Instructions and Parts List

Scotch® BRAND

3M-Matic

S-647

"L" Clip Applicator

Model 57900

IMPORTANT

It is recommended you immediately order the spare parts listed on page 15. These parts are expected to wear through normal use, and should be kept on hand to minimize production delays.

34-7004-7243-3(D115.01)R1

Litho in U.S.A.

Packaging Systems Division/3M
220-8W 3M Center
St. Paul, Minnesota 55144

3M

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 catalog 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 **model number.**

Replacement parts and parts prices available from:

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

34-7004-7364-7(G201)R2 XY

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

3M

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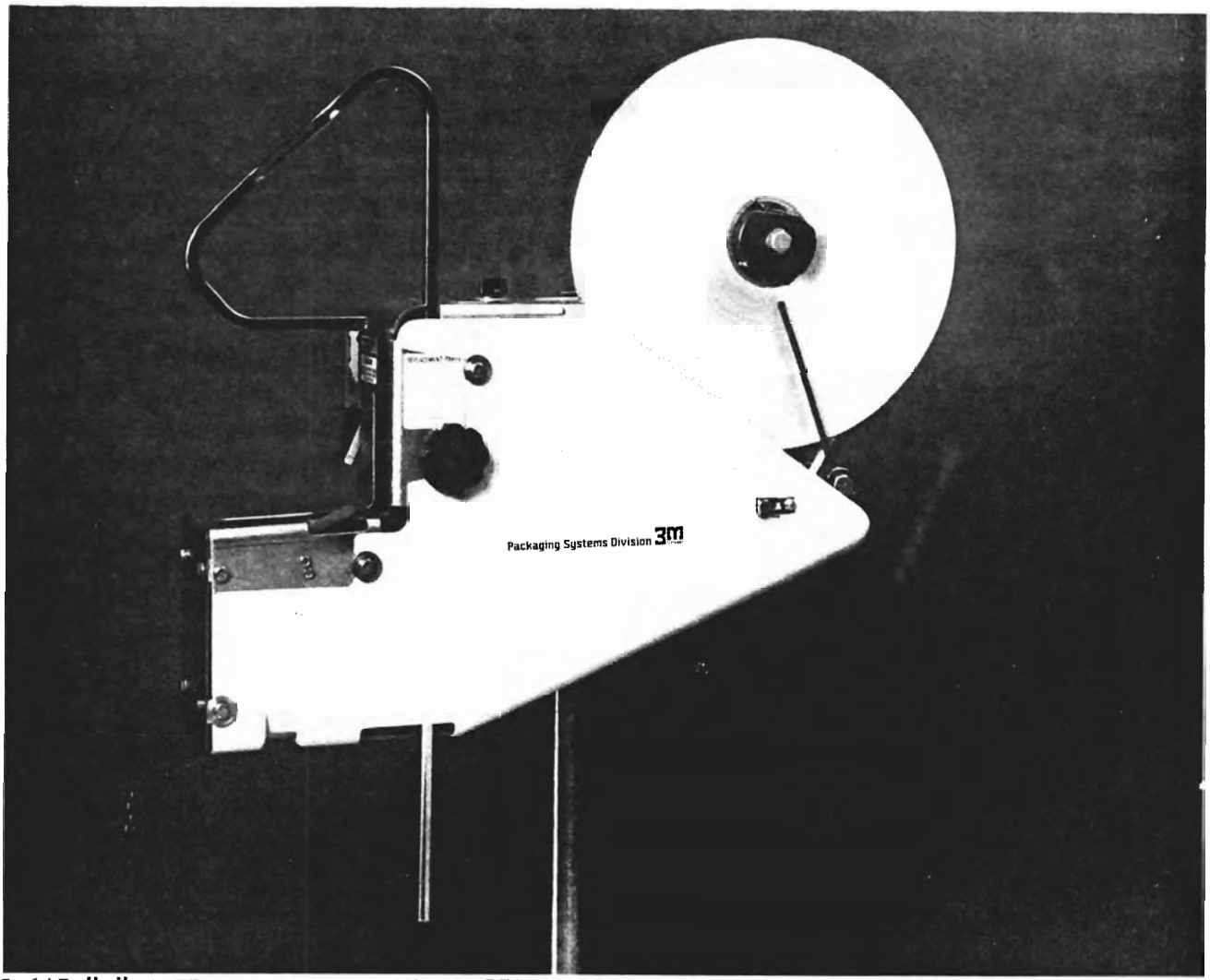

S-647 "L" CLIP APPLICATOR, MODEL 57900

DESCRIPTION

The S-647 "L" Clip Applicator is a semi-automatic taping head for applying "SCOTCH" Brand Filament Tape in an "L"shaped clip to most box corners. Designed for installation adjacent to a conveyor system or on a stand for off-line systems, the S-647 allows an operator to quickly apply the "L" clip box closure. When a box is inserted into the nest, two product valve levers are depressed to actuate the air operated mechanism which applies the "L" clip tape closure to secure the flaps on either the bottom or top of a box. The unit returns to the rest position when the box is removed and is ready for another application.

RECEIVING AND HANDLING

Examine the "L" Clip Applicator 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.

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: The only obligation of the seller and manufacturer of "SCOTCH" Brand equipment shall be to repair or replace any mechanical part proved to be defective, provided the defect occurs within 90 days after date of purchase, and the so-purchased item 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 "SCOTCH" BRAND 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.

"SCOTCH" is a registered trademark for the pressure-sensitive adhesive tapes and dispensers of 3M, St. Paul, Minnesota 55144.

SPECIFICATIONS

TAPE SPECIFICATIONS:

1. Tape: Most "SCOTCH" Brand Filament Tapes.
2. Tape Width: 3/8 or 9 mm, 1/2 or 12 mm, and 5/8 or 15 mm inch.
3. Tape Roll Diameter: Up to 15 inches [380 mm] maximum on a 3 inch [76.2 mm] diameter core. (Accommodates 720 yard [660 m] roll of "SCOTCH" Brand Filament Tape, No. 898.)
4. Applied Tape Length: 4 1/4 inches [110 mm] (nominal). Tape legs are 2 1/8 ± 1/8 inches [55 mm ± 3.2 mm].

SPECIFICATIONS (CONTINUED)

BOX SIZE CAPACITY:

1. Bottom Taping Position:
   a) Height: 3 inch [75 mm] minimum to unlimited maximum
   b) Width: 6 inch [150 mm] minimum to unlimited maximum
   c) Length: 2 1/4 inch [55 mm] minimum to unlimited maximum

2. Top Taping Position:
   a) Height: 2 1/2 inch [65 mm] minimum to unlimited maximum
   b) Width: 6 inch [150 mm] minimum to unlimited maximum
   c) Length: 2 1/4 inch [55 mm] minimum to unlimited maximum

3. NOTE: Operator capability will determine maximum height, width, and length. Smaller heights and widths are sometimes possible and it is recommended that your 3M representative be contacted for testing of these applications.

CYCLE TIME:

1.2 seconds per cycle

The cycle time is sufficient to satisfy the majority of applications. Flow control mufflers (see page 13 - "Air Flow Controls") control the application rate and return stroke rate of the air cylinder. While these mufflers can be adjusted for increased speed, this practice may result in higher maintenance costs and shorten machine life.

AIR POWER REQUIREMENTS:

Serial Nos. 1500 to 1699	Serial Nos. 1700 and up
55 to 60 PSIG [380 kPa - 415 kPa gauge pressure], 2.16 SCFM [3.65 m^3/h 21°C, 101 kPa] at 50 cycles/min.	75 to 80 PSIG [515 kPa - 550 kPa gauge pressure], 2.74 SCFM [4.65 m^3/h 21°C, kPa], at 50 cycles/min.

OPERATING CONDITIONS: Use in dry, relatively clean environments at 40 to 120°F [5° to 49°C] with clean, dry boxes.

MACHINE DIMENSIONS:

1. Length: 29 inches [735 mm]
2. Height: 25 inches [635 mm] (includes 720 yard [660 m] tape roll)
3. Width: 10 inches [255 mm]
4. Weight:
   Packaged 55 lbs. [25 kg]
   Unpackaged 40 lbs. [18 kg]

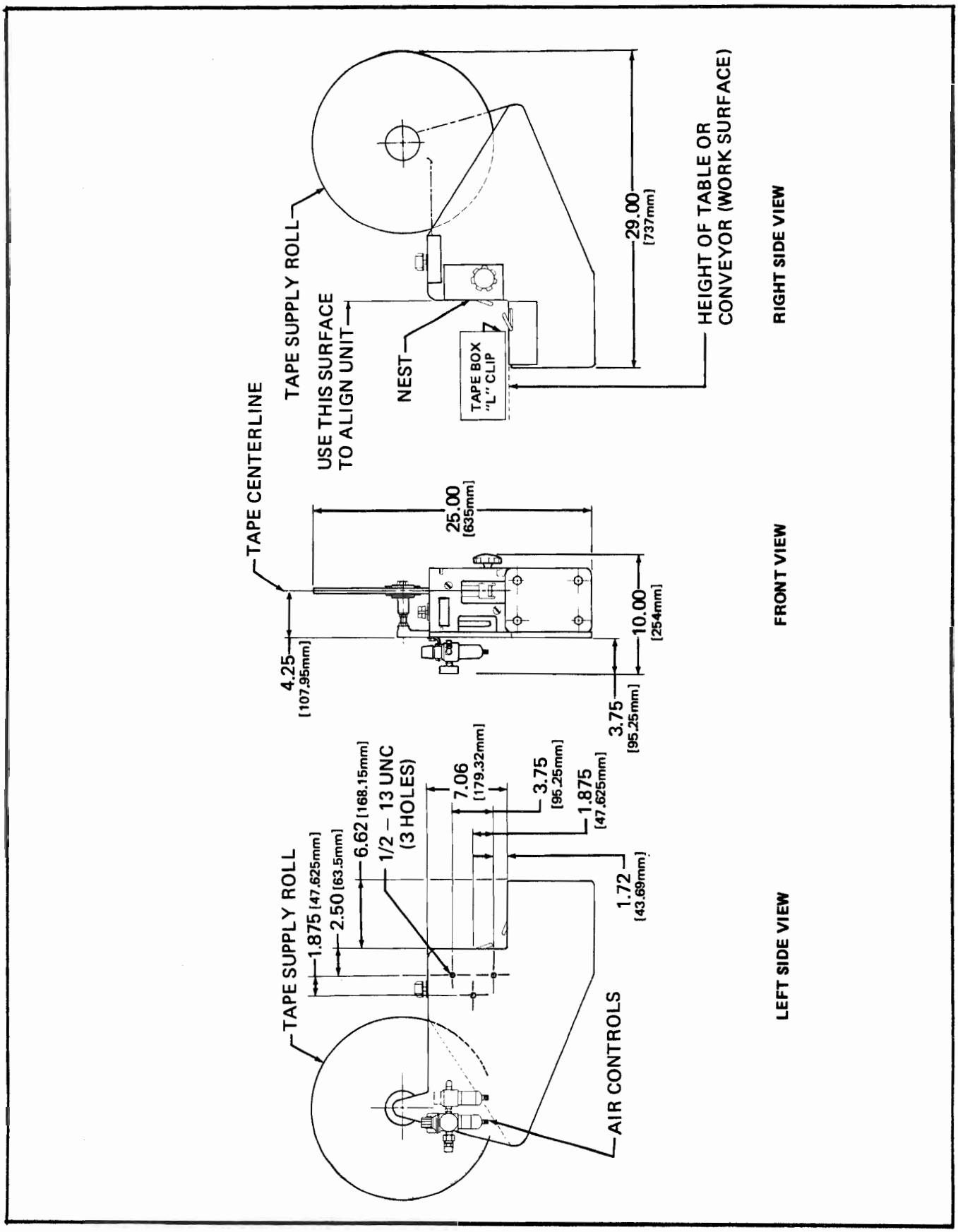

FIGURE 1 - MOUNTING - BOTTOM TAPING POSITION

INSTALLATION AND SET-UP (CONTINUED)

Read the installation instructions through completely before performing the set-up procedure.

Refer to the front of this manual for literature on "Typical Mounting Set-up" for the S-647 Applicator.

Mounting - The S-647 can be set up in either of two taping positions:

Bottom Taping Position - Shown in Figure 1.
For application of "L" Clip tape seal to the bottom corner of a box.

Top Taping Position - Shown in Figure 2.
For application of a tape seal to the top corner of a box.

A. There are three 1/2-13 UNC tapped holes provided in the main plate for mounting in each position. Refer to Figures 1 and 2 for mounting hole locations. The S-647 must be securely fastened to a stand or supports to obtain satisfactory operation.

NOTE: The enclosed angle of the nest is greater than 90°.
When mounting the unit for top taping, align the top surface of the nest (see Fig. 2) parallel with the work surface.
When mounting the unit for bottom taping, align the vertical surface of the nest (see Fig. 1) perpendicular to the work surface.

(Instructions continued on next page.)

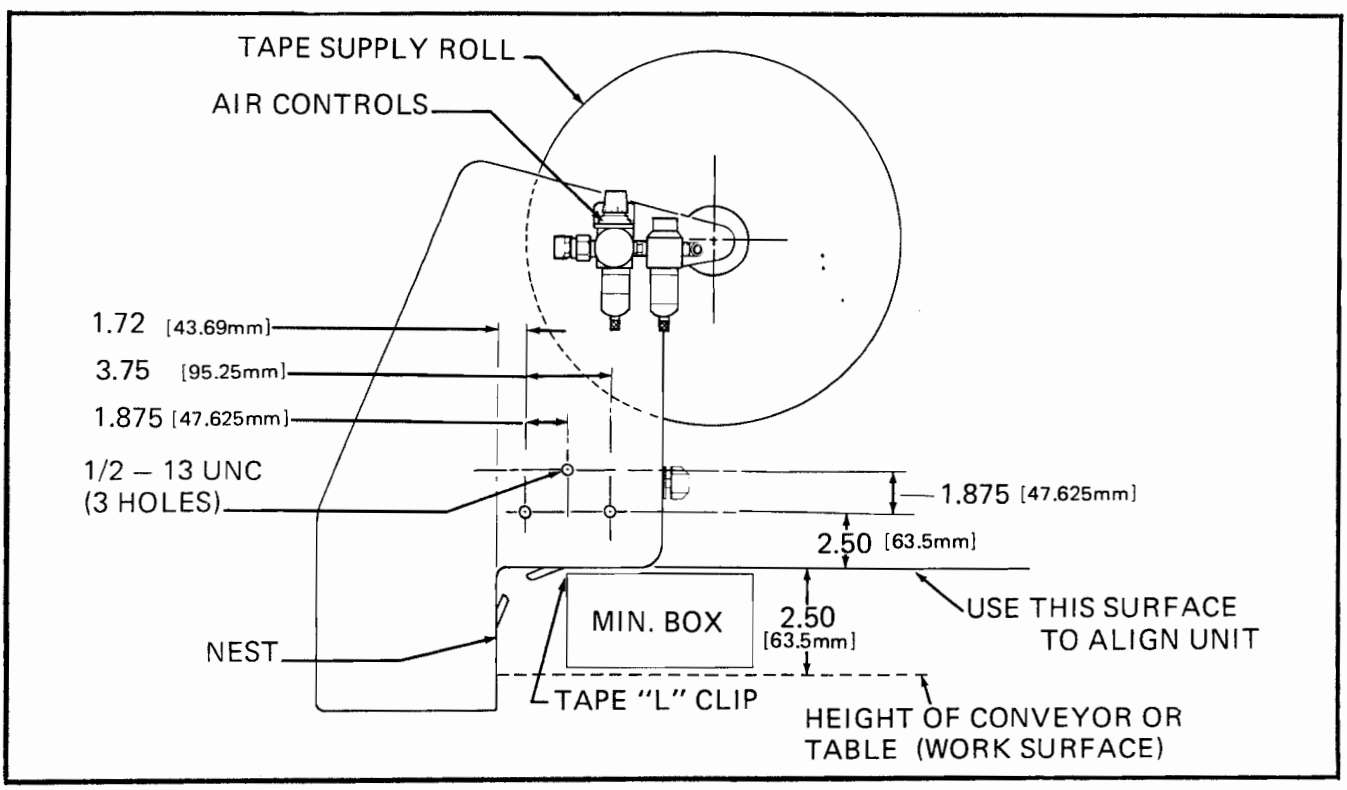

FIGURE 2 - MOUNTING TOP TAPING POSITION - LEFT SIDE VIEW

B. It is suggested that a secondary height adjustment be provided for head adjustments as referred to in the top taping operation section.

C. The slide spring, Figure 10, IS NOT USED FOR TOP TAPING. Disconnect and retain the spring from the slide for future use.

IMPORTANT NOTES

SLIDE SPRING MUST BE ATTACHED TO SLIDE FOR BOTTOM TAPING.

REFER TO FIGURE 15B FOR INSTRUCTIONS ON A PNEUMATIC CHANGE WHICH CAN BE MADE FOR SMOOTHER MACHINE OPERATION FOR TOP TAPING.

Air Regulator-Filter-Lubricator - The air control unit is supplied with two mounting screws. Install the unit on the main plate rear left side. NOTE: Filter-Regulator Assembly may be removed from mounting bracket to provide easier installation of the mounting bracket.

A. Refer to Figure 3 and assemble the two 10-32 UNF x 1/2 lg. screws (A) and lock washer in the mounting holes provided. Secure the air control unit in a vertical position for proper operation.

B. Connect and secure the air line (B) from the right side to the air lubricator (C).

C. The main air line and all other fittings are to be supplied by the customer. Complete the set-up instructions before connecting the main air supply.

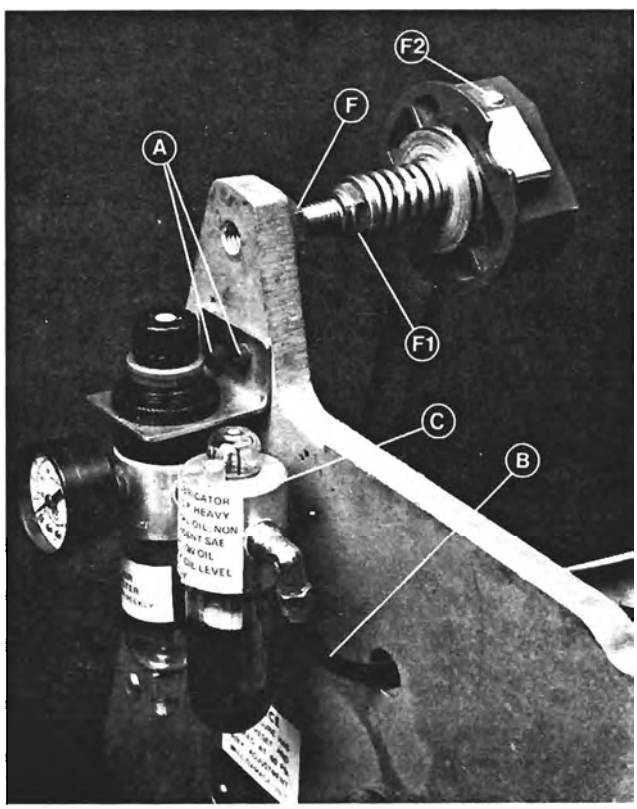

FIGURE 3 INSTALLATION - AIR CONTROL - LEFT SIDE VIEW

D. Remove lubricator bowl and fill with U.S.P. Heavy Mineral Oil or Non-Detergent SAE #5 or #10 oil (2 inch depth) as noted in Figure 4.

E. The lubricator oil metering adjustment screw, Figure 4, has been preset - open 1/4 turn. If excessive oil becomes visible at the flow control mufflers, close adjustment screw clockwise 1/8 turn. If lubricator does not use oil, open adjustment screw counter clockwise 1/8 turn.

F. Set the on-off valve knob (Figure 6) in "OFF" position and connect the main air supply.
Check the air setting. The air regulator has been preset at:
(Serial Nos. 1500-1699) 60 PSIG [415 kPa gauge pressure],
(Serial Nos. 1700 and up) 80 PSIG [550 kPa gauge pressure].
The air regulator requires no further adjustment.

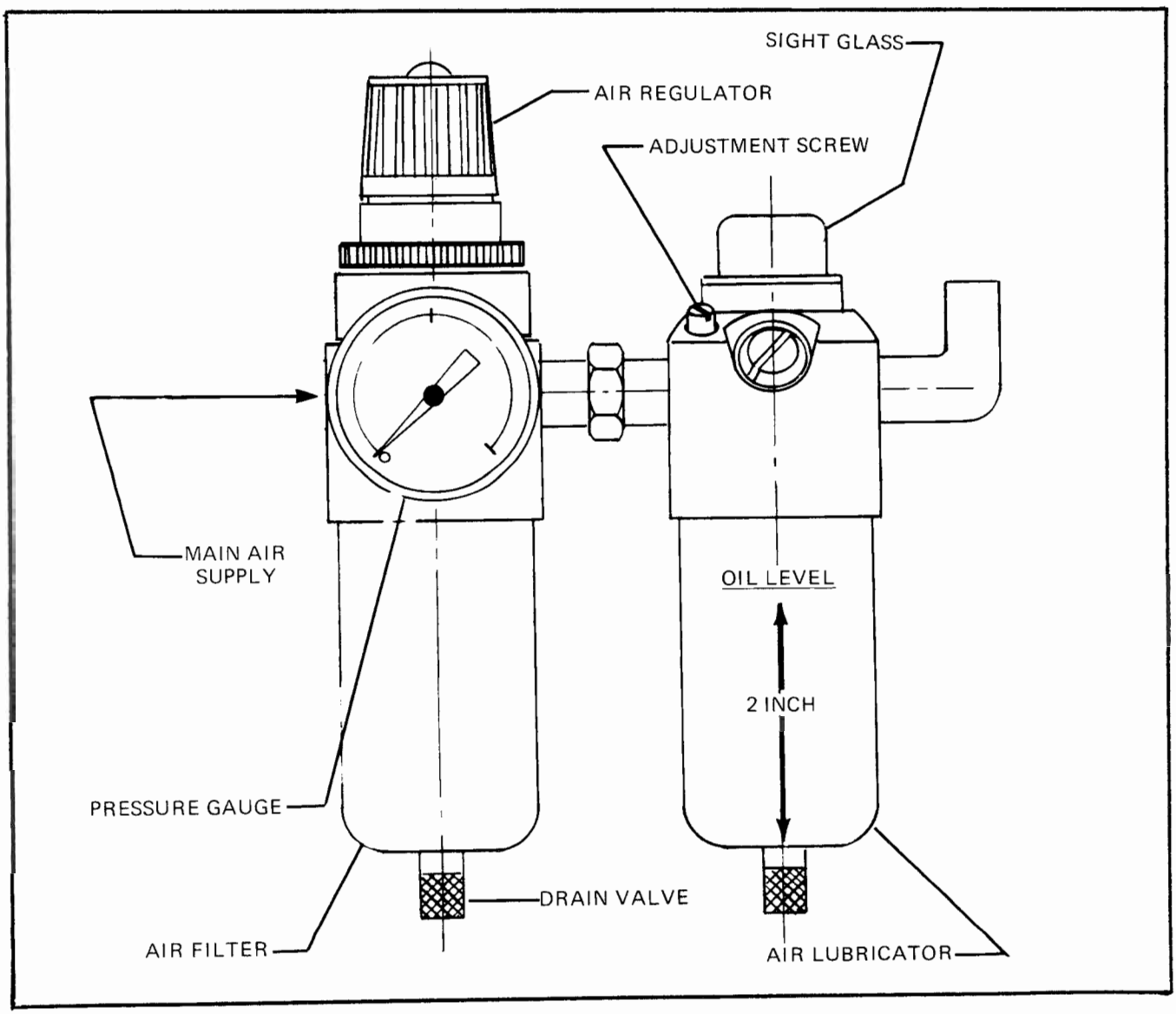

FIGURE 4 AIR CONTROL UNIT - SET UP

Tape Loading and Threading - The tape drum assembly is set up for dispensing 1/2 inch or 12 mm wide tape. For dispensing other tape widths, refer to the tape width adjustment section. A tape threading diagram is located below the tape drum on the main frame for quick reference.

A. Release the latch that secures the side panel to the tension roller assembly (E). Slide the panel back and down to remove.
Push the tape alignment device in toward the main casting and rotate it clockwise to allow loading of the tape roll. Place the tape roll on the tape drum (H) so the tape is dispensed downward, adhesive side forward. The tape roll must be fully against the drum flange.

CAUTION - TURN "OFF" MAIN AIR SUPPLY AT "ON-OFF" VALVE BEFORE THREADING TAPE.
Refer to Figure 5 and thread the tape as follows:

B. Pull approximately 18 inches or 450 mm of tape from the roll and thread the tape under the tension roller (E), adhesive side up.

C. Bring the tape forward, adhesive side up, to the dancer arm (G) threading over the smooth roller (G1) and under the knurled roller (G2).

D. Run the tape, adhesive side up, forward to the wind-back arm (H) threading over the pivot roller (H1), under the clutch roller (H2), around the anti-tack roller (H3), and over the movable roller (H4). Turn the tension roller (E) clockwise to strip additional tape.

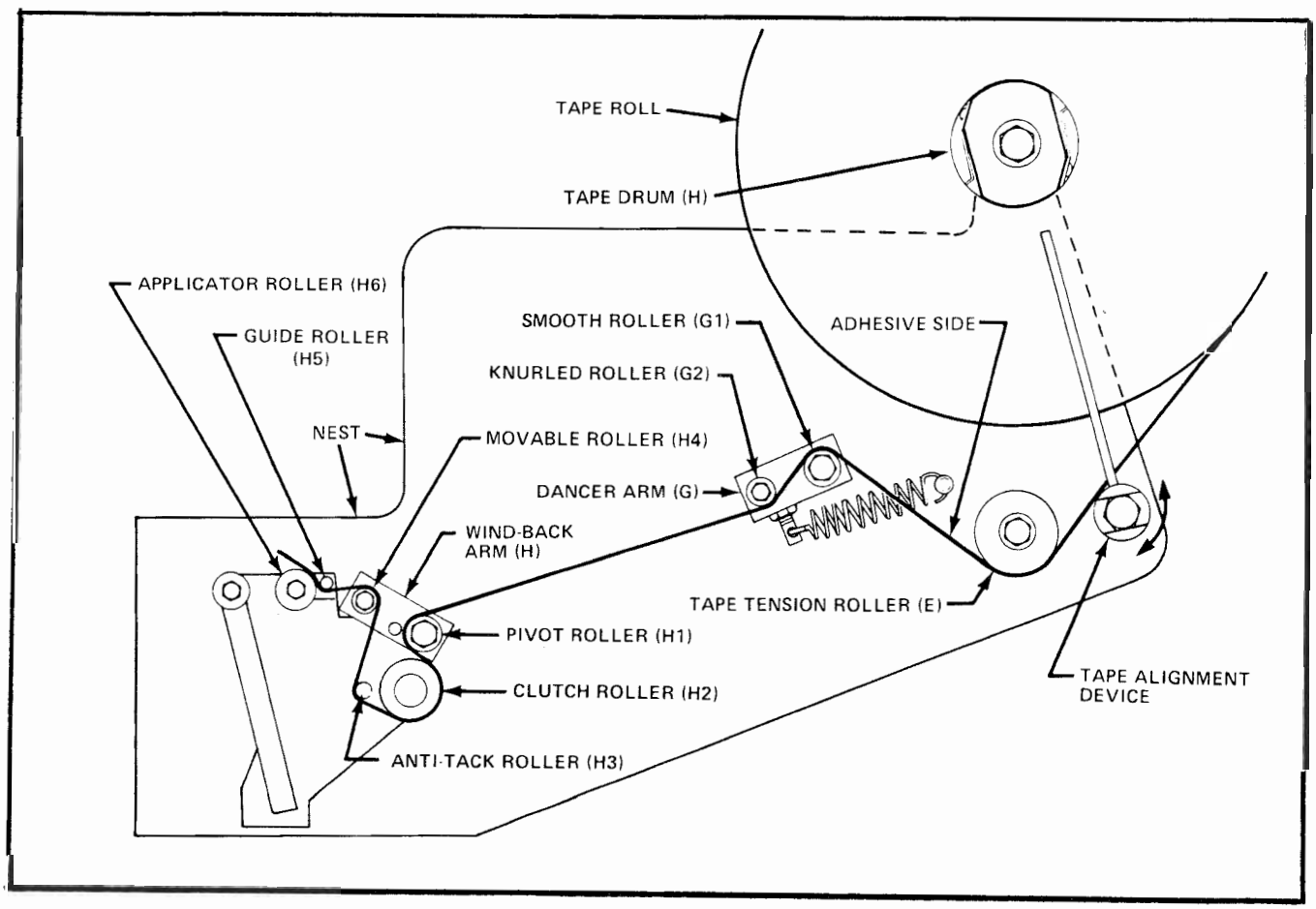

FIGURE 5 TAPE LOADING & THREADING - RIGHT SIDE VIEW

E. Pull the tape, adhesive side up, under the guide roller (H5) and over the applicator roller (H6). The tape web from the tape roll to the applicator roller must be without slack. Allow the lead end of the tape web to extend approximately one inch or 25 mm forward from the top of the applicator roller.

NOTE: Subsequently replacement tape rolls can be spliced onto the tape web to reduce tape threading.
To simplify the tape threading at the next reloading, change the tape roll before the roll on the applicator completely runs out.
Replace with a new roll of "SCOTCH" Brand filament tape, No. 898, and splice the tape web together at the tension roller (E).

F. Rotate the tape alignment device back into position.

Hold Down Ski - The box hold down ski is stored inside the S-647 shipping container.

A. For bottom taping - Refer to Figure 6. Install the ski (K) through the ski clamp behind the knob (K1) with the hold down loop (K2) in the position shown.

B. For top taping - The ski hold down loop is not used. Install the ski (K) through the ski clamp with the hold down loop (K2) turned clockwise 90° as shown in Figure 8. If ski is not installed, secure clamp knob (K1) before operating S-647.

C. Tighten the ski clamp knob (K1) to secure the ski in proper position.

D. Replace and secure the side shield panel.

NOTE: Remove all work tools, etc. from inside the shield case before replacing panel

Turn "ON" the main air supply at the "ON-Off" valve (D, Fig. 6) and the applicator is ready to operate.

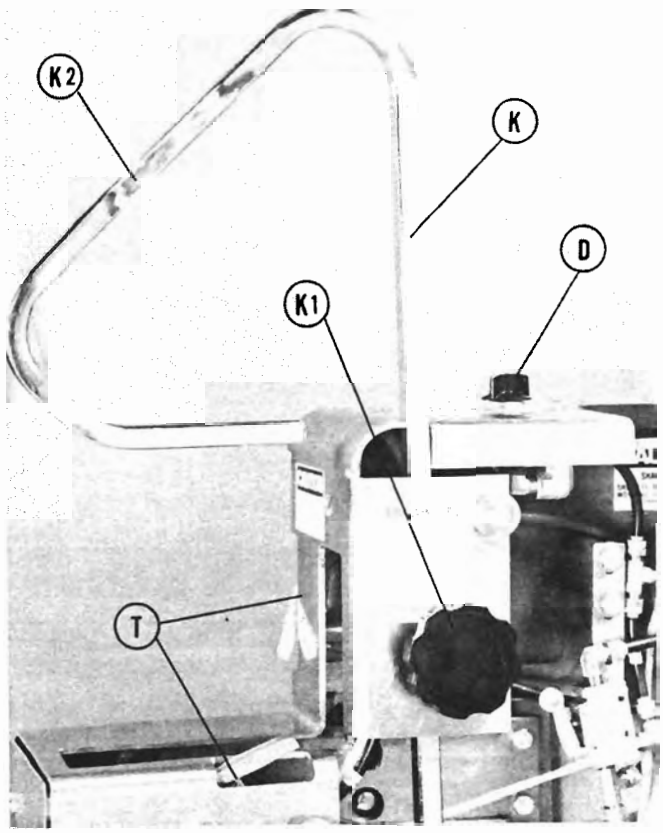

FIGURE 6 HOLD DOWN SKI - BOTTOM TAPING POSITION - RIGHT SIDE VIEW

OPERATION

Bottom Taping - Refer to Figure 7.

A. Position box under hold down loop (K2) approximately 2 inches or 50 mm from vertical surface (M1). Box corner to be taped must be down.

B. Loosen the ski clamp knob (K1) and lower the hold down ski loop onto the top surface of the box. The box must slide easily under ski without drag. Tighten the clamp knob to secure the ski.

C. Move the box forward and hold it squarely against the nest vertical surface (M1) until the end of the application cycle.

D. Move the box straight back from under the hold down ski to complete the operation.

Top Taping - Refer to Figure 8.

A. The hold down ski loop (K2) is not used for top taping applications. Refer to hold down ski set-up section for installation instructions.

B. The slide spring, item 53, Figure 13, is not used for top taping. Refer to installation and set-up section - mounting for instructions.

C. Position box under nest surface (M2) approximately 2 inches or 50 mm from vertical surface (M3). Lower the S-647 so the nest surface (M2) rests on the top surface of the box. The box must slide easily under the nest surface without drag. Up to 1/8 inch or 3 mm clearance between the nest surface (M2) and the box is allowable.

D. Locate the box corner to be sealed on top and toward the vertical surface (M3). Move the box forward and hold it squarely against the vertical surface (M3) until the end of the application cycle.

E. Move the box straight back from under the S-647 nest to complete the operation.

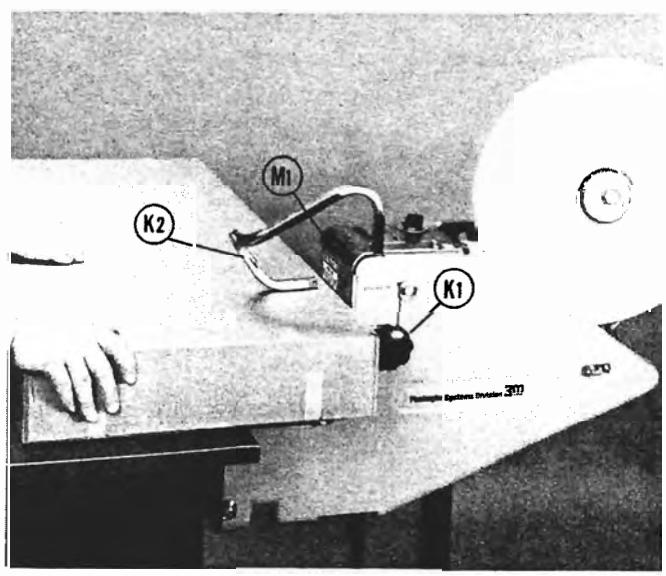

FIGURE 7 - BOTTOM TAPING POSITION
RIGHT SIDE VIEW

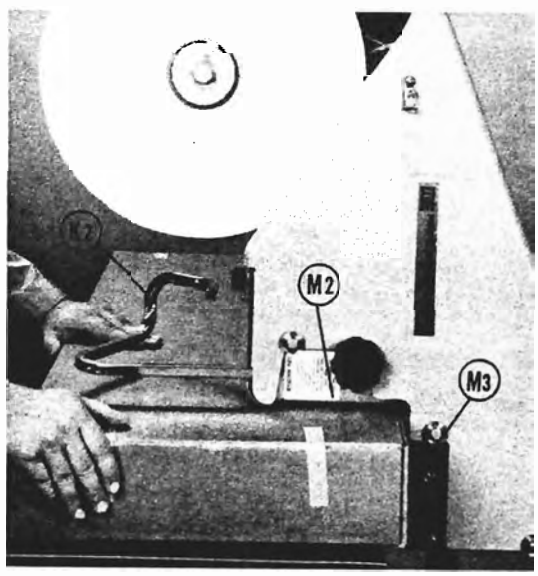

FIGURE 8 - TOP TAPING POSITION
RIGHT SIDE VIEW

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
a. Machine slows or stalls	1. Low air pressure.	1. Check air pressure. (Ser. Nos. 1500-1699) 55-60 PSIG [380-415 kPa gauge pressure] (Ser. Nos. 1700 & up) 75-80 PSIG [515-550 kPa gauge pressure]
	2. Inadequate slide lubrication.	2. Grease slide. Refer to Maint. Lub. Section
	3. Defective air gauge.	3. Replace defective air gauge.
	4. Excessive tape tension.	4. Reset tape tension adjustments.
b. Machine does not cycle	1. Air supply shut off.	1. Turn on main air supply.
	2. Product valves defective or out of adjustment.	2. Replace defective part or adjust as needed.
c. Tape applied - machine does not return to rest position after box is removed	1. Product valves defective or out of adjustment.	1. Replace defective part or adjust as needed.
d. Tape runs off center of rollers or folds over	1. Tape alignment device out of adjustment.	1. Adjust tape alignment device. Refer to Adjustment Section.
	2. Tape drum out of adjustment.	2. Adjust tape drum. Refer to Adjustment Section.
e. Trailing leg of tape not buffed	1. Box is being removed from machine before cycle is complete.	1. Allow machine to complete cycle before retracting taped box. Refer to Operation Section.
	2. Top taping only - too much clearance between nest and box.	2. Adjust nest. Refer to Operation Section - Top Taping.
f. Machine double cycles	1. Product valves being double cycled.	1. Hold product firmly in machine.
	2. Product valves out of adjustment.	2. Adjust product valve.
g. Tape shredding on cut ends or not cutting	1. Dull blade.	1. Replace blade. Refer to Maintenance Section - Blade Replacement.
	2. Tape not tracking properly.	2. Adjust position of tape drum or tape alignment device.
h. Top taping only - tape end folding over on itself.	1. Slide spring not used for this taping operation.	1. DISCONNECT SLIDE SPRING. Refer to mounting set up section.

ADJUSTMENTS

CAUTION - TURN OFF THE MAIN AIR SUPPLY AT THE ON-OFF VALVE BEFORE MAKING ANY ADJUSTMENT.

Tape Width - The tape drum is assembled at the factory for 3/8 inch [9 mm] and 1/2 inch [12 mm] wide tapes. For 5/8 inch [15 mm] tapes the retainers (F2, figure 3) must be moved to the secondary position on the tape drum. This is done by removing the two screws securing each retainer, relocating the retainer and replacing the screws.

Tape Web Alignment - The tape alignment device and the tape drum assembly control tape web alignment in the applicator. First adjust the tape alignment device for proper tape tracking. Then adjust the tape drum assembly so the tape roll is centered between the guide rods on the tape alignment device.

Tape Roll Tension - The friction brake on the tape drum assembly controls the tape roll tension to prevent overtravel. The tape roll friction brake has been preset and requires no further adjustment. If the drum assembly is replaced or comes out of adjustment, refer to Figure 3 and adjust as follows to obtain the proper tape roll tension.

a. Turn the lock nut (F1) on the tape drum assembly to compress the spring to an overall length of 1.31 $\pm$ .06 inches [33.5 mm $\pm$ 1.5 mm].

Tape Tension Roller - The friction brake on the tension roller assembly (E, Fig. 9) controls the tape web tension to prevent tape web sag. The tension roller friction brake has been preset and requires no further adjustment. If the tension roller assembly is replaced or comes out of adjustment, adjust as follows to obtain the proper tape web tension.

a. Turn the lock nut behind the tension roller assembly to compress the spring to an overall length of 1.31 $\pm$ .06 inches [33.5 mm $\pm$ 1.5 mm].

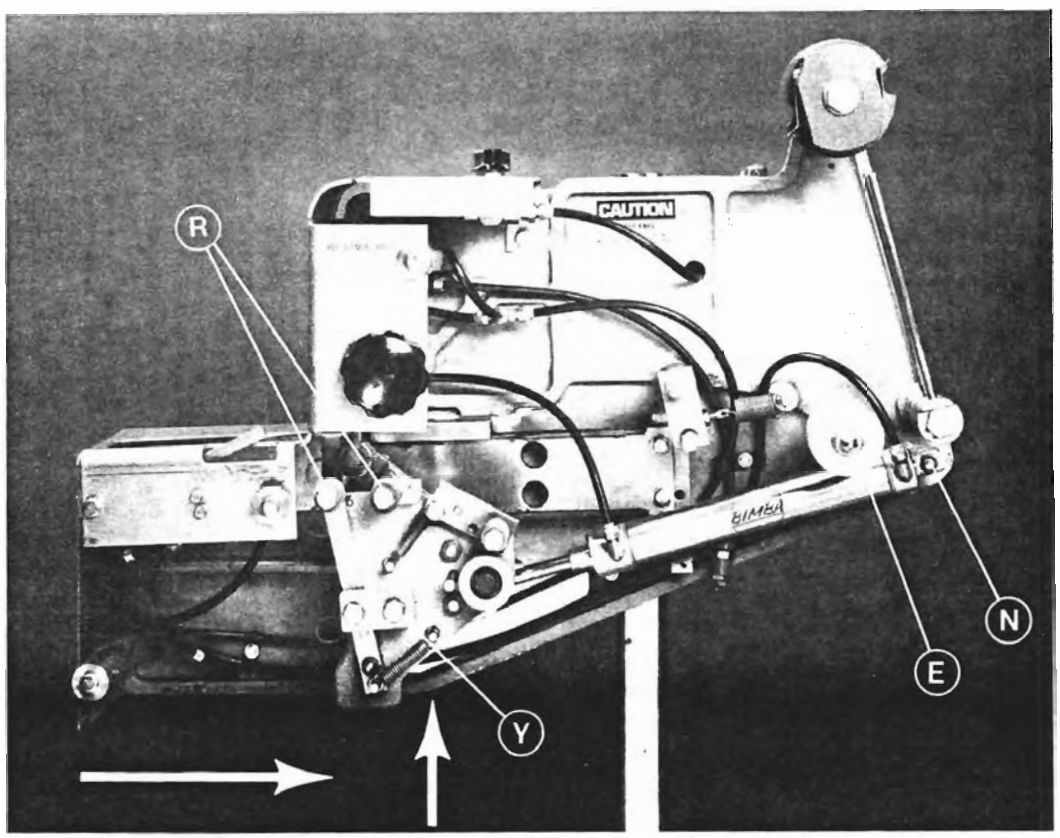

FIGURE 9 - ADJUSTMENT

ADJUSTMENTS (CONTINUED)

Air Flow Controls

Serial Nos. 1500 - 1699: A flow control muffler controls the rate at which the taping head returns to the rest position. The adjustment screw was set at one turn open at the factory. Should adjustment be necessary, the screw should be set so the applying head does not return with excessive impact or so slow that it becomes sluggish. The flow control muffler is located at the end of the air tube coming from the exhaust port of the vertically mounted product valve.

Serial Nos. 1700 and up:

These machines have a flow control muffler for both the application and return strokes of the air cylinder. The control for the application cycle has been adjusted 2 1/2 turns open at the factory. The flow control muffler is located at the end of the air tube coming from the exhaust port of the vertically mounted product valve. The return stroke flow control muffler is located at the end of the air tube from the exhaust port of the horizontally mounted product valve and was factory set 3/4 of a turn open.

Should adjustment be necessary, the screw should be set so the applying head does not move with excessive impact or so slow that it becomes sluggish. If the S-647 is being used for top edge taping and the pneumatic circuit has been changed as outlined on Figure 15B, the flow adjustments are also reversed.

MAINTENANCE

CAUTION - TURN OFF THE MAIN AIR SUPPLY AT THE ON-OFF VALVE BEFORE BEGINNING ANY MAINTENANCE.

Blade Replacement - Refer to Figure 10.
USE CAUTION WHEN REPLACING BLADE AS IT IS EXTREMELY SHARP.

a. Remove the side panel from the S-647 Applicator.
b. Loosen but do not remove, the screw (P) and remove the used blade.
c. Install the new blade into the blade holder as shown with the beveled side of the cutting edge toward the applicator nest.
d. Seat the bottom of the blade slot against the screw. Tighten the screw to secure the blade.
e. Operate manually and check for clearance between side of knife cam and applicator plate.
f. Replace and secure the side panel and connect the main air supply.

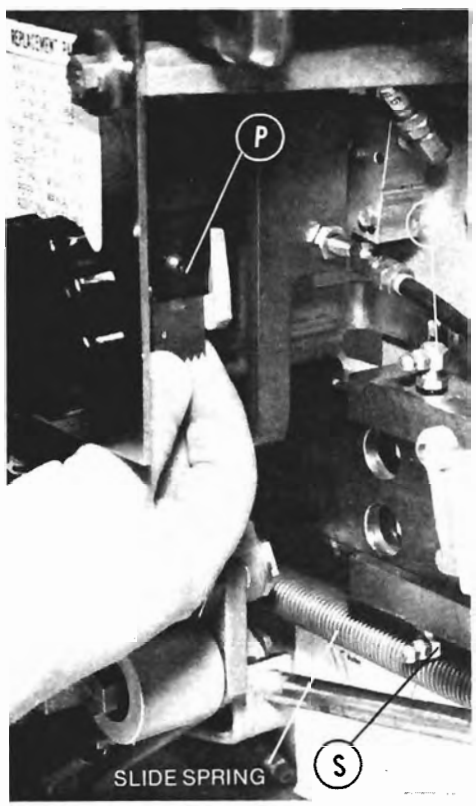

FIGURE 10 BLADE REPLACEMENT RIGHT SIDE VIEW

Buffing and Applicator Roller Sleeve Replacement
Refer to Figure 9

a. Remove the side panel from the S-647.
b. Remove and discard the used roller sleeves (R).
ROLLER ASSEMBLIES NEED NOT BE REMOVED FROM UNIT.
c. Assemble and center the new roller sleeves on the bearings.
d. The rollers must turn freely. Replace the S-647 side panel.

MAINTENANCE (CONTINUED)

Air Line Filter - Refer to Figure 4. Occasionally drain the water from the air line filter and clean the bowl. Do not allow the water to go above the baffle.

Lubrication

CAUTION -

TURN OFF THE MAIN AIR SUPPLY AT THE ON-OFF VALVE BEFORE BEGINNING ANY MAINTENANCE.

USE U.S.P. HEAVY MINERAL OR NON-DETERGENT SAE #5 or #10 OIL.

A. Air Line Lubricator - refer to Figure 4. Maintain proper level in lubricator bowl as noted.

B. Actuator - refer to Figure 6. Lubricate actuator pivot points (T) periodically.

C. Buffing Arm Pivot Block - refer to Figure 9. Lubricate periodically through holes provided on top of block (Y).

D. Air Cylinder Pivot - refer to Figure 9. Lubricate air cylinder pivot stud (N) periodically.

USE MULTI-PURPOSE GREASE.

E. Slide - refer to Figure 10. Check and lubricate at grease fittings (S) as follows:
First month - every week
Thereafter - every 1000,000 to 200,000 cycles.

NOTE: Binding or sluggish cycling can result if slide lubrication is not adequate.

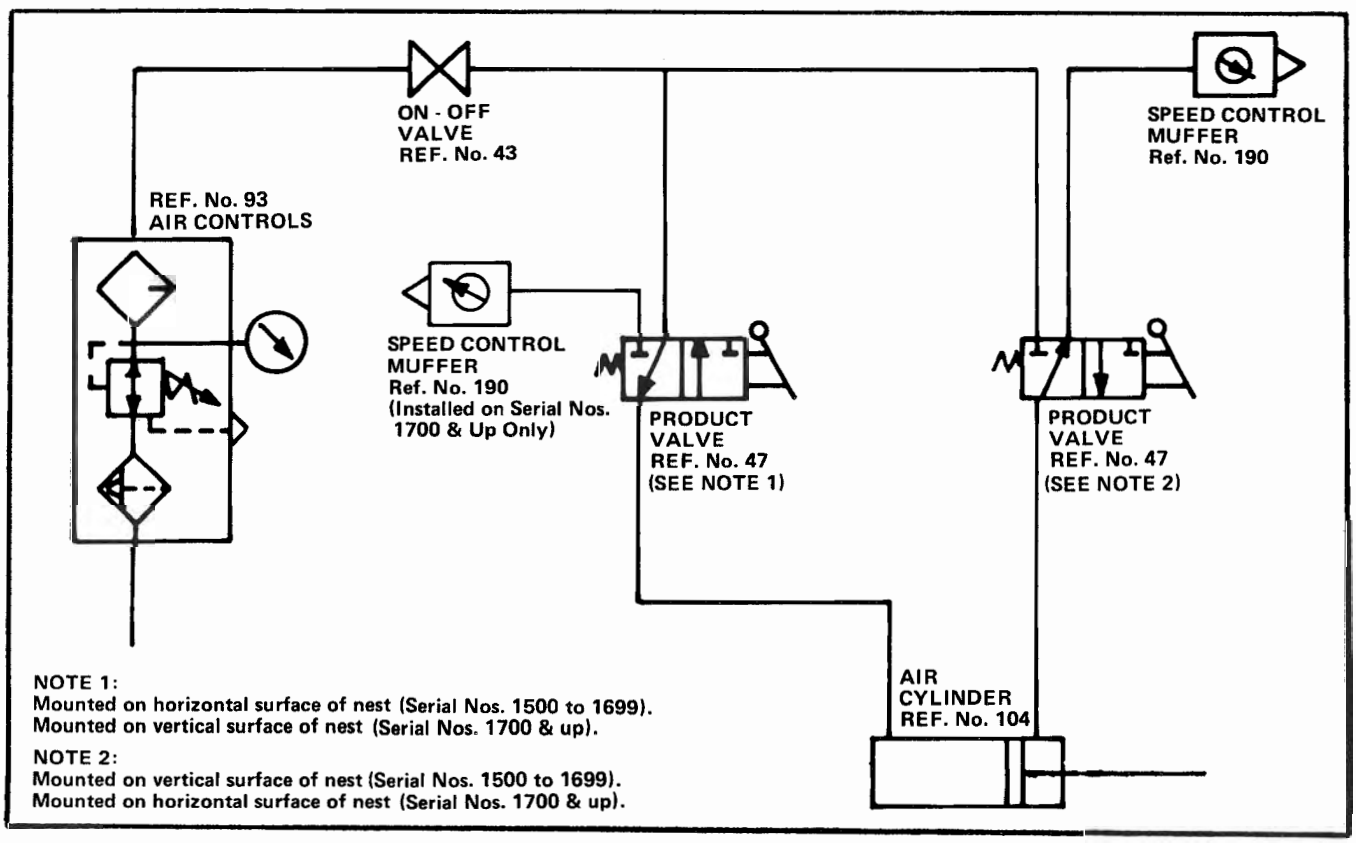

FIGURE 11 - PNEUMATIC CIRCUIT DIAGRAM S-647, MODEL 57900

SUGGESTED SPARE PARTS LIST

It is suggested that the following minimum list of spare parts be maintained.

NOTE: Refer to the replacement parts list for full part description.

QTY.	REF. NO.	PART NUMBER	DESCRIPTION
1	6	70-8000-5858-1	Spring - Dancer
2	17	78-8018-7524-2	Tire - Buffing
1	47	70-8000-5481-2	Valve - Product Assy.
1	52	70-8601-0077-8	Knife

HOW TO ORDER REPLACEMENT PARTS

1. Refer to Figures 12, 13, 14 and 15 A/B to determine individual part and reference number. Refer to replacement parts list for the part number and part name.

NOTE: The complete description has been included for the standard fasteners and commercially available components. This has been done to allow the customer to obtain these standard parts locally, should they elect to do so.

2. Order parts by part number, description, catalog number, model number and part quantity required. (Order form attached to back section of manual.)

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

3. Replacement parts and part prices available direct from:

   Dispenser Parts/3M
   P. O. Box 33900
   St. Paul, MN 55133

4. Machines for repair service ship direct to:

   Tape Equipment Repair Service/3M
   3M Center, Bldg. 216-3S, Docks 5-9
   St. Paul, MN. 55144

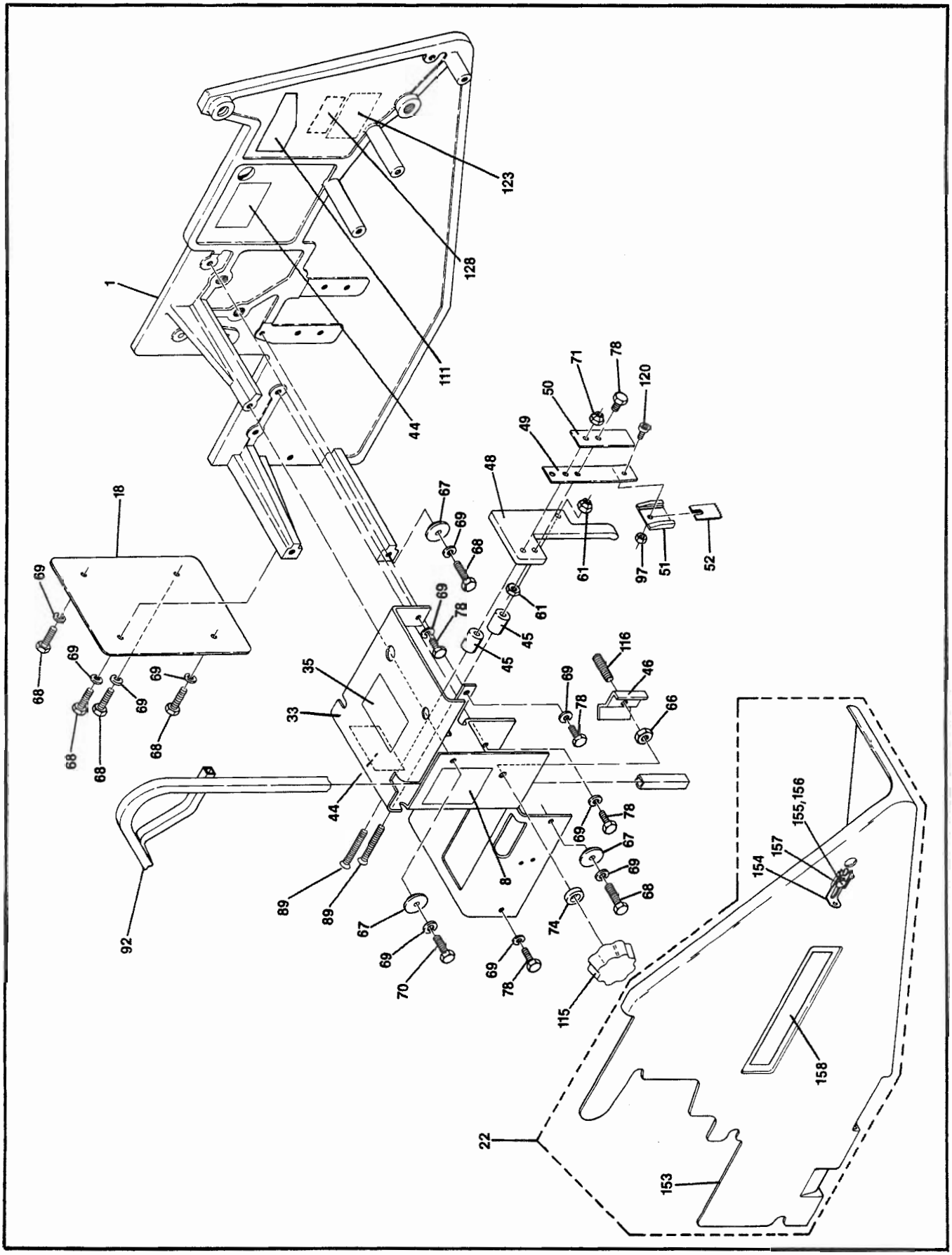

FIGURE 12 - MAIN FRAME - NEST - COVERS & CUT-OFF ASSEMBLY
Refer to page 21 for Main Frame-Nest-Covers & Cut-off Assembly Parts List.

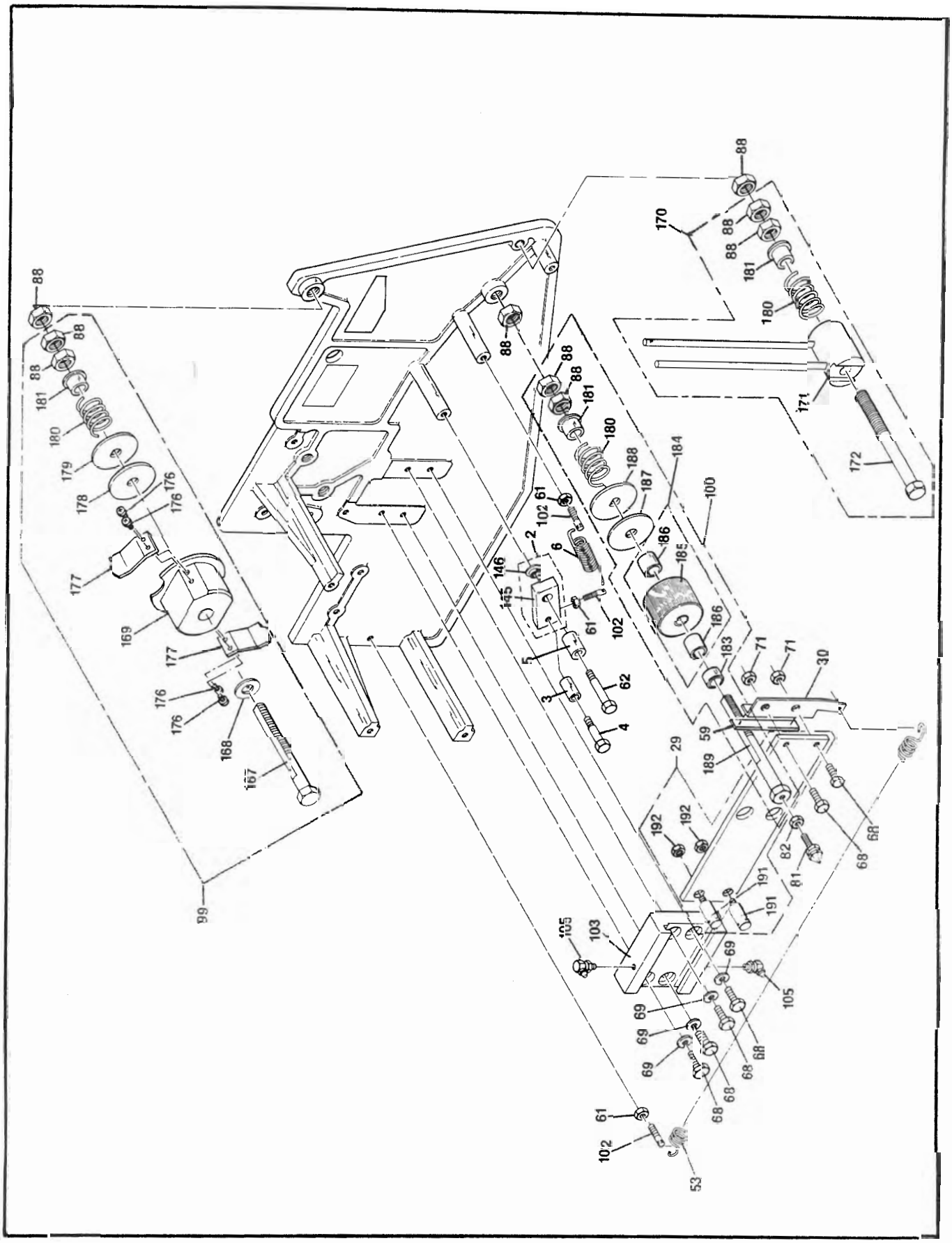

FIGURE 13 - SLIDE - TAPE DRUM & TENSION ROLLER ASSEMBLY
Refer to page 22 for Slide - Tape Drum & Tension Roller Assembly Parts List.

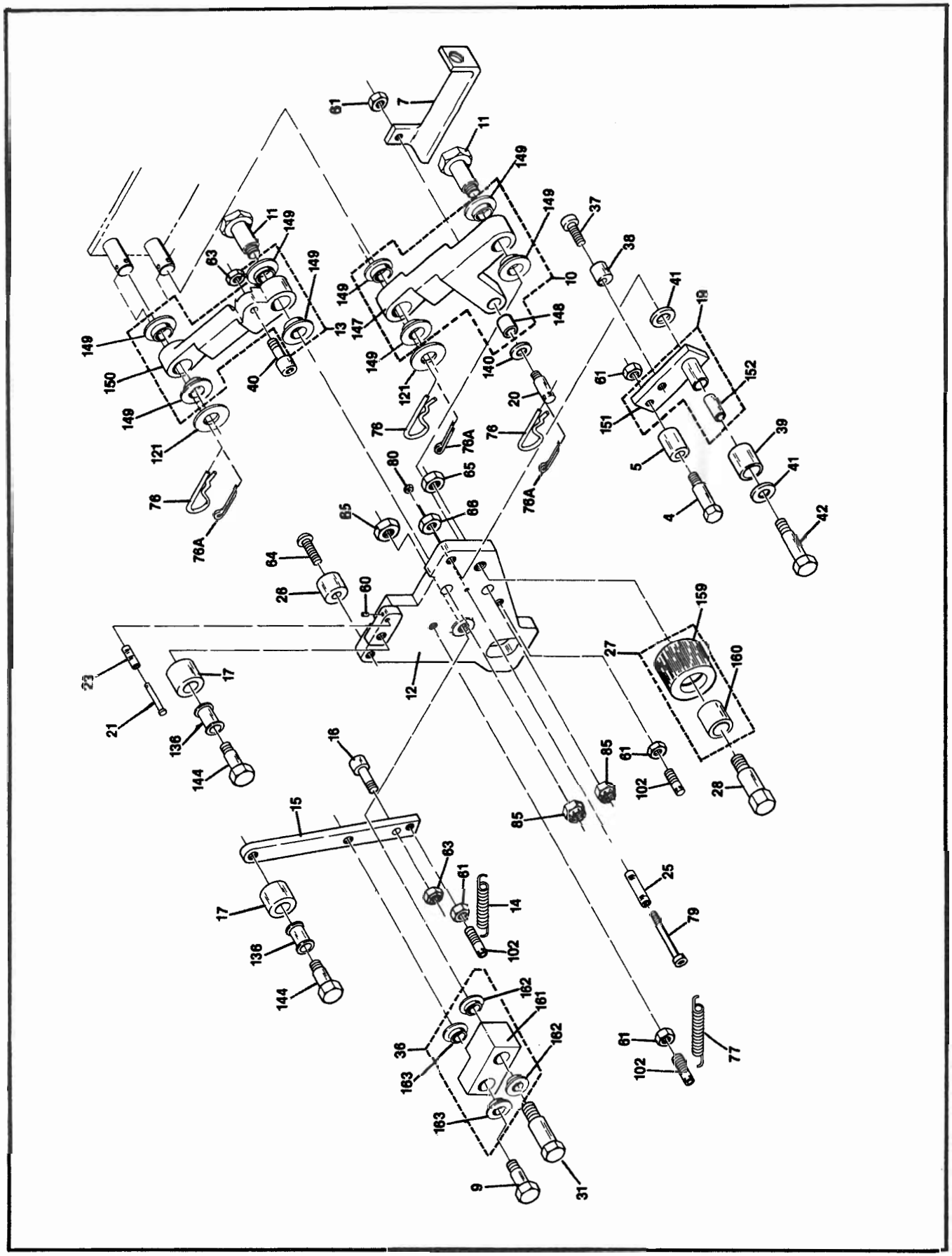

FIGURE 14 - APPLICATOR ASSEMBLY
Refer to pages 23-24 for Applicator Assembly Parts List.

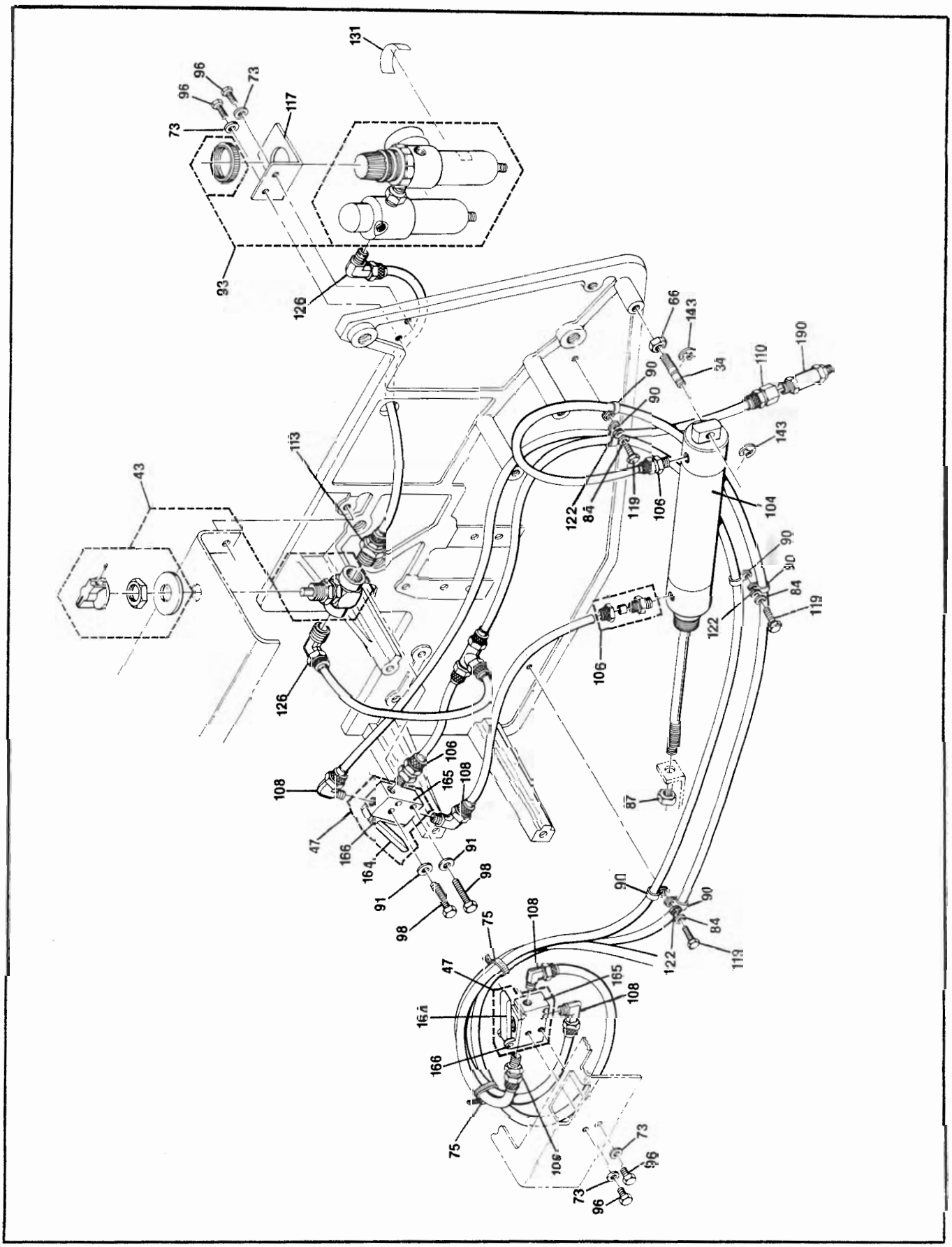

FIGURE 15A - PNEUMATIC COMPONENTS (Serial Nos. 1500 to 1699)
Refer to page 24 for Pneumatic Components Parts List.

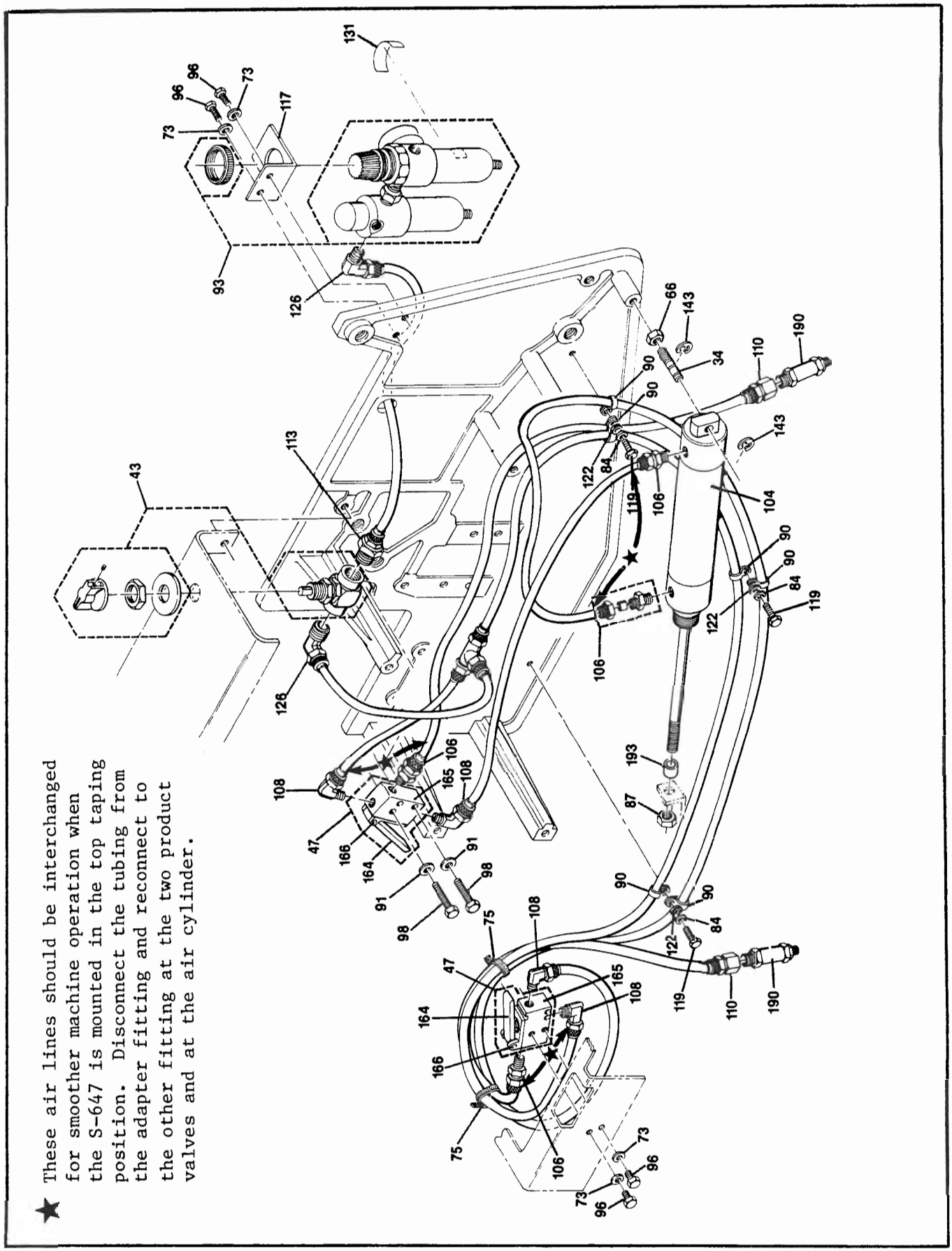

FIGURE 15B - PNEUMATIC COMPONENTS (Serial Nos. 1700 & Up)
Refer to page 24 for Pneumatic Components Parts List.

REPLACEMENT PARTS LIST

S-647 "L" CLIP APPLICATOR, MODEL 57900

FIGURE 12 - MAIN FRAME - NEST - COVERS & CUT-OFF ASSEMBLIES

REF. NO.	PART NUMBER	DESCRIPTION
* 1	78-8018-7645-5	Frame - Cast
* 8	70-8000-4912-7	Label, Information
* 18	78-8011-6882-0	Cover, Front
22	70-8000-5988-6	Cover, Side Assembly
33	70-8000-5846-6	Nest
* 35	78-8023-2210-3	Nameplate
* 44	70-8000-4907-7	Label, Caution
45	70-8000-5882-1	Spacer
46	78-8014-1140-2	Clamp, Ski
48	70-8000-5883-9	Cam, Upper
49	78-8018-7531-7	Support, Knife
50	78-8018-7530-9	Damper, Knife
51	70-8000-4141-3	Knife, Cam
52	70-8601-0077-8	Knife
* 61	78-8005-9722-7	Nut, Jam, Hex 1/4-20 UNC
* 66	78-8005-8996-8	Nut, Jam, Hex, 5/16-18 UNC
67	70-8000-5917-5	Spacer, Cover
* 68	77-8007-6243-5	Screw, Cap, Hex Hd. 1/4-20 UNC x 3/4 Lg.
* 69	78-8003-9182-9	Washer, Lock-Spring, Med 1/4
* 70	78-8005-9756-5	Screw, Cap-Hex Hd. 1/4-20 x 1 Lg.
71	78-8005-9720-1	Nut, Hex, 1/4-20 UNC, "FLEXLOC", SPS #50FA420
74	78-8011-6874-7	Spacer, Knob
78	78-8005-9711-0	Screw, Cap, Hex Hd., 1/4-20 UNC x 5/8 Lg.
* 89	12-7996-4494-8	Screw, Cap Flat Hd. Soc. 1/4-20 UNC x 1 3/4 Lg.
92	70-8000-5920-9	Ski, Hold Down
97	78-8005-9908-2	Nut, Twin Whiz-Lock "MAC LEAN-FOGG" #M-F31WLTM-1032
*111	78-8011-6850-7	Label, Threading
115	78-8032-1241-0	Knob, "Dimco" #232 W/5/16-18 UNC Brass Insert
116	78-8011-6664-2	Stud, Ski Clamp
*120	12-7997-6227-8	Screw, Cap, But Hd. Soc. 10-32 UNF x 1/4 Lg.
*123	78-8011-6674-1	Label, Regulator
*128	78-8011-6828-3	Label, Air Lubricator
*153	70-8000-5924-1	Cover, Side
*154	78-8032-0845-9	Latch, "Dimco-Gray" #2-LMS-21332-12
*155	78-8032-0848-3	Washer, "Dimco-Gray" #3-WMS-21332-43
*156	78-8032-0847-5	Rivet, "Dimco-Gray" #3-4-172
*157	78-8032-0846-7	Guide, "Dimco-Gray" #3-GMS-21332-22
*158	78-8011-7218-6	Label Identification

NOTE - Parts identified by (*) are not available as a replacement stock item.

REPLACEMENT PARTS LIST

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FIGURE 13 - SLIDE - TAPE DRUM & TENSION ROLLER ASSEMBLIES

REF. NO.	PART NUMBER	DESCRIPTION
2	70-8000-5840-9	Arm, Dancer Assembly
3	70-8000-4078-7	Roller, Knurled Dancer
4	70-8000-5873-0	Screw, Shoulder
5	70-8000-4079-5	Roller
6	70-8000-5858-1	Spring, Dancer
29	78-8017-9464-1	Slide
	(Serial Nos. 1500 to 1699)	
29A	78-8028-7829-4	Slide (preferred part for all Model 57900
	(Serial Nos. 1700 & up)	machines. Also order 3 each Item 76A Pins)
30	78-8014-1465-3	Stop-Slide
53	70-8000-4143-9	Spring, Slide
59	70-8000-5887-0	Bumper
* 61	78-8005-9722-7	Nut, Jam, Hex 1/4-20 UNC
62	70-8000-5872-2	Screw, Shoulder
* 68	77-8007-6243-5	Screw, Cap, Hex Hd. 1/4-20 UNC x 3/4 Lg.
* 69	78-8003-9182-9	Washer, Lock-Spring, Med 1/4
71	78-8005-9720-1	Nut, 1/4-20 UNC, "FLEXLOC", SPS #50FA420
81	78-8032-1239-4	Stud, Threaded Hex, Dimco-Gray #3-H-14-125-500
* 82	26-1000-0080-6	Nut, Jam, Hex, 1/4-28 UNF
* 88	78-8005-9723-5	Nut, Jam, Hex, 1/2-13 UNC
* 99	78-8023-2189-9	Tape Drum Assembly
100	70-8000-5902-7	Tension Roller Assembly
102	70-8000-5919-1	Post, Spring
103	70-8000-5925-8	Guide, Slide
*105	12-7996-4461-7	Fitting, Grease, 90° Type, "Alemite" #1911-B
*145	70-8000-5841-7	Arm, Dancer
*146	70-8000-4199-1	Bearing, Flange Type, Bronze Lubricating "OILITE" #FF-411-2
*167	70-8000-5901-9	Shaft - Tape Drum
*168	26-8092-5015-7	Bearing-Thrust "OILITE" #TT-1001-1
169	78-8023-2190-7	Drum - Tape
170	78-8023-2196-4	Tape Alignment Assembly
171	78-8023-2198-0	Guide - Tape
*172	78-8023-2197-2	Shaft-Locking
176	26-1000-0336-2	Screw, Self-Tap, Phil Pan Hd, 6-19 x 3/8 Lg.
177	78-8023-2191-5	Retainer - Tape
178	78-8023-2192-3	Washer - Drum
*179	78-8023-2193-1	Washer - Shaft
*180	78-8032-0632-1	Spring-Compression, Lee No. LC-115L-1, SST
*181	78-8032-0633-9	Bearing - Flange "OILITE" #FF-604-1
*183	78-8014-0998-4	Bearing, Thrust, "OILITE" TT-801
*184	70-8000-5909-2	Roller Assembly
*185	70-8000-5910-0	Roller, Tension
*186	78-8005-1094-9	Bearing, Sleeve, "OILITE" #AA-607-1
*187	70-8000-5900-1	Washer, Thrust
*188	70-8000-5202-2	Washer, Torque
*189	70-8000-5911-8	Shaft, Tension Roller
191	78-8028-8349-2	Pin, Parallel Arm
192	26-1002-3586-5	Nut, Hex, 3/8-24 UNF SPS #50FK624

NOTE - Parts identified by (*) are not available as a replacement stock item.

REPLACEMENT PARTS LIST

S-647 "L" CLIP APPLICATOR, MODEL 57900

FIGURE 14 - APPLICATOR ASSEMBLY

REF. NO.	PART NUMBER	DESCRIPTION
4	70-8000-5873-0	Screw, Shoulder
5	70-8000-4079-5	Roller
7	70-8000-5876-3	Connector, Cylinder Rod
9	70-8000-5875-5	Screw, Shoulder
10	70-8000-5929-0	Arm, Lower Parallel Assembly
11	78-8017-9460-9	Bolt - Pivot
12	78-8018-7510-1	Frame, Applicator
13	70-8000-5928-2	Arm, Upper Parallel Assembly
14	70-8000-5859-9	Spring, Buffing Roller
15	70-8000-5877-1	Arm, Buffing
16	26-1002-1424-1	Cam Follower, Torrington #CRS-10
17	78-8018-7524-2	Tire, Buffing
19	70-8000-5861-5	Arm, Windback Assembly
20	70-8000-5854-0	Pin, Parallel Arm
21	70-8000-5855-7	Shaft, Guide Roller
23	70-8000-4101-7	Roller, Guide
25	70-8000-5425-9	Roller, Guide
26	12-7996-7605-6	Cam Follower, Torrington #YCRS-12
27	70-8000-5912-6	Roller, Clutch Assembly
28	70-8000-5869-8	Screw, Shoulder
31	70-8000-5871-4	Screw, Shoulder
36	70-8000-5848-2	Arm, Pivot Assembly
37	70-8000-5880-5	Screw
38	70-8000-5881-3	Eccentric
39	70-8000-4902-8	Roller
40	70-8000-4971-3	Cam Follower, McGill #CFH-1/2-SB
41	26-8091-5009-2	Bearing, Thrust Type, Bronze, Lubricating "OILITE" #TT-710-1
42	70-8000-5870-6	Screw, Shoulder
60	18-9260-5775-5	Pin, Spring Cyl. 3/32 Dia. x 1/2 Lg.
*61	78-8005-9722-7	Nut, Jam, Hex 1/4-20 UNC
63	26-1000-0081-4	Nut, Hex, 1/4-28 UNF "FLEXLOC" SPS #50FK-428
64	78-8014-1196-4	Screw
*65	78-8032-0484-7	Nut, Jam, Hex, 3/8-16 UNC
*66	78-8005-8996-8	Nut, Jam, Hex, 5/16-18 UNC
76	78-8032-0958-0	Pin, Cotter-Hairpin, Leitzke #1610-0091-01875 (Serial Nos. 1500 to 1699)
76A	18-9120-5975-7	Pin, Cotter Ext'd Miter Pt 3/32 Dia. x 3/4 Lg. SST (Serial Nos. 1700 & Up) (preferred part for all Model 57900 machines)
77	78-8032-0957-2	Spring, Associated #E0350-031-1250-S
79	78-8028-7935-9	Shaft, Guide Roller
*80	18-1728-2275-3	Nut, Mach. Screw Hex 10-32 UNF
85	78-8005-9726-8	Nut - Hex, 3/8-16 UNC, SPS No. 50 FKF-616
102	70-8000-5919-1	Post, Spring
121	12-7996-9763-1	Washer, Plain SAE 1/2
136	78-8018-7523-4	Bearing - Tire
*140	12-7996-9758-1	Washer, Plain - Type A, 5/16 Narrow
144	78-8018-7525-9	Screw - Shoulder
*147	70-8000-5930-8	Arm, Lower Parallel
*148	78-8161-8083-6	Bearing, Sleeve - "OILITE" #AA-306-3

- Continued -

NOTE - Parts identified by (*) are not available as a replacement stock item.

REPLACEMENT PARTS LIST

S-647 "L" CLIP APPLICATOR, MODEL 57900

FIGURE 14 - APPLICATOR ASSEMBLY (Continued)

REF. NO.	PART NUMBER	DESCRIPTION
149	26-1001-0844-3	Bearing, Flange Type, Lubricating "SUPER OILITE"
150	70-8000-5927-4	Arm, Upper Parallel
*151	70-8000-5860-7	Arm, Windback
*152	70-7023-8880-5	Bearing, Sleeve Type, Bronze, Lubricating "OILITE" #AA-507-23
*159	70-8000-5913-4	Roller, Clutch
*160	70-8000-1095-4	Clutch, "Torrington" Drawn Cup Roller #RCB-081214
*161	70-8000-5847-4	Arm, Pivot
*162	70-8000-4943-2	Bearing, Flange Type, Bronze, Lubricating "OILITE" #FF-636-2
*163	26-8064-0208-2	Bearing, Flange Type, Bronze, Lubricating "OILITE" #FF-520-9

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FIGURES 15 A/B - PNEUMATIC COMPONENTS

REF. NO.	PART NUMBER	DESCRIPTION
34	78-8015-7189-0	Post - Pivot
43	70-8000-4970-5	Valve, Shut Off, Generant 4,000 Series #QE44
47	70-8000-5481-2	Valve, Product Assembly
* 66	78-8005-8996-8	Nut, Jam, Hex, 5/16-18 UNC
* 73	77-8007-6245-0	Washer, Lock-Spring Med #10
* 75	78-8005-4229-8	Tie, Cable Tie 3M #760 "Scotchflex"
* 84	18-9832-0875-4	Washer, Lock-Spring, Med #8
* 87	78-8005-9764-9	Nut, Jam, Hex, 7/16-20 UNF
* 90	70-8000-5029-9	Clamp, Cable, Nylon Black, "Tyton" Type 4-1129
* 91	26-1000-0078-0	Washer, Lock-Spring, Med #6
93	78-8011-6671-7	Filter-Regulator-Lubricator
* 96	77-8001-0363-0	Screw, Mach. Hex Hd. Trimmed #10-32 UNF x 3/8 Lg.
* 98	26-1000-0074-9	Screw, Mach. Hex Hd. Trim #6-32 UNC x 1 Lg.
104	70-8000-5918-3	Cylinder, Air
106	78-8002-2269-3	Coupling, Connector Pipe 1/4 NPT - "Imperial" #268-P
108	78-8002-2189-3	Elbow, Brass, "Imperial" #269-P
109	78-8002-2361-8	Tee, Brass "Imperial" #264-P
110	78-8032-1836-7	Coupling, Pipe - "Imperial" #266-P
113	78-8003-7734-9	Coupling, Connector, Pipe 1/8 NPT - "Imperial" #268-P
117	78-8011-6637-8	Bracket, Mounting Regulator
*119	12-7996-1447-9	Screw, Mach. Hex Hd. Trim. #8-32 UNC x 1/2 Lg.
*122	18-9813-0875-4	Washer, Plain SAE #8
126	70-8672-5498-2	Elbow, Male - "Imperial " #269-P
*131	78-8011-6869-7	Label, Air Filter
143	77-8007-5393-9	Ring - Retaining "TRUARC" #X5133-31-H
*164	70-8000-5480-4	Actuator
*165	78-8032-6034-4	Valve - 3 Way Without Actuator "Versa" #LSC-3200-LL40
*166	78-8032-6041-9	Pin, Valve Actuator "Versa" #L-3200-44
190	70-8000-4196-7	Muffler-Speed Control, Tiny Tim #SCM-1
193	70-8000-4498-7	Cushion (Installed on Serial Nos. 2102 and up. Can be added to all Serial Nos. 1500 and up.)

NOTE - Parts identified by (*) are not available as a replacement stock item.