ORIGINAL INSTRUCTIONS

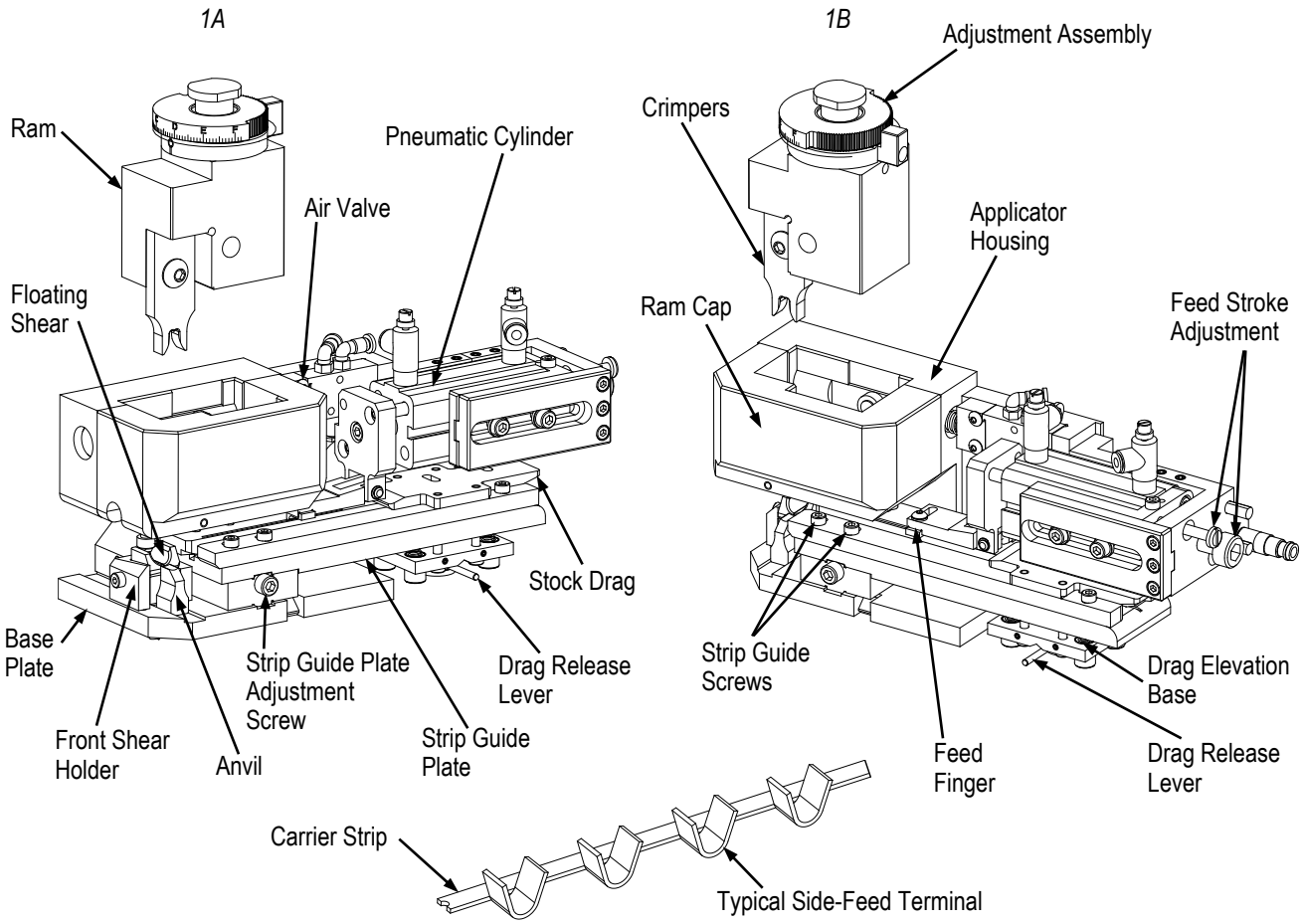


Figure 1

1. INTRODUCTION

The Mid-Wire Size Pneumatic EF (End-Feed) Splice Applicator applies pre-stripped 0.5 mm^2 to 25 mm^2 wires to side-feed stripped terminals. (Note that using 25 mm^2 wire depends on terminal thickness and geometry.) Each applicator accepts the terminal strip form type shown in Figure 1 which are identified on the applicator parts list and applicator log for each applicator.

These instructions, parts lists, and exploded view drawings packaged with the machine provide all the information required to operate and maintain the applicator and machine (or unit).

When reading this document, pay particular attention to DANGER, CAUTION, and NOTE statements.

DANGER
Denotes an imminent hazard which may result in moderate or severe injury.

CAUTION
Denotes a condition which may result in product or equipment damage.

NOTE
Highlights special or important information.

NOTE
All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions in the document are in millimeters. Figures and illustrations are for reference only and are not drawn to scale.

Reasons for reissue of this document are provided in Section 10, REVISION SUMMARY.

2. APPLICATOR DESCRIPTION

The applicators may be used in various terminating machines, provided that the machines have the proper stroke length, and all the necessary equipment.

NOTE
The applicator can be used in 40 mm and 44 mm stroke terminating machines.

The main components of the applicators are identified in Figure 1. The ram assembly is shown in detail in Figure 2.

The terminal strip if fed into the applicator from the end to front. The terminal wire barrel is rotated at 90° in relationship to the strip guides (side-feed terminal) with the wire barrel crossed in front of the operator. The strip passes under the strip drag as well as between the front and rear strip guides. The rear strip guide aligns with the terminal carrier strip. The lead terminal is positioned over the anvil (for PRE-FEED applications). Pre-feed applicators feed terminals as the ram moves up. The feed finger feeds one terminal during each cycle of the terminating machine. The terminals are fed by the action of the air feed mechanism which is actuated by compressed air. Refer to Paragraphs 5.4 and 5.5 for air feed unit adjustment. Also refer to Figure 4.

The ram post (also referred to as the ram mounting post), engages the post adapter of the machine ram. It is the machine ram that actuates the applicator.

The Fine Adjustment Assembly (1707291-1 is used to provide a greater number of crimp height options without the necessity of changing parts. It consists of a ram post, a wire crimp height adjustment disc (refer to Paragraphs 5.2, 7.5, and Figure 3). In addition, the fine adjustment assembly uses a spacer and shim between insulation crimp height adjustment disc and ram face. For adjustment of the fine adjustment assembly, refer to Paragraph 5.2.

The wire crimper is located on the ram slot by a crimper bolt. The depressor block is installed under the ram to actuate the floating shear down to cut the crimped terminal from the strip.

The applicator's mounting surface is its base plate. The anvil, floating shear holder, floating shear, strip guide assembly, and the applicator housing are mounted on the base plate. The stock drag and the front and rear strip guides are mounted on the strip guide assembly.

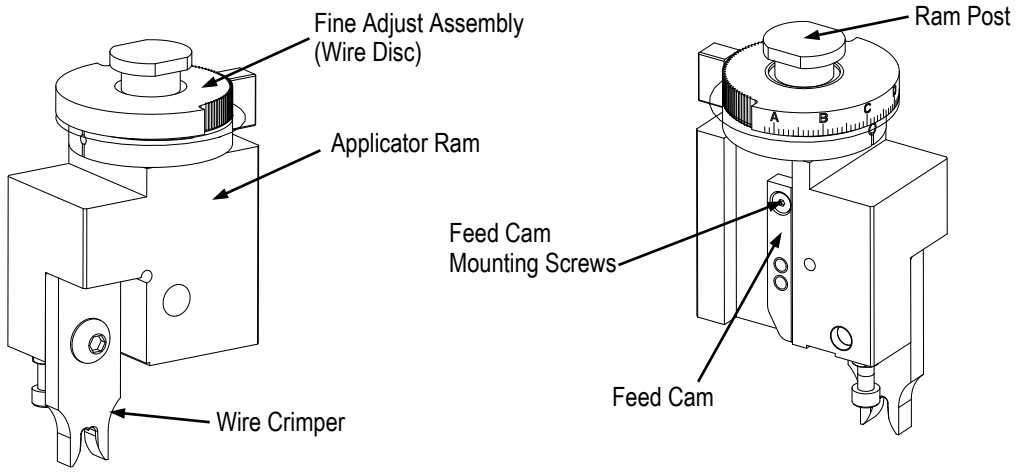


Figure 2

3. APPLICATOR INSTALLATION AND REMOVAL

DANGER
To avoid personal injury, be SURE power and air source to the machine is turned "off" and the power cord/air supply are disconnected BEFORE installing or removing applicator.

CAUTION
With applicator in the machine, NEVER attempt to cycle machine under power WITHOUT terminals properly loaded, as described in Section 4 (APPLICATOR LOADING AND UNLOADING); otherwise, the tooling may be damaged.

DANGER
To avoid personal injury, this applicator should be used ONLY in an appropriate terminating machine. The pressurized air supply should only be connected after the applicator is properly installed in the terminating machine.

NOTE
All terminating machines (TE Connectivity and others) are required to have the following items:

- *Traditional TE applicator base plates*
- *Traditional TE ram post adapters and*
- *40 mm and 44 mm stroke machines*

Refer to the customer documentation shipped with the machines.

4. APPLICATOR LOADING AND UNLOADING

4.1. Terminal Strip Loading

CAUTION
Before loading terminal strip in applicator, be SURE the installed applicator is the right one for the terminal to be applied. Compare terminal number on reel with numbers listed on applicator parts list.

DANGER
To avoid personal injury, be SURE power and air source to the machine is turned "off" and power cord/air supply are disconnected.

1. Turn off or disconnect power and air source to machine.
2. Be sure ram assembly is all the way up. If necessary, hand-cycle machine to raise the ram. (Refer to the terminating machine manual for hand cycling instructions.)
3. Remove applicator/terminator guard assembly.
4. Raise stock drag by turning drag release lever right/left. Remove length of terminal strip left in applicator by grasping terminals with long-nose pliers at the strip guide entry, raising the feed finger, and pulling strip straight out of the applicator.
5. With reel of terminals installed on reel support, feed terminal strip into applicator between strip guides.

CAUTION
Be SURE terminal strip enters strip guides with the stock drag elevated (open) by turning the stock drag arm right/left side.

6. Raise feed finger and continue to feed terminal strip until LEAD terminal is over anvil and feed finger engages hole in carrier strip.
7. Turn drag release lever right/left to lower the stock drag.
8. Be sure tip of feed finger is in feed hole in carrier strip.

NOTE
Some carrier strip have additional holes which are not used for feed purposes.

9. Hand-cycle the machine several times to make sure the applicator is properly adjusted as described in Section 5, ADJUSTMENTS.
10. Re-install applicator/terminator guard assembly.

4.2. Terminal Strip Unloading

Cut terminal strip one or two terminals from end of applicator.

NOTE
The applicator should never be unloaded unnecessarily. A section of the terminal strip should always be left in the unit. Since it is not necessary to remove the strip section for cleaning, lubrication, or repair, it should only be removed as a part of the loading procedure.

4.3. Terminal Lubrication

Some terminal strips require the use of a terminal lubricant. Wick-type lubricators apply lubricant to the terminal strip as it feeds into the applicator.

Terminal lubricants reduce tooling wear and help reduce damage to the plating on some terminals.

NOTE
Depending on the final use of the crimped terminal, terminal lubricators are not always recommended. To determine if your applications warrant the use of a terminal lubricator, contact your local TE Field Representative.

If your application warrants the use of a terminal lubricator, appropriate lubricant can be recommended by TE.

5. ADJUSTMENTS

5.1. Feed Cam Adjustment

All end-feed air-feed applicators are setup at the factory with a 40 mm and 44 mm stroke feed cam.

DANGER
To avoid personal injury, be SURE the power and air source to the machine is turned "off" and power cord/air supply is disconnected BEFORE taking the applicator out of the machine. The machine ram should be in the raised position.

1. Remove the applicator from the terminating unit.
2. Remove the applicator ram from the applicator frame by pulling it straight out of the applicator.

NOTE
It may be necessary to manually actuate the feed mechanism to free the ram from the frame.

3. Remove the feed cam mounting screws securing the cam to the ram. See Figure 2.
4. Locate the new feed cam on the ram. Then re-secure using feed cam mounting screws. See Figure 2.

CAUTION
Improper positioning of the cam in the applicator can cause serious damage to the applicator, the terminating machine, or both. Hand-cycle the machine prior to running under power to ensure that there are no mechanical interferences.

5.2. Wire Crimp Height Adjustment Disc

The wire crimp height adjustment disc in this assembly is an adjustable plate with fifty-four increment notches, as opposed to the four pin settings available on the standard applicator wire crimp height adjustment disc. Each increment represents a change in crimp height of 0.015 mm.

1. Turn the crimp height adjustment disc clockwise to decrease the crimp height; turn the disc counterclockwise increases the crimp height.

NOTE
Every tenth increment is denoted by a letter (A to F) with the increments between each letter represented numerically (1 to 9). Wire sizes and their relevant crimp heights will be listed on the log sheet with the corresponding reference setting, such as A6, C4, and so forth.

2. After making wire crimp adjustment described in Paragraph 5.2, make several test cycles and inspect terminations CLOSELY.
   a. Look for rough or sharp edges around crimped barrels (flash), deformed crimps, bent terminals, or other defects caused by worn or broken tooling. If necessary, replace tooling as described in Section 7, REPAIR AND REPLACEMENT OF PARTS.
   b. If terminations appear normal, measure crimp height of each termination. Crimp height must agree with measurement specified on applicator log for wire size being used. Record crimp height dimensions for reference.

NOTE
Refer to Instruction Sheet 408-7424 for information concerning crimp height measurement.

   c. If crimp height is INCORRECT, remove applicator and install one that is KNOWN to produce terminations of CORRECT crimp height. Make several test cycles and repeat Step b. If crimp height is INCORRECT for this applicator, problem is machine shut height, and corrective information can be found in appropriate machine manual. If crimp height is CORRECT, problem is in original applicator, and corrective measures are presented in Paragraph 7.5, Fine Adjust Assembly Removal and Installation.

3. During extensive operation, periodically repeat Step 2 to make sure that applicator is producing correct terminations.

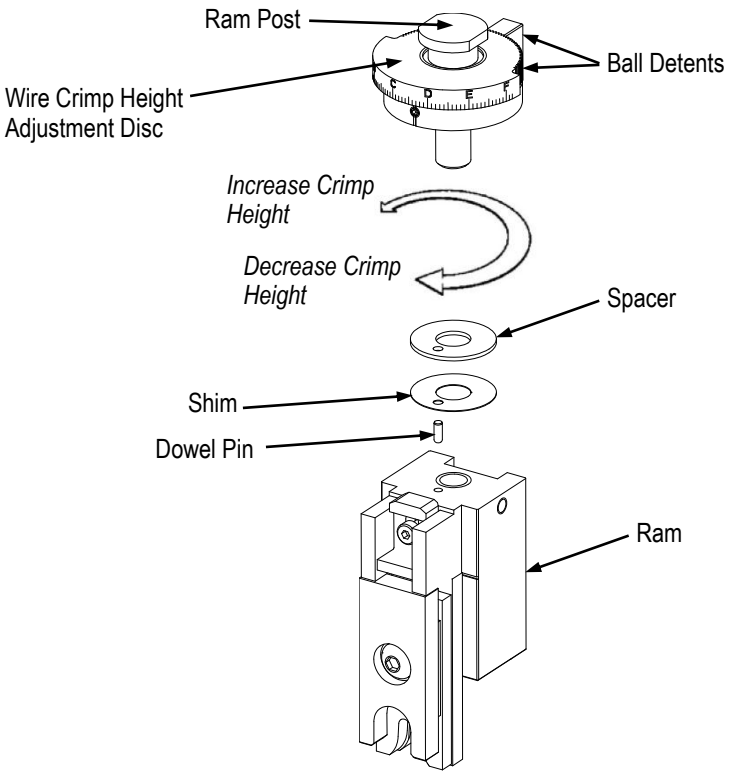


Figure 3

5.3. Adjustment of Air Feed Mechanism

The feed mechanism is actuated by compressed air.

CAUTION
Please take extra precautions during adjustments. When the machine is manually cycled, the mechanism will move forward and backwards once during each machine stroke, unless the air is disconnected.

The feed stroke is adjustable in range from 0 mm to 50 mm (or larger, if necessary). Proceed as follows:

1. Mount the applicator onto the terminator.
2. Insert terminal strip, until the leading terminal is located above the anvil.
3. Connect air supply to applicator.
4. Adjust the terminal feed as follows (Figure 4):
   a. Loosen screws (01) and (04).
   b. Rotate screw (02). (With the cylinder actuated, feed the terminal on top of the anvil.)
   c. Fasten (tighten screw) (01).
5. Adjust the terminal feed pitch as follows (Figure 4):
   a. Close the air of the compress plug (05).
   b. Manually return the cylinder shaft, adjusting the terminal feed finger into the carrier hole of the previous terminal.
   c. Rotate screw (03) “up” so that it touches at the cylinder shaft’s guide (to control the cylinder shaft return).
   d. Fasten (tighten) screw (04).

6. Connect the air supply to the applicator.
7. Cycle terminator manually. The next terminal must now be located exactly above the anvil.

NOTE
At the end of its backstroke, the feed finger should be at the back edge of the feed hole to be used. The backstroke MUST NOT be longer than this, or the feed finger might not drop into the feed hole.

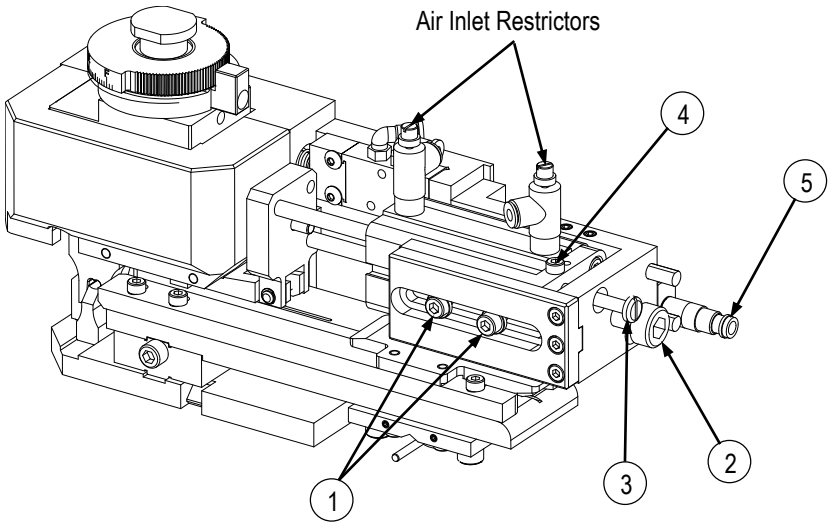


Figure 4

5.4. Adjustment of Feed Speed

NOTE
The feed speed has been set precisely at the factory and should therefore require re-adjustment only in exceptional circumstances.

DANGER
Please take extra precautions during adjustments. When the machine is manually cycled, the mechanism will move forward and backwards once during each machine stroke unless the air is disconnected.

The feed mechanism has been adjusted at the factory to ensure that the terminal is advanced at the lowest possible speed. In rare occasions, it is possible that the feed speed is not fast enough, if the applicator is used on a fully automatic machine. The feed speed can be adjusted by the two air inlet restrictors (Figure 4). The air inlet restrictors control the feed and return stroke.

5.5. Strip Guide Plate and Feed Pawl Adjustments

This adjustment is made to change the terminal bellmouth and rear cutoff tab, a necessary feature for proper termination. Refer to the appropriate terminal application specification for terminal bellmouth.

This procedure moves the block on which the strip guides are mounted. Since the terminal strip is fed into the applicator through the strip guide assembly, it is moved front and back over the anvil as the strip guide is moved. (See strip guide plate adjustment in Figure 1B.)

NOTE
The adjustment of the feed pawl to match any change in the position of the front strip guide is also described here.

1. From bottom side of strip guide plate, use a 3 mm hex wrench to loosen the screw that holds the strip guide assembly lockscrew. See Figure 1B.
2. With the LEAD terminal centered over the anvil, lift and hold (or block) the feed pawl up to clear the strip guides to move the terminal strip.
3. Make sure that the terminal is centered on strip guide. Guide position of the carrier strip must be also centered with the slot of the rear guide. See Figure 1B.

4. Adjust the drag required on the carrier strip using the drag screws under the drag elevation base. See Figure 1B.
5. Turn strip guide assembly adjustment screw CLOCKWISE to move strip guide assembly TOWARD FRONT, or COUNTERCLOCKWISE to move it TOWARD REAR. The correct positioning will be done when the bellmouth and the cutoff tab is as required. Tighten the screw to hold the strip guide assembly in position.
6. Loosen screw holding feed pawl to release feed finger (feed pawl holder). Move feed pawl until its tip drops into slot in rear strip guide. Retighten screw.
7. Hand-cycle terminating unit, check for proper terminal feed and strip guide plate alignment.

5.6. Strip Guide Adjustments

This adjustment is not used very often. It is only needed when the rear strip guide is not parallel to the strip guide plate. Thus, the strip guides are not parallel to each other, or there is a variation in strip width.

CAUTION
To avoid damage to the rear strip guide, do NOT pry the terminal strip out of the guides with a screwdriver or similar tool.

NOTE
The strip guides are correctly positioned on the strip guide plate when the applicator is built, and normally do NOT need new adjustments.

DANGER
To avoid personal injury, turn "off" the power and air source to terminating unit and disconnect the power cord/air supply BEFORE removing the applicator.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Lift and hold (or block) the feed finger to clear the front strip guide, and loosen screws holding rear strip guide to strip guide plate.
3. With a section of terminal strip in place, move the rear strip guide in the desired direction. The strip should slide smoothly but have no front-to-back play. Tighten the screws.
4. Loosen screws securing the front strip guide; align the front strip guide with the holes in the terminal carrier strip; and tighten screws.
5. Lower the feed finger into the slot and carefully move the feed linkage through its motion. The feed finger should be centered in the slot throughout its range of motion.

NOTE
If the feed finger is not aligned with the front strip guide, refer to Paragraph 5.5, Step 4.

5.7. Adjustment of Shear(s) and Shear Holder(s)

With the lead terminal centered over the anvil, check to see if the floating shear(s) cuts the terminal from the carrier strip(s) correctly. If necessary, make the following adjustments.

NOTE
The applicator must be removed from the terminating unit for this procedure. Remove the applicator ram before proceeding.

DANGER
To avoid personal injury, turn "off" the power and air source to the terminating unit and disconnect the power cord/air supply BEFORE removing the applicator.

A. Front Shear Adjustment

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. From the bottom of the base plate, loosen the two screws that secure the shear holder to the base plate.

3. Position the shear holder so that the shear is against the anvil.
4. Tighten the screws loosened in Step 2. The shears should freely move up and down with minimal clearance to the anvil. A 0.025 mm shim can be used between the shear and the anvil for proper positioning.
5. With the applicator ram replaced and the lead terminal centered over the anvil, check that the floating shear correctly cuts the terminal from the carrier strip. If shearing action is not correct, check for worn or damaged tooling.

B. Rear Shear Adjustment (Dual Carrier Strip Product Only)

The rear shear is more likely to need adjustment because it is affected by differences in terminal strip widths and strip guide plate adjustments.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. From the bottom of the base plate, loosen screws that hold the rear shear holder to the base plate.
3. With the terminal strip inserted into the applicator, and the lead terminal centered over the anvil, move the floating shear holder in the anvil direction as required to obtain the proper cutoff tab.
4. Check that the floating shear is installed correctly, and then tighten the screws.
5. Depress the floating shear and check for proper shearing action and proper cutoff tab.
6. If necessary, repeat Steps 2 through 5 or check for worn or damaged tooling.

6. PREVENTATIVE MAINTENANCE

DANGER
To avoid personal injury, turn "off" the power and air source to terminating unit and disconnect the power cord/air supply BEFORE removing the applicator for preventative maintenance. The machine ram should be in the raised position.

NOTE
Do not remove terminal strip during cleaning or lubrication.

6.1. Daily Cleaning

Applicators MUST be cleaned and lubricated after every eight hours of operation, or when removed from terminating unit to be stored.

DANGER
To avoid personal injury, turn "off" the power and air source to terminating unit and disconnect the power cord/air supply BEFORE removing the applicator.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Remove applicator ram from applicator by pulling upward. It may be necessary to move the feed finger to release the ram assembly. DO NOT REMOVE TOOLING FROM RAM.
3. Wipe the complete ram assembly with a clean, dry cloth to remove old grease and dirt.

CAUTION
DO NOT CLEAN APPLICATOR WITH AIR HOSE.

4. Check crimpers, anvil, and shear for excessive wear or damage. If necessary, replace parts as described in Section 7, REPAIR AND REPLACEMENT OF PARTS.
5. Check alignment of terminal stripper and tightness of stripper, anvil, and crimper mounting bolts.
6. Clean applicator body. Make sure all chips, dirt, and grease are removed. Lubricate pivot points as described in Paragraph 6.3.
7. Lubricate ram as described in Paragraph 6.3.
8. Replace ram in applicator.

6.2. Monthly Cleaning

Applicators MUST be cleaned completely every thirty days to remove all grease, oil, and dirt.

DANGER
To avoid personal injury, BE SURE power and air source to the terminating unit is turned "off" and the power cord/air supply is disconnected.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Remove ream from applicator. DO NOT REMOVE TOOLING FROM RAM.
3. Submerge the applicator (ram assembly and applicator body) in a cleaning solution that will not attack plastic or cast metal.

CAUTION
DO NOT CLEAN IN VAPOR DEGREASER.

4. Air dry the applicator.
5. Lubricate ram as described in Paragraph 6.3.
6. Lubricate pivot points as described in Paragraph 6.3.
7. Replace ram in applicator.

6.3. Lubrication

DON'T use too much oil or grease on applicator. Any excess lubricant MUST be wiped off before placing applicator back in service.

DANGER
To avoid personal injury, be SURE power and air source to the terminating unit is turned "off" and the power cord/air supply is disconnected.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Take ram assembly out of applicator, clean ram and feed cam, and apply a thin coat of grease to each corner of ram and to feed cam.
3. Carefully lay applicator on its side and put one drop of oil on feed finger pivot pin. Wipe feed finger pivot pin to remove excess oil.
4. Put ram assembly back into applicator, and wipe off excess oil or grease.

7. REPAIR AND REPLACEMENT OF PARTS

These procedures cover the applicator parts which most often need repair or replacement because of wear. Remove the applicator from the machine before doing any maintenance work. Refer to the exploded view drawing and parts list packaged with the applicator for identification of parts. Be sure to order replacements for parts used from spare parts stock, so that they will be available when needed.

DANGER
To avoid personal injury, turn "off" the power and air source to terminating unit and disconnect the power cord/air supply BEFORE removing the applicator for preventative maintenance. The machine ram should be in the raised position.

NOTE
Wipe parts with a clean, dry cloth as they are removed from the applicator. Then, when putting them back into applicator, wipe mating surfaces with your fingers to make sure that all lint and other foreign matter have been removed.

7.1. Anvil Replacement

DANGER
To avoid personal injury, be SURE power and air source to machine is turned "off" and the power cord/air supply is disconnected BEFORE taking the applicator out of the machine.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. From bottom of base plate, remove screw that holds anvil to base plate.

3. Turn drag release lever upward, raise feed finger, and pull strip back using long-nose pliers so lead terminal is between strip guides.
4. Remove anvil from groove in top of base plate.
5. Install anvil using reversed procedure. If a new anvil is needed, be sure the part number of the new anvil agrees with the number on the applicator parts list.

NOTE
When the anvil is replaced, the front shear and holder must be realigned. See Paragraph 5.7.A.

6. Re-align crimpers as described in Paragraph 7.3.

7.2. Floating Shear Replacement

DANGER
To avoid personal injury, be SURE power and air source to the terminating unit is turned "off" and the power cord/air supply is disconnected.

NOTE
It is not necessary to remove shear holder(s) to replace floating shear(s). Before removing floating shear(s), not orientation for reinstallation. The floating shears are spring-loaded, so be careful during removal.

1. Turn drag release lever upward, raise feed finger, and pull strip back using long-nose pliers so lead terminal is between strip guides.
2. Push down on the floating shear, then remove shear retaining screw from side of shear holder.
3. Slowly release pressure on floating shear. Compression spring will push it out of shear holder.
4. After removing floating shear, lift compression spring out of shear holder.
5. Inspect spring for damage and replace it if necessary. Refer to parts list for correct number.
6. Re-install floating shear(s) using reversed procedure. If installing new shear, be sure part number agrees with the number on the parts list.
7. Raise feed finger and move lead terminal over the anvil. Turn drag release lever down to lower stock drag.
8. Check shear holder adjustment as described in Paragraph 5.7, Adjustment of Shear(s) and Shear Holder(s).

7.3. Crimper Replacement

DANGER
To avoid personal injury, turn "off" the power and air source to terminating unit and disconnect the power cord/air supply BEFORE removing the applicator for preventative maintenance. The machine ram should be in the raised position.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Loosen the crimper bolt slightly and remove ram assembly from applicator by pulling upward. It may be necessary to move the feed finger forward to release the ram assembly.
3. Remove crimper bolt which holds the wire crimper in place on the ram assembly. Note position for reinstallation.
4. Re-install wire crimper using reversed procedure. The upper end of the wire crimper must be up against the wall ram cavity on the ram assembly. Tighten the crimper bolt ONLY finger tight.
5. Put ram assembly back into applicator, and install applicator in machine.
6. Lift feed finger and pull terminal strip back until lead terminal is between strip guides.
7. Form a piece of heavy paper over anvil, then slowly hand-cycle machine while watching alignment of crimpers with anvil. When ram assembly has reached bottom of stroke, carefully tighten crimper bolt. Crimpers MUST move freely over anvil after paper is removed.

7.4. Feed Finger Replacement

DANGER
To avoid personal injury, be SURE power and air source to the terminating unit is turned "off" and the power cord/air supply is disconnected.

1. Remove the adjustment screw which secures the feed finger to the feed finger holder.
2. Replace feed finger using reversed procedure. If new finger is installed, be SURE the part number agrees with the number on the parts list.
3. Adjust feed finger as described in Paragraph 5.5.

7.5. Fine Adjust Assembly Removal

The fine adjust assembly 1707291-1 is factory installed and should require no further adjustment. Under the fine adjust assembly is a laminated washer which may break or compress after extensive use. To remove the fine adjust assembly from the ram and replace the laminated washer, use the following procedure.

DANGER
To avoid personal injury, be SURE power and air source to the terminating unit is turned "off" and the power cord/air supply is disconnected BEFORE removing the applicator.

1. Remove the applicator as described in Section 3, INSTALLATION AND REMOVAL.
2. Remove ram assembly from applicator, and loosen ram post locking screw in the side of applicator ram (see Figure 1A).
3. Hold ram assembly with ram post pointing down, and unscrew ram from ram post, leaving fine adjust assembly in place. If necessary, the end of the ram post may be placed in a vice to free both hands for turning ram.
4. Ensure that the correct fine adjust spacer and shim sub-assembly are reassembled (as per the appropriate applicator log) to the ram post in the correct order (see Figure 3).
5. Hold ram with hole facing downward, screw into the ram.
6. Be sure the two ball detents on the fine adjust assembly are aligned with the centerline of the ram and oriented relative to the front of the tooling (as shown in Figure 3). If necessary, turn ram post back slightly until this alignment is achieved. Tighten ram post locking set screw to hold ram post in position.
7. Put ram assembly back into applicator.
8. Install applicator in machine and make some test crimps. Measure crimp height and check it against crimp height specified on applicator parts list. If crimp height is within specified tolerances, applicator may be placed in service. If not, repeat this procedure, starting with Step 1.

8. APPLICATOR STORAGE

When storing applicator, or taking it out of machine for any reason, use the following procedure to keep tooling from being damaged by bottoming or ram assembly.

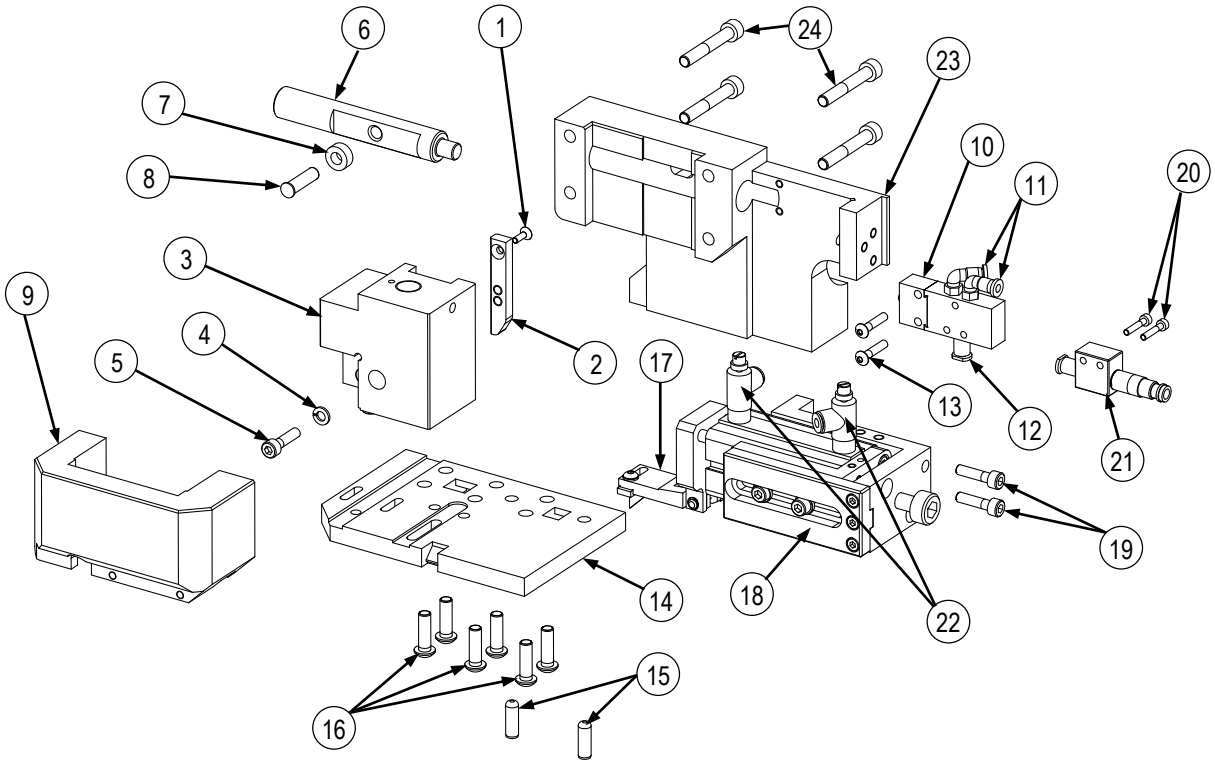
1. Cut terminal strip one or two terminals from end of applicator.
2. Take applicator out of machine as described in Section 3, INSTALLATION AND REMOVAL. Clean and lubricate as presented in Section 7.
3. Lower ram assembly to hold lead terminal between crimpers and anvil. This will also identify type of terminal to be used when applicator is put back in service.

9. APPLICATOR ASSEMBLY AND SUBASSEMBLY

Refer to the applicator log for the applicator assembly and subassembly. The applicator logs, which contain part descriptions and identifying item numbers, are intended to be used with the drawings shipped with the applicator to determine the appropriate item part numbers.

10. REVISION SUMMARY

- Release of initial document



ITEM NUMBER	DESCRIPTION
1	SCREW, Flat Head (M3 X 10)
2	CAM
3	RAM
4	WASHER, Spring Lock (M5)
5	SCREW, Socket Head M5 X 20)
6	ROD, Feed
7	CAM, Roller
8	PIN, Cam Roller
9	RAM, Cap
10	VALVE, 5-Way
11	AIR CONNECTIONS
12	AIR IN
13	SCREW, Socket Head (M6 X 20)
14	BASE PLATE, Applicator
15	GUIDE, Pin
16	SCREW, Button Head (M6 X 20)
17	HOLDER, Feed Finger
18	FEEDING UNIT
19	SCREW, Socket Head (M5 X 16)
20	SCREW, Socket Head (M3 X 16)
21	INLET, Air
22	VALVES, Flow Control
23	HOUSING, Applicator
24	SCREW, Socket Head (M5 X 50)

Figure 5