

Instructions and Parts List

3M-Matic™

22A

Model 28600

Adjustable Case Sealer with

AccuGlide™

Taping Heads

Model 18500

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.

"3M-Matic" and "AccuGlide" are Trademarks of 3M, St. Paul, MN 55144-1000

7004-7386-0(E59.12)R1

© 3M CO. 1989

Litho in U.S.A.

3M Packaging Systems Division

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



Service Instructions

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

Instruction Manual
22A Adjustable Case Sealer
Model 28600

Table of Content	Page
Equipment Warranty and Limited Remedy - - -	ii
Description - - - - -	1
Receiving and Handling - - - - -	2
Specifications - - - - -	2 - 4
Set-Up Procedure - - - - -	5 - 11
Conveyor Bed Height - - - - -	6
Machine Leveling - - - - -	6
Electrical Connection - - - - -	7
Tape Loading - - - - -	7 - 9
Box Size Set-Up & Operation - - - - -	10 - 11
Adjustments - - - - -	12 - 15
Tape Web Alignment - - - - -	12
Applying Mechanism Spring - - - - -	12
One-way Tension Roller Assembly - - - - -	13
Box Drive Belts - - - - -	14 - 15
Replacing Box Drive Belts - - - - -	14
Maintenance - - - - -	16 - 18
Blade Replacement - - - - -	16
Cleaning of the Machine - - - - -	17
Cut-Off Blade - - - - -	17
Electrical Schematic - - - - -	17
Circuit Breaker - - - - -	17
Lubrication - - - - -	18
Blade Oiler Pad - - - - -	18
Suggested Spare Parts - - - - -	19
How To Order Replacement Parts - - - - -	19
Repair Service - - - - -	19
Attachments - - - - -	20
Replacement Parts Illustrations & Parts Lists - - - - -	21 - 22
Taping Head Assemblies - - - - -	21
Frame Assemblies - - - - -	22

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

3M Sells its 3M-Matic™ 22A Adjustable Case Sealer, Model 28600 with the following warranties:

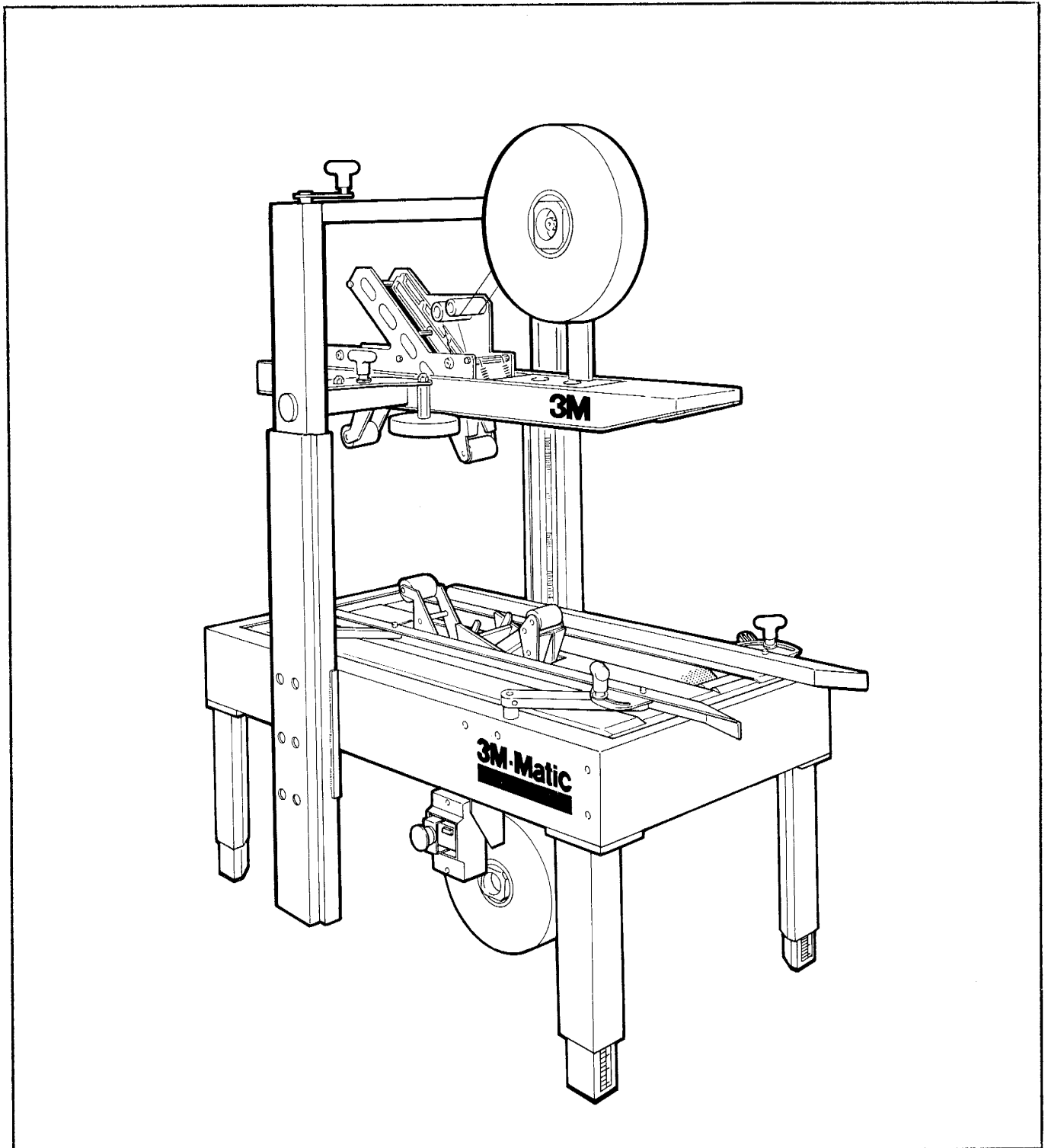
1. The Taping Head knife blades, springs and rollers will be free from all defects for ninety (90) days after delivery.
2. All other Taping Head parts will be free from all defects for three (3) years after delivery.
3. a. (for 200a, 700a, and 700r) The gearmotor will be free from all defects for one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

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



"3M-Matic" 22A Adjustable Case Sealer - Model 28600

Description

The **"3M-Matic"** 22A 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 22A 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 22A 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, 3.4A for Coel and Franklin motors.
4A for G. E. motors.

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:

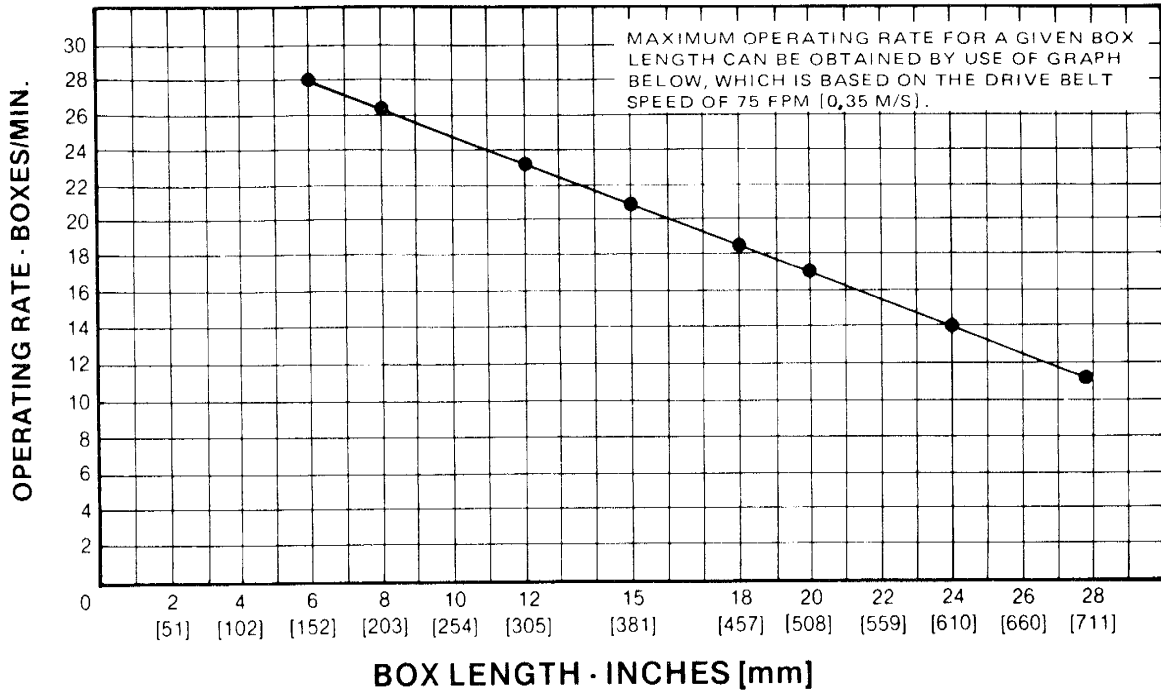
Overall Dimensions

Length	-	42 1/2 inches [1,080 m]
Width	-	27 1/2 inches [0,700 m]
Height	-	56 5/8 inches [1,440 m]
Conveyor Bed Height (without casters)	-	Adjustable from 20 1/2 inches [520 mm] to 31 1/2 inches [800 mm]
Weight	-	300 pounds [137 kg] crated 240 pounds [110 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:

1 1/2 inches or 36 mm minimum to 2 inches [50 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 of "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, 85 lbs. [37 kg] maximum

B. Box size:	Minimum	Maximum
Length -	6.0 inches or 150 mm	unlimited
Width -	6.0 inches or 150 mm *	20 inches or 500 mm
Height -	4.75 inches or 120 mm	20 inches or 500 mm

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

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

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

DETERMINE THE BOX LIMITATIONS BY COMPLETING THIS FORMULA:

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

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

Set-Up Procedure

It is **recommended** that the 22A 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 22A before subjecting it and operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

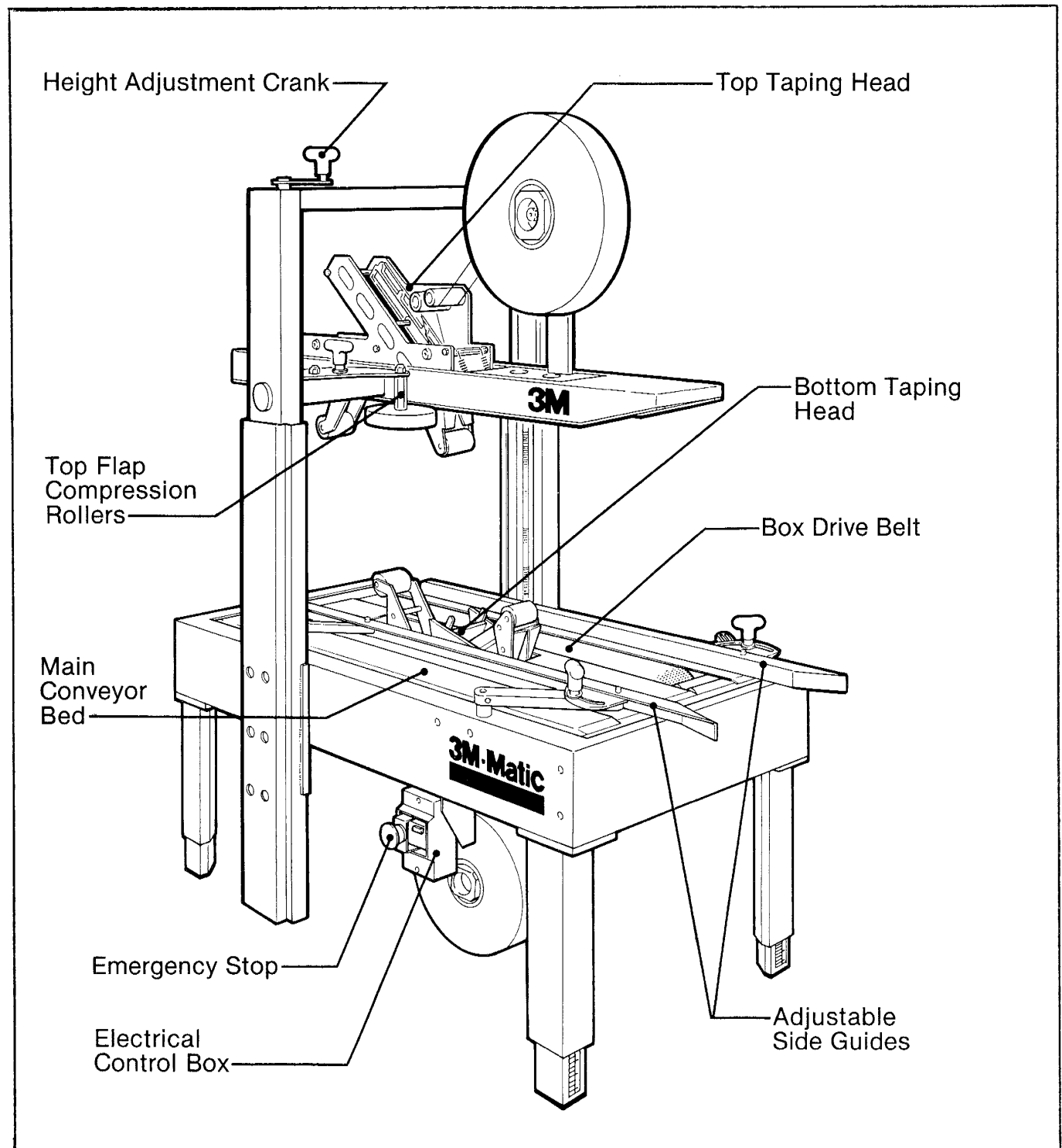


Figure 1 - Set-Up Instructions - Case Sealer Components - Left Front View

Set-Up Procedure (Continued)

The following instructions are presented in **the order recommended** for setting up and installing the 22A 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 22A Case Sealer.

Conveyor Bed Height:

The 22A 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.

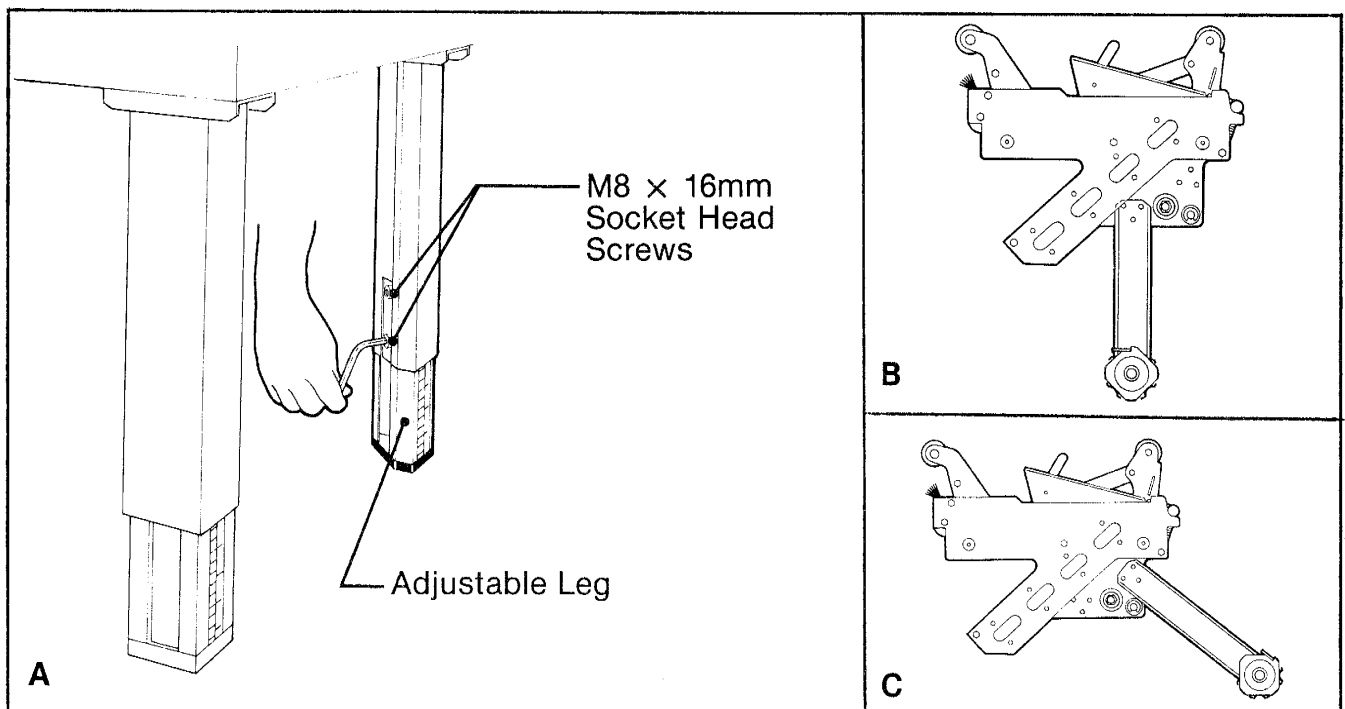


Figure 2 - Conveyor Bed Height Adjustment and Tape Drum Bracket Position

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 220/240 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 FIGURE 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 120° F [49° 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 1-1/2 inch or 36 mm or 1-3/4 inch or 42 mm wide tapes, 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.

Set-Up Procedure (Continued)

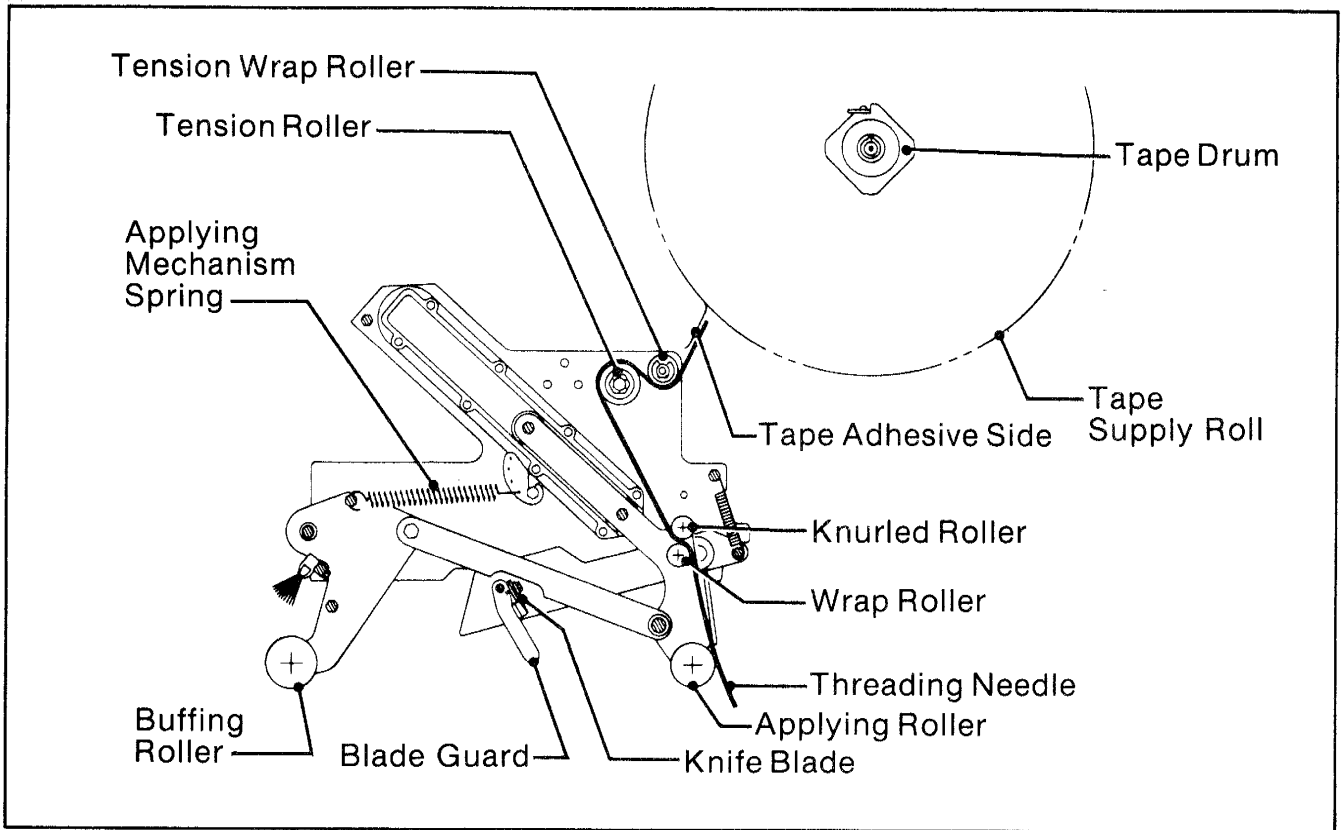


Figure 3 - Tape Threading Diagram - Top Taping Head - Left Side View

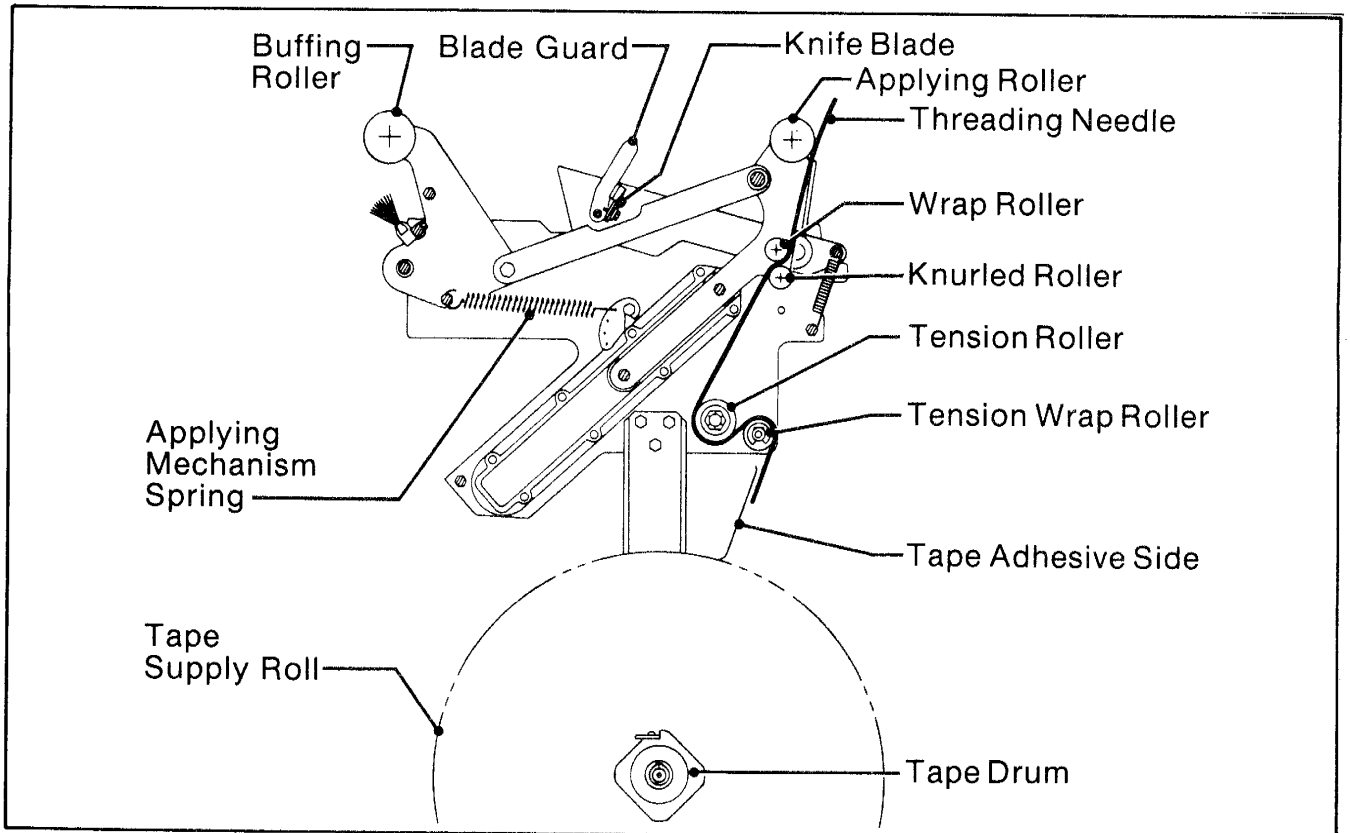


Figure 3A - Tape Threading Diagram - Bottom Taping Head - Left Side View

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.

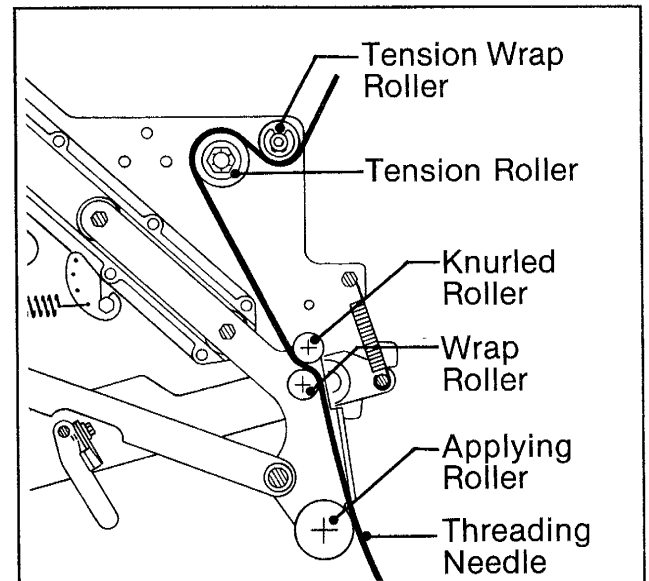


Figure 3B

Figure 3B

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

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.

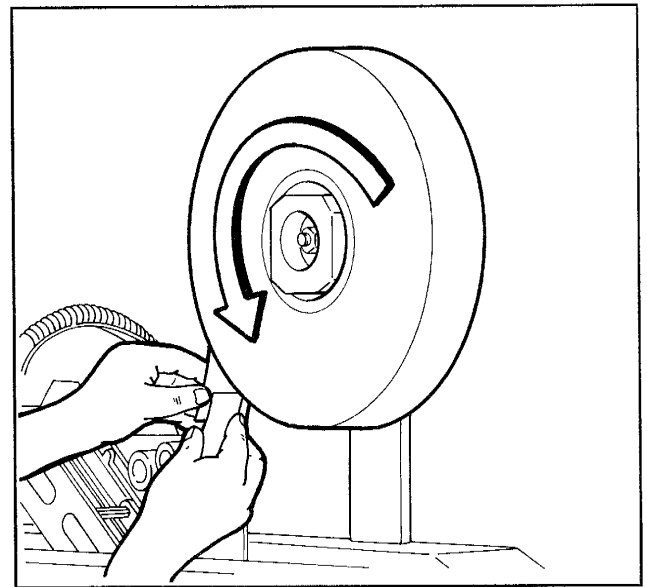


Figure 3C

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.

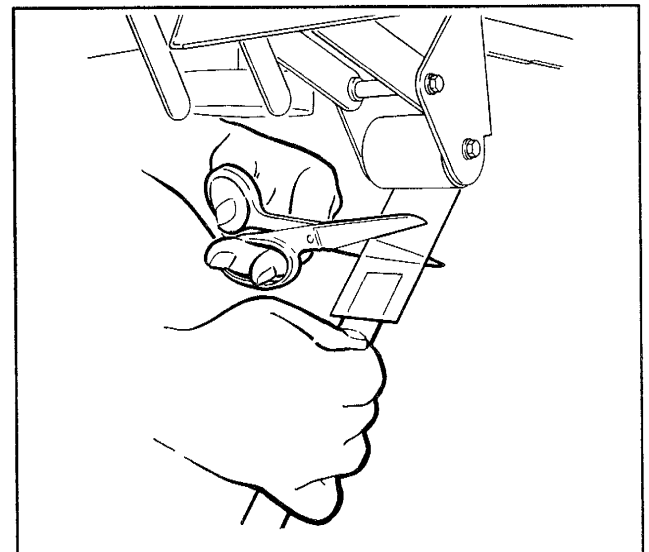


Figure 3D

Set-Up Procedure (Continued)

Box Size Set-Up and Operation

Figure 4

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.

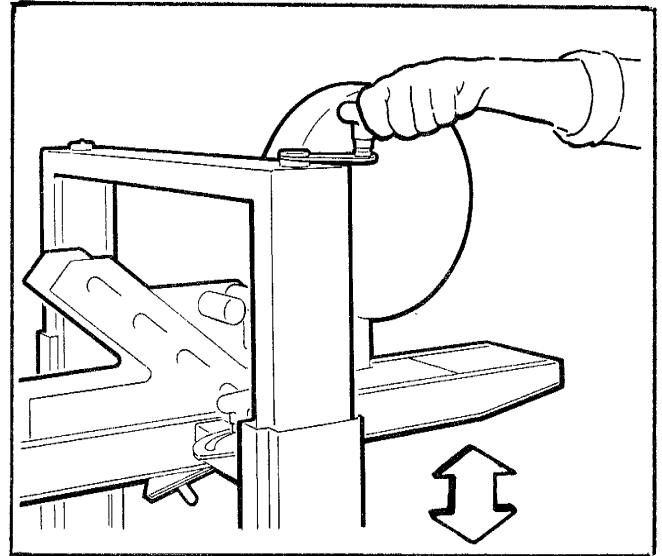


Figure 4

Figure 5

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 arrows on front of skis.

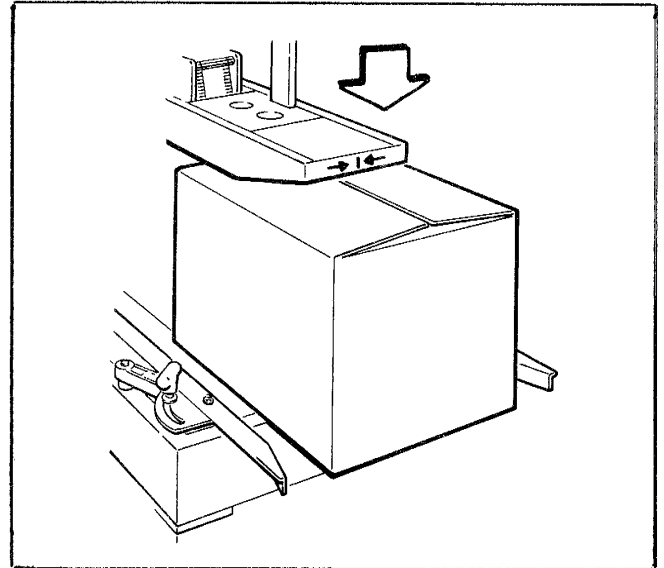


Figure 5

Figure 6

Move side guides against each side of box to hold box in position, centered on arrows on front of ski. Tighten hand knobs to secure side guides.

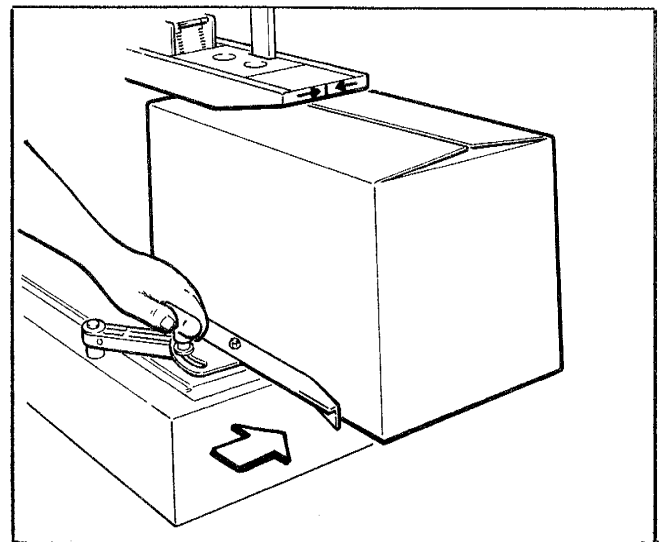


Figure 6

Set-Up Procedure (Continued)

Figure 7

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.

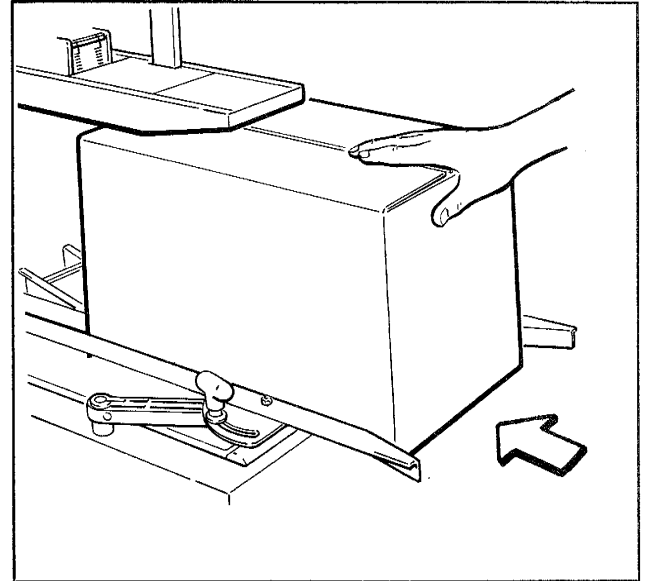


Figure 7

Figure 8

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

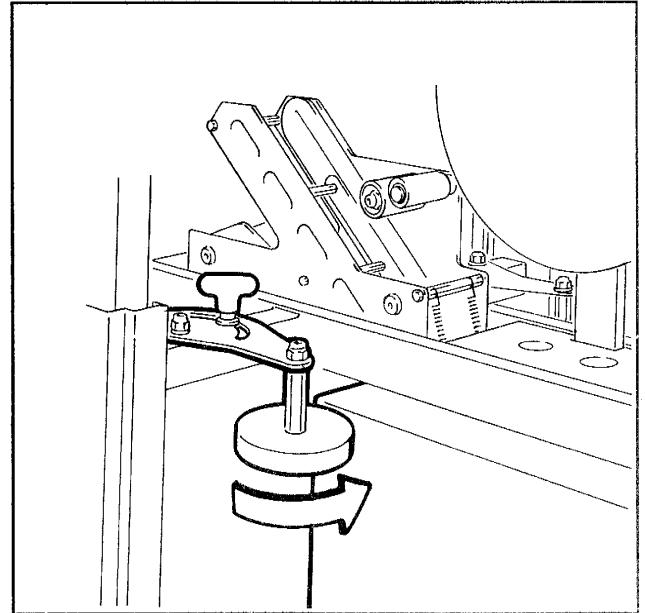


Figure 8

Adjustments

Tape Web Alignment-

Refer to Figure 9

The tape drum assembly on each taping head is pre-set to accommodate 2 inch [50 mm] wide tape, but is adjustable to provide alignment of narrower tapes. If adjustment is necessary to center the tape width on the centerline of the taping head, (and therefore box center seam), make adjustment as follows:

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

No other components require adjustment for tape web alignment.

Applying Mechanism Spring

The applying mechanism spring, shown in Figure 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 10, 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 11, will decrease the spring pressure.

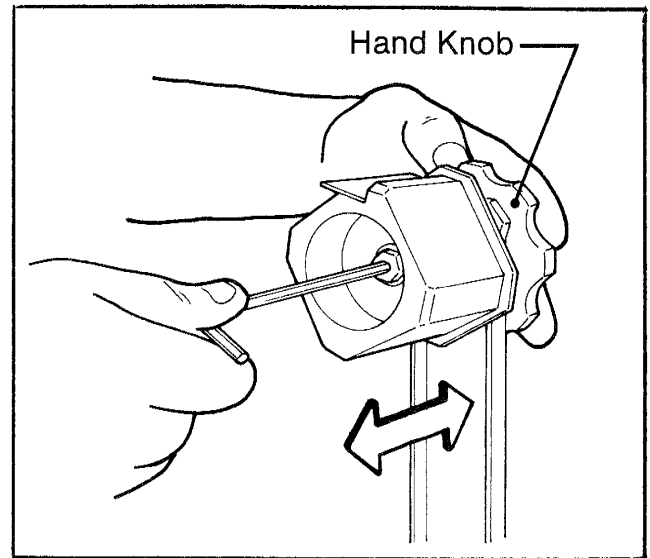


Figure 9

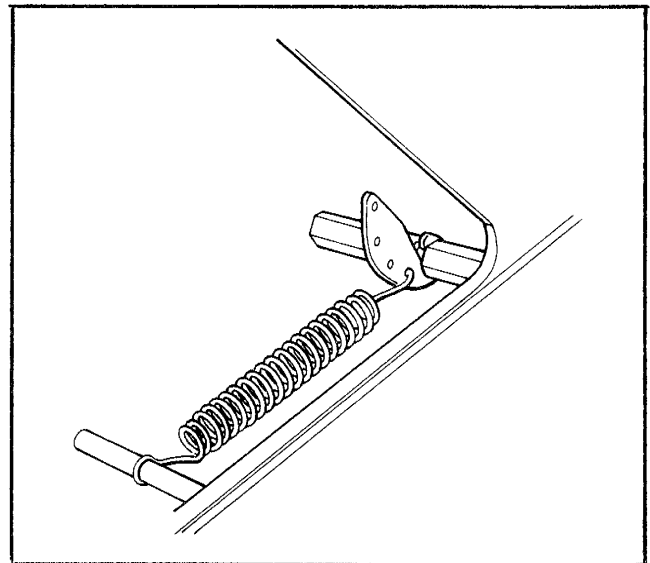


Figure 10

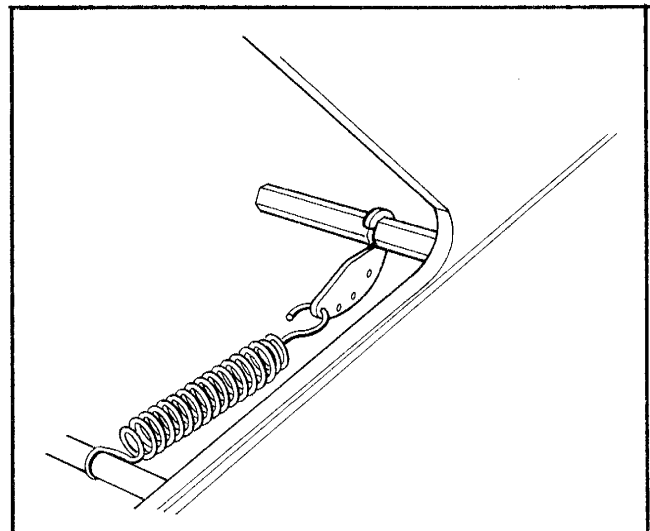


Figure 11

Adjustments (Continued)

One Way Tension Roller Assembly Figure 12

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.

To Set Tension:

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

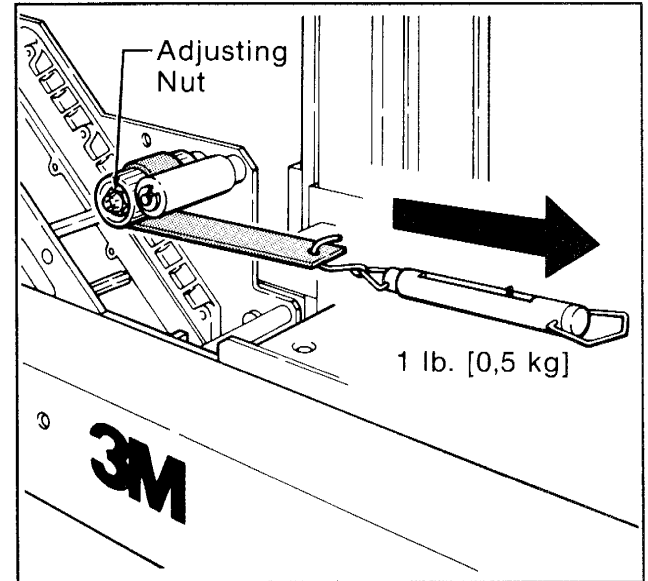


Figure 12

Adjustments (Continued)

Box Drive Belts

The two continuously moving box drive belts convey boxes through the tape applying mechanism. The box drive belts are powered by the electric motor through the timing belt/pulley 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

Refer to Figure 13

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 14, 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 15

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.

Replacing Box Drive Belts

DO NOT REMOVE BOTTOM TAPING HEAD.

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

Adjustments (Continued)

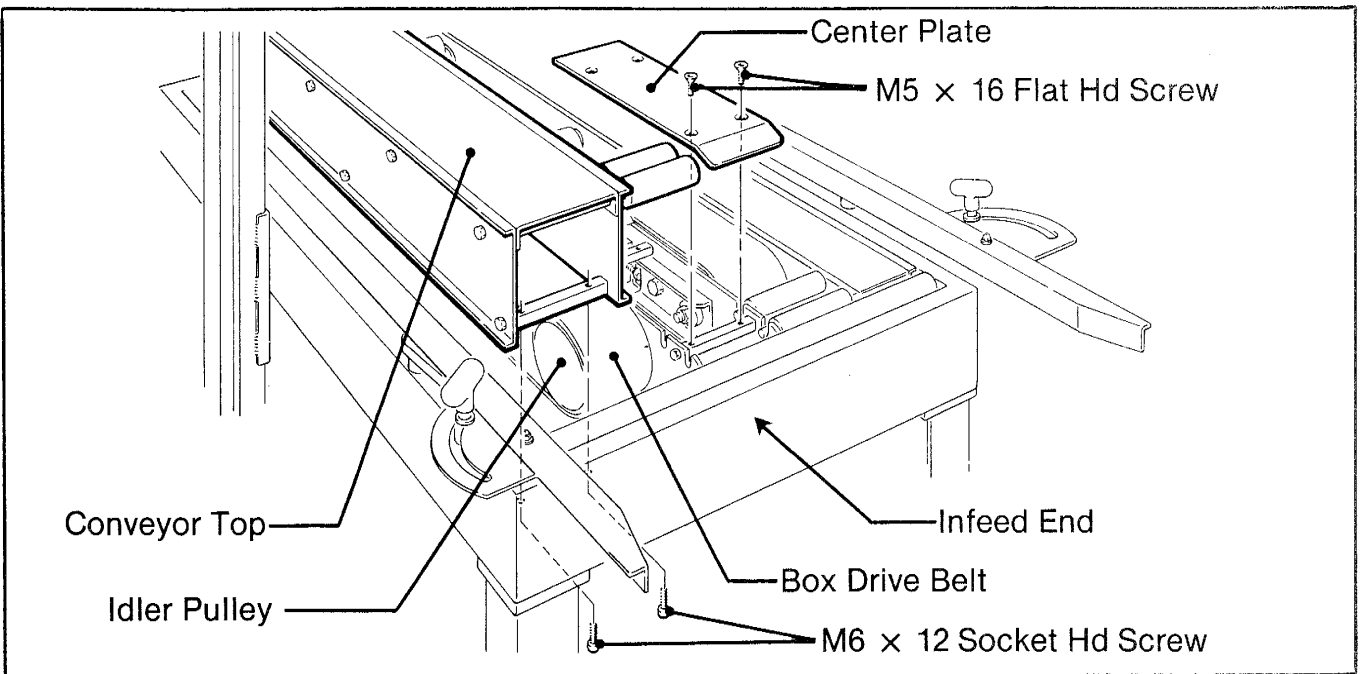


Figure 13 - Box Drive Belt Adjustment - Frame Bed Infeed End

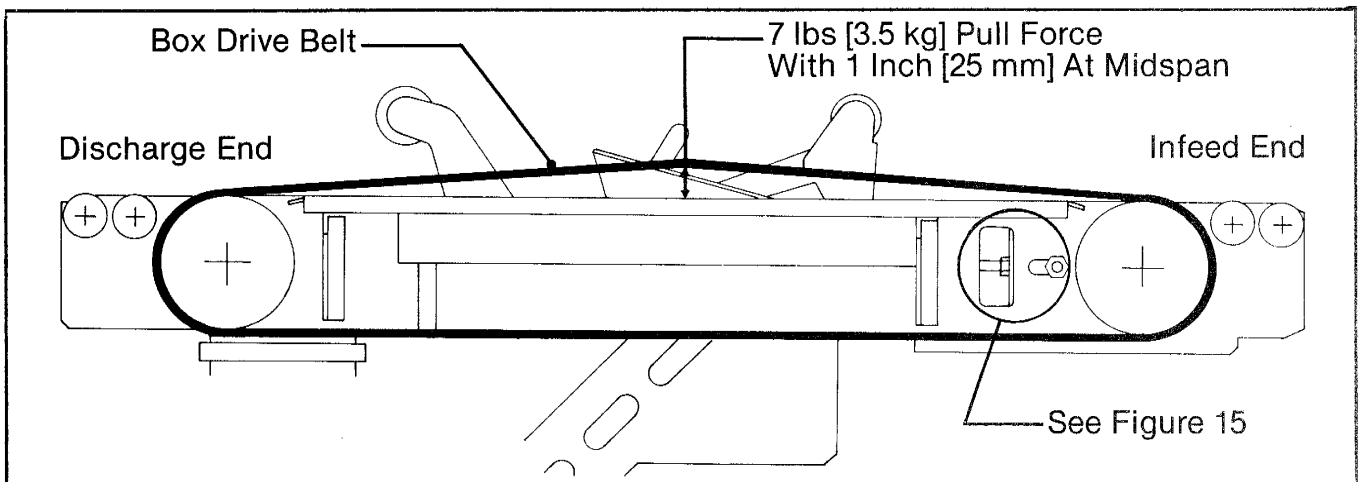


Figure 14 - Box Drive Belt Tension Adjustment - Left Side View

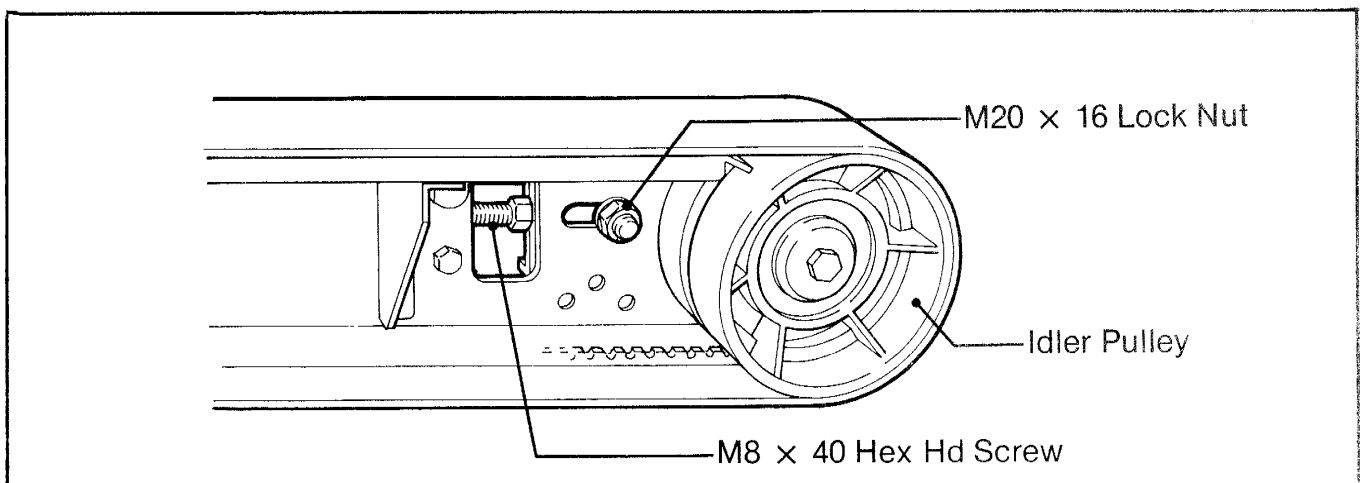


Figure 15 - Tension Adjustment - Left Side View

Maintenance

The 22A 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.

Tool Kit

Since the case sealer utilizes metric fasteners, a tool kit consisting of open end and hex socket wrenches is provided with the machine.

! 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 Figure 16

1. Loosen, but do not remove, the blade screws (A). Remove and discard the old blade.
2. Mount the new blade (B) with the **beveled side toward the blade holder**.
3. Position the blade at an angle so all the teeth are as close as possible to the blade guard without contacting it. **Tighten** the blade screws to secure the blade.

NOTE - check the blade position to insure proper clearance by **slowly pivoting** the blade guard back.

The same steps are followed on the top and bottom taping heads. Connect the main power supply.

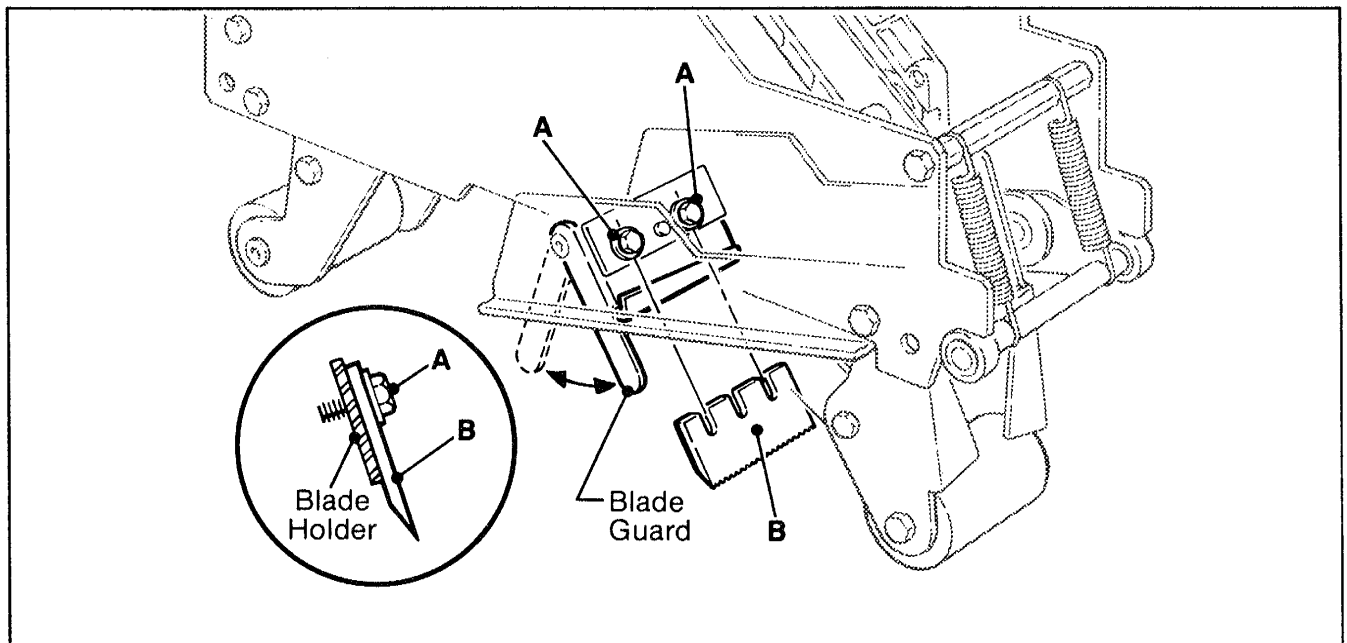


Figure 16 - Blade Replacement

Maintenance (Continued)

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 22A 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 17 illustrates the electrical system of the 22A Case Sealer. No adjustments to the electrical systems are required.

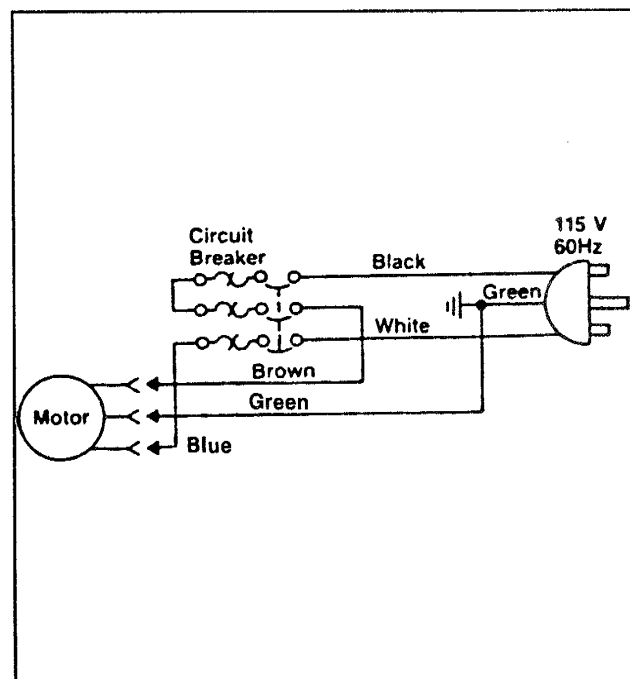


Figure 17

Circuit Breaker

The 22A 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.

Maintenance (Continued)

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 18 and 19 illustrate the taping head and frame points which should be lubricated every 250 hours of operation. The oil bottle 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. Saturate oiler pad.

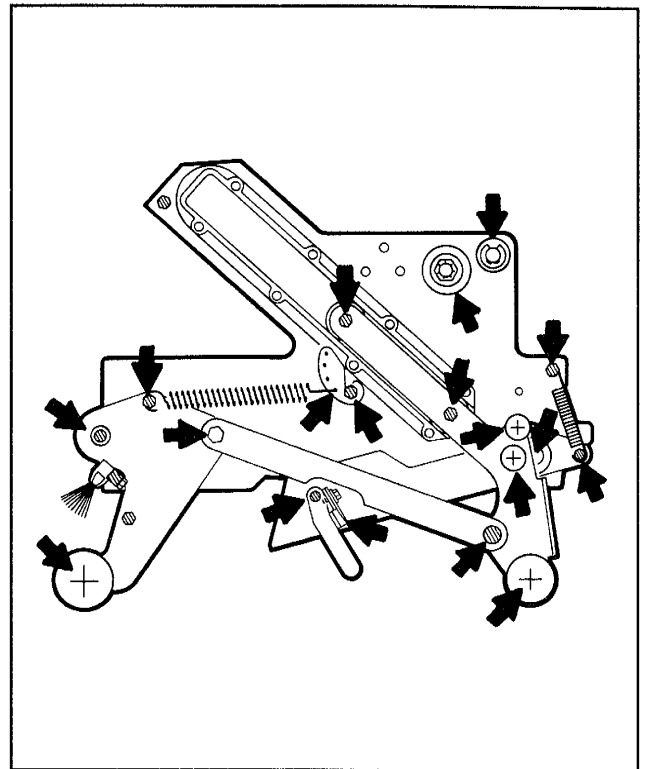


Figure 18 - Lubrication Points - Top And Bottom Taping Heads

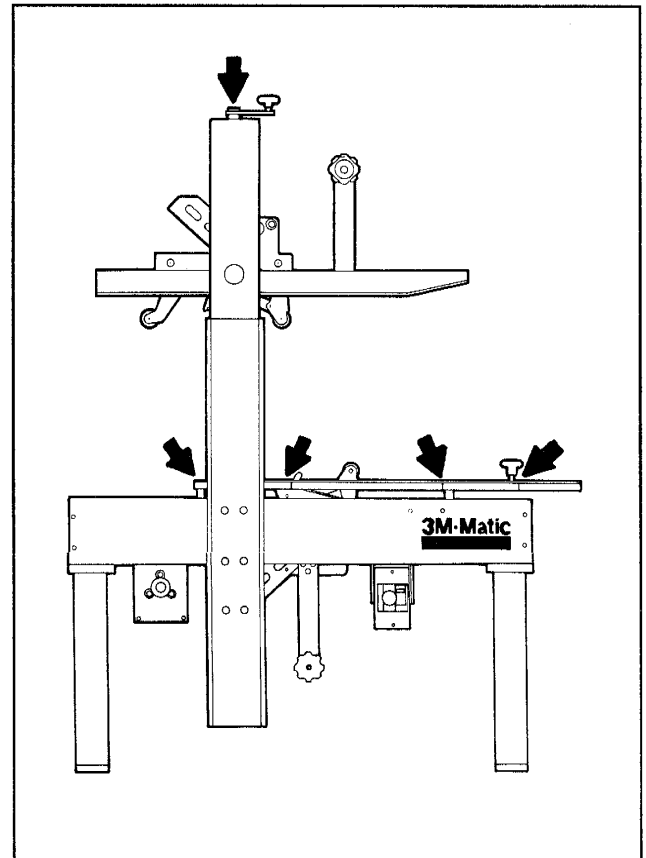


Figure 19 - Lubrication Points - Frame

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
1	1145-6	78-8057-6179-4	Roller - Applying
1	1146-5	78-8057-6178-6	Roller - Buffing
1	1146-10	78-8052-6589-5	Spring - Extension Top
2	1148-2	78-8017-9173-8	Blade - 2.56 inch/65 mm
2	1148-10	78-8052-6602-6	Spring - Cutter
1	1198-11	78-8054-8550-1	Spring - Extension Bottom
2	1310-3	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 open end and hex socket wrenches for use with the metric fasteners on the case sealer. 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.

<p>Minimum billing on parts orders will be \$10.00. Replacement part prices available on request.</p>

2. Replacement parts and part prices available direct from:

Dispenser Parts
Route 4, Box 5B
Amery, WI 54001

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 repair service information.

Attachments

For additional information on the attachments listed below contact your 3M Representative.

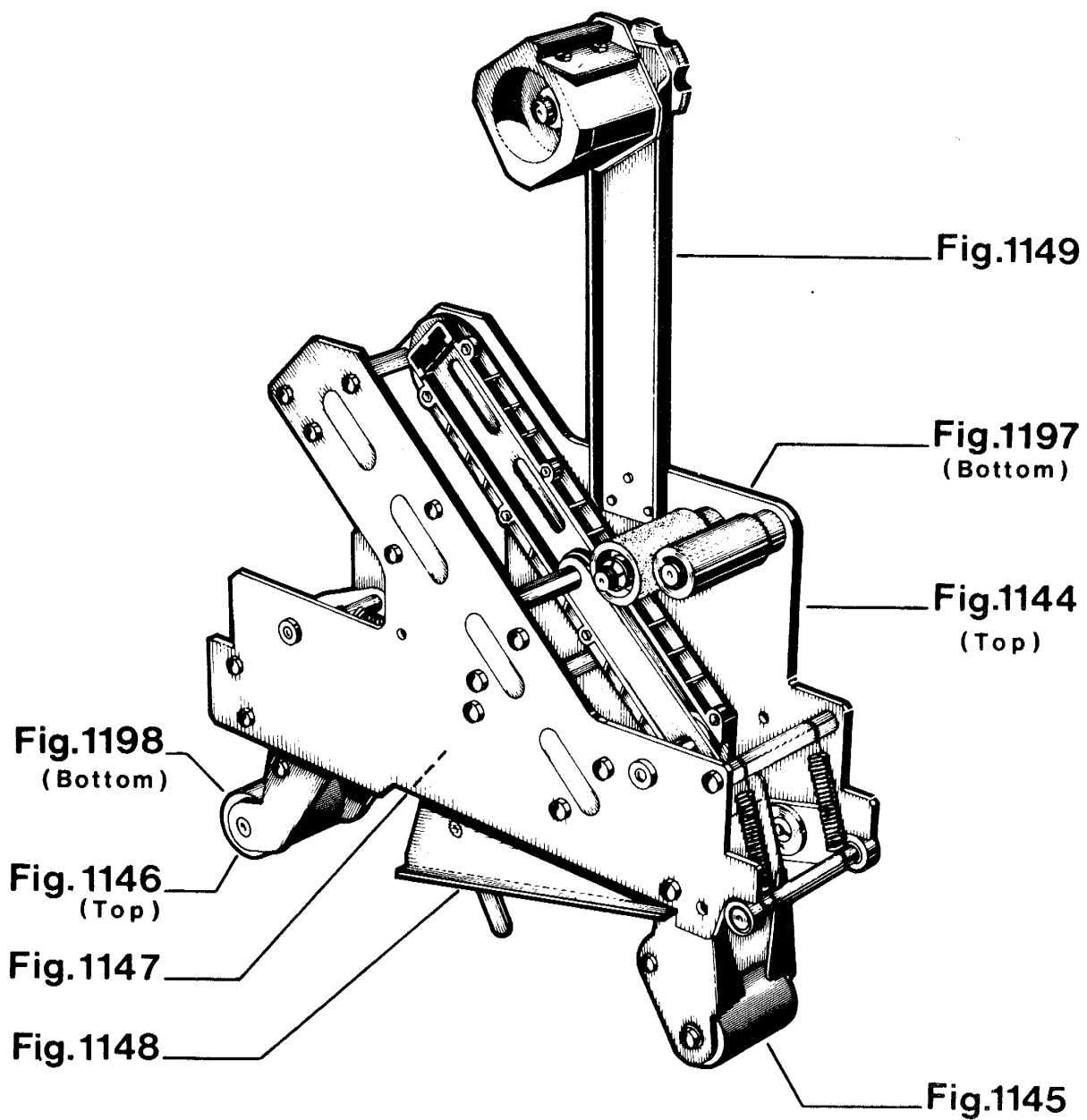
Part Number	Attachment Name
78-8052-6553-1	Box Hold Down Attachment, Model 18500
78-8052-6554-9	Caster Kit Attachment, Model 18500
78-8052-6555-6	Conveyor Extension Attachment, Model 18500

22A Case Sealer, Model 28600
Replacement Parts Illustrations and Parts Lists
Taping Head Assemblies

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 19 - "**Replacement Parts and Service Information**" of this manual for replacement parts ordering information.



Taping Head Assemblies

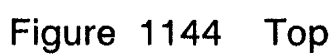


Figure 1144

Ref. No.	3M Part No.	Description
1144-1	78-8052-6556-4	Frame - Right Hand Top
1144-2	78-8052-6557-2	Frame - Left Hand Top
1144-3	78-8052-6558-0	Spacer - Spring Hook
1144-4	78-8052-6559-8	Spacer - Upper
1144-5	78-8052-6560-6	Spacer - Front
1144-10	78-8052-6564-8	Shaft - Tension Roller
1144-11	78-8052-6565-5	Roller - Top Tension
1144-12	78-8052-6566-3	Washer - Friction
1144-13	78-8017-9077-1	Nut - Hex M10 x 1
1144-14	78-8052-6567-1	Spring - Compression
1144-15	78-8052-6568-9	Shaft - Wrap Roller
1144-16	78-8052-6569-7	Roller - Wrap
1144-17	26-1000-1613-3	Ring - Retaining, No. 10
1144-18	26-1003-5828-7	Screw - Hex Hd. M6 x 10 Zinc Pl.
1144-19	78-8052-6570-5	Guide
1144-20	83-0002-7336-3	Screw - Hex Hd. M4 x 14 Zinc Pl.
1144-21	78-8010-7416-8	Nut - Hex M4 Zinc Pl.
1144-23	26-1000-0010-3	Washer - Flat M6
1144-24	78-8060-7936-0	Brush Assembly

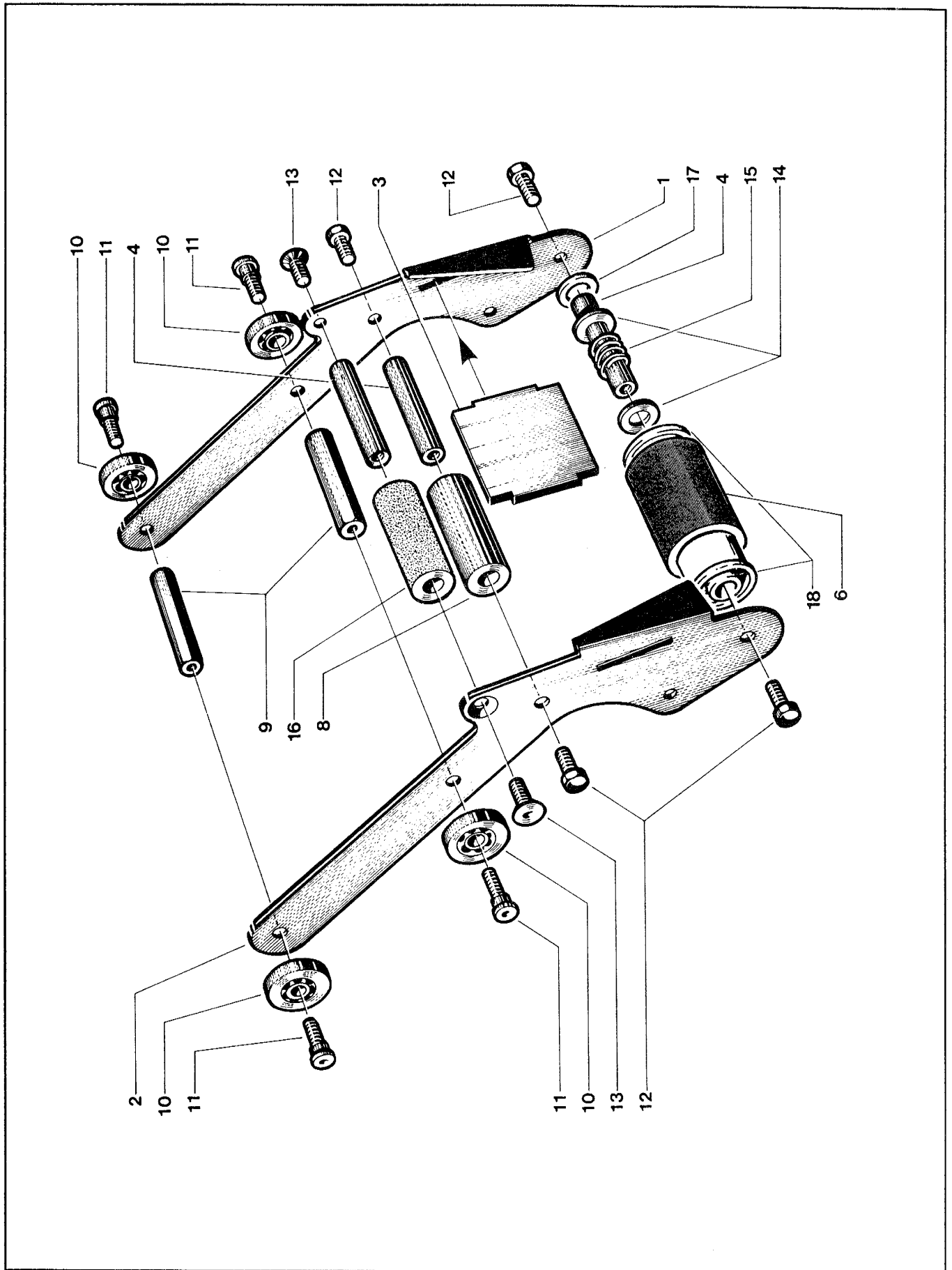


Figure 1145

Figure 1145

Ref. No.	3M Part No.	Description
1145-1	78-8052-6572-1	Frame - Applying Right Hand
1145-2	78-8052-6573-9	Frame - Applying Left Hand
1145-3	78-8052-6574-7	Plate - Back Up
1145-4	78-8052-6575-4	Shaft - Roller
1145-6	78-8057-6179-4	Roller - Applying
1145-8	78-8052-6579-6	Roller - Wrap
1145-9	78-8052-6580-4	Spacer
1145-10	78-8017-9082-1	Bearing - Special 30 mm
1145-11	78-8017-9106-8	Screw - Bearing Shoulder
1145-12	26-1003-5828-7	Screw - Hex Hd. M6 x 10 Zinc Pl.
1145-13	26-1005-4759-0	Screw - Flat Hd M6 x 12 Zinc Pl.
1145-14	78-8052-6566-3	Washer - Friction
1145-15	78-8052-6567-1	Spring - Compression
1145-16	78-8060-7942-8	Roller - Knurled
1145-17	78-8017-9074-8	Washer - Nylon 15 mm
1145-18	78-8060-8395-8	Bushing - Applying Roller

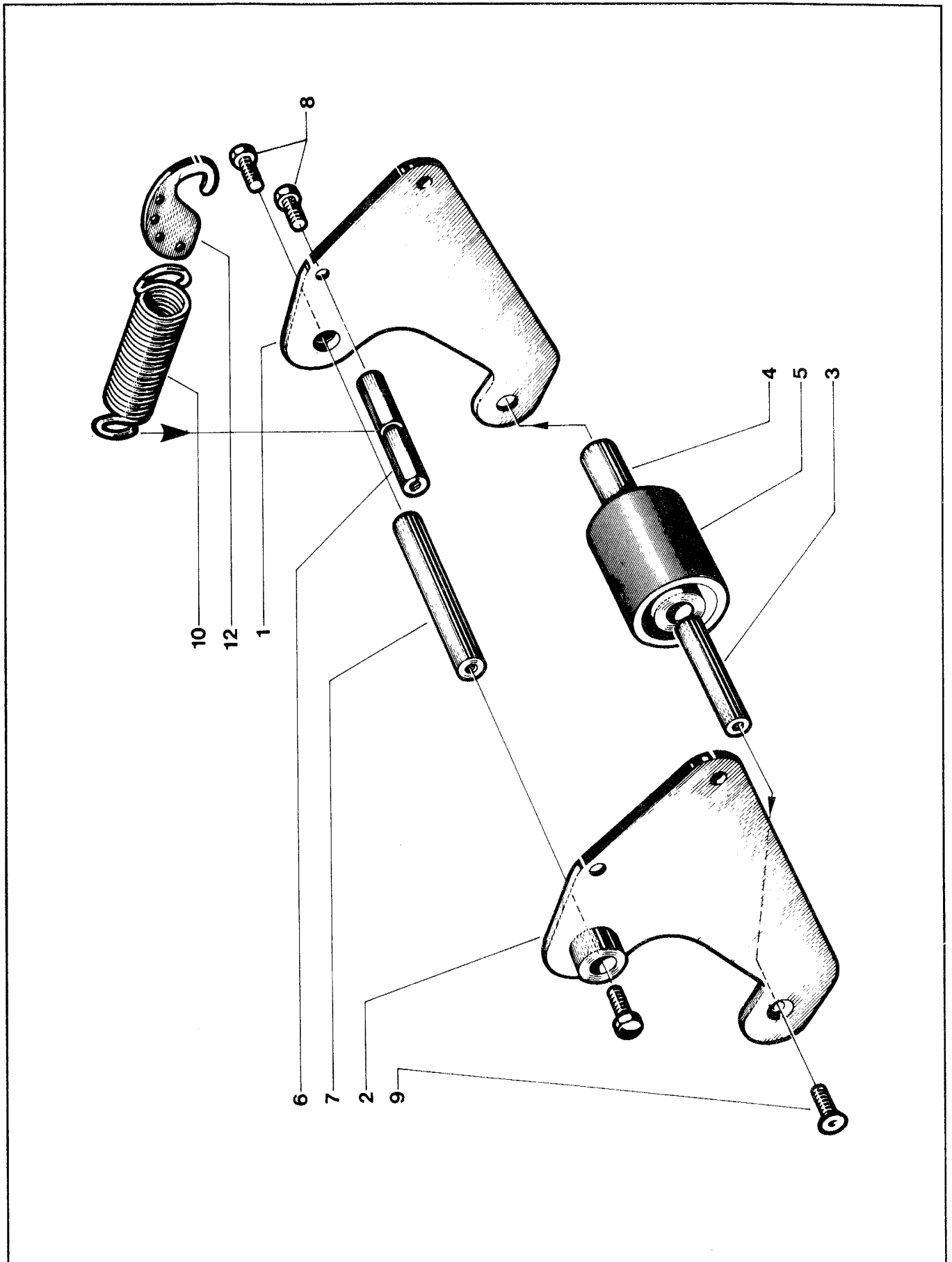


Figure 1146

Figure 1146

Ref. No.	3M Part No.	Description
1146-1	78-8052-6583-8	Frame - Right Hand
1146-2	78-8052-6584-6	Frame - Left Hand
1146-3	78-8052-6575-4	Shaft - Buffing Roller
1146-4	78-8052-6586-1	Bushing - Buffing Roller
1146-5	78-8057-6178-6	Roller - Buffing
1146-6	78-8052-6587-9	Spacer - Spring
1146-7	78-8017-9109-2	Shaft - Buffing Assy.
1146-8	26-1003-5828-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1146-9	26-1005-4759-0	Screw - Flat Hd M6 x 12
1146-10	78-8052-6589-5	Spring - Top Extension
1146-12	78-8052-6590-3	Holder - Spring

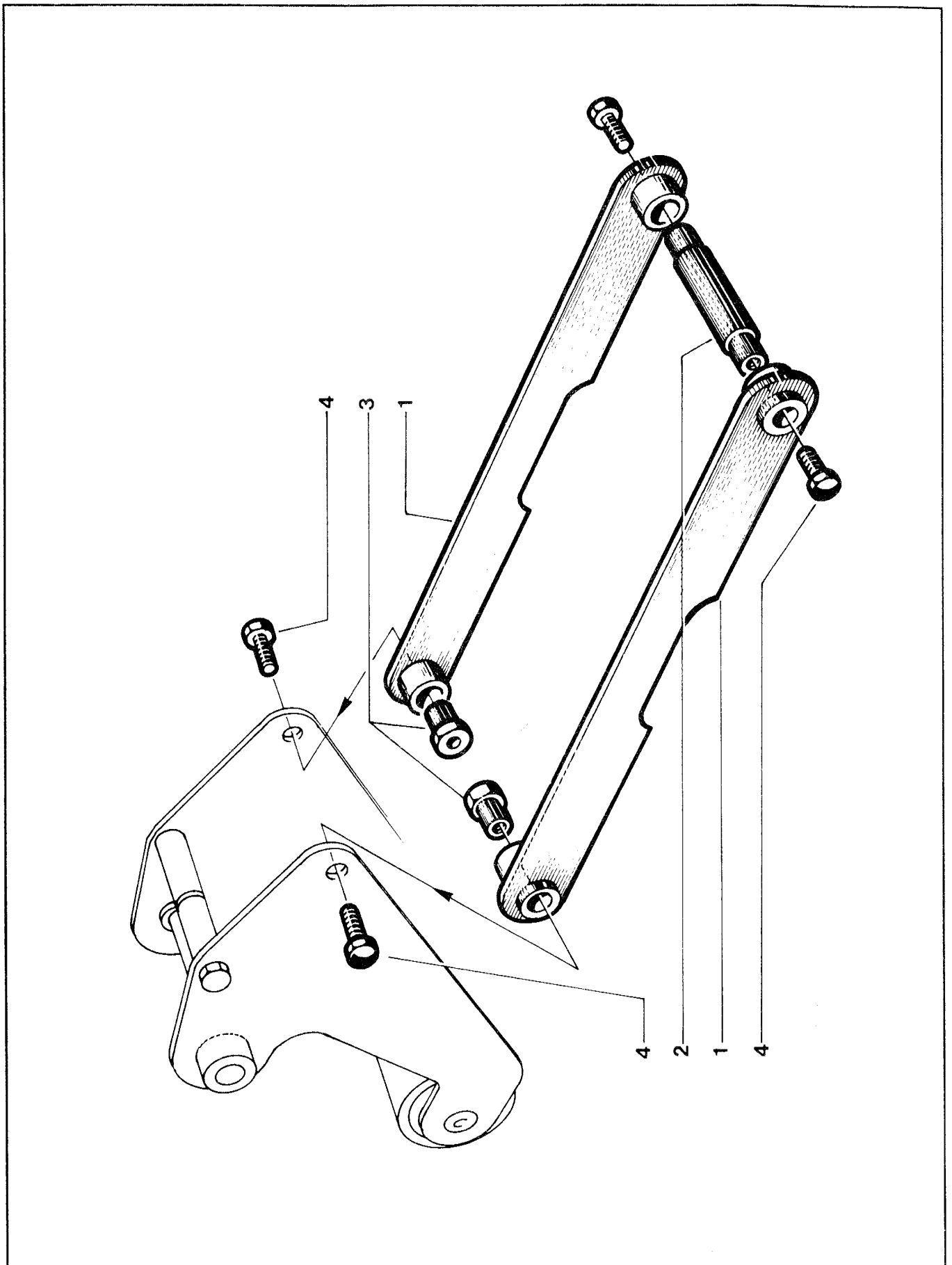


Figure 1147

Figure 1147

Ref. No.	3M Part No.	Description
1147-1	78-8052-6592-9	Arm - Link
1147-2	78-8052-6593-7	Shaft - Pivot
1147-3	78-8052-6594-5	Bushing - Pivot
1147-4	78-8010-7163-6	Screw - Hex Hd M5 x 10 Zinc Pl.

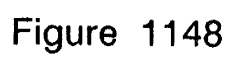


Figure 1148

Ref. No.	3M Part No.	Description
1148-1	78-8060-8167-1	Bracket - Cut-off
1148-2	78-8017-9173-8	Blade - 2.56 inch/65 mm
1148-3	78-8052-6596-0	Guard - Blade
1148-4	78-8052-6597-8	Shaft - Blade Guard
1148-5	78-8052-6598-6	Spring - Tension
1148-6	78-8017-9135-7	Shaft - Spacer
1148-7	78-8052-6600-0	Spacer
1148-8	78-8017-9133-2	Bumper
1148-9	78-8017-9132-4	Pivot - Cutter Lever
1148-10	78-8052-6602-6	Spring - Cutter
1148-11	26-1002-5829-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1148-12	26-1005-4757-4	Screw - Flat Hd M5 x 20 Zinc Pl.
1148-15	26-1005-4758-2	Screw - Flat Hd M4 x 10 Zinc Pl.
1148-16	26-1002-5817-2	Screw - Hex Hd M5 x 8 Zinc Pl.
1148-17	78-8005-5741-1	Washer - Plain M5 Metric

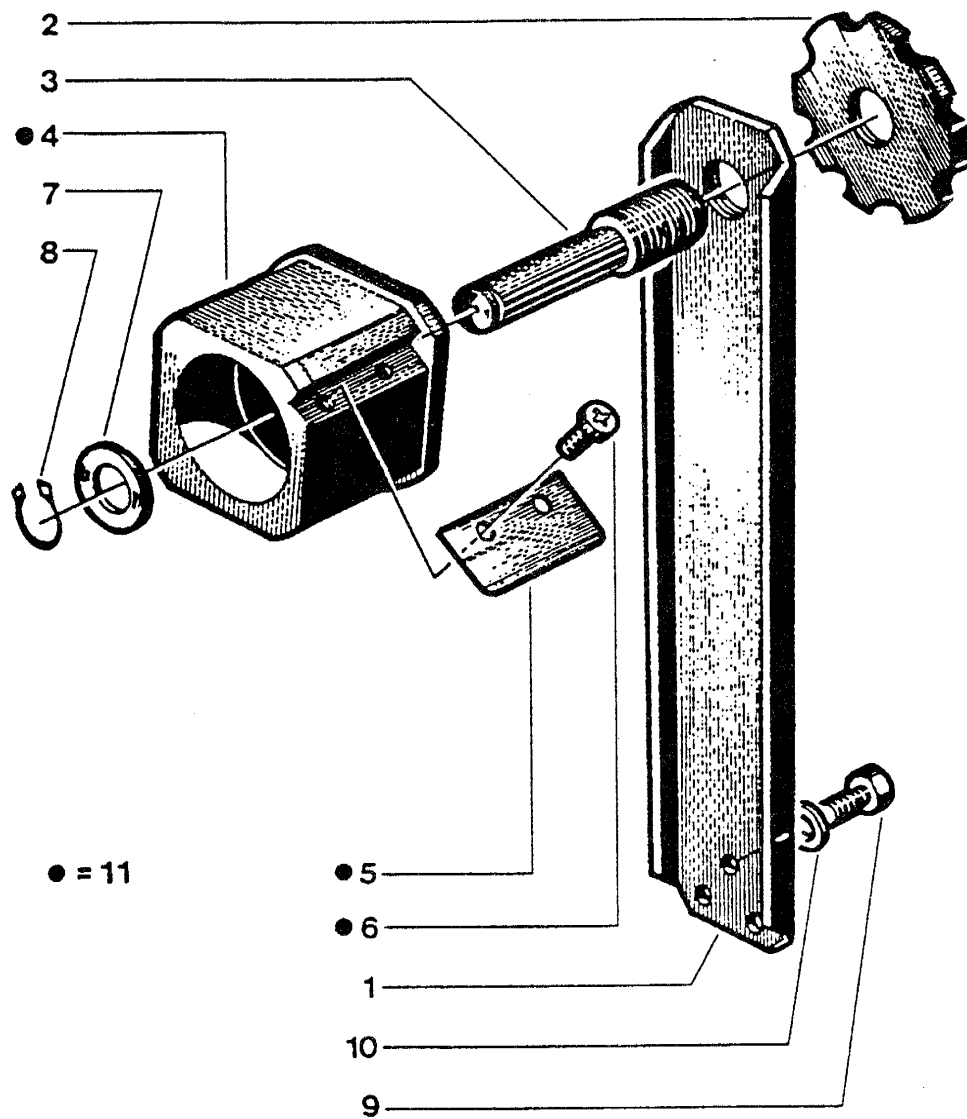


Figure 1149

Figure 1149

Ref. No.	3M Part No.	Description
1149-1	78-8052-6544-0	Bracket - Tape Drum
1149-2	78-8017-9091-2	Plate - Locking, Tape Drum Shaft
1149-3	78-8052-6603-4	Shaft - Tape Drum
1149-4	78-8052-6749-5	Drum - Tape
1149-5	78-8052-6268-6	Leaf - Spring
1149-6	26-1002-5753-9	Screw - Self Tapping 7SP x 8
1149-7	78-8052-6541-6	Washer - Special
1149-8	26-1002-6110-1	Ring - Retaining No. 14
1149-9	26-1003-5828-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1149-10	26-1000-0010-3	Washer - Flat M6
1149-11	78-8070-1569-4	Tape Drum Assembly 2 Inch Wide

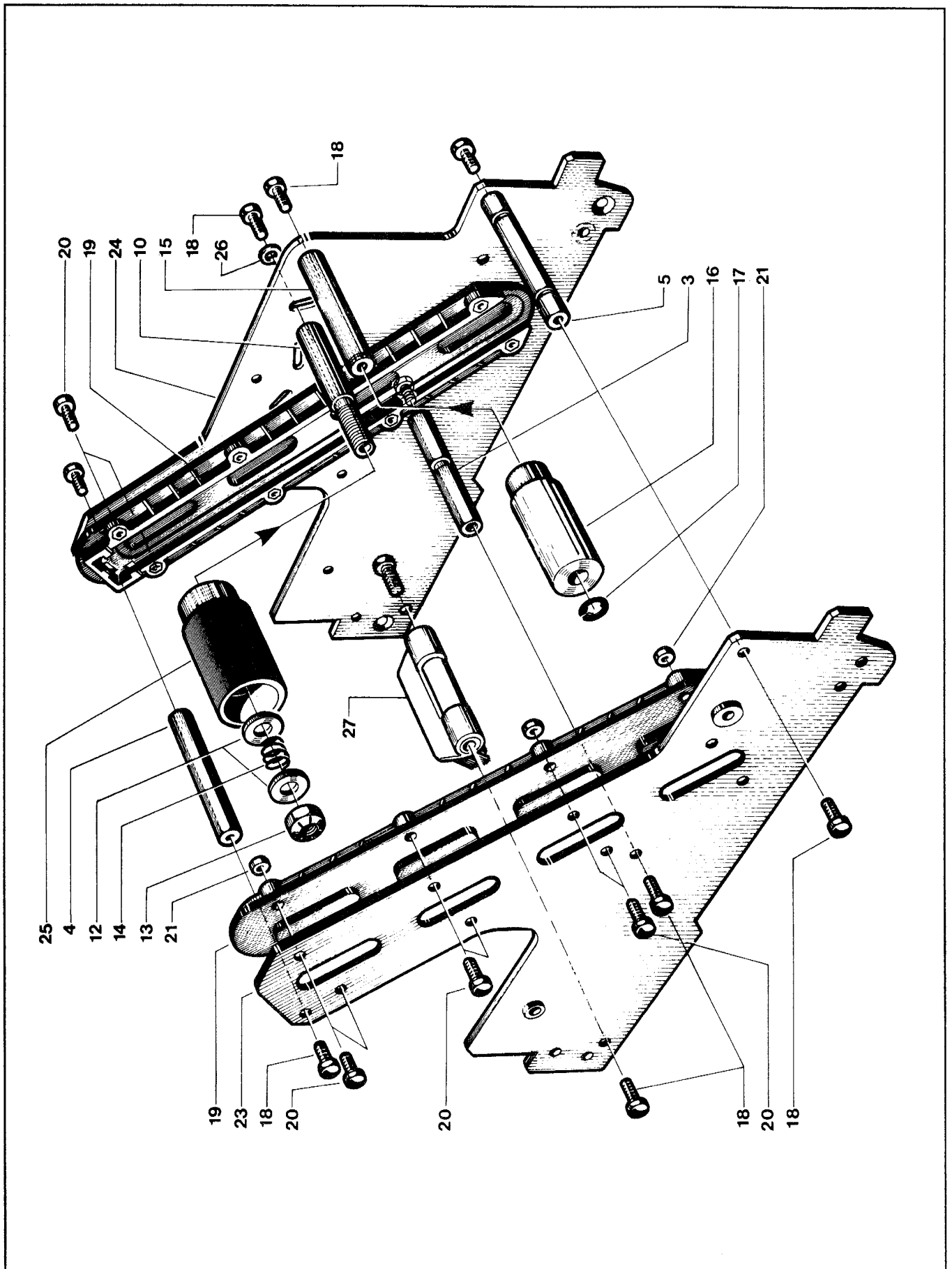


Figure 1197 Bottom

Figure 1197

Ref. No.	3M Part No.	Description
1197-3	78-8052-6558-0	Spacer - Spring Hook
1197-4	78-8052-6559-8	Spacer - Upper
1197-5	78-8052-6560-6	Spacer - Front
1197-10	78-8052-6564-8	Shaft - Tension Roller
1197-12	78-8052-6566-3	Washer - Friction
1197-13	78-8017-9077-1	Nut - Hex
1197-14	78-8052-6567-1	Spring - Compression
1197-15	78-8052-6568-9	Shaft - Wrap Roller
1197-16	78-8052-6569-7	Roller Wrap
1197-17	26-1000-1613-3	Ring - Retaining
1197-18	26-1003-5828-7	Screw - Hex Hd M6 x 10 Zinc Pl.
1197-19	78-8052-6570-5	Guide
1197-20	83-0002-7336-3	Screw - Hex Hd M4 x 14 Zinc. Pl.
1197-21	78-8010-7416-8	Nut - Hex M4 Zinc Pl.
1197-23	78-8052-6604-2	Frame - Left Hand Bottom
1197-24	78-8052-6605-9	Frame - Right Hand Bottom
1197-25	78-8052-6606-7	Roller - Tension Bottom
1197-26	26-1000-0010-3	Washer - Flat M6
1197-27	78-8060-7936-0	Brush Assembly

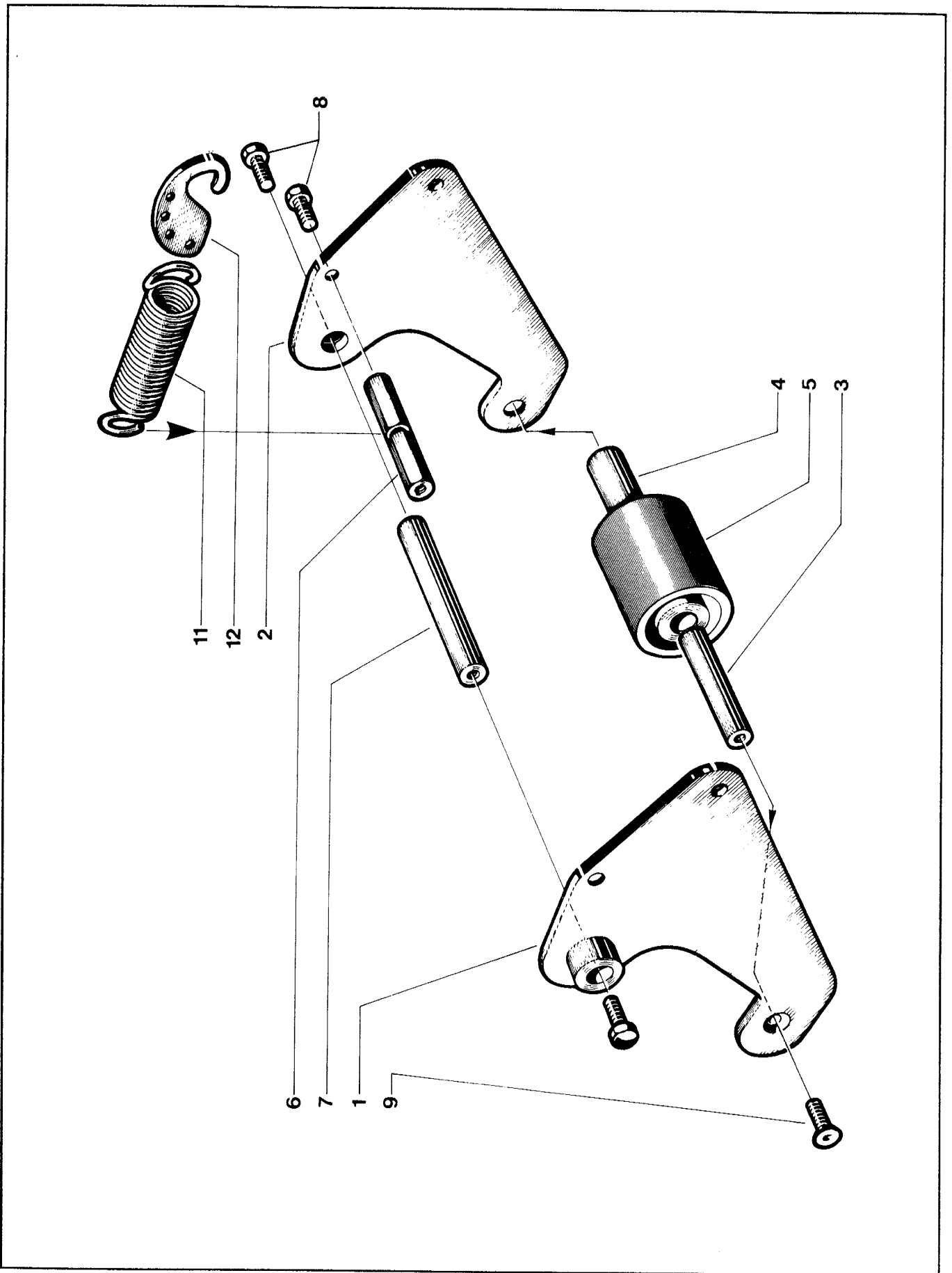


Figure 1198

Figure 1198

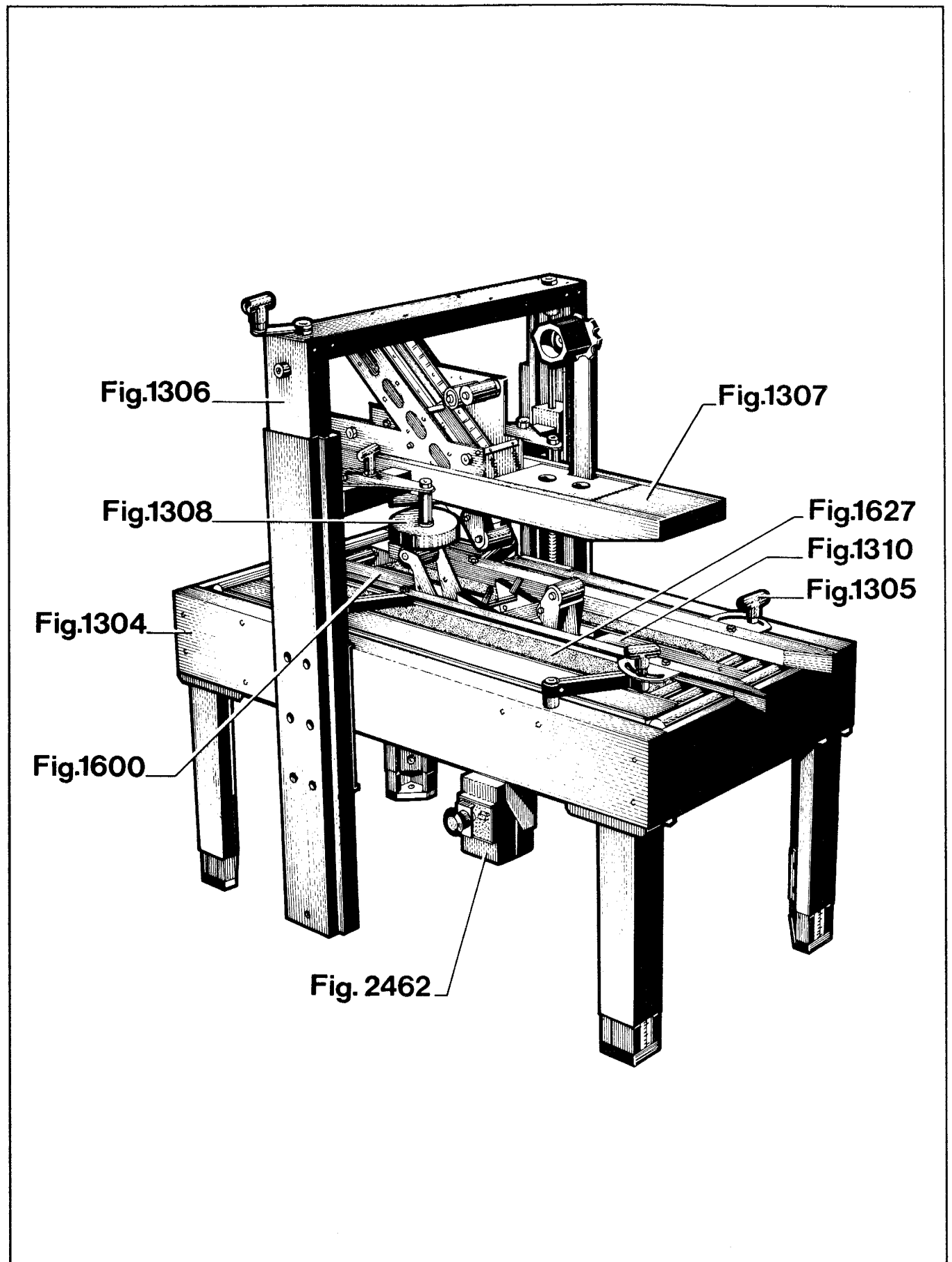
Ref. No.	3M Part No.	Description
1198-1	78-8052-6583-8	Frame - Right Hand
1198-2	78-8052-6584-6	Frame - Left Hand
1198-3	78-8052-6575-4	Shaft - Buffing Roller
1198-4	78-8052-6586-1	Bushing - Buffing Roller
1198-5	78-8057-6178-6	Roller - Buffing
1198-6	78-8052-6587-9	Spacer - Spring
1198-7	78-8017-9109-2	Shaft - Buffing Assembly
1198-8	26-1003-5828-7	Screw - Hex Hd M6 x 10
1198-9	26-1005-4759-0	Screw - Flat Hd M6 x 12
1198-11	78-8054-8550-1	Spring - Bottom Extension
1198-12	78-8052-6590-3	Holder - Spring

22A Case Sealer, Model 28600
Replacement Parts Illustrations and Parts Lists
Frame Assemblies

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.

<p>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.</p>
--

4. Refer to page 19 - "**Replacement Parts and Service Information**" of this manual for replacement parts ordering information.



Frame Assemblies

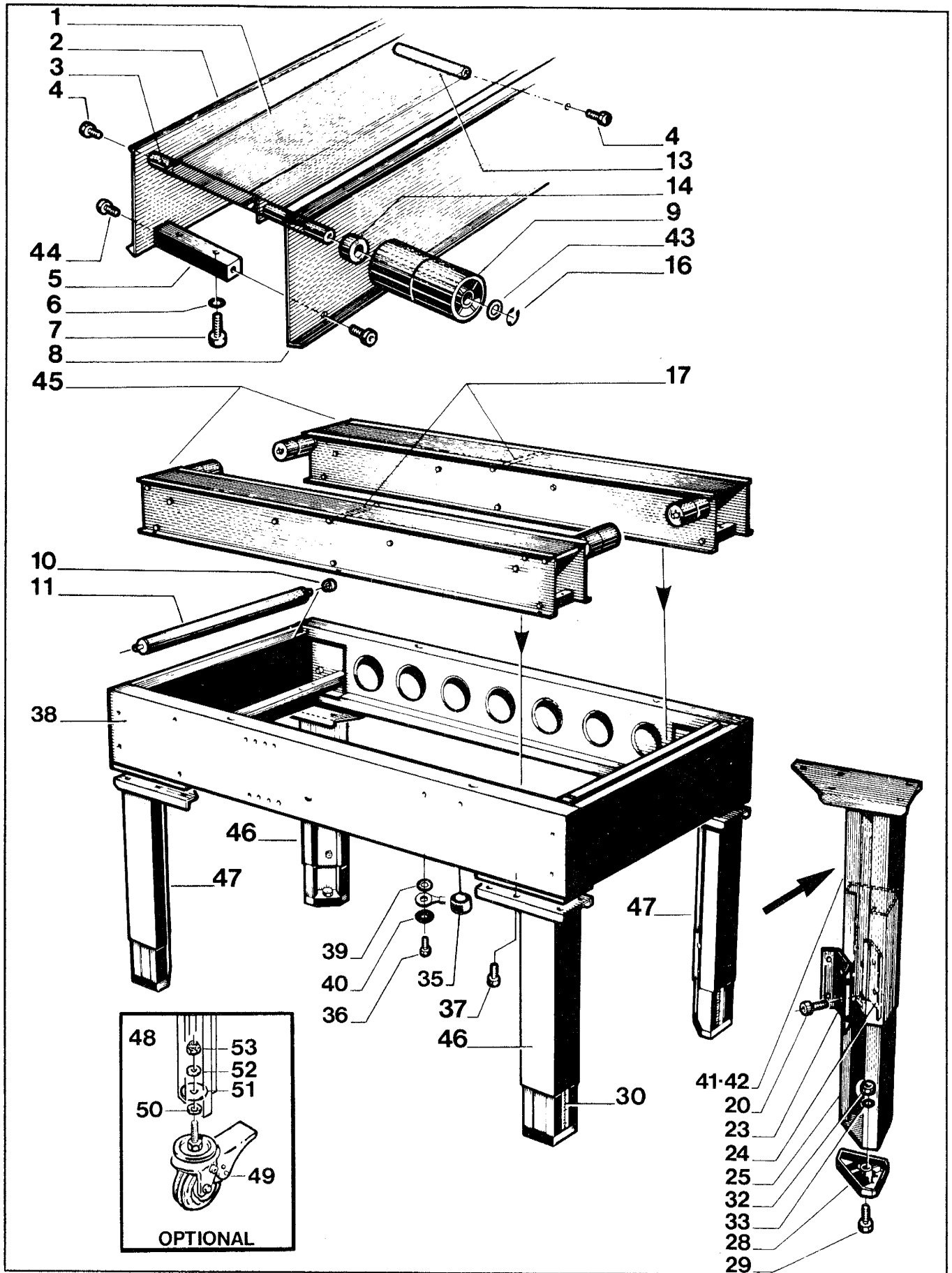


Figure 1304

Figure 1304

Ref. No.	3M Part No.	Description
1304-1	78-8052-6662-0	Conveyor Bed
1304-2	78-8052-6663-8	Side Plate
1304-3	78-8052-6664-6	Spacer
1304-4	78-8010-7163-6	Screw - Hex Hd M5 x 10 Metric
1304-5	78-8052-6665-3	Block - Mounting
1304-6	26-1000-0010-3	Washer - Flat M6
1304-7	78-8010-7209-7	Screw - Soc Hd M6 x 12
1304-8	78-8052-6666-1	Side Plate
1304-9	78-8052-6667-9	Roller
1304-10	78-8052-6668-7	Snap - Roller
1304-11	78-8052-6669-5	Roller - Conveyor
1304-13	78-8052-6671-1	Spacer
1304-14	78-8052-6672-9	Spacer
1304-16	78-8052-6732-1	Ring - M8 Special
1304-17	78-8052-6673-7	Spacer
1304-20	26-1003-7963-0	Screw - Soc Hd M8 x 16
1304-23	78-8052-6676-0	Clamp - Outer
1304-24	78-8052-6677-8	Clamp - Inner
1304-25	78-8052-6678-6	Leg - Inner
1304-28	78-8052-6679-4	Pad - Foot
1304-29	26-1003-5842-8	Screw - Hex Hd M8 x 20
1304-30	78-8052-6680-2	Label - Height
1304-32	78-8017-9313-0	Nut - Self Locking M-8 Nick Pl.
1304-33	26-1004-5507-5	Washer - M-8
1304-35	78-8060-7758-8	Fairlead /20
1304-36	26-1003-5820-4	Screw - Hex Hd M5 x 12
1304-37	26-1003-7964-8	Screw - Soc Hd Hex Soc Dr M8 x 20
1304-38	78-8055-0671-0	Bed - Conveyor
1304-39	78-8046-8217-3	Washer - Special
1304-40	78-8005-5741-1	Washer - Metric, Plain M5
1304-41	78-8060-7948-r	Leg - Left
1304-42	78-8060-7947-7	Leg - Right
1304-43	78-8017-9318-9	Washer - Plain 8 mm Metric
1304-44	26-1003-7948-1	Screw - Soc Hd Hex Soc M5 x 10
1304-45	78-8060-8141-6	Conveyor Bed Assembly
1304-46	78-8060-8123-4	Leg Assembly - Left
1304-47	78-8060-8122-6	Leg Assembly - Right
1304-48	78-8060-8060-8	Caster Assembly /80
1304-49	78-8060-8061-6	Caster /80
1304-50	78-8060-8124-2	Spacer - Caster
1304-51	78-8060-7699-4	Washer /12-45, 5 x 4
1304-52	78-8017-9059-9	Washer - Flat For M12 Screw
1304-53	78-8060-7532-7	Nut - Self Locking M12

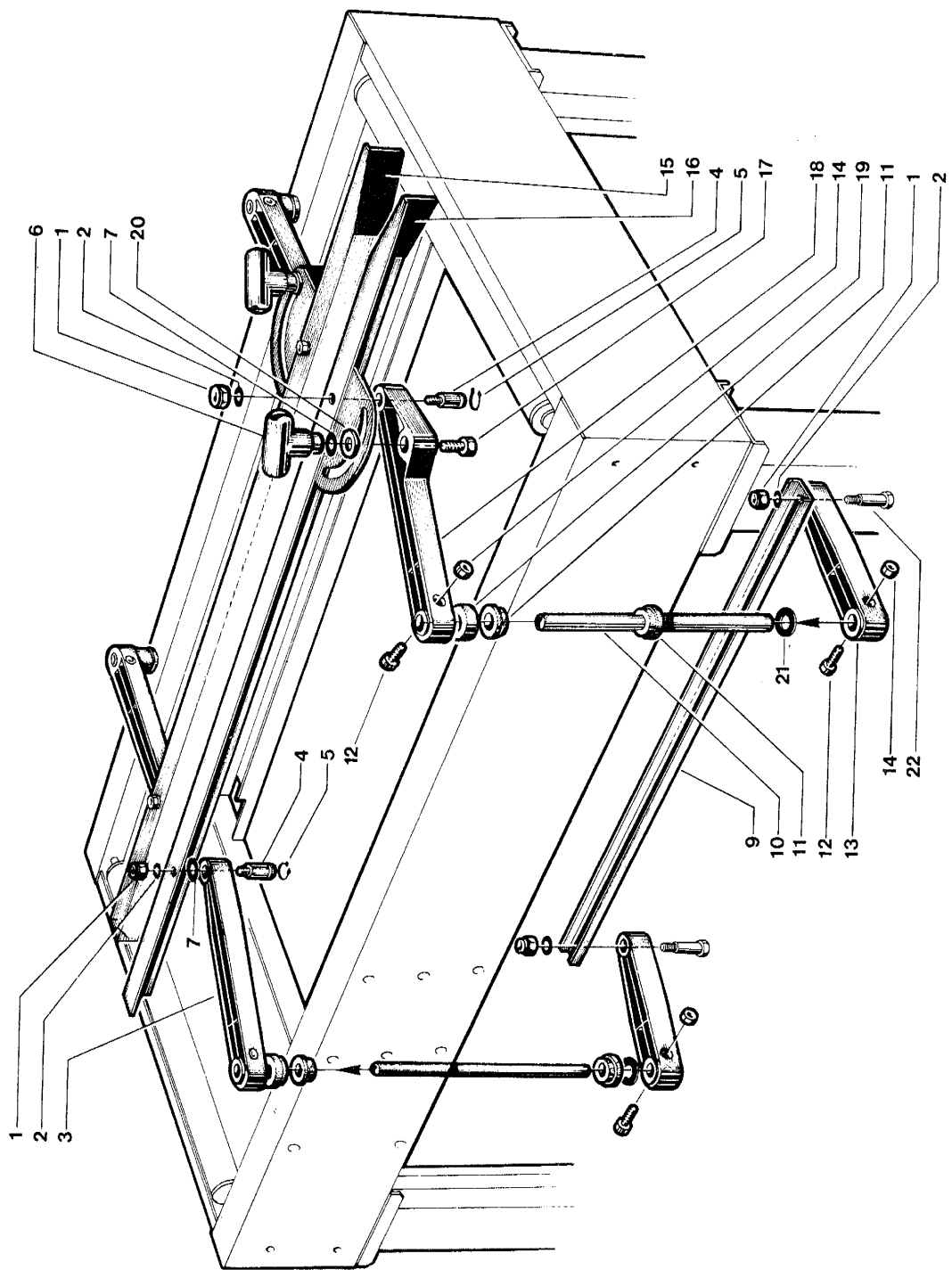


Figure 1305

Figure 1305

Ref. No.	3M Part No.	Description
1305-1	26-1003-6916-9	Nut - Locking Plastic Insert M6
1305-2	26-1000-0010-3	Washer - Flat M6
1305-3	78-8052-6682-8	Arm - Guide
1305-4	78-8052-6683-6	Stud - Guide
1305-5	78-8052-6733-9	Ring - M10 Special
1305-6	78-8060-8055-8	Knob
1305-7	78-8052-6566-3	Washer - Friction
1305-9	78-8052-6685-1	Link - Guide
1305-10	78-8052-6686-9	Shaft
1305-11	78-8052-6687-7	Sleeve
1305-12	78-8010-7210-5	Screw - Soc Hd Hex Soc M6 x 20
1305-13	78-8052-6688-5	Arm - Guide
1305-14	78-8010-7418-4	Nut - Hex M6 Metric
1305-15	78-8052-6689-3	Guide - Right
1305-16	78-8052-6690-1	Guide - Left
1305-17	26-1003-7976-2	Screw - Soc Hd M10 x 35
1305-18	78-8052-6691-9	Arm - Guide
1305-19	78-8052-6692-7	Sleeve
1305-20	78-8057-5803-0	Washer - Dented
1305-21	78-8017-9059-9	Washer - Flat For M12 Screw
1305-22	78-8060-7878-4	Idler Screw

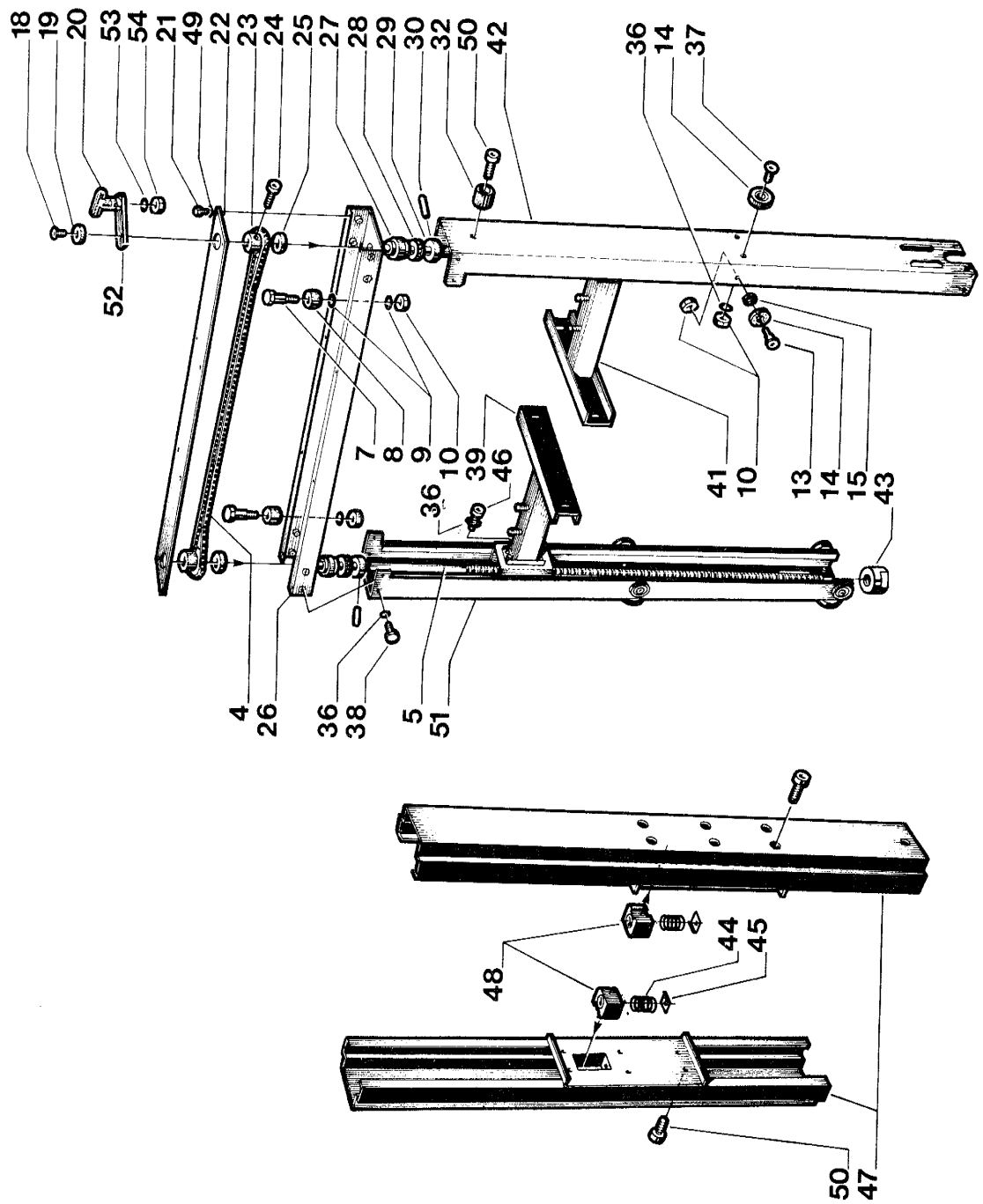


Figure 1306

Figure 1306

Ref. No.	3M Part No.	Description
1306-4	78-8054-8572-5	Chain
1306-5	78-8054-8573-3	Lead Screw
1306-7	78-8060-7878-4	Idler Screw
1306-8	78-8054-8575-8	Idler Roller
1306-9	78-8042-2919-9	Washer - M6 Nick Pl.
1306-10	26-1003-6916-9	Nut - Locking Plastic Insert M6
1306-13	78-8017-9106-8	Screw - Bearing Shoulder
1306-14	78-8054-8617-8	Bearing Special
1306-15	78-8054-8576-6	Spacer
1306-18	26-1001-9843-6	Screw - Flat Soc Hd M6 x 16
1306-19	78-8054-8577-4	Washer - Special
1306-20	78-8054-8578-2	Crank
1306-21	26-1002-5753-9	Screw - Self Tapping
1306-22	78-8054-8579-0	Cover - Chain
1306-23	78-8054-8580-8	Sprocket
1306-24	26-1003-7946-5	Screw - Soc Hd M4 x 25
1306-25	78-8054-8581-6	Spacer
1306-26	78-8054-8582-4	Chain - Housing
1306-27	78-8054-8583-2	Bushing
1306-28	78-8054-8584-0	Spacer
1306-29	78-8054-8585-7	Collar
1306-30	78-8054-8586-5	Pin
1306-32	78-8054-8587-3	Stop
1306-36	26-1000-0010-3	Washer - Flat M6
1306-37	78-8054-8589-9	Screw - Special
1306-38	78-8032-0375-7	Screw - Hex Hd M6 x 16
1306-39	78-8054-8590-7	Head Support Right
1306-41	78-8054-8591-5	Head Support Left
1306-42	78-8054-8592-3	Column Inner
1306-43	78-8054-8968-5	Nut - Special
1306-44	78-8054-8969-3	Spring
1306-45	78-8054-8970-1	Spring Plate
1306-46	78-8010-7210-5	Screw - Soc Hd Hex Soc M6 x 20
1306-47	78-8054-8994-1	Column - Outer
1306-48	78-8054-8571-7	Nut - Plastic
1306-49	78-8005-5740-3	Washer - Plain 4 mm Nick. Metric
1306-50	26-1003-7964-8	Screw Soc. Hd. Hex Soc. Dr., M8 X 20
1306-51	78-8060-8142-4	Inner Column Assembly
1306-52	78-8060-8065-7	Lever - Knob
1306-53	78-8010-7435-8	Washer - Lock M6 Metric
1306-54	78-8010-7418-4	Nut - Hex M6 Metric

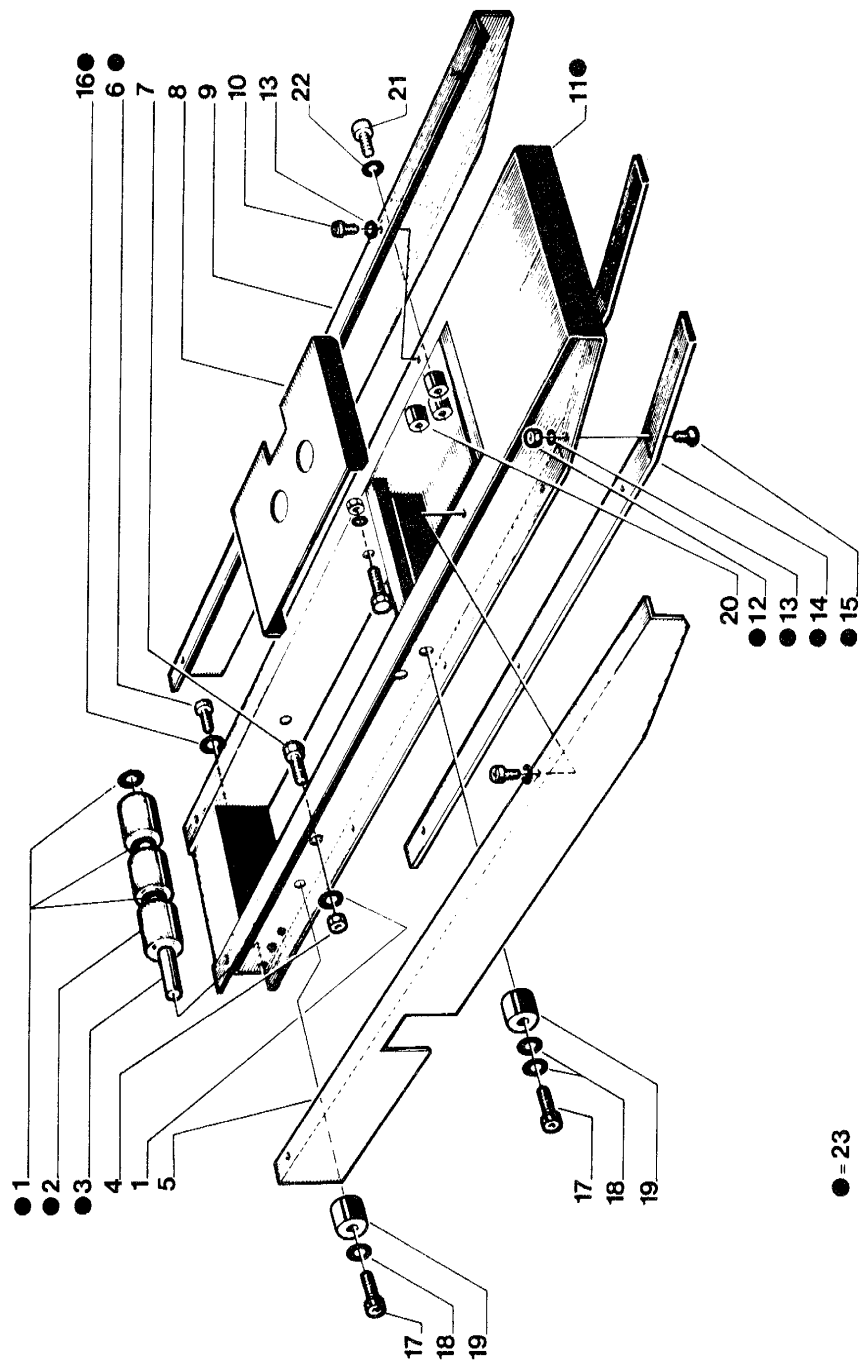


Figure 1307

Figure 1307

Ref. No.	3M Part No.	Description
1307-1	78-8017-9318-9	Washer - Plain Metric 8 mm
1307-2	78-8060-7693-7	Roller 32 x 38
1307-3	78-8052-6694-3	Shaft
1307-4	26-1000-1347-8	Nut - Hex M8 Metric
1307-5	78-8052-6695-0	Cover - Left
1307-6	26-1003-5820-4	Screw - Hex Hd M5 x 12
1307-7	26-1003-5841-0	Screw - M8 x 16
1307-8	78-8052-6696-8	Cover
1307-9	78-8052-6697-6	Cover - Right
1307-10	26-1002-5753-9	Screw - Self Tapping
1307-11	78-8052-6698-4	Housing - Upper
1307-12	26-1003-6914-4	Nut - Plastic Insert M4
1307-13	78-8005-5740-3	Washer - Plain - 4mm Metric
1307-14	78-8052-6699-2	Slide
1307-15	26-1004-7121-3	Screw - Flat Hd M4 x 15
1307-16	78-8005-5741-1	Washer - Plain M5 Metric
1307-17	78-8010-7210-5	Screw - Hex Hd Soc M6 x 20
1307-18	78-8042-2919-9	Washer - M6 Nick Pl.
1307-19	78-8052-6700-8	Spacer
1307-20	78-8054-8972-7	Spacer
1307-21	78-8010-7211-3	Screw - Soc Hd M6 X 25
1307-22	26-1000-0010-3	Washer - Flat M6
1307-23	78-8060-8143-2	Top Head Support Assembly

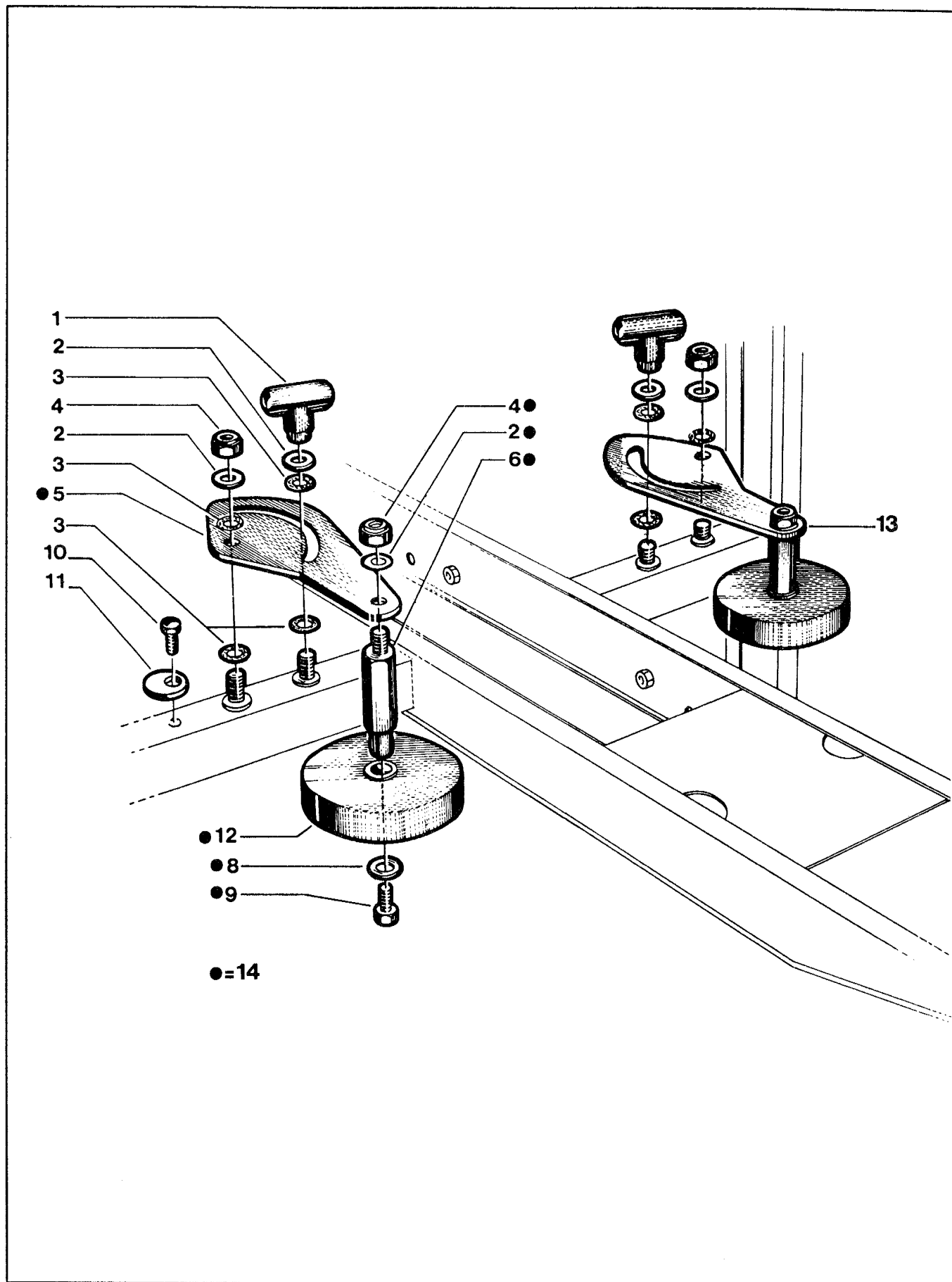


Figure 1308

Figure 1308

Ref. No.	3M Part No.	Description
1308-1	78-8060-8055-8	Knob
1308-2	78-8052-6566-3	Washer - Friction
1308-3	78-8017-9074-8	Washer - Nylon 15 mm
1308-4	26-1003-6918-5	Nut - Plastic Insert M10 Hex Flange
1308-5	78-8052-6701-6	Plate - Mounting
1308-6	78-8052-6702-4	Stud - Mounting
1308-8	78-8052-6703-2	Washer - Special
1308-9	26-1003-5841-0	Screw - M8 x 16
1308-10	70-8010-7163-6	Screw - Metric Hex Hd M5 x 10
1308-11	78-8054-8973-5	Cam for Pressure Roller Stop
1308-12	78-8054-8974-3	Pressure Roller - <i>compression top</i>
1308-13	78-8060-8144-0	Side Roller Assembly - Right
1308-14	78-8060-8145-7	Side Roller Assembly - Left

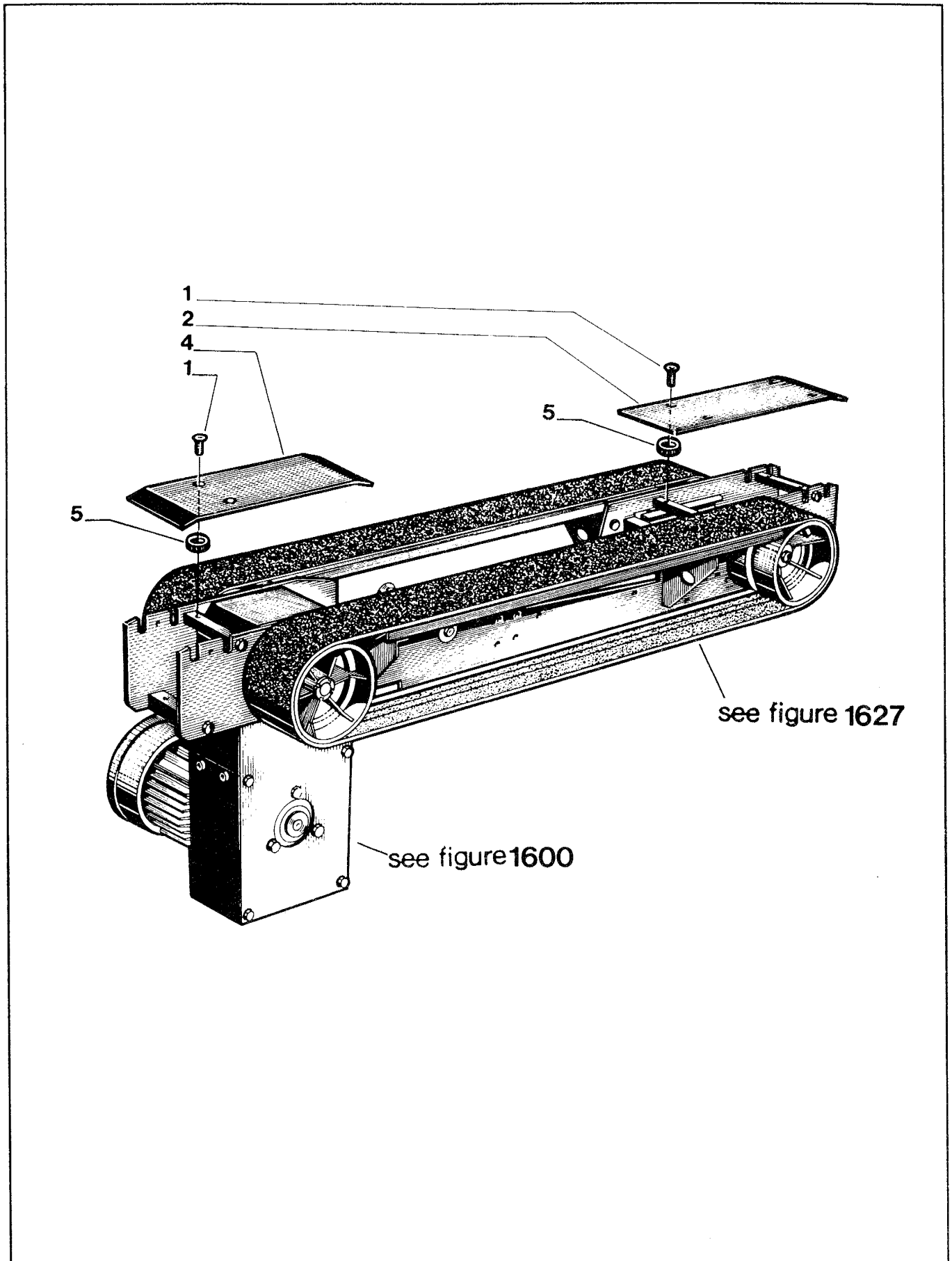


Figure 1310

Figure 1310

Ref. No.	3M Part No.	Description
1310-1	26-1005-5316-8	Screw - Flat Hd Hex Dr M5 x 16
1310-2	78-8052-6721-4	Plate - Center, Front
1310-3	78-8052-6722-2	Belt - Drive
1310-4	78-8052-6723-0	Plate - Center, Rear
1310-5	78-8054-8751-5	Spacer

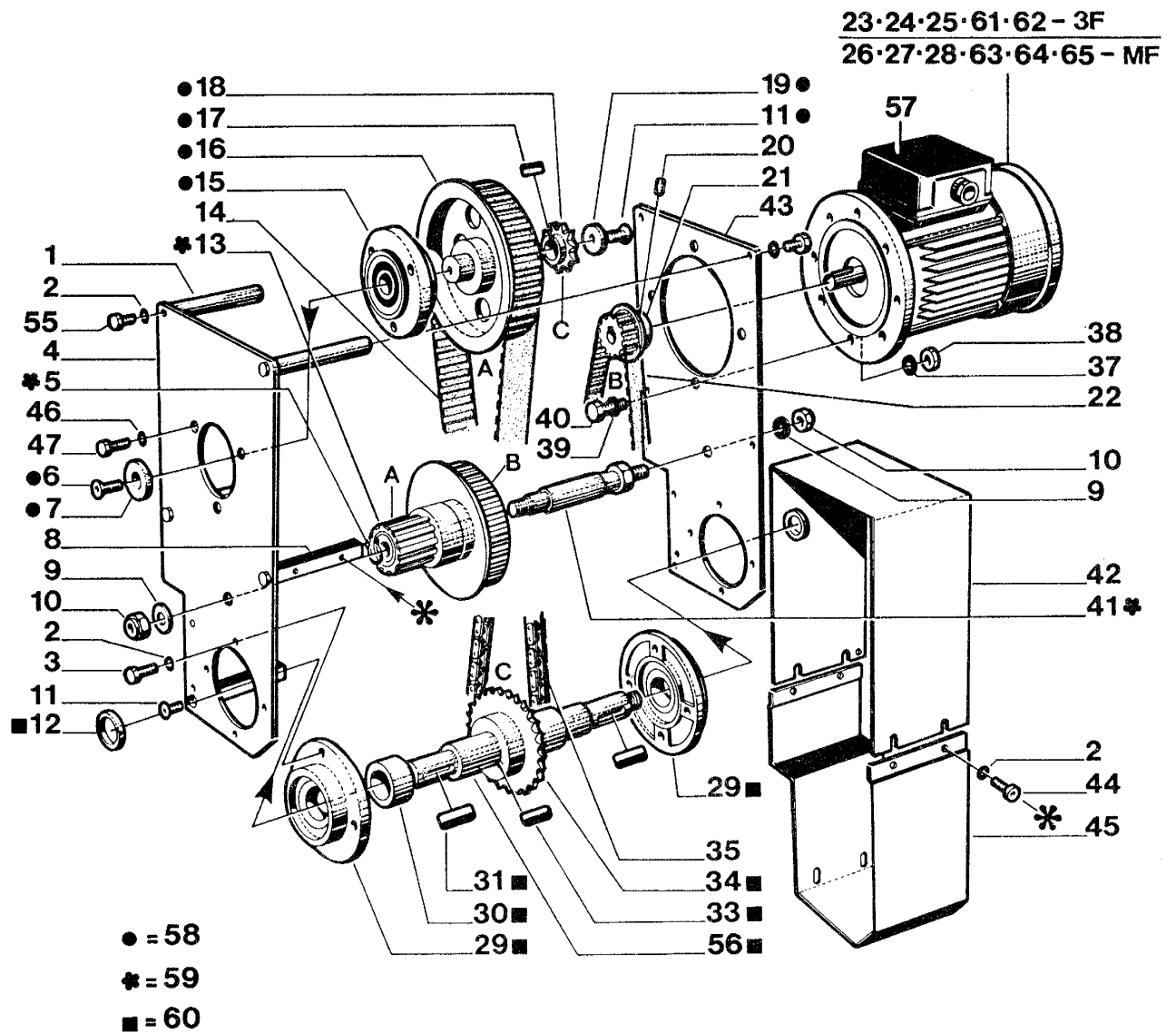
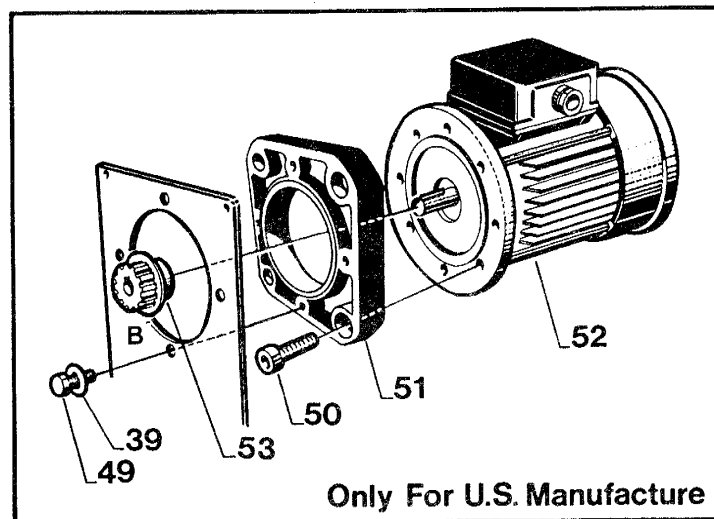


Figure 1600

Figure 1600

Ref. No.	3M Part No.	Description
1600-1	78-8054-8975-0	Spacer
1600-2	78-8005-5741-1	Washer - Plain M5 Metric
1600-3	26-1002-5820-6	Screw - Hex Hd M5 x 16
1600-4	78-8054-8976-8	Frame - Left Side
1600-5	78-8016-5855-6	E-Ring 10 mm
1600-6	26-1001-9843-6	Screw - Flat Soc Hd M6 x 16
1600-7	78-8054-8577-4	Washer - Special
1600-8	78-8054-8977-6	Spacer
1600-9	78-8017-9318-9	Washer - Plain 8 mm Metric
1600-10	78-8017-9313-0	Nut - Self Locking M8 Nick Pl.
1600-11	26-0001-5862-1	Screw - Flat Hd Soc M5 x 12
1600-12	78-8054-8879-4	Washer - 20,5 mm
1600-13	78-8054-8978-4	Pulley - Reducer
1600-14	78-8057-5808-9	Belt - Timing 187L100
1600-15	78-8054-8979-2	Housing - Bearing
1600-16	78-8054-8980-0	Pulley Timing Belt
1600-17	78-8028-8244-5	Key - 4 x 4 x 10 mm
1600-18	78-8054-8981-8	Sprocket - 3/8 Pitch, 13 Teeth (//)
1600-19	78-8054-8877-8	Washer - 5.5 x 20 x 4 mm
1600-20	26-1003-8816-9	Screw - Set M5 x 6
1600-21	78-8054-8982-6	Pulley - Timing 11 Teeth
1600-22	78-8057-5724-8	Timing Belt 187L050
1600-23	78-8052-6718-0	Motor - 220/380V 50 HZ 3 Phase
1600-24	78-8052-6719-8	Motor - 260/440V 50 HZ 3 Phase
1600-25	78-8052-6720-6	Motor - 240/415V 50 HZ 3 Phase
1600-26	78-8046-8268-6	Motor - 220V, 50 HZ, Single Phase
1600-27	78-8046-8270-2	Motor - 240V, 50 HZ, Single Phase
1600-28	78-8046-8267-8	Motor - 110V, 60 HZ Single Phase 3A
1600-29	78-8054-8983-4	Housing Bearing
1600-30	78-8054-8984-2	Bushing
1600-31	78-8057-5739-6	Key - 5 x 5 x 30 mm
1600-33	78-8057-5811-3	Key - 6 x 6 x 20 mm
1600-34	78-8054-8986-7	Sprocket - 3/8 Pitch, 28 Teeth
1600-35	78-8054-8987-5	Chain - 3/8 Pitch, 56 Pitch Lg.
1600-37	78-8005-5736-1	Lockwasher - For M8 Screw
1600-38	26-1000-1347-8	Nut - Hex Stl., M8 Metric
1600-39	26-1004-5507-5	Washer M8
1600-40	78-8017-9301-5	Screw - Hex Hd M8 x 25
1600-41	78-8054-8988-3	Shaft Timing Pulley
1600-42	78-8054-8989-1	Cover - Top
1600-43	78-8054-8990-9	Frame - Right Side
1600-44	26-1003-7949-9	Screw - Soc Hd Hex Soc M5 x 12
1600-45	78-8054-8991-7	Cover - Bottom
1600-46	78-8042-2919-9	Washer - M6 Nick Pl.
1600-47	78-8010-7193-3	Screw - Hex Hd Metric, M6 x 20
1600-49	26-1003-5842-8	Screw - Hex Hd M8 x 20
1600-50	12-7991-1573-3	Screw - Soc Hd 3/8" - 16 X 1 1/4"
1600-51	78-8054-8993-3	Adapter
1600-52	26-1005-8092-2	Motor - 115V, 60 HZ U.S.
1600-53	78-8055-0672-8	Pulley for U.S. Motor
1600-55	26-1003-5820-4	Screw - Hex Hd. M5 X 12
1600-56	78-8060-8047-5	Shaft - Drive
1600-57	78-8060-7880-0	Eyelet Terminal 1/4 Red
1600-58	78-8060-8146-5	Gear Box Pulley Assembly
1600-59	78-8060-8147-3	Pulley Assembly
1600-60	78-8060-8148-1	Drive Shaft Assembly
1600-61	78-8059-5621-2	Motor - 200V, 60 HZ, 3 Phase
1600-62	78-8060-8158-0	Motor - 220V, 60 HZ, 3 Phase
1600-64	78-8060-8159-8	Motor - 115V, 60 HZ, Single Phase
1600-65	78-8060-8160-6	Motor - 230V, 50 HZ, Single Phase

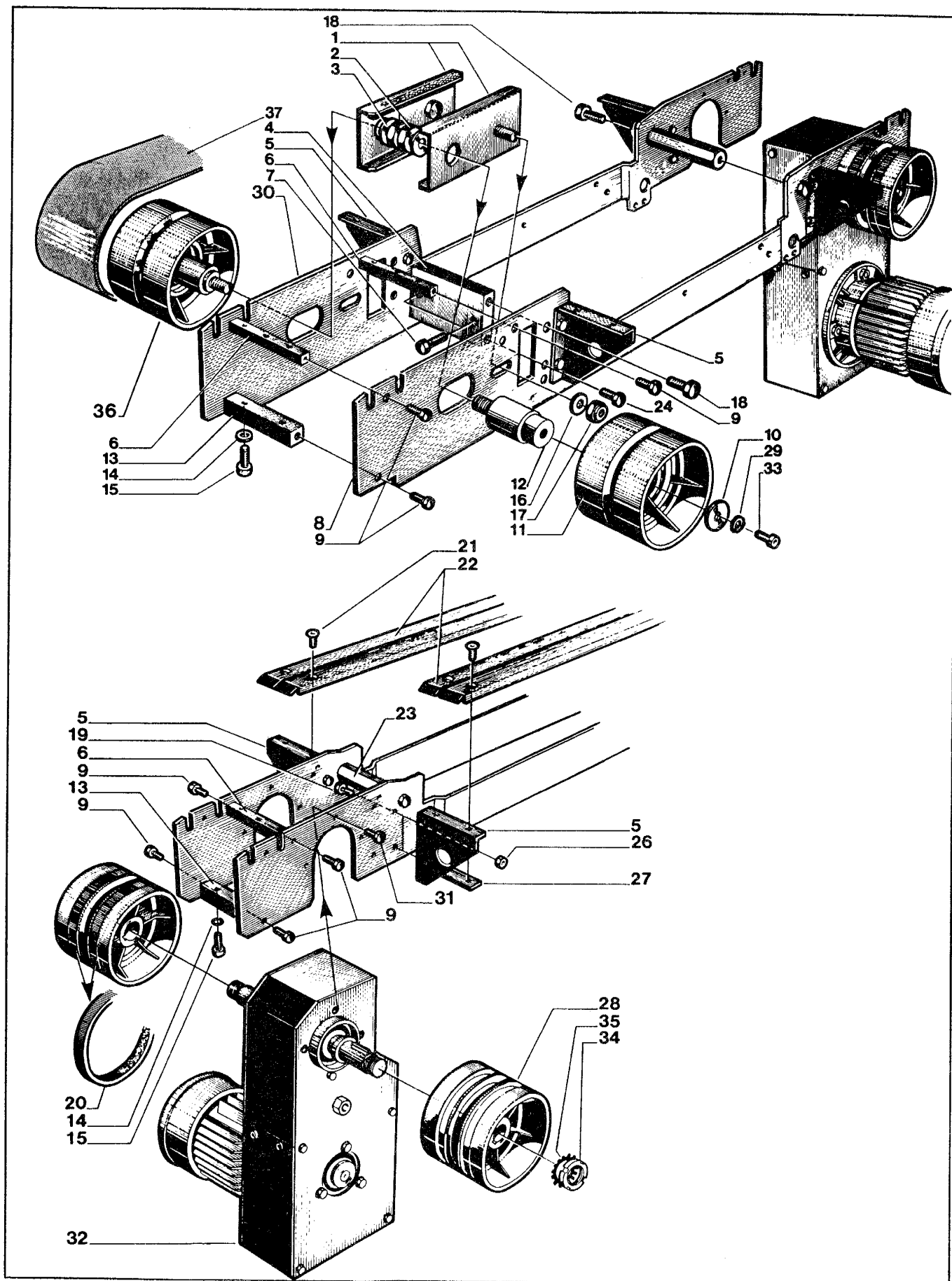


Figure 1627

Figure 1627

Ref. No.	3M Part No.	Description
1627-1	78-8052-6704-0	Roller - Bracket
1627-2	26-1003-6906-0	Nut - M12 Metric
1627-3	26-1004-5511-7	Washer - Metric
1627-4	78-8052-6705-7	Block - Spacer
1627-5	78-8052-6706-5	Bracket
1627-6	78-8054-8764-8	Spacer - 10 x 10 x 90 mm
1627-7	26-1003-5845-1	Screw - Hex Hd M8 x 40
1627-8	78-8052-6708-1	Side Plate
1627-9	78-8010-7169-3	Screw - Hex Hd M6 x 12 Metric
1627-10	78-8052-6709-9	Washer - Special
1627-11	78-8052-6710-7	Roller - Idler
1627-12	78-8052-6711-5	Shaft - Roller
1627-13	78-8052-6712-3	Bar - Spacer
1627-14	26-1000-0010-3	Washer - Flat M6
1627-15	78-8010-7209-7	Screw - Soc Hd M6 x 12
1627-16	78-8052-6566-3	Washer - Friction
1627-17	26-1003-6918-5	Nut - Plastic Insert M10 Hex Flange
1627-18	26-1003-5849-3	Screw - Hex Hd M10 x 16
1627-19	26-1003-5820-4	Screw - Hex Hd M5 x 12
1627-20	78-8052-6713-1	Ring - Polyurethane
1627-21	26-1005-5316-8	Screw - Flat Hd Hex Dr M5 x 16
1627-22	78-8052-6714-9	Guide - Drive Belt
1627-23	78-8017-9144-9	Spacer - Hexagonal
1627-24	78-8032-0375-7	Screw - Hex Hd M6 x 16 Metric
1627-26	78-8010-7417-6	Nut - Hex Stl. M5 Metric
1627-27	78-8052-6715-6	Bracket
1627-28	78-8060-8072-3	Roller - Drive
1627-29	78-8010-7435-8	Washer - Lock M6 Metric
1627-30	78-8054-8649-1	Lower Main Plate Left
1627-31	26-1002-5820-6	Screw - Hex Hd M5 x 16
1627-32	78-8052-6716-4	Gear Box Assembly W/O motor
1627-33	26-1003-7957-2	Screw - Soc Hd Hex Hd M6 X 16
1627-34	78-8060-8149-9	Ring Nut M20 X 1
1627-35	78-8060-8150-7	Washer
1627-36	78-8060-8151-5	Idler Roller Assembly
1627-37	78-8052-6722-2	Belt - Drive

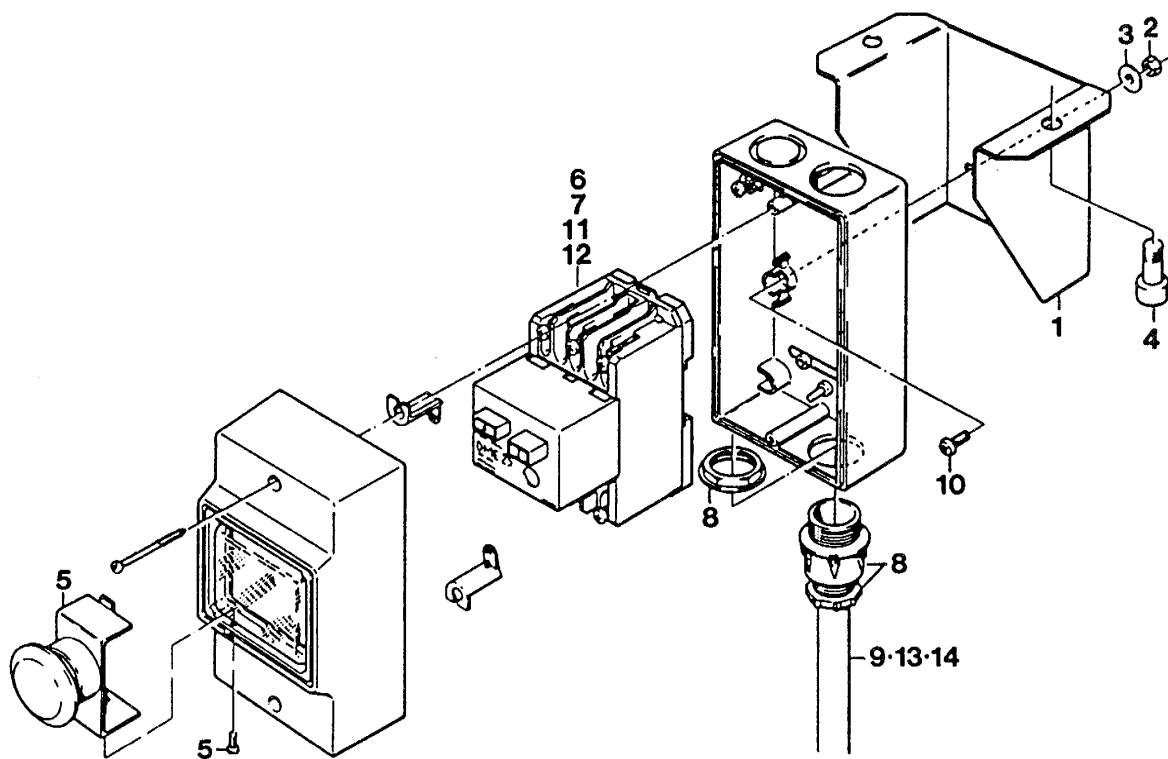


Figure 2462

Figure 2462

Ref. No.	3M Part No.	Description
2462-1	78-8052-6724-8	Switch - Bracket
2462-2	78-8010-7416-8	Nut - Hex M4 Metric
2462-3	78-8017-9018-5	Washer - Plain M4 Metric Special
2462-4	26-1003-7963-0	Screw - Soc Hd M8 x 16
2462-5	78-8052-6725-5	Emergency Stop
2462-6	78-8052-6726-3	Switch - On/Off 0,63 - 1 Amp
2462-7	78-8052-6728-9	Switch - On/Off 1.6 - 2,5 Amp
2462-8	78-8057-5807-1	Cord Grip
2462-9	78-8028-7909-4	Power Cord U.S.A.
2462-10	78-8017-9257-9	Screw - Phil Hd M4 x 10
2462-11	78-8060-7637-4	Plug Terminal, Wire 1.5
2462-12	78-8060-7881-8	Eyelet Terminal /5 Yellow
2462-13	78-8060-8052-5	Cable 4 X 1,5 MT .5 X 3F
2462-14	78-8060-8053-3	Cable 3 X 1,5 5 MT Single Phase

SWITCH BOX ONLY
78-8070-1573-6