matic™ 700rks Type 40800 Random Case Sealer with AccuGlide™ 3 Taping Heads

Important Safety Information

BEFORE INSTALLING OR OPERATING THIS EQUIPMENT
Read, understand, and follow all safety and operating instructions.

Spare Parts

It is recommended you immediately order the spare parts listed in the "Spare Parts/Service Information" section. These parts are expected to wear through normal use, and should be kept on hand to minimize production delays.

Serial No._____
For reference, record machine serial number here.

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, adjustments, maintenance, troubleshooting, repair work and servicing plus parts list of the **3M-Matic™ 700rks-NA** Random case sealer.

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

Edition January 2010

The manufacturer reserves the right to change the product at any time without notice.

To Our Customers:

This is the 3M-Matic™/AccuGlide™/Scotch® equipment you ordered. It has been set up and tested in the factory with Scotch® 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 / Replacement Parts and Additional Manuals:

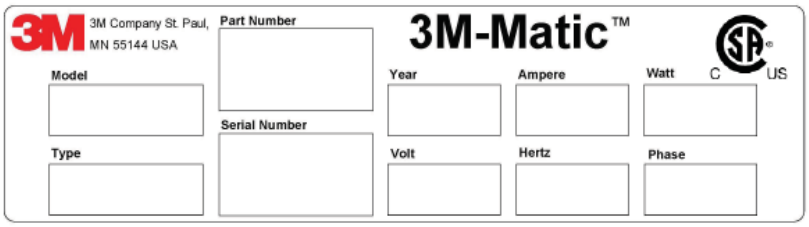
Contact your local service provider. Provide the customer support coordinator with the model/machine name, machine type, and serial number that are located on the identification plate (For example: Model 700rks - Type 40800 - Serial Number 13282).

Replacement Parts and Additional Manuals

Order parts by part number, part description, and quantity required.
When ordering parts or additional manuals, include model/machine name, machine type, and serial number that are located on the identification plate (For example: Model 700rks - Type 40800 - Serial Number 13282).

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

1-800-344-9883
Fax: 1-715-268-8153



Identification Plate

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

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

Printed in U.S.A.

THIS PAGE IS BLANK

To Our Customers:

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

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

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

Order parts by part number, part description, and quantity required. Also, when ordering parts or additional manuals, include model/machine name, machine type, and serial number that are located on the identification plate.

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

Printed in U.S.A.

THIS PAGE IS BLANK

TABLE OF CONTENTS - MANUAL 1: 700rks Random Case Sealer
(For Taping Head Information - See MANUAL 2: AccuGlide™ 3 Taping Heads - 3 inch)

700rks Random Case Sealer **Page**

THIS PAGE IS BLANK

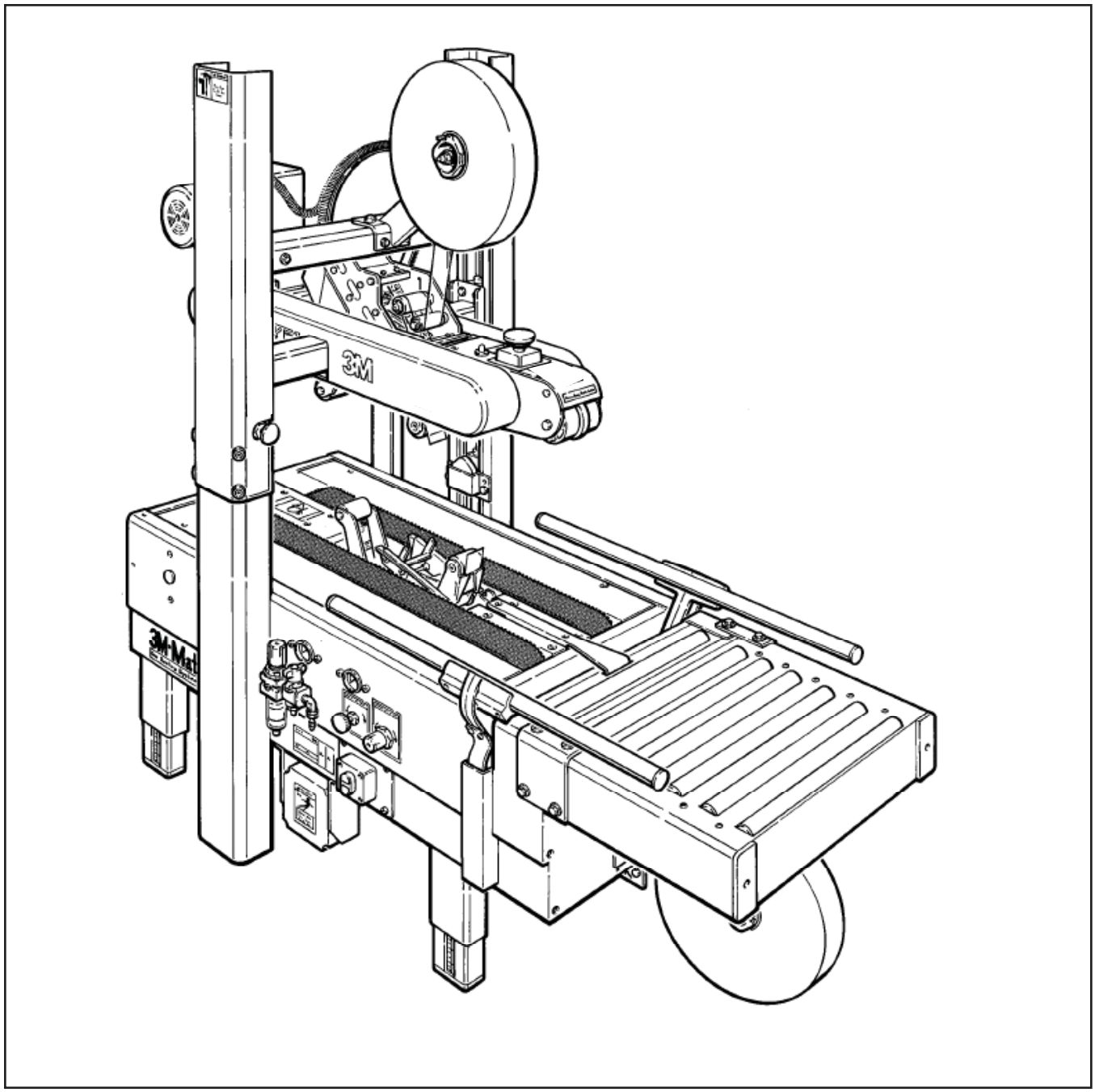
THIS PAGE IS BLANK

LIST OF ABBREVIATIONS, ACRONYMS

3M-Matic	- Trademark of 3M St. Paul, MN 55144- 1000
AccuGlide	- Trademark of 3M St. Paul, MN 55144-1000
Scotch	- Trademark of 3M St. Paul, MN 55144-1000
Drw.	- drawing
Ex.	- for example
Fig.	- exploded view figure no. (spare parts)
Figure	- Illustration
Max.	- maximum
Min.	- minimum
Nr.	- number
N/A	- not applicable
OFF	- machine not operating
ON	- machine operating
PLC	- Programmable Logic Control
PP	- Polypropylene
PTFE	- Polytetraflourethelene
PVC	- Poly-vinyl chloride
W	- Width
H	- Height
L	- Length

1.1 Manufacturing Specifications / Description / Intended Use

The **3M-Matic™ 700rks Random Case Sealer** with **AccuGlide™ 3** Taping Heads is designed to apply a “C” clip of **Scotch®** pressure-sensitive film box sealing tape to the top and bottom center seam of regular slotted containers. The 700rks is adjustable to a wide range of box sizes (see "Specifications Section – Box Weight and Size Capacities").



3M-Matic™ 700rks Random Case Sealer, Type 40800

Note – Shown above is the lower tape supply roll and bracket assembly in the alternate location.

1.1 Manufacturing Specifications / Description / Intended Use (continued)

The 3M-Matic™ case sealing machines have been designed and manufactured following the "Machine Directives 89/392 in compliance with the legal requirements at the date of inception.

1.2 How to Read and Use the Instruction Manual

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, set-up and adjustments, technical and manufacturing specifications, maintenance, troubleshooting, repair work and servicing, electric diagrams, warranty information, disposal a definition of symbols, plus a parts list of the 3M-Matic™ 700rks Random case sealer 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition January 2010 Copyright 3M 2010 All rights reserved The manufacturer reserves the right to change the product at any time without notice Publication © 3M 2010 44-0009-2079-1.

1.2.1 Importance of the Manual

The manual is an important part of the machine; all information contained herein is intended to enable the equipment to be maintained in perfect condition and operated safely. Ensure that the manual is available to all operators of this equipment and is kept up to date with all subsequent amendments. Should the equipment be sold or disposed of, please ensure that the manual is passed on. Electrical and pneumatic diagrams are included in the manual. Equipment using PLC controls and/or electronic components will include relevant schematics or programs in the enclosure and in addition, the relevant documentation will be delivered separately.

1.2.2 Manual Maintenance

Keep the manual in a clean and dry place near the machine. Do not remove, tear, or rewrite parts of the manual for any reason. Use the manual without damaging it. In case the manual has been lost or damaged, ask your after sale service for a new copy.

1.2.3 Consulting the Manual

The manual is composed of:

- Pages which identify the document and the machine
- Index of the subjects
- Instructions and notes on the machine
- Enclosures, drawings and diagrams
- Spare parts (last section)

All pages and diagrams are numbered. The spare parts lists are identified by the figure identification number. All the notes on safety measures or possible dangers are identified by the symbol:

1.2.4 How to Update the Manual in Case of Modifications to the Machine

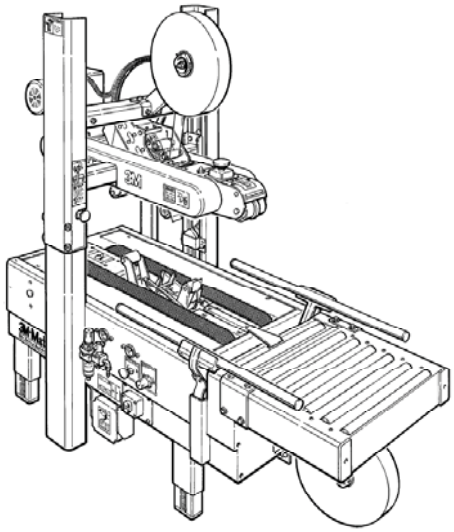
Modifications to the machine are subject to manufacturer's internal procedures. The user receives a complete and up-to-date copy of the manual together with the machine. Afterwards the user may receive pages or parts of the manual which contain amendments or improvements made after its first publication. The user must use them to update this manual.

2.1 Data Identifying Manufacturer and Machine

3M

3M Industrial Adhesives and Tapes

3M Center Bldg. 220-5E-06
St. Paul, MN 55144-1000 (USA)



3M Company St. Paul, MN 55144 USA

Part Number

3M-Matic™

Model

Year

Ampere

Watt

Serial Number

Type

Volt

Hertz

Phase

2.2 Data for Technical Assistance and Service

AGENT/DISTRIBUTOR OR LOCAL AFTER SALE SERVICE:

2.3 Warranty

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

3M sells its **3M-Matic™ 700rks Random Case Sealer, Type 40800** with the following warranties:

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

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

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

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

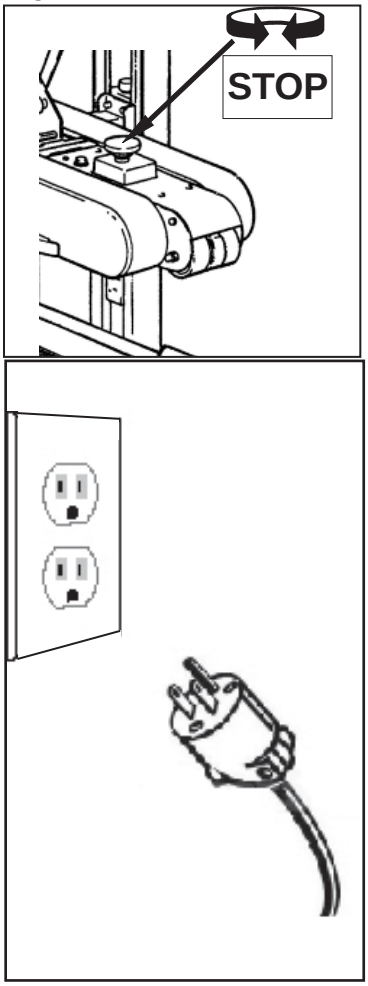
Contents—700rks Random Case Sealer

(1) 700rks Random Case Sealer, Type 40800
(1) Tool/Spare Parts Kit
(1) Instruction and Parts Manual

3.1 General Safety Information

Read all the instructions carefully before starting work with the machine; please pay particular attention to sections marked by the symbol:

Figure 3-1



The machine is provided with a LATCHING EMERGENCY STOP BUTTON **(Figure 3-1)**; when this button is pressed, it stops the machine at any point in the working cycle. Maintain clear access to power cord while machine is operating. Disconnect plug from power source before machine maintenance **(Figure 3-1).** Also disconnect air if the machine has a pneumatic system. Keep this manual in a handy place near the machine. This manual contains information that will help you to maintain the machine in a good and safe working condition.

3.2 Explanation of Signal Word and Possible Consequences

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

CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.

3.3 Table of Warnings

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.
  - Allow only properly trained and qualified personnel to operate and service this equipment.

WARNING

- **To reduce the risk associated with hazardous voltage:**
  - Position electrical cord away from foot and vehicle traffic.

WARNING

- **To reduce the risk associated with pinches, entanglement and hazardous voltage:**
  - Turn electrical supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads.

WARNING

- **To reduce the risk associated with pinches and entanglement hazards:**
  - Do not leave the machine running while unattended.
  - Turn the machine off when not in use.
  - Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running.

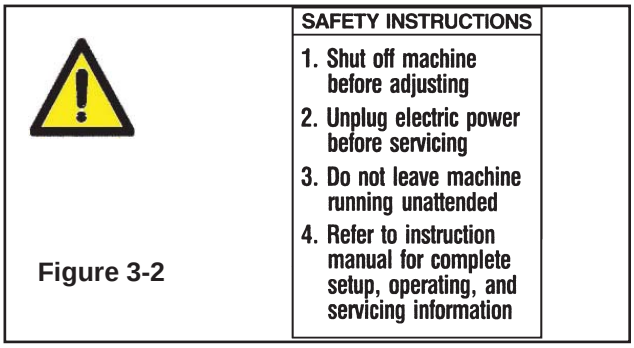


Figure 3-2

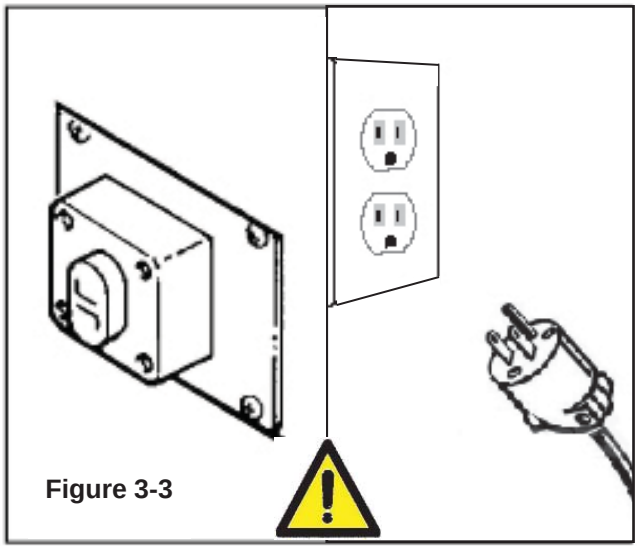


Figure 3-3

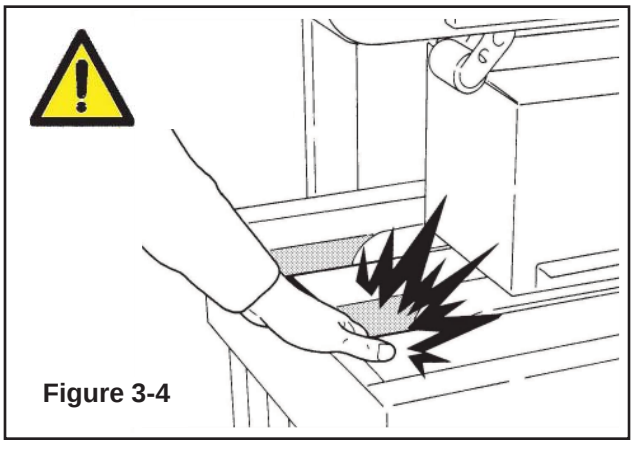


Figure 3-4

IMPORTANT! Cavity in the conveyor bed. Never put your hands inside any part of the machine while it is working**.** Serious injury may occur **(Figure 3-4)**.

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

IMPORTANT! Tape cutting blade. Never remove the safety device which covers the blade on the top and bottom taping units. Blades are extremely sharp. Any error may cause serious injuries **(Figure 3-5).**

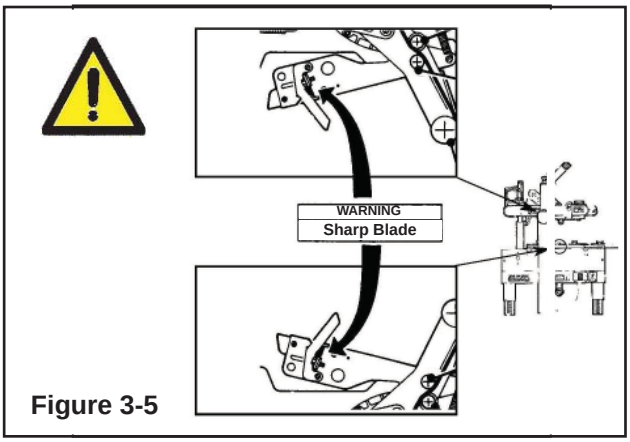


Figure 3-5

WARNING

- **To reduce the risk associated with fire and explosion hazards:**
  - Do not operate this equipment in potentially flammable/explosive environments.

WARNING

- **To reduce the risk associated with muscle strain:**
  - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

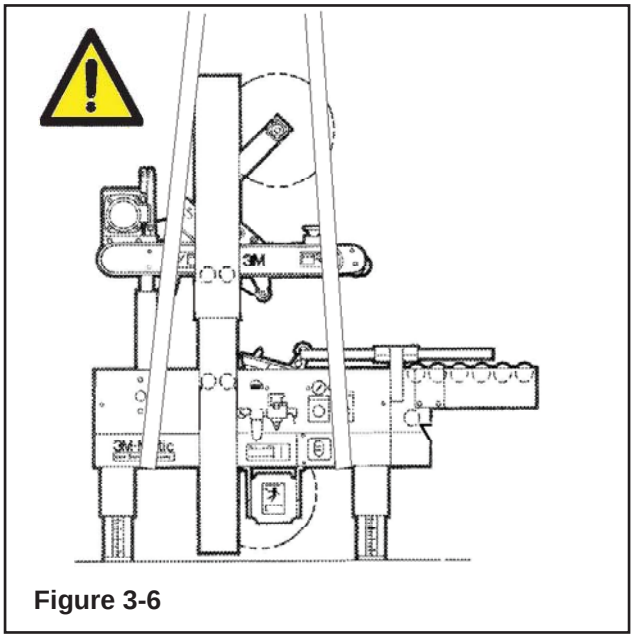


Figure 3-6

CAUTION

- **To reduce the risk associated with pinches hazards:**
  - Keep hands clear of the upper head support assembly as boxes are transported through the machine.
  - Keep hands, hair, loose clothing, and jewelry away from box compression rollers.
  - Always feed boxes into the machine by pushing only from the end of the box.
  - Keep hands, hair, loose clothing, jewelry away from moving belts and taping heads.

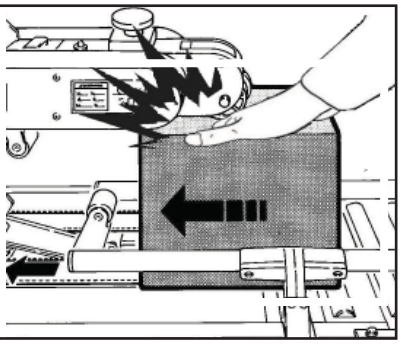


Figure 3-7

IMPORTANT! Side flap compression rollers. Never keep hands on the box while it is driven by the belts **(Figure 3-7).**

IMPORTANT! Drive belts. Never work on the machine with loose hair or loose garments such as scarfs, ties or sleeves. Although protected, the drive belts may be dangerous **(Figure 3-8).**

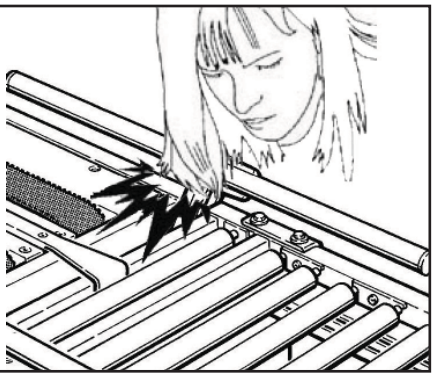


Figure 3-8

3.4 Operator's Qualifications

- Machine Operator
- Mechanical Maintenance Technician
- Electrical Maintenance Technician
- Manufacturer's Technician/Specialist
  (See Section 3.11)

3.5 Number of Operators

The operations described below have been analyzed by the manufacturer; the recommended number of operators for each operation provides the best and safest work performance.

Note: A smaller or greater number of operators could be unsafe.

3.6 Instructions for a Safe Use of the Machine / Definition of Operator's Qualifications

Only persons who have the skills described in the skill levels section should be allowed to work on the machine. It is the responsibility of the user to appoint the operators having the appropriate skill level and the appropriate training for each category of job.

3.7 Residual Hazards

The case sealer 700rks incorporates various safety protections which should never be removed or disabled. It is essential that the operator and service personnel be warned that hazards exist which cannot be eliminated.

3.8 Recommendations and Measures to Prevent Other Hazards which Cannot be Eliminated

- The operator must stay on the working position shown in the Operation Section. He must never touch the running driving belts or put his hands inside any cavity.
- The operator must pay attention to the blades during the tape replacement.

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.
  - Allow only properly trained and qualified personnel to operate and service this equipment.

3.9 Personal Safety Measures

Safety glasses, safety gloves, safety helmet, safety shoes, air filters, ear muffs - None is required except when recommended by the user.

3.10 Predictable Actions which are Incorrect and Not Allowed

- Never try to stop/hold the box while being driven by the belts.
- Never remove or disable the safety devices.
- Only authorized personnel should be allowed to carry out the adjustments, repairs or maintenance which require operation with reduced safety protections. During such operations, access to the machine must be restricted. When the work is finished, the safety protections must immediately be reactivated.
- The cleaning and maintenance operations must be performed after disconnecting the electric power.
- Do not modify the machine or any part of it.
- Clean the machine using only dry cloths or light detergents. Do not use solvents, petrols, etc.
- Install the machine following the suggested layouts and drawings.

3.11 Operator's Skill Levels Required to Perform the Main Operations on the Machine

The Table shows the minimum operator's skill for each machine operation.

Important: The factory manager must ensure that the operator has been properly trained on all the machine functions before starting work.

Skill 1: Machine Operator
This operator is trained to use the machine with the machine controls, to feed cases into the machine, make adjustments for different case sizes, to change the tape and to start, stop and restart production.

Skill 2: Mechanical Maintenance Technician
This operator is trained to use the machine as the MACHINE OPERATOR and in addition is able to:
- Work with the safety protection disconnected
- Check and adjust mechanical parts
- Carry out machine maintenance operations/repairs

He is not allowed to work on live electrical components

Skill 2a: Electrical Maintenance Technician
This operator is trained to use the machine as the MACHINE OPERATOR and in addition is able to:
- Work with the safety protection disconnected
- Check and adjust mechanical parts
- Carry out machine maintenance operations / repairs / adjustments / repair electrical components

He is allowed to work on live electrical panels, connector blocks, control equipment, etc.

Skill 3: Specialist from the Manufacturer
Skilled operator sent by the manufacturer or its agent to perform complex repairs or modifications (on agreement with the customer).

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  – Allow only properly trained and qualified personnel to operate and service this machine

Operator's Skill Levels Required to Perform the Main Operations on Machine

Operation	Machine Status	Required Operator Skill	Number of Operators
Machine installation and setup	Running with safety protections disabled	2 and 2a	2
Adjusting box size	Stopped by pressing the EMERGENCY STOP button	1	1
Tape replacement	Stopped by pressing the EMERGENCY STOP button	1	1
Blade replacement	Electric power disconnected	2	1
Drive belt replacement	Electric power disconnected	2	1
Ordinary maintenance	Electric power disconnected	2	1
Extraordinary mechanical maintenance	Running with safety protections disabled	3	1
Extraordinary electrical maintenance	Running with safety protections disabled	2a	1

3.12 Component Locations

Refer to **Figure 3-9** below to acquaint yourself with the various components and controls of the case sealer. Also refer to Section 7 for controls, valves, and switch locations and Manual 2 for taping head components.

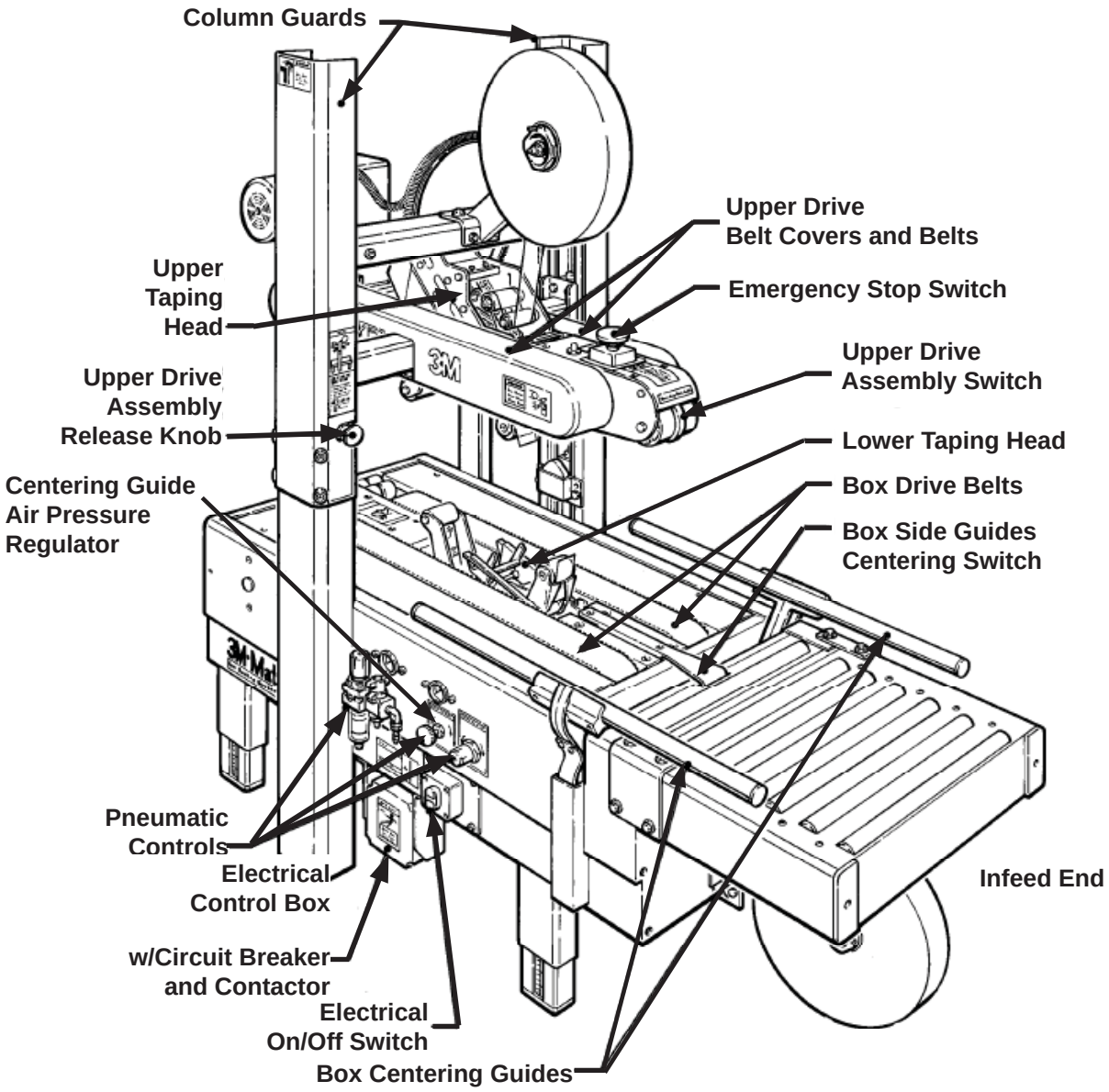


Figure 3-9—700rks Case Sealer Components (Left Front View)

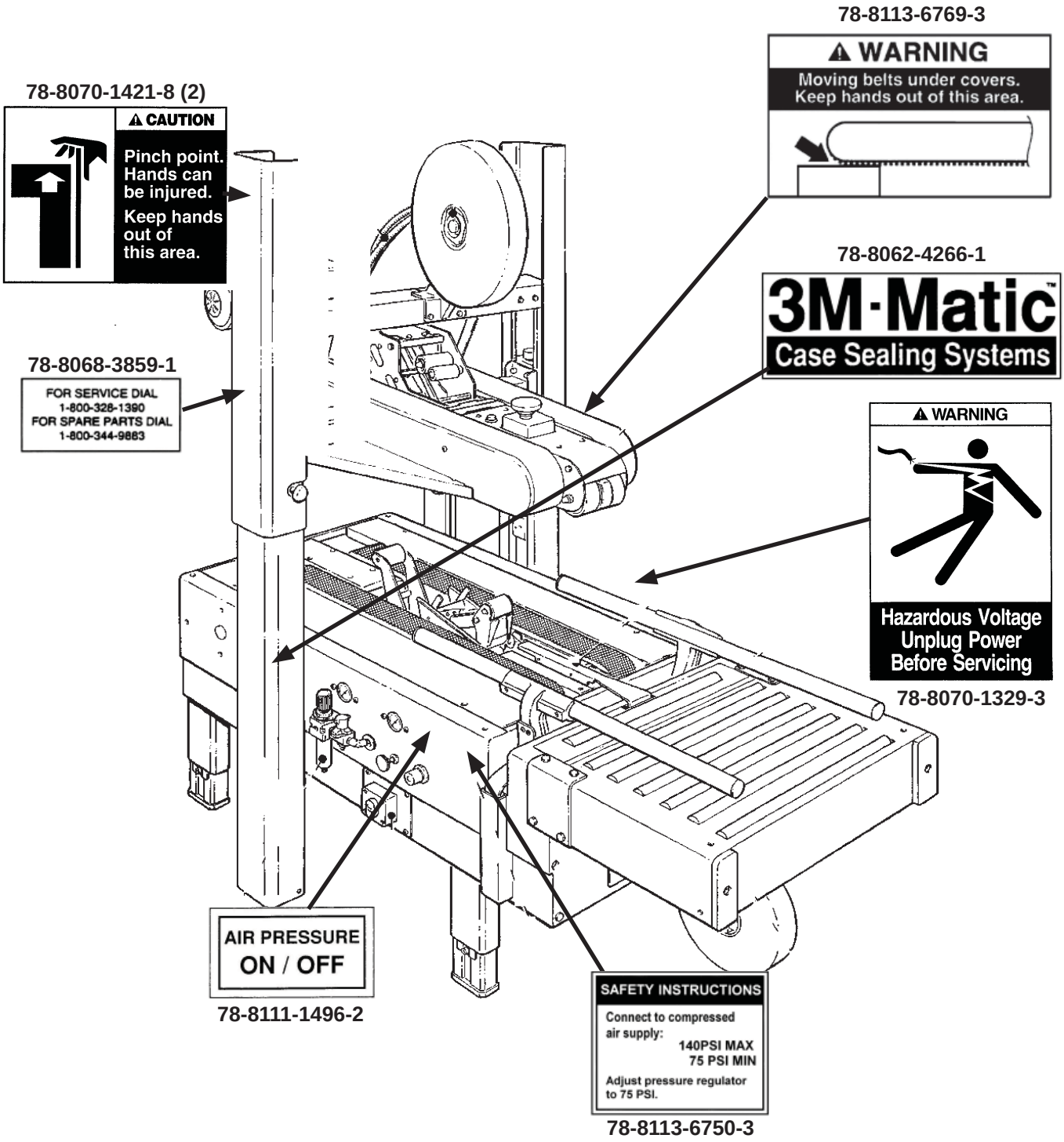


Figure 1-1 – Replacement Labels/3M Part Numbers

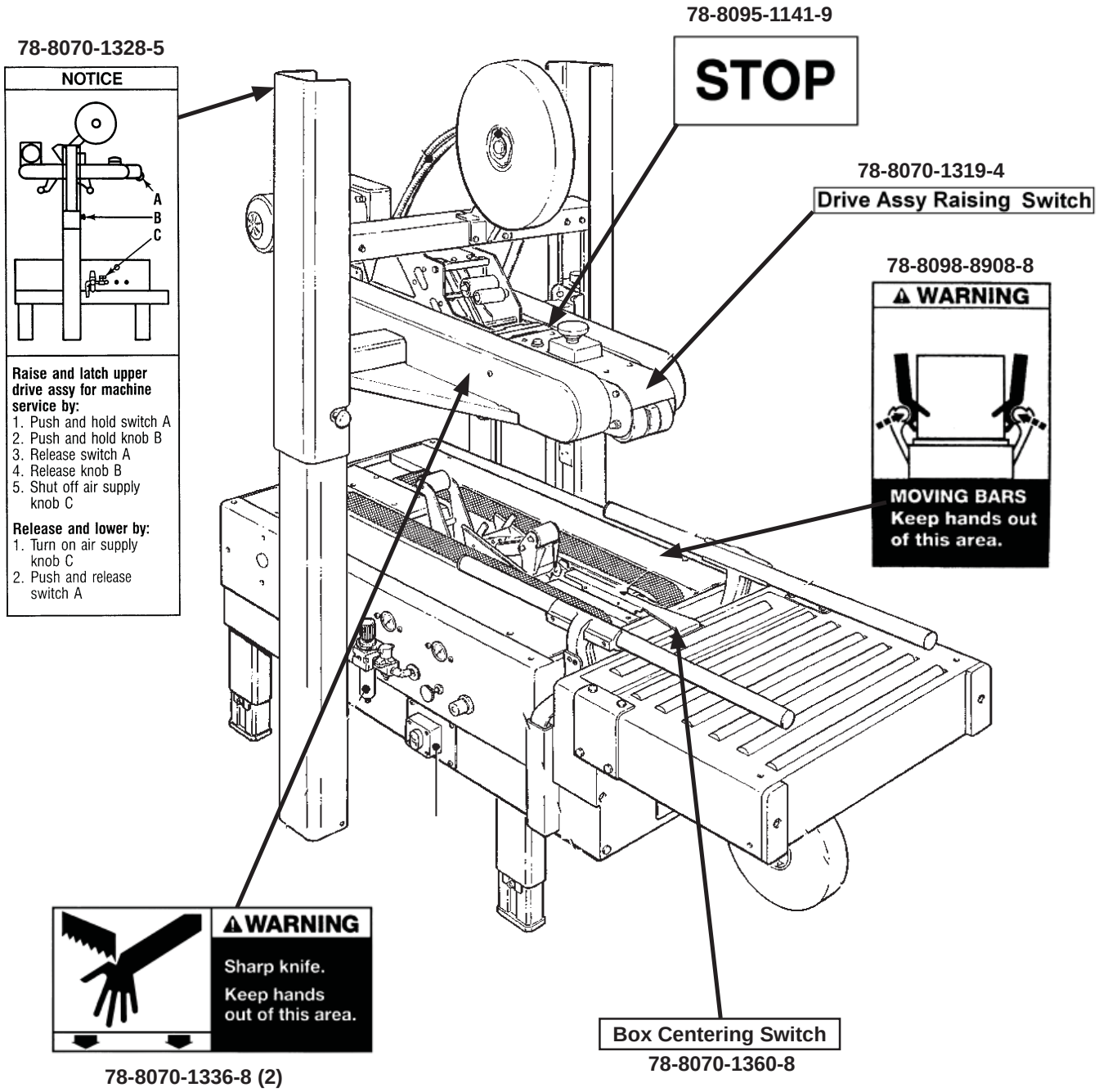


Figure 1-2 – Replacement Labels/3M Part Numbers

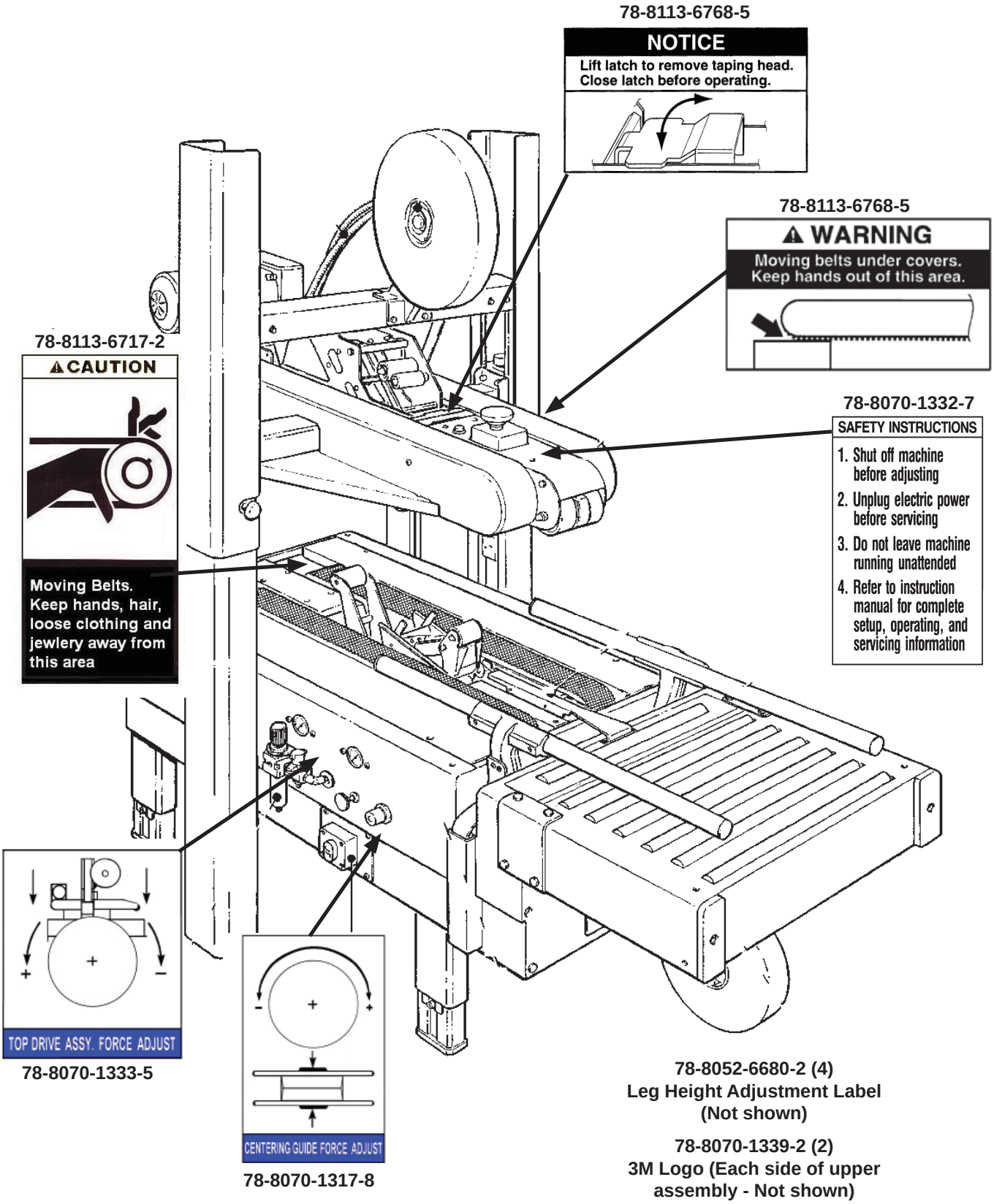


Figure 1-3 – Replacement Labels/3M Part Numbers

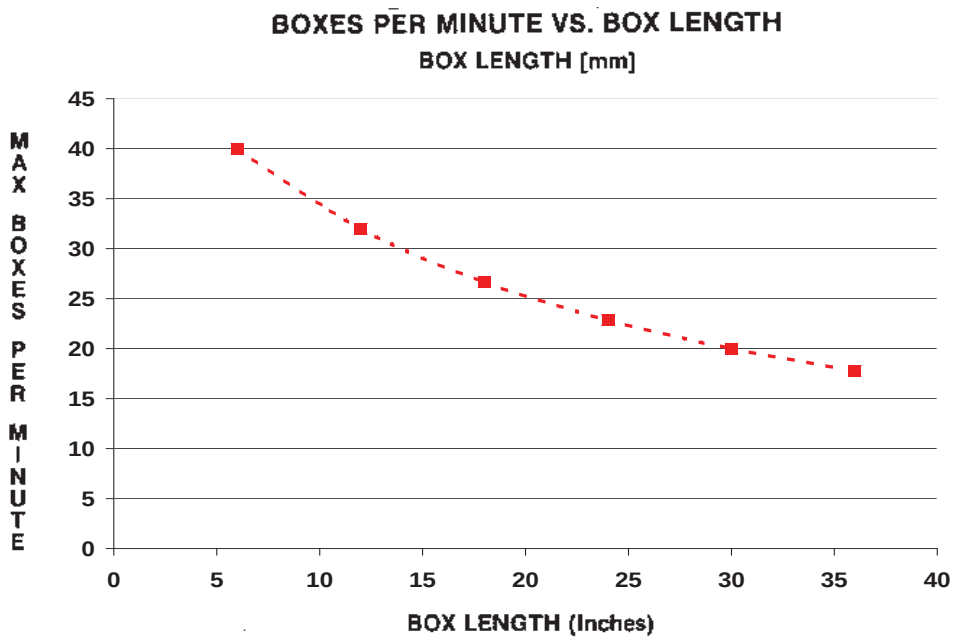
1. Power Requirements

Electrical: 115 VAC, 60 Hz, 6.4 A (675 watts)
Pneumatic: 85 PSIG [6 bar pressure], 2.5 SCFM
[70 liter/minute @ 2PC, 1.01 bar] maximum at maximum random cycle rate.
A pressure regulator/filter is included

The machine is equipped with a 2.4m [8 foot] standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above.

2. Operating Rate

Box drive belt speed is approximately 0.5 m/s [100 feet per minute].



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

3. Operating Conditions

Use in dry, relatively clean environments at 4.4° C to 48.9° C [40° F to 120° F] with clean, dry boxes.

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

⚠ WARNING

- **To reduce the risk associated with fire and explosion hazards:**
  - Do not operate this equipment in potentially flammable or explosive environments.

4. Tape

Scotch® pressure-sensitive film box sealing tapes.

5. Tape Width

50mm [2 inches] minimum to 72mm [3 inches] maximum

Specifications

6. Tape Roll Diameter

Up to 405 mm [16 inch] maximum on a 76.2mm [3 inch] diameter core.

(Accommodates all system roll lengths of **Scotch**® film tapes.)

7. Tape Application Leg Length – Standard

70mm ± 6 mm [2.75 inch ±. 25 inch]

Tape Application Leg Length – Optional
50mm ± 6mm [2 inch ±. 25 inch]
(See "Removing Taping Heads Procedure – Changing the Tape Leg Length")

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.
23-44 lbs. per inch of width Edge Crush Test (ECT)

9. Box Weight and Size Capacities

A. Box Weight, filled: 5 lbs.–65 lbs. [2.3 kg–29.5 kg]. Contents must support flaps.

B. Box Size:

	Minimum	**Maximum**
Length:	150mm [6.0 inch]	Unlimited
Width:	175mm [7.0 inch]*****	645mm [25.5 inch]
Height:	120mm [4.75 inch]******	645mm [25.5 inch]

*Boxes narrower than 200mm [8 inches] may require more frequent belt replacement because of limited contact area.
** Minimum/maximum box height dimensions are with machine at factory setting. To accommodate smaller or larger boxes, machine upper taping head frame and/or outer column assemblies can be re-positioned as described in the "Special Set-Up Procedure" section of this manual. Refer to chart below for box height range desired and then to illustration indicated for machine adjustments necessary.

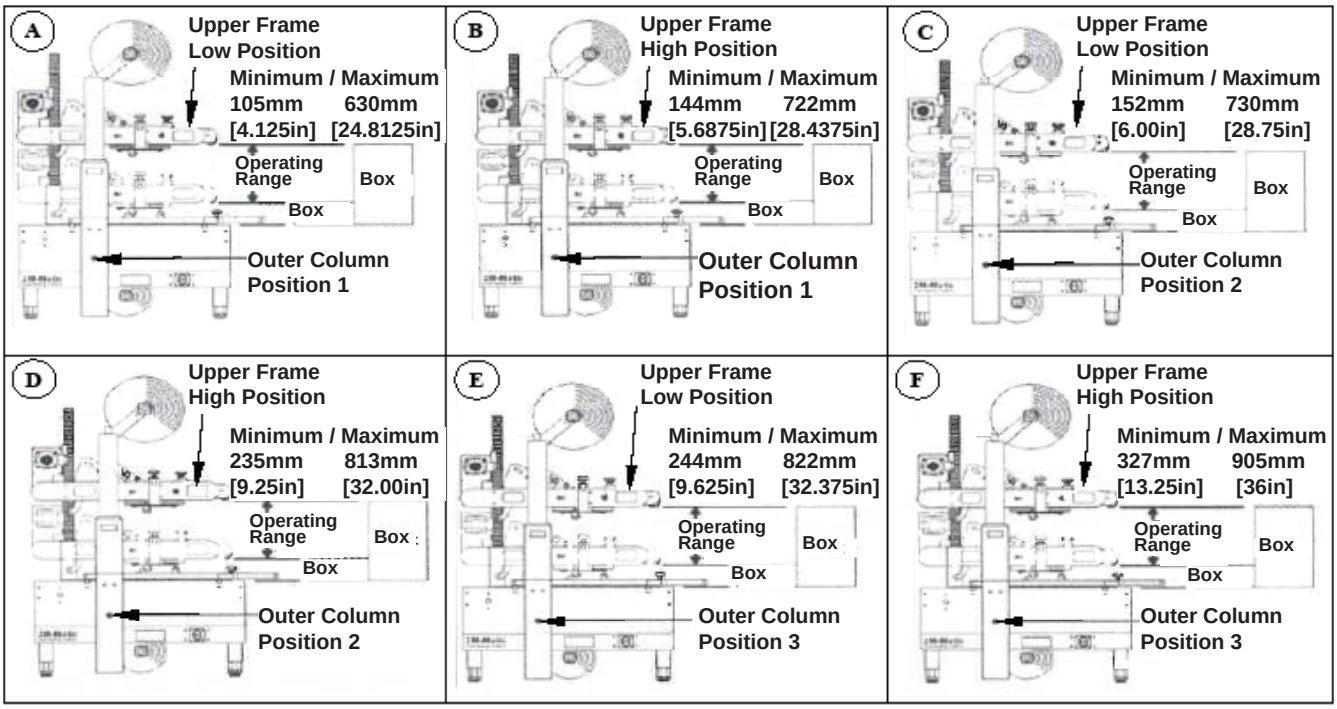
Minimum/Maximum Box Height Combinations

Minimum* mm [Inches]	Maximum mm [Inches]	Refer to Illustration	Minimum mm [Inches]	Maximum mm [Inches]	Refer to Illustration
120 [4-3/4]	645 [25-1/2]	A	280 [11-1/8]	810 [31-7/8]	D
175 [6-7/8]	700 [27-5/8]	B	275 [10-7/8]	805 [31-5/8]	E
230 [9]	755 [29-3/4]	C	385 [15-1/8]	910 [35-7/8]	F

Note: Shaded area on chart indicates machine setting as shipped from factory.

Minimum/Maximum Box Height Combinations
(To re-locate upper frame or outer columns, see "Special Set-Up Procedure".)

Case Height Range Illustration



Note: Length of boxes in illustrations above are not to scale.

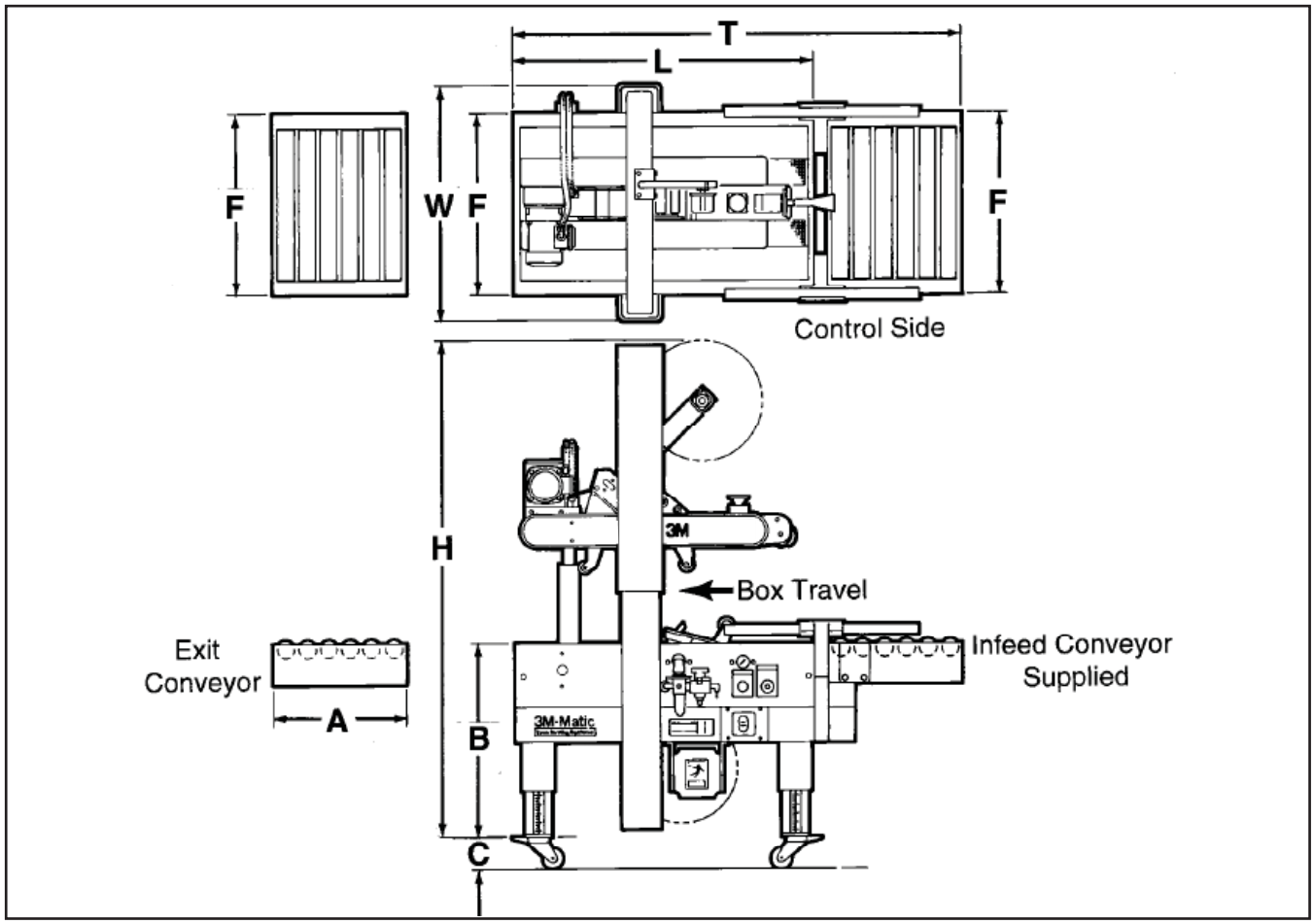
Special modifications may be available for carton sizes not listed on previous page.
Contact your 3M Representative for information.

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 .6 or less, then several boxes should be test run to assure proper machine performance.

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

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

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



10. Machine Dimensions:

	W	L	H	A*	B	C**	F	T
Minimum								
mm	927	1180	1575	460	610***	120	772	1640
[Inches]	[36.5]	[40 .5]	[62]	[18]	[24]	[4.75]	[30.38]	[64.5]
Maximum								
mm			2185***		890			
[Inches]	- -	- -	[86]	- -	[35]	- -	- -	- -

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

11 Machine Noise Level:

78dB with tape roll inserted.

12. 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.

THIS PAGE IS BLANK

5.1 Shipment and Handling of Packed Machine

- The machine is fixed on the pallet with four (4) bolts and can be lifted by using a fork truck.
- The package is suitable to travel by land and by air.
- Optional sea freight package is available.

Packaging Overall Dimensions (Figure 5-1)

See Specifications.

During the shipment it is possible to stack a maximum of 2 machines **(Figure 5-2).**

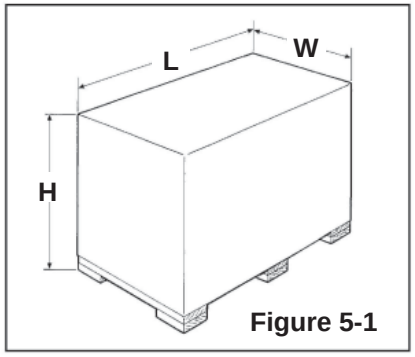


Figure 5-1

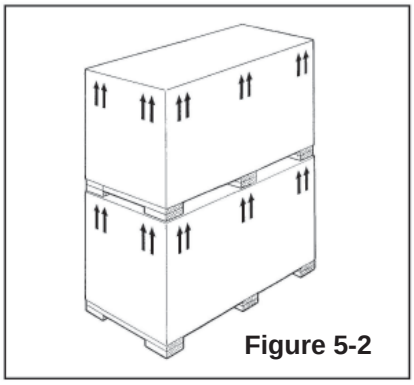


Figure 5-2

5.2 Packaging for Overseas Shipment (Optional - Figure 5-3)

The machines shipped by sea freight are covered by an aluminum/polyester/polythene bag which contains dehydrating salts.

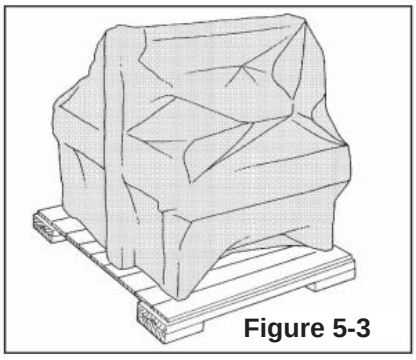


Figure 5-3

5.3 Handling and Transportation of Uncrated Machine

The uncrated machine should not be moved except for short distances and indoors ONLY. Without the supporting pallet, the machine is exposed to damage and may cause injuries. To move the machine use belts or ropes, paying attention to place them in the points indicated using care to not interfere with the lower taping head **(Figure 5-4).**

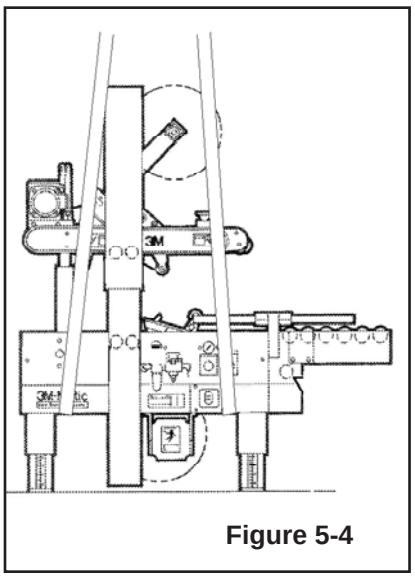


Figure 5-4

5.4 Storage of the Packed or Unpacked Machine

If the machine is not used for a long period, please take the following precautions:

- Store the machine in a dry and clean place.
- If the machine is unpacked it is necessary to protect it from dust.
- Do not stack anything over the machine.
- It is possible to stack a maximum of 2 machines (if they are in their original packing).

6.1 Uncrating

The envelope attached to the shipping box contains the uncrating instructions of the machine **(Figure 6-1).**

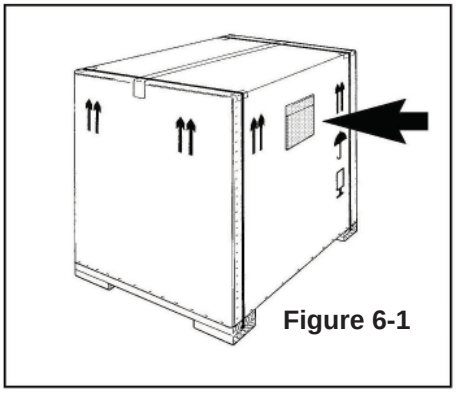


Figure 6-1

Cut straps. Cut out staple positions along the bottom of the shipping box (or remove staples with an appropriate tool**) Figure 6-2).**

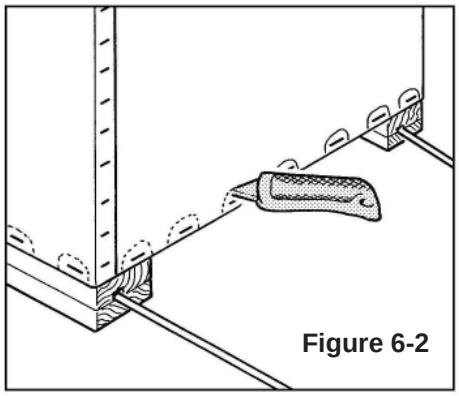


Figure 6-2

After cutting out or removing the staples, lift the shipping box in order to clear the machine (two persons required).

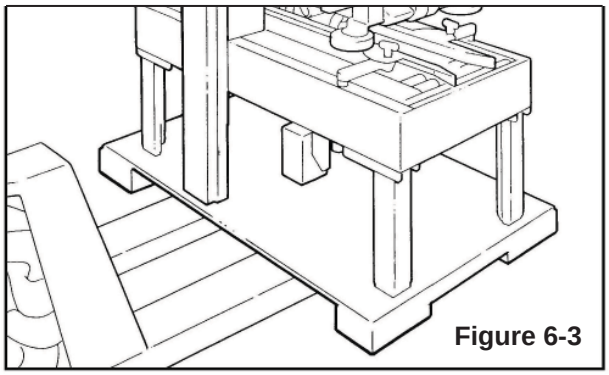


Figure 6-3

Transport the machine with a fork-lift truck to the operating position. Lift the pallet at the point indicated in **Figure 6-3** (weight of machine + pallet = 225 kg).

Removal of Pallet

Loosen and remove nuts and brackets using the open end spanner supplied in the tool box **(Figure 6-4).**

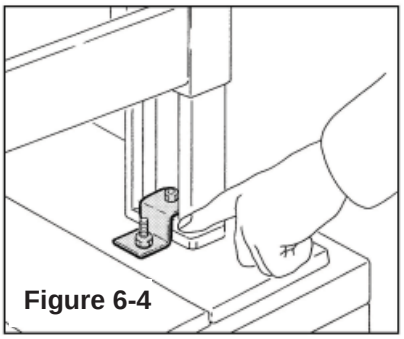


Figure 6-4

A cardboard box is located under the machine body. Retrieve the instruction manual for additional procedures of the set up. The box also contains parts removed for shipping, spare parts and tools **(Figure 6-5).**

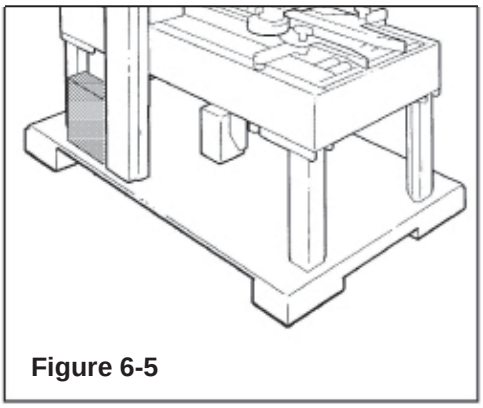


Figure 6-5

6.2 Disposal of Packaging Materials

The 700rks-NA package is composed of:

- Wooden pallet
- Cardboard shipping box
- Wooden supports
- Metal fixing brackets
- PU foam protection
- PP plastic straps
- Dehydrating salts in bag
- Special bag of laminated polyester/aluminium/
- Polyethylene (sea freight package only)
- Polyethylene protective material

For the disposal of the above materials, please follow the environmental directives or the law in your country.

7.1 Operating Conditions

The machine should operate in a dry and relatively clean environment (See Specifications).

7.2 Space Requirements for Machine Operation and Maintenance Work

Minimum distance from wall **(Figure 7-1)**:

A = 1000mm.
B = 700mm.
Minimum height = 2700mm.

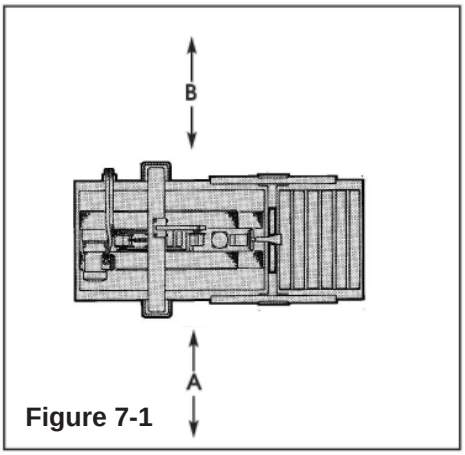


Figure 7-1

7.3 Tool Kit Supplied with the Machine

A tool kit containing some tools are supplied with the machine. These tools should be adequate to set-up the machine, however, other tools supplied by the customer will be required for machine maintenance.

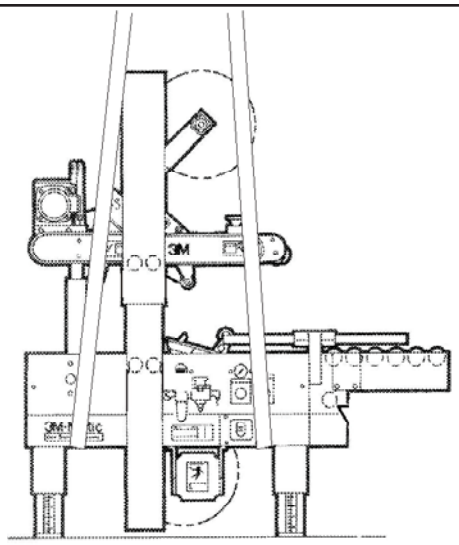


Figure 7-2

WARNING

- **To reduce the risk associated with muscle strain:**
  - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

7.4 Machine Positioning / Bed Height

1 - Lift the machine with belts or ropes paying attention to place the belts in the points (**Figure 7-2).**
To set the machine bed height, do the following:

Adjust machine bed height. The case sealer is equipped with four (4) adjustable legs that are located at the corners of the machine frame. The legs can be adjusted to obtain different machine bed heights from 610mm [24 inch] minimum to 890mm [35 inch] maximum.

Note – Minimum machine bed height can be reduced to 570mm [22.5 inch] by moving outer columns up one set of mounting holes. However, this change also increases minimum box height of 120 mm [4.8 inch] to 170mm [6.8 inch].

Refer to **Figure 7-3** and set the machine bed height as follows:

2. Loosen, but do not remove, two (2) M8 x 1.25 socket head screws in one leg (use M6 hex wrench). Adjust the leg length for the desired machine bed height. Retighten the two screws to secure the leg. Adjust all four (4) legs equally.

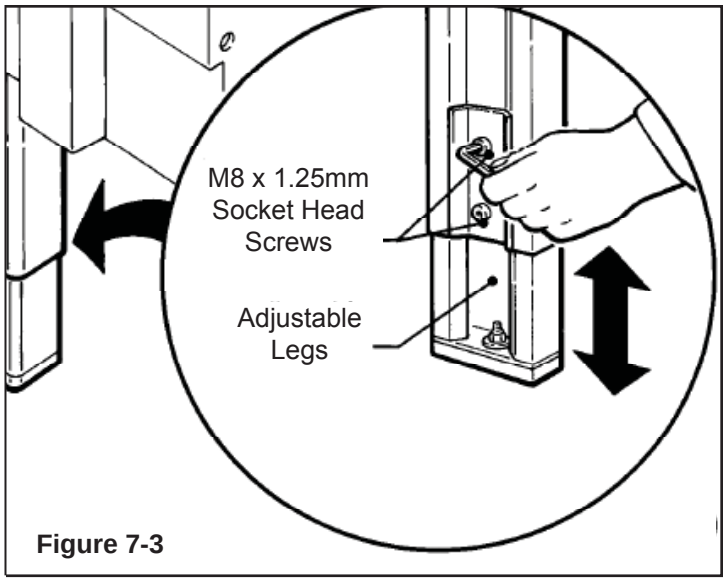


Figure 7-3

7.5 Removal of Plastic Ties

Cut the plastic which attaches the top head to the frame and remove the polystyrene blocks **(Figure 7-4).**

Cut the plastic strap which attaches the strip and the EMERGENCY STOP cable to the frame **(Figure 7-5).**

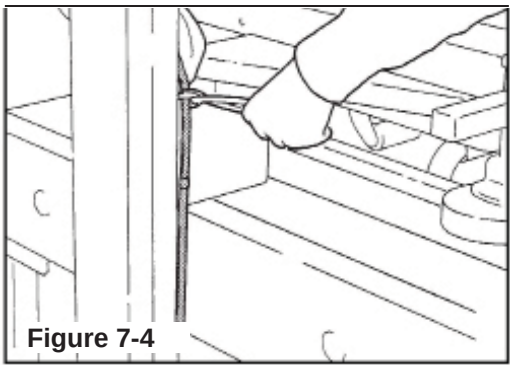


Figure 7-4

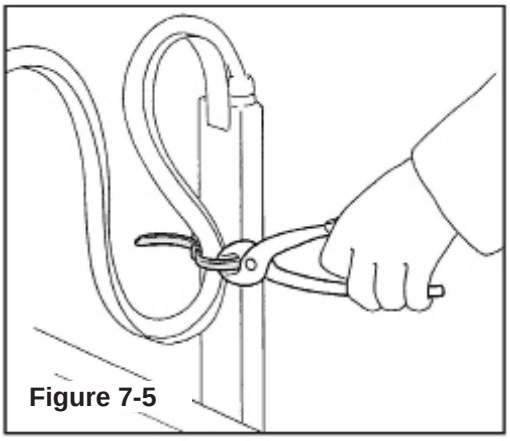


Figure 7-5

Cut the plastic ties holding the lower taping head in position **(Figure 7-6).**

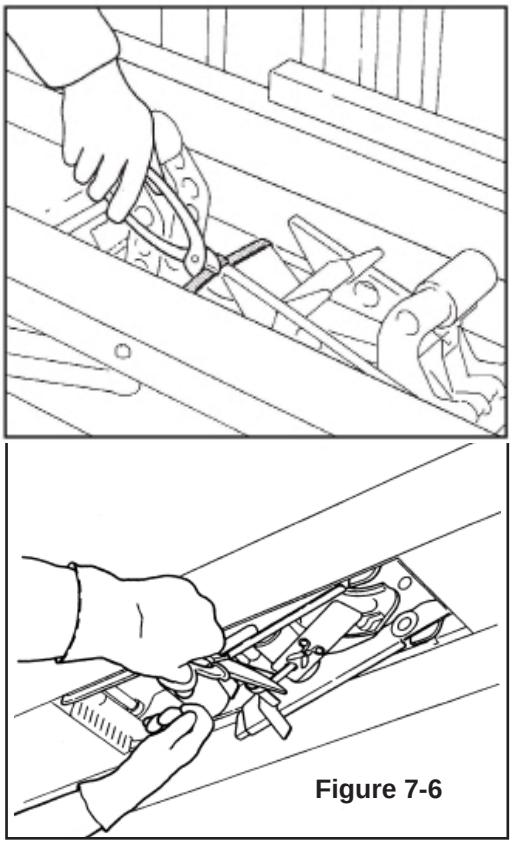


Figure 7-6

7.6 Assembly Completion / Machine Set-up

Note – A tool kit consisting of metric open end and hex socket wrenches is provided with the machine. These tools should be adequate to set-up the machine, however, other tools supplied by the customer will be required for machine maintenance (see the Technical Documentation/Spare Parts-Order Section).

Machine Set-Up

The following instructions are presented in the order recommended for setting up and installing the case sealer, as well as for learning the operating functions and adjustments. Following them step by step will result in your thorough understanding of the machine and an installation in your production line that best utilizes the many features built into the case sealer. Refer to **Figure 7-13 and 7-14** to identify the various components of the case sealer.

1. Install the upper tape drum bracket on the top crossbar as shown in **Figure 7-7A**.

2. The column guards, shown in **Figure 7-7** have been installed upside down for shipping. Remove and retain the screws and washers holding the guards on the columns for re-installation after the Bumper Supports have been mounted (see Column Bumper Installation in the Installation and Set-Up Section and Special Set-Up Procedures Section / **Figure 7-7**). After the Bumpers have been installed, the Column Guards must be repositioned (rotated 180° and re-installed - **Figure 7-7**) for safe operation of the machine. Replace existing screws and washers to secure the guards in place.

3. Cut cable ties securing upper assembly to machine bed on each side.

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

Important – Use care when working with compressed air.

The case sealer requires a 5 bar gauge pressure 110 litre/min [70 PSIG], @21°C, 1.01 bar [3.75 SCFM] compressed air supply. As shown in **Figure 7-14**, 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 3 litre/min. [0.1 SCFM].

4. Pneumatic connection.

a. Read and remove safety tag from pneumatic "On/Off" valve.

b. Connect the main air supply line to the inlet side of the on/off valve using the barbed fitting and hose clamp provided **(See Figure 7-7B)**.

The customer supplied air hose (8mm [5/16 inch] ID) must be clamped tightly to the barbed fitting.

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

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

5. Turn the air supply on be turning the air on/off valve to SUP (On).

6. Raise and latch upper drive assembly in full "Up" position.

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

Note – Read "Operation – Mechanical Latch" before raising and latching upper drive assembly.

WARNING

- **To reduce the risk associated with impact hazards:**
  - Always use appropriate supporting means when working under the upper drive assembly

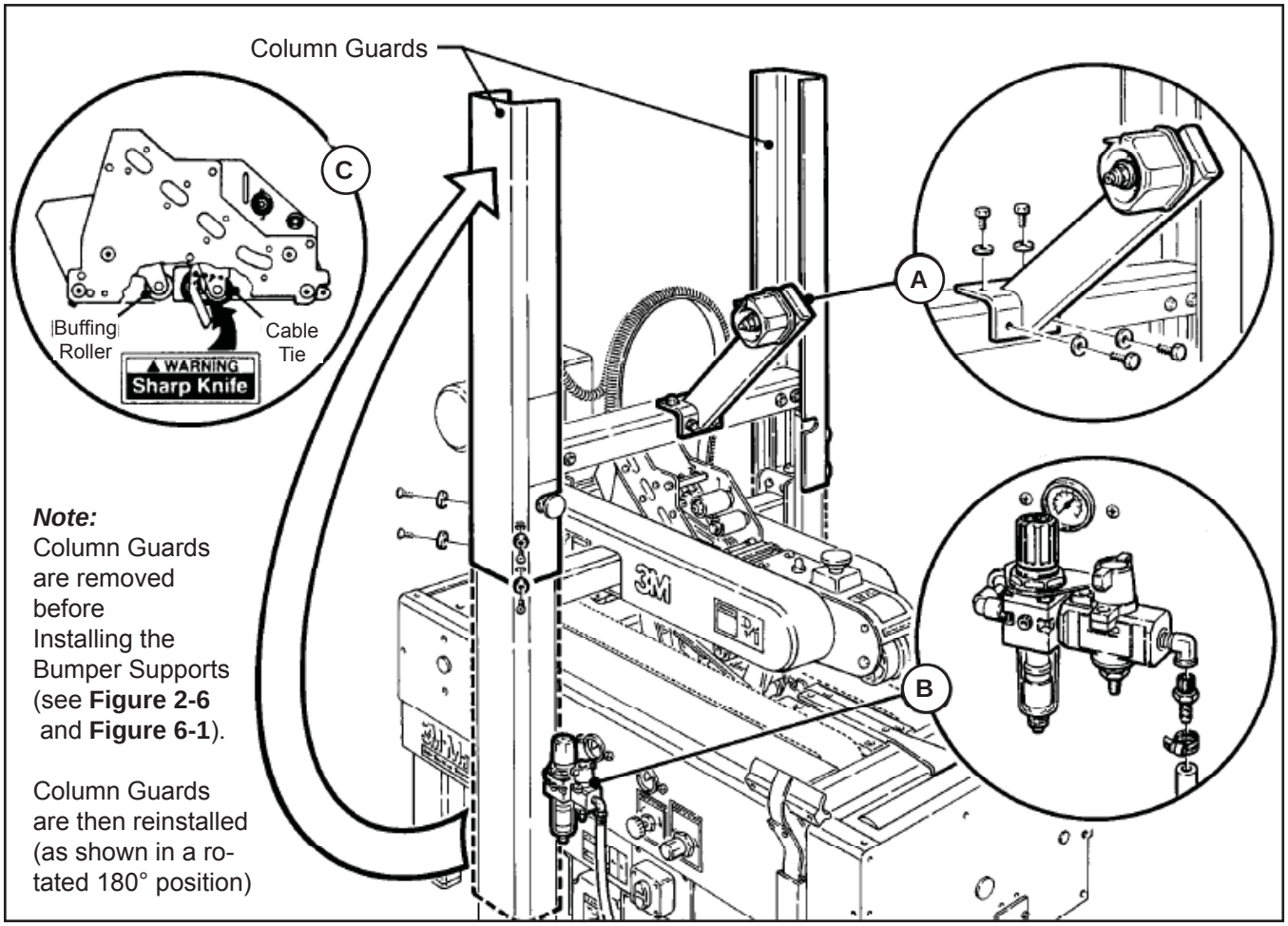


Figure 7-7 – 700rks Frame Set-Up

7. Hold taping head BUFFING ROLLER and cut and remove cable tie that holds applying/buffing arms retracted (Applying/buffing rollers are held retracted for shipment - See **Figure 7-6)**. Allow buffing/applying arms to extend slowly.

   Also cut and remove cable tie at rear of lower taping head.

⚠ WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

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

⚠ WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

9. Ensure that the tape drum bracket assembly, located on the lower taping head, is mounted straight down, as shown in **Figure 7-8A**. The tape drum bracket assembly can be pivoted to provide tape roll clearance in certain cases.

7.7 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 (12) M8 x 15 hex head screws, and eight (8) M8 flat washers.
3. To assemble the infeed conveyor, refer to **Figure 7-9** 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 (4) screws with a 13mm wrench.
6. Refer to **Figure 7-10**. Set the cover plates over the joint between the conveyor and the frame on each side and secure them with four (4) M8 x 15 screws and M8 washers.

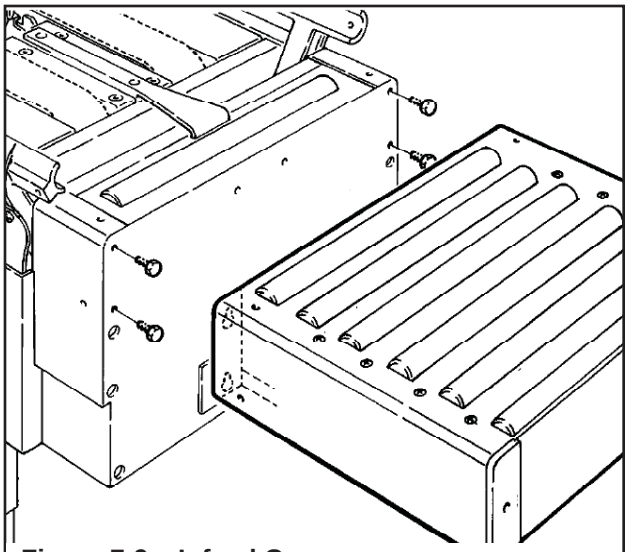


Figure 7-9 – Infeed Conveyor

7.8 Centering Guides

1. Remove the two centering guides and four (4) M6 x 20 socket head screws from the package.
2. Using a 5mm hex key wrench, attach the centering guides to the rails with four (4) M6 x 20 screws (two [2] in each guide) as shown in **Figure 7-11**.

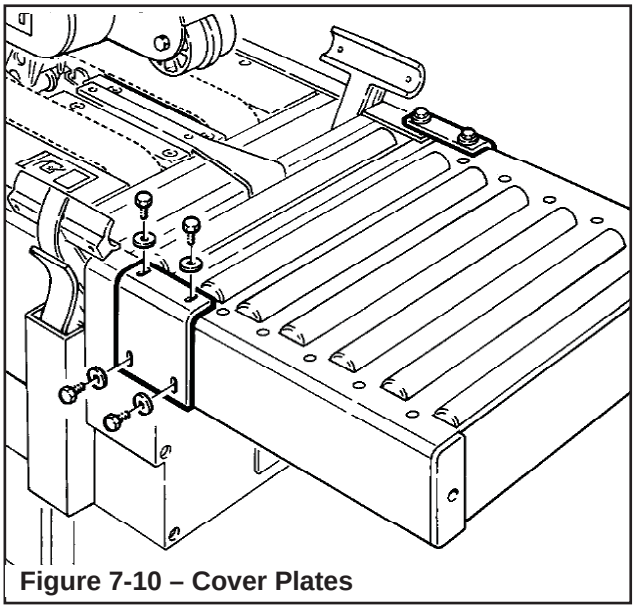


Figure 7-10 – Cover Plates

7.9 Outboard Tape Roll Mounting

(Lower Taping Head)

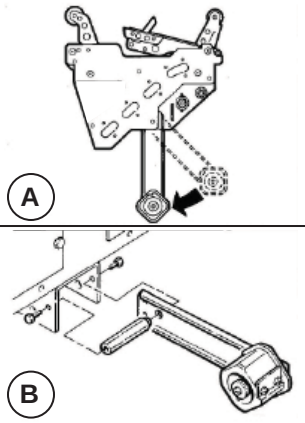
Remove the tape drum bracket assembly, spacer and fasteners from the lower taping head. Install and secure on the infeed end of the lower frame (as shown in **Figure 7-8)**.

7.10 Tape Leg Length

Taping heads are pre-set to apply 70mm [2.75 inch] long tape legs. To change tape leg length to 50mm [2.0 inch], see "Special Set-Up Procedure – Changing the Tape Leg Length."

Figure 7-8

Lower Taping Head Mounting



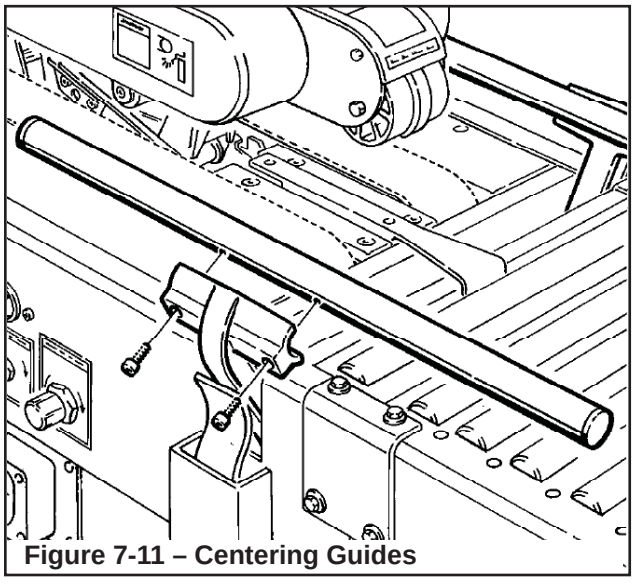


Figure 7-11 – Centering Guides

WARNING

- **To reduce the risk associated with impact hazards:**
  - Always use appropriate supporting means when working under the upper drive assembly
- **To reduce the risk associated with mechanical and electrical hazards:**
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

7.11 Bumper Supports (Upper Drive Assembly)

With the Safety Guard removed (**Figure 7-12**):
Also See Special Set-Up Procedure - Column Bumper Installation

- Raise and lock the upper drive assembly in the raised position. See "Operation – Mechanical Latch."
- Turn off air supply and electric power.
- Remove the Column Bumper and set screw parts package from the carton.
- Using set screws provided, install Column Bumper (the recommended position is shown below).
- Re-install Safety Guard.

*** NOTE - *IMPORTANT:*** - Some bumper positions may:
1) Allow upper and lower taping heads to come into contact with each other.
2) Create added stress to the bumper.
3) Cause a malfunction of the machine.

These events can potentially cause damage to the machine. For more information on bumper settings, contact your 3M service representative.

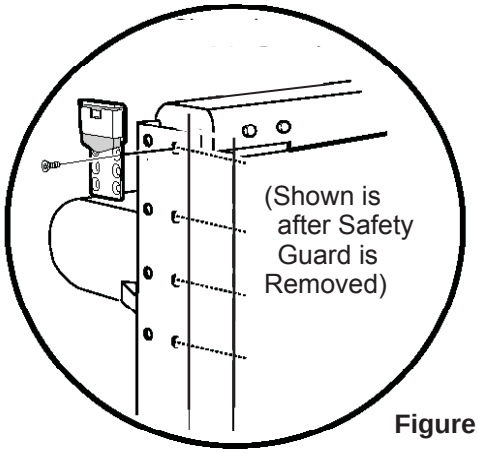


Figure 7-12

7.12 Box Size Capacity of Case Sealer

At its factory setting, the case sealer handles a variety of box sizes. If larger capacity is needed, the machine can be adjusted to accommodate larger boxes.

Refer to Specifications Section and also Figure 15266.

7.13 Electrical Connections and Controls

The electrical control box and "On/Off" switch are located on the lower left side of the machine frame. See **Figure 7-13**. If desired, for operator convenience, the "On/Off" switch can be relocated to the right side of the machine frame. A 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 shall be properly grounded. Before the power cord is plugged into 115 Volt, 60 Hz outlet make sure that all packaging materials and tools are removed from the machine.
Do not plug electrical cord into outlet until ready to run machine.

Use of an extension cord is not recommended. However, if one is needed for temporary use, it must have a wire size of 1.5mm diameter [AWG16], have a maximum length of 30.5 m [100 ft], and must be properly grounded.

WARNING

- **To reduce the risk associated with hazardous voltage:**
  - Position electrical cord away from foot and/or vehicle traffic

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

7.14 Initial Start-Up of Case Sealer

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

7.15 Controls, Valves, and Switch Locations

Refer to **Figure 7-13** below to acquaint yourself with the various components and controls of the case sealer. Also see component locations in Section 3 and Section II for taping head components.

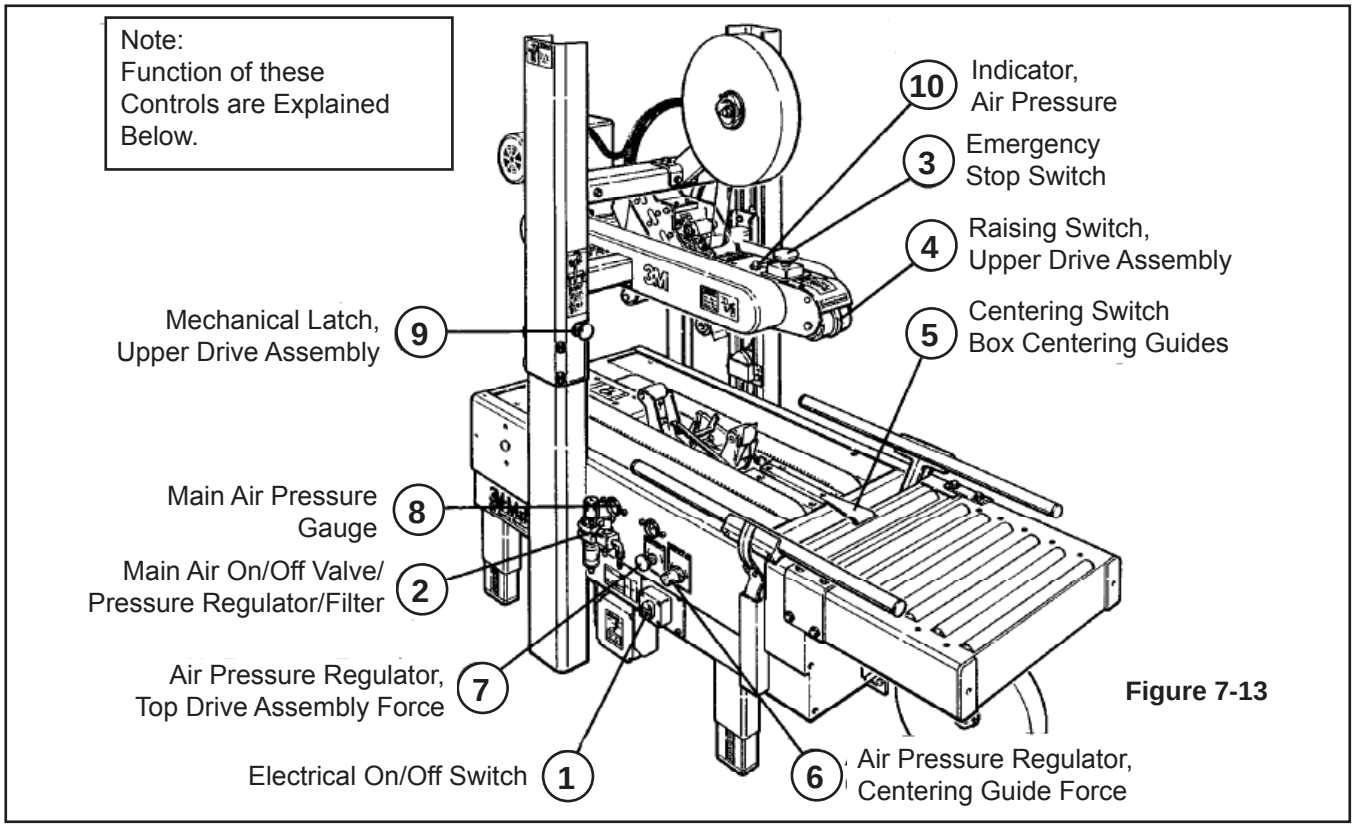


Figure 7-13

Figure 7-14 – Controls, Valves and Switches

1. **Electrical "On/Off" Switch**
   The box drive belts are turned on and off ("Off" button is red) with the electrical switch on the side of the machine frame.

Note – The case sealer has a circuit breaker located in the electrical enclosure on the lower left side of the machine frame. If circuit becomes overloaded and circuit breaker trips, unplug the machine electrical cord and determine cause of overload. After two minutes, remove the electrical control box cover and reset the circuit breaker by pressing the "Reset" button and then the "Start" button on the circuit breaker. Replace the control box cover, plug machine electrical cord into outlet and restart machine by pressing green "On" button.

2. **Main Air "On/Off" Valve/Pressure Regulator/ Filter – Figure 7-14**
   This set of pneumatic components controls, regulates and filters plant air supply to the two separate control circuits of the case sealer. **"On/Off" Valve –** "On" turn to "SUP" – "Off" turn to "EXH". ***Note –*** Turning air supply "Off" automatically bleeds air pressure from the case sealer air circuits.

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

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

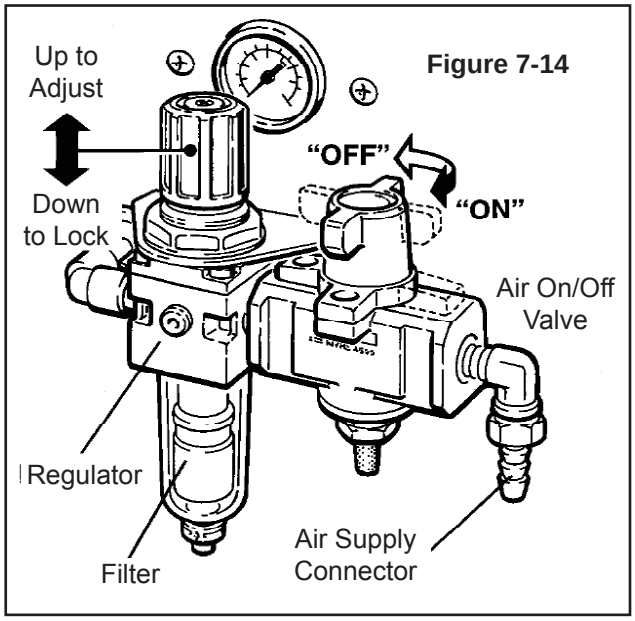


Figure 7-14

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

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

3. **Emergency Stop Switch**
   The machine electrical supply can be turned off by pressing the latching emergency stop switch. To restart machine, rotate emergency stop switch (releases switch latch) and then restart machine by pressing green (On) button on side of machine frame.

4. **Raising Switch, Upper Drive Assembly**
   This switch, when touched by the leading edge of a box , pneumatically raises the upper frame to allow insertion of the box under the drive belts. As the box moves under the switch, releasing it, the upper drive assembly descends on the box and the drive belts convey the box through the machine. When switch is actuated by hand, the upper drive assembly rises to its maximum height. Released, the upper drive assembly descends to its rest position.

5. **Centering Switch, Box Centering Guide**
   This pneumatic switch controls the box centering guides. When switch is activated by a box entering the case sealer, the centering guides close (centering the box), and released (after box passes over switch), the guides open.

6. **Air Pressure Regulator, Centering Guide Force Adjustment – Figure 7-15**
   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.

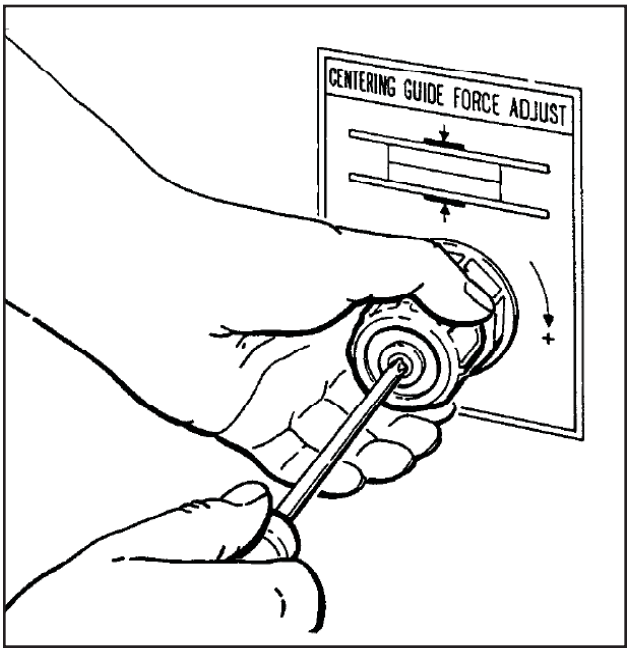


Figure 7-15– Air Regulator, Centering Guides

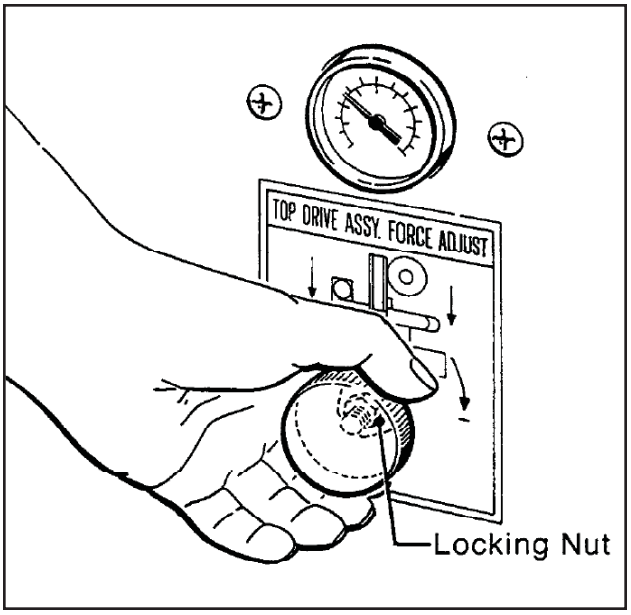


Figure 7-16 – Air Regulator/Gauge, Top Drive Assembly

7. **Air Pressure Regulator/Gauge, Top Drive Assembly Force Adjustment – Figure 7-16**
   Set nominally to control "down" movement of top drive assembly and the pressure exerted against the box. The regulator setting is changed as necessary for the boxes being sealed to provide adequate drive belt 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 belt 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 upper frame (drive belts) 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 frame 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 7-16**.

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 3 liter/min [0.1 SCFM].

8. **Main Air Pressure Gauge**
   Indicates main air regulator pressure setting. Air regulator should be adjusted so gauge reads 5 bar gauge pressure [70 PSIG].
9. **Mechanical Latch, Upper Drive Assembly – Figure 7-17**
   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 upper frame 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".

10. **Indicator, Air Pressure**
    An "Optical Warning Indicator" for the compressed air circuit of the machine is located on the upper drive assembly just behind the red "Stop" button. When indicator is "Red", air circuit is on.

Important – Before turning drive belts on, be sure no tools or other objects are on the conveyor bed.

⚠ CAUTION

- **To reduce the risk associated with pinch and entanglement hazards:**
  - Always feed boxes into the machine by pushing only from the end of the box
  - Keep hands clear of the upper head support assembly as boxes are transported through the machine
- **To reduce the risk associated with pinch and impact hazards:**
  - Keep away from the pneumatically controlled upper drive assembly and box centering guides when air and electric supplies are on

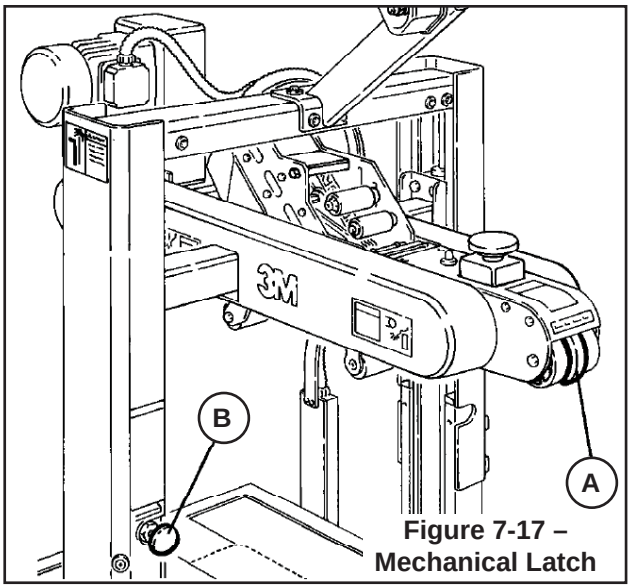


Figure 7-17 – Mechanical Latch

7.16 Tape Loading/Threading - See Manual 2.

Note – If lower tape drum is mounted in alternate lower outboard position, remove taping head from machine bed by pulling straight up, insert threading needle in taping head and replace taping head. Install tape roll on drum (adhesive on tape leg up), thread tape under knurled roller on outboard mount, then attach tape to threading needle and pull tape through taping head with threading needle.

7.17 Theory of Operation

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 7-18,** the lever is depressed causing the air cylinder powered centering guides to move inward, thereby centering the box.
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 7-19**, 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.

⚠ CAUTION

- **To reduce the risk associated with pinch and entanglement hazards:**
  - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads

3. Once the box is pushed under the upper taping head, the upper drive assembly raising switch is released causing the upper drive assembly to descend onto the box top, as shown in **Figure 7-20**, 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.
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 drive assembly switches be manually actuated to understand the functions described above. Depressing the box centering switch causes the guides to close, releasing the switch causes the guides to open. Depressing the upper drive assembly raising switch causes the upper drive assembly to rise, releasing the switch causes the drive assembly to descend.

7.18 Box Sealing

1. Turn main air valve to "SUP" (On).

2. Press green electrical push button on side of machine frame to start drive belts.

3. Feed boxes to machine allowing previous box to exit machine BEFORE feeding next box.

4. Turn air and electrical supplies "Off" when machine is not in use.

5. Reload and thread tape as necessary.

6. Be sure machine is cleaned and lubricated according to recommendations in "Maintenance" section of this manual.

Notes –

1. Machine or taping head adjustments are described in "Adjustments" Section for machine or Manual 2 for taping heads.
2. Box drive motors are designed to run at a moderate temperature of 40°C [104°F]. In some cases, they may feel hot to the touch.

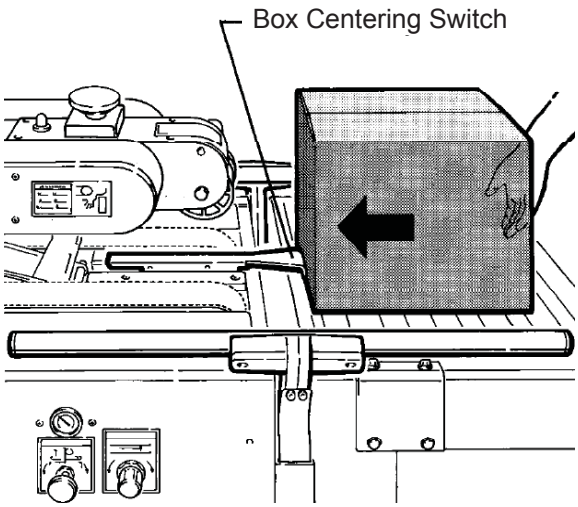


Figure 7-18 – Box Centering Switch

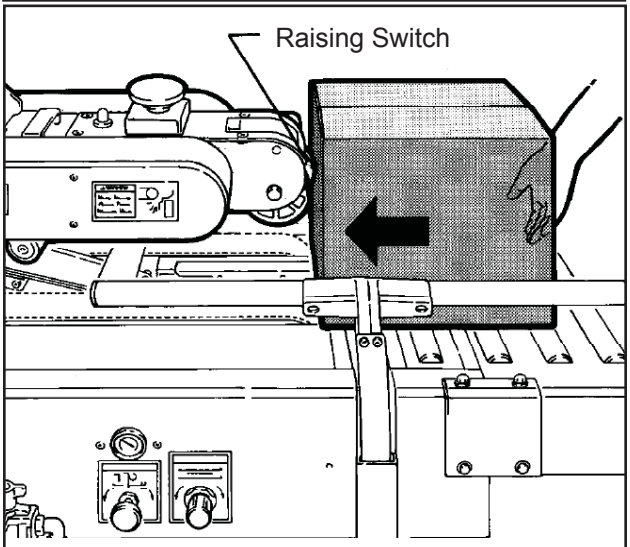


Figure 7-19 – Drive Assembly Raising Switch

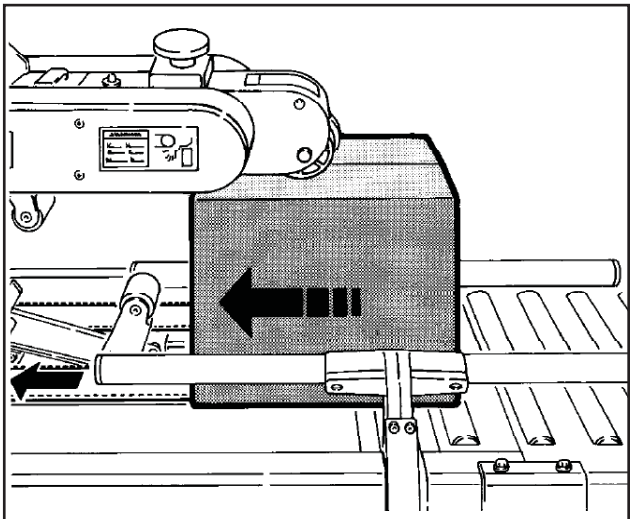


Figure 7-20 – Drive Belts

7.19 Completion of Taping Heads

See Manual 2 for Complete Instructions:

1. Place the Upper Taping Head in a convenient working position
2. Use **Figure 7-21** and tape threading label. Position the tape supply roll so the adhesive side of tape is facing the front of the taping head as it is pulled from the supply roll.
3. Attach the threading needle to the end of the roll. Guide the threading needle around the wrap roller **(Position 1)** then back around the one-way tension roller **(Position 2).**
4. Continue pulling the threading needle down and guide it between the two (2) rollers on the apply arm **(Position 3).**
5. Pull the threading needle down until the tape travels between the apply plate and the ears of the apply arm **(Position 4)** until it extends past the applying roller. When properly threaded the adhesive side of the tape should be facing the knurled rollers at position 2 and also position 3.
6. Cut away any excess tape and repeat steps for Lower Taping Head.

Important – Do not cut against the apply roller - roller damage could occur.

7.20 Outboard Tape Roll Holder

If you intend to use the outboard tape roll holder, proceed as follows:

1 - Remove the lower taping head from the machine.
2 - Remove the tape drum bracket assembly, stud spacer, and fasteners from the lower taping head.
3 - Install alternative wrap roller and bracket on the head in place of tape bracket. Replace lower head into machine.
4 - Install and secure tape drum bracket assembly on the entry end of the lower frame (as shown in **Figure 7-22.**

7.21 Preliminary Electric Inspection

Before connecting the machine to the mains please carry out the following operations:

7.21.1 Make sure that the socket is provided with an earth protection circuit and that both the mains voltage and the frequency match the specifications on the name plate.

7.21.2 Check that the connection of the machine to the mains meets the safety regulations in your country.

7.21.3 The machine is fitted with a main switch and a circuit breaker. The user should check that the electrical settings of the machine are compatible with all the components of the mains system.

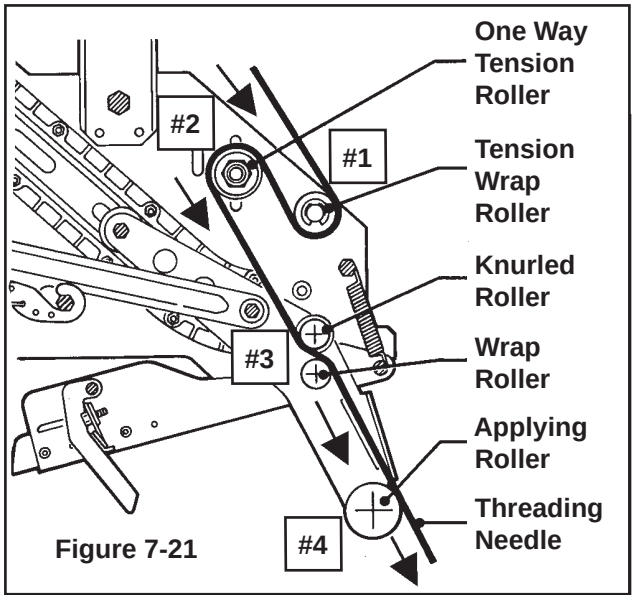


Figure 7-21

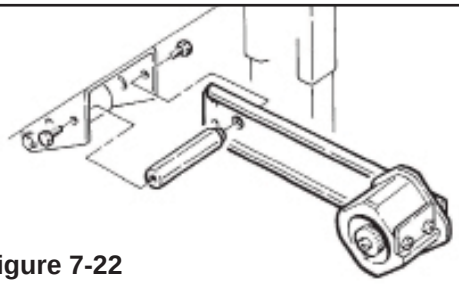


Figure 7-22

7.22 Machine Connection to the Mains

For technical specifications: **See Section 4 - Specifications**

- Push the LATCHING EMERGENCY STOP BUTTON.
- The main switch is normally turned OFF.

Connect the power cord supplied with the machine to a wall socket using a plug which complies with the safety regulations of your country.

7.23 Inspection of Phases (For Three-Main Phases Only)

Procedure to be followed in order to correctly connect the position of the phases:

- Release the latching emergency stop button by turning it clockwise **(Figure 8-1).**
- Turn Main Switch to ON Position **(Figure 8-2).**
- Check the rotation direction of the drive belts **(Figure 8-3).**
- If the drive belts rotate in the wrong direction, correct the rotation direction of the drive belts by reversing 2 phases on the plug.

Note - Machines outside the U.S. may be equipped with 220/380 Volt, 50Hz systems, or other electrical requirements compatible with local practice.

8.1 Description of the Working Cycle

After having closed the top flaps of the carton, the operator pushes it under the top infeed end in order to avoid the opening of the top flaps. Further pushing causes the two top and bottom belts to drive the box through the taping heads which automatically seal the top and bottom seams. The carton is then expelled on the exit conveyor.

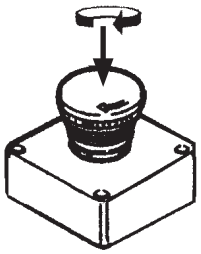


Figure 8-1

8.2 Definition of Running Mode

The case sealer 700rks-NA has only one (automatic) operating mode with:

- The EMERGENCY STOP BUTTON unlocked **(Figure 8-1)**
- The main start switch “ON” **(Figure 8-2)**

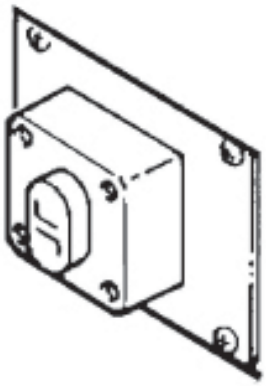


Figure 8-2

8.3.1 Normal Stop Procedure

When the main switch is turned OFF, the machine stops immediately at any point of the working cycle. The same thing happens in case of electrical failure or when the machine is disconnected from the mains.

8.3.2 Emergency Stop

The LATCHING EMERGENCY STOP BUTTON is located on the top center of the machine **(Figure 8-3).**

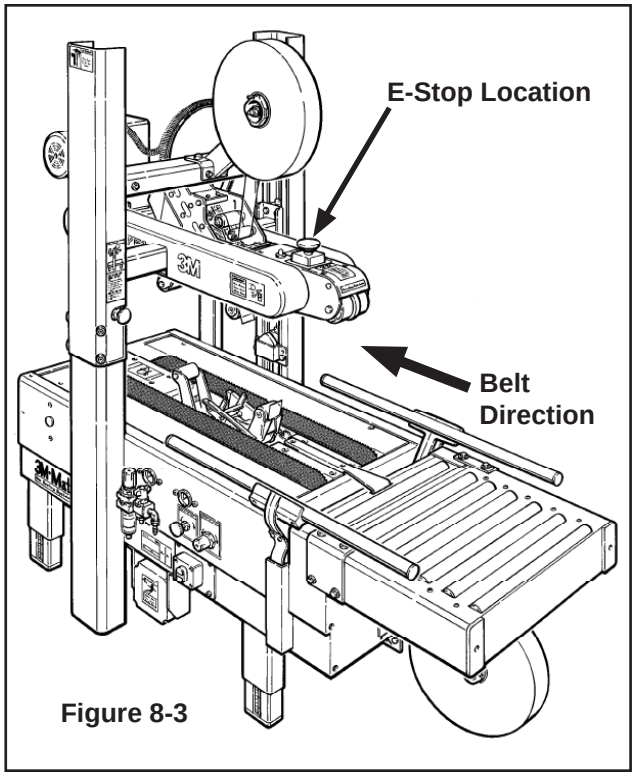


Figure 8-3

9.1 Electrical/Drive Belt On/Off Switch

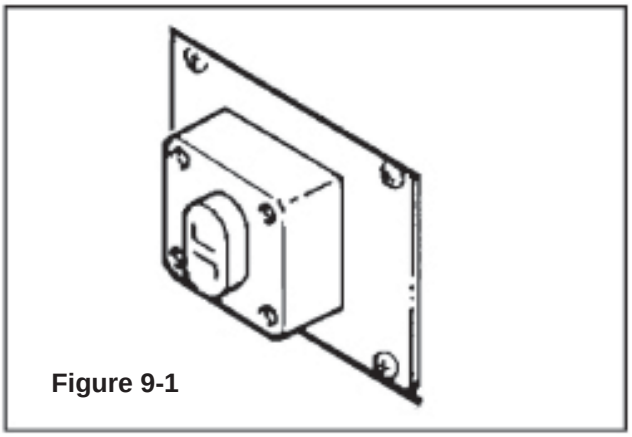


Figure 9-1

9.2 Latching Emergency Stop Button

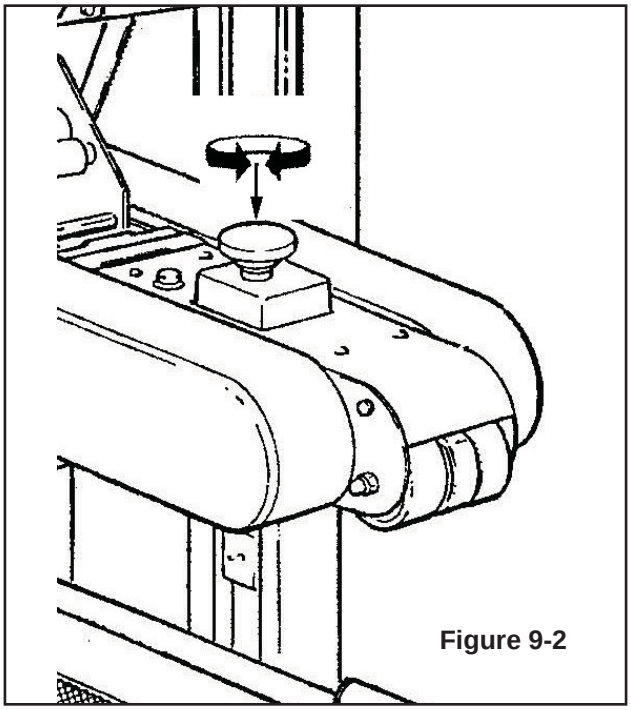


Figure 9-2

9.3 Main Air On-Off Valve-Regulator-Filter

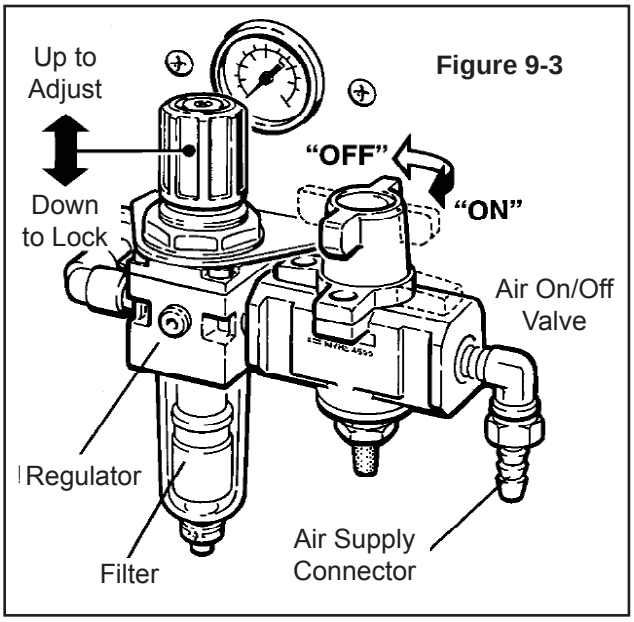


Figure 9-3

9.4 Upper Drive Raising Switch

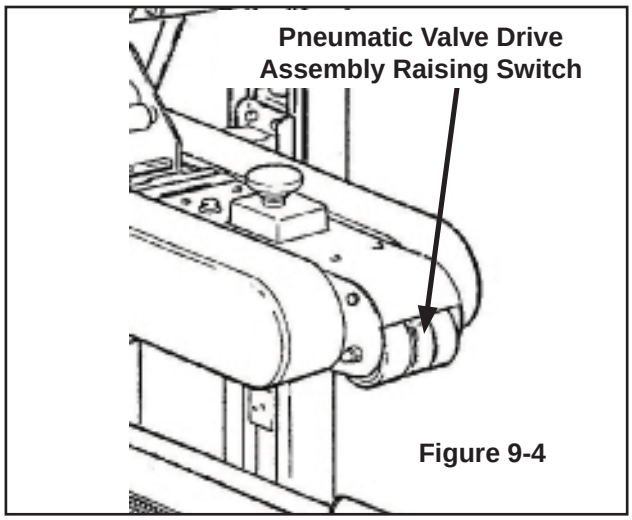


Figure 9-4

9.5 Air Pressure Regulator / Top Drive Force Adjustment

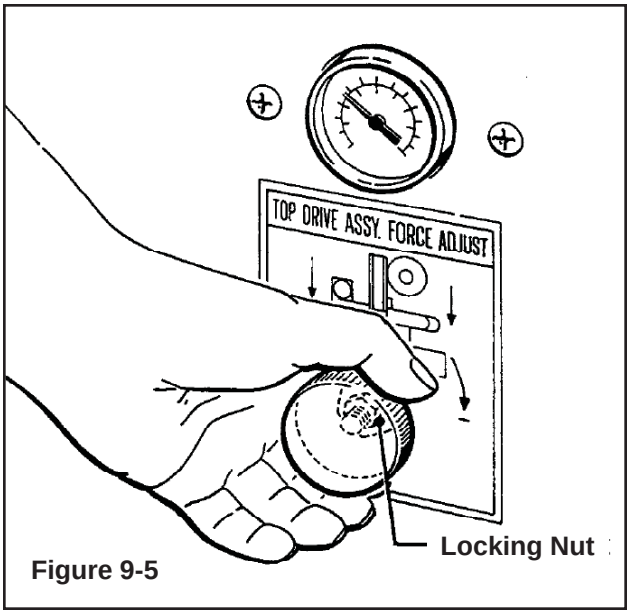


Figure 9-5

9.6 Upper Drive Assembly Actuator Switch

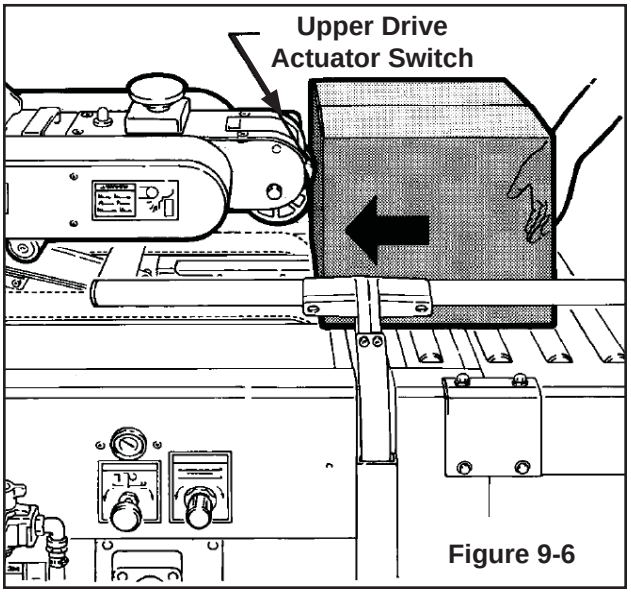


Figure 9-6

9.7 Box Conveying / Tape Seal Application

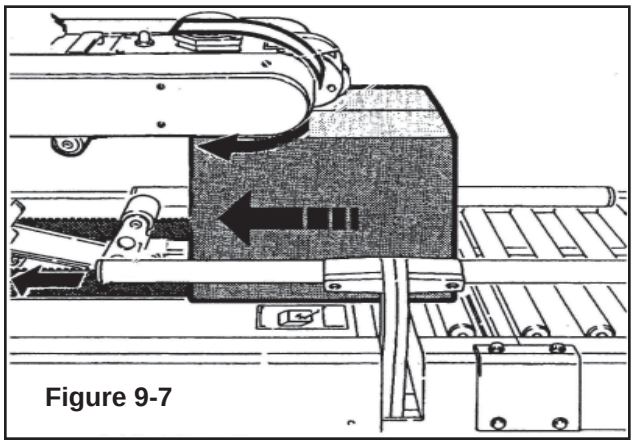


Figure 9-7

10.1 Blade Guards

Both the top and bottom taping units have a blade guard. (See Manual 2: AccuGlide™ 3 Taping Heads - 3 Inch).

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

10.2 Emergency Stop Button

The box drive belts are turned on and off with the electrical switch on the side of the machine frame.

The machine electrical supply can be turned off by pressing the latching emergency stop switch. To restart machine, rotate the emergency stop switch clockwise to release the switch latch. Restart machine by turning the On/Off switch to the Off (O) position and then to the On (I) position **(Figure 10-1)**.

WARNING

- **To reduce the risk associated with hazardous voltage:**
  - Position electrical cord away from foot and vehicle traffic.

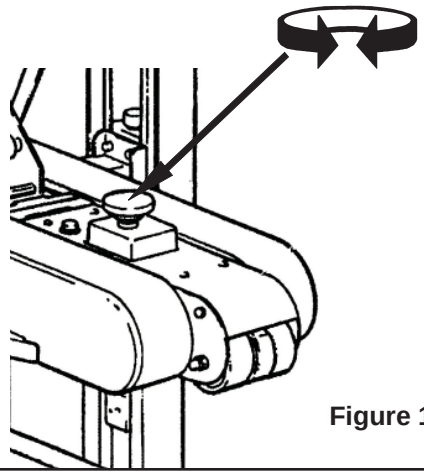


Figure 10-1

10.3 Electric System

The electric system is protected by a ground wire whose continuity has been tested during the final inspection. The system is also subject to insulation and dielectric strength tests.

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Allow only properly trained and qualified personnel to operate and service this equipment.

Note: The case sealer has a circuit breaker located in the electrical enclosure on the machine frame. If circuit becomes overloaded and circuit breaker trips, unplug the machine electrical cord and determine cause of overload. After two minutes, reset the circuit breaker. Plug machine electrical cord into outlet and restart machine by pushing the On/Off switch to the On (O) position.

Important: The use of an extension cord is not recommended. However, if one is needed for temporary use, it must:

- Have a wire size of 1.5mm diameter [AWG 16]
- Have a maximum length of 30.5m [100 ft]
- Be properly grounded.

11.1 Box Width Adjustment

Boxes are automatically centered by the Side Guides **(Figure 11-1).** The Side Guides are triggered by the Centering Guide Switch which is located on the machine bed. Side Guides air pressure adjustments can be made using the Centering Guide Air Pressure Regulator **(See Figure 9-8).**

11.2 Box Height Adjustment

Box Height is automatically determined when the Upper Drive Assembly Actuator Switch is engaged which is located on the front of the Upper Drive Assembly **(See Figure 11-2).** .The Upper Drive air pressure adjustments can be made using the Centering Guide Air Pressure Regulator **(See Figure 9-8).**

11.3 Adjustment of Top Flap Compression Rollers (Not Applicable to this Machine)

11.4 Changing the Tape Leg Length

Taping heads are preset to apply 70mm [2.75 inches] long tape legs. To change tape leg length to 50mm [2.0 inches], refer to Instructions below and also to Manual 2, "Removing Taping Heads Procedure - Changing the Tape Leg Length".

With upper drive assembly in raised position:

1. Remove tape from upper taping head.
2. Pivot up the clamp that secures the upper taping head.
3. Hold upper taping head applying and buffing arms from under upper assembly, slide head forward and down to remove. See **Figure 11-3**.
4. Lift the lower taping head, shown in **Figure 11-4**, straight up to remove it from the case sealer bed.
5. Refer to Section II, "Adjustments – Changing Tape Leg Length," for taping head set-up.
6. Replace taping heads reverse of disassembly. Turn on air supply and electric power, unlatch upper drive assembly and allow it to return to its rest position.

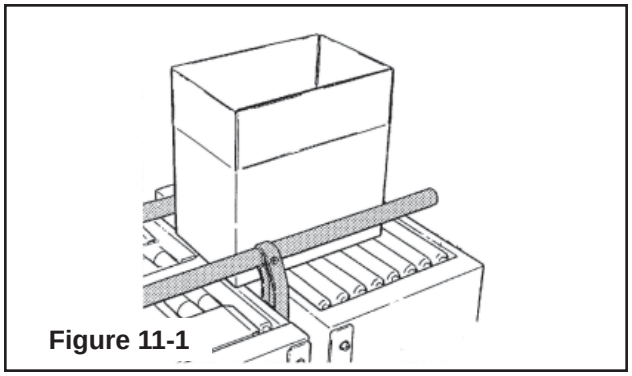


Figure 11-1

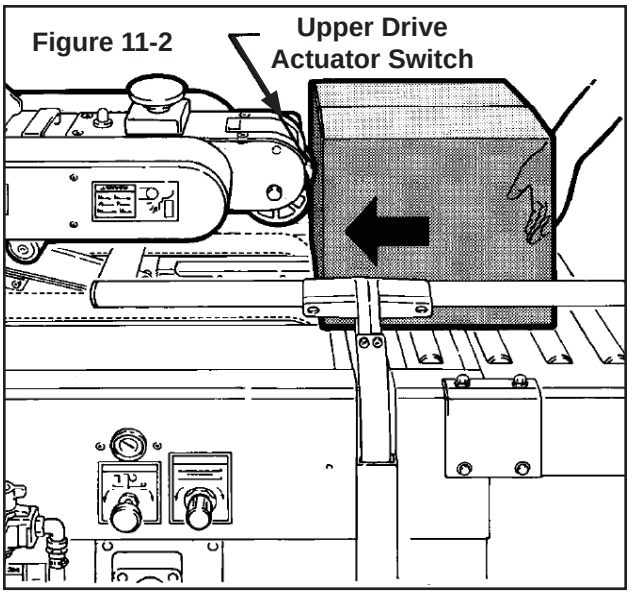


Figure 11-2

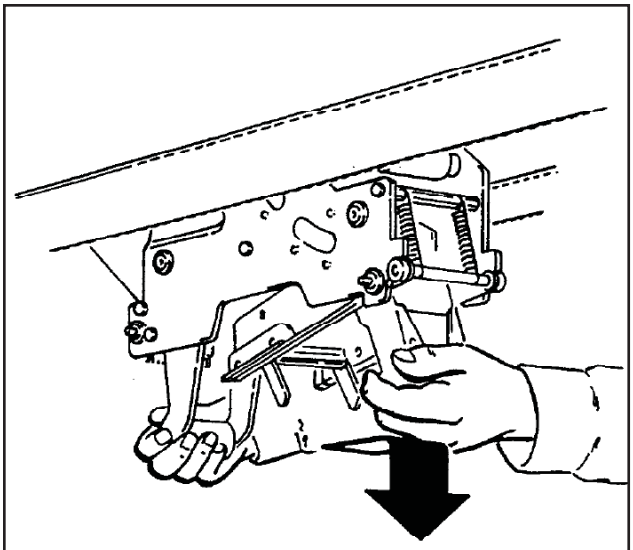


Figure 11-3 – Remove Upper Taping Head

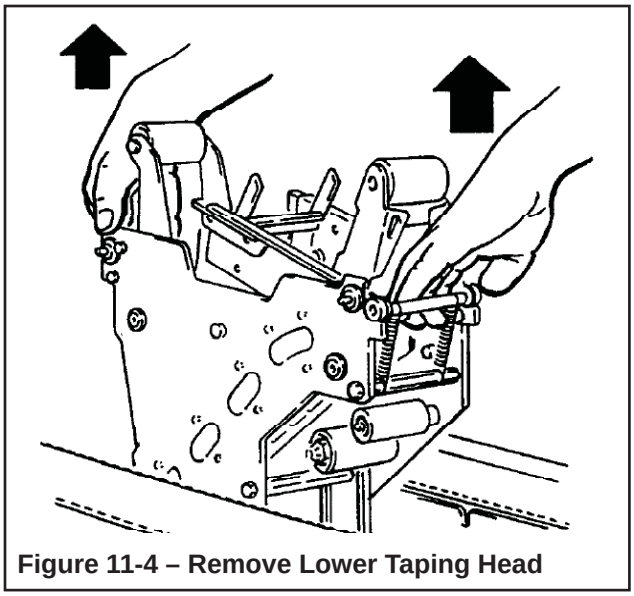


Figure 11-4 – Remove Lower Taping Head

11.5 Run Boxes to Inspect Adjustment (Figure 11-5)

Important: Before starting the machine, verify that no tools or other objects are on the conveyor bed.

Turn electrical and air pressure switches to **On**. This starts the drive belts and engages the pneumatic air pressure system. Move box forward until it contacts the Side Guides Centering Switch in the machine bed which automatically center the box. Continue moving the box forward until it contacts the Upper Drive Assembly Actuator Switch. The Upper Drive Height adjustment adjusts automatically as the box is taken away by the drive belts. Always push at the end of the box. If the box is not centered correctly or the Upper Drive Assembly does not contact the top of the box correctly, see pressure adjustment settings and/or the Troubleshooting Section.

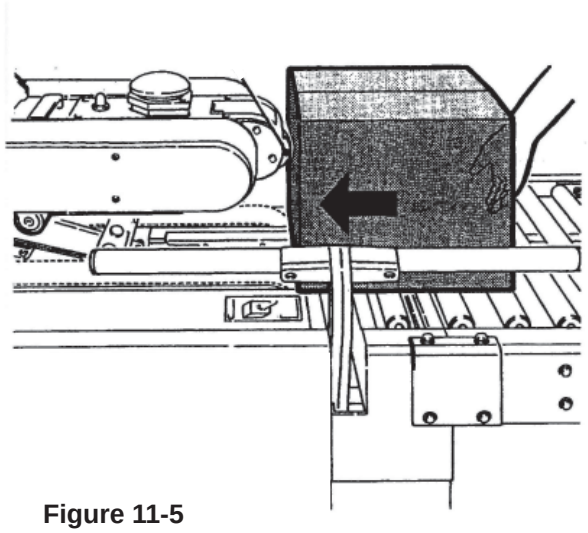


Figure 11-5

CAUTION

- **To reduce the risk associated with pinches hazards:**
  - – Keep hands clear of the upper head support assembly as boxes are transported through the machine.
  - – Keep hands, hair, loose clothing, and jewelry away from box compression rollers.
  - – Always feed boxes into the machine by pushing only from the end of the box.
  - – Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads.

Note – The upper head has a unique feature for overstuffed boxes. The head will raise up to 13mm [0.5 inches] to compensate for this condition.

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

Note - For belt replacement and tension specifications - refer to **Section 13 / Maintenance and Repairs.**

12.1 Operator's Correct Working Position and Operational Flow (Figure 12-1).

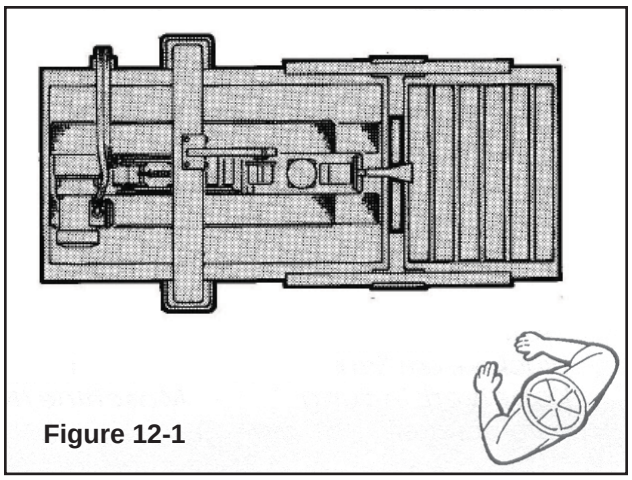


Figure 12-1

Once the box has been filled, close its top flaps and push it between the top and bottom drive belts. Always keep hands in position as shown in **Figure 12-2.**

The box will be automatically sealed with adhesive tape on the top and bottom box seams. Then the box will be expelled on the exit conveyor.

Hand Position

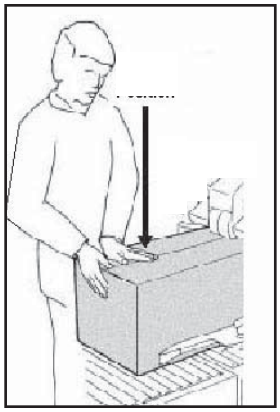


Figure 12-2

12.2 Starting the Machine

Important: Before starting the machine, verify that no tools or other objects are on the conveyor bed.

Push the main rotary switch ON **(Figure 12-3)** after the EMERGENCY BUTTON is released**.**

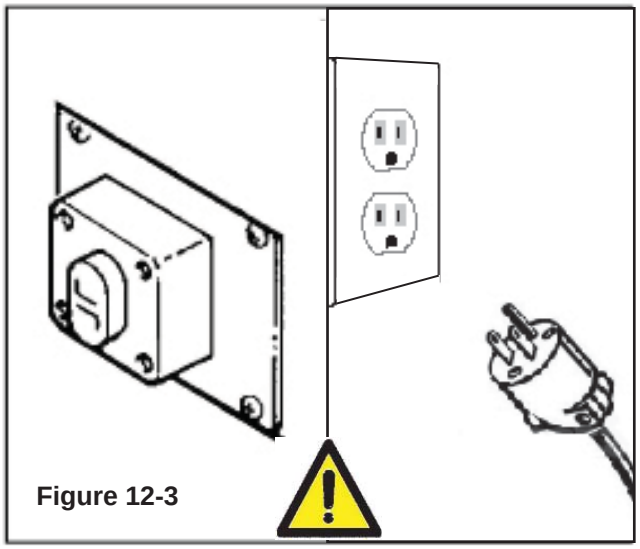


Figure 12-3

12.3 Starting Production

Let the machine run without cartons and check its safety devices. Then start the working cycle.

12.4 Tape Replacement and Threading

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  – Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp.

See Manual 2: AccuGlide™ 3 Taping Heads - 3 Inch.

Press the
LATCHING EMERGENCY STOP BUTTON.

12.5 Box Size Adjustment

Repeat all the operations shown in
Section 11 - Set-Up and Adjustments.

12.6 Cleaning

Before carrying out any cleaning or maintenance operation stop the machine by turning the OFF rotary switch on the main and disconnect the electric power **(Figure 12-3).**

12.7 Table of Operation Adjustments - Operator Qualifications

1	Tape loading and threading	1
2	Tape web alignment	1
3	Adjustment of one way tension roller	1
4	Adjustment to box size (H and W)	1
5	Top flap compression rollers	1
6	Adjustment of tape applying spring	1
7	Conveyor bed height adjustment	1
8	Special Adjustment-Changing tape leg length	2
9	Special Adjustment-Column re-positioning	2

12.8 Safety Devices Inspection

1 Taping units blade guard
2 Latching emergency stop button
3 STOP (OFF) main rotary switch

The Troubleshooting Guide lists some possible machine problems, causes and corrections.
Also see Manual 2 "Troubleshooting" for taping head problems.

12.9 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 fore 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 Guide

Problem	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	
	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	Clean or replace valve
		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 wrongly adjusted	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

13.1 Safety Measures (see section 3)

Carrying out maintenance and repairs may imply the necessity to work in dangerous situations.

13.2 Tools and Spare Parts Supplied with the Machine

See Spare Parts Order Section.

13.3 Recommended Frequency of Inspection and Maintenance Operations

Operation	Frequency	Qualification	Sections
Inspection safety features	daily	1	13.4
Cleaning of machine	weekly	1	13.5
Cleaning of cutter blade	weekly	2	13.6
Oiling of felt pad	weekly	2	13.7
Lubrication	monthly	2	13.7-13.8
Blade replacement	when worn	2	See Manual 2
Drive belt replacement	when worn	2	13.10

13.4 Inspections to be Performed Before and After Every Maintenance Operation

Before every maintenance operation, turn the main switch OFF and disconnect. During the maintenance operation, only properly trained and qualified personnel must work on the machine. At the end of every maintenance operation check the safety devices.

13.5 Check Efficiency of Safety Features

1. Blade guard assembly upper taping head
2. Blade guard assembly lower taping head
3. Latching Emergency stop button with mechanical lock (interrupt supply of electrical power)
4. Turn the main switch STOP/OFF
5. Safety guards top drive belts

13.6 Cleaning of Machine

Qualification 1
A weekly cleaning with dry rags or diluted detergents is necessary. Cardboard boxes produce a significant quantity of dust and paper chips when processed or handled in case sealing equipment. If this dust is allowed to build up on machine components, it can cause component wear and over-heating of drive motors. The dust build up is best removed from the machine with a vacuum cleaner. Depending on the number of cartons processed, this cleaning should be done weekly. Excessive build-up that cannot be removed by vacuuming should be removed with a damp cloth.

13.7 Cleaning of Cutter Blade

Qualification 2
Should tape adhesive build-up occur, carefully wipe clean with oily cloth or brush **(Figure 13-1).** Oil prevents the build-up of tape adhesive.

(See manual 2.)

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  − Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.
  − Allow only properly trained and qualified personnel to operate and service this equipment.
- **To reduce the risk associated with pinches, entanglement and hazardous voltage:**
  − Turn electrical supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads.

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads
- **To reduce the risk associated with impact hazards:**
  - Always use appropriate supporting means when working under the upper drive assembly

13.8 Box Drive Belt Replacement

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

Lower Drive Belts
Figure 13-4

1. Remove and retain center plates **(A)** and four (4) 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".
8. Replace side cover and center plates and secure with original fasteners.

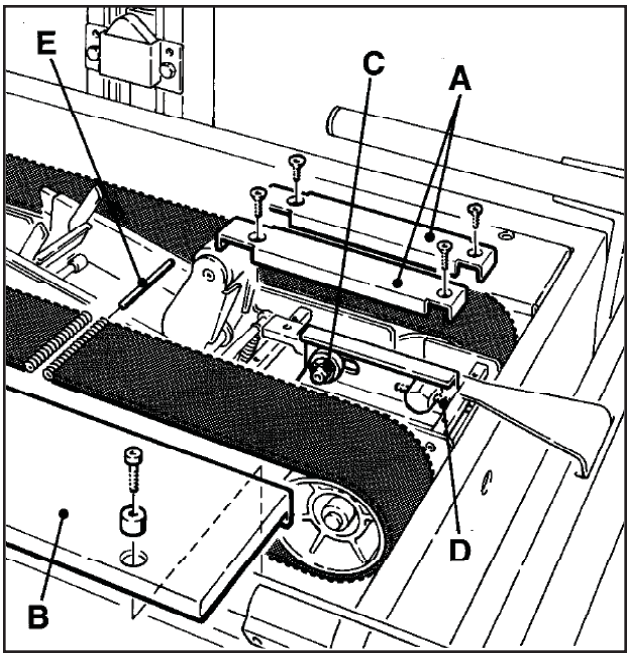


Figure 13-4 – Lower Drive Belt Replacement

Upper Drive Belts
Figure 13-5

1. Remove and retain center plate **(A)** and four screws and plain washers.
2. Loosen, but do not remove lock nut **(B)**.
3. Loosen tension screw **(C)** until all tension is removed from belt.
4. Remove four (4) screws on side of belt guard **(D)** and slide belt guard out to expose belt.
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".
8. Replace front cover and belt guard(s) and secure with original fasteners.

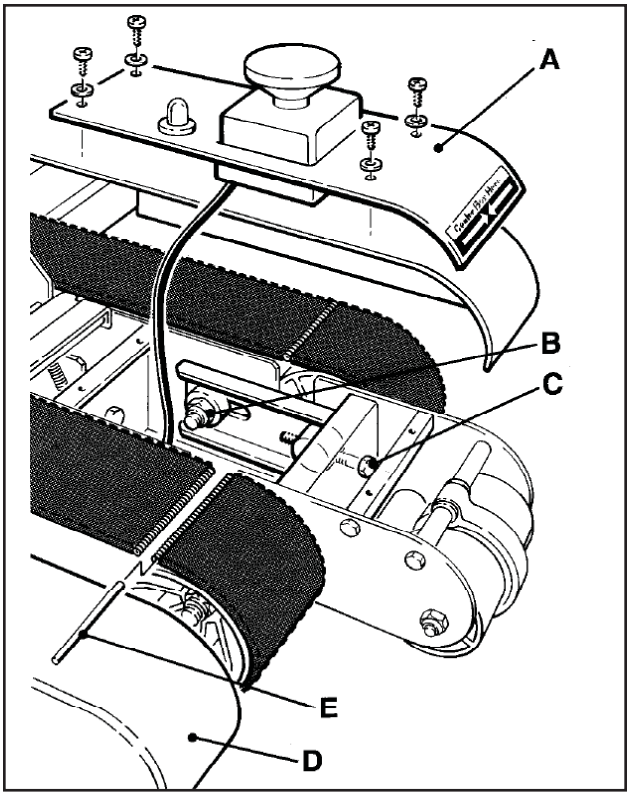


Figure 13-5 – Upper Drive Belt Replacement

13.9 Drive Pulley Rings

Before installing a new belt, check the orange plastic drive pulley rings for wear. If torn, broken, or worn smooth, replace the rings **(Figure 13-6).**

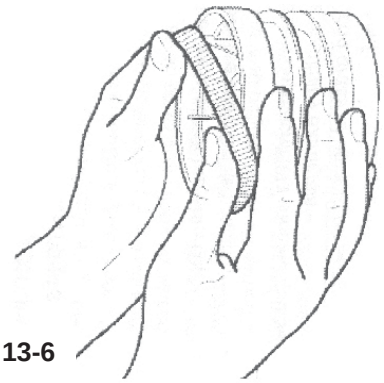


Figure 13-6

WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads.

13.10 Box Drive Belt Tension

The four (4) continuously moving drive belts convey boxes through the tape applying mechanism. The box drive belts are powered by an electric gear motor.

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 the belts 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 screw so that a moderate pulling force of 3.5kg [7lbs.] applied at the mid span, as shown in **Figure 13-7**, will deflect the belt 25mm [1 inch]. This will assure positive contact between the belt and the drive pulley on the discharge end of the drive assembly.

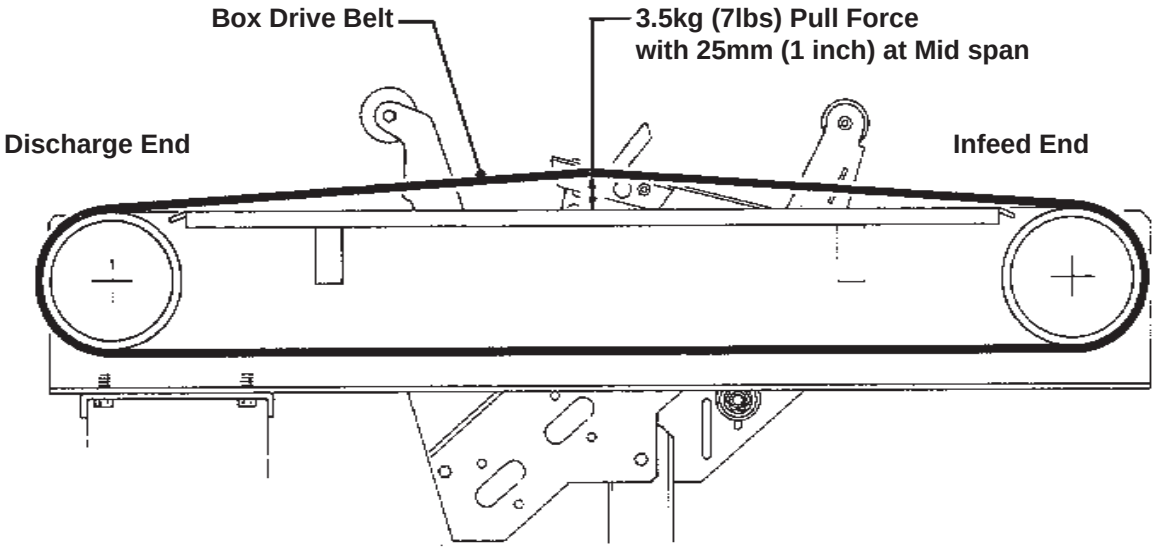


Figure 13-7 Box Drive Belt Tension Adjustment

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

Refer to **Figure 13-8 and 13-9** 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 17mm open end wrench.
3. Reset the tension on the drive belts as needed. Adjust the M8 tension screws in (clockwise) to **increase** tension or out (counterclockwise) to **decrease** tension. Tighten lock nut to secure tension setting.
4. Replace center plates/front cover and secure with original screws.

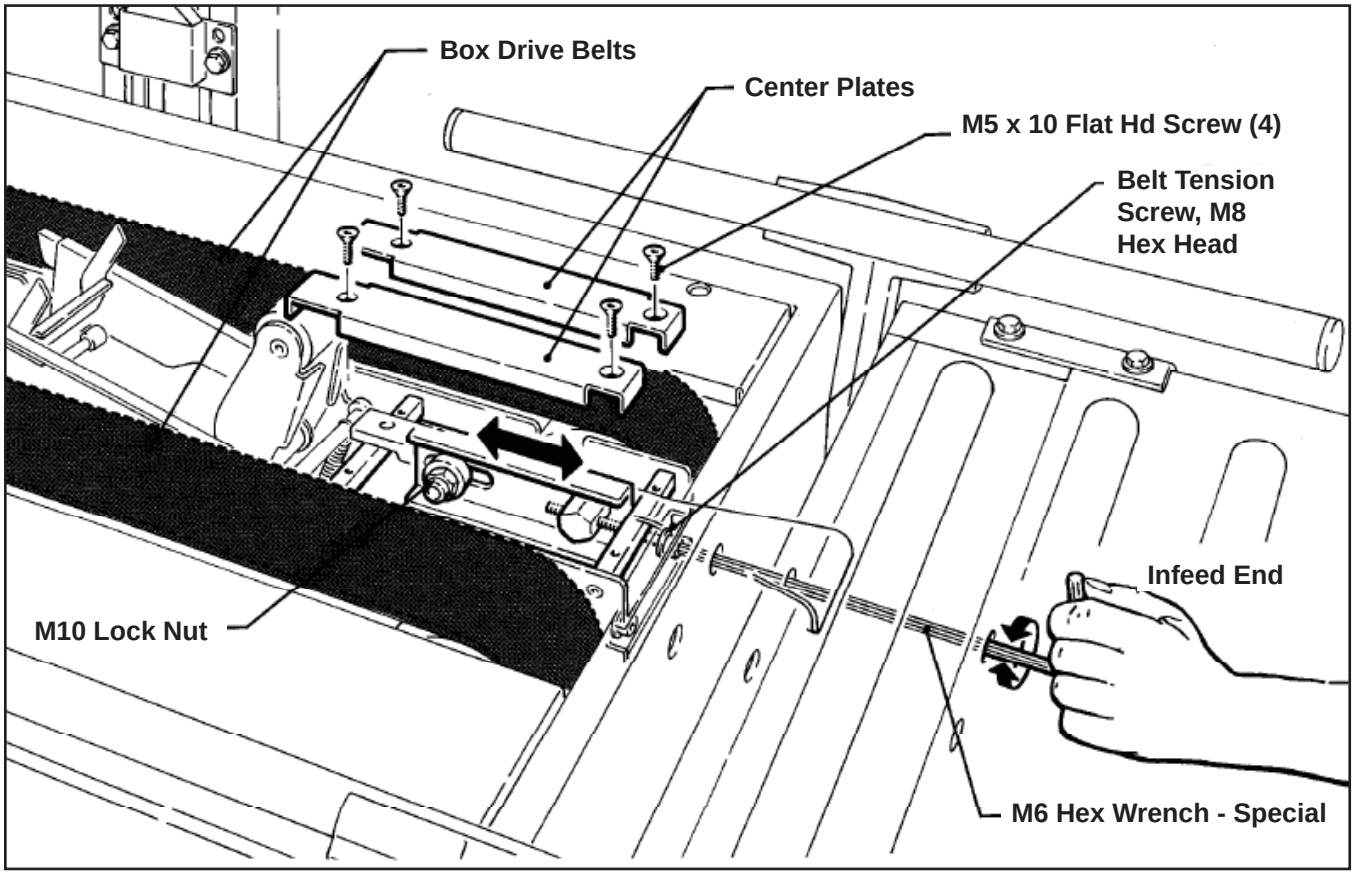


Figure 13-8 – Box Drive Belt Tension Adjustment, Lower Belts (Infeed End)

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

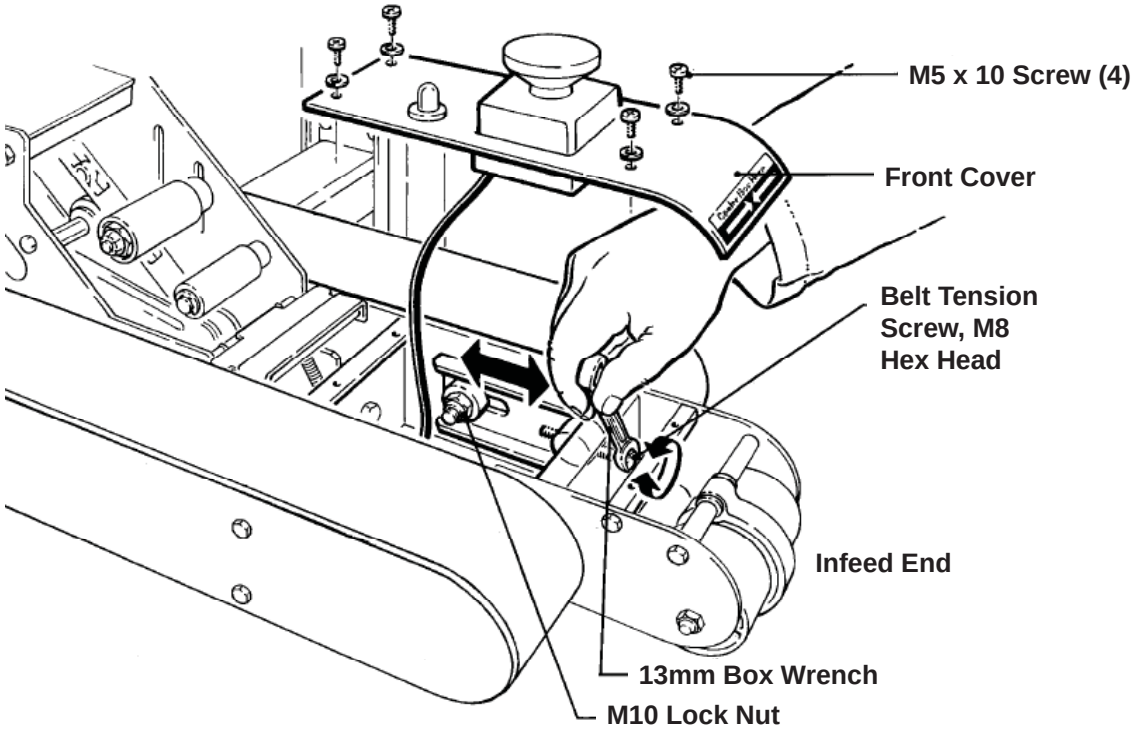


Figure 13-9 – Box Drive Belt Tension Adjustment, Upper Belts (Infeed End)

Taping Head Adjustments – Refer to Manual 2

⚠ WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

TAPE WEB ALIGNMENT – Manual 2

TAPE DRUM FRICTION BRAKE – Manual 2

APPLYING MECHANISM SPRING – Manual 2I

ONE-WAY TENSION ROLLER – Manual 2

TAPE LEG LENGTH ADJUSTMENT – Manual 2

EXTENDED PLATE BUMPER - Manual 2

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

13.11 Special Set-Up Procedure - Column Bumper Installation

Purpose of Column Bumper Special Set-up Procedure: Installing Column Bumpers restrict the operating range of the upper assembly in proportion to the size of boxes to be sealed.
This installation results in an increase to the operating speed.

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

Installation Instructions - Column Bumper (A parts package is included with the unit for installation purposes).

The Column Bumper will be located on the column according to the size of the box that is to be taped (Refer to **Figure 13-10A**).

1. Raise and Lock the Upper Drive Assembly. ***IMPORTANT:*** This procedure is for authorized personnel ONLY!
2. Turn off air supply and electric power.
3. Remove Guard (see Installation and Set-Up / **Figure 7-7)**, the existing holes for installing Column Bumper should be visible.
4. Remove Column Bumper and set screw parts package from the carton.
5. Position Bumper as needed (the recommended position is shown in **Figure 13-10A**).
6. After the new Bumper is installed, re-install the Safety Guard (see Installation and Set-Up Section/**Figure 7-7**).
7. Turn on air supply and electric power.

* ***NOTE - IMPORTANT:***

- See **Figure 15266** for Plate Change. When Column Adjusted to **"Raised"** Position - Parts #40 and #41 are removed and replaced by Part #42.
- Some bumper positions may:
  1) Allow upper and lower taping heads to come into contact with each other.
  2) Create added stress to the bumper.
  3) Cause a malfunction of the machine.

  These events can potentially cause damage to the machine. For more information on bumper settings, contact your 3M service representative.

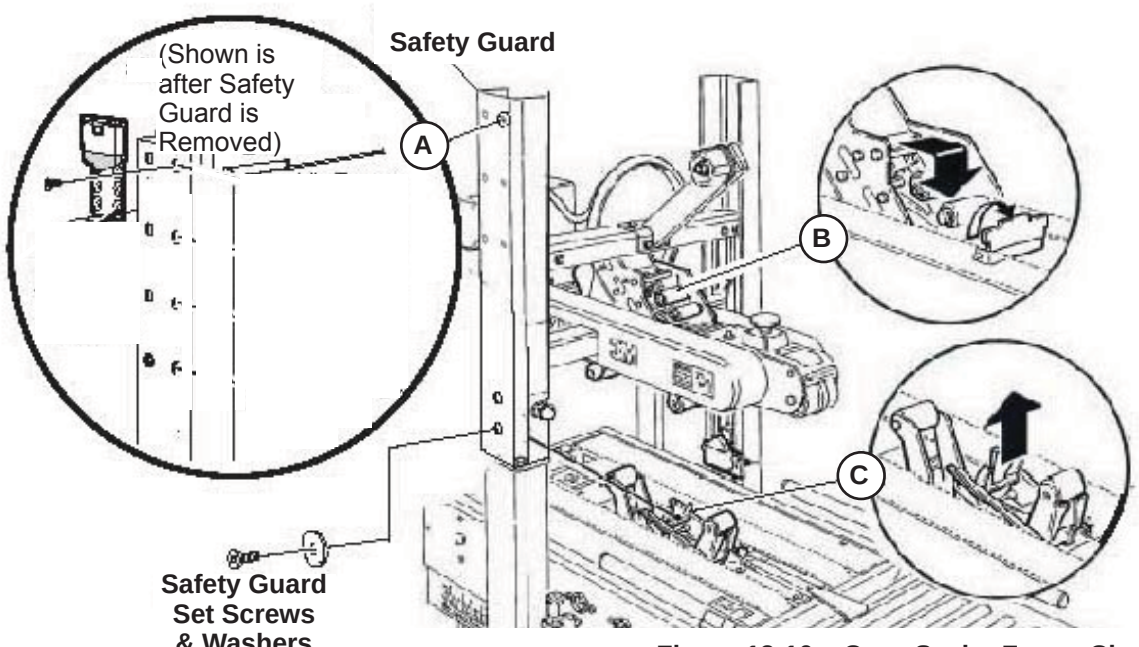


Figure 13-10 – Case Sealer Frame Changes

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads

Box and Machine Bed Height Range – Refer to **Figure 13-11**

Moving the outer columns up one set of mounting holes increases the maximum box size handled by the 700rks case sealer and decreases the minimum machine bed height.

IMPORTANT **–** When raising the column, the existing Safety Plates (2) must be replaced by a new Safety Plate (included in the parts kit) as shown in **Figure 15266**.

Note – This also increases the minimum box height from 120mm [4.8 inch] to 170mm [6.8 inch].

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

1. Lift the upper taping head/drive assembly up and place a 200 - 250mm [8 - 10 inch] block at the front and rear of the upper drive assembly. ***Important –*** Blocks (front and rear) must be same height in order to keep upper drive assembly parallel with machine bed. Also, block both columns up with solid spacers between outer columns and floor. See **Figure 13-11A**.
2. Remove and retain the six screws and plain washers that fasten each column to the frame - **Figure 13-11B**.
3. Lift the outer columns up one set of mounting holes, and place spacers between the blocks on the floor and each column. See **Figure 13-11C**.

⚠ WARNING

- **To reduce the risk associated with muscle strain:**
  - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment
- **To reduce the risk associated with impact hazards:**
  - Always use appropriate supporting means when working under the upper drive assembly

4. Install and tighten the six (6) screws and plain washers in each column that were removed in Step 2. Turn on 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 570mm [22.5 inch] by adjusting legs upward. (See "Installation and Set-Up – Machine Bed Height.")

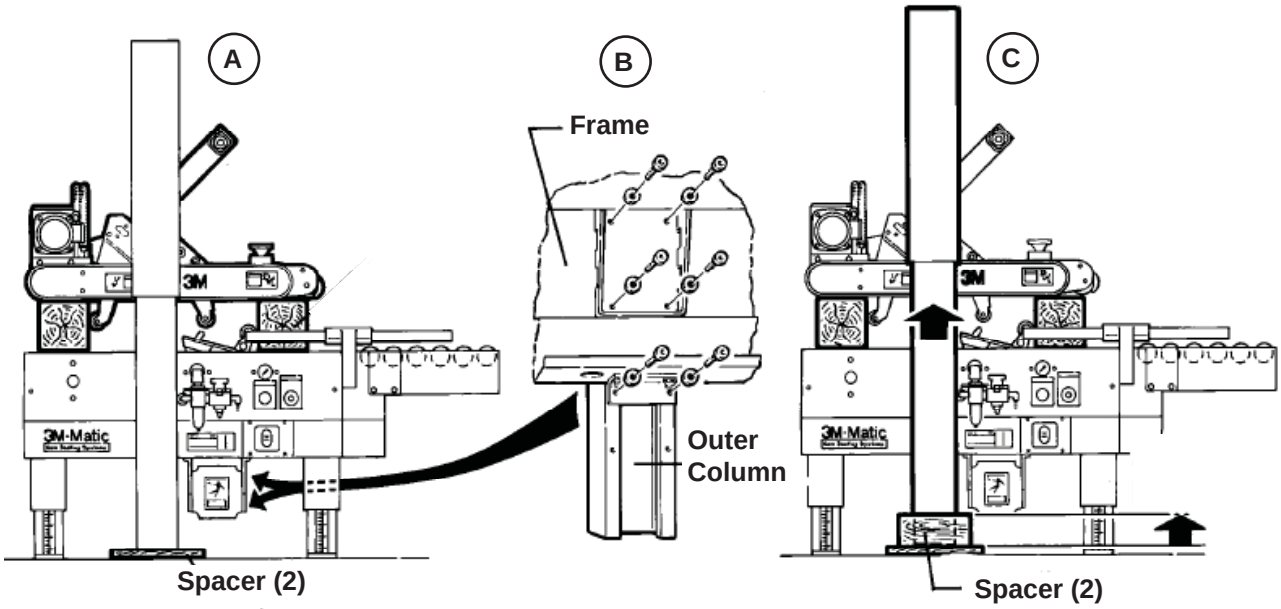


Figure 13-11 – Box and Machine Bed Height Range

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads
  - Allow only properly trained and qualified personnel to operate and/or service this equipment

Box Height Range – (Refer to **Figure 13-11 / Section 7.4 / and Specifications**)

The operating range of the upper drive assembly can be adjusted to minimize its movement (which increases the operating speed) and in conjunction with adjusting the bed height, to change the range of box heights being sealed.

⚠ WARNING

- **To reduce the risk associated with muscle strain:**
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift

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 **(See Figure 13-11 and Figure 15266)**.

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.

THIS PAGE IS BLANK

13.12 List of the Maintenance Operations

Date: **Description of Operation**

THIS PAGE IS BLANK

14.1 Information for Disposal of Machine

The machine is composed of the following materials:

- Steel structure
- Nylon rollers
- Drive belts in PVC
- Nylon pulleys

For machine disposal, follow the regulations published in each country.

14.2 Emergency Procedures

In case of danger/fire:
Disconnect plug of power cable from power supply. **(Figure 14-1)**

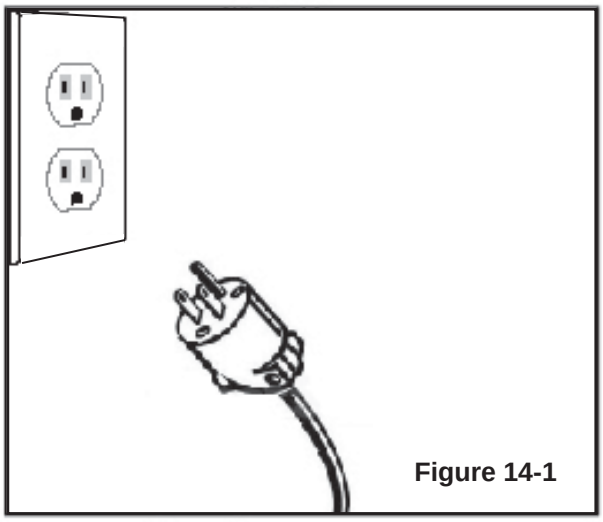


Figure 14-1

IN CASE OF FIRE

Use a fire extinguisher that is rated for electrical fires **(Figure 14-2).**

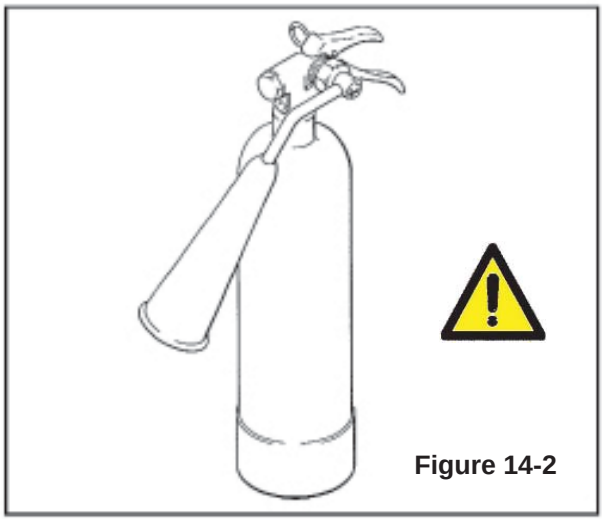


Figure 14-2

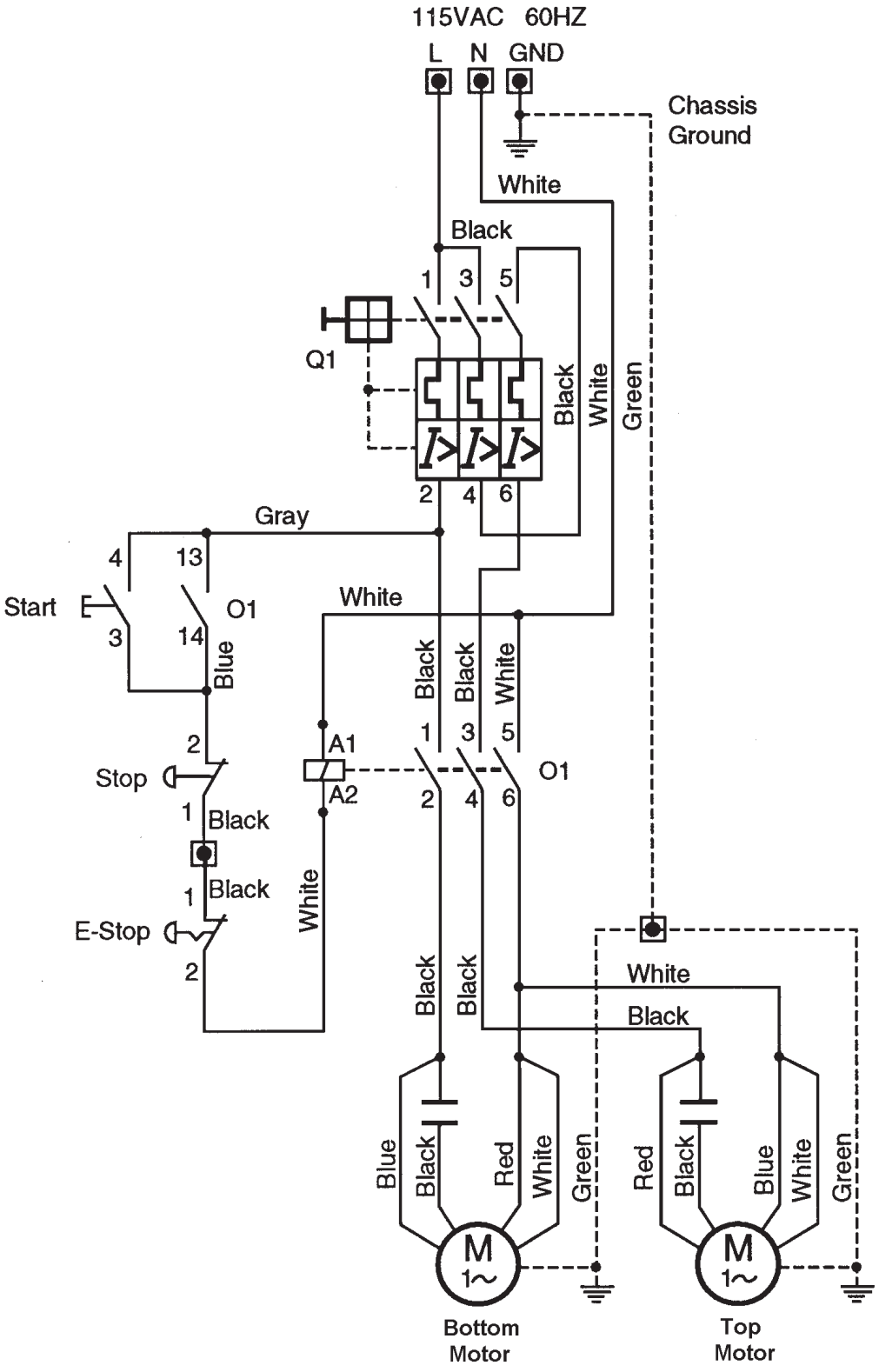
15.1 Statement of Conformity

Not Applicable.

15.2 Emission of Hazardous Substances

Nothing to report

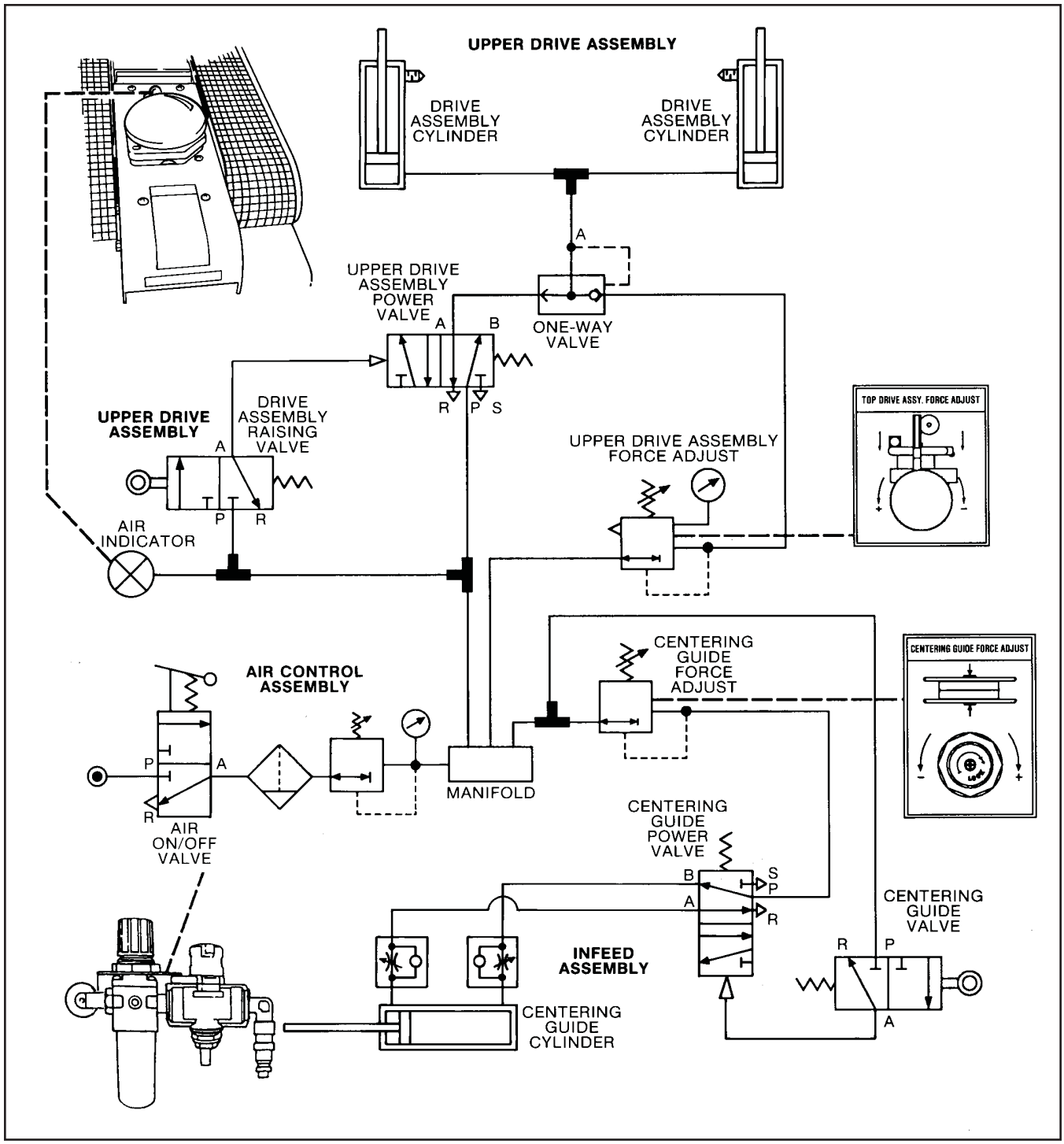
16.1 Electric Diagram



16.2 Pneumatic Diagram

⚠ WARNING

- **To reduce the risk associated with mechanical and electrical hazards:**
  - Turn electrical and air supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads



THIS PAGE IS BLANK

16.3 Spare Parts Order

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

Qty.	Part Number	Description
4	78-8070-1531-4	Belt – Drive W/Pin

In addition, a tool/spare parts kit supplied with the 700rks Random Case Sealer contains the following spare parts:

Qty.	Part Number	Description
1	78-8137-3311-6	Spring – Upper Extension
1	78-8137-3312-4	Spring – Lower Extension
2	78-8028-7899-7	Knife – 89mm/3.5 /Inch
4	78-8052-6602-6	Spring – Cutter
2	78-8070-1531-4	Belt-Drive W/Pin

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

Also see Section II for recommended taping head spare parts.

Label Kit

In the event that any labels are damaged or destroyed, they must be replaced to ensure operator safety. A label kit, part number 78-8098-9177-9 is available as a stock item. It contains all the safety labels used on the 700rks Random Case Sealer.

Tool Kit

A tool kit, part number 78-8076-4950-0, is supplied with the machine. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 78-8076-4726-4, contained in above kit is also available as a replacement stock item.

Replacement Parts Ordering Information and Service

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

THIS PAGE IS BLANK

700rks Random Case Sealer, Type 40800
Frame Assemblies

To Order Parts:

1. Refer to first illustration, **Frame Assemblies,** for the **Figure Number** that identifies a specific portion of the machine.

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

3. The Parts List that follows each illustration, includes the **Reference Number, Part Number** and **Part Description** for the parts on that illustration.

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

4. Order parts by Part Number, Part Description and Quantity required. Also include the model/machine name, machine type, and serial number that are located on the identification plate.

5. Refer to the first page of this instruction manual **"Replacement Parts and Service Information"** for replacement parts ordering information.

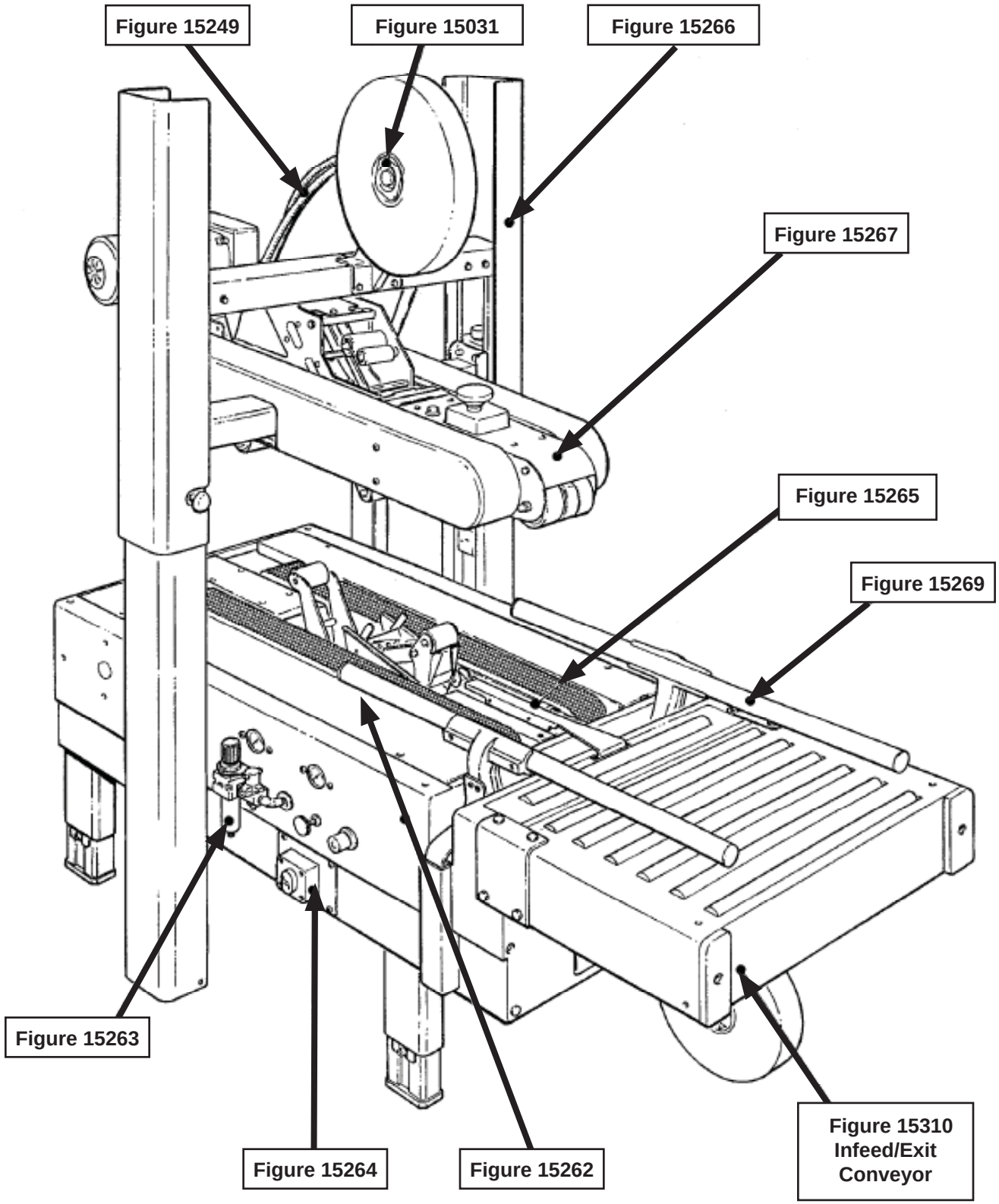
Important **–** Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on special order. Contact 3M/Tape Dispenser Parts to confirm item availability.

Options and Accessories

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

Part Number	Option/Accessory
78-8052-6553-1	Box Hold Down Attachment
78-8069-3983-7	Caster Kit Attachment
70-0066-5081-9	Conveyor Extension Attachment
78-8095-4853-6	Bottom Edge Fold Kit 3"
78-8069-3926-6	Low Tape Sensor Kit
70-0064-4965-9	AccuGlide 3 Upper Taping Head - 3 inch, Type 10800
70-0064-4964-2	AccuGlide 3 Lower Taping Head - 3 inch, Type 10800
78-8095-4852-8	3-Inch Tape Edge Fold Attachment, Upper Head
78-8095-4853-6	3-Inch Tape Edge Fold Attachment, Lower Head
78-8114-0940-4	Three Flap Folder Kit

THIS PAGE IS BLANK



Frame Assemblies

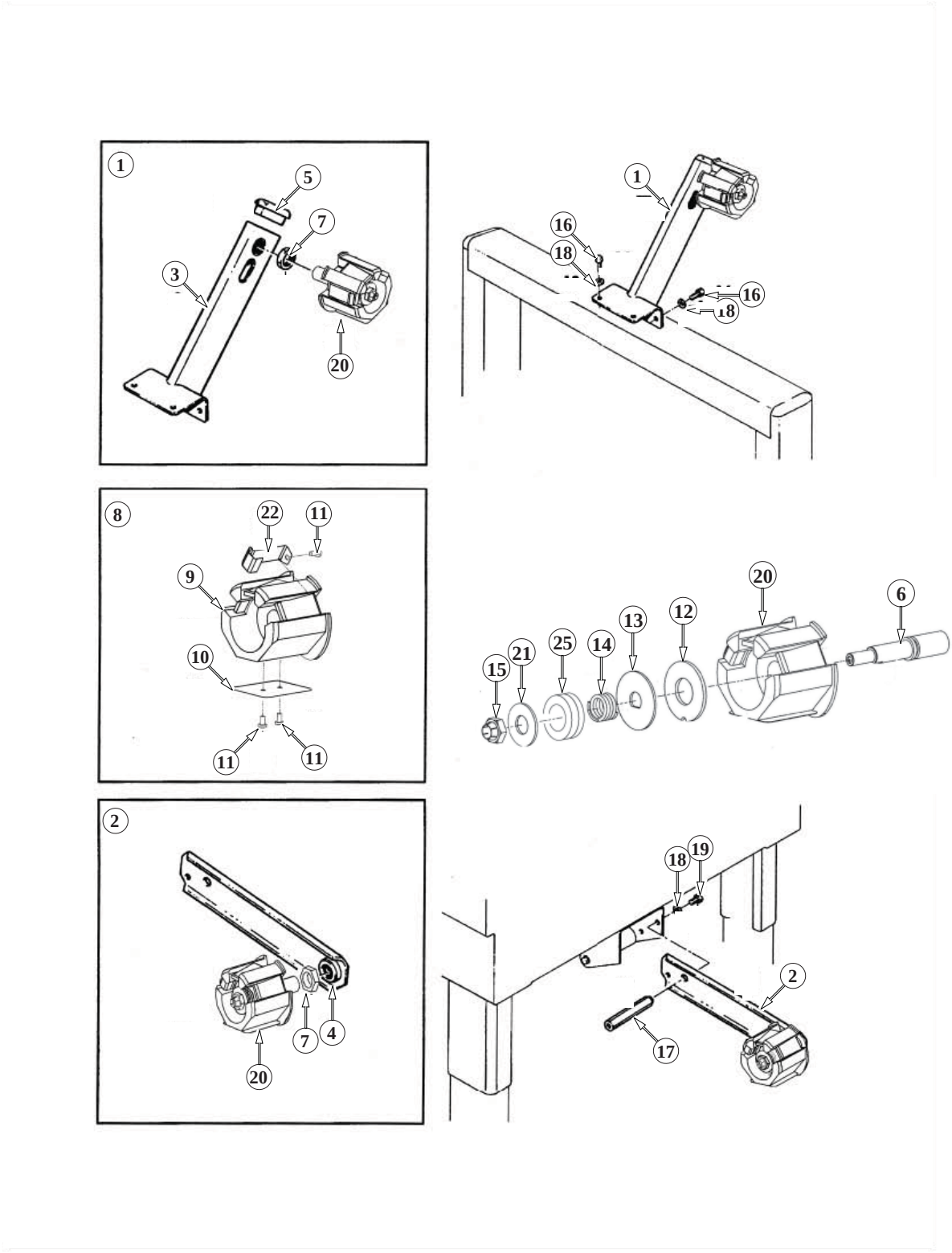
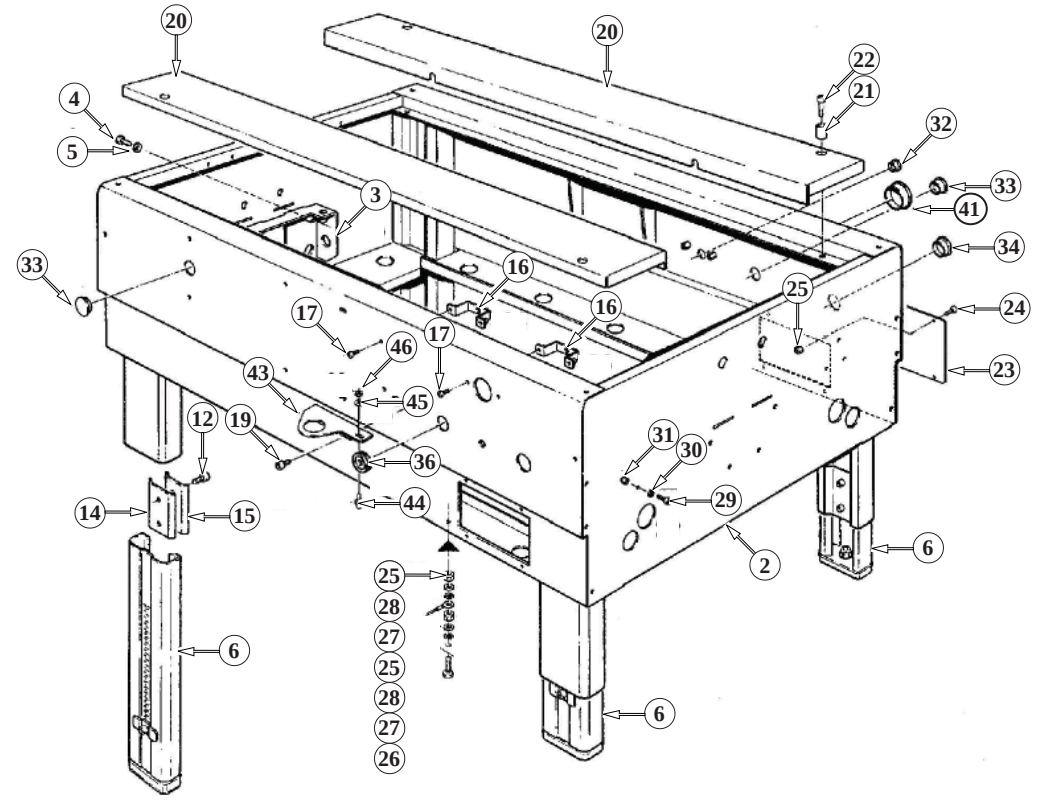
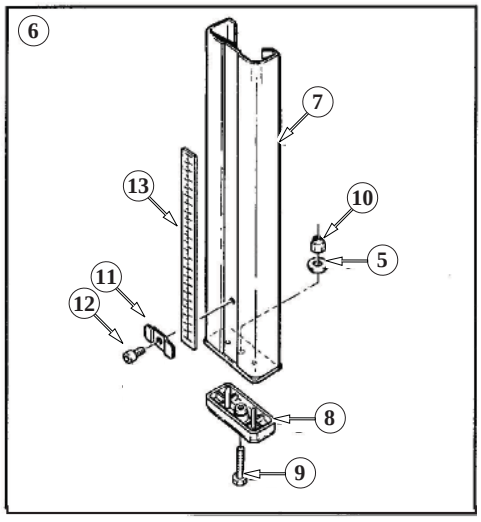


Figure 10531

Figure 15031

Ref. No.	3M Part No.	Description
15031-1	78-8137-1157-5	Tape Roll Bracket Assembly
15031-2	78-8137-1158-3	Tape Drum Bracket Assembly
15031-3	78-8070-1566-0	Bracket – Tape Drum
15031-4	78-8070-1395-4	Bracket – Bushing Assembly
15031-5	78-8070-1568-6	Cap – Bracket
15031-6	78-8060-8462-6	Shaft – Tape Drum, 3 Inch Head
15031-7	78-8017-9169-6	Nut – M18 x 1
15031-8	78-8098-8829-0	Tape Drum Sub-Assembly - 3 Inch
15031-9	78-8098-8828-8	Tape Drum
15031-10	78-8098-8830-4	Leaf Spring
15031-11	26-1002-5753-9	Screw – Self Tapping
15031-12	78-8060-8172-1	Washer – Friction
15031-13	78-8052-6271-0	Washer – Tape Drum
15031-14	78-8100-1048-4	Spring – Core Holder
15031-15	78-8017-9077-1	Nut – Self Locking, M10 x 1
15031-16	78-8032-0375-7	Screw – Hex Hd, M6 x 16
15031-17	78-8070-1215-4	Spacer – Stud
15031-18	26-1000-0010-3	Washer – Flat, M6
15031-19	78-8010-7169-3	Screw – Hex Hd, M6 x 12
15031-20	78-8133-9641-9	Tape Drum Assembly – 3 Inch Head
15031-21	26-1004-5510-9	Washer - Plain, M10
15031-22	78-8098-8816-3	Latch - Tape Drum
15244-25	78-8052-6651-3	Washer - Nylon





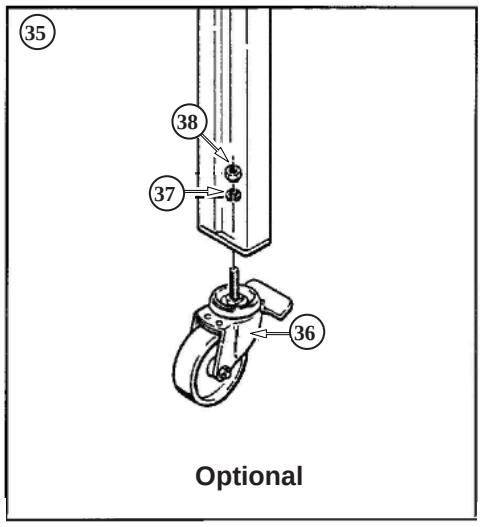


Figure 15262

Figure 15262

Ref. No.	3M Part No.	Description
15262-1	78-8137-0975-1	Conveyor Bed Assembly
15262-2	78-8137-0976-9	Bed – Conveyor
15262-3	78-8137-0577-5	Support – Drive
15262-4	26-1003-5842-8	Screw – Hex Hd, M8 x 20
15262-5	78-8017-9318-9	Washer – Plain, 8 mm
15262-6	78-8076-5381-7	Leg Assembly – Inner, W/Stop
15262-7	78-8076-5382-5	Leg – Inner
15262-8	78-8060-8480-8	Pad – Foot
15262-9	78-8055-0867-4	Screw – Hex Hd, M8 x 30
15262-10	78-8017-9313-0	Nut – Self Locking, M8
15262-11	78-8076-5383-3	Stop – Leg
15262-12	26-1003-7963-0	Screw – Soc Hd, M8 x 16
15262-13	78-8060-8481-6	Label – Height
15262-14	78-8052-6677-8	Clamp – Inner
15262-15	78-8052-6676-0	Clamp – Outer
15262-16	78-8076-4535-9	Bracket
15262-17	78-8076-4625-8	Screw – Special, M5 x 16
15262-19	78-8010-7209-7	Screw – Soc Hd, M6 x 12
15262-20	78-8137-0977-7	Plane – Conveyor Bed
15262-21	78-8060-8486-5	Bushing
15262-22	78-8023-2334-1	Screw – Soc Hd, M6 x 25
15262-23	78-8060-8487-3	Cover – Switch
15262-24	78-8017-9066-4	Screw – M5 x 10
15262-25	78-8010-7417-6	Nut – M5
15262-26	78-8060-8488-1	Screw – Hex Hd, M5 x 20
15262-27	78-8046-8217-3	Washer – Special
15262-28	78-8005-5741-1	Washer – Plain, M5
15262-29	78-8076-4537-5	Screw – Soc Hd, M3 x 25
15262-30	78-8076-4538-3	Washer – Flat, M3
15262-31	78-8059-5517-2	Nut – Self Locking, M3
15262-32	78-8076-4517-7	End Cap – /22 x 1
15262-33	78-8076-4701-7	Cap – /28
15262-34	78-8060-8184-6	Cap – /35 x 1,5
15262-35	78-8098-9076-3	Caster Assembly
15262-36	26-1009-9096-4	Caster - Dual Locking
15262-37	26-1009-9094-9	Washer - Spring, Helical M12
15262-38	26-1009-9095-6	Nut M12 Self-Locking
15262-39	26-1009-9094-9	Washer – Spring Helical, M12
15262-40	26-1009-9095-6	Nut – M12
15262-41	26-1009-9095-6	Cap – 45 X 1.5
15262-43	78-8091-0717-6	Support – R/H, Filter Assembly
	78-8091-0612-9	Support - L/H, Filter Assembly (Not Shown)
15262-44	78-8091-0613-7	Shaft – Valve
15262-45	26-1000-0010-3	Washer – Flat, M6
15262-46	78-8010-7418-4	Nut – Hex, M6

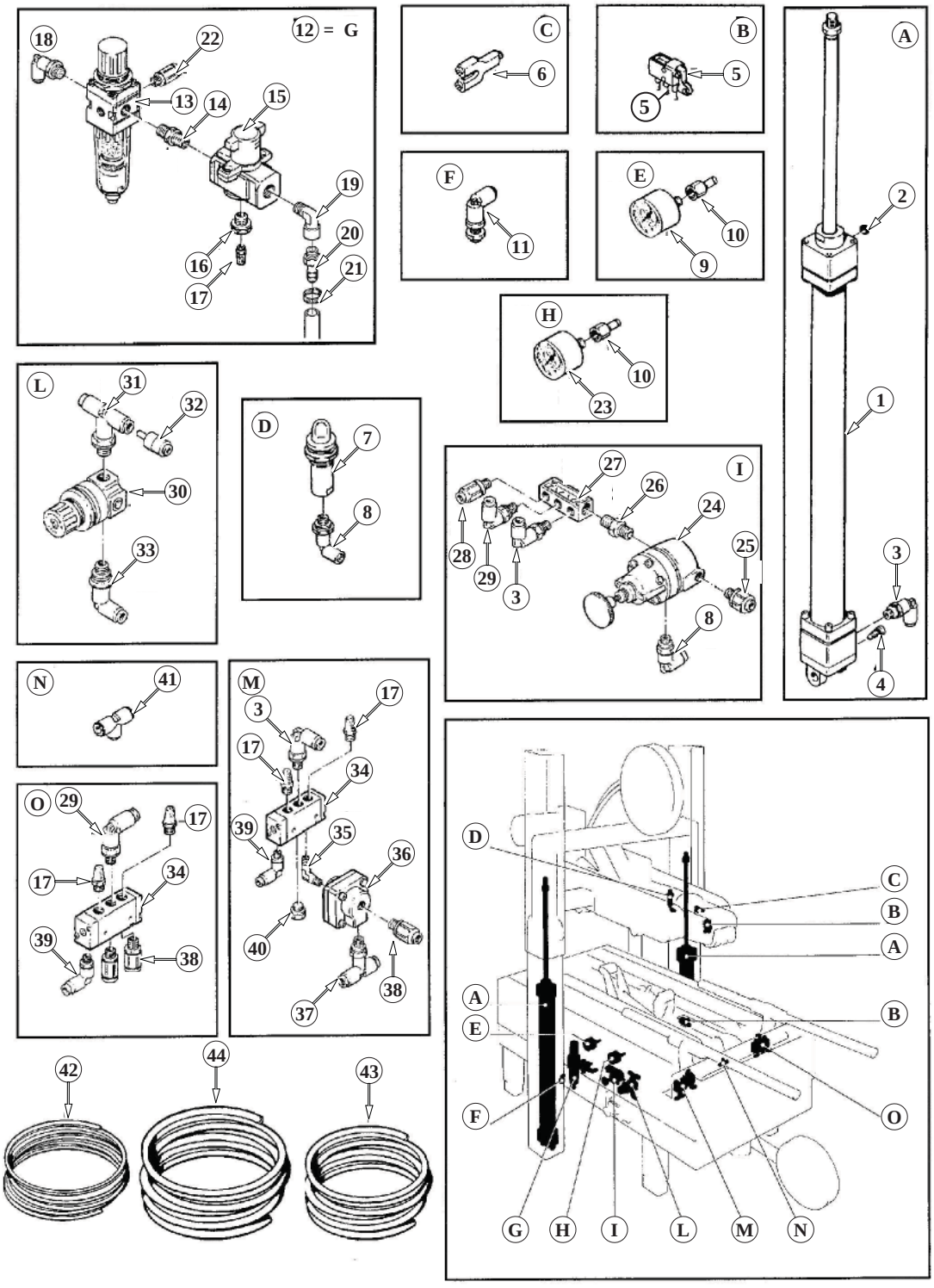


Figure 15263

Figure 15263

Ref. No.	3M Part No.	Description
15263-1	78-8076-4663-9	Cylinder – Air /32 x 580 + 20
15263-2	78-8094-6457-7	Cap – 1/8 Inch
15263-3	78-8091-0313-4	Elbow – 3199.08.10
15263-4	78-8076-4680-3	Screw – Cushioning, Cyl/32
15263-5	78-8060-8091-3	Valve – R/O-3-M5
	26-1005-6359-7	Fitting - Barb N-M5-Pk3
15263-6	78-8076-4664-7	Union – Female
15263-7	78-8076-4665-4	Indicator – Visual
15263-8	26-1005-5909-0	Elbow
15263-9	78-8054-8838-0	Gauge – Air
15263-10	78-8076-4672-0	Union – Straight, Female
15263-11	78-8091-0350-6	Union – Special
15263-12	78-8091-0314-2	Filter – EAW 2000, W/O Gage
15263-13	26-1014-4558-8	Filter – Regulator, W/Metal Bowl
15263-14	78-8060-7899-0	Nipple – RA 012 1/4 - 1/4
15263-15	78-8076-4669-6	Valve – On/Off
15263-16	78-8076-4670-4	Reduction – 3/8 - 1/8
15263-17	26-1005-6890-1	Muffler
15263-18	78-8091-0315-9	Elbow – 3199.08.13
15263-19	78-8060-7900-6	Union – RA 002 1/4 - 1/4
15263-20	26-1005-6897-6	Hose Connector
15263-21	78-8091-0430-6	Clamp – /14-24
15263-22	78-8060-7853-7	Union – Straight MR12-04-18
15263-23	78-8076-4671-2	Gauge – Pressure
15263-24	78-8076-4673-8	Regulator – Pressure
15263-25	26-1005-6901-6	Union – Straight
15263-26	78-8076-4674-6	Nipple – 1/4 - 1/8
15263-27	78-8059-5633-7	Air Distributor
15263-28	78-8091-0316-7	Union – Straight, 3101.08.10
15263-29	26-1005-6893-5	Elbow – 90°
15263-30	78-8076-4675-3	Regulator – 0,5-7 Bar
15263-31	78-8076-4676-1	Union
15263-32	78-8057-5735-4	Fitting – Reducer MR25-04-06
15263-33	78-8055-0756-9	Union – Rotating MR41-06-14
15263-34	78-8076-4677-9	Valve – V2A 5120-01
15263-35	78-8017-9426-0	Elbow – 90°, 1/8 M x 1/8 M
15263-36	78-8076-4678-7	Valve – One-Way
15263-37	78-8091-0317-5	Union – Tee, 3198.08.10
15263-38	26-1005-6910-7	Union – Straight
15263-39	78-8057-5732-1	Fitting – Elbow MR41-04-05
15263-40	78-8060-7690-3	Cap – B-1/8
15263-41	78-8076-4679-5	Union – Tee
15263-42	78-8119-8666-6	Tube – Air, 4 mm O.D. x 2.5 mm I.D.
15263-43	78-8119-8667-4	Tube – Air, 6 mm O.D. x 4 mm I.D.
15263-44	78-8119-8668-2	Tube – Air, 8 mm O.D. x 5 mm I.D.
15263	78-8060-8175-4	Repair Kit for Cylinder /32

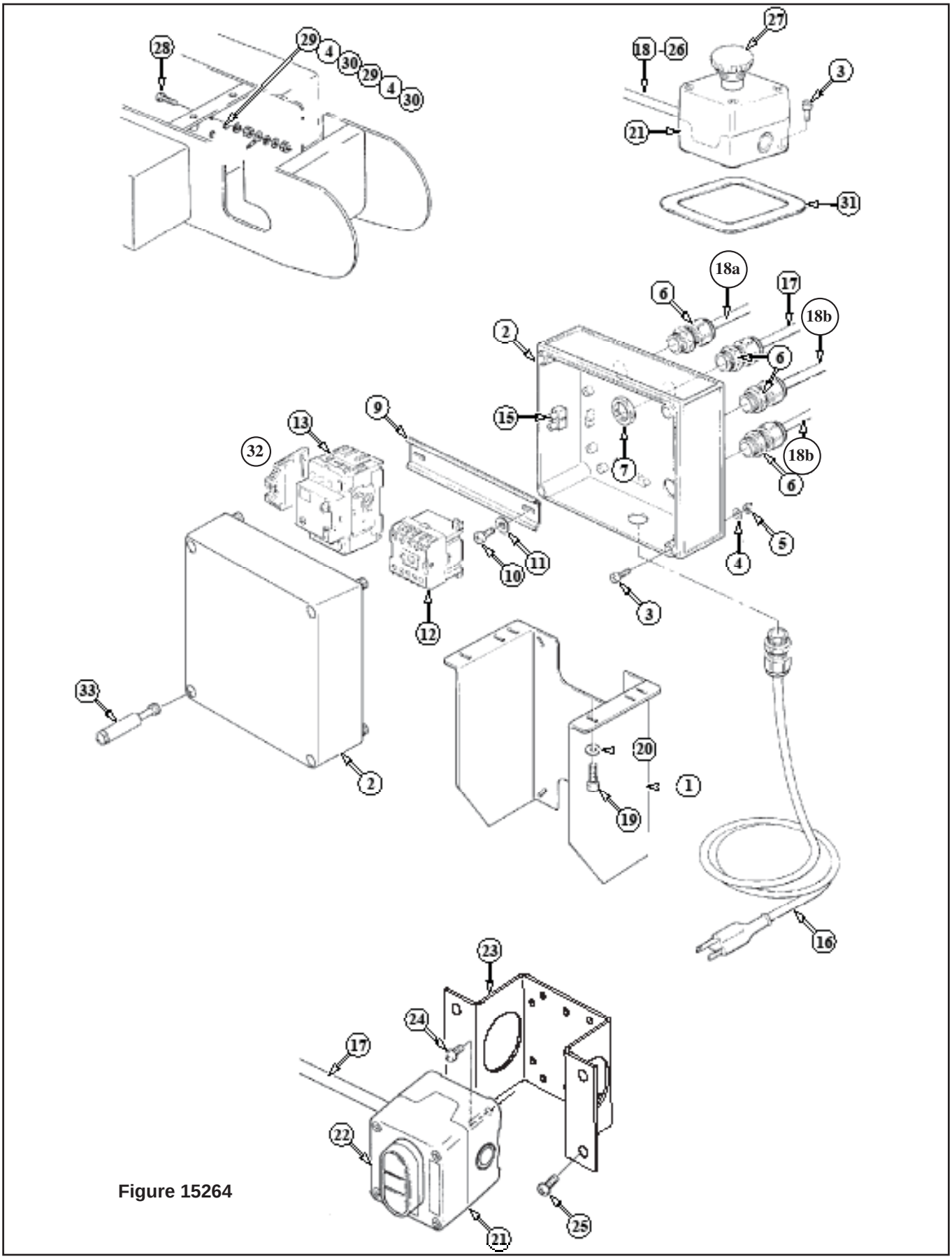


Figure 15264

Figure 15264

Ref. No.	3M Part No.	Description
15264-1	78-8094-6379-3	Support – Box
15264-2	78-8113-6759-4	Box – W/English Language Label
15264-3	78-8094-6381-9	Screw – Soc Hd, Hex Hd, M4 x 15
15264-4	78-8005-5740-3	Washer – Plain, 4 mm
15264-5	26-1003-6914-4	Nut – Plastic Insert, M4
15264-6	78-8076-4715-7	Cord Grip
15264-7	78-8076-5211-6	Set Nut – GMP 13.5
15264-9	78-8094-6382-7	Guide – Mounting
15264-10	78-8028-8208-0	Screw – 6P x 9,5
15264-11	78-8017-9018-5	Washer – Plain, M4
15264-12	78-8100-0830-6	Contactor - Allen Bradley 220V, 50HZ
	78-8100-0831-4	Contactor - Allen Bradley 380V, 50HZ
	78-8094-6383-5	Contactor - Allen Bradley 110V, 60HZ
	78-8137-0604-7	Contactor - Allen Bradley 120V 60 Hz
15264-13	78-8100-0755-5	Circuit Breaker - Allen Bradley 2.5-4 A
	78-8076-5378-3	Circuit Breaker - Allen Bradley 1.6-2.5A
	78-8114-4600-0	Circuit Breaker - Allen Bradley 6.3-10a
	78-8076-5223-1	Circuit Breaker - Allen Bradley 1-1.6A
	78-8119-8965-2	Circuit Breaker - Allen Bradley
15264-14	78-8094-6384-3	Ground Clamp – VGPE 4/6
15264-15	78-8076-4968-2	Terminal
15264-16	78-8028-7909-4	Power Cord – U.S.A.
15264-17	78-8076-5176-1	Cable – FROR 07 3X0.75, 5 Mt
15264-18A	78-8076-5273-6	Cable – 3X1, 5Mt
15264-18B	78-8060-8052-5	Cable – 4X1.5 5Mt 3 Ph
	78-8091-0433-0	Cable – 3X1.5 1 Ph, 5 Mt
15264-19	26-1003-7957-2	Screw – Soc Hex Hd, M6 x 16
15264-20	26-1000-0010-3	Washer – Flat, M6
15264-21	78-8076-5194-4	Box – E-Stop, Yellow
15264-22	78-8137-0823-3	Switch - ON/Off
15264-23	78-8100-1039-3	Support – On/Off Switch
15264-24	78-8017-9257-9	Screw – Phillips Head, M4 x 10
15264-25	78-8017-9066-4	Screw - Metric, M5X12
15264-26	78-8060-7758-8	Grommet
15264-27	78-8137-0609-6	E-Stop
15264-28	78-8091-0538-6	Screw - Hex. Hd. M4X20
15264-29	78-8076-4716-5	Star Washer – M4
15264-30	78-8010-7416-8	Nut – Hex, M4
15264-31	78-8100-1234-0	Collar
15264-32	78-8094-6384-3	Clamp
15264-33	78-8114-4896-4	Box – On/Off, Grey

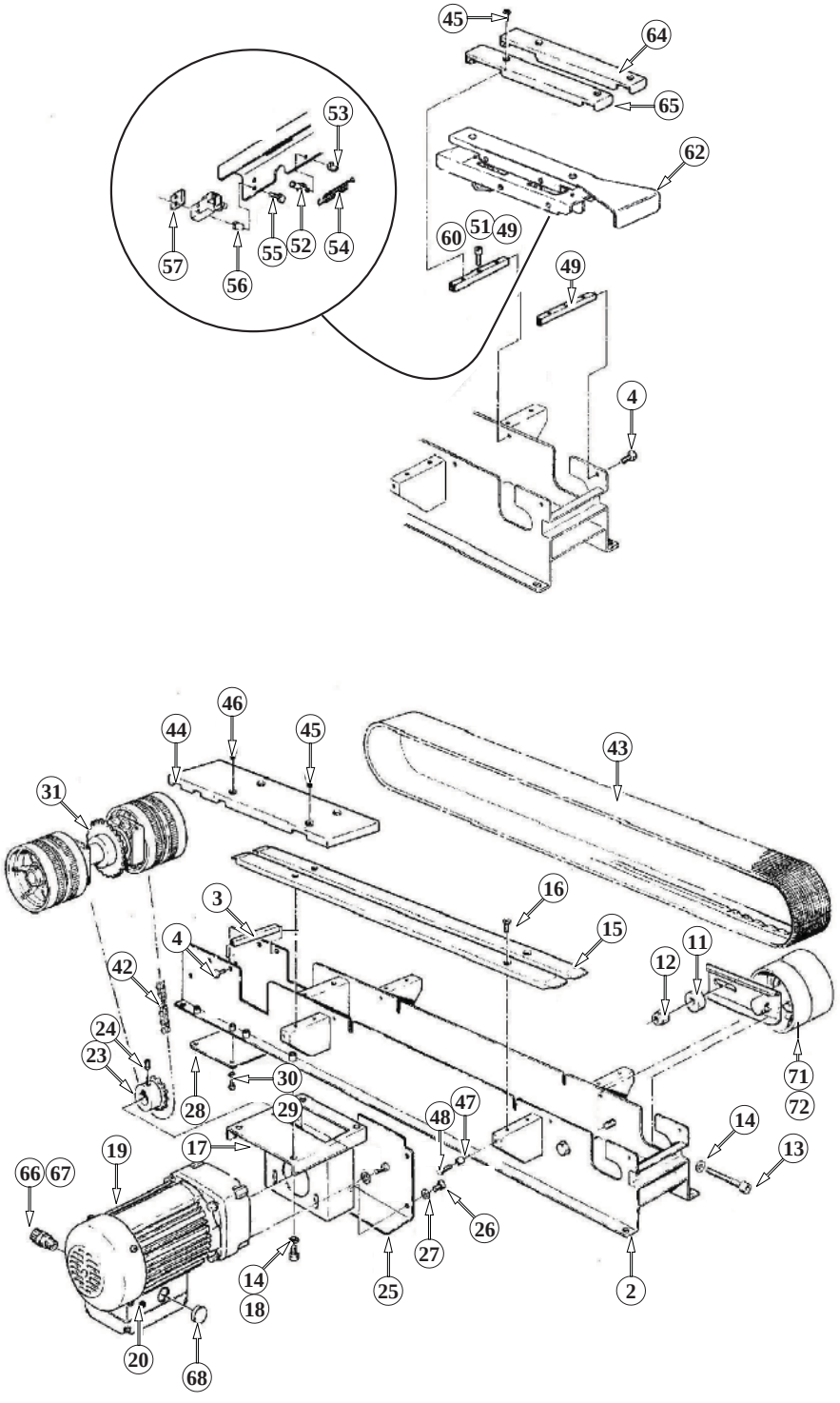


Figure 15265/1

Figure 15265/1

Ref. No.	3M Part No.	Description
15265-1	78-8137-0978-5	Bottom Drive Assy - w/Motor
15265-2	78-8137-0579-1	Frame - Drive
15265-3	78-8137-0568-4	Spacer
15265-4	26-1003-5829-5	Screw Hex Hd. M6 X 12
15265-7	78-8052-6710-7	Roller - Idler
15265-8	78-8052-6709-9	Washer - Special
15265-9	78-8010-7435-8	Washer - Metric Lock, M6
15265-10	26-1003-7957-2	Screw Soc. Hd. Hex Hd. M6 X 16
15265-11	78-8070-1518-1	Spacer - Shaft
15265-12	26-1003-6918-5	Nut, Plastic Insert M10 Hex Flange
15265-13	78-8070-1519-9	Screw - Soc. Hd. Hex. Hd. M8 X 70
15265-14	78-8017-9318-9	Washer - Plain - Metric 8MM
15265-15	78-8070-1520-7	Guide - Drive Belt
15265-16	26-1005-4757-4	Screw - Flat Hd, Soc. Dr. M5 X 20
15265-17	78-8137-0960-3	Support - Gear Box
15265-18	26-1003-7964-8	Screw Soc. Hd. Hex Soc. Dr., M8 X 20
15265-19	78-8137-0580-9	Support - Motor Bottom
15265-20	26-1011-8828-7	Capacitor - 115V Gear Motor
15265-21	78-8070-1523-1	Screw 1/4-28X3/4
15265-22	78-8042-2919-9	Washer - Triple, M6
15265-23	78-8137-0936-3	Sprocket - 3/8" Z=24
15265-24	78-8137-0940-5	Screw - Set M6 x 20
15265-25	78-8137-0962-9	Cover
15265-26	78-8010-7209-7	Screw, Soc. Hd. M6 X 12
15265-27	26-1000-0010-3	Washer - Flat M6
15265-28	78-8076-4562-3	Cover - Bottom
15265-29	26-1003-5820-4	Screw - Hex Hd. M5 X 12
15265-30	78-8005-5741-1	Washer - Flat, M5
15265-31	78-8137-0570-0	Shaft with Drive Pulleys
15265-32	78-8137-0537-9	Shaft - Gearbox
15265-33	78-8057-5811-3	Key, 6 X 6 X 20MM.
15265-34	78-8054-8986-7	Sprocket - 3/8" Pitch, 28 Teeth

Figure 15265/2

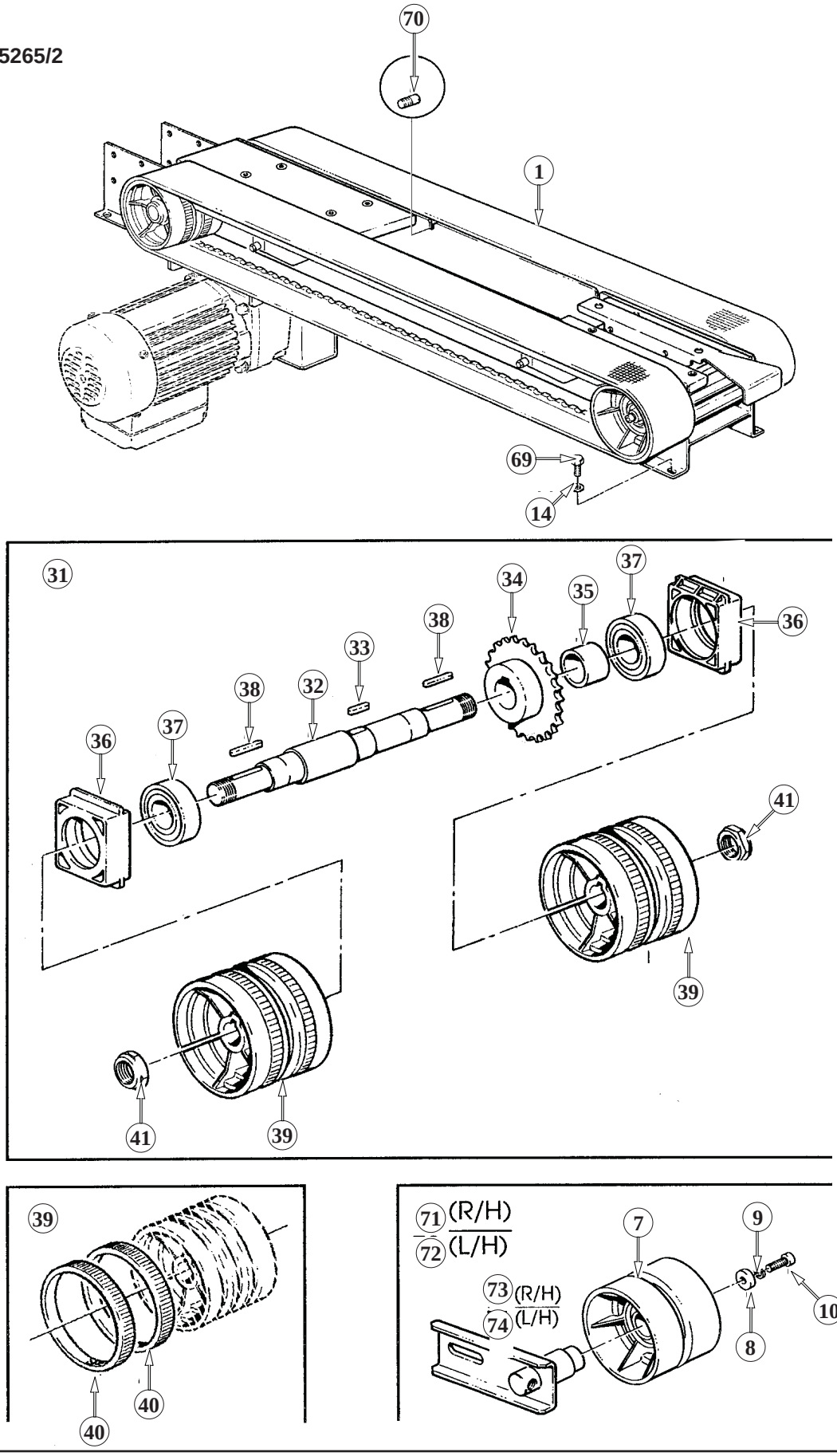
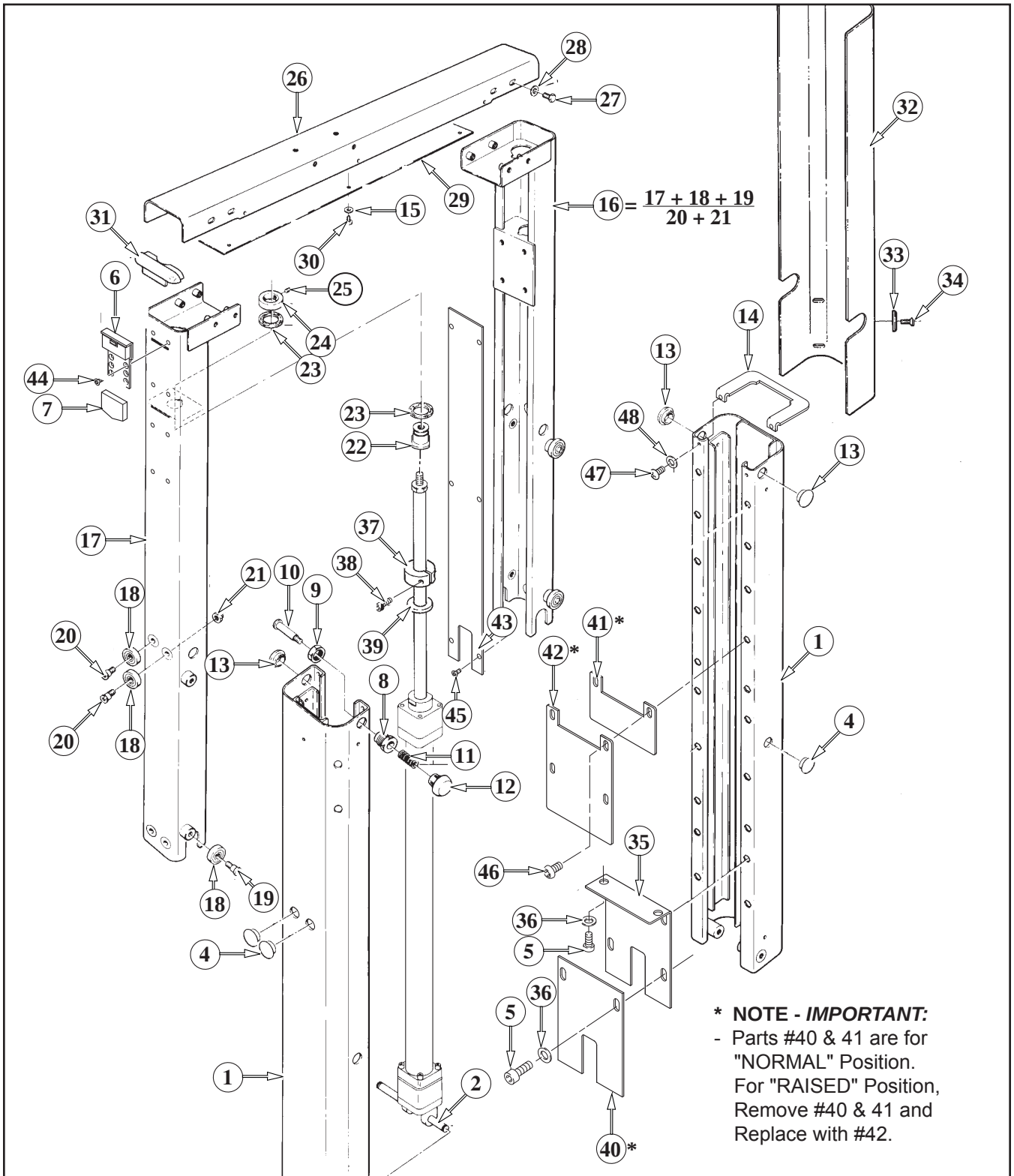


Figure 15265/2

Ref. No.	3M Part No.	Description
15265-35	78-8054-8984-2	Bushing
15265-36	78-8070-1529-8	Support - Shaft
15265-37	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52
15265-38	78-8057-5739-6	Key, M5 X5 X 30MM
15265-39	78-8076-5105-0	Pulley Assy - Drive
15265-40	78-8052-6713-1	Ring - Polyurethane
15265-41	78-8060-8416-2	Nut - Special M20 X 1
15265-42	78-8137-0964-5	Chain 3/8" - 60P
15265-43	78-8070-1531-4	Belt - Drive, w/Hook
15265-44	78-8137-0546-0	Cover - Drive, Rear
15265-45	26-0001-5862-1	Screw, Flat Hd Soc. M5 X 12
15265-46	26-1005-5316-8	Screw, Flat Hd. Hex DR. M5 X 16
15265-47	78-8070-1534-8	Stud - Side Plate
15265-48	78-8060-8488-1	Screw - Hex. Hd. M5 X 20
15265-49	78-8076-4555-7	Spacer
15265-50	78-8076-4556-5	Support - Valve
15265-51	26-1003-7951-5	Screw, Soc Hd Hx Soc M5 X 20
15265-52	78-8054-8757-2	Pin - Spring Holder
15265-53	26-1005-6859-6	Nut Self-Locking M5
15265-54	78-8076-4774-4	Spring
15265-55	26-1003-7947-3	Screw Soc. Hd. Hex M4 X 35
15265-56	78-8054-8758-0	Spacer - Valve Holder
15265-57	78-8059-5607-1	Plate - Threaded
15265-58	78-8137-0979-3	Lever - Front
15265-59	78-8137-0980-1	Cam - Valve
15265-60	78-8054-8756-4	Shaft - 6 X 46MM
15265-61	26-1002-4955-1	Screw - Self Tap 8P X 13
15265-62	78-8100-1151-6	Actuator - Side Guide
15265-63	78-8054-8752-3	Shaft - 6 X 33MM
15265-64	78-8137-0557-7	Cover - Right
15265-65	78-8137-0558-5	Cover - Left
15265-66	78-8076-4715-7	Cord Grip
15265-67	78-8076-5211-6	Set Nut GMP 13.5
15265-68	78-8060-7885-9	End Cap
15265-69	26-1003-5841-0	Screw M8 X 16
15265-70	78-8076-4500-3	Stud - Mounting
15265-71	78-8100-1236-5	Belt Tensioning Assy - R/H
15265-72	78-8100-1237-3	Belt Tensioning Assy - L/H
15265-73	78-8100-1238-1	Belt Tensioning Assy - R/H
15265-74	78-8100-1239-9	Belt Tensioning Assy - L/H



*** NOTE - *IMPORTANT:***
- Parts #40 & 41 are for "NORMAL" Position. For "RAISED" Position, Remove #40 & 41 and Replace with #42.

*** NOTE - *IMPORTANT:*** - Some bumper positions may:
1) Allow upper and lower taping heads to come into contact with each other.
2) Create added stress to the bumper.
3) Cause a malfunction of the machine.

These events can potentially cause damage to the machine. For more information on bumper settings, contact your 3M service representative.

Figure 15266

Figure 15266

Ref. No.	3M Part No.	Description
15266-1	78-8137-0981-9	Column - Outer
15266-2	78-8076-4540-9	Pin - Air Cylinder
15266-3	78-8060-8035-0	E-Ring 7DIN6799
15266-4	78-8054-8821-6	End - Cap
15266-5	26-1003-7964-8	Screw Soc. Hd. Hex M8 X 20
15266-6	78-8137-0924-9	Plate - Bumper Support
15266-7	78-8137-0831-6	Bumper
15266-8	78-8076-4543-3	Bushing - Height Stop
15266-9	78-8017-9169-6	Nut - M18 X 1
15266-10	78-8076-4544-1	Stud - Height Stop
15266-11	78-8076-4545-8	Spring
15266-12	78-8100-0954-4	Knob
15266-13	78-8076-4547-4	Cap
15266-14	78-8137-0832-4	Cap - Column
15266-15	78-8005-5740-3	Washer Plain - Metric 4MM Nick.
15266-16	78-8137-0982-7	Column Assy - Inner
15266-17	78-8137-0983-5	Column - Inner
15266-18	78-8054-8617-8	Bearing - Special /33-8-6
15266-19	78-8017-9106-8	Screw - Bearing Special
15266-20	78-8054-8589-9	Screw Special
15266-21	26-1003-6916-9	Nut Locking Plastic Insert M6
15266-22	78-8137-0984-3	Mounting - Rod
15266-23	78-8054-8823-2	Washer - Bumper
15266-24	78-8054-8823-2	Ring Nut - Rod
15266-25	78-8076-4552-4	Set Screw M6 X 8
15266-26	78-8059-5617-0	Crossmember
15266-27	78-8060-7886-7	Screw - Hex. Hd. M6 X 16 Special
15266-28	26-1000-0010-3	Washer - Flat M6
15266-29	78-8137-0959-5	Cover
15266-30	78-8010-7157-8	Screw - Hex. Hd. M4 X 10
15266-31	78-8070-1505-8	Cap - Inner Column
15266-32	78-8100-1152-4	Guard - Column
15266-33	78-8076-5477-3	Washer - Special /6.5 X20 X 4
15266-34	26-1001-9843-6	Screw Soc. Hd. M6 X 16
15266-35	78-8060-8490-7	Plate - Column Mounting
15266-36	26-1004-5507-5	Washer M8
15266-37	78-8100-1153-2	Collar - Height Locking
15266-38	78-8010-7210-5	Screw- Soc. Hd. Hex. Soc. M6 X 20
15266-39	78-8100-1154-0	Washer - /30-15-05
15266-40	78-8137-0836-5	Safety Plate - Column (Plate used in "Normal" Position ONLY)
15266-41	78-8137-0837-3	Safety Plate - Inner Column (Plate used in "Normal" Position ONLY)
15266-42	78-8137-0838-1	Plate - Inner Column (Plate Replaces #40 & 41 in "Raised" Position ONLY)
15266-43	78-8137-0839-9	Cover - Inner Column
15266-44	26-1005-4759-0	Screw 6 X 12
15266-45	26-1005-4758-2	Screw 4 X 10
15266-46	78-8129-6124-7	Screw 8 X 16
15266-47	78-8017-9066-4	Screw 5 X 12
15266-48	78-8137-0741-7	Washer - Flat M5

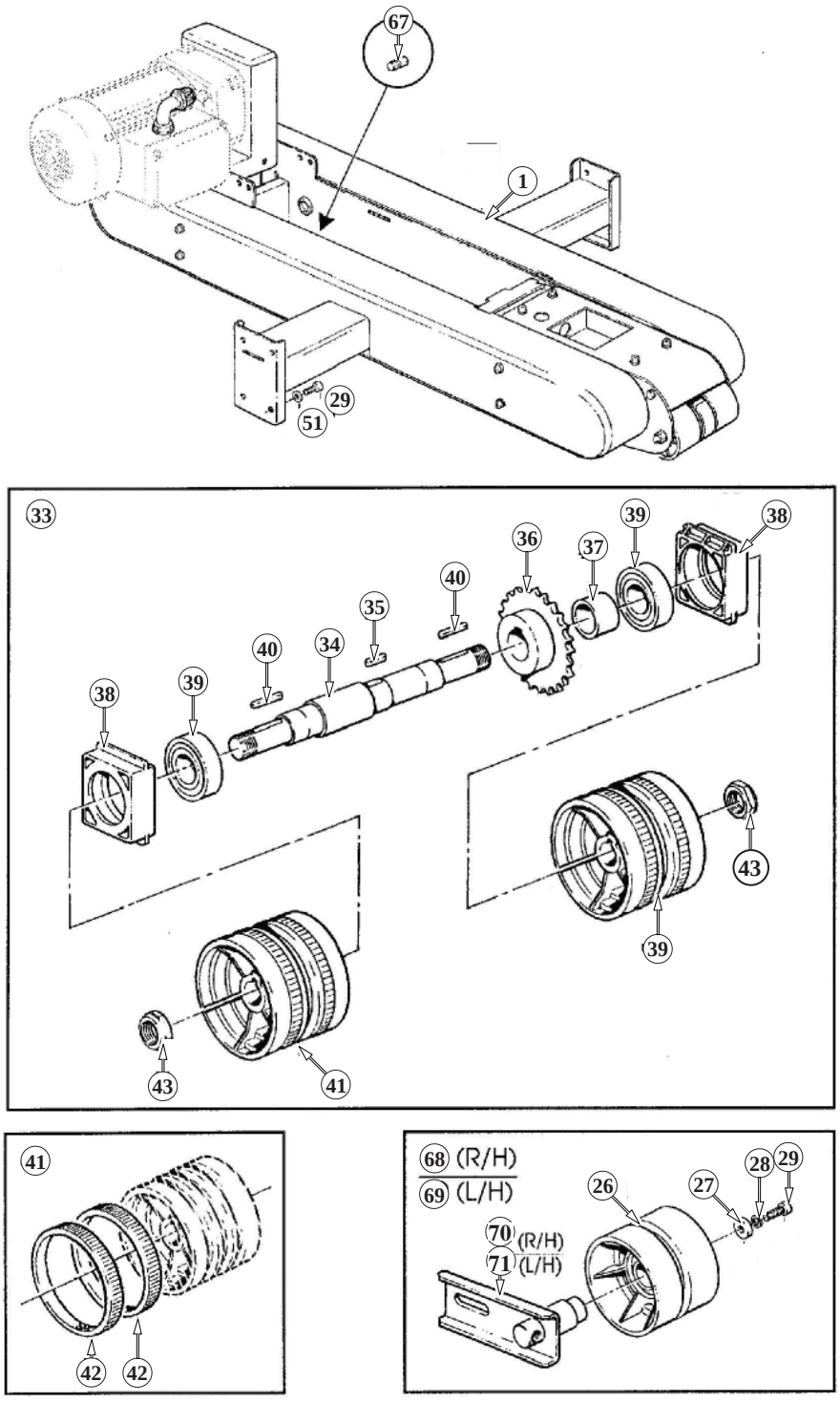


Figure 15267/1

Figure 15267/1

Ref. No.	3M Part No.	Description
15267-1	78-8137-0988-4	Top Drive Assy
15267-2	78-8137-0968-6	Frame Drive - Upper
15267-3	78-8070-1520-7	Guide - Drive Belt
15267-4	26-1005-4757-4	Screw - Flat Hd, Soc. Dr. M5 X 20
15267-5	78-8137-0533-8	Clamp - Upper Head
15267-6	78-8137-0534-6	Shaft - Roller
15267-7	26-1003-7948-1	Screw, Soc. Hd Hex Soc.M5 X 10
15267-8	78-8076-4655-5	Spacer - Valve
15267-9	78-8010-7169-3	Screw Metric, M6 X 12, Hex Hd.
15267-10	26-1000-0010-3	Washer - Flat M6
15267-11	78-8100-1130-0	Tube - Roller
15267-12	78-8076-4656-3	Roller
15267-13	78-8076-4657-1	Link - Actuator Valve
15267-14	78-8100-1131-8	Shaft - Roller
15267-15	78-8100-1132-6	Nut - Special, M8
15267-16	78-8017-9318-9	Washer - Plain Metric 8MM
15267-17	78-8137-0591-6	Shaft
15267-18	26-1004-5510-9	Washer - Plain, M10
15267-19	78-8016-5855-6	E - Ring 10MM
15267-20	78-8076-4659-7	Plate - Valve
15267-21	78-8010-7163-6	Screw- Metric, M5 X 10, Hex .Hd.
15267-22	26-1003-7946-5	Screw - SOC.HD. M4X25
15267-23	78-8059-5607-1	Plate - Threaded
15267-26	78-8052-6710-7	Roller - Idler
15267-27	78-8052-6709-9	Washer - Special
15267-28	78-8010-7435-8	Washer - Metric Lock, M6
15267-29	26-1003-7957-2	Screw Sox. Hd. Hex Hd. M6 X 16
15267-30	78-8070-1518-1	Spacer - Shaft
15267-31	26-1003-6918-5	Nut, Plastic Insert M10 Hex Flange
15267-32	78-8070-1594-2	Screw - Hex. Hd. M8 X 60
15267-33	78-8137-0570-0	Shaft with Drive Pulleys
15267-34	78-8137-0537-9	Shaft - Gear Box
15267-35	78-8057-5811-3	Key, 6 X 6 X 20MM.
15267-36	78-8054-8986-7	Sprocket - 3/8" Pitch, 28 Teeth
15267-37	78-8054-8984-2	Bushing
15267-38	78-8070-1529-8	Support - Shaft
15267-39	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52
15267-40	78-8057-5739-6	Key, M5 X 5 X 30MM
15267-41	78-8076-5105-0	Pulley Assy - Drive
15267-42	78-8052-6713-1	Ring - Polyurethane
15267-43	78-8060-8416-2	Nut - Special M20 X 1
15267-44	78-8137-0582-5	Support - Motor Top

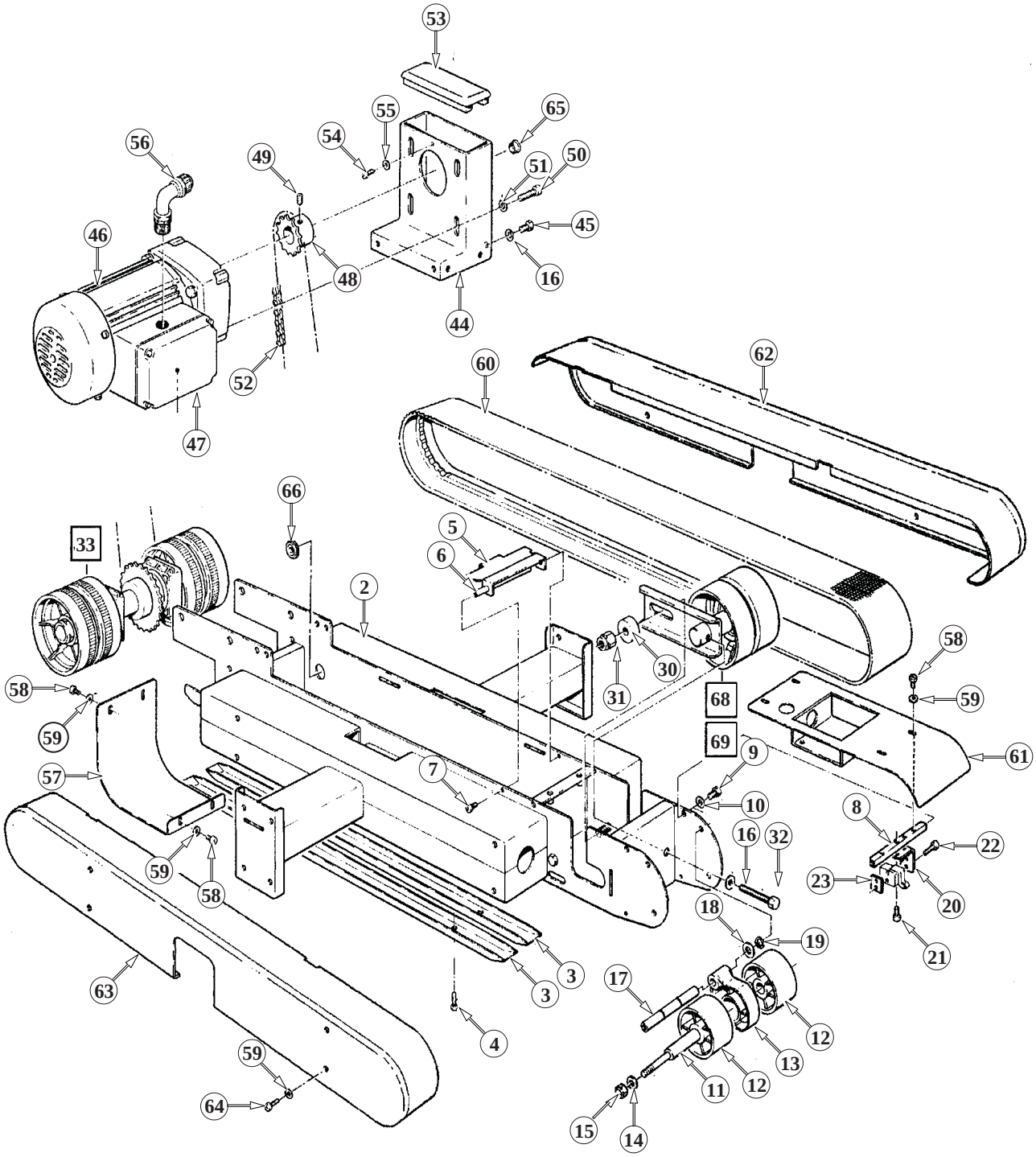


Figure 15267/2

Figure 15267/2

Ref. No.	3M Part No.	Description
15267-45	26-1003-5842-8	Screw Hd.M8 X 20
15267-46	78-8091-0596-4	Gear Motor 115V 60Hz
	78-8100-0865-2	Motor - 220/220v, 50/60 Hz, 3 Phase
	78-8052-6718-0	Motor - 220/415v, 50 Hz, 3 Phase
	78-8052-6719-8	Motor - 260/440v, 50 Hz, 3 Phase
	78-8046-8267-8	Motor - 110/110v, 50/60 Hz, 1 Phase 0.12kw
	78-8091-0654-1	Motor - 145v, 60 Hz, 1 Phase
	78-8046-8268-6	Motor - 220/240v, 50 Hz, 1 Phase 0.12kw
	78-8076-4590-4	Motor - 220/240v, 60 Hz, 1 Phase
15267-47	26-1011-8828-7	Capacitor - 115V Gear Motor
15267-48	78-8137-0936-3	Sprocket Z24 P 3/8"
15267-49	78-8137-0940-5	Screw - Set M6 x 20
15267-50	78-8070-1523-1	Screw 1/4 - 28X3/4
15267-51	78-8100-1042-7	Washer - /15X6.35X2
15267-52	78-8137-0937-1	Chain - 3/8" P=67
15267-53	78-8070-1598-3	Cover
15267-54	26-1002-4955-1	Screw - Self Tap 8P X1 3
15267-55	78-8005-5740-3	Washer Plain Metric 4MM Nick.
15267-56	78-8070-1596-7	Union - Elbow, PG 13,5
15267-57	78-8137-0546-0	Cover - Rear Upper
15267-58	78-8017-9066-4	Screw, MetricM5X12
15267-59	78-8005-5741-1	Washer - Flat, M5
15267-60	78-8070-1531-4	Belt - Drive with Hook
15267-61	78-8137-0989-2	Cover - Upper, Front
15267-62	78-8100-1148-2	Guard - Belt, R/H
15267-63	78-8100-1149-0	Guard - Belt, L/H
15267-64	78-8076-4625-8	Screw - Special L M5 X 16
15267-65	78-8054-8821-6	End - Cap
15267-66	78-8076-4702-5	Grommet - HEYCO SB1093-13
15267-67	78-8076-4500-3	Stud - Mounting
15267-68	78-8100-1236-5	Belt - Tensioning Assy - R/H
15267-69	78-8100-1237-3	Belt - Tensioning Assy - L/H
15267-70	78-8100-1238-1	Belt - Tensioning Assy - R/H
15267-71	78-8100-1239-9	Belt - Tensioning Assy - L/H

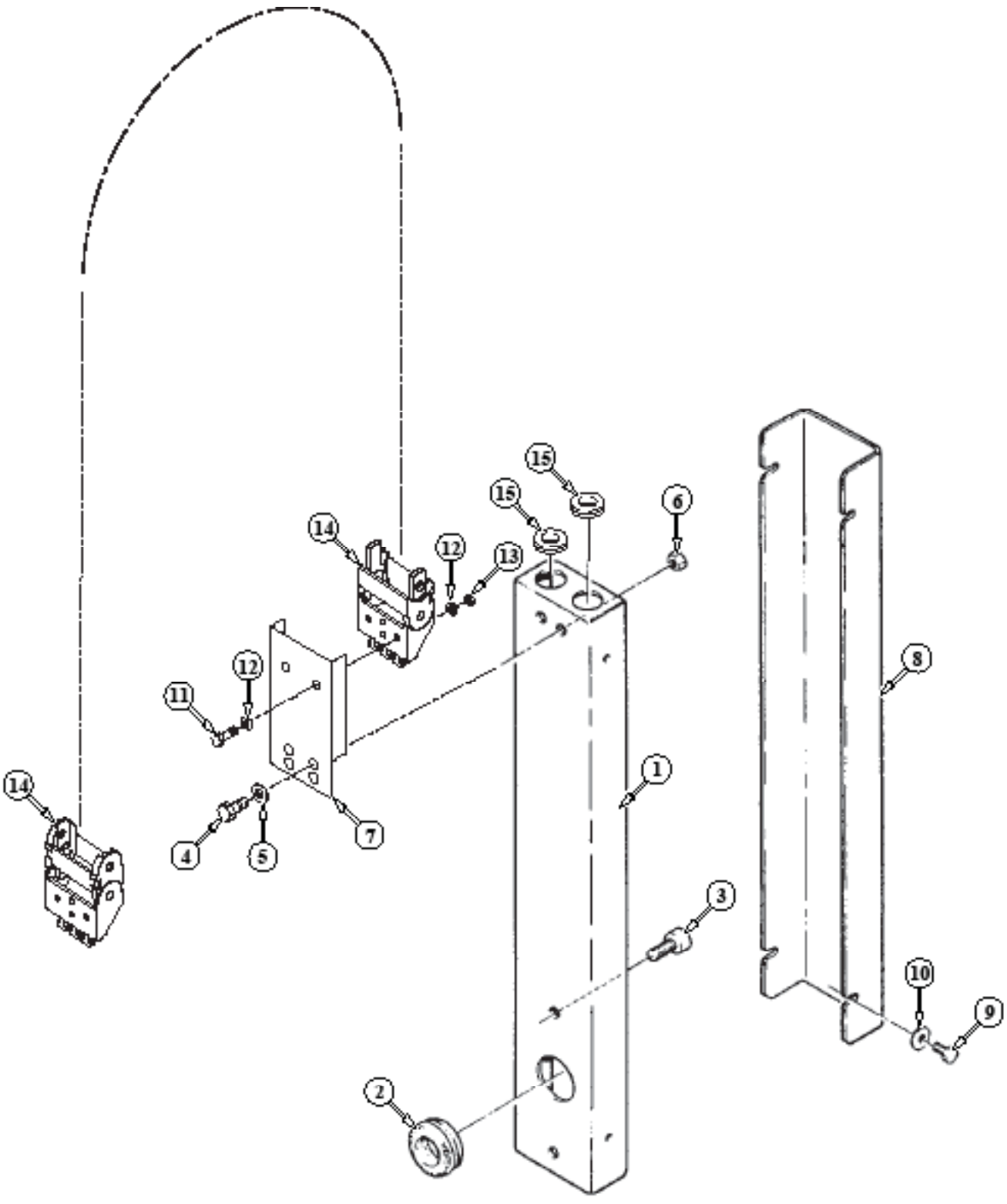


Figure 15249

Figure 15249

Ref. No.	3M Part No.	Description
15249-1	78-8091-0660-8	Housing – Wire
15249-2	78-8076-4702-5	Grommet – /28
15249-3	26-1003-7963-0	Screw – Soc Hd M8 x 16
15249-5	78-8010-7163-6	Screw – Hex Hd M5 x 10
15249-6	78-8005-5741-1	Washer – Plain M5
15249-7	78-8137-0965-2	Support
15249-8	78-8076-4641-5	Cover
15249-9	78-8010-7157-8	Screw -Hex.Hd. M4X10
15249-10	78-8017-9018-5	Washer-Metric, Plain, M4 Spec.
15249-11	78-8060-7826-3	Screw , Hex.Hd. M4X16
15249-12	78-8005-5740-3	Washer Plain-Metric 4MM Nick.
15249-13	78-8010-7416-8	Nut-Metric, Hex, Steel M4
15249-14	78-8137-0966-0	Chain
15249-15	78-8060-7758-8	Grommet

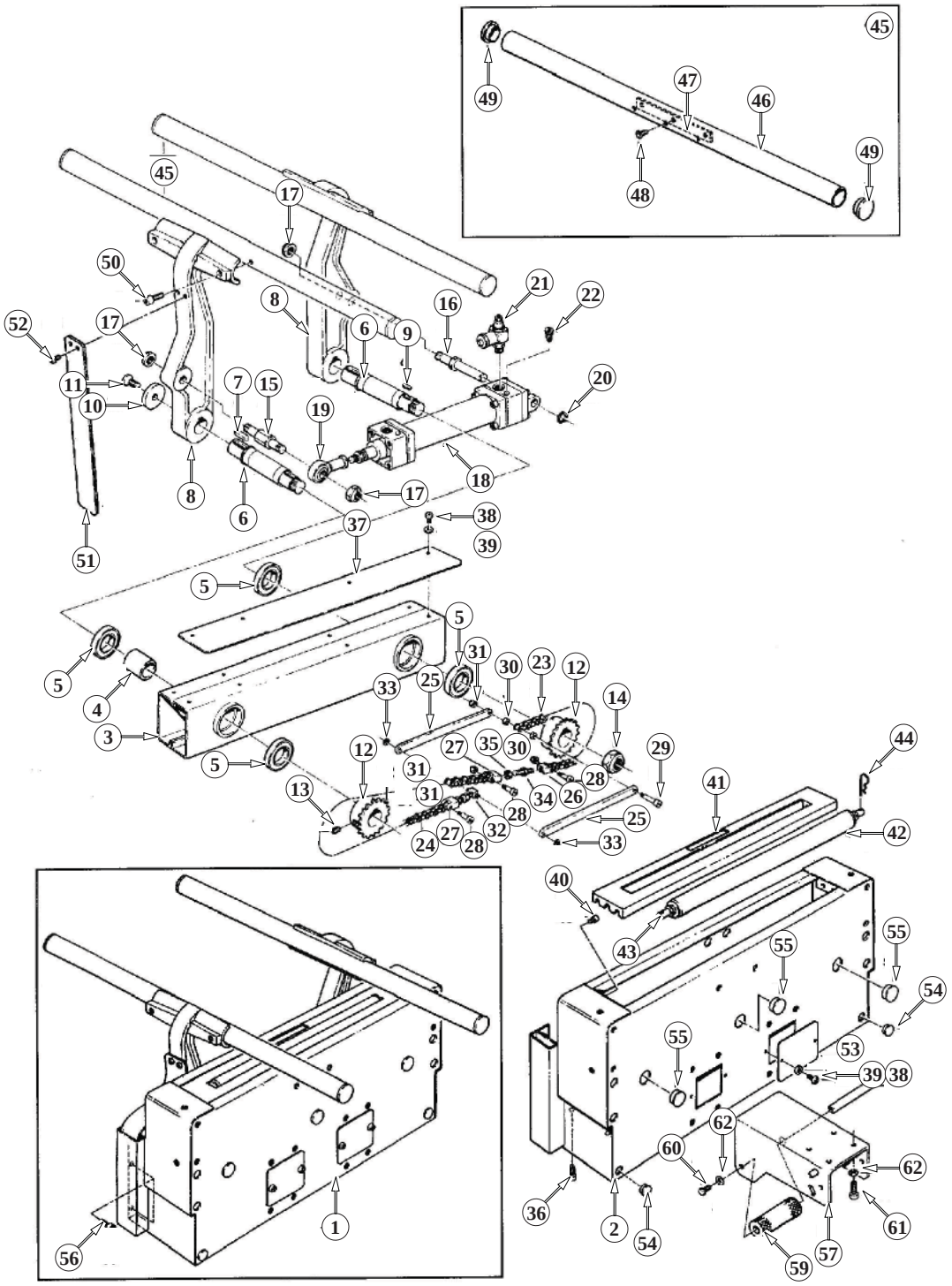


Figure 15269

Figure 15269

Ref. No.	3M Part No.	Description
15269-1	78-8137-0990-0	Infeed Conveyor Assembly
15269-2	78-8137-0991-8	Frame – Infeed
15269-3	78-8137-0992-6	Frame
15269-4	78-8076-4518-5	Spacer – Bearing
15269-5	78-8023-2551-0	Bearing – 6005-2RS
15269-6	78-8076-4567-2	Pivot – Infeed
15269-7	78-8076-4568-0	Key – 7 x 8 x 25
15269-8	78-8100-1158-1	Lever – Infeed
15269-9	78-8076-4570-6	Key – 6 x 6 x 15
15269-10	78-8054-8588-1	Washer – 8,5/40 x 6
15269-11	78-8054-8567-5	Screw – Soc Hd, Special
15269-12	78-8076-4571-4	Sprocket – Z = 20
15269-13	78-8023-2479-4	Screw – Set W/End Cup, M6 x 10
15269-14	78-8060-8416-2	Nut – Special, M20 x 1
15269-15	78-8076-4572-2	Stud – Joint
15269-16	78-8076-4573-0	Pin – Air Cylinder
15269-17	78-8091-0555-0	Nut – Special, M12
15269-18	78-8076-4575-5	Cylinder – Air, /40 x 155
15269-19	78-8057-5747-9	Mount – Cylinder Rod End
15269-20	78-8056-3965-1	External Retaining Ring – M8
15269-21	78-8091-0510-5	Regulator– Speed
15269-22	78-8076-4653-0	Screw – Cushioning Cyl./40
15269-23	78-8137-0994-2	Chain - 3/8" P=38
15269-24	78-8055-0718-9	Chain-3/8" Pitch,55 Pitch Long
15269-25	78-8054-8787-9	Link – Chain
15269-26	78-8054-8788-7	Connector – Chain
15269-27	78-8054-8786-1	Connector – Chain
15269-28	78-8060-7520-2	Screw – M3 x 20
15269-29	78-8060-7519-4	Screw – M3 x 25
15269-30	78-8054-8783-8	Washer – Special
15269-31	78-8059-5517-2	Nut – Self Locking, M3
15269-32	78-8054-8784-6	Block – Chain
15269-33	78-8056-3945-3	E-Ring – M4
15269-34	78-8054-8785-3	Rod – Threaded Right/Left
15269-35	78-8010-7418-4	Nut – Hex, M6
15269-36	26-1003-7963-0	Screw – Soc Hd, M8 x 16
15269-37	78-8137-0995-9	Cover – Chain
15269-38	26-1002-5753-9	Screw – Self Tapping
15269-39	78-8005-5740-3	Washer – Plain, 4 mm
15269-40	26-1003-7943-2	Screw – Soc Hd, M4 x 12
15269-41	78-8137-0996-7	Cover
15269-42	78-8114-5073-9	Roller /32 x 1.2 x 580
15269-43	78-8137-0997-5	Shaft – Roller
15269-44	78-8076-5385-8	Spring
15269-45	78-8076-4648-0	Guide Assembly
15269-46	78-8076-4649-8	Guide – Infeed
15269-47	78-8076-4650-6	Plate – Guide
15269-48	26-1002-5830-5	Screw – Soc Hd, M6 x 12
15269-49	78-8054-8779-6	End – Cap
15269-50	78-8010-7210-5	Screw – Soc Hd Hex Soc, M6 x 20
15269-51	78-8100-1162-3	Strap – Safety
15269-52	78-8094-6145-8	Screw – Phillips, M5 x 12
15269-53	78-8076-4651-4	Plate – Infeed
15269-54	78-8054-8821-6	End – Cap
15269-55	78-8060-7885-9	End – Cap, /25 x 1,2
15269-56	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
15269-57	78-8137-0998-3	Support – Bracket
15269-58	78-8076-4759-5	Shaft – Roller
15269-59	78-8076-5030-0	Roller - Knurled
15269-60	78-8032-0375-7	Screw – Hex Hd, M6 x 16
15269-61	26-1003-7957-2	Screw – Soc Hd Hex Hd, M6 x 16
15269-62	26-1000-0010-3	Washer – Flat, M6
15269-63	78-8137-0566-8	Locking Colalr
15269-64	78-8060-8435-2	Repair Kit – Cylinder/40

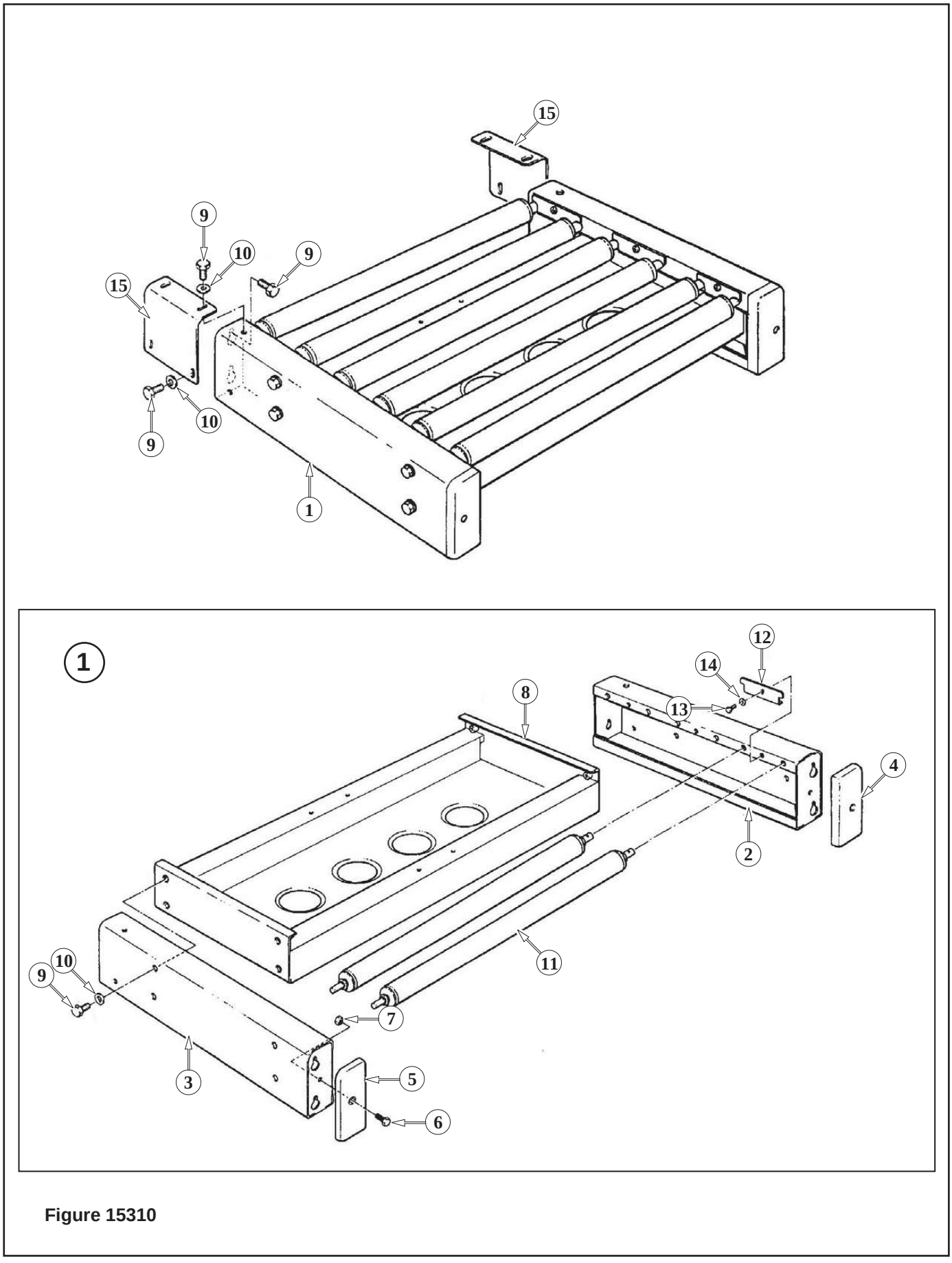


Figure 15310

Figure 15310

Ref. No.	3M Part No.	Description
15310-1	78-8137-3529-3	Conveyor In/Exit 700rks/rks Type 40800
15310-2	78-8076-4509-4	Frame - R/H
15310-3	78-8076-4510-2	Frame - L/H
15310-4	78-8076-4511-0	Cap - Front, R/H
15310-5	78-8076-4512-8	Cap - Front, L/H
15310-6	78-8032-0375-7	Screw - Hex Hd M6 x 16
15310-7	78-8010-7418-4	Nut - Hex M6
15310-8	78-8137-3600-2	Plate - W/Rod
15310-9	26-1003-5841-0	Screw - M8 x 16
15310-10	78-8017-9318-9	Washer - Plain 8mm
15310-11	78-8137-3601-0	Roller - 32 x 642
15310-12	78-8076-4507-8	Plate - Infeed
15310-13	78-8010-7157-8	Screw - Hex Hd M4 x 10
15310-14	78-8005-5740-3	Washer - Plain 4mm
15310-15	78-8076-4514-4	Bracket - Conveyor

THIS PAGE IS BLANK

3M

Instructions and Parts List

AccuGlide™ 3 Upper and Lower Taping Heads - 3 Inch

Type 10800

Serial No._____

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

Important Safety Information

BEFORE INSTALLING OR OPERATING THIS EQUIPMENT
Read, understand, and follow all safety and operating instructions.

Spare Parts

It is recommended you immediately order the spare parts listed in the "Spare Parts/Service Information" section. These parts are expected to wear through normal use, and should be kept on hand to minimize production delays.

3M

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

To Our Customers:

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

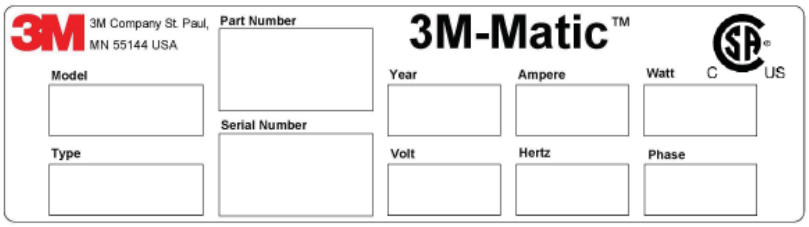
Included with each machine is an Instructions and Parts List manual.

Technical Assistance / Replacement Parts and Additional Manuals:

Call the 3M-Matic™ Help line at 1-800 328-1390. Provide the customer support coordinator with the model/machine name, machine type, and serial number that are located on the identification plate (For example: Model 700a - Type 3600 - Serial Number 13282).

United States -
3M Tape Dispenser Parts
241 Venture Drive
1-800-344-9883
Amery, WI 54001-1325
Fax: 1-715-268-8153

Identification Plate



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 Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

THIS PAGE IS BLANK

To Our Customers:

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

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

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

Order parts by part number, part description, and quantity required. Also, when ordering parts or additional manuals, include model/machine name, machine type, and serial number that are located on the identification plate.

3M Industrial Adhesives and Tapes
3M Center, Building 220-5E-06
St. Paul, MN 55144-1000

THIS PAGE IS BLANK

Instruction Manual

AccuGlide™ 3
Upper and Lower Taping Heads - 3 Inch
Type 10800

Table of Contents **Page**

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

3M sells its **AccuGlide™ 3 Upper and Lower Taping Heads - 3 Inch, Type 10800** with the following warranty:

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

If any part is defective within this warranty period, your exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to repair or replace the part. 3M must receive actual notice of any alleged defect within a reasonable time after it is discovered, but in no event shall 3M have any obligation under this warranty unless it receives such notice within five (5) business days after the expiration of the warranty period. All notices required hereunder shall be given to 3M solely through the 3M-Matic™ Help line (800-328-1390). To be entitled to repair or replacement as provided under this warranty, the part must be returned as directed by 3M to its factory or other authorized service station designated by 3M. If 3M is unable to repair or replace the part within a reasonable time after receipt thereof, 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 remove any part or equipment or to install the repaired or replacement part or equipment. 3M shall have no obligation to repair or replace those parts failing due to normal wear, inadequate or improper maintenance, inadequate cleaning, non-lubrication, improper operating environment, improper utilities, operator error or misuse, alteration or modification, mishandling, lack of reasonable care, or due to any accidental cause.

Limitation of Liability: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from this 3M equipment, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including breach of warranty, breach of contract, negligence, or strict liability.

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

Taping Head Contents

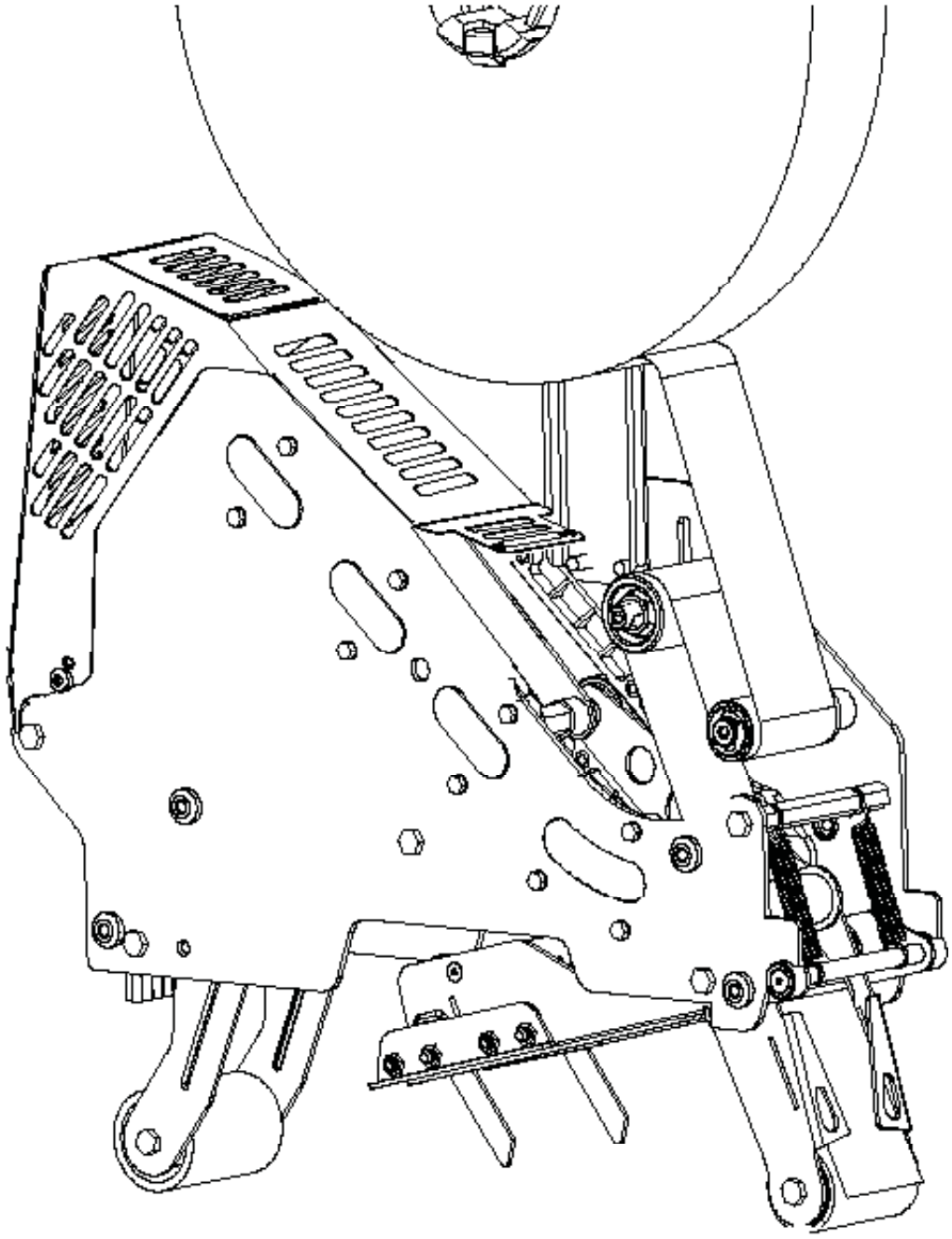
AccuGlide™ 3 Upper and Lower Taping Heads - 3 Inch - consists of:

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

Intended Use

The intended use of the AccuGlide™ 3 Upper and Lower Taping Heads **- 3 Inch-** is to apply a "C" clip of Scotch® pressure-sensitive film box sealing tape to the top and/or bottom center seam of regular slotted containers.

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



AccuGlide™ 3 Upper Taping Head - 3 Inch, Type 10800

THIS PAGE IS BLANK

Taping Head Contents

AccuGlide™ 3 Upper and Lower Taping Heads - 3 Inch - consists of:

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

General Information

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, set-up and adjustments, technical and manufacturing specifications, maintenance, troubleshooting, repair work and servicing, electric diagrams, warranty information, disposal (ELV), a glossary with a definition of symbols, plus a parts list 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition February 2009/ The manufacturer reserves the right to change the product at any time without notice Publication © 3M 2009.

How to use this Manual

The manual is an important part of the machine; all information contained herein is intended to enable the equipment to be maintained in perfect condition and operated safely. Ensure that the manual is available to all operators of this equipment and the manual is kept up to date with all subsequent amendments. Should the equipment be sold or disposed of, please ensure that the manual is passed on with the machine.

Electrical and pneumatic diagrams are included in the manual. Equipment using PLC controls and/or electronic components will include relevant schematics or programs in the enclosure (or will be delivered separately as needed)

Keep the manual in a clean and dry place near the machine. Do not remove, tear or rewrite parts of the manual for any reason. Use the manual without damaging it. However, if the manual has been lost or damaged, ask your after sale service for a new copy (if it is possible, please have the manual name, part number, and revision information and/or model/machine name, machine type, and serial number) that are located on the identification plate (For example: Model 700a - Type 3600 - Serial Number 13282).

NOTE:
All the important warning notes related to the operation of the machine are identified by the symbol: 

Updating the Manual

Modifications to the machine are subject to manufacturer's internal procedures. The user may receive pages or parts of the manual which contain amendment made after its first publication. The user must use them to update this manual.

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

Explanation of Signal Word Consequences

WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.

CAUTION: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

WARNING

- **To reduce the risk associated with mechanical hazards:**
  - Read, understand and follow all safety and operating instructions before operating or servicing the case sealer
  - Allow only properly trained and qualified personnel to operate and/or service this equipment
- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the taping heads
  - Never attempt to work on the taping head or load tape while the box drive system is running
- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

CAUTION

- **To reduce the risk associated with muscle strain:**
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift
- **To reduce the risk associated with impact hazards:**
  - Place the taping head on a smooth level surface when maintaining or servicing this equipment

Important – In the event the following safety labels are damaged or destroyed, **they must be replaced to ensure operator safety**. See "Replacement Parts Illustrations and Parts Lists" for label part numbers.

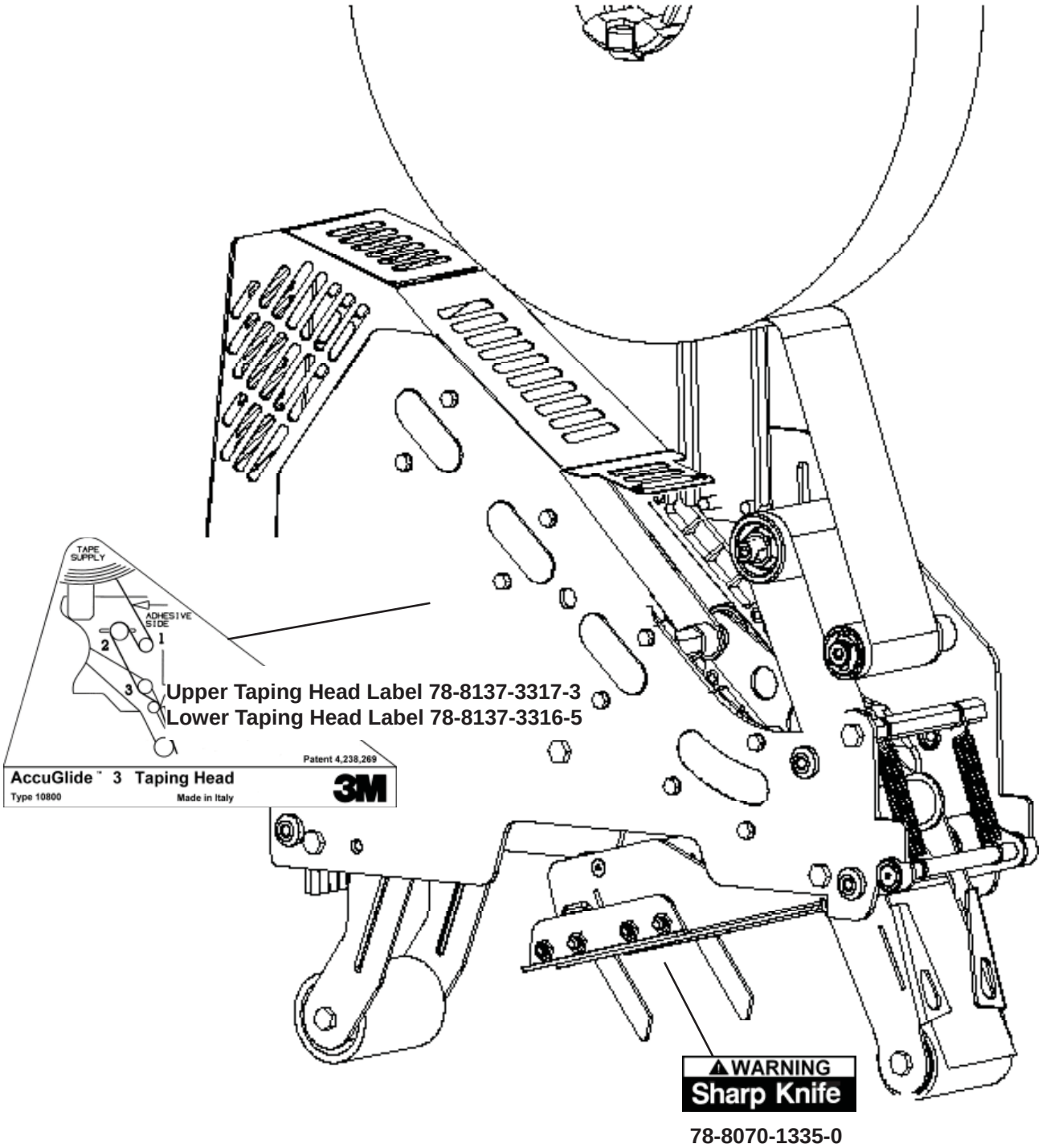


Figure 1-1 Replacement Labels/3M Part Numbers

Specifications

1. **Tape:**

   For use with **Scotch**® pressure-sensitive film box sealing tapes.

2. **Tape Width:**

   48mm [2 inches] minimum to 72mm [3 inches] maximum.

3. **Tape Roll Diameter:**

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

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

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

   Tape Application Leg Length - Optional:

   50mm ± 6mm [2 inches ± 1/4 inch] (See "Adjustments – Tape Leg Length.")

5. **Box Size Capacities:**

   For use with center seam regular slotted containers.

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

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

6. **Operating Rate:**

   Conveyor speeds up to 0.5 m/s [100 feet per minute].

7. **Operating Conditions:**

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

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

8. **Taping Head Dimensions:**

Length	–	442 mm [17 3/8 inches]
Height	–	648 mm [25 1/2 inches] (with tape drum)
Width	–	130 mm [5-1/8 inches] (without mounting spacers)
Weight	–	Packaged: 8.2 kg [18 lbs.] Unpackaged: 7.3 kg [16 lbs.]

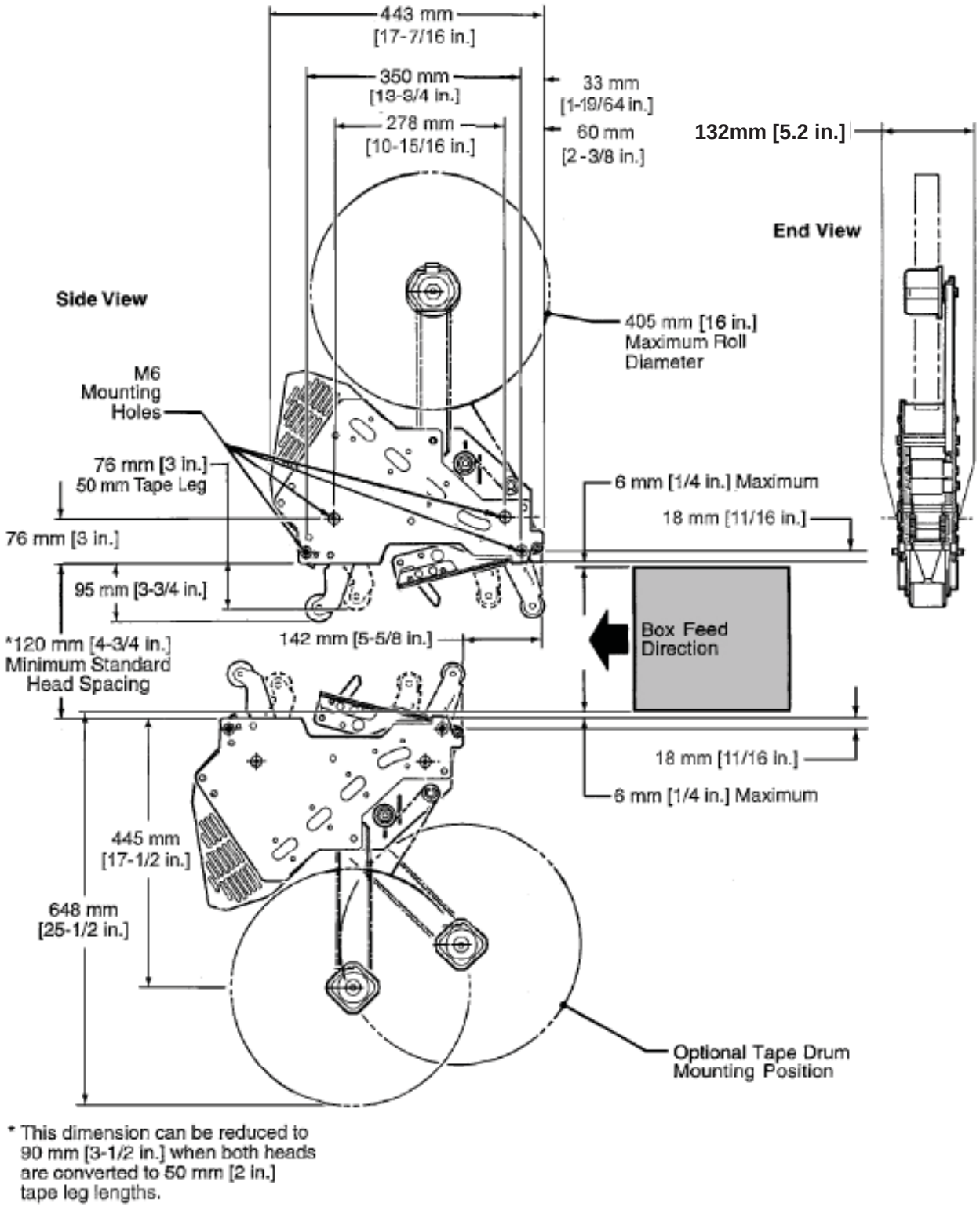


Figure 2-1 – Dimensional Drawing

⚠ WARNING

- **To reduce the risk associated with sharp blade hazards:**

  – Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

Receiving And Handling

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

Installation Guidelines

The taping head assembly can be used in converting existing or in custom made machinery.
It can be mounted for top taping or bottom taping. Refer to "Box Size Capacities," as well as **Figure 2-1** in the Specifications section, for the following points in making such installations:

⚠ CAUTION

- **To reduce the risk associated with muscle strain:**

  – Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift

Important – Always conduct a hazard review to determine appropriate guarding requirements when the installation is in an application other than 3M-Matic (TM) equipment

1. The box conveying system must positively propel the box in a continuous motion, not exceeding 0.50 m/s [100 feet per minute], past the taping head assembly since the box motion actuates the taping mechanism.

2. If a pusher or cleated conveyor is being used, steps should be taken in the conveyor design to prevent the pusher from contacting the applying or buffing roller arms resulting in damage to the taping head.

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

   Note – AccuGlide™ 3 Upper Taping Head is supplied with a buffing arm guard. Adjustments to this guard may be required to install the taping head into some older design 3M-Matic™ case sealers.

4. Mounting studs are provided with the taping head, but special installations may require alternate means for mounting.

5. Box hold-down or guide skis should be provided and the taping head mounted so that the side plates are 6mm [1/4 inch] maximum away from the ski surface on which the box rides.

Tape Leg Length

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

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

Tape Width Adjustment

Taping heads are factory set to apply 72mm [3 inch] wide tape. If it is necessary to align the tape or to apply narrower tapes, refer to "Adjustments – Tape Web Alignment" for set-up procedure.

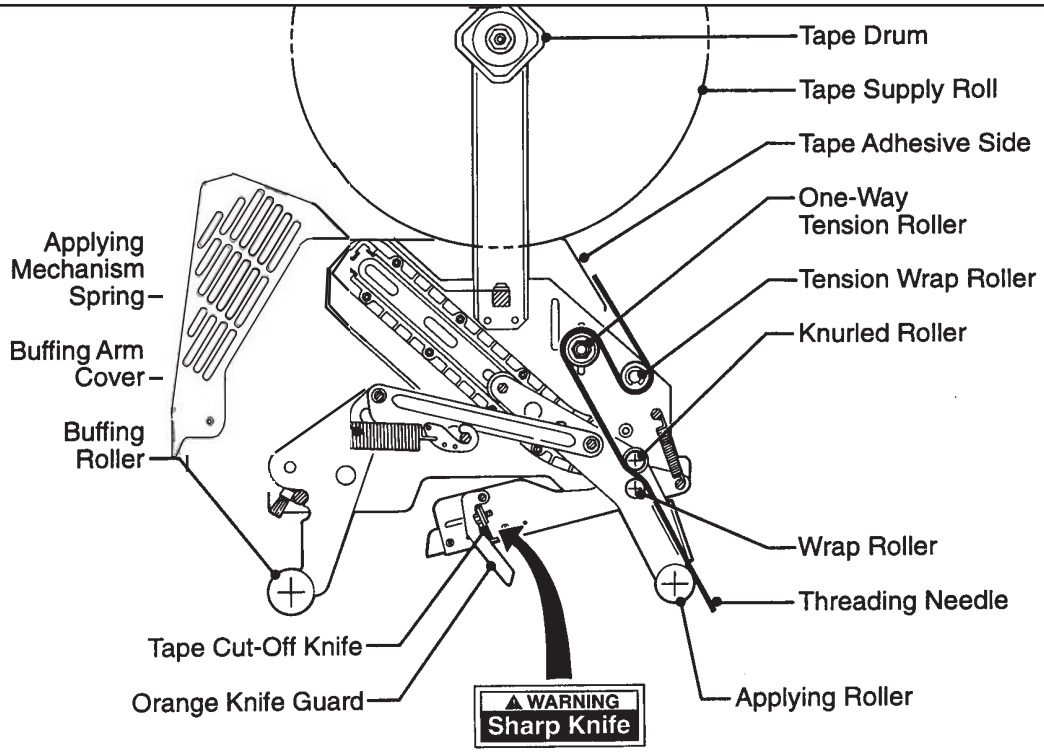


Figure 3-1 Taping Head Components/Threading Diagram - Upper Head (Left Side) View)

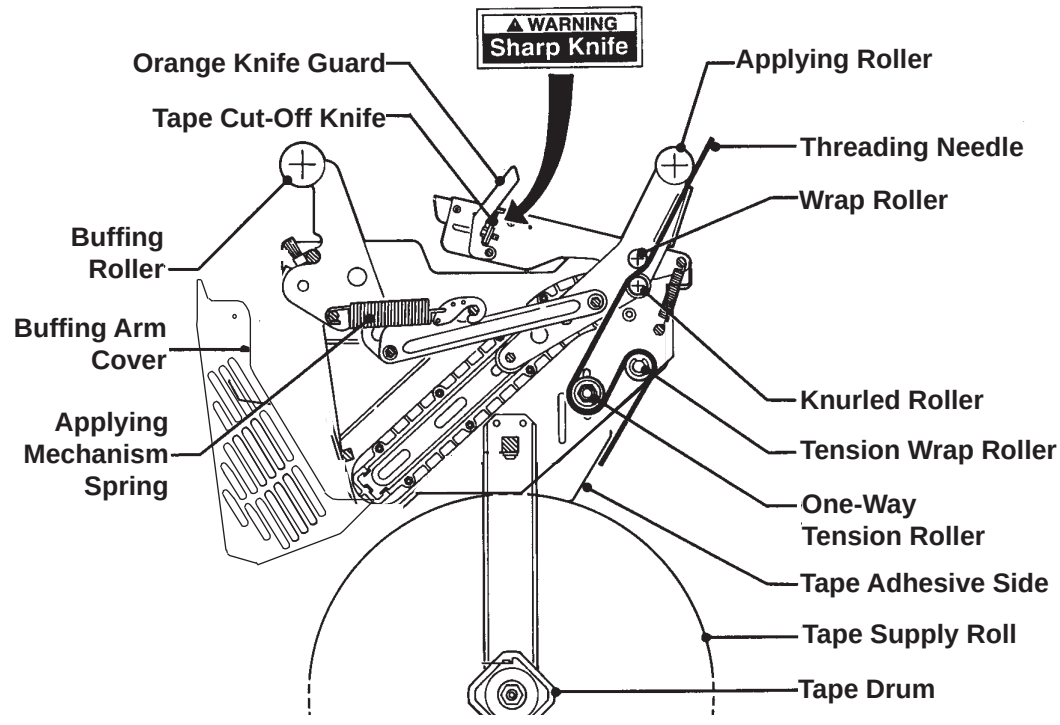


Figure 3-2 Taping Head Components/Threading Diagram - Lower Head (Left Side) View)

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads
  - Never attempt to work on the taping heads or load tape when the box drive system is running
- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

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

Note *– Remove tape roll before removing taping head from machine to minimize weight.*

CAUTION

- **To reduce the risk associated with muscle strain:**
  - Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift
- **To reduce the risk associated with impact hazards:**
  - Place the taping head on a smooth level surface when maintaining or servicing this equipment

Tape Loading – Upper Taping Head

1. Place the upper taping head in a convenient working position.
2. Refer to **Figures 3-3 to 3-5** and tape threading label. Position the tape supply roll so the adhesive side of tape is facing the front of the taping head as it is pulled from the supply roll.
3. Attach the threading needle to the end of the roll. Guide the threading needle around the wrap roller (Position 1) then back around the one-way tension roller (Position 2).
4. Continue pulling the threading needle down and guide it between the two rollers on the apply arm (Position 3).
5. Pull the threading needle down until the tape travels between the apply plate and the ears of the apply arm (Position 4) until it extends past the applying roller. When properly threaded the adhesive side of the tape should be facing the knurled rollers at position 2 and also position 3.
6. Cut away any excess tape.

   Important **–** Do not cut against the apply roller - roller damage could occur.

Tape Loading – Lower Taping Head

1. Remove the lower taping head from the conveyor bed or associated equipment and place it a convenient working position.
2. The lower taping head is loaded and threaded in the same manner as the upper head. Follow the upper taping head tape loading/threading procedure.

Figure 3-3 Insert threading needle through rollers in direction indicated by arrows.

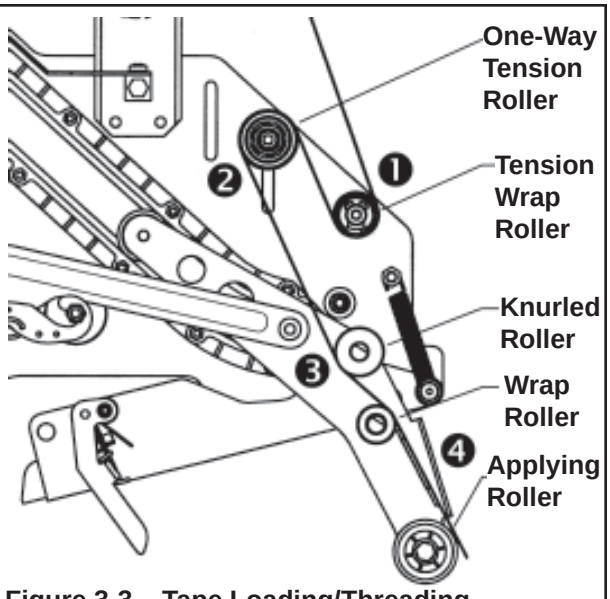


Figure 3-3 – Tape Loading/Threading

Figure 3-4

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

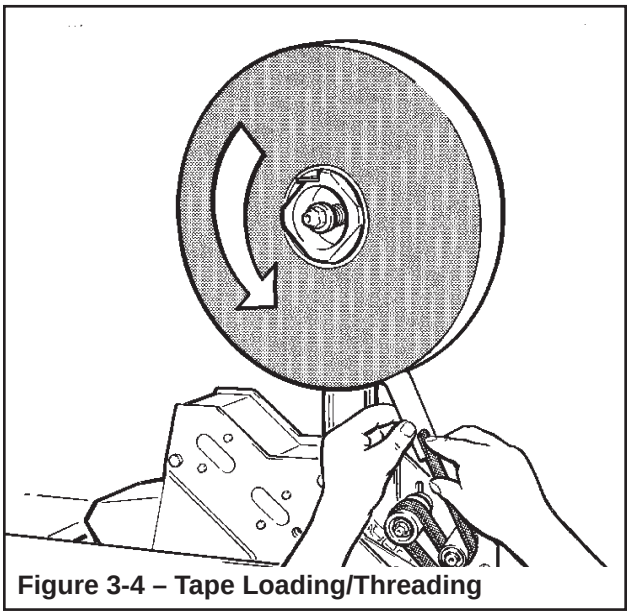


Figure 3-4 – Tape Loading/Threading

⚠ WARNING

- **To reduce the risk associated with sharp blade hazards:**

  – Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

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

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

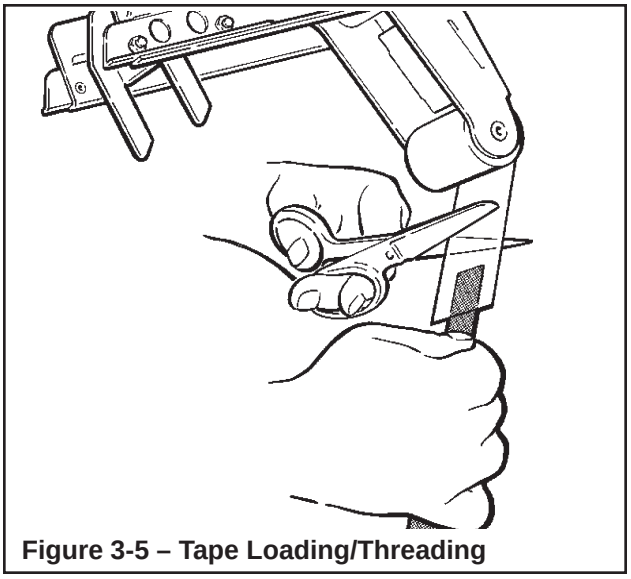


Figure 3-5 – Tape Loading/Threading

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the taping heads
  - Never attempt to work on the taping head or load tape while the box drive system is running
- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

The AccuGlide™ 3 Taping Head - 3 Inch has been designed for long, trouble free service. The taping head will perform best when it receives routine maintenance and cleaning. Taping head components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the head or to the product.

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

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blade edge. The knives are extremely sharp

1. Loosen, but do not remove, the blade screws **(A)**. Remove and discard old blade.
2. Mount the new blade **(B)** with the beveled side away from the blade holder.

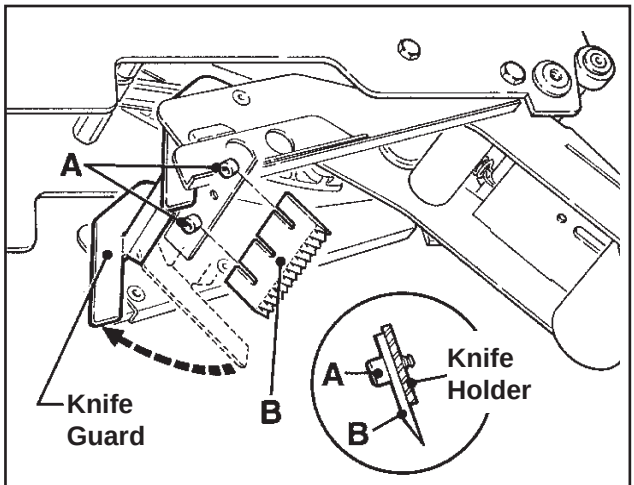


Figure 4-1 – Blade Replacement

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.

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

Blade Guard

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

Blade Oiler Pad

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blade edge. The knives are extremely sharp

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

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

⚠ WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the taping heads
  - Never attempt to work on the taping head or load tape while the box drive system is running
- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff blades under orange blade guards. The blades are extremely sharp

Cleaning

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

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

Applying/Buffing Roller Replacement

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

To ease removal of second screw, a 5mm hex socket has been provided at the bottom of the threads in both ends of the shaft. Insert a 5mm hex key wrench into this socket after removing one screw to hold the shaft for removal of the second screw. **See Figure 4-2.**

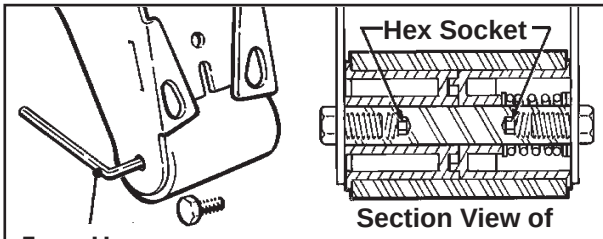


Figure 4-2 – Roller Shaft Section View

⚠ WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads
  - Never attempt to work on the taping head or load tape while the box drive system is running

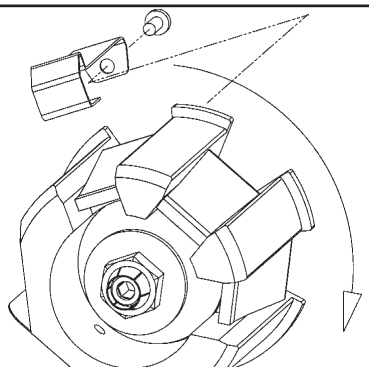


Figure 5-1 – Tape Latch Alignment

Tape Latch Alignment – Figure 5-1

The Latching tape drum assembly is pre-set to accommodate 72mm [3 inch] wide tape. The tape drum assembly is adjustable to provide alignment of narrower tapes.

To move the latch to a position that corresponds to a new tape core width **(Figure 5-1):**

1. Remove screw from the latch.
2. Move to the latch to the position that corresponds to the tape core width.
3. Replace screw in the new latch location.

To adjust or center the tape width on the centerline of the taping head, and therefore box center seam, **(Figure 5-2):**

1. Loosen the locking hex nut behind tape drum bracket on tape drum shaft. Use an adjustable wrench or 25mm open end wrench.

Note – To set up 72mm tape drum for 48mm tape, disassemble tape drum from bracket and install lock nut between tape drum and bracket as shown in inset, **Figure 5-3.**

2. Turn tape drum shaft in or out to center the tape web (use 5mm hex wrench).
3. Tighten locking hex nut to secure the adjustment.

No other components require adjustment for tape web alignment.

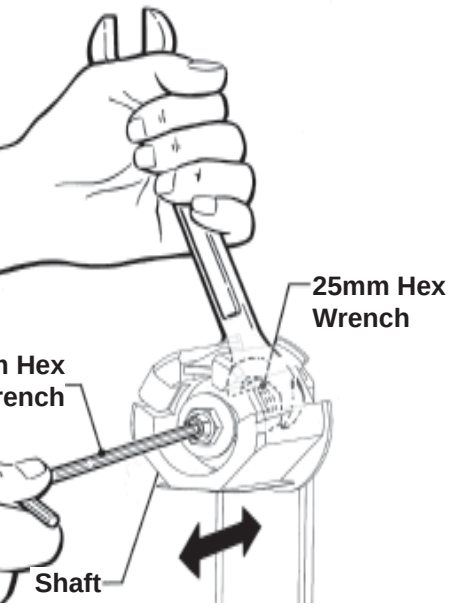


Figure 5-2 – Tape Web Alignment

Tape Drum Friction Brake – Figure 5-3

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

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

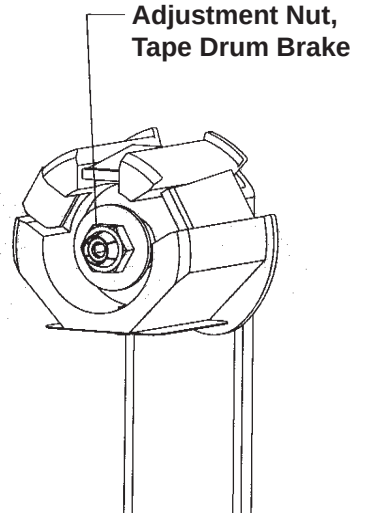


Figure 5-3 – Tape Drum Friction Brake

⚠ WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**

  – Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads

  – Never attempt to work on the taping head or load tape while the box drive system is running

Applying Mechanism Spring

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

The applying mechanism spring, shown in **Figures 5-4A and 5-4B,** controls applying and buffing roller pressure on the box and returns the mechanism to the reset position. The spring pressure is pre-set, as shown in **Figure 5-4A** for normal operation, but is adjustable.

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

Removing the spring end loop from the spring holder and placing loop in other holes provided, as shown in **Figure 5-4B,** will adjust the spring pressure.

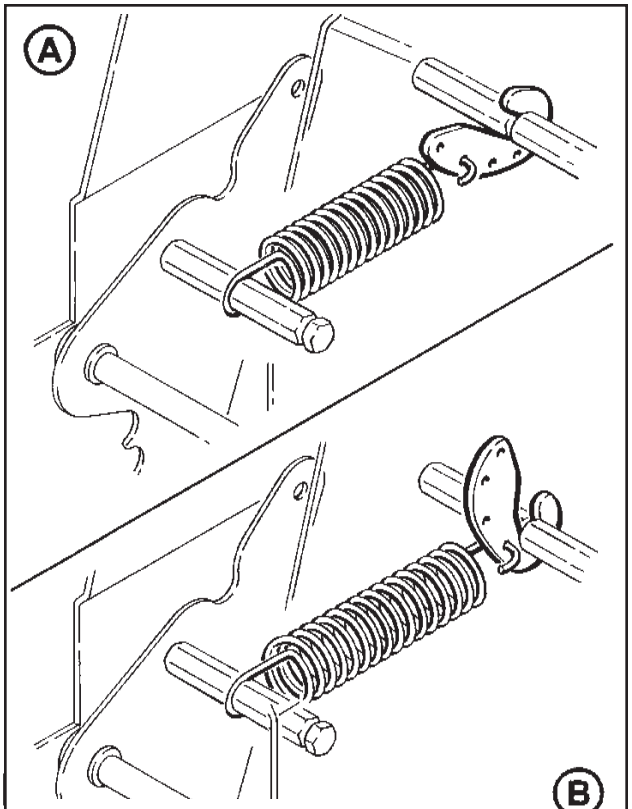


Figure 5-4 – Applying Mechanism Spring

One-Way Tension Roller

Figure 5-5

The one-way tension roller is factory set. When replacing this assembly, the roller must have a force of approximately 0.5 kg to 0.9 kg [1 to 2 lbs.] when turning.

To Adjust Tension:

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

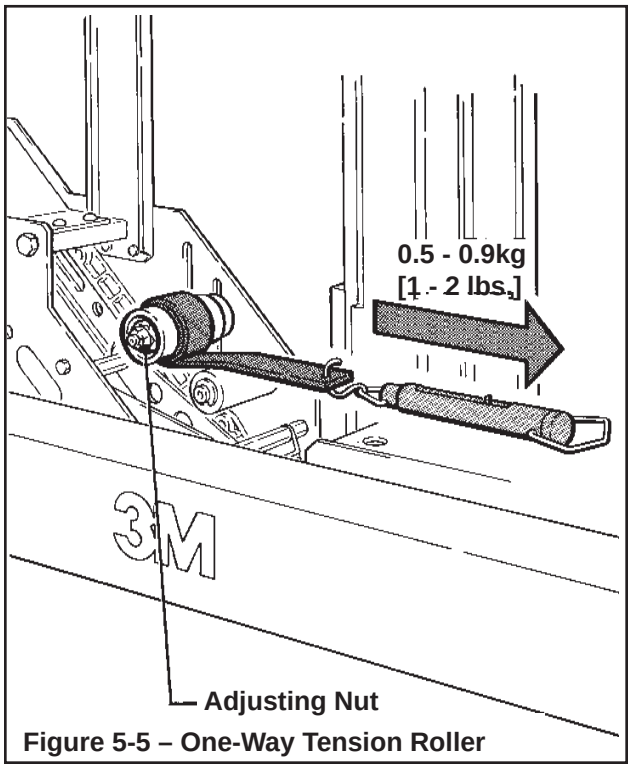


Figure 5-5 – One-Way Tension Roller

WARNING

- **To reduce the risk associated with shear, pinch, and entanglement hazards:**
  - Turn air and electrical supplies off on associated equipment before performing any adjustments, maintenance, or servicing the machine or taping heads
  - Never attempt to work on the taping head or load tape while the box drive system is running

Tape Leg Length

WARNING

- **To reduce the risk associated with sharp blade hazards:**
  - Keep hands and fingers away from tape cutoff knives under orange blade guards. The blades are extremely sharp

Leading Tape Leg Length Adjustment – Figure 5-6

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

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

Changing Tape leg Length from 70 to 50mm [2-3/4 to 2 inches] – **Figure 5-7**

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

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

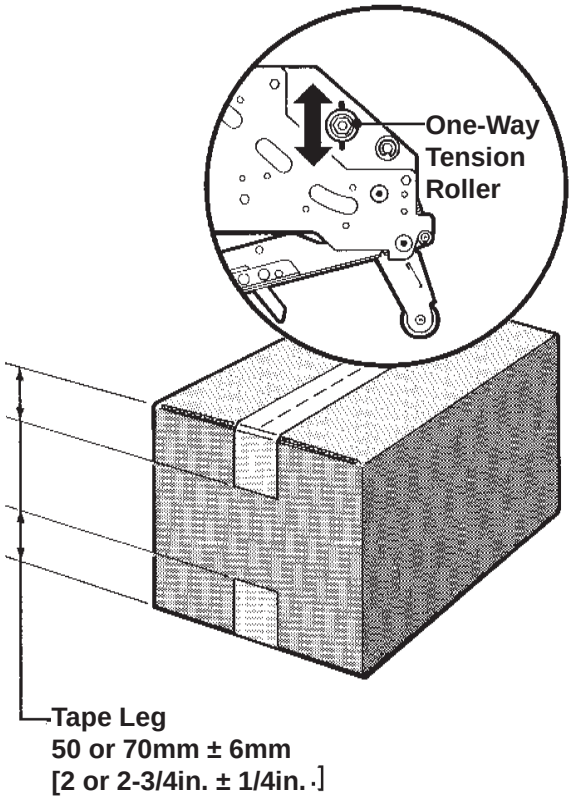


Figure 5-6 – Leading Tape Leg Length

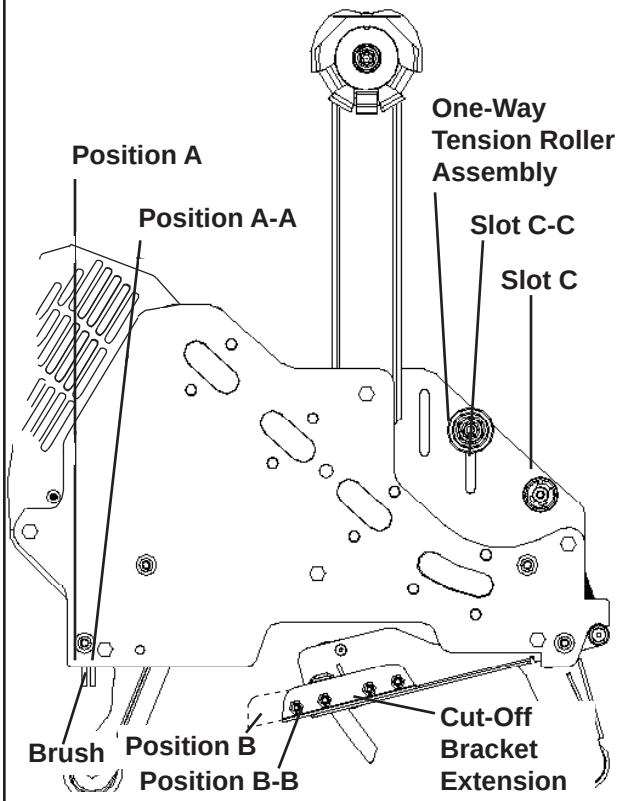


Figure 5-7 – Changing Tape Leg Length

Troubleshooting Guide

Problem	Cause	Correction
The tape leg on the front of the case is too long	The tape is threaded incorrectly	The tape must go around the wrap roller before going around the one-way tension roller
	The tape tension is too low	Adjust the one-way tension roller
	The knurled roller drags	Check for adhesive build-up between the knurled roller and its shaft. Clean and lubricate shaft. Remove all lubricant from roller surfaces.
	Tape tracks to one side or drags on the support tabs of applying frame	Adjust the tape web alignments
	The one-way tension roller is not correctly positioned	Position the roller in its mounting slot so that the tape extends just beyond the 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 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 Guide

Problem	Cause	Correction
Tape is tabbing on the trailing leg on the back of the box	There is excess tension on the tape drum assembly and/or the one-way tension roller assembly	Adjust the one-way tension roller and/or the tape drum assembly
	Rollers in the tape path do not rotate freely	Clean adhesive deposits from the surface, ends, and shafts of the rollers. Then lubricate roller shafts. Remove all lubricant from roller surfaces.
	The 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 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 it 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
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

Recommended Spare Parts

Listed are a set of spare parts that will periodically require replacement due to normal wear. These parts should be ordered to keep the taping heads in production:

AccuGlide™ 3 Upper Taping Head - 3 Inch

Qty.	Ref. No.	Part Number	Description
4	10932-22	78-8076-4500-3	Stud – Mounting
1	10928-10	78-8137-3311-6	Spring – Upper Extension
1	10928-2	78-8028-7899-7	Knife – 89mm/3.5 Inch
2	10928-12	78-8052-6602-6	Spring – Cutter
1	-	78-8076-4726-4	Tool – Tape Threading

AccuGlide™ 3 Lower Taping Head - 3 Inch

Qty.	Ref. No.	Part Number	Description
1	10928-2	78-8028-7899-7	Knife – 89mm/3.5 Inch
2	10928-12	78-8052-6602-6	Spring – Cutter
4	10931-22	78-8076-4500-3	Stud – Mounting
1	10927-10	78-8137-3312-4	Spring – Lower Extension
1	-	78-8076-4726-4	Tool – Tape Threading

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

Qty.	Ref. No.	Part Number	Description
1	10929-15	78-8057-6181-0	Roller – Applying
1	10926/10927-5	78-8057-6180-2	Roller – Buffing
1	10928-18	78-8113-7030-9	Spring – Torsion

Replacement Parts and Service

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

Replacement Parts Illustrations and Parts Lists

AccuGlide™ 3 Upper Taping Head - 3 Inch, Type 10800
AccuGlide™ 3 Lower Taping Head - 3 Inch, Type 10800

1. Refer to the **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 the first page of this instruction manual **"Replacement Parts and Service Information"** for replacement parts ordering information.

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

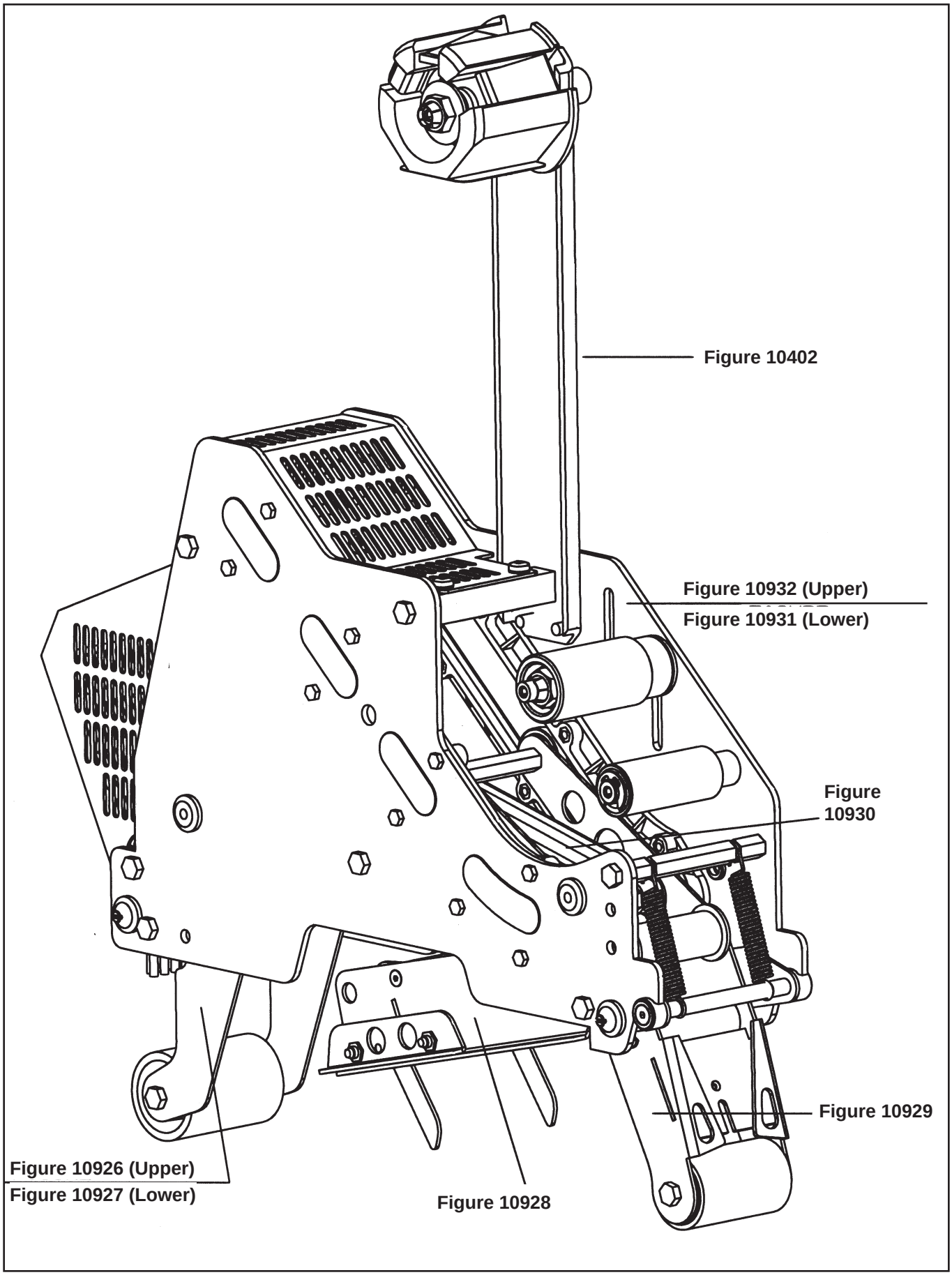


Figure 10402
Figure 10932 (Upper)
Figure 10931 (Lower)
Figure 10930
Figure 10929
Figure 10926 (Upper)
Figure 10927 (Lower)
Figure 10928

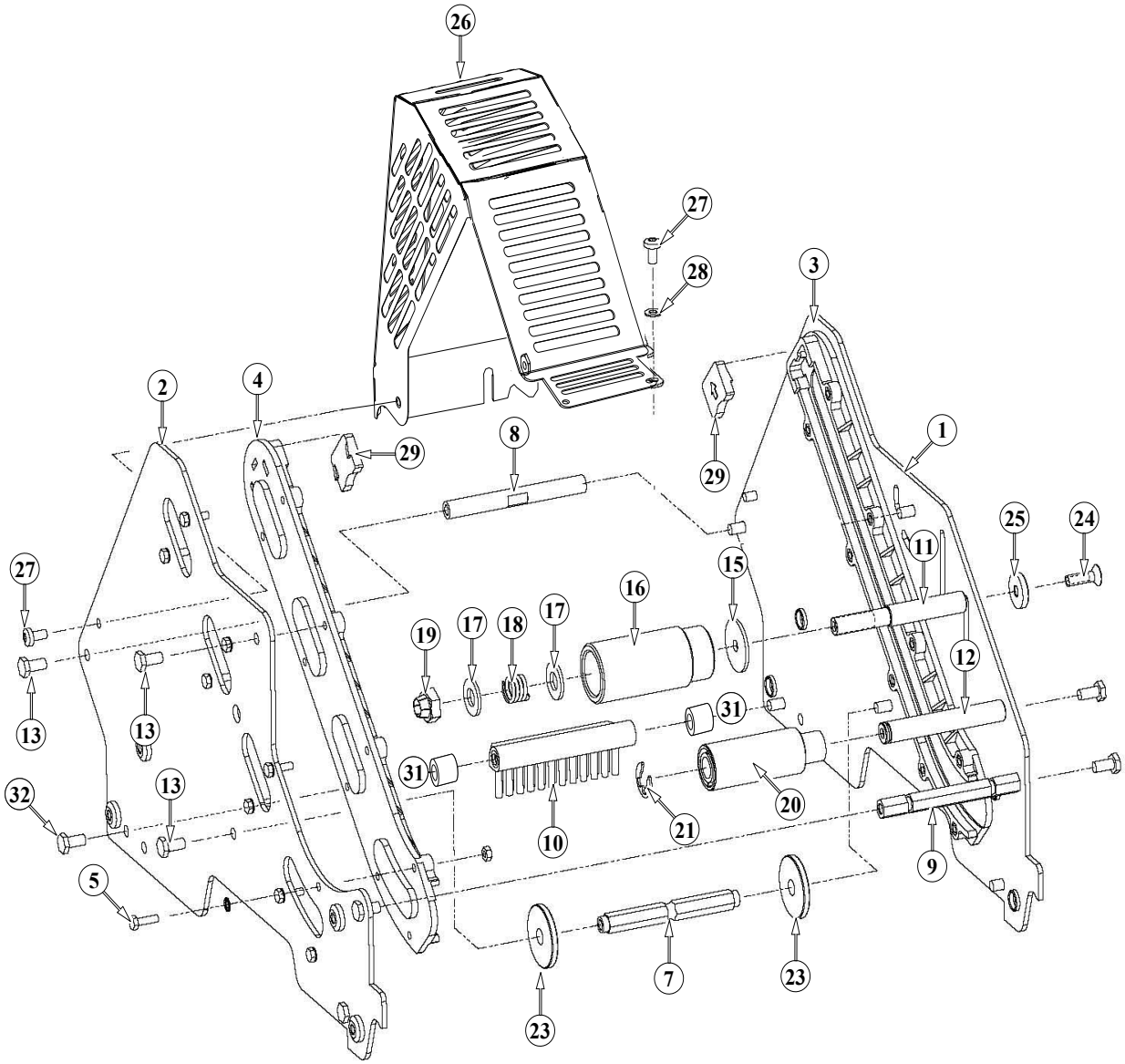


Figure 10932 – Upper Head

Figure 10932 – Upper Head

Ref. No.	3M Part No.	Description
10932-1	78-8137-3294-4	Frame – Tape Mount Upper Assembly
10932-2	78-8137-3295-1	Frame – Front Upper Assembly
10932-3	78-8068-4143-9	Guide – #1
10932-4	78-8068-4144-7	Guide – #2
10932-5	78-8060-7818-0	Screw – Hex Hd, M4 x 12
10932-6	78-8010-7416-8	Nut – Hex Jam, M4
10932-7	78-8076-4735-5	Spacer – Spring
10932-8	78-8137-3309-0	Shaft - Pivot 115mm
10932-9	78-8060-7939-4	Spacer – 10 x 115 W/Slots
10932-10	78-8060-7936-0	Brush Assembly
10932-11	78-8054-8796-0	Shaft – Tension Roller
10932-12	78-8054-8798-6	Shaft – Wrap Roller
10932-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10932-15	78-8100-1009-6	Washer – Special
10932-16	78-8054-8797-8	Roller – Top Tension
10932-17	26-1004-5510-9	Washer – Plain, M10
10932-18	78-8052-6567-1	Spring – Compression
10932-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
10932-20	78-8054-8799-4	Roller – Wrap
10932-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
10932-22	78-8076-4500-3	Stud – Mounting
10932-23	78-8076-5242-1	Stop – Cut-Off Frame
10932-24	78-8060-8179-6	Screw - Flat Head Hex, M6 x 20
10932-25	78-8076-5477-3	Washer – Special, 6.5 x 20 x 4
10932-26	78-8137-3310-8	Guard – Head
10932-27	78-8060-8087-1	Screw – M5 x 10
10932-28	78-8005-5741-1	Washer – Flat, M5
10932-29	78-8133-9615-3	Bumper
10932-30	78-8133-9605-4	Label – Threading, English Language
10932-31	78-8060-7937-8	Spacer 6.5 / 14 x 12.5
10932-32	78-8060-7938-6	Screw - Low Profile M6 x 25

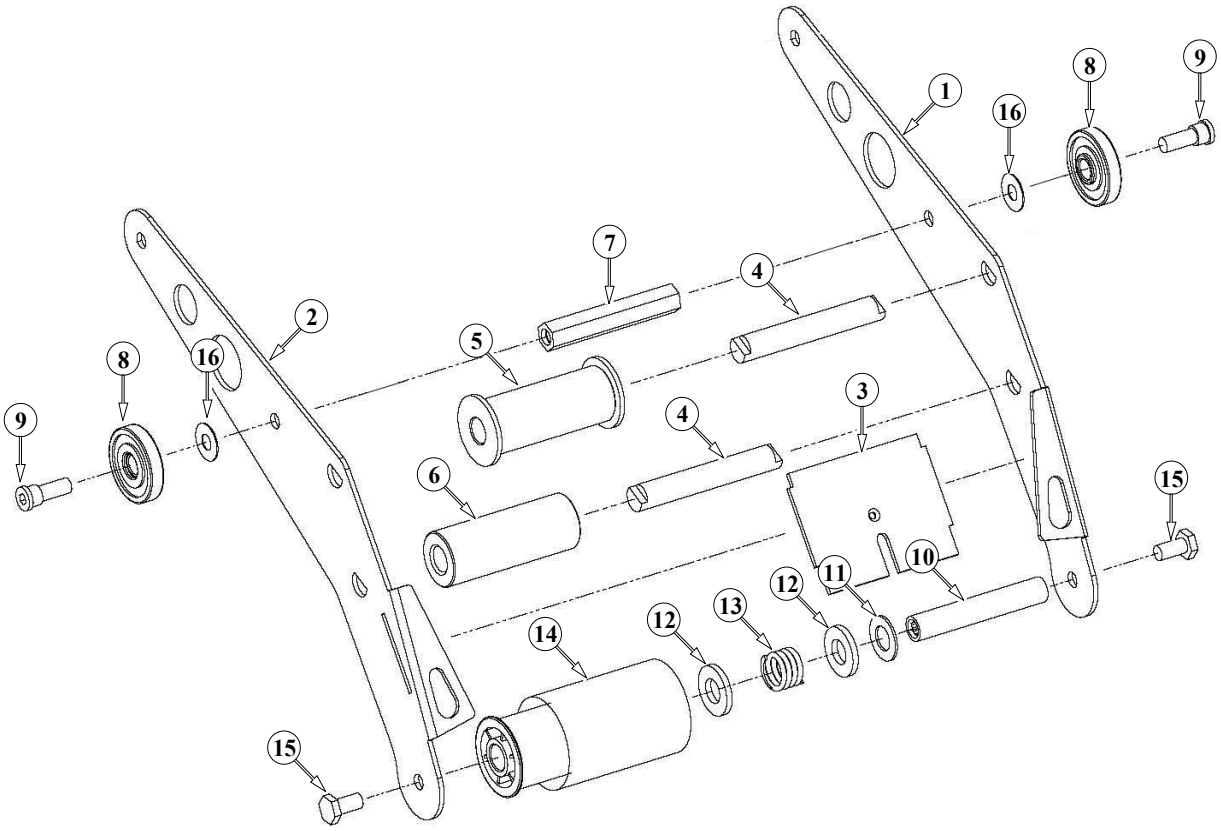


Figure 10929 – Upper and Lower Heads

Figure 10929 – Upper and Lower Heads

Ref. No.	3M Part No.	Description
10929-1	78-8133-9520-5	Arm – Applying, R/H
10929-2	78-8133-9521-3	Arm – Applying, L/H
10929-3	78-8070-1292-3	Plate – Back-Up
10929-4	78-8076-4736-3	Shaft Roller
10929-5	78-8076-4737-1	Roller Assembly – Knurled
10929-6	78-8076-4738-9	Roller – Wrap
10929-7	78-8054-8806-7	Spacer
10929-8	78-8017-9082-1	Bearing – Special, 30 mm
10929-9	78-8017-9106-8	Screw – Bearing Shoulder
10929-10	78-8054-8801-8	Shaft – 10 x 85, W/Hexagon
10929-11	78-8017-9074-8	Washer – Nylon, 15mm
10929-12	26-1004-5510-9	Washer – Friction
10929-13	78-8052-6567-1	Spring – Compression
10929-14	78-8137-1392-8	Assembly– Applying Roller
10929-15	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10929-16	78-8094-6151-6	Washer - Flat, 6.5 ID x 15 OD x 0.5 Thk

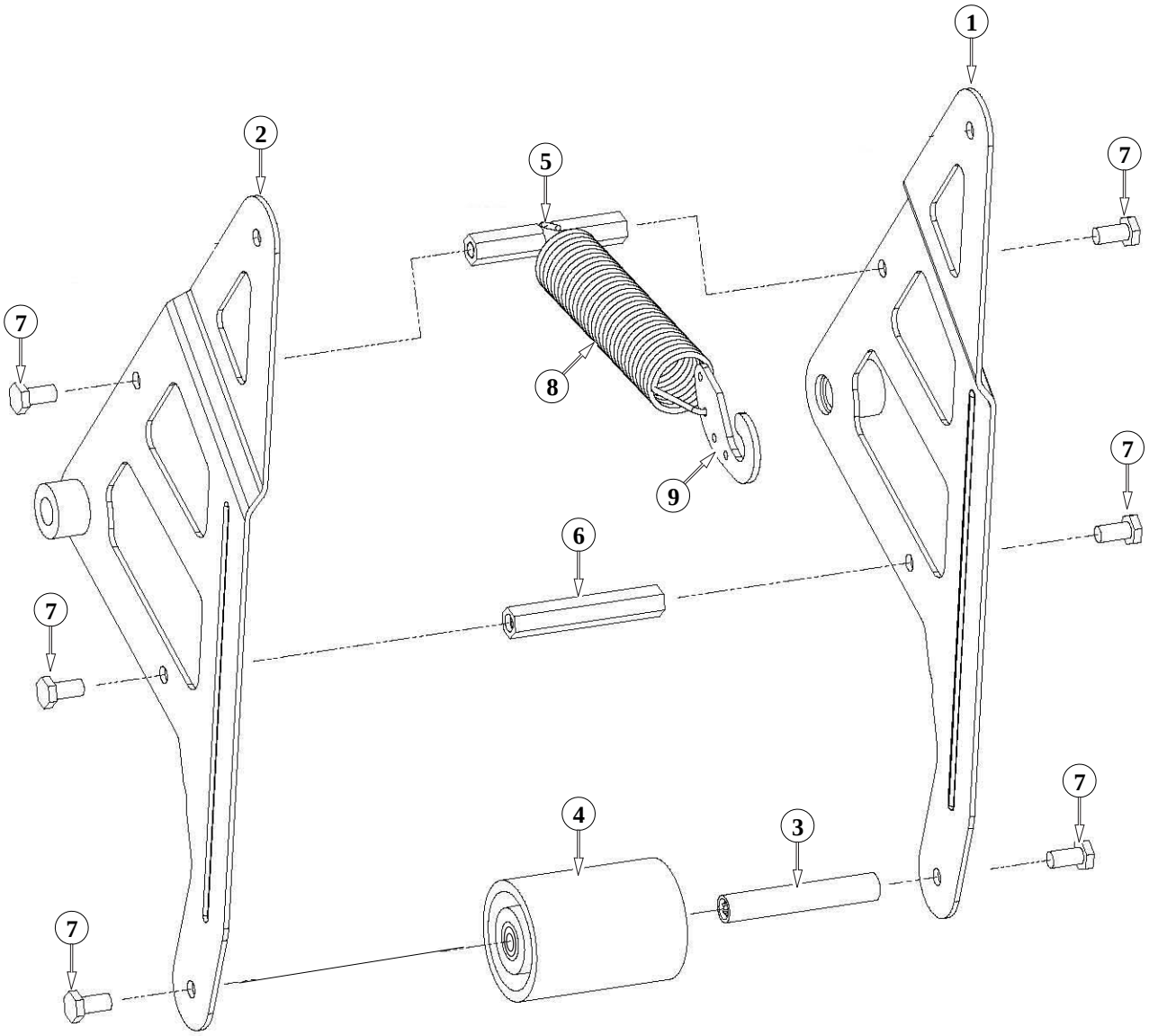


Figure 10926 – Upper Head

Figure 10926 – Upper Head

Ref. No.	3M Part No.	Description
10926-1	78-8137-3300-9	Buffing Arm – Sub Assembly
10926-2	78-8137-3301-7	Buffing Arm – Sub Assembly
10926-3	78-8091-0799-4	Shaft – 10 x 85, W/Hexagon
10926-4	78-8137-1397-7	Roller – Buffing Assembly
10926-5	78-8076-4739-7	Spacer – Spring
10926-6	78-8052-6580-4	Spacer
10926-7	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10926-8	78-8137-3311-6	Spring – Upper (100 fpm)
10926-9	78-8070-1244-4	Holder – Spring

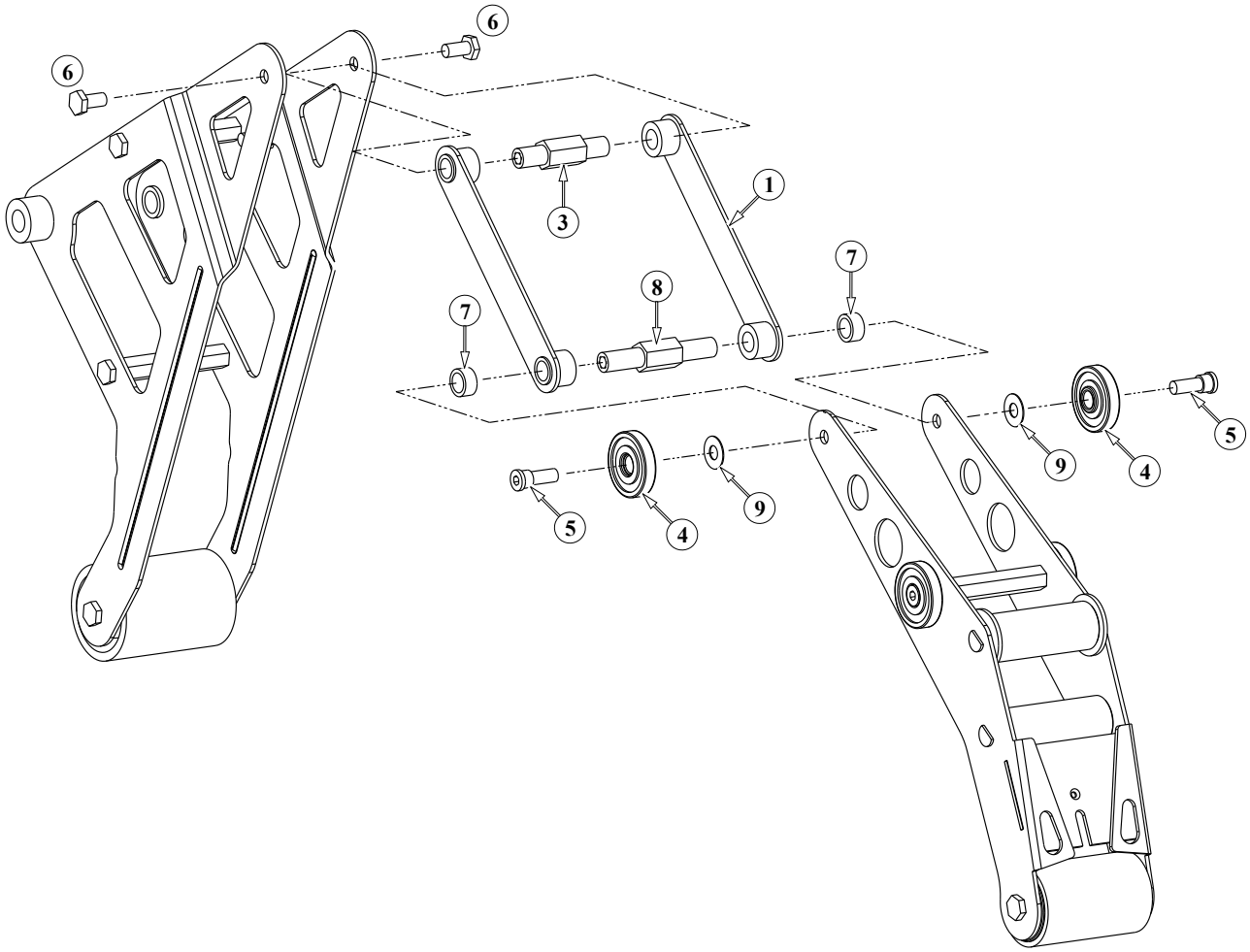


Figure 10930 – Upper and Lower Heads

Figure 10930 – Upper and Lower Heads

Ref. No.	3M Part No.	Description
10930-1	78-8137-3302-5	Link – R/H Assembly
10930-3	78-8137-3314-0	Shaft – Pivot, Buffing
10930-4	78-8017-9082-1	Bearing – Special 30 mm
10930-5	78-8017-9106-8	Screw – Bearing Shoulder
10930-6	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10930-7	78-8137-3305-8	Spacer – Applying Pivot
10930-8	78-8137-3313-2	Shaft – Pivot, Applying
10930-9	78-8137-6151-6	Washer - Flat, 6.5 ID x 15 OD x 0.5 Thk

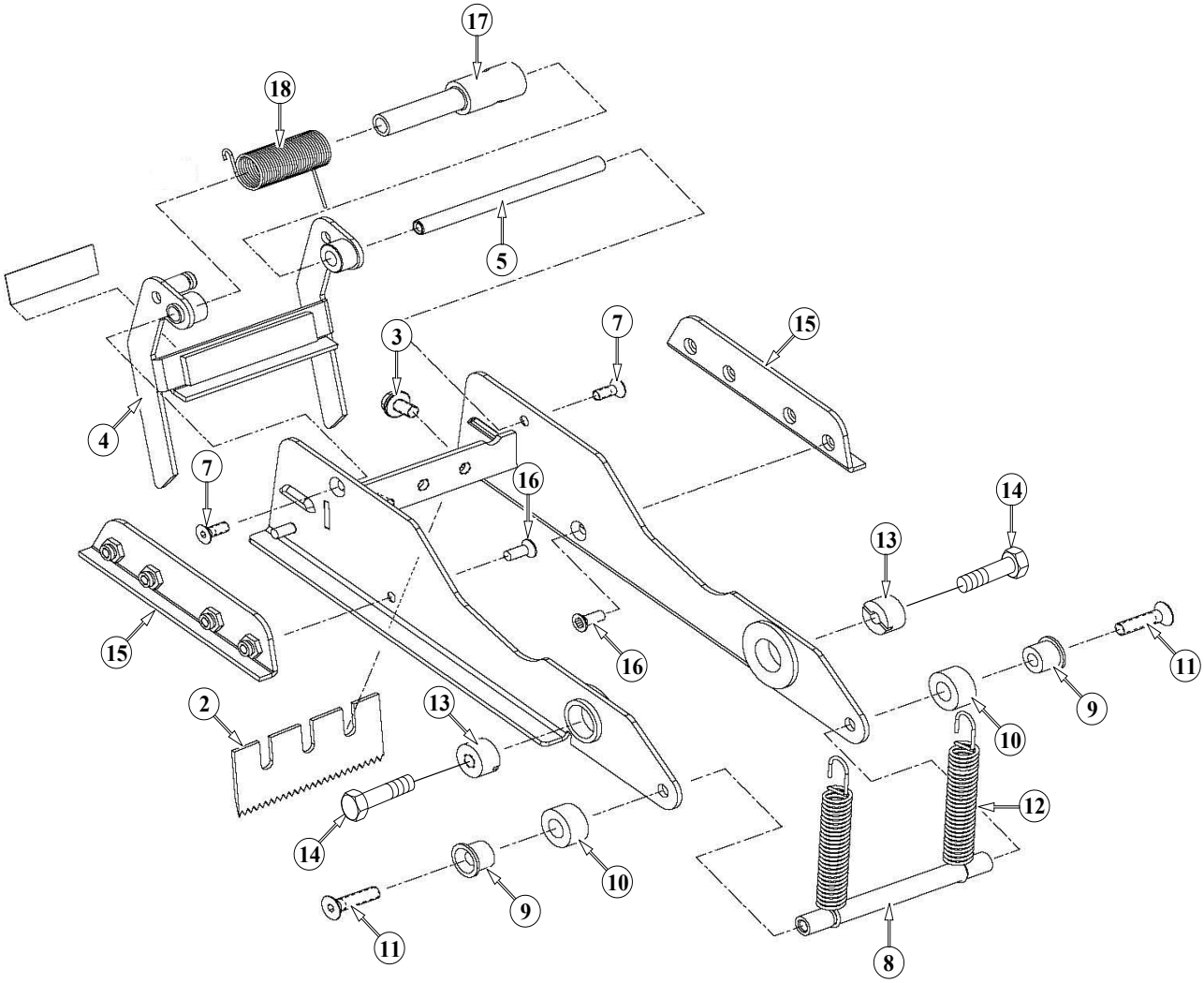
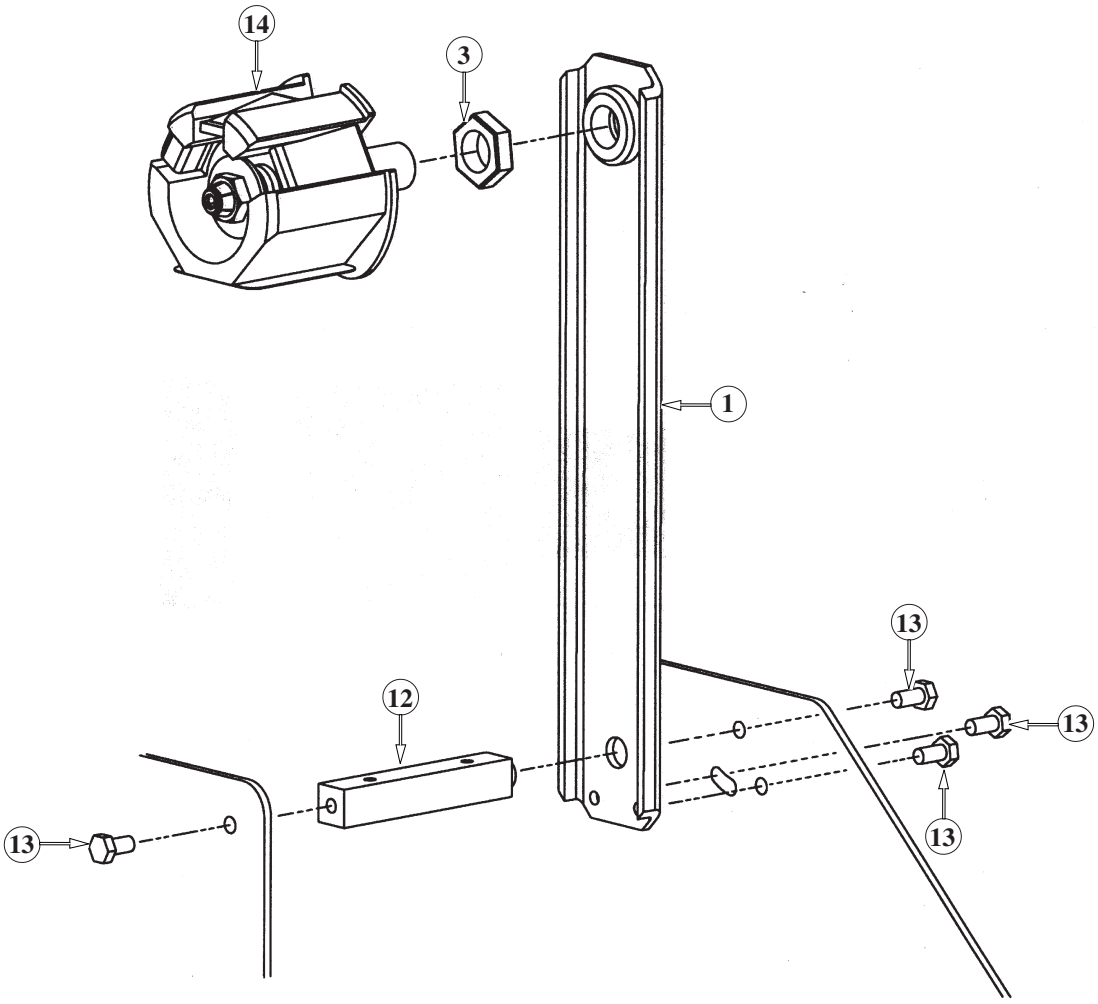
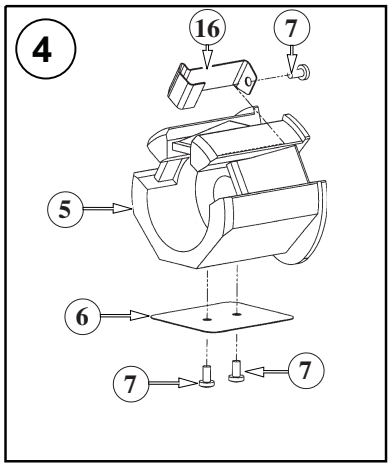


Figure 10928 – Upper and Lower Heads

Figure 10928 – 3" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10928-1	78-8070-1283-2	Frame – Cut-Off
10928-2	78-8028-7899-7	Knife – 89 mm/3.5 Inch
10928-3	26-1002-5817-2	Screw – Hex Hd, M5 x 8
10928-4	78-8076-4741-3	Knife Guard Assembly – W/English Language Label
10928-5	78-8054-8813-3	Shaft – Knife Guard
10928-7	26-1005-4758-2	Screw – Flat Hd, Soc Dr, M4 x 10
10928-8	78-8060-7941-0	Pin – Spring Holder W/Slots
10928-9	78-8052-6600-0	Spacer
10928-10	78-8070-1269-1	Bumper
10928-11	26-1005-4757-4	Screw – Flat Hd, Soc Dr, M5 x 20
10928-12	78-8052-6602-6	Spring – Cutter
10928-13	78-8017-9132-4	Pivot – Cutter Lever
10928-14	26-1003-5828-7	Screw – Spec, Hex Hd, M6 x 10
10928-15	78-8070-1216-2	Slide – Extension
10928-16	26-1008-6574-5	Screw – Flat Hd, Phil Dr, M4 x 10
10928-17	78-8113-7060-6	Bushing – 83.7 mm Long
10928-18	78-8113-7030-9	Spring – Torsion
10928-19	78-8070-1335-0	Label – Warning, English





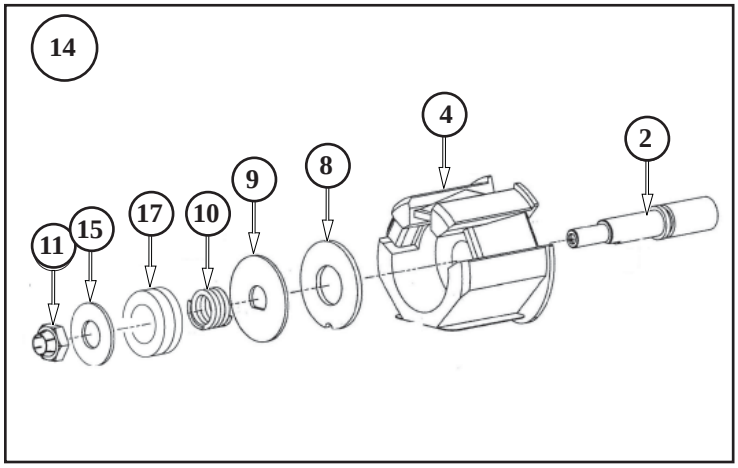


Figure 10402 – Upper and Lower Heads

Figure 10402 – 3" Latch Upper and Lower Heads

Ref. No.	3M Part No.	Description
10402-1	78-8070-1395-4	Bracket – Bushing Assembly
10402-2	78-8060-8462-6	Shaft – Tape Drum, 3 Inch Head
10402-3	78-8017-9169-6	Nut – M18 x 1
10402-4	78-8098-8829-6	Tape Drum Sub Assembly – 3 Inch Wide
10402-5	78-8098-8828-8	Tape Drum
10402-6	78-8098-8830-4	Leaf Spring
10402-7	26-1002-5753-9	Screw – Self Tapping
10402-8	78-8060-8172-1	Washer – Friction
10402-9	78-8052-6271-0	Washer – Tape Drum
10402-10	78-8100-1048-4	Spring – Core Holder
10402-11	78-8017-9077-1	Nut – Self Locking, M10 x 1
10402-12	78-8100-1050-0	Spacer – Bracket
10402-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10402-14	78-8133-9641-9	Tape Drum Assembly – 3 Inch Head
10402-15	26-1004-5510-9	Washer – Plain, M10
10402-16	78-8098-8816-3	Latch – Tape Drum
10402-17	78-8052-6651-3	Washer - Nylon

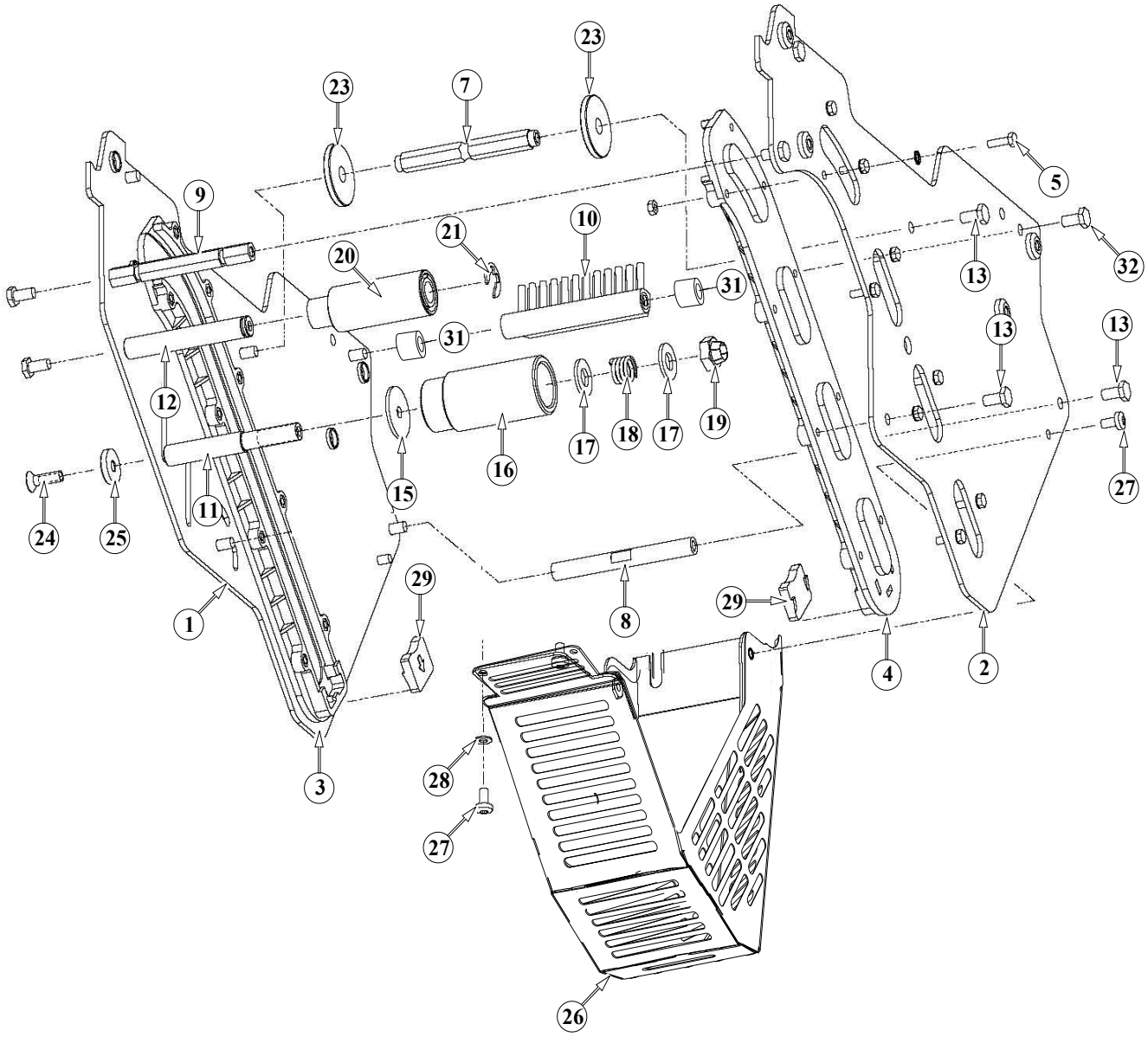


Figure 10931 – Lower Head

Figure 10931 – Lower Head

Ref. No.	3M Part No.	Description
10931-1	78-8137-3296-9	Frame – Tape Mount Lower Assembly
10931-2	78-8137-3297-7	Frame – Front Lower Assembly
10931-3	78-8068-4144-7	Guide – #2
10931-4	78-8068-4143-9	Guide – #1
10931-5	83-0002-7336-3	Screw – Hex Hd, M4 x 14
10931-6	78-8010-7416-8	Nut – Hex, M4
10931-7	78-8076-4735-5	Spacer – Spring
10931-8	78-8055-0694-2	Spacer – 10 x 10 x 115 mm
10931-9	78-8060-7939-4	Spacer – 10 x 115, W/Slots
10931-10	78-8060-7936-0	Brush Assembly
10931-11	78-8054-8796-0	Shaft – Tension Roller
10931-12	78-8054-8798-6	Shaft – Wrap Roller
10931-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10931-15	78-8100-1009-6	Washer – Special
10931-16	78-8054-8817-4	Roller – Tension Bottom
10931-17	26-1004-5510-9	Washer – Plain, M10
10931-18	78-8052-6567-1	Spring – Compression
10931-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
10931-20	78-8054-8799-4	Roller – Wrap
10931-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
10931-22	78-8076-4500-3	Stud – Mounting
10931-23	78-8076-5242-1	Stop – Cut-Off Frame
10931-24	78-8060-8179-6	Screw – Flat Head Hex, M6 x 20
10931-25	78-8076-5477-3	Washer – Special /6.5 x 20 x 4
10931-26	78-8137-3310-8	Guard – Head
10931-27	78-8060-8087-1	Screw – M5 x 10
10931-28	78-8005-5741-1	Washer – Flat, M5
10931-29	78-8133-9615-3	Bumper
10931-30	78-8133-9606-2	Label – Threading, English Language
10931-31	78-8060-7937-8	Spacer 6.5 / 14 x 12.5
10931-32	78-8060-7938-6	Screw - Low Profile M6 x 25

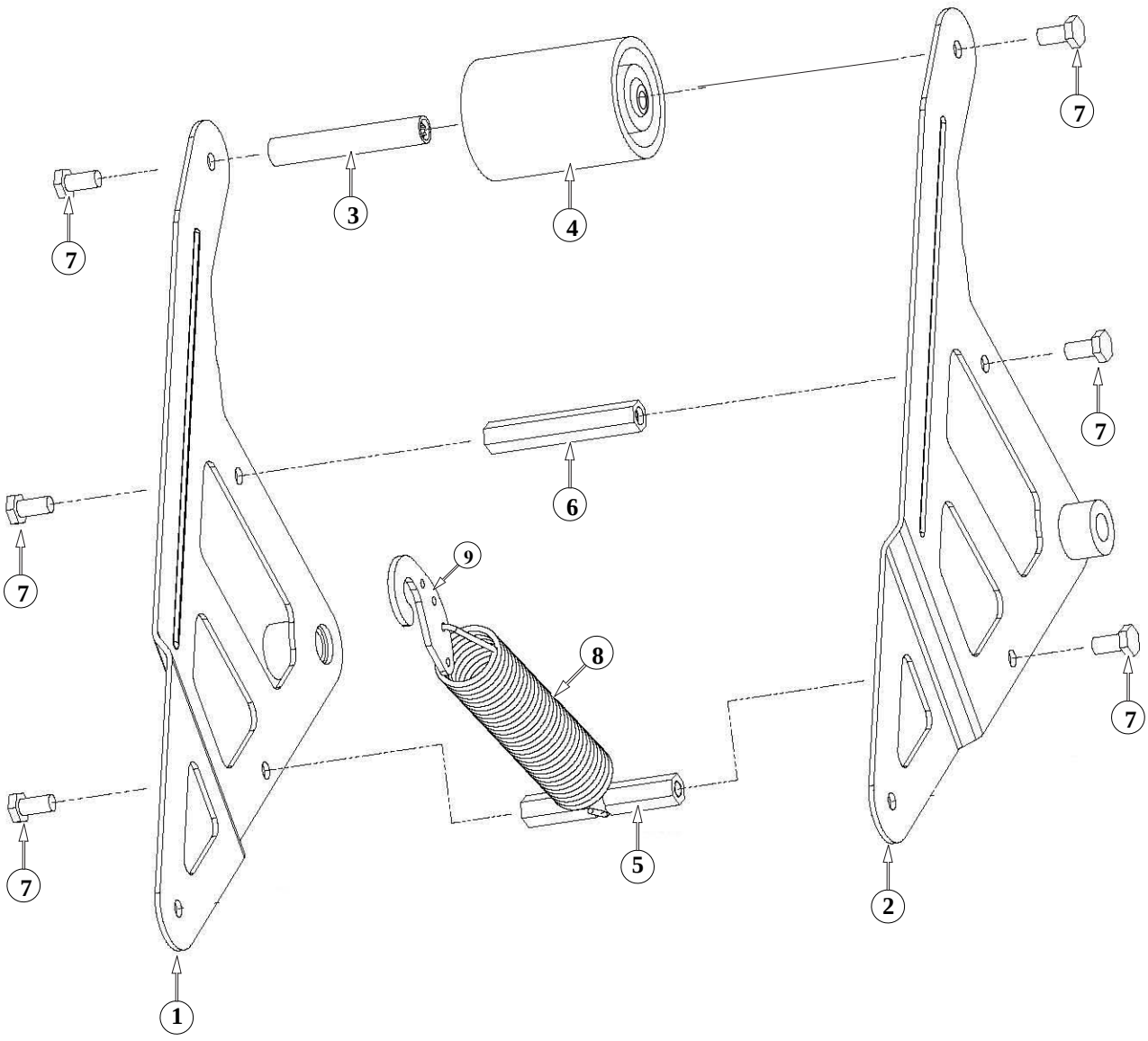


Figure 10927 – Lower Head

Figure 10927 – Lower Head

Ref. No.	3M Part No.	Description
10927-1	78-8137-3300-9	Buffing Arm – Sub Assembly
10927-2	78-8137-3301-7	Buffing Arm – Sub Assembly
10927-3	78-8091-0799-4	Shaft – 10 x 85, W/Hexagon
10927-4	78-8137-1397-7	Roller – Buffing
10927-5	78-8076-4739-7	Spacer – Spring
10927-6	78-8052-6580-4	Spacer
10927-7	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10927-8	78-8137-3312-4	Spring – Lower (100 fpm)
10927-9	78-8070-1244-4	Holder – Spring

THIS PAGE IS BLANK