Instructions and Parts List

3M-Matic™ 77A-KS Adjustable Case Sealer with AccuGlide™ Taping Heads

Model 18600

Model 18600

IMPORTANT

It is recommended you immediately order the spare parts listed on page 19. These parts are expected to wear through normal use, and should be kept on hand to minimize production delays.

34-7004-7393-6(E72.025)R1

Litho in U.S.A.

3M Packaging Systems Division
3M Center Bldg. 220-8W-01
St. Paul, MN 55144-1000

3M

To Our Customers:

This is the "3M-Matic"/"AccuGlide"/"Scotch"/"Opta-Pak" brand Equipment you ordered. It has been set up and tested in the factory with "Scotch" Brand tapes. If any problems occur when operating this equipment, and you desire a service call, or phone consultation, call the 3M National Service Center on 1-800/328 1390 (Twin Cities Metro Area call 731 6507). Please provide the customer support coordinator with the machine number and serial number. If you have a technical question that does not require an immediate response, you may Fax it to 612/731 6650.

Replacement Parts

Order parts by **part number, part name,** quantity required, **machine name, number** and **type number.**

Replacement parts and parts prices available from:

Dispenser Parts
Route 4, Box 5B
Amery, WI 54001
715/268 8126 (WI)
800/344 9883 (Outside WI)
FAX# 715/268 8153

34-7004-7364-7(H21.25)R2 XY

Litho in U.S.A.

3M Packaging Systems Division
3M Center Bldg. 220-8W-01
St. Paul, MN 55144-1000

Instruction Manual
77A-KS Adjustable Case Sealer
Model 18600

Table of Content **Page**

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

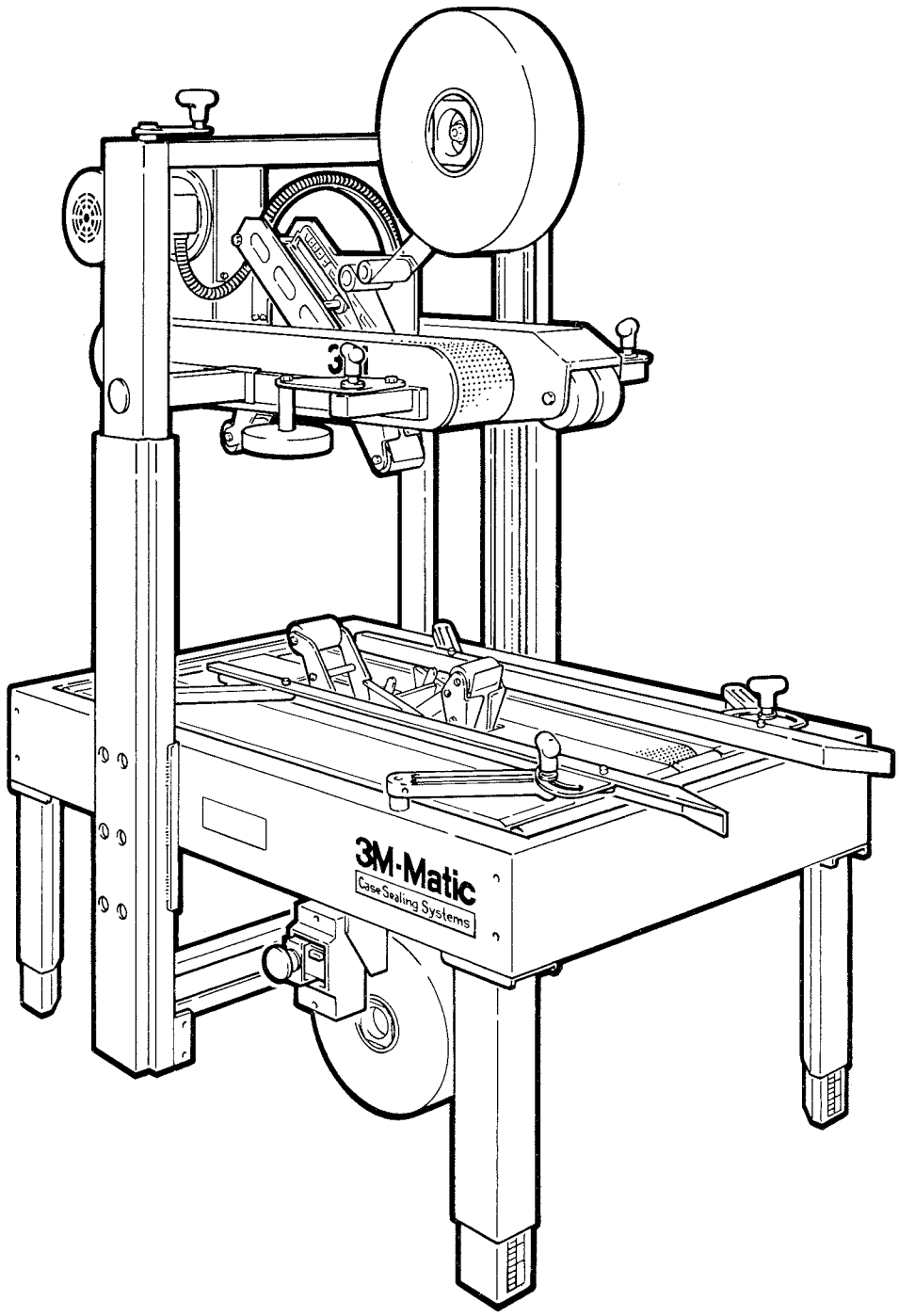
3M sells its **3M-Matic™ 77A-KS Adjustable Case Sealer, Model 18600** with the following warranties:

1. The Taping Head knife blades, springs, and rollers will be free from all defects for ninety (90) days after delivery.
2. All other Taping Head parts will be free from all defects for three (3) years after delivery.
3. a. (for 200a, 700a, and 700r) The gearmotor will be free from all defects for one (1) year after delivery.
3. b. (for all other case sealers listed) The motor and transmission will be free from all defects for one (1) year after delivery.
4. All other parts will be free from all defects for ninety (90) days after delivery.

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

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

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



"3M-Matic" 77A-KS Adjustable Case Sealer - Model 18600

Description

The **"3M-Matic"** 77A-KS Adjustable Case Sealer with **"AccuGlide"** Taping Heads is designed to apply a "C" clip of **"Scotch"** Brand Pressure-sensitive Film Box Sealing Tape to the top and bottom center seam of regular slotted containers. The 77A-KS is manually adjustable to a wide range of box sizes (see box size specifications).

Receiving And Handling

After the machine has been uncrated, examine the 77A-KS Case Sealer for damage that might have occurred during transit. **If damage is evident, file a damage claim immediately** with the transportation company and also your 3M Representative. Several **machine components** are **tied down** to prevent damage during transit. **Remove** these **before proceeding** with following set-up instructions.

Specifications

1. **Power Requirements:**

   Electrical - 115 VAC, 60 Hz, 5.6 A
   The machine is equipped with a standard neoprene covered power cord and a grounded plug. Contact your 3M Representative for power requirements not listed above.

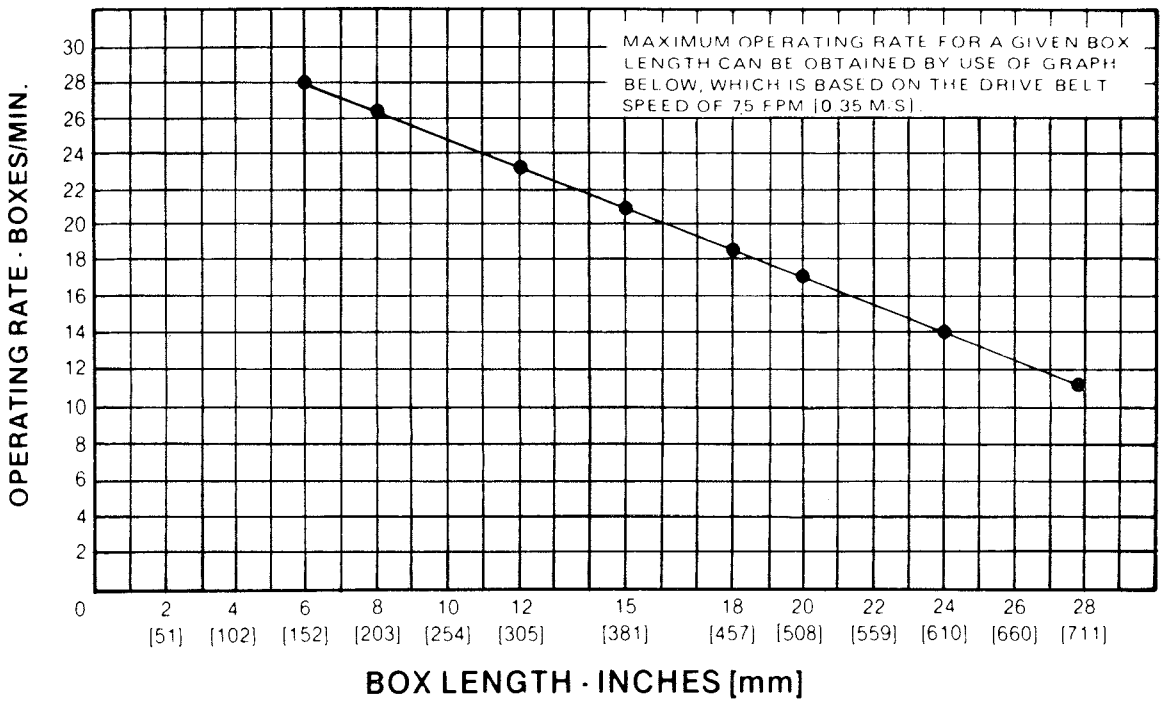
2. **Machine Dimensions:** **Overall Dimensions**

Length	-	42 1/2 inches [1,080 m]
Width	-	34 1/2 inches [0,875 m]
Height	-	70 inches [1,780 m]
Conveyor Bed Height	-	Adjustable up from factory set height of 20 1/2 inches [520 mm]
Weight	-	400 pounds [180 kg] crated 350 pounds [160 kg] uncrated

(Specifications continued on next page.)

Specifications (Continued)

3. **Operating Rate:**



4. **Operating Conditions:**

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

IMPORTANT SAFEGUARD

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

5. **Tape:**

"Scotch" brand pressure-sensitive film box sealing tapes.

6. **Tape Width:**

2 inches or 50 mm minimum to 3 inches or 72 mm maximum.

7. **Tape Roll Diameter:**

Up to 15-1/2 inches [395 mm] maximum on a 3 inch [76,2 mm] diameter core. (Accommodates all system roll lengths **"Scotch"** brand film tapes.)

8. **Tape Application Leg Length:**

2 3/4 inches $\pm$ 1/4 inch [70 mm $\pm$ 6 mm]

(Specifications continued on next page.)

Specifications (Continued)

9. **Box Board:**

   125 to 275 P.S.I. bursting test, single wall A, B, or C flute.

10. **Box Weight and Size Capacities**

   A. Box weight, filled - 5 lbs. [2,3 kg] minimum, 80 lbs. [37 kg] maximum

   B. Box size:

	Minimum	**Maximum**
Length -	6.0 inches or 150 mm	unlimited
Width -	* 7.0 inches or 175 mm	26 inches or 660 mm
Height -	4 3/4 inches or 120 mm	** 36 inches or 915 mm

   * Cartons smaller than 8 inches or 200 mm in width may require more frequent belt replacement because of limited contact area.

   ** Some set up required. See page 10.

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

Note: The 77A-KS Case Sealer can accommodate most boxes within the size range listed above. However, if the box length (in direction of seal) to box height ratio is **.5 or less,** several boxes should be test run to assure proper machine performance.

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

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

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

Set-Up Procedure

It is recommended that the 77A-KS Case Sealer be set-up and operated with product before placing it in the production line. This approach will allow your thorough review and familiarization with the 77A-KS before subjecting it and operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

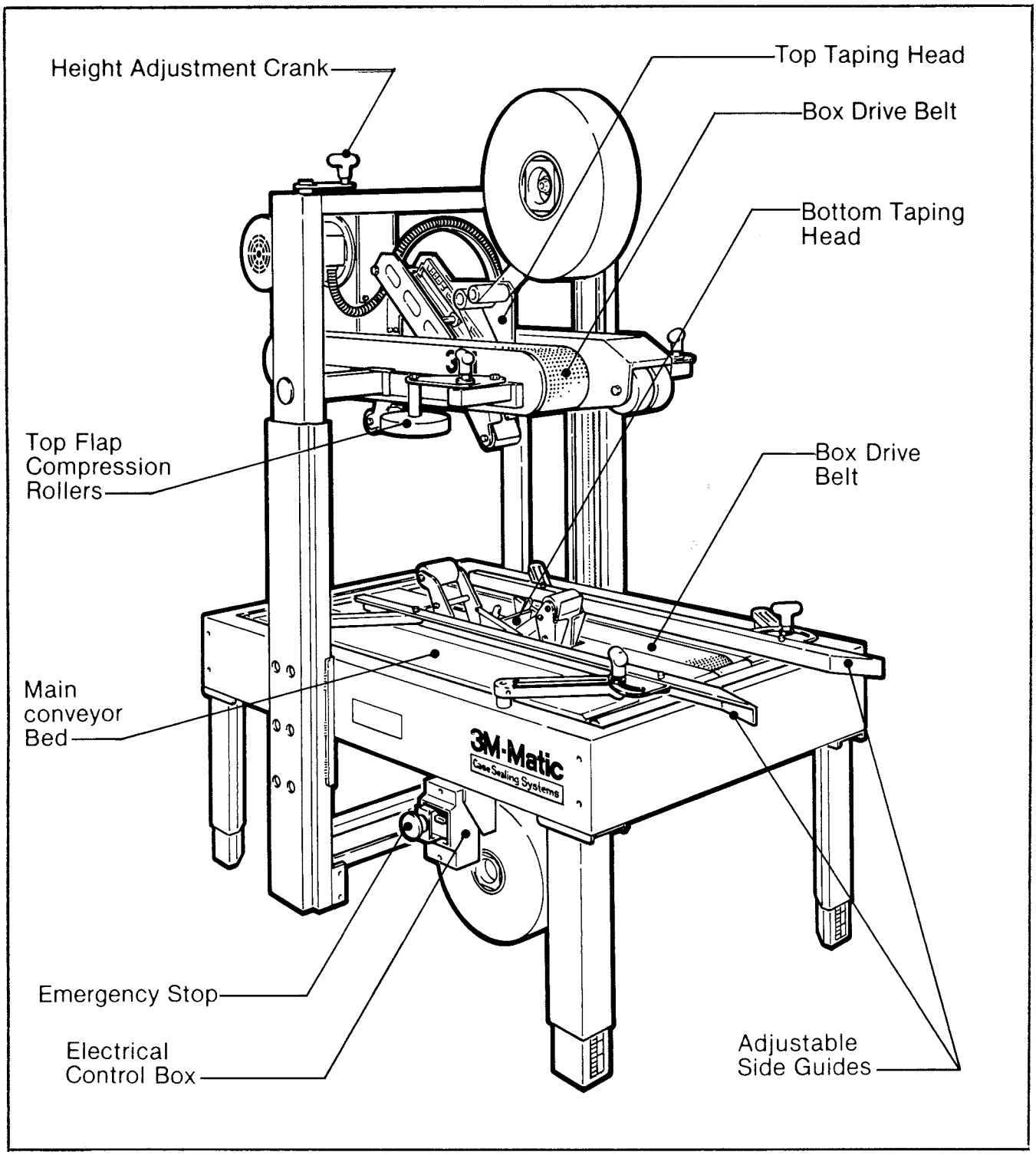


Figure 1 - Set-Up Instructions - Case Sealer Components - Left Front View

Set-Up Procedure (Continued)

The following instructions are presented in **the order recommended** for setting up and installing the 77A-KS Case Sealer, as well as **for learning the operating functions and adjustments.** Following them step by step will result in your thorough understanding of the machine and an installation in your production line that best utilizes the many features built into the 77A-KS Case Sealer.

Conveyor Bed Height:

The 77A-KS Case Sealer is equipped with four **adjustable legs** that are located at the corners of the frame. The legs can be adjusted to obtain different machine conveyor bed heights from **20 1/2 inches [520 mm] minimum to 31 1/2 inches [800 mm] maximum.**

The recommended minimum machine conveyor bed height (measured from floor) is 24 inches [610 mm].

Refer to Figure 2A and set the conveyor bed height as follows:

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

2. **Loosen, but do not remove,** two M8 x 16 mm socket head screws in one leg. Adjust the leg length for the desired conveyor bed height. **Retighten** the two screws to secure the leg. Adjust all four legs as noted.

The tape drum bracket assembly, located on the bottom taping head, has two mounting positions to allow maximum tape roll capacity through the machine conveyor bed height range.

For conveyor bed heights 24 inches and above, use mounting position shown in Figure 2B.

For conveyor bed heights below 24 inches, use mounting position shown in Figure 2C.

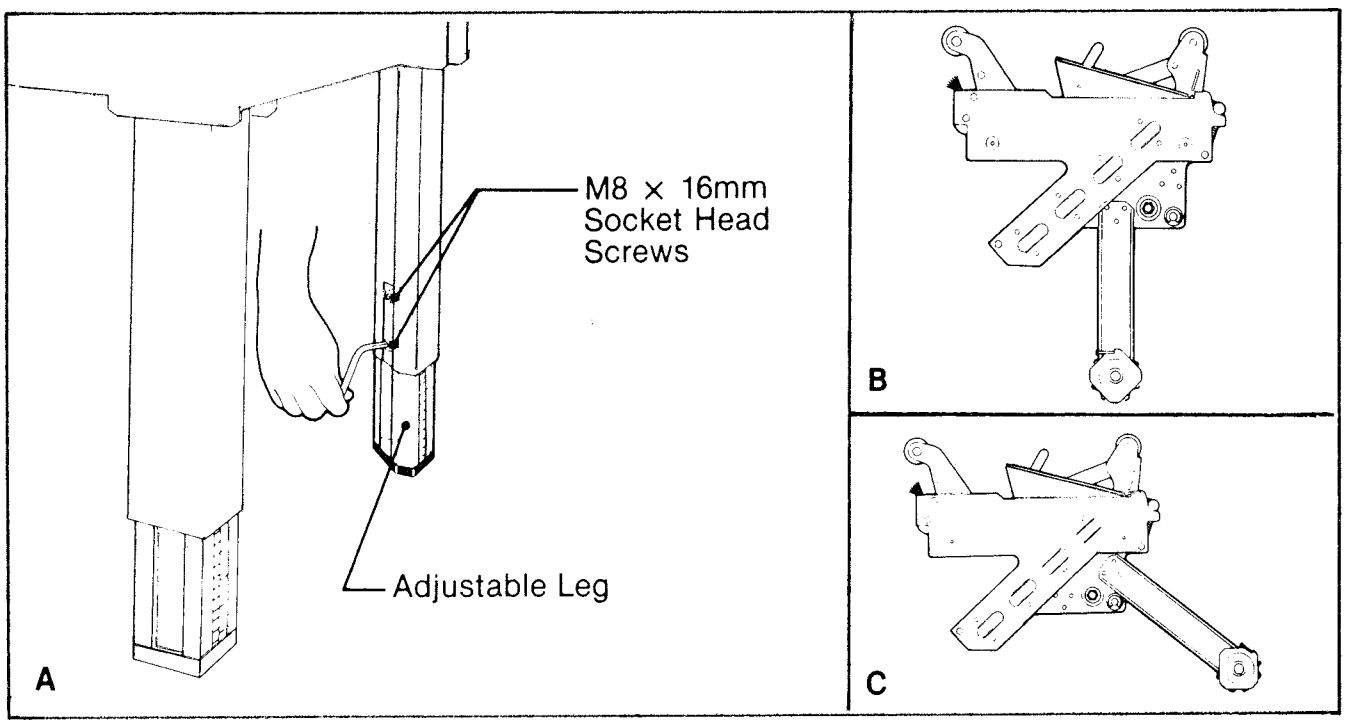


Figure 2 - Conveyor Bed Height Adjustment

Set-Up Procedure (Continued)

Electrical Connection

The electrical control box, shown in Figure 1, contains the **"On-Off" switch** with **pre-set** circuit breaker and can be located on either side of the main conveyor for customer operating convenience. A standard **three conductor power cord with plug** is provided at the back of the electrical control box for **115 Volt, 60 Hz** electrical service. The **receptacle** providing this service shall be **properly grounded.** Before the power cord is plugged into **115 Volt, 60 Hz outlet,** make sure the switch is **"Off"** and that all **packaging materials** and **tools** are **removed** from the machine.

Note: Machines outside the U.S. may be equipped with 220/440 Volt, 50 Hz systems, or other electrical requirements compatible with local practice.

IMPORTANT SAFEGUARDS

1. **BOTH THE TOP AND BOTTOM TAPING HEADS UTILIZE EXTREMELY SHARP KNIFE BLADES ON THE ORANGE CUTTER LEVER ASSEMBLY AND WHICH ARE LOCATED UNDER THE BLADE GUARD WHICH HAS THE "WARNING - SHARP KNIFE" LABEL. BEFORE WORKING WITH THE TAPING HEADS OR ATTEMPTING TO LOAD THE TAPE, REFER TO FIGURES 3 AND 3A AND IDENTIFY THE BLADE LOCATION. KEEP HANDS OUT OF THESE AREAS EXCEPT AS NECESSARY TO SERVICE THE TAPING HEADS.**
2. **NEVER ATTEMPT TO WORK ON THE TAPING HEADS OR LOAD TAPE WHEN THE BOX DRIVE BELTS ARE RUNNING.**
3. **BOX DRIVE MOTORS ARE DESIGNED TO RUN AT A MODERATE TEMPERATURE OF 105° F [40° C]. IN SOME CASES THEY MAY FEEL WARM TO THE TOUCH.**

Tape Loading

The taping heads have been **pre-set** to accommodate **2 inch [50 mm] wide tape rolls.** To apply **3 inch or 72 mm wide tape,** refer to **"Adjustments" Section** for set-up information.

Two temporary **threading needles** are shipped in threaded position for initial tape **loading convenience.** Retain these for continued use in the tape loading operation. For operator assistance, a threading diagram has been applied to the taping heads. However, **it is recommended** that the more detailed instructions and sketches in this manual be referred to the first few times the unit is loaded until the operator becomes thoroughly familiar with the tape loading operation. **The bottom taping head can be removed from unit by lifting out for convenience in tape loading.**

Tape Loading - Top Taping Head

⚠ WARNING - NEVER ATTEMPT TO WORK ON THE TAPING HEADS OR LOAD TAPE WHEN THE BOX DRIVE BELTS ARE RUNNING. PERSONNEL INJURY OR EQUIPMENT DAMAGE CAN POTENTIALLY RESULT.

1. It is first necessary to raise the top taping head. Utilize the **height adjustment crank** and move the top taping head to the fully raised position.
2. With the temporary threading needle already in position, as shown in Figure 3, follow the tape loading procedure from Figure 3C to complete the tape threading.

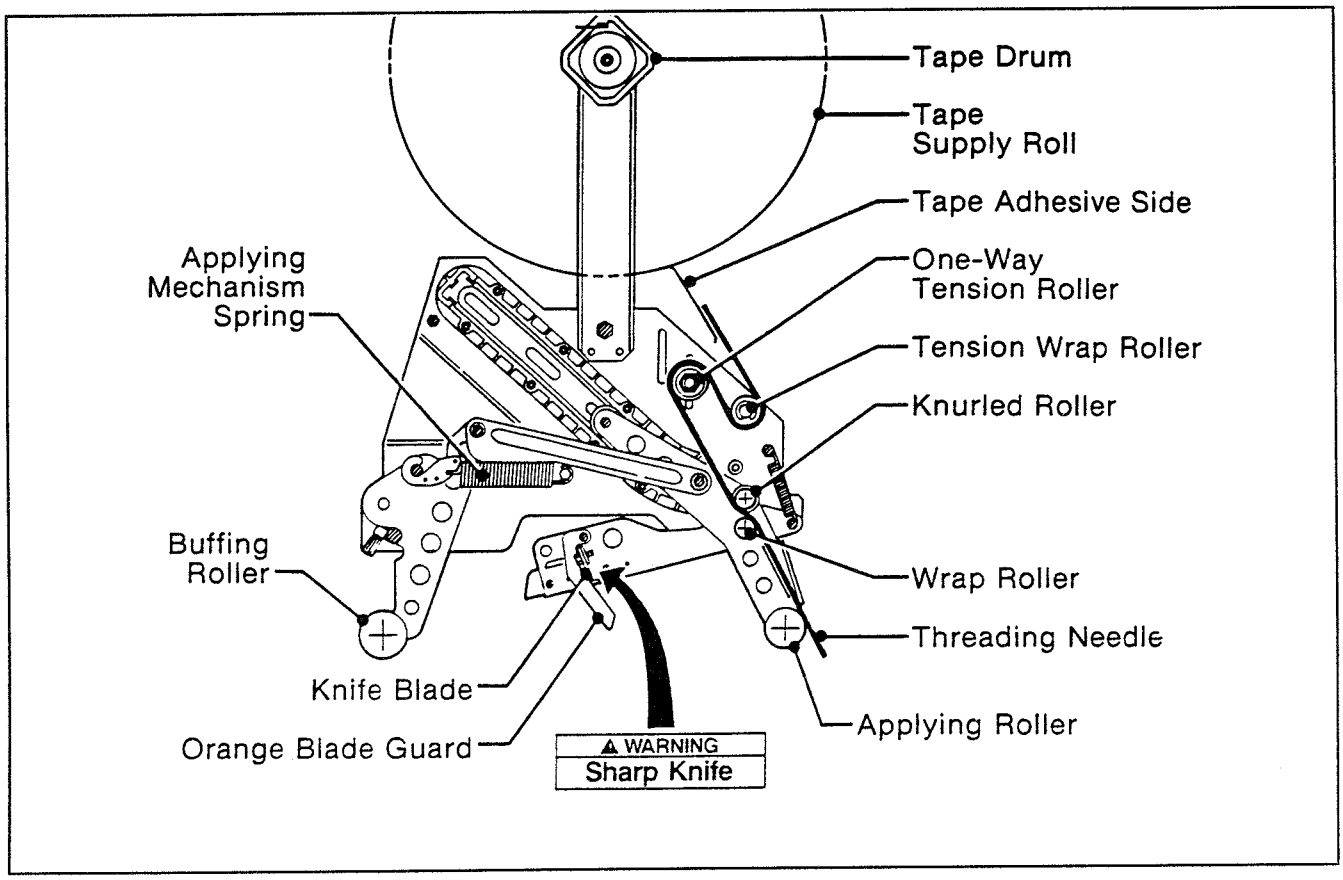


Figure 3 - Tape Threading Diagram - Top Taping Head - Left Side View

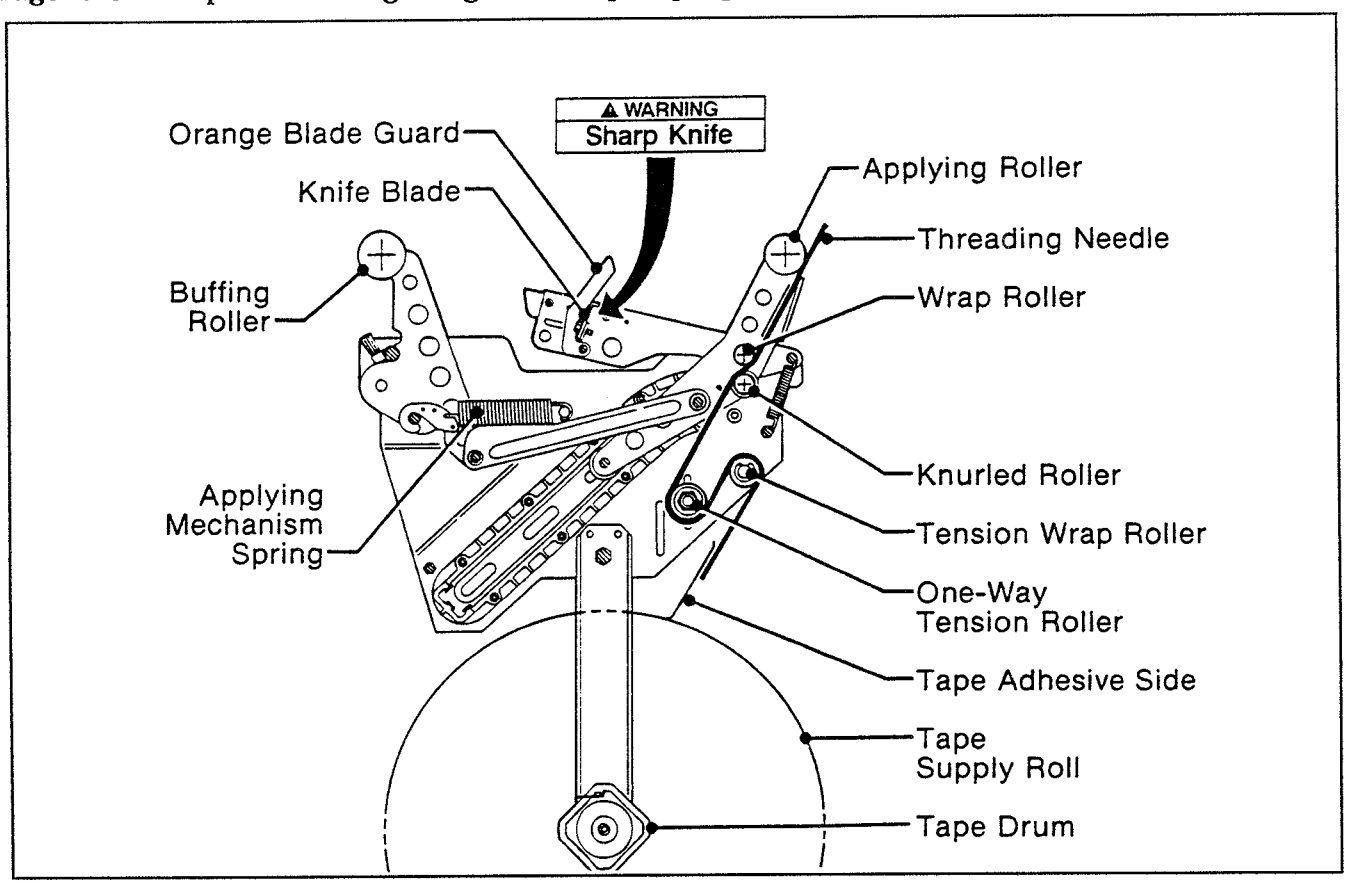


Figure 3A - Tape Threading Diagram - Bottom Taping Head - Left Side View

Set-Up Procedure (Continued)

3. For subsequent tape loading operations, use the red plastic threading needle and follow the loading procedures from Figure 3B to complete the tape threading.

Tape Loading - Bottom Taping Head
Refer to Figure 3A

The bottom taping head is loaded and threaded in the same manner as the top taping head.
For ease in loading, first remove the bottom taping head from the conveyor bed and follow the top taping head tape loading procedure.

Figure 3B

Insert the red plastic needle **downward** around rollers as illustrated.

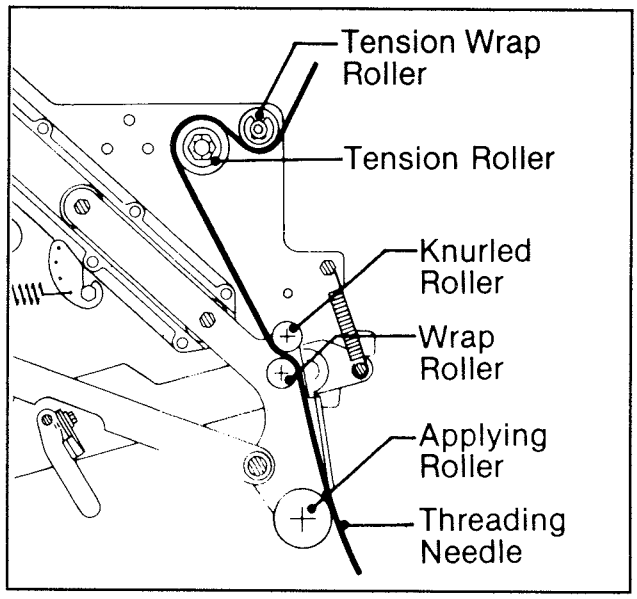


Figure 3B

Figures 3B and 3C

Place tape roll on drum to **dispense tape from bottom of roll** toward tension wrap roller with tape **adhesive side in.** Seat tape roll fully against back flange of drum. Adhere tape lead end to upper end of threading needle as shown.

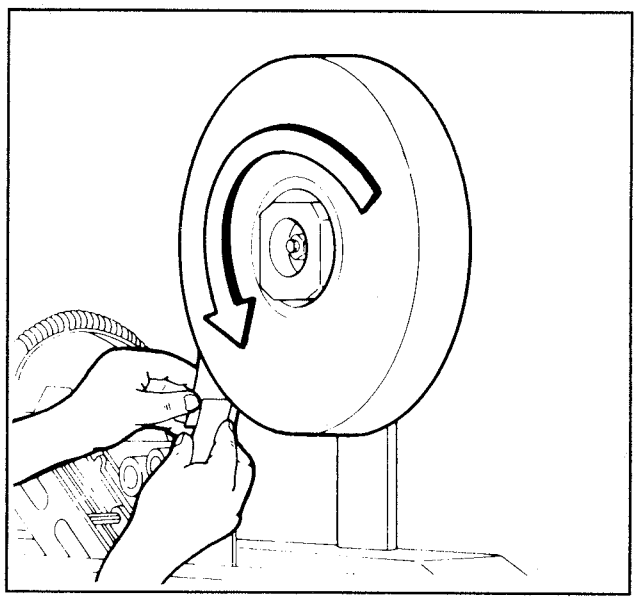


Figure 3C

Figure 3D

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

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

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

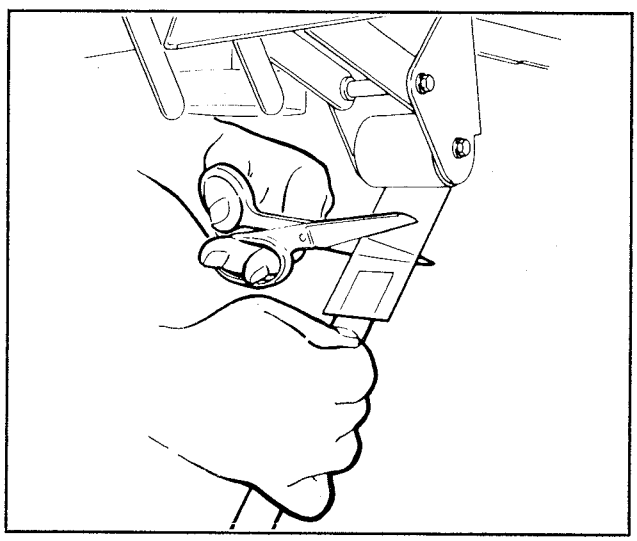


Figure 3D

Set-Up Procedure (Continued)

Box Size Set-Up and Operation

The 77A-KS Case Sealer has been **pre-assembled,** for shipping purposes, to accommodate a box height up to **25 1/2 inches or 650 mm** (4 3/4 inches or 120 mm minimum). Box heights up to **32 inches or 815 mm** (11 1/4 inches or 285 mm minimum) are obtained by raising the top taping head frame. In addition, the **maximum box height** of **36 inches or 915 mm** (15 1/4 inches or 390 mm minimum) is obtained by also raising the top taping head frame columns. Determine the box height needed and follow the procedures as noted below.

⚠ WARNING - IT IS RECOMMENDED THAT NO LESS THAN TWO PEOPLE ASSIST ON THESE SET-UPS OR SEVERE INJURY OR EQUIPMENT DAMAGE COULD RESULT.

To Raise Top Taping Head Frame -
Refer to Figure 4

Place a box or blocks under the top taping head to provide **adequate support.** Use the height adjustment crank to lower taping head until its **full weight is supported. Remove and retain** the four screws on **both side** of the head frame.
Mount the frame support to the **upper set of holes** in the inner column, as shown, and secure with the four screws on **each side** of the frame.

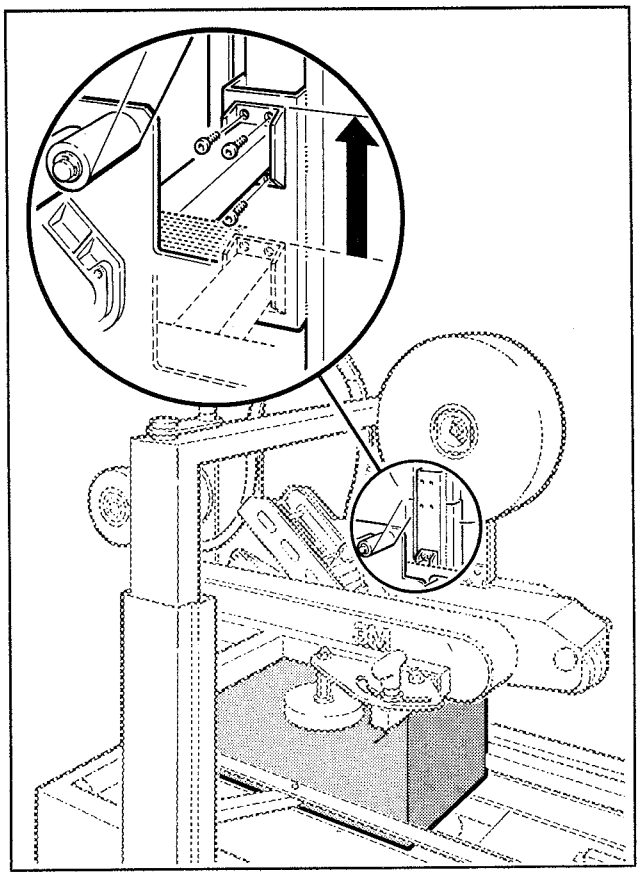


Figure 4

To Raise Top Taping Head Frame Columns-
Refer to Figure 5.

Use the height adjustment crank to fully raise top taping head.
Place **boxes or blocks** under the taping head to provide **adequate support.**
Remove and retain the four column screws on **both sides** of the bed frame.
Raise the column to the **upper position,** as shown, and secure with the four screws on **each side** of the bed frame.

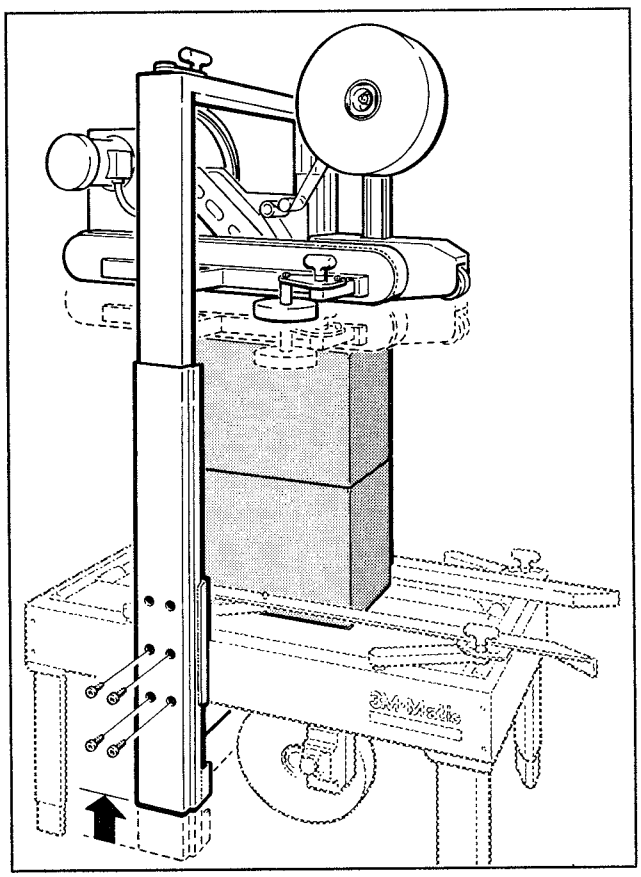


Figure 5

Set-Up Procedure (Continued)

Figure 6 -

Once both taping heads are loaded with tape, the top taping head can be positioned for the box height being sealed by means of the **height adjustment crank.** Turn **clockwise** to lower head, **counterclockwise** to raise head.

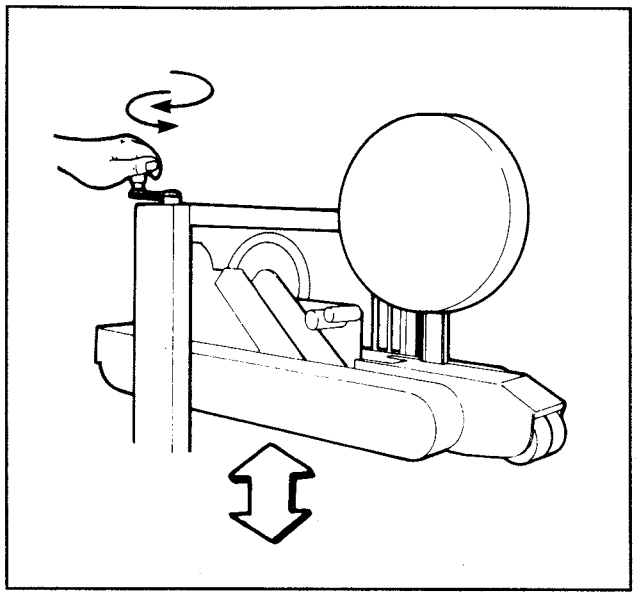


Figure 6

Figure 7

Place box on infeed conveyor with both top and bottom flaps folded and insert under top head skis approximately **2 inches or 50 mm.** Lower top head until all flaps are fully closed. Align box top flap center seam with **groove** in top head front roller.

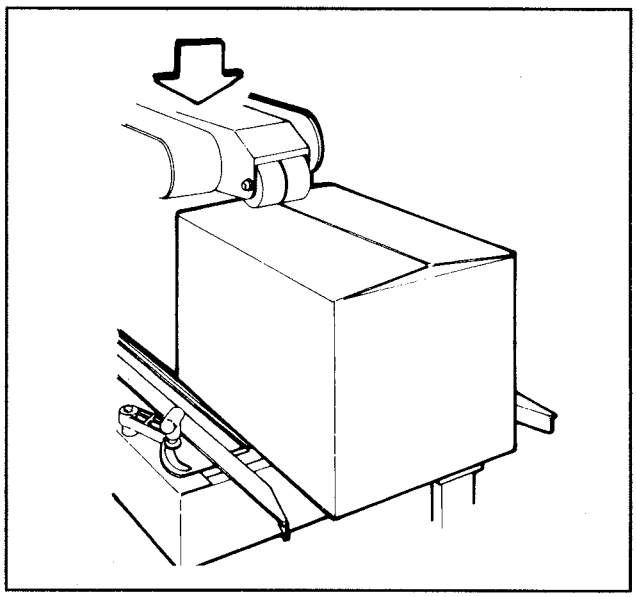


Figure 7

Figure 8

Move side guides against each side of box to hold box in position, centered on **groove** in roller. **Tighten hand knobs to secure side guides.**

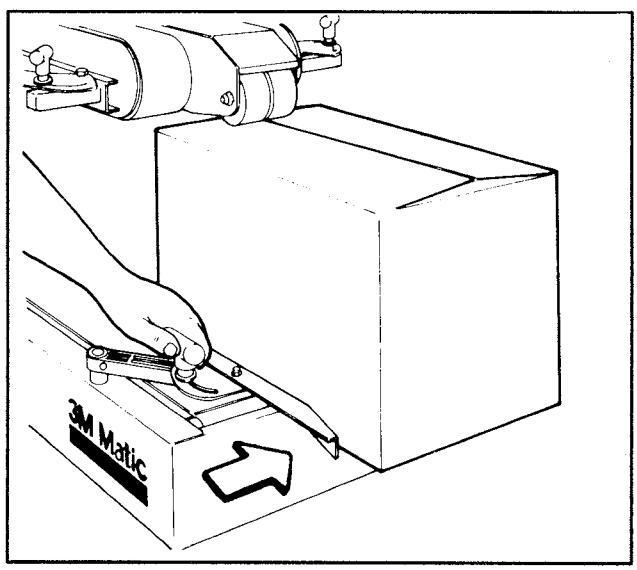


Figure 8

Set-Up Procedure (Continued)

Figure 9

Turn electrical switch to **"On"** to start drive belts. Move box forward under top taping head until it is taken away by drive belts. If box is hard to move under head or is crushed, **raise** top head slightly. If box movement is jerky or stops under top head, **lower** top head slightly to add more pressure between box and drive belts.

Note: Top head has unique feature for overstuffed boxes. Top head will raise automatically for this type of condition.

⚠ CAUTION - IF DRIVE BELTS ARE ALLOWED TO SLIP ON BOX, EXCESSIVE BELT WEAR WILL OCCUR.

Figure 10

Adjust Top Flap Compression rollers against top edge of box and **tighten knobs to secure rollers** in operating position.

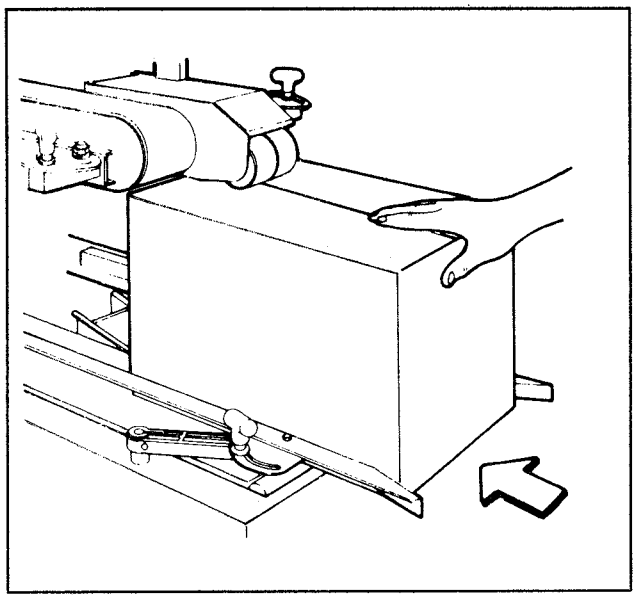


Figure 9

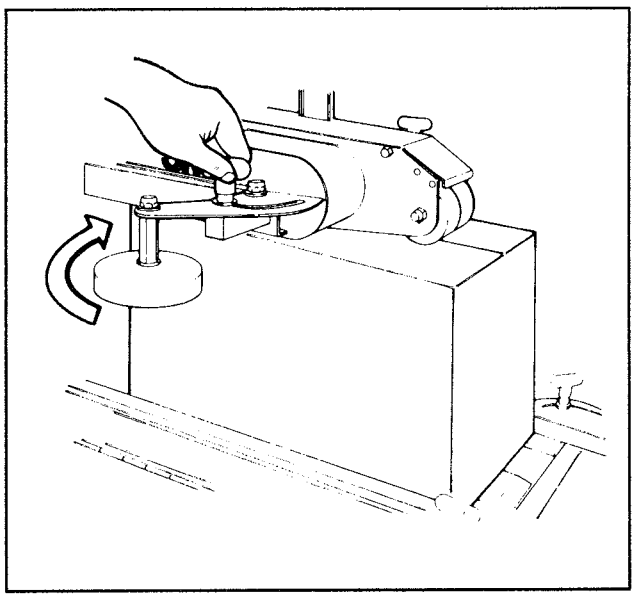


Figure 10

Adjustments

Tape Drum Assembly - Friction Brake

The tape drum assembly provides adjustable friction brake to prevent tape roll over travel.

The friction brake is pre-set for normal operation. If it should be necessary to change the braking force, adjust the knurled nut shown in Figure 11A. Clockwise to increase braking force, counterclockwise to decrease braking force.

Tape Web Alignment-
Refer to Figure 11A

The tape drum assembly on each taping head is **pre-set** to accommodate **2 inch** [50 mm] **wide tape.** The tape drum assembly provides adjustment to align other tape widths on the centerline of the taping head, (and therefore box center seam). Make adjustment as follows:

1. **Loosen** hand knob behind tape drum.
2. **Turn tape drum shaft** in or out to center the tape web.
3. **Tighten** hand knob to secure the adjustment.

3 Inch or 72 mm Wide Tape
(Upper Taping Head)
Refer to Figure 11B

(Lower Taping Head)
Refer to Figure 11C

1. Remove and retain three screws and washers that hold tape drum bracket to taping head frame.
2. Rotate bracket 180° as shown and mount to frame with existing fasteners.
3. Remove and reassemble tape drum assembly to bracket as shown.
4. Make alignment adjustment as noted above.

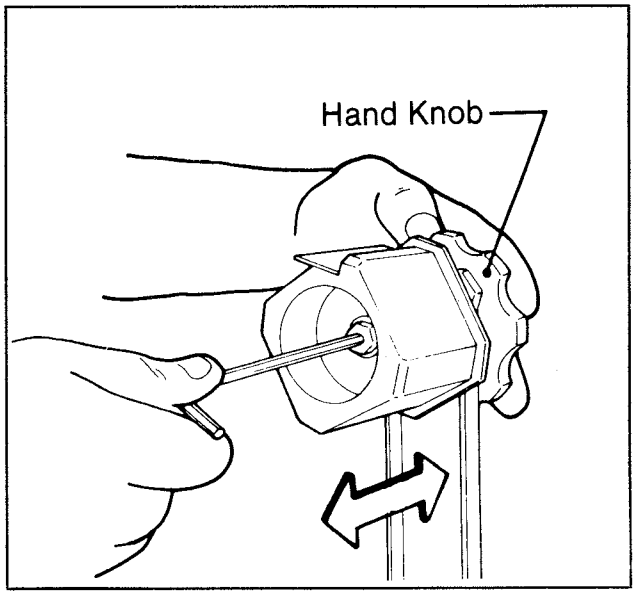


Figure 11A

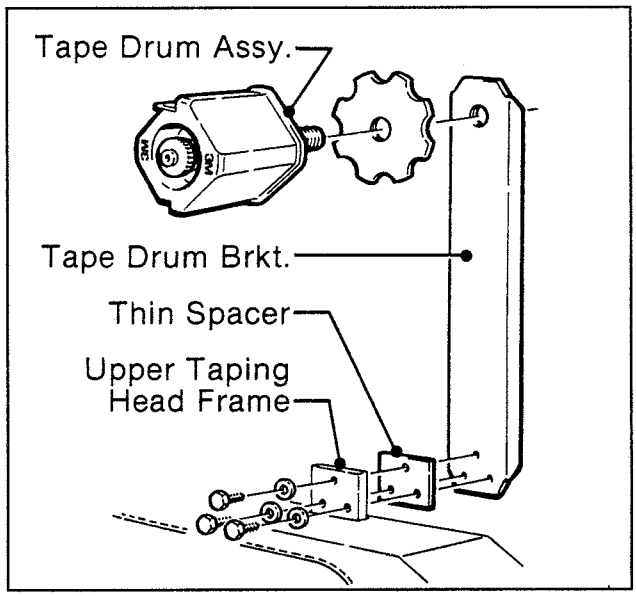


Figure 11B

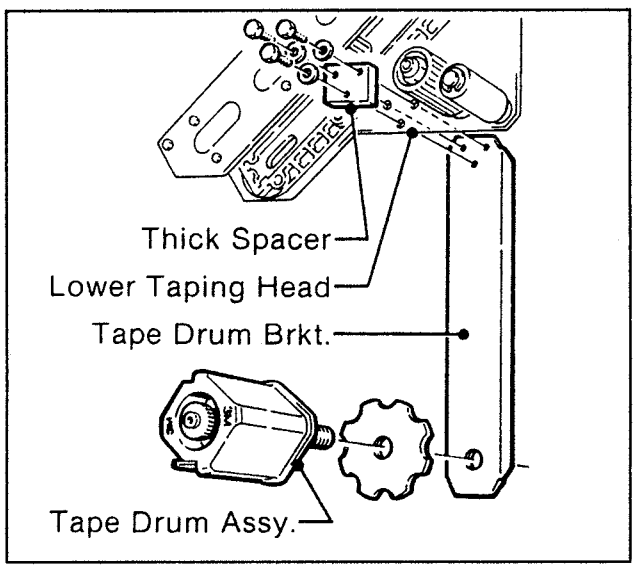


Figure 11C

THIS PAGE IS BLANK

Adjustments (Continued)

Applying Mechanism Spring

The applying mechanism spring, shown in Figures 3 and 3A, controls applying and buffing roller pressure on the box and returns the mechanism to the reset position. The spring pressure is pre-set, as shown in Figure 12, for normal operation but is adjustable.

Removing the spring end loop from the spring holder and placing loop in other holes provided, as shown in Figure 13, **will decrease the spring pressure.**

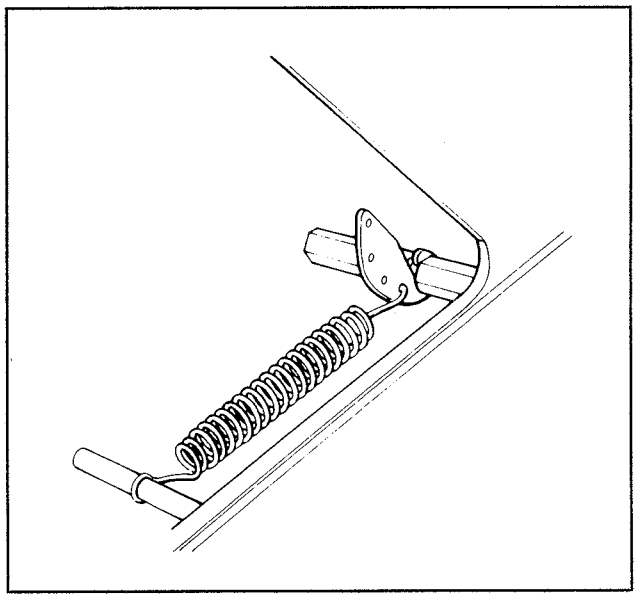


Figure 12

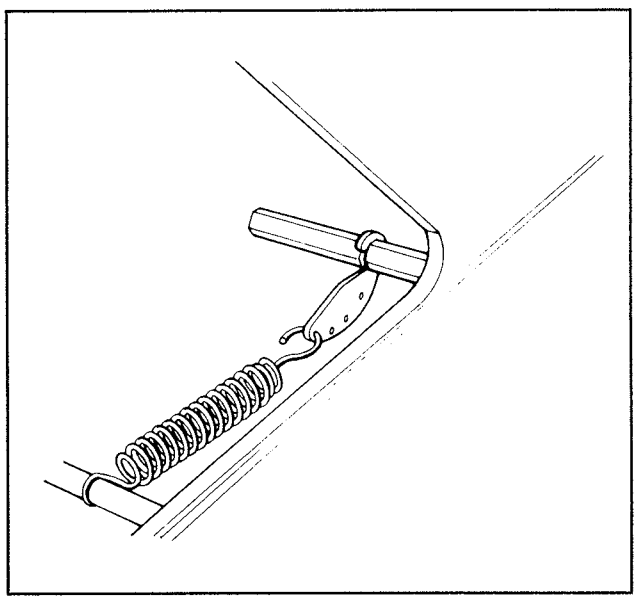


Figure 13

One Way Tension Roller Assembly

The one way tension roller, is factory set. When replacing this assembly, the roller must have **1 lb. [0,5 kg] tangential force** when turning. See Figure 14.

1. Wrap a cord or small strap (non-adhesive) 4-6 turns around the tension roller.
2. Attach a spring scale to the end of the cord or strap.
3. Turn the adjusting nut until a force of approximately 1 lb. [0,5 kg] is required to turn the roller by pulling on the spring scale.

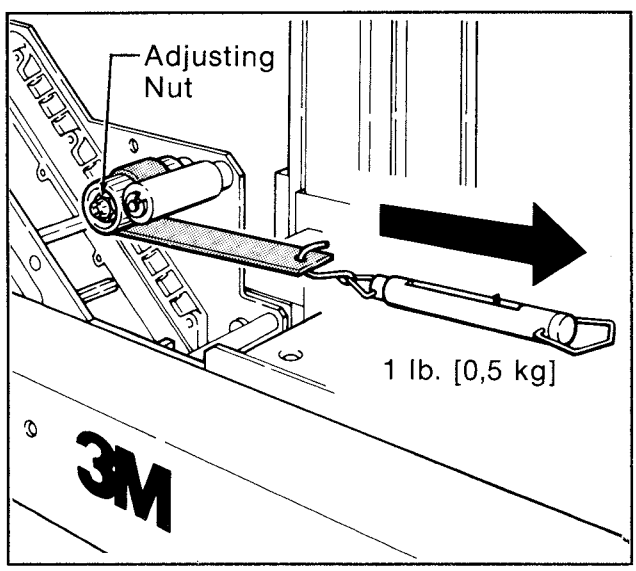


Figure 14

Adjustments (Continued)

Box Drive Belts

The four continuously moving box drive belts convey boxes through the tape applying mechanism. The box drive belts are powered by the electric motor through a transmission.

Tension adjustment of these belts may be required during normal operation. Belt tension must be adequate to positively move the box through the machine and they should run fully on the surface of the pulleys at each end of the frame. The idler pulleys on the infeed end are positioned by adjustment screws. Adjustment of these screws can be made by using the following steps to provide proper tension. Each belt is adjusted separately.

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

Box Drive Belts - Bottom Taping Head

Refer to Figure 15

Step 1. **Remove and retain** center plates and 4 screws.

Step 2. **Remove and retain** eight M6 x 12 mm socket head screws to remove conveyor tops from housing.

Belt tension is obtained by **uniform tightening** of the adjustment screws so that a moderate pulling force of **7 lbs. [3,5 kg]** applied at the midspan, as shown in Figure 16, will deflect the belt **1 inch [25 mm].**

This will assure **positive contact** between the belt and the drive pulley on the discharge end of the taping head.

Refer to Figure 17

Step 3. **Loosen, but do not remove,** lock nut M20 x 16 with socket wrench provided.

Step 4. **Reset the tension** on the drive belt as needed. Adjust the M8 x 40 mm hex head screws, **(out to increase - in to decrease).**
Tighten lock nut to **secure tension setting.**

Step 5. **Reverse procedure** in steps 1 and 2 above to reassemble the unit.

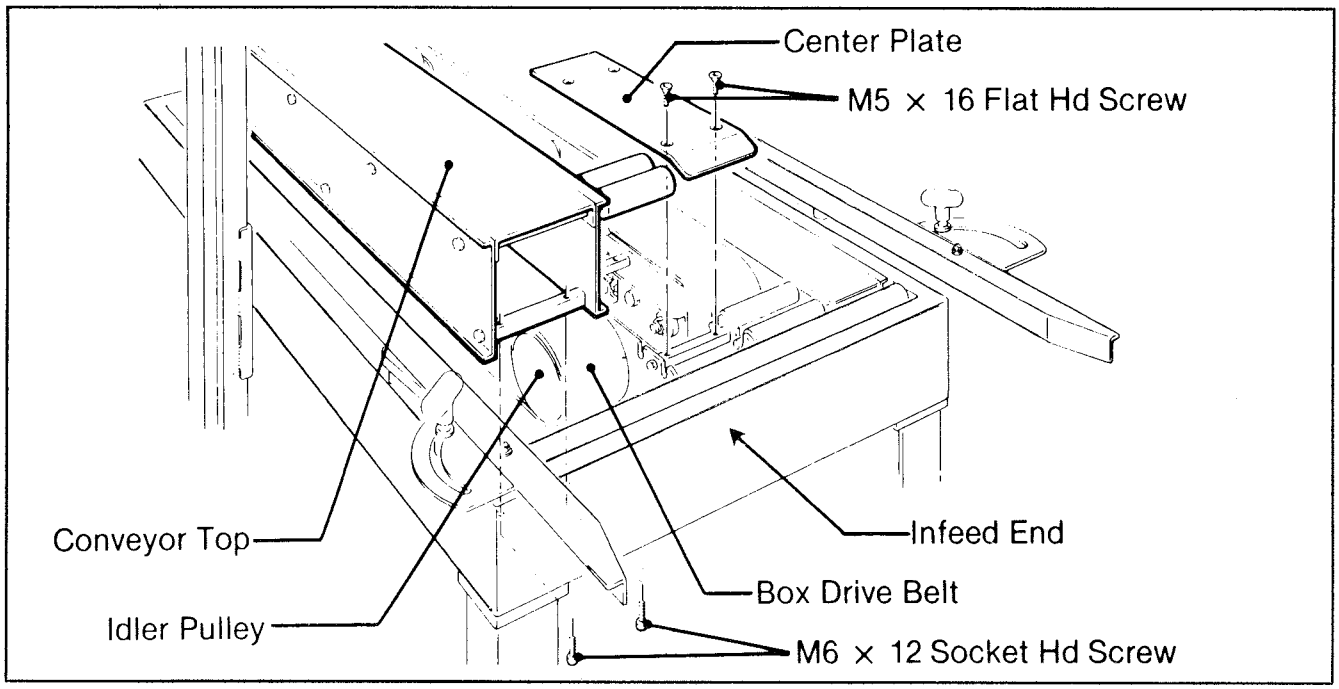


Figure 15 - Box Drive Belt Adjustment - Frame Bed Infeed End

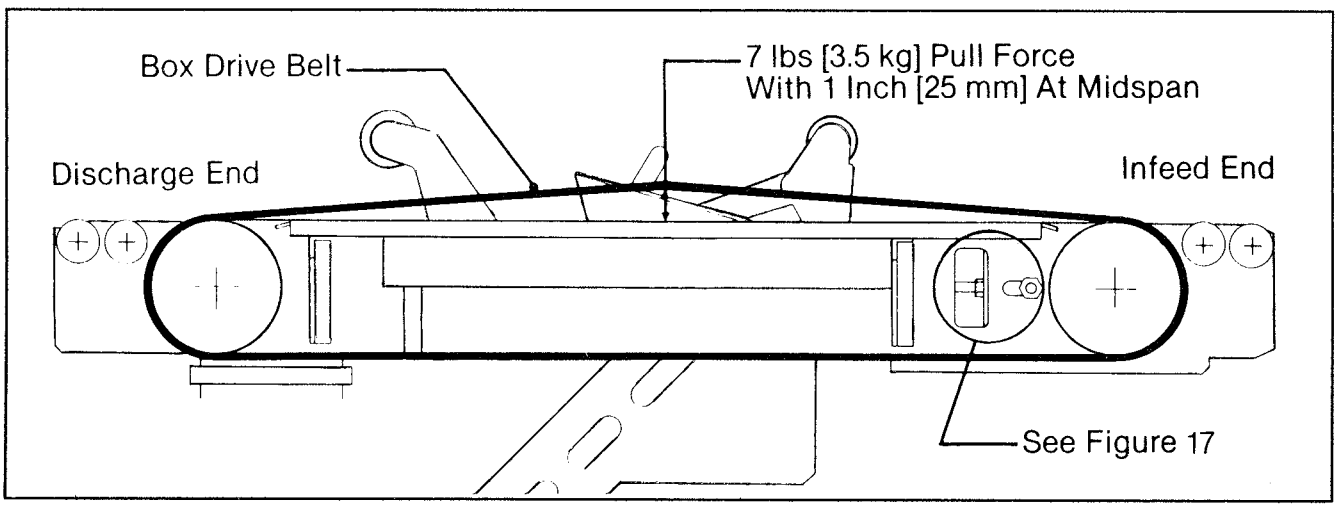


Figure 16 - Box Drive Belt Tension Adjustment - Left Side View

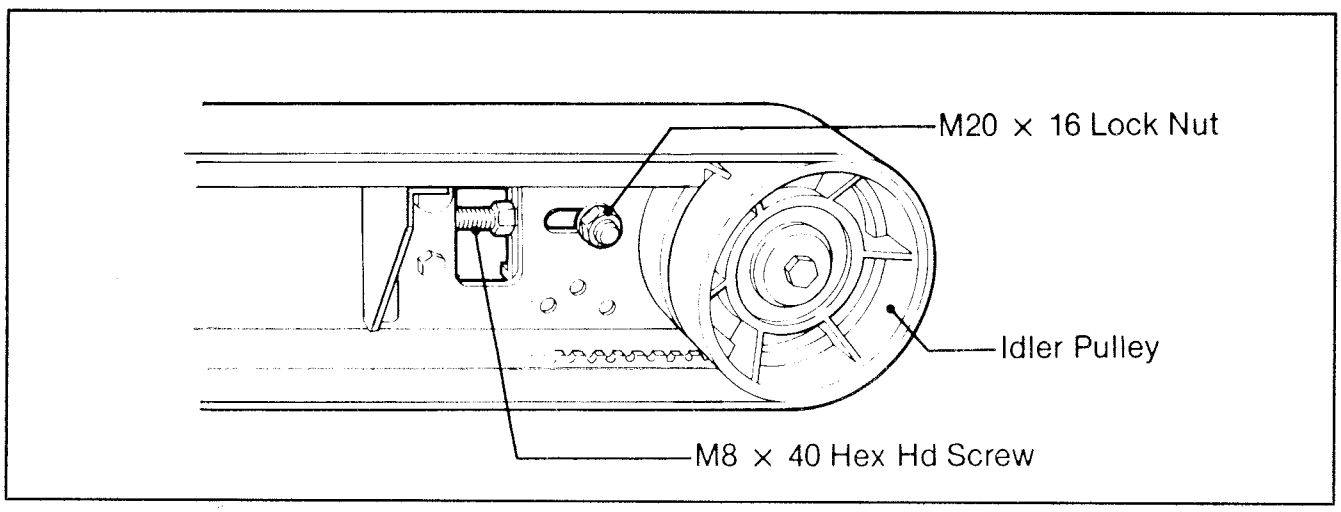


Figure 17 - Tension Adjustment - Left Side View

Maintenance

The 77A-KS Case Sealer has been designed for long, trouble free service. The machine will perform best when it receives **routine maintenance and cleaning.** Machine components that fail or wear excessively should be **promptly** repaired or replaced to **prevent damage** to other portions of the machine or to the product.

> ⚠ **WARNING - TURN OFF ELECTRICAL POWER SUPPLY AND DISCONNECT POWER CORD FROM ELECTRICAL SUPPLY BEFORE BEGINNING MAINTENANCE. IF POWER CORD IS NOT DISCONNECTED, SEVERE INJURY TO PERSONNEL COULD RESULT. USE CARE WHEN REPLACING BLADES AS BLADES ARE EXTREMELY SHARP. IF CARE IS NOT TAKEN, SEVERE INJURY TO PERSONNEL COULD RESULT.**

Blade Replacement:

Refer to Parts Illustrations, **yellow pages,** Figure 1332.

1. **Loosen, but do not remove,** the blade screws (13) holding the blade. Remove the old blade.

2. Position the new blade with the beveled side **toward** the blade holder. **Tighten** the blade screws to secure the blade.

The **same steps** are followed on the Top and Bottom Taping Heads. Connect the main power supply.

Replacing Box Drive Belts

1. Top taping head **must be removed** to replace top box drive belts.

2. **Remove** top taping head from frame assembly. **Remove** top flap compression rollers and **loosen** four mounting screws.

   Note: Make sure taping head has adequate support before screws are removed.

3. Install new belts and adjust belt tension as noted in **Step 4 under adjustments.**

4. **DO NOT REMOVE BOTTOM TAPING HEAD.**
   Install new belts and adjust belt tension as noted in **Step 4 under adjustments.**

Cleaning Of The Machine

⚠ CAUTION - NEVER ATTEMPT TO REMOVE DIRT BY BLOWING IT OUT WITH COMPRESSED AIR. THIS CAN CAUSE THE DIRT TO BE BLOWN INSIDE THE MOTOR, AND SLIDING SURFACES. GRITTY DIRT IN THESE AREAS CAN CAUSE SERIOUS EQUIPMENT DAMAGE. NEVER WASH DOWN OR SUBJECT EQUIPMENT TO CONDITIONS CAUSING MOISTURE CONDENSATION ON COMPONENTS. SERIOUS EQUIPMENT DAMAGE COULD RESULT.

Regular slotted containers produce a great deal of **dust** and **paper chips** when processed or handled in equipment. If this dust is allowed to build up on machine components, it can cause **component wear** and **overheating** of drive motor. The dust build up can best be removed from the machine by a shop vacuum. Depending on the number and type of boxes sealed in the 77A-KS Case Sealer, this **cleaning** should be done approximately **once per month.** If the boxes sealed are dirty, or if the environment in which the machine operates is dusty, cleaning on a more frequent basis may be necessary. **Excessive dirt** build up that cannot be removed by vacuuming should be wiped off with a **damp cloth.**

Cut-Off Blade:

Should tape **adhesive build-up** occur, carefully wipe clean with **oily cloth.**

Electrical Schematic

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

Figure 18 illustrates the electrical system of the 77A-KS Case Sealer. No adjustments to the electrical systems are required.

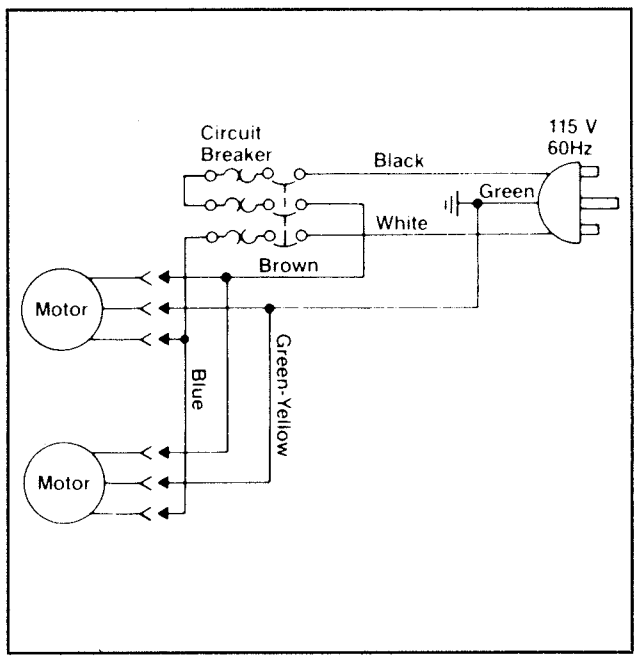


Figure 18

Circuit Breaker

The 77A-KS Case Sealer is equipped with a circuit breaker which trips the **"On-Off" switch** to tripped position. If circuit is **overloaded** and circuit breaker trips, **wait 2 minutes,** move to **"Off"**, then turn **"On"**. Located inside the electrical control box on the side of the main frame just below the conveyor bed, the circuit breaker has been **pre-set** and requires no further maintenance.

Lubrication - Mechanical

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

Figure 19 and 20 illustrate the taping head and frame points which should be **lubricated every 3 months or 150,000 machine cycles, which ever comes first.** The oil can supplied with the Case Sealer can be utilized to lubricate the rotating and pivoting points noted by the arrows with **SAE #30 non-detergent oil.** At the same time, a small amount of **multipurpose grease** should be applied to the end of each spring where the loop is secured at an eyelet, post, or hole.

⚠ CAUTION - WIPE OFF EXCESS OIL AND GREASE; IT WILL ATTRACT DUST AND DIRT WHICH CAN CAUSE PREMATURE EQUIPMENT WEAR AND JAMMING. TAKE CARE THAT OIL AND GREASE ARE NOT LEFT ON THE SURFACE OF ROLLERS AROUND WHICH TAPE IS THEADED, AS IT CAN CONTAMINATE THE TAPE'S ADHESIVE.

Blade Oiler Pad

The taping heads are equipped with a blade oiler pad that has been **pre-lubricated** at the factory to provide a film of oil on the cut-off blade to reduce adhesive build-up. Apply **SAE #30 non-detergent oil** as needed. **Do not saturate.**

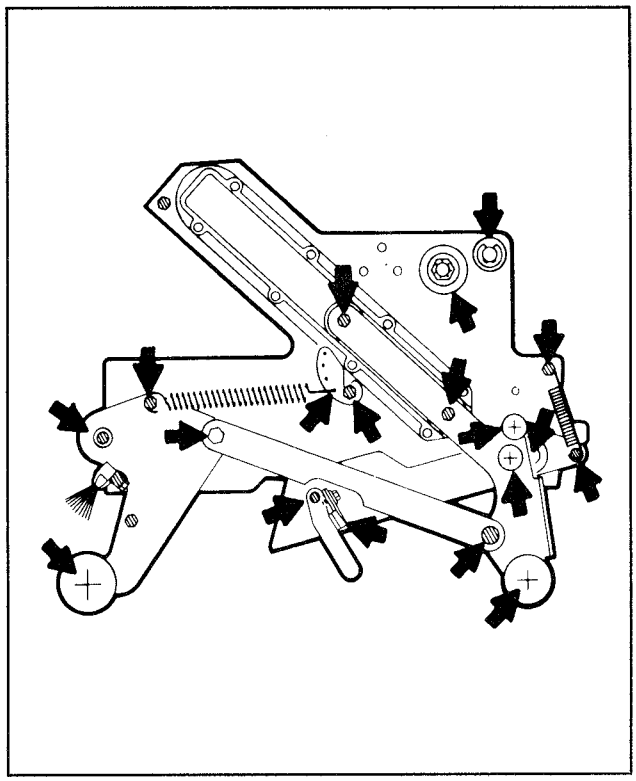


Figure 19 Lubrication Points - Top And Bottom Taping Heads

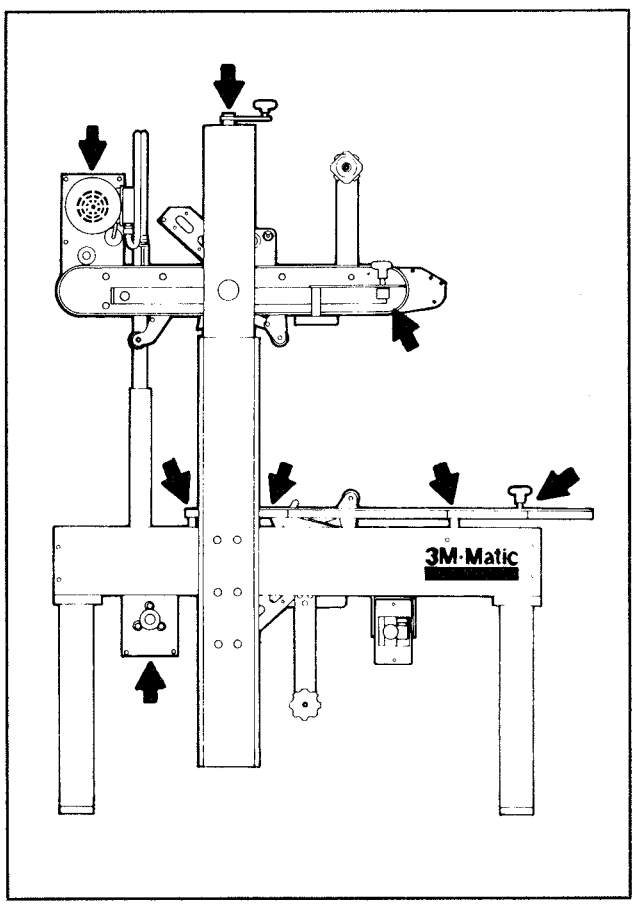


Figure 20 - Lubrication Points - Frame

Replacement Parts And Service Information

Spare Parts

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

Qty.	Ref. No.	3M Part Number	Description
2	1329-6	78-8054-8803-4	Roller - Applying
1	1330-10	78-8052-6589-5	Spring - Extension Top
2	1332-2	78-8028-7899-7	Blade - 3.50 inch/89 mm
2	1332-10	78-8052-6602-6	Spring - Cutter
2	1335-5	78-8054-8808-3	Roller - Buffing
1	1335-11	78-8054-8550-1	Spring - Extension Bottom
2	1453-5	78-8052-6722-2	Belt - Drive

Tool Kit

A tool kit, P/N 78-8054-8732-5, is available as a stock item. The kit contains the necessary wrenches and an oil can. The threading tool, Part No. 78-8017-9433-6, contained in above kit is also available as a replacement stock item. Refer to **"How To Order Replacement Parts"** for ordering information.

How To Order Replacement Parts

1. Order parts by **part number, part name, machine catalog number, model number** and **part quantity** required.

> **Minimum billing on parts orders will be $10.00.**
> **Replacement part prices available on request.**

2. Replacement parts and part prices available direct from:

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

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

3. Refer to the front of the instruction manual for **3M equipment service** information.

Attachments

Additional information on the attachments listed below is included with the manual except where noted:

Part Number	Attachment Name
78-8052-6553-1	Box Hold Down Attachment, Model 18500
78-8052-6554-9	Caster Kit Attachment, Model 18500
78-8055-0951-6	Conveyor Extension Attachment, Model 18600

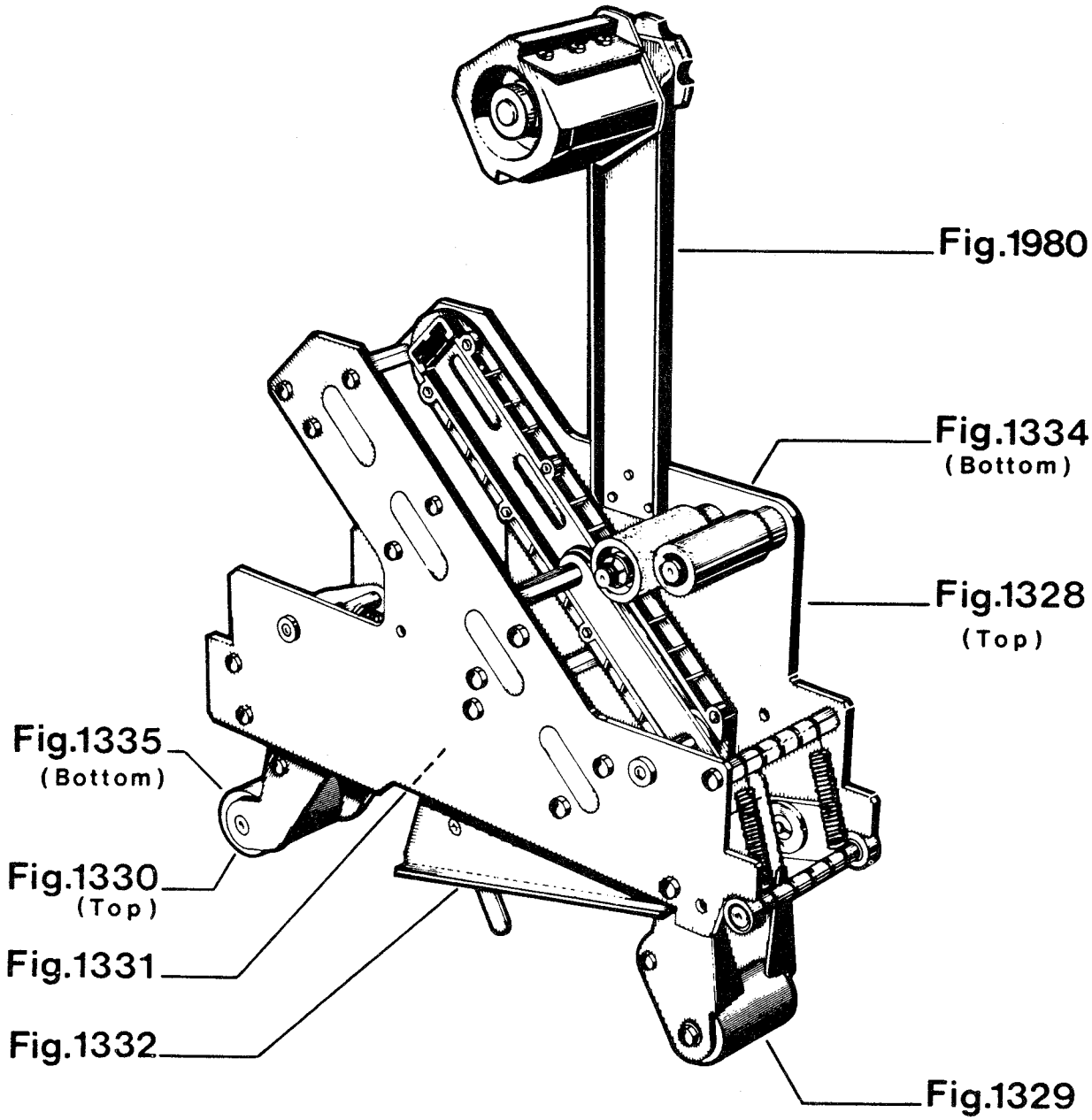
1. Refer to **Taping Head Assemblies** figure to find all the parts illustrations identified by **figure numbers.**

2. Refer to the figure or figures to determine the **individual parts** required and the parts **reference number.**

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

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

4. Refer to page 20 - **"Replacement Parts and Service Information"** of this manual for replacement parts ordering information.



TAPING HEAD ASSEMBLIES

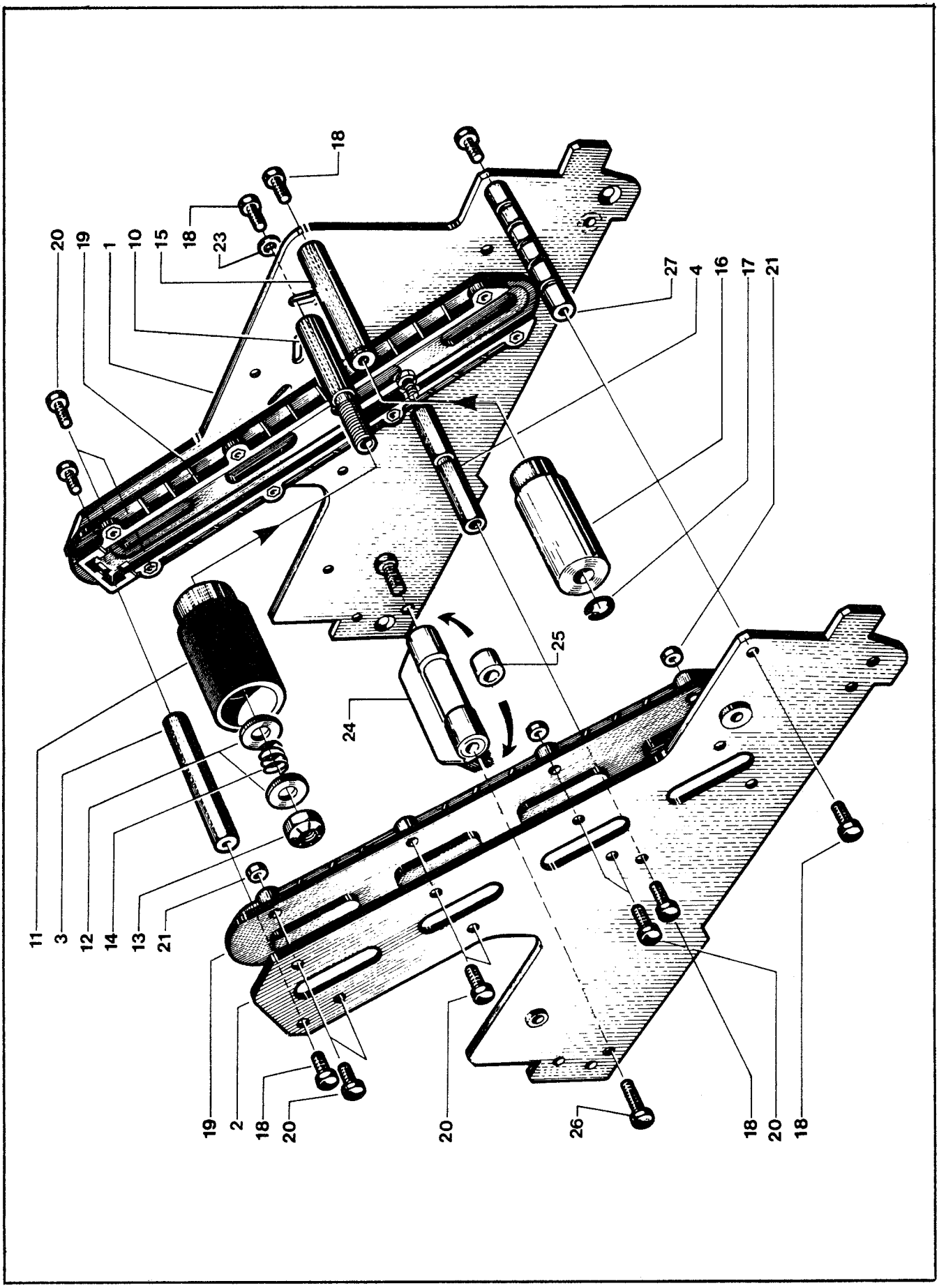


FIGURE 1328 (TOP)

Figure 1328

Ref. No.	3M Part No.	Description
1328-1	78-8052-6556-4	Frame - R/H Top
1328-2	78-8052-6557-2	Frame - L/H Top
1328-3	78-8054-8792-9	Spacer - Hexagonal
1328-4	78-8054-8793-7	Spacer - Upper
1328-10	78-8054-8796-0	Shaft - Tension Roller
1328-11	78-8054-8797-8	Roller - Top Tension
1328-12	78-8052-6566-3	Washer - Friction
1328-13	78-8017-9077-1	Nut - Self Locking, Hex M10 x 1
1328-14	78-8052-6567-1	Spring - Compression
1328-15	78-8054-8798-6	Shaft - Wrap Roller
1328-16	78-8054-8799-4	Roller - Wrap
1328-17	26-1000-1613-3	Ring - Retaining
1328-18	26-1003-5828-7	Screw - Hex Hd. M6 x 10 Zinc Pl.
1328-19	78-8052-6570-5	Guide
1328-20	83-0002-7336-3	Screw - Hex Hd. M4 x 14 Zinc Pl.
1328-21	78-8010-7416-8	Nut - Hex M4 Zinc Pl.
1328-23	26-1000-0010-3	Washer - Flat M6
1328-24	78-8060-7936-0	Brush Assembly
1328-25	78-8060-7937-8	Spacer /6,5/14 x 12,5
1328-26	78-8060-7938-6	Screw - M6 x 25, Special
1328-27	78-8060-7939-4	Spacer - 10 x 115 W/Slots

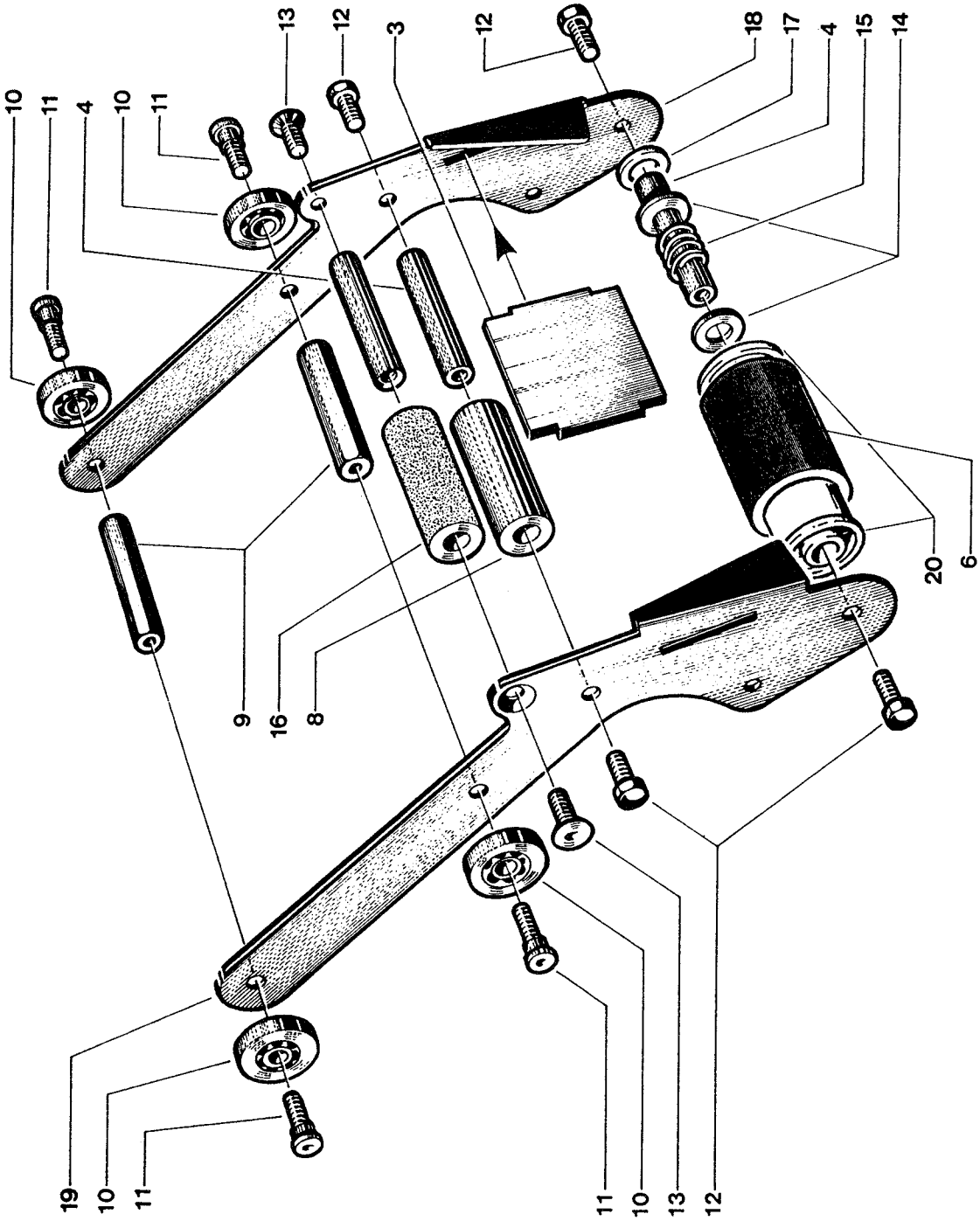


FIGURE 1329

Figure 1329

Ref. No.	3M Part No.	Description
1329-3	78-8054-8800-0	Plate - Back Up
1329-4	78-8054-8801-8	Shaft - Roller
1329-6	78-8057-6181-0	Roller - Applying
1329-8	78-8054-8805-9	Roller - Wrap
1329-9	78-8054-8806-7	Spacer
1329-10	78-8017-9082-1	Bearing - Special 30 mm
1329-11	78-8017-9106-8	Screw - Bearing Shoulder
1329-12	26-1003-5828-7	Screw - Hex Hd. M6 x 10 Zinc Pl.
1329-13	26-1005-4759-0	Screw - Flat Hd M6 x 12 Zinc Pl.
1329-14	78-8052-6566-3	Washer - Friction
1329-15	78-8052-6567-1	Spring - Compression
1329-16	78-8060-7940-2	Roller - Knurled
1329-17	78-8017-9074-8	Washer - Nylon 15 mm
1329-18	78-8060-8170-5	Frame - Applying, Right
1329-19	78-8060-8171-3	Frame - Applying, Left
1329-20	78-8060-8396-6	Bushing - Applying Roller

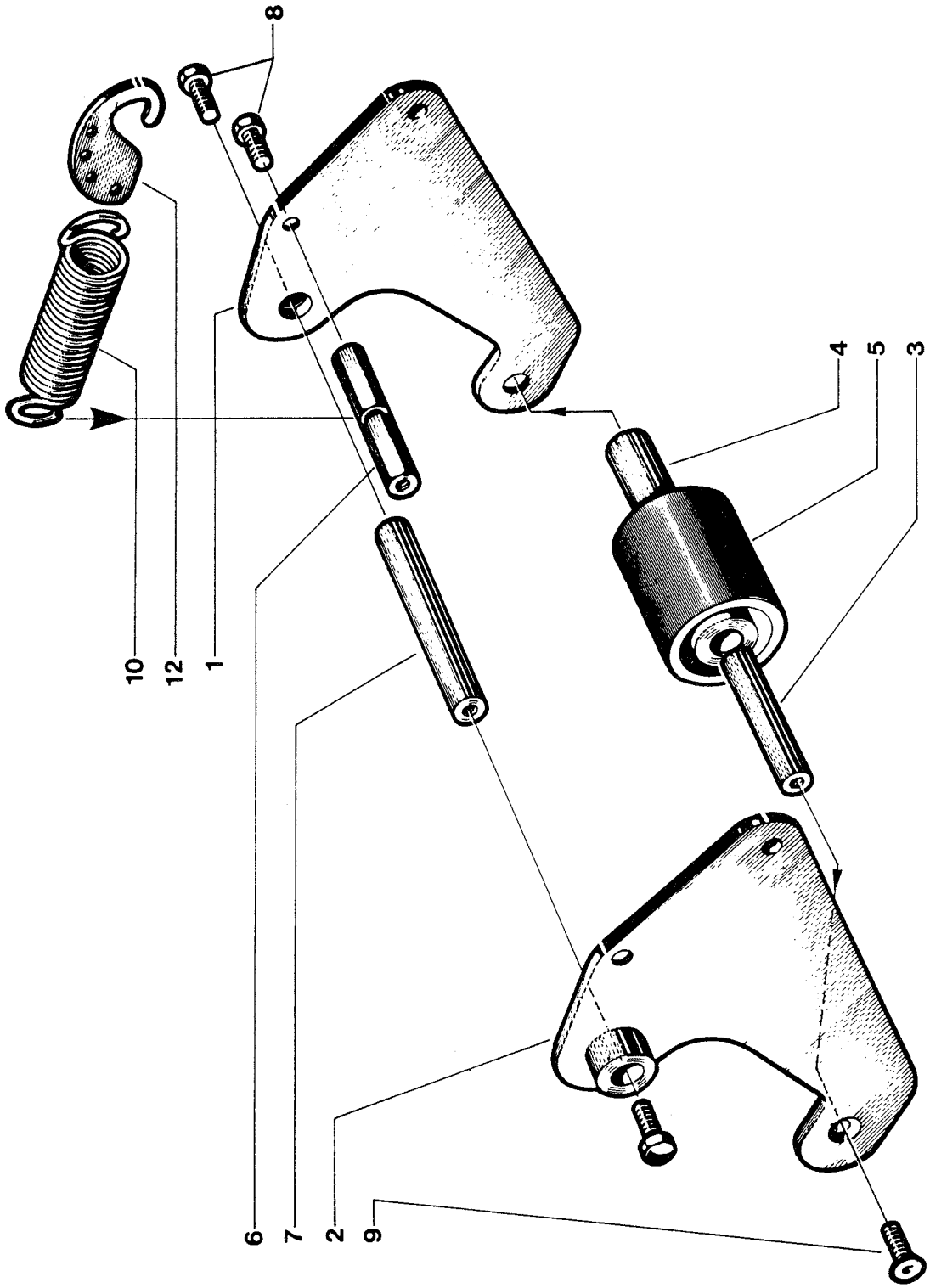


FIGURE 1330 (TOP)

Figure 1330

Ref. No.	3M Part No.	Description
1330-1	78-8052-6583-8	Frame - R/H
1330-2	78-8052-6584-6	Frame - L/H
1330-3	78-8054-8801-8	Shaft - Roller
1330-4	78-8054-8807-5	Bushing - Buffing Roller
1330-5	78-8057-6180-2	Roller - Buffing
1330-6	78-8054-8809-1	Spacer - Spring
1330-7	78-8028-7885-6	Shaft - 10 x 115 mm
1330-8	26-1003-5828-7	Screw - Hex Hd M6 x 10
1330-9	26-1005-4759-0	Screw - Flat Hd M6 x 12
1330-10	78-8052-6589-5	Spring - Top Ext.
1330-12	78-8052-6590-3	Holder - Spring

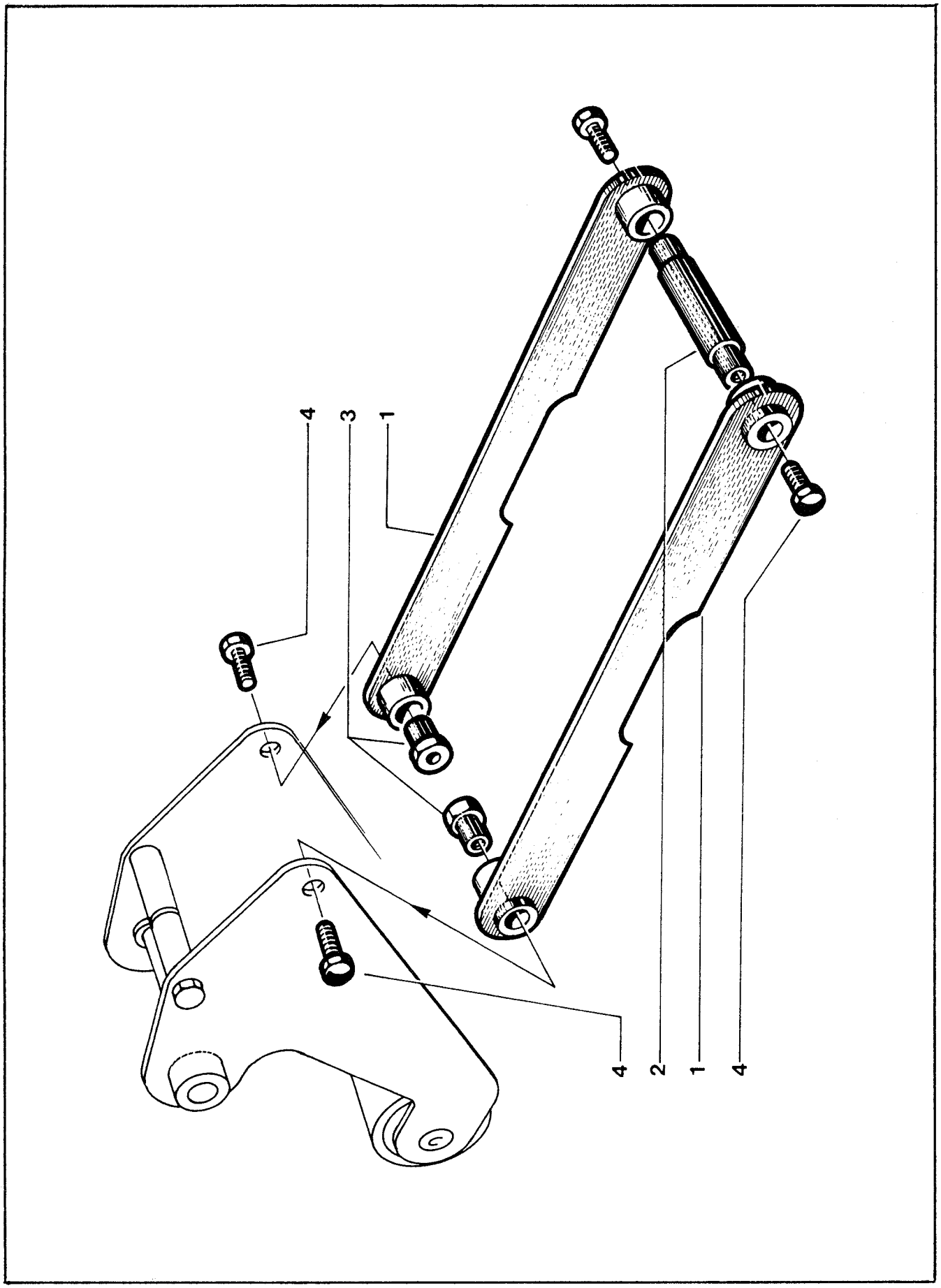


FIGURE 1331

Figure 1331

Ref. No.	3M Part No.	Description
1331-1	78-8052-6592-9	Arm - Link
1331-2	78-8054-8810-9	Shaft - Pivot
1331-3	78-8052-6594-5	Bushing - Pivot
1331-4	78-8010-7163-6	Screw - Hex Hd M5 x 10 Metric

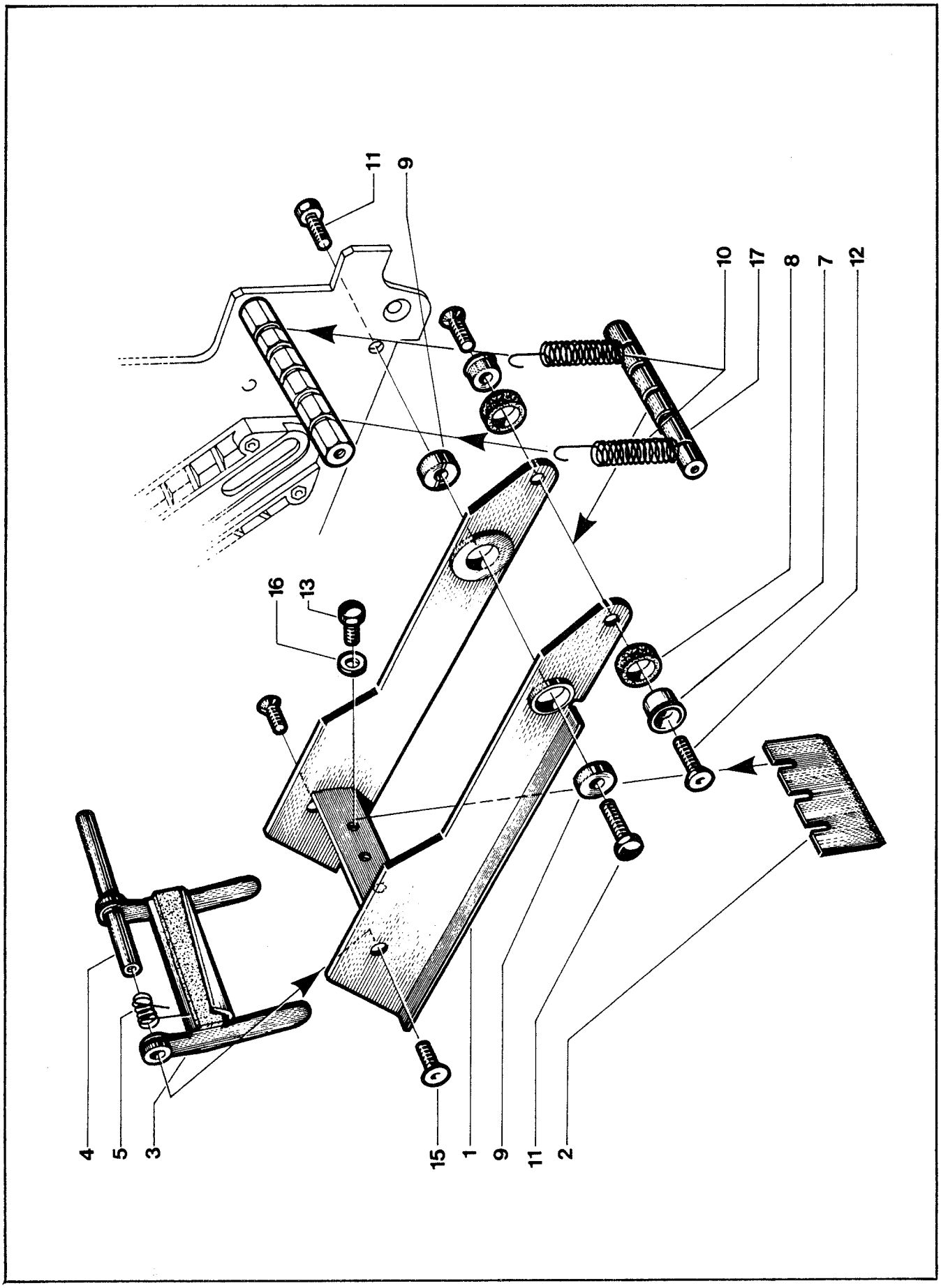


FIGURE 1332

Figure 1332

Ref. No.	3M Part No.	Description
1332-1	78-8060-8173-9	Bracket - Cut-Off
1332-2	78-8028-7899-7	Blade - 3.50 Inch/89 mm
1332-3	78-8054-8812-5	Guard - Blade
1332-4	78-8054-8813-3	Shaft - Blade Guard
1332-5	78-8052-6598-6	Spring - Tension
1332-7	78-8052-6600-0	Sleeve - Bumper
1332-8	78-8017-9133-2	Bumper
1332-9	78-8017-9132-4	Pivot - Cutter Lever
1332-10	78-8052-6602-6	Spring - Cutter
1332-11	26-1003-5828-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1332-12	26-1005-4758-2	Screw - Flat Hd M5 x 20 Zinc Pl.
1332-13	26-1002-5817-2	Screw - Hex Hd M5 x 8
1332-15	26-1005-4757-4	Screw - Flat Hd M4 x 10 Zinc Pl.
1332-16	78-8005-5741-1	Washer - Plain, M5, Metric
1332-17	78-8060-7941-0	Pin - Spring Holder W/Slots

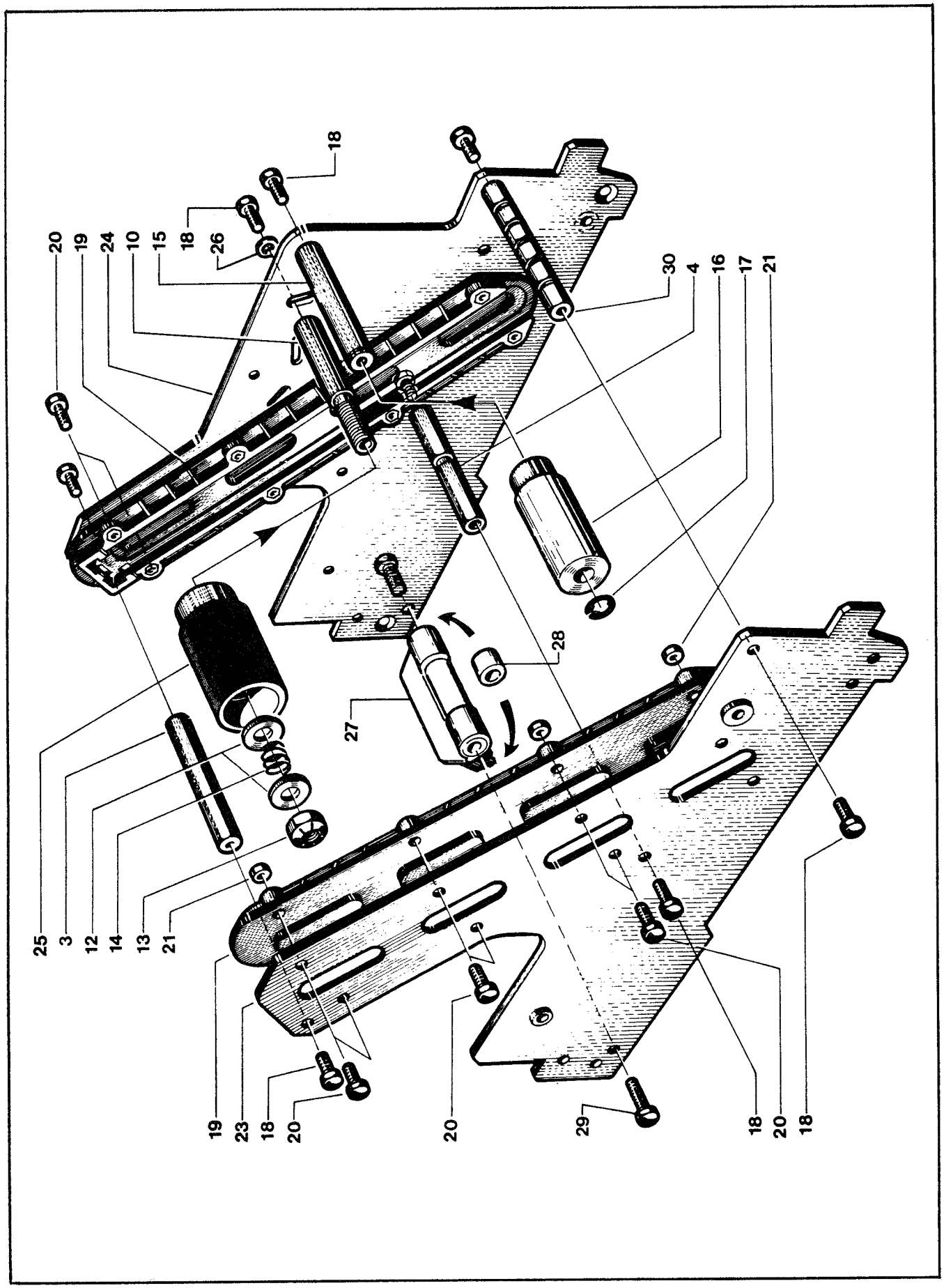


FIGURE 1334 (BOTTOM)

Figure 1334

Ref. No.	3M Part No.	Description
1334-3	78-8054-8793-7	Spacer
1334-4	78-8054-8792-9	Spacer - Spring Hook
1334-10	78-8054-8796-0	Shaft - Tension Roller
1334-12	78-8052-6566-3	Washer - Friction
1334-13	78-8017-9077-1	Nut - Self Locking M10 x 1
1334-14	78-8052-6567-1	Spring - Compression
1334-15	78-8054-8798-6	Shaft - Wrap Roller
1334-16	78-8054-8799-4	Roller Wrap
1334-17	26-1000-1613-3	Ring - Retaining
1334-18	26-1003-5828-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1334-19	78-8052-6570-5	Guide
1334-20	83-0002-7336-3	Screw - Hex Hd M4 x 14 Zinc. Pl.
1334-21	78-8010-7416-8	Nut - Hex M4 Steel Metric
1334-23	78-8052-6604-2	Frame - L/H Bottom
1334-24	78-8052-6605-9	Frame - R/H Bottom
1334-25	78-8054-8817-4	Roller - Tension Bottom
1334-26	26-1000-0010-3	Washer - Flat M6
1334-27	78-8060-7936-0	Brush Assembly
1334-28	78-8060-7937-8	Spacer /6,5/14 x 12,5
1334-29	78-8060-7938-6	Screw - M6 x 25, Special
1334-30	78-8060-7939-4	Spacer 10 x 115 W/Slots

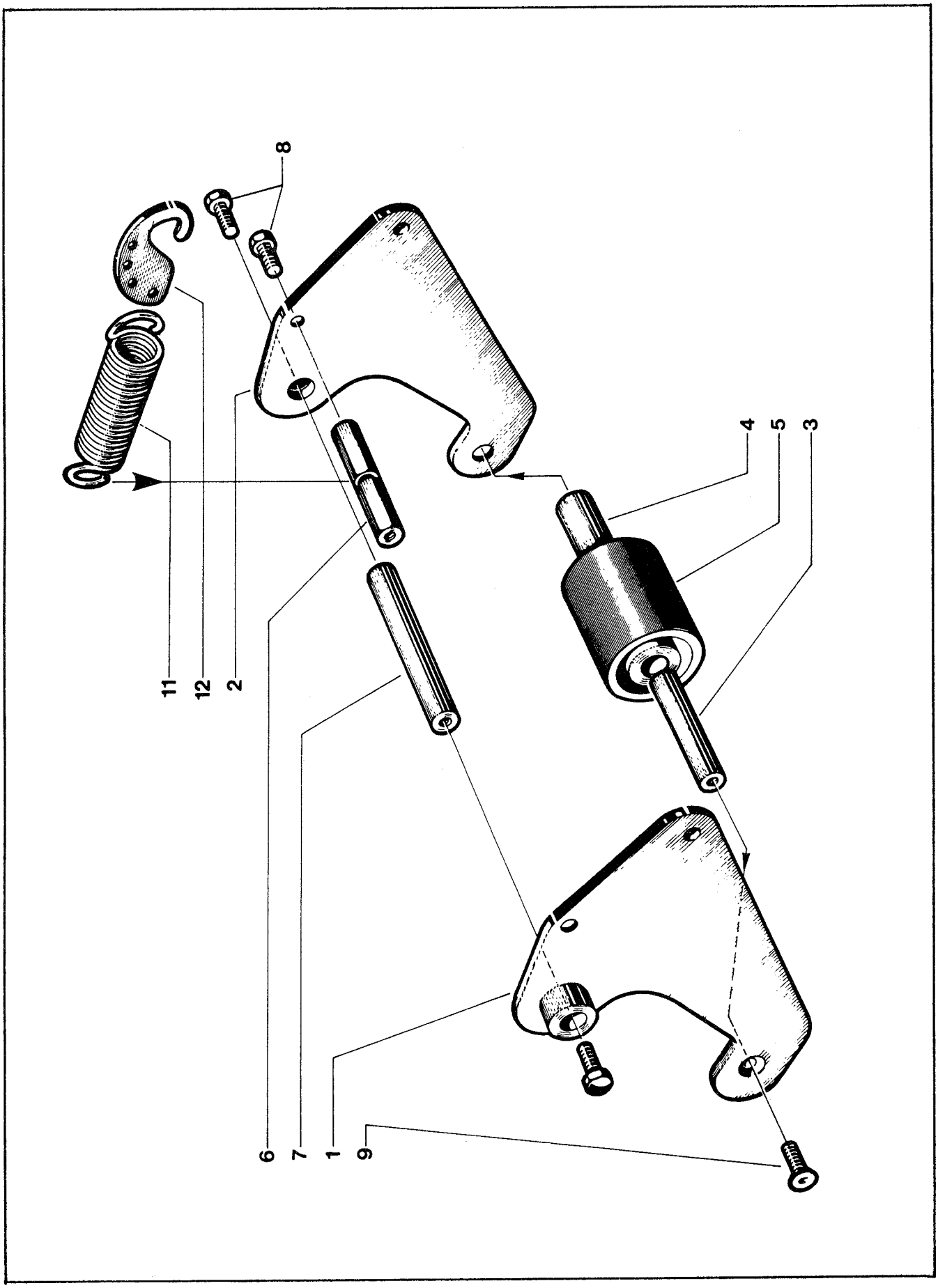


FIGURE 1335 (BOTTOM)

Figure 1335

Ref. No.	3M Part No.	Description
1335-1	78-8052-6583-8	Frame - R/H
1335-2	78-8052-6584-6	Frame - L/H
1335-3	78-8054-8801-8	Shaft - Roller
1335-4	78-8054-8807-5	Bushing - Buffing Roller
1335-5	78-8057-6180-2	Roller - Buffing
1335-6	78-8054-8809-1	Spacer - Spring
1335-7	78-8028-7885-6	Shaft - 10 x 115 mm
1335-8	26-1003-5828-7	Screw - Hex Hd M6 x 10
1335-9	26-1005-4759-0	Screw - Flat Hd M6 x 12
1335-11	78-8054-8550-1	Main Spring - Bottom Head
1335-12	78-8052-6590-3	Holder - Spring

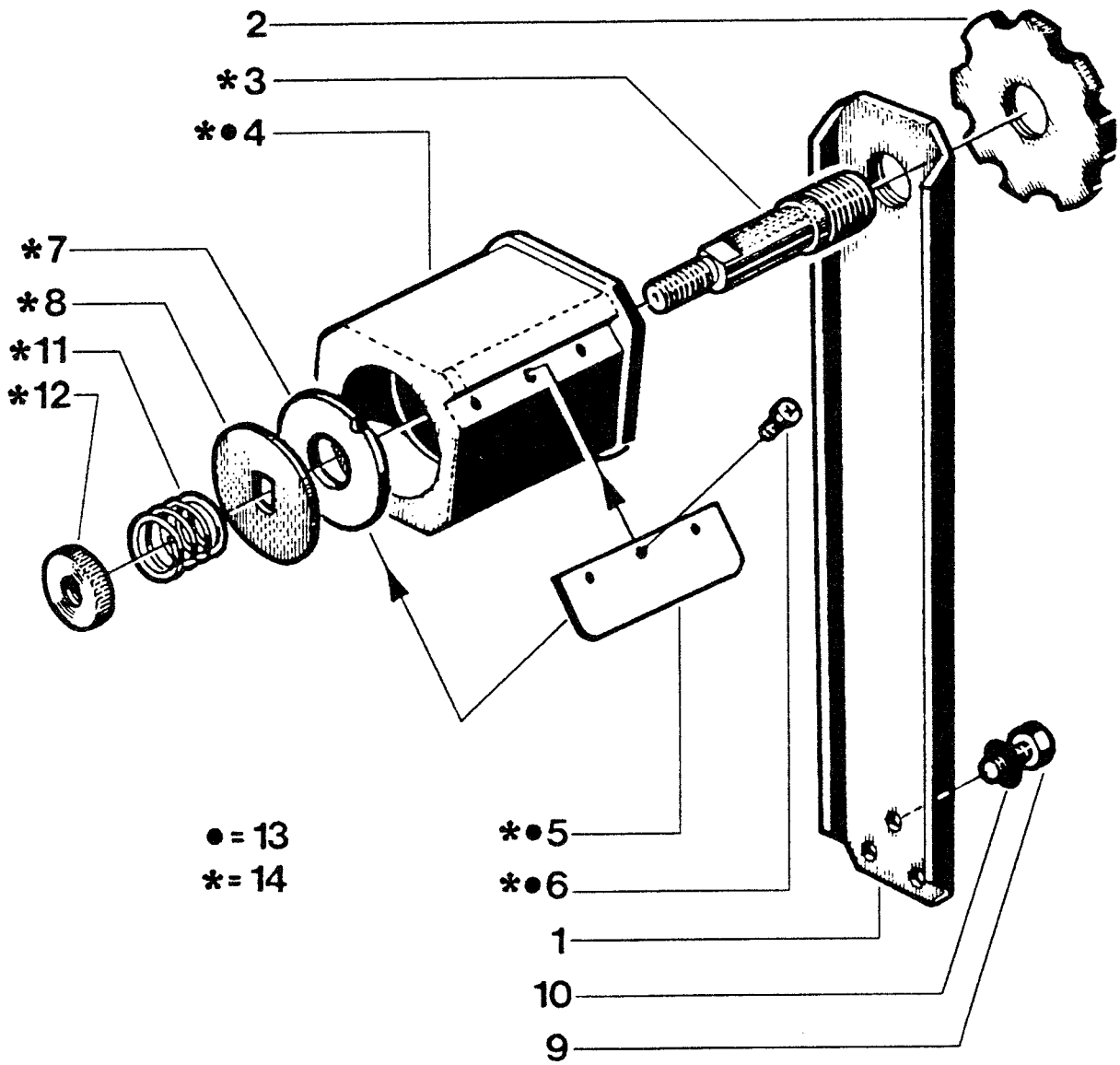


Figure 1980

Figure 1980

Ref. No.	3M Part No.	Description
1980-1	78-8052-6544-0	Bracket - Tape Drum
1980-2	78-8017-9091-2	Plate - Locking, Tape Drum Shaft
1980-3	78-8060-8462-6	Shaft - Tape Drum
1980-4	78-8054-8815-8	Tape Drum Assembly
1980-5	78-8054-8816-6	Leaf - Spring
1980-6	26-1002-5753-9	Screw - Self Tapping
1980-7	78-8060-8172-1	Washer - Friction
1980-8	78-8052-6271-0	Washer - Tape Drum
1980-9	26-1003-5829-5	Screw - Hex Hd M6 x 12
1980-10	26-1000-0010-3	Washer - Flat M6
1980-11	78-8054-8826-5	Spring
1980-12	78-8060-7851-1	Ring Nut - Adjusting
1980-13	78-8076-4731-4	Tape Drum Assembly
1980-14	78-8076-4732-2	Tape Drum Assembly W/Shaft, W/O Bracket/Lock/Plate

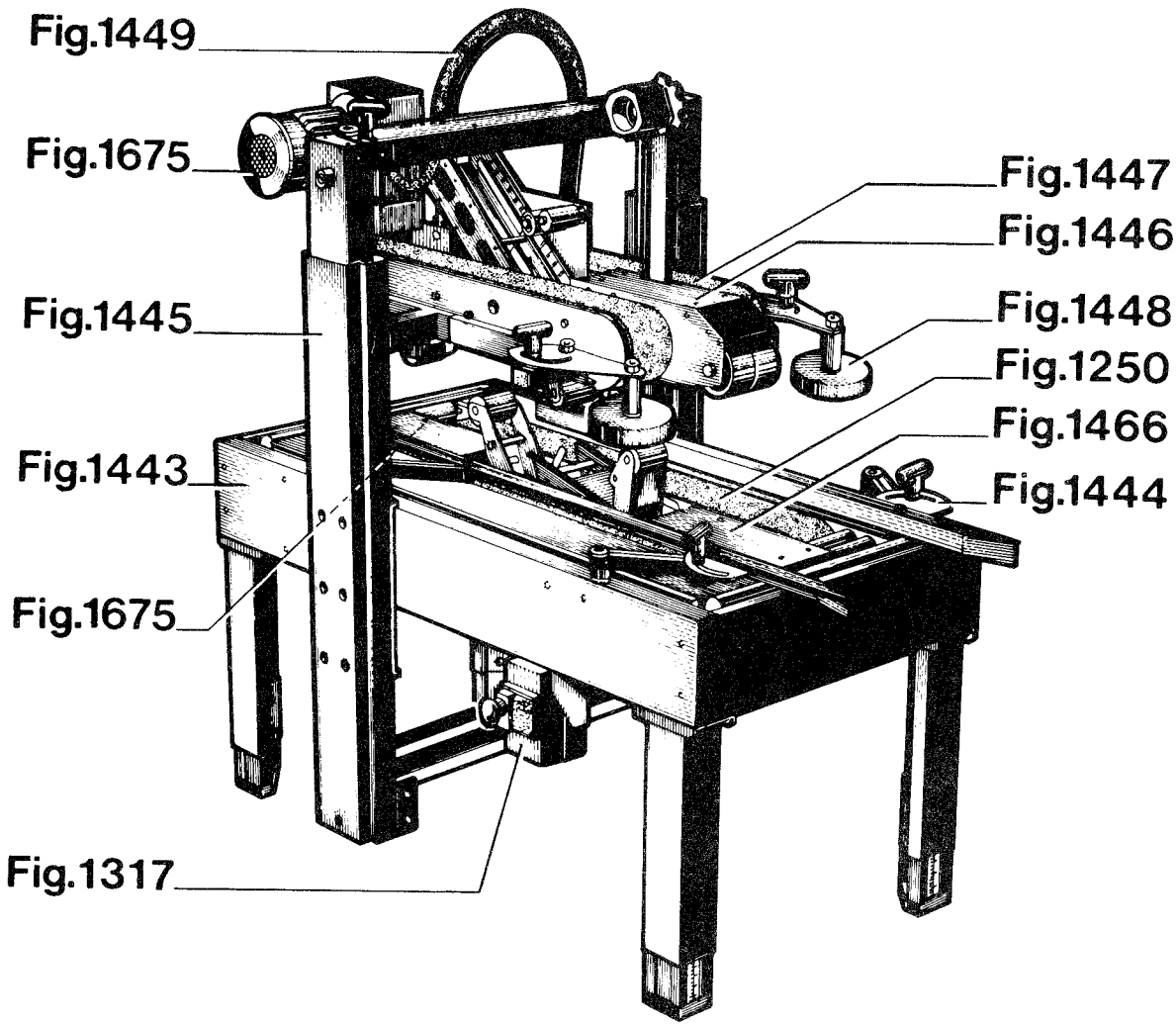
1. Refer to **Frame Assemblies figure** to find all parts illustrations identified by **figure numbers.**

2. Refer to the figure or figures to determine the **individual parts** required and the **parts reference number.**

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

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

4. Refer to page 20 - **"Replacement Parts and Service Information"** of this manual for replacement parts ordering information.



FRAME ASSEMBLIES

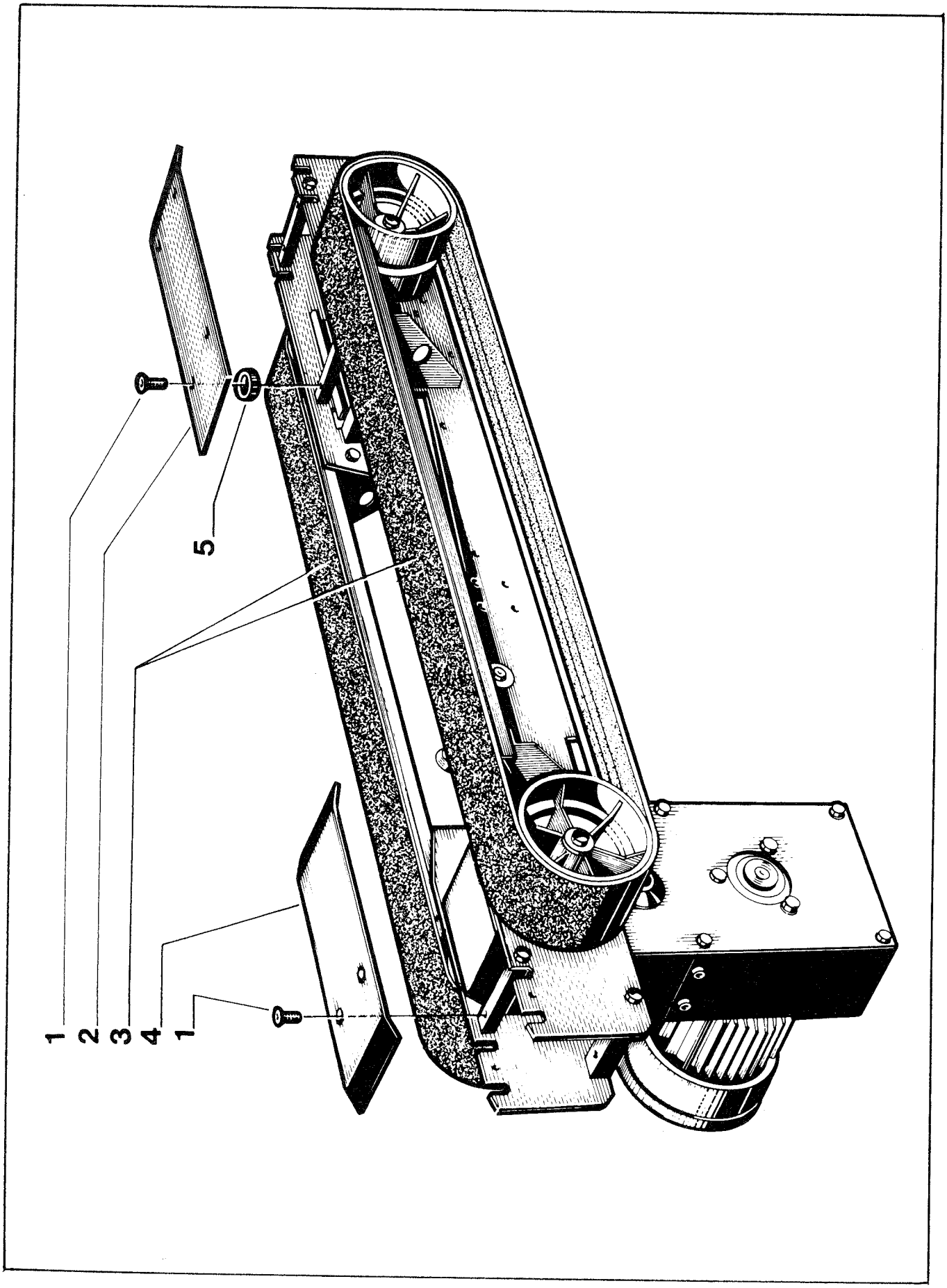


FIGURE 1250

Figure 1250

Ref. No.	3M Part No.	Description
1250-1	26-1005-5316-8	Screw - Flat Hd. Hex. Dr. M5 x 16
1250-2	78-8055-0673-6	Plate - Center, Front
1250-3	78-8052-6722-2	Belt - Drive
1250-4	78-8055-0674-4	Plate - Center, Rear
1250-5	78-8054-8751-5	Spacer

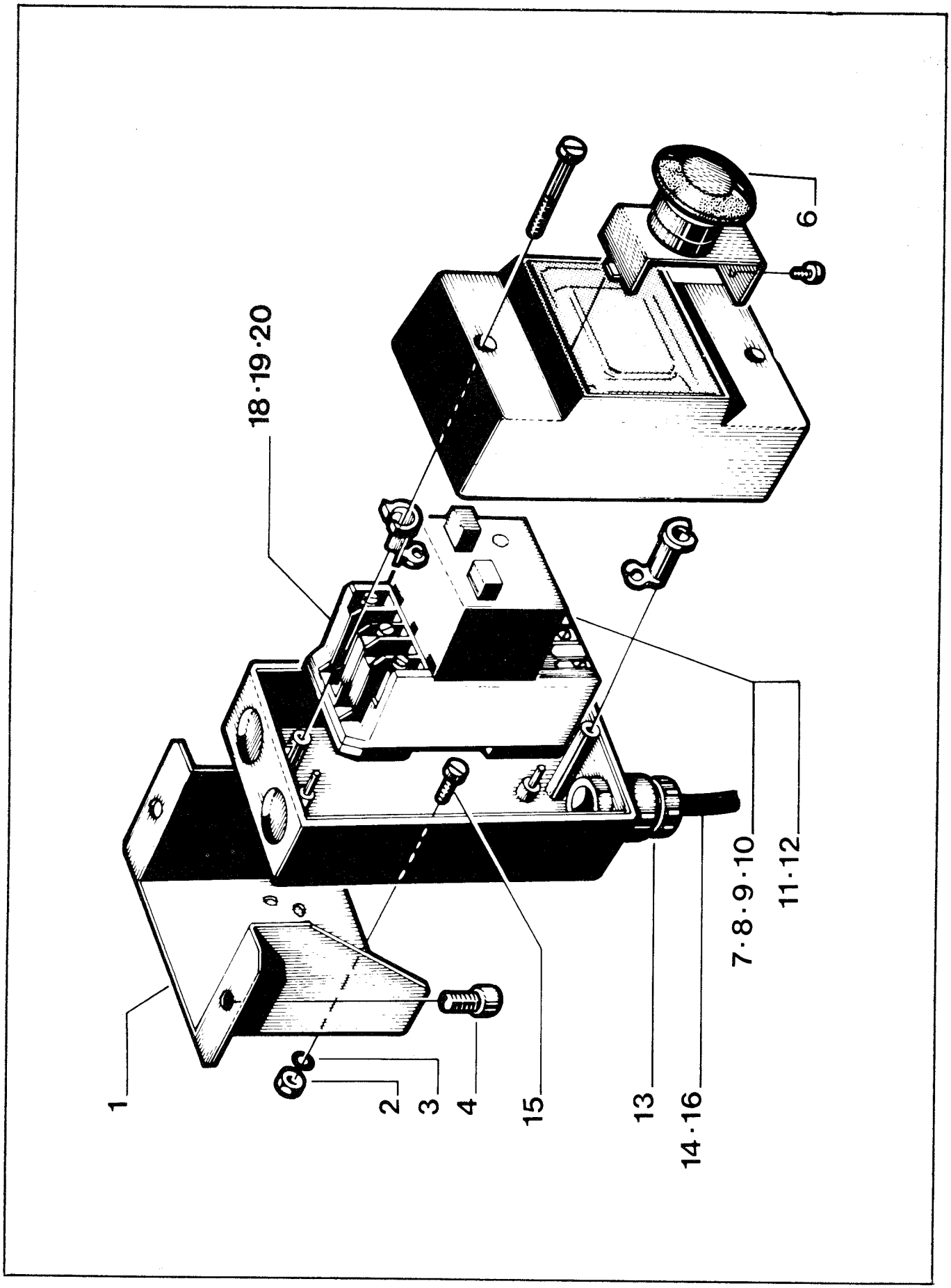


FIGURE 1317

Figure 1317

Ref. No.	3M Part No.	Description
1317-1	78-8052-6724-8	Switch - Bracket
1317-2	78-8010-7416-8	Nut - Hex M4 Steel Metric
1317-3	78-8017-9018-5	Washer - Plain M4 Metric Special
1317-4	26-1003-7963-0	Screw - Soc Hd. M8 x 16
1317-6	78-8052-6725-5	Emergency Stop
1317-7	78-8052-6726-3	Switch - On/Off 0.63 - 1 Amp
1317-8	78-8052-6727-1	Switch - On/Off 1 - 1.6 Amp
1317-9	78-8052-6728-9	Switch - On/Off 1.6 - 2.5 Amp
1317-10	78-8052-6729-7	Switch - On/Off 2.5 - 4 Amp
1317-11	78-8052-6660-4	Switch - On/Off 4 - 6.3 Amp
1317-12	78-8052-6661-2	Switch - On/Off 6.3 - 10 Amp
1317-13	78-8057-5807-1	Cord - Grip
1317-14	78-8028-7909-4	Power Cord/US
1317-15	78-8017-9257-9	Screw - Phil Hd. M4 x 10
1317-16	78-8055-0708-0	Power Cord - European
1317-18	78-8060-7637-4	Plug Terminal, Wire /1,5
1317-19	78-8060-7880-0	Eyelet Terminal /4 Red
1317-20	78-8060-7881-8	Eyelet Terminal /5 Yellow

SWITCH BOX ONLY
78-8070-1573-6

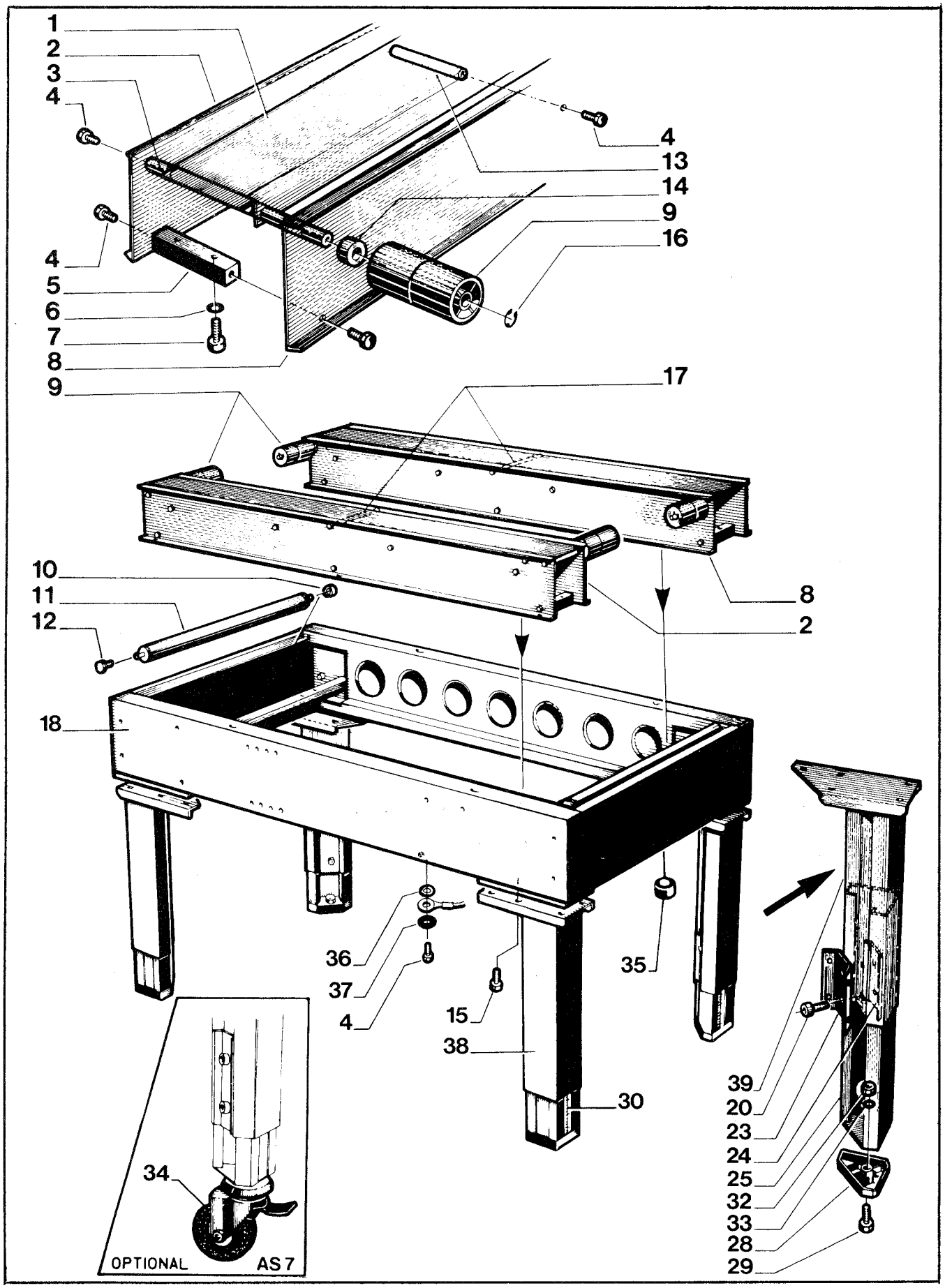
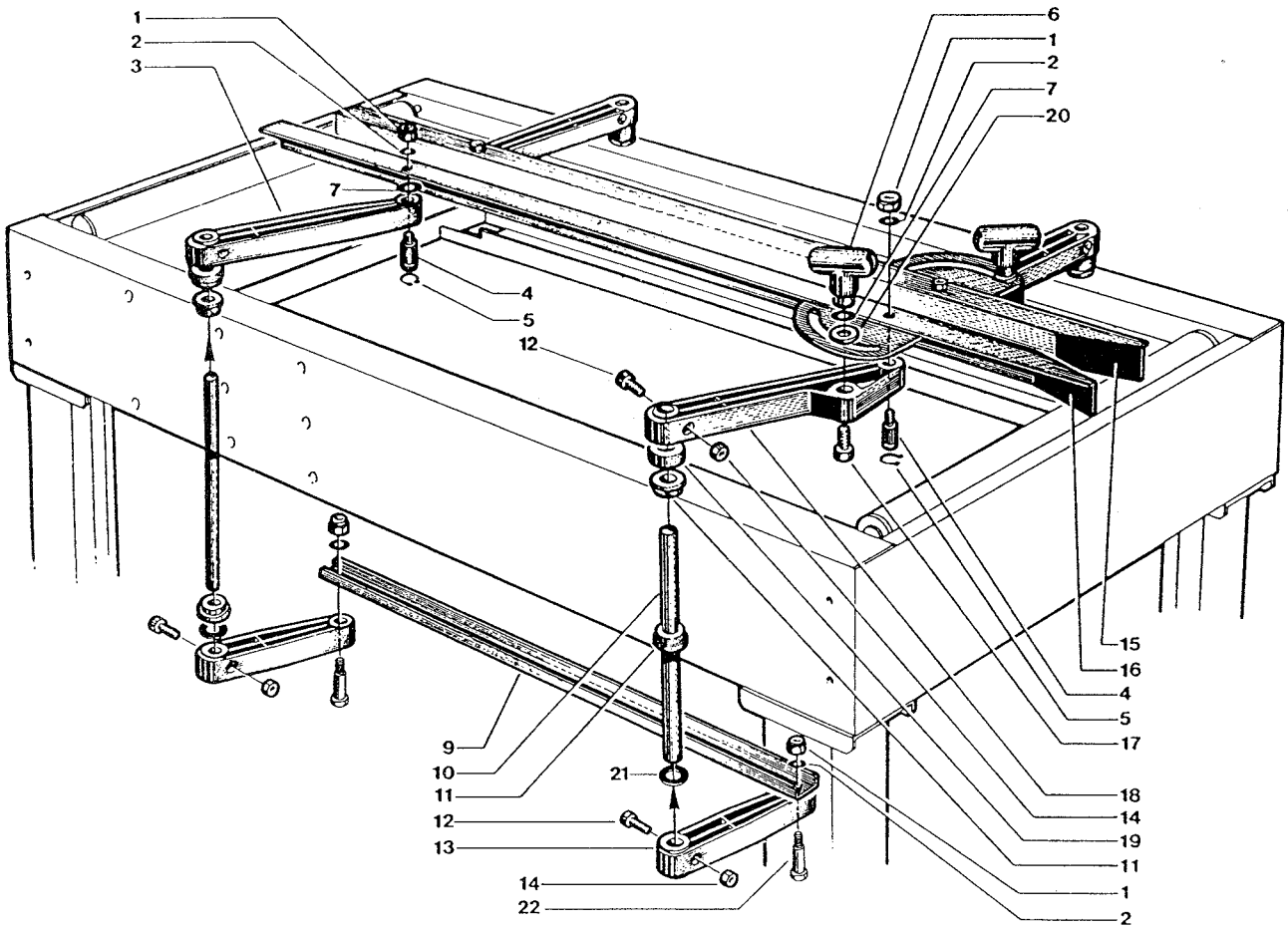

1
2
3
4
4
13
14
9
16
4
5
6
7
8
9
17
10
11
12
8
2
18
36
37
4
15
38
35
30
39
20
23
24
25
32
33
28
29
34
OPTIONAL
AS 7

FIGURE 1443

Figure 1443

Ref. No.	3M Part No.	Description
1443-1	78-8055-0675-1	Conveyor Bed
1443-2	78-8052-6663-8	Side Plate
1443-3	78-8055-0676-9	Shaft KS
1443-4	78-8010-7163-6	Screw - Hex. Hd. M5 x 10 Metric
1443-5	78-8055-0677-7	Block - Mounting
1443-6	26-1000-0010-3	Washer - Flat M6
1443-7	78-8010-7209-7	Screw - Soc. Hd. M6 x 12
1443-8	78-8052-6666-1	Side Plate
1443-9	78-8052-6667-9	Roller
1443-10	78-8052-6668-7	Snap - Roller
1443-11	78-8055-0678-5	Roller - Conveyor 32 x 588 mm
1443-12	78-8052-6670-3	Nut -Special
1443-13	78-8055-0679-3	Shaft - 8 x 139 mm
1443-14	78-8052-6672-9	Spacer
1443-15	26-1003-7964-8	Screw - Soc Hd. Hex Soc. Dr M8 x 20
1443-16	78-8052-6732-1	Ring - M8 Special
1443-17	78-8055-0680-1	Shaft - 8 x 145 mm
1443-18	78-8055-0681-9	Bed - Conveyor
1443-20	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1443-23	78-8052-6676-0	Clamp - Outer
1443-24	78-8052-6677-8	Clamp - Inner
1443-25	78-8052-6678-6	Leg - Inner
1443-28	78-8052-6679-4	Pad - Foot
1443-29	26-1003-5842-8	Screw - Hex Hd M8 x 20
1443-30	78-8052-6680-2	Label - Height
1443-32	78-8017-9313-0	Nut - Self Locking M8 Nick. Pl.
1443-33	26-1004-5507-5	Washer - M-8
1443-34	78-8054-8818-2	Wheel Caster
1443-35	78-8057-5802-2	Grommet
1443-36	78-8046-8217-3	Washer - Special
1443-37	78-8005-5741-1	Washer - Metric, Plain M5
1443-38	78-8060-7855-2	Leg - Conveyor Left
1443-39	78-8060-7856-0	Leg - Conveyor Right



Only For U.S. Manufacture

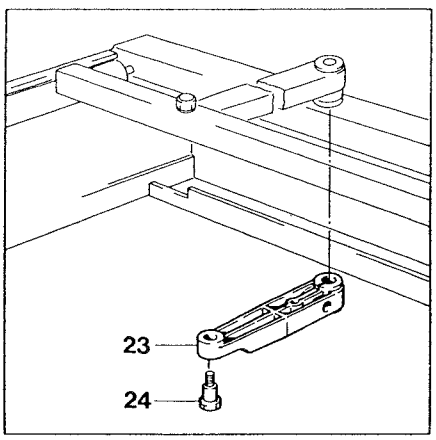


FIGURE 1444

Figure 1444

Ref. No.	3M Part No.	Description
1444-1	26-1003-6916-9	Nut - Locking Plastic Insert M6
1444-2	26-1000-0010-3	Washer - Flat M6
1444-3	78-8055-0682-7	Arm - Guide
1444-4	78-8052-6683-6	Stud - Guide
1444-5	78-8052-6733-9	Ring - M10 Special
1444-6	78-8060-8055-8	Knob
1444-7	78-8052-6566-3	Washer - Friction
1444-9	78-8052-6685-1	Link - Guide
1444-10	78-8052-6686-9	Shaft
1444-11	78-8052-6687-7	Sleeve
1444-12	78-8010-7210-5	Screw - Soc. Hd. M6 x 20
1444-13	78-8052-6688-5	Arm - Guide
1444-14	78-8010-7418-4	Nut - Hex, M6 Metric
1444-15	78-8052-6689-3	Guide - Right
1444-16	78-8052-6690-1	Guide - Left
1444-17	26-1003-7976-2	Screw - Soc. Hd. M10 x 35
1444-18	78-8055-0683-5	Arm - Guide
1444-19	78-8052-6692-7	Sleeve
1444-20	78-8057-5803-0	Washer - Dented
1444-21	78-8017-9059-9	Washer - Flat For M12 Screw
1444-22	78-8060-7878-4	Idler Screw
1444-23	78-8060-8465-9	Arm - Guide, Special
1444-24	78-8060-8466-7	Screw - Special, Arm

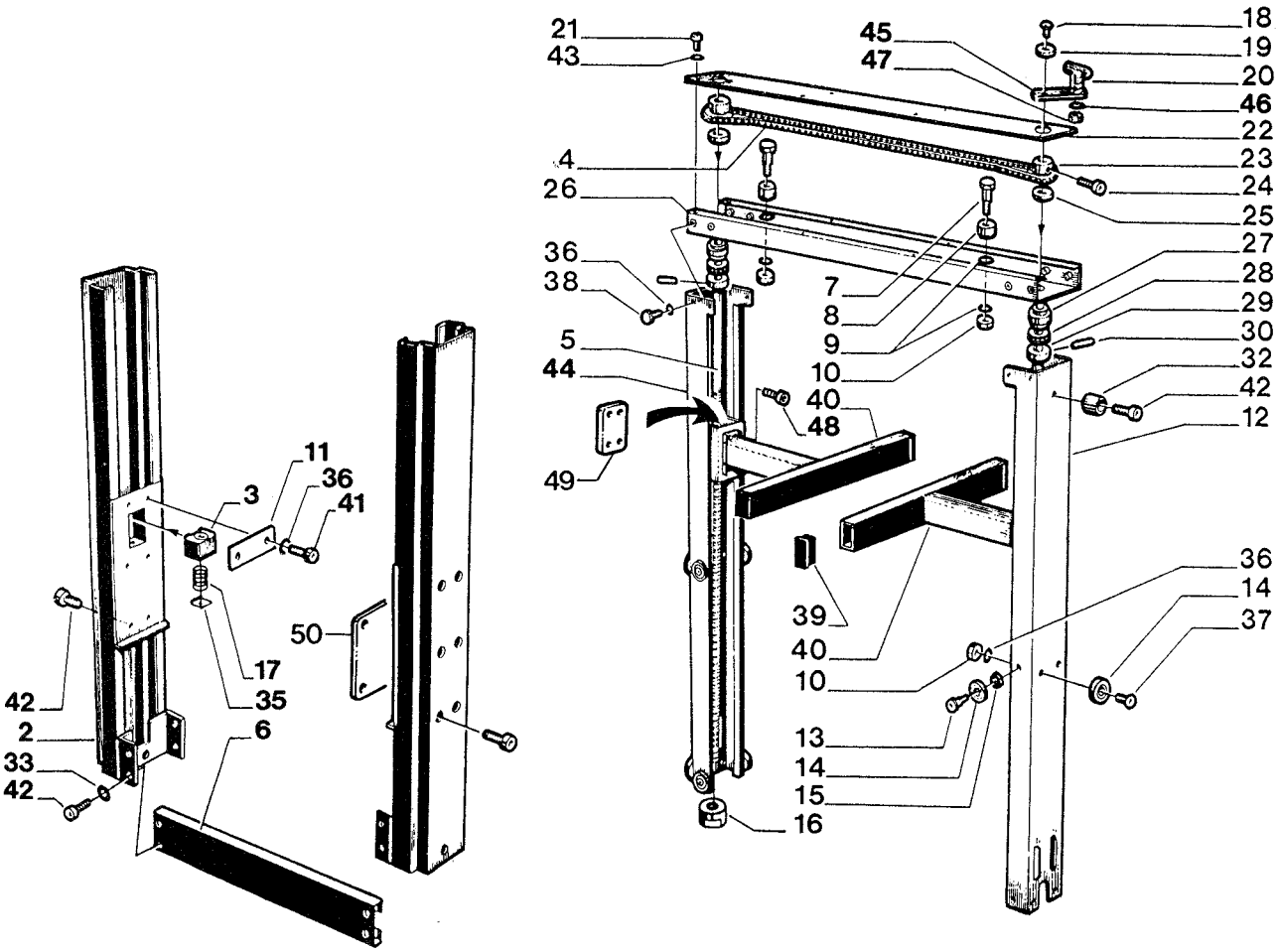

21
43
45
47
18
19
20
46
22
23
24
25
4
26
36
38
7
8
9
10
27
28
29
30
32
42
12
5
44
40
48
49
11
36
41
3
17
35
50
42
2
33
42
6
39
40
10
13
14
15
16
36
14
37

FIGURE 1445

Figure 1445

Ref. No.	3M Part No.	Description
1445-2	78-8055-0684-3	Column
1445-3	78-8054-8971-9	Nut - Plastic
1445-4	78-8055-0685-0	Chain - 3/8 Pitch, 173 Pitch Lg.
1445-5	78-8055-0686-8	Screw - Lead
1445-6	78-8055-0687-6	Crossmember
1445-7	78-8060-7878-4	Screw - Idler
1445-8	78-8054-8575-8	Roller - Idler
1445-9	78-8042-2919-9	Washer - M6 Nick Pl.
1445-10	26-1003-6916-9	Nut - Locking Plastic Insert M6
1445-11	78-8055-0688-4	Bracket
1445-12	78-8055-0689-2	Column - Inner
1445-13	78-8017-9106-8	Screw - Bearing Shoulder
1445-14	78-8054-8617-8	Bearing Special
1445-15	78-8054-8576-6	Spacer
1445-16	78-8054-8968-5	Nut - Special
1445-17	78-8054-8995-8	Spring
1445-18	26-1001-9843-6	Screw - Flat Soc. Hd. M6 x 16
1445-19	78-8054-8577-4	Washer - Special
1445-20	78-8054-8578-2	Crank
1445-21	26-1002-5753-9	Screw - Self Tapping
1445-22	78-8055-0690-0	Cover - Chain
1445-23	78-8054-8580-8	Sprocket
1445-24	26-1003-7946-5	Screw - Soc. Hd. M4 x 25
1445-25	78-8054-8581-6	Spacer
1445-26	78-8055-0691-8	Chain - Chain Box
1445-27	78-8054-8583-2	Bushing
1445-28	78-8054-8584-0	Spacer
1445-29	78-8054-8585-7	Collar
1445-30	78-8054-8586-5	Pin
1445-32	78-8054-8587-3	Stop
1445-33	78-8017-9318-9	Washer - Plain 8 mm Metric
1445-35	78-8054-8970-1	Bed Plat for Spring
1445-36	26-1000-0010-3	Washer - Flat M6
1445-37	78-8054-8589-9	Screw Special
1445-38	78-8032-0375-7	Screw - Hex Hd. M6 x 16 Metric
1445-39	78-8054-8593-1	Cap - End
1445-40	78-8055-0692-6	Head Support
1445-41	26-1003-7957-2	Screw - Soc. Hd. Hex Hd. M6 x 12
1445-42	26-1003-7964-8	Screw - Soc. Hd. Hex Soc. Dr., M8 x 20
1445-43	78-8005-5740-3	Washer Plain-Metric 4 mm
1145-44	78-8060-8425-3	Inner Column Assembly
1145-45	78-8060-8065-7	Lever - Knob
1145-46	78-8010-7435-8	Washer - Lock, M6 Metric
1145-47	78-8010-7418-4	Nut - Hex M6 Metric
1145-48	26-1003-7963-0	Screw - Soc Hd M8 x 16
1145-49	78-8076-5473-2	Plate - Threaded - Serial #5380 and above
1145-50	78-8076-5474-0	Plate - Column Mount Assy - Serial #5380 and above

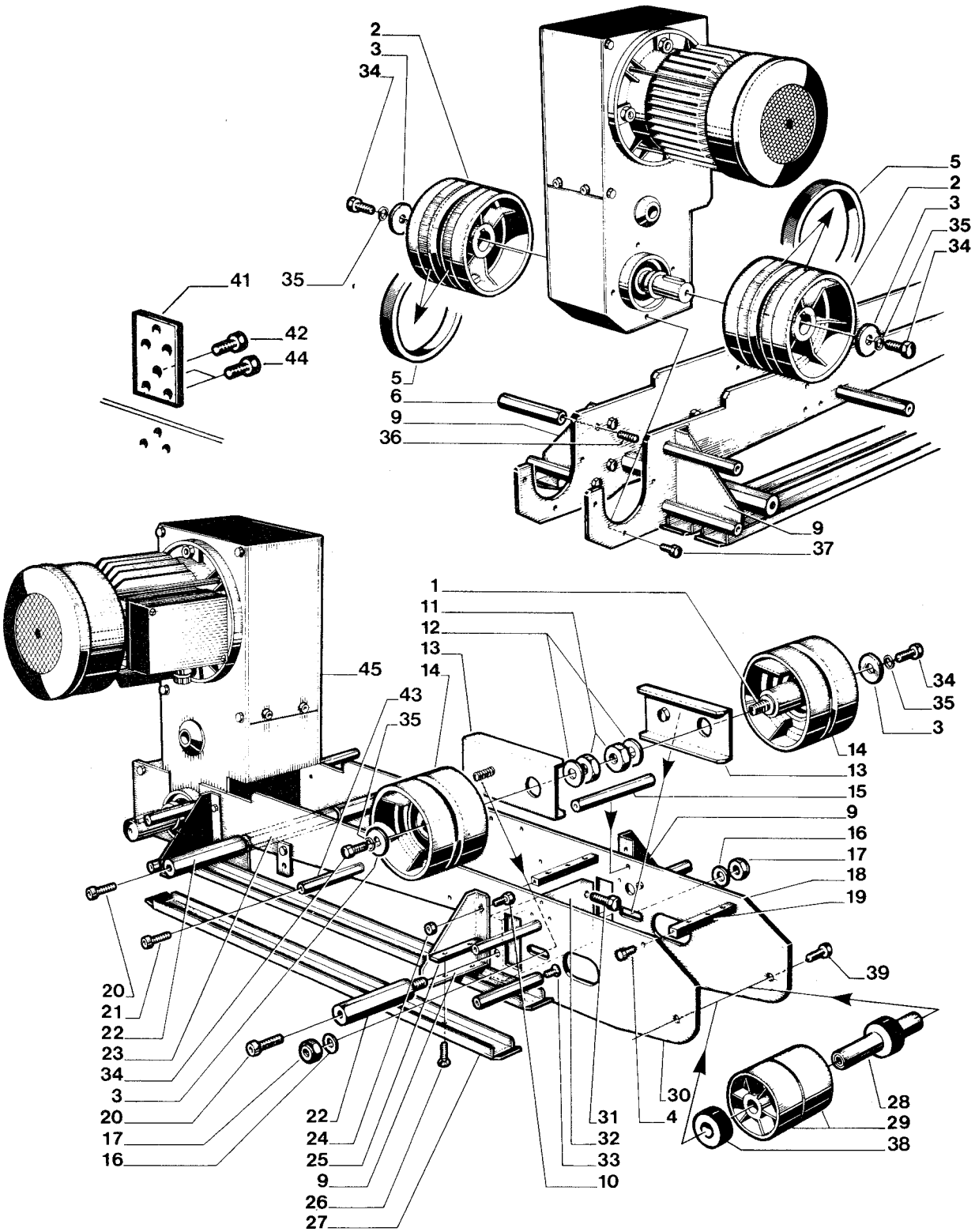

2
3
34
35
41
42
44
5
6
9
36
5
2
3
35
34
9
37
45
43
35
1
11
12
13
14
34
35
3
14
13
15
9
16
17
18
19
39
20
21
22
23
34
3
20
17
16
22
24
25
9
26
27
31
32
33
10
30
4
28
29
38

FIGURE 1446

Figure 1446

Ref. No.	3M Part No.	Description
1446-1	78-8052-6711-5	Shaft - Roller
1446-2	78-8052-6717-2	Roller - Drive
1446-3	78-8052-6709-9	Washer - Special
1446-4	78-8010-7169-3	Screw - Hex Hd. M6 x 12 Metric
1446-5	78-8052-6713-1	Ring - Rubber
1446-6	78-8052-6558-0	Spacer - Spring Hook
1446-9	78-8052-6706-5	Bracket
1446-10	26-1003-5820-4	Screw - Hex Hd. M5 x 12
1446-11	26-1003-6906-0	Nut - M-12 Metric
1446-12	26-1004-5511-7	Washer - Metric
1446-13	78-8052-6704-0	Roller - Bracket
1446-14	78-8052-6710-7	Roller - Idler
1446-15	78-8055-0693-4	Spacer - Tape Drum
1446-16	78-8052-6566-3	Washer - Friction
1446-17	26-1003-6918-5	Nut - Hex Flange Plastic Insert M10
1446-18	78-8052-6638-0	Side Plate - Right
1446-19	78-8055-0694-2	Spacer - 10 x 10 x 115 mm
1446-20	26-1003-7973-9	Screw - Soc Hd M10 x 16
1446-21	78-8010-7229-5	Screw - Soc Hd. M6 x 10
1446-22	78-8054-8843-0	Spacer
1446-23	78-8055-0695-9	Spacer - Hexagonal
1446-24	78-8010-7417-6	Nut - Hex Stl. M5 Metric
1446-25	78-8052-6715-6	Bracket
1446-26	26-1005-5316-8	Screw - Flat Hd Hex Dr. M5 x 16
1446-27	78-8052-6714-9	Guide - Drive Belt
1446-28	78-8055-0696-7	Shaft - Roller
1446-29	78-8052-6641-4	Roller
1446-30	78-8052-6642-2	Side Plate - Left
1446-31	26-1003-5845-1	Screw - Hex Hd. M8 x 40
1446-32	78-8055-0697-5	Block - Spacer
1446-33	26-1002-5830-5	Screw - Hex Hd. M6 x 12
1446-34	78-8032-0375-7	Screw - Hex Hd. M6 x 16 Metric
1446-35	78-8010-7435-8	Washer - Lock M6 Metric
1446-36	78-8057-5809-7	Screw - Set M6 x 25
1446-37	26-1003-5824-6	Screw - Hex Hd. M5 x 30
1446-38	78-8055-0698-3	Spacer
1446-39	26-1003-5841-0	Screw - M8 x 16
1446-41	78-8052-6644-8	Bracket
1446-42	78-8010-7193-3	Screw - Hex Hd. M6 x 20 Metric
1446-43	78-8052-6643-0	Spacer
1446-44	26-1003-5828-7	Screw - Hex. Hd. M6 x 12 Zinc. Pl.
1446-45	78-8060-7893-3	Gear Box Assembly W/O Motor

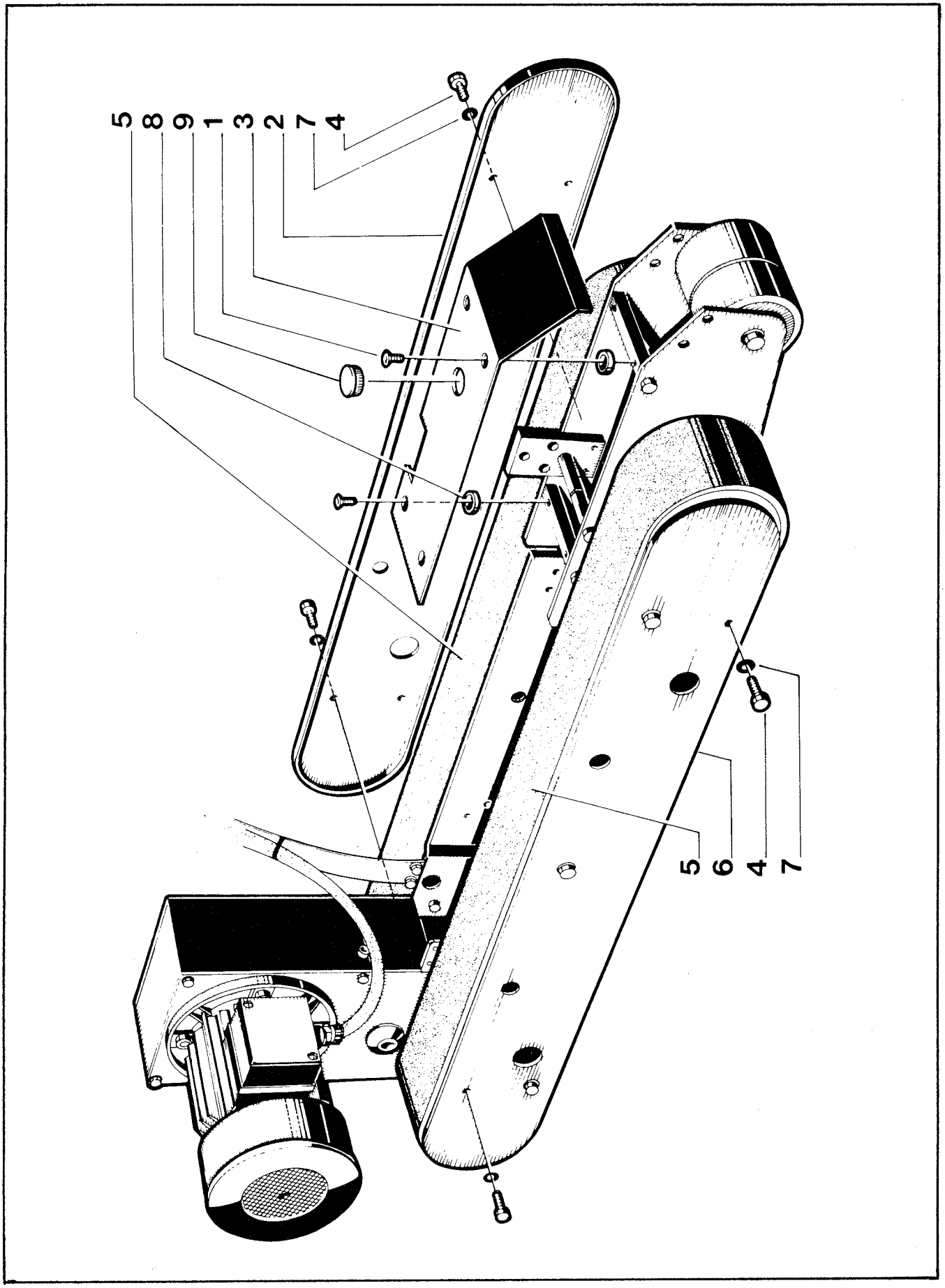


FIGURE 1447

Figure 1447

Ref. No.	3M Part No.	Description
1447-1	26-1005-5316-8	Screw - Flat Hd. Hex Dr. M5 x 16
1447-2	78-8052-6645-5	Cover - Right
1447-3	78-8055-0699-1	Cover Top
1447-4	78-8010-7169-3	Screw - Hex Hd. M6 x 12 Metric
1447-5	78-8052-6722-2	Belt - Drive
1447-6	78-8052-6647-1	Cover - Left
1447-7	26-1000-0010-3	Washer - Flat M6
1447-8	78-8054-8751-5	Spacer
1447-9	78-8060-7885-9	End Cap 25 x 1,2

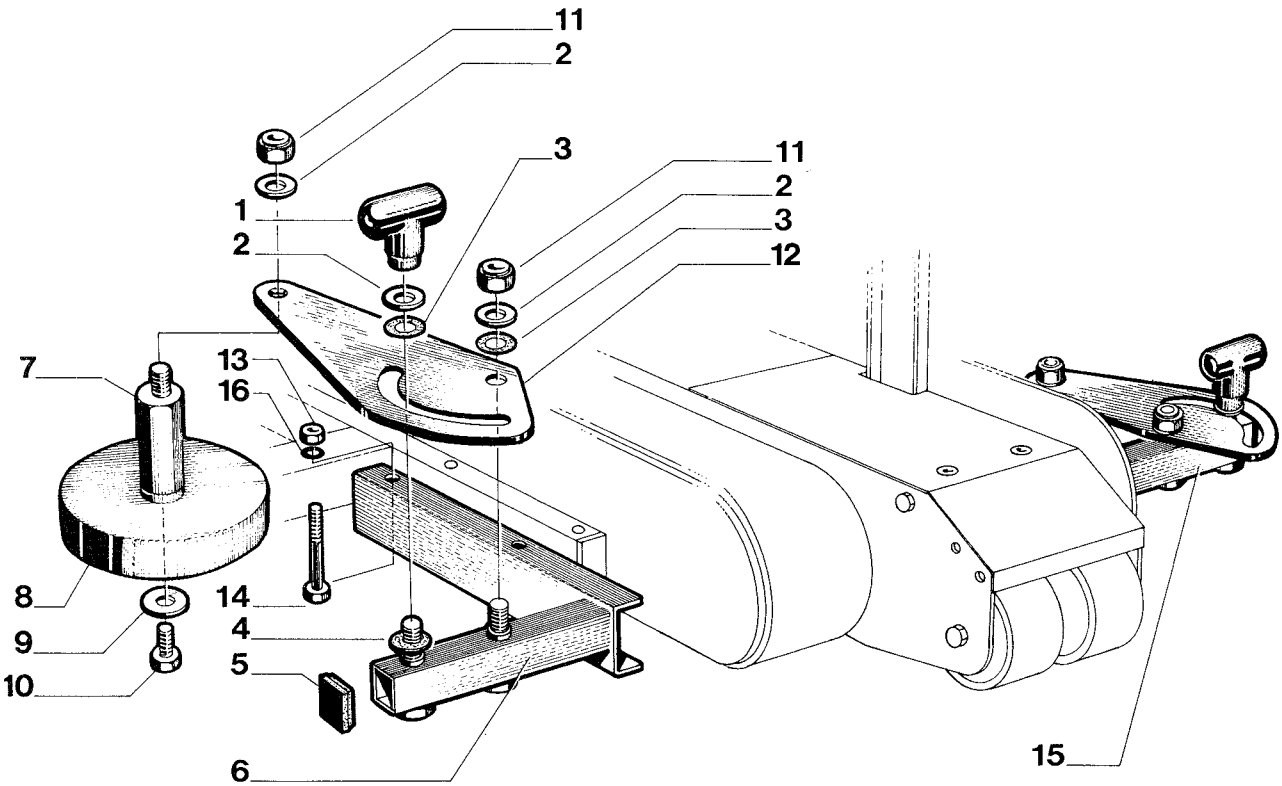


FIGURE 1448

Figure 1448

Ref. No.	3M Part No.	Description
1448-1	78-8052-6684-4	Knob
1448-2	78-8052-6566-3	Washer - Friction
1448-3	78-8017-9074-8	Washer - Nylon 15 mm
1448-4	78-8052-6651-3	Washer - Nylon
1448-5	78-8052-6652-1	Cap - End
1448-6	78-8055-0700-7	Support - Roller Left
1448-7	78-8052-6702-4	Stud - Mounting
1448-8	78-8054-8648-3	Pressure Roller
1448-9	78-8052-6703-2	Washer - Special
1448-10	26-1003-5841-0	Screw - M8 x 16
1448-11	26-1003-6918-5	Nut - Hex Flange Plastic Insert M10
1448-12	78-8055-0701-5	Plate - Mounting
1448-13	26-1003-6916-9	Nut - Locking Plastic Insert M6
1448-14	26-1005-5318-4	Screw - Hex Hd. M6 x 55 Metric
1448-15	78-8055-0702-3	Support - Roller, Right
1448-16	26-1000-0010-3	Washer - Flat M6

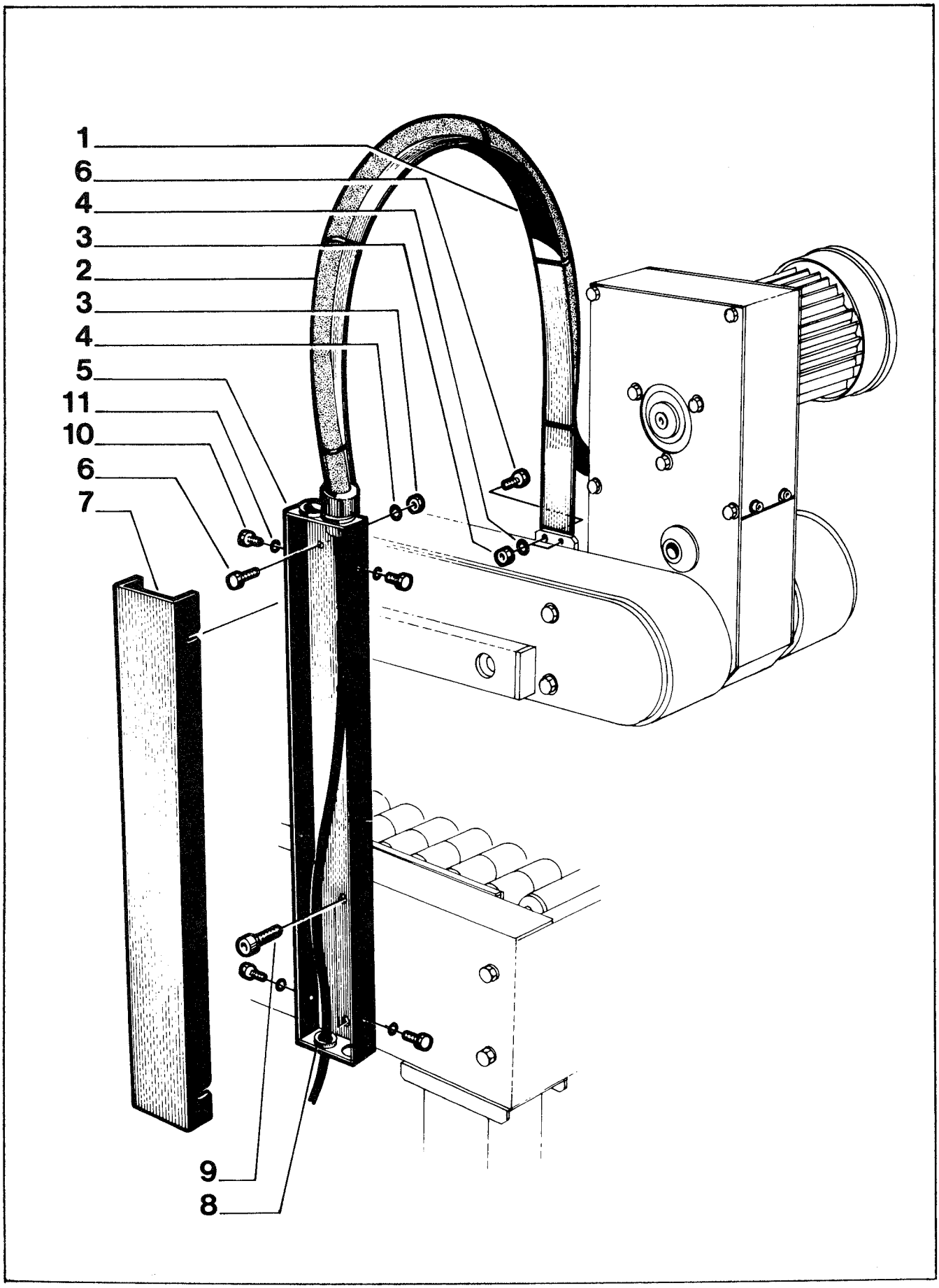


FIGURE 1449

Figure 1449

Ref. No.	3M Part No.	Description
1449-1	78-8054-8958-6	Strap - Wire
1449-2	78-8054-8959-4	Sleeving - Wire
1449-3	78-8010-7417-6	Nut - Hex M5 Metric
1449-4	78-8005-5741-1	Washer - Plain M5 Metric
1449-5	78-8052-6657-0	Housing - Wire
1449-6	78-8010-7163-6	Screw - Hex Hd. M5 x 10 Metric
1449-7	78-8052-6658-8	Cover
1449-8	78-8052-6659-6	Grommet
1449-9	26-1003-7963-0	Screw - Soc Hd. M8 x 16
1449-10	26-1003-5810-5	Screw - Hex Hd. M4 x 8
1449-11	78-8005-5740-3	Washer - Plain 4mm Metric

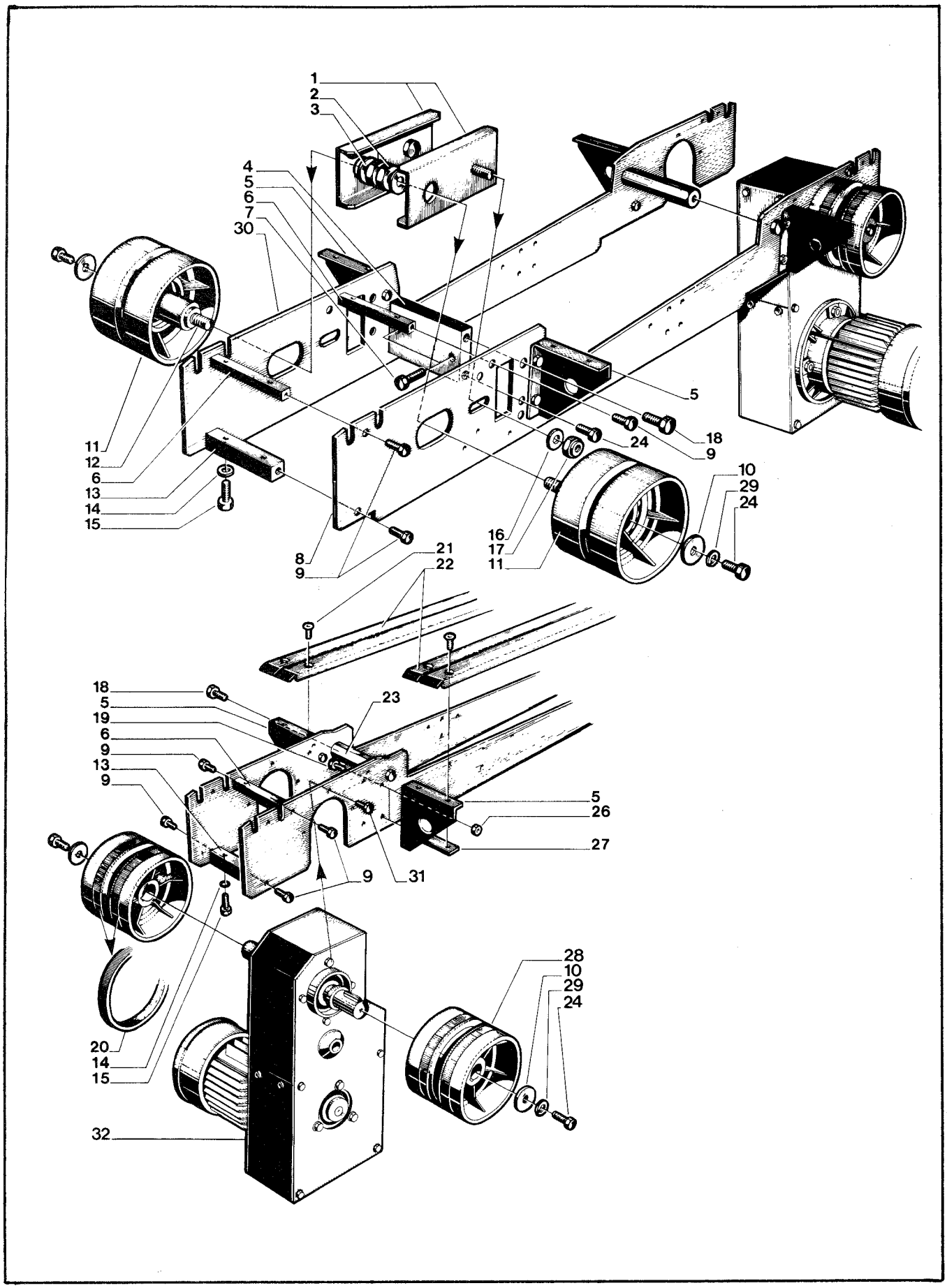
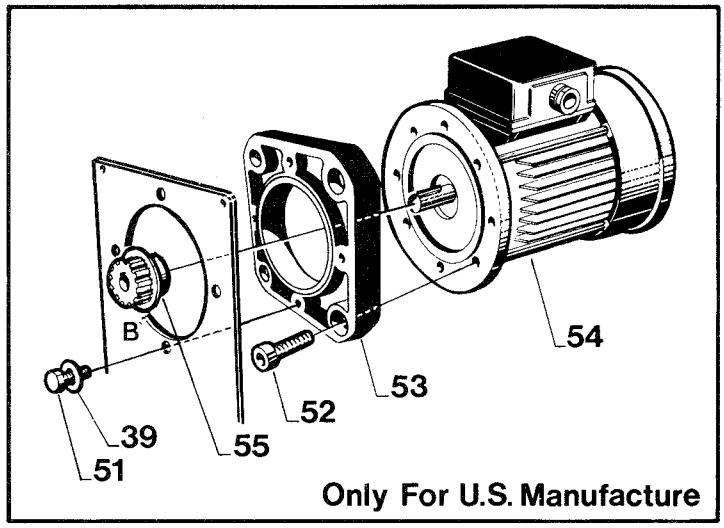

1
2
3
4
5
6
7
30
11
12
6
13
14
15
8
9
21
22
16
17
11
10
29
24
18
9
24
5
18
5
19
6
9
13
9
23
5
26
27
9
31
20
14
15
32
28
10
29
24

FIGURE 1466

Figure 1466

Ref. No.	3M Part No.	Description
1466-1	78-8052-6704-0	Roller - Bracket
1466-2	26-1003-6906-0	Nut - Metric M-12
1466-3	26-1004-5511-7	Washer - Metric
1466-4	78-8055-0697-5	Block - Spacer
1466-5	78-8052-6706-5	Bracket
1466-6	78-8055-0694-2	Spacer - 10 x 10 x 115 mm
1466-7	26-1003-5845-1	Screw - Hex. Hd. M8 x 40
1466-8	78-8052-6708-1	Side Plate
1466-9	78-8010-7169-3	Screw - Hex Hd. M6 x 12 Metric
1466-10	78-8052-6709-9	Washer - Special
1466-11	78-8052-6710-7	Roller - Idler
1466-12	78-8052-6711-5	Shaft - Roller
1466-13	78-8055-0703-1	Spacer - 15 x 15 x 115 mm
1466-14	26-1000-0010-3	Washer - Flat M6
1466-15	78-8010-7209-7	Screw - Soc. Hd. M6 x 12
1466-16	78-8052-6566-3	Washer - Friction
1466-17	26-1003-6918-5	Nut - Plastic Insert M10 Hex Flange
1466-18	26-1002-4189-7	Screw - Hex. Hd. M10 x 20
1466-19	26-1003-5820-4	Screw - Hex. Hd. M5 x 12
1466-20	78-8052-6713-1	Ring - Rubber
1466-21	26-1005-5316-8	Screw, Flat Hd. Hex, Dr. M5 x 16
1466-22	78-8052-6714-9	Guide - Drive Belt
1466-23	78-8055-0695-9	Spacer - Hexagonal
1466-24	78-8032-0375-7	Screw - Hex. Hd. M6 x 16 Metric
1466-26	78-8010-7417-6	Nut - Hex. Stl. M5 Metric
1466-27	78-8052-6715-6	Bracket
1466-28	78-8052-6717-2	Roller - Drive
1466-29	78-8010-7435-8	Washer - Lock M6 Metric
1466-30	78-8054-8649-1	Lower Main Plate Left
1466-31	26-1002-5820-6	Screw - Hex. Hd. M5 x 16
1446-32	78-8060-7893-3	Gear Box Assembly W/O Motor


B
54
53
52
39
55
51
Only For U.S. Manufacture

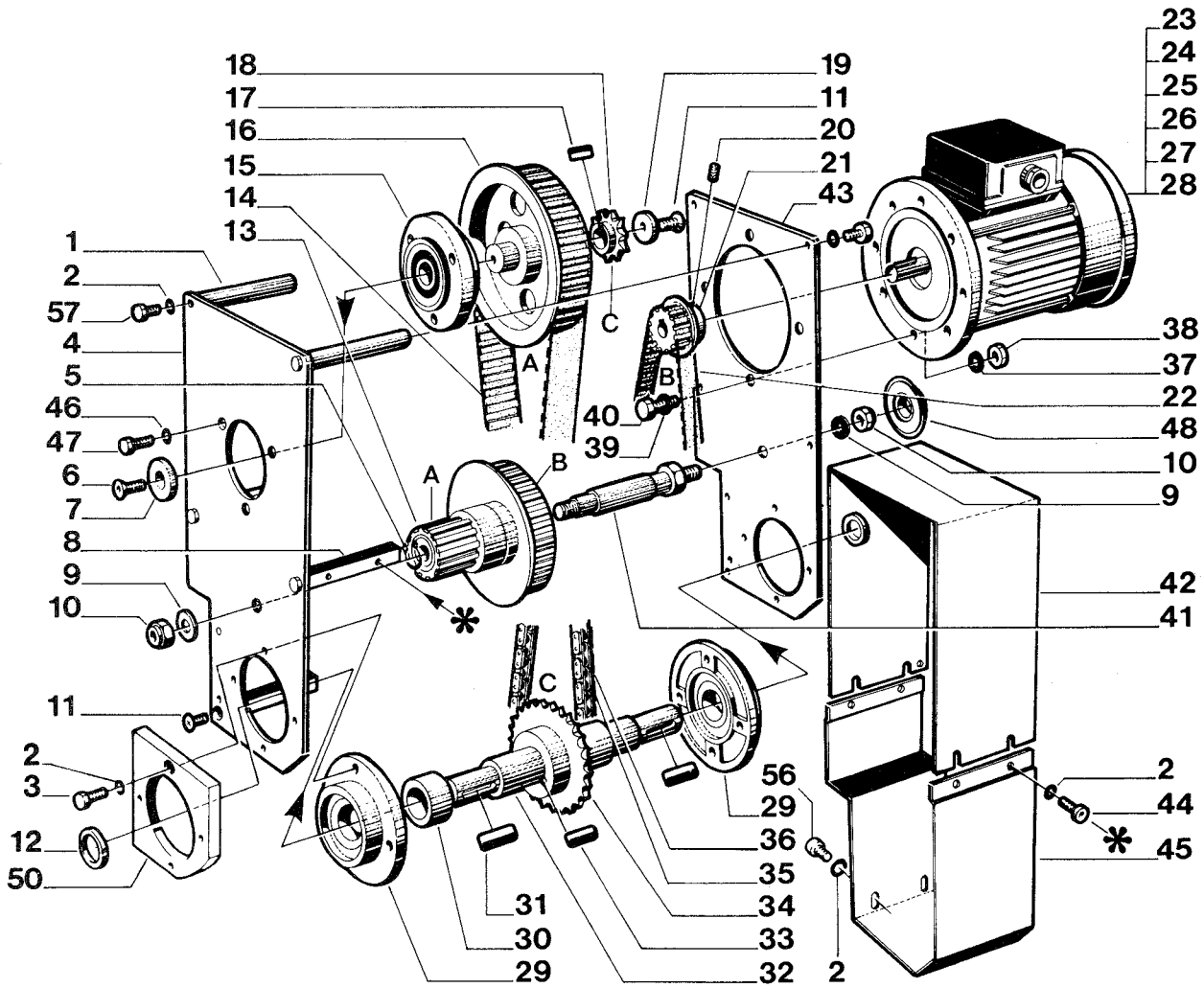

18
17
16
15
14
13
19
11
20
21
43
23
24
25
26
27
28
1
2
57
4
5
46
47
6
7
8
9
10
11
2
3
12
50
A
B
C
38
37
22
48
10
9
40
39
42
41
56
29
36
35
34
33
32
31
30
29
2
2
44
45

FIGURE 1675

Figure 1675

Ref. No.	3M Part No.	Description
1675-1	78-8054-8975-0	Spacer
1675-2	78-8005-5741-1	Washer - Metric, Plain, M5
1675-3	26-1002-5820-6	Screw - Hex. Hd. M5 x 16
1675-4	78-8054-8976-8	Frame - Left Side
1675-5	78-8016-5855-6	E-Ring 10 mm
1675-6	26-1001-9843-6	Screw - Flat Soc. Hd. M6 x 16
1675-7	78-8054-8577-4	Washer - Special
1675-8	78-8054-8977-6	Spacer
1675-9	78-8017-9318-9	Washer - Plain, Metric 8 mm
1675-10	78-8017-9313-0	Nut - Self Locking M8 Nick Pl.
1675-11	26-0001-5862-1	Screw - Fl. Hd. Soc. M5 x 12
1675-12	78-8054-8879-4	Washer - 20.5 mm
1675-13	78-8054-8978-4	Reducer - Pulley
1675-14	78-8057-5808-9	Belt - Timing 187L100
1675-15	78-8054-8979-2	Housing - Bearing
1675-16	78-8054-8980-0	Pulley Timing Belt
1675-17	78-8028-8244-5	Key - 4 x 4 x 10 mm
1675-18	78-8054-8981-8	Sprocket - 3/8 Pitch, 13 Teeth
1675-19	78-8054-8877-8	Washer - 5.5 x 20 x 4 mm
1675-20	26-1003-8816-9	Screw - Set M5 x 6
1675-21	78-8054-8982-6	Pulley - Timing 11 Teeth
1675-22	78-8057-5724-8	Timing Belt 187L050 Boran
1675-23	78-8052-6718-0	Motor - 220/380V 50 HZ 3 Phase
1675-24	78-8052-6719-8	Motor - 260/440V 50 HZ 3 Phase
1675-25	78-8052-6720-6	Motor - 240/415V 50 HZ 3 Phase
1675-26	78-8046-8268-6	Motor - 220V, 50 HZ, Single Phase
1675-27	78-8046-8270-2	Motor - 240V, 50 HZ, Single Phase
1675-28	78-8046-8267-8	Motor - 110V, 60 HZ Single Phase 3A
1675-29	78-8054-8983-4	Housing Bearing
1675-30	78-8054-8984-2	Bushing
1675-31	78-8057-5739-6	Key - M5 x 5 x 30 mm
1675-32	78-8055-0704-9	Shaft - Drive
1675-33	78-8057-5811-3	Key - 6 x 6 x 20 mm
1675-34	78-8054-8986-7	Sprocket - 3/8 Pitch, 28 Teeth
1675-35	78-8054-8987-5	Chain - 3/8 Pitch, 56 Pitch Lg.
1675-36	78-8046-8269-4	Connecting - Link 3/8 Pitch Chain
1675-37	78-8005-5736-1	Lock Washer - For M8 Screw
1675-38	26-1000-1347-8	Nut - Metric Hex Stl., M8
1675-39	26-1004-5507-5	Washer M8
1675-40	78-8017-9301-5	Screw - Hex Head M8 x 25
1675-41	78-8054-8988-3	Shaft Timing Pulley
1675-42	78-8054-8989-1	Covert, Top
1675-43	78-8054-8990-9	Frame - Right Side
1675-44	26-1003-7949-9	Screw - Soc. Hd. Hex. Soc. M5 x 12
1675-45	78-8054-8991-7	Cover - Bottom
1675-46	78-8042-2919-9	Washer - M6 Nick. Pl.
1675-47	78-8010-7193-3	Screw - Hex. Hd. Metric, M6 x 20
1675-48	78-8054-8992-5	Guard - Nut
1675-50	78-8055-0705-6	Spacer - Gear Box
1675-51	26-1003-5842-8	Screw - Hex. Hd. M8 x 20
1675-52	12-7991-1573-3	Screw - Soc. Hd. 3/8" - 16 x 1 1/4"
1675-53	78-8054-8993-3	Adapter
1675-54	26-1005-8092-2	Motor 115V, 60 Hz. U.S.
1675-55	78-8055-0672-8	Pulley For U.S. Motor
1675-56	26-1003-7948-1	Screw - Soc. Hd. Hex Soc. M5 x 10
1675-57	26-1003-5820-4	Screw - Hex Hd. M5 x 12