# **3M**

# **Instructions and Parts List**

3M-Matic<sup>™</sup>

**700aks** Type 40800

Adjustable Case Sealer

with

AccuGlide<sup>™</sup> 3 Taping Heads

Serial No.

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.



**3M Industrial Adhesives and Tapes** 3M Center, Building 220-5E-06 St. Paul, MN 55144-1000 "3M-Matic"and "AccuGlide" are Trademarks of, 3M St. Paul, MN 55144-1000 Printed in U.S.A.



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

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

Edition October 2011

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

700aks-NA 2011 October

#### **Replacement Parts and Service Information**

#### To Our Customers:

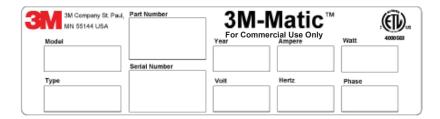
This is the 3M-Matic<sup>™</sup>/AccuGlide<sup>™</sup>/Scotch<sup>®</sup> equipment you ordered. It has been set up and tested in the factory with Scotch<sup>®</sup> tapes. If technical assistance or replacement parts are needed, call or fax the appropriate number listed below.

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 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 700aks - Type 40800 - Serial Number 13282).

#### **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



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To Our Customers	omers:	Custome	ir Custo	r	u	U	10
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This is the 3M-Matic<sup>™</sup>/AccuGlide<sup>™</sup>/Scotch<sup>®</sup> equipment you ordered. It has been set up and tested in the factory with Scotch<sup>®</sup> tapes. If any problems occur when operating this equipment and you desire a service call or phone consultation, call, write, or fax the appropriate number listed below.

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

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

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



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



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**TAPING HEAD INFORMATION -**

MANUAL 2: AccuGlide™ 3 Taping Heads - 3 inch (See MANUAL 2 for Table of Contents)

### 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 - Polytetraflourethelene

PVC - Poly-vinyl chloride

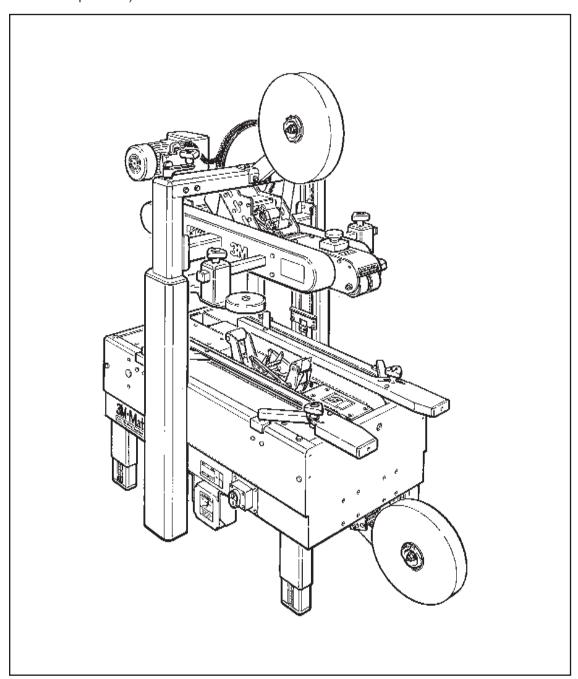
W - Width

H - Height

L - Length

### 1.1 Manufacturing Specifications / Description / Intended Use

The **3M-Matic<sup>™</sup> 700aks Adjustable Case Sealer** with **AccuGlide<sup>™</sup> 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 700aks is manually adjustable to a wide range of box sizes (see "Specifications Section – Box Weight and Size Capacities").



3M-Matic<sup>™</sup> 700aks Adjustable Case Sealer, Type 40800

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

# 1.1 Manufacturing Specifications / Description / Intended Use (continued)

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

#### 1.2 How to Read and Use the Instruction Manual

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, set-up and adjustments, technical and manufacturing specifications, maintenance, troubleshooting, repair work and servicing, electric diagrams, warranty information, disposal (ELV), a definition of symbols, plus a parts list of the 3M-Matic<sup>™</sup> 700aks Adjustable case sealer 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition October 2011 Copyright 3M 2011 All rights reserved The manufacturer reserves the right to change the product at any time without notice Publication © 3M 2011 44-0009-2076-7.

#### 1.2.1 Importance of the Manual

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

#### 1.2.2 Manual Maintenance

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

#### 1.2.3 Consulting the Manual

The manual is composed of:

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

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

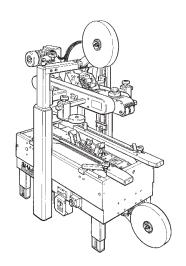
# 1.2.4 How to Update the Manual in Case of Modifications to the Machine

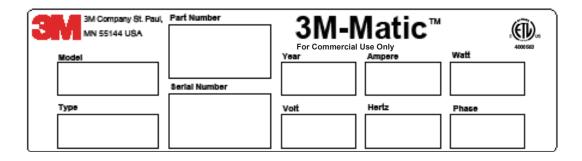
Modifications to the machine are subject to manufacturer's internal procedures. The user receives a complete and up-to-date copy of the manual together with the machine. Afterwards the user may receive pages or parts of the manual which contain amendments or improvements made after its first publication.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

# 2.1 Data Identifying Manufacturer and Machine



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





### 2.2 Data for Technical Assistance and Service

AGENT/DISTRIBUTOR OR LOCAL AFTER SALE SERVICE:

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#### 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™ 700aks Adjustable Case Sealer, Type 40800 with the following warranties:

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

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

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

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

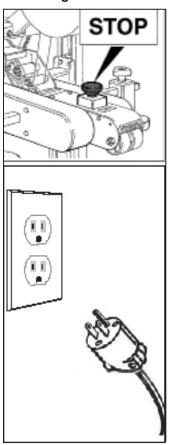
### Contents—700aks Adjustable Case Sealer

- (1) 700aks Adjustable Case Sealer, Type 40800
- (1) Upper Assembly Height Adjustment Crank Hardware
- (1) Tool and Spare Parts Kit
- (1) Instruction and Parts Manual

# 3.1 General Safety Information

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

Figure 3-1



The machine is provided with a LATCHING EMER-GENCY 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.



Figure 3-2

# SAFETY INSTRUCTIONS

- 1. Shut off machine before adjusting
- 2. Unplug electric power before servicing
- 3. Do not leave machine running unattended
- 4. Refer to instruction manual for complete setup, operating, and servicing information



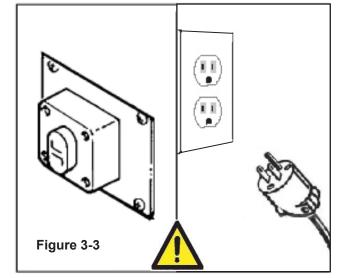
# **WARNING**

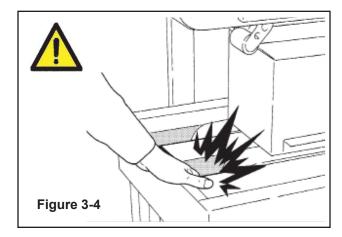
- To reduce the risk associated with hazardous voltage:
- Position electrical cord away from foot and vehicle traffic.



# **WARNING**

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





*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 pinches and entanglement hazards:
- Do not leave the machine running while unattended.
- Push 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.



# **WARNING**

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

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



# **WARNING**

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



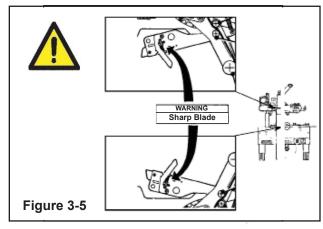
# WARNING

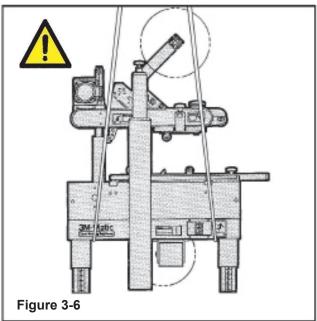
- To reduce the risk associated with muscle strain:
- Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

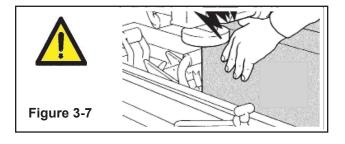


# **CAUTION**

- 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 the box.
- Keep hands, hair, loose clothing, jewelry away from moving belts and taping heads.









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## 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 700aks incorporates various safety protections which should never be removed or disabled. It is essential that the operator and service personnel be warned that hazards exist which cannot be eliminated:

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

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



# **WARNING**

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

#### 3.9 Personal Safety Measures

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

# 3.10 Predictable Actions which are Incorrect and Not Allowed

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

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

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

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

### **Skill 1: Machine Operator**

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

# **Skill 2: Mechanical Maintenance Technician**This operator is trained to use the machine as the MACHINE OPERATOR and in addition is able to:

- · Work with the safety protection disconnected
- · Check and adjust mechanical parts
- Carry out machine maintenance operations/repairs He is not allowed to work on live electrical components

# **Skill 2a: Electrical Maintenance Technician**This operator is trained to use the machine as the

This operator is trained to use the machine as the MACHINE OPERATOR and in addition is able to:

- · Work with the safety protection disconnected
- · Check and adjust mechanical parts
- Carry out machine maintenance operations / repairs / adjustments / repair electrical components
   He is allowed to work on live electrical panels, connector blocks, control equipment, etc.

# **Skill 3: Specialist from the Manufacturer** Skilled operator sent by the manufacturer or its

agent to perform complex repairs or modifications (on agreement with the customer).



# **WARNING**

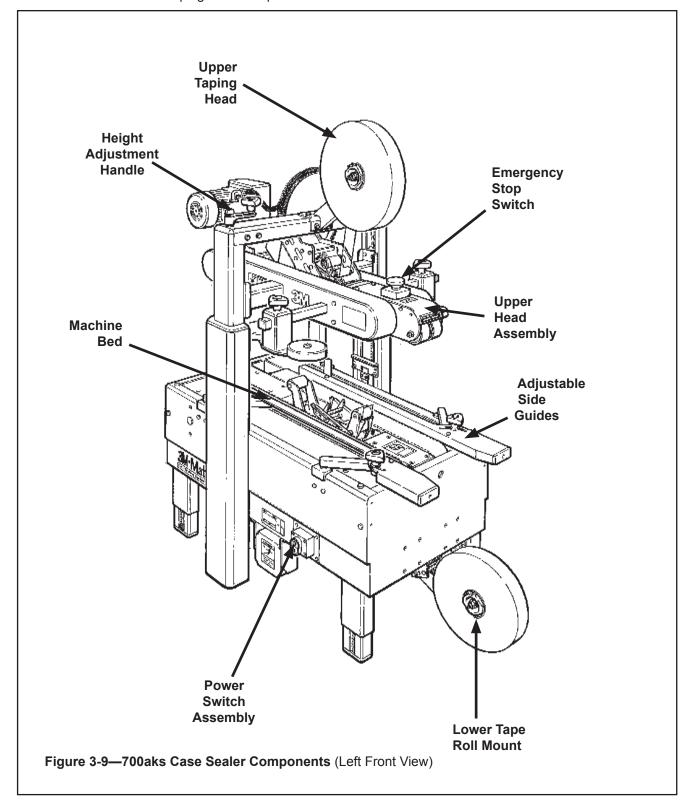
- To reduce the risk associated with mechanical and electrical hazards:
- Allow only properly trained and qualified personnel to operate and service this equipment.

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

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

# 3.12 Component Locations

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



# 3.13 Table of Warnings and Replacements Labels (continued)

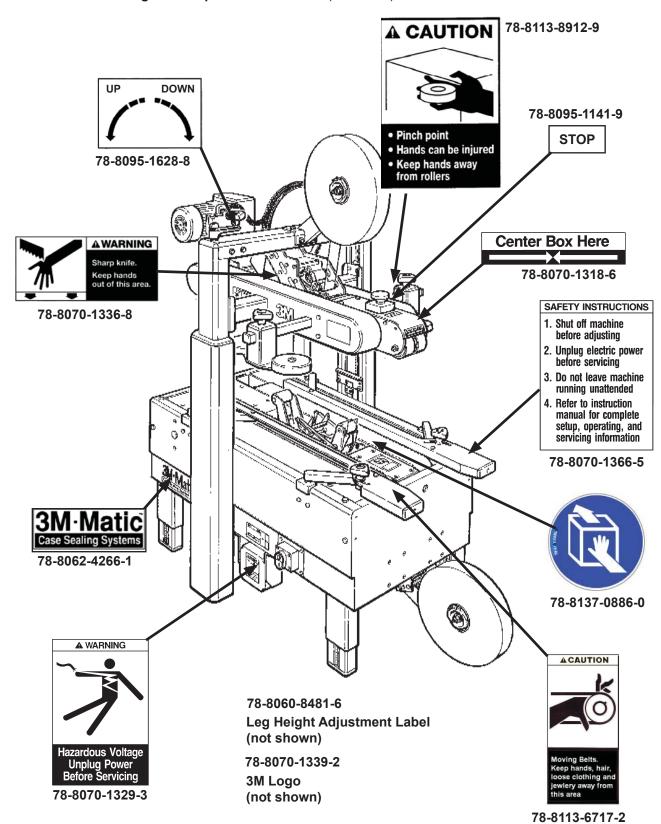


Figure 3-10 - Replacement Labels / 3M Part Numbers

#### 1. Power Requirements:

Electrical - 120 VAC, 60 Hz, 6 A

Pneumatic – 6.5 bar gauge pressure [95 PSIG], 2.5 SCFM

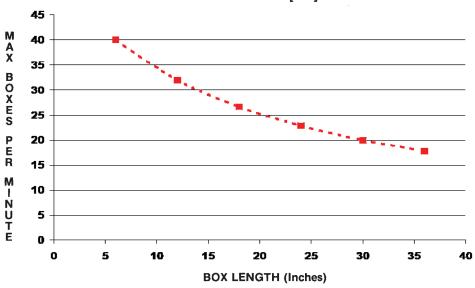
75 liter/minute @ 21° C., 1.01 bar maximum at maximum cycle rate.

A pressure regulator/filter is included.

The machine is equipped with two 1/6 HP gearmotors and comes with an 2.4m [8 foot] standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above. Contact your 3M Representative for power requirements not listed above.

#### 2. Operating Rate: Belt speed is 0.5m/s [100 F.P.M.]

# BOXES PER MINUTE VS. BOX LENGTH BOX LENGTH [mm]



Actual production rate is dependent on operator's dexterity.

Boxes must be 18 inches [455mm] apart minimum.

Actual production rate is dependent on operator's dexterity. Boxes must be 18 inches (457mm) apart minimum.

### 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. Tape

Scotch® pressure-sensitive film box sealing tapes.

#### 5. Tape Width

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

## 6. Tape Roll Diameter

Up to 406.4mm [16 inch] maximum on a 76.2mm [3 inch] diameter core. (Accommodates all system roll lengths of **Scotch**® film tapes.)

# 7. Tape Application Leg Length - Standard

70mm ± 6mm [2.75 inch ±. 25 inch ]

# **Tape Application Leg Length – Optional**

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

#### 8. Box Board

Style – regular slotted containers – RSC 125 to 275 P.S.I. bursting test, single wall or double wall B or C flute. 23-44 lbs. per inch of width Edge Crush Test (ECT)

## 9. Box Weight and Size Capacities

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

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

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

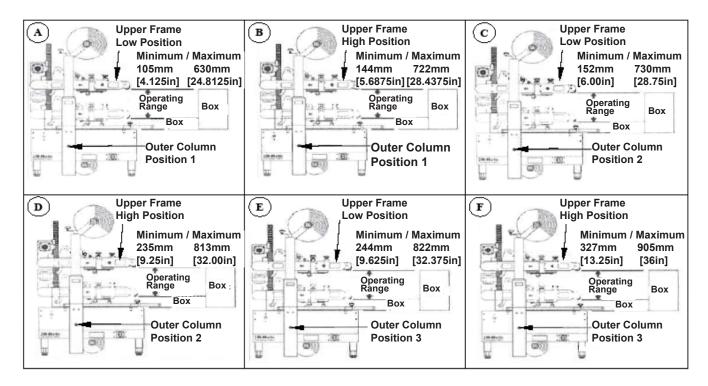
(continued on next page)

<sup>\*\*</sup> Minimum/maximum box height dimensions are with machine at factory setting. To accommodate smaller or larger boxes, machine upper taping head frame and/or outer column assemblies can be repositioned as described in "Special Set-Up Procedure" section of this manual. Refer to chart below for box height range desired and then to illustration indicated for machine upper frame and/or outer column position required.

### Minimum/Maximum Box Height Combinations

(To relocate upper frame or outer columns, see "Special Set-Up Procedure".)

### **Case Height Range Illustration**



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

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

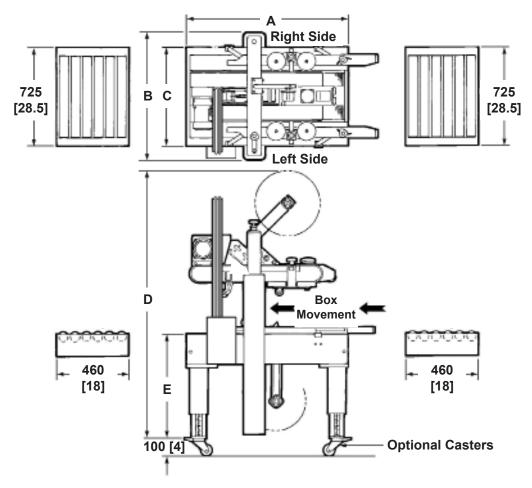
**Note:** The case sealer can accommodate most boxes within the size range listed above. However, if the box length (in direction of seal) to box height ratio is .6 or less, then several boxes should be test run to assure proper machine performance.

#### DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

# BOX LENGTH IN DIRECTION OF SEAL = SHOULD BE GREATER THAN .6 BOX HEIGHT

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

(continued on next page)



#### 10. Machine Dimensions:

	Α	В	С	D	E	
<b>Minimum</b> mm [Inches]	1080 [42.5]	855 [33.75]	725 [58.5]	1420 [56]	520 [20.5]	
<b>Maximum</b> mm [Inches]				2210 [87]	785 [31]	

<sup>\*</sup> Infeed/Exit conveyors are optional

Weight -190 kg [425 pounds] crated (approximate) 170 kg [375 pounds] uncrated (approximate)

**11. Machine Noise Level:** Acoustic pressure measured at a distance of 1m. from machine with Scotch PVC adhesive tape in operation; 78dB Acoustic radiation pressure at 1.6m. height with Scotch PVC adhesive tape in operation; 73dB Measurement taken with appropriate instrument: (Type SPYRI-MICROPHON 11).

# 12. Set-Up Recommendations:

- Machine must be level.
- Customer supplied infeed and exit conveyors (if used) should provide straight and level box entry and exit.
- · Exit conveyors (powered or gravity) must convey sealed boxes away from machine.

<sup>\*\*</sup> Casters are optional

### 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**).

# 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.

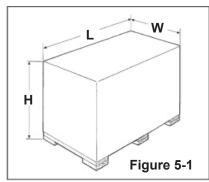
# 5.3 Handling and Transportation of Uncrated Machine

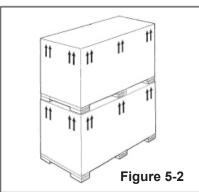
The uncrated machine should not be moved except for short distances and indoors ONLY. Without the supporting pallet, the machine is exposed to damage and may cause injuries. To move the machine use belts or ropes, paying attention to place them in the points indicated using care to not interfere with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

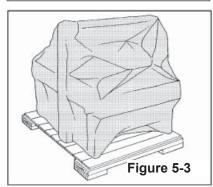
#### 5.4 Storage of the Packed or Unpacked Machine

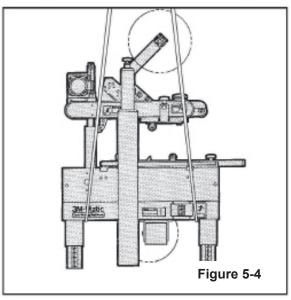
If the machine is not used for a long period, please take the following precautions:

- 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).



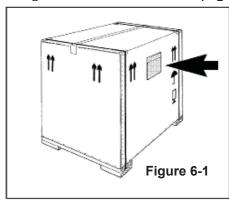




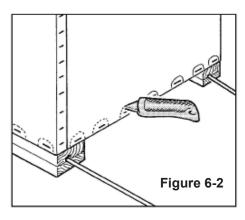


# 6.1 Uncrating

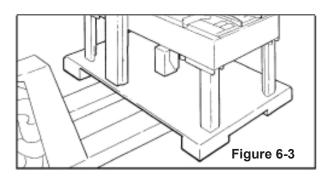
The envelope attached to the shipping box contains the uncrating instructions of the machine (Figure 6-1).



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



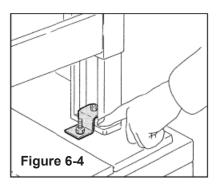
After cutting out or removing the staples, lift the shipping box in order to clear the machine (two persons required).



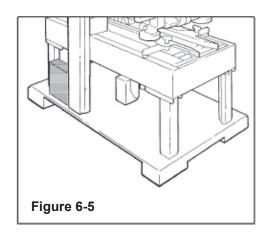
Transport the machine with a fork-lift truck to the operating position. Lift the pallet at the point indicated in **Figure 6-3** (weight of machine + pallet = See Specifications).

#### **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 the instruction manual for additional procedures of the set up. The box also contains parts removed for shipping, spare parts and tools (Figure 6-5).



#### 6.2 Disposal of Packaging Materials

The 700aks 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.

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### 7.1 Operating Conditions

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

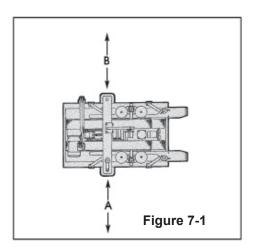
# 7.2 Space Requirements for Machine Operation and Maintenance Work

Minimum distance from wall (Figure 7-1):

A = 1000 mm.

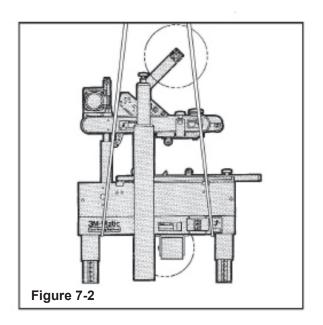
B = 700mm.

Minimum height = 2700mm.



#### 7.3 Tool Kit Supplied with the Machine

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





# **WARNING**

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



# **WARNING**

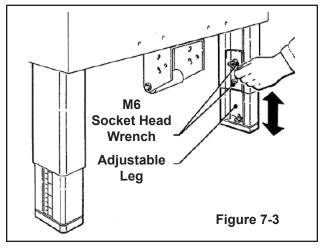
- To reduce the risk associated with muscle strain:
- Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
- Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

#### 7.4 Machine Set-Up / Bed Height

Adjust machine bed height. The case sealer is equipped with four (4) adjustable legs that are located at the corners of the machine frame. The legs can be adjusted to obtain different machine bed heights from 520mm [20 1/2 inches] minimum to 785mm [31 inches] maximum (see specifications).

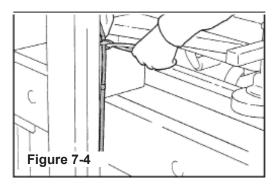
Refer to **Figure 7-3** and set the machine bed height as follows:

- 1. Raise and block up the machine frame to allow adequate leg adjustment.
- Loosen, but do not remove, two (2) M8 x 16 socket head screws in one leg (use M6 hex wrench). Adjust the leg length for the desired machine bed height. Retighten the two (2) screws to secure the leg. Adjust all four (4) legs equally.

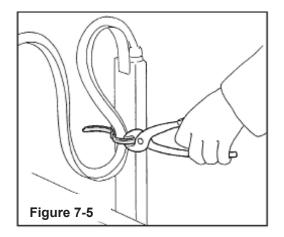


#### 7.5 Removal of Plastic Tles

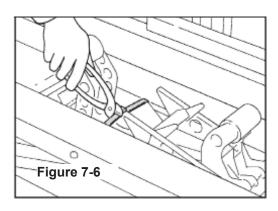
Cut the plastic which attaches the top head to the frame and remove the polystyrene blocks (Figure 7-4).



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

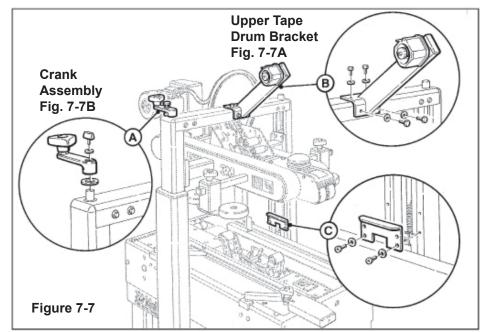


Cut the plastic ties holding the lower taping head in position (Figure 7-6).



# 7.6 Assembly Completion

- 1 Crank Install the crank handle on the top of the left column as shown (Figure 7-7B). Upper taping head frame height adjustment crank is installed on top of the left column. If desired, for operator convenience, it may be moved to the right side of the machine.
- 2 Tape Drum Bracket Install the upper tape drum bracket on the top cross bar as shown (Figure 7-7A).



#### 7.7 Completion of Taping Heads

See Manual 2 for Complete Instructions:

- Place the Upper Taping Head in a convenient working position
- .2. Use **Figure 7-8** 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 oneway tension roller (Position 2).
- 4. Continue pulling the threading needle down and guide it between the two (2) rollers on the apply arm (Position 3).
- 5. Pull the threading needle down until the tape travels between the apply plate and the ears of the apply arm (Position 4) until it extends past the applying roller. When properly threaded the adhesive side of the tape should be facing the knurled rollers at position 2 and also position 3.
- 6. Cut away any excess tape and repeat steps for Lower Taping Head.

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

### 7.8 Outboard Tape Roll Holder

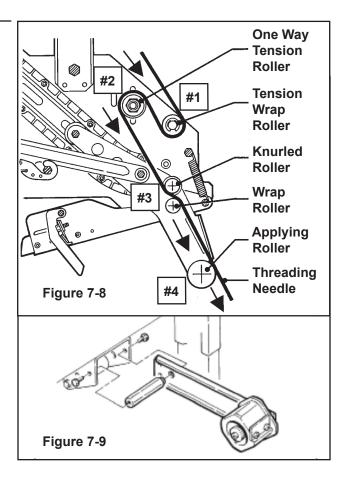
If you intend to use the outboard tape roll holder, proceed as follows:

- 1 Remove the lower taping head from the machine.
- 2 Remove the tape drum bracket assembly, stud spacer, and fasteners from the lower taping head.
- 3 Install alternative wrap roller and bracket on the head in place of tape bracket. Replace lower head into machine.
- 4 Install and secure tape drum bracket assembly on the entry end of the lower frame (as shown in **Figure 7-9**).

#### 7.9 Preliminary Electric Inspection

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

- 7.9.1 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.
- **7.9.2** Check that the connection of the machine to the mains meets the safety regulations in your country.
- **7.9.3** The machine is fitted with a main switch and a circuit breaker. The user should check that the electrical settings of the machine are compatible with all the components of the mains system.



#### 7.10 Machine Connection to the Mains

For technical specifications: See Section 4 - Specifications

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

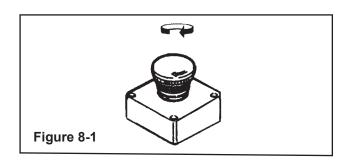
Connect the power cord supplied with the machine to a wall socket using a plug which complies with the safety regulations of your country.

# 7.11 Inspection of Phases (For Three-Main Phases Only)

N/A for this machine.

### 8.1 Description of the Working Cycle

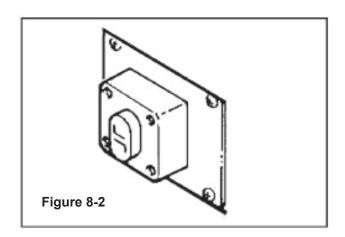
After having closed the top flaps of the carton, the operator pushes it under the top infeed end in order to avoid the opening of the top flaps. Further pushing causes the two top and bottom belts to drive the box through the taping heads which automatically seal the top and bottom seams. The carton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



# 8.2 Definition of Running Mode

The case sealer 700aks has only one (automatic) operating mode with:

- The EMERGENCY STOP BUTTON unlocked (Figure 8-1)
- The main switch start switch "ON" (I) (Figure 8-2)

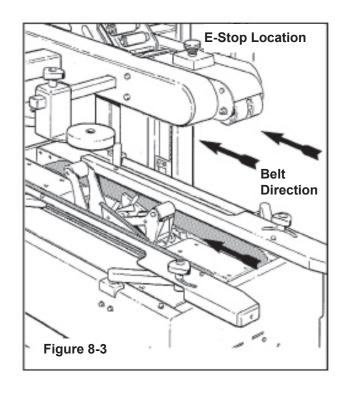


# 8.3.1 Normal Stop Procedure

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

# 8.3.2 Emergency Stop

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

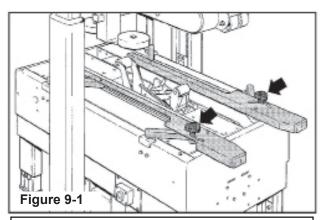


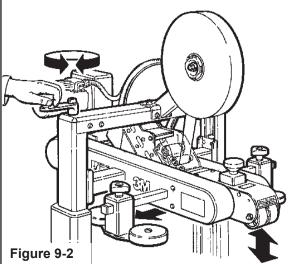
9.1 Box Width Adjusting Knobs

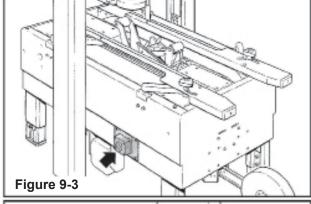
9.2 Box Height Adjusting Crank

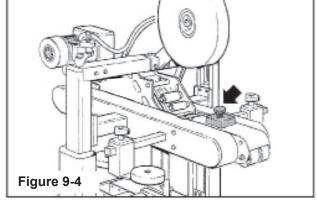
9.3 Start/Stop Buttons

9.4 Lockable Emergency Stop Button









#### 10.1 Blade Guards

Both the top and bottom taping units have a blade guard. (See Manual 2: AccuGlide  $^{\text{TM}}$  3 Taping Heads - 3 inch).



# **WARNING**

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

#### 10.2 Emergency Stop Button

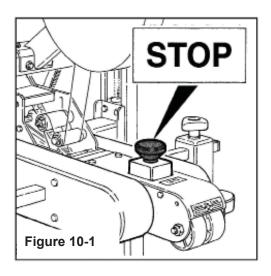
The box drive belts are turned on and off with the electrical switch on the side of the machine frame.

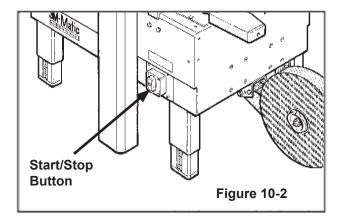
The machine electrical supply can be turned off by pressing the latching emergency stop switch. To restart machine, rotate the emergency stop switch clockwise to release the switch latch (Figure 10-1). Restart machine by Pushing the On/Off switch to the Off (O) position and then to the On (I) position.



# **WARNING**

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





# 10.3 Electric System / Circuit Breaker

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

#### Circuit Breaker

The case sealer is equipped with a circuit breaker which trips if the motors are overloaded. Located inside the electrical enclosure on the side of the machine frame just below the machine bed, the circuit breaker has been pre-set and requires no further maintenance.



# WARNING

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

If circuit is overloaded and circuit breaker trips, unplug machine from electrical power:

- 1. Determine cause of overload and correct.
- 2. Plug in machine.
- 3. Press machine "On" (I) button 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.

### 11.1 Box Width Adjustment

Place box on infeed end of frame bed and align top flap center seam with arrows on front of upper frame. Move in and lock the side by tightening the appropriate knobs (Figure 11-1).

#### 11.2 Box Height Adjustment

Lower top head by turning the height adjustment crank clockwise until it lightly presses the case (Figure 11-2).

#### 11.3 Adjustment of Top Flap Compression Rollers

Run the box through the machine and press the EMERGENCY STOP BUTTON when the box is adjacent to the compression rollers. Move the compression rollers in to firmly press the top flaps together.

The standard position for the compression rollers is shown in **Figure 11-3A**. In this position they accommodate boxes from 335 to 660mm [13-1/4 to 26 inches] wide.

To accommodate narrower boxes from 170 to 520mm [6-3/4 to 20-1/2] wide.

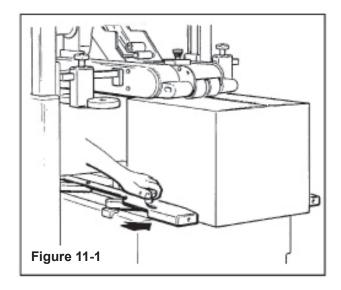
- 1. Loosen hand knob and remove compression roller assembly from machine.
- 2. Move both rollers to alternate hole locations as shown in **Figured 11-3B.**
- 3. Install roller assembly on machine as shown in **Figure 11-3B** and tighten hand knob.
- 4. Repeat this procedure for both sets of compression rollers. Release Emergency Stop Button and press electrical ON (I) button (Figure 11-4).

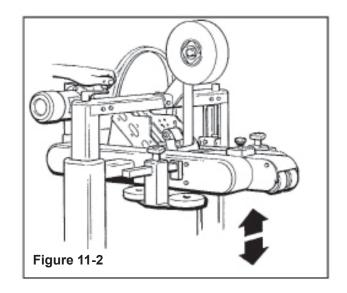
### 11.4 Changing the Tape Leg Length

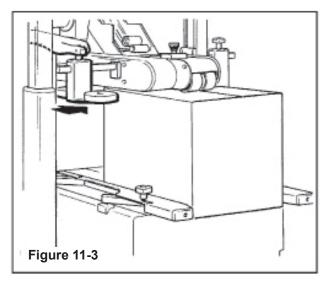
Taping heads are preset to apply 70mm [2.75 inches] long tape legs. To change tape leg length to 50mm [2.0 inches], refer to Instructions below and also to Manual 2, "Removing Taping Heads Procedure - Changing the Tape Leg Length".

#### **Taping Heads**

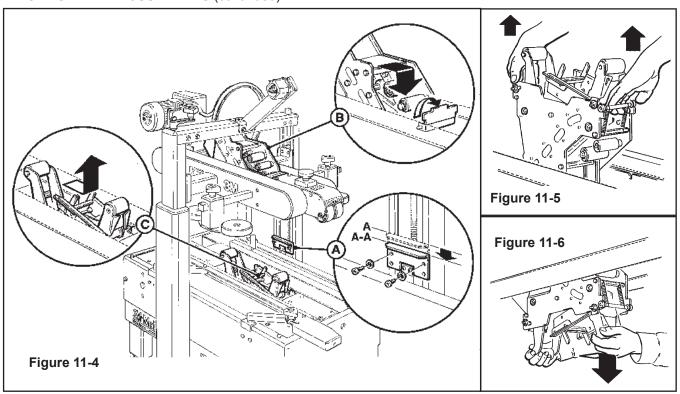
Important! Turn off Electric Power







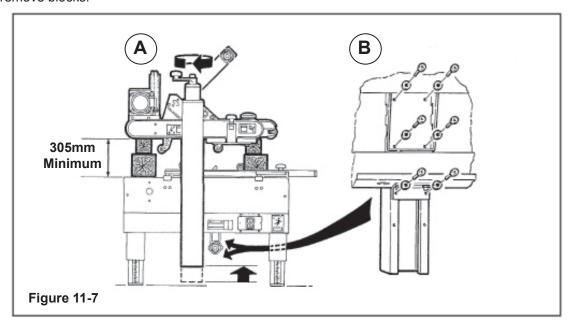
### 11 - SET UP AND ADJUSTMENTS (continued)



# 11.5 Special Set-Up Procedure for Outer Column Re-Positioning

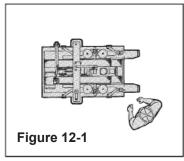
Moving the outer columns up one set of mounting holes increases the maximum box height handled by the 700aks case sealer and decreases the minimum conveyor bed height.

- 1 Place solid blocks approximately 305mm high at the front and rear of the upper taping head assembly as shown in **Figure 11-7A**.
- 2 Crank the upper taping head assembly down until it touches these blocks.
- 3 Remove and retain the six (6) screws and plain washers that fasten each column to the frame (Figure 11-7B).
- 4 Turn the height adjustment crank clockwise to raise the outer columns up one set of mounting holes.
- 5 Install and tighten the six screws and plain washers in each column. Crank upper taping head assembly up and remove blocks.



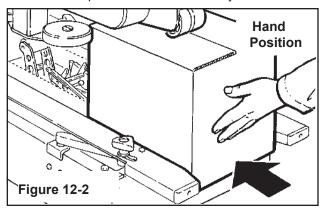
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# 12.1 Operator's Correct Working Position and Operational Flow (Figure 12-1).



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.** 

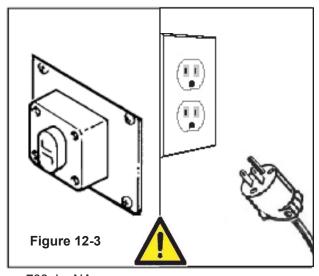
The box will be automatically sealed with adhesive tape on the top and bottom box seams. Then the box will be expelled on the exit conveyor.



## 12.2 Starting the Machine

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

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



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## 12.3 Starting Production

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

#### 12.4 Tape Replacement and Threading

#### Skill 1 - Operator

See Manual 2: AccuGlide™ 3 High Speed 3 inch Taping Heads.

Press the LATCHING EMERGENCY STOP BUTTON.



# 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.

## 12.5 Box Size Adjustment

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

## 12.6 Cleaning

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

# 12.7 Table of Operation Adjustments - Operator Qualifications

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

#### 12.8 Safety Devices Inspection

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

# 12.9 Trouble Shooting Guide

PROBLEM	CAUSE	CORRECTION
When pressing the ON button the machine does not start	The lockable emergency stop button is pressed	Release the emergency stop button  Check the electrical system
The magnetothermic protection opens the main switch	Motor under stress  Thermal cut-out not at correct amperage setting	Check that the drive belts are not blocked  Set the correct amperage
Drive belts do not convey boxes	Narrow boxes  Worn drive belts  Taping head applying spring holder missing  Taping head applying spring set too high	Check machine specifications Boxes are narrower than recommended, causing slippage and premature belt wear  Replace drive belts  Adjust the box height adjust- ment with the crank  Reduce spring pressure
Drive belts do not turn	Worn or missing friction rings  Drive belt tension too low  Electrical disconnect  Motor not turning	Replace friction rings  Adjust belt tension  Check power and electrical plug  Evaluate problem and correct

# 12.9 Trouble Shooting Guide (continued)

PROBLEM	CAUSE	CORRECTION
The blade does not cut tape or the tape end is jagged or	The blade is dull and/or has broken teeth	Replace the blade
shredded		Increase tape tension by adjusting the one-way roller
	Tape tension is insufficient	Clean and adjust the blade
	Adhesive has built up on the blade  The blade is in backwards	Make sure the blade is bottomed out against the mounting bolts
	One or both cutter springs are missing or stretched	Lubricate the blade oiler pad on the blade guard
	<b>3</b>	Mount the blade so that the beveled edge is away from the entrance end of the head
		Replace the defective spring(s)
Tape is tabbing on the trailing leg on the back of the box	There is excess on the tape drum assembly and/or the on-way tension roller assembly	Adjust the one-way tension roller and/or tape drum assembly
	Rollers in the tape path do not rotate freely	Clean adhesive deposits from the surface ends and shafts of the rollers. Remove all
	The blade is not cutting tape properly	lubricant from roller surfaces
		Refer to tape cutting problems
	The tape is threaded incorrect	Rethread tape
	Applying mechanism spring has too little tension	Move spring hook to next tighter hole

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### 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 feature	es daily	1	13.4	
Cleaning of machine	weekly	1	13.5	
Cleaning of cutter blade	weekly	2	13.6	
Oiling of felt pad	weekly	2	13.7	
Lubrication	monthly	2	13.7-13.8	
Blade replacement	when worn	2	See Manual 2	
Drive belt replacement	when worn	2	13.10	

# 13.4 Inspections to be Performed Before and After Every Maintenance Operation

Before every maintenance operation, Push the 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. Push the 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 (**Figure 13-1**). Oil prevents the build-up of tape adhesive.

(See manual 2)



# **WARNING**

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



# **WARNING**

- To reduce the risk associated with mechanical and electrical hazards:
- Turn electrical 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 the replacement of drive belts in pairs, especially if belts are unevenly worn.

## Lower Drive Belts (Figure 13-4)

- 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).
- 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.

Important - Pin must not extend beyond edge of belt.

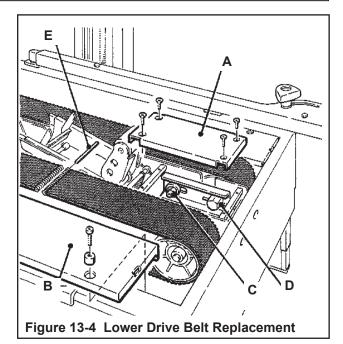
- Adjust belt tension as explained in "Adjustments - Box Drive Belt Tension."
- 8. Replace side cover and center plate and secure with original fasteners.

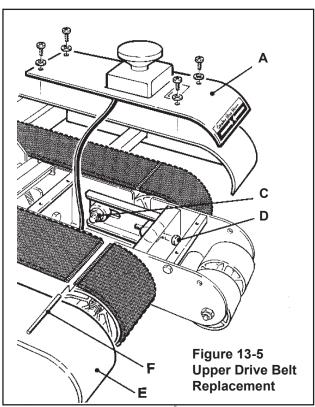
#### **Upper Drive Belts (Figure 13-5)**

- Remove and retain front cover (A) and four (4) screws.
- 2. Loosen, but do not remove lock nut (C).
- Loosen tension screw (D) until all tension is removed from belt.
- Move compression roller assembly out to full open position.
- Remove 4 screws on side of belt guard (E) and slide belt guard out to expose belt.
- 6. Pull belt splicing pin (F) out and remove belt.
- 7. Place new belt over pulleys with laced splice at top. Insert splicing pin.

Important - Pin must not extend beyond edge of belt.

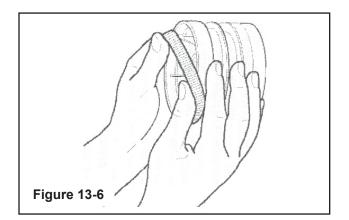
- 8. Adjust belt tension as explained in "Adjustments Box Drive Belt Tension."
- 9. Replace front cover and belt guard(s) and secure with original fasteners.





### 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 13-6**).





# **WARNING**

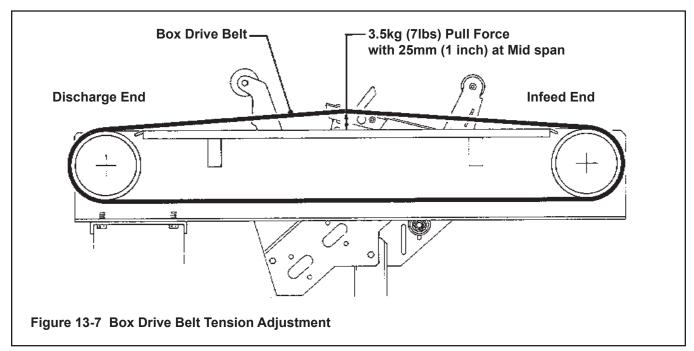
- To reduce the risk associated with mechanical and electrical hazards:
- Turn electrical supply off and disconnect before performing any adjustments,
   maintenance or servicing the machine or taping heads.

#### 13.10 Box Drive Belt Tension

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

Tension adjustment of these belts may be required during normal operation (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.

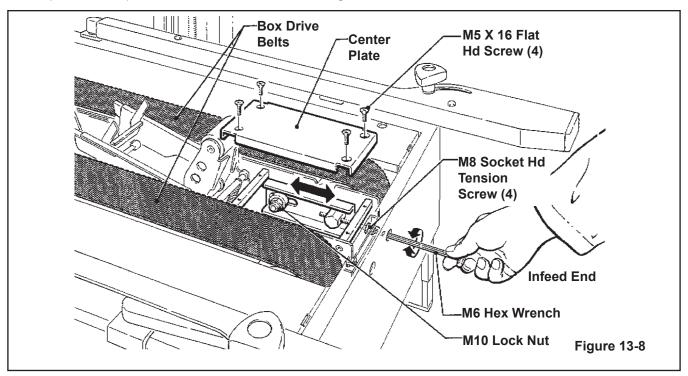
Belt tension is obtained by tightening the adjustment screw so that a moderate pulling force of 3.5kg [7lbs.] applied at the mid span, as shown in **Figure 13-7**, will deflect the belt 25mm [1 inch]. This will assure positive contact between the belt and the drive pulley on the discharge end of the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

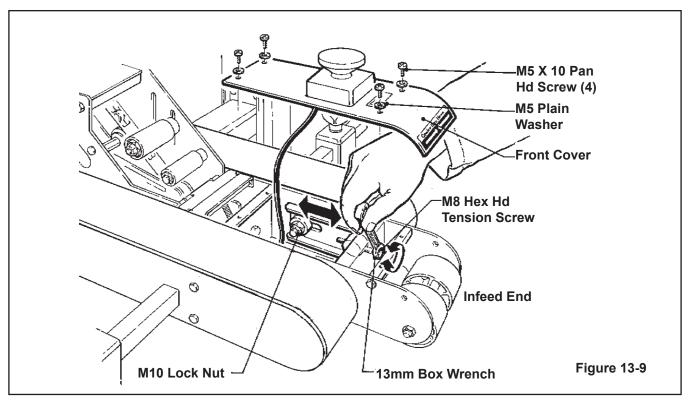


(Tension Adjustment continued on next page)

Refer to Figure 13-8 and 13-9 and adjust belt tension as follows:

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





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# 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

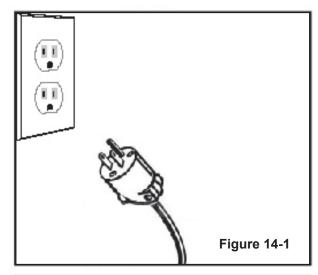
Use a fire extinguisher that is rated for electrical fires (Figure 14-2).

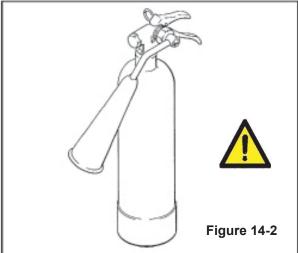
# 15.1 Statement of Conformity

Not Applicable.

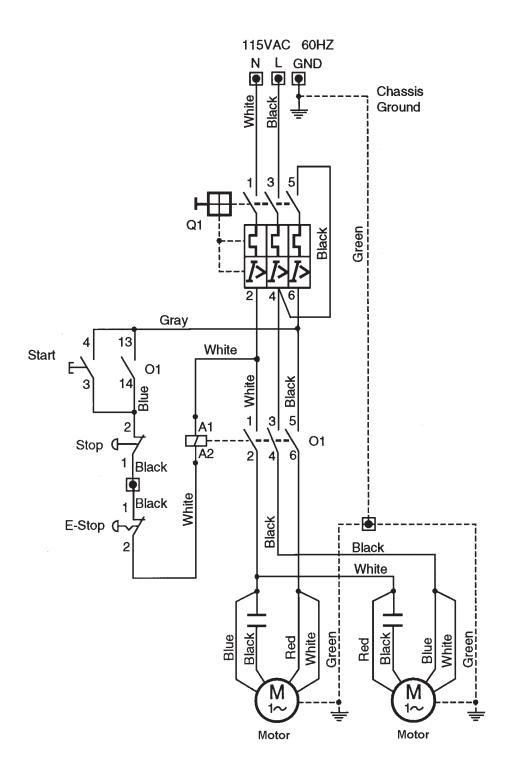
## 15.2 Emission of Hazardous Substances

Nothing to report





# 16.1 Electric Diagram



## 16.2 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 NO.
- POSITION
- 3M PART NO. (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 - 700aks Adjustable Case Sealer

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

#### 700aks

Qty.	3M-Part Number	Description
2	78-8070-1531-4	Belt-Drive W/Hook

Also see Manual 2

#### **Label Kit**

In the event that any labels are damaged or destroyed, **they must be replaced to ensure operator safety**. A label kit, part number 78-8113-6727-1, is available as a stock item. It contains all the safety labels used on the 700aks Adjustable Case Sealer.

#### **Tool Kit**

A tool kit, part number TBA, 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".

# 700aks Adjustable Case Sealer, Type 40800 Frame Assemblies

#### To Order Parts:

- 1. Refer to first illustration, **Frame Assemblies**, for the **Figure Number** that identifies a specific portion of the machine.
- 2. Refer to the appropriate **Figure or Figures** to determine the parts required and the parts reference number.
- 3. The Parts List that follows each illustration, includes the **Reference Number**, **Part Number** and **Part Description** for the parts on that illustration.
  - **Note** The complete description has been included for standard fasteners and some commercially available components. This has been done to allow obtaining these standard parts locally, if desired.
- 4. Order parts by Part Number, Part Description and Quantity required. Also include the model/machine name, machine type, and serial number that are located on the identification plate.
- 5. Refer to the first page of this instruction manual "**Replacement Parts and Service Information**" for replacement parts ordering information.

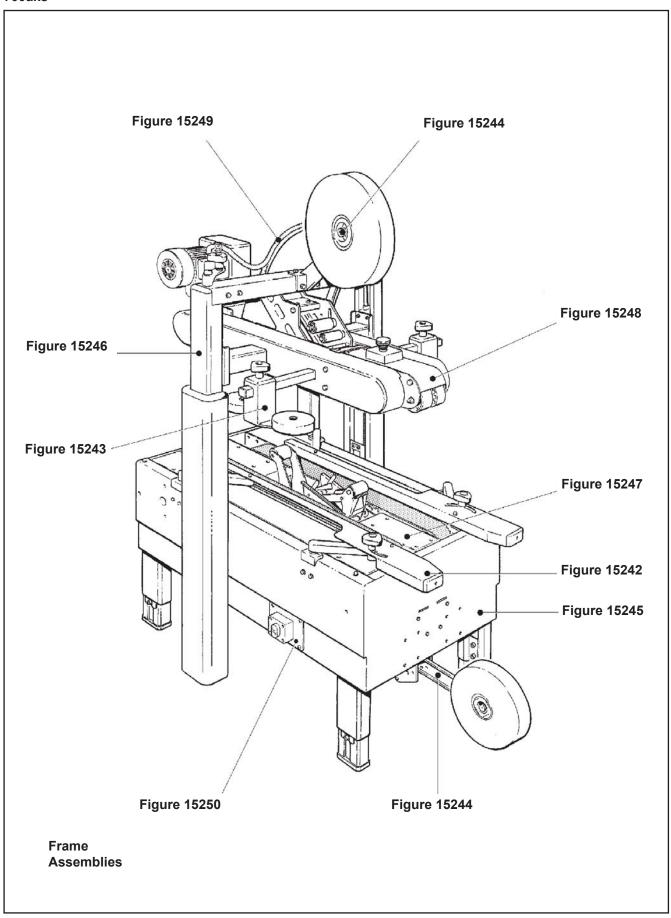
*Important* – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on special order. Contact 3M/Tape Dispenser Parts to confirm item availability.

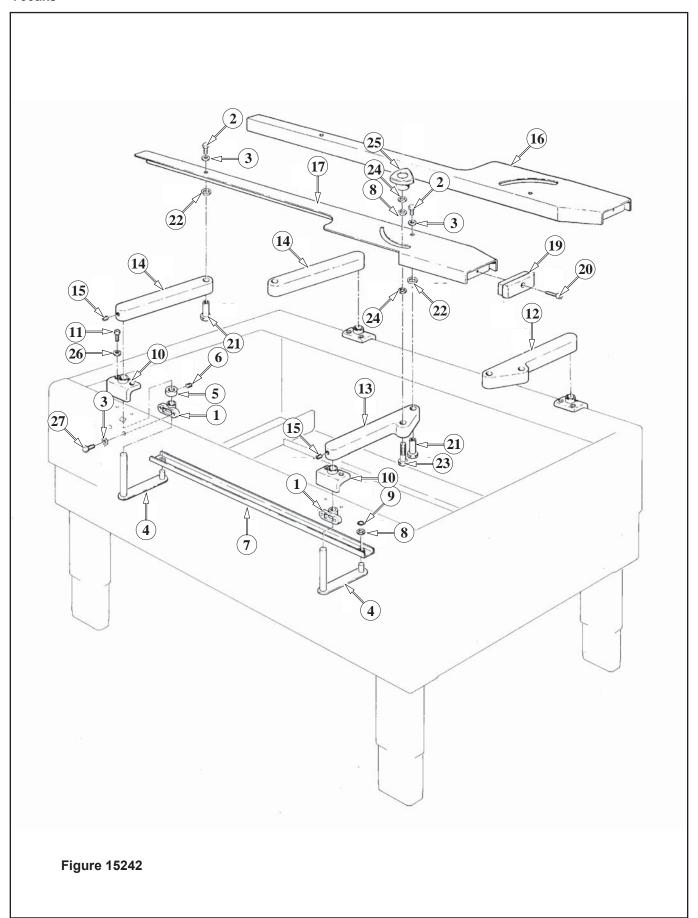
#### **Options and Accessories**

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

Part Number	Option/Accessory
78-8052-6553-1	Box Hold Down Attachment
78-8069-3983-7	Caster Kit Attachment
78-8079-5574-1	Conveyor Extension Attachment
70-0064-4963-4	AccuGlide 3 Upper Taping Head - 3 inch, Type 10800
70-0064-4962-6	AccuGlide 3 Lower Taping Head - 3 inch, Type 10800
78-8069-3926-6	Low Tape Sensor Kit
78-8079-5581-6	Mounting Bracket, Low Tape Monitor Kit
78-8095-4852-8	3 Inch Tape Edge Fold Attachment – Upper
78-8095-4853-6	3 Inch Tape Edge Fold Attachment – Lower

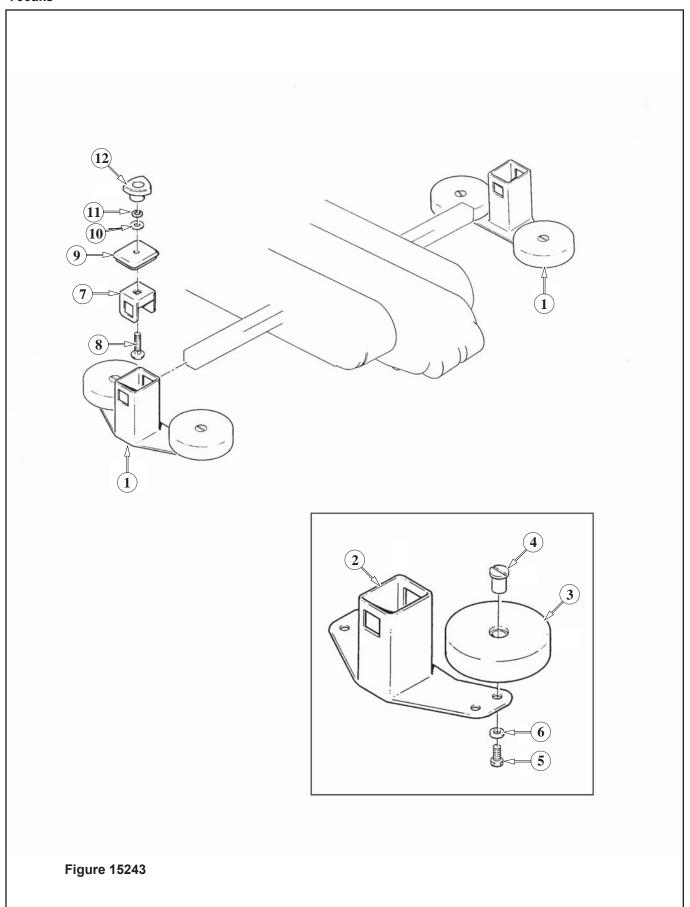
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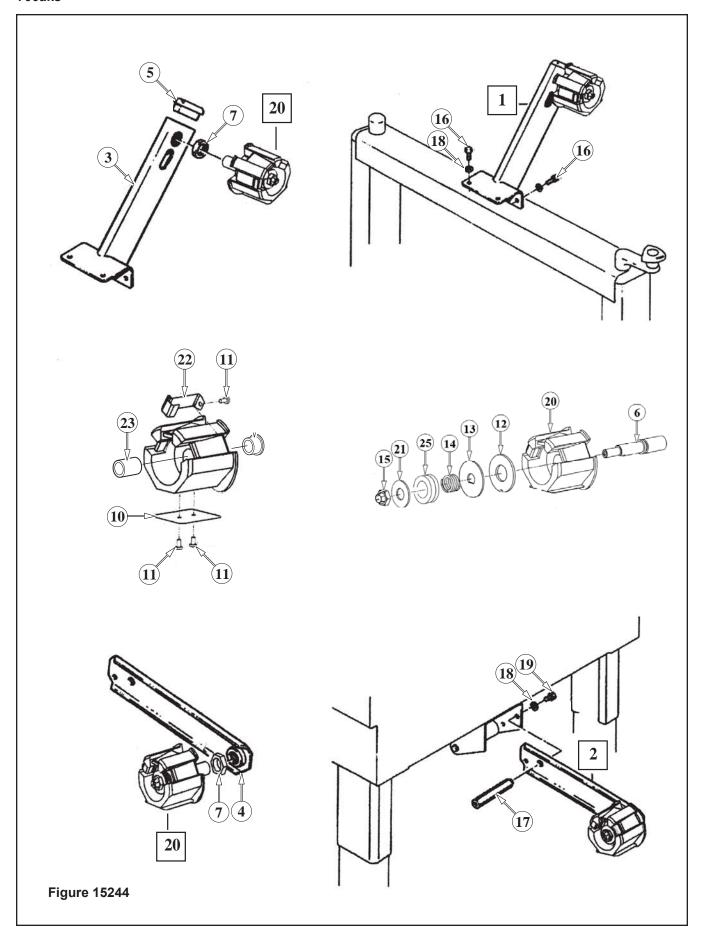
# **Figure 15242**

Ref. No.	3M Part No.	Description
15242-1	78-8070-1536-3	Support – Guide Arm
15242-2	78-8010-7169-3	Screw – Hex Hd, M6 x 12
15242-3	26-1000-0010-3	Washer – Flat, M6
15242-4	78-8070-1537-1	Lever With Pivot
15242-5	78-8070-1538-9	Bushing
15242-6	26-1003-8816-9	Screw - Set, M5 x 6
15242-7	78-8070-1539-7	Link – Guide
15242-8	78-8017-9074-8	Washer – 15 mm, Nylon
15242-9	78-8052-6733-9	Ring – M10, Special
15242-10	78-8070-1540-5	Support – Lever
15242-11	78-8032-0382-3	Screw – Soc Hd, M5 x 16
15242-12	78-8091-0566-7	Guide Arm – Front, Right
15242-13	78-8091-0567-5	Guide Arm – Front, Left
15242-14	78-8137-0944-7	Guide Arm – Rear
15242-15	78-8076-4505-2	Screw - Set, M6 x 8
15242-16	78-8137-0945-4	Guide – Right
15242-17	78-8137-0946-2	Guide – Left, W/English Language Label
15242-19	78-8070-1546-2	Cap – Guide
15242-20	26-1003-7953-1	Screw - Soc Hd, M5 x 30
15242-21	78-8070-1547-0	Shaft - Guide
15242-22	78-8070-1548-8	Washer – 20 x 12, 5 x 1 Nylon
15242-23	26-1003-5852-7	Screw – Hex Hd, M10 x 40
15242-24	26-1004-5510-9	Washer – Plain, M10
15242-25	78-8070-1549-6	Knob – VTR-B-M10
15242-26	78-8005-5735-3	Washer – Lock, M5
15242-27	78-8032-0375-7	Screw – Hex Hd, M6 x 16



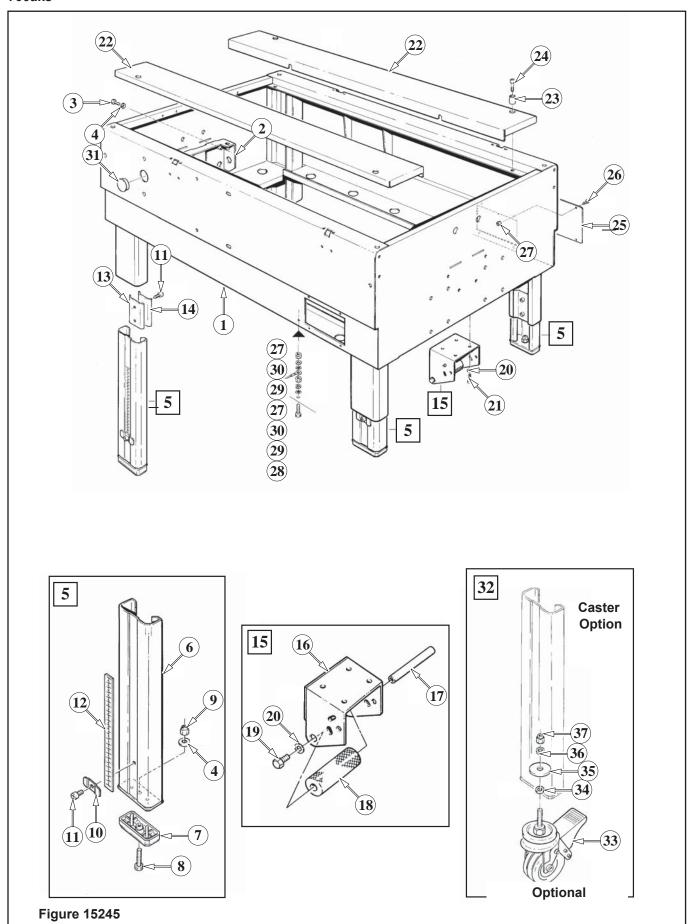
**Figure 15243** 

3M Part No.	Description
78-8076-4626-6	Compression Roller Assy
78-8076-4627-4	Support - Compression Roller
78-8076-4628-2	Roller - Compression
78-8076-4629-0	Shaft - Roller
26-1003-5841-0	Screw M8 X 16
78-8017-9318-9	Washer - Plain - Metric 8MM
78-8076-4630-8	Plate - Tube, Roller
78-8076-4631-6	Screw - M10X35
78-8076-4632-4	Cap - Support
78-8017-9074-8	Washer - Nylon 15MM
26-1004-5510-9	Washer - Plain, M10
78-8070-1549-6	Knob VTR-B-M10
	78-8076-4626-6 78-8076-4627-4 78-8076-4628-2 78-8076-4629-0 26-1003-5841-0 78-8017-9318-9 78-8076-4630-8 78-8076-4631-6 78-8076-4632-4 78-8017-9074-8 26-1004-5510-9



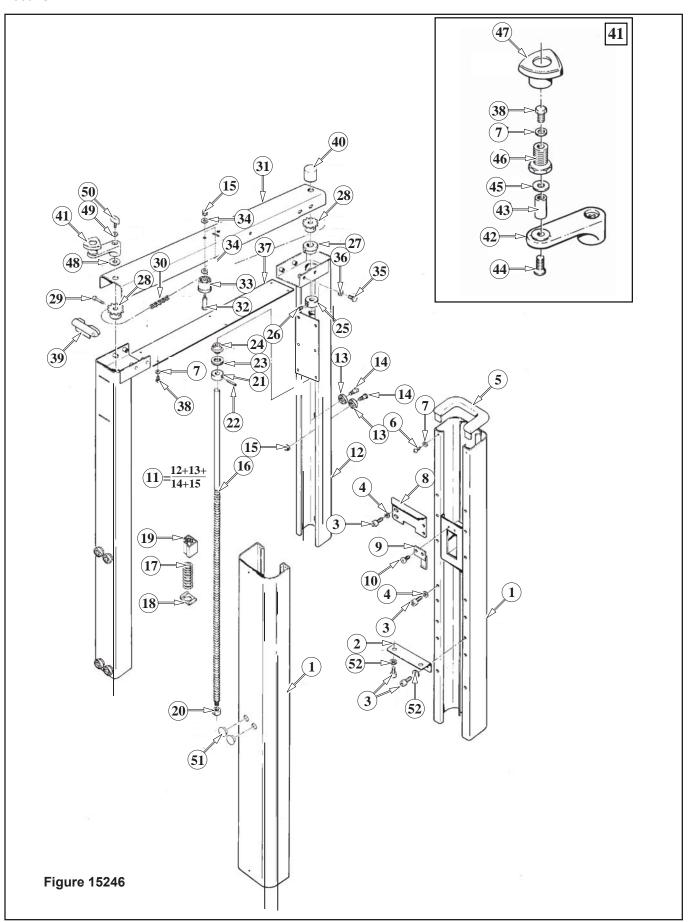
**Figure 15244** 

Ref. No.	3M Part No.	Description
15244-1	78-8076-4633-2	Tape Roll Bracket Assy
15244-2	78-8070-1565-2	Tape Drum Bracket Assy
15244-3	78-8070-1566-0	Bracket - Tape Drum
15244-4	78-8137-0947-0	Bracket - Bushing Assembly
15244-5	78-8070-1568-6	Cap - Bracket
15244-6	78-8060-8462-6	Shaft - Tape Drum 3" Head
15244-7	78-8017-9169-6	Nut - M18 X 1
15244-10	78-8098-8830-4	Leaf Spring, 3"
15244-11	26-1002-5753-9	Screw - Self Tapping, 7SP X 8
15244-12	78-8060-8172-1	Washer - Friction
15244-13	78-8052-6271-0	Washer - Tape Drum
15244-14	78-8100-1048-4	Spring - Core Holder
15244-15	78-8017-9077-1	Nut - Self Locking M10 X 1
15244-16	78-8032-0375-7	Screw Metric M6 X 16 Hex. Hd.
15244-17	78-8070-1215-4	Spacer - Stud
15244-18	26-1000-0010-3	Washer - Flat M6
15244-19	78-8010-7169-3	Screw - Metrci, M6 X1 2, Hex Hd.
15244-20	78-8098-8832-0	3" Latched Tape Drum Assy w/Shaft
15244-21	26-1004-5510-9	Washer - Plain, M10
15244-22	78-8098-8816-3	Tape Drum Hook-up
15244-23	78-8137-0949-6	Bushing 14 X 20 X 30
15244-25	78-8052-6651-3	Washer - Nylon



**Figure 15245** 

Ref. No.	3M Part No.	Description	
15245-1	78-8137-0951-2	Conveyor Bed Assembly	
15245-2	78-8137-0577-5	Support – Drive	
15245-3	26-1003-5842-8	Screw – Hex Hd M8 x 20	
15245-4	78-8017-9318-9	Washer – Plain 8 mm	
15245-5	78-8076-5381-7	Leg Assembly – Inner W/Stop	
15245-6	78-8076-5382-5	Leg – Inner	
15245-7	78-8060-8480-8	Pad – Foot	
15245-8	78-8055-0867-4	Screw – Hex Hd M8 x 30	
15245-9	78-8017-9313-0	Nut – Self Locking M8	
15245-10	78-8076-5383-3	Stop – Leg	
15245-11	26-1003-7963-0	Screw – Soc Hd M8 x 16	
15245-12	78-8060-8481-6	Label – Height	
15245-13	78-8052-6677-8	Clamp – Inner	
15245-14	78-8052-6676-0	Clamp – Outer	
15245-15	78-8137-0952-0	Support – Tape Drum	
15245-16	78-8076-4758-7	Support – Outboard Roll	
15245-17	78-8076-4742-1	Shaft – Roller	
15245-18	78-8076-5030-0	Roller	
15245-19	78-8032-0375-7	Screw – Hex Hd M6 x 16	
15245-20	26-1000-0010-3	Washer – Flat M6	
15245-21	26-1003-7957-2	Screw – Soc Hd M6 x 16	
15245-22	78-8137-0953-8	Plane – Conveyor Bed	
15245-23	78-8060-8486-5	Bushing	
15245-24	78-8023-2334-1	Screw – Soc Hd M6 x 25	
15245-25	78-8060-8487-3	Cover – Switch	
15245-26	78-8017-9066-4	Screw – M5 x 12	
15245-27	78-8010-7417-6	Nut – Hex M5	
15245-29	78-8060-8488-1	Screw – Hex Hd M5 x 20	
15245-29	78-8046-8217-3	Washer – Special	
15245-30	78-8005-5741-1	Washer – Flat M5	
15245-31	78-8076-4701-7	Cap – /28	
15245-32	78-8098-9276-3	Caster Assembly	
15245-33	78-8060-8061-6	Caster	
15245-34	78-8060-8124-2	Spacer - Caster	
15245-35	78-8060-7699-4	Washer /12-45,5X4	
15245-36	78-8017-9059-9	Washer - Spring, Helical, M12	
15245-37	78-8060-7532-7	Nut – M12	
700aks-NA		47	2011 October



# **Figure 15246**

Ref. No.	3M Part No.	Description
15246-1	78-8060-8489-9	Column - Outer
15246-2	78-8060-8490-7	Plate - Column Mounting
15246-3	26-1003-7964-8	Screw Soc. Hd. Hex Soc. Dr., M8 X 20
15246-4	78-8017-9318-9	Washer - Plain - Metric 8MM
15246-5	78-8060-8491-5	Cap - Column
15246-6	26-1002-4955-1	Screw - Self Tap 8P X 13
15246-7	78-8005-5740-3	Washer Plain - Metric 4MM Nick.
15246-8	78-8060-8492-3	Stop - Height
15246-9	78-8076-5482-3	Plate - Nut Stop
15246-10	78-8017-9066-4	Screw - Metric, M5 X 12
15246-11	78-8137-0954-6	Column Assy - Inner
15246-12	78-8137-0955-3	Column - Inner
15246-13	78-8054-8617-8	Bearing - Special /33-8-6
15246-14	78-8054-8589-9	Screw Special
15246-15	26-1003-6916-9	Nut Locking Plastic Insert M6
15246-16	78-8137-0956-1	Lead Screw
15246-17	78-8054-8997-4	Spring
15246-18	78-8054-8970-1	Bed Plate for Spring
15246-19	78-8054-8571-7	Plastic Nut
15246-20	78-8054-8968-5	Special Nut
15246-21	78-8054-8585-7	Collar
15246-22	78-8054-8586-5	Pin
15246-23	78-8054-8584-0	Thrust Bearing - O.D. 30mm
15246-24	78-8054-8583-2	Bushing
15246-25	78-8060-8497-2	Bushing - Lead Screw
15246-26	78-8059-5617-0	Set Screw M6X8
15246-27	78-8060-8498-0	Bushing - Inner Column
15246-28	78-8060-8499-8	Sprocket - 3/8" Z=13
15246-29	26-1003-7946-5	Screw- Soc. HD. M4 X 25
15246-30	78-8137-0957-9	Chain - 3/8" - P = 186
15246-31	78-8137-0958-7	Housing - Chain
15246-32	78-8060-7878-4	Idler Screw
15246-33	78-8070-1503-3	Roller - Chain Tensioning
15246-34	78-8042-2919-9	Washer - Triple, M6
15246-35	26-1003-5829-5	Screw Hex. Hd.M6 X1 2
15246-36	26-1000-0010-3	Washer - Flat M6
15246-37	78-8137-0959-5	Cover
15246-38	78-8010-7157-8	Screw-Hex. Hd. M4 X 10
15246-39	78-8070-1505-8	Cap - Inner Column
15246-40	78-8070-1506-6	Cover - Screw
15246-41	78-8076-4807-2	Crank Assy
15246-42	78-8076-5422-9	Crank
15246-43	78-8070-1509-0	Shaft - Crank
15246-44	26-1005-5316-8	Screw, Flat Hd. Hex Dr. M5 X 16
15246-45	78-8070-1510-8	Washer - Nylon, / 7 X 15 X 1
15246-46	78-8070-1511-6	Bushing Wash NTD B M40
15246-47	78-8070-1512-4	Knob- VTR-B-M12
15246-48	78-8076-4800-7	Washer - Crank
15246-49	78-8076-4809-8	Washer - Crank
15246-50	78-8076-4821-3	Key - Stop
15246-51	78-8054-8821-6	End - Cap
15246-52	26-1004-5507-5	Washer M8

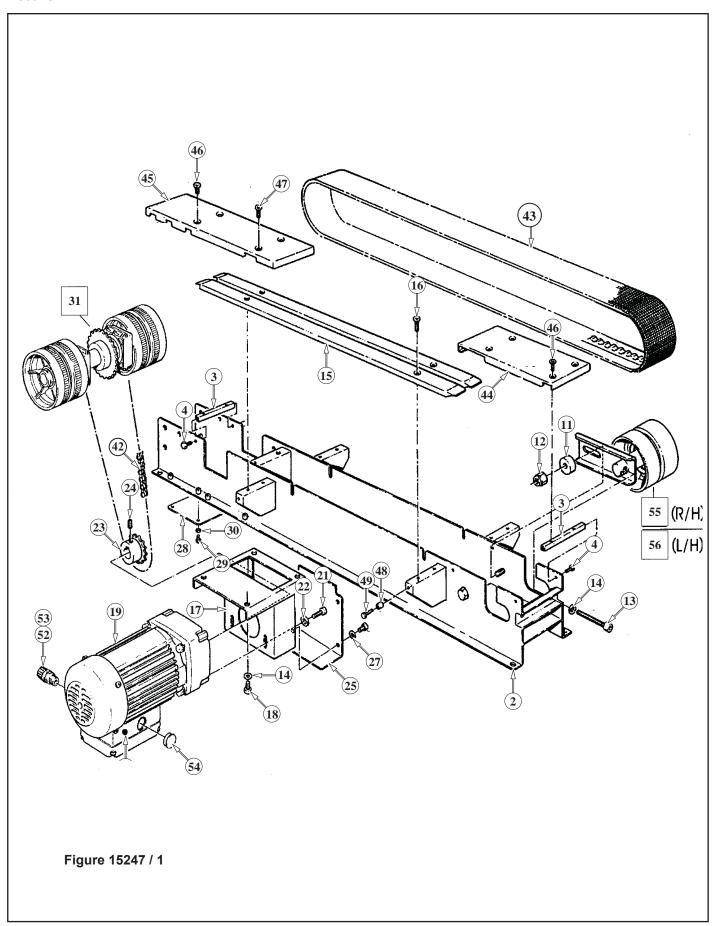


Figure 15247 / 1

Ref. No.	3M Part No.	Description
15247-1	78-8137-0973-6	Drive Assy- BTM
15247-2	78-8137-0579-1	Frame - Drive
15247-3	78-8137-0568-4	Spacer
15247-4	26-1003-5829-5	Screw Hex. Hd. M6 X 12
15247-7	78-8052-6710-7	Roller - Idler
15247-8	78-8052-6709-9	Washer - Special
15247-9	78-8010-7435-8	Washer Metric Lock,M6.
15247-10	26-1003-7957-2	Screw Soc. Hd. Hex. Hd. M6 X 16
15247-11	78-8070-1518-1	Spacer - Shaft
15247-12	26-1003-6918-5	Nut Plastic Insert M10 Hex Flange
15247-13	78-8070-1519-9	Screw - Soc. Hd. Hex. Hd. M8 X 70
15247-14	78-8017-9318-9	Washer-Plain Metric 8MM
15247-15	78-8070-1520-7	Guide - Drive Belt
15247-16	26-1005-4757-4	Screw - Flat Hd, Soc. Dr. M5 X 20
15247-17	78-8137-0960-3	Support - Gear Box
15247-18	26-1003-7964-8	Screw Soc. Hex. Hd. Soc. DR. ,M8 X 20
15247-19	78-8091-0596-4	Gear Motor - Bodine
	78-8100-0865-2	Motor - 220/220v, 50/60 Hz, 3 Phase
	78-8052-6718-0	Motor - 220/415v, 50 Hz, 3 Phase
	78-8052-6719-8	Motor - 260/440v, 50 Hz, 3 Phase
	78-8046-8267-8	Motor - 110/110v, 50/60 Hz, 1 Phase 0.12kw
	78-8091-0654-1	Motor - 145v, 60 Hz, 1 Phase
	78-8046-8268-6	Motor - 220/240v, 50 Hz, 1 Phase 0.12kw
	78-8076-4590-4	Motor - 220/240v, 60 Hz, 1 Phase
15247-20	26-1011-8828-7	Capacitor - 115V Gear Motor
15247-21	78-8070-1523-1	Screw, 1/4 28 X 3/4
15247-22	78-8042-2919-9	Washer - Triple, M6
15247-23	78-8137-0936-3	Sprocket - 3/8" Pitch, 24 Teeth
15247-24	78-8137-0940-5	Screw - Hex Hd.M6 X 20
15247-25	78-8137-0962-9	Cover - Chain

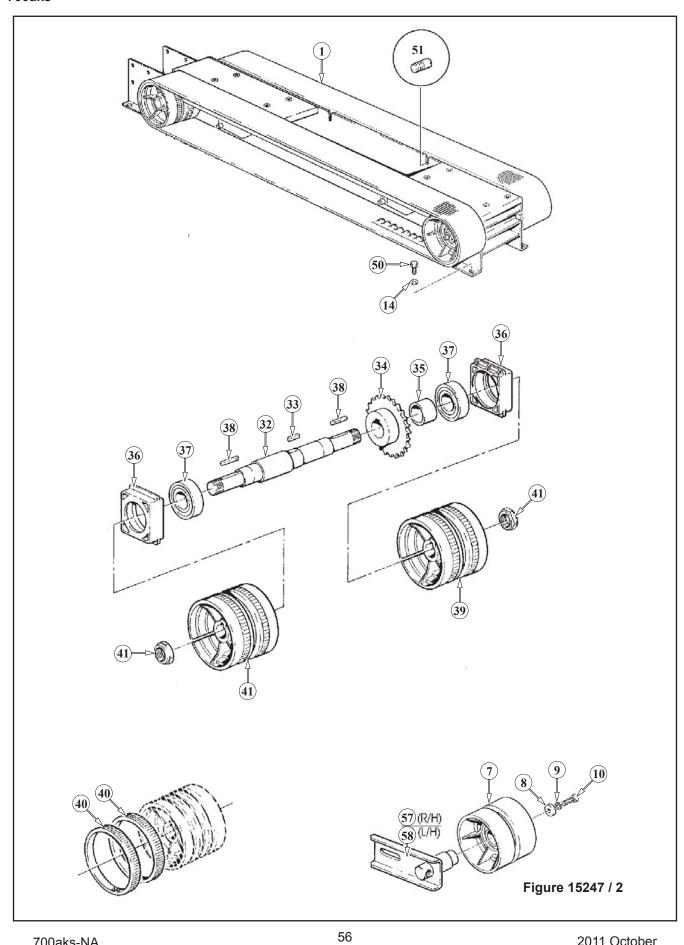
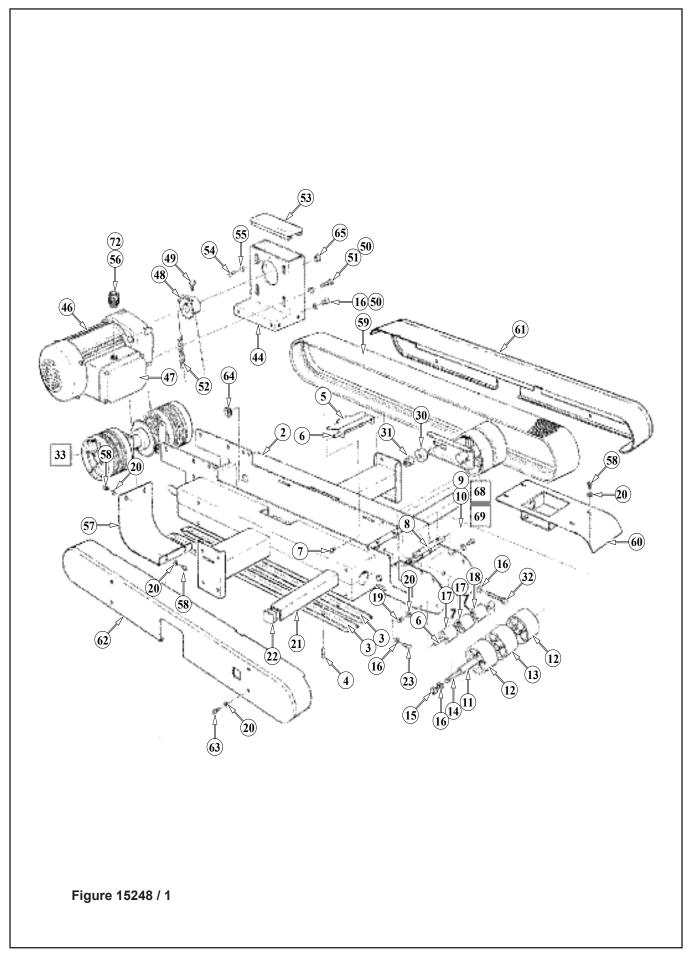


Figure 15247 / 2

Ref. No.	3M Part No.	Description	
15247-26	78-8010-7209-7	Screw, Soc. Hd. M6 X 12	
15247-27	26-1000-0010-3	Washer - Flat M6	
15247-28	78-8137-0963-7	Cover - Bottom	
15247-29	26-1003-5820-4	Screw - Hex Hd. M-5 X1 2	
15247-30	78-8005-5741-1	Washer - Flat, M5	
15247-31	78-8137-0570-0	Shaft W/Drive Pulleys	
15247-31	78-8060-8416-2	Nut - Special M20 X 1	
15247-33	78-8052-6713-1	Ring - Polyurethane	
15247-34	78-8137-0537-9	Shaft - Gear Box	
15247-35	78-8057-5811-3	Key, 6 X 6 X 20MM.	
15247-36	78-8054-8986-7	Sprocket - 3/8" Pitch, 28 Teeth	
15247-37	78-8054-8984-2	Bushing	
15247-38	78-8070-1529-8	Support - Shaft	
15247-39	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52	
15247-40	78-8057-5739-6	Key, M5 X 5 X 30MM	
15247-41	78-8076-5105-0	Pulley Assy - Drive	
15247-42	78-8054-8987-5	Chain- 3/8" P=57	
15247-43	78-8070-1531-4	Belt - Drive, w/Hook	
15247-44	78-8137-0545-2	Cover - Drive, Front	
15247-45	78-8137-0546-0	Cover - Drive, Rear	
15247-46	26-0001-5862-1	Screw, Flat Hd Soc. M5 X 12	
15247-47	26-1005-5316-8	Screw, Flat Hd. Hex Dr.M5 X 16	
15247-48	78-8070-1534-8	Stud - Side Plate	
15247-49	78-8060-8488-1	Screw - Hex. Hd. M5 X 20	
15247-50	26-1003-5841-0	Screw M8X16	
15247-51	78-8076-4500-3	Stud - Mounting	
15247-52	78-8137-0607-0	Core Grip	
15247-53	78-8129-6469-6	Set Nut	
15247-54	78-8060-7885-9	End Cap	
15247-55	78-8100-1236-5	Belt Tensioning Assy - R/H	
15247-56	78-8100-1237-3	Belt Tensioning Assy - L/H	
15247-57	78-8100-1238-1	Belt Tensioning - R/H	
15247-58	78-8100-1239-9	Belt Tensioning - L/H	
700 alsa NIA		57	2011 October



# Figure 15248 / 1

Ref. No.	3M Part No.	Description
45040.4	70 0407 0007 0	Drive Access Top
15248-1	78-8137-0967-8	Drive Assy - Top
15248-2	78-8137-0968-6	Frame- Drive , Upper
15248-3	78-8070-1520-7	Guide - Drive Belt
15248-4	26-1005-4757-4	Screw - Flat Hd, Soc .DR. M5 X 20
15248-5	78-8137-0533-8	Clamp - Upper Head
15248-6	78-8137-0534-6	Shaft - Roller
15248-7	26-1003-7948-1	Screw, Soc. Hd. Hex. Soc. M5 X 10
15248-8	78-8137-0568-4	Spacer
15248-9	78-8010-7169-3	Screw - Metric, M6 X 12, Hex. Hd.
15248-10	26-1000-0010-3	Washer - Flat M6
15248-11	78-8100-1130-0	Tube - Roller
15248-12	78-8137-0599-9	Roller
15248-13	78-8076-4656-3	Roller
15248-14	78-8100-1131-8	Shaft - Roller
15248-15	78-8100-1132-6	Nut - Special, M8
15248-16	78-8017-9318-9	Washer - Plain- Metric 8MM
15248-17	78-8060-7693-7	Roller 32 X 38
15248-18	78-8137-0548-6	Spacer - Roller
15248-19	26-1003-5820-4	Screw - Hex. Hd. M-5 X 12
15248-20	78-8005-5741-1	Washer - Flat, M5
15248-21	78-8137-0969-4	Tube - Compression Roller
15248-22	78-8052-6652-1	Cap - End
15248-23	26-1003-5841-0	Screw M8 X 16
15248-26	78-8052-6710-7	Roller, Idler
15248-27	78-8052-6709-9	Washer - Special
15248-28	78-8010-7435-8	Washer Metric Lock, M6
15248-29	26-1003-7957-2	Screw Soc. Hd. Hex Hd. M6 X 16
15248-30	78-8070-1518-1	Spacer - Shaft
15248-31	26-1003-6918-5	Nut, Plastic Insert M10 Hex Flange
15248-32	78-8070-1594-2	Screw - Hex. Hd. M8 X 60
15248-33	78-8137-0570-0	Shaft w/Drive Pulleys
15248-34	78-8137-0537-9	Shaft - Gear Box
15248-35	78-8057-5811-3	Key, 6 X 6 X 20MM.
15248-36	78-8054-8986-7	Sprocket - 3/8" Pitch, 28 Teeth
15248-37	78-8054-8984-2	Bushing
15248-38	78-8070-1529-8	Support - Shaft
15248-39	78-8070-1530-6	Radial Ball Bearing - 6205-2RS, O.D. 52
15248-40	78-8057-5739-6	Key, M5 X 5 X 30MM
15248-41	78-8076-5105-0	Pulley Assy - Drive
15248-42	78-8052-6713-1	Ring - Polyurethane
10270 72	10 0002-01 10-1	rang rolyarothano

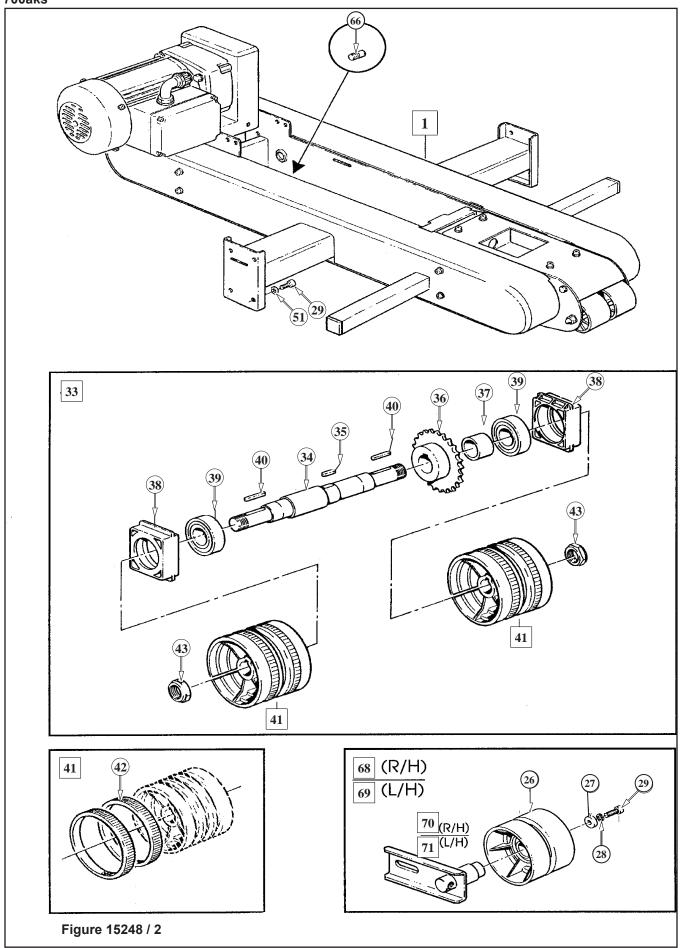
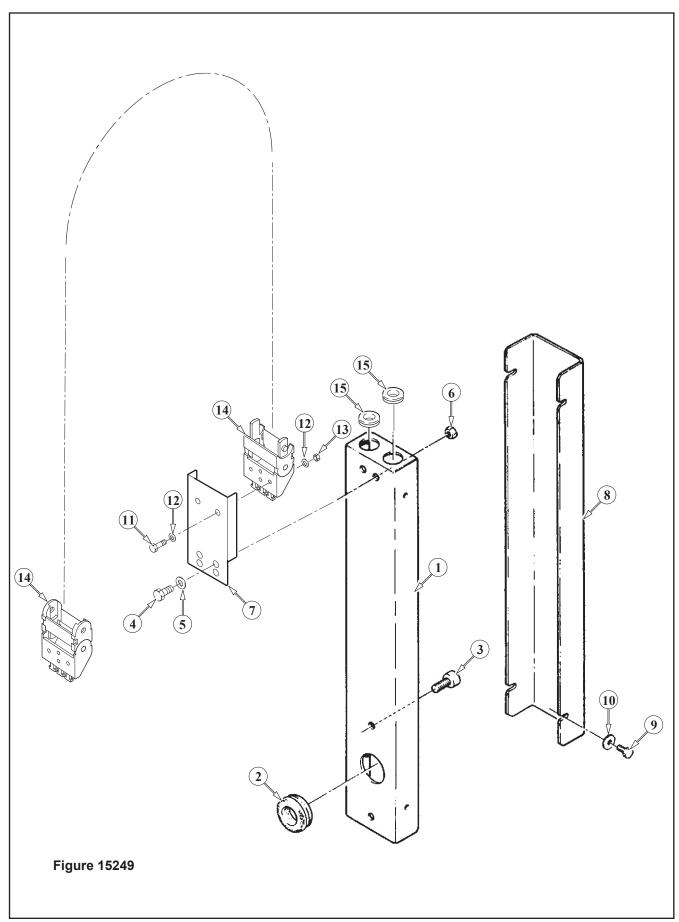


Figure 15248 / 2

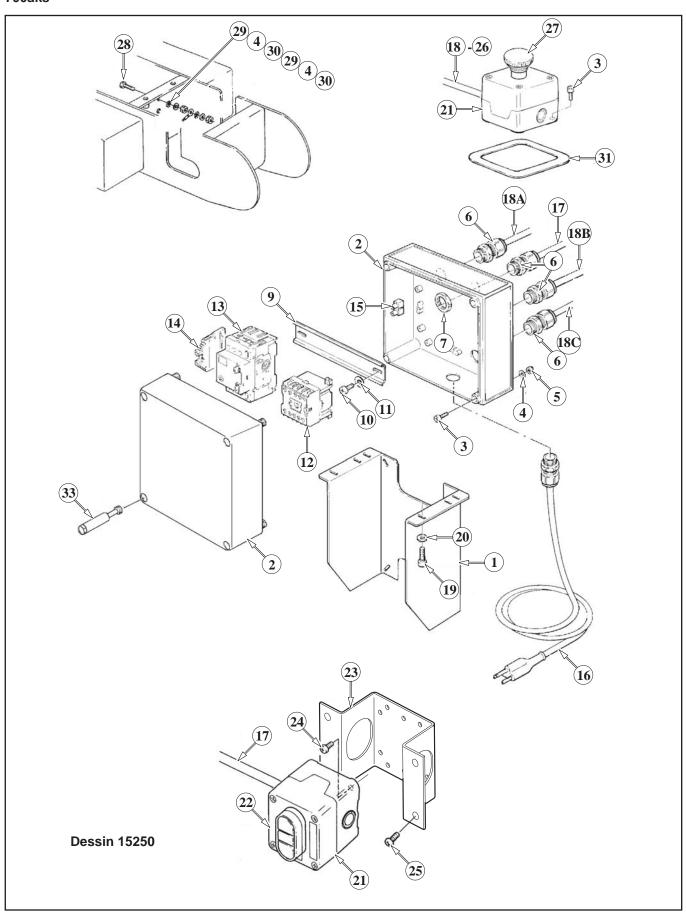
Ref. No.	3M Part No.	Description
15248-43	78-8060-8416-2	Nut - Special M20 X 1
15248-44	78-8137-0970-2	Support - Drive
15248-45	26-1003-5842-8	Screw Hex. Hd. M8 X20
15248-46	78-8091-0596-4	Gear Motor - Bodine
15248-47	26-1011-8828-7	Capacitor - 115V Gear Motor
15248-48	78-8137-0936-3	Sprocket - 3/8" Z=24
15248-49	78-8137-0940-5	Screw - M6X20
15248-50	78-8070-1523-1	Screw- 1/4-28X3/4
15248-51	78-8100-1042-7	Washer - /15X6.35X2
15248-52	78-8137-0937-1	Chain - 3/8 Pitch 65 Pitch Long
15248-53	78-8070-1598-3	Cover
15248-54	26-1002-4955-1	Screw - Self Tap 8P X 13
15248-55	78-8005-5740-3	Washer Plain - Metric 4MM Nick.
15248-56	78-8137-0607-0	Cord Grip
15248-57	78-8076-4622-5	Cover - Rear Upper
15248-58	78-8017-9066-4	Screw - Metric, M5X12
15248-59	78-8070-1531-4	Belt- Drive , w/Hook
15248-60	78-8137-0971-0	Cover - Upper, Front
15248-61	78-8100-1133-4	Guard - Belt, R/H
15248-62	78-8100-1134-2	Guard - Belt L/H
15248-63	78-8076-46258-	Screw - Special M5 X 16
15248-64	78-8076-4702-5	Grommet - HEYCO SB1093-13
15248-65	78-8054-8821-6	End - Cap
15248-66	78-8076-4500-3	Stud - Mounting
15248-68	78-8100-1236-5	Belt Tensioning ASSY - R/H
15248-69	78-8100-1237-3	Belt Tensioning ASSY - L/H
15248-70	78-8100-1238-1	Belt Tensioning - R/H
15248-71	78-8100-1239-9	Belt Tensioning - L/H
15248-72	78-8129-6469-6	Set Nut



## 700aks

## **Figure 15249**

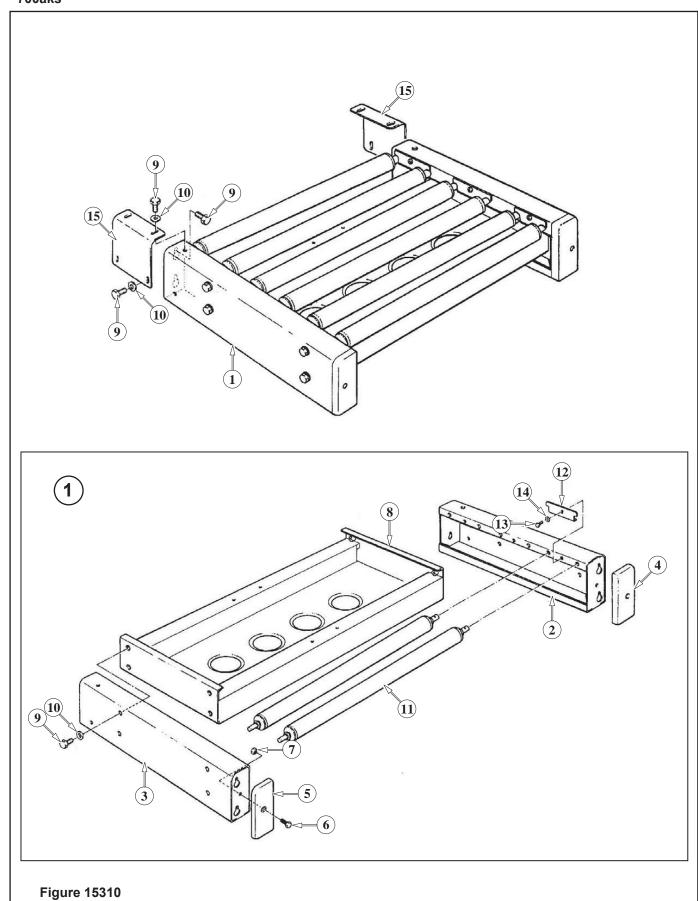
Ref. No.	3M Part No.	Description
15249-1	78-8091-0660-8	Housing - Wire
15249-2	78-8076-4702-5	Grommet - HEYCO SB1093-13
15249-3	26-1003-7963-0	Screw - Soc. Hd. M8 X 16
15249-4	78-8010-7163-6	Screw - Metric, M5 X 10, Hex. Hd.
15249-5	78-8005-5741-1	Washer - Flat, M5
15249-6	78-8010-7417-6	Nut - Metric, Hex. STL. M5
15249-7	78-8137-0965-2	Support
15249-8	78-8076-4641-5	Cover
15249-9	78-8010-7157-8	Screw - Hex. Hd. M4 X 10
15249-10	78-8017-9018-5	Washer - Metric, PLAIN, M4 Spec.
15249-11	78-8060-7826-3	Screw, Hex. Hd. M4 X 16
15249-12	78-8005-5740-3	Washer Plain - Metrci 4MM Nick.
15249-13	78-8010-7416-8	Nut - Metric, Hex., STEEL M4
15249-14	78-8137-0966-0	Chain
15249-15	78-8060-7758-8	Grommet



## 700aks

## **Figure 15250**

Ref. No.	3M Part No.	Description	
15250-1	78-8094-6379-3	Support - Box	
15250-2	78-8113-6759-4	Enclosure w/English Lang. Label	
15250-3	78-8094-6381-9	Screw - Soc. Hd., Hex. Hd. M4 X 15	
15250-4	78-8005-5740-3	Washer Plain - Metric 4MM Nick.	
15250-5	26-1003-6914-4	Nut, Plastic Insert M4	
15250-6	78-8076-4715-7	Cord Grip	
15250-7	78-8076-5211-6	Set Nut GMP13.5	
15250-9	78-8094-6382-7	Guide - Mounting	
15250-10	78-8028-8208-0	Screw - 6PX9,5	
15250-11	78-8017-9018-5	Washer - Metric, Plain, M4 Spec.	
15250-12	78-8137-0604-7	Contactor - Allen Bradley 120V 60 Hz	
	78-8094-6383-5	Contactor - Allen Bradley 110V, 60HZ	
	78-8100-0830-6	Contactor - Allen Bradley 220V, 50HZ	
	78-8100-0831-4	Contactor - Allen Bradley 380V, 50HZ	
15250-13	78-8137-0603-9	Circuit Breaker - Allen Bradley	
	78-8100-0755-5	Circuit Breaker - Allen Bradley 2.5-4 A	
	78-8076-5378-3	Circuit Breaker - Allen Bradley 1.6-2.5A	
	78-8114-4600-0	Circuit Breaker - Allen Bradley 6.3-10a	
	78-8076-5223-1	Circuit Breaker - Allen Bradley 1-1.6A	
	78-8119-8965-2	Circuit Breaker - Allen Bradley	
15250-14	78-8094-6384-3	Clamp	
15250-15	78-8076-4968-2	Terminal	
15250-16	78-8028-7909-4	Power Cord U.S.A.	
15250-17	78-8100-1038-5	Cable - 3 X 20 AWG, 5 MT	
15250-18	78-8060-8053-3	Wire - 3-Pole, 5 Meters Length	
15250-19	26-1003-7957-2	Screw Soc. Hd. Hex. Hd. M6X16	
15250-20	26-1000-0010-3	Washer - Flat M6	
15250-21	78-8076-5194-4	Box - E-Stop - Yellow	
15250-22	78-8137-0823-3	Switch - On/Off	
15250-23	78-8137-0972-8	Support - On/Off Switch	
15250-24	78-8017-9257-9	Screw - Phillips Head, M4 X 10	
15250-25	78-8017-9066-4	Screw - Metric, M5 X 12	
15250-26	78-8060-7758-8	Grommet	
15250-27	78-8137-0609-6	E-Stop	
15250-28	78-8091-0538-6	Screw - Hex. Hd. M4X20	
15250-29	78-8076-4716-5	Star Washer - M4	
15250-30	78-8010-7416-8	Nut - Metric, Hex, Steel M4	
15250-31	78-8100-1234-0	Collar	
15250-33	78-8114-4896-4	Box - On/Off, Grey	



## 700aks

## **Figure 15310**

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

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## **3M**

# Instructions and Parts List

3M-Matic

AccuGlide 3
Upper and
Lower
Taping Heads
3 Inch

**Type 10800** 

Serial No.\_\_\_\_\_

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



# Important Safety Information

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

## **Spare Parts**

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



**3M Industrial Adhesives and Tapes** 3M Center, Building 220-5E-06 St. Paul, MN 55144-1000 AccuGlide<sup>™</sup> is a Trademark of 3M, St. Paul, MN 55144-1000 Litho in U.S.A

© 3M 2012 44-0009-2071-8 (E010712-NA)

#### **Replacement Parts and Service Information**

#### To Our Customers:

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

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

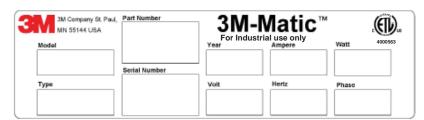
Technical Assistance / Replacement Parts and Additional Manuals:

Call the 3M-Matic<sup>™</sup> 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 200a - Accuglide 3 - 3 inch - Type 10800 - Serial Number 13282).

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

Fax: 1-715-268-8153

#### **Identification Plate**



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

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





To Our Customers:

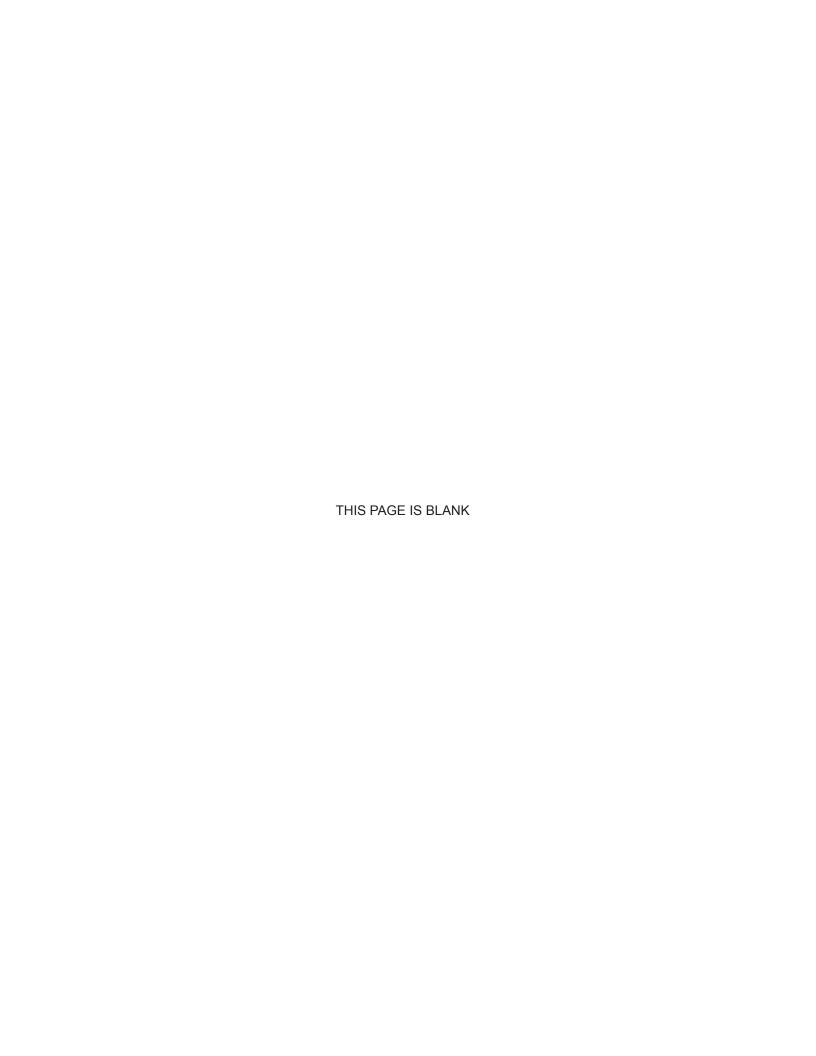
This is the 3M-Matic<sup>™</sup>/AccuGlide<sup>™</sup>/Scotch<sup>®</sup> equipment you ordered. It has been set up and tested in the factory with Scotch<sup>®</sup> tapes. If any problems occur when operating this equipment and you desire a service call or phone consultation, call, write, or fax the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





## **Instruction Manual**

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

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#### **Equipment Warranty and Limited Remedy:**

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

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

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

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

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

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

#### **Taping Head Contents**

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

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

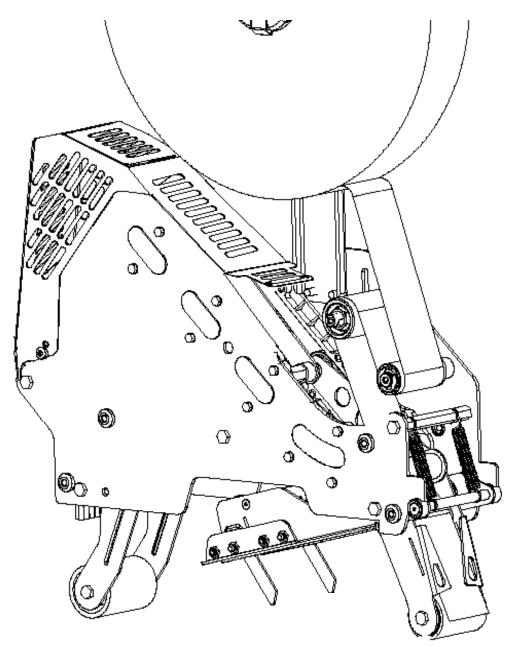
AccuGlide™, Scotch™, and 3M-Matic™ are Trademarks of 3M, St. Paul, Minnesota 55144-1000

#### **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  $3M\text{-}Matic^{\,\text{TM}}$  case sealers. The compact

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



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

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#### **Taping Head Contents**

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

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

#### **General Information**

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, set-up and adjustments, technical and manufacturing specifications, maintenance, troubleshooting, repair work and servicing, electric diagrams, warranty information, disposal (ELV), a glossary with a definition of symbols, plus a parts list 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition January 2012/Copyright 3M 2012. All rights reserved The manufacturer reserves the right to change the product at any time without notice Publication © 3M 2012.

#### 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 - &\$\$U#Accuglide 3 - 3" - Type 10800 - Serial Number 13282**).

#### Note:

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



#### **Updating the Manual**

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



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

#### **Explanation of Signal Word Consequences**



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



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



## **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

- Pour réduire le risque associé aux dangers mécaniques et électriques:
- Lisez, comprenez, et suivez toutes les consignes de sécurité d'utilisation avant d'utiliser ou entretenir la colleuse de carton.
- Permettre uniquement au personnel correctement formé et qualifié d'utiliser et entretenir cet équipement.
- Pour réduire le risque associé aux pincements, à l'enchevêtrement et tension électrique dangereuse:
- Couper l'alimentation électrique et débrancher avant d'effectuer tout réglage, toute maintenance ou entretien courant sur la machine ou les applicateurs de ruban.
- Pour réduire le risque associé aux dangers de pincements et enchevêtrement:
- Ne pas laisser la machine en fonctionnement sans surveillance.
- Arrêtez la machine quand elle n'est pas utilisée.
- N'essayez jamais de travailler sur quelque partie que ce soit de la machine, de charger le ruban, ou d'enlever des boîtes bloqués dans la machine pendant que la machine fonctionne.
- Pour réduire le risque associé à la tension électrique dangereuse:
- Placez le cordage électrique loin de la circulation de pieds et de véhicules.

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.

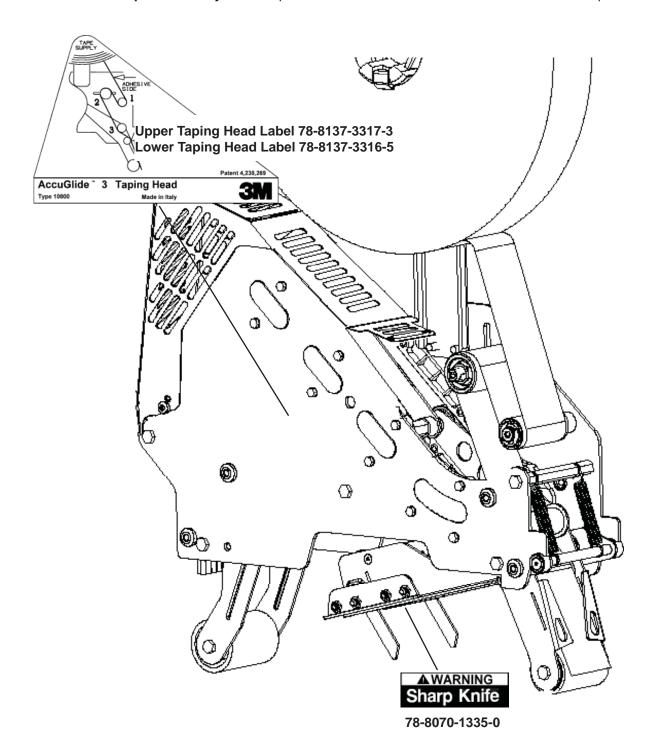


Figure 1-1 Replacement Labels/3M Part Numbers

#### **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

Length – 150mm [6 inches]

Height – 120mm [4-3/4 inches] (most "3M-Matic" Case Sealers)
90mm [3-1/2 inches] (with optional 2 inch leg length)

Width – 150mm [6 inches]

Maximum

Unlimited
Limited by
Case Sealer

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

#### 6. Operating Rate:

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

#### 7. Operating Conditions:

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

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

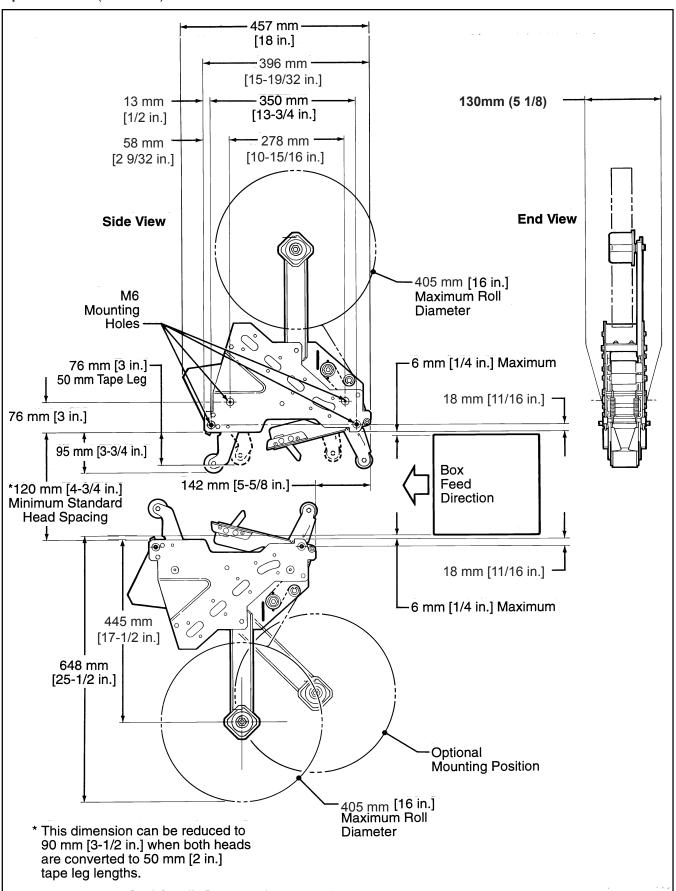
#### 8. Taping Head Dimensions:

Length – 442 mm [17 3/8 inches]

Height – 648 mm [25 1/2 inches] (with tape drum)

Width – 130 mm [5-1/8 inches] (without mounting spacers)

Weight – Packaged: 8.2 kg [18 lbs.] Unpackaged: 7.3 kg [16 lbs.]





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

#### **Receiving And Handling**

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

#### **Installation Guidelines**

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



## **CAUTION**

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

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

- The box conveying system must positively propel the box in a continuous motion, not exceeding 0.50 m/s [100 feet per minute], past the taping head assembly since the box motion actuates the taping mechanism.
- If a pusher or cleated conveyor is being used, steps should be taken in the conveyor design to prevent the pusher from contacting the applying or buffing roller arms resulting in damage to the taping head.

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

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

- 4. Mounting studs are provided with the taping head, but special installations may require alternate means for mounting.
- 5. Box hold-down or guide skis should be provided and the taping head mounted so that the side plates are 6mm [1/4 inch] maximum away from the ski surface on which the box rides.

#### Tape Leg Length

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

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

#### **Tape Width Adjustment**

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

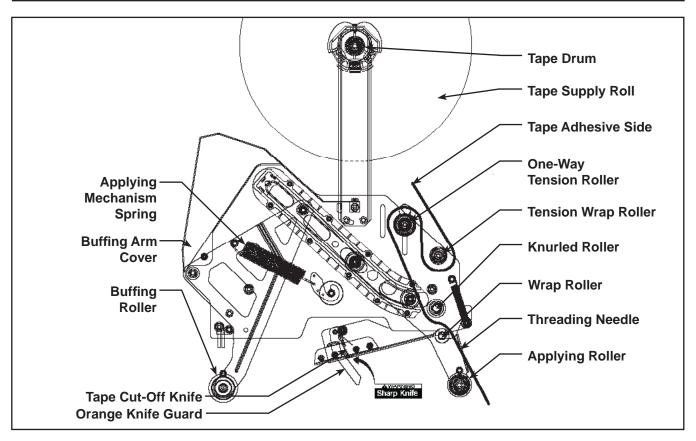


Figure 3-1 Taping Head Components/Threading Diagram - Upper Head (Left Side) View)

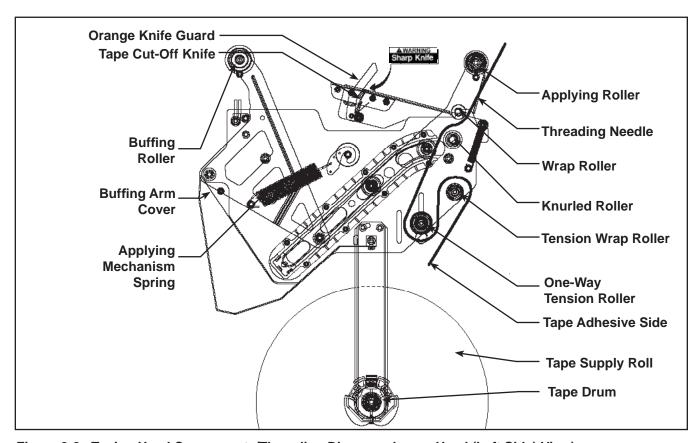


Figure 3-2 Taping Head Components/Threading Diagram - Lower Head (Left Side) View)



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

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

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



### **CAUTION**

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

#### Tape Loading - Upper Taping Head

- 1. Place the upper taping head in a convenient working position.
- Refer to Figures 3-3 to 3-5 and tape threading label. Position the tape supply roll so the adhesive side of tape is facing the front of the taping head as it is pulled from the supply roll.
- 3. Attach the threading needle to the end of the roll. Guide the threading needle around the wrap roller (Position 1) then back around the one-way tension roller (Position 2).
- 4. Continue pulling the threading needle down and guide it between the two rollers on the apply arm (Position 3).

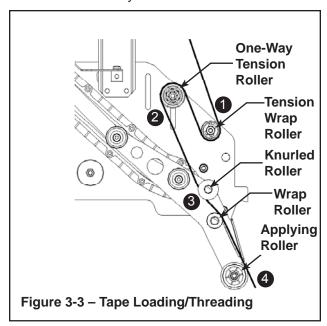
- 5. Pull the threading needle down until the tape travels between the apply plate and the ears of the apply arm (Position 4) until it extends past the applying roller. When properly threaded the adhesive side of the tape should be facing the knurled rollers at position 2 and also position 3.
- 6. Cut away any excess tape.

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

#### Tape Loading - Lower Taping Head

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

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



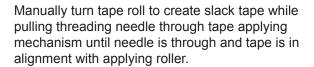
### Figure 3-4

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.

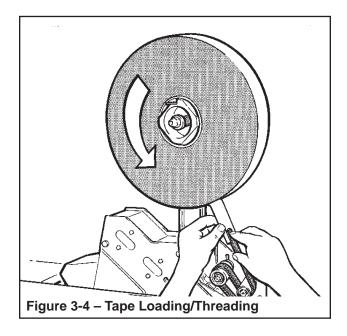


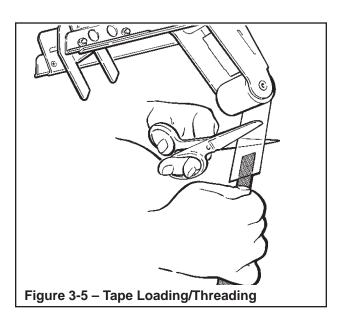
## **WARNING**

- 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



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







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

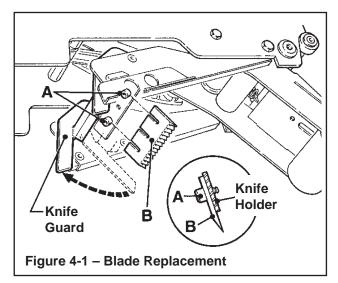
The AccuGlide™ 3 Taping Head - 3 Inch has been designed for long, trouble free service. The taping head will perform best when it receives routine maintenance and cleaning. Taping head components that fail or wear excessively should be promptly repaired or replaced to prevent damage to other portions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

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



## **WARNING**

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



Bottom the blade slots against the screws.
 (This will position the blade at the correct angle.)
 Tighten the blade screws to secure the blade.

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

#### **Blade Guard**

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

#### **Blade Oiler Pad**



#### WARNING

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

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 tto reduce adhesive build-up. Apply SAE #30 non-detergent oil as needed. Saturate felt oiler pad.oil.

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



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

#### Cleaning

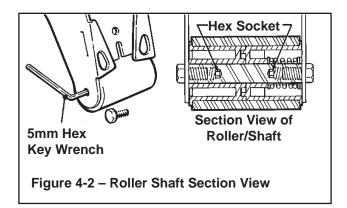
Regular slotted containers produce a great deal of dust and paper chips when conveyed through taping heads. If this dust is allowed to build-up on the heads, it can cause wear on the moving parts. Excessive dirt build-up should be wiped off with a damp cloth. Cleaning should be done once per month, depending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

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

#### Applying/Buffing Roller Replacement

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

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





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



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

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

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

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

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

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

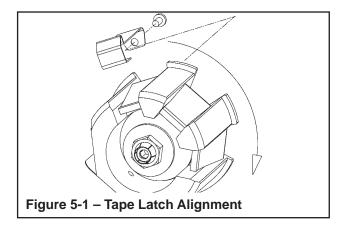
- 2. Turn tape drum shaft in or out to center the tape web (use 5mm hex wrench).
- 3. Tighten locking hex nut to secure the adjustment.

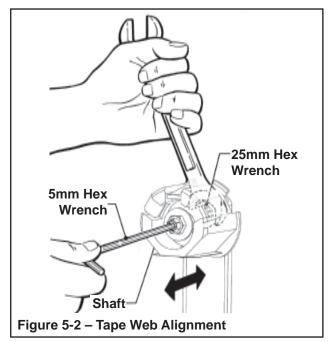
No other components require adjustment for tape web alignment.

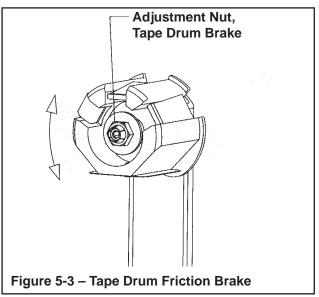
#### **Tape Drum Friction Brake - Figure 5-3**

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

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









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

#### **Applying Mechanism Spring**

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

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

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

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

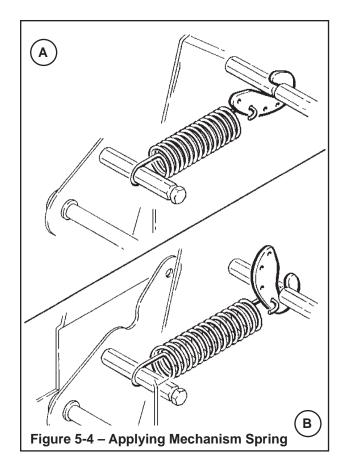
#### **One-Way Tension Roller**

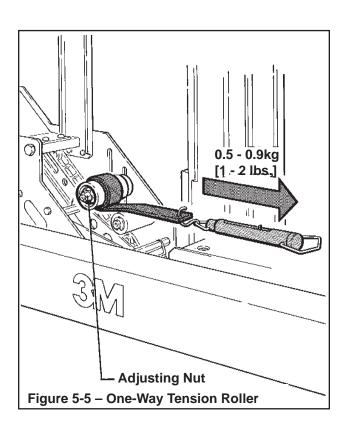
#### Figure 5-5

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

#### To Adjust Tension:

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







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

#### Tape Leg Length



### WARNING

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

#### Leading Tape Leg Length Adjustment - Figure 5-6

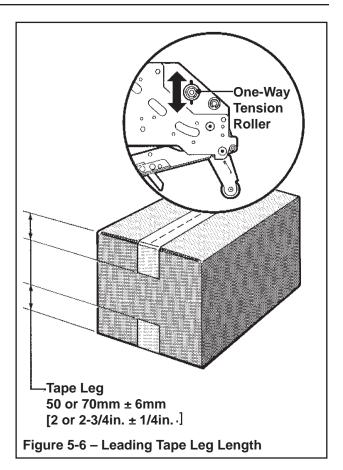
The one-way tension roller position is adjustable to control the leading tape leg length.

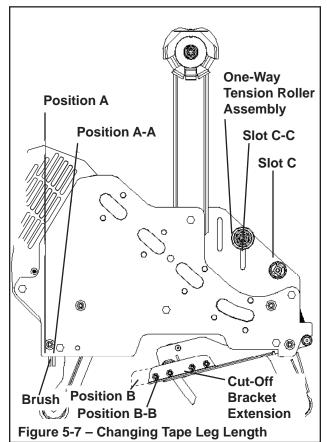
Moving this roller farther away from the box top or bottom surface will decrease the leading leg length. Moving it closer to the box top or bottom surface will increase the leading leg length.

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

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

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





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## Troubleshooting

## **Troubleshooting Guide**

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

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

#### **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	Knife – 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	Knife – 89mm/3.5 Inch
2	78-8052-6602-6	Spring – Cutter
4	78-8076-4500-3	Stud – Mounting
1	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.

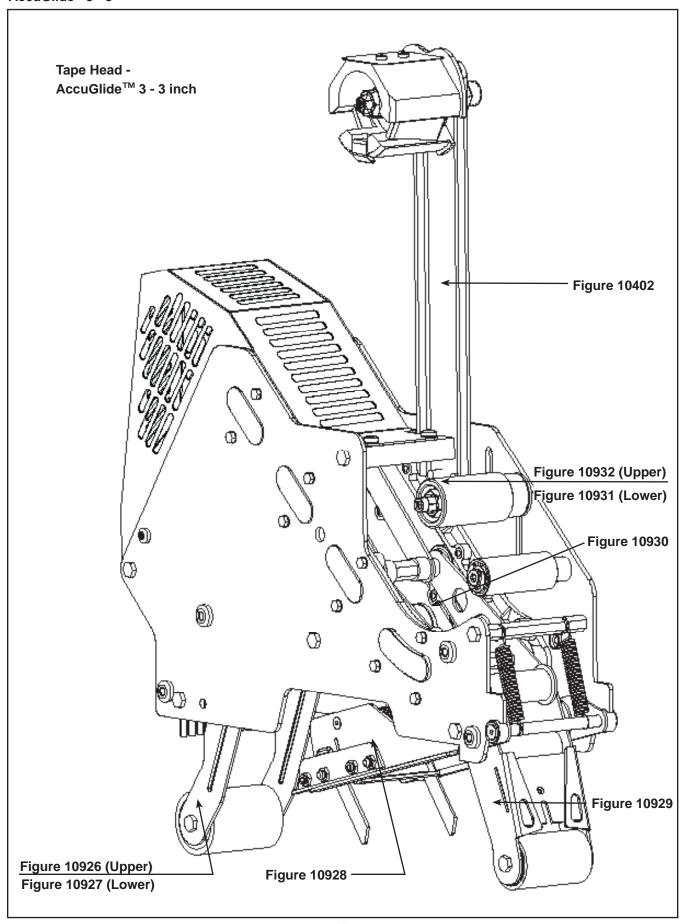
Qty.	Part Number	Description
1	78-8057-6181-0	Roller – Applying
1	78-8057-6180-2	Roller – Buffing
1	78-8113-7030-9	Spring – Torsion

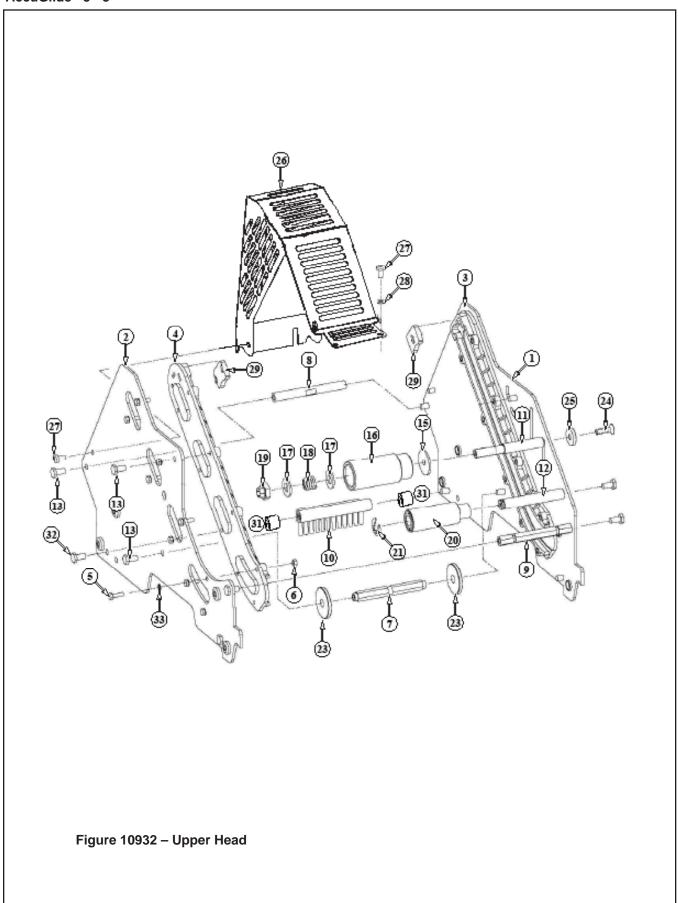
#### **Replacement Parts and Service**

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

to confirm item availability.

1.	Refer to the <b>Taping Head Assemblies</b> Figure to find all the parts illustrations identified by <b>figure numbers</b> .
2.	Refer to the figure or figures to determine the <b>individual parts</b> required and the <b>parts reference number.</b>
3.	The <b>replacement parts list</b> , that follows each illustration, includes the <b>part number</b> and <b>part description</b> for the parts in that illustration.
	<b>Note</b> – 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





### 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
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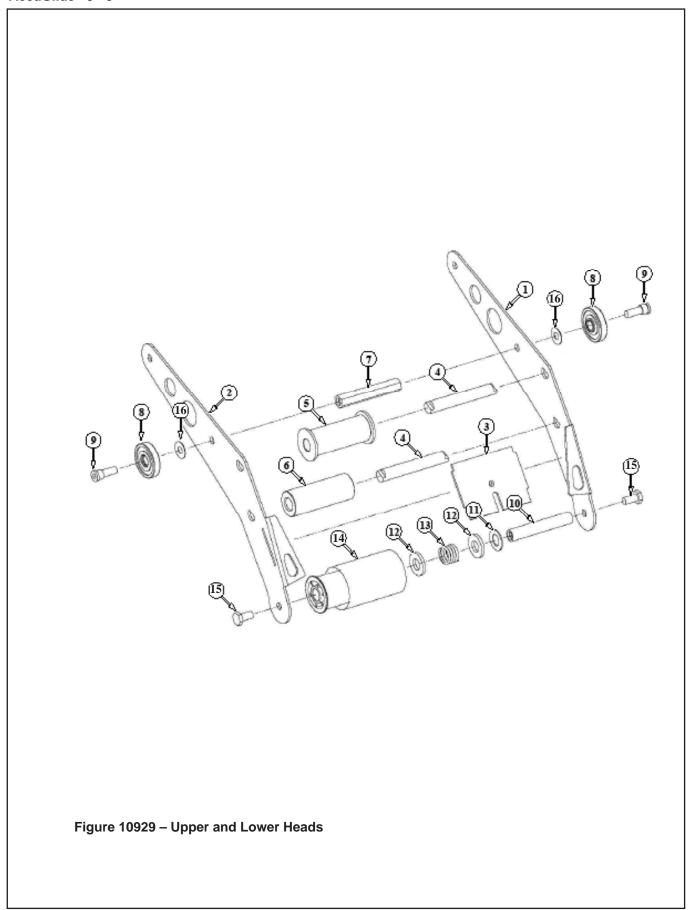
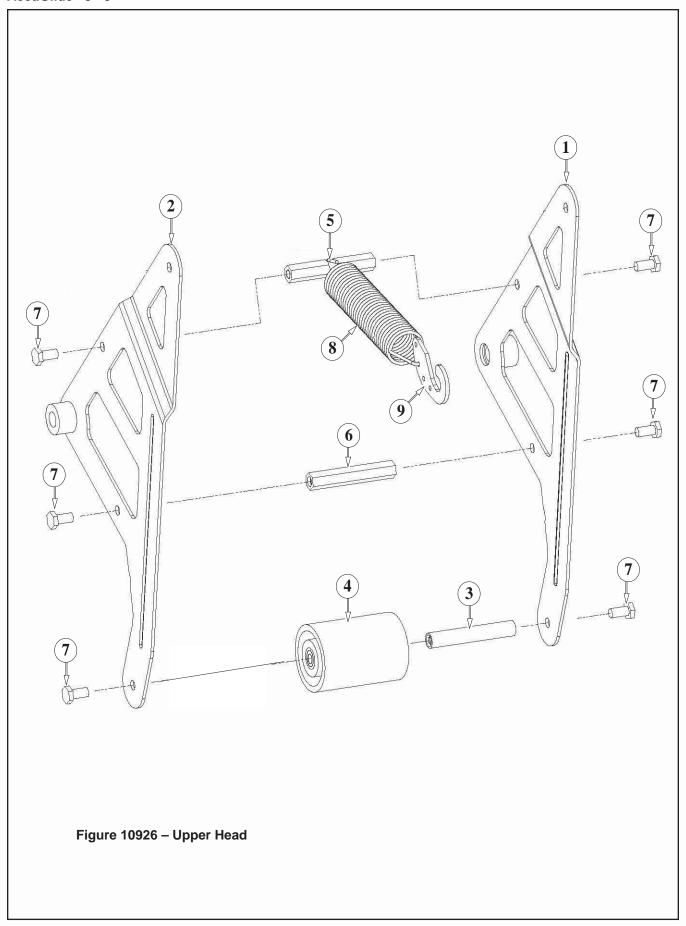


Figure 10929 – Upper and Lower Heads

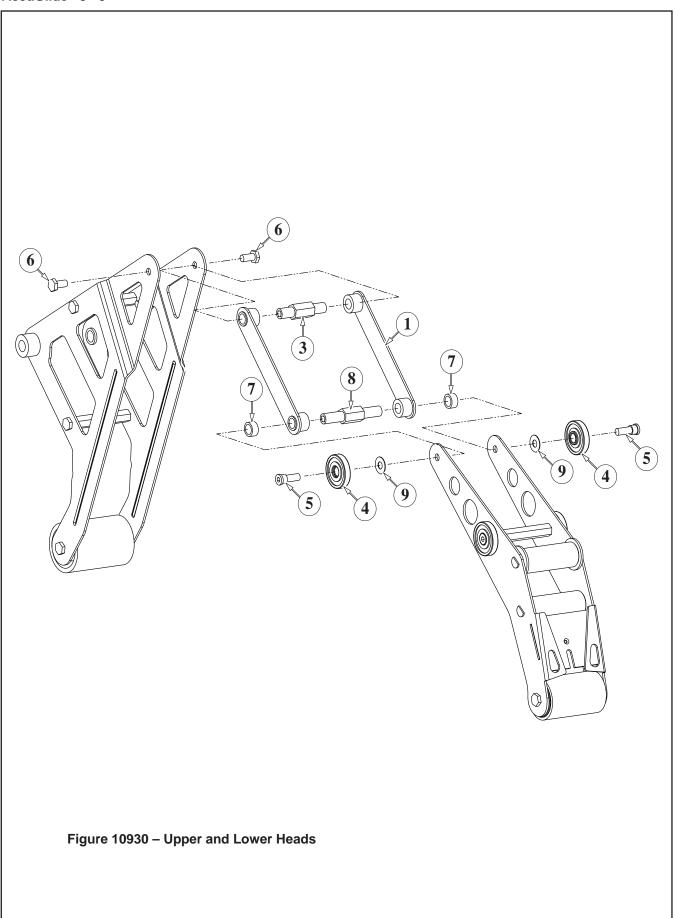
Ref. No.	3M Part No.	Description
10929-1	78-8133-9520-5	Arm – Applying, R/H
10929-2	78-8133-9521-3	Arm – Applying, L/H
10929-3	78-8070-1292-3	Plate – Back-Up
10929-4	78-8076-4736-3	Shaft Roller
10929-5	78-8076-4737-1	Roller Assembly – Knurled
10929-6	78-8076-4738-9	Roller – Wrap
10929-7	78-8054-8806-7	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



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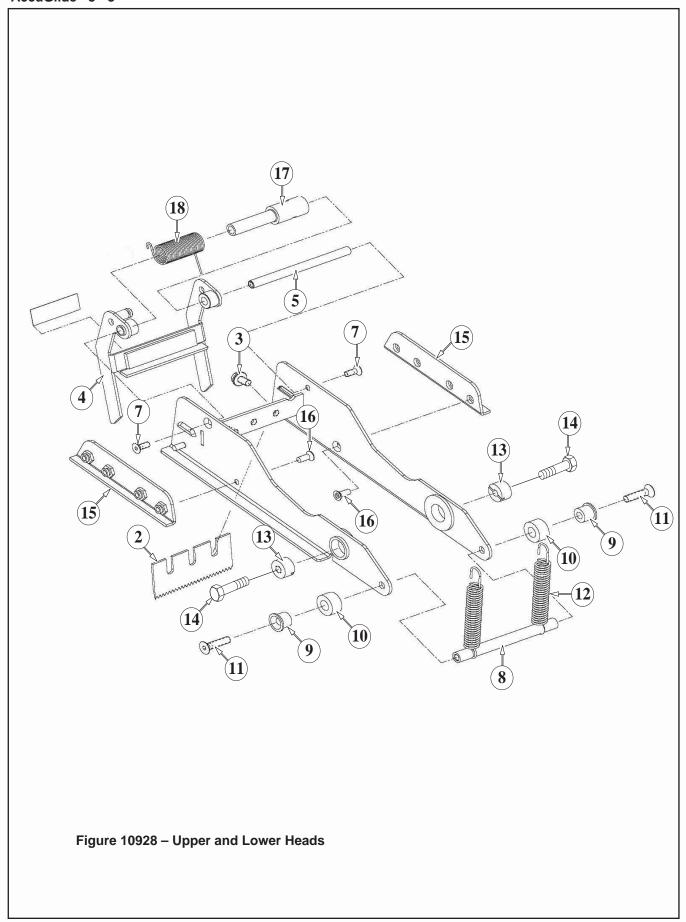
## Figure 10926 – Upper Head

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

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



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# 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

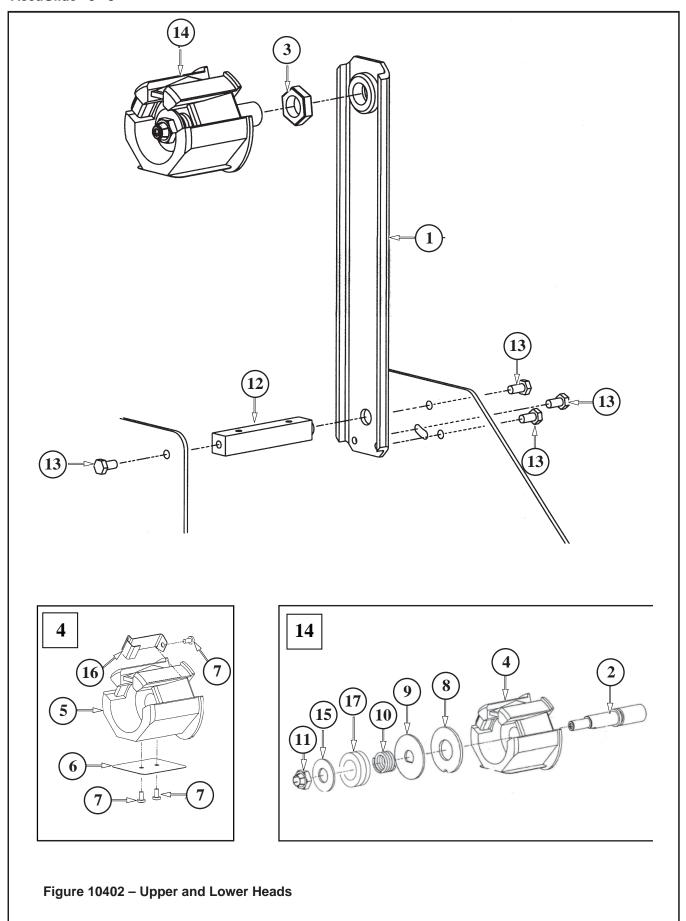


Figure 10402 – 3" Latch Upper and Lower Heads

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

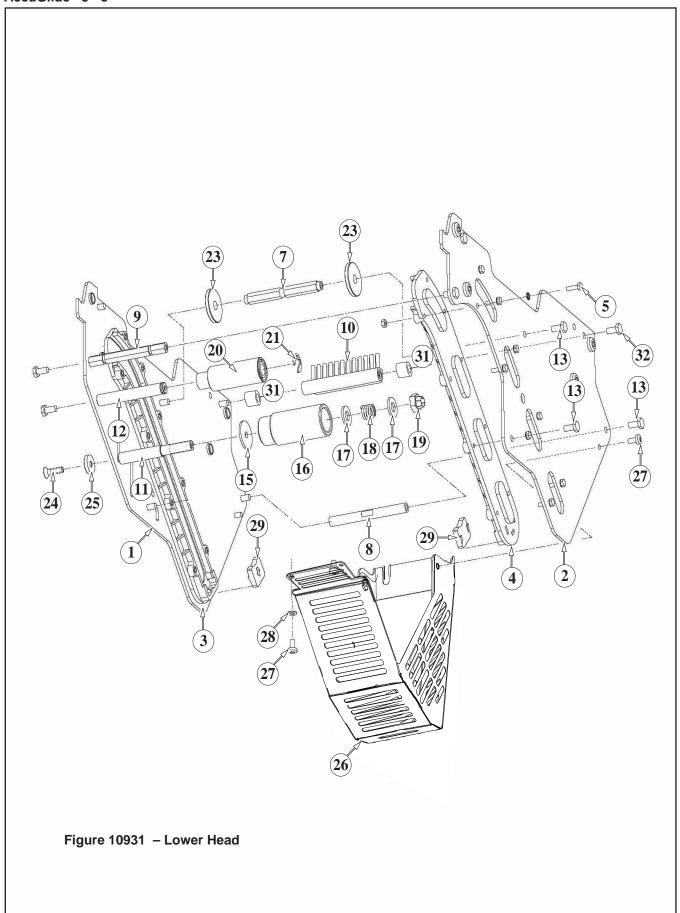
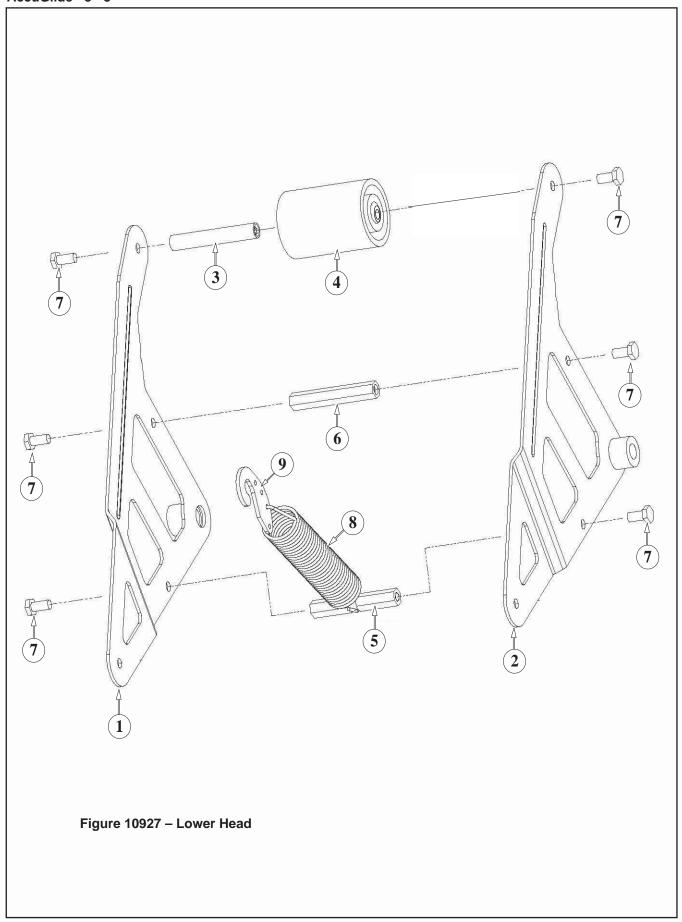


Figure 10931 – Lower Head

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



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### 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

