



Instructions and Parts List

3M-MaticTM

700a Type 39600

Adjustable Case Sealer

with

AccuGlideTM 2+ Taping Heads

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



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



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.

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3M St. Paul, MN 55144-1000
Printed in U.S.A.

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SMB00064E



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 700a-I-NA** Adjustable case sealer.

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

Edition April 2009

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

Replacement Parts and Service Information

To Our Customers:

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

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

Technical Assistance / Replacement Parts and Additional Manuals:

Contact your local service provider. Provide the customer support coordinator with the model/machine name, machine type, and serial number that are located on the identification plate (For example: Model 700a - Type 3600 - Serial Number 13282).

Identification Plate

3M 3M Company St. Paul, MN 55144 USA	Part Number	3M-Matic™			CE
	Model	Year	Ampere	Watt	
Type	Serial Number	Volt	Hertz	Phase	

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



3M Industrial Adhesives and Tapes

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St. Paul, MN 55144-1000

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To Our Customers:

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

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

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



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



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TAPING HEAD INFORMATION -

MANUAL 2: AccuGlide™ 2+ STD 2 Inch Taping Heads (See MANUAL 2 for Table of Contents)

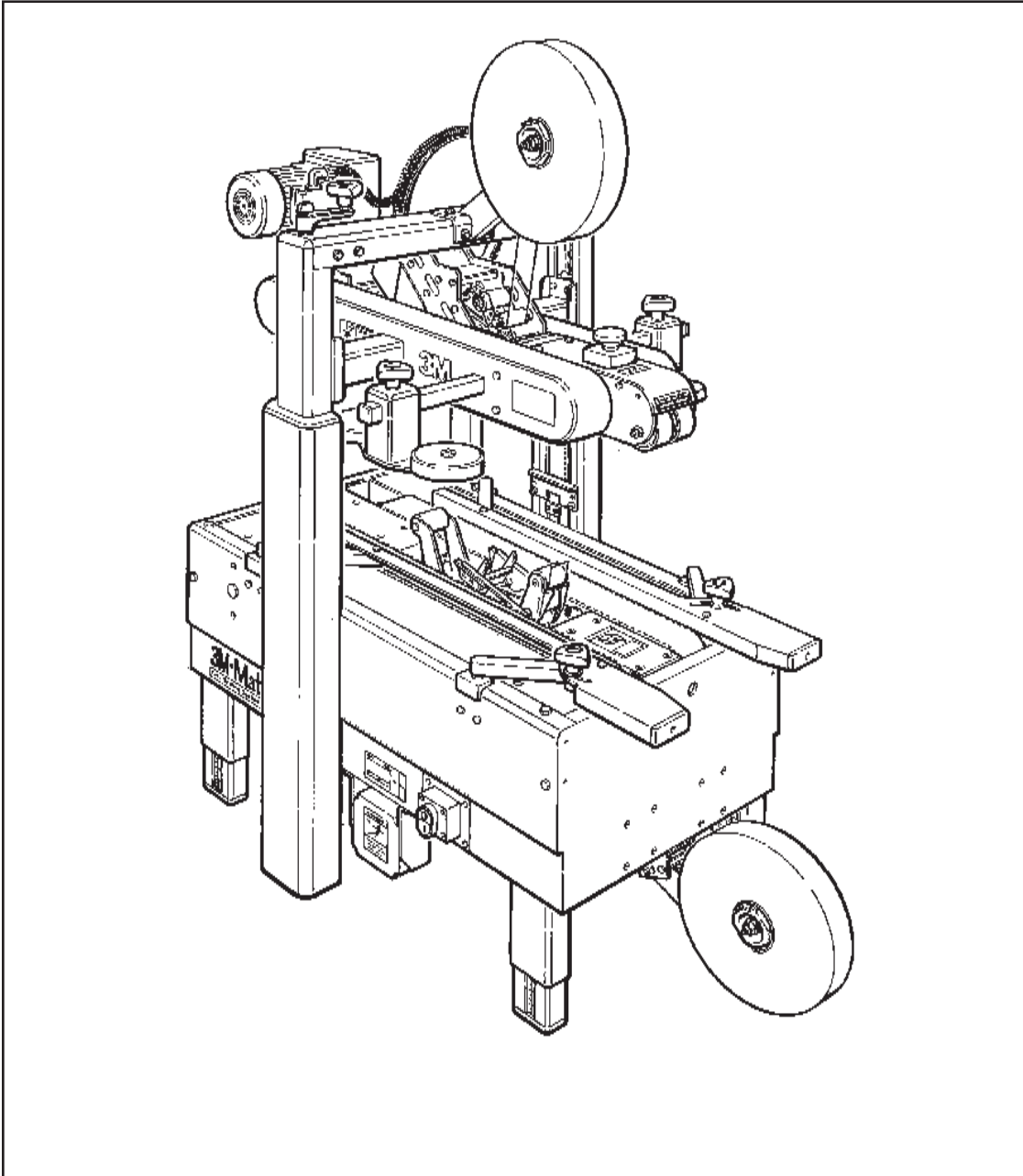
LIST OF ABBREVIATIONS, ACRONYMS

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
PTFE	- Polytetrafluorethelene
PVC	- Poly-vinyl chloride
W	- Width
H	- Height
L	- Length

1-INTRODUCTION

1.1 Manufacturing Specifications / Description / Intended Use

The **3M-Matic™ 700a Adjustable Case Sealer with AccuGlide™ 2+** 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 700a is manually adjustable to a wide range of box sizes (see "Specifications Section – Box Weight and Size Capacities").



3M-Matic™ 700a Adjustable Case Sealer, Type 39600

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

1.1 Manufacturing Specifications / Description / Intended Use (continued)

The 3M-Matic case sealing machines have been designed and manufactured following the "Machine Directives 89/392/EEC (amended 98/37/EEC) and Directive 2006/42/EC (from 29th Dec 2009) in compliance with the legal requirements at the date of inception.

Reference Documents:

Safety:

EN ISO 12100-1&2: Safety of Machinery.

Basic Concepts and Technical Principles

EN 294: 1992A1: Safety Distances

EN 349: Minimum Gap

EN ISO 13850: Emergency Stop Equipment

EN ISO 3741: Acoustics. Determination of sound power levels of noise sources using sound pressure

EN 60204-1 Safety of machinery. Electrical equipment of machines—general requirements

EMC:

EN 61000-6-3: Generic emission standard: residential, commercial, and light industry

EN 55011: Limits and methods of measurement of radio disturbance characteristics of industrial, scientific, and medical (ISM) radio frequency equipment

EN 61000-3-2: Electromagnetic Compatibility (EMC) Limits. Limits for Harmonic Current Emissions

EN 61000-3-3: Electromagnetic Compatibility (EMC) Limitations of voltage changes, voltage fluctuations, and flicker in public low-voltage supply systems

EN 61000-6-1: Electromagnetic Compatibility (EMC) Generic standards. Immunity for residential, commercial, and light industrial environments

EN 61000-4-2: Electromagnetic Compatibility (EMC) Electrostatic Discharge

EN 61000-4-3: Electromagnetic Compatibility (EMC) Radiated Radio Frequency Electromagnetic Field

EN 61000-4-4: Electromagnetic compatibility (EMC) Electrical Fast Transient/Burst

EN 61000-4-5: Electromagnetic compatibility (EMC) Surge Immunity Test

EN 61000-4-6: Electromagnetic compatibility (EMC) Immunity to conducted disturbances

EN 61000-4-11: Electromagnetic compatibility (EMC) Voltage dips, short interruptions, and voltage

1.2 How to Read and Use the Instruction Manual

This instruction manual covers safety aspects, handling and transport, storage, unpacking, preparation, installation, operation, set-up and adjustments, technical and manufacturing specifications, maintenance, troubleshooting, repair work and servicing, electric diagrams, warranty information, disposal, a definition of

symbols, plus a parts list of the 3M-Matic 700a Adjustable case sealer 3M Industrial Adhesives and Tapes Division 3M Center, Bldg. 220-5E-06 St. Paul, MN 55144-1000 (USA) Edition April 2009 Copyright 3M 2009 All rights reserved The manufacturer reserves the right to change the product at any time without notice Publication © 3M 2009 44-0009--1906-6.

1.2.1 Importance of the Manual

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

1.2.2 Manual Maintenance

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

1.2.3 Consulting the Manual

The manual is composed of:

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

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

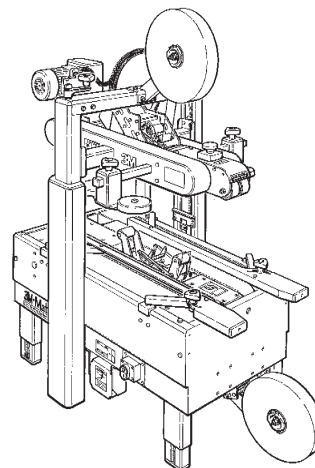


1.2.4 How to Update the Manual in Case of Modifications to the Machine

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

2.1 Data Identifying Manufacturer and Machine

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



3M	3M Company St. Paul, MN 55144 USA	Part Number	3M-Matic™			CE
Model			Year	Amps	Watt	
Type		Serial Number				
			Volt	Hertz	Phase	

2.2 Data for Technical Assistance and Service

AGENT/DISTRIBUTOR OR LOCAL AFTER SALE SERVICE:

2.3 Warranty

Within the limits of what is set out below, Seller agrees to repair or replace without cost to Buyer any defective goods when such defect occurs within a period of twelve (12) months from the date in which Seller's goods have been put into use, but in no event beyond fourteen (14) months from the date of shipment. Expressly excluded from this warranty are those parts subject to normal wear and tear (by way of illustration, but not limitation, such parts as belts, rubber rollers, gaskets, brushes, etc.) and electrical parts. Buyer must immediately notify Seller of any defect, specifying the serial number of the machine. Buyer shall send to Seller the defective item for repair or replacement.

Seller will perform the repairs or provide a replacement within a reasonable period of time.

Upon effecting such repair or replacement, Seller shall have fulfilled its warranty obligations. In the event the repairs or replacement must be effected at the place where the machine is installed, all expenses for labor, travel and lodging of Seller's personnel shall be sustained by the Buyer.

Buyer will be invoiced in conformity with Seller's standard charges for the services rendered.

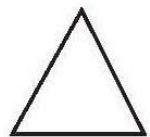
Seller is not responsible for defects resulting from:

- Events which develop subsequently to delivery
- Improper use of the machine
- Lack of proper maintenance
- Tampering with the machine or repairs effected by the Buyer.

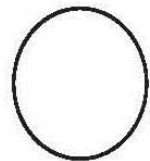
Seller will not be liable for any injury to persons or things or for the failure of production. With respect to the materials not manufactured by Seller, such as motors and electrical equipment, Seller will grant to Buyer the same warranty Seller receives from its supplier of such materials. Seller does not warrant the compliance of its machines with the laws of non-EEC countries in which the machines may be installed, nor does it warrant compliance with laws or standards relating to the prevention of accidents or pollution. Adaptation of Seller's machines to the aforesaid laws or standards shall be the responsibility of Buyer who assumes all liability therefore. Buyer shall indemnify and hold Seller harmless against any claim by third parties resulting from failure to comply with the aforesaid laws and standards.

Contents—700a Adjustable Case Sealer

- (1) 700a Adjustable Case Sealer, Type 39600
- (1) Upper Assembly Height Adjustment Crank Hardware
- (1) Upper Tape Drum/Bracket/Hardware
- (2) Column Stop Bracket/Hardware
- (1) Tool and Spare Parts Kit
- (1) Instruction and Parts List



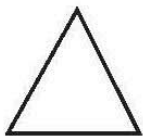
Caution



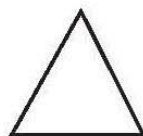
Prohibition



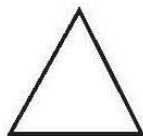
Information



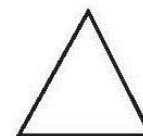
Disconnect electrical power supply before attempting any service work on the machine



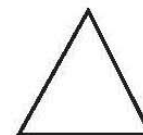
Warning!
Sharp knife



Stop
(Latching
Emergency
Stop Button)



Keep hands out
of working parts



Shows the point
for earth wire
connection
on the
machine frame



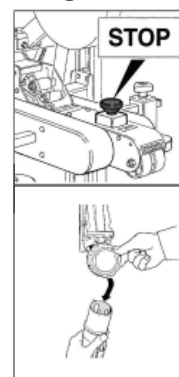
3.1 General Safety Information

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



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

Figure 3-1



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.**





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




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

3.3 Table of Warnings

 WARNING
<ul style="list-style-type: none">• To reduce the risk associated with mechanical and electrical hazards:<ul style="list-style-type: none">– Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.– Allow only properly trained and qualified personnel to operate and service this equipment.

 WARNING
<ul style="list-style-type: none">• To reduce the risk associated with hazardous voltage:<ul style="list-style-type: none">– Position electrical cord away from foot and vehicle traffic.

 WARNING
<ul style="list-style-type: none">• To reduce the risk associated with pinches, entanglement and hazardous voltage:<ul style="list-style-type: none">– Turn electrical supply off and disconnect before performing any adjustments, maintenance or servicing the machine or taping heads (Figure 3-3).


 WARNING
<ul style="list-style-type: none">• To reduce the risk associated with pinches and entanglement hazards:<ul style="list-style-type: none">– Do not leave the machine running while unattended.– Turn the machine off when not in use.– Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running.



Figure 3-2

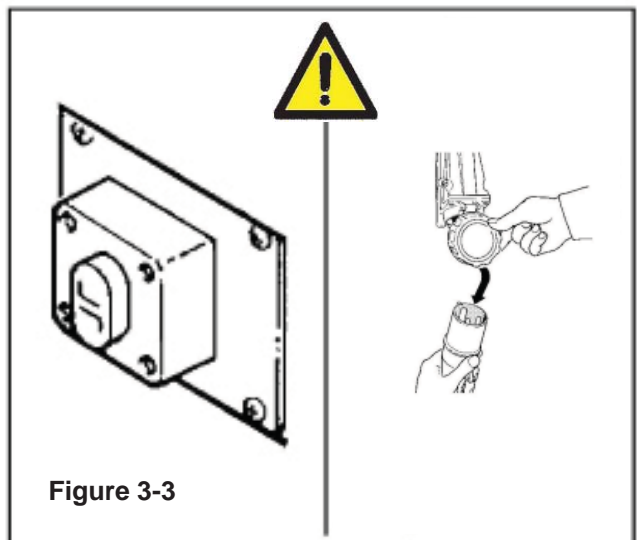


Figure 3-3

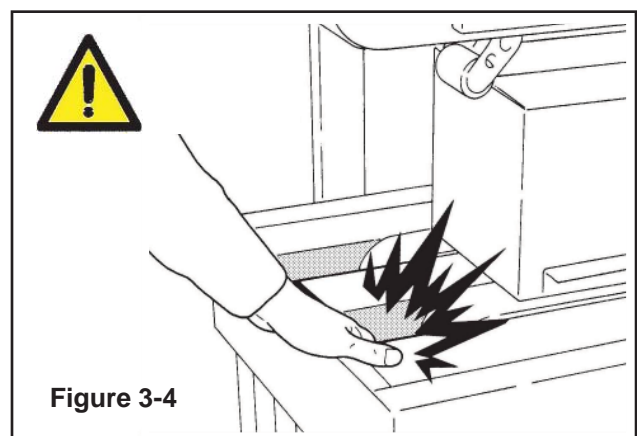


Figure 3-4

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



WARNING

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

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



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 (Figure 3-6):
 - Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment (Figure 3-6)
 - 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 pinches hazards:
 - Keep hands clear of the upper head support assembly as boxes are transported through the machine.
 - Keep hands, hair, loose clothing, and jewelry away from box compression rollers.
 - Always feed boxes into the machine by pushing only from the end of the box.
 - Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads.

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

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

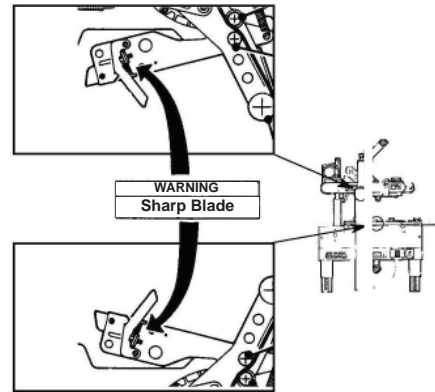


Figure 3-5

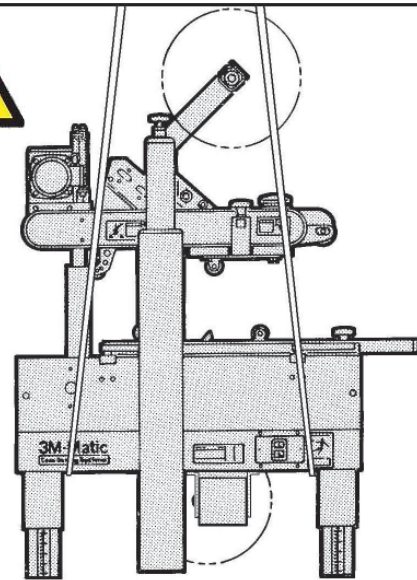


Figure 3-6

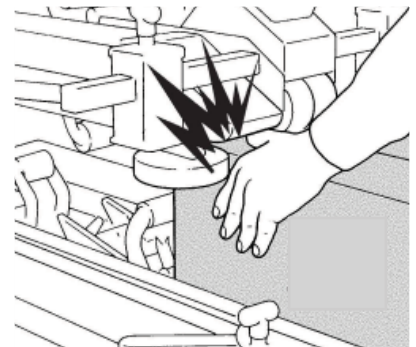


Figure 3-7

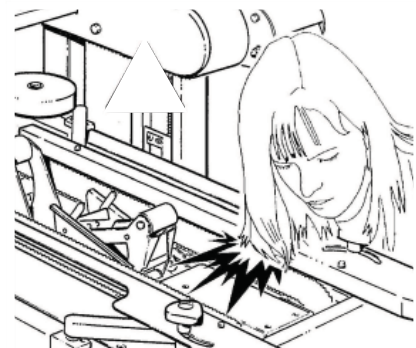


Figure 3-8

3.4 Operator's Qualifications

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

3.5 Number of Operators

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

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

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

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

3.7 Residual Hazards

The case sealer 700a has been designed following the Directive 89/392/EEC (amended 98/37/EEC) and Directive 2006/42/EC (from 29th Dec 2009) directives, and incorporates various safety protections which should never be removed or disabled. Notwithstanding the safety precautions conceived by the designers of the machine, it is essential that the operator and service personnel be warned that the following residual 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. Only use the EMERGENCY STOP BUTTON.
- Never work without the safety protections.
- 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. The manufacturer will not be responsible for any modifications.
- 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. The manufacturer will not be responsible for damages caused by improper installation.

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 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 Technician

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

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

Skill 3: Specialist from the Manufacturer

Skilled operator sent by the manufacturer or its agent to perform complex repairs or modifications (on agreement with the customer).



WARNING

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

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

Operation	Machine Status	Required Operator Skill	Number of Operators
Machine installation and setup	Running with safety protections disabled	2 - 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 - 3	1

3.12 Component Locations

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

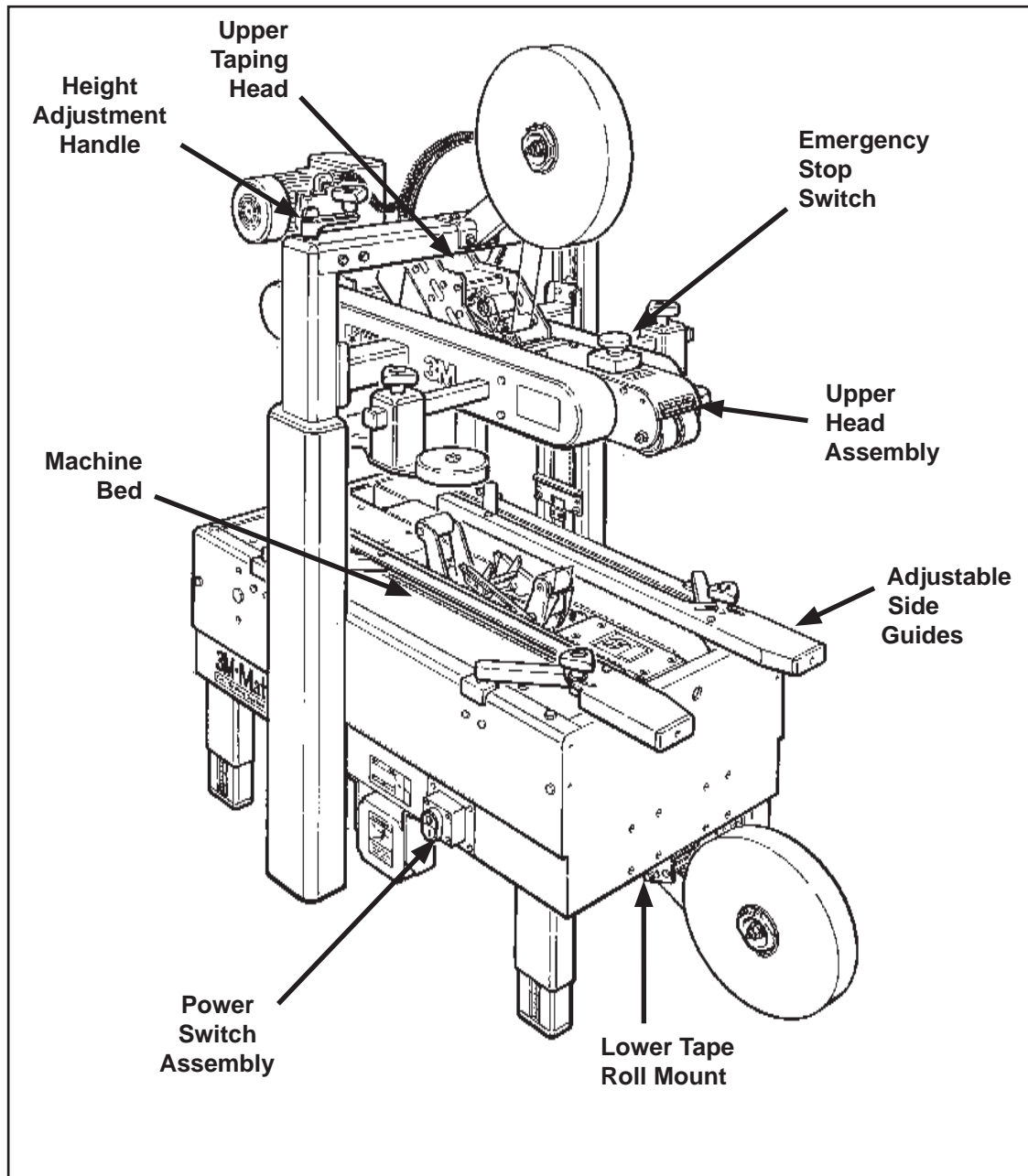


Figure 3-9—700a Case Sealer Components (Left Front View)

3.13 Table of Warnings and Replacements Labels (continued)

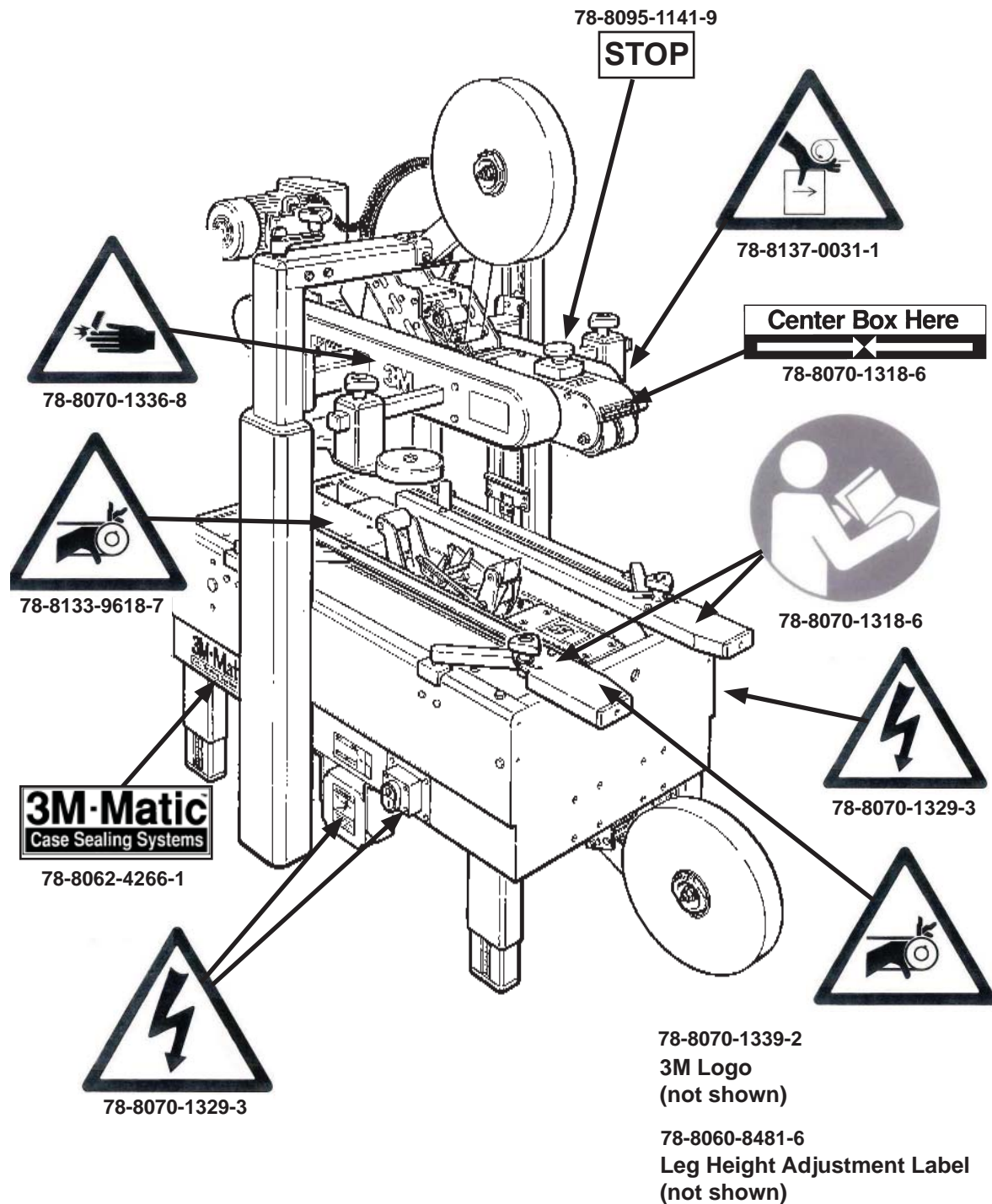


Figure 3-10 - Replacement Labels / 3M Part Numbers

4-SPECIFICATIONS

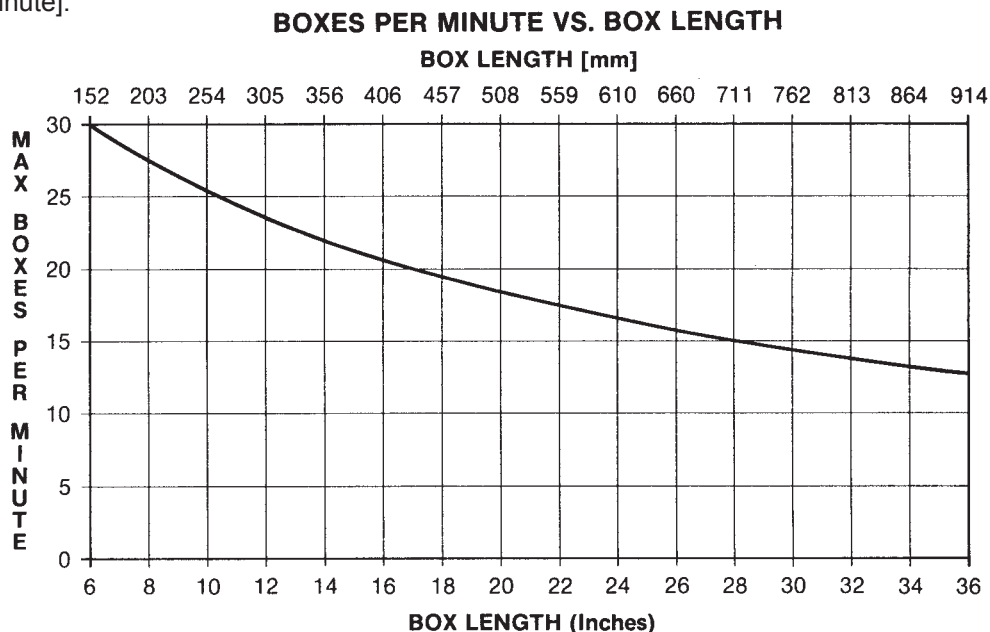
1. Power Requirements

Electrical: 230/400 Volt, 50Hz, 1Ph

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

2. Operating Rate

Up to 30 cases per minute, depending on box length. Box drive belt speed is approximately 0.38 m/s [75 feet per minute].




Actual production rate is dependent on operator's dexterity.

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

3. Operating Conditions

Use in dry, relatively clean environments at 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
<ul style="list-style-type: none">• To reduce the risk associated with fire and explosion hazards:<ul style="list-style-type: none">– Do not operate this equipment in potentially flammable or explosive environments.	

4. Tape

Scotch® pressure-sensitive film box sealing tapes.

5. Tape Width

36mm [1 1/2 inch] minimum to 48mm [2 inch] maximum

Specifications

6. Tape Roll Diameter

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

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

7. Tape Application Leg Length – Standard

70 mm ± 6mm [2.75 inch ± .25 inch]

Tape Application Leg Length – Optional

50 mm ± 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.–85 lbs. [2.3 kg–38.6 kg]. Contents must support flaps.

B. Box Size:	Minimum	Maximum
Length –	150mm [6.0 inch]	Unlimited
Width –	150mm [6.0 inch]*	550mm [21.5 inch]
Height –	120mm [4.75 inch]** ***	620mm [24.5 inch] ***

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

** 90mm [3.5 inch] height with heads adjusted to apply 50mm [2 inch] tape leg lengths. (See "Special Setup Procedure—Changing the Tape Leg Length".)

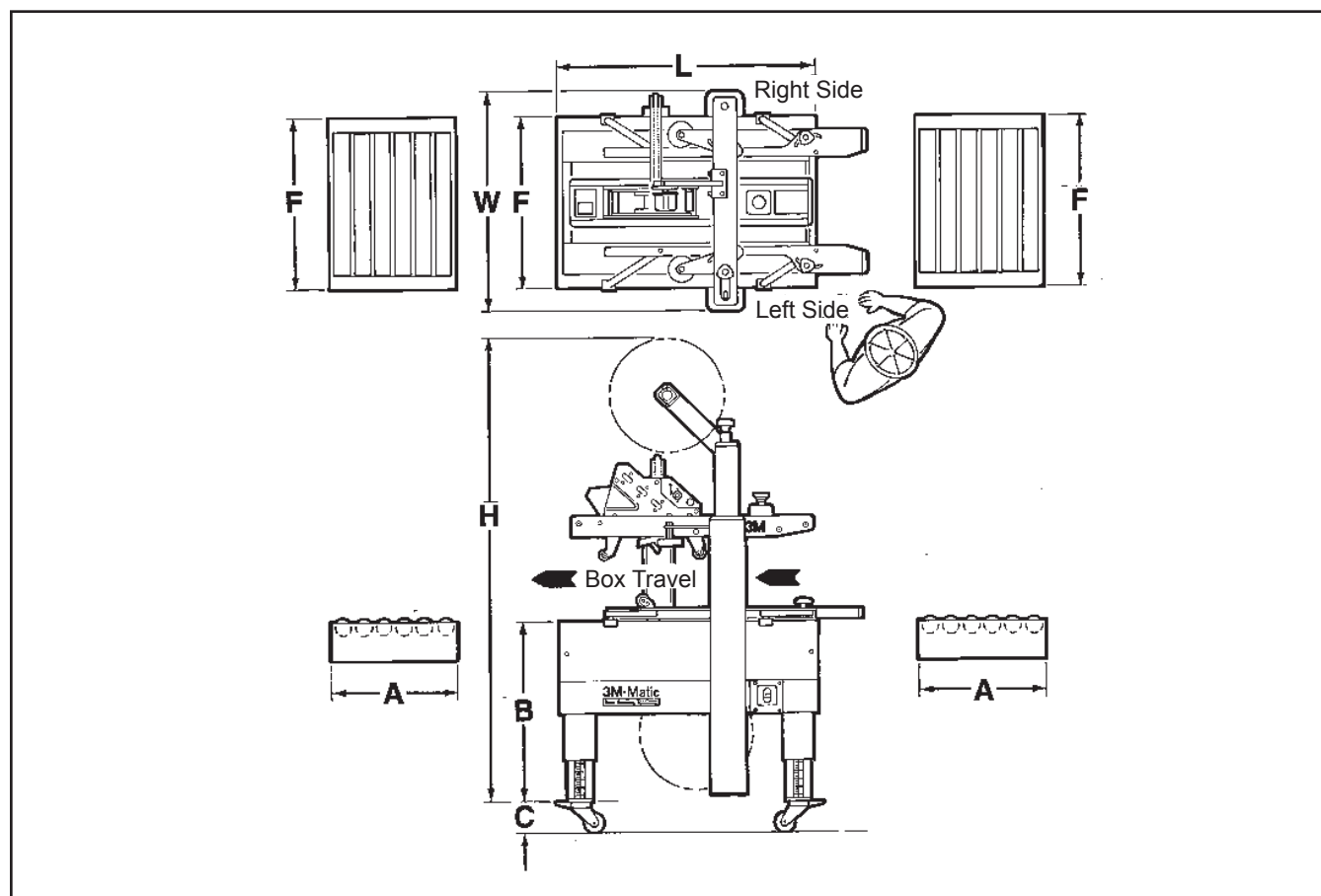
*** When columns are adjusted to upper position, "B" minimum/maximum dimension decreases by 90mm [3 1/2 inches] and "H" maximum dimension increases by 100 mm [4 inch]. (See "Special Set-Up Procedure – Box and Machine Bed Height Range".)

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 0.5 or less, test run several boxes to ensure proper machine performance.

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

$$\frac{\text{BOX LENGTH IN DIRECTION OF SEAL}}{\text{BOX HEIGHT}} = \text{SHOULD BE GREATER THAN 0.5}$$

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



10. Machine Dimensions

	W	L	H	A*	B	C**	F
Minimum							
mm	790	1030	1350	460	610	100	625
[Inches]	[31]	[40.5]	[53]	[18]	[24]**	[4]	[24.5]
Maximum							
mm	--	--	2185	--	890	--	--
[Inches]	--	--	[86]**	--	[35]**	--	--

* Infeed/Exit conveyors are optional

** Casters are optional

*** When columns are adjusted to upper position, "B" minimum/maximum dimension decreases by 90 mm [3 1/2 inches] and "H" maximum dimension increases by 100 mm [4 inch]. (See "Special Set-Up Procedure – Box and Machine Bed Height Range".)

Weight – 180kg [400 lbs] crated (approximate)
160kg [350 lbs] 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.

5.1 Shipment and Handling of Packed Machine

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

Packaging Overall Dimensions (Figure 5-1)

See Specifications.

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

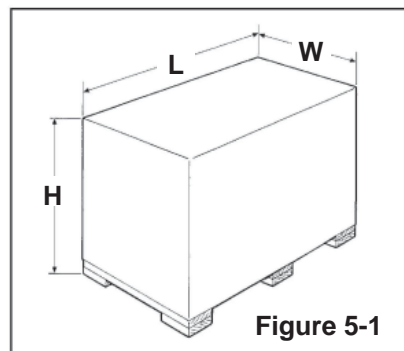


Figure 5-1

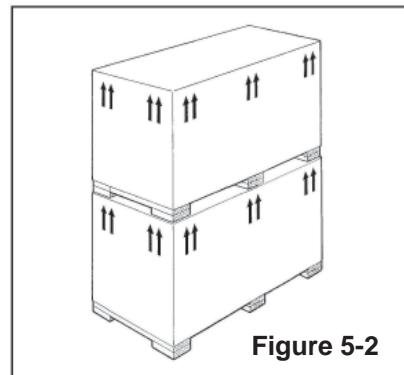


Figure 5-2

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

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

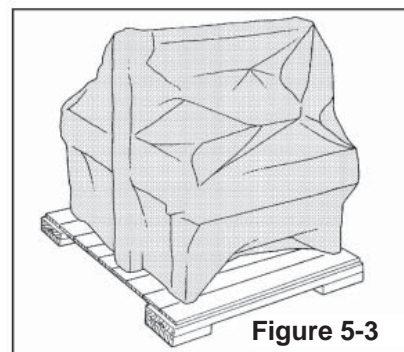


Figure 5-3

5.3 Handling and Transportation of Uncrated Machine

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

5.4 Storage of the Packed or Unpacked Machine

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

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

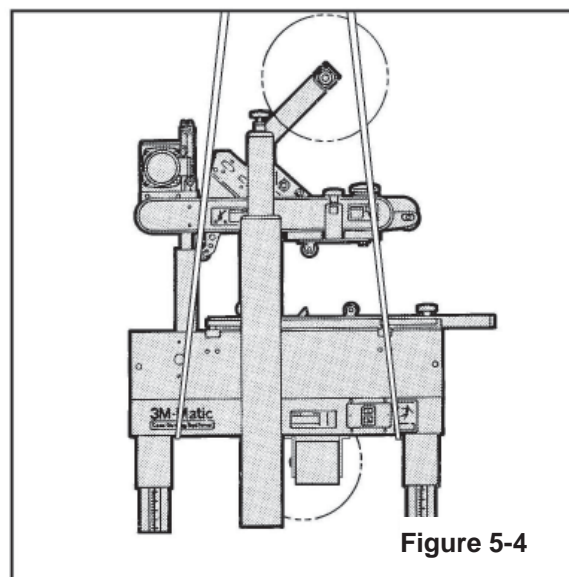
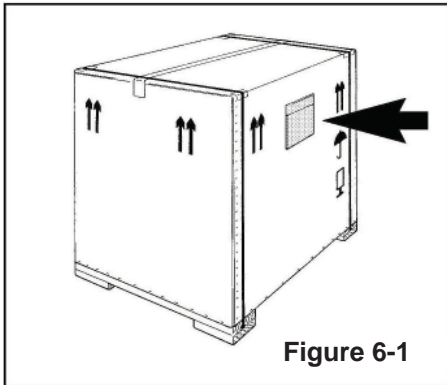


Figure 5-4

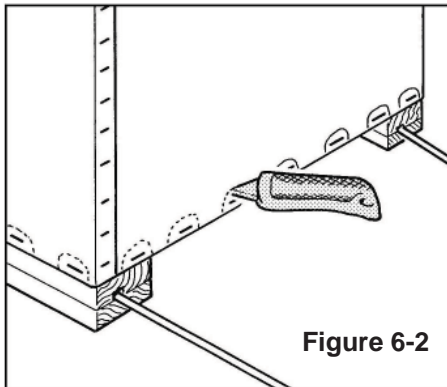
6-UNPACKING

6.1 Uncrating

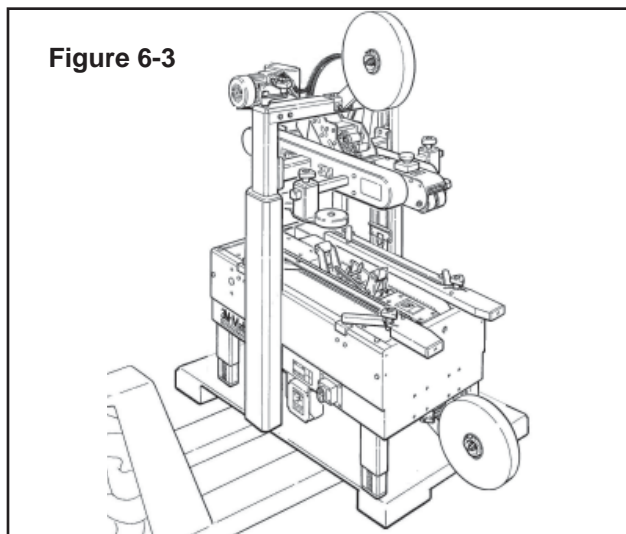
The envelope attached to the shipping box contains the uncrating instructions of the machine (**Figure 6-1**).



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



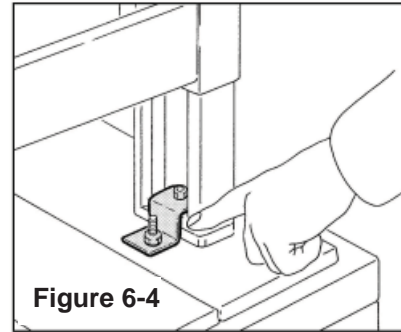
After cutting out or removing the staples, lift the shipping box in order to clear the machine (two persons required).



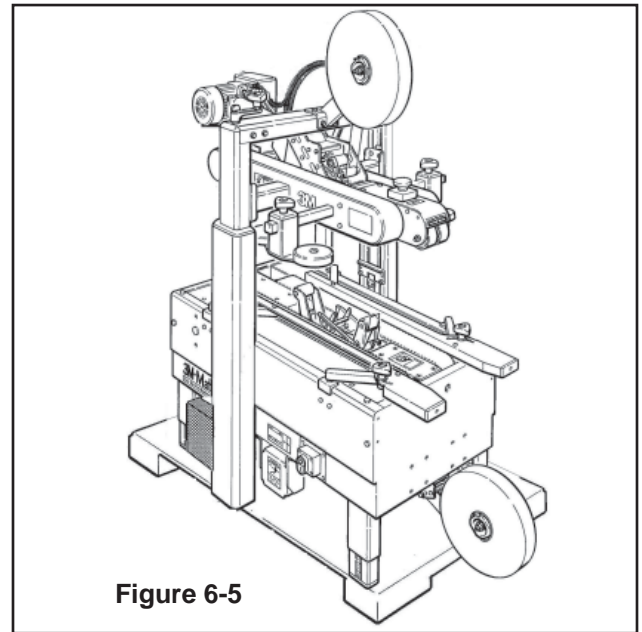
Transport the machine with a fork-lift truck to the operating position. Lift the pallet at the point indicated in **Figure 6-3** (weight of machine + pallet = 180kg).

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 700a-I-NA package is composed of:

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

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

7-INSTALLATION

7.1 Operating Conditions

The machine should operate in a dry and relatively clean environment at 5° to 50°C. with clean dry boxes-relative humidity between 0% and 80%

7.2 Space Requirements for Machine Operation and Maintenance Work

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

A = 1000 mm.

B = 700 mm.

Minimum height = 2700 mm.

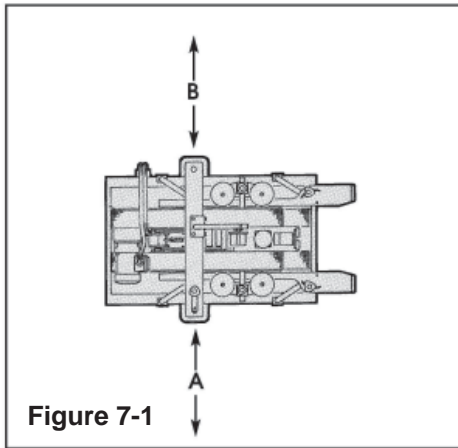


Figure 7-1

7.3 Tool Kit Supplied with the Machine

The machine is supplied complete with all the tools which are necessary for installation and use. For a detailed description of the tools kit (see the Maintenance and Repair section).

7.4 Machine Positioning / Bed Height

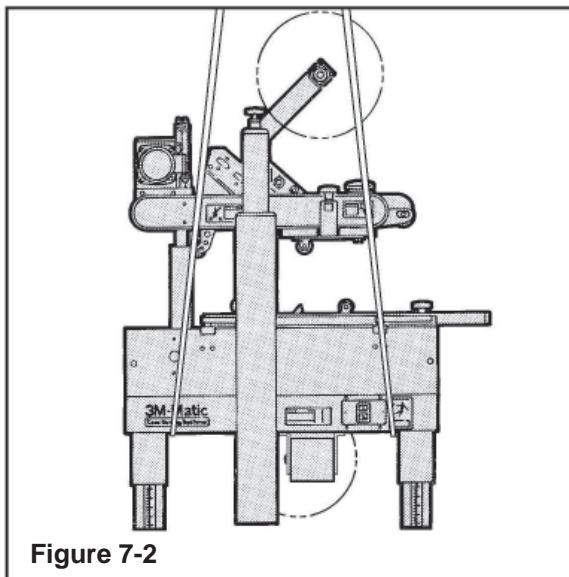


Figure 7-2

700a-I-NA



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.



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 610mm [24 inches] minimum to 890mm [35 inches] maximum.

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.
2. Loosen, but do not remove, two (2) M8 x 16mm socket head screws in one leg (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.

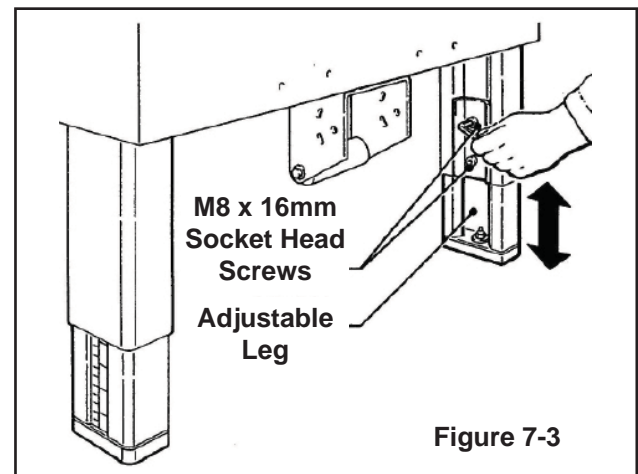


Figure 7-3

7.5 Removal of Plastic Ties

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

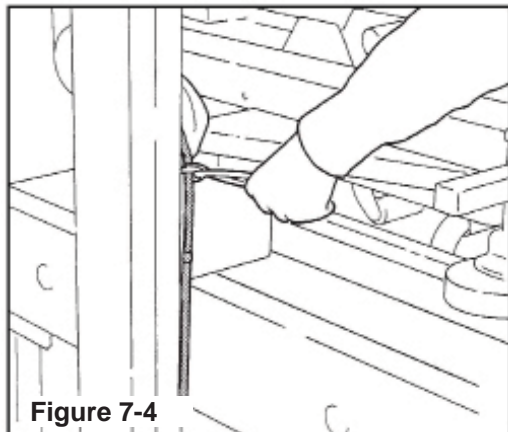


Figure 7-4

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

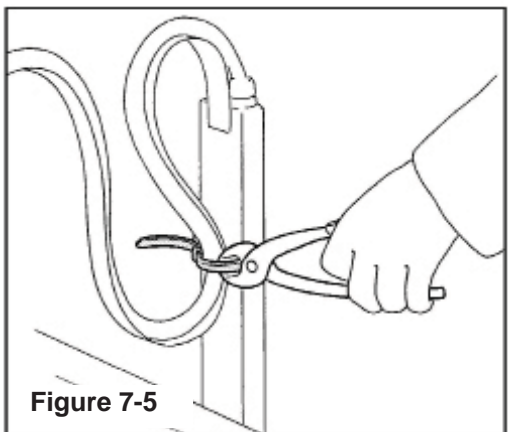


Figure 7-5

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

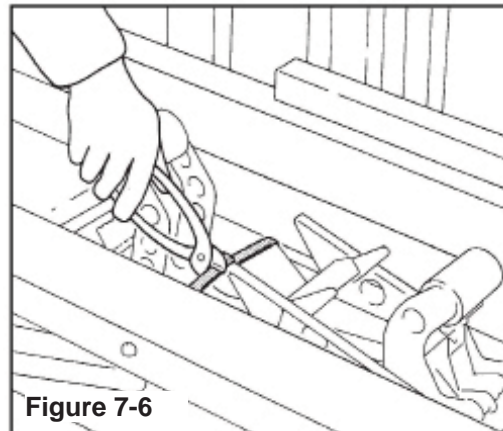


Figure 7-6

7.6 Assembly Completion

- 1 CRANK - Install the crank handle on the top of the left column as shown (**Figure 7-7B**).
- 2 TAPE DRUM BRACKET - Install the upper tape drum bracket on the top cross bar as shown (**Figure 7-7A**).
- 3 STOP BRACKET - Raise upper head assembly (turn crank handle counterclockwise) and install the two stop brackets (provided in the parts bag). Use lower set of holes as shown in **Figure 7-7C**. The upper set of holes should only be used when both taping heads are adjusted to apply 50mm tape legs.

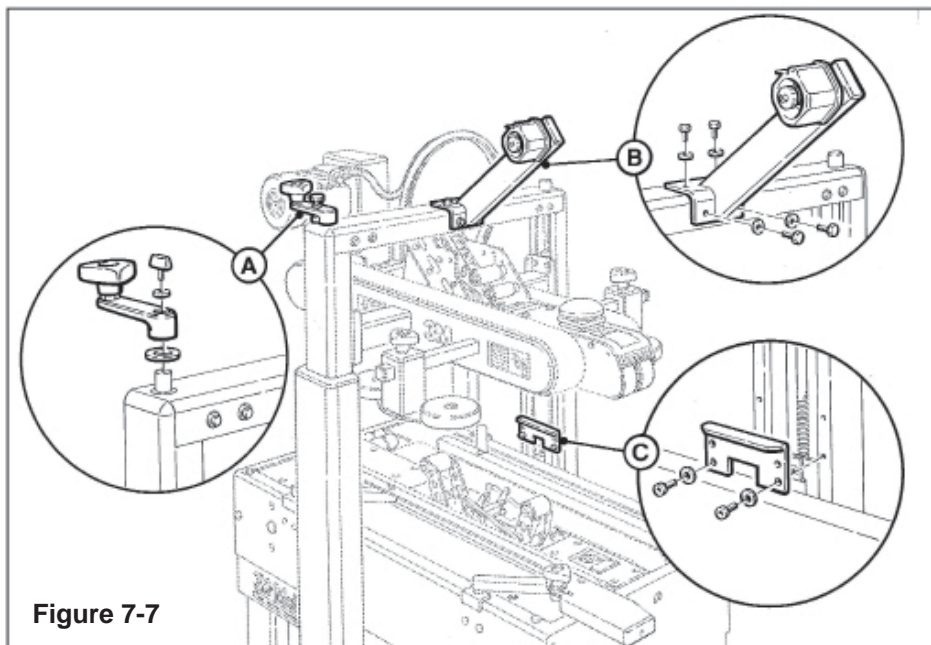


Figure 7-7

7.7 Completion of Taping Heads

See Manual 2 for Complete Instructions:

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

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

7.8 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 having a maximum breaking power of 2.6A and a short-circuit breaker pre-set at 120A. The user will be responsible for testing the short-circuit current in its facility and should check that the short-circuit amperage setting of the machine is compatible with all the components of the mains system.

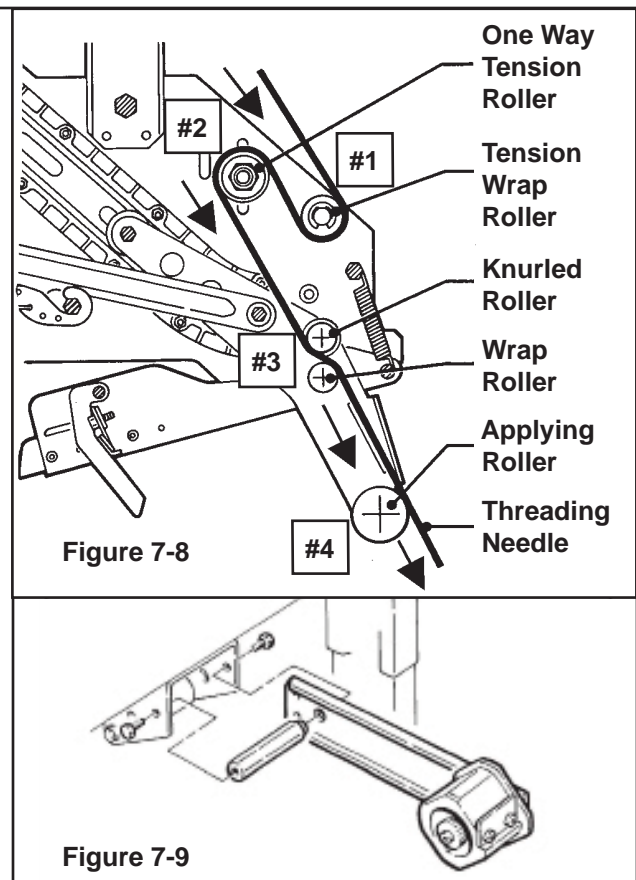


Figure 7-8

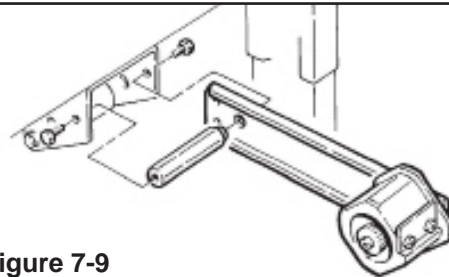


Figure 7-9

7.10 Machine Connection to the Mains

Power Supply = 260W

Maximum Breaker Switch = 2.6A (230/400V)

- 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)

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

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

Note - Machines outside the U.S. may be equipped with 230/400 Volt, 50Hz systems, or other electrical requirements compatible with local practice.

8.1 Description of the Working Cycle

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

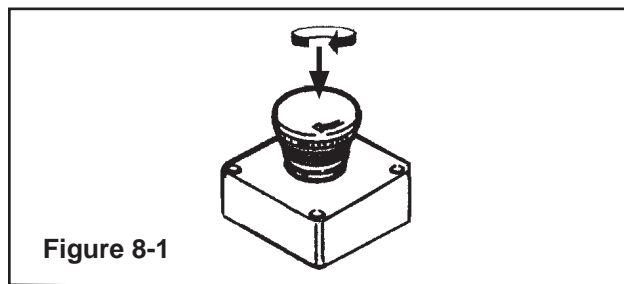


Figure 8-1

8.2 Definition of Running Mode

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

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

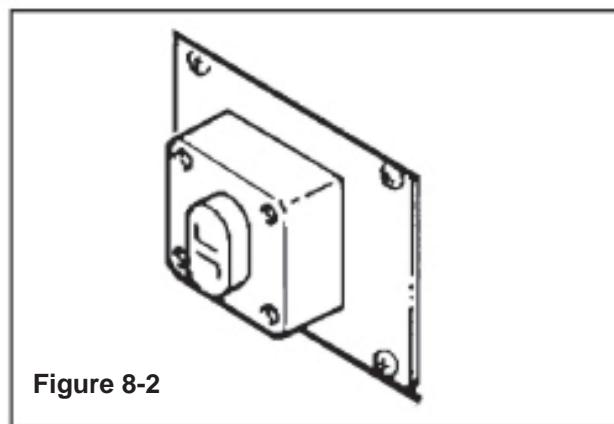


Figure 8-2

8.3.1 Normal Stop Procedure

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

8.3.2 Emergency Stop

The LATCHING EMERGENCY STOP BUTTON is located on the top center of the machine (This part is not produced by the machine manufacturer) (**Figure 8-1**).

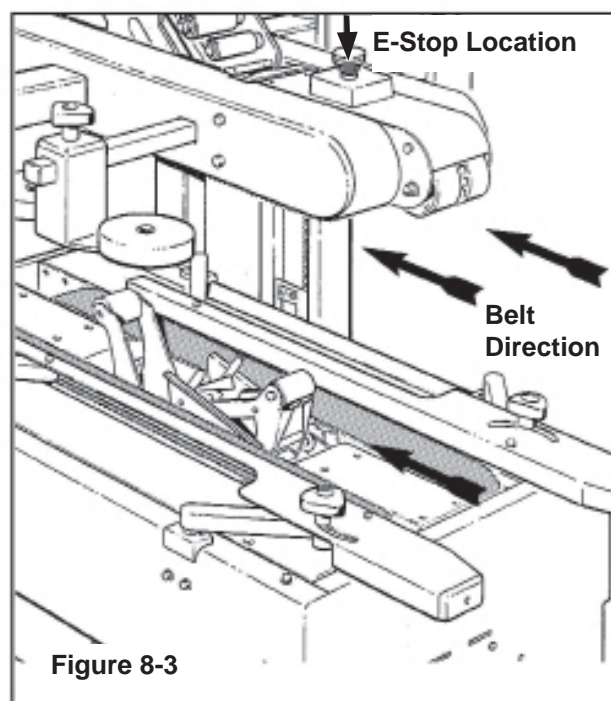
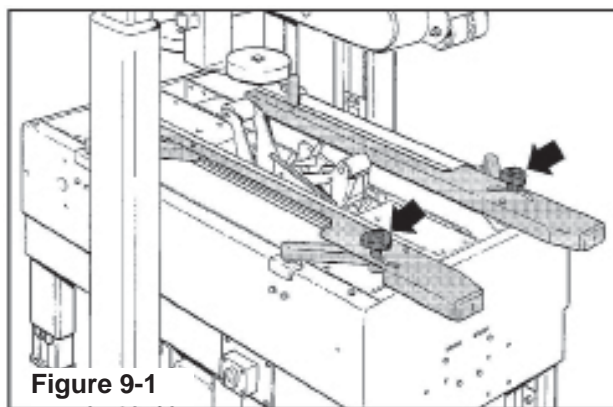
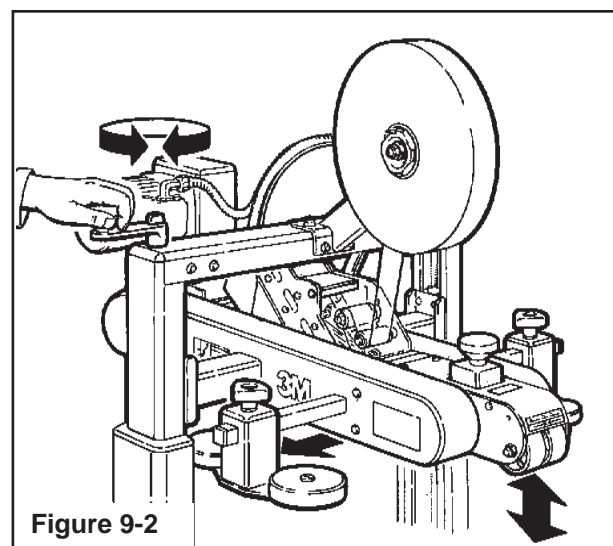


Figure 8-3

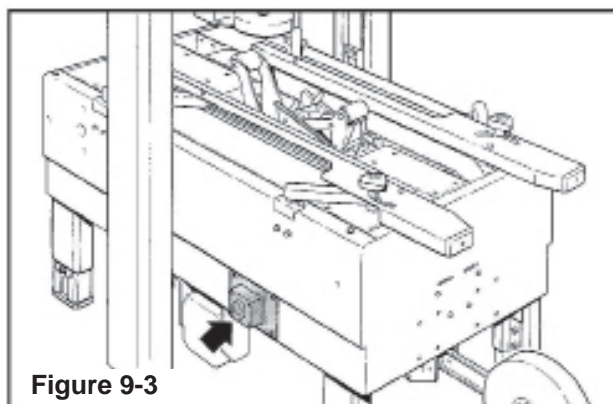
9.1 Box Width Adjusting Knobs



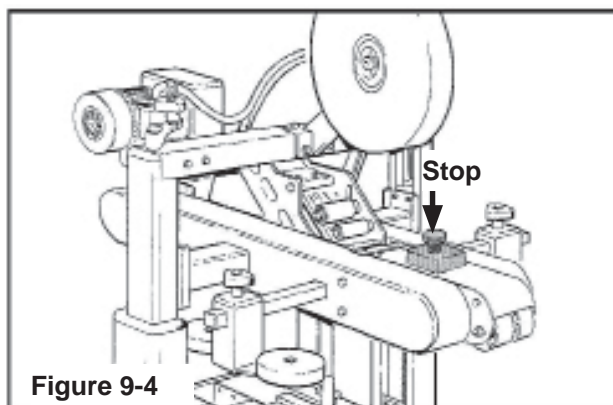
9.2 Box Height Adjustment Crank



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™ 2+ STD 2 Inch Taping Heads).

IMPORTANT!

Use care when working near blades as blades are extremely sharp. If care is not taken, severe injury to personnel could result.

10.2 Emergency Stop Button

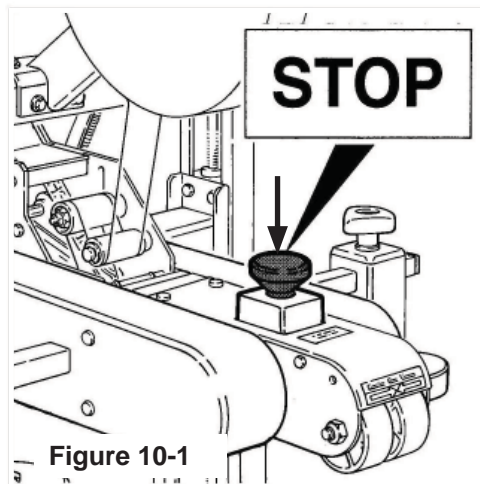
The box drive belts are turned on and off with the electrical switch on the side of the machine frame.

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

IMPORTANT!

All adjustments and tape loading require that the machine is stopped and the emergency stop button is locked.

Main electric switch "OFF" Severe injury to personnel could result by lack of observing these elementary rules



10.3 Electric System

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



WARNING

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



WARNING

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

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

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

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

11 - SET UP AND ADJUSTMENTS

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. Release Emergency Stop Button and press electrical ON button (**Figure 11-3**).

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".

CASE SEALER FRAME

(Refer to **Figure 11-4A**)

1. Raise the upper head assembly by turning crank handle counterclockwise. Remove and retain the two screws and washers that secure the stop bracket in position "A".
2. Remount and secure the stop bracket in the lower position "A-A" with original fasteners through top holes of stop bracket. Relocate both right and left stop brackets.

TAPING HEADS

WARNING! Turn off Electric Power. Blades are SHARP! / If Care not taken-Injury could result!

1. Remove tape from upper taping head and raise upper assembly to a convenient working height.
2. Loosen, but do not remove, the two retaining screws that secure the upper taping head shown in **Figure 11-4B**.
3. Hold upper taping head applying and buffing arms from under upper assembly, slide head forward and down to remove. **See Figure 11-5**
4. Raise upper assembly to provide working room around lower taping head and remove tape from taping head.
5. Slide the head forward and lift the lower taping head, shown in **Figure 11-6 and 11-4C**, straight up to remove it from the case sealer bed.
6. Refer to Section II, "Adjustments – Changing Tape Leg Length", for taping head set-up

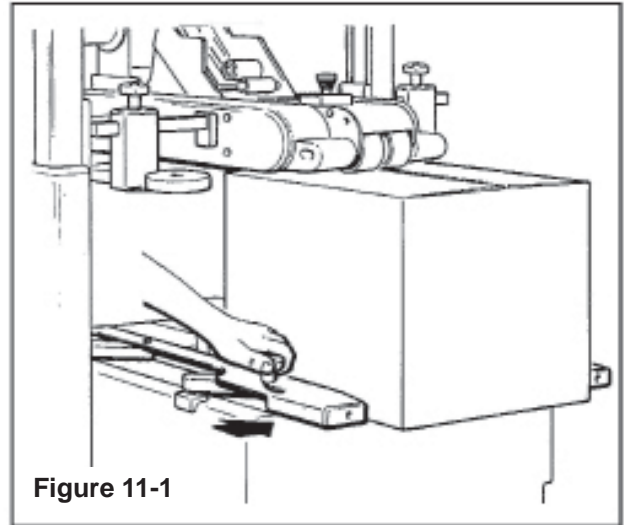


Figure 11-1

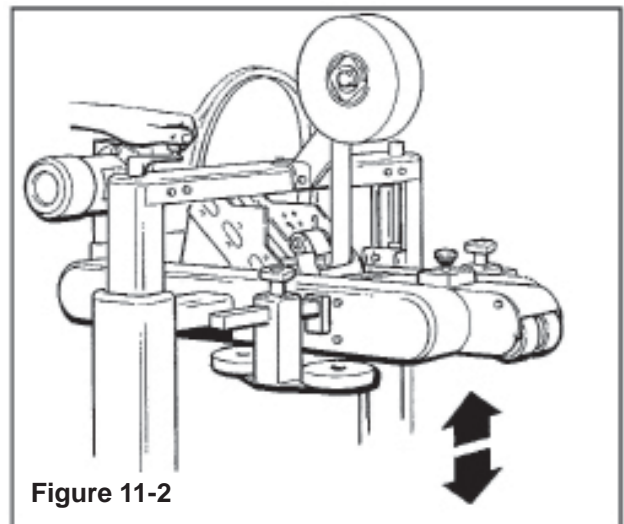


Figure 11-2

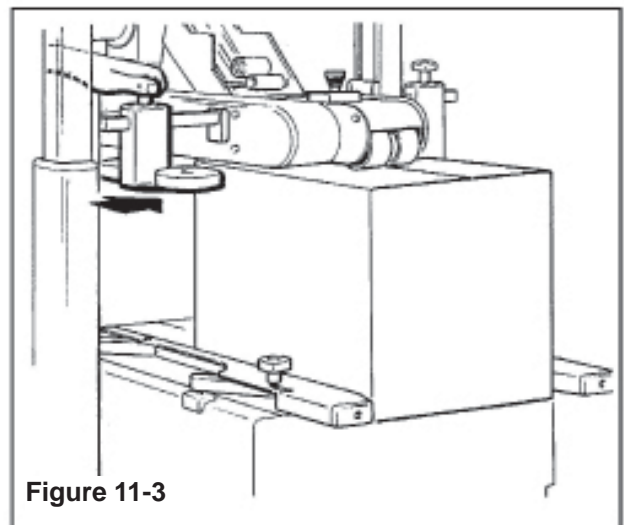
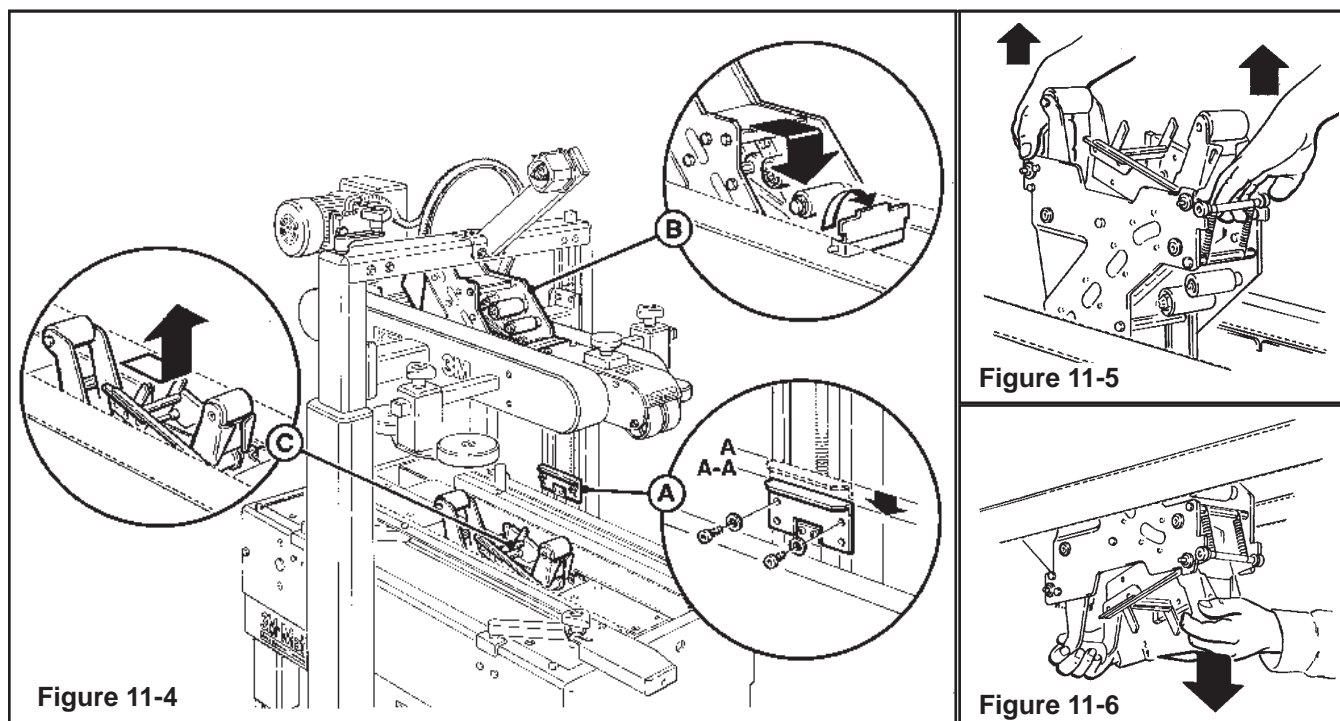


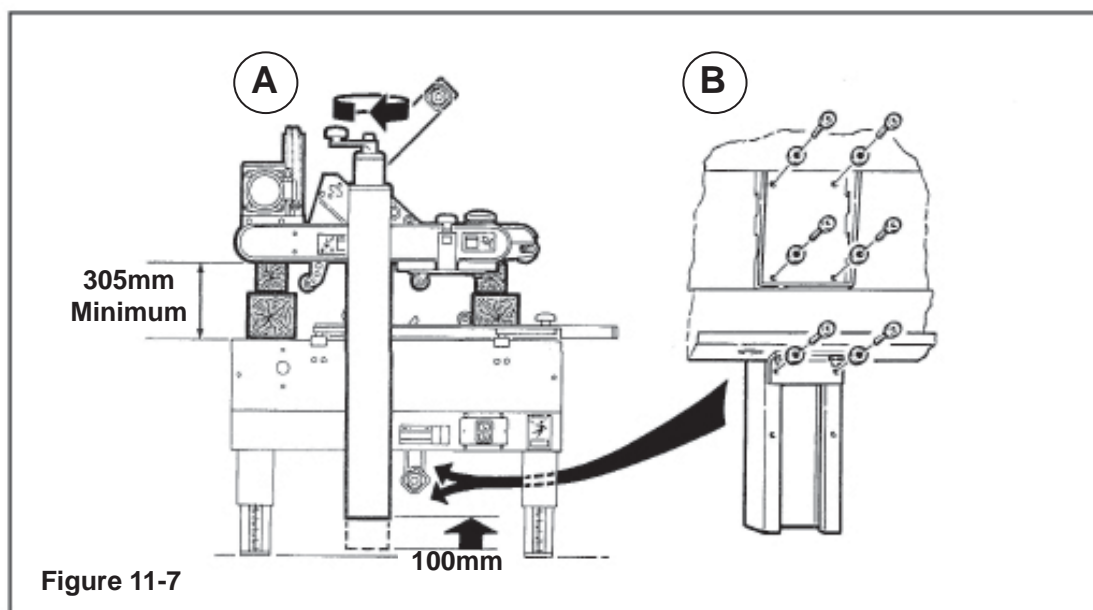
Figure 11-3



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 700a-I-NA case sealer and decreases the minimum conveyor bed height.

- 1 - Place solid blocks approx. 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 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 (100mm).
- 5 - Install and tighten the six screws and plain washers in each column. Crank upper taping head assembly up and remove blocks.



12-OPERATION

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

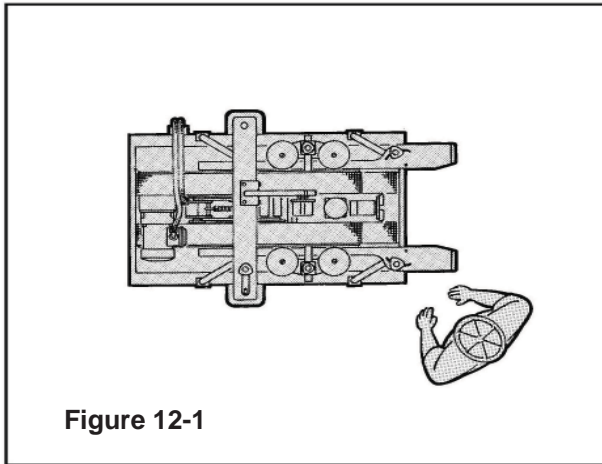


Figure 12-1

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

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

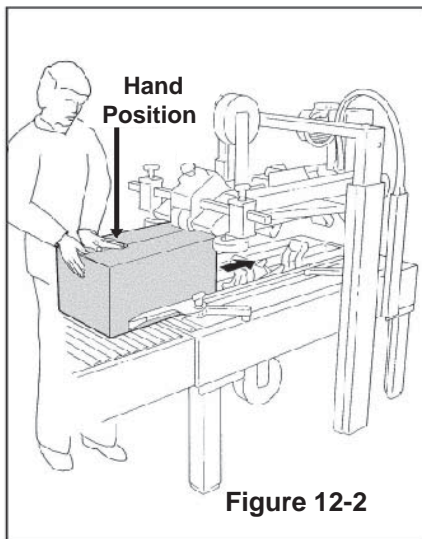


Figure 12-2

12.2 Starting the Machine

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

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

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

WARNING! Be careful with the blades!

Skill 1 - Operator

See Manual 2: AccuGlide™ 2+ STD 2 Inch Taping Heads.

Press the
LATCHING EMERGENCY STOP BUTTON.

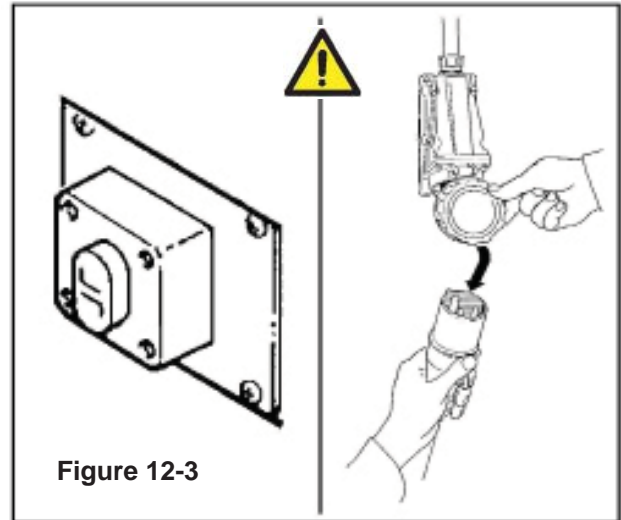


Figure 12-3

12.5 Box Size Adjustment

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

12.6 Cleaning

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

12.7 Table of Operation Adjustments - Operator Qualifications

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

12.8 Safety Devices Inspection

- 1 Taping units blade guard
- 2 Latching emergency stop button
- 3 STOP (OFF) main 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 adjustment with the crank Reduce spring pressure
Drive belts do not turn	Worn or missing friction rings Drive belt tension too low Electrical disconnect Circuit breaker not at correct setting Motor not turning	Replace friction rings Adjust belt tension Check power and electrical plug Set to correct current value Evaluate problem and correct

(continued on next page)

12.9 Trouble Shooting Guide (continued)

PROBLEM	CAUSE	CORRECTION
Drive belts break	Worn belt	Replace belt
Squeaking noise as boxes pass through machine	Dry compression rollers Defective column bearings	Lubricate compression rollers Replace column bearings
Tape not centered on box seam	Tape drum not centered Centering guides not centered Box flaps not of equal length	Reposition tape drum Adjust centering guides Check box specifications
The tape leg on the front of the case is too long	The tape is threaded incorrectly The tape tension is too low The knurled roller drags Tape tracks to one side or drags on the support tabs of applying frame Taping heads is not set up properly	Check machine specifications Boxes are narrower than recommended, causing slippage and premature belt wear Replace drive belts Adjust the box height adjustment with the crank Reduce spring pressure

12.9 Trouble Shooting Guide (continued)

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

13-MAINTENANCE AND REPAIRS

13.1 Safety Measures (see section 3)

Carrying out maintenance and repairs may imply the necessity to work in dangerous situations. This machine has been designed making reference to the standards EN292 NOV. 92/6.1.2 and EN292/2NOV. 92/5.3.



WARNING

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

13.2 Tools and Spare Parts Supplied with the Machine

See Spare Parts Order Section.

13.3 Recommended Frequency of Inspection and Maintenance Operations

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

13.4 Inspections to be Performed Before and After Every Maintenance Operation

Before every maintenance operation, turn the main switch OFF and disconnect the plug from the control panel. During the maintenance operation only the operator responsible for this duty must work on the machine. At the end of every maintenance operation check the safety devices.

13.5 Check Efficiency of Safety Features

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

13.6 Cleaning of Machine

Qualification 1

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

13.7 Cleaning of Cutter Blade

Qualification 2

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

IMPORTANT! Use care when working near blades as they are extremely sharp. If care is not taken, severe injury to personnel could result. Worn or damaged cutter blades must be replaced promptly in order to guarantee a perfect cut of the tape. Lubricate the felt pad on the blade guard without saturating it.

13.8 Lubrication

Most of the machine bearings, including the drive motor, are permanently lubricated and sealed and do not require additional lubricant.

Figures illustrate the taping head and frame points which should be lubricated every 250 hours of operation. Lubricate the rotating and pivoting points noted by the arrows with SAE#30 non-detergent oil. At the same time, a small amount of multipurpose grease should be applied to the end of each spring where the loop is secured to an eyelet (**Figures 13-2 and 13-3**).

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

13.9 Lubrication Products

- Grease; Type metal/metal; B.C. 190 heavy duty (or grease general purpose for chains and/or bearings)
- Grease; Type metal/plastic; Synthetic Silicone
- Lubrication oil: Normal lubrication oil

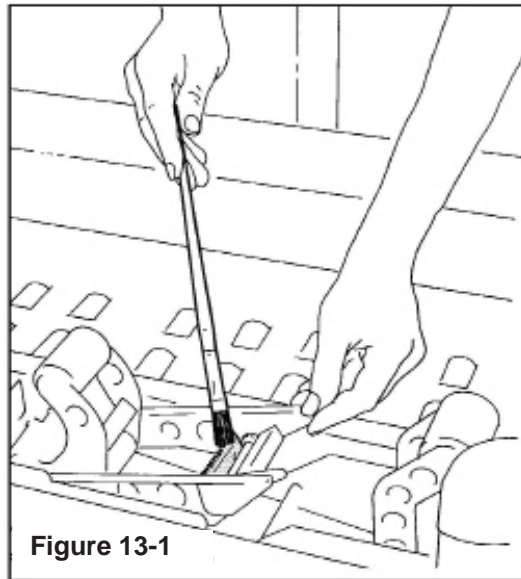


Figure 13-1

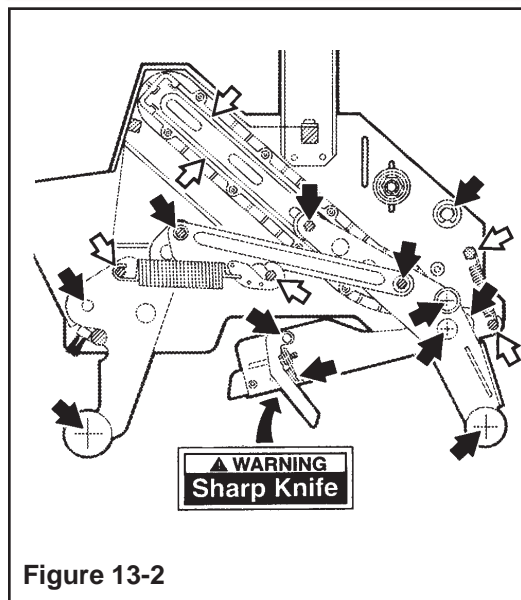


Figure 13-2

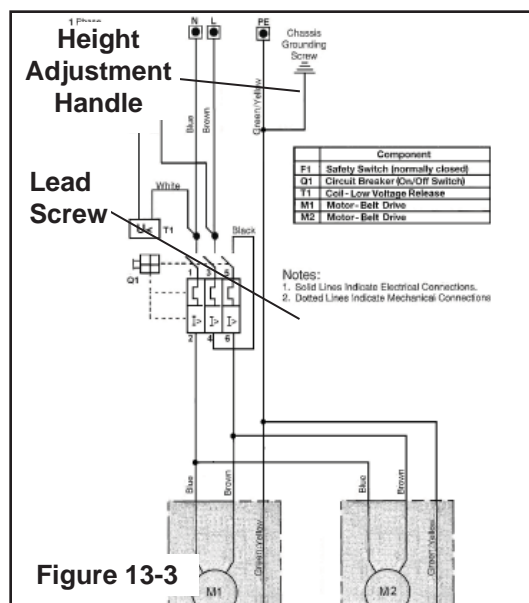


Figure 13-3

**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 Replacement

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

Lower Drive Belts (Figure 13-4)

1. Remove and retain center plate (A) and four (4) screws.
2. Remove and retain side cover (B) and fasteners.
3. Loosen, but do not remove lock nut (C).
4. Loosen tension screw (D) until all belt tension is removed.
5. Pull belt splicing pin (E) out and remove belt.
6. Place new belt over pulleys with laced splice at top. Insert splicing pin.

Important – Pin must not extend beyond edge of belt.

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

Upper Drive Belts (Figure 13-5)

1. Remove and retain front cover (A) and four (4) screws.
2. Loosen, but do not remove lock nut (C).
3. Loosen tension screw (D) until all tension is removed from belt.
4. Move compression roller assembly out to full open position.
5. 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.

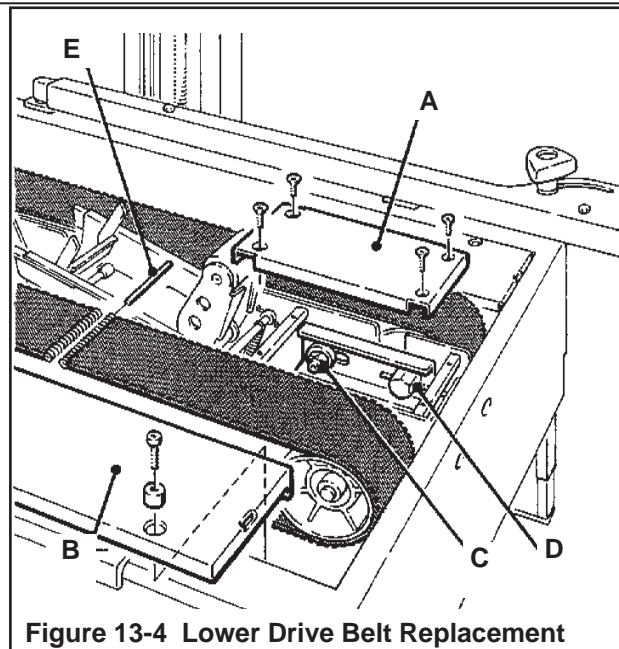


Figure 13-4 Lower Drive Belt Replacement

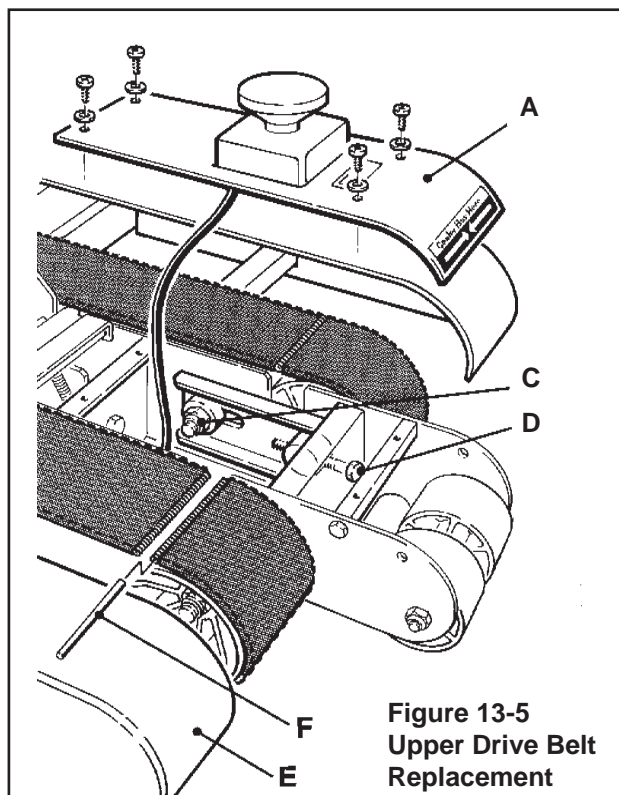


Figure 13-5 Upper Drive Belt Replacement

13.11 Box Drive Belt Tension and Drive Pulley Rings

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

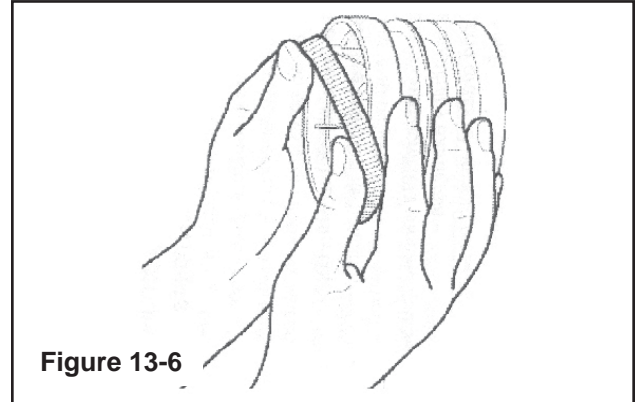


Figure 13-6



WARNING

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

13.12 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 **Section 11 / Set-Up and Adjustments**). Belt tension must be adequate to positively move the box through the machine and the belts should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are adjusted in or out to provide proper belt tension. Each belt is adjusted separately.

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

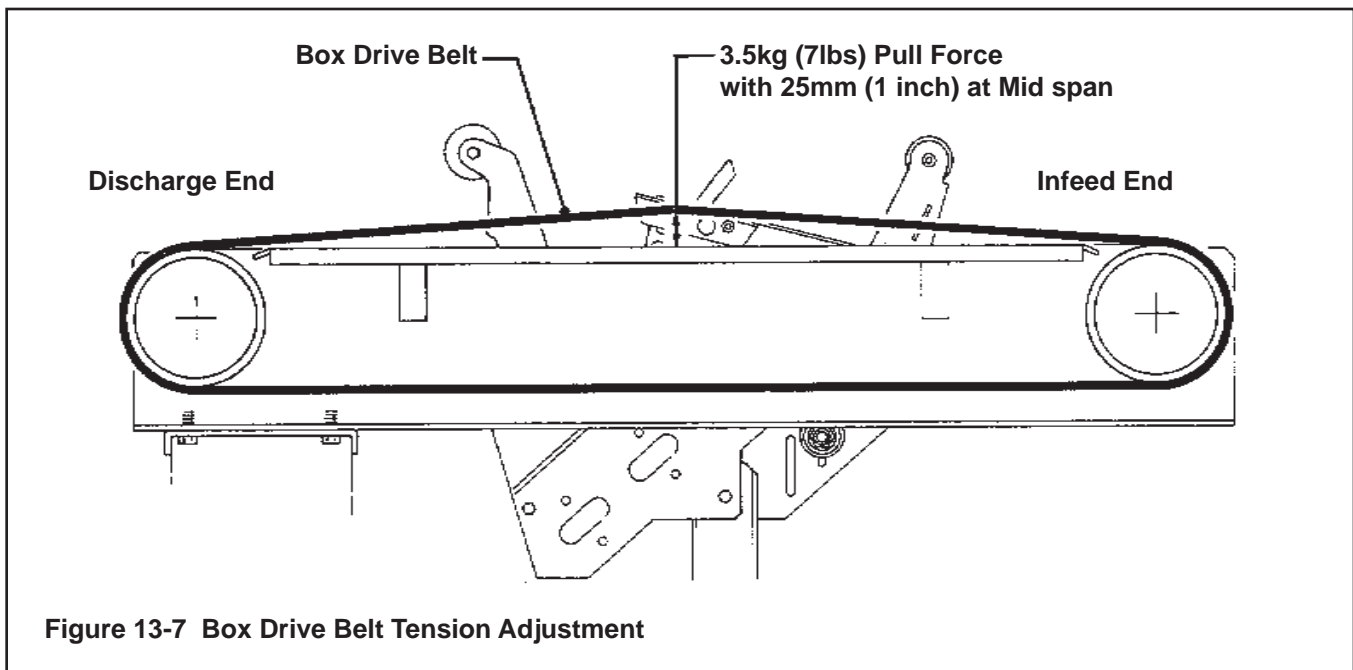
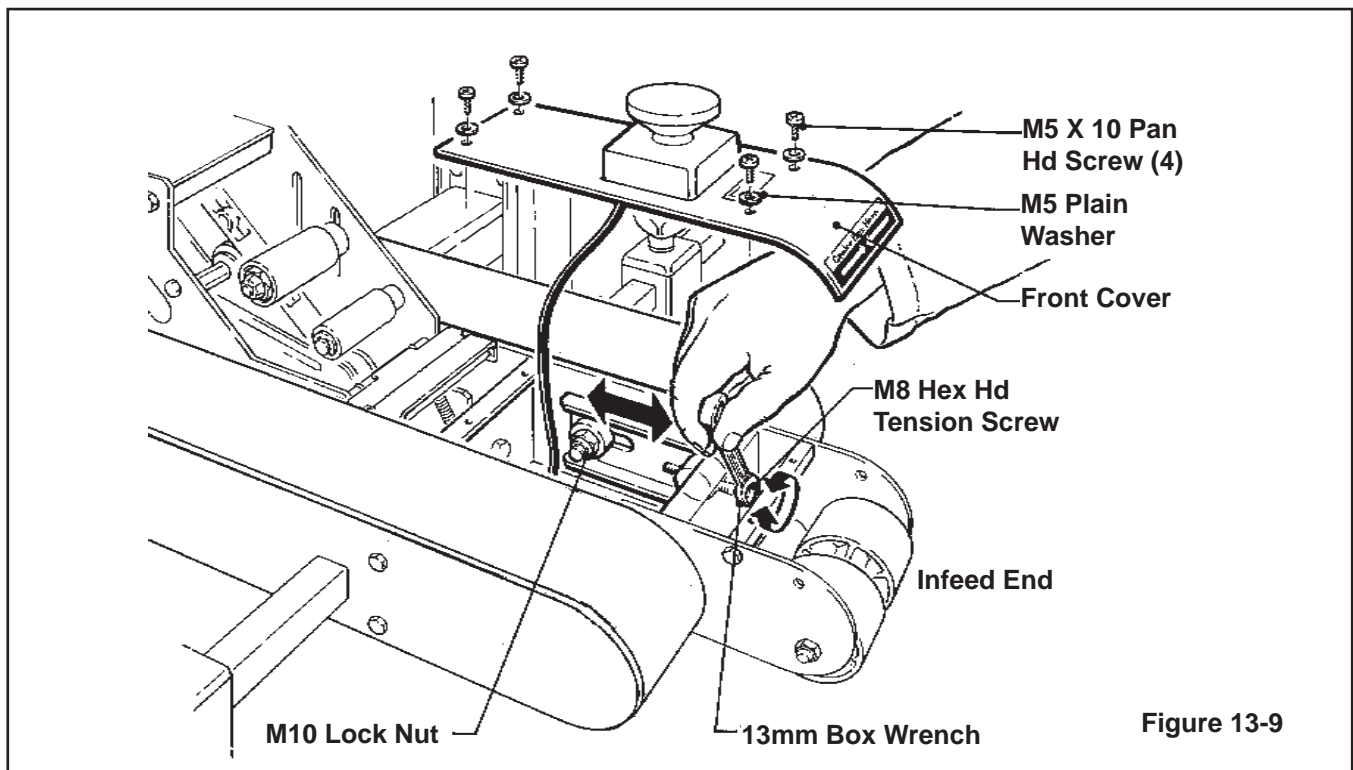
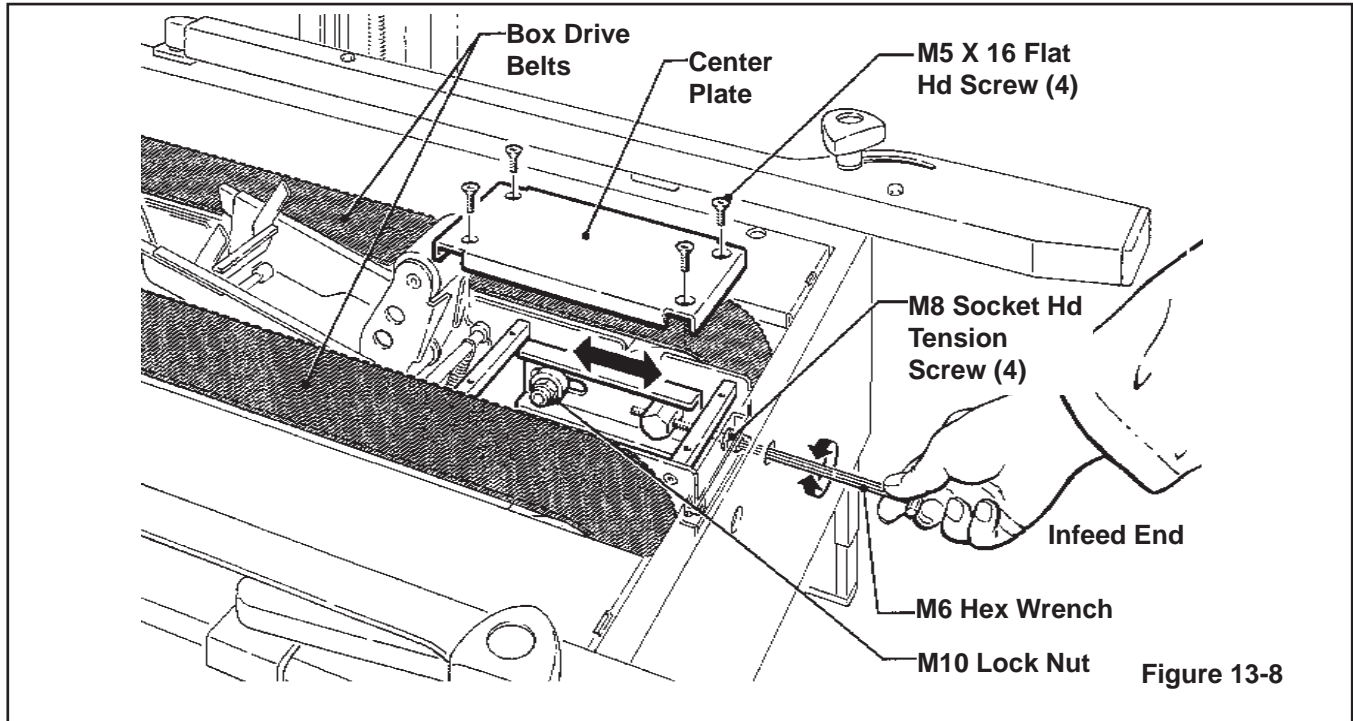


Figure 13-7 Box Drive Belt Tension Adjustment

Drive Belt Tension Adjustment 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 17 mm 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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13.13 List of the Maintenance Operations

Description of Operation

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14.1 Information for Disposal of Machine

The machine is composed of the following materials:

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

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

14.2 Emergency Procedures

In case of danger/fire:

Disconnect plug of power cable from power supply.

(Figure 14-1)

IN CASE OF FIRE

Use a fire extinguisher containing CO2 **(Figure 14-2)**.

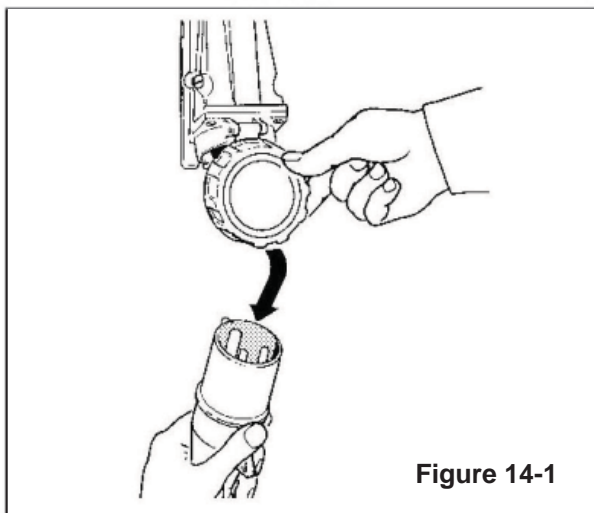


Figure 14-1

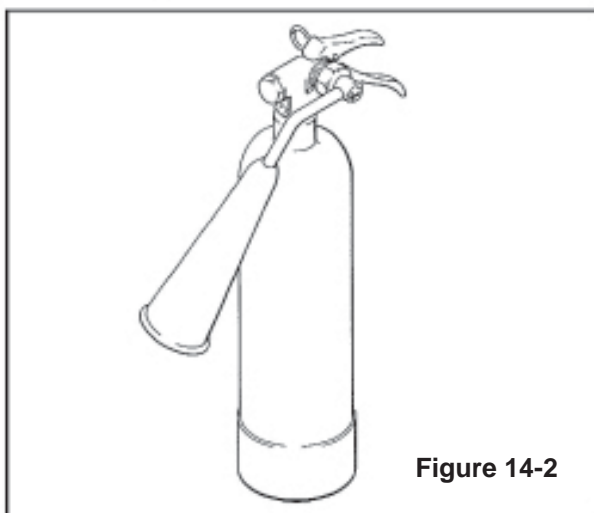


Figure 14-2

15.1 Statement of Conformity

With Directions 89/392 CEE of 14/6/89 and 91/368 of 2/6/91, 93/44 of 14/6/93 and 93/68 of 22/7/93. Refer to Page vii for the Declaration of Conformity.

15.2 Emission of Hazardous Substances

Nothing to report

15.3 List of Safety Features

List of components/assemblies with safety functions

- LATCHING EMERGENCY STOP BUTTON
- Thermal cut-out relay
- Fixed guards upper drive belts
- Blade guard assemblies on both tapping heads

- **Important:** Earth wire protection of electrical installation.

All safety features/components must be explained and highlighted to all operators and to the person responsible for spare parts in order to ensure that these components are always on hand or ordered as a priority procedure.

ONLY USE ORIGINAL REPLACEMENT PARTS

15.4 Copies of Test Reports, Certifications (etc.) Required by User

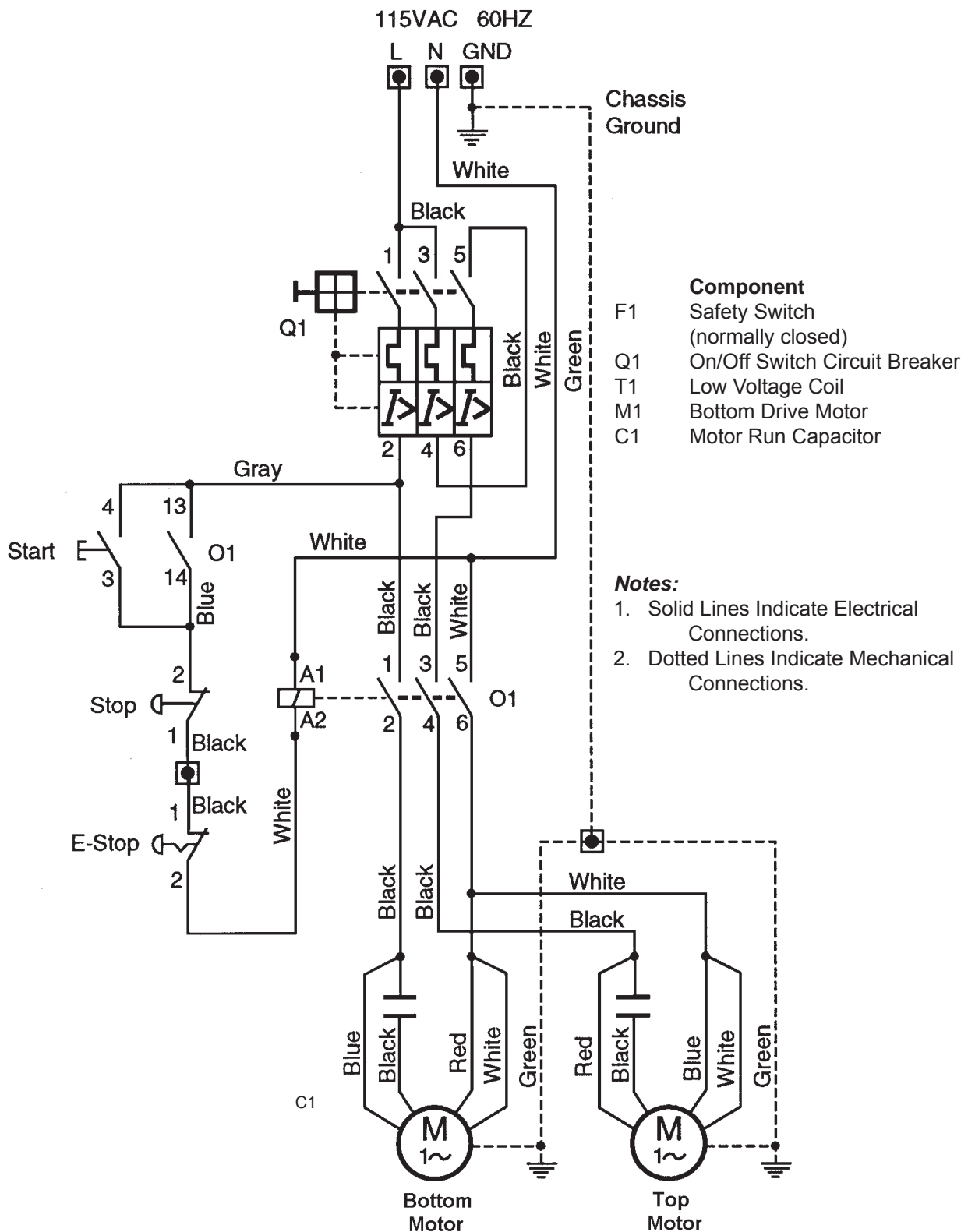
Electrical tests

- 1 - Earth continuity
- 2 - Insulation resistance
- 3 - High voltage test

Reference; EN60204-1 par. 20.2.,3.,4.

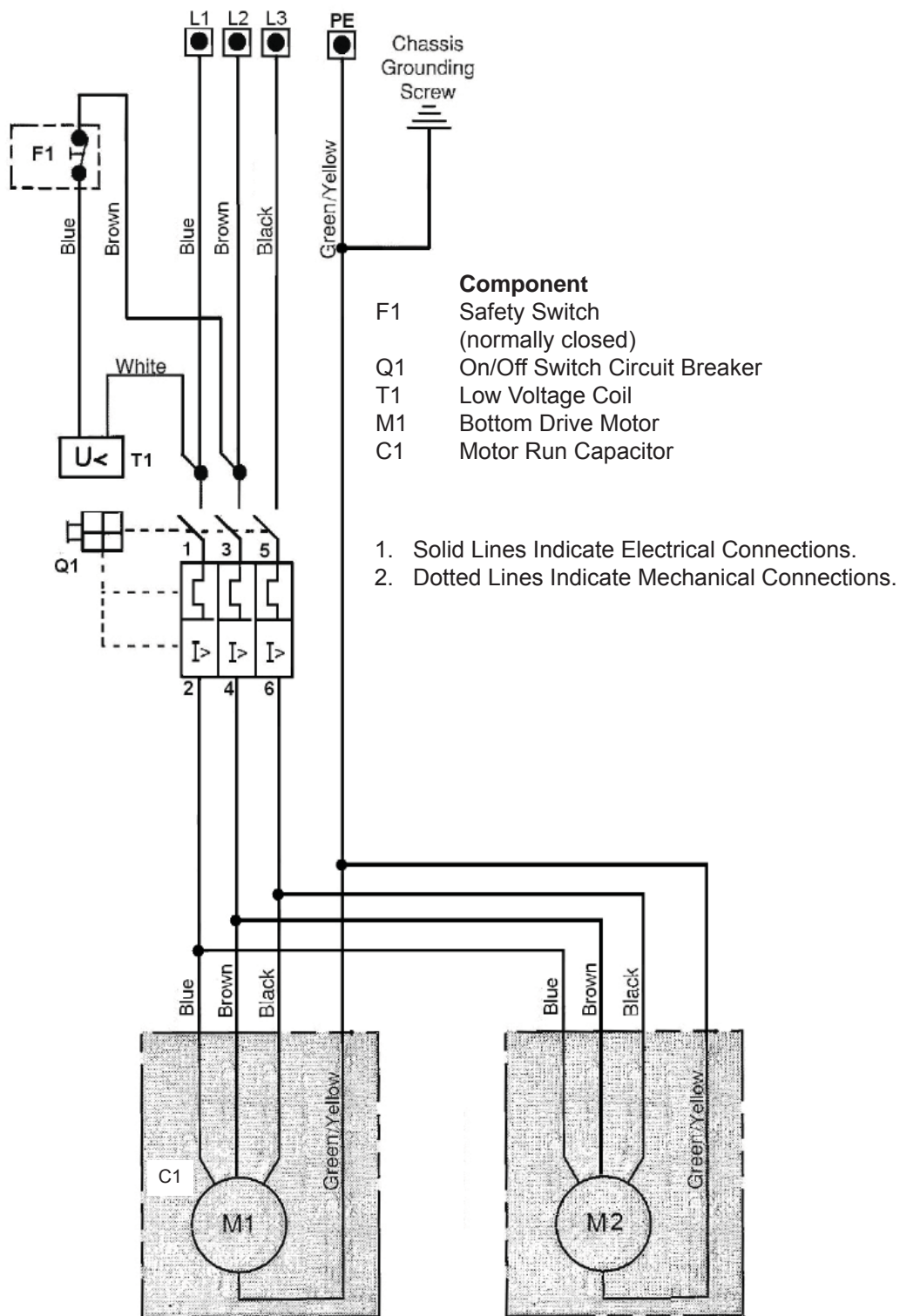
16.1 Electric Diagram

1 Phase



16.1 Electric Diagram

3 Phase



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.

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

700a

Qty.	Ref. No.	3M-Part Number	Description
1	2880-15	78-8057-6179-4	Roller-Applying
1	2881-5	78-8057-6178-6	Roller-Buffering
1	2881-10	78-8070-1274-1	Spring-Upper Extension
1	2883-2	78-8017-9173-8	Blade-65 mm
2	2883-12	78-8052-6602-6	Spring-Cutter
1	2886-10	78-8070-1273-3	Spring-Lower Extension
2	2902-69	78-8070-9531-0	Belt-Drive W/Hook

Tool Kit

A tool kit, part number 78-8060-8476-6, is available as a stock item. The kit contains the necessary open end and hex socket wrenches for use with the metric fasteners on the case sealer. The threading tool, part number 78-8076-4726-4, contained in above kit is also available as a replacement stock item.

Label Kit

In the event that any labels are damaged or destroyed, they must be replaced to ensure operator safety. A label kit, part number 78-8098-9175-3, is available as a stock item. It contains all the safety labels used on the 700a Adjustable Case Sealer.

700a Adjustable Case Sealer, Type 39600 Frame Assemblies

To Order Parts:

1. Refer to first illustration, **Frame Assemblies**, for the **Figure Number** that identifies a specific portion of the machine.
2. Refer to the appropriate **Figure or Figures** to determine the parts required and the parts reference number.
3. The Parts List that follows each illustration, includes the **Reference Number**, **Part Number** and **Part Description** for the parts on that illustration.

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

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

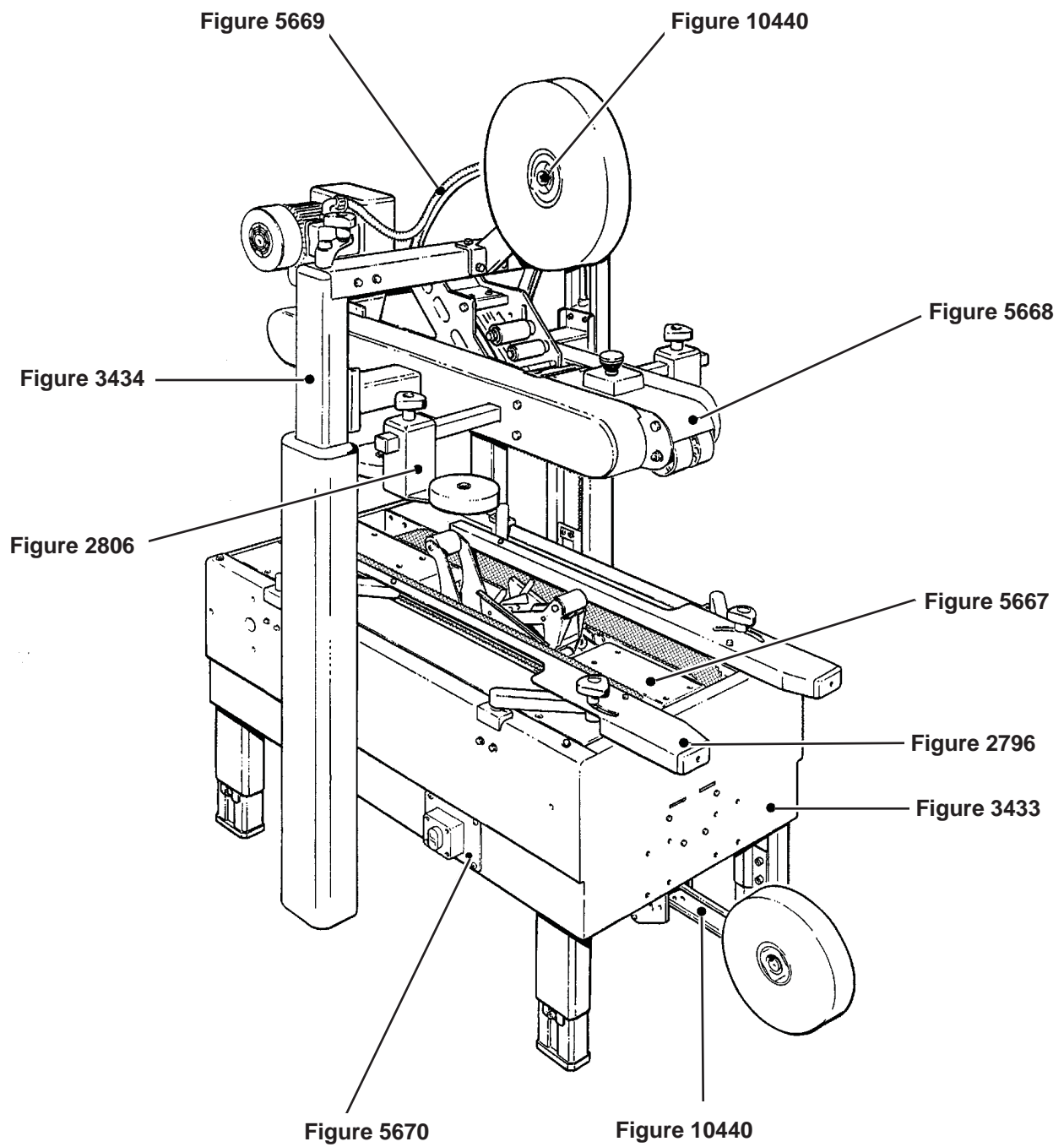
Important – Not all the parts listed are normally stocked items. Some parts or assemblies shown are available only on special order. Contact 3M/Tape Dispenser Parts to confirm item availability.

Options and Accessories

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

Part Number	Option/Accessory
70-0064-2997-4	Box Hold Down Attachment, Model 39600
70-0064-2998-2	Caster Kit Attachment
70-0064-2999-0	Conveyor Extension Attachment
70-0064-0353-2	AccuGlide™ 2+ STD 2 Inch Upper Taping Head, Type 10500
70-0064-0354-0	AccuGlide™ 2+ STD 2 Inch Lower Taping Head, Type 10500
70-0064-3000-6	Compression Roller Kit
78-8060-8476-6	Tool and Parts Kit

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**Frame
Assemblies**

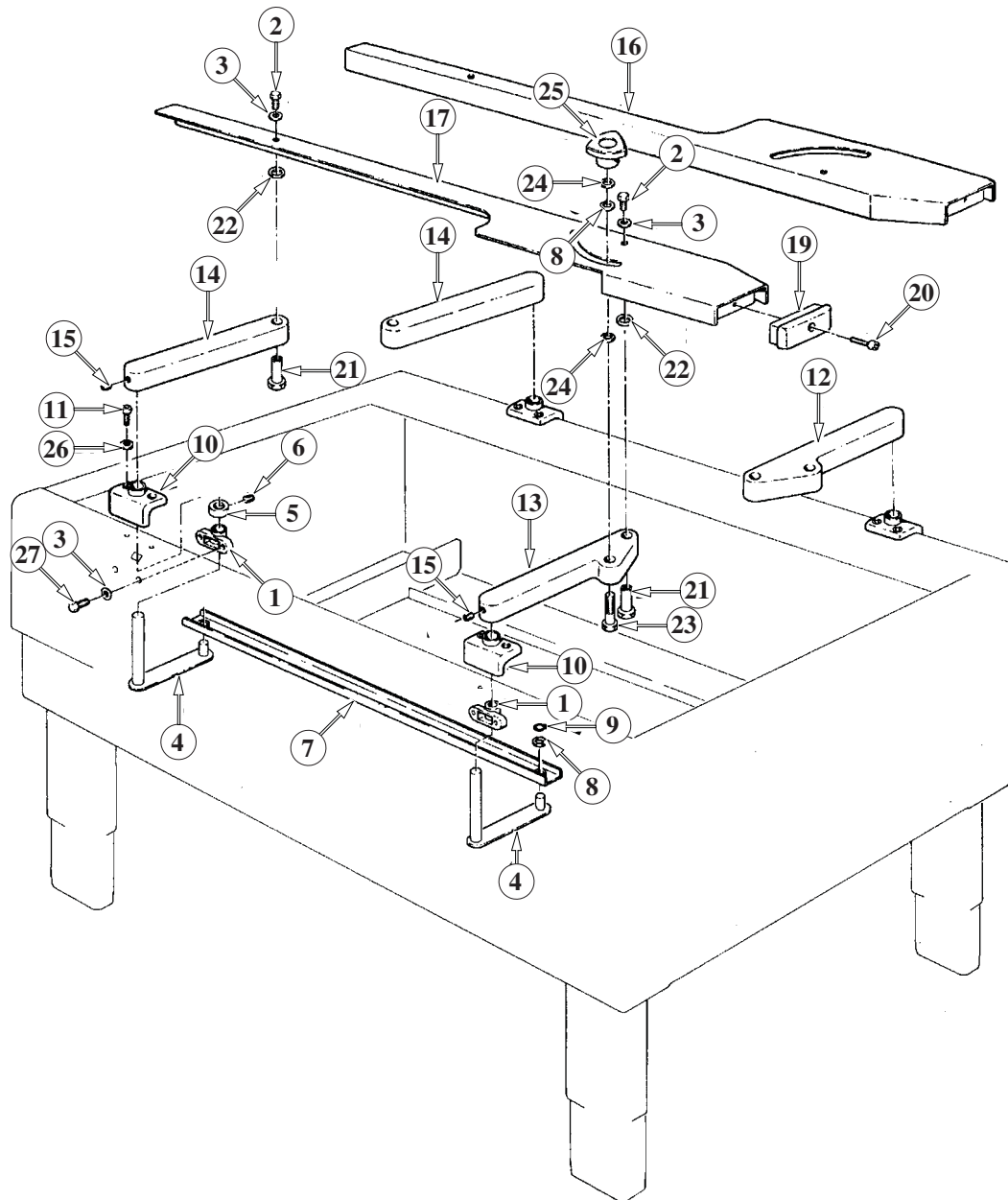


Figure 2796

Figure 2796

Ref. No.	3M Part No.	Description
2796-1	78-8070-1536-3	Support – Guide Arm
2796-2	78-8010-7169-3	Screw – Hex Hd, M6 x 12
2796-3	26-1000-0010-3	Washer – Flat, M6
2796-4	78-8070-1537-1	Lever With Pivot
2796-5	78-8070-1538-9	Bushing
2796-6	26-1003-8816-9	Screw – Set, M5 x 6
2796-7	78-8070-1539-7	Link – Guide
2796-8	78-8017-9074-8	Washer – 15 mm, Nylon
2796-9	78-8052-6733-9	Ring – M10, Special
2796-10	78-8070-1540-5	Support – Lever
2796-11	78-8032-0382-3	Screw – Soc Hd, M5 x 16
2796-12	78-8070-1541-3	Guide Arm – Front, Right
2796-13	78-8070-1542-1	Guide Arm – Front, Left
2796-14	78-8070-1543-9	Guide Arm – Rear
2796-15	78-8076-4505-2	Screw – Set, M6 x 8
2796-16	78-8070-1544-7	Guide – Right
2796-17	78-8113-6792-5	Guide – Left, W/English Language Label
2796-19	78-8070-1546-2	Cap – Guide
2796-20	26-1003-7953-1	Screw – Soc Hd, M5 x 30
2796-21	78-8070-1547-0	Shaft - Guide
2796-22	78-8070-1548-8	Washer – 20 x 12, 5 x 1 Nylon
2796-23	26-1003-5852-7	Screw – Hex Hd, M10 x 40
2796-24	26-1004-5510-9	Washer – Plain, M10
2796-25	78-8070-1549-6	Knob – VTR-B-M10
2796-26	78-8005-5735-3	Washer – Lock, M5
2796-27	78-8032-0375-7	Screw – Hex Hd, M6 x 16

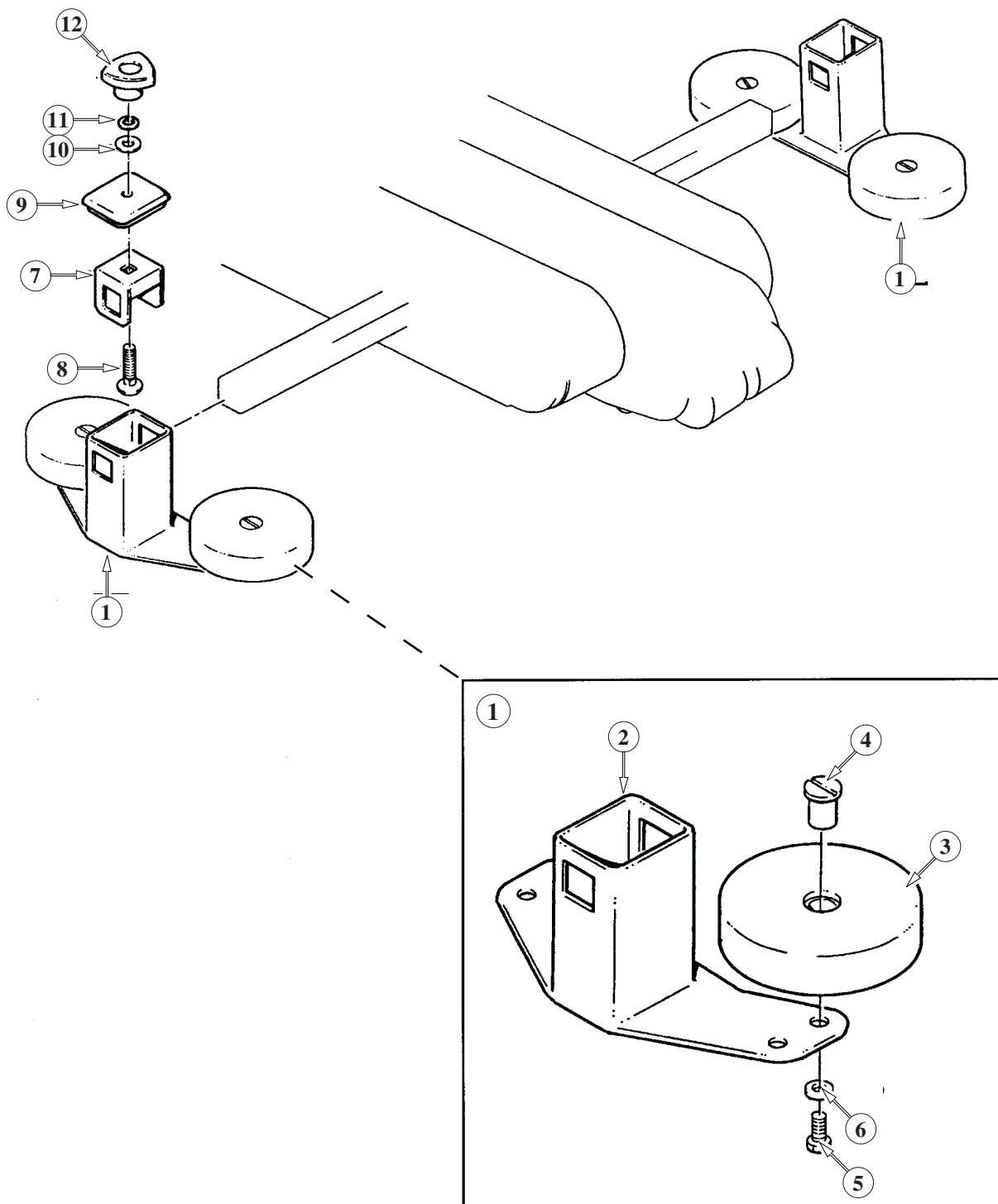


Figure 2806

Figure 2806

Ref. No.	3M Part No.	Description
2806-1	78-8076-4626-6	Compression Roller Assembly
2806-2	78-8076-4627-4	Support – Compression Roller
2806-3	78-8076-4628-2	Roller – Compression
2806-4	78-8076-4629-0	Shaft – Roller
2806-5	26-1003-5841-0	Screw – M8 x 16
2806-6	78-8017-9318-9	Washer – Plain 8 mm
2806-7	78-8076-4630-8	Plate – Tube, Roller
2806-8	78-8076-4631-6	Screw – M10 x 35
2806-9	78-8076-4632-4	Cap – Support
2806-10	78-8017-9074-8	Washer – Nylon 15 mm
2806-11	26-1004-5510-9	Washer – Plain, M10
2806-12	78-8070-1549-6	Knob – VTR-B-M10

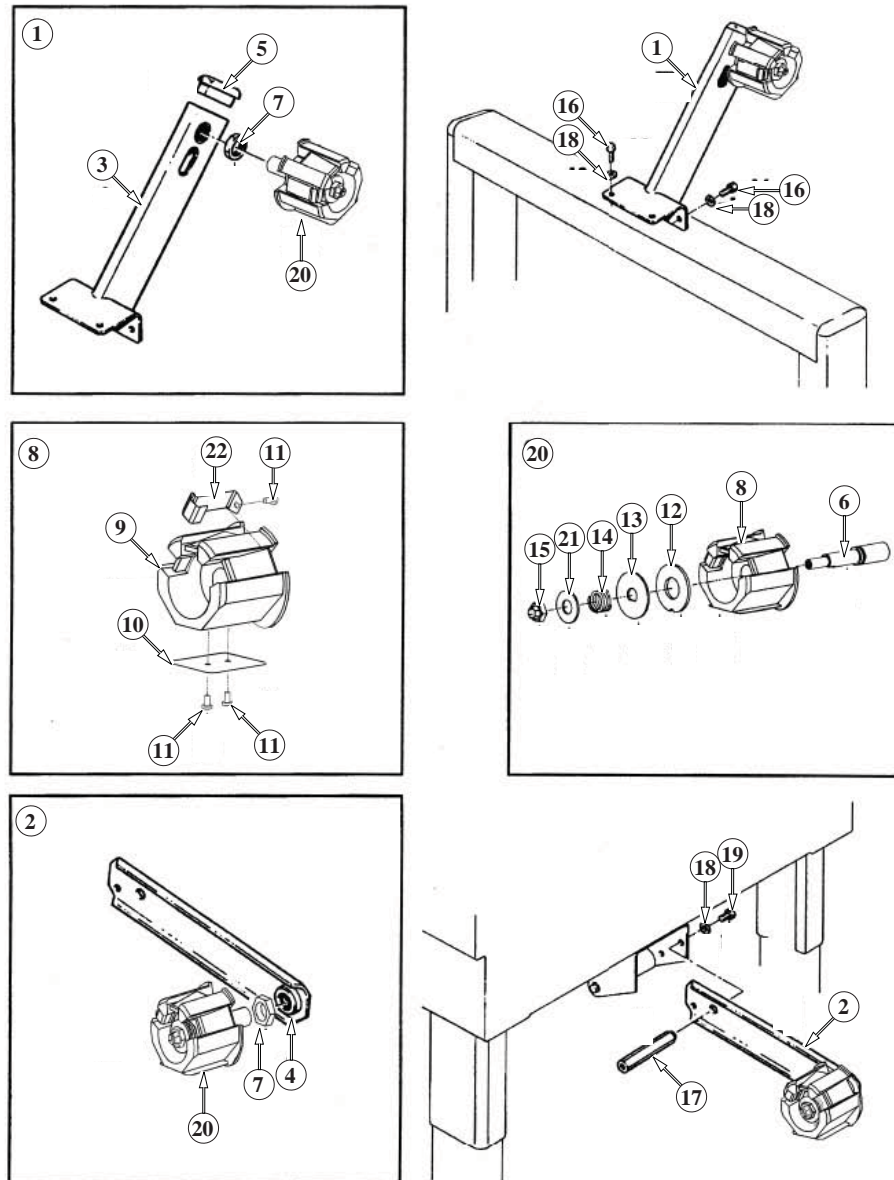


Figure 10440

Figure 10440

Ref. No.	3M Part No.	Description
10440-1	78-8076-4633-2	Tape Roll Bracket Assembly
10440-2	78-8070-1565-2	Tape Drum Bracket Assembly
10440-3	78-8070-1566-0	Bracket – Tape Drum
10440-4	78-8070-1395-4	Bracket – Bushing Assembly
10440-5	78-8070-1568-6	Cap – Bracket
10440-6	78-8076-4519-3	Shaft – Tape Drum
10440-7	78-8017-9169-6	Nut – M18 x 1
10440-8	78-8098-8827-0	Tape Drum Sub-Assembly - 2 Inch
10440-9	78-8098-8749-6	Tape Drum
10440-10	78-8098-8817-1	Leaf Spring
10440-11	26-1002-5753-9	Screw – Self Tapping
10440-12	78-8060-8172-1	Washer – Friction
10440-13	78-8052-6271-0	Washer – Tape Drum
10440-14	78-8100-1048-4	Spring – Core Holder
10440-15	78-8017-9077-1	Nut – Self Locking, M10 x 1
10440-16	78-8032-0375-7	Screw – Hex Hd, M6 x 16
10440-17	78-8070-1215-4	Spacer – Stud
10440-18	26-1000-0010-3	Washer – Flat, M6
10440-19	78-8010-7169-3	Screw – Hex Hd, M6 x 12
10440-20	78-8060-8474-1	Tape Drum Assembly – 2 Inch Head
10440-21	26-1004-5510-9	Washer - Plain, M10
10440-22	78-8098-8816-3	Latch - Tape Drum

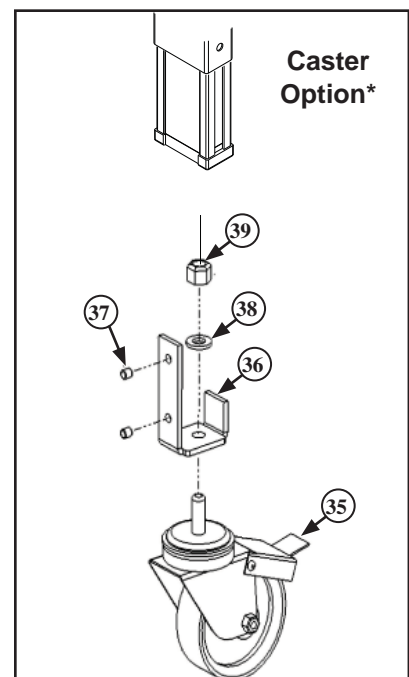
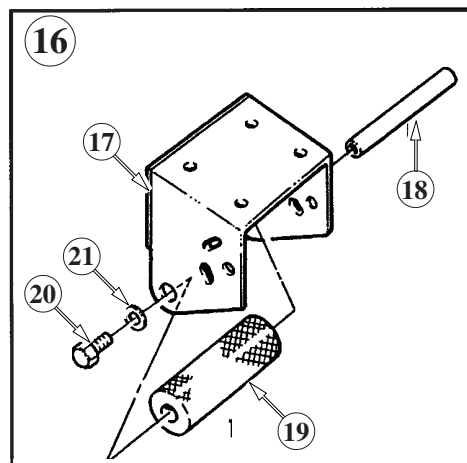
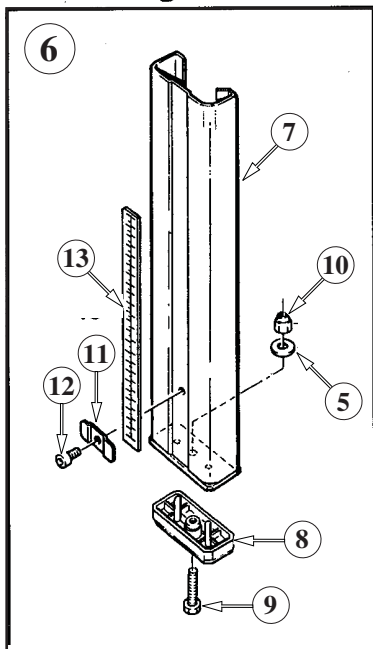
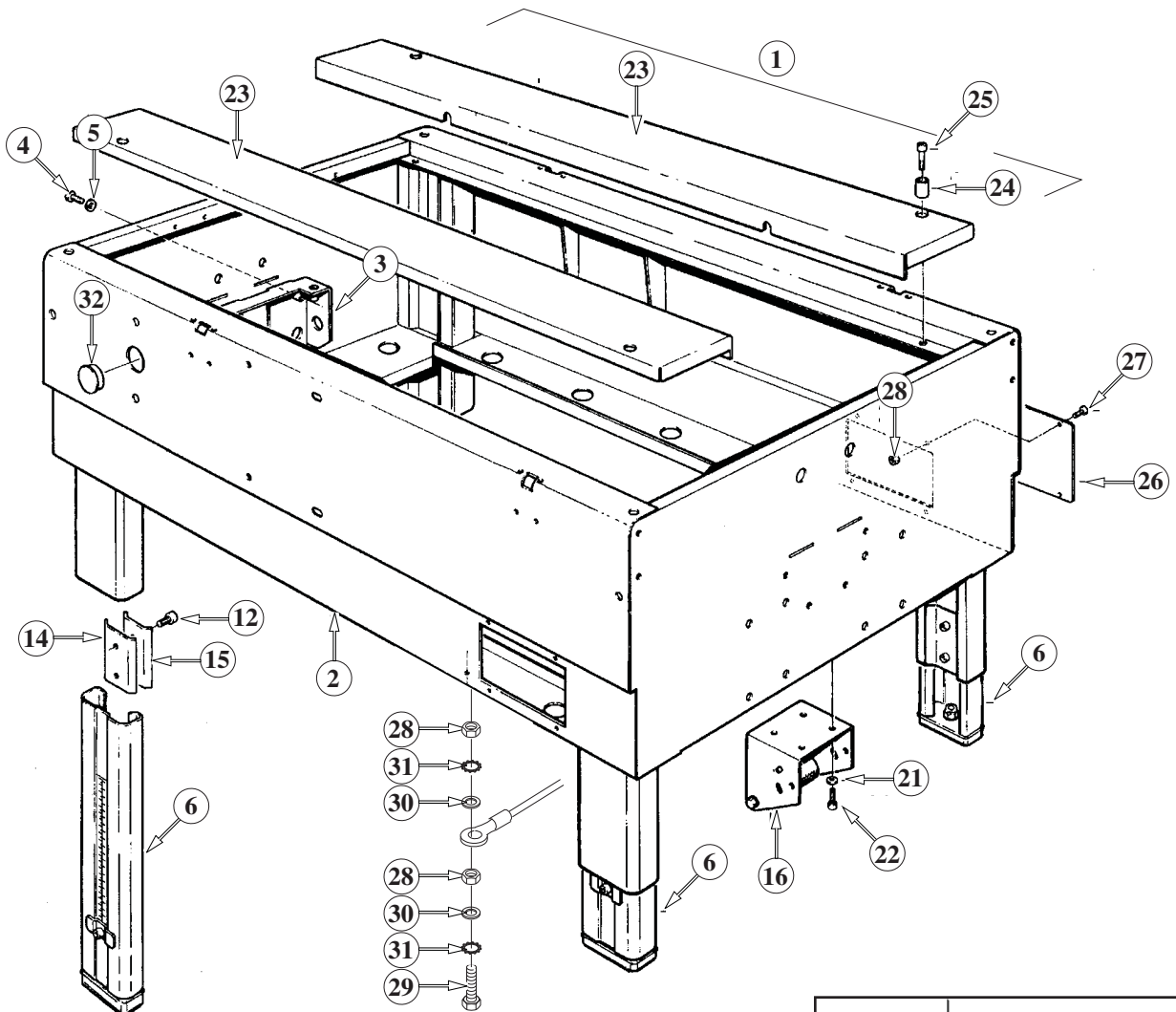


Figure 3433

Figure 3433

Ref. No.	3M Part No.	Description
3433-1	78-8091-0309-2	Conveyor Bed Assembly
3433-2	78-8091-0310-0	Bed – Conveyor
3433-3	78-8091-0307-6	Support – Drive
3433-4	26-1003-5842-8	Screw – Hex Hd M8 x 20
3433-5	78-8017-9318-9	Washer – Plain 8 mm
3433-6	78-8076-5381-7	Leg Assembly – Inner W/Stop
3433-7	78-8076-5382-5	Leg – Inner
3433-8	78-8060-8480-8	Pad – Foot
3433-9	78-8055-0867-4	Screw – Hex Hd M8 x 30
3433-10	78-8017-9313-0	Nut – Self Locking M8
3433-11	78-8076-5383-3	Stop – Leg
3433-12	26-1003-7963-0	Screw – Soc Hd M8 x 16
3433-13	78-8060-8481-6	Label – Height
3433-14	78-8052-6677-8	Clamp – Inner
3433-15	78-8052-6676-0	Clamp – Outer
3433-16	78-8076-5392-4	Support – Tape Drum
3433-17	78-8060-8483-2	Support – Outboard Roll
3433-18	78-8060-8484-0	Shaft – Roller
3433-19	78-8060-8485-7	Roller
3433-20	78-8032-0375-7	Screw – Hex Hd M6 x 16
3433-21	26-1000-0010-3	Washer – Flat M6
3433-22	26-1003-7957-2	Screw – Soc Hd M6 x 16
3433-23	78-8076-4620-9	Plane – Conveyor Bed
3433-24	78-8060-8486-5	Bushing
3433-25	78-8010-7211-3	Screw – Soc Hd M6 x 25
3433-26	78-8060-8487-3	Cover – Switch
3433-27	78-8060-8087-1	Screw – M5 x 10
3433-28	78-8010-7417-6	Nut – Hex M5
3433-29	78-8060-8488-1	Screw – Hex Hd M5 x 20
3433-30	78-8046-8217-3	Washer – Special
3433-31	78-8005-5741-1	Washer – Flat M5
3433-32	78-8076-4701-7	Cap – /28
3433-35	78-8060-8061-6	Caster Assembly
3433-36	78-8129-6105-6	Bracket - Wheel
3433-37	78-8129-6104-9	Set Screw - M8x8
3433-38	78-8017-9059-9	Washer – Spring, Helical, M12
3433-39	78-8060-7532-7	Nut – M12

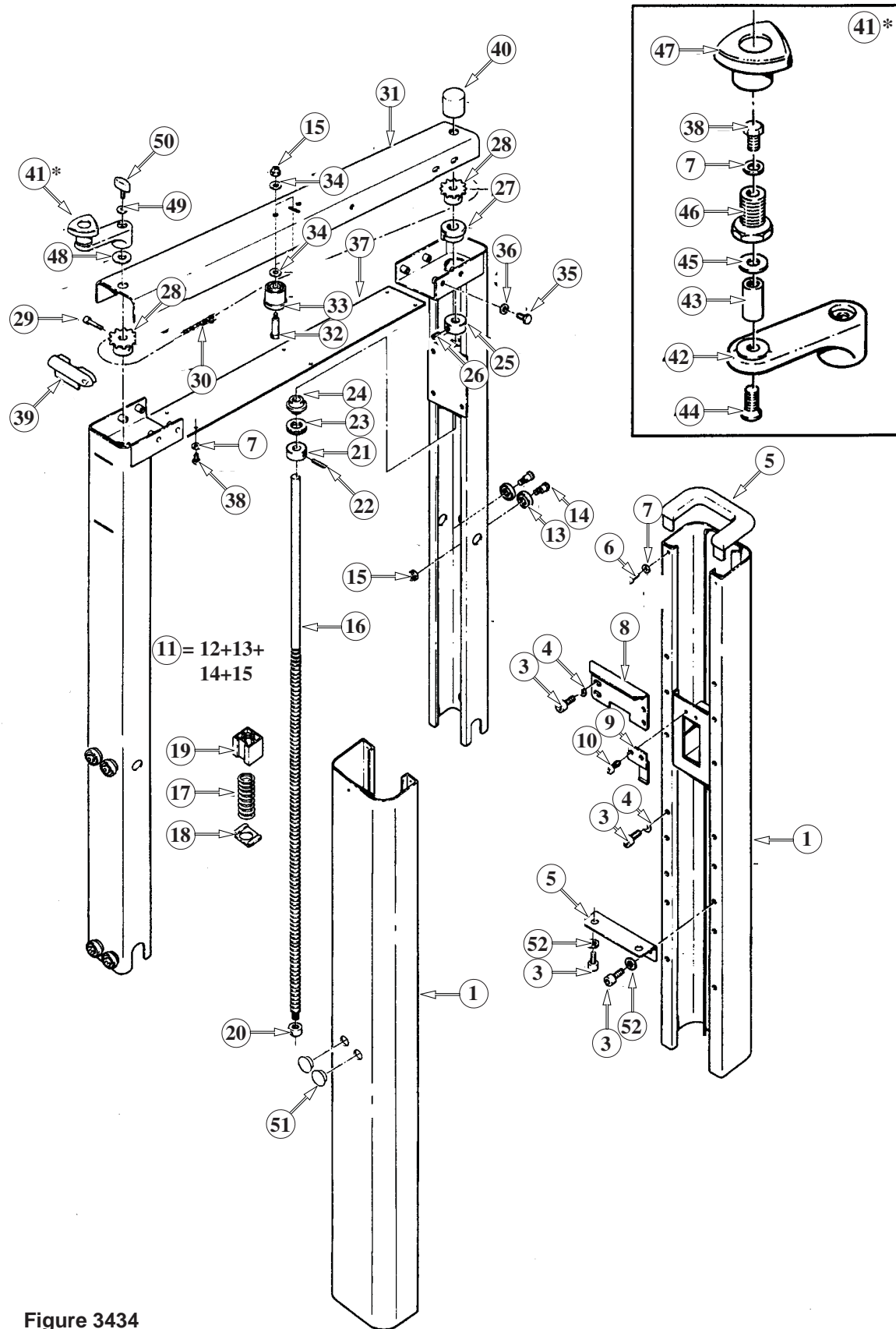


Figure 3434

Ref. No.	3M Part No.	Description
3434-1	78-8060-8489-9	Column – Outer
3434-2	78-8060-8490-7	Plate – Column Mounting
3434-3	26-1003-7964-8	Screw – Soc Hd Hex Soc Dr, M8 x 20
3434-4	78-8017-9318-9	Washer – Plain 8 mm
3434-5	78-8060-8491-5	Cap – Column
3434-6	26-1002-4955-1	Screw – Self Tap 8P x 13
3434-7	78-8005-5740-3	Washer – Plain 4 mm
3434-8	78-8060-8492-3	Stop – Height
3434-9	78-8076-5482-3	Plate – Nut Stop
3434-10	78-8060-8087-1	Screw – M5 x 10
3434-11	78-8060-8494-9	Column Assembly – Inner
3434-12	78-8060-8495-6	Column – Inner
3434-13	78-8054-8617-8	Bearing – Special
3434-14	78-8054-8589-9	Screw – Special
3434-15	26-1003-6916-9	Nut – Locking, Plastic Insert M6
3434-16	78-8060-8496-4	Lead Screw
3434-17	78-8054-8997-4	Spring
3434-18	78-8054-8970-1	Bed Plate – Spring
3434-19	78-8054-8571-7	Nut – Plastic
3434-20	78-8054-8968-5	Nut – Special
3434-21	78-8054-8585-7	Collar
3434-22	78-8054-8586-5	Pin
3434-23	78-8054-8584-0	Spacer
3434-24	78-8054-8583-2	Bushing
3434-25	78-8060-8497-2	Bushing – Lead Screw
3434-26	78-8059-5617-0	Set Screw – M6 x 8
3434-27	78-8060-8498-0	Bushing – Inner Column
3434-28	78-8060-8499-8	Sprocket – 3/8" Z = 13
3434-29	26-1003-7946-5	Screw – Soc Hd M4 x 25
3434-30	78-8070-1501-7	Chain – 3/8" P = 156
3434-31	78-8113-6755-2	Housing – Chain, W/English Language Label
3434-32	78-8060-7878-4	Idler Screw
3434-33	78-8070-1503-3	Roller – Chain Tensioning
3434-34	78-8042-2919-9	Washer – Triple M6
3434-35	26-1003-5829-5	Screw – Hex Hd M6 x 12
3434-36	26-1000-0010-3	Washer – Flat M6
3434-37	78-8070-1504-1	Cover
3434-38	78-8010-7157-8	Screw – Hex Hd M4 x 10
3434-39	78-8070-1505-8	Cap – Inner Column
3434-40	78-8070-1506-6	Cover – Screw
3434-41	78-8076-4807-2	Crank Assembly
3434-42	78-8076-5422-9	Crank
3434-43	78-8070-1509-0	Shaft – Crank
3434-44	26-1005-5316-8	Screw – Flat Hd Hex Dr M5 x 16
3434-45	78-8070-1510-8	Washer – Nylon
3434-46	78-8070-1511-6	Bushing
3434-47	78-8070-1512-4	Knob – VTR-B-M12
3434-48	78-8076-4800-7	Washer – Crank
3434-49	78-8076-4809-8	Washer – Crank
3434-50	78-8076-4821-3	Key – Stop
3434-51	78-8054-8821-6	End Cap
3434-52	26-1004-5507-5	Washer – M8

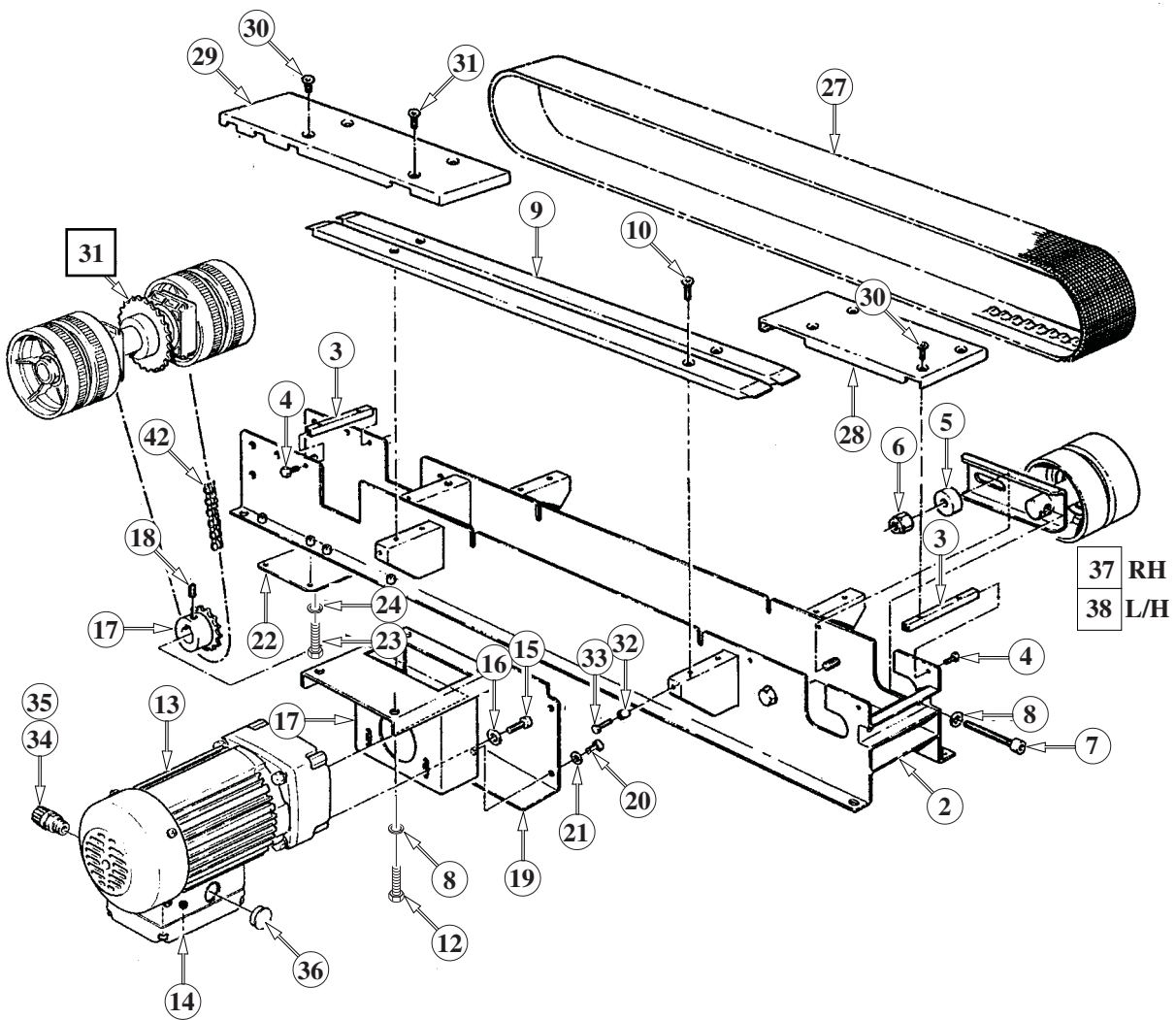


Figure 5667 / 1 of 2

Figure 5667 / 1

Ref. No.	3M Part No.	Description
5667-1	78-8100-1128-4	Drive Assembly – BTM, W /O Motor
5667-1	78-8100-1129-2	Upper Drive Assembly – W /O Motor
5667-2	78-8070-1580-1	Frame – Drive
5667-3	78-8070-1514-0	Spacer
5667-4	26-1003-5829-5	Screw – Hex Hd, M6 x 12
5667-5	78-8070-1518-1	Spacer – Shaft
5667-6	26-1003-6918-5	Nut – Hex Plastic Insert M10
5667-7	78-8070-1519-9	Screw – Soc Hd, Hex Hd, M8 x 70
5667-8	78-8017-9318-9	Washer – Plain, 8 mm
5667-9	78-8070-1520-7	Guide – Drive Belt
5667-10	26-1005-4757-4	Screw – Flat Hd, Soc Dr, M x 20
5667-11	78-8070-1521-5	Support – Gearbox
5667-12	26-1003-7964-8	Screw – Soc Hd, Hex Soc Dr, M8 x 20
5667-13	78-8070-1522-3	Gearmotor – 115V, 60HZ
5667-14	78-8076-4515-1	Capacitor – 115V Gearmotor
5667-15	78-8070-1523-1	Screw – 1/4-28 x 1/2 SHCS
5667-16	78-8042-2919-9	Washer – Triple
5667-17	78-8070-1524-9	Sprocket – 3/8 ", Z=17
5667-18	78-8023-2479-4	Screw – Set W/End Cup,M6 x 10
5667-19	78-8070-1526-4	Cover – Chain
5667-20	78-8010-7209-7	Screw – Soc Hd, M6 x 12
5667-21	26-1000-0010-3	Washer – Flat M6
5667-22	78-8076-4562-3	Cover – Bottom
5667-23	26-1003-5820-4	Screw – Hex Hd, M5 x 12
5667-24	78-8005-5741-1	Washer – Flat, M5
5667-25	78-8070-1527-2	Shaft – With Drive Pulleys
5667-26	78-8070-1525-6	Chain – 3/8" P=54
5667-27	78-8070-1531-4	Belt – Drive With Hook
5667-28	78-8070-1584-3	Cover – Drive, Front
5667-29	78-8113-6794-1	Cover – Drive, Rear, W/English Language Label
5667-30	26-0001-5862-1	Screw – Flat Hd Soc, M5 x 12
5667-31	26-1005-5316-8	Screw – Flat Hd, Hex Dr, M5 x 16
5667-32	78-8070-1534-8	Stud – Side Plate
5667-33	78-8060-8488-1	Screw – Hex Hd, M5 x 20
5667-34	78-8076-4715-7	Cord Grip
5667-35	78-8076-5211-6	Set Nut – GMP 113.5
5667-36	78-8060-7885-9	End Cap – /25 x 1,2
5667-37	78-8100-1236-5	Belt Tensioning Assembly – R/H
5667-38	78-8100-1237-3	Belt Tensioning Assembly – L/H

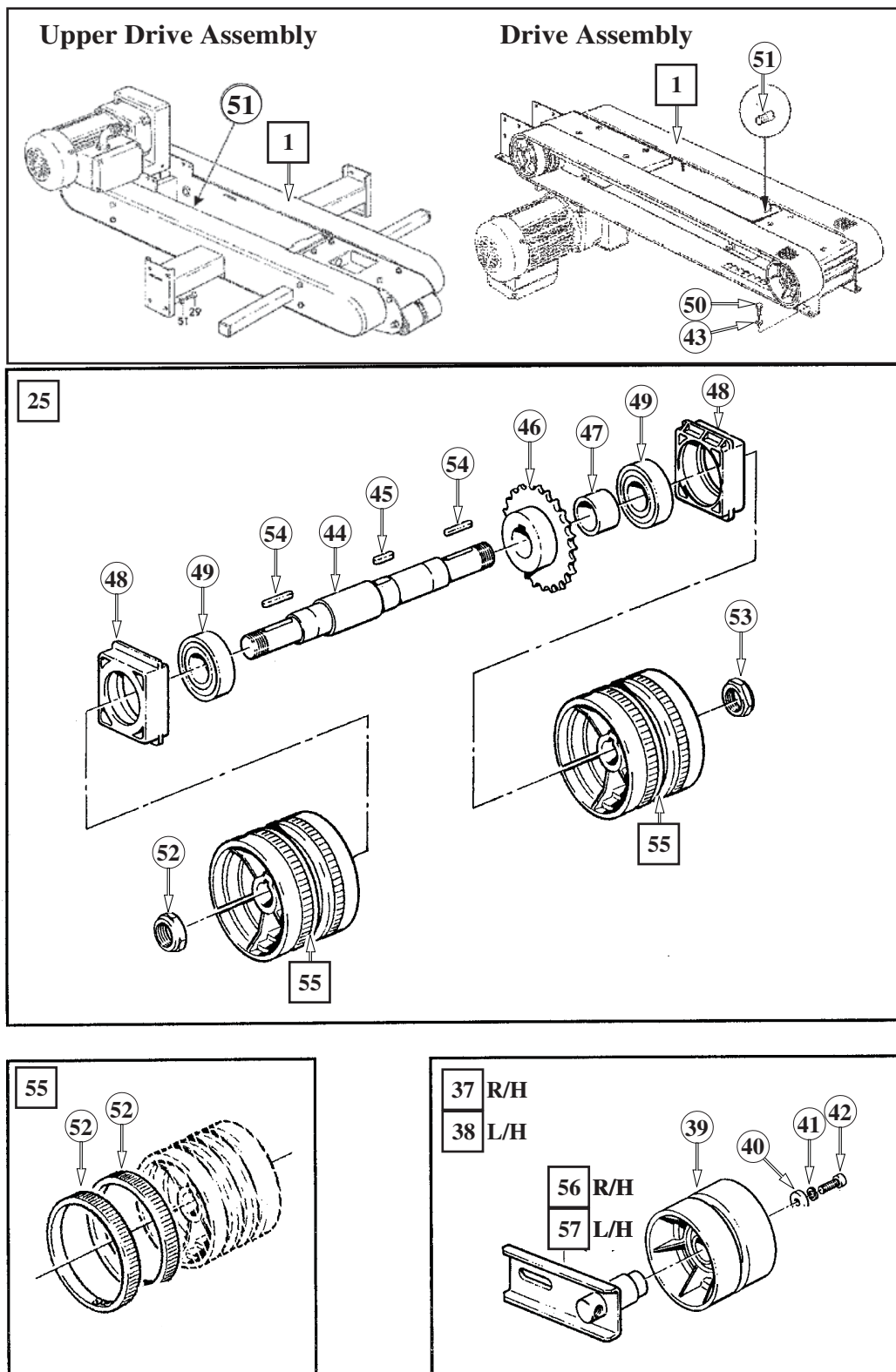


Figure 5667 / 2 of 2

Figure 5667 / 2

Ref. No.	3M Part No.	Description
5667-39	78-8052-6710-7	Roller – Idler
5667-40	78-8052-6709-9	Washer – Special
5667-41	78-8010-7435-8	Washer – Lock M6
5667-42	26-1003-7957-2	Screw – Soc Hd M6 x 16
5667-43	78-8017-9318-9	Washer – Plain, 8 mm
5667-44	78-8070-1528-0	Shaft – Gearbox
5667-45	78-8057-5811-3	Key – 6 x 6 x 20 mm
5667-46	78-8054-8986-7	Sprocket – 3/8" Pitch 28 Teeth
5667-47	78-8054-8984-2	Bushing
5667-48	78-8070-1529-8	Support – Shaft
5667-49	78-8070-1530-6	Bearing – 6205-2RS
5667-50	26-1003-5841-0	Screw – M8 x 16
5667-51	78-8076-4500-3	Stud – Mounting
5667-52	78-8052-6713-1	Ring – Polyurethane
5667-53	78-8060-8416-2	Nut – Special M20 x 1
5667-54	78-8057-5739-6	Key – M5 x 5 x 30 mm
5667-55	78-8076-5105-0	Pulley Assembly – Drive
5667-56	78-8100-1238-1	Belt Tensioning – R/H
5667-57	78-8100-1239-9	Belt Tensioning – L/H

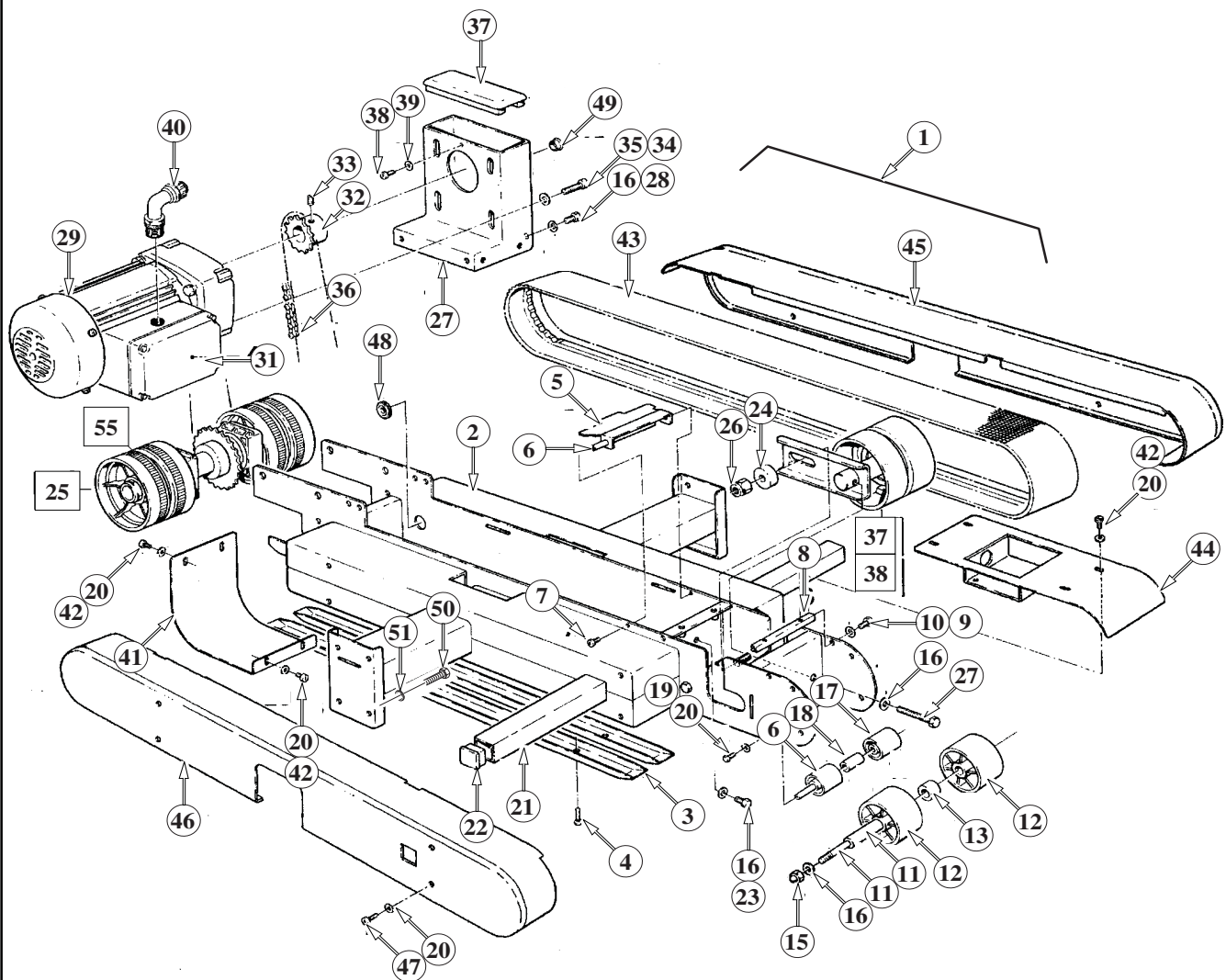


Figure 5668

Figure 5668

Ref. No.	3M Part No.	Description
5668-1	78-8100-1129-2	Upper Drive Assembly – W /O Motor
5668-2	78-8070-1588-4	Frame – Drive, Upper
5668-3	78-8070-1520-7	Guide – Drive Belt
5668-4	26-1005-4757-4	Screw – Flat Hd M5 x 20
5668-5	78-8070-1589-2	Clamp – Upper Head
5668-6	78-8070-1590-0	Shaft – Roller
5668-7	26-1003-7948-1	Screw – Soc Hd M5 x 10
5668-8	78-8070-1514-0	Spacer
5668-9	78-8010-7169-3	Screw – Hex Hd M6 x 12
5668-10	26-1000-0010-3	Washer – Flat M6
5668-11	78-8100-1130-0	Tube – Roller
5668-12	78-8052-6641-4	Roller
5668-13	78-8070-1592-6	Spacer – Roller
5668-14	78-8100-1131-8	Shaft – Roller
5668-15	78-8100-1132-6	Nut – Special, M8
5668-16	78-8017-9318-9	Washer – Plain 8 mm
5668-17	78-8060-7693-7	Roller – 32 x 38
5668-18	78-8070-1593-4	Spacer – Roller
5668-19	26-1003-5820-4	Screw – Hex Hd, M5 x 12
5668-20	78-8005-5741-1	Washer – Flat, M5
5668-21	78-8070-1599-1	Tube – Compression Roller
5668-22	78-8052-6652-1	Cap – End
5668-23	26-1003-5841-0	Screw – M8 x 16
5668-24	78-8070-1518-1	Spacer – Shaft
5668-25	78-8070-1527-2	Shaft – With Drive Pulleys
5668-26	26-1003-6918-5	Nut – Hex Plastic Insert M10
5668-27	78-8070-1595-9	Support – Drive
5668-28	26-1003-5842-8	Screw – Hex Hd, M8 x 20
5668-29	78-8070-1522-3	Gearmotor – 115V, 60HZ
5668-30	26-1003-7957-2	Screw – Hex Hd M8 x 60
5668-31	26-1011-8828-7	Capacitor – 115V Gearmotor
5668-32	78-8070-1524-9	Sprocket – 3/8" Z=17
5668-33	78-8023-2479-4	Set Screw – W/End Cup M6 x 10
5668-34	78-8070-1523-1	Screw – 1/4-28 x 1/2 SHCS
5668-35	78-8042-2919-9	Washer – Triple, M6
5668-36	78-8070-1597-5	Chain – 3/8" P=62
5668-37	78-8070-1598-3	Cover
5668-38	26-1002-4955-1	Screw – Self Tap 8P x 13
5668-39	78-8005-5740-3	Washer – Plain 4 mm
5668-40	78-8070-1596-7	Union – Elbow, PG 13,5
5668-41	78-8076-4622-5	Cover – Rear Upper
5668-42	78-8060-8087-1	Screw – M5 x 10
5668-43	78-8070-1531-4	Belt – Drive, With Hook
5668-44	78-8113-6791-7	Cover – Upper, Front, W/English Language Label
5668-45	78-8113-6790-9	Guard – Belt, R/H, W/English Language Label
5668-46	78-8113-6789-1	Guard – Belt, L/H, W/English Language Label
5668-47	78-8076-4625-8	Screw – Special, M5 x 16
5668-48	78-8076-4702-5	Grommet – /28
5668-49	78-8054-8821-6	End – Cap
5668-50	26-1003-7957-2	Screw - Soc Hd M6 x 16
5668-51	78-8042-2919-9	Washer -Triple, M6

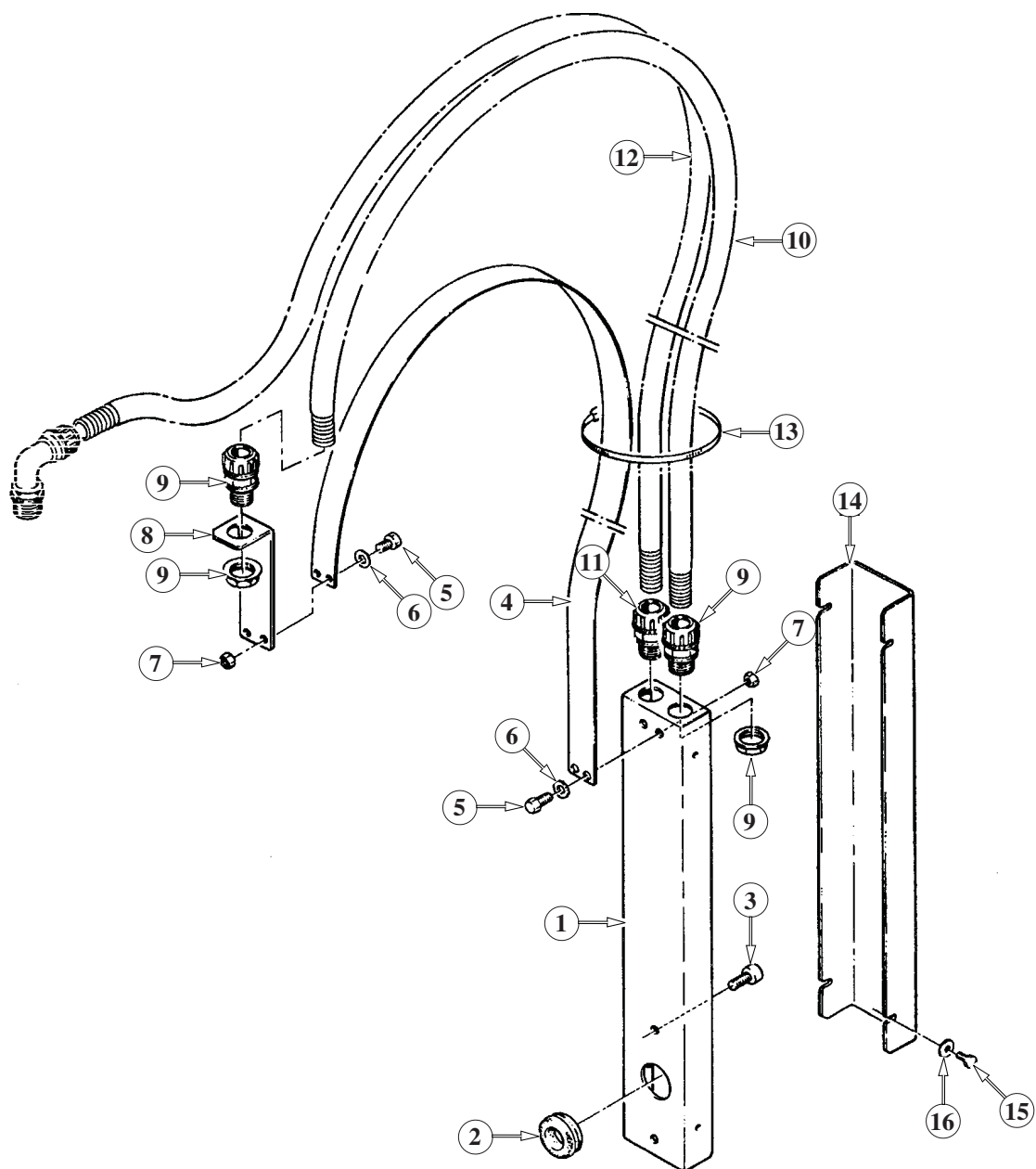


Figure 5669

Figure 5669

Ref. No.	3M Part No.	Description
5669-1	78-8091-0660-8	Housing – Wire
5669-2	78-8076-4702-5	Grommet – /28
5669-3	26-1003-7963-0	Screw – Soc Hd M8 x 16
5669-4	78-8076-4636-5	Strap – Wire
5669-5	78-8010-7163-6	Screw – Hex Hd M5 x 10
5669-6	78-8005-5741-1	Washer – Plain M5
5669-7	78-8010-7417-6	Nut – Hex M5
5669-8	78-8100-1135-9	Bracket – Strap
5669-9	78-8076-4520-1	Union PG13 – Sleeve /16
5669-10	78-8076-4521-9	Sleeving – Wire, 900 mm /16
5669-11	78-8076-4638-1	Union PG 13.5 – Sleeve /14
5669-12	78-8076-4640-7	Sleeving – Wire, 11 mm /14
5669-13	78-8060-8029-3	Clamp – 140 x 3,5
5669-14	78-8076-4641-5	Cover
5669-15	78-8010-7157-8	Screw – Hex Hd M4 x 10
5669-16	78-8017-9018-5	Washer – Plain M4

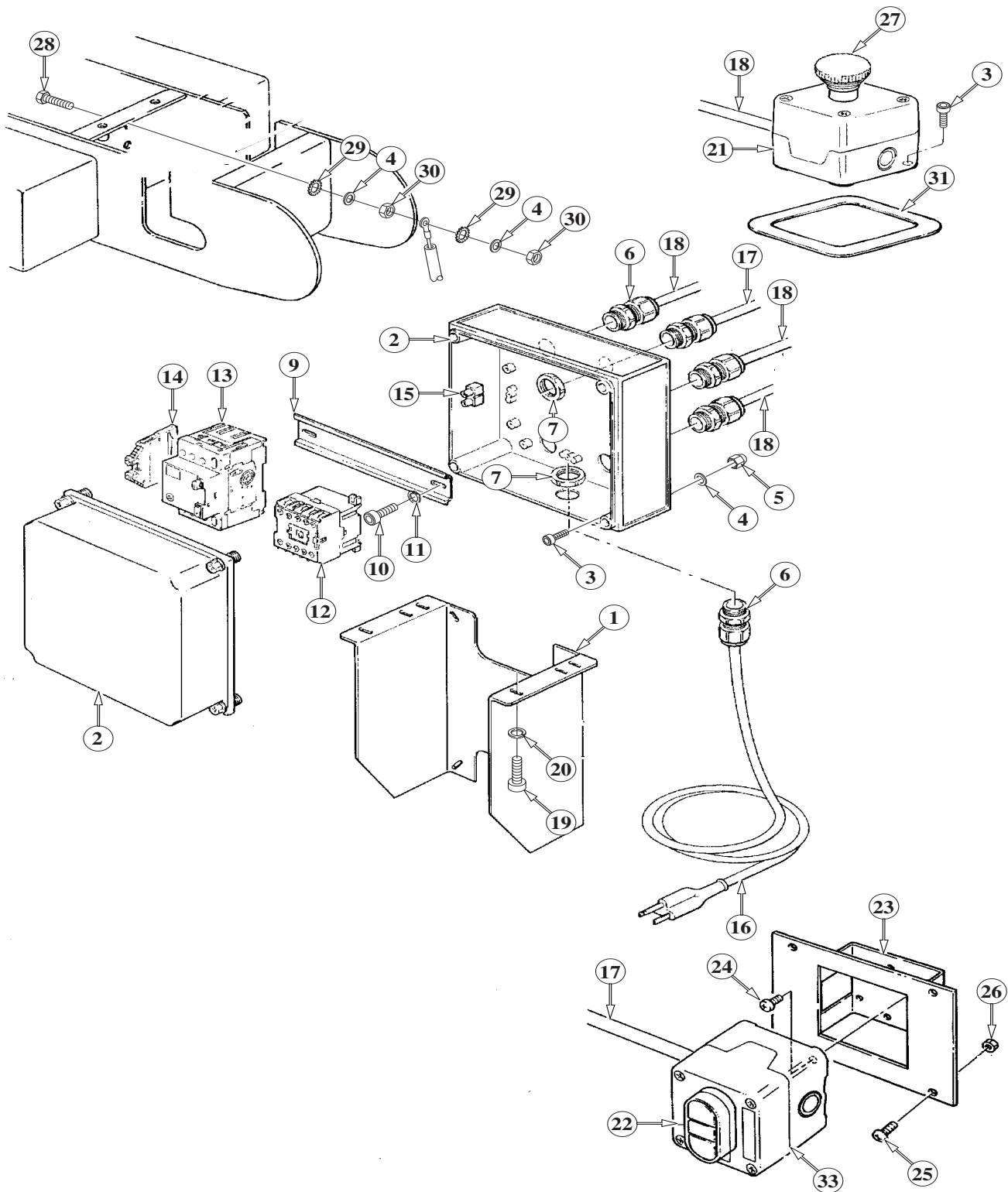


Figure 5670

Figure 5670

Ref. No.	3M Part No.	Description
5670-1	78-8094-6379-3	Support – Box
5670-2	78-8113-6759-4	Box – W/English Language Label
5670-3	78-8094-6381-9	Screw – Soc Hd, Hex Hd, M4 x 15
5670-4	78-8005-5740-3	Washer – Plain, 4 mm
5670-5	26-1003-6914-4	Nut – Plastic Insert, M4
5670-6	78-8076-4715-7	Cord Grip
5670-7	78-8076-5211-6	Set Nut – GMP 13.5
5670-9	78-8094-6382-7	Guide – Mounting
5670-10	78-8028-8208-0	Screw – 6P x 9,5
5670-11	78-8017-9018-5	Washer – Plain, M4
5670-12	78-8094-6383-5	Contactor – CA4-5-10, 110V, 60HZ
5670-13	78-8076-5378-3	Circuit Breaker, KTA-3-25
5670-14	78-8094-6384-3	Ground Clamp – VGPE 4/6
5670-15	78-8076-4968-2	Terminal
5670-16	78-8028-7909-4	Power Cord – U.S.A.
5670-17	78-8100-1038-5	Cable – 3 x 20 AWG, 5 MT
5670-18	78-8060-8053-3	Wire – 3-Pole, 5 Meters Length
5670-19	26-1003-7957-2	Screw – Soc Hex Hd, M6 x 16
5670-20	26-1000-0010-3	Washer – Flat, M6
5670-21	78-8076-5194-4	Box – E-Stop, Yellow
5670-22	78-8094-6386-8	Switch – On/Off, DM3N-C-01/10
5670-23	78-8100-1039-3	Support – On/Off Switch
5670-24	78-8017-9257-9	Screw – Phillis Head, M4 x 10
5670-25	78-8060-8087-1	Screw – M5 x 10
5670-26	78-8010-7417-6	Nut – Hex, M5
5670-27	26-1014-5845-8	E-Stop – 800EM-MTS644-3LX01
5670-28	78-8091-0538-6	Screw – Hex Hd, M4 x 25
5670-29	78-8076-4716-5	Star Washer – M4
5670-30	78-8010-7416-8	Nut – Hex, M4
5670-31	78-8100-1234-0	Collar
5670-32	78-8114-4896-4	Box – On/Off, Grey

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