Instructions and Parts List

[™]M-Matic

77R

Model 18500

Model 18500

Random Case Sealer with AccuGlide™

Taping Heads M

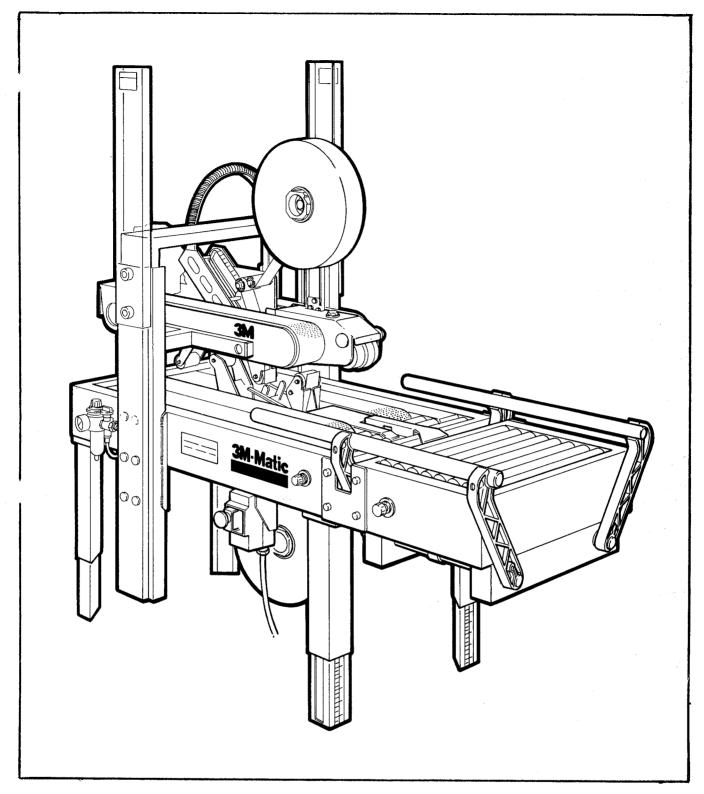
Model 18500

4-7365-4(D97.015)R1

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

Litho in U.S.A.





"3M-Matic" 77R Random Case Sealer - Model 18500

Description

The "3M-Matic" 77R Case Sealer with "AccuGlide" Taping Heads is designed to apply a "C" clip of "Scotch" Brand Presssure-sensitive Film Box Sealing Tape to the top and stom center seams of regular slotted containers. The 77R will automatically adjust steelf to a wide range of random box sizes (see box size specifications).

Receiving And Handling

After the machine has been uncrated, examine the 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.

Spare parts, tools, and oil can are provided in a small plastic case. Remove and keep with Case Sealer for use in set-up, operation, and maintenance.

Several machine components are tied down to prevent damage during transit. Remove these before proceeding with following set-up instructions.

Warranty

IMPORTANT NOTICE TO PURCHASER: The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: Seller and manufacturer warrant that the "3M-Matic" equipment is free from defects in material and workmanship on the date the machine is shipped by the seller and for the time periods stated below. Seller's and manufacturer's only obligation hereunder shall be to repair or replace, at its option, any mechanical part proved to be defective, provided the defect occurs within ninety (90) days* (see NOTE below) after the date of delivery and the said part is returned immediately to the 3M factory or to an authorized service station designated by the manufacturer. Neither seller nor manufacturer shall be liable either in tort or in contract for any loss or damage, direct, incidental, or consequential, arising out of the use of or the inability to use the "3M-Matic" equipment. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

NOTE: * This time period shall be three (3) years for the "AccuGlide" taping head, except for the blades, springs and apply/buffing rollers which shall remain subject to the ninety (90) day warranty period.

"Scotch", "3M-Matic" and "AccuGlide" are trademarks for the pressure-sensitive tapes and dispensers of 3M, St. Paul, Minnesota 55144-1000.

Specifications

1. Power Requirements:

115V, 60 Hz., 5.6 A. 70 PSIG [585 kPa gauge pressure], 2.5 SCFM [4.25 $\rm m^3/h$ 21°C, 101 kPa] maximum at maximum random cycle rate. A pressure regulator-filter is included.

2.	Machine Dimensions:	Overall Dimensions	For Shipping Purposes
	* * · · · · · · · · · · · · · · · · · ·	60inches [1525 mm] 29 inches [736 mm] 67 inches [1700 mm]	63 inches [1600 mm]
		(Specifications conti	nued on next page.)

Specifications (Continued)

D. Conveyor Bed Height - Adjustable up and down from factory set height of 24.6 inches [625 mm].

E. Weight - 405 pounds [185 kg] crated - 360 pounds [165 kg] uncrated

3. Operating Rate:

Up to 12 boxes per minute depending on box size, weight, and operator capability. Higher rates are possible through box size range of fixed size adjustments provided.

4. Operating Conditions:

Use in dry, relatively clean environments at $40^{\rm o}$ to $105^{\rm o}$ F [5 $^{\rm o}$ to $40^{\rm o}$ 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.

ö. 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:

 $2 \frac{3}{4} inches + \frac{1}{4} inch [70 mm + 6 mm]$

9. Box Board:

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

(Specifications continued on next page.)

Set-Up Procedures

It is recommended that the 77R 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 77R before subjecting it and operating personnel to a production situation where time for set-up, adjustments, and operator training usually becomes limited.

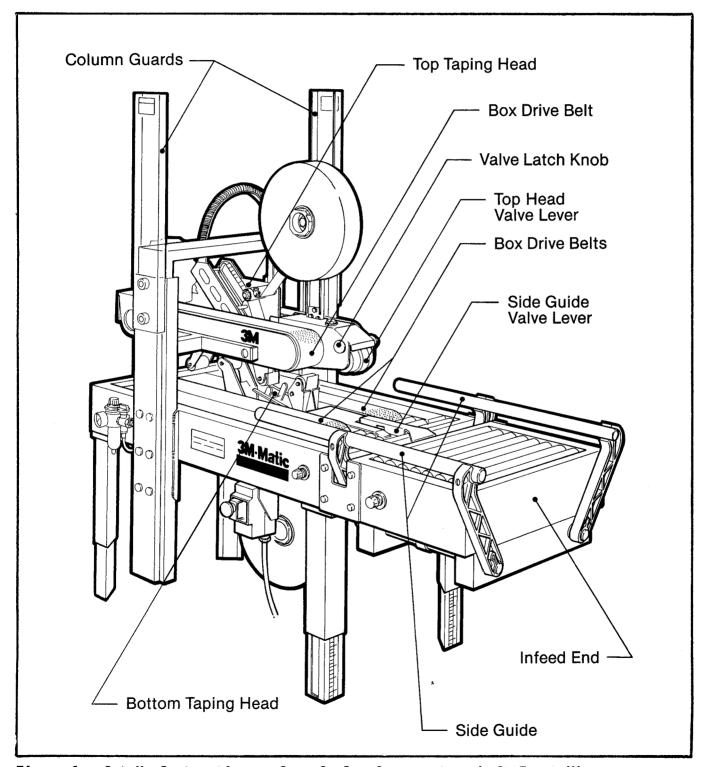


Figure 1 - Set-Up Instructions - Case Sealer Components - Left Front View

The following instructions are presented in the order recommended for setting up and installing the 77R 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 77R Case Sealer.

Conveyor Bed Height:

The 77R 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.

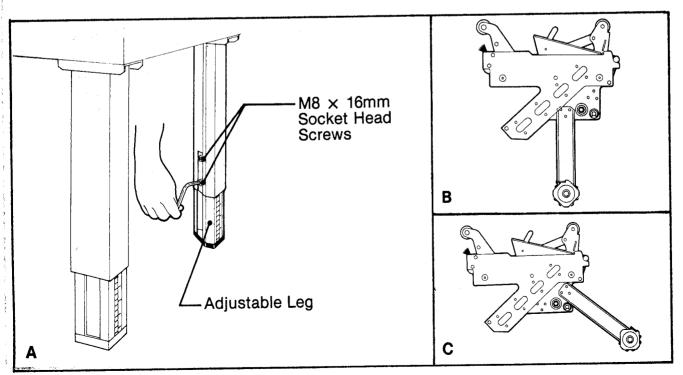


Figure 2 - Conveyor Bed Height Adjustment

Column Guards Refer to Figure 3.

Remove and retain screws holding plastic column guards in shipping position on columns. Remove guards and rotate 180° and install back on column as shown. Replace existing screws to secure guards in place.

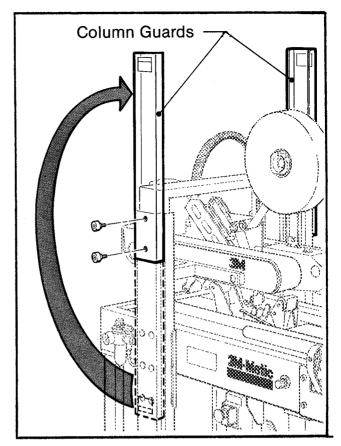


Figure 3 - Column Guards

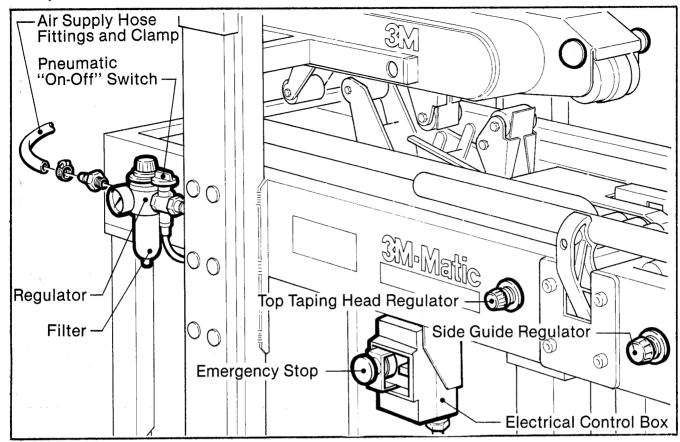


Figure 4 - Electrical - Pneumatic Connections

Electrical Connection

The electrical control box, shown in Figure 4, 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, 5 amp electrical service. The receptacle providing this service shall be properly grounded. The electrical power supply is turned "On" by pressing the Green button, "Off" by pressing the Red button. Before the power cord is plugged into a 115 Volt, 60 Hz outlet, make sure the Red button is depressed 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.

Pneumatic Connection

The Case Sealer requires a 70 PSIG [585 kPa gauge pressure], 2.5 SCFM [4.25 m³/h 21⁰ C, 101 kPa] compressed air supply. As illustrated in Figure 4, an on/off valve, pressure regulator, and filter are provided to service the air supply.

The air supply line should be connected to the on/off valve by means of the union fitting and hose clamp provided on the outer side of the on/off valve as illustrated. The customer supplied air hose should be slipped over the union ferrule and clamped tightly in place.

If another type of connector between the air supply line and on/off valve is desired, the union fitting and/or elbow can be removed and replaced with desired connector. The on/off valve inlet port has 1/8-28 British Standard pipe threads.

The hand knob is utilized to turn the air supply to the pneumatic components on and off once the air supply line is connected and energized. The air supply is turned "On" when the knob is turned 180° , "Off" when turned back 180° . Always turn the valve "Off" when the air supply line is being connected or disconnected.

Remove all packaging materials and tools from the machine. Turn the valve "Off" and connect the air line. Turn the valve "On" to energize the pneumatic components.

Pneumatic Component Controls

In addition to the on/off valve described in the preceding "Pneumatic Connection" Section, the pneumatic components have several controls and settings which will be covered in this section.

To provide independent adjustment of the side guide and top taping head movements, the air supply is routed through the main pressure regulator and filter assembly and then split into two separate circuits. Both the side guide and top taping head circuits have controls and settings as follows: (refer to Figures 6 - 7).

Note: All air pressure regulators discussed below have a red lock ring behind the adjustment knob, as shown in Figure 7. The red lock ring should be pulled toward the knob to unlock the knob for air pressure adjustment, pushed back against the regulator body to lock the knob after adjustment if desired.

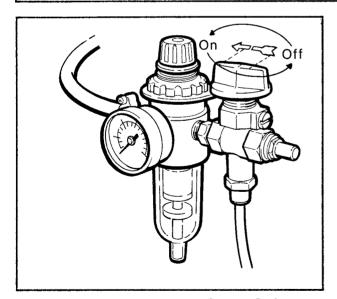


Figure 5 - Pressure Regulator And On/Off Valve

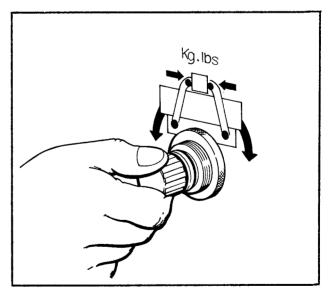


Figure 6 - Side Guide Pneumatic Regulator

Side Guide Movement Circuit

The regulator, shown in Figure 6, is used to adjust side guides according to weight of boxes. Pressure should be adequate to center boxes, but low enough to allow easy pushing of boxes under taping head.

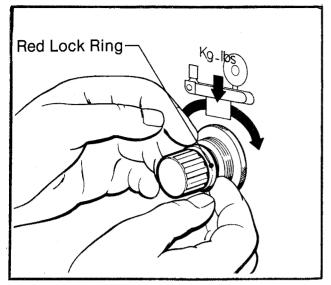


Figure 7 - Top Head Pneumatic Regulator Locking Ring

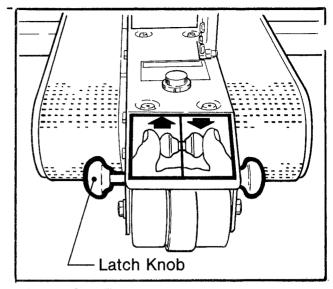


Figure 8 - Top Head Valve Latch Knob

Top Taping Head Movement Circuit

"Down" Movement Air Pressure Regulator (Refer to Figure 7)

Set nominally to control "down" movement of top taping head and the top taping head pressure exerted against the box. The regulator setting is changed as necessary for the boxes being sealed to provide adequate top taping head pressure against the box to positively convey the boxes through the machine. If the boxes stop or hesitate while being conveyed, decrease the regulator pressure which will increase the top taping head pressure on the box for more friction between the box and drive belts. Adjust setting as necessary to get continuous movement of boxes through machine.

For boxes which are fully packed with products that support the top flaps, the adjustment of this regulator is not critical since the boxes can support the pressure of the top taping head at a wide range of regulator settings. However, if underfilled or fragile boxes are sealed, this regulator can be used to set the top taping head pressure to a minimum that is still adequate to positively convey the box and to prevent damage of boxes.

Top Taping Head Valve Latch Knob (Refer to Figure 8)

To hold the top taping head at the fully raised position for tape threading and maintenance, a latch is provided to hold the valve closed. To engage the latch, manually push the knob from **left to right**. The top taping head will then be held at the **fully raised position**. Push the knob from **right to left to lower** the top taping head.

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 "CAUTION - SHARP KNIFE" LABEL. BEFORE WORKING WITH THE TAPING HEADS OR ATTEMPTING TO LOAD THE TAPE, REFER TO FIGURE 9A 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 [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 **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.

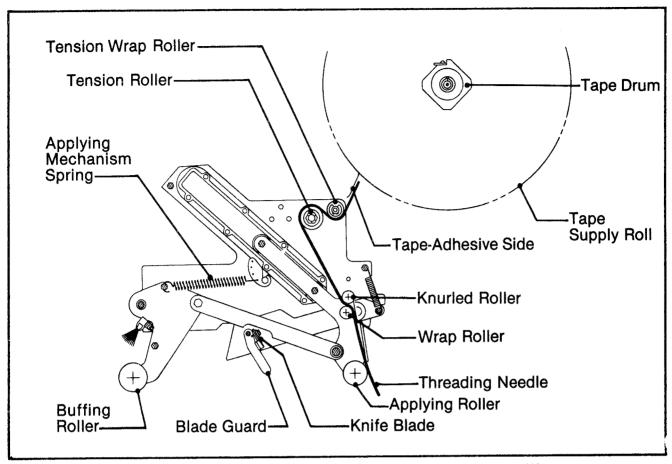


Figure 9A - Tape Threading Diagram - Top Taping Head - Left Side View

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 valve latch knob and move the top taping head to the fully raised position.
- 2. With the temporary threading needle already in position, as shown in Figure 9A, follow the tape loading procedure from Figure 9C to complete the tape threading.
- For subsequent tape loading operations, use the red plastic threading needle and follow the loading procedures from Figure 9A to complete the tape threading.

Tape Loading - Bottom Taping Head

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 9B

insert the red plastic needle downward
around rollers as illustrated.

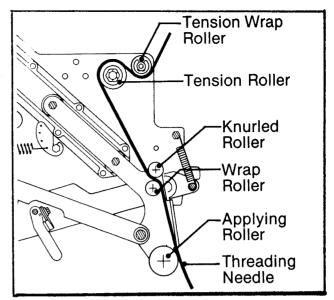


Figure 9B

Figures 9B and 9C

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.

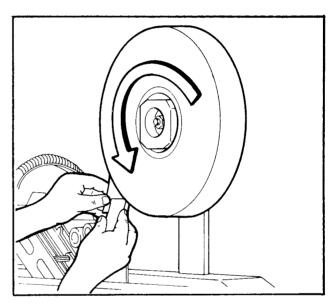


Figure 9C

Figure 9D

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.

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

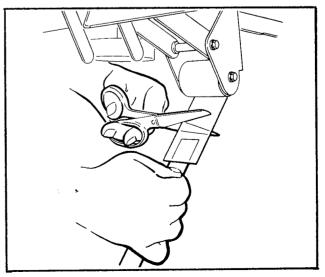


Figure 9D

Operation

Pneumatic Components Function

The air supply powers movement of the side guides and top taping head to automatically adjust the Case Sealer to the box size being sealed as follows (refer to Figures 10-12):

- 1. A valve lever in the center of the infeed roller conveyor actuates movement of the side guides. When the operator pushes a box onto the infeed conveyor, as shown in Figure 10, the lever is depressed causing the air cylinder powered side guides to move inward, therefore centering the box.
- 2. Once the box is centered by the side guides, the operator pushes the box against the valve lever on the top taping head, as shown in Figure 11, causing the top taping head to be raised by two air cylinders. The top taping head will continue to rise above the box height so the operator can insert the box underneath the top taping head drive belts.

3. Once the box is pushed under the top taping head, the top taping head valve lever is released causing the top taping head to descend onto the box top, as shown in Figure 12, allowing the drive belts to convey the box through the top and bottom taping heads for application of the tape seals.

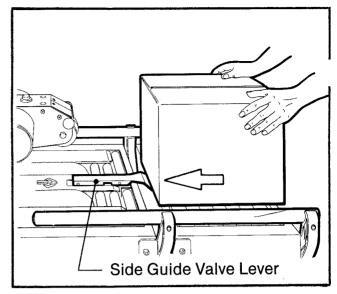


Figure 10 - Side Guide Valve Lever

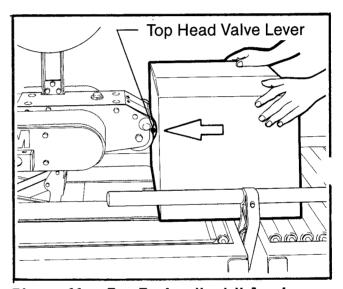


Figure 11 - Top Taping Head Valve Lever

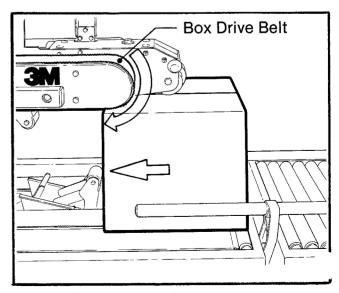


Figure 12 - Drive Belts

Operation (Continued)

- 4. As the box is conveyed through the machine, the **side guide valve lever** is released causing the **side guides** to return to their **full open position**, ready for insertion of the next box.
- 5. Once the box is conveyed from under the top taping head, the **top taping head** descends to its **rest position**, ready for insertion of the next box.

At this point **it is recommended** that the side guide and top taping head valve levers be manually actuated to understand the functions described above. Depressing the side guide valve lever causes the side guides to close, releasing the valve lever causes the side guides to open. Depressing the top taping head valve lever causes the top taping head to rise, releasing the valve lever causes the top taping head to descend.

Once the pneumatic component functions are understood, it is recommended that the electrical supply also be turned on and pre-taped boxes fed through the Case Sealer following the pneumatic component sequence 1 through 5. This will insure that the operating sequence and powered component functions are understood.

Adjustments

Tape Web Alignment-Refer to Figure 13

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 9A, 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 14, 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 15, will decrease the spring pressure.

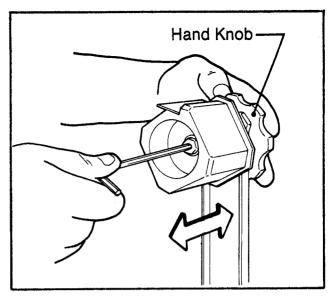


Figure 13

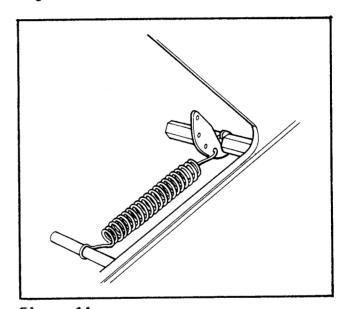


Figure 14

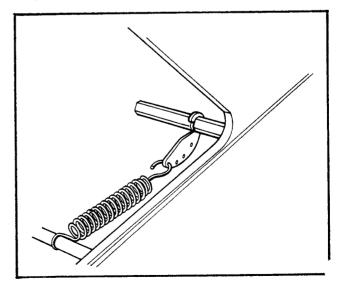


Figure 15

Adjustments (Continued)

One Way Tension Roller Assembly

The one way tension roller, shown in Figure 9A, is **pre-set** for normal operation. Should the one way tension assembly require replacement, the roller must have 1 **pound** [0.5 kg] tangential force when turning as illustrated in Figure 16.

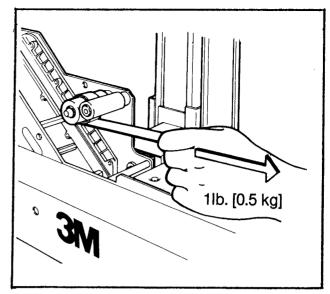


Figure 16

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 gear box.

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 17

- 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 18, 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 19

- 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.

Adjustments (Continued)

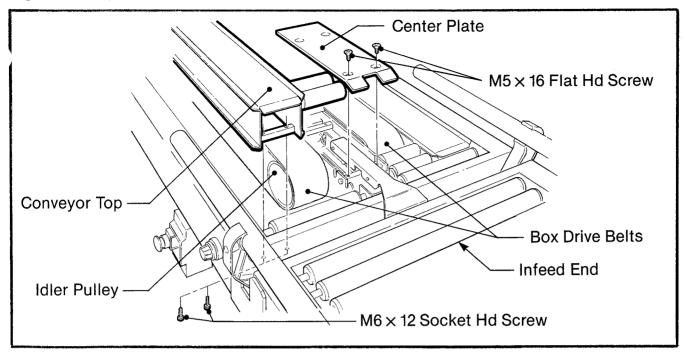


Figure 17 - Box Drive Belt Adjustment - Frame Bed Infeed End

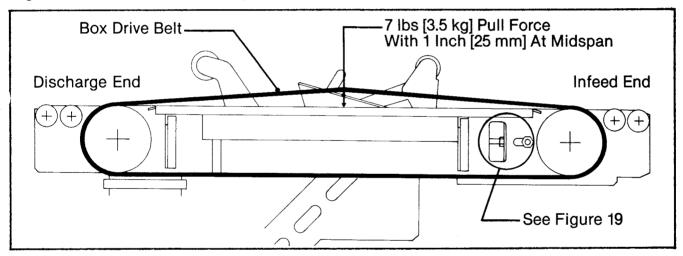


Figure 18 - Box Drive Belt Tension Adjustment - Left Side View

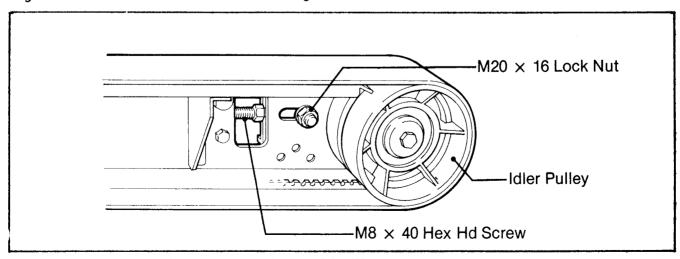


Figure 19 - Tension Adjustment - Left side View

Maintenance

The 77R 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 1148.

- 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

DO NOT REMOVE BOTTOM TAPING HEAD.

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

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 77R 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 20 illustrates the electrical system of the 77R Case Sealer.

No adjustments to the electrical systems are required.

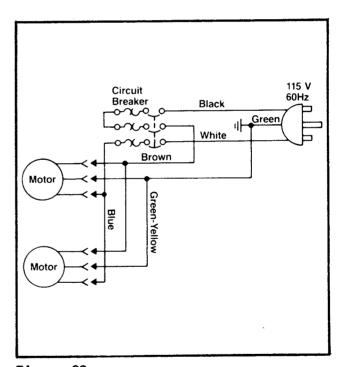


Figure 20

Circuit Breaker

The 77R Case Sealer is equipped with a circuit breaker which trips the "On-Off" witch to tripped position. If circuit is overloaded and circuit breaker trips, wait _ 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 21 and 22 illustrate the taping head and frame points which should be lubricated every 250 hours of operation. 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 THREADED, 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.

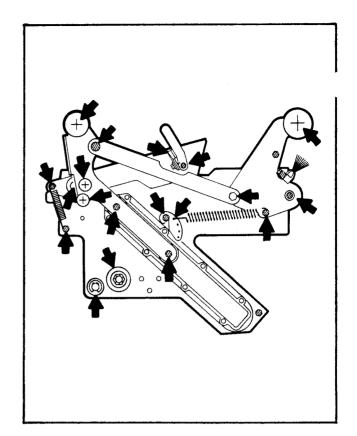


Figure 21 - Lubrication Points - Top And Bottom Taping Head

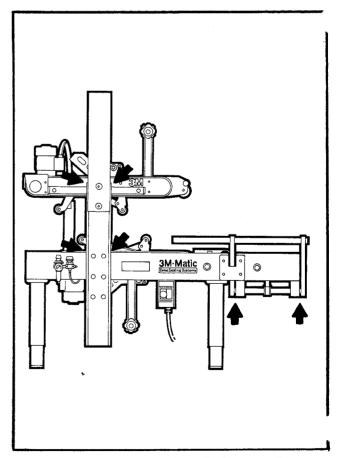


Figure 22 - Lubrication Points - Frame

Maintenance (Continued)

Pneumatic Schematic

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

Figure 23 illustrates the pneumatic system of the Case Sealer. A similar pneumatic schematic is mounted on the machine.

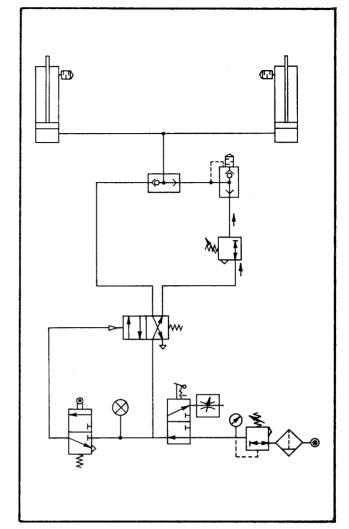


Figure 23 - Pneumatic Schematic

Replacement Parts And Service Information

Spare Parts

A set of spare parts that will periodically require replacement due to normal wear or breakage is supplied with the case sealer. The set includes the following which should be reordered as consumed to keep the case sealer in production:

Qty.	Ref. No.	3M Part Number	Description
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

In addition to the above minimum spare parts, it is suggested that the following spare parts be ordered and kept on hand:

Qty.	Ref. No.	3M Part Number	Description	
1	1146-5	78-8017-9140-7	Roller - Buffing	
1	1145-6	78-8017-9101-9	Roller - Applying	
2	1363-5	78-8052-6722-2	Belt - Drive	

Tool Kit

The tool kit, P/N 78-8054-8732-5, provided with the case sealer, is available as a replacement stock item. The kit contains the necessary wrenches, an oil can and the first set of spare parts listed above. (Threading tool contained in above kit - Part No. 78-8017-9433-6.) 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:

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

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

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 ${\tt manual}$ except where noted:

Part Number	Attachment Name
78-8052-6555-6	Conveyor Extension Attachment, Model 18500
78-8052-6554-9	Caster Kit Attachment, Model 18500 (no additional information)

77R Case Sealer, Model 18500	
Replacement Parts Illustrations and Part	s Lists
Taping Head Assemblies	

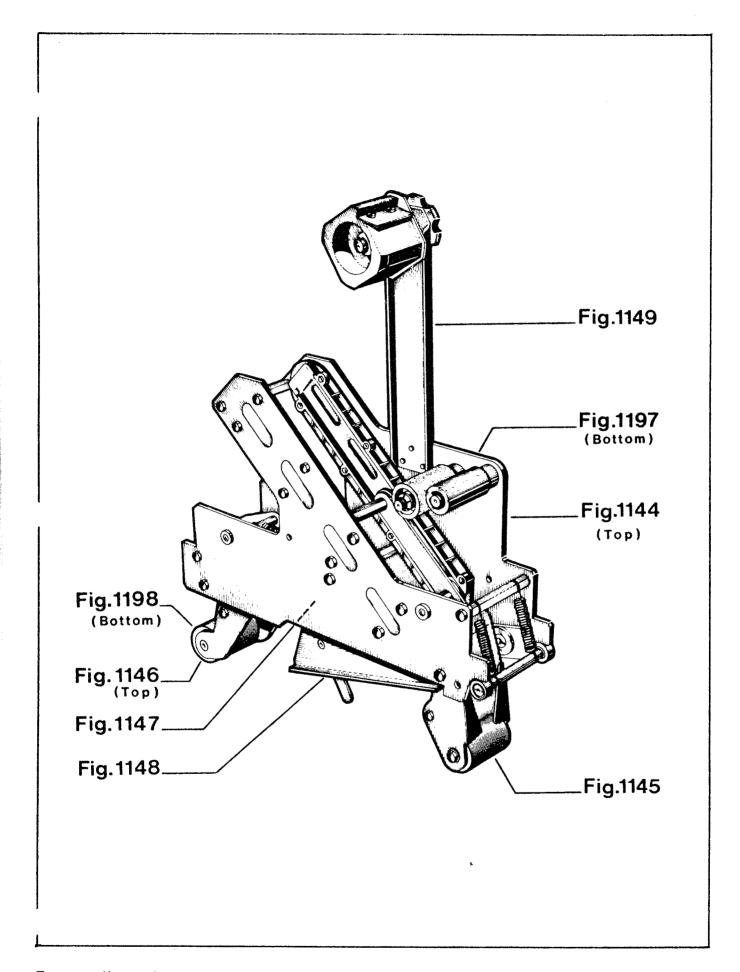


2. Refer to the figure or figures to determine the individual parts required and the parts reference number.

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



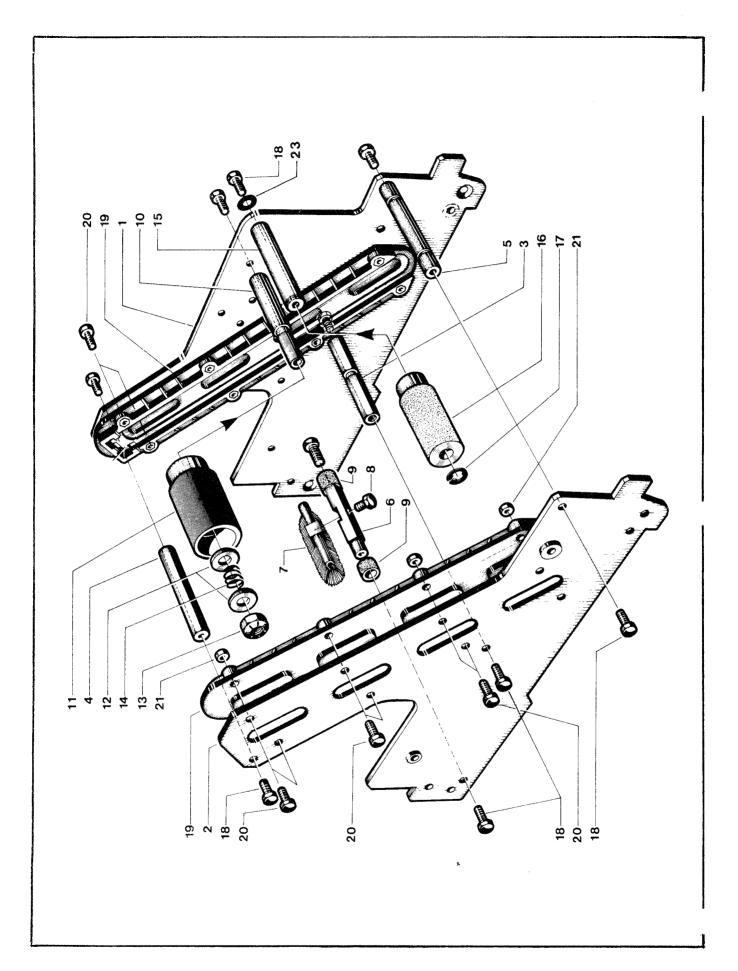


FIGURE 1144 TOP

Figure 1144

Ref. No.	3M Part No.	Description
1144-1	78-8052-6556-4	Frame - R/H Top
1144-2	78-8052-6557-2	Frame - L/H 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
1144-6	78-8052-6561-4	Spacer - Brush Holder
1144-7	78-8052-6562-2	Buffing Brush Assy.
1144-8	78-8018-7798-2	Screw - Hex Hd. M5 x 14 Zinc Pl.
1144-9	78-8052-6563-0	Bumper
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

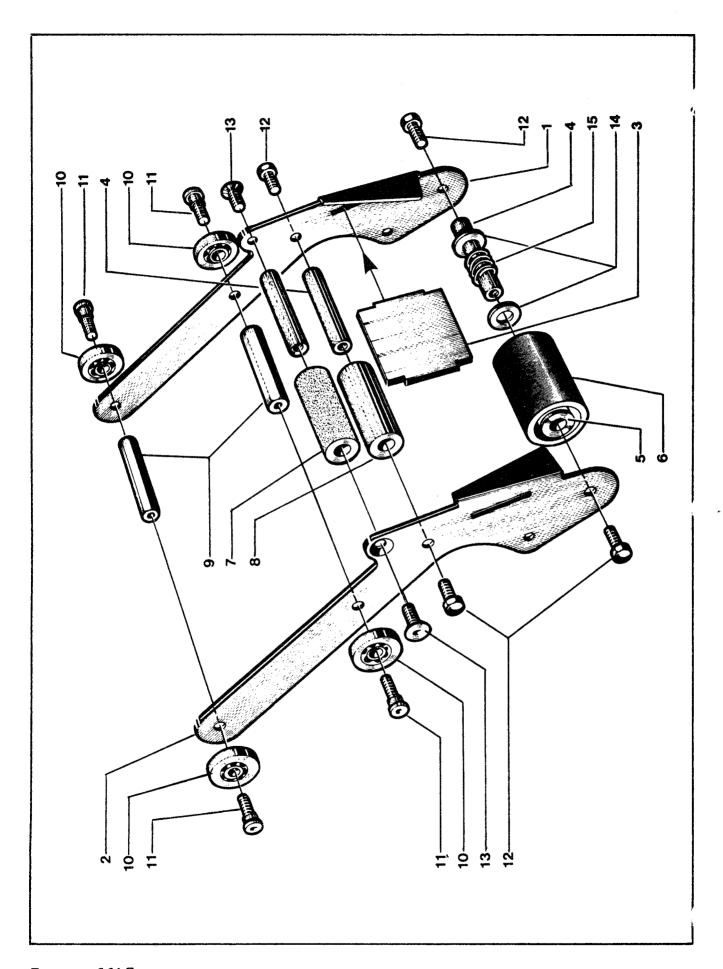


FIGURE 1145

Figure 1145

Ref. No.	3M Part No.	Description
1145-1	78-8052-6572-1	Frame - Applying R/H
1145-2	78-8052-6573-9	Frame - Applying L/H
1145-3	78-8052-6574-7	Plate - Back Up
1145-4	78-8052-6575-4	Shaft - Roller
1145-5	78-8052-6576-2	Bushing - Roller
1145-6	78-8017-9101-9	Roller - Applying
1145-7	78-8052-6578-8	Roller - Knurled
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	78-8052-6581-2	Washer - Friction
1145-15	78-8052-6582-0	Spring - Compression

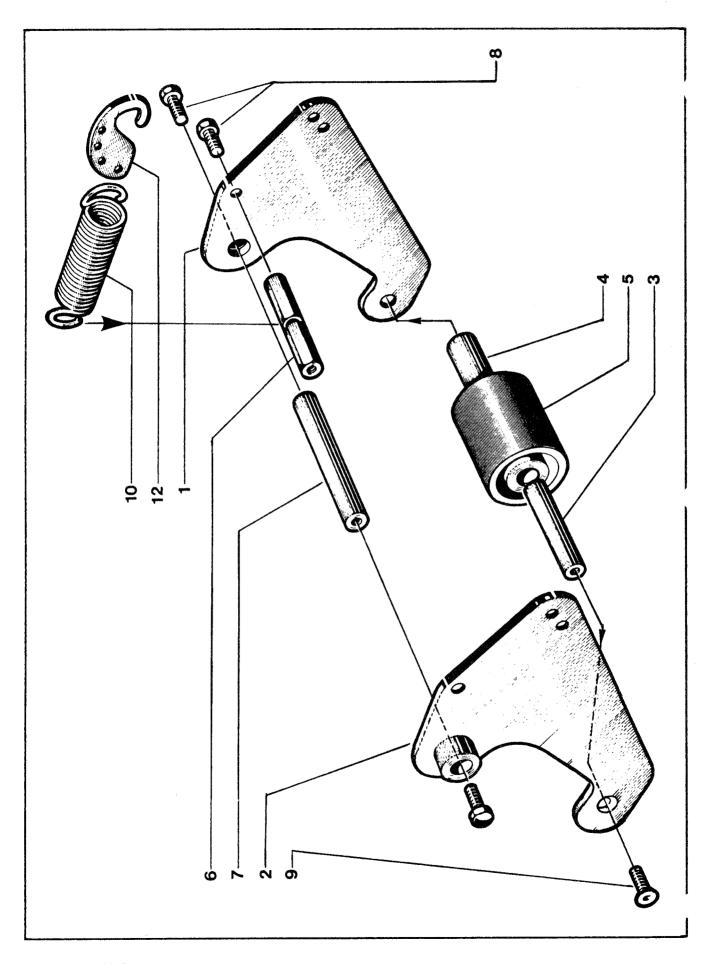


FIGURE 1146 TOP

Figure 1146

Ref. No.	3M Part No.	Description
1146-1	78-8052-6583-8	Frame - R/H
1146-2	78-8052-6584-6	Frame - L/H
1146-3	78-8052-6585-3	Shaft - Buffing Roller
1146-4	78-8052-6586-1	Bushing - Buffing Roller
1146-5	78-8017-9140-7	Roller - Buffing
1146-6	78-8052-6587-9	Spacer - Spring
1146-7	78-8017-9109-2	Shaft - Buffing Assy.
1146-8	26-1002-5830-5	Screw - Hex Hd M6 x 10
1146-9	26-1005-4759-0	Screw - Flat Hd M6 x 12
1146-10	78-8052-6589-5	Spring - Top Ext.
1146-12	78-8052-6590-3	Holder - Spring

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 P1.

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 P1.

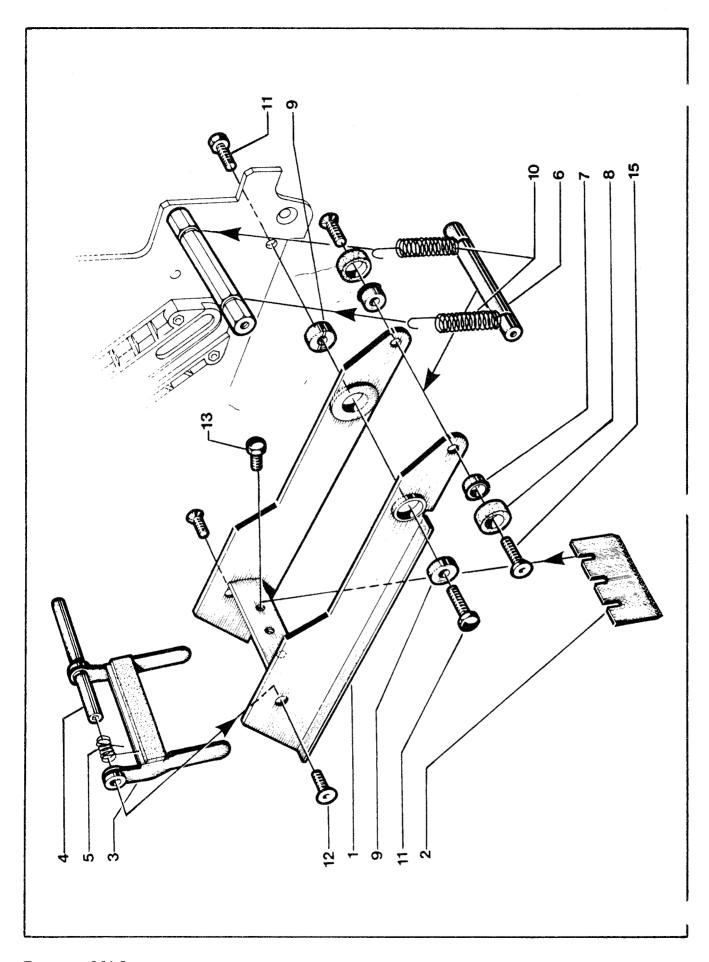


FIGURE 1148

Figure 1148

Ref. No.	3M Part No.	Description
1148-1	78-8052-6595-2	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	Bumper
1148-8	78-8017-9133-2	Spacer
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	26-1005-4758-2	Screw - Flat Hd M5 x 20 Zinc Pl.
1148-13	78-8052-6747-9	Screw - Hex Hd M5 x 8 Zinc Pl.
1148-15	26-1005-4757-4	Screw - Flat Hd M4 x 10 Zinc Pl.

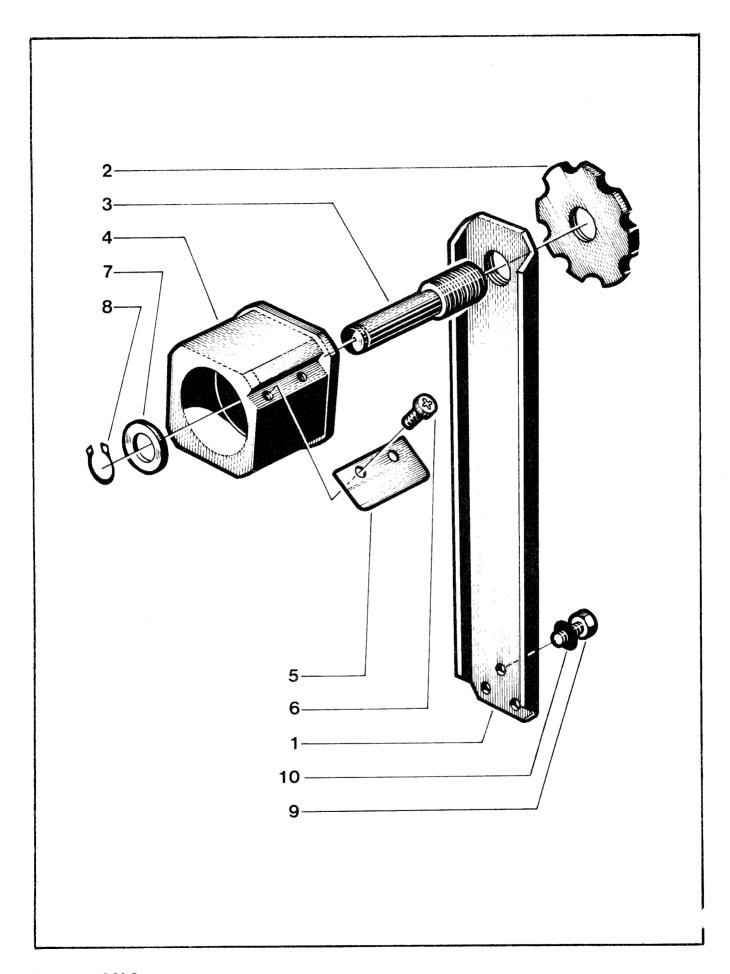


Figure 1149

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	26-1002-5829-7	Screw - Hex Hd M6 x 10
1149-10	26-1000-0010-3	Washer - Flat M6

Figure 1197

D 6 N	One is a		
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	
1197-6	78-8052-6561-4	Spacer - Brush Holder	
1197-7	78-8052-6562-2	Buffing Brush Assy.	
1197-8	78-8018-7798-2	Screw - Hex Hd M5 x 14 Zinc Pl.	
1197-9	78-8052-6563-0	Bumper	
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 M-6 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 - L/H Bottom	
1197-24	78-8052-6605-9	Frame - R/H Bottom	
1197-25	78-8052-6606-7	Roller - Tension Bottom	
1197-26	26-1000-0010-3	Washer - Flat M6	

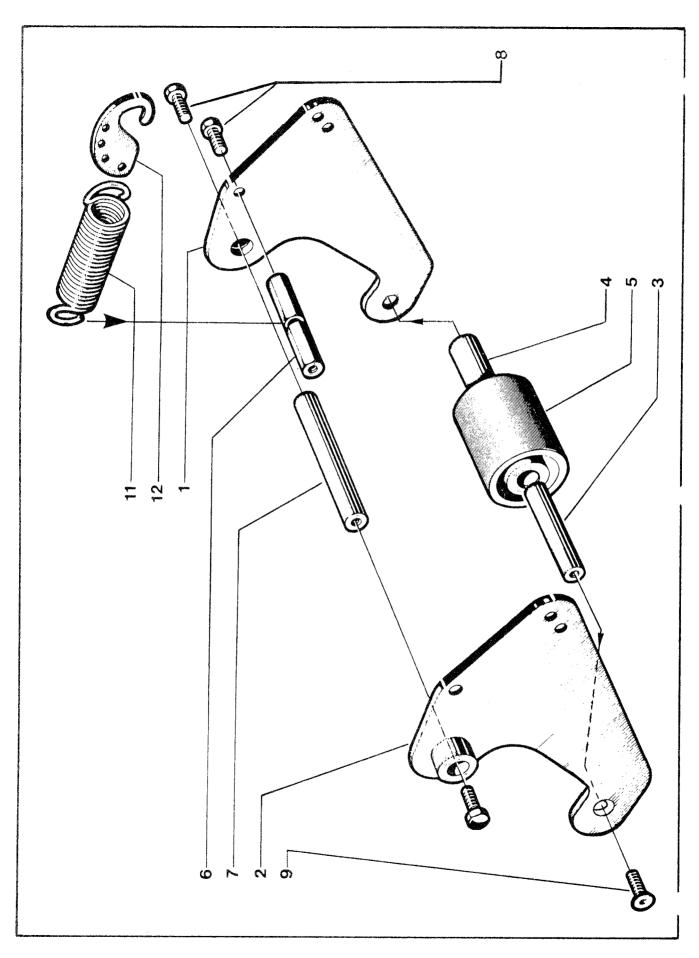


FIGURE 1198 BOTTOM

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
1197-6	78-8052-6561-4	Spacer - Brush Holder
1197-7	78-8052-6562-2	Buffing Brush Assy.
1197-8	78-8018-7798-2	Screw - Hex Hd M5 x 14 Zinc Pl.
1197-9	78-8052-6563-0	Bumper
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 M-6 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 P1.
1197-23	78-8052-6604-2	Frame - L/H Bottom
1197-24	78-8052-6605-9	Frame - R/H Bottom
1197-25	78-8052-6606-7	Roller - Tension Bottom
1197-26	26-1000-0010-3	Washer - Flat M6

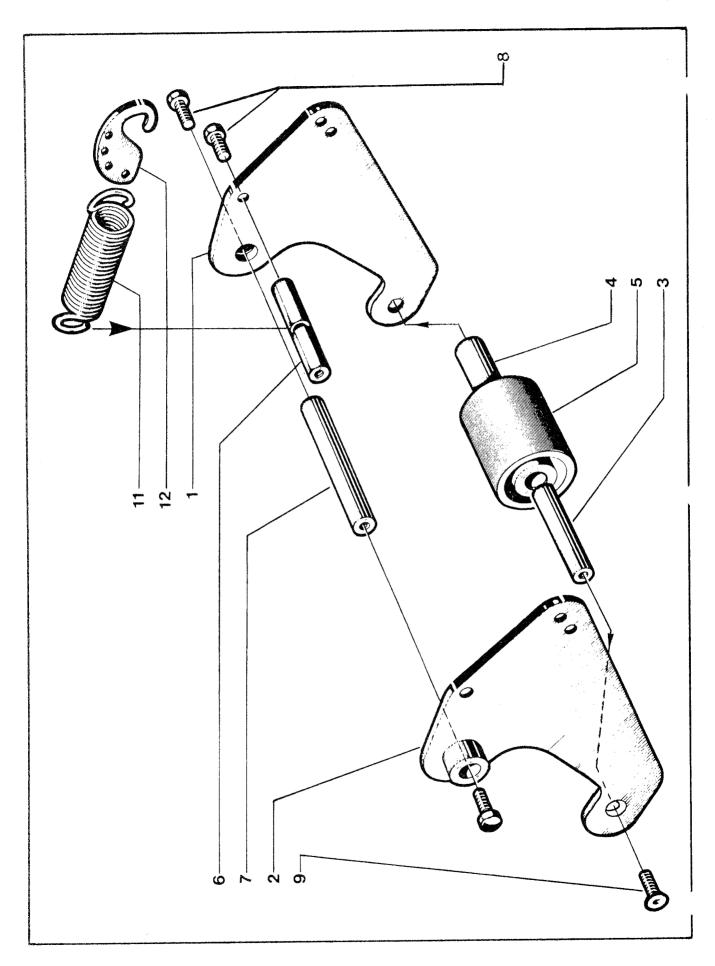
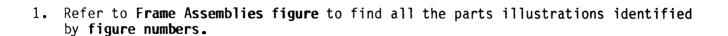


FIGURE 1198 BOTTOM

Figure 1198

Ref. No.	3M Part No.	Description
1198-1	78-8052-6583-8	Frame - R/H
1198-2	78-8052-6584-6	Frame - L/H
1198-3	78-8052-6585-3	Shaft - Buffing Roller
1198-4	78-8052-6586-1	Bushing - Buffing Roller
1198-5	78-8017-9140-7	Roller - Buffing
1198-6	78-8052-6587-9	Spacer - Spring
1198-7	78-8017-9109-2	Shaft - Buffing Assy.
1198-8	26-1002-5830-5	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 Ext.
1198-12	78-8052-6590-3	Holder - Spring

77R Case Sealer, Model 18500	
Replacement Parts Illustrations	and Parts Lists
Frame Assemblies	

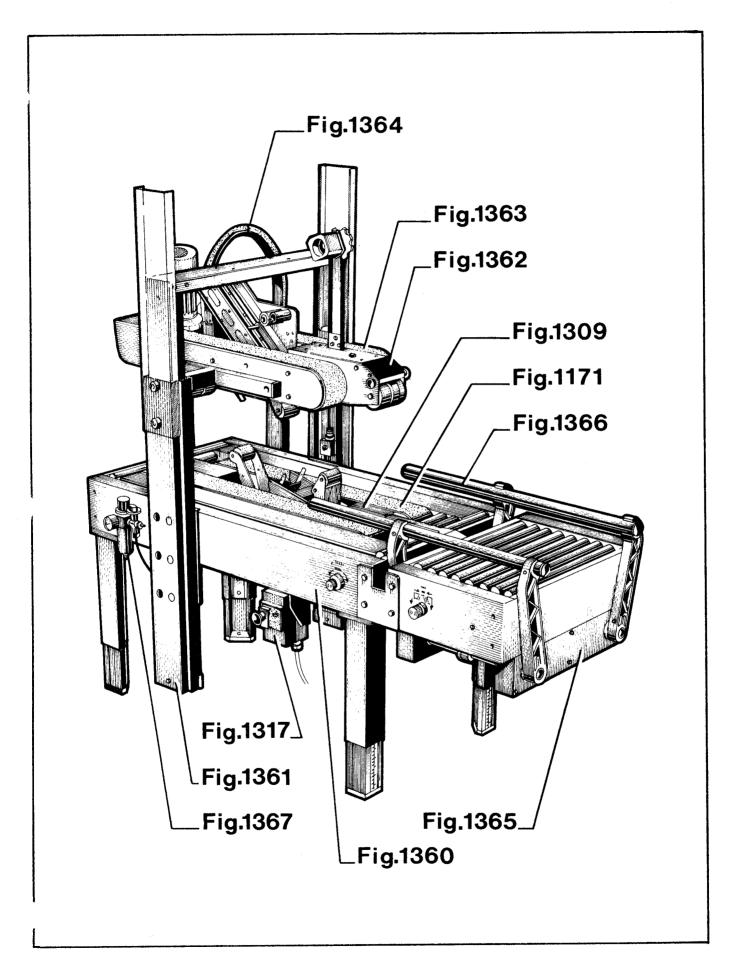


2. Refer to the figure or figures to determine the individual parts required and the parts reference number.

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



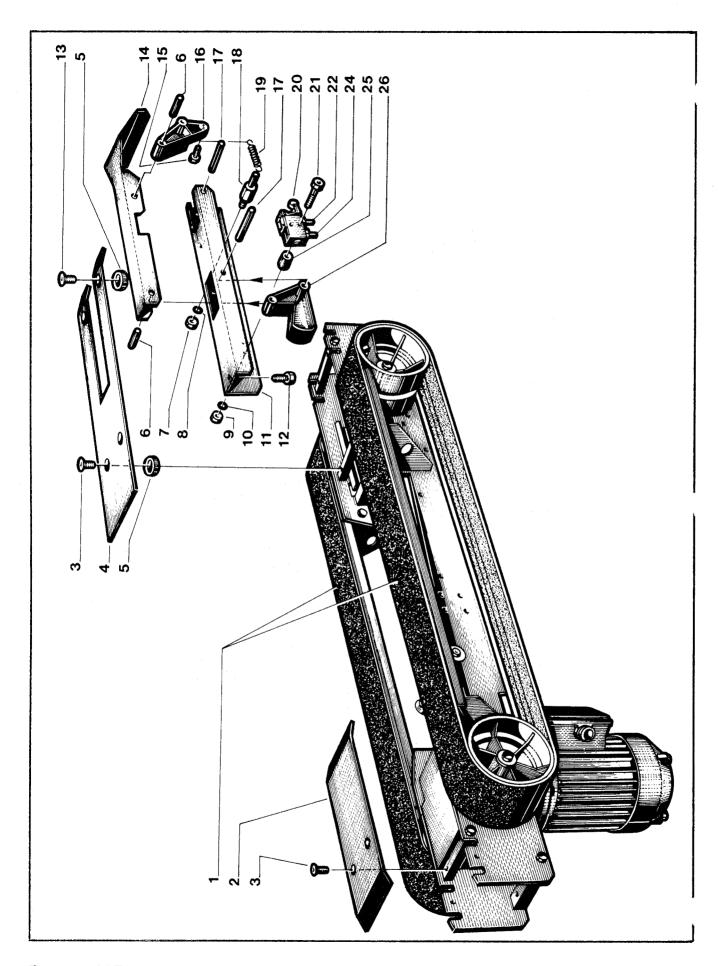


FIGURE 1171

Figure 1171

Ref. No.	3M Part No.	Description
1171-1	78-8052-6722-2	Belt - Drive
1171-2	78-8052-6723-0	Plate - Center, Rear
1171-3	26-1005-5316-8	Screw - Flat Hd Hex Dr M5 x 16
1171-4	78-8054-8750-7	Plate - Center, Front
1171-5	78-8054-8751-5	Spacer
1171-6	78-8054-8752-3	Shaft - 6 x 33 mm
1171-7	78-8010-7417-6	Nut - Hex Stl. M5, Metric
1171-8	78-8005-5741-1	Washer - Plain M5, Metric
1171-9	78-8010-7416-8	Nut - Hex Stl. M4, Metric
1171-10	78-8005-5740-3	Washer - Plain Metric 4mm
1171-11	78-8054-8753-1	Support - Valve
1171-12	26-1002-5817-2	Screw - Hex. Hd. Zinc. Pl. M5 x 8
1171-13	26-1002-3866-1	Screw - Fl. Hd. Hex. Dr. M5 x 10
1171-14	78-8054-8754-9	Side Guide Actuator
1171-15	26-1002-4955-1	Screw - Self Tap Thd, 12 mm
1171-16	78-8054-8755-6	Front Actuator Link
1171-17	78-8054-8756-4	Shaft - 6 x 46 mm
1171-18	78-8054-8757-2	Pin - Spring Holder
1171-19	78-8017-9136-5	Spring - Cutter
1171-20	26-1005-6358-9	Valve - 3 Way - 2 Position
1171-21	26-1003-7347-3	Screw - Soc Hd Hex Soc M4 x 30
1171-22	26-1005-6359-7	Fitting Barb 2.5 mm
1171-24	26-1005-6880-2	Fitting Barb 2.5 mm
1171-25	78-8054-8758-0	Spacer - Valve Holder
1171-26	78-8054-8759-8	Rear Actuator Link

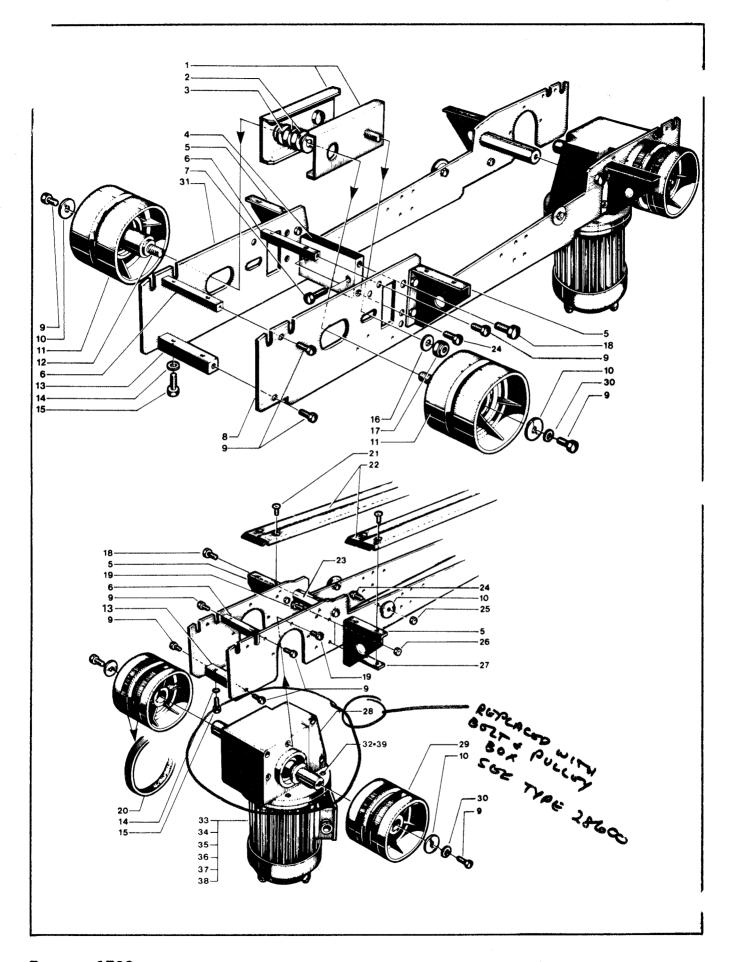


Figure 1309

Ref. No.	3M Part No.	Description
1309-1	78-8052-6704-0	Roller - Bracket
1309-2	26-1003-6906-0	Nut - M12 Metric
1309-3	26-1004-5511-7	Washer - Metric
1309-4	78-8052-6705-7	Block - Spacer
1309-5	78-8052-6706-5	Bracket
1309-6	78-8052-6707-3	Bar - Spacer
1309-7	26-1003-5845-1	Screw - Hex Hd. M8 x 40
1309-8	78-8052-6708-1	Side Plate
1309-9	78-8010-7169-3	Screw - Hex Hd. M6 x 12 Metric
1309-10	78-8052-6709-9	Washer - Special
1309-11	78-8052-6710-7	Roller - Idler
1309-12	78-8052-6711-5	Shaft - Roller
1309-13	78-8052-6712-2	Bar - Spacer
1309-14	26-1000-0010-3	Washer - Flat M6
1309-15	78-8010-7209-7	Screw - Soc. Hd. M6 x 12
1309-16	78-8052-6566-3	Washer - Friction
1309-17	26-1003-6918-5	Nut - Hex Flange Plastic Insert M10
1309-18	26-1002-4189-7	Screw - Hex. Hd. M10 x 20
1309-19	26-1003-5820-4	Screw - Hex. Hd. M5 x 12
1309-20	78-8052-6713-1	Ring - Rubber
1309-21	26-1005-5316-8	Screw - Flat Hd. Hex Dr. M5 x 16
1309-22	78-8052-6714-9	Guide - Drive Belt
1309-23	78-8017-9144-9	Spacer - Hexagonal
1309-24	78-8032-0375-7	Screw - Hex. Hd. M6 x 16 Metric
1309-25	78-8010-7418-4	Nut - Hex, Stl. M6 Metric
1309-26	78-8010-7417-6	Nut - Hex Stl. M5 Metric
1309-27	78-8052-6715-6	Bracket
1309-28	78-8052-6716-4	Gear - Box
1309-29	78-8052-6717-2	Roller - Drive
1309-30	78-8010-7435-8	Washer - Lock M6 Metric
1309-31	78-8054-8649-1	Plate - Lower Main - Left
1309-32	78-8005-5736-1	Lockwasher - For M8 Screw
1309-33	78-8052-6718-0	Motor - 220/380V - 50 Hz 3 Phase
1309-34	78-8052-6719-8	Motor - 260/440V - 50 Hz 3 Phase
1309-35	78-8052-6720-6	Motor - 240/415V - 50 Hz 3 Phase
£309 - 36	78-8046-8268-6	Motor - 220V, 50 Hz, Single Phase
1309-37	78-8046-8270-2	Motor 240V, 50 Hz, Single Phase
1309-38	78-8046-8267-8	Motor - 110V, 60 Hz, Sgl. Phase 3A
1309-39	26-1003-5842-8	Screw - Hex. Hd. M8 x 20

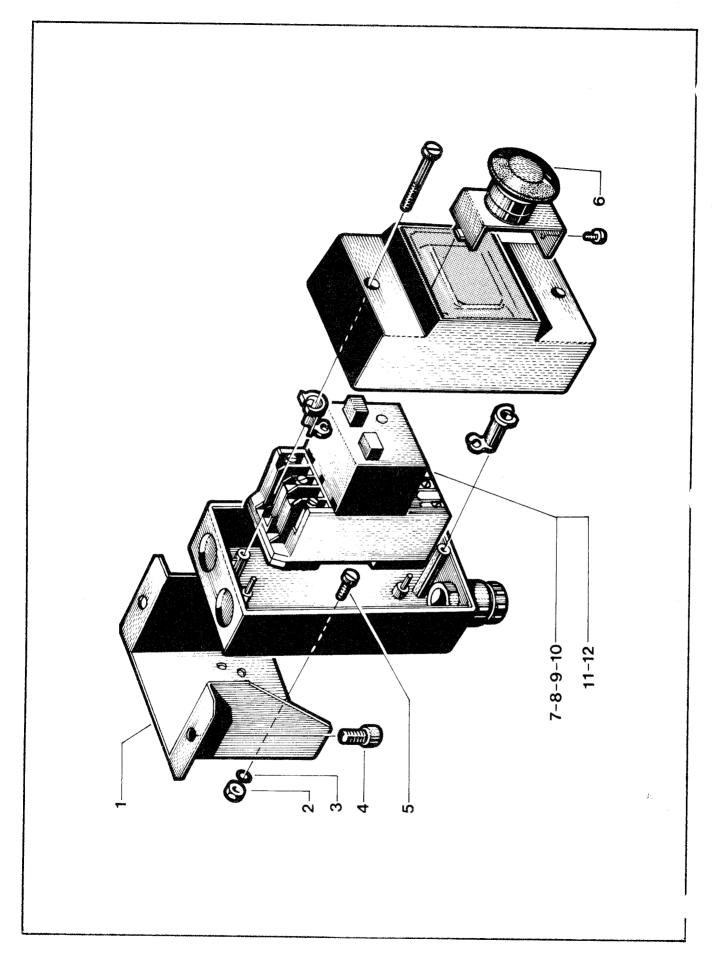


Figure 1317

Ref. No.	3M Part No.	Description
1317-1	78-8052-6724 - 8	Switch - Bracket
1317-2	78-8010-7416-8	Nut - Hex. Stl. M4 Metric
1317-3	78-8017-9018-5	Washer - Plain M4 Spec. Metric
1317-4	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1317-5	26-1003-5707-3	Screw - Phillips Dr. M4 x 16
1317-6	78-8052-6725-5	Emergency Stop
1317-7	78-8052-6726-3	Switch - 0n/0ff 0.63 - 1 AMP
1317-8	78-8052-6727-1	Switch - 0n/0ff 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 - 0n/0ff 6.3 - 10 AMP

56-8070-1573-6

Ref. No.	3M Part No.	Description
1360-1	78-8052-6662-0	Conveyor Bed
1360-2	78-8052-6663-8	Side Plate
1360-3	78-8052-6664-6	Spacer
1360-4	78-8010-7163-6	Screw - Hex. Hd. M5 x 10 Metric
1360-5	78-8052-6665-3	Block - Mounting
1360-6	26-1000-0010-3	Washer - Flat M6
1360-7	78-8010-7209-7	Screw - Soc. Hd. M6 x 12
1360-8	78-8052-6666-1	Side Plate
1360-9	78-8052-6667-9	Roller
1360-10	78-8052-6668-7	Snap - Roller
1360-11	78-8052-6669-5	Roller - Conveyor
1360-12	78-8052-6670-3	Nut - Special
1360-13	78-8052-6671-1	Spacer
1360-14	78-8052-6672-9	Spacer
1360-15	78-8052-6693-5	Roller
1360-16	78-8052-6732-1	Ring - M8 Special
1360-17	78-8052-6673-7	Spacer
1360-18	78-8054-8760-6	Bed - Conveyor
1360-19	26-1002-6216-6	Screw - Self Theading M5 x 12
1360-20	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1360-21	78-8052-6675-2	Leg - Conveyor Left
1360-22	78-8054-8650-9	Leg - Conveyor Right
1360-23	78-8052-6676-0	Clamp - Outer
1360-24	78-8052-6677-8	Clamp - Inner
1360-25	78-8052-6678-6	Leg - Inner
1360-26	78-8017-9313-0	Nut - Self Locking Nick. Pl. M-8
1360-27	26-1004-5507-5	Washer M8
1360-28	78-8052-6679-4	Pad - Foot
1360-29	26-1003-5842-8	Screw - Hex. Hd. M8 x 20
1360-30	78-8052-6680-2	Label - Height
1360-31	78-8054-8818-2	Wheel - Caster
1360-32	78-8054-8761-4	Roller - Conveyor
1360-33	26-1002-5817-2	Screw - Hex. Hd. M5 x 8 Zinc Pl.
.360-34	78-8010-7417-6	Nut - Hex. Stl. M5 Metric
1360-35	78-8054-8762-2	Support - Roller

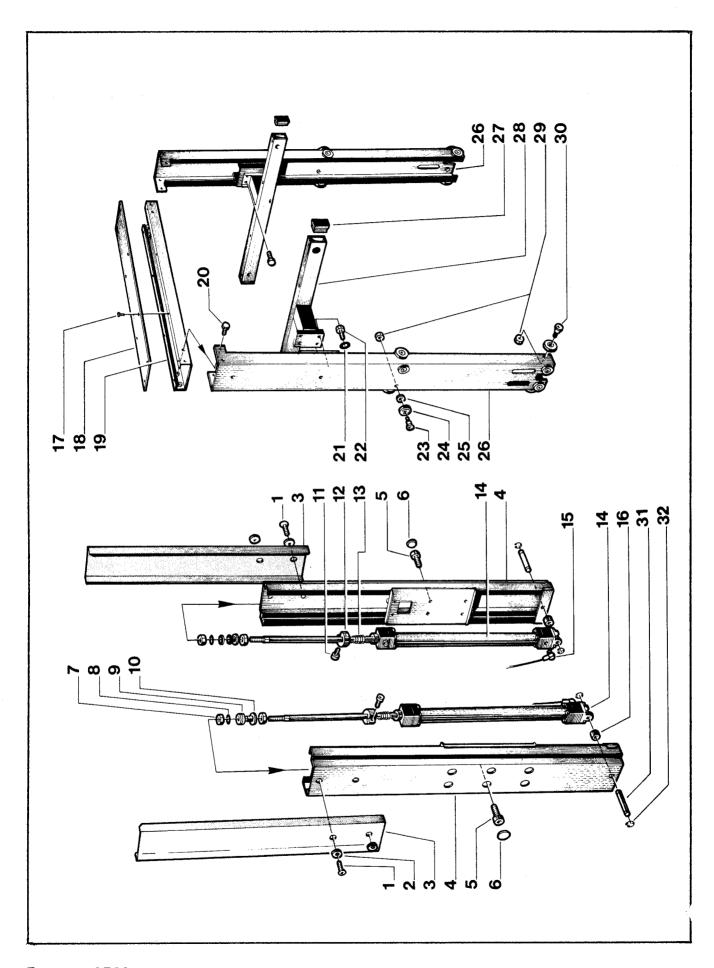


FIGURE 1361

Figure 1361

Ref. No.	3M Part No.	Description
1261 1	26 1001 0042 6	Screw - Flat Soc. Hd. M6 x 16
1361-1	26-1001-9843-6	
1361-2	78-8054-8577-4	Washer - Special
1361-3	78-8054-8819-0	Guard
1361-4	78-8054-8820-8	Column
1361-5	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1361-6	78-8054-8821-6	End - Cap
1361-7	78-8017-9169-6	Nut - M18 x 1
1361-8	78-8054-8822-4	Washer
1361-9	78-8054-8823-2	Bumper
1361-10	78-8054-8824-0	Rod End
1361-11	26-1003-7965-5	Screw - Soc. Hd. M8 x 25
1361-12	78-8054-8825-7	Clamp - Tubing
1361-13	78-8054-8826-5	Spring
1361-14	78-8054-8827-3	Cylinder - Air, 32 x 440L mm
1361-15	26-1005-6893-5	90 Degree Elbow
1361-16	78-8054-8828-1	Spacer
1361-17	26-1002-5753-9	Screw - Self Tapping
1361-18	78-8054-8829-9	Cover
1361-19	78-8054-8830-7	Crossmember
1361-20	78-8010-7169-3	Screw - Hex. Hd. M6 x 12 Metric
1361-21	26-1000-0010-3	Washer - Flat M6
1361-22	26-1003-7957-2	Screw - Soc. Hd. Hex Hd. M6 x 16
1361-23	78-8054-8589-9	Screw Special
1361-24	78-8054-8617-8	Bearing - Special
1361-25	78-8054-8576-6	Spacer
1361-26	78-8054-8592-3	Column - Inner
1361-27	78-8054-8593-1	End Cap
1361-28	78-8054-8594-9	Head Support
1361-29	26-1003-6916-9	Nut - Locking Plastic Insert M6
1361-30	78-8017-9106-8	Screw - Bearing Shoulder
1361-31	78-8054-8966-9	Pin - Air Cylinder Clevis
1361-32	78-8656-4038-3	Ring - Retaining 10 mm

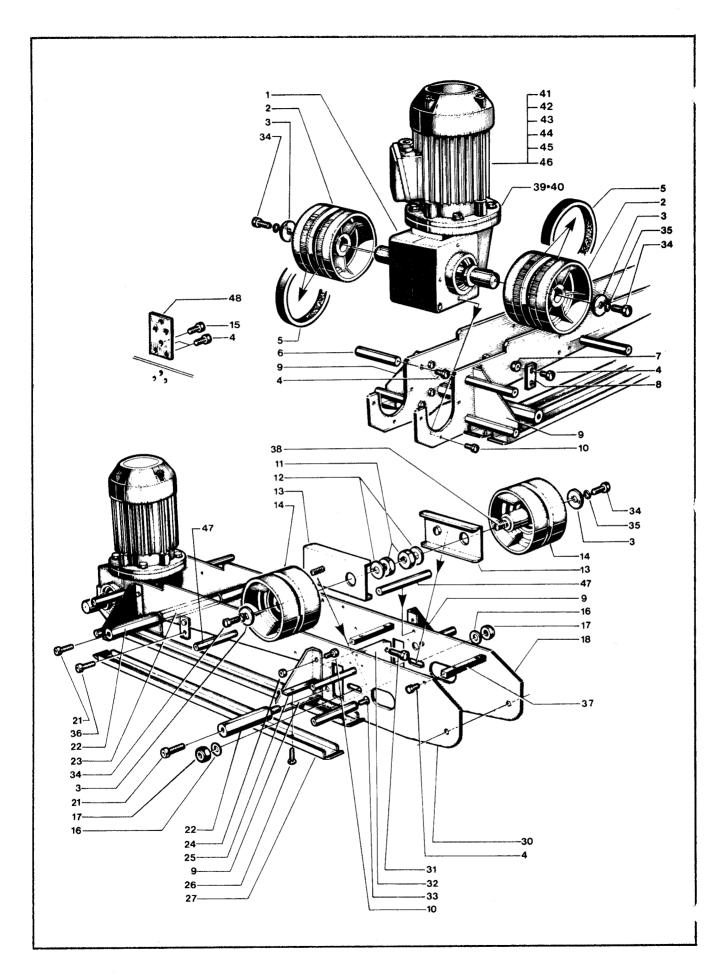


FIGURE 1362

ef. No.	3M Part No.	Description
1262 1	78-8052-6716-4	Gear - Box
1362-1 1362-2	78-8052-6717-2	Roller - Drive
1362-2	78-8052-6709-9	Washer - Special
1362-3	78-8010-7169-3	Screw - Hex. Hd. M6 x 12 Metric
1362-5	78-8052-6713-1	Ring - Rubber
1362-6	78-8052-6558-0	Spacer - Spring Hook
1362-7	78-8010-7418-4	Nut - Hex. Stl. M6 Metric
1362-8	78-8054-8763-0	Bracket for K7 Taping Head
1362-9	78-8052-6706-5	Bracket
1362-10	26-1003-5820-4	Screw - Hex Hd. M5 x 12
1362-11	26-1003-5026-0	Nut - M12 Metric
1362-11	26-1003-0500-0	Washer - Metric
1362-13	78-8052-6704-0	Roller - Bracket
1362-14	78-8052-6710-7	Roller - Idler
1362-15	78-8010-7193-3	Screw - Hex. Hd. M6 x 20 Metric
1362-16	78-8052-6566-3	Washer - Friction
1362-17	26-1003-6918-5	Nut - Hex Flange Plastic Insert M10
1362-18	78-8052-6638-0	Side Plate - Right
1362-21	26-1003-7973-9	Screw - Soc. Hd. M10 x 16
1362-22	78-8054-8843-0	Spacer
1362-23	78-8017-9144-9	Spacer - Hexagonal
1362-24	78-8010-7417-6	Nut Hex. Stl. M5 Metric
1362-25	78-8052-6715-6	Bracket
1362-26	26-1005-5316-8	Screw - Flat Hd. Hex Dr. M5 x 16
1362-27	78-8052-6714-9	Guide - Drive Belt
1362-30	78-8052-6642-2	Side Plate - Left
1362-31	26-1003-5845-1	Screw - Hex Hd. M8 x 40
1362-32	78-8052-6705-7	Block - Spacer
1362-33	26-1002-5830-5	Screw - Hex Hd. M6 x 12
1362-34	78-8032-0375-7	Screw - Hex Hd M6 x 16 Metric
1362-35	78-8010-7435-8	Washer - Lock M6 Metric
1362-36	78-8010-7229-5	Screw - Soc. Hd. M6 x 10
1362-37	78-8054-8764-8	Spacer 10 x 10 x 90 mm
1362-38	78-8052-6711-5	Shaft - Roller
1362-39	26-1003-5842-8	Screw - Hex. Hd. M8 x 20
1362-40	78-8005-5736-1	Lockwasher - for M8 Screw
1362-41	78-8052-6718-0	Motor - 220/380V - 50 Hz 3 Phase
1362-42	78-8052-6719-8	Motor - 260/440V - 50 Hz 3 Phase
1362-43	78-8052-6720-6	Motor - 240/415V - 50 Hz 3 Phase
1362-44	78-8046-8268-6	Motor - 220V - 50 Hz Single Phase
1362-45	78-8046-8270-2	Motor - 240V - 50 Hz Single Phase
1362-46	78-8046-8267-8	Motor - 110V - 60 Hz Single Phase 3A
1362-47	78-8052-6643-0	Spacer
1362-48	78-8052-6644-8	Bracket

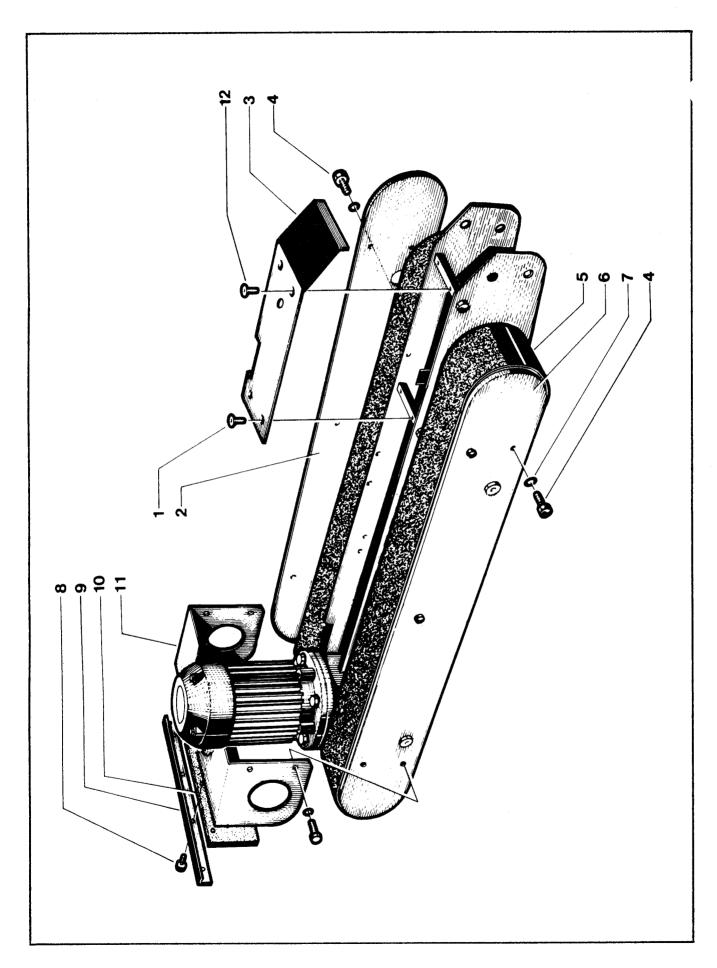


FIGURE 1363

Figure 1363

Ref. No.	3M Part No.	Description	
(262.1	26 1005 5216 0	Compare Florid House Dr. ME v. 16	
1363-1	26-1005-5316-8	Screw - Flat Hd. Hex Dr. M5 x 16	
1363-2	78-8052-6645-5	Cover - Right	
1363-3	78-8052-6646-3	Cover - Top	
1363-4	78-8010-7169-3	Screw - Hex. Hd. M6 x 12 Metric	
1363-5	78-8052-6722-2	Belt - Drive	
1363-6	78-8052-6647-1	Cover - Left	
1363-7	26-1000-0010-3	Washer - Flat M6	
1363-8	26-1002-4955-1	Screw - Self Tapping Thd. 12 mm	
1363-9	78-8052-6648-9	Guard - Bracket	
1363-10	78-8052-6649-7	Guard - Belt	
1363-11	78-8052-6650-5	Guard - Housing	
1363-12	26-1002-3866-1	Screw - Flat Hd. Hex Dr. M5 x 10	

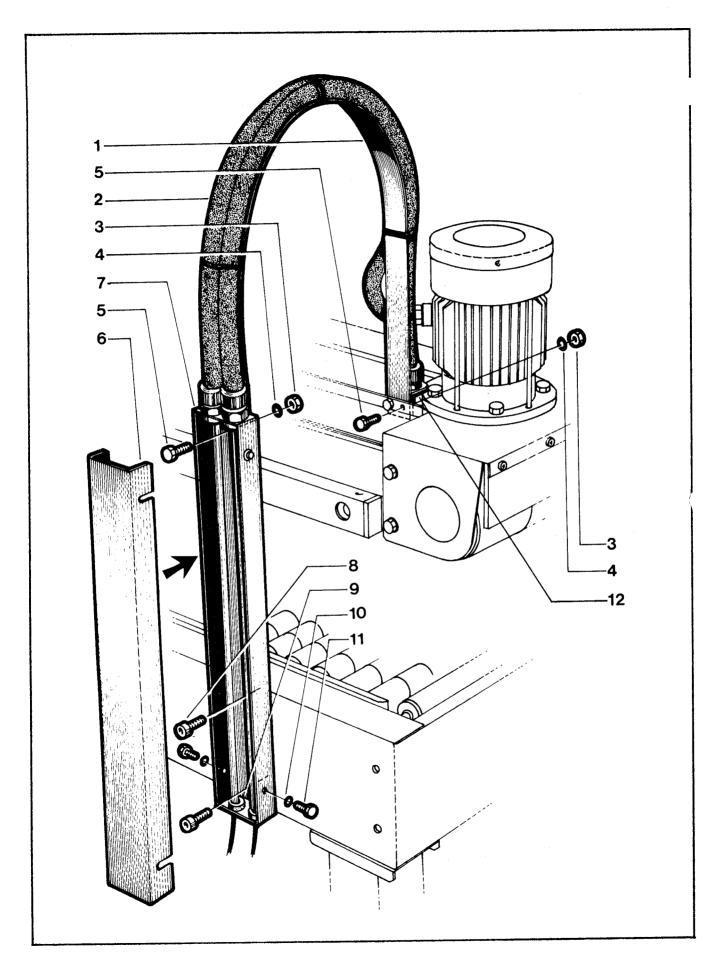


FIGURE 1364

Figure 1364

ef. No.	3M Part No.	Description
1364-1	78-8052-6655-4	Strap - Wire
1364-2	78-8052-6656-2	Sleeving - Wire
1364-3	78-8010-7417-6	Nut - Hex. Stl. M5 Metric
1364-4	78-8005-5741-1	Washer - Plain M5 Metric
1364-5	78-8010-7163-6	Screw - Hex. Hd. M5 x 10 Metric
1364-6	78-8052-6658-8	Cover
1364-7	78-8052-6657-0	Housing - Wire
1364-8	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1364-9	78-8052-6659-6	Grommet
1364-10	78-8005-5740-3	Washer - Plain 4 mm Metric
1364-11	26-1003-5810-5	Screw Hex. Hd. M4 x 8
1364-12	78-8054-8765-5	Bracket

Figure 1365

Ref. No.	3M Part No.	Description
1365-1	26-1005-6881-0	Flow Control 6 mm
1365-2	12-7991-1752-3	Washer - Plain M14
1365-3	78-8057-5738-8	Cylinder - Air 400 x 100 mm
1365-4	78-8054-8766-3	Bushing
1365-5	78-8054-8767-1	Spring
1365-6	78-8054-8768-9	Block - Pivot
1365-7	78-8017-9318-9	Washer - Plain 8 mm Metric
1365-8	78-8017-9313-0	Nut - Self Locking M8 Nick. Pl.
1365-9	78-8052-6668-7	Snap - Roller
1365-10	78-8017-9059-9	Washer - Flat (for M12 Screw)
1365-11	26-1005-6883-6	Bulk Head Fitting
1365-12	26-1005-6884-4	Swivel - Tee - Laterial
1365-13	78-8054-8769-7	Bracket - Conveyor
1365-14	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1365-18	78-8054-8770-5	Infeed Main Frame
1365-19	26-1005-6885-1	Regulator
1365-20	26-1005-6893-5	90 Degree Elbow
1365-22	78-8052-6669-5	Roller - Conveyor
1365-24	26-1005-6887-7	Bulk Head Fitting
1365-25	26-1005-6888-5	Tubing - 6 mm x 4 mm
1365-26	26-1005-6889-3	Tubing - 4 mm x 2.5 mm
1365-27	26-1005-6890-1	Muffler
1365-28	26-1005-6891-9	Stud - Male
1365-29	78-8010-7207-1	Screw - Soc. Hd. Hex Hd. M5 x 40
1365-30	78-8005-5741-1	Washer - Plain M5 Metric
1365-31	26-1005-6911-5	Valve - Single Pilot
1365-32	26-1005-6859-6	Nut - Self Locking M5

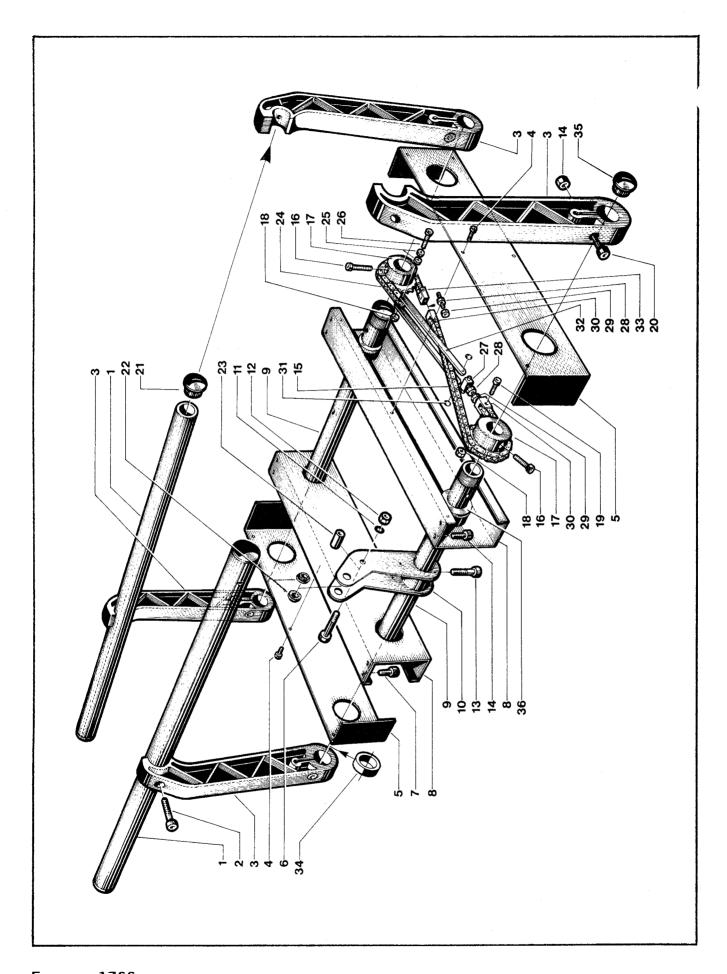


FIGURE 1366

Ref. No.	3M Part No.	Description
1366-1	78-8054-8771-3	Rod - Square
1366-2	78-8010-7211-3	Screw - Soc. Hd. M6 x 25
1366-3	78-8054-8772-1	Clamp - Guide
1366-4	26-1002-5753-9	Screw - Self Tapping
1366-5	78-8054-8773-9	Guide - Housing Infeed
1366-6	26-1002-5836-2	Screw - Hex. Hd. M6 x 40
1366-7	26-1003-7957-2	Screw - Soc. Hd. Hex Hd. M6 x 16
1366-8	78-8054-8774-7	Guide - Housing Center
1366-9	78-8054-8775-4	Guide - Centering Rod
1366-10	78-8054-8776-2	Lever - Flanged
1366-11	26-1000-0010-3	Washer - Flat M6
1366-12	26-1003-6916-9	Nut - Locking Plastic Insert M6
1366-13	26-1003-7963-0	Screw - Soc. Hd. M8 x 16
1366-14	26-1000-1347-8	Nut - Hex Stl. M8 Metric
1366-15	78-8054-8777-0	Chain - 3/8 Pitch, 41 Pitch Lg.
1366-16	26-1003-7949-9	Screw - Soc. Hd. Hex Soc. M5 x 12
1366-17	78-8054-8778-8	Sprocket - 20 Teeth 3/8
1366-18	78-8055-0528-2	Nut - Self Locking 1/8 Special
1366-19	78-8055-0529-0	Screw - Soc. Hd. Hex. Soc. 1/8 x 20 mm Special
1366-20	26-1003-7969-7	Screw - Soc. Hd., Hex. Soc. M8 x 45 m
1366-21	78-8054-8779-6	End - Cap
1366-22	78-8054-8780-4	Bushing - 10 x 14 mm
1366-23	78-8054-8781-2	Spacer
1366-24	78-8054-8782-0	Chain - 3/8 Pitch 23 Pitch Lg.
1366-25	78-8054-8783-8	Washer - Special
1366-26	78-8055-0527-4	Screw - Soc. Hd. Hex Hd. 1/8 x 25 mm Special
1366-27	78-8054-8784-6	Block - Chain
1366-28	78-8054-8785-3	Rod - Threaded Right/Left
1366-29	78-8010-7418-4	Nut - Hex. Stl. M6 Metric
1366-30	78-8054-8786-1	Chain - Connector
1366-31	78-8656-3945-0	E-Ring M-4
1366-32	78-8054-8787-9	Chain - Link
1366-33	78-8054-8788-7	Chain - Connector
1366-34	78-8054-8789-5	Spacer
1366-35	78-8054-8790-3	End - Cap
1366-36	78-8054-8791-1	Rod Bushing

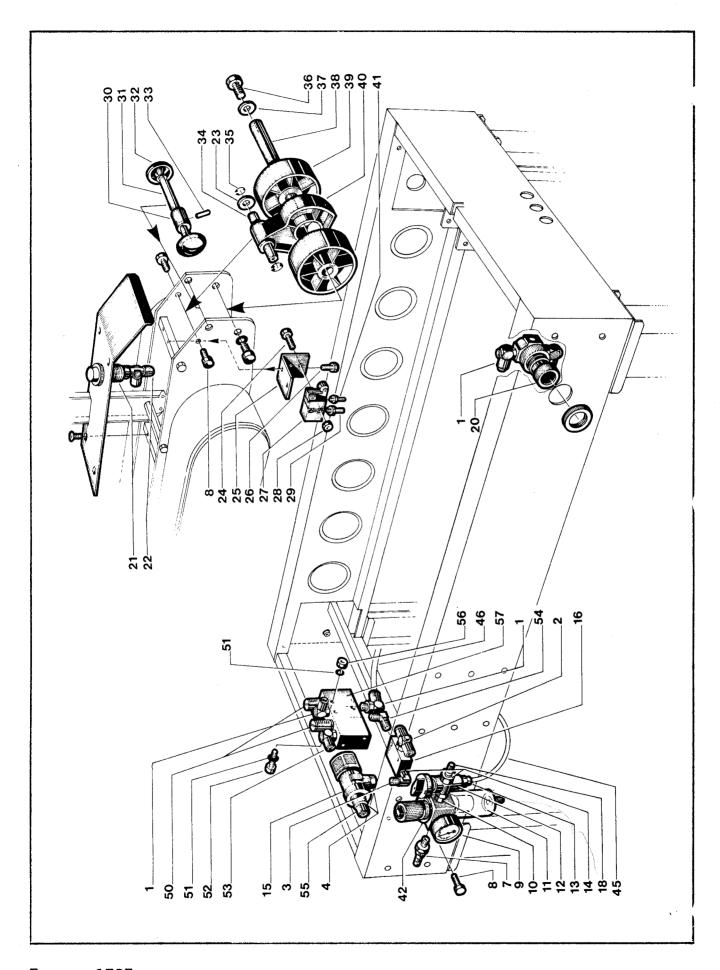


FIGURE 1367

1367-1
1367-3
1367-4
1367-7
1367-8 78-8010-7169-3 Screw - Hex. Hd. M6 x 12 Metric 1367-9 78-8054-8838-0 Gauge - Air 1367-10 26-1005-6898-4 Nipple - 1/4 x 1/4 1367-11 26-1005-6900-8 Valve - On/Off 1367-12 26-1005-6900-8 Valve - On/Off 1367-13 26-1005-6901-6 Union - Straight 1367-15 26-1005-6903-2 Quick Exhaust 1367-16 26-1005-6904-0 Valve 1367-18 26-1005-6905-7 Valve - Regulator 1/8 1367-20 26-1005-6907-3 Air Indicator 1367-21 26-1005-6907-3 Air Indicator 1367-22 26-1005-6884-4 Swival - Tee - Laterial 1367-23 78-8054-8832-3 Support - Valve 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-29 26-1005-6380-2 Valve - 3 Way - 2 Position 1367-30 78-8054-8833-1 Nut - Hex. Stl. M4 Metric 1367-31 78-8054-8833-1 Shaft - 8 x 135 mm 1367-32 78-8054-8835-6 Fitting Barb 2.5 mm 136
1367-9
1367-10 26-1005-6898-4 Nipple - 1/4 x 1/4 1367-11 26-1005-6890-2 Filter-Pressure-Regulator 1367-13 26-1005-6901-6 Union - Straight 1367-14 26-1005-6902-4 Reducer - 1/4 - 1/8 1367-15 26-1005-6903-2 Quick Exhaust 1367-16 26-1005-6904-0 Valve 1367-18 26-1005-6906-5 Valve - Regulator 1/8 1367-20 26-1005-6907-3 Air Gauge 0-160 PSI 1367-21 26-1005-6907-3 Air Indicator 1367-22 26-1005-6884-4 Swival - Tee - Laterial 1367-23 78-8052-6566-3 Washer - Friction 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Soc. Hd. M4 x 25 1367-27 26-1005-6358-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-30 78-8054-8833-1 Fitting Barb 2.5 mm 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8016-5855-6 Shaft - 10 x 90 mm 1367-34 78-8016-5855-6 E-Ring 10 mm <
1367-11
1367-12 26-1005-6900-8 Valve - On/Off 1367-13 26-1005-6901-6 Union - Straight 1367-14 26-1005-6902-4 Reducer - 1/4 - 1/8 1367-15 26-1005-6903-2 Quick Exhaust 1367-16 26-1005-6904-0 Valve 1367-18 26-1005-6905-7 Valve - Regulator 1/8 1367-20 26-1005-6907-3 Air Gauge 0-160 PSI 1367-21 26-1005-6907-3 Air Indicator 1367-22 26-1005-6884-4 Swival - Tee - Laterial 1367-23 78-8052-6566-3 Washer - Friction 1367-24 26-1003-7946-5 Screw - Soc. Hd. M4 x 25 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-27 26-1005-6388-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8833-1 Shaft - 8 x 135 mm 1367-32 78-8054-8833-8 Knob 1367-34 78-8016-5855-6 E-Ring 10 mm 1367-35 <td< td=""></td<>
1367-13
1367-14
1367-15
1367-16 26-1005-6904-0 Valve 1367-18 26-1005-6905-7 Valve - Regulator 1/8 1367-20 26-1005-6906-5 Air Gauge 0-160 PSI 1367-21 26-1005-6807-3 Air Indicator 1367-22 26-1005-6884-4 Swival - Tee - Laterial 1367-23 78-8052-6566-3 Washer - Friction 1367-24 26-1003-7946-5 Screw - Soc. Hd. M4 x 25 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-27-2- 26-1005-6358-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8054-8839-8 Knob 1367-33 78-8017-9259-5 Pin - Roll 3 x 14 kmm 1367-35 78-8016-5855-6 E-Ring 10 mm 1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-18
1367-20
1367-21 26-1005-6907-3 Air Indicator 1367-22 26-1005-6884-4 Swival - Tee - Laterial 1367-23 78-8052-6566-3 Washer - Friction 1367-24 26-1003-7946-5 Screw - Soc. Hd. M4 x 25 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-27 - 26-1005-6358-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-29 26-1005-6880-2 Fitting Barb 2.5 mm 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8054-8839-8 Knob 1367-34 78-8054-8835-6 Shaft - 10 x 90 mm 1367-35 78-8016-5855-6 E-Ring 10 mm 1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-22
1367-23 78-8052-6566-3 Washer - Friction 1367-24 26-1003-7946-5 Screw - Soc. Hd. M4 x 25 1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-27 - 26-1005-6358-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-29 26-1005-6880-2 Fitting Barb 2.5 mm 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8054-8839-8 Knob 1367-33 78-8017-9259-5 Pin - Roll 3 x 14 kmm 1367-34 78-8054-8835-6 Shaft - 10 x 90 mm 1367-35 78-8016-5855-6 E-Ring 10 mm 1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-24
1367-25 78-8054-8832-3 Support - Valve 1367-26 26-1002-5817-2 Screw - Hex Hd. M5 x 8 Zinc. Pl. 1367-27 - 26-1005-6358-9 Valve - 3 Way - 2 Position 1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-29 26-1005-6880-2 Fitting Barb 2.5 mm 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8054-8839-8 Knob 1367-33 78-8017-9259-5 Pin - Roll 3 x 14 kmm 1367-34 78-8054-8835-6 Shaft - 10 x 90 mm 1367-35 78-8016-5855-6 E-Ring 10 mm 1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-26
1367-27
1367-28 78-8010-7416-8 Nut - Hex. Stl. M4 Metric 1367-29 26-1005-6880-2 Fitting Barb 2.5 mm 1367-30 78-8054-8833-1 Cam 1367-31 78-8054-8834-9 Shaft - 8 x 135 mm 1367-32 78-8054-8839-8 Knob 1367-33 78-8017-9259-5 Pin - Roll 3 x 14 kmm 1367-34 78-8054-8835-6 Shaft - 10 x 90 mm 1367-35 78-8016-5855-6 E-Ring 10 mm 1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-29
1367-30
1367-30
1367-31
1367-32
1367-33
1367-35
1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1367-36 26-1003-5841-0 Screw - M8 x 16 Zinc
1001-01 10-0011-3010-3 MUSHUL LIGHT O HIM HOUT IO
1367-38
1367-39 78-8054-8836-4 Roller - 70 x 32 mm
1367-40 78-8054-8840-6 Cam Upper Head
1367-41 26-1005-6359-7 Fitting Barb 2.5 mm
1367-42 78-8054-8837-2 Bracket - Regulator
1367-45 26-1005-6888-5 Tubing - 6 mm x 4 mm
1367-46 26-1005-6889-3 Tubing - 4 MM x 2.5 mm
1367-50 26-1005-6890-1 Muffler
1367-51 78-8005-5741-1 Washer - Plain M5 Metric
1367-52 78-8010-7207-1 Screw - Soc. Hd. Hex Hd. M5 x 40
1367-53 26-1005-5909-9 Elbow
$1367-54$ $78-8017-9426-0$ Elbow - 90° 1/8 Male x 1/8 Male
1367-55 26-1005-6910-7 Union - Straight
1367-56 26-1005-6859-6 Nut - Self Locking M-5
1367-57 26-1005-6911-5 Valve - Single Pilot