3M Science. Applied to Life.™

Instructions and Parts List

3M-Matic™ 7000r-7000r3 Pro

Type 11500

Random Case Sealer with AccuGlide™ 3 Taping Heads

Serial #: _____

For reference, record machine serial number 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.

Replacement Parts and Service Information

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.

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

Technical Assistance / Replacement Parts and Additional Manuals:

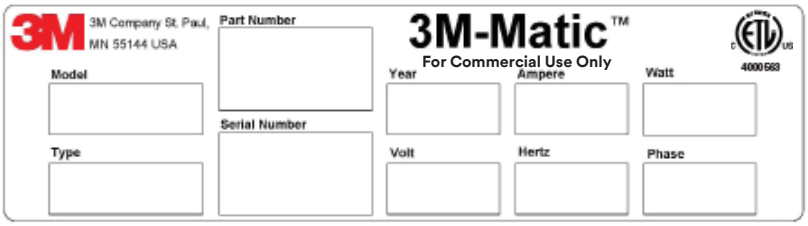
For technical assistance, contact our help line at 1-800-328-1390. Provide the customer support coordinator with the model/machine name, machine type, and serial number that are located on the identification plate (For example: Model 7000r - Type 11500 - Serial Number 13282).

To order replacement parts, contact us:

CSPD division of Combi Packaging Systems LLC.
5365 East Center Dr. N.E.
Canton, OH 44721

1-800-344-9883
e-mail: CSPD-CSR@combi.com
www.combi.com

Identification Plate



Replacement Parts and Service Information

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.

Table of Contents — Manual 1:
7000r-7000r3 Pro Random Case Sealer

(For Taping Head information, see Manual 2 or 3: AccuGlide™ 3 Taping Heads, 2 Inch or 3 Inch)

Table of Contents *(continued)* — Manual 1: 7000r-7000r3 Random Case Sealer

(For Taping Head information, see Manual 2 or 3: AccuGlide™ 3 Taping Heads, 2 Inch or 3 Inch)

Table of Contents *(continued)* — Manual 1: 7000r-7000r3 Random Case Sealer

(For Taping Head information, see Manual 2 or 3: AccuGlide™ 3 Taping Heads, 2 Inch or 3 Inch)

Abbreviations and Acronyms

List of Abbreviations/Acronyms

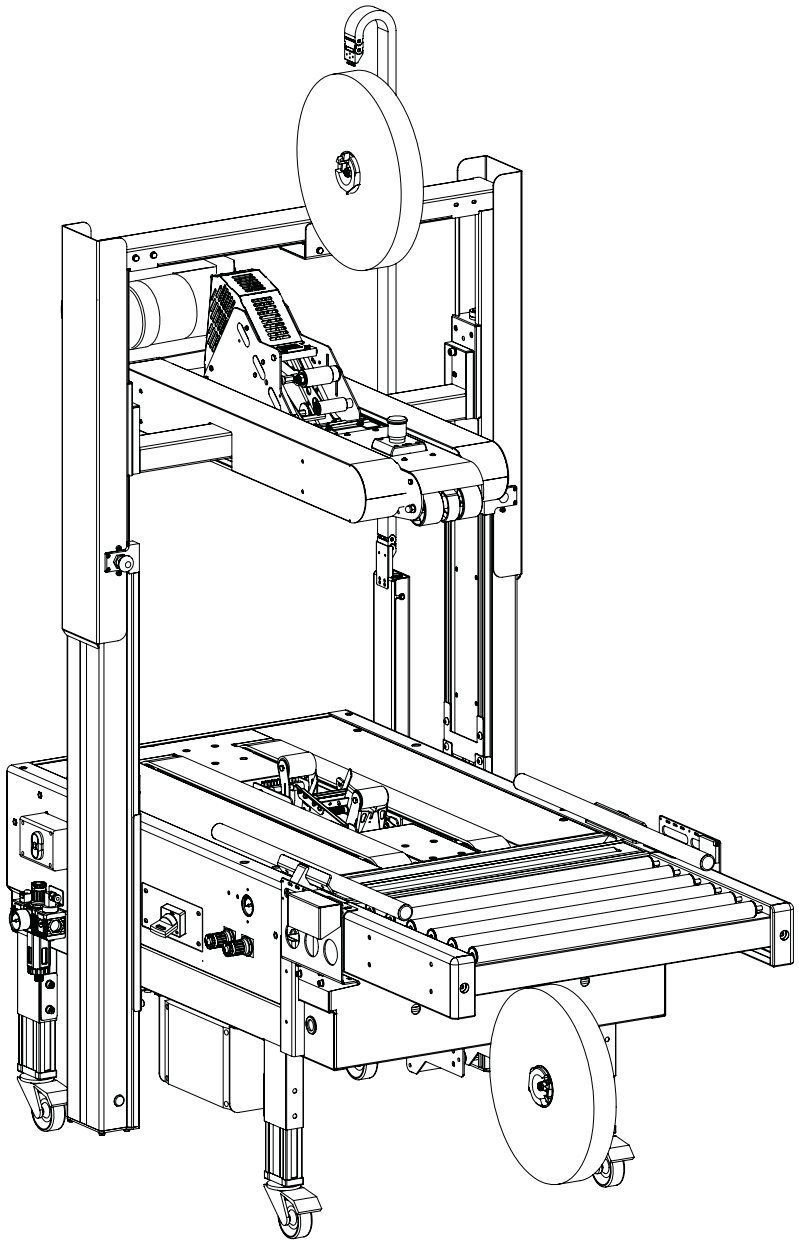
3M-Matic ..... Trademark of 3M St. Paul, MN 55144-1000
AccuGlide ..... Trademark of 3M St. Paul, MN 55144-1000
Scotch ..... Trademark of 3M St. Paul, MN 55144-1000
Drw. ..... Drawing
Ex. ..... For Example
Fig. ..... Exploded View Figure no. (spare parts)
Figure ..... Illustration
Max. ..... Maximum
Min. ..... Minimum
Nr. ..... Number
N/A ..... Not Applicable
OFF ..... Machine Not Operating
ON ..... Machine Operating
PLC ..... Programmable Logic Control
PP ..... Polypropylene
PU/PU Foam .... Polyurethane Foam
PTFE ..... Polytetrafl ourethelene
PVC ..... Poly-vinyl chloride
W ..... Width
H ..... Height
L ..... Length

1. Introduction

1.1 Manufacturing Specifications / Description / Intended Use

The **3M-Matic™ 7000r-7000r3 Pro 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 **7000r-7000r3** Pro automatically adjusts to a wide range of box sizes (see "Specifications Section – Box Weight and Size Capacities").

The 3M-Matic™ case sealing machines have been designed and manufactured in compliance with the legal requirements at the date of inception.



3M-Matic™ 7000r-7000r3 Pro Random Case Sealer, Type 11500

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 (ELV), a definition of symbols, plus a parts list of the 3M-Matic™ **7000r-7000r3** Pro Random Case Sealer.

3M Industrial Adhesives and Tapes Division
3M Center, Bldg. 220-5E-06
St. Paul, MN 55144-1000 (USA)

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.

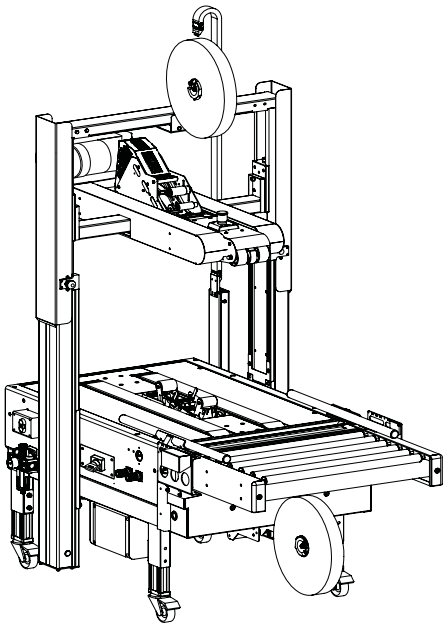
2. General Information

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™

For Commercial Use Only

4000583

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™ 7000r-7000r3 Pro Random Case Sealer, Type 11500** 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: 7000r-7000r3 Pro Random Case Sealer

(1) 7000r-7000r3 Pro Random Case Sealer, Type 11500

(1) Tool/Spare Parts Kit

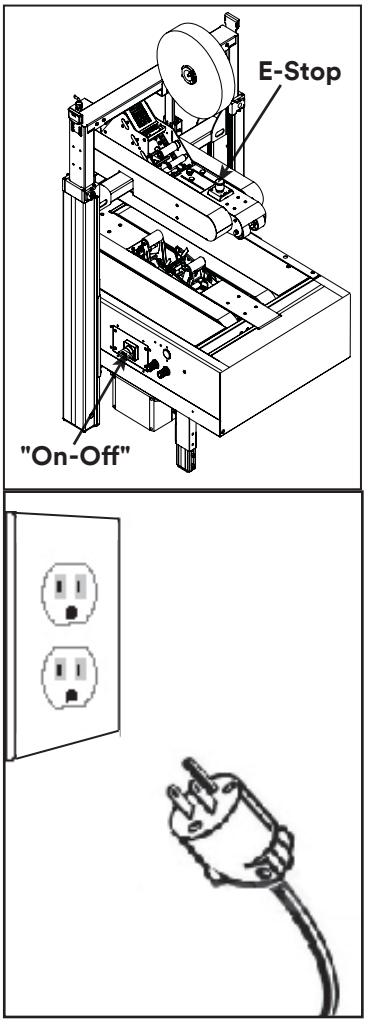
(1) Instruction and Parts Manual

3. Safety

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 peumatic and electrical supplies 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.

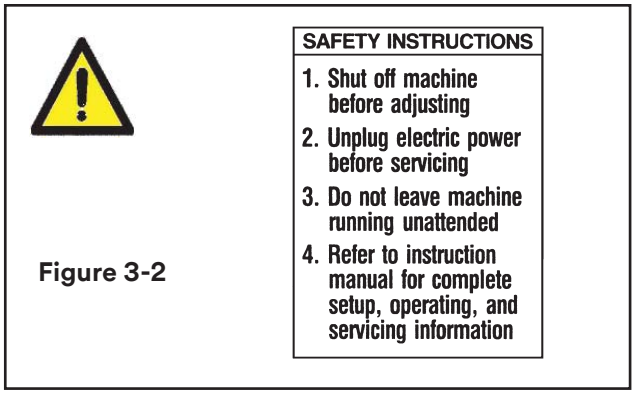


Figure 3-2

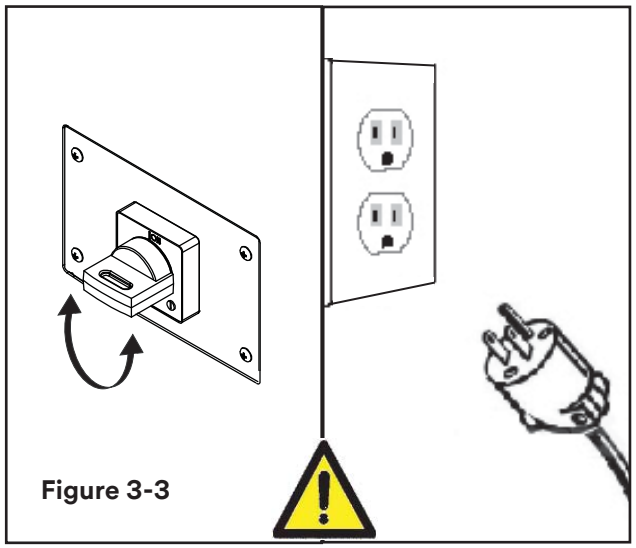


Figure 3-3

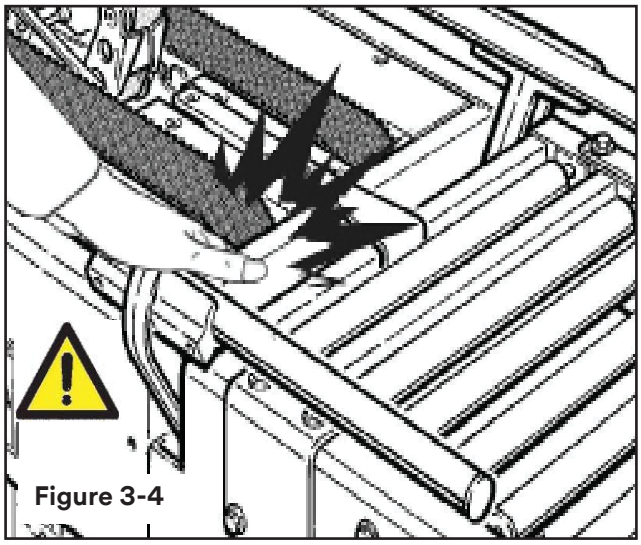


Figure 3-4

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 safety device which covers blade on top and bottom taping units. Blades are extremely sharp. Any error may cause serious injuries **(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 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.

CAUTION

- To reduce the risk associated with pinch 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 box.

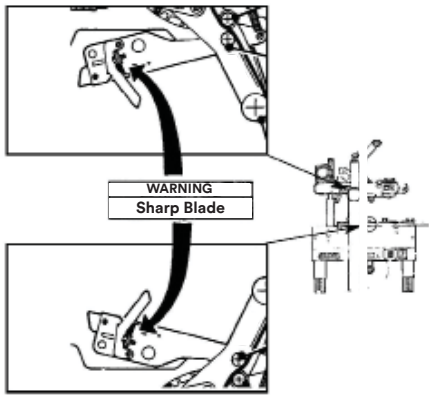


Figure 3-5

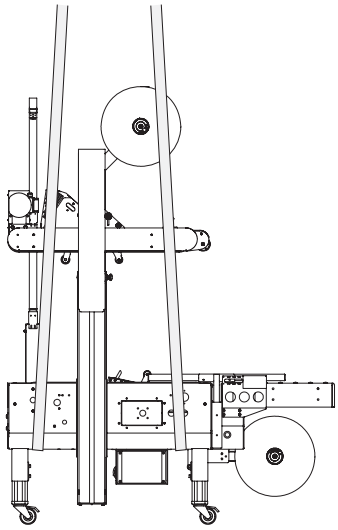


Figure 3-6

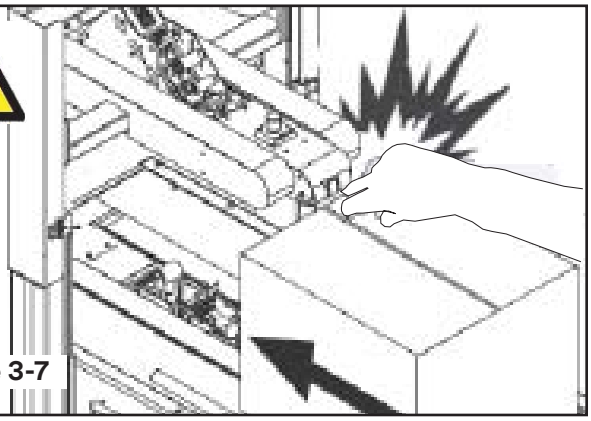


Figure 3-7

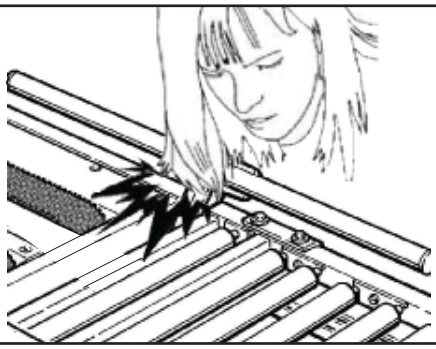


Figure 3-8

3.4 Operator's Qualifications

- Machine Operator
- Mechanical Maintenance Technician
- Electrical Maintenance Technician
- Manufacturer's Technician/Specialist **(See Section 3)**

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 **7000r-7000r3 Pro** 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.

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 pneumatic system and 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.

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.

3.11 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).

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
Extraordinary mechanical maintenance		3	1
Extraordinary electrical maintenance		2a	1
Adjusting box size	Stopped by pressing the EMERGENCY STOP button	1	1
Tape replacement		1	1
Blade replacement	Electric power disconnected	2	1
Drive belt replacement		2	1
Ordinary maintenance		2	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 Manual 2 for taping head components.

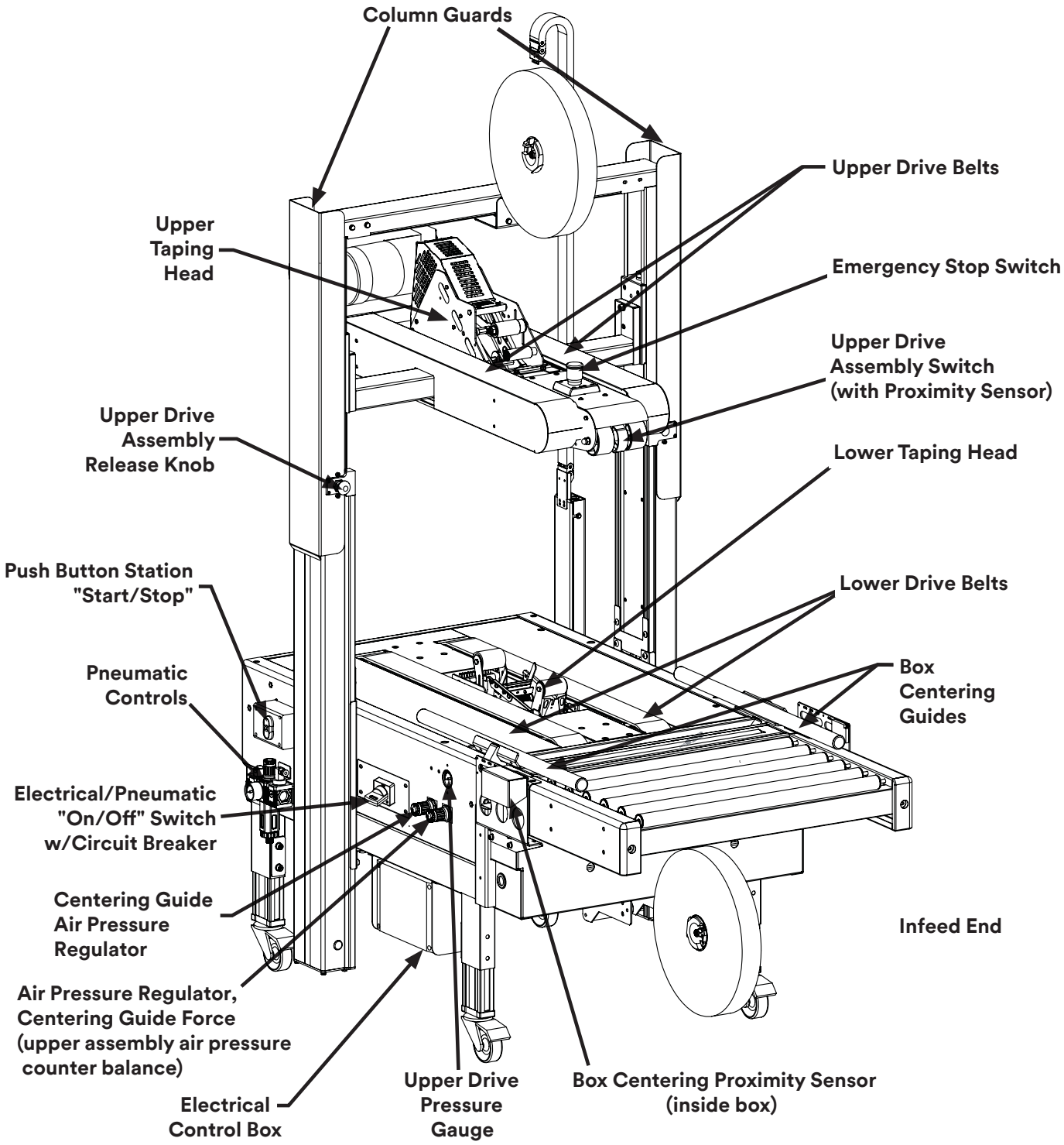


Figure 3-9 7000r-7000r3 Pro Case Sealer Components (Left Front View)

3.13 Table of Warnings and Replacements Labels

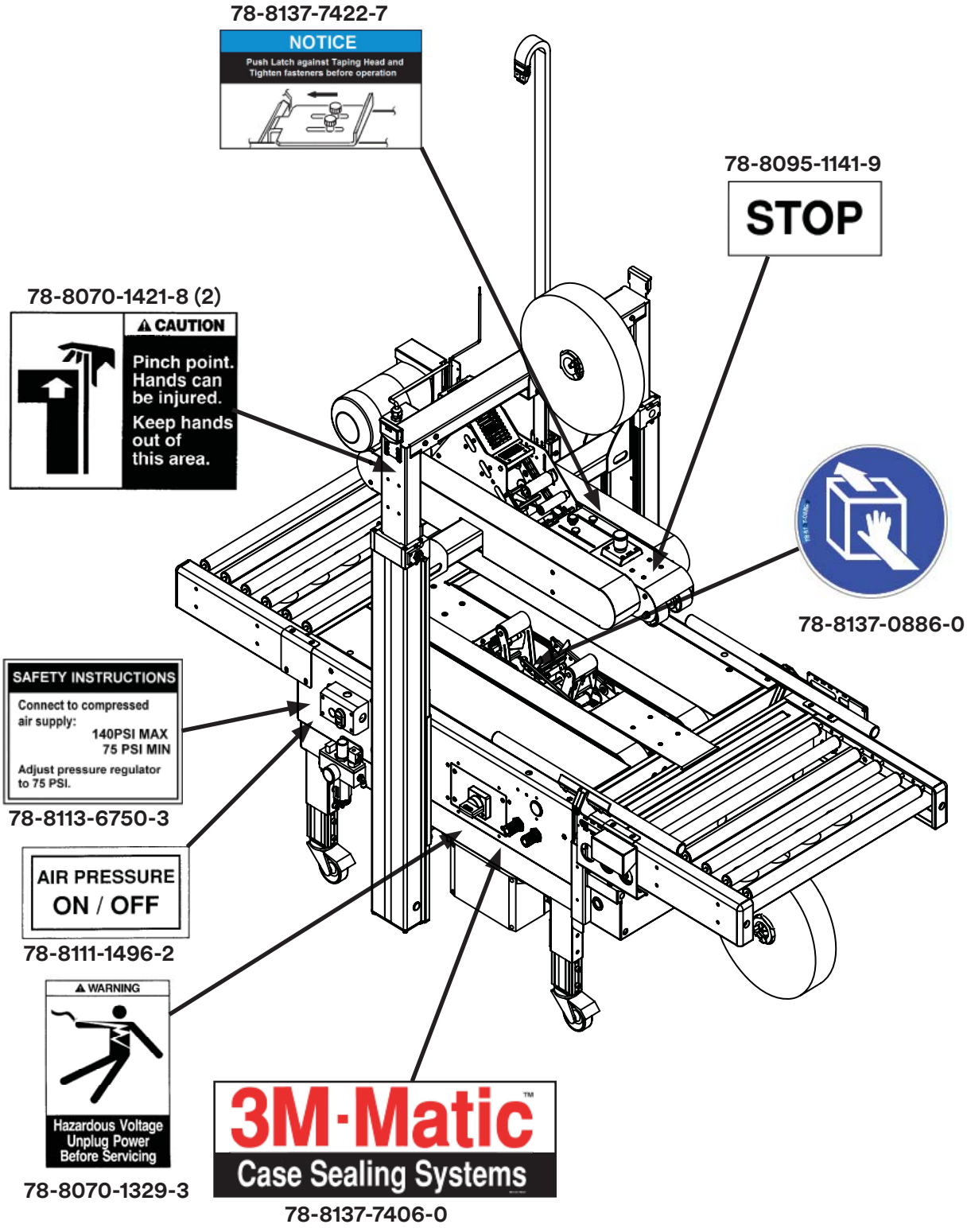


Figure 3-10 Replacement Labels / 3M Part Numbers

3.13 Table of Warnings and Replacements Labels *(continued)*

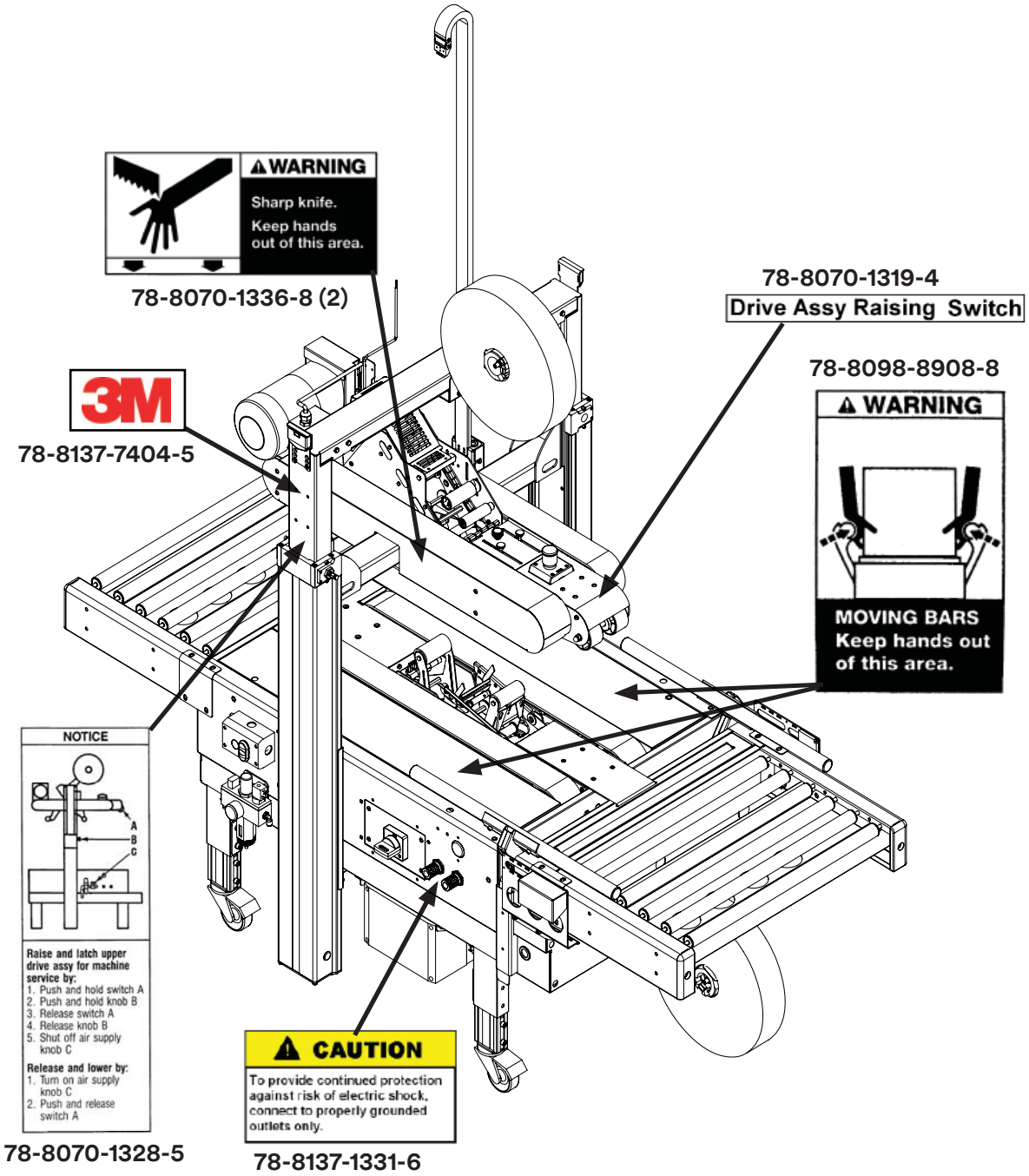


Figure 3-11 Replacement Labels / 3M Part Numbers

3.13 Table of Warnings and Replacements Labels *(continued)*

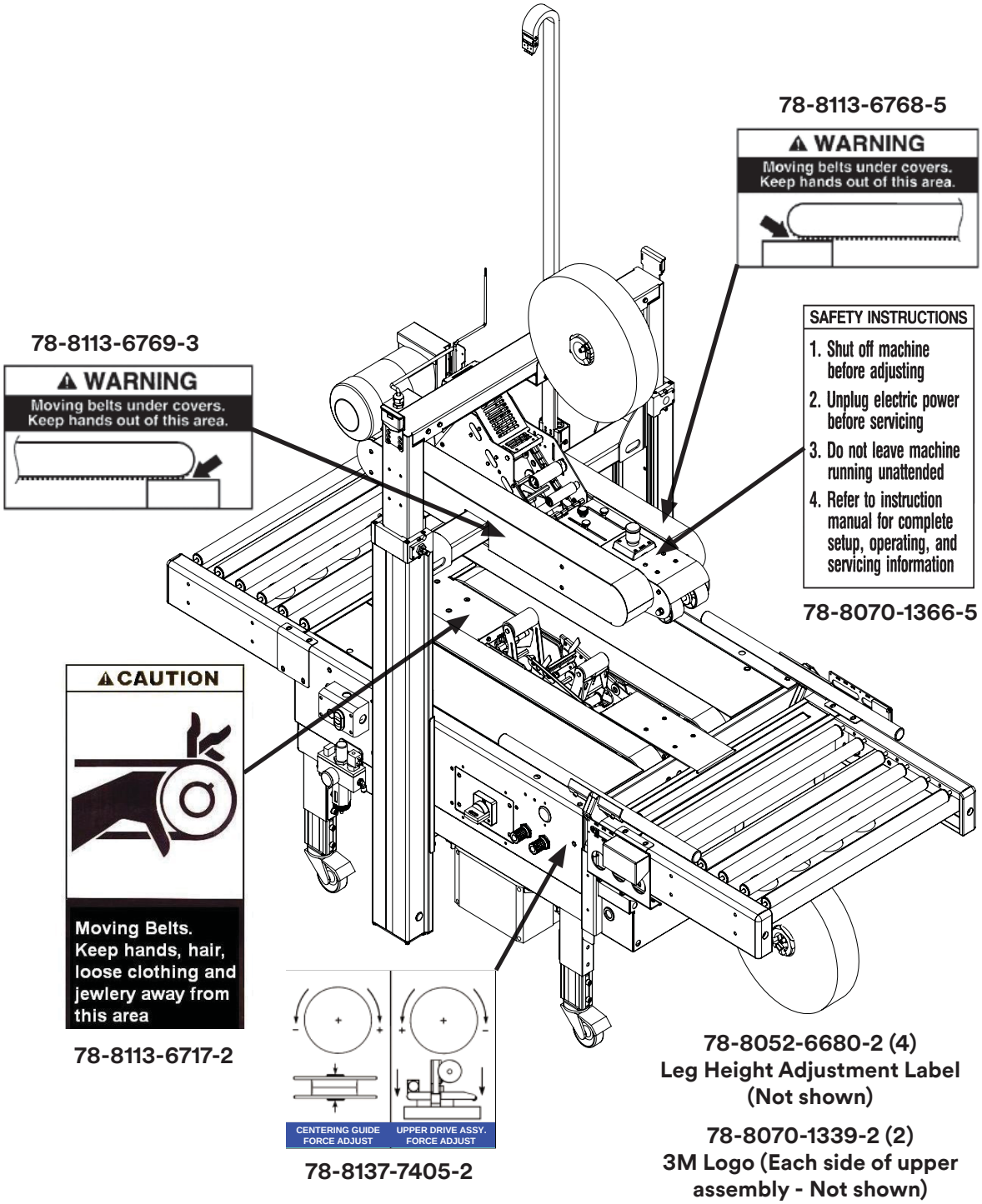


Figure 3-12 Replacement Labels / 3M Part Numbers

4. Specifications

4.1 Power Requirements:

Electrical: 115 VAC, 60 Hz, 6.4 A , 1/4 hp (720 watts)

Pneumatic: 90PSIG [6.2 bar], 11.6 SCFM [1200 NL/Min] Peak Usage.

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.

4.2 Operating Rate:

Belt speed is 0.5m/s [100 F.P.M.]
Actual production rate is dependent on operator's dexterity.
Boxes must be 18 inches (457mm) apart minimum.

4.3 Operating Conditions

Use in dry, relatively clean environments at 5° C to 50° 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.

4.4 Tape

Scotch® pressure-sensitive film box sealing tapes.

4.5 Tape Width

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

4.6 Tape Roll Diameter

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

4.7 Tape Width - 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")

4.8 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)

4.9 Box Weight and Size Capacities

A. Box Weight, filled: 5 lbs.– 85 lbs. [2.3 kg–38.6 kg]. Contents must support flaps.
B. Box Dimensions for 7000r Pro and 7000r3 Pro Machines: Inches [mm]

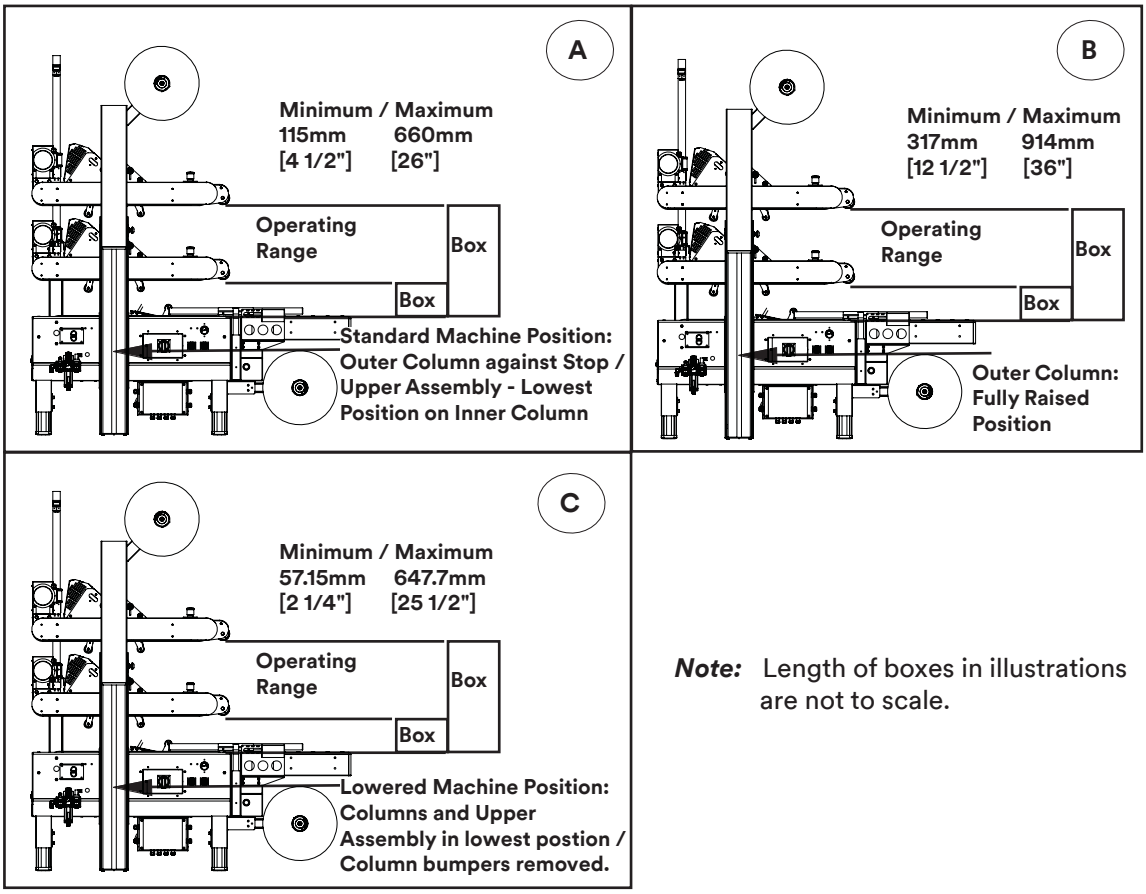
* Boxes narrower than 8 inches [200mm] may require more frequent belt replacement because of limited contact area.

To accommodate smaller or larger boxes, machine upper taping head frame and/or outer column assemblies can be repositioned as described in "Special Set-Up Procedure" section of this manual. Refer to illustration/chart for box height range possibilities by adjusting machine upper frame and/or outer column positioning.

	Length	Width	(A) Standard Pos. AG 3 Tape Leg (i.e. 2 3/4" [70])	(B) Fully Raised Pos.	(C) Lowered Pos. Tape Leg 2" [70] (AG3/no bumper)
Minimum	6" [152]	6 1/2" [165]*	4 1/2" [115]	12 1/2" [317]	2 1/4" [57]
Maximum	N/A	26" [660]	26" [660]	36" [914]	25 1/2" [647]

4. Specifications *(continued)*

Minimum/Maximum Box Height Combinations
(To relocate upper frame or outer columns, see “Special Set-Up Procedure”)



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

Case Height Range Illustration:

A. Standard Machine Position: Outer Columns positioned against Stop with Upper Drive Assembly set to Lowest Position on Inner Columns. Tape Leg Length - 2 3/4” [70mm].

B. Raised Machine Position: Maximum Box Height (i.e. Outer Columns and Upper Drive Assembly in Highest Position - See Special Set-Up Procedure). Tape Leg Length - 2 3/4” [70mm].

C. Lowered Machine Position: Lowest Box Height, columns in lowest position heads in offset position, Tape leg length 2”, Upper assembly in lowest position, column bumpers removed.

Boxes narrower than 8” [200mm] may require more frequent belt replacement because of limited contact area.

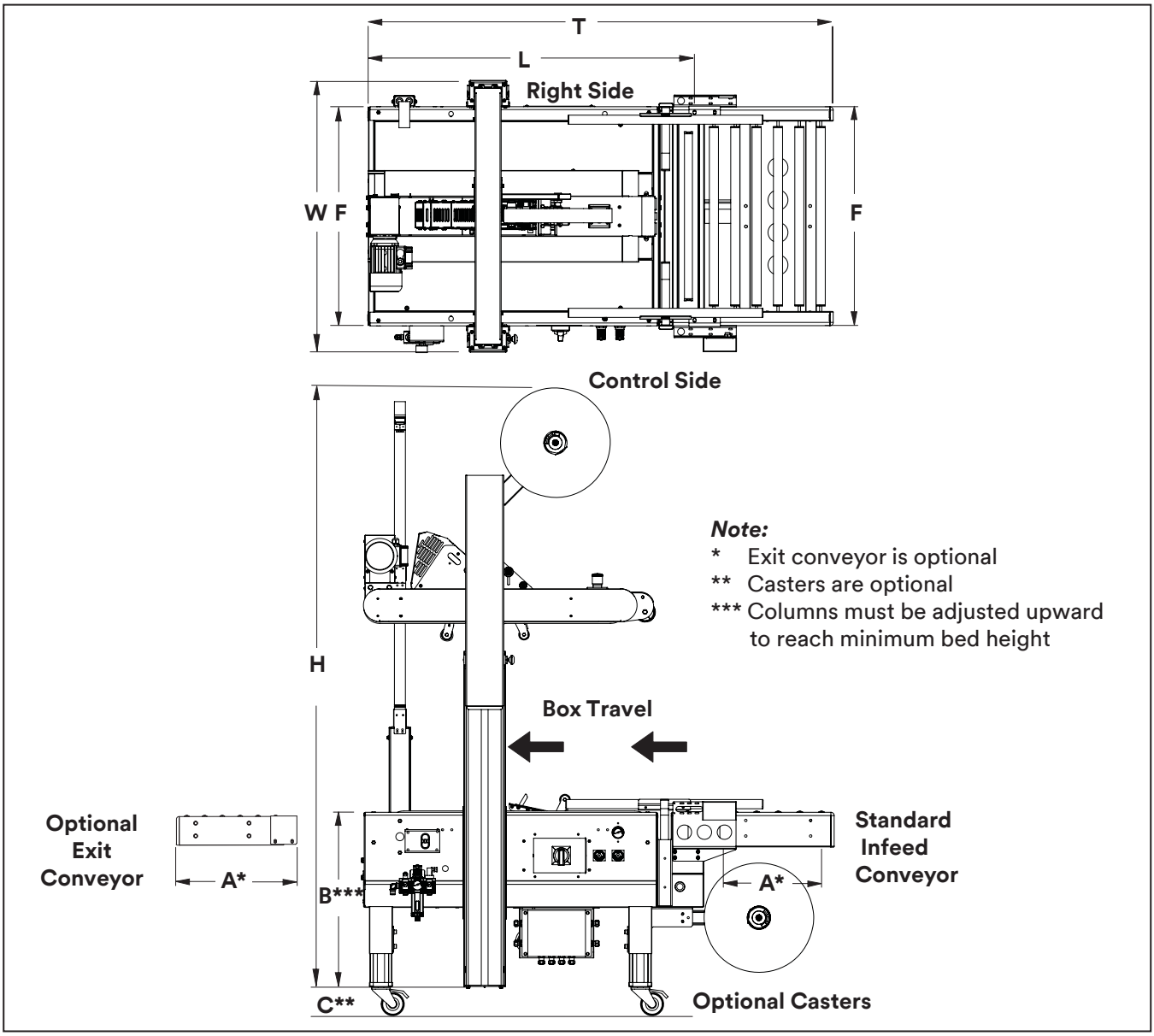
Special modifications may be available for carton sizes not listed on previous page. Contact your 3M Representative for information.

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

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

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

4. Specifications *(continued)*



4.10 Machine Dimensions:

	W	L	H	A	B	C	F	T
Minimum								
mm	959	1180	1575	457	597***	111	768	1637
[Inches]	[37 3/4]	[46 1/2]	[62]	[18]	[23 1/2]	[4 3/8]	[30 1/4]	[64 1/2]
Maximum								
mm			2642		890			
[Inches]	- -	- -	[104]	- -	[35]	- -	- -	-

Packaged:
49 1/2" [1257] (H) x 51" [1295] (L) x 42" [1067] (W)

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

4.11 Machine Noise Level:

78dB with tape roll inserted.

4.12 Set-Up Recommendations:

- Machine must be level.
- Supplied infeed and optional exit conveyors (if used) should provide straight and level box entry/exit.
- Optional exit conveyor (powered or gravity) can help move sealed boxes away from machine.

5. Shipment-Handling-Storage-Transport

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).**

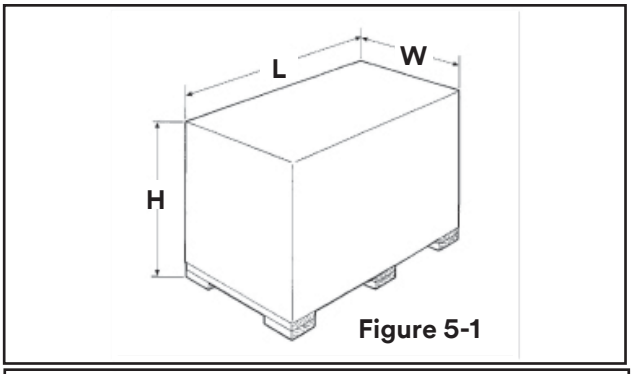


Figure 5-1

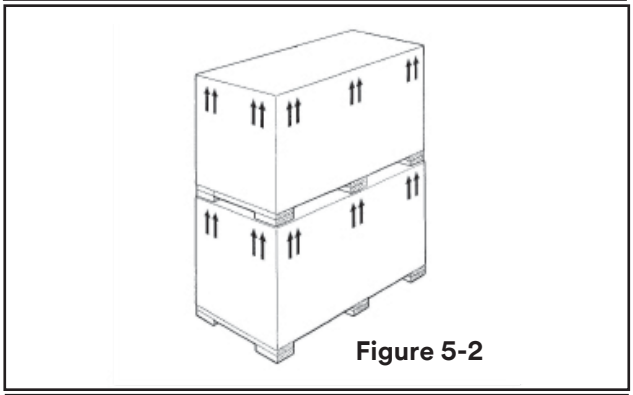


Figure 5-2

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.

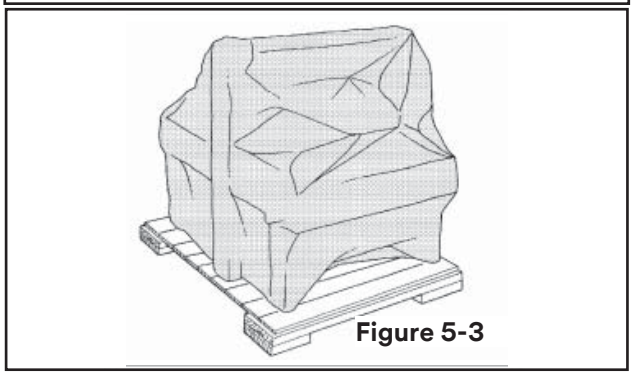


Figure 5-3

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).**

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).

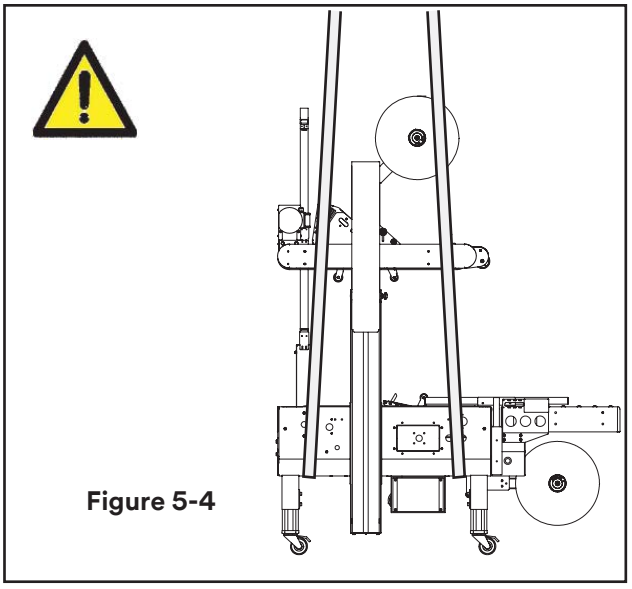


Figure 5-4

6. Unpacking

6.1 Uncrating

The envelope attached to shipping box contains the uncrating instructions of the machine **(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)**. After cutting out or removing the staples, lift the shipping box in order to clear the machine (two persons required).

Transport the machine with a forklift truck to the operating position. Lift the pallet at the point indicated in **Figure 6-3** (weight of machine + pallet = See Specifications).

Removal of Pallet

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

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

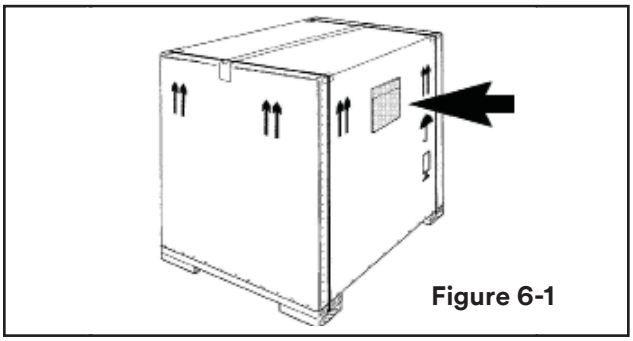


Figure 6-1

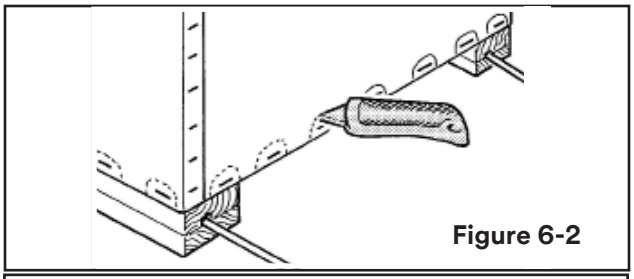


Figure 6-2

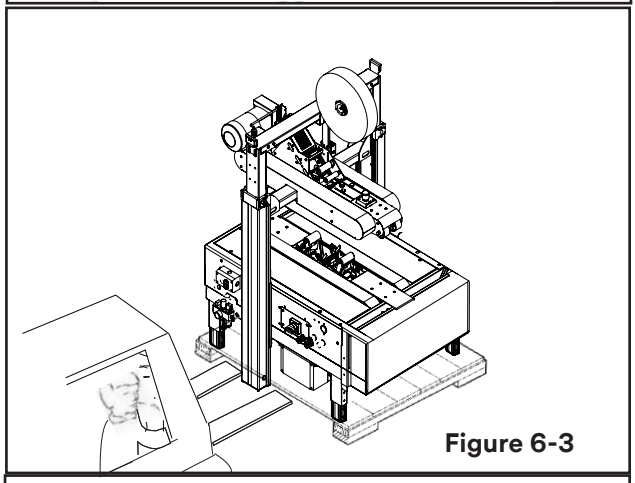


Figure 6-3

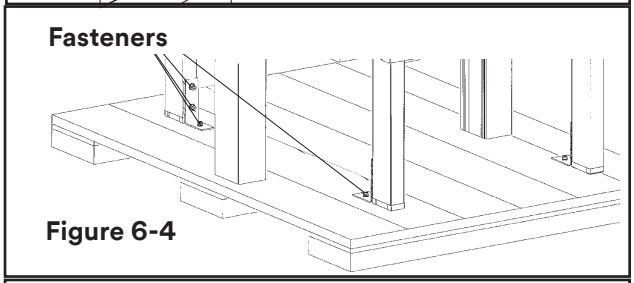


Figure 6-4

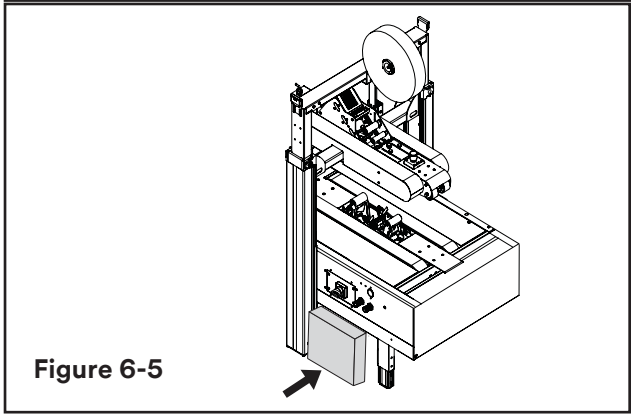


Figure 6-5

6.2 Disposal of Packaging Materials

The **7000r-7000r3** Pro 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. Installation

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.

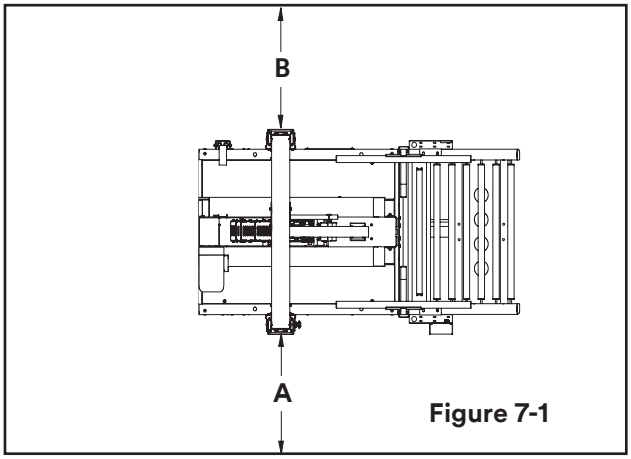


Figure 7-1

7.3 Tool Kit Supplied with 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.

7.4 Machine Set-Up / Bed Height

1 - Lift the machine with belts or ropes paying attention to place the belts in the points **(Figure 7-2).**

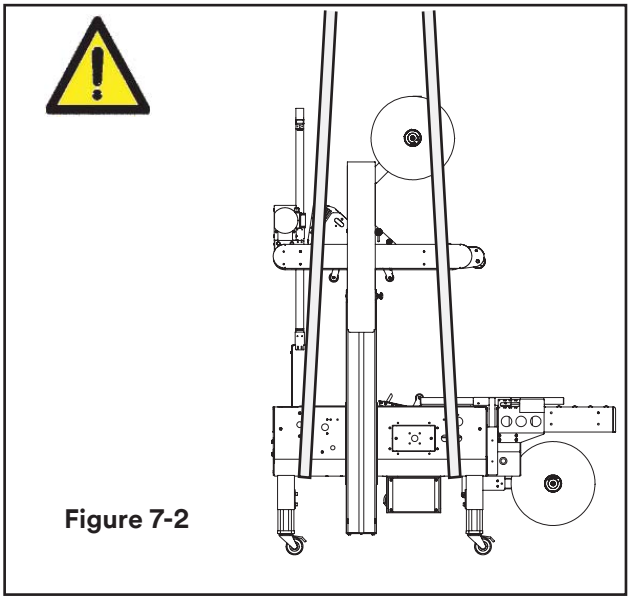


Figure 7-2

To set the machine bed height, do the following:

2 - 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 **(Figure 7-3)**.

Also refer to “Specifications”

3 - Lock the screws.

4 - Repeat the operation for all legs. (It is not necessary to fix or anchor the machine to the floor).

5 - For Outer Column Repositioning-

See Special Set-up Procedure **(Section 11).**

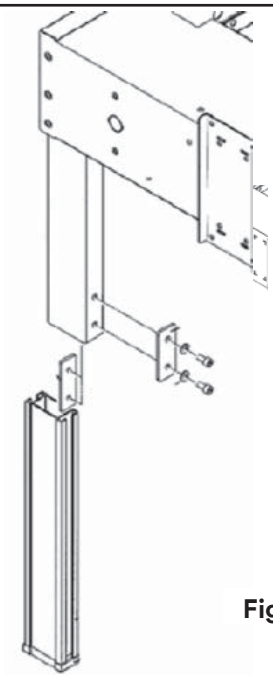


Figure 7-3

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

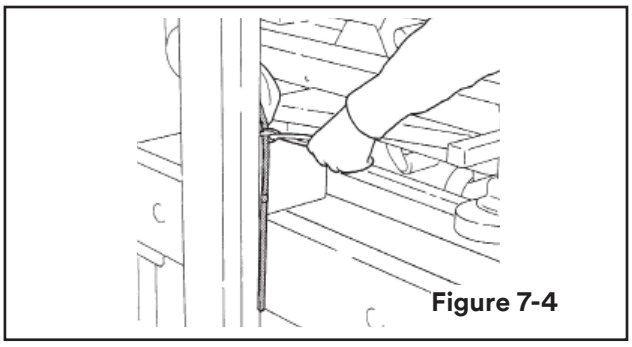


Figure 7-4

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).

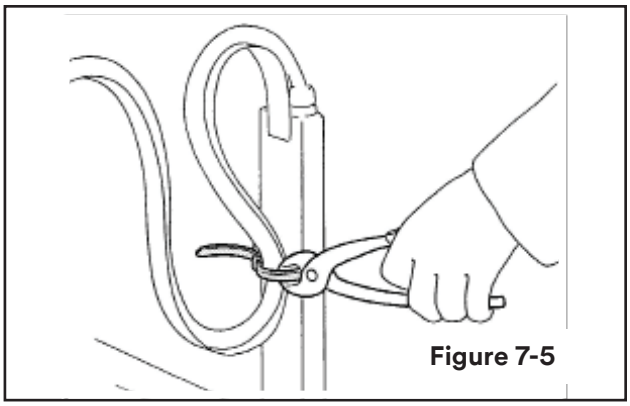


Figure 7-5

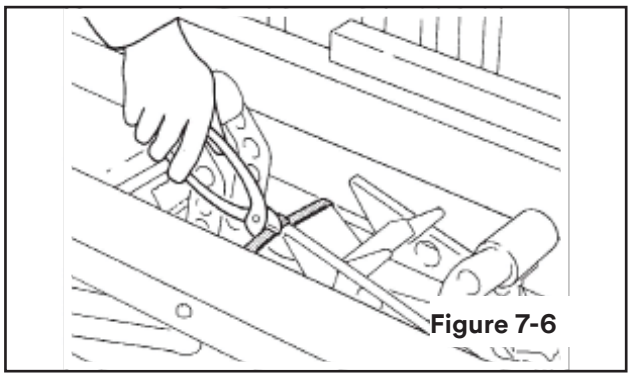


Figure 7-6

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 7-14** to identify the various components of the case sealer.

1. Install the upper tape drum bracket on top crossbar as shown in **Figure 7-7A**.
2. Mount the column guards, shown in **Figure 7-7**. Remove and retain the screws and washers holding the guards on the columns for reinstallation after 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 and Section 13**). After the Bumpers have been installed, the Column Guards must be 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.

Important – Use care when working with compressed air.

See Specifications for compressed air supply needs. As shown in **Figure 7-15**, an on/off valve, pressure regulator, and filter are provided to service the air supply.

Note – A precision regulator is used to balance the upper 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].

⚠ WARNING

- Allow only properly trained and qualified personnel to operate and service this equipment.

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] 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 by turning the air on/off valve to SUP (On).
6. Raise and latch upper drive assembly in full “Up” position.

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

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 - **Figure 7-6)**. Allow buffing/applying arms to extend slowly.

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

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.

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

⚠ 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.

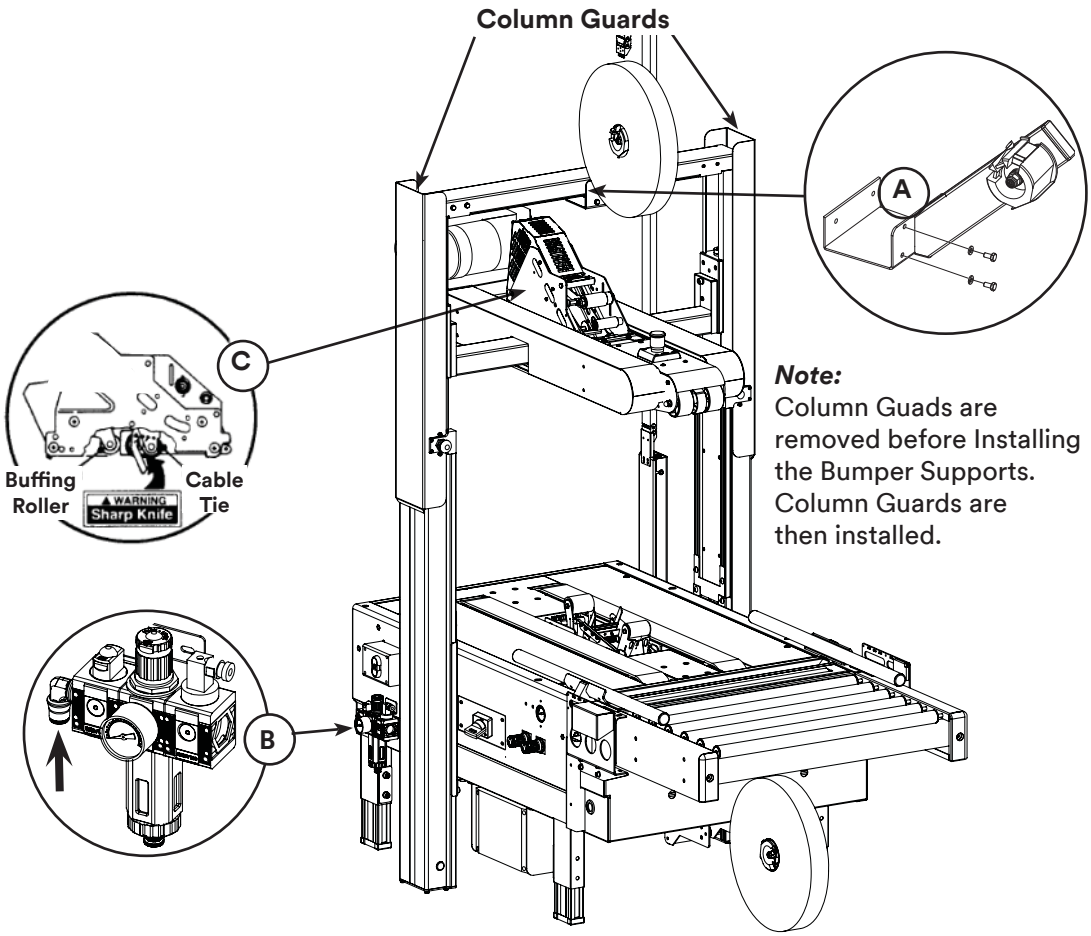


Figure 7-7 7000r-7000r3 Pro Frame Set-Up

7.7 Infeed Conveyor Assembly

1. Remove the conveyor and the package of parts from the carton.
2. Verify that package contains two right angled cover plates, twelve (12) M8 × 15 hex head screws, and eight (8) M8 flat washers.
3. To assemble the infeed conveyor, refer to **Figure 7-9** and locate four (4) bolt holes on the infeed end of the case sealer frame.
4. Insert a M8 × 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 × 15 screws and M8 washers.

7.8 Centering Guides

1. Remove the two centering guides and four (4) M6 × 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 × 20 screws (two [2] in each guide) as shown in **Figure 7-11**.

7.9 Outboard Tape Roll Mounting
(Lower Taping Head)

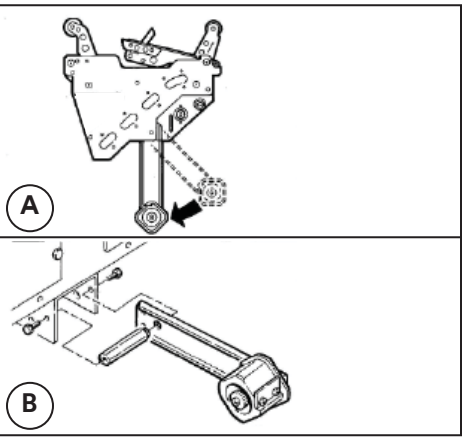
Remove the tape drum bracket assembly, spacer and fasteners from the lower taping head. Install and secure on the infeed end of lower frame (as shown in **Figure 7-8)**.

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



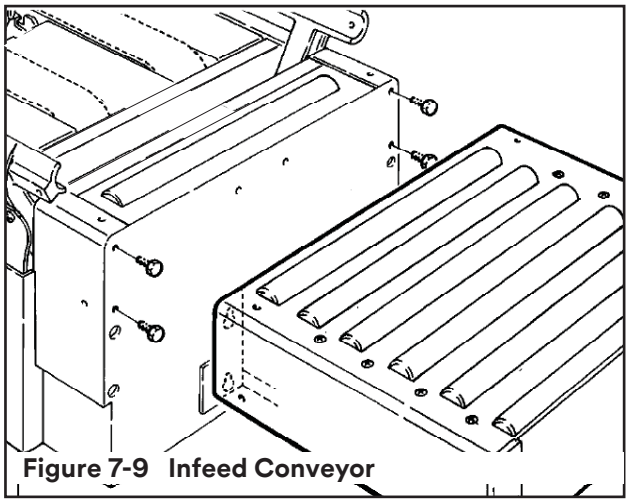


Figure 7-9 Infeed Conveyor

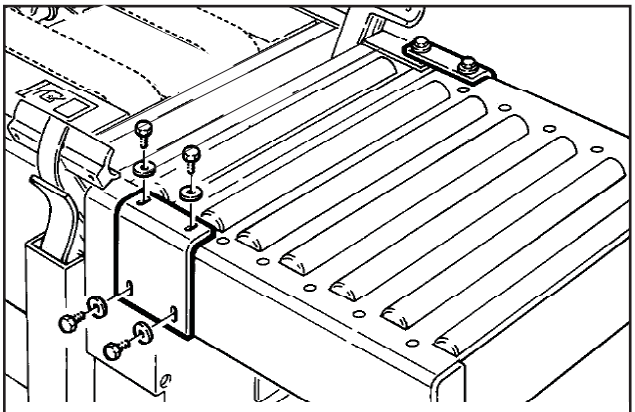


Figure 7-10 Cover Plates

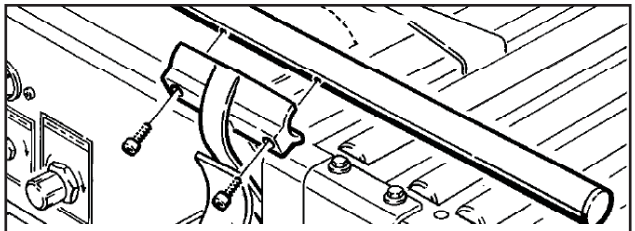


Figure 7-11 Centering Guides

7.11 Column Cap and Bumper Supports
(Upper Drive Assembly)

With Safety Guard removed **- Figure 7-13: (Also See Special Set-Up Procedure - Column Bumper Installation).**

1) Install Column Cap (see Figure 7-12)

- Remove Column Cap and socket head screw parts package from carton.
- Latching mechanism should be installed on operator side column.

2) Install Bumper Supports

Raise and lock the upper drive assembly in the raised position. See Controls, Valves, Switch Locations - **Section 7.**

- Turn off air supply and electric power.
- Remove the Column Bumper and flat head screw parts package from carton.
- Using flat head screws provided, install Column Bumper (recommended position is shown in **Figure 7-13).**
- Install Safety Guard using socket heads screws from parts package

Important: Some bumper positions may allow upper and lower taping heads to come into contact with each other. This creates added stress to bumper and/or can cause a malfunction of machine.

For more information on bumper settings, contact your 3M service representative.

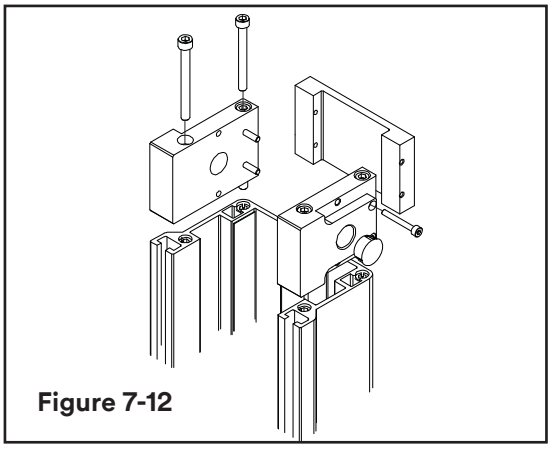


Figure 7-12

7.12 Box Size Capacity of Case Sealer

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

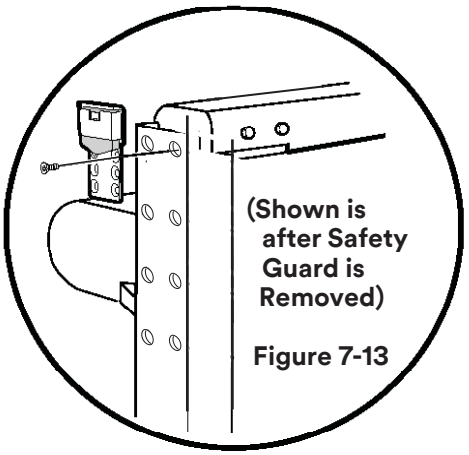


Figure 7-13

7.13 Electrical Connections and Controls

The electrical and pneumatic "On/Off" switch and the Push Button Station "Start/Stop" are located on the left side of the machine frame (**Figure 7-14**). If desired, for operator convenience, the "On/Off" and "Start/Stop" switches 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 (See Specifications) electrical service. The receptacle providing this service shall be properly grounded. Before the power cord is plugged into 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 30.5m [100 ft] and must be properly grounded.

Note - Machines outside the U.S. may be equipped with 220/240 Volt, 50Hz 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, Switch Locations

1. **Electrical/Pneumatic "On/Off" Switch**
   The switch box houses an under voltage motor protection release circuit breaker that supplies AC power to the Electrical Control Box The Circuit Breaker is preset and requires no further maintenance. If circuit is overloaded and trips, unplug machine from power source:

a) Determine and correct cause of overload.
b) Reconnect machine to power source.
c) Turn "On/Off" and Push Button Switches "On".

2. **Main Air "On/Off" Valve/Pressure Regulator/Filter/Exhaust Valve – Figure 7-15**
   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 circuit (*continued*)

Refer to **Figure 7-14** below to acquaint yourself with the various components and controls of the case sealer. Also see component locations in **Section 3** and **Manual 2 and Manual 3** for taping head components.

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

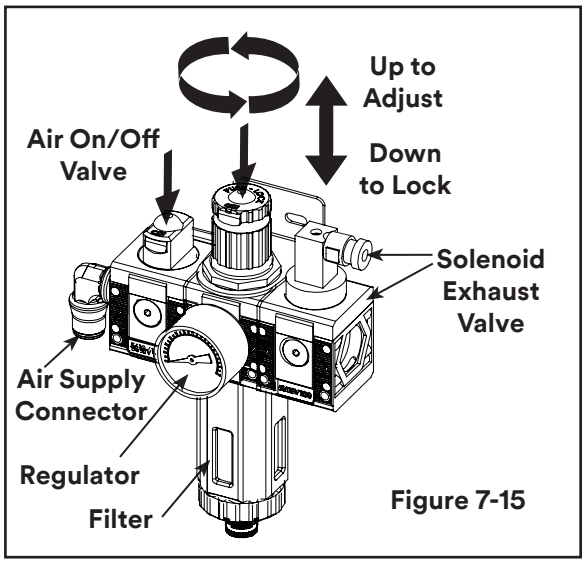


Figure 7-15

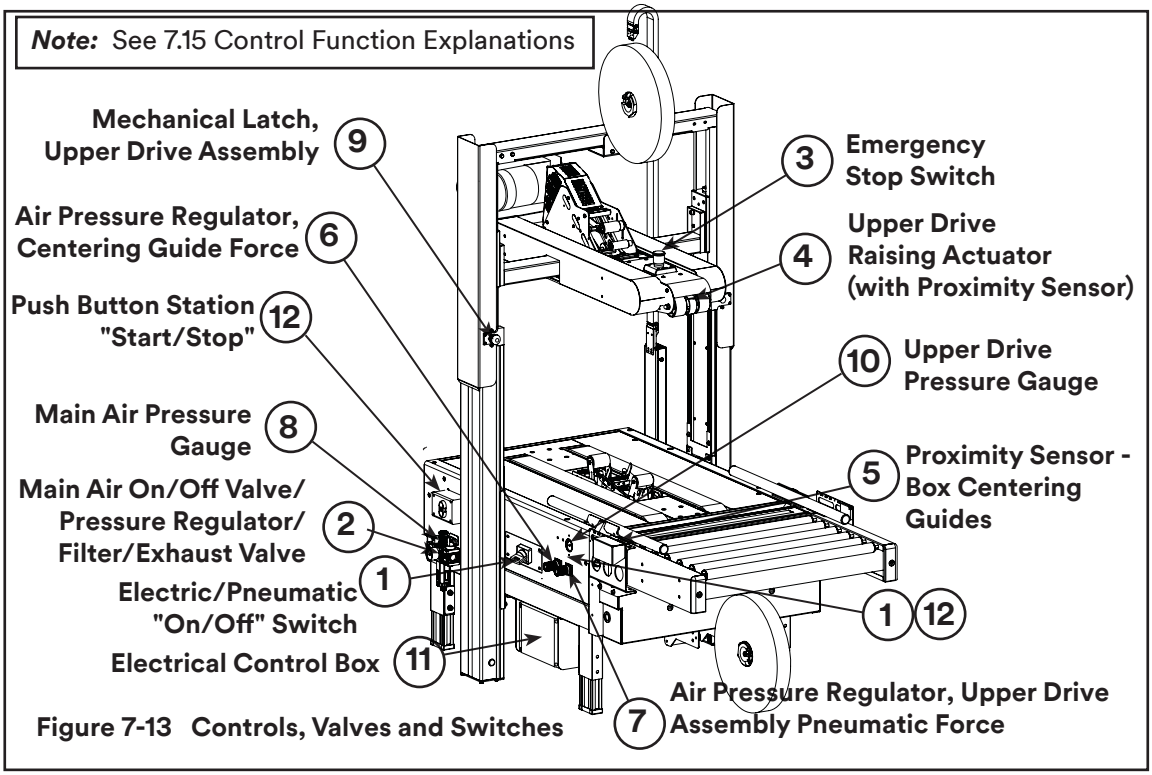


Figure 7-13 Controls, Valves and Switches

(continued)

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. The Exhaust Valve releases exhaust air from the pneumatic circuit (but column air pressure is maintained).

Note: Column air pressure is maintained to keep the upper assembly from dropping too quickly from raised position.

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 turning switch on side of machine frame to "ON" and then pressing the "Start" Station Button.
4. **Raising Actuator - Upper Drive Assembly**
   This switch, when touched by the leading edge of a box, triggers a proximity sensor that pneumatically raises the upper frame to allow insertion of the box under the drive belts. As the box moves under the switch, 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. **Proximity Sensor - Box Centering Guide**
   This sensor controls the box centering guides. When sensor is activated by box entering the case sealer, centering guides close (centering the box), and release (after box passes sensor), the guides open.
6. **Air Pressure Regulator, Centering Guide Force Adjustment – Figure 7-16**
   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.
7. **Air Pressure Regulator/Gauge, Upper Drive Assembly Force Adjustment – Figure 7-17**
   Set nominally to control "down" movement of upper drive assembly and resulting 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 positively conveying boxes through the machine. This Pressure Regulator acts as a "counter balance force" that equalizes air pressure on the Column Cylinders and keeps the Upper Assembly from dropping too quickly from the raised position. If the boxes stop or hesitate, decrease the Regulator pressure (which will increase 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.

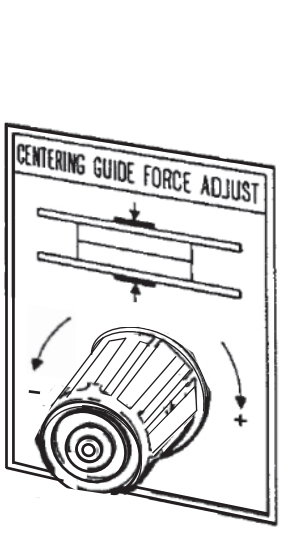


Figure 7-16
Air Regulator / Centering Guides

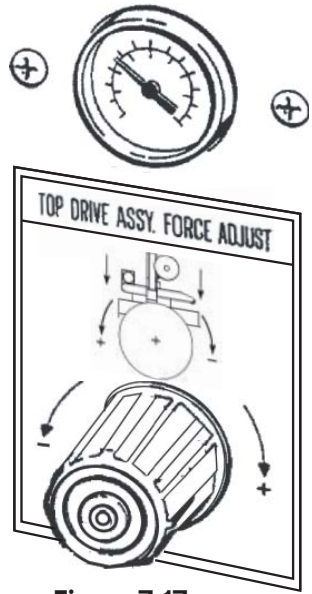


Figure 7-17
Air Regulator / Gauge / Upper Drive

For boxes which are fully packed with products that support the top flaps, adjustment of this regulator is not critical since the boxes can support pressure of upper frame (drive belts) at a wide range of regulator settings. However, if under-filled or fragile boxes are to be sealed, this regulator can be used to set the upper frame to a higher pressure that is adequate for conveying boxes through the machine while also allowing upper assembly to descend on box (preventing box damage).

Note – A precision regulator is used to balance upper drive assembly. Due to the self relieving feature of this regulator a small amount of air will continually vent to atmosphere. This is normal and amounts to approx. 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 7-18**) 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 upper assembly:
1. Push and hold 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/lower the upper assembly:
1. Turn on air supply.
2. Push and release switch “A”.

10. **Upper Drive Pressure Gauge** As indicated in Air Pressure Regulator / Gauge, Upper Drive Assembly Force Adjustment, Upper Drive Pressure Gauge is used as indicator of “counter balance force” that equalizes air pressure on the Column Cylinders and keeps Upper As sembly from dropping too quickly from raised position. Adjust force higher (+)/ Lower (-) to equalize and create balance.

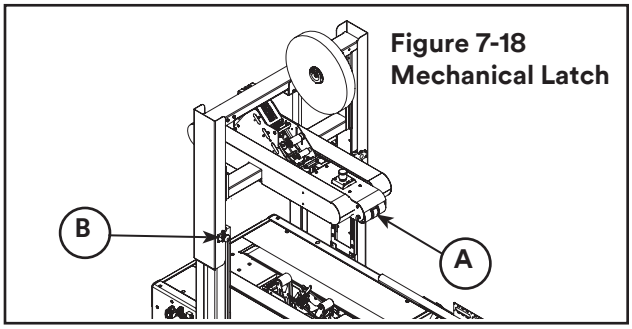


Figure 7-18 Mechanical Latch

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

11. **Electrical Control Box -** Houses DC Power Supply for Proximity Sensors, Control Relays, Motor(s) Contactor, and opening delay timer for Box Centering Guides.

12. **Push Button Station “Start/Stop”** Controls Box taping Cycle / Starts and Stops Drive Belts.

7.16 Tape Loading/Threading - See Manual 2 or 3.

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.

⚠ WARNING

- To reduce the risk associated with pinch 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.

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 Proximity Sensor in infeed roller conveyor actuates movement of the centering guides. When the operator pushes a box onto the infeed conveyor, as shown in **Figure 7-19,** the proximity sensor activates 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 Actuator/ Proximity Sensor on the upper drive assembly, as shown in **Figure 7-20**, 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.
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 7-21**, 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 Proximity Sensor is deactivated causing the centering guides to return to their full open position, ready for insertion of the next box.

At this point it is recommended that the centering proximity sensor and upper drive assembly switches be manually actuated to understand the functions described above. Activation (run a box on conveyor) of the automatic sensors causes the guides to close, Deactivation (box moves past Proximity Sensor) causes guides to open. Depressing upper drive assembly raising switch causes upper drive assembly to rise, releasing the switch causes drive assembly to descend.

Notes:

1. Machine or taping head adjustments are described in **"Adjustments" Section** for machine or **Manual 2 or Manual 3** for taping heads.
2. Box drive motors are designed to run at a moderate temperature (See Specifications) In some cases, they may feel hot to the touch.

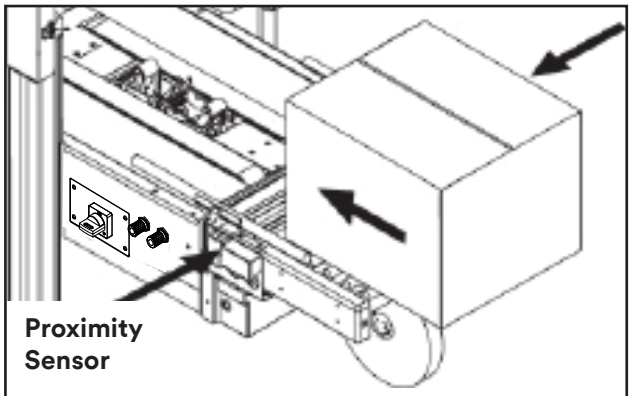


Figure 7-19 Box Centering Proximity Sensor

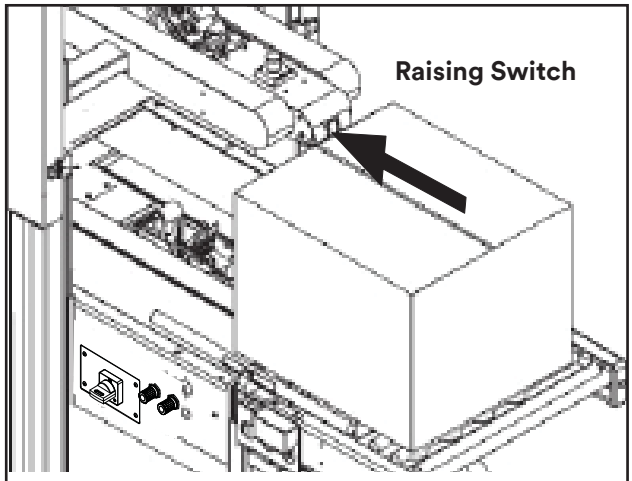


Figure 7-20 Drive Assembly Raising Switch

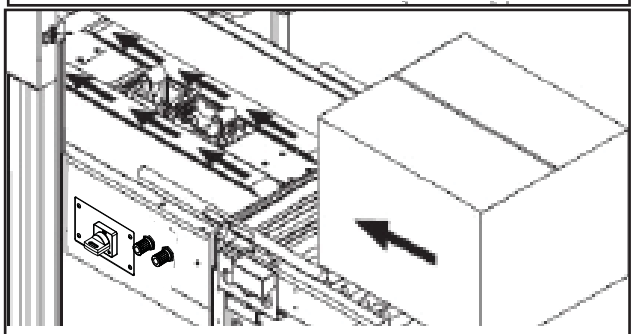


Figure 7-21 Drive Belts

7.18 Box Sealing

1. Turn main air valve to “SUP” (On).
2. Turn pneumatic/electrical switch (side of machine) to start machine.
3. Press Push Button Station “Start/ Stop” to start drive belts and Air Pressure/Pneumatic operations.
4. Feed boxes to machine allowing previous box to exit machine BEFORE feeding next box.
5. Turn electrical/pneumatic switch “Off” when machine is not in use.
6. Reload and thread tape as needed.
7. Be sure machine is cleaned and lubricated according to recommendations in “Maintenance” section of this manual.

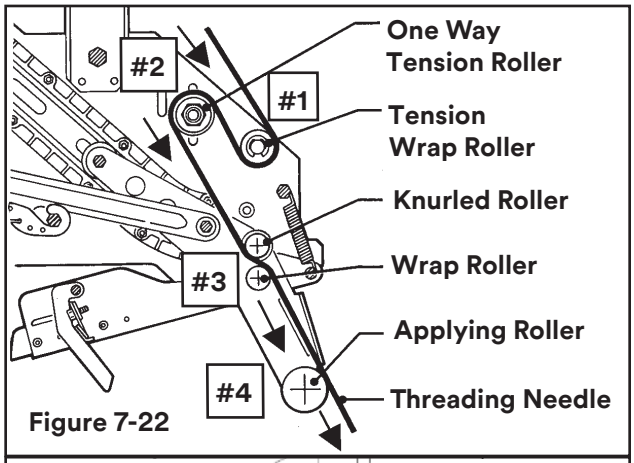


Figure 7-22

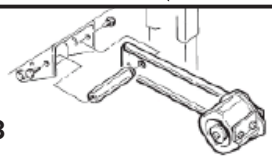


Figure 7-23

7.19 Completion of Taping Heads

See Manual 2 or 3 for Complete Instructions:

1. Place the Upper Taping Head in a convenient working position
2. Use **Figure 7-22** 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 between the two (2) rollers on the apply arm **(Position 3).**
5. Pull threading needle down until the tape travels between 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 position 3.
6. Cut away excess tape and repeat steps for Lower Taping Head.

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

7.20 Outboard Tape Roll Holder

To use the Outboard Tape Roll Holder:

1 - Remove lower taping head from machine.

2 - Remove tape drum bracket assembly, stud spacer, fasteners from lower taping head.

3 - Install alternative wrap roller and bracket on head in place of tape bracket. Place lower head in machine.

4 - Install and secure tape drum bracket assembly on the entry end of lower frame (as shown in **Figure 7-23.**

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 circuit breaker. User should check that electrical settings of the machine are compatible with all components of mains system.

7.22 Machine Connection to the Mains

For technical specifications:
See Section 4 - Specifications

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

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

8. Theory of Operation

8.1 Description of the Working Cycle

After having closed the top flaps of the carton, the operator pushes it past the box centering guides Proximity Sensor and against the upper assembly raising Proximity Sensor/Raising Actuator and under 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 (exit conveyor is optional)

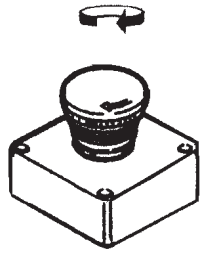


Figure 8-1

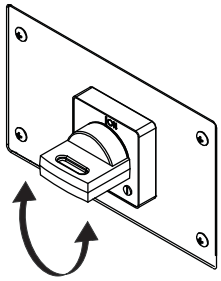


Figure 8-2

8.2 Definition of Running Model

The case sealer **7000r-7000r3 Pro** has only one (automatic) operating mode with:

- The EMERGENCY STOP BUTTON unlocked **(Figure 8-1)**
- The Main Start Switch “ON” **(Figure 8-2)**
- The Push Button Station “Start” is pressed (**Figure 8-3)**

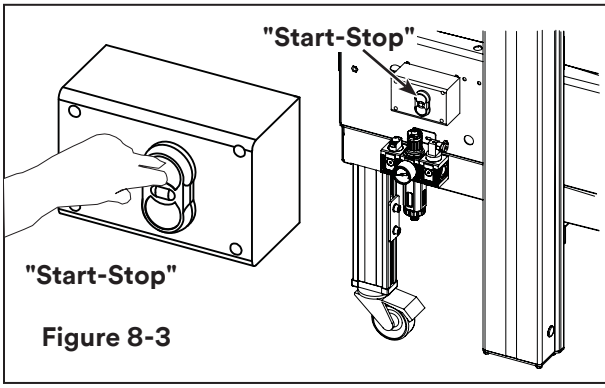


Figure 8-3

8.3.1 Normal Stop Procedure

The Push Button Station “Stop” is pressed, the machine stops immediately at any point of the working cycle.

8.3.2 Emergency Stop

The LATCHING EMERGENCY STOP BUTTON is located on the top center of the machine **(Figure 8-4).**

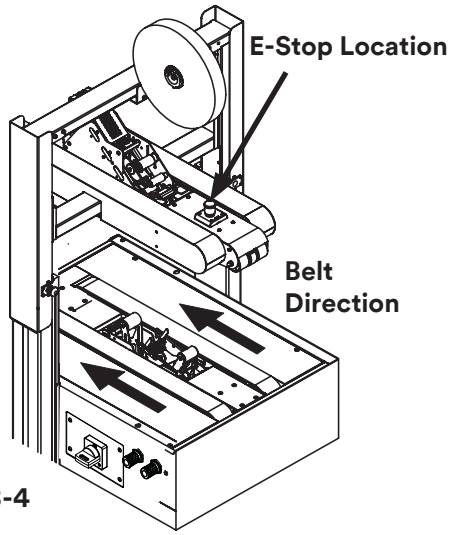


Figure 8-4

9. Controls

9.1 Electrical/Pneumatic Drive Belt "On/Off" Switch

Note: If Main Power is lost, the under-voltage mechanism in this switch is tripped. After power is restored, this switch must be re-set to the "On" position.

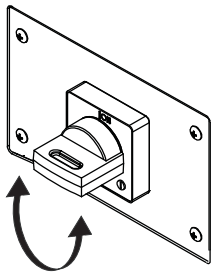


Figure 9-1

9.2 "Start/Stop" Button

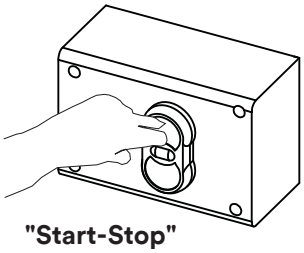


Figure 9-2

9.3 Latching Emergency Stop Button

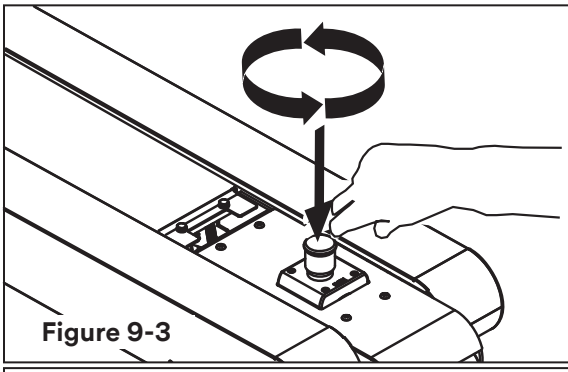


Figure 9-3

9.4 Main Air On-Off Valve-Regulator-Filter

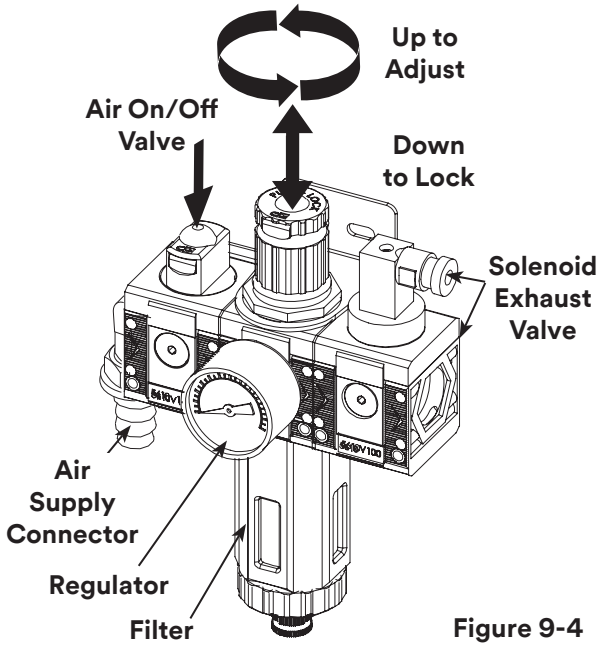


Figure 9-4

9.5 Upper Drive Actuator (with Proximity Sensor)

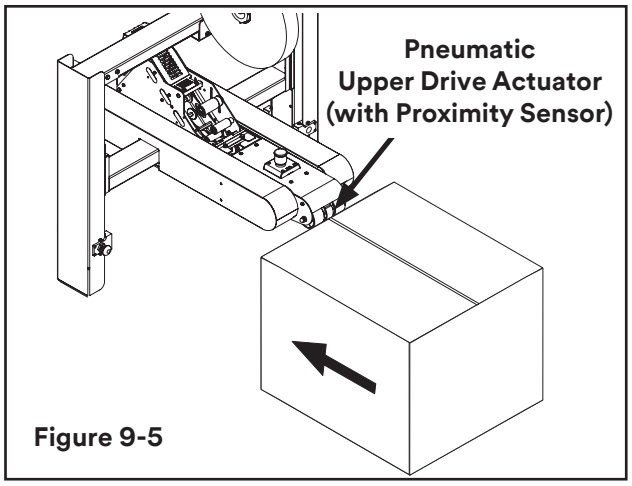


Figure 9-5

9.6 Initiating the Raising Actuator

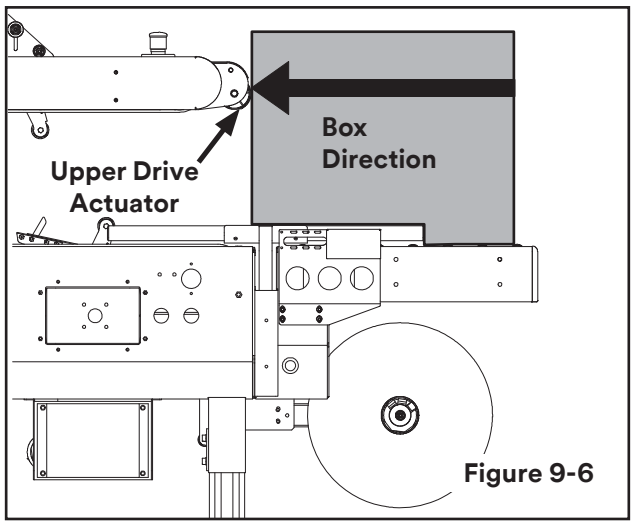


Figure 9-6

9.7 Air Pressure Regulator / Upper Drive Force Adjustment

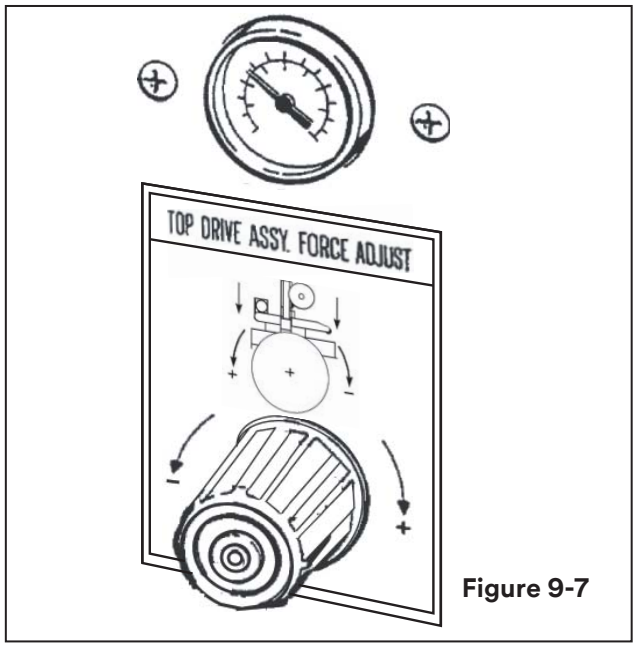


Figure 9-7

9.8 Upper Drive Air Regulator (centering guide force adjustment)

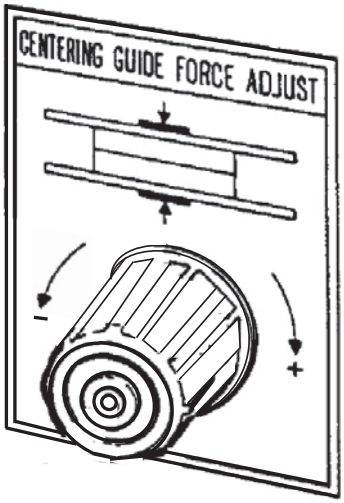


Figure 9-8

9.9 Box Conveying / Tape Seal Application

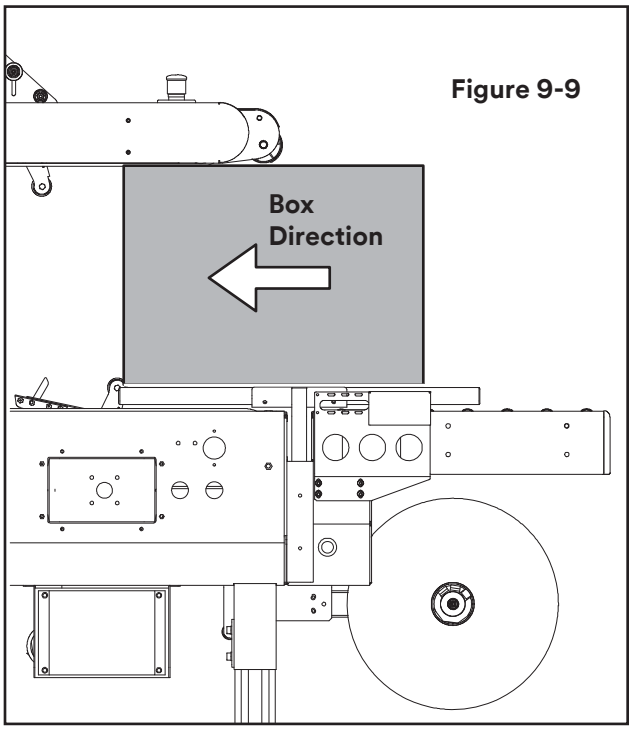


Figure 9-9

10. Safety Devices of the Machine

10.1 Blade Guards

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

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 **(Figure 10-1)**.

- To restart machine, rotate the emergency stop switch clockwise to release the switch latch. Restart machine by turning the On/Off switch to Off position and then to On position **(Figure 10-2)**.

- Then press the Station "Start" Button **(Figure 10-3)**.

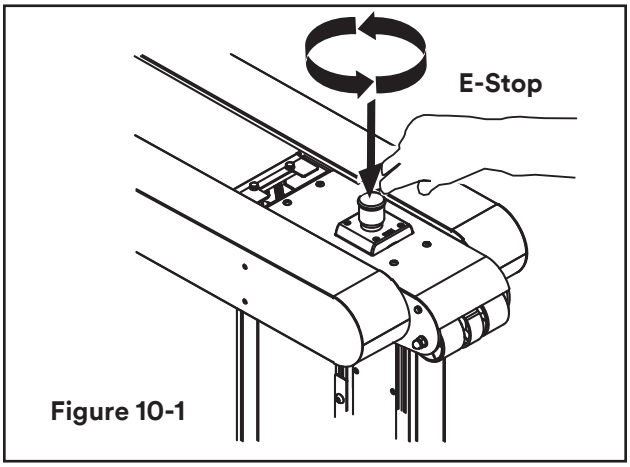


Figure 10-1

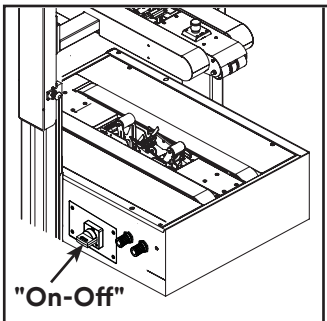


Figure 10-2

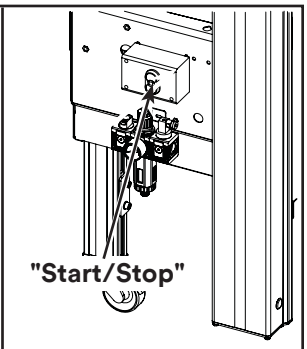


Figure 10-3

10.3 Electric System / Circuit Breaker

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

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 Turning the On/Off switch to the On position.

1. Determine cause of overload and correct.
2. Plug in machine.
3. Turn machine switch "On" (I) to resume case sealing

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.

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.

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 mechanical and electrical hazards:
  - Allow only properly trained and qualified personnel to operate and service this equipment.

11. Set-Up and Adjustments

11.1 Box Width Adjustment

Boxes are automatically centered by Side Guides **(Figure 11-1).** The Box Centering Guides are triggered by Proximity Sensor which is located on side of the infeed conveyor. Side Guides air pressure adjustments can be made using Centering Guide Air Pressure Regulator **(Figure 9-8).**

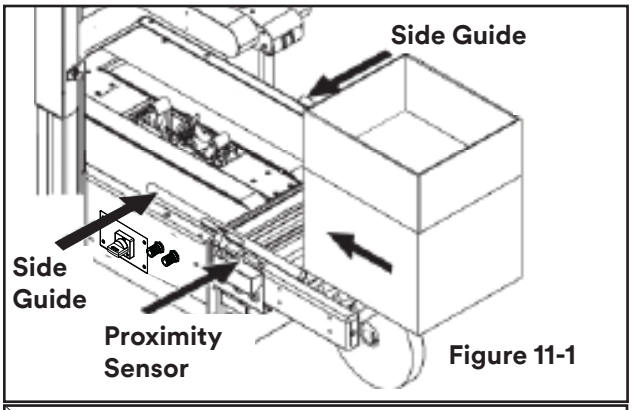


Figure 11-1

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 Air Regulator and Gauge for the Upper Drive Assembly **(See Figure 7-17).**

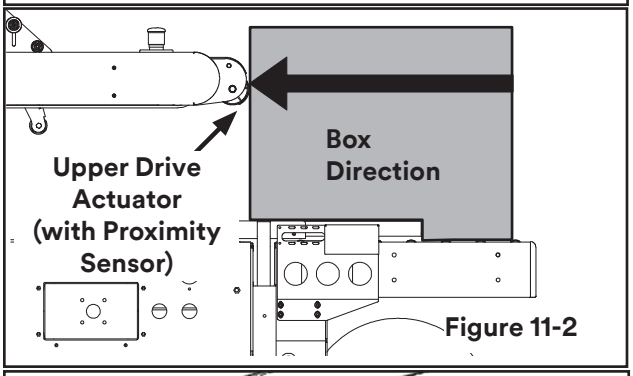


Figure 11-2

11.3 Adjustment of Top Flap Compression Rollers

(Not Applicable to this Machine)

Note: Taping Heads - *Important!*
Turn off Pneumatics and Electric Power

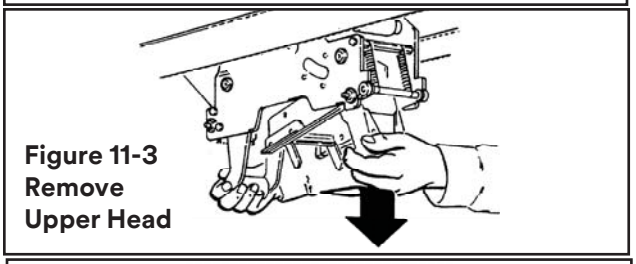


Figure 11-3
Remove Upper Head

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:

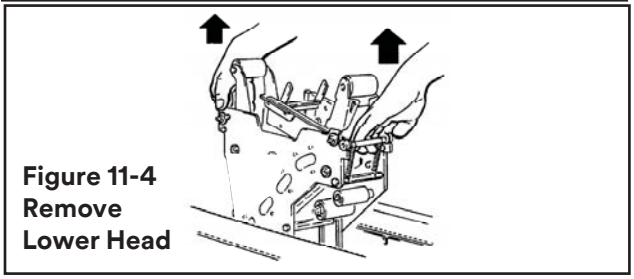


Figure 11-4
Remove Lower Head

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 **(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 Manual 2, “Adjustments – Changing Tape Leg Length,” for taping head set-up.
6. Replace taping heads reverse of disassembly. Turn on air supply/electric power, unlatch upper drive assembly and allow it to return to its rest position.

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

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

Turn main electrical/pneumatic switch to **"On"**. Then press the Push Button Station **"Start"**. This starts the drive belts and engages the pneumatic air pressure system. Move box forward on the infeed conveyor until the Proximity Sensor is activated (which activates the Box Centering Guides automatically centering 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.

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.**

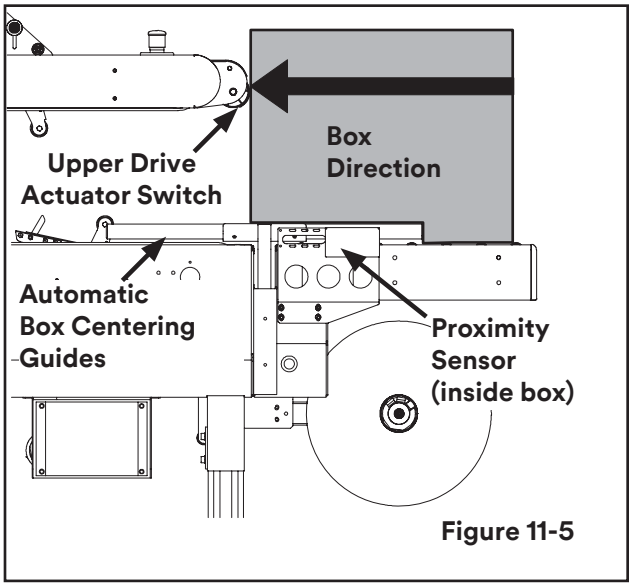


Figure 11-5

⚠ WARNING

- To reduce the risk associated with pinch 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.

⚠ WARNING

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

12. Operation

12.1 Operator's Working Position and Operational Flow (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 top and bottom box seams. Then the box will be expelled on the exit conveyor.

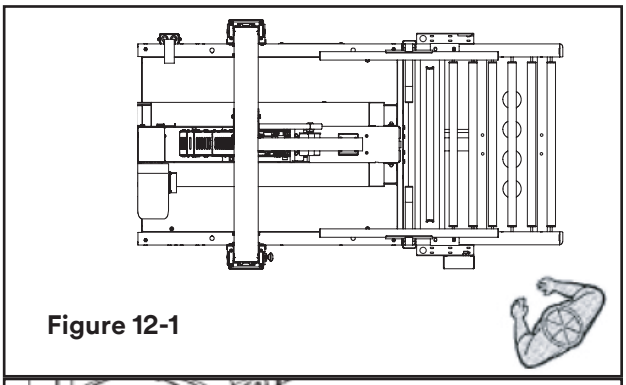


Figure 12-1

12.2 Starting the Machine

Important: Before starting the machine, verify that no tools or objects are on conveyor bed. Let the machine run without cartons and check its safety devices. Then start the working cycle.

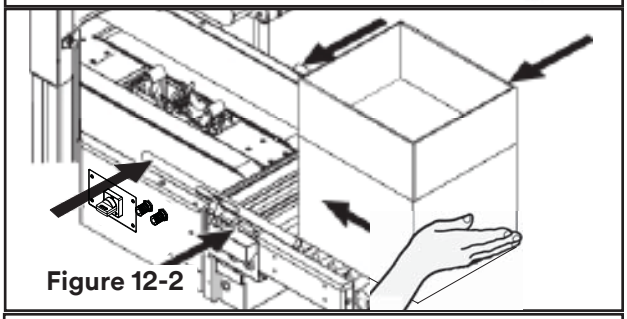


Figure 12-2

12.3 Starting Production

After adjusting machine to box dimensions (height-width), let machine run without cartons and check safety devices. Then start working cycle.

12.4 Tape Replacement and Threading

See Manual 2 or 3: AccuGlide™ 3 Taping Heads - 2 Inch or 3 Inch. Press the LATCHING EMERGENCY STOP BUTTON.

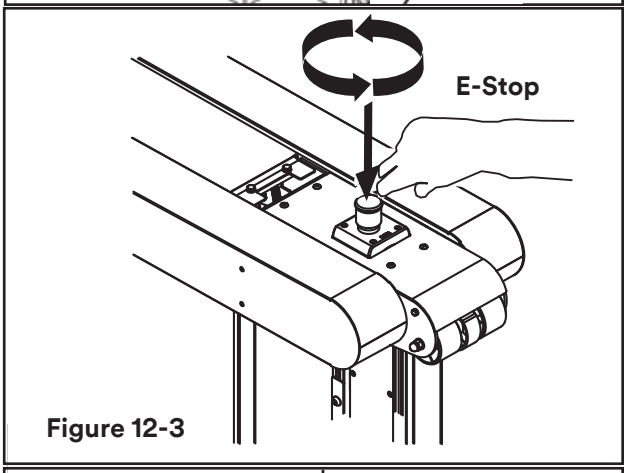


Figure 12-3

12.5 Box Size Adjustment

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

12.6 Cleaning

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

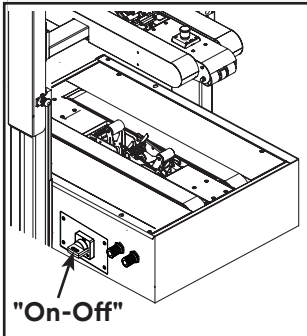


Figure 12-4

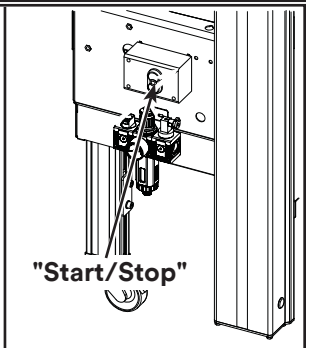


Figure 12-5

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 Adjust-Changing tape leg	2
9	Special Adjust-Column re-position	2

12.8 Safety Devices Inspection

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

12.9 Trouble Shooting 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
	Upper taping head does not apply enough pressure	Adjust the upper drive assembly force adjust regulator to increase the force against the top of the box. Turn air regulator counterclockwise
	Taping head applying spring holder missing	Replace spring holder
	Taping head applying spring set too high	Reduce spring pressure
Drive belts do not turn	Worn or missing friction rings	Replace friction rings
	Drive belt tension too low	Adjust belt tension
	Electrical disconnect	Check power and electrical plug
	Circuit breaker not at correct setting	Set to correct current value
	Motor not turning	Evaluate problem and correct
Upper and lower applying mechanisms interfere with each other	Machine's minimum height stop does not match tape head leg length setting	Check manual to make sure taping heads match machine setting
Drive belts break	Worn belt	Replace belt
Squeaking noise as boxes pass through machine	Dry compression rollers	Lubricate compression rollers
	Dry column bearings	Lubricate column bearings
	Defective column bearings	Replace column bearings
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps not of equal length	Check box specifications

(*continued*)

12.9 Trouble Shooting Guide (*continued*)

Problem	Cause	Correction
Upper drive assembly does not move up, moves up slowly or fails to operate	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 or incorrect setting on Proximity Sensor	Clean or replace head raising 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 aping 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 upper drive assembly force adjust regulator	Replace regulator
	Defective one-way valve	Clean or replace valve
	Defective head power valve	Clean or replace valve
Upper drive assembly comes down too fast or hard or fails to operate	Upper drive assembly force adjust regulator set too heavy	Adjust upper drive assembly force adjust regulator to decrease force against top of box. Turn regulator clockwise.
	Defective upper drive assembly force adjust regulator	Replace regulator
	Cushion screw wrongly adjusted	Adjust cushion screw at base of cylinder
	Cushion screw missing	Replace screw
Centering guides move slower than normal or fail to operate	Centering guide force adjust regulator set too low	Adjust regulator
	Centering guide cylinder speed controls need correct adjustment	Adjust speed controls mounted on centering guide cylinder
	Defective centering guide power valve/proximity sensor misaligned with sensor receptacle	Clean/replace valve / realign sensor and sensor receptacle

13. Maintenance and Repairs

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 or 3
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 pneumatics and main switch OFF (O) 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 main switch STOP/OFF (O)
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. Oil prevents the build-up of tape adhesive

(See Manual 2 or 3)

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 pneumatic and electrical supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads.

13.8 Box Drive Belt Replacement

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

Lower Drive Belts - Figure 13-1

1. Remove and retain center plate **(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.

Upper Drive Belts - Figure 13-2

1. Remove and retain center plate **(A)** and four (4) 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.

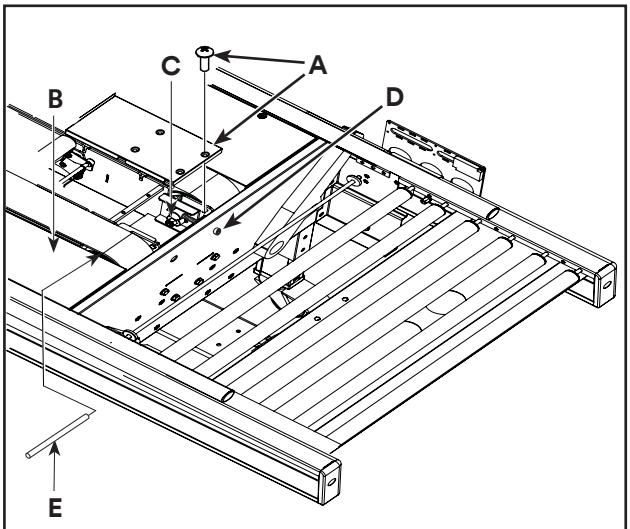


Figure 13-1 Lower Drive Belt Replacement

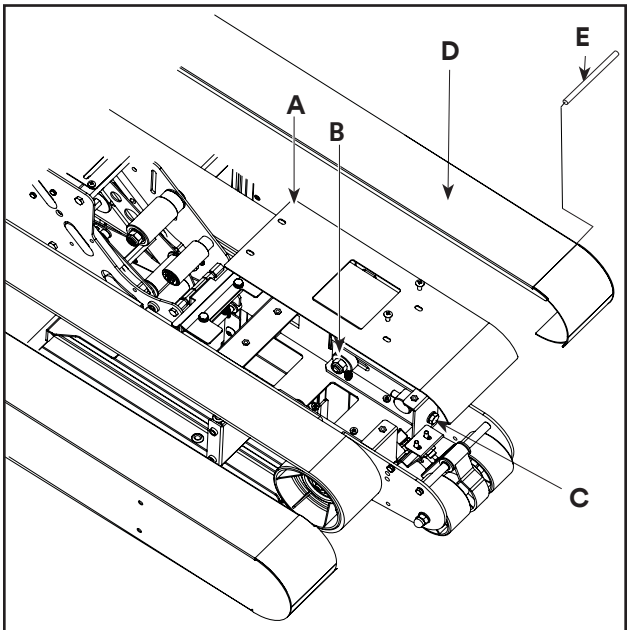


Figure 13-2 Upper Drive Belt Replacement

⚠ WARNING

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

13.9 Box 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 13-3).**

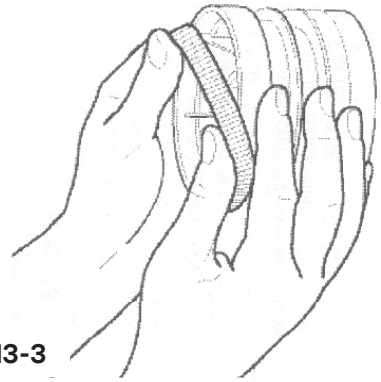


Figure 13-3

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 (for Belt Tension Adjustment - refer to **Box Drive Belt Replacement**). 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 13-4**, 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.

⚠ WARNING

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

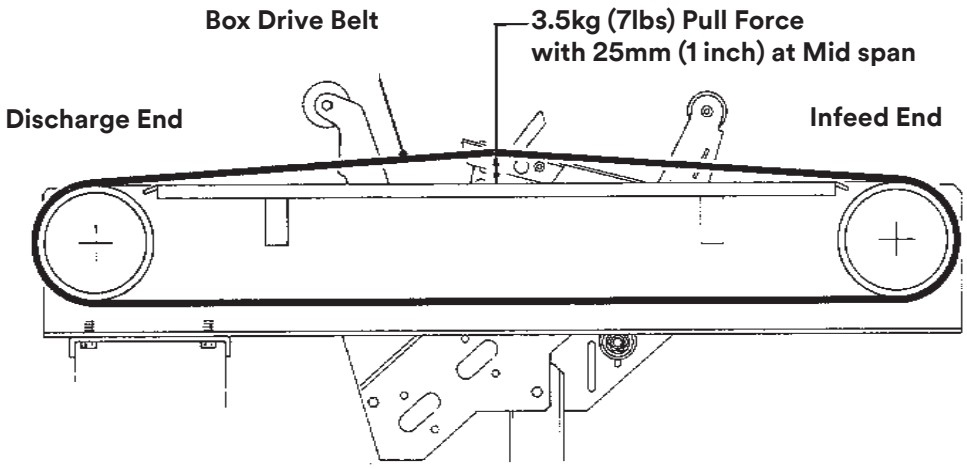


Figure 13-4 Box Drive Belt Tension Adjustment

Refer to **Figure 13-5 and 13-6** and adjust belt tension as follows:

1. Remove and retain center plates/ front cover and four (4) screws.
2. Loosen, but do not remove, the lock nut with an open end wrench.
3. Reset the tension on the drive belts as needed. Adjust the 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.

⚠ WARNING

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

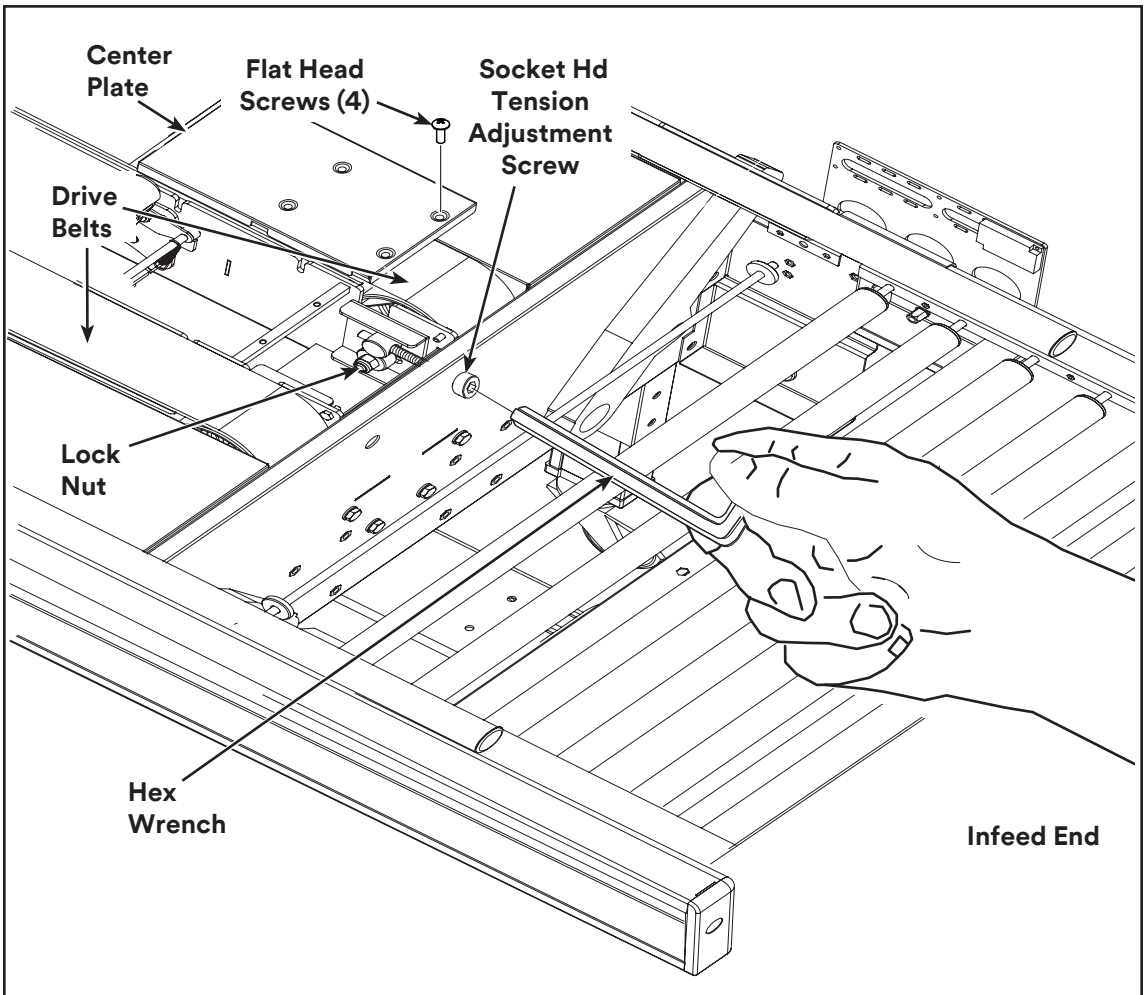


Figure 13-5 Box Drive Belt Tension Adjustment, Lower Belts (Infeed End)

Taping Head Adjustments –

Refer to Manual 2

Tape Web Alignment	– Manual 2
Tape Drum Friction Brake	– Manual 2
Applying Mechanism Spring	– Manual 2
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 peumatic and electrical supplies off and disconnect before performing any adjustments, maintenance or servicing the machine or 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.

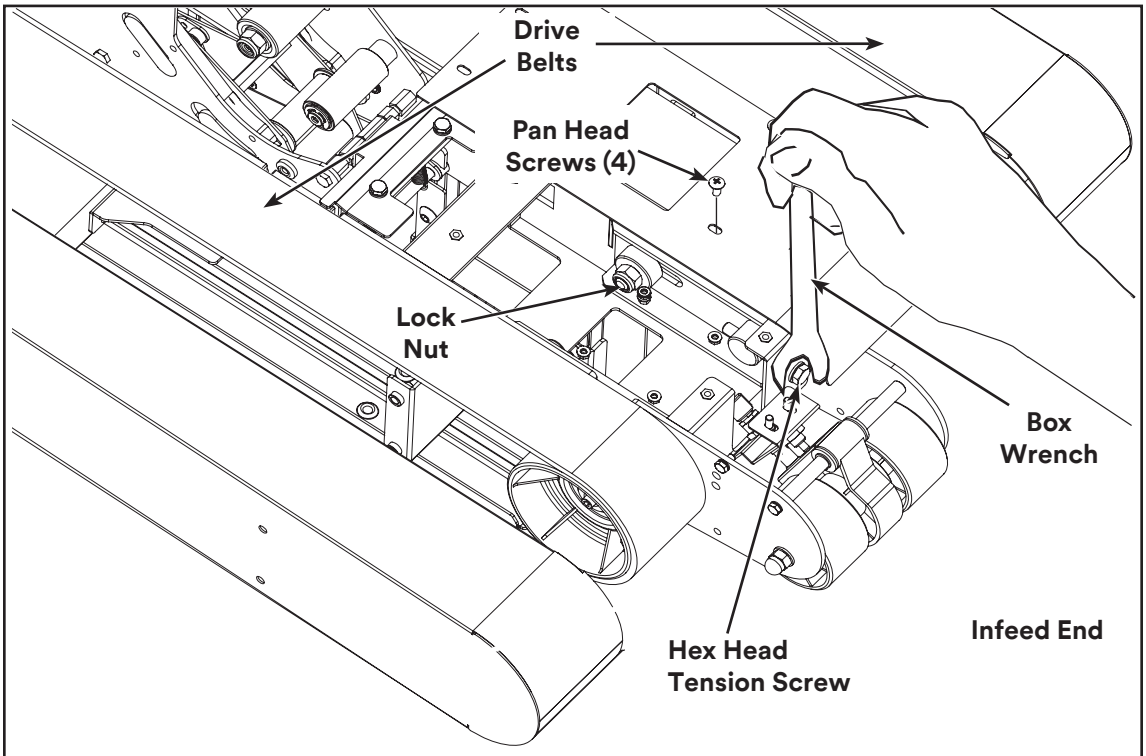


Figure 13-6 Box Drive Belt Tension Adjustment, Upper Belts (Infeed End)

13.11 Special Set-Up Procedure - Column Bumper Installation

Purpose of Bumper Special Set-up Procedure: Installing Column Bumpers restrict operating range of upper assembly in proportion to box sizes to be sealed **(Figure 13-7A).** This installation limits working cycle time resulting in increased operating speed.

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 13-7A**).

1. Raise and Lock the Upper Drive Assembly.

Important: This procedure is for **authorized personnel ONLY!**

2. Turn off air supply/electric power.
3. Remove Guard (see Installation and Set-Up / **Section 7)**, existing holes/installing Column Bumper should be visible.
4. Remove Column Bumper and set screw parts package from carton.
5. Position Bumper as needed (the recommended position is shown in **Figure 13-7A**).
6. After the new Bumper is installed, re-install the Safety Guard (see Installation and Set-Up Section 7).
7. Turn "On" Electric Power/Pneumatics and press Station "Start" Button.

* ***Important:*** See **Figure 15983** for Plate Change. When Column Adjusted to **"Raised"** Position - Part #30 is removed and replaced by Part #12.

- 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 malfunction of machine.

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

⚠ 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.

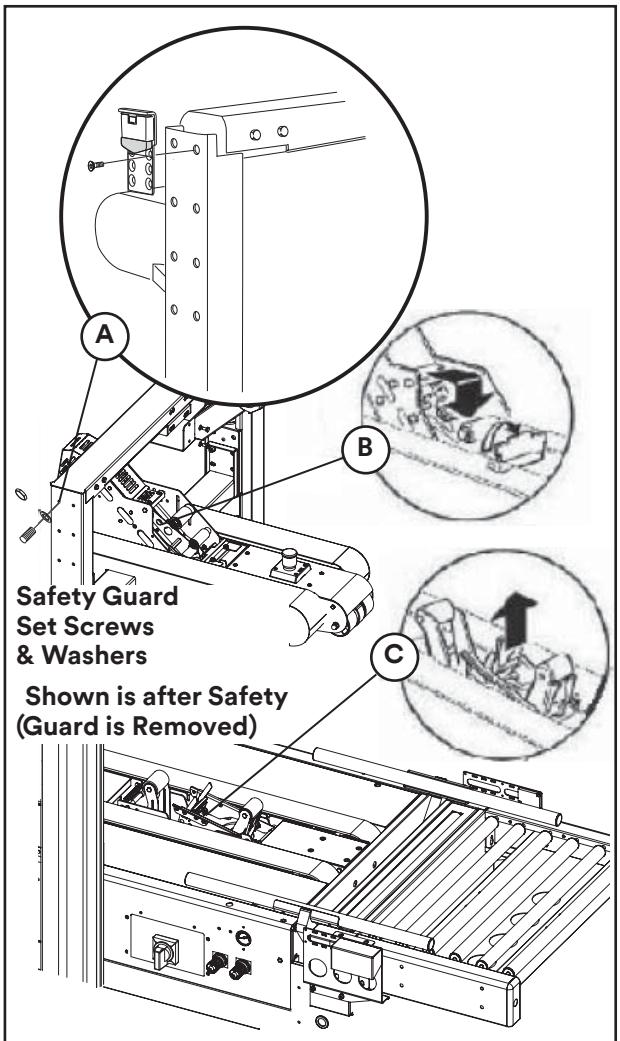


Figure 13-7 Case Sealer Frame Changes

13.12 Special Set-Up Procedure for Outer Column Re-Positioning

(*continued* on next page)

Moving the outer columns will increase/decrease the maximum box height capacity of the **7000r-7000r3** case sealer.

1. On both sides, place a solid spacer block (as needed to support column and to help line up new holes) between floor and bottom of outer column **(Figure 13-8A)**.
2. On both front and rear, place solid spacer blocks (14" [355mm]) and lower the upper taping head assembly until the upper assembly rests on blocks.
3. Remove eight (8) column screws **(Figure 13-8B)**.
4. Place second spacer block under column **(Figure 13-8A)**.
5. Re-attach/tighten the eight (8) screws and washers in each column **(Figure 13-8B)**.
6. Remove existing guard and attach inner guide plate using hardware provided **(Figure 13-8B).**

(*continued*)

Important! When the column is in the upper position, the Inner Column Guard must be installed **(Figure 13-8B).**

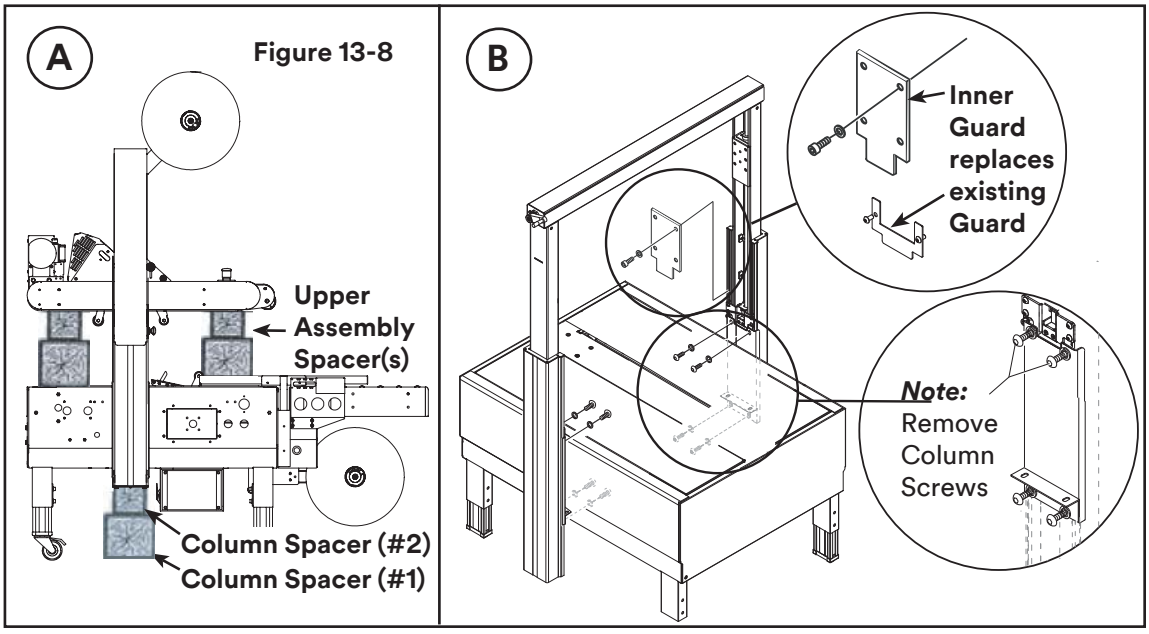
WARNING

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

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

Figure 13-8



13.12 Special Set-Up Procedure for Outer Column Re-Positioning (*continued*)

Moving the outer columns will increase or decrease the box height handled by the **7000r-7000r3 Pro** case sealer.

Maximum Height:
An additional adjustment can be made to reach Maximum Height. This additional height adjustment can be made by moving the Upper Assembly Crossbar up to top holes - **(Figure 13-9).**

Box Height Range – (Refer to **Figure 13-8 / Section 7 / 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.

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 **(Figure 13-7 and Figure 15983)**.
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.

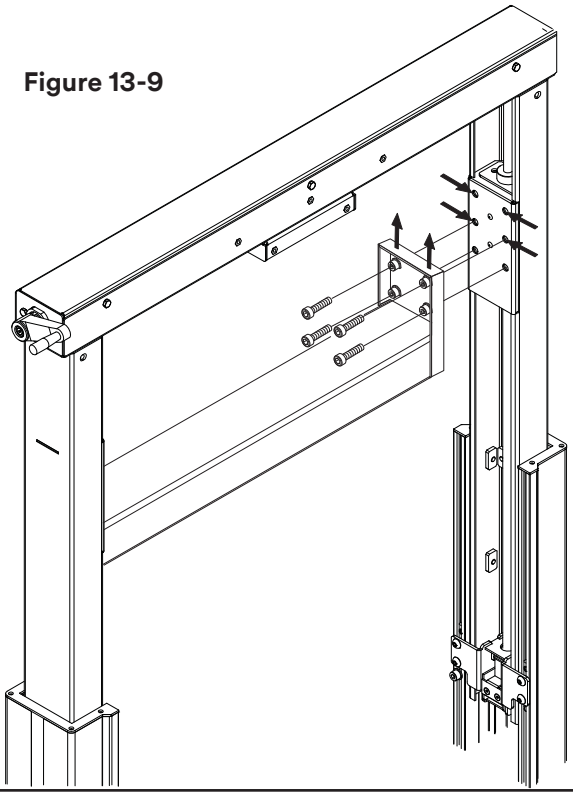
⚠ WARNING

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

⚠ 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

Figure 13-9



13. Maintenance and Repairs *(continued)*

13.11 List of the Maintenance Operations

Date:	**Description of Operation**

14. Additional Instructions

14.1 Information for Disposal of Machine (ELV)

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).**

IN CASE OF FIRE

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

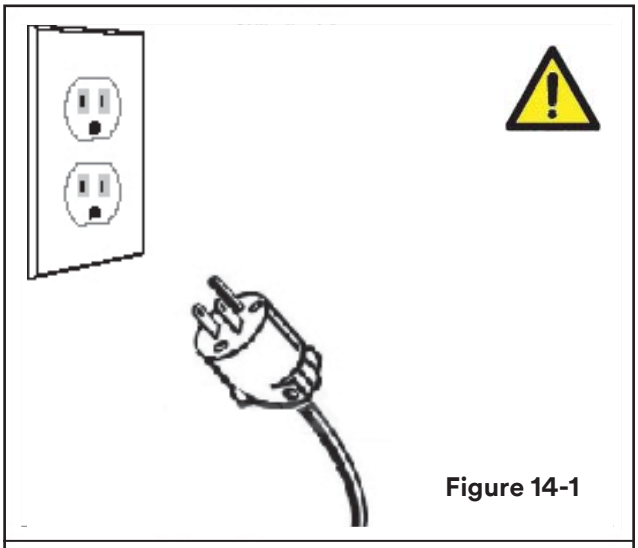


Figure 14-1

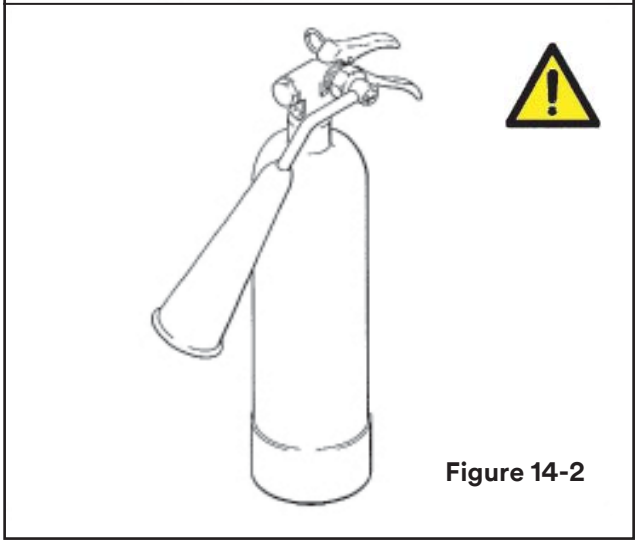


Figure 14-2

15. Additional Information

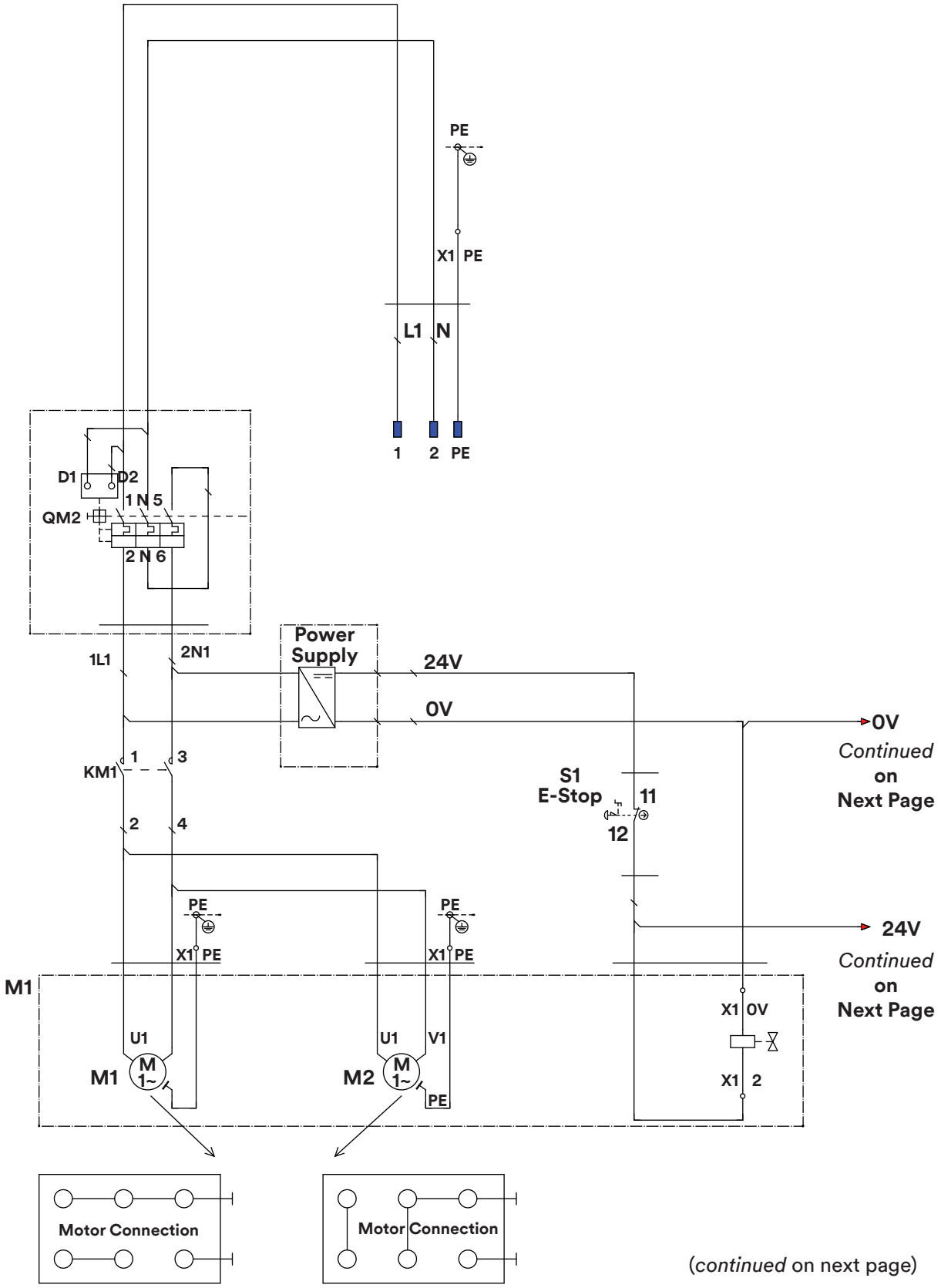
15.1 Statement of Conformity

N/A

15.2 Emission of Hazardous Substances

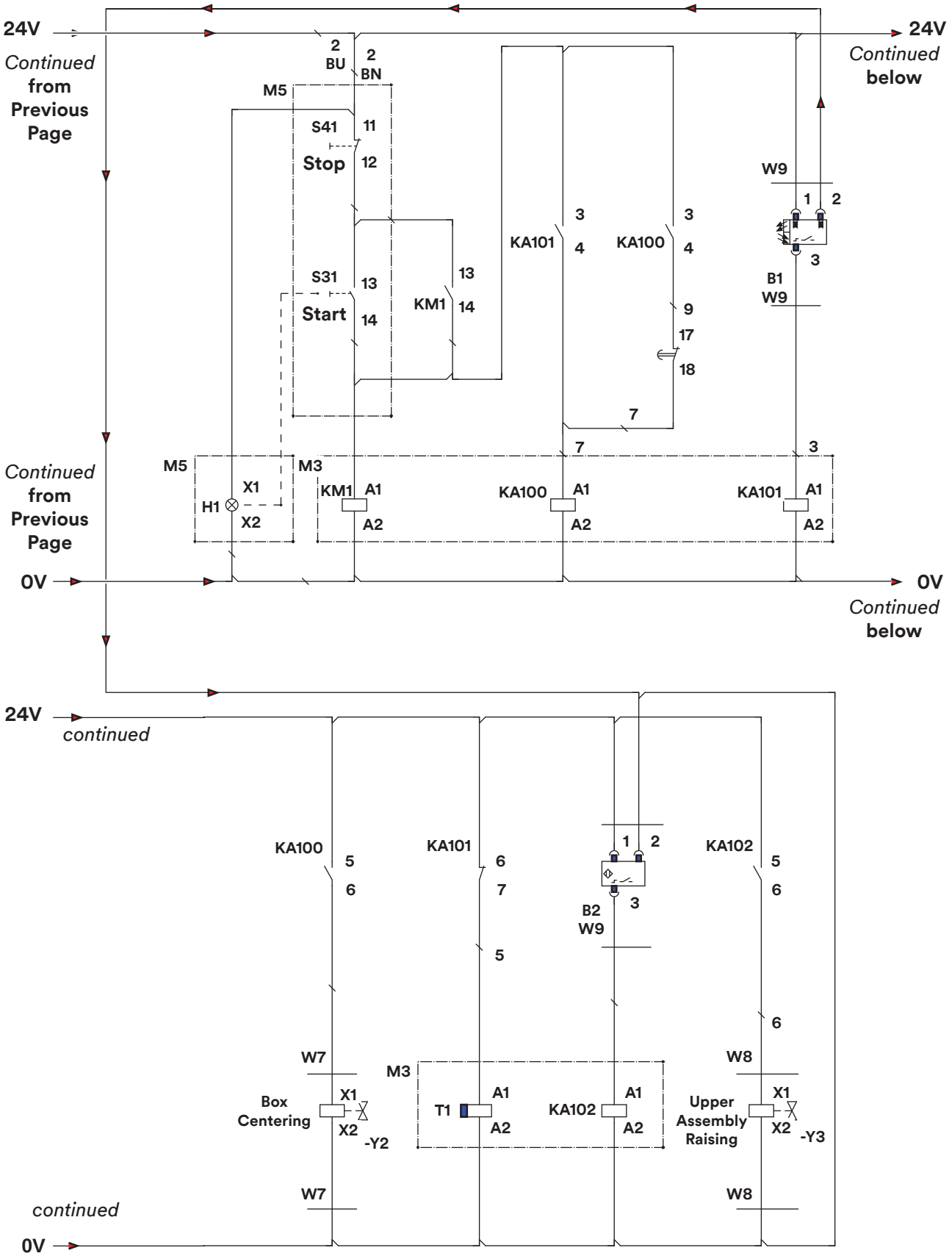
Nothing to report

16.1 Technical Diagrams - Electric

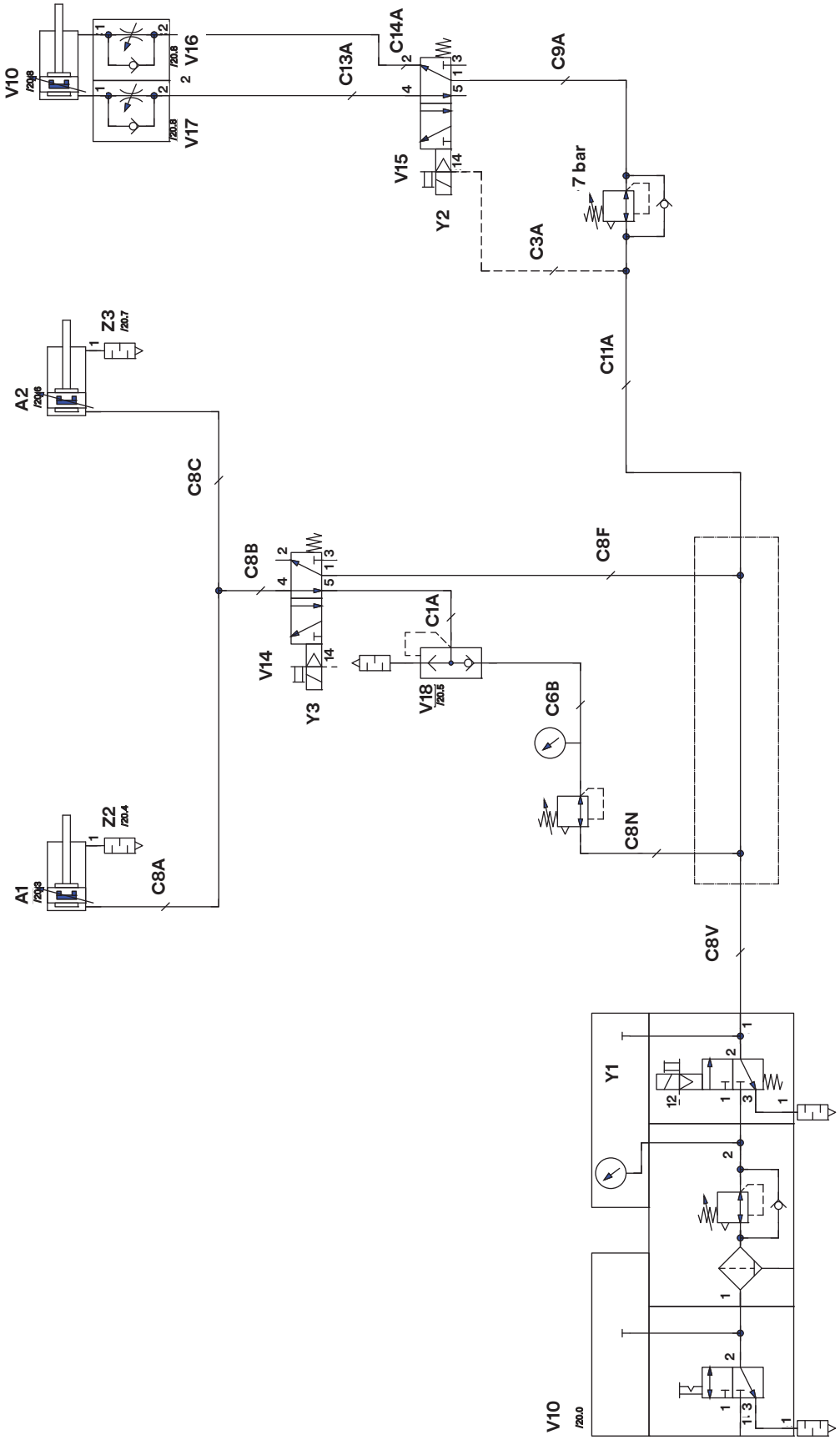


(*continued* on next page)

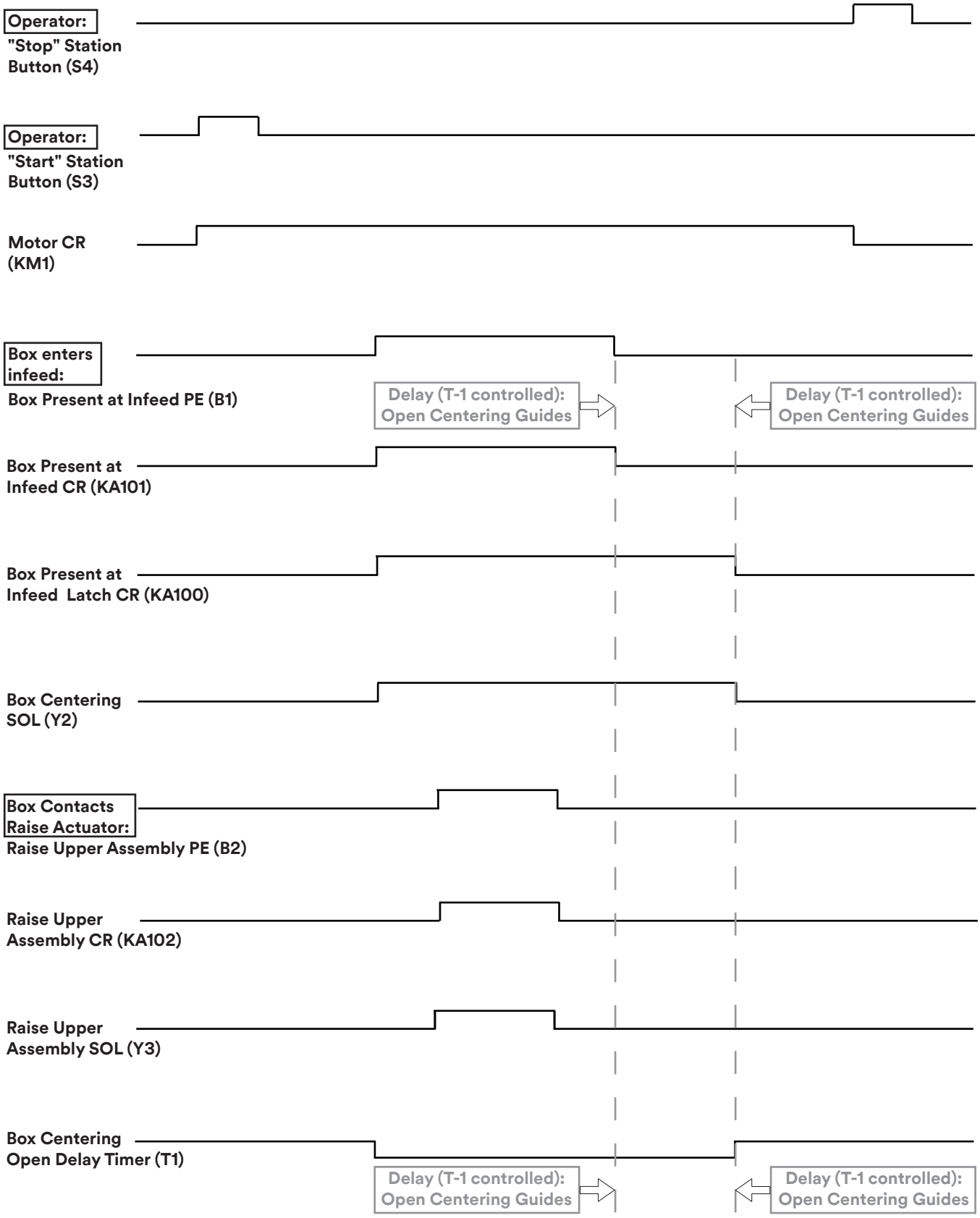
16. Technical Diagrams - Electric *(continued)*



16.2 Technical Diagrams - Pneumatic



16.3 Technical Diagrams - Electrical Component Timing



16.4 Spare Parts Order

Replacement Parts Ordering Information and Service

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

Order parts by quoting the following information:

(Refer to the Identification Plate on the Machine)

- Machine Model
- Serial Number
- Figure Number
- Position
- 3M Part Number (11 Digits)
- Description
- Quantity

Refer to Manual 2 for recommended taping head spare parts.

Important!
The machine is constantly revised and improved by our designers. The spare parts catalogue is also periodically updated. It is very important that all the orders of spare parts make reference to the serial number of the machine (located on the identification plate on the machine).

The manufacturer reserves the right to modify the machine at any time without notice.

Spare Parts – 7000r-7000r3 Pro Random Case Sealer

It is suggested that the following spare parts be ordered and kept on hand: (*continued*)

7000r-7000r3 Pro

Qty.	3M-Part Number	Description
2	78-8137-6303-0	Belt-Drive w/Hook

Spare Parts Kit

7000r - Part Number 78-8137-8728-6
7000r3 - Part Number 78-8137-8729-4

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 78-8137-7538-0, is available as a stock item. It contains all the safety labels used on the **7000r-7000r3** Pro Random Case Sealer.

Tool Kit

A tool kit, part number 78-8137-7541-4, is supplied with the machine as a stock item. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 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”.

7000r-7000r3 Pro Random Case Sealer, Type 11500 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.

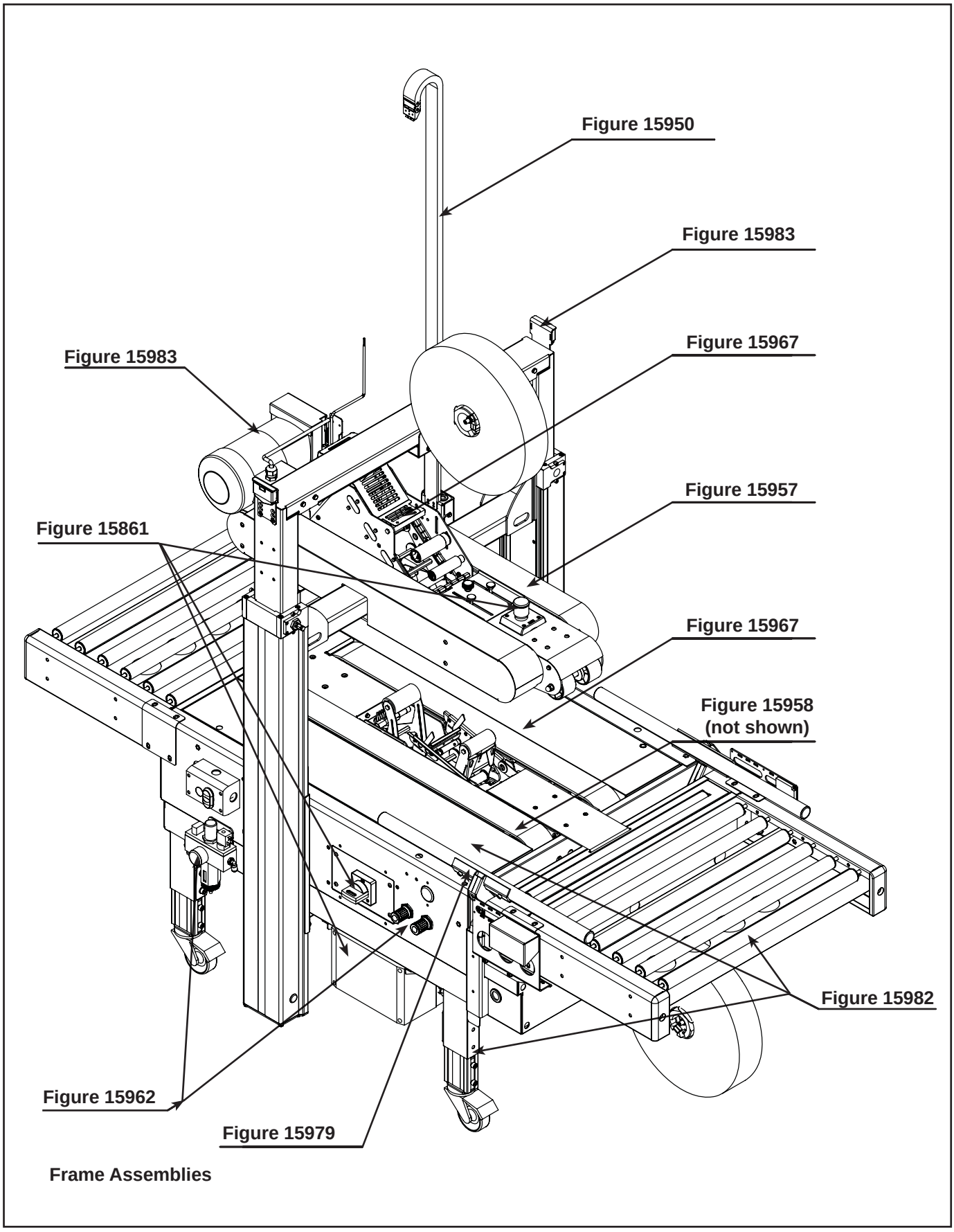
4. Order parts by Part Number, Part Description and Quantity required. Also include the model/machine name, machine type, and serial number that are located on the identification plate.
5. Refer to the first page of this instruction manual **"Replacement Parts and Service Information"** for replacement 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

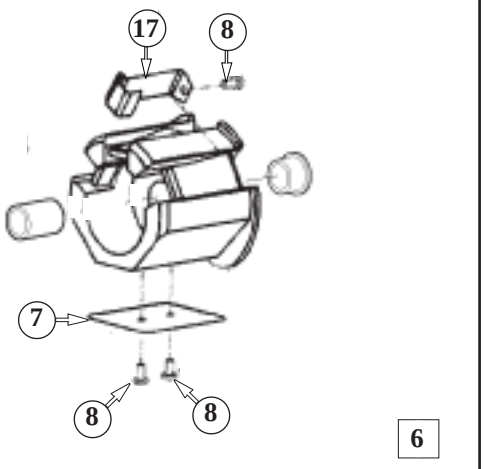
Options and Accessories

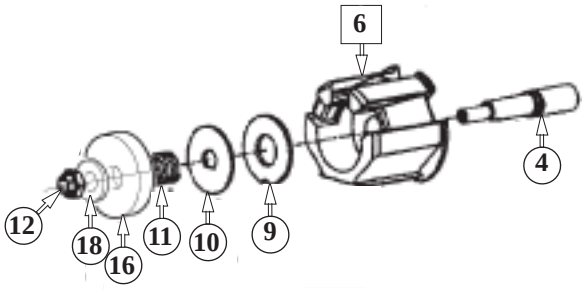
For additional information on the options and accessories listed below - contact your 3M Representative.

Part Number	Option / Accessory
70-0064-2998-2	Caster Kit Attachment
70-0067-5966-9	Conveyor Extension Attachment
78-8069-3926-6	Low Tape Sensor Kit
70-0064-4963-4	AccuGlide™ 3 Upper Taping Head - 2 inch, Type 10800
70-0064-4962-6	AccuGlide™ 3 Lower Taping Head - 2 inch, Type 10800
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
70-0064-1097-4	Tape Application Monitor (TAM)
70-0064-1104-8	Tape Application Monitor - Tape Outboard
78-8095-4854-4	Tape Edge Fold Attachment - Upper Head 2 inch
78-8095-4855-1	Tape Edge Fold Attachment - Lower Head 2 inch
70-0067-3769-9	Filler Plate - Lower



Frame Assemblies

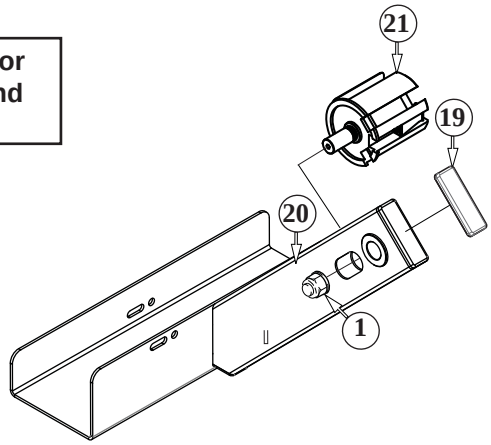


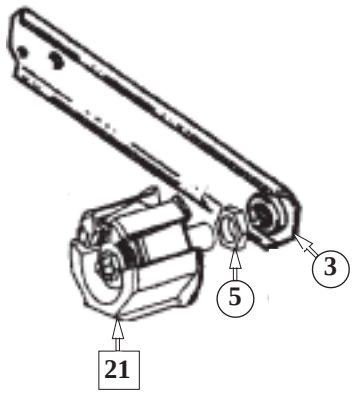


Note: Part Number 19 - 3” Taping Head only

21

Note: See Parts List for Accuglide 2” and 3” information





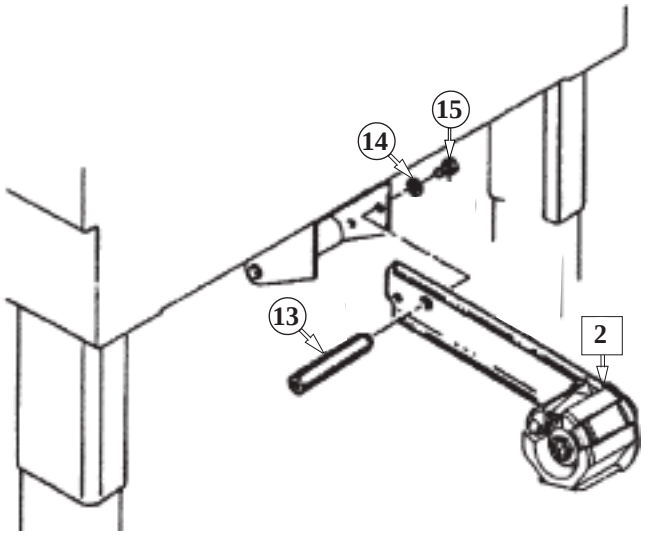


Figure 15967

Figure 15967

Ref. No.	3M Part No.	Description
15967-1	78-8017-9169-6	Nut - M18x1 - Galvanized
15967-2	78-8137-1158-3	Tape Drum Bracket Assembly
15967-3	78-8070-1395-4	Bracket - Bushing Assembly
15967-4	78-8076-4519-3	Shaft - Tape Drum 2”
	78-8060-8462-6	Shaft - Tape Drum 3”
15967-5	78-8017-9169-6	Nut - M18x1
15967-6	78-8098-8832-0	Latched Tape Drum Assy w/Shaft
15967-7	78-8098-8817-1	Leaf - Spring 2”
	78-8098-8830-4	Leaf - Spring 3”
15967-8	26-1002-5753-9	Screw - Self Tapping 7SPX8
15967-9	78-8060-8172-1	Washer - Friction
15967-10	78-8052-6271-0	Washer - Tape Drum
15967-11	78-8100-1048-4	Spring - Core Holder
15967-12	78-8017-9077-1	Nut - M10X1
15967-13	78-8076-4742-1	Spacer - Stud
15967-14	26-1000-0010-3	Washer - M6 Flat
15967-15	78-8010-7169-3	Screw - M6x12 Hex Hd.
15967-16	78-8052-6651-3	Washer - Nylon
15967-17	78-8098-8816-3	Lock - Core Holder
15967-18	26-1004-5510-9	Washer - M10 Plain
15967-19	78-8137-6346-9	Cap
15867-20	78-8137-6345-1	Bracket - Tape Head Arm
15967-21	78-8098-8814-8	Tape Drum Assembly w/Shaft 2”
	78-8098-8832-0	Tape Drum Assembly w/Shaft 3”

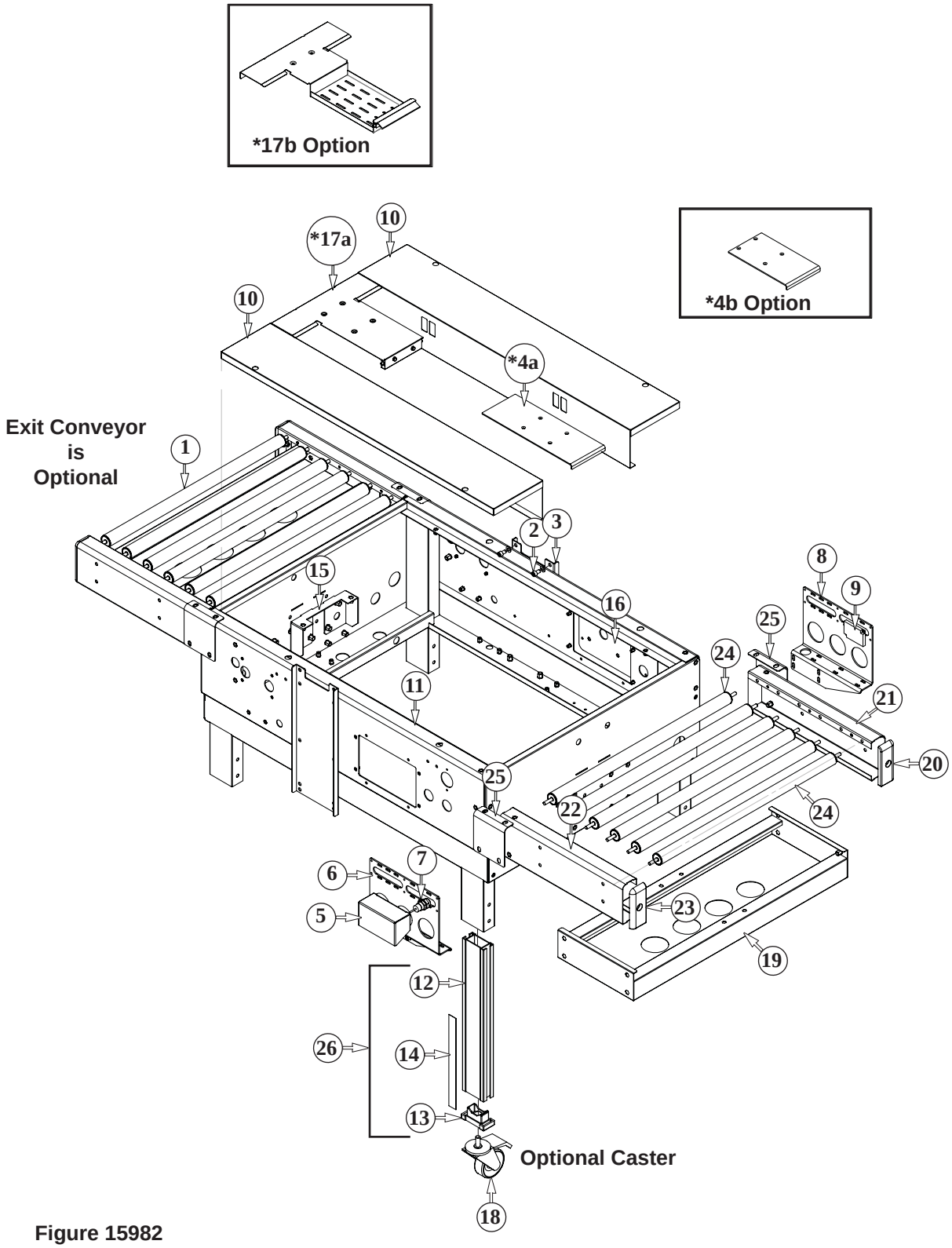


Figure 15982

Figure 15982

Ref. No.	3M Part No.	Description
15982-1	78-8137-7723-8	Rollers Bed Assembly
15982-2	78-8114-4818-8	Screw - M8X14 Soc. Hd. Hex Hd.
15982-3	78-8017-9318-9	Washer - 8mm Plain
15982-4a	78-8137-7984-6	Infeed Bracket
15982-4b	78-8137-7985-3	Infeed Bracket
15982-5	78-8137-7729-5	Cover w/Nutsers
15982-6	78-8137-7732-9	Support - SX FTC
15982-7	78-8137-7958-0	Photocell - Polarized M18 PNP 3MT
15982-8	78-8137-7731-1	Support DX FTC
15982-9	78-8076-5057-3	CTR E39-R1
15982-10	78-8137-6329-5	Side Sliding Plane
15982-11	78-8137-6285-9	Bed Assembly w/Nutzers
15982-12	78-8137-6287-5	Leg - Inner
15982-13	78-8137-0641-9	Pad - Foot
15982-14	78-8060-8481-6	Label - Height
15982-15	78-8137-7865-7	Front Support - Drive Belt
15982-16	78-8137-7837-6	Support Plate - Housing
15982-17a	78-8137-7986-1	Rear Sliding Plane
15982-17b	78-8137-7987-9	Lowered Plane w/Pin Assembly
15982-18	78-8137-7866-5	Casters / 80
15982-19	78-8137-3600-2	Lower Plate - Roller Bed w/Nutzers
15982-20	78-8076-4511-0	Cap - Front R/H
15982-21	78-8137-7867-3	Support - Right Shoulder
15982-22	78-8137-7869-9	Support - Left Shoulder
15982-23	78-8076-4512-8	Cap - Front, L/H
15982-24	78-8137-3601-0	Roller Assembly
15982-25	78-8137-7870-7	Joint Plate
15982-26	78-8137-6373-3	Leg – Inner Assembly

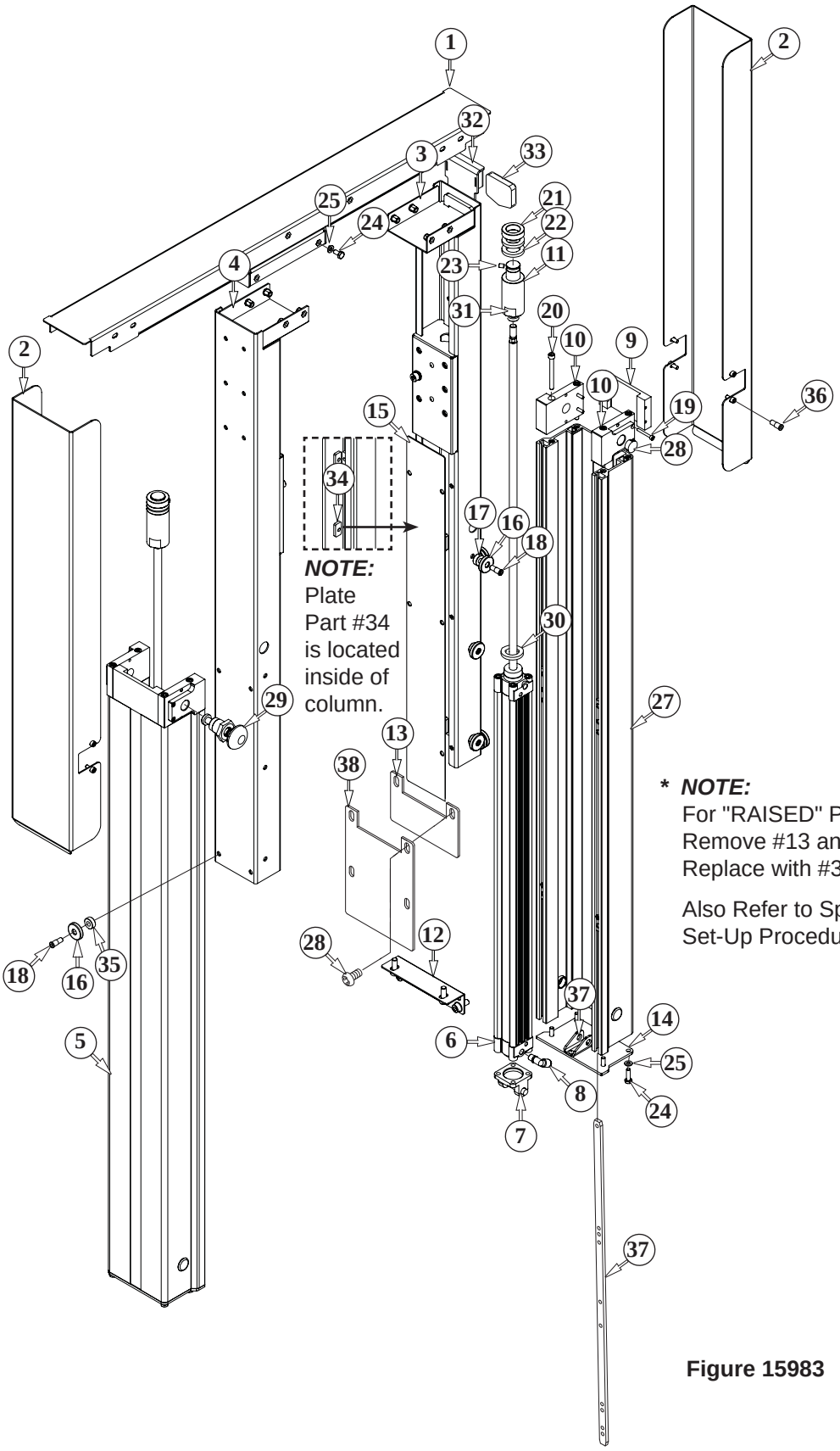
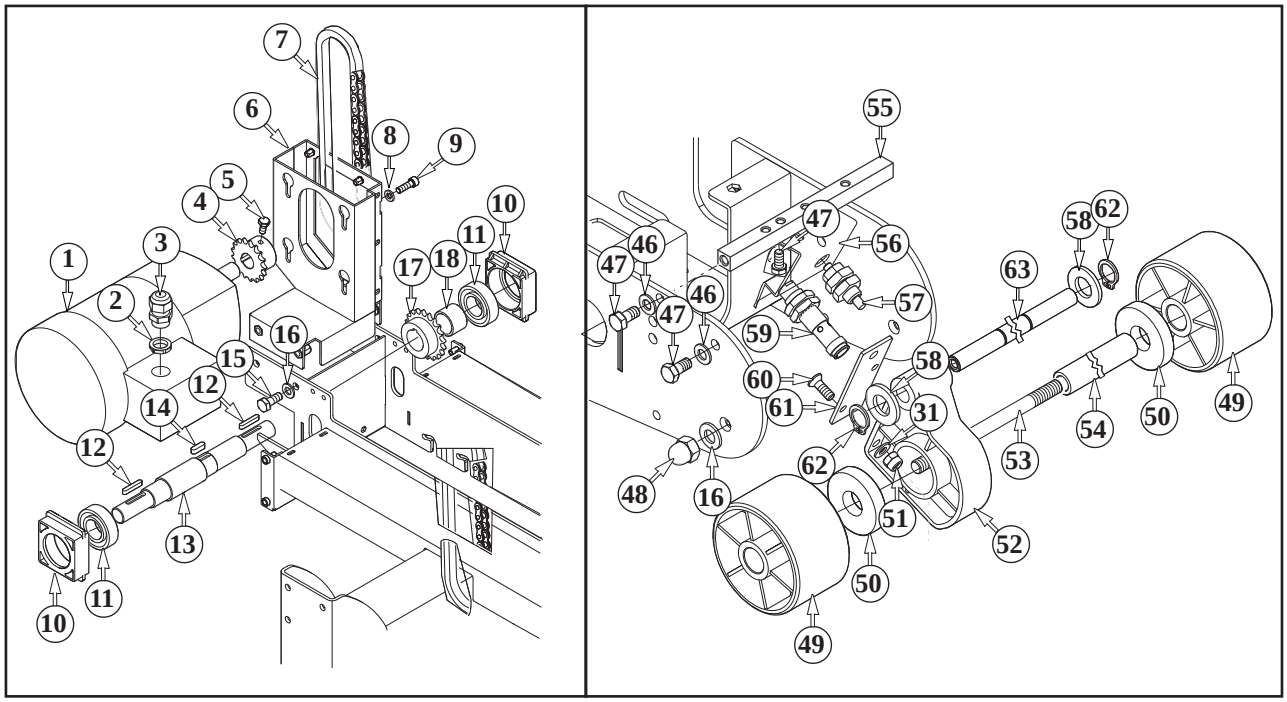


Figure 15983

Figure 15983

Ref. No.	3M Part No.	Description
15983-1	78-8137-6391-5	Cover - Columns Top Crossbar w/Nutzers
15983-2	78-8137-6384-0	Cover - External
15983-3	78-8137-6386-5	Sliding Column w/Nutzers
15983-4	78-8137-6386-5	Sliding Column w/Nutzers
15983-5	78-8137-6374-1	Fixed Column
15983-6	78-8137-6381-6	Sliding Columns Cylinder Assembly
15983-7	78-8137-6383-2	Hinge - Type D5032-A SMC
15983-8	78-8076-4890-8	Fitting
15983-9	78-8137-6379-0	Central Block - Columns
15983-10	78-8137-6380-8	Side Block - Columns
15983-11	78-8137-6378-2	Cylinder Rod Attachment
15983-12	78-8137-7906-9	Bracket - Fixed Column
15983-13	78-8137-0837-3	Safety Plate - Inner Column
15983-14	78-8137-6377-4	Bracket - Cylinder Connectiont
15983-15	78-8137-6389-9	Cover - Sliding Column
15983-16	78-8137-6388-1	Bearing - Polyamide Coated 33X6X7,5X8
15983-17	78-8129-6313-6	Washer - Galvanized
15983-18	78-8129-6312-8	Screw - Bearing
15983-19	78-8060-7711-7	Screw - M4X30 Galvanized
15983-20	78-8137-3616-8	Screw - M6X60 Galvanized
15983-21	78-8076-4552-4	Ferrule - Rod Connection Galvanized
15983-22	78-8054-8823-2	Washer - 35X5 Black
15983-23	78-8059-5617-0	Screw - M6X8 Set
15983-24	78-8010-7193-3	Screw - M6X20 Galvanized
15983-25	26-1000-0010-3	Washer - M6 Galvanized
15983-26	78-8129-6124-7	Screw - M8X16 Galvanized
15983-27	78-8137-6375-8	Fixed Column w/Strip
15983-28	78-8076-4517-7	Cap - Black ABS/22X1
15983-29	78-8137-7949-9	Handle Assembly - Height Adjusting
15983-30	78-8137-7988-7	Buffer - Columns Cylinders
15983-31	78-8137-7989-5	Washer - Columns Cylinders
15983-32	78-8137-7990-3	Damper - Support Assembly
15983-33	78-8137-0831-6	Damper - Sliding Column
15983-34	78-8129-6311-0	Plate - Tapped/Column Bearing
15946-35	78-8129-6314-4	Washer - Galvanized
15946-36	26-1003-7949-9	Screw - M5 x 12 Soc. Hd. Hex
15946-37	78-8131-7965-5	Cleat
15946-38	26-1003-7964-8	Plate - Inner Column



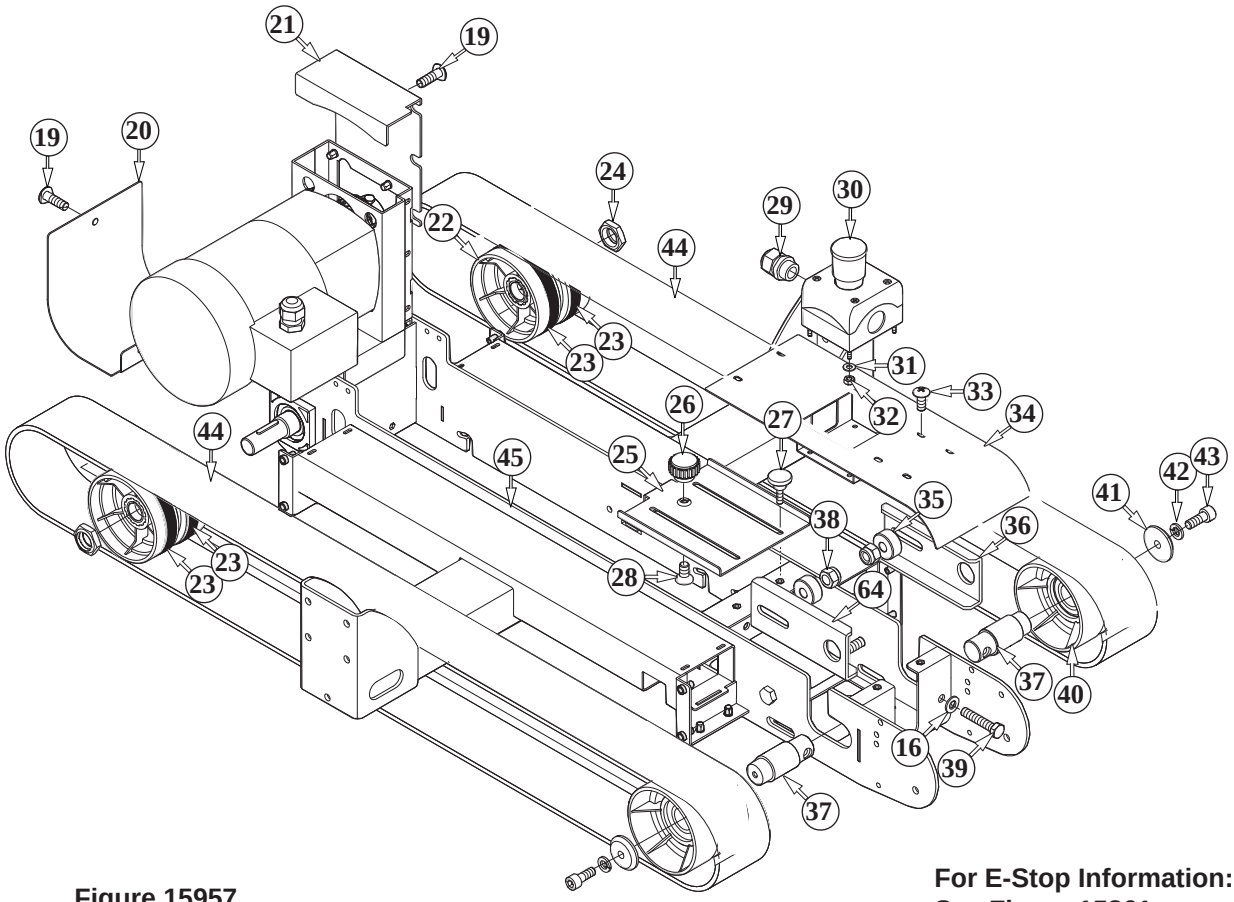


Figure 15957

For E-Stop Information:
See Figure 15861

Figure 15957	Ref. No.	3M Part No.	Description
	15957-1	78-8091-0596-4	Gearmotor - Bodine
		26-1011-8828-7	Capacitor (only)
	15957-2	78-8076-5211-6	Nut - Set GMP13.5
	15957-3	78-8076-4715-7	Cord Grip
	15957-4	78-8070-1524-9	Sprocket - Z=17 3/8
	15957-5	78-8129-6450-6	Screw - M6x12 Hex Hd.
	15957-6	78-8137-8014-1	Support - Gearmotor
	15957-7	78-8137-6059-8	Chain - 3/8", 59 Pitch
	15957-8	26-1000-0010-3	Washer - Flat M6
	15957-9	78-8070-1523-1	Screw - TCEI 1/4 28 FIL.X 3/4
	15957-10	78-8070-1529-8	Support - Shaft
	15957-11	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52
	15957-12	78-8057-5739-6	Key - M5X5X30mm
	15957-13	78-8137-0537-9	Shaft - Gearbox
	15957-14	78-8057-5811-3	Key - 6X6X20mm
	15957-15	26-1003-5842-8	Screw - M8X20 Hex Hd.
	15957-16	78-8017-9318-9	Washer - 8mm Plain
	15957-17	78-8137-6307-1	Pinion - Gearbox Z=20
	15957-18	78-8054-8984-2	Bushing
	15957-19	78-8076-4625-8	Screw - M5X16 Special
	15957-20	78-8137-8015-8	Cover - Gearmotor
	15957-21	78-8137-8016-6	Upper Cover
	15957-22	78-8076-5105-0	Drive Pulley
	15957-23	78-8052-6713-1	Ring - Polyurethane
	15957-24	78-8060-8416-2	Nut - M20X1 Special
	15957-25	78-8137-6357-6	Fixing Plate - Top Unit
	15957-26	78-8137-8017-4	Knob - 193/25 B-M6 "Elesa'
	15957-27	78-8137-6355-0	Knob - M5X16 "Elesa" DIN 464
	15957-28	26-1002-5830-5	Screw - M6X12 Hex Hd.
	15957-29	78-8137-0607-0	Cable Gland
	15957-30	78-8137-7893-9	E-Stop M22-IY1
	15957-31	78-8005-5740-3	Washer - M4 Galvanized
	15957-32	78-8010-7416-8	Nut - M4 Hex Steel
	15957-33	78-8017-9066-4	Screw - M5X12 Metric
	15957-34	78-8137-6352-7	Cover - Emergency Button
	15957-35	78-8070-1518-1	Spacer - Shaft
	15957-36	78-8137-8018-2	Belt Tensioner - Bottom Drive
	15957-37	78-8137-8009-1	Pin - Idler Pulley
	15957-38	26-1003-6918-5	Nut - M10 Plastic Insert - Hex Flange
	15957-39	26-1002-5949-3	Screw - M8x60 Hex Hd.
	15957-40	78-8052-6710-7	Pulley
	15957-41	78-8052-6709-9	Washer - Special
	15957-42	78-8010-7435-8	Washer - M6 Metric Lock
	15957-43	26-1003-7957-2	Screw - M6X16 Soc. Hd. Hex Hd.
	15957-44	78-8137-6303-0	Driving Belt w/Hook 75x1914+-3.5
	15957-45	78-8137-7977-0	Frame - Top Drive Belt w/Nutzers
	15957-46	78-8005-5740-3	Washer - M4 Galvanized
	15957-47	78-8010-7163-6	Screw - TE M5X10 Galvanized
	15957-48	78-8100-1132-6	Nut - M8 Special
	15957-49	78-8052-6641-4	Infeed Roller
	15957-50	78-8137-7715-4	Spacer - Infeed Rollers
	15957-51	26-1003-6914-4	Nut
	15957-52	78-8137-8019-0	Lever
	15957-53	78-8137-0535-3	Pin - Infeed Rollers
	15957-54	78-8137-0536-1	Pipe - Infeed Rollers
	15957-55	78-8137-0521-3	Fixing Spacer - Cover
	15957-56	78-8137-7713-9	Bracket - Wheels Sensor - Top Drive Belt
	15957-57	78-8137-7719-6	Spring Plunger
	15957-58	26-1004-5510-9	Washer - M10 Screw - Galvanized
	15957-59	78-8137-7720-4	Sensor - Proximity M12 PNP NO 5mm E2B
	15957-60	78-8017-9317-1	Screw - M4X12 - Allen FH
	15957-61	78-8137-7718-8	Plate
	15957-62	78-8016-5855-6	Stop Ring 10 DIN 471 - Burnished
	15957-63	78-8137-0591-6	Pin - Cam
	15957-64	78-8137-8020-8	Belt Tensioner - Bottom Drive

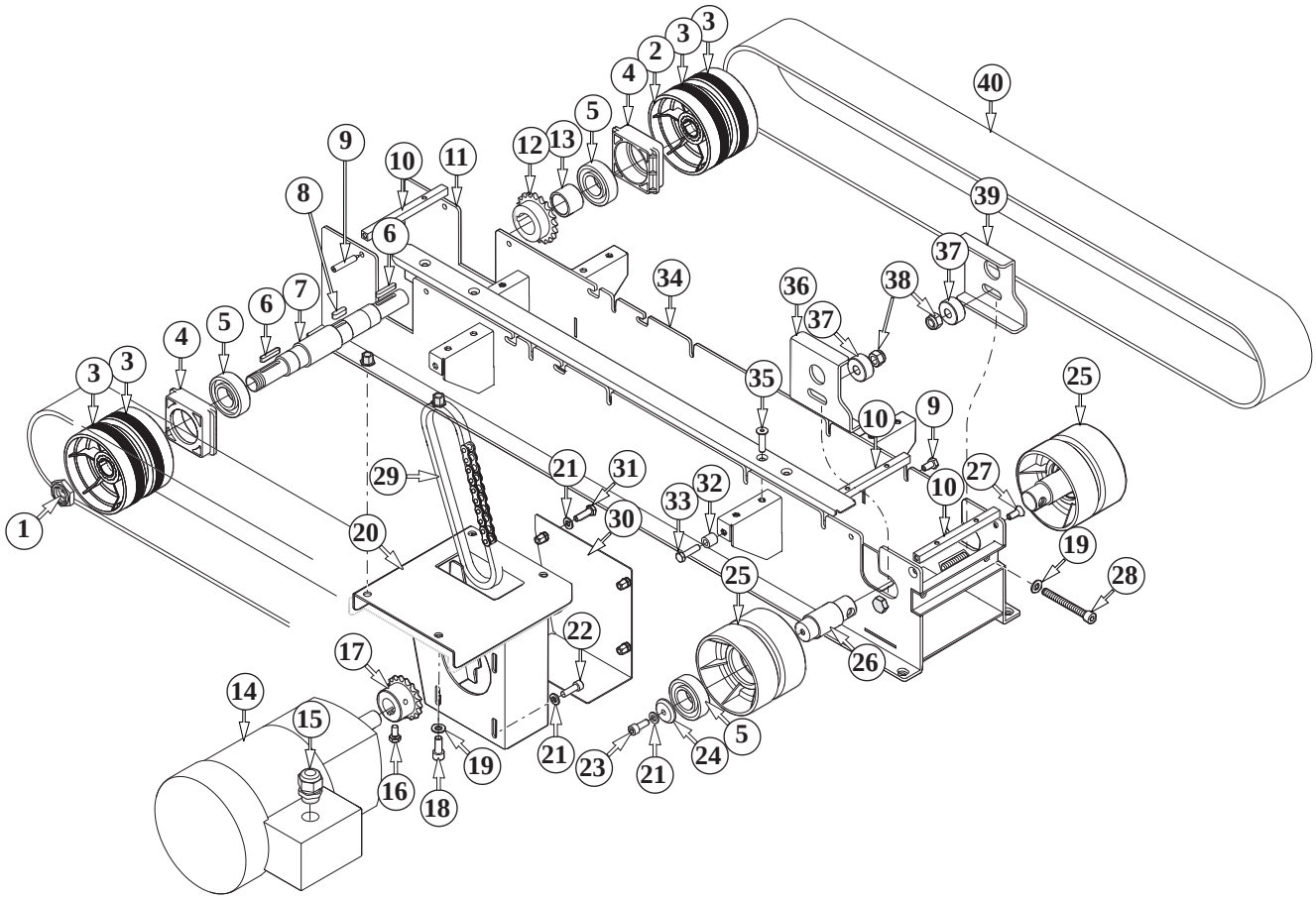


Figure 15958

Figure 15958

Ref. No.	3M Part No.	Description
15958-1	78-8060-8416-2	Nut - M20X1 Special
15958-2	78-8076-5105-0	Driving Pulley
15958-3	78-8052-6713-1	Ring - Polyurethane
15958-4	78-8070-1529-8	Support - Shaft
15958-5	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52
15958-6	78-8057-5739-6	Key - M5X5X30mm
15958-7	78-8137-0537-9	Shaft - Gearbox
15958-8	78-8057-5811-3	Key - 6X6X20mm.
15958-9	78-8137-8099-2	Bar - Support
15958-10	78-8137-0568-4	Spacer
15958-11	78-8137-6297-4	Sliding Guide - Drive Belt
15958-12	78-8137-6307-1	Gearbox Pinion Z=20
15958-13	78-8054-8984-2	Bushing
15958-14	78-8091-0596-4	Gearmotor - Bodine
	26-1011-8828-7	Capacitor (only)
15958-15	78-8137-0607-0	Cable Gland
15958-16	78-8129-6450-6	Screw - M6x12 Hex Hd.
15958-17	78-8070-1524-9	Sprocket - Z=17 3/8
15958-18	26-1003-7964-8	Screw - M8X20 Soc. Hd. Hex Soc. Dr.
15958-19	78-8017-9318-9	Washer - 8mm Plain
15958-20	78-8137-8008-3	Support - Gearmotor
15958-21	26-1000-0010-3	Washer - M6 Flat
15958-22	78-8070-1523-1	Screw - TCEI 1/4 28 FIL.X 3/4
15958-23	26-1003-7957-2	Screw - M6X16 Soc. Hd. Hex Hd.
15958-24	78-8052-6709-9	Washer - Special
15958-25	78-8052-6710-7	Pulley
15958-26	78-8137-8009-1	Pin - Idler Pulley
15958-27	26-1001-9843-6	Screw - M6X16 Flat Soc. Hd.
15958-28	78-8070-1519-9	Screw - M8X70 Soc. Hd. Hex Hd.
15958-29	78-8137-8010-9	Chain - P=3/8" L=55
15958-30	78-8137-8011-7	Cover - Gearmotor
15958-31	78-8010-7193-3	Screw - M6X20 Hex Hd.
15958-32	78-8070-1534-8	Stud - Side Plate
15958-33	78-8060-8488-1	Screw - M5X20 Hex Hd.
15958-34	78-8137-7983-8	Frame - Bottom Drive Belt w/Nutzers
15958-35	26-1005-4757-4	Screw - M5X20 Flat Hd. Soc. Dr.
15958-36	78-8137-8012-5	Belt Tensioner - Bottom Drive
15958-37	78-8070-1518-1	Spacer - Shaft
15958-38	26-1003-6918-5	Nut - M10 Plastic Insert - Hex Flange
15958-39	78-8137-8013-3	Belt Tensioner - Bottom Drive
15958-40	78-8137-6303-0	Drive Belt w/Hook 75x1914+-3.5

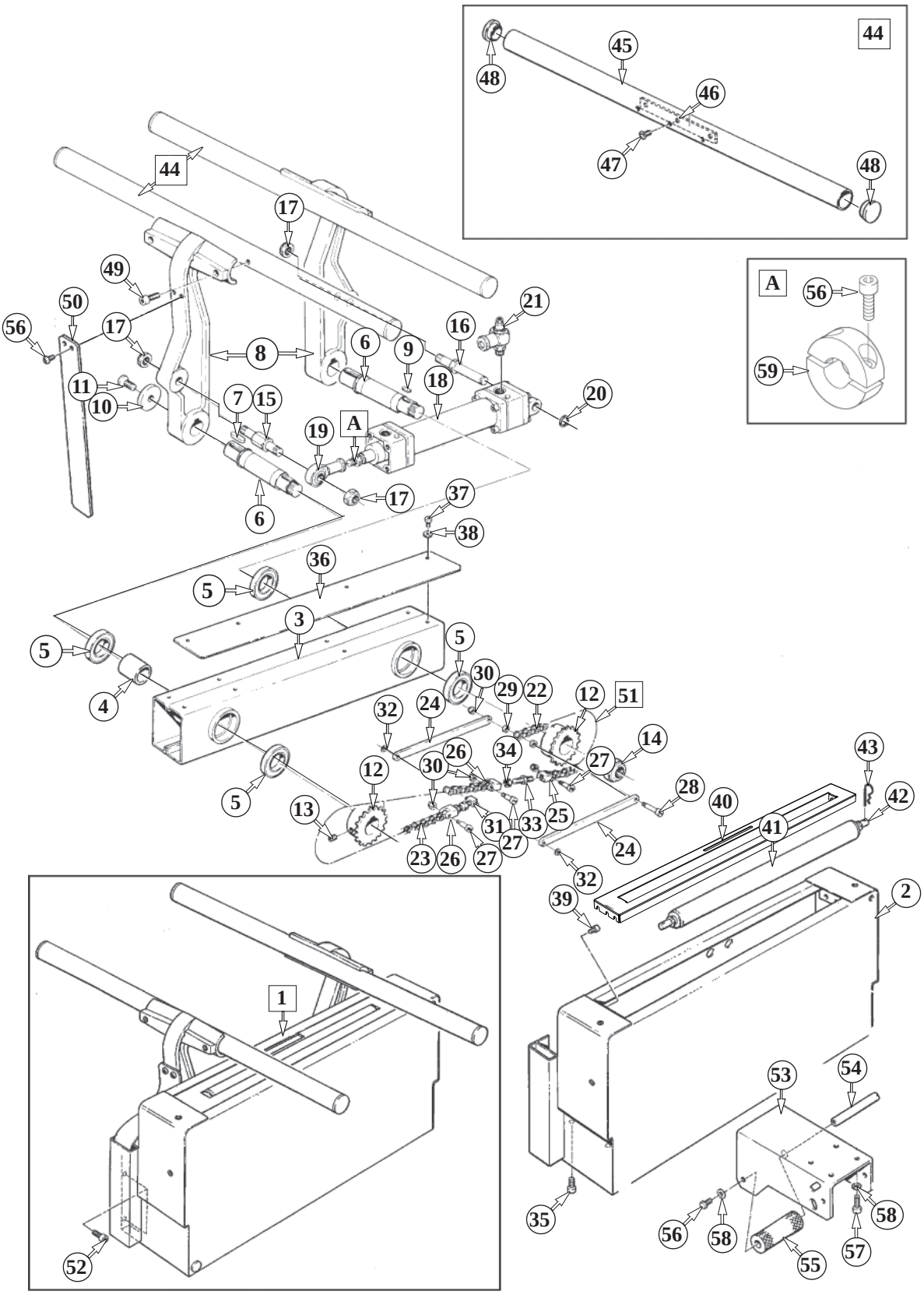


Figure 15979

Figure 15979	Ref. No.	3M Part No.	Description
	15979-1	78-8137-7706-3	Infeed Conveyor Assembly
	15979-2	78-8137-7708-9	Frame - Infeed
	15979-3	78-8137-0992-6	Frame
	15979-4	78-8076-4518-5	Spacer - Bearing
	15979-5	78-8023-2551-0	Bearing - 6005-2RS
	15979-6	78-8076-4567-2	Pivot - Infeed
	15979-7	78-8076-4568-0	Key - 7X8X25
	15979-8	78-8100-1158-1	Lever - Infeed
	15979-9	78-8076-4570-6	Key - 6X6X15
	15979-10	78-8054-8588-1	Washer - 8,5/40X6
	15979-11	78-8054-8567-3	Screw - Soc. Hd. Special
	15979-12	78-8076-4571-4	Sprocket - Z=20
	15979-13	78-8023-2479-4	Screw - M6X10 Set w/End Cup
	15979-14	78-8060-8416-2	Nut - M20X1 Special
	15979-15	78-8076-4572-2	Stud - Joint
	15979-16	78-8076-4573-0	Pin - Air Cylinder
	15979-17	78-8091-0555-0	Nut - M12 Special
	15979-18	78-8137-7709-7	Cylinder
	15979-19	78-8057-5747-9	Mount - Cylinder Rod End
	15979-20	78-8056-3965-1	Ring - 8 DIN 6799
	15979-21	78-8091-0510-5	Regulator - Speed
	15979-22	78-8137-7948-1	Chain - 3/8" P=37
	15979-23	78-8055-0718-9	Chain - 3/8" Pitch 55 Pitch Long
	15979-24	78-8054-8787-9	Chain - Link
	15979-25	78-8054-8788-7	Chain Connector
	15979-26	78-8054-8786-1	Chain Connector
	15979-27	78-8060-7520-2	Screw - M3X20
	15979-28	78-8060-7519-4	Screw - M3X25
	15979-29	78-8054-8783-8	Washer - Special
	15979-30	78-8059-5517-2	Nut - M3 Self Locking - Zinc. Pl.
	15979-31	78-8054-8784-6	Block - Chain
	15979-32	78-8056-3945-3	E-Ring - M4
	15979-33	78-8054-8785-3	Rod - Threaded Right/Left
	15979-34	78-8010-7418-4	Nut - M6 Hex Steel
	15979-35	26-1003-7963-0	Screw - M8X16 Soc. Hd.
	15979-36	78-8137-0995-9	Cover - Chain
	15979-37	26-1002-5753-9	Screw - Self-Tapping 7SPX8
	15979-38	78-8005-5740-3	Washer - 4mm Plain Nick.
	15979-39	26-1003-7943-2	Screw - M4X12 Soc. Hd.
	15979-40	78-8137-7981-2	Cover
	15979-41	78-8114-5073-9	Roller / 32x1.2x580
	15979-42	78-8137-0997-5	Shaft - Roller
	15979-43	78-8076-5385-8	Pin - Cotter
	15979-44	78-8076-4648-0	Box Guide Assembly
	15979-45	78-8076-4649-8	Guide - Infeed
	15979-46	78-8076-4650-6	Plate - Guide
	15979-47	26-1002-5830-5	Screw - M6X12 Hex Hd.
	15979-48	78-8054-8779-6	End - Cap
	15979-49	78-8010-7210-5	Screw - M6X20 Soc. Hd. Hex Soc.
	15979-50	78-8100-1162-3	Strap - Safety
	15979-51	78-8137-7707-1	Lever
	15979-52	26-1003-7964-8	Screw - M8X20 Soc. Hd. Hex Soc. Dr.
	15979-53	78-8137-0998-3	Support - Bracket
	15979-54	78-8076-4759-5	Shaft - Roller
	15979-55	78-8076-5030-0	Roller - Knurled
	15979-56	78-8032-0375-7	Screw - M6X16 Hex Hd.
	15979-57	26-1003-7957-2	Screw - M6X16 Soc. Hd. Hex Hd.
	15979-58	26-1000-0010-3	Washer - M6 Flat
	15979-59	78-8137-0566-8	Locking Collar

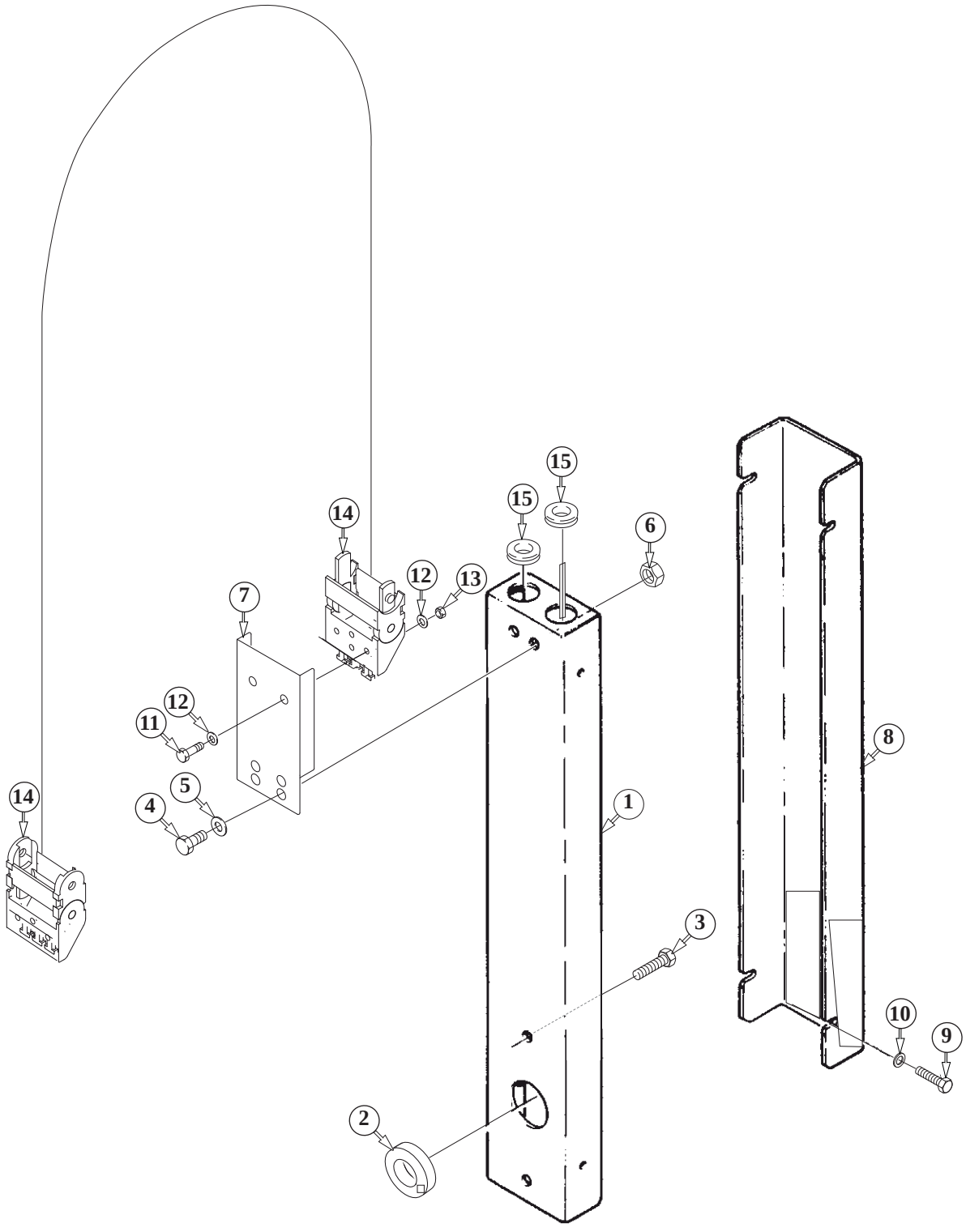


Figure 15950

Figure 15950

Ref. No.	3M Part No.	Description
15860-1	78-8091-0660-8	Housing
15860-2	78-8076-4702-5	Grommet
15860-3	26-1003-7963-0	Screw - M8X16 Soc. Hd.
15860-4	78-8010-7163-6	Screw - M5X10 Hex Hd.
15860-5	78-8005-5741-1	Washer - M5 Flat
15860-6	78-8010-7417-6	Nut - M5 Hex - Steel
15860-7	78-8137-7852-5	Bracket - Cable Chain
15860-8	78-8137-7853-3	Cover - Grey Housing
15860-9	78-8010-7157-8	Screw - M4X10 Hex Hd.
15860-10	78-8017-9018-5	Washer - M4 Special
15860-11	78-8060-7826-3	Screw - M4X16 Hex Hd.
15860-12	78-8005-5740-3	Washer - 4mm Nickel
15860-13	78-8028-8222-1	Nut - M4 Hex Steel
15860-14	78-8137-0966-0	Chain
15860-15	78-8060-7758-8	Grommet

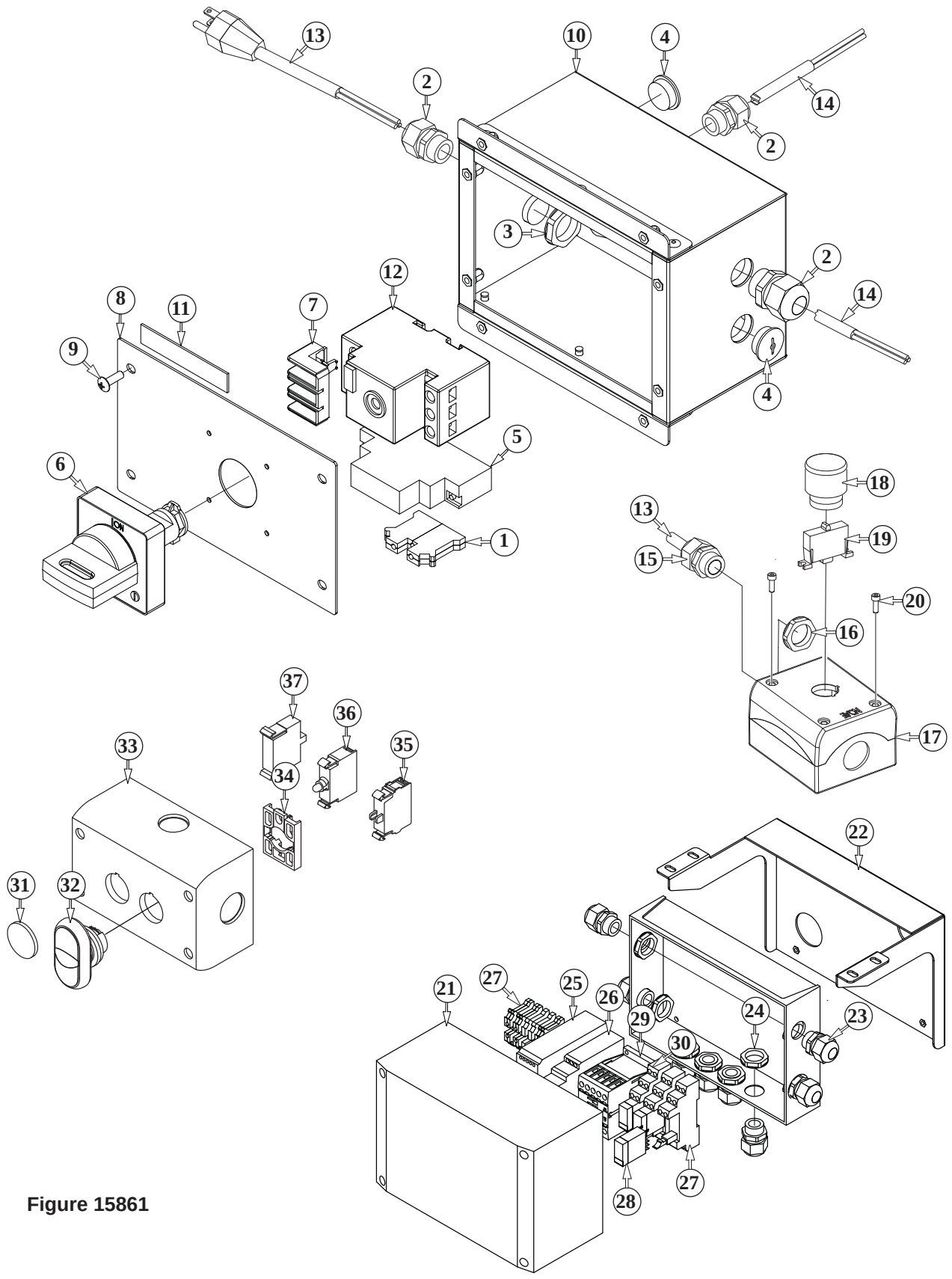
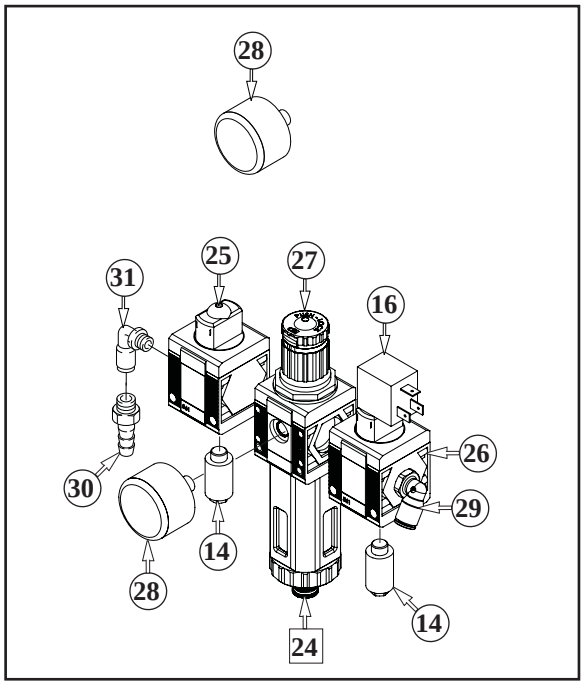
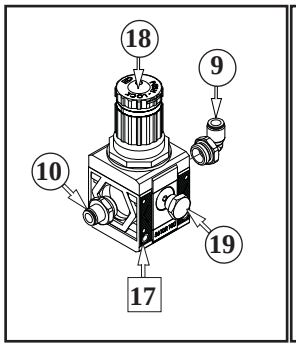


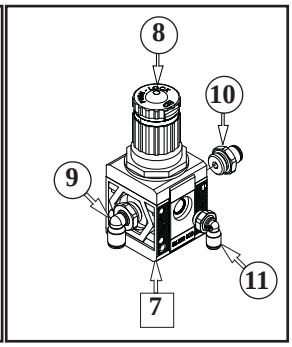
Figure 15861

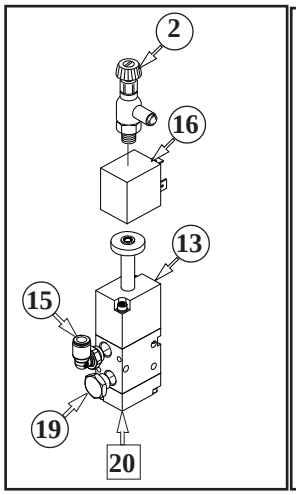
Figure 15861

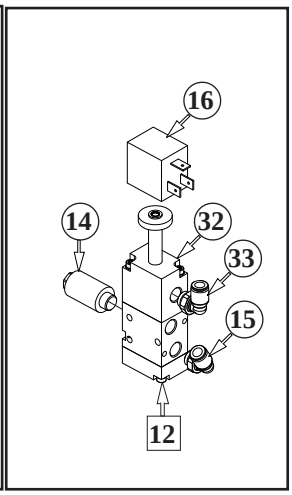
Ref. No.	3M Part No.	Description
15861-1	78-8094-6384-3	Clamp - 6 1492-WG6 - Ground
15861-2	78-8137-0607-0	Fitting - M20X1.5
15861-3	78-8129-6469-6	Nut - M20X1.5
15861-4	78-8137-0796-1	Plug
15861-5	78-8137-0604-7	Coil - Under Voltage
15861-6	78-8137-0606-2	Handle - Door Coupling
15861-7	78-8137-0782-1	Phases Spacer
15861-8	78-8137-8090-1	Cover - Electrical Box
15861-9	78-8137-7968-9	Screw TCBCR M5X16 - Galvanized
15861-10	78-8137-7976-1	Box - Electrical
15861-11	78-8119-8554-4	Seal - Adhesive Rubber
15861-12	78-8137-0780-5	Circuit Breaker - Motor Protection
15861-13	78-8028-7909-4	Power Cord Assembly
15861-14	78-8137-5956-6	Cable
15861-15	78-8060-7785-1	Fitting
15861-16	78-8129-6469-6	Nut - M20 x 1.5 Special
15861-17	78-8137-7893-9	Housing - Black M22-IY1
15861-18	78-8137-6353-5	Emergency Button
15861-19	78-8137-0797-9	Terminal Switch
15861-20	78-8060-8413-9	Screw - M4 x 12 Soc. Hd.
15861-21	78-8137-7737-8	Junction Box
15861-22	78-8137-7741-0	Bracket - Junction Box
15861-23	78-8137-0607-0	Cable Strain Relief
15861-24	78-8129-6469-6	Nut - Cable Strain Relief
15861-25	78-8091-0412-4	Terminal Block
15861-26	78-8137-7734-5	Contactor - 24VDC
15861-27	78-8137-4085-5	Socket - Relay
15861-28	78-8137-5901-2	Control Relay - 24VDC
15861-29	78-8137-7735-2	Timer
15861-30	78-8137-7736-0	Power Supply 24VDC
15861-31	78-8137-8083-6	Cap /22 Black
15861-32	78-8137-8079-4	Push Button - Start/Stop
15861-33	78-8137-8080-2	Housing - White
15861-34	78-8137-8084-4	Adaptor
15861-35	78-8137-8081-0	Contact Block M22-K10
15861-36	78-8137-8082-8	Light Unit - White M22-LED
15861-37	78-8137-8085-1	Contact Block M22-K01

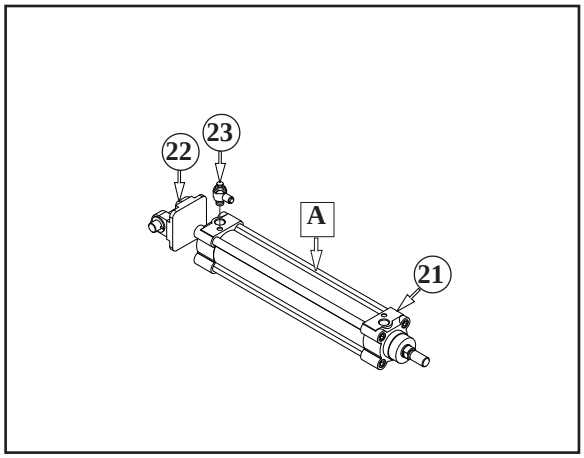


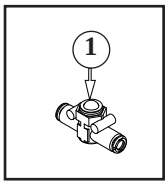


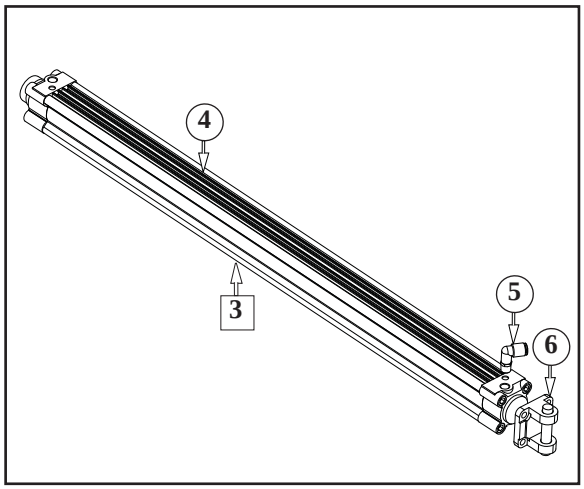












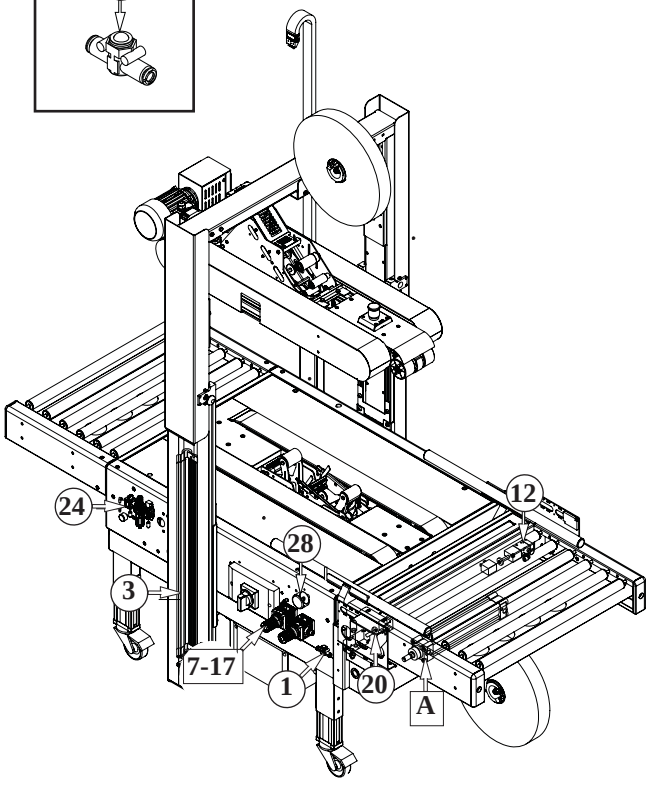


Figure 15962

Figure 15962

Ref. No.	3M Part No.	Description
15962-1	78-8137-7951-5	Valve - Quick Exhaust
15962-2	78-8137-7992-9	Regulator - Flow AS-FS AS1201FS-M5-04
15962-3	78-8137-6381-6	Cylinder Assembly - Sliding Columns
15962-4	78-8137-6382-4	Cylinder
15962-5	78-8076-4890-8	Fitting - KQ2L06-01S
15962-6	78-8137-6383-2	Hinge - Type D5032-A SMC
15962-7	78-8137-7952-3	Regulator - Columns Cylinders
15962-8	78-8137-6398-0	Regulator - SY1 1/4 04 PZ 1
15962-9	78-8055-0756-9	Fitting - GIR.31990613
15962-10	26-1005-6901-6	Fitting - DIR.M.CIL.31010613
15962-11	26-1005-6909-9	Fitting - GIR.31990410
15962-12	78-8137-7953-1	Valve - Solenoid
15962-13	78-8137-7700-6	Valve - SOV 25 SOS OO
15962-14	78-8137-7704-8	Silencer - MWSPL-F 1/8
15962-15	26-1005-6893-5	Fitting - GIR.31990610
15962-16	78-8137-7701-4	Coil - 22 ø8 BA 2W-24VDC UR
15962-17	78-8137-7954-9	Regulator - Centering Assembly
15962-18	78-8137-7702-2	Regulator - SY1 1/4 08
15962-19	78-8060-7690-3	Cap - RA 019 1/8"
15962-20	78-8137-7955-6	Solenoid Valve Assembly
15962-21	78-8137-7709-7	Cylinder - 1213400205CN
15962-22	78-8076-4903-9	Hinge - D5040-A SMC
15962-23	78-8091-0510-5	Fitting - Speed EAS2201F-02-065
15962-24	78-8137-7956-4	Air Pressure Assembly - 24VDC
15962-25	78-8137-7957-2	Valve - Manual V3V SY1
15962-26	78-8137-6395-6	Filter - Regulator FR SY1 20 08 RA
15962-27	78-8137-7705-5	Valve - V3V SY1 ELPN
15962-28	78-8054-8838-0	Air Gauge
15962-29	78-8091-0315-9	Fitting - 31990813
15962-30	26-1005-6897-6	Fitting - Hose RA 030 9-1/4"
15962-31	78-8060-7900-6	Fitting - RA 022-1/4-1/4
15962-32	78-8137-7966-3	Valve 5/2 1/8”SOV25SESOO
15962-33	78-8057-5732-1	Fitting - Elbow 1/16 NPT x 4mm

Science.
Applied to Life.™

Instructions and Parts List

3M-Matic™ Accuglide™ 3

Type 11400

Upper and Lower

High Speed Taping Heads

2 Inch

Serial #: _____

For reference, record machine serial number 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.

Replacement Parts and Service Information

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.

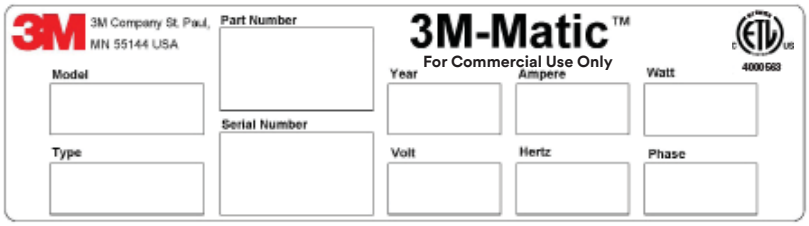
Technical Assistance/Replacement Parts and Additional Manuals:

Contact your local service provider 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: Accuglide 3 - 2 inch - Type 11400 - 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.

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.

Table of Contents - Manual 2: Accuglide 3 High Speed - 2 inch

(Upper and Lower Taping Heads)

Warranty

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™ Accuglide 3 Taping Head, Type 11400** with the following warranties:

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.

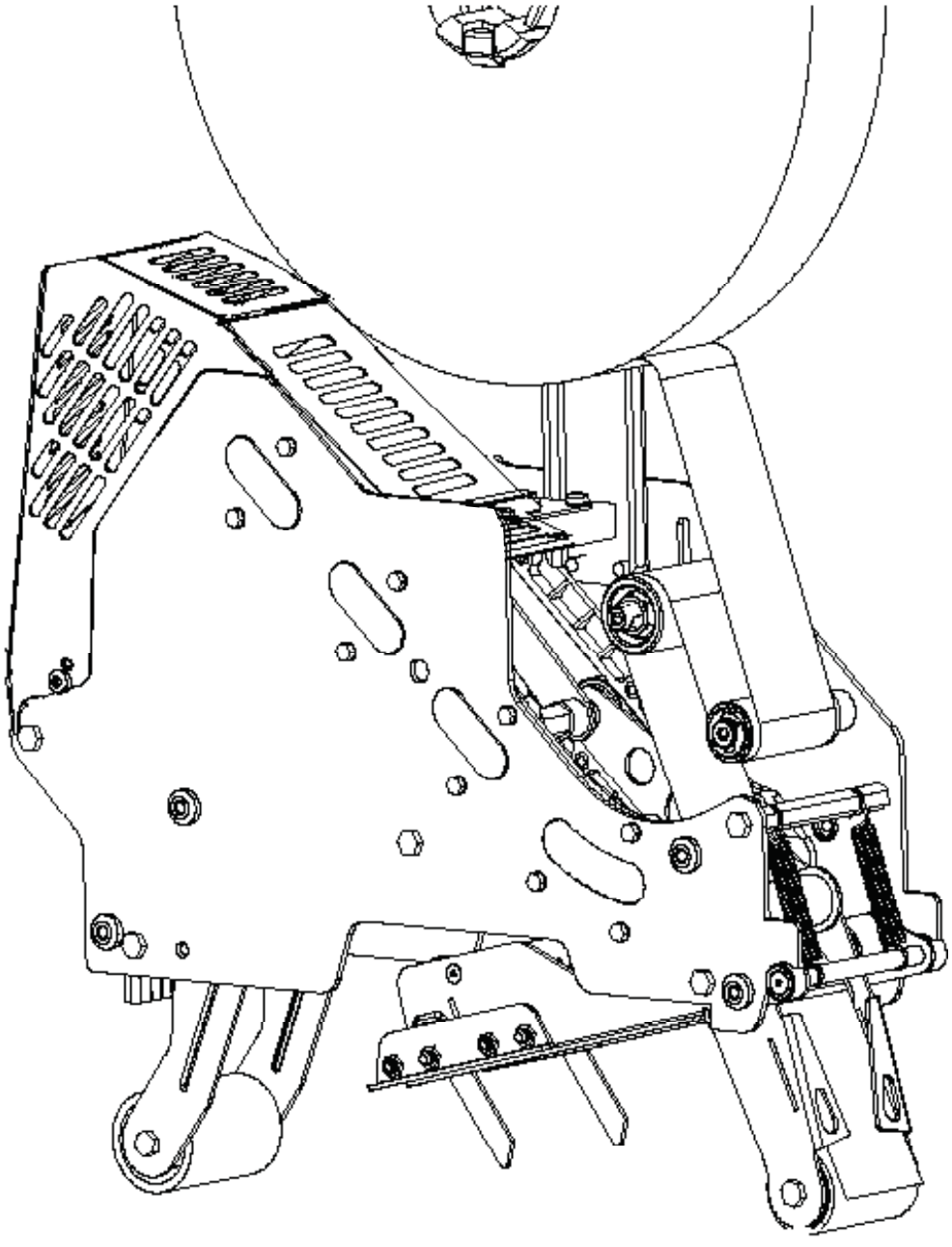
Limitation of Liability: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from this 3M equipment, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including breach of warranty, breach of contract,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

Intended Use

The intended use of the AccuGlide™ 3 Upper and Lower Taping Heads - 2 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 Upper and Lower Taping Heads - 2 Inch have been designed and tested for use with Scotch® pressure-sensitive film box sealing tape.



AccuGlide™ 3 Upper Taping Head - 2 inch, Type 11400

Taping Head Contents

AccuGlide™ 3 High Speed - 2 Inch Upper and Lower Taping Heads consist 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 of the 3M-Matic™ Accugllide 3 (2 inch) 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition April 2016/ Copyright 3M 2016. All rights reserved The manufacturer reserves the right to change the product at any time without notice.

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 - Accuglide 3 - 2" - Type 11400 - 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.

Important Safeguards

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.

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

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

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

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 Safeguards *continued* on next page)

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.

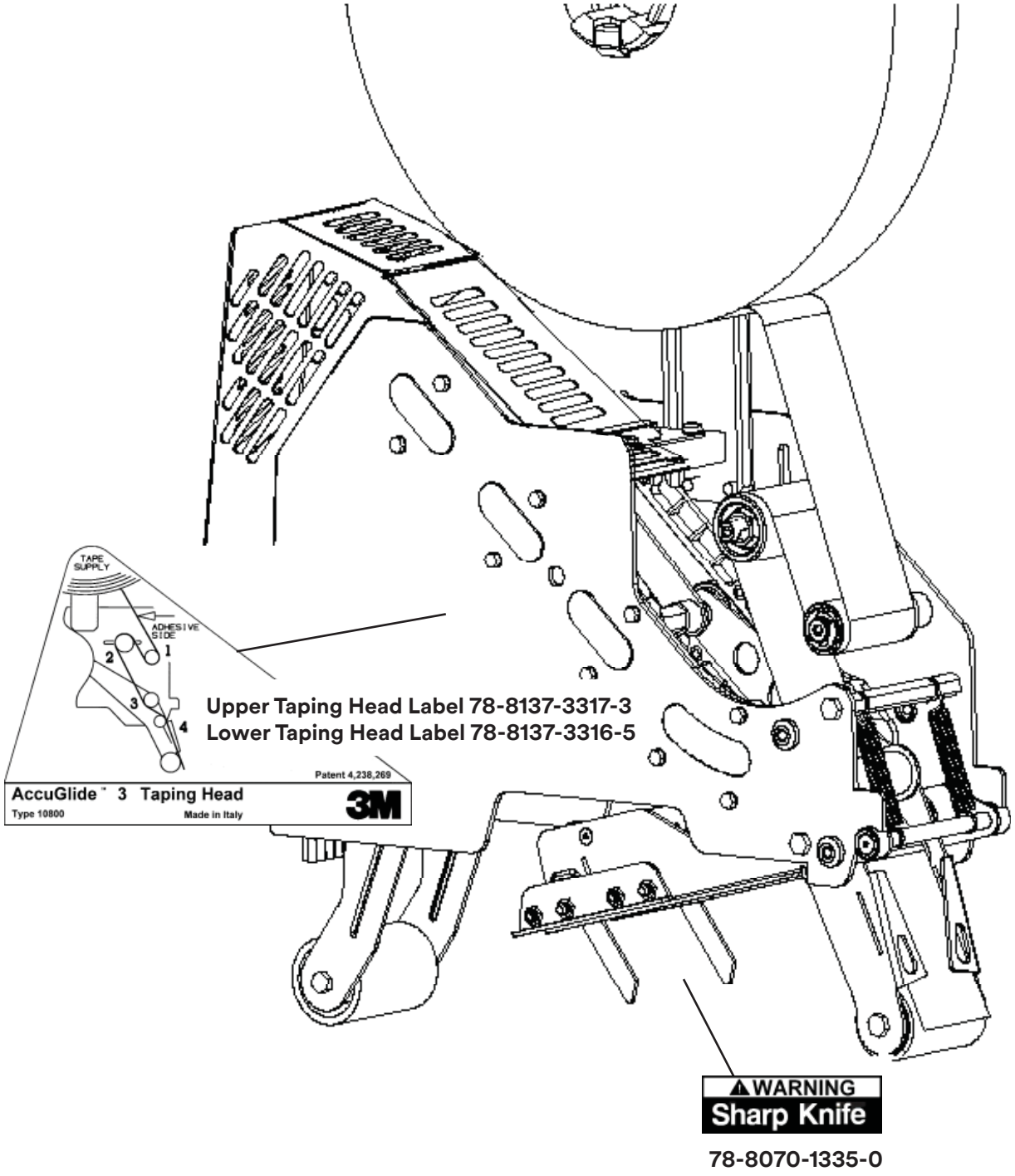


Figure 1-1 Replacement Labels/3M Part Numbers

Specifications

1. **Tape:**

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

2. **Tape Width:**

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

   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.

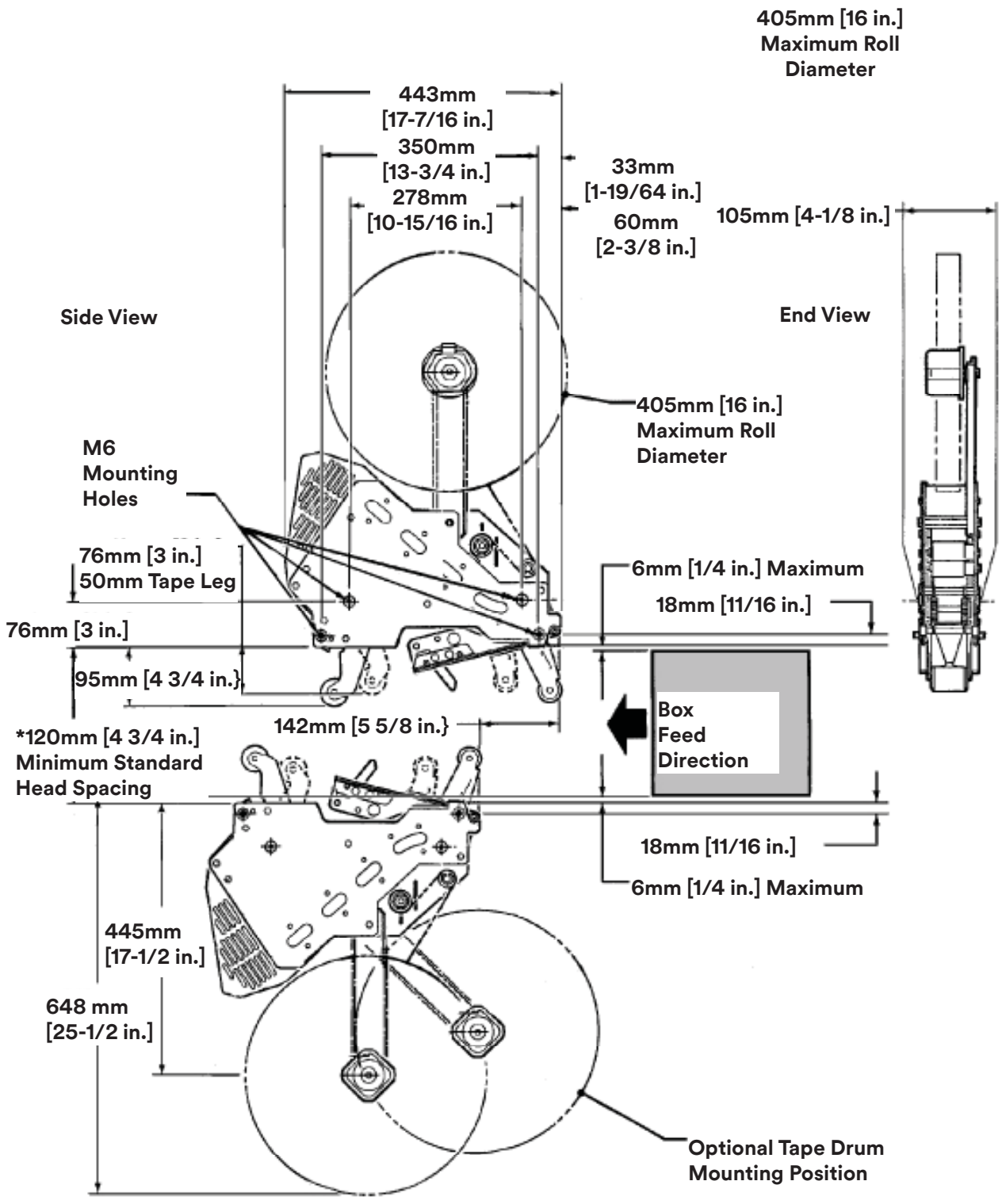
   Important – Taping heads should not be washed down or subjected to conditions causing moisture condensation on components.

8. **Taping Head Dimensions:**

   Length – 442mm [17 3/8 inches]
   Height – 648mm [25 1/2 inches] (with tape drum)
   Width – 105mm [4-1/8 inches] (without mounting spacers)
   Weight – Packaged: 8.6kg [19 lbs.] Unpackaged: 7.7kg [17 lbs.]

(Specifications *continued* on next page.)

Specifications *(continued)*



*** This dimension can be reduced to 90mm [3-1/2 in.] when both heads are converted to 50mm [2 in.] tape leg lengths.**

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 following points making installations:

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

1. The box conveying system must positively propel the box in a continuous motion, not exceeding 0.40 m/s [80 feet per minute], past the taping head assembly since the box motion actuates the taping mechanism.

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

2. If a pusher/cleated conveyor is used, steps should be taken in conveyor to prevent pusher from contacting applying or buffing roller arms (resulting in damage to 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 High Speed Upper Taping Head is supplied with a buffing arm guard. Adjustments to guard may be required to install taping head into some older design case sealers.

4. Mounting studs are provided with the taping head, but special installations may require alternate mounting means.
5. Box hold-down/guide skis should be provided and taping head mounted so that 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 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, conveyor speed at which the product moves through 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 48mm [2 inch] wide tape. If it is necessary to align the tape or to apply narrower tapes, refer to "Adjustments – Tape Web Alignment" set-up procedure.

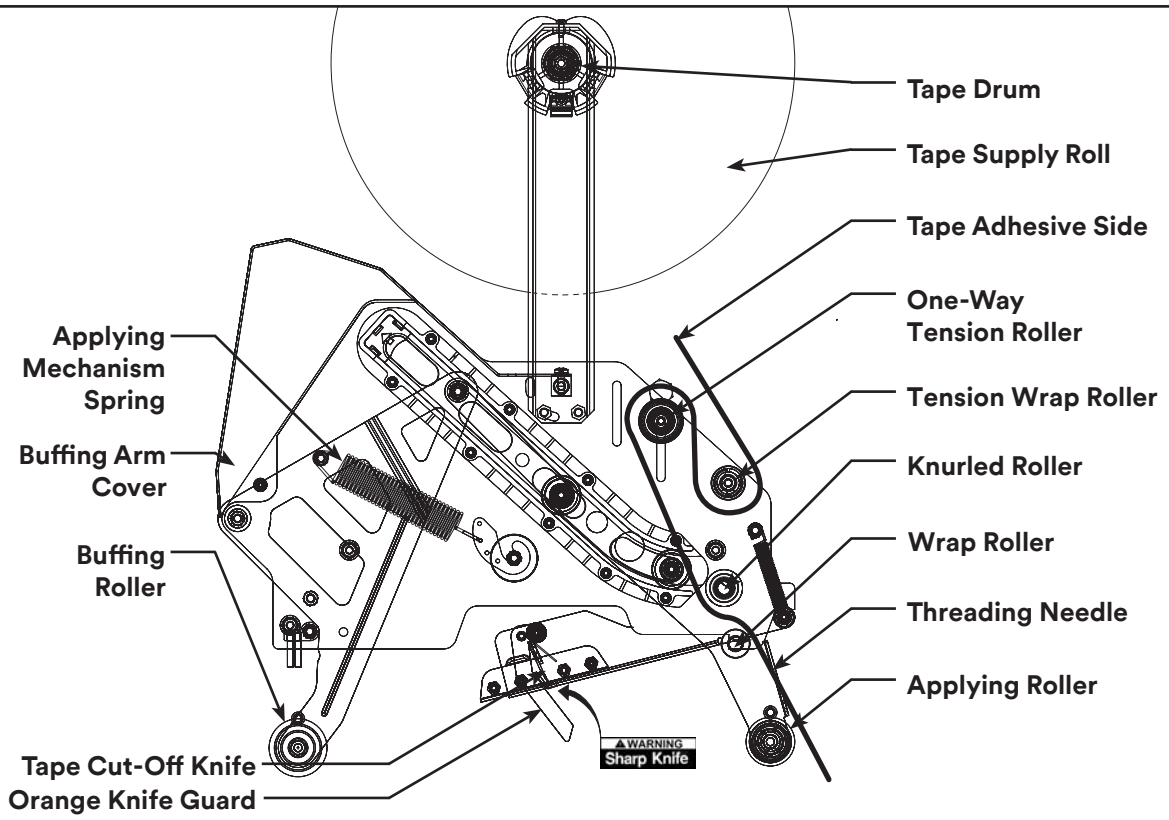


Figure 3-1 Taping Head Components/Threading Diagram - Upper Head (Left Side View)

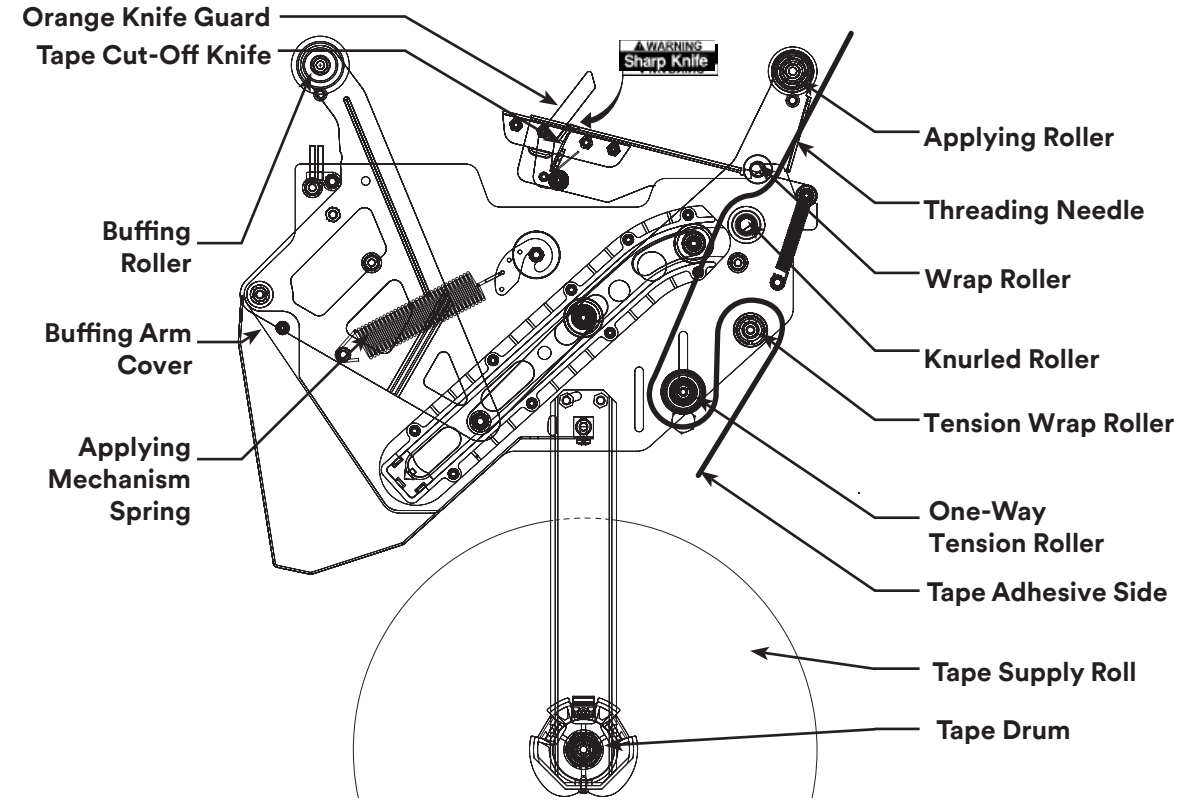


Figure 3-2 Taping Head Components/Threading Diagram - Lower Head (Left Side View)

WARNING

- To reduce the risk associated with 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.

Tape Loading – Upper Taping Head

1. Place the upper taping head in a convenient working position.
2. Use **Figures 3-3/3-5** and tape threading label. Position tape roll so adhesive side of tape faces front of taping head as it's pulled from 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 threading needle down until tape travels between apply plate and ears of apply arm (Position 4) until extends past apply roller. When threaded adhesive side of tape should face knurled rollers at position 2 and also position 3.
6. Cut away any excess tape.

Important – Do not cut against 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. Lower taping head is loaded and threaded in same manner as upper head.

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

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

Figure 3-3

Insert threading needle through rollers in direction indicated by arrows.

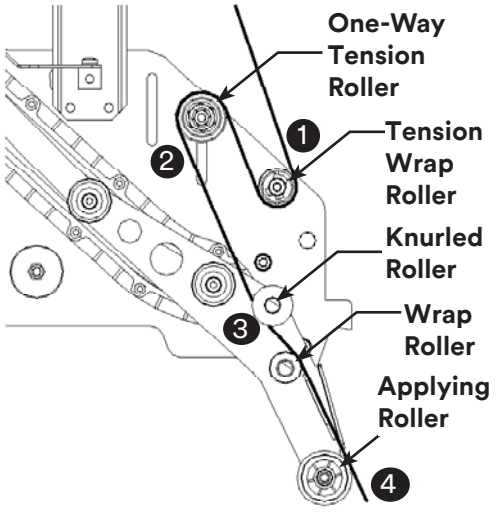


Figure 3-3 Tape Loading/Threading

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.

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.

⚠ 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.

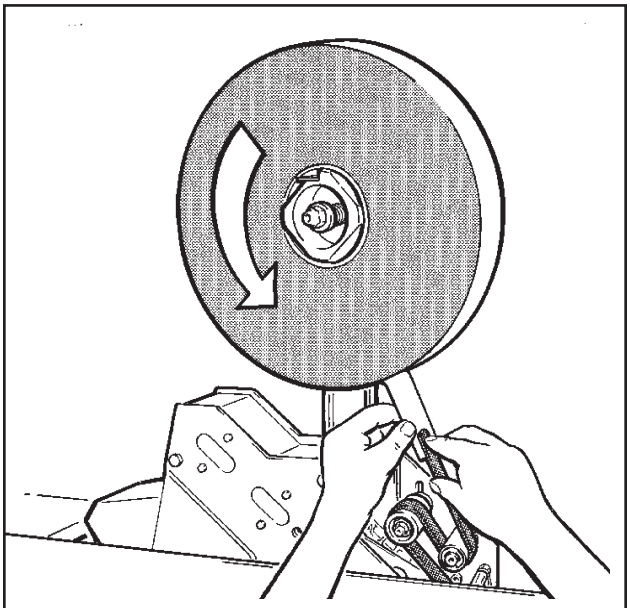


Figure 3-4 Tape Loading/Threading

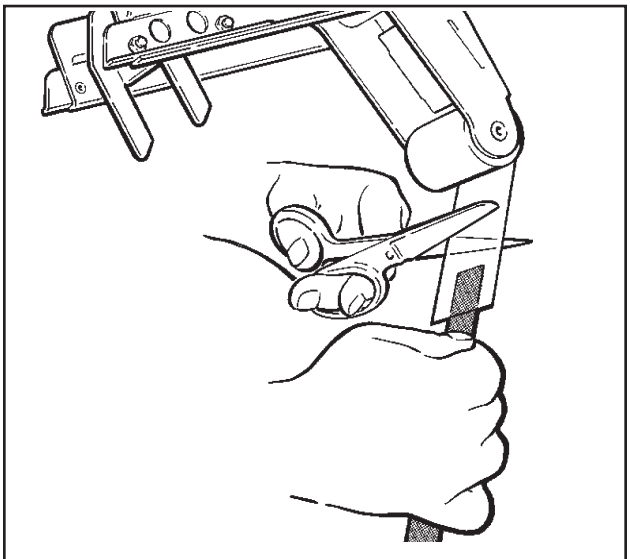


Figure 3-5 Tape Loading/Threading

Maintenance

The AccuGlide™ 3 High Speed 2 Inch Taping Head has been designed for long, trouble free service. The taping head will perform best when it receives routine maintenance and cleaning. Taping head components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions of the head or to the product.

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

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.
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 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

To reduce adhesive build-up, the taping heads are equipped with a factory pre-lubricated felt oiler pad that provides a film of oil on the cutting edge of the blade. Blade maintainance should include keeping the felt oiler pad saturated with Silicone.

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

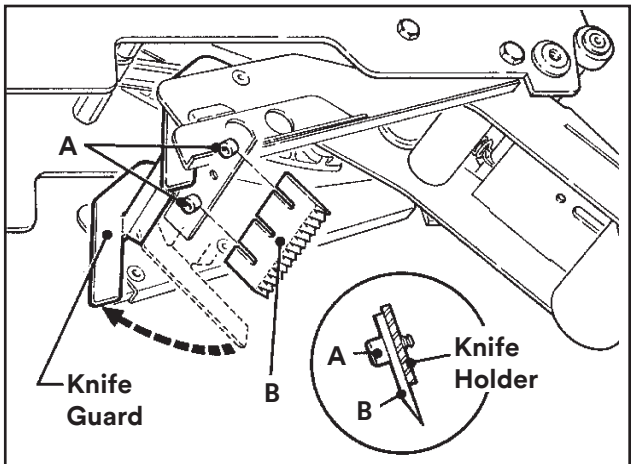


Figure 4-1 Blade Replacement

⚠ 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.

(Maintenance *continued* on next page.)

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 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 4mm hex key wrench into this socket after removing one screw to hold the shaft for removal of the second screw. See **Figure 4-2.**

⚠ 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

⚠ 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.

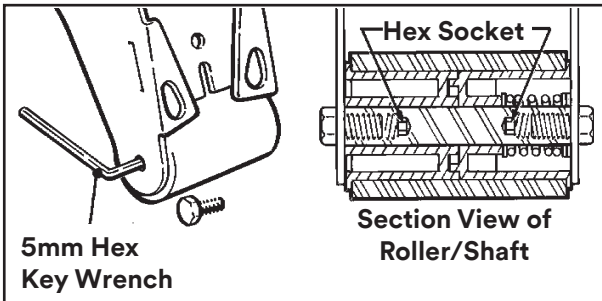


Figure 4-2 Roller Shaft Section View

Adjustments

Tape Latch Alignment – Figure 5-1

The Latching tape drum assembly is pre-set to accommodate 48mm [2 inch] wide tape. 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 latch to position that corresponds to the tape core width.
3. Replace screw in new latch location.

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

1. Loosen locking hex nut behind tape drum bracket on tape drum shaft. Use an adjustable wrench or 25mm open end wrench.
2. Using 5mm Hex Wrench, turn tape drum shaft in/out to center tape web.
3. Tighten locking hex nut to secure the adjustment.

No other components require adjustment for tape web alignment.

Tape Drum Friction Brake – Figure 5-3

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

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

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

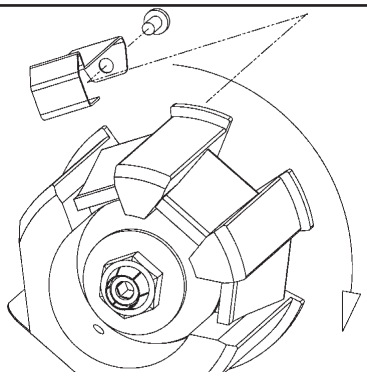


Figure 5-1 Tape Latch Alignment

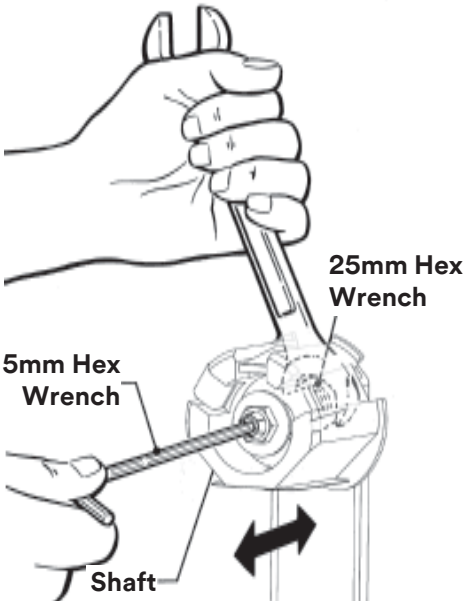


Figure 5-2 Tape Web Alignment

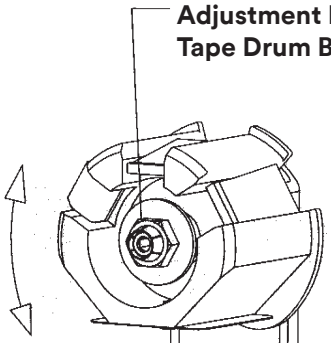


Figure 5-3 Tape Drum Friction Brake

(adjustments *continued* on next page.)

Applying Mechanism Spring

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

The applying mechanism spring, shownin **Figures 5-4A and 5-4B**, controls applying/buffing roller pressure on box and returns the mechanism to 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 trailing surface of box increase spring pressure. If front of box is being crushed by applying roller decrease spring pressure. Removing spring end loop from spring holder and placing loop in other holes provided to adjust spring pressure (see **Figure 5-4B**.

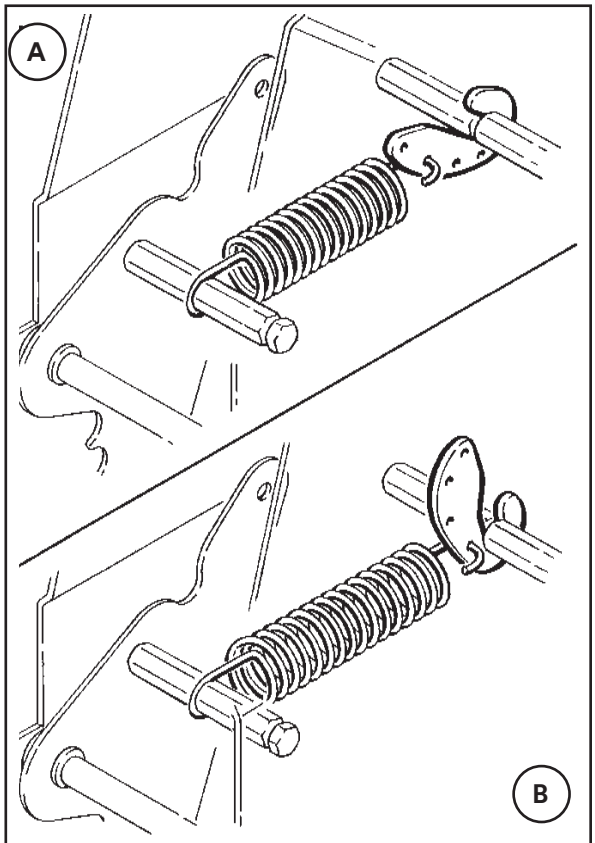


Figure 5-4 Applying Mechanism Spring

One-Way Tension Roller
Figure 5-5

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

To Adjust Tension:

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

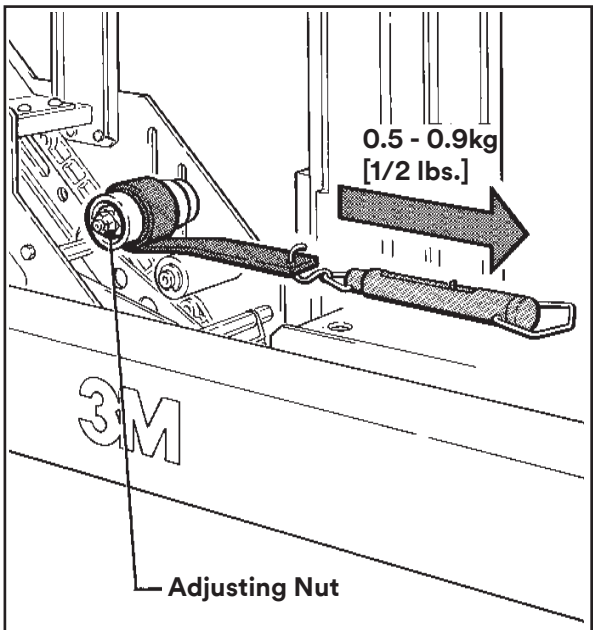


Figure 5-5 One-Way Tension Roller

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

(Adjustments *continued* on next page.)

Tape Leg Length

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.

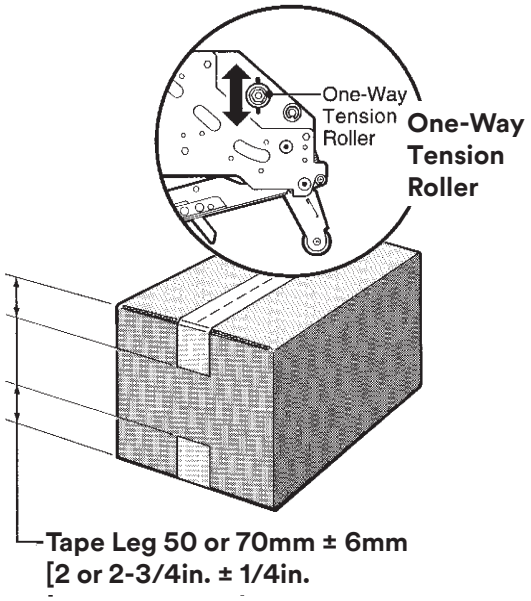


Figure 5-6 Leading Tape Leg Length

Changing Tape Leg Length from 70 to 50mm [2 3/4-2 Inches] – Figure 5-7

Note – When changing tape leg length, both upper and lower heads must be adjusted to apply 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 with original fasteners.
3. Remove cut-off bracket extensions from position “B”.
4. Remount cut-off bracket extensions in forward position “B-B”.
5. Remove/retain 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.

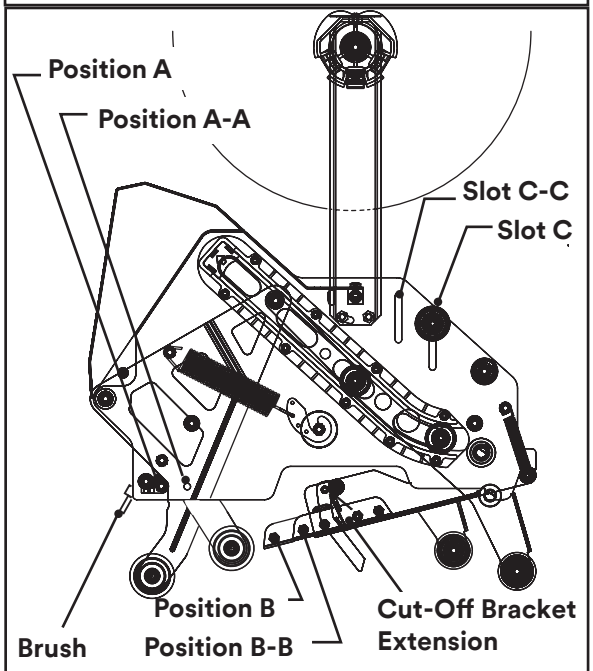


Figure 5-7 Changing Tape Leg Length

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

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.

Toubleshooting

Troubleshooting Guide

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

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	Re thread 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	Re thread 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 centerline of applying roller
	The one-way tension roller is defective	Replace the one-way tension roller
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps not of equal length	Check box specifications

Spare Parts/Service Information

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 - 2 inch

Qty.	Part Number	Description
4	78-8076-4500-3	Stud – Mounting
1	78-8137-3311-6	Spring – Upper Extension
1	78-8017-9173-8	Blade – 65mm/2.56 Inch
2	78-8052-6602-6	Spring – Cutter
1	78-8076-4726-4	Tool – Tape Threading

AccuGlide™ 3 Lower Taping Head - 2 inch

Qty.	Part Number	Description
1	78-8017-9173-8	Blade – 65mm/2.56 Inch
2	78-8052-6602-6	Spring – Cutter
4	78-8076-4500-3	Stud – Mounting
	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.	Part Number	Description
1	78-8057-6179-4	Roller – Applying
1	78-8057-6178-6	Roller – Buffing
1	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 High Speed 2 Inch Upper Taping Head, Type 11400

AccuGlide™ 3 High Speed 2 Inch Lower Taping Head, Type 11400

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.

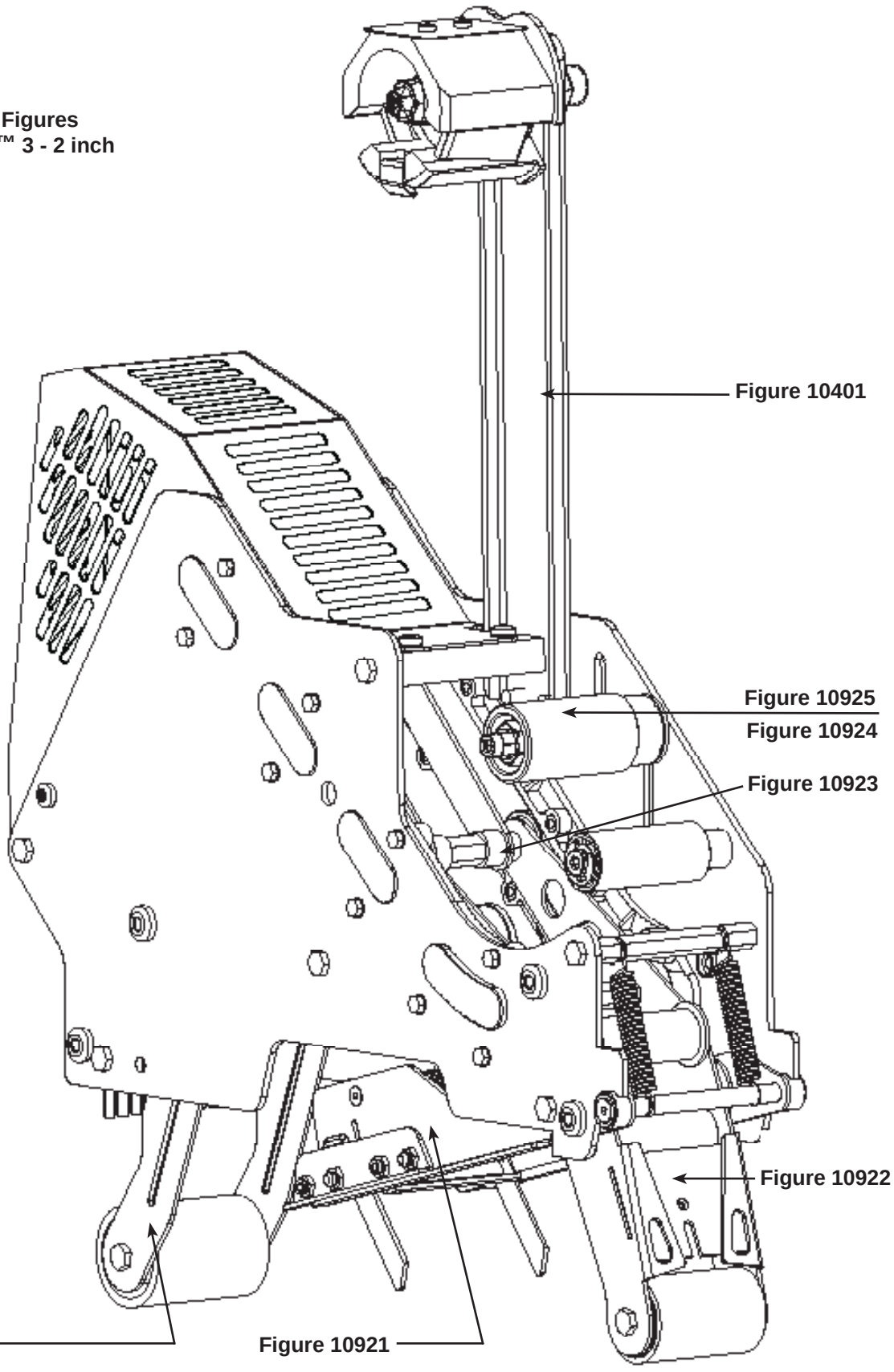
3. The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.

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.

Tape Head Figures
AccuGlide™ 3 - 2 inch



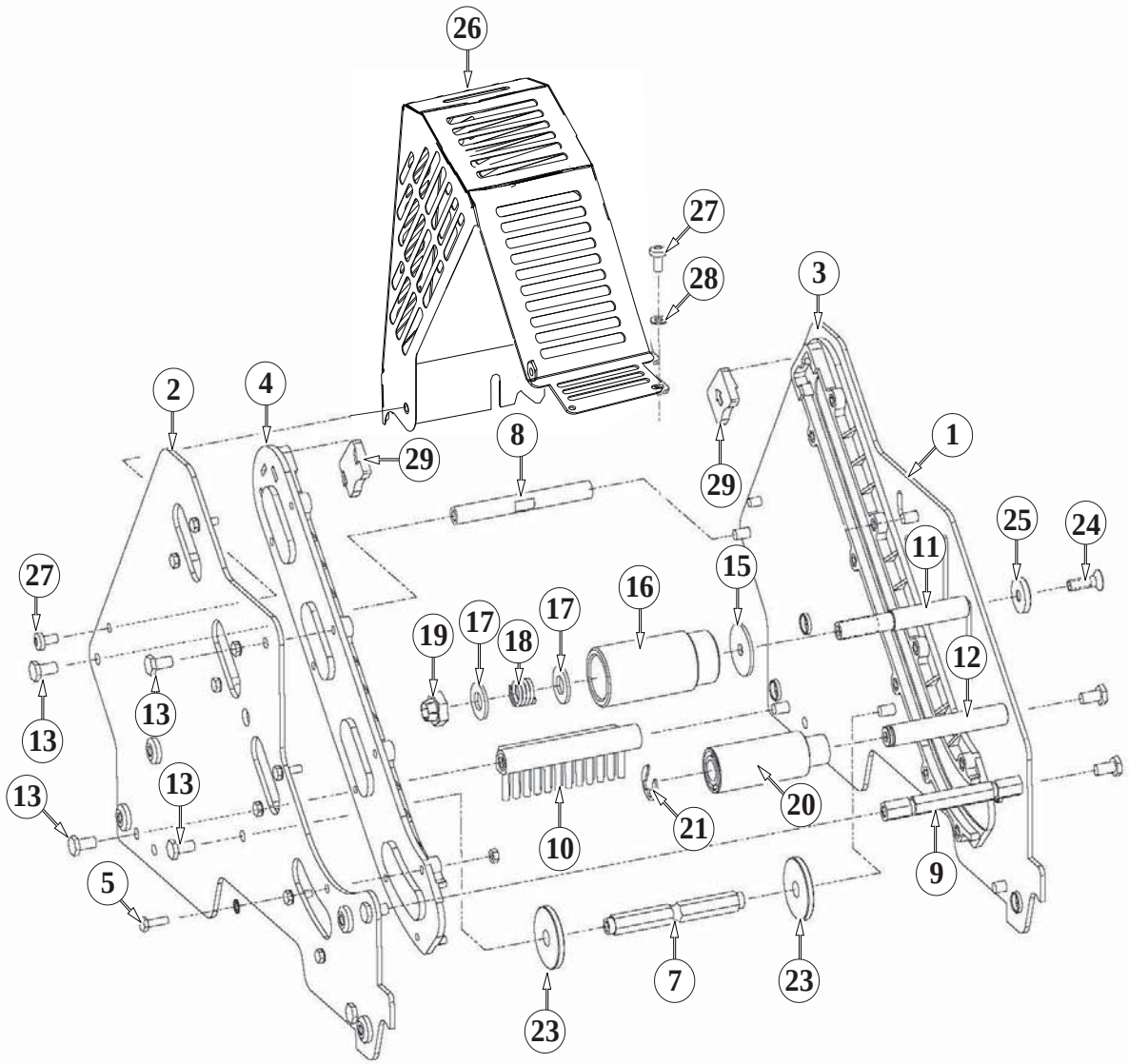


Figure 10925 – Upper Head

Figure 10925 – 2" Upper Head

Ref. No.	3M Part No.	Description
10925-1	78-8137-3294-4	Frame – Tape Mount Upper Assembly
10925-2	78-8137-3295-1	Frame – Front Upper Assembly
10925-3	78-8068-4143-9	Guide – #1
10925-4	78-8068-4144-7	Guide – #2
10925-5	78-8060-7818-0	Screw – Hex Hd, M4 x 12
10925-6	78-8010-7416-8	Nut – Hex Jam, M4
10925-7	78-8070-1251-9	Spacer – Spring
10925-8	78-8137-3298-5	Shaft - Pivot 90mm
10925-9	78-8052-6560-6	Spacer – Front
10925-10	78-8060-7936-0	Brush Assembly
10925-11	78-8052-6564-8	Shaft – Tension Roller
10925-12	78-8052-6568-9	Shaft – Wrap Roller
10925-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10925-15	78-8100-1009-6	Washer – Special
10925-16	78-8052-6565-5	Roller – Top Tension
10925-17	26-1004-5510-9	Washer – Plain, M10
10925-18	78-8052-6567-1	Spring – Compression
10925-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
10925-20	78-8052-6569-7	Roller – Wrap
10925-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
10925-22	78-8076-4500-3	Stud – Mounting (not shown)
10925-23	78-8076-5242-1	Stop – Cut-Off Frame
10925-24	78-8060-8179-6	Screw – Flat Hd Hex, M6 x 20
10925-25	78-8076-5477-3	Washer – Special /6.5 x 20 x 4
10925-26	78-8137-3299-3	Guard – Head
10925-27	78-8060-8087-1	Screw – M5 x 10
10925-28	78-8005-5741-1	Washer – Flat, M5
10925-29	78-8133-9615-3	Bumper
10925-30	78-8133-9605-4	Label – Threading, English Language
10925-31	78-8076-4716-5	Star Washer 4mm

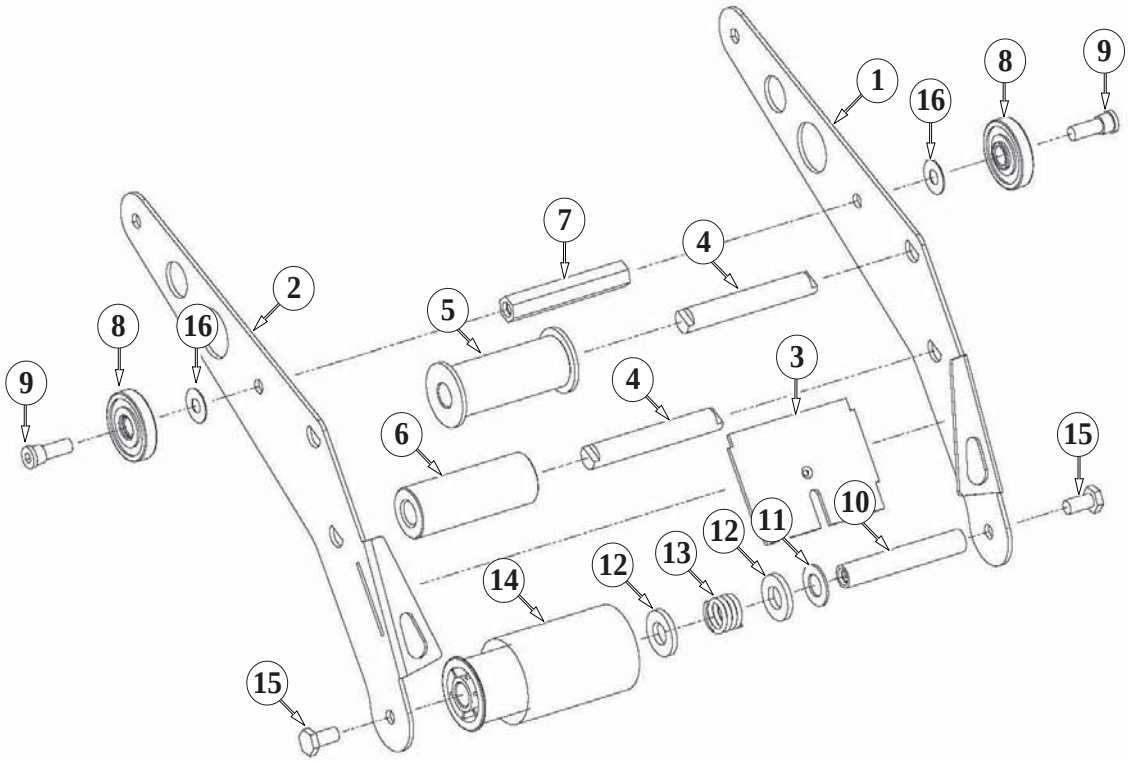


Figure 10922 – Upper and Lower Heads

Figure 10922 – 2" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10922-1	78-8133-9509-8	Applying Arm #1
10922-2	78-8133-9510-6	Applying Arm #2
10922-3	78-8070-1221-2	Plate – Tape
10922-4	78-8070-1309-5	Shaft Roller
10922-5	78-8070-1367-3	Roller – Knurled Assembly
10922-6	78-8070-1266-7	Roller – Wrap
10922-7	78-8052-6580-4	Spacer
10922-8	78-8017-9082-1	Bearing – Special, 30 mm
10922-9	78-8017-9106-8	Screw – Bearing Shoulder
10922-10	78-8052-6575-4	Shaft – Roller
10922-11	78-8017-9074-8	Washer – Nylon, 15 mm
10922-12	26-1004-5510-9	Washer – Friction
10922-13	78-8052-6567-1	Spring – Compression
10922-14	78-8137-1438-9	Assembly– Applying Roller
10922-15	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10922-16	78-8094-6151-6	Washer - Flat, 6.5 ID x 15 OD x 0.5 Thk

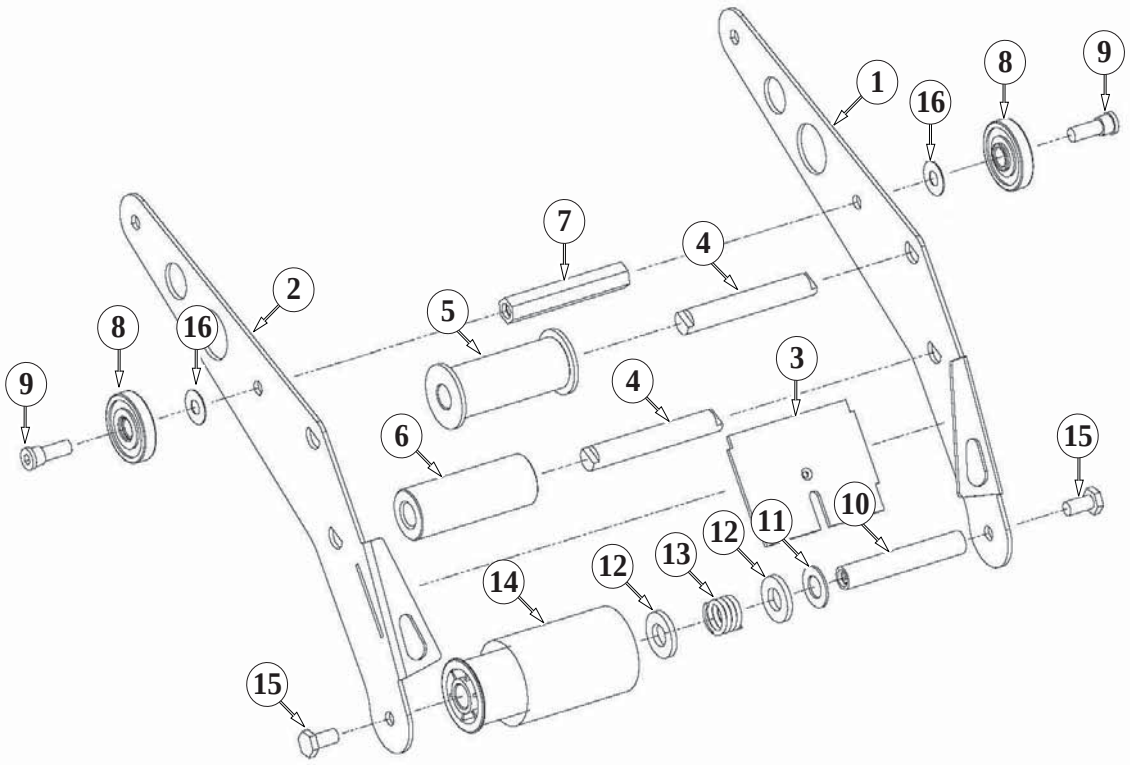


Figure 10919 – Upper Head

Figure 10919 – 2" Upper Head

Ref. No.	3M Part No.	Description
10919-1	78-8137-3300-9	Buffing Arm – Sub Assembly
10919-2	78-8137-3301-7	Buffing Arm – Sub Assembly
10919-3	78-8052-6575-4	Shaft – Roller
10919-4	78-8137-1398-5	Roller - Buffing Assembly
10919-5	78-8070-1220-4	Spacer – Spring
10919-6	78-8052-6580-4	Spacer
10919-7	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10919-8	78-8137-3311-6	Spring – Upper (100 fpm)
10919-9	78-8070-1244-4	Holder – Spring

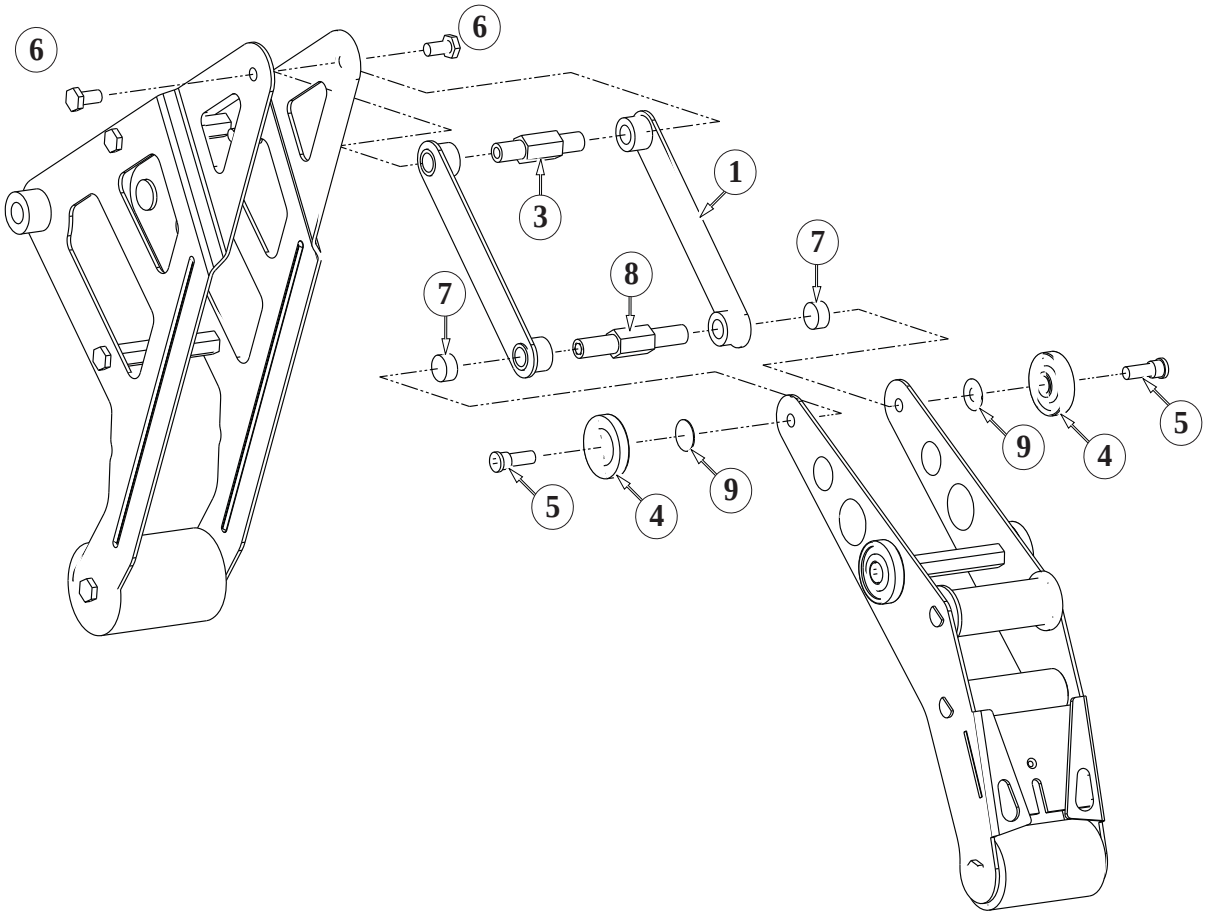


Figure 10923 – Upper and Lower Heads

Figure 10923 – 2" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10923-1	78-8137-3302-5	Link – Assembly
10923-3	78-8137-3304-1	Shaft – Pivot, Buffing
10923-4	78-8017-9082-1	Bearing – Special 30 mm
10923-5	78-8017-9106-8	Screw – Bearing Shoulder
10923-6	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10923-7	78-8137-3305-8	Spacer – Applying Pivot
10923-8	78-8137-3306-6	Shaft – Pivot, Applying
10923-9	78-8094-6151-6	Washer - Flat, 6.5 ID x 15 OD x 0.5 Thk

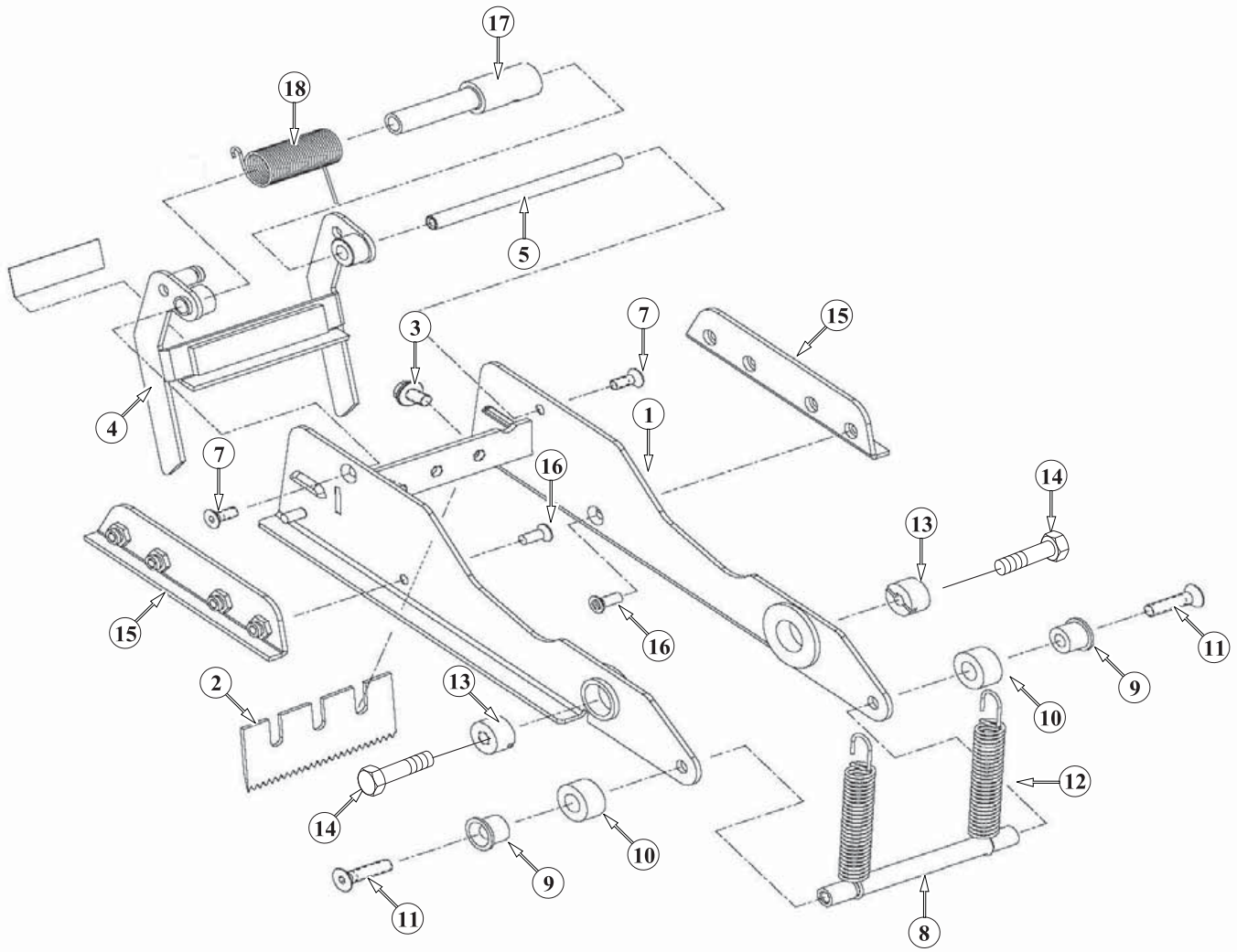


Figure 10921 – Upper and Lower Heads

Figure 10921 – 2" Upper and Lower Heads

Ref. No.	3M Part No.	Description
10921-1	78-8137-3307-4	Frame – Cut-Off Weldment
10921-2	78-8017-9173-8	Blade – 65 mm/2.56 Inch
10921-3	26-1003-8596-7	Screw - Hex Hd M5 x 8 w/ Ext. Tooth Lockwasher
10921-4	78-8070-1371-5	Blade Guard Assembly – W/English Language Label
10921-5	78-8052-6597-8	Shaft – Blade Guard
10921-7	26-1005-4758-2	Screw – Flat Hd, Soc Dr, M4 x 10
10921-8	78-8017-9135-7	Shaft – Spacer
10921-9	78-8052-6600-0	Spacer
10921-10	78-8070-1269-1	Bumper
10921-11	26-1005-4757-4	Screw – Flat Hd, Soc Dr, M5 x 20
10921-12	78-8052-6602-6	Spring – Cutter
10921-13	78-8017-9132-4	Pivot – Cutter Lever
10921-14	26-1003-5828-7	Screw – Spec, Hex Hd, M6 x 10
10921-15	78-8137-3308-2	Slide – Extension
10921-16	26-1008-6574-5	Screw – Flat Hd, Phil Dr, M4 x 10
10921-17	78-8113-7031-7	Bushing – 58.5mm Long
10921-18	78-8113-7030-9	Spring – Torsion
10921-19	78-8070-1335-0	Label – Warning, English

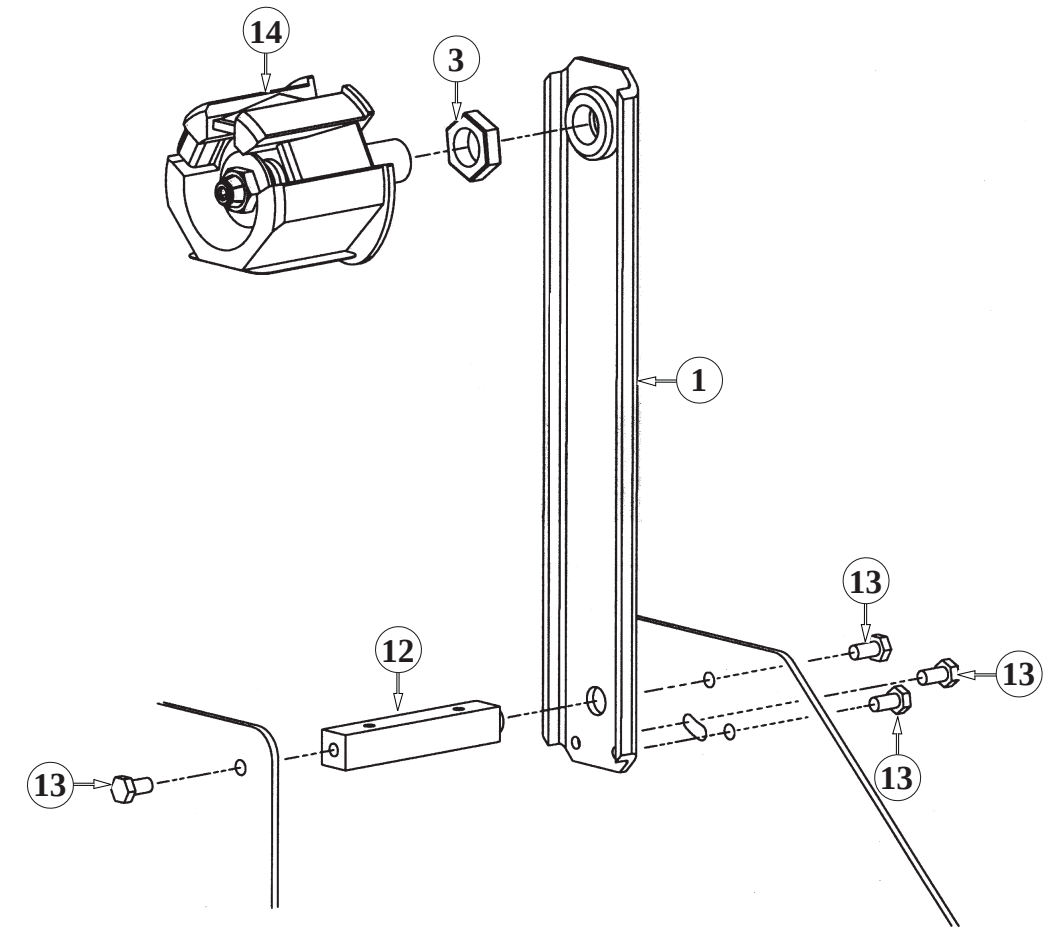


Figure 10401 – Upper and Lower Heads

Figure 10401 – 2" Latch Upper and Lower Heads

Ref. No.	3M Part No.	Description
10401-1	78-8070-1395-4	Bracket – Bushing Assembly
10401-2	78-8076-4519-3	Shaft – Tape Drum, 50mm
10401-3	78-8017-9169-6	Nut – M18 x 1
10401-4	78-8098-8827-0	Tape Drum Sub Assembly – 2 Inch Wide
10401-5	78-8098-8749-6	Tape Drum
10401-6	78-8098-8817-1	Leaf Spring
10401-7	26-1002-5753-9	Screw – Self Tapping
10401-8	78-8060-8172-1	Washer – Friction
10401-9	78-8052-6271-0	Washer – Tape Drum
10401-10	78-8100-1048-4	Spring – Core Holder
10401-11	78-8017-9077-1	Nut – Self Locking, M10 x 1
10401-12	78-8100-1046-8	Spacer – Bracket
10401-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10401-14	78-8098-8814-8	Tape Drum Assembly – 2 Inch Head
10401-15	26-1004-5510-9	Washer – Plain, M10
10401-16	78-8098-8816-3	Latch – Tape Drum

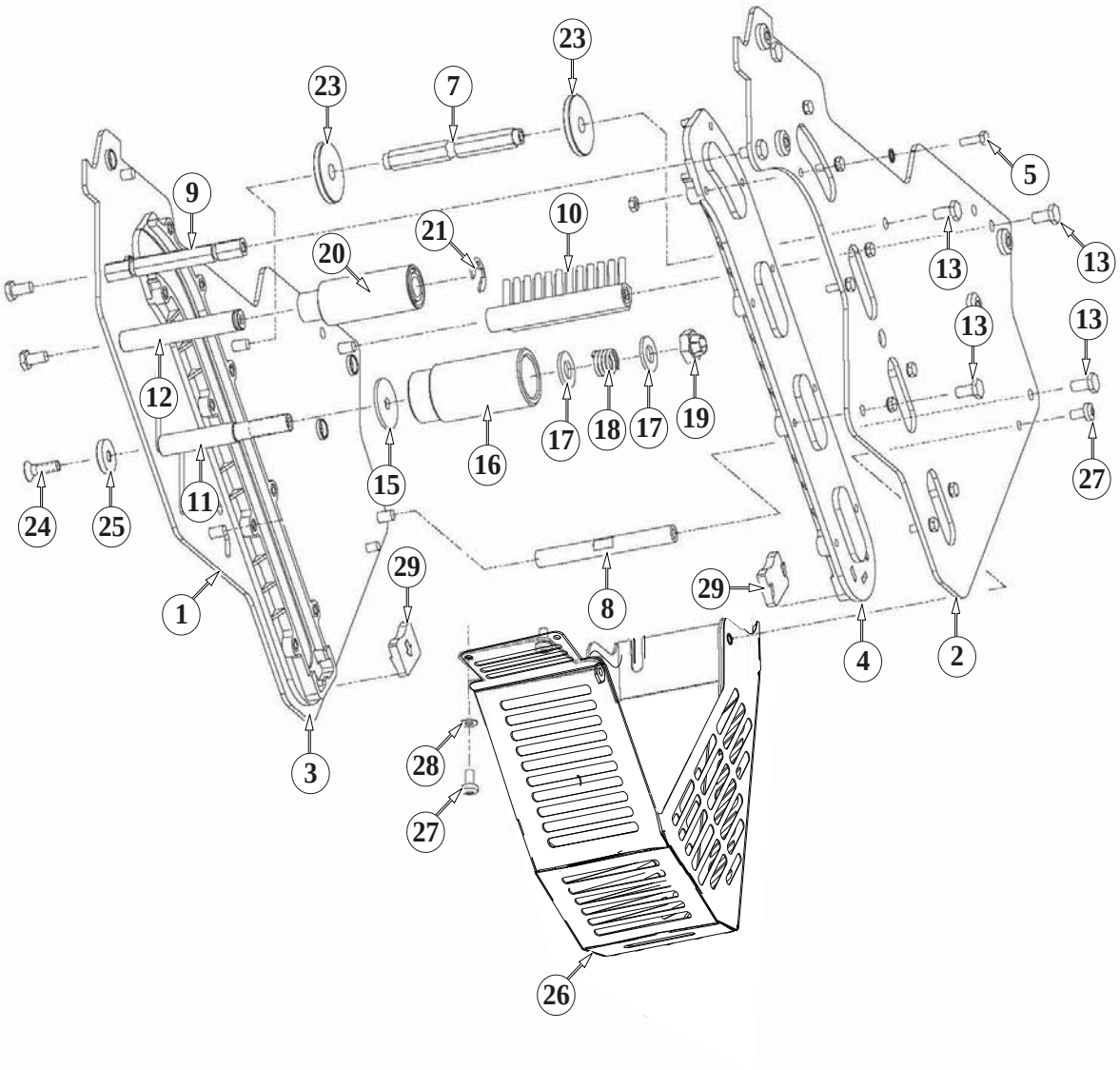


Figure 10924 – Lower Head

Figure 10924 – 2" Lower Head

Ref. No.	3M Part No.	Description
10924-1	78-8137-3296-9	Frame – Tape Mount Lower Assembly
10924-2	78-8137-3297-7	Frame – Front Lower Assembly
10924-3	78-8068-4144-7	Guide – #2
10924-4	78-8068-4143-9	Guide – #1
10924-5	78-8060-7818-0	Screw – Hex Hd, M4 x 12
10924-6	78-8010-7416-8	Nut – Hex, M4
10924-7	78-8070-1251-9	Spacer – Spring
10924-8	78-8054-3298-5	Spacer – 10 x 10 x 90 mm
10924-9	78-8052-6560-6	Spacer – Front
10924-10	78-8060-7936-0	Brush Assembly
10924-11	78-8052-6564-8	Shaft – Tension Roller
10924-12	78-8052-6568-9	Shaft – Wrap Roller
10924-13	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10924-15	78-8100-1009-6	Washer – Special
10924-16	78-8052-6606-7	Roller – Tension Bottom
10924-17	26-1004-5510-9	Washer – Plain, M10
10924-18	78-8052-6567-1	Spring – Compression
10924-19	78-8017-9077-1	Nut – Self Locking, M10 x 1
10924-20	78-8052-6569-7	Roller – Wrap
10924-21	26-1000-1613-3	Ring – Retaining, Tru-Arc #1-420-0120-100
10924-22	78-8076-4500-3	Stud – Mounting (not shown)
10924-23	78-8076-5242-1	Stop – Cut-Off Frame
10924-24	78-8060-8179-6	Screw – Flat Hd Hex, M6 x 20
10924-25	78-8076-5477-3	Washer – Special /6.5 x 20 x 4
10924-26	78-8137-3299-3	Guard – Head
10924-27	78-8060-8087-1	Screw – M5 x 10
10924-28	78-8005-5741-1	Washer – Flat, M5
10924-29	78-8076-4734-8	Bumper
10924-30	78-8133-9606-2	Label – Threading, English Language
10924-31	78-8076-4716-5	Star Washer 4mm

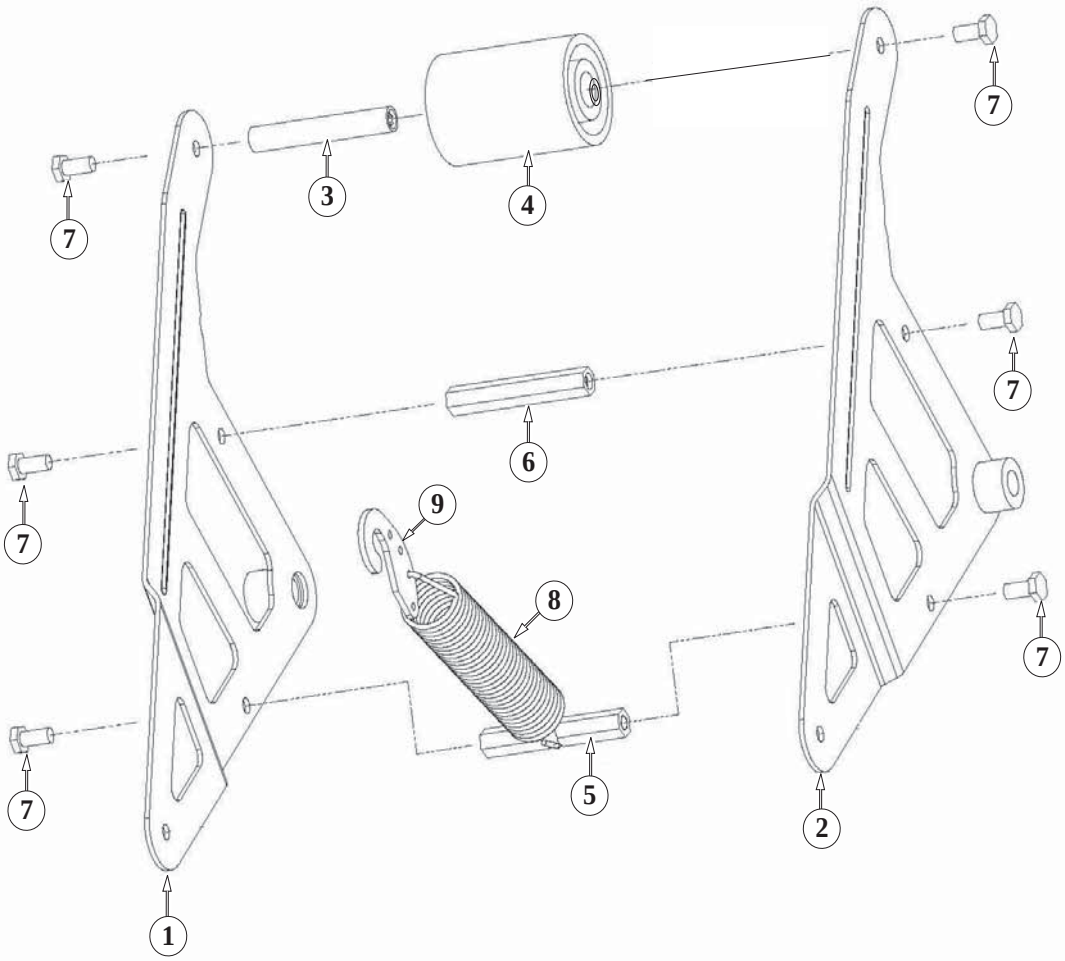


Figure 10920 – Lower Head

Figure 10920– Lower Head

Ref. No.	3M Part No.	Description
10920-1	78-8137-3300-9	Buffing Arm – Sub Assembly
10920-2	78-8137-3301-7	Buffing Arm – Sub Assembly
10920-3	78-8052-6575-4	Shaft – Roller
10920-4	78-8137-1398-5	Roller - Buffing Assembly
10920-5	78-8070-1220-4	Spacer – Spring
10920-6	78-8052-6580-4	Spacer
10920-7	26-1003-5829-5	Screw – Hex Hd, M6 x 12
10920-8	78-8137-3312-4	Spring – Lower (100 fpm)
10920-9	78-8070-1244-4	Holder – Spring

3M Science. Applied to Life.™

Instructions and Parts List

3M-Matic™ Accuglide™ 3

Type 11400

Upper and Lower

High Speed Taping Heads

3 Inch

Serial #: _____

For reference, record machine serial number 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.

Replacement Parts and Service Information

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.

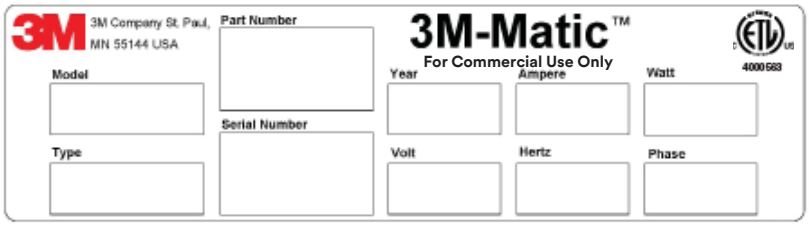
Technical Assistance/Replacement Parts and Additional Manuals:

Contact your local service provider 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: Accuglide 3 - 3 inch - Type 11400 - 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.

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.

Table of Contents - Manual 2: Accuglide 3 High Speed - 3 inch

(Upper and Lower Taping Heads)

Warranty

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™ Accuglide 3 Taping Head Type 11400** with the following warranties:

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.

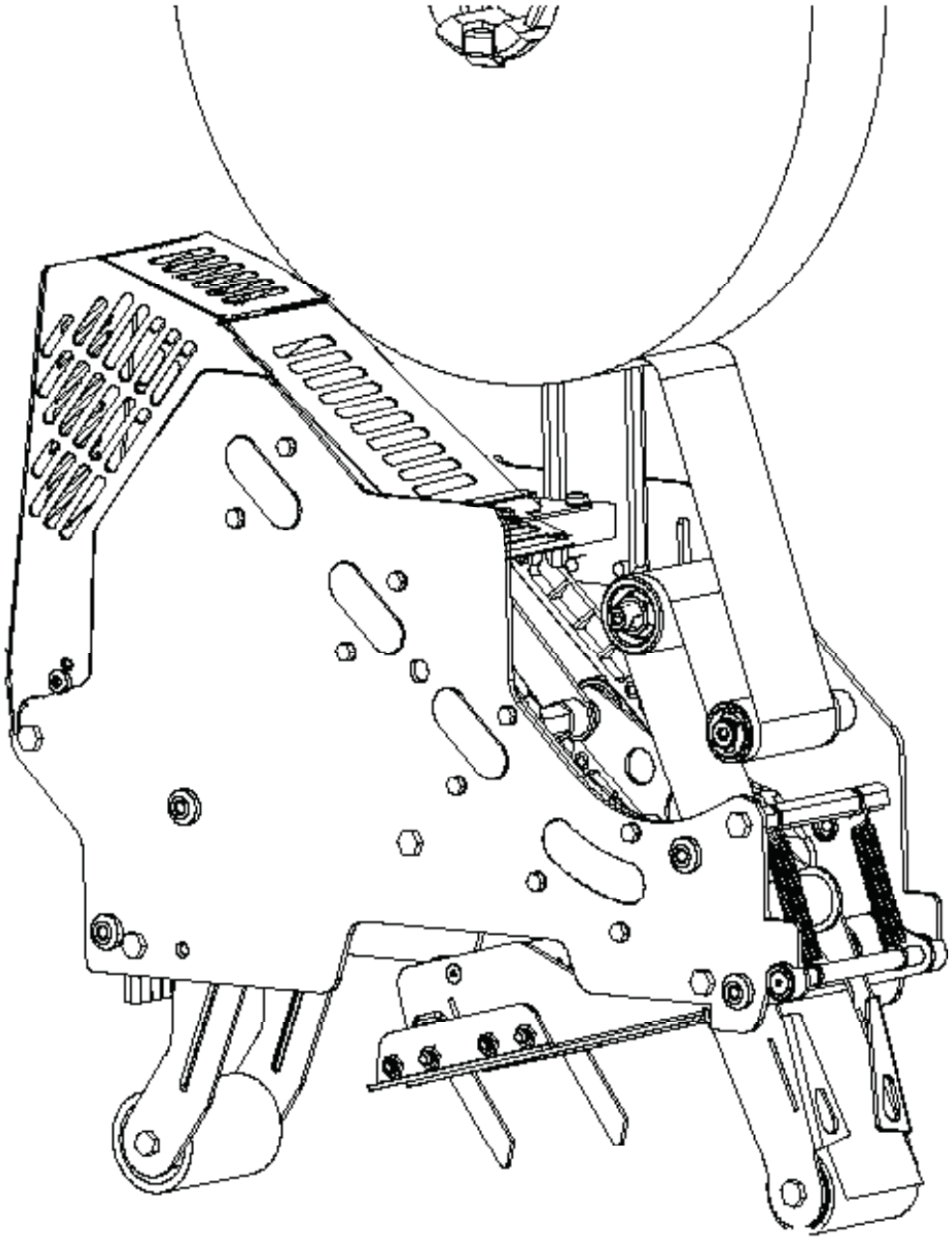
Limitation of Liability: Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from this 3M equipment, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including breach of warranty, breach of contract,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

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 Upper and Lower Taping Heads - 3 inch have been designed and tested for use with Scotch® pressure-sensitive film box sealing tape.



AccuGlide™ 3 Upper Taping Head - 3 inch, Type 11400

Taping Head Contents

AccuGlide™ 3 High Speed - 3 inch Upper and Lower Taping Heads consist 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 of the 3M-Matic™ Accugllide 3 (3 inch) 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition April 2016/ Copyright 3M 2016. All rights reserved The manufacturer reserves the right to change the product at any time without notice.

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 - Accuglide 3 - 3" - Type 11400 - 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.

Important Safeguards

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.

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

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

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

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 Safeguards *continued* on next page)

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.

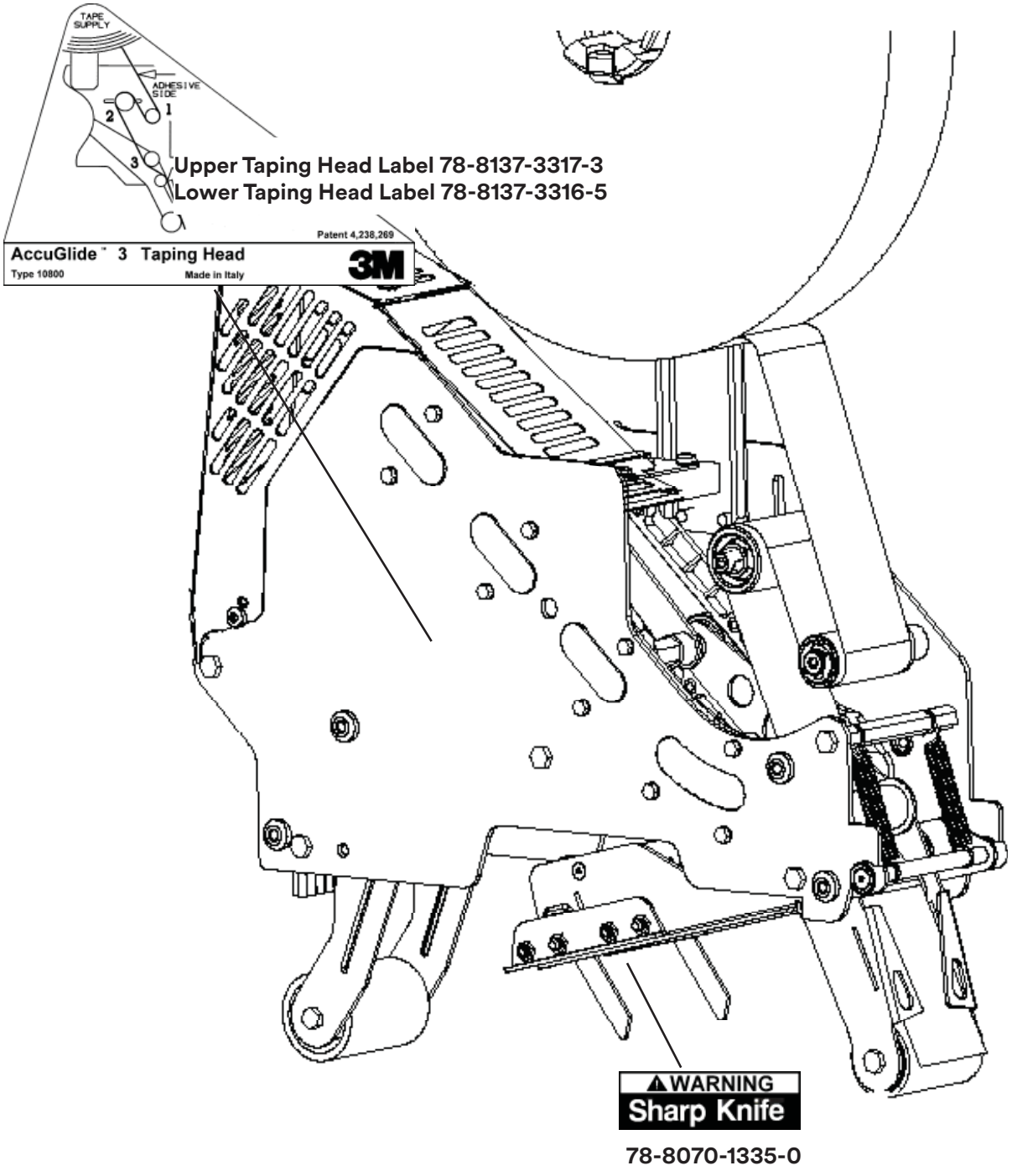


Figure 1-1 Replacement Labels/3M Part Numbers

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)		Limited by Case Sealer
90mm [3-1/2 inches] (with optional 2 inch leg length)		
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.

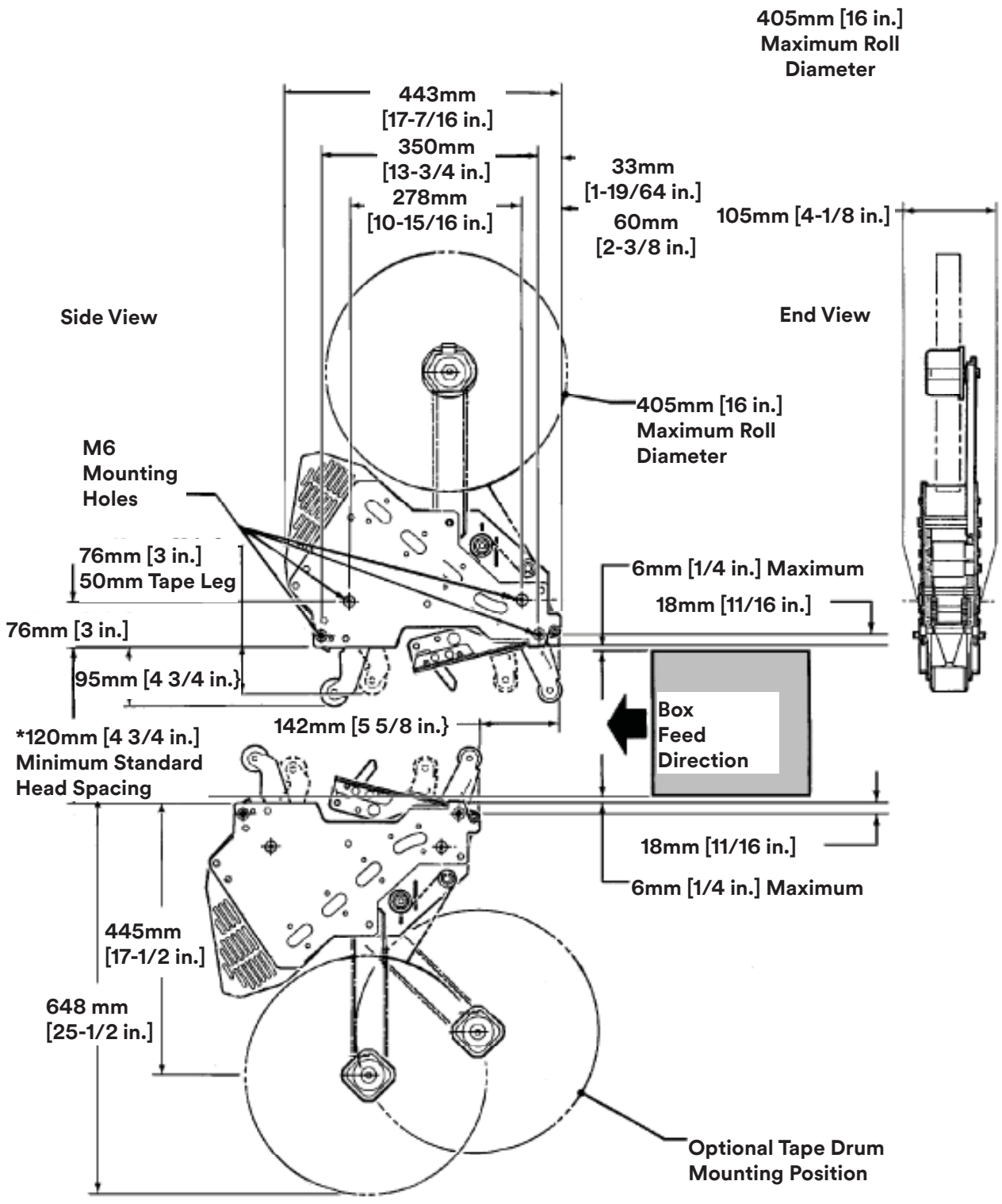
   Important – Taping heads should not be washed down or subjected to conditions causing moisture condensation on components.

8. **Taping Head Dimensions:**

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

(Specifications *continued* on next page.)

Specifications *(continued)*



*** This dimension can be reduced to 90mm [3-1/2 in.] when both heads are converted to 50mm [2 in.] tape leg lengths.**

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 following points making installations:

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

1. The box conveying system must positively propel the box in a continuous motion, not exceeding 0.40 m/s [80 feet per minute], past the taping head assembly since the box motion actuates the taping mechanism.

⚠ 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

2. If a pusher/cleated conveyor is used, steps should be taken in conveyor to prevent pusher from contacting applying or buffing roller arms (resulting in damage to 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 High Speed Upper Taping Head is supplied with a buffing arm guard. Adjustments to guard may be required to install taping head into some older design case sealers.

4. Mounting studs are provided with the taping head, but special installations may require alternate mounting means.
5. Box hold-down/guide skis should be provided and taping head mounted so that 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 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, conveyor speed at which the product moves through 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 48mm [2 inch] wide tape. If it is necessary to align the tape or to apply narrower tapes, refer to "Adjustments – Tape Web Alignment" set-up procedure.

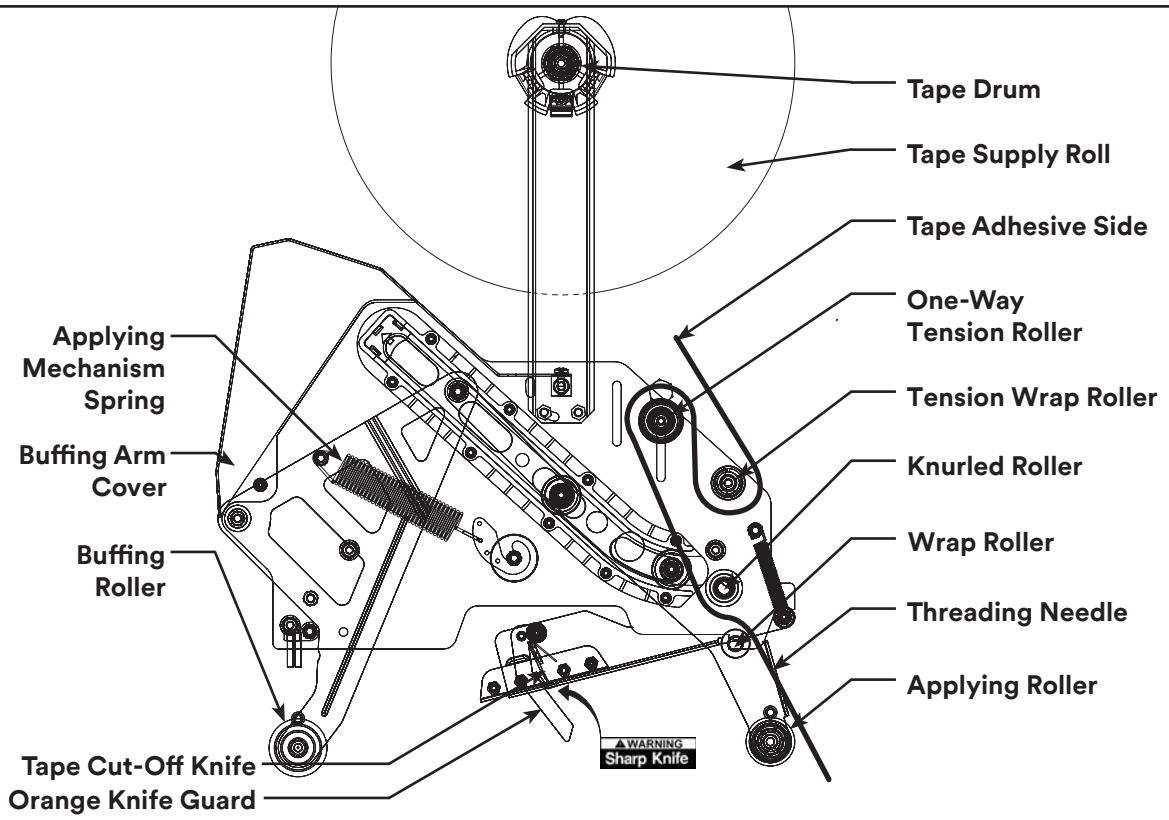


Figure 3-1 Taping Head Components/Threading Diagram - Upper Head (Left Side View)

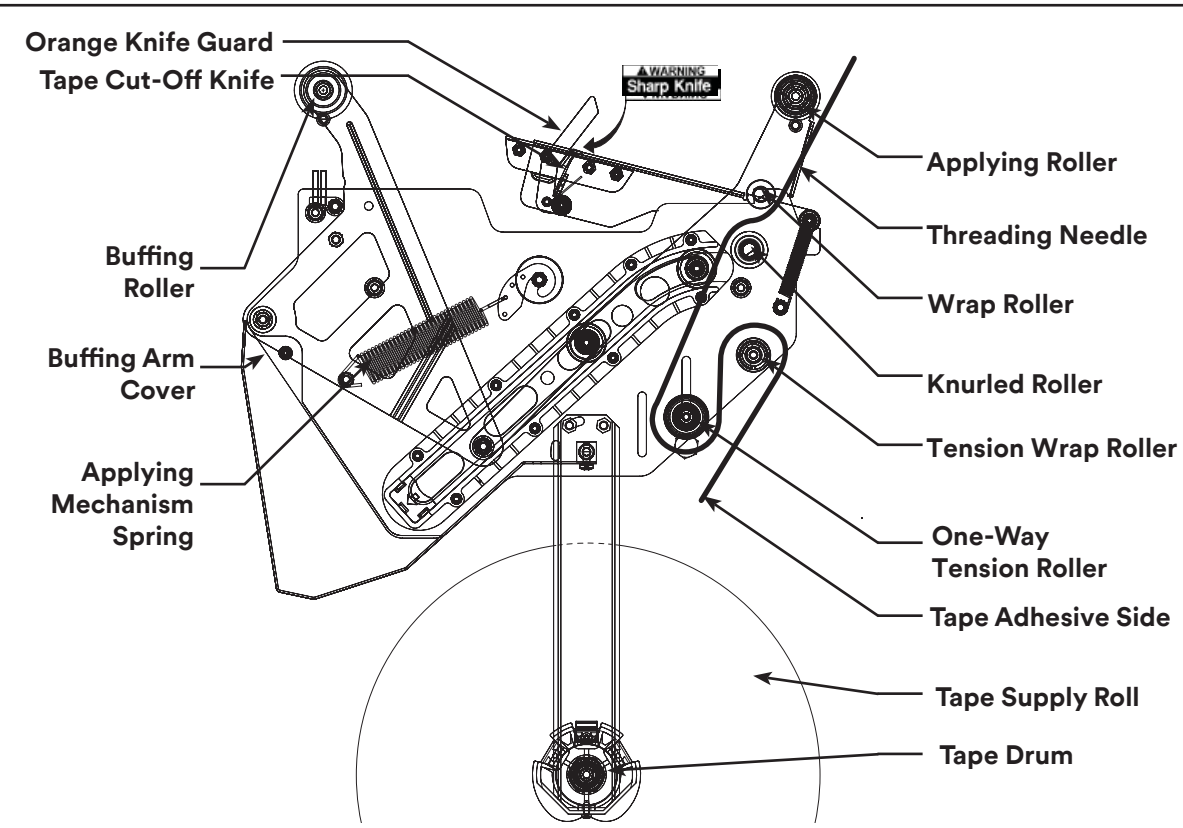


Figure 3-2 Taping Head Components/Threading Diagram - Lower Head (Left Side View)

⚠ WARNING

- To reduce the risk associated with 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.

Tape Loading – Upper Taping Head

1. Place the upper taping head in a convenient working position.
2. Use **Figures 3-3/3-5** and tape threading label. Position tape roll so adhesive side of tape faces front of taping head as it's pulled from 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 threading needle down until tape travels between apply plate and ears of apply arm (Position 4) until extends past apply roller. When threaded adhesive side of tape should face knurled rollers at position 2 and also position 3.
6. Cut away any excess tape.

Important – Do not cut against 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. Lower taping head is loaded and threaded in same manner as upper head.

⚠ 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

⚠ 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

Figure 3-3

Insert threading needle through rollers in direction indicated by arrows.

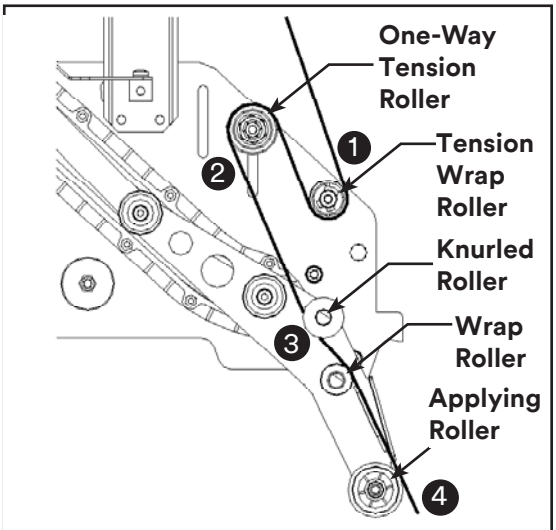


Figure 3-3 Tape Loading/Threading

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.

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.

⚠ 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.

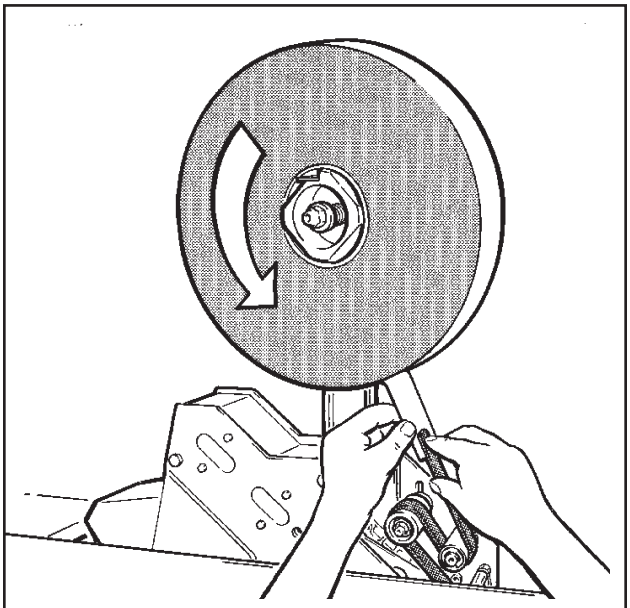


Figure 3-4 Tape Loading/Threading

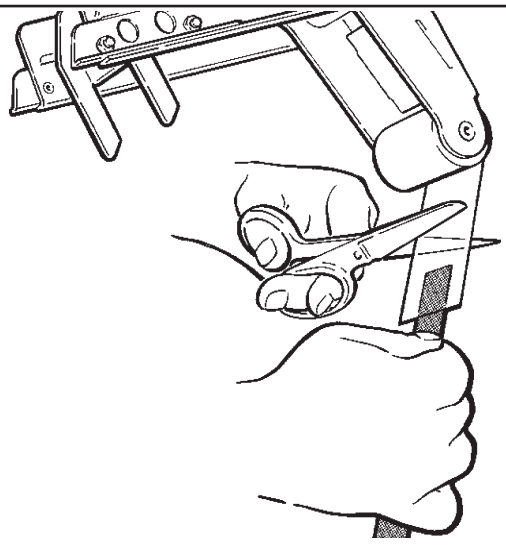


Figure 3-5 Tape Loading/Threading

Maintenance

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

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

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.
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 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

To reduce adhesive build-up, the taping heads are equipped with a factory pre-lubricated felt oiler pad that provides a film of oil on the cutting edge of the blade. Blade maintainance should include keeping the felt oiler pad saturated with Silicone.

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

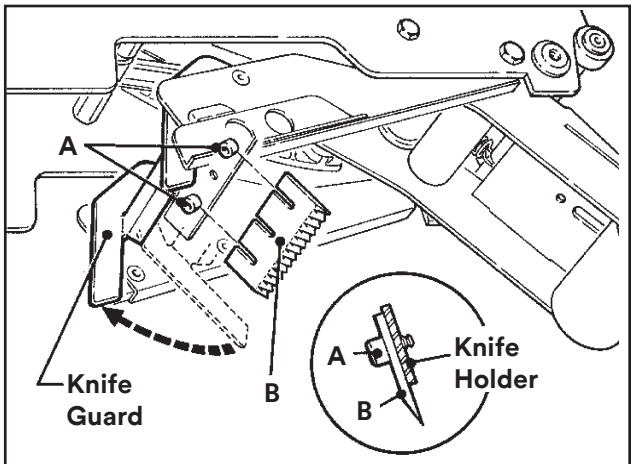


Figure 4-1 Blade Replacement

⚠ 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.

(Maintenance *continued* on next page.)

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 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 4mm hex key wrench into this socket after removing one screw to hold the shaft for removal of the second screw. See **Figure 4-2.**

⚠ 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

⚠ 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.

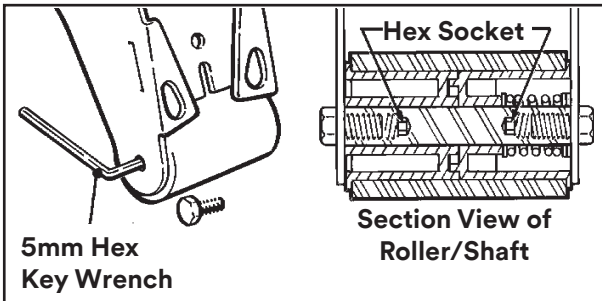


Figure 4-2 Roller Shaft Section View

Adjustments

Tape Latch Alignment – Figure 5-1

The Latching tape drum assembly is pre-set to accommodate 48mm [2 inch] wide tape. 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 latch to position that corresponds to the tape core width.
3. Replace screw in new latch location.

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

1. Loosen locking hex nut behind tape drum bracket on tape drum shaft. Use an adjustable wrench or 25mm open end wrench.
2. Using 5mm Hex Wrench, turn tape drum shaft in/out to center tape web.
3. Tighten locking hex nut to secure the adjustment.

No other components require adjustment for tape web alignment.

Tape Drum Friction Brake – Figure 5-3

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

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

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

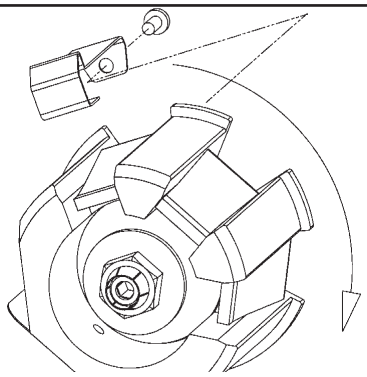


Figure 5-1 Tape Latch Alignment

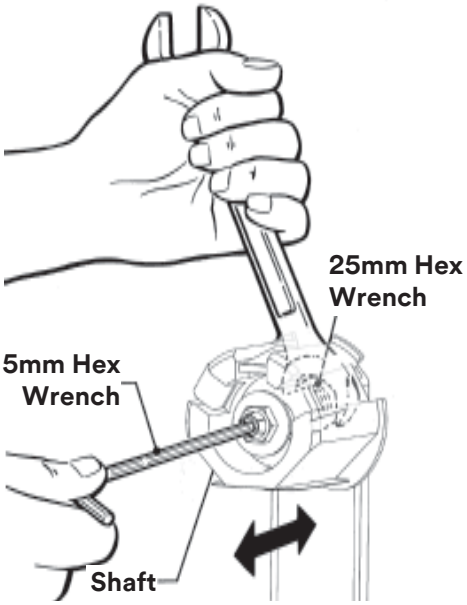


Figure 5-2 Tape Web Alignment

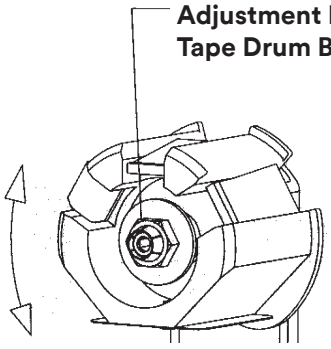


Figure 5-3 Tape Drum Friction Brake

(adjustments *continued* on next page.)

Applying Mechanism Spring

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

The applying mechanism spring, shownin **Figures 5-4A and 5-4B**, controls applying/buffing roller pressure on box and returns the mechanism to 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 trailing surface of box increase spring pressure. If front of box is being crushed by applying roller decrease spring pressure. Removing spring end loop from spring holder and placing loop in other holes provided to adjust spring pressure (see **Figure 5-4B**.

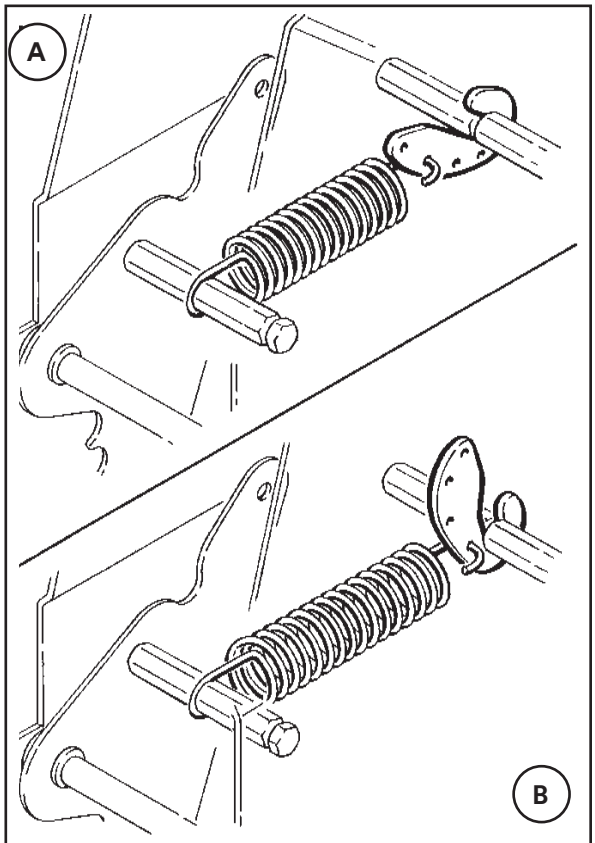


Figure 5-4 Applying Mechanism Spring

One-Way Tension Roller
Figure 5-5

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

To Adjust Tension:

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

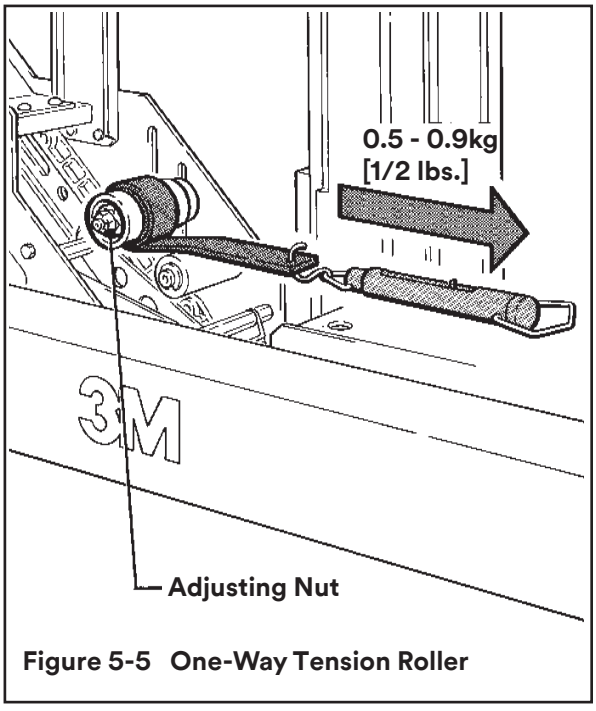


Figure 5-5 One-Way Tension Roller

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

(Adjustments *continued* on next page.)

Tape Leg Length

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.

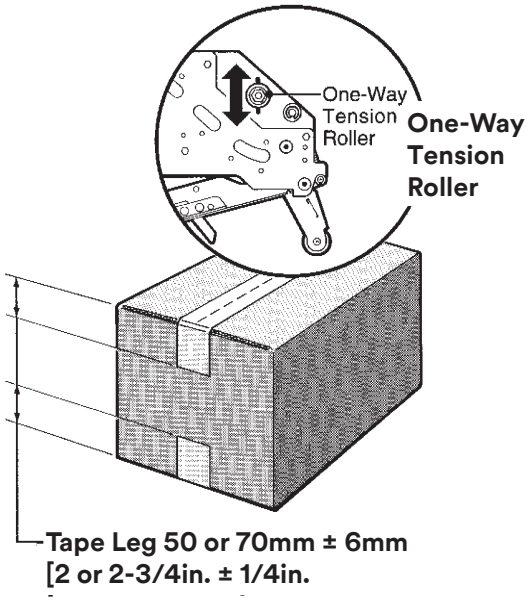


Figure 5-6 Leading Tape Leg Length

Changing Tape Leg Length from 70 to 50mm [2 3/4-2 Inches] – Figure 5-7

Note – When changing tape leg length, both upper and lower heads must be adjusted to apply 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 with original fasteners.
3. Remove cut-off bracket extensions from position “B”.
4. Remount cut-off bracket extensions in forward position “B-B”.
5. Remove/retain 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.

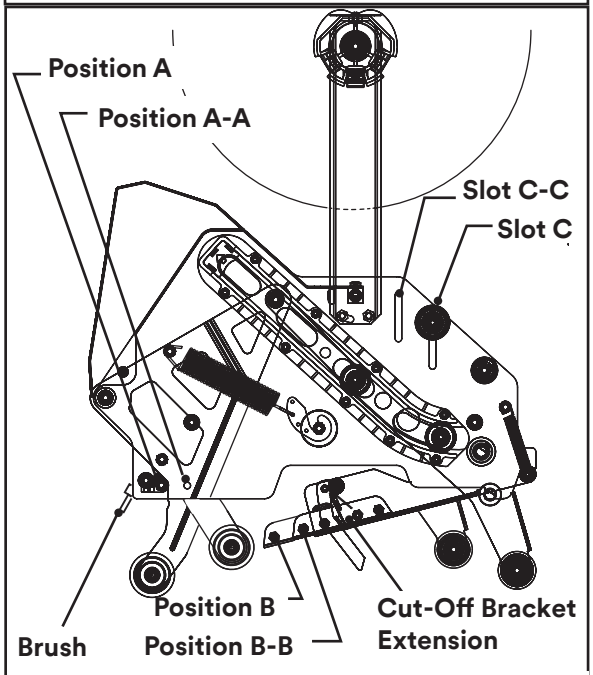


Figure 5-7 Changing Tape Leg Length

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

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.

Toubleshooting

Troubleshooting Guide

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

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	Re thread 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	Re thread 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 centerline of applying roller
	The one-way tension roller is defective	Replace the one-way tension roller
Tape not centered on box seam	Tape drum not centered	Reposition tape drum
	Centering guides not centered	Adjust centering guides
	Box flaps not of equal length	Check box specifications

Spare Parts/Service Information

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.	Part Number	Description
4	78-8076-4500-3	Stud – Mounting
1	78-8137-3311-6	Spring – Upper Extension
1	78-8028-7899-7	Blade – 89mm/3.5 Inch
2	78-8052-6602-6	Spring – Cutter
1	78-8076-4726-4	Tool – Tape Threading

AccuGlide™ 3 Lower Taping Head - 3 inch

Qty.	Part Number	Description
1	78-8028-7899-7	Blade – 89mm/3.5 Inch
2	78-8052-6602-6	Spring – Cutter
4	78-8076-4500-3	Stud – Mounting
	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.	Part Number	Description
1	78-8057-6181-0	Roller – Applying
1	78-8057-6180-2	Roller – Buffing
1	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 High Speed 3 inch Upper Taping Head, Type 11400

AccuGlide™ 3 High Speed 3 inch Lower Taping Head, Type 11400

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.

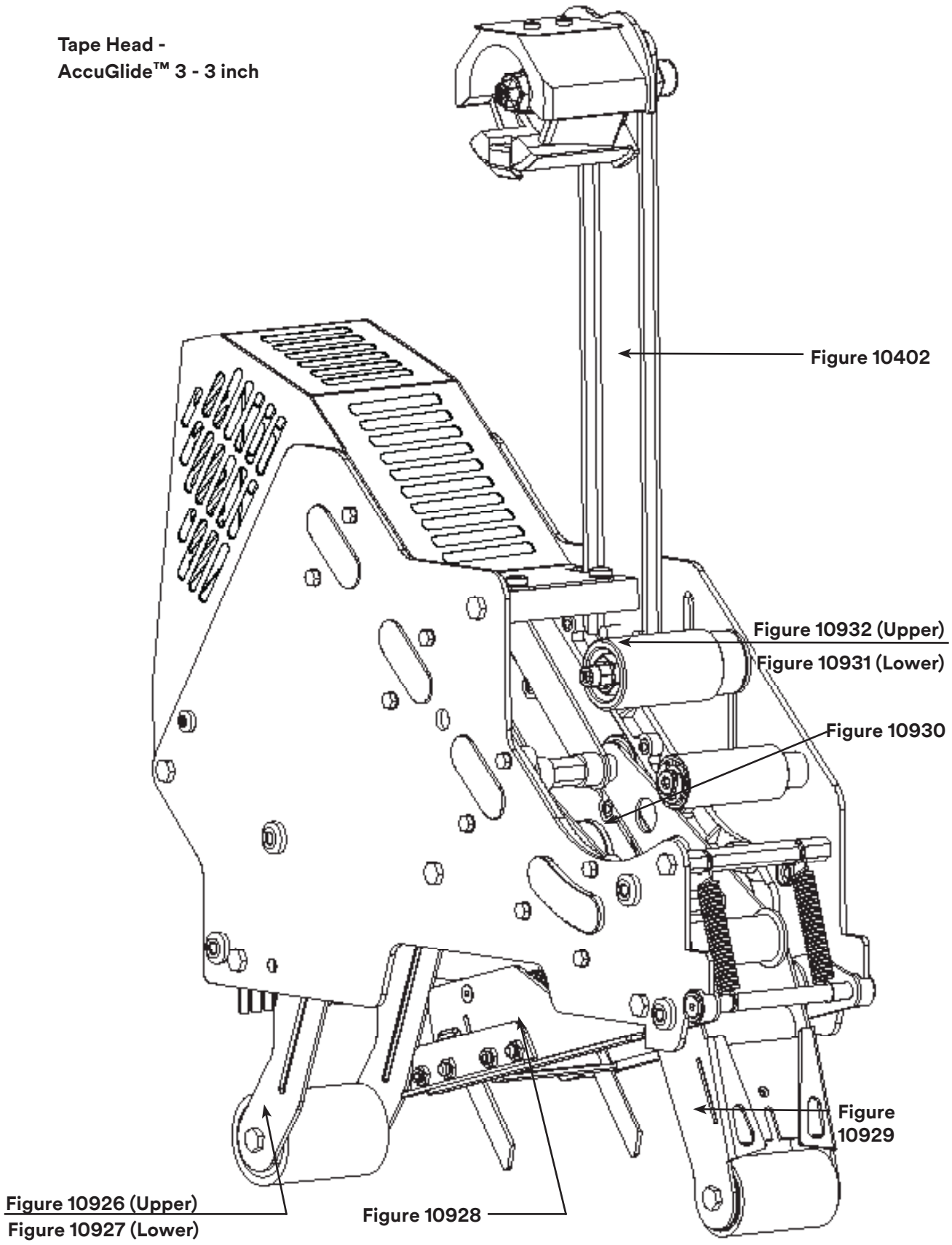
3. The replacement parts list, that follows each illustration, includes the part number and part description for the parts in that illustration.

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.

Tape Head -
AccuGlide™ 3 - 3 inch



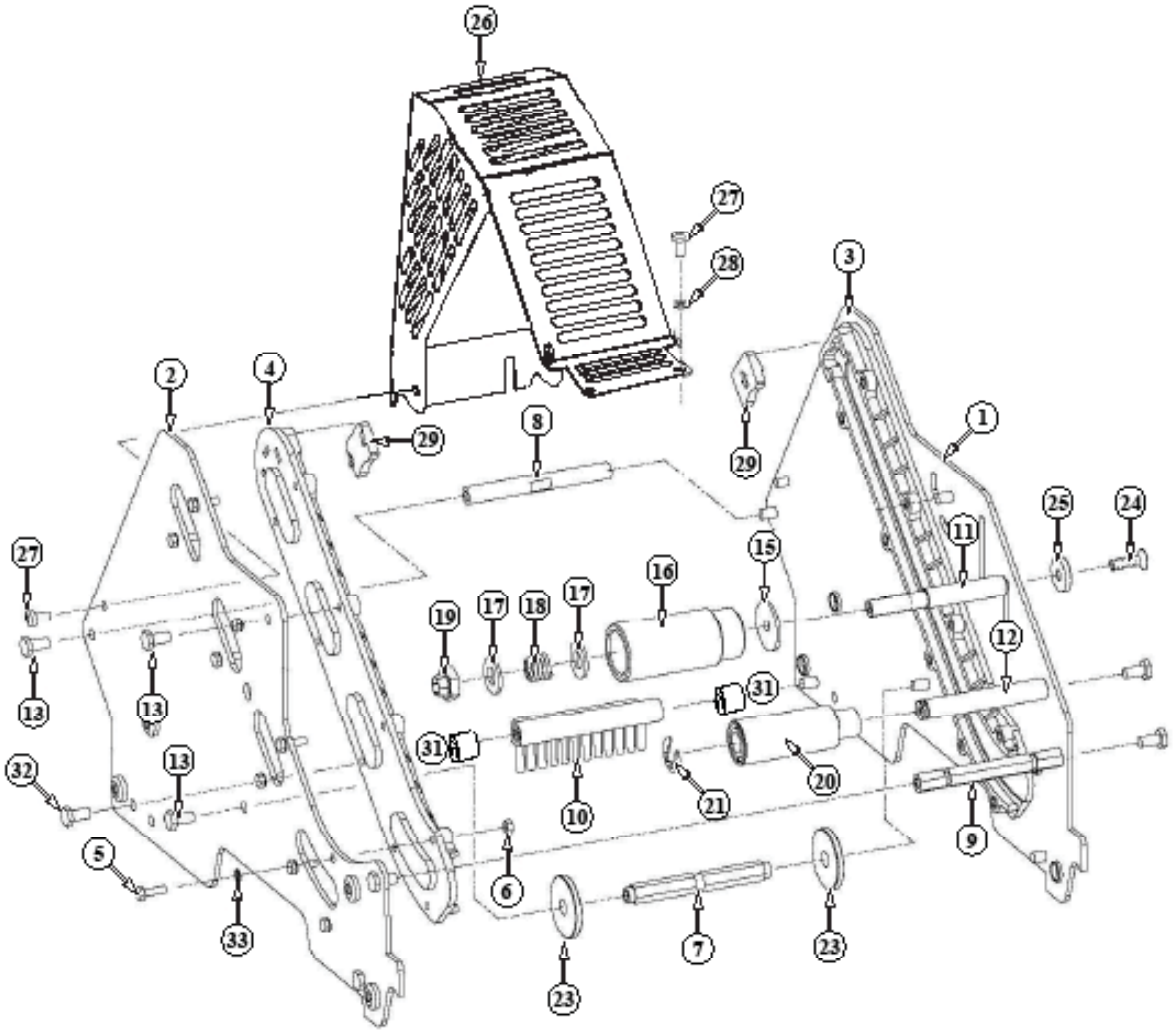


Figure 10932 – Upper Head

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 (not shown)
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
10924-33	78-8076-4716-5	Star Washer 4mm

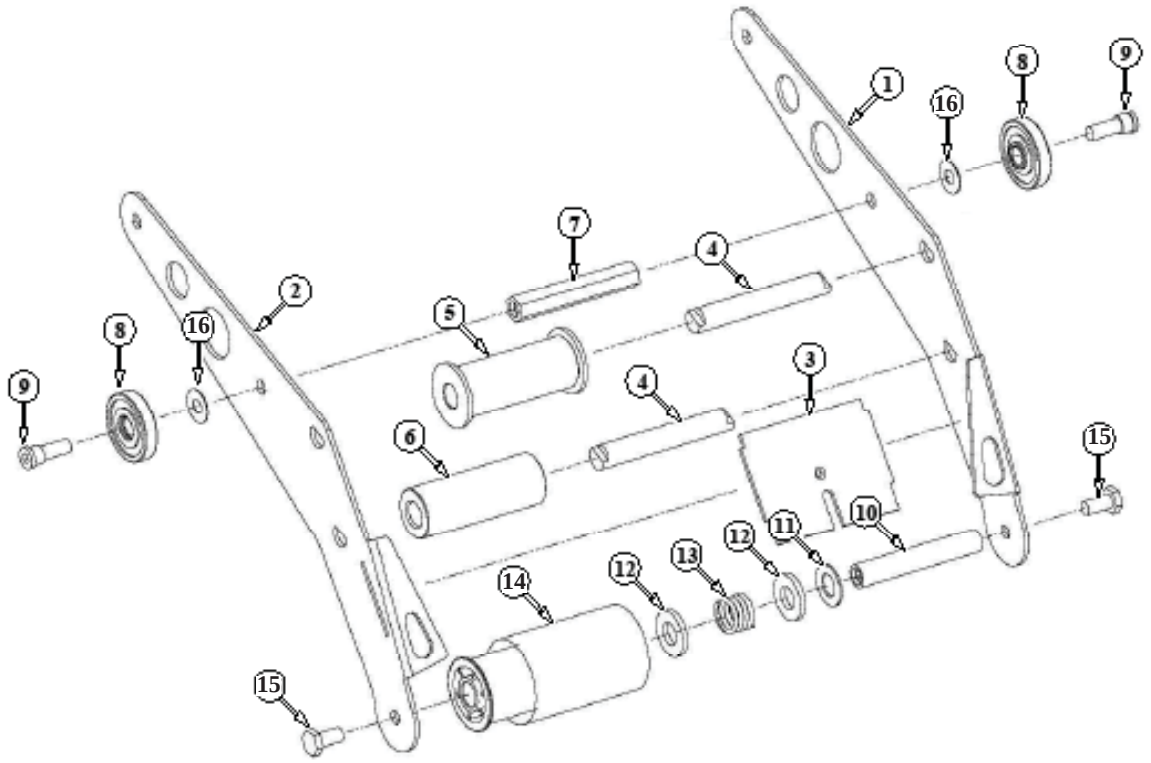


Figure 10929 – Upper and Lower Heads

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

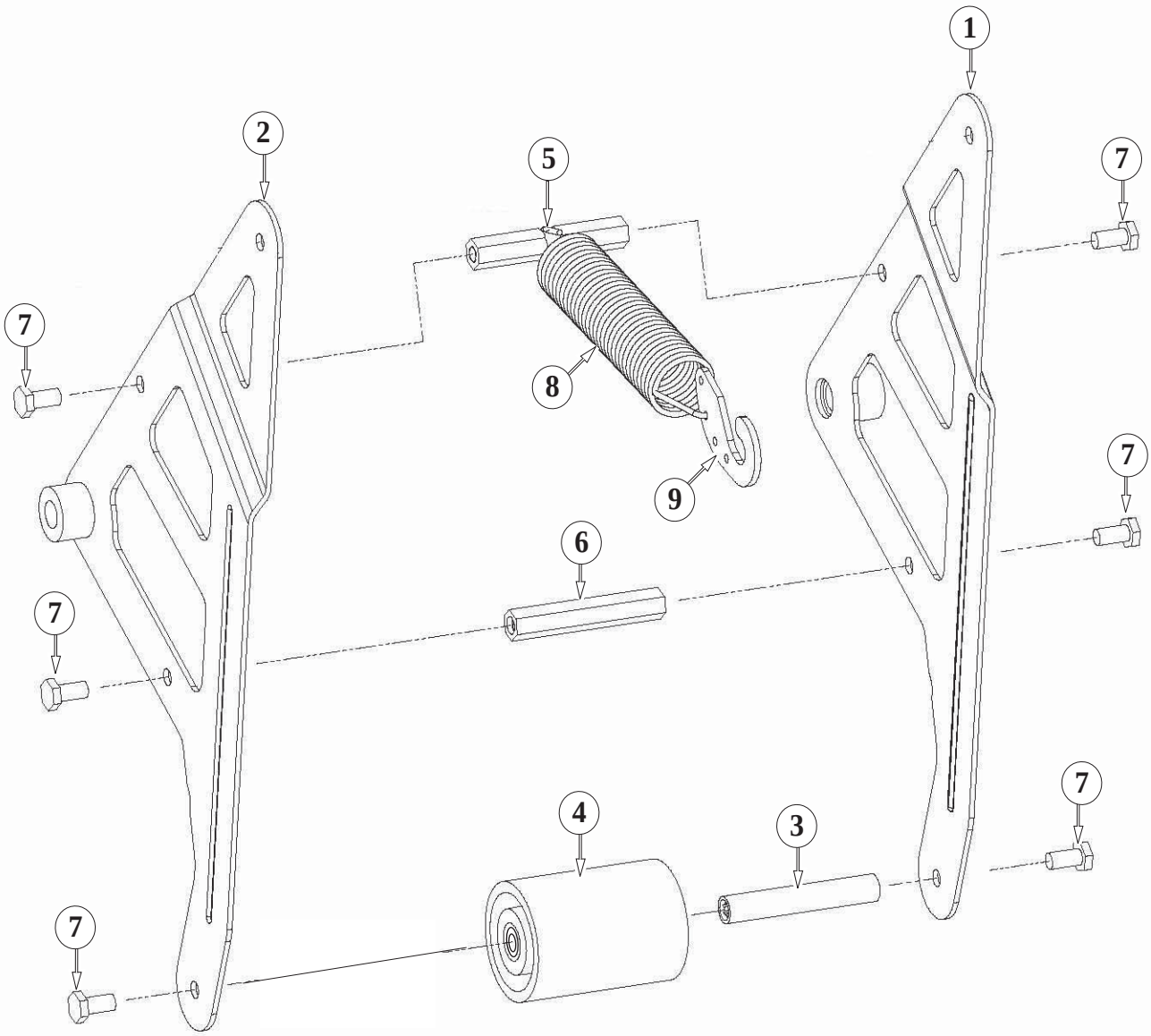


Figure 10926 – Upper Head

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

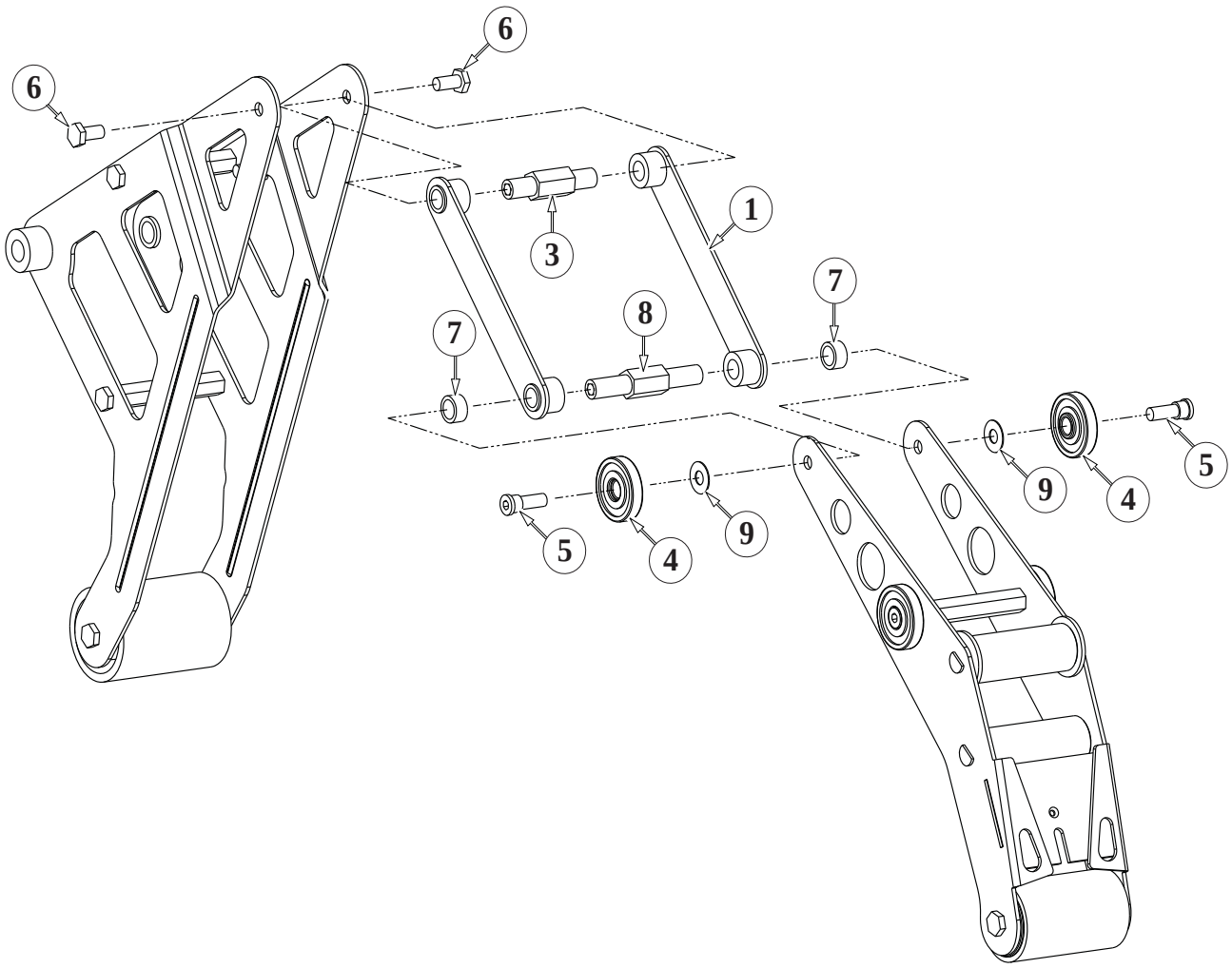


Figure 10930 – Upper and Lower Heads

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	78-8094-6151-6	Washer - Flat, 6.5 ID x 15 OD x 0.5 Thk

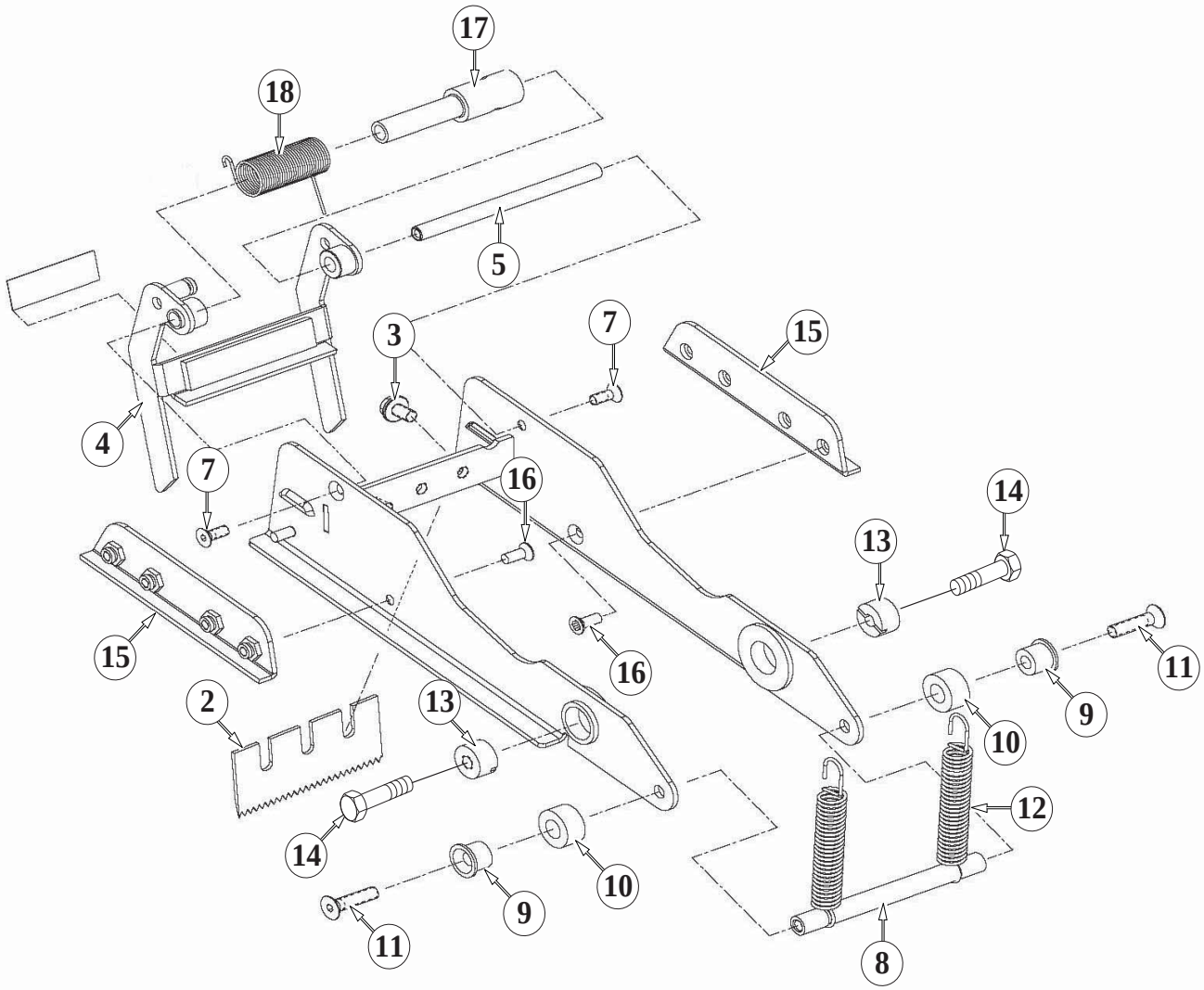


Figure 10928 – Upper and Lower Heads

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

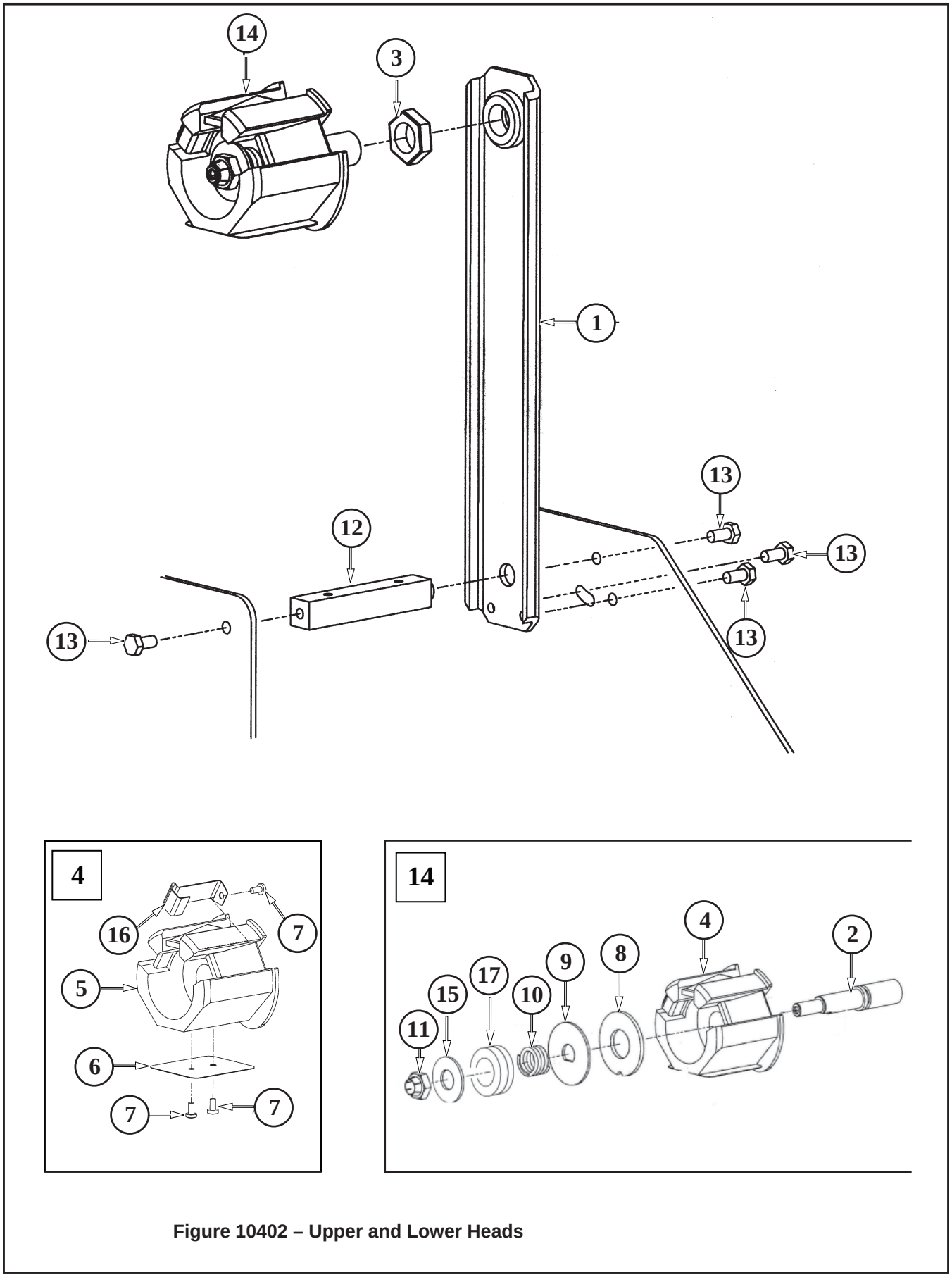


Figure 10402 – Upper and Lower Heads

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

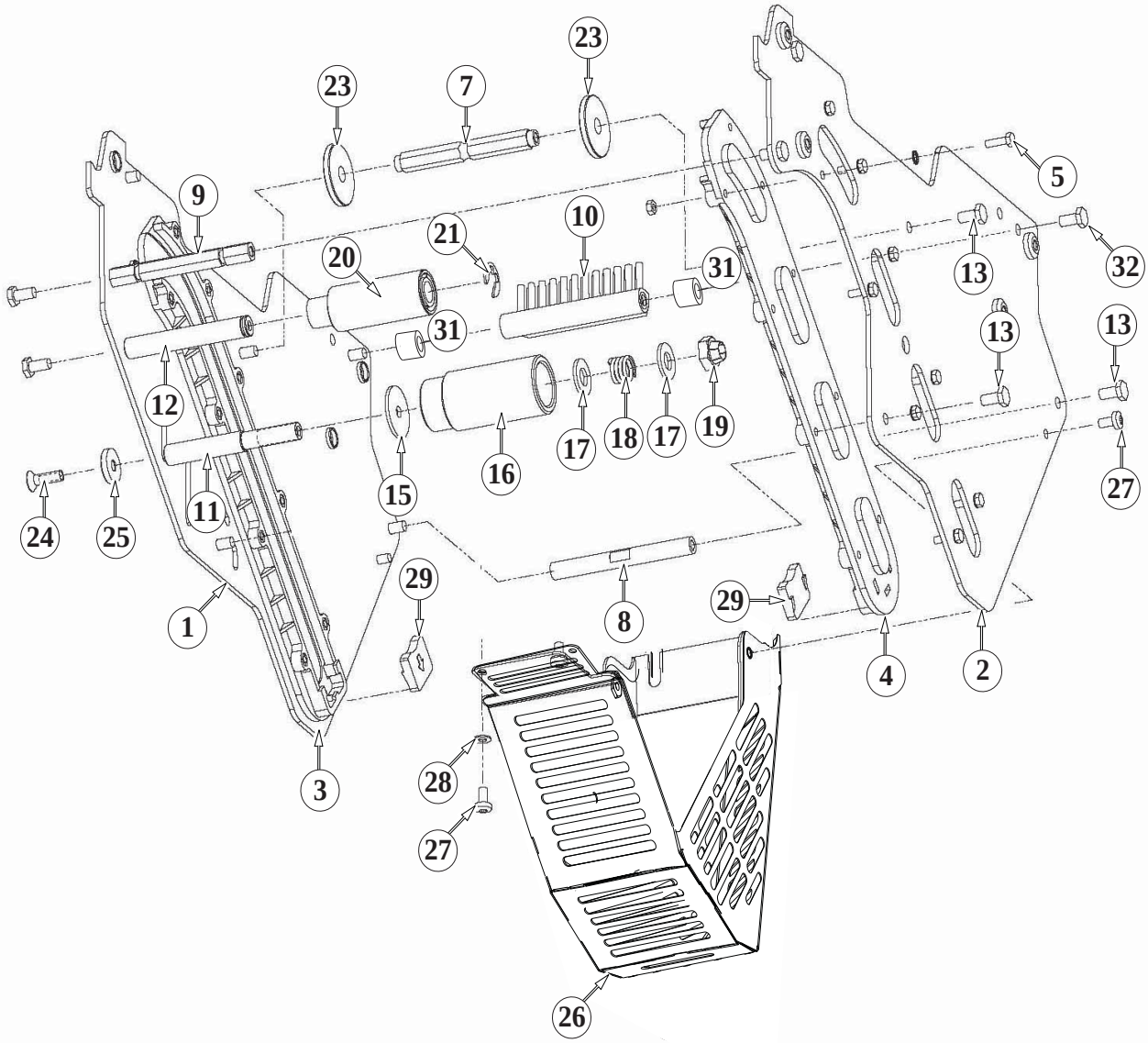


Figure 10931 – Lower Head

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	78-8137-3309-0	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 (not shown)
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
10924-33	78-8076-4716-5	Star Washer 4mm

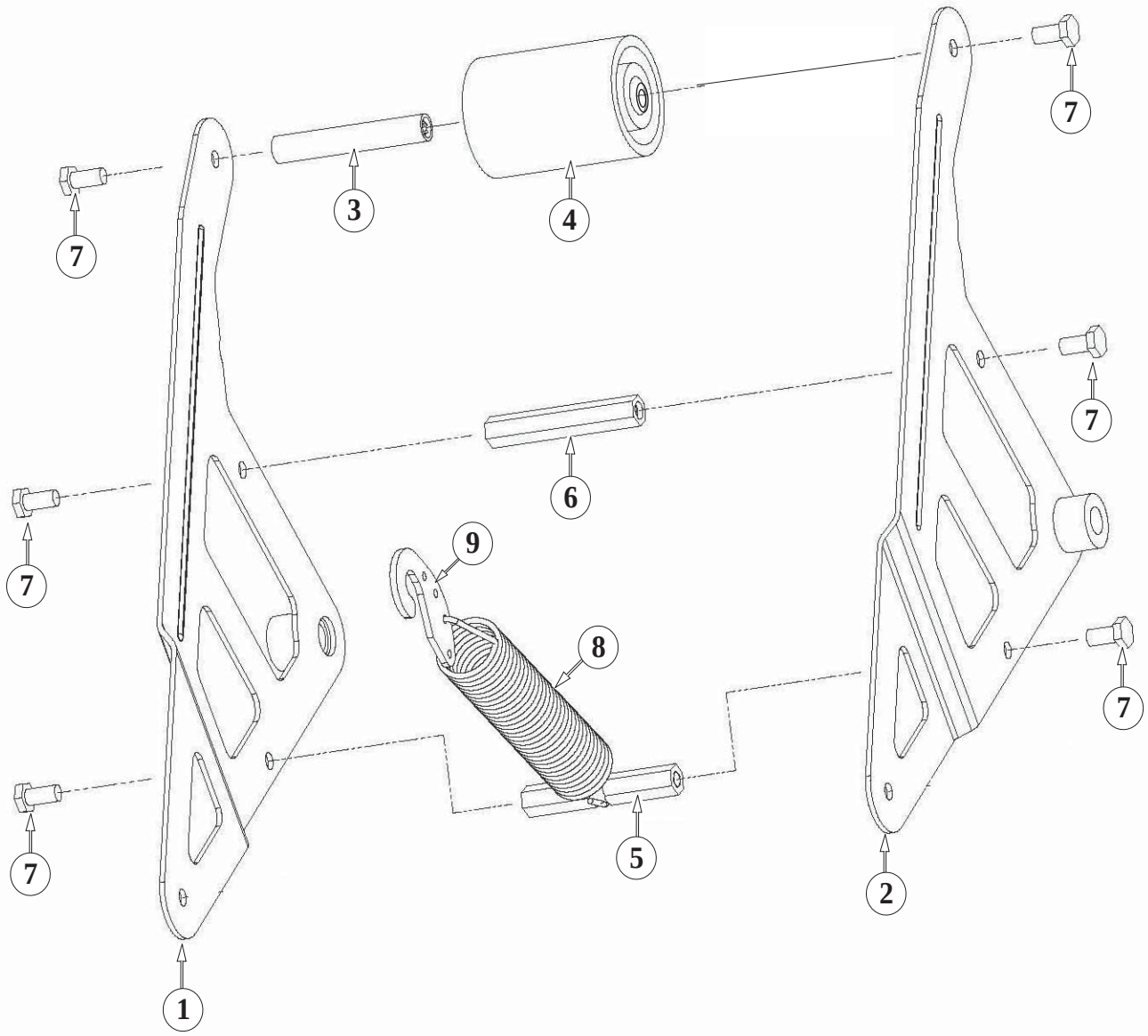


Figure 10927 – Lower Head

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