

Figure 1

## 1. INTRODUCTION

Heavy Duty Miniature Quick-Change Applicators (Figure 1) apply end-feed strip terminals to pre-stripped wires. Each applicator accepts the strip form of certain terminals, which are identified on the applicator parts list and exploded view drawing (Applicator Log) for each applicator. The terminal listed on the data plate is the one that was specified when the applicator was ordered.



### NOTE

Use *ONLY* the terminals called out in the applicator log and on the applicator data plate.

This instruction sheet, the parts list and exploded view drawing packaged with the applicator, and the appropriate Customer Manual (409-5128 for the Basic AMP-O-LECTRIC\* Machine; 409-5207 or 409-5289 for the Model "T" Terminating Unit; 409-5842 for the Model "G" Terminating Machine; or 409-10047 for the AMP-3K\* and AMP-5K\* Terminating Machines), provide all the information required to operate and maintain the applicator and machine (or unit).

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

## 2. APPLICATOR DESCRIPTION

### 2.1. General

The end-feed applicators now feature a heavier, more rugged construction than previous models. This lets them stand up to the higher crimping pressures needed to apply terminals to the larger wire sizes.

These applicators also feature improved feed and drag mechanisms.

Although these applicators accept only certain terminals, they provide valuable application flexibility. The wire crimp can be easily adjusted for as many as four different wire sizes, and the insulation crimp can be adjusted to accept eight insulation diameters.

These applicators can be used in various machines, provided that they have the proper stroke length specified in paragraph 2.2 and all the necessary equipment.

Some of these applicators have air-powered feed mechanisms. The air feed system allows better control of the feed finger's movement and provides a longer feed stroke. These features are required only in a few specialized applications.

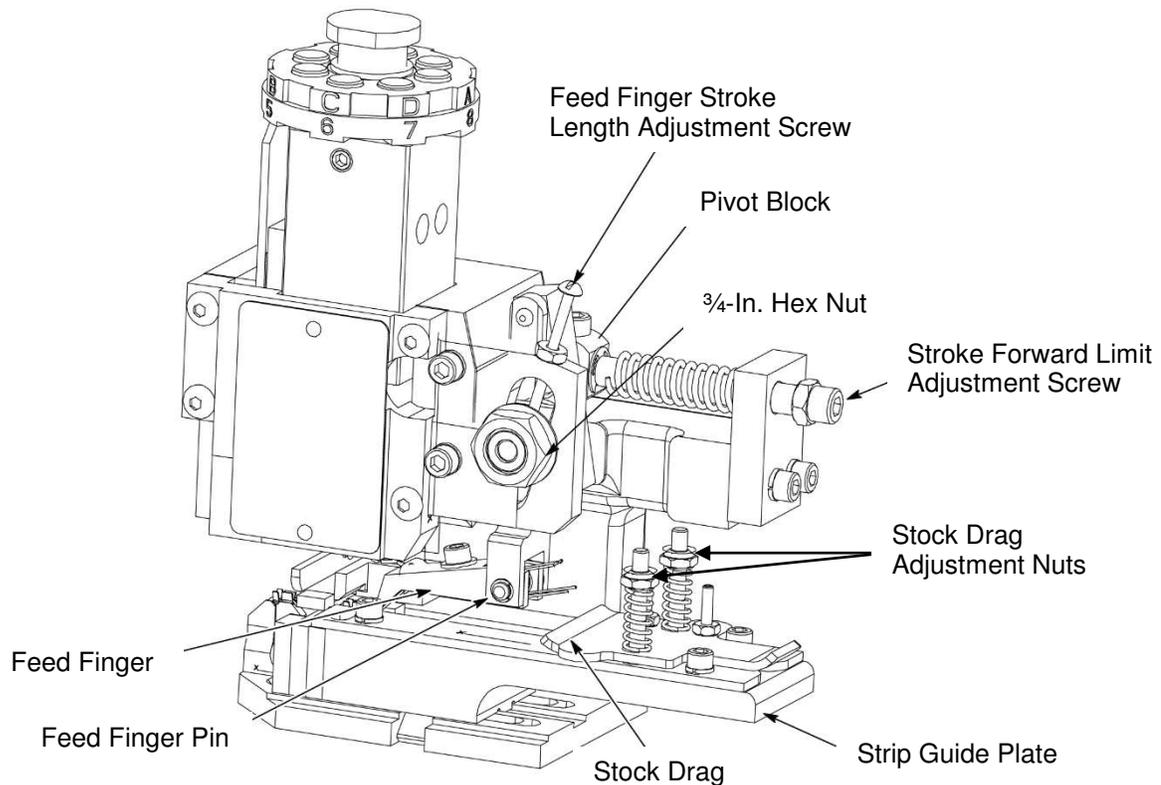


Figure 2

The main components of the applicators with mechanical feed are identified in Figure 1 and Figure 2. The ram assembly is shown in detail in Figure 3. Figure 4 and Figure 5 show the applicators with air feed.

The terminal strip is fed into the applicator with the barrel (wire) end first, between the front (outer) and rear (inner) strip guides. It passes under the stock drag, and the LEAD terminal is positioned ahead of the feed finger. The feed finger feeds one terminal during each cycle of the machine. In the mechanical feed system, the terminals are fed by the action of the feed cam and a series of rods and levers which move the feed finger. The air feed system moves the terminals by using air pressure, controlled by a series of valves, to operate an air cylinder which moves the feed finger.

The ram post (also referred to as the ram mounting post) engages the post adapter of the machine ram, and it is the machine ram that actuates the applicator. Just below the ram post are the wire disc and insulation disc. The wire disc has as many as four pairs of pads, depending on the number of different wire sizes the terminals will accept. Each pair of pads has a different height. By rotating the disc, each pair of pads can be lined up with the two bosses on the ram post adapter (see Figure 3) to change the length of stroke of the wire crimper over the anvil. The insulation disc contains eight pads of different heights. When this disc is turned, the pads line up with the top of the insulation crimper to change the insulation crimp height.

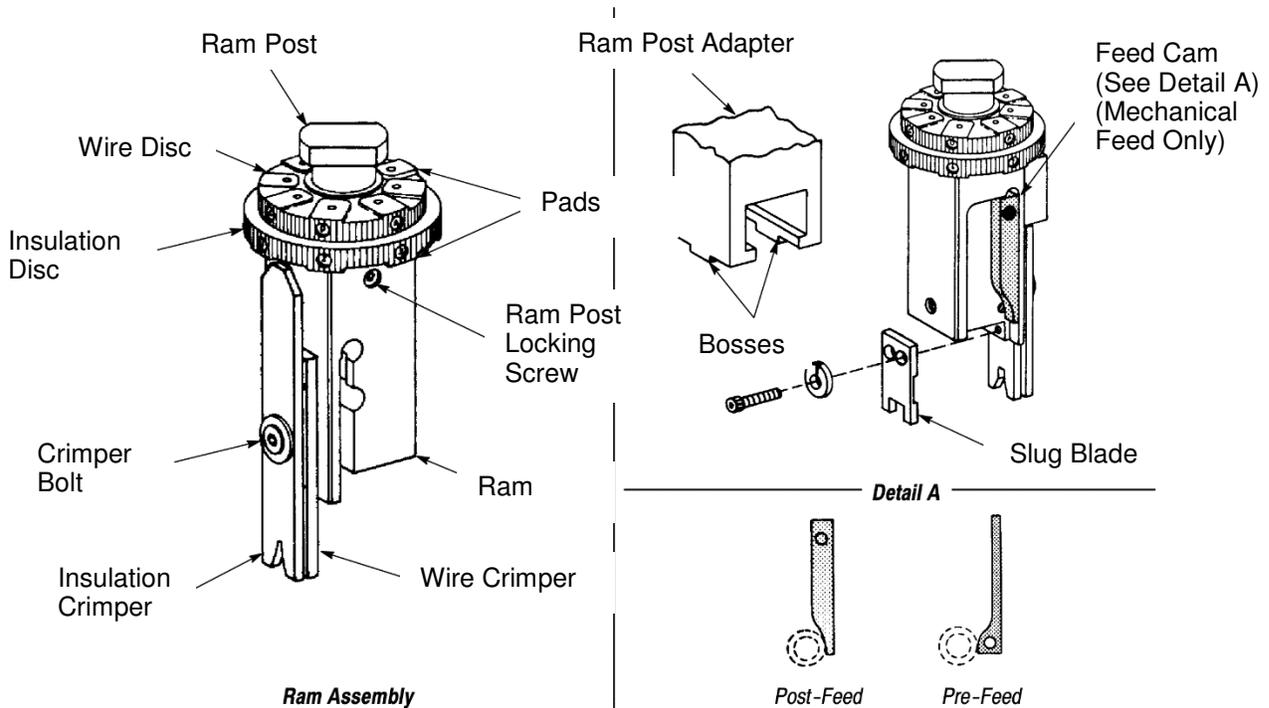


Figure 3

The wire crimper is held in a preset position by two pins on the ram assembly and by the crimper bolt. The insulation crimper is also held by the crimper bolt, but is free to move up and down so the insulation crimp may be changed.

The slug blade, which cuts the connecting tab from the strip between the lead and second terminals, is also attached to the bottom of the ram.

The spring-loaded terminal hold-down, located on the ram, holds the terminal in place during the crimping and slugging process.

The applicator's mounting surface is its base plate. The anvil and the strip guide plate are mounted on the base plate. The strip guides, stock drag, front and rear shear plates, and strip hold-down plate are all mounted on the strip guide plate. The shear plates are spaced to allow the slug blade to pass between them and remove the connecting tab from between the terminals.

## 2.2. Applicators with Mechanical-Feed Systems

Two lengths of feed cams are available for these applicators. The length of the feed cam to be used is determined by the length of the machine stroke. For example, a machine with a 28.58-mm [1.125-in.] stroke MUST use an applicator with a SHORT feed cam and a machine with a 41.28-mm [1.625-in.] stroke MUST use an applicator with a LONG feed cam. Both long and short POST-FEED cams are available. The PRE-FEED cam is only available in the short length.

POST-FEED cam moves the lead terminal over the anvil on the DOWNWARD stroke of the ram, which leaves the anvil clear when the machine is at rest. The PRE-FEED cam moves the lead terminal over the anvil on the UPWARD stroke of the ram, so that a terminal is always over the anvil when the machine is at rest.

## 2.3. Applicators with Air-Feed Systems

In these applicators, the feed cam and its mechanical system of rods, levers, and springs are replaced by an air cylinder and a series of valves. In the air feed system, the feed action is started when the foot switch is depressed to begin the machine cycle. At the beginning of the ram's DOWNWARD stroke, the feed mechanism of the machine switches the on-off valve to the "off" position, which shuts off the air supply to the extension side of the feed cylinder. When this happens, a spring inside the cylinder retracts the cylinder shaft and the feed finger attached to it. The ram continues downward, completes the crimping action, and starts back up.

As it approaches the fully raised position, the machine feed mechanism switches the on-off valve back to the "on" position. This supplies air to extend the feed finger and move the next terminal over the anvil. The flow control valve controls the speed of the feed finger stroke.

## 3. APPLICATOR INSTALLATION AND REMOVAL



### **DANGER**

*Be SURE power to the machine is turned "off" (or power cord is disconnected) and air supply is disconnected (if used) 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; 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*

### 3.1. AMP-O-LECTRIC Machine

#### A. Installation

This machine must be equipped with Machine Conversion Kit PN 690675-2, to adapt it for use with the miniature applicators. The kit includes Instruction Sheet 408-8022, which explains how an applicator with mechanical feed is put into and taken out of the machine.

The procedure for applicators with air feed systems is basically the same, with the addition of the following steps:

1. Loosen two screws holding reel support to right side of machine. Slide the valve bracket - with on-off valve forward - between reel support and machine, and then retighten the screws.
2. Connect air line from flow control valve to on-off valve elbow.



### **CAUTION**

*Be SURE machine is in rest position, and clutch is disengaged. This can be checked by opening flywheel cover and turning flywheel by hand in proper direction.*

3. Install valve lever on feed arm drive shaft of machine, with clamp to outside (right). Before tightening screws fully, line up lever with on-off valve, then rotate lever clockwise to fully open position. While holding in this position, tighten screws to fasten lever to shaft.
4. Connect air supply to sleeve valve. With valve open, feed finger should extend.
5. Hand-cycle machine through one complete cycle (refer to customer manual for machine), while CLOSELY watching operation of applicator. Feed finger should retract at beginning of DOWNWARD stroke and extend again as ram nears end of UPWARD stroke.

6. Load applicator with terminals as described in Section 4, then repeat Step 5 while watching crimping action and feeding of terminals. Make any necessary adjustments to the applicator as described in Section 5, and to the machine as described in the machine manual.
7. Connect electrical power to machine and turn machine "on". Make several test cycles under power to be sure that crimping action is correct. Make any additional adjustments that may be necessary.
8. If machine is not to be used immediately, disconnect power cord and airline.

#### **B. Removal**

1. Turn machine "off" and disconnect power cord. If applicator has an air feed system, disconnect air supply.
2. Unload applicator as described in Section 4, remove hold-down bracket, and slide applicator away from stops on base mount until ram post is clear of machine ram.
3. If the applicator has an air feed system, and is not to be re-installed immediately, remove valve lever from feed arm drive shaft on machine by loosening two screws.
4. Loosen two screws holding reel support and valve bracket to machine, then slide valve bracket out. Tighten screws.

### **3.2. Model "T" Terminating Unit**

#### **A. Installation**

1. Turn "off" or disconnect power to unit.
2. Push IN release bar on quick-change base plate. Locking latch will pivot downward.
3. Place applicator on quick-change base plate, then slide it back until two notches engage stops at back of plate. At the same time, guide ram post into ram post adapter.
4. Flip locking latch UP to secure applicator in place.
5. If applicator has an air feed system, connect air line from flow control valve on automatic equipment to extension port of feed cylinder (in end of cylinder away from applicator).

#### **B. Removal**

1. Disconnect power cord, and air line (if used).
2. Cut terminal strip one or two terminals from end of applicator.
3. Push IN release bar on quick-change base plate. Locking latch will pivot downward.
4. Slide applicator forward until clear of ram post adapter.

### **3.3. Model "G" Terminating Machine**

Refer to Customer Manual 409-5842 for installation and removal procedures.

### **3.4. AMP-3K and AMP-5K Terminating Machines**

Refer to Customer Manual 409-10047 for installation and removal procedures.

### **3.5. Other Terminating Machines**

Refer to the customer documentation supplied with the machine.

## 4. APPLICATOR LOADING AND UNLOADING



### NOTE

*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.*



### CAUTION

*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 field representative.*



### NOTE

*If your application warrants the use of a terminal lubricator, the recommended lubricant is Stoner Mechanical Lubricant E807, available from Stoner, Inc. Call 1-800-227-5538 or visit their website.*

### 4.1. Terminal Strip Loading



### CAUTION

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

1. Turn "off" or disconnect power to machine.
2. Be sure ram assembly is all the way up. If necessary, hand-cycle machine to raise the ram. (Refer to customer manual for machine.)
3. Remove length of terminal strip left in applicator by grasping terminal over anvil with needle-nose pliers and pulling strip straight out front of applicator.
4. 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 barrel (wire) end first and open side up.*

5. Lift stock drag, and feed terminals under it toward feed finger.



### NOTE

*Note that terminals are advanced in POST- FEED applicators on the DOWN stroke of the ram assembly, while in PRE-FEED applicators, they are advanced on the UP stroke.*

6. Lift feed finger and advance strip until feed finger engages feed area behind the SECOND terminal.



### NOTE

*Terminal length, or notation on applicator parts list, may require strip to be positioned differently under feed finger.*

7. Be sure applicator is properly adjusted (as described in Section 5) by making several test cycles.

### 4.2. Terminal Strip Unloading

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



### NOTE

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

2. If terminals are POST-FED, lift stock drag and feed finger and move lead terminal over anvil.

## 5. ADJUSTMENTS

### 5.1. Wire Crimp Adjustment

1. Select pad letter (A, B, C, or D) from data plate for AWG wire size to be used.
2. Turn wire disc (upper disc) to line up selected pad letter with **BOSSSES ON RAM POST ADAPTER** (reference Figure 3). This provides the right crimp height for that wire size.
3. After making insulation 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 6.
  - b. If terminations appear normal, measure crimp height of each termination as described in Instruction Sheet 408-7424, packaged with the applicator. Crimp height must agree with measurement specified on parts list for wire size being used. Record crimp height dimensions for reference.
  - 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 6.5, Adjustable Crimp Height Repair.
4. During extensive operation, periodically repeat Step 3 to make sure that applicator is producing correct terminations.

### 5.2. Insulation Crimp Adjustment

To adjust insulation crimp height, turn insulation disc (lower disc) to line up the number (1 through 8) with top of insulation crimper on ram assembly. No. 8 makes the tightest crimp and No. 1 the loosest, a difference of approximately 1.78 mm [.070 in.]. To find the insulation crimp you want, start with No. 1 and make test crimps. Increase the setting one number at a time until you get the proper insulation crimp height.

### 5.3. Terminal Strip Feed Adjustment

1. With terminal strip loaded in applicator as described in paragraph 4.1, check position of lead terminal in relation to slug blade (determined by forward limit of feed finger stroke) by running several test crimps and inspecting the terminals. Slug blade **MUST** remove the connecting tab between lead and second terminals – without deforming either terminal.
2. If tab is correctly slugged out and terminals are not damaged, forward limit of feed finger stroke is correct; go to Step 5. If adjustment is needed, continue with Step 3.
3. Adjust forward limit of feed finger stroke as follows:
  - a. Applicators with mechanical-feed systems (reference Figure 2)
    - (1) Loosen screw on top of pivot block.
    - (2) Turn stroke forward limit adjustment screw **COUNTERCLOCKWISE** to move forward limit toward anvil, or **CLOCKWISE** to move forward limit away from anvil.
    - (3) Tighten screw on top of pivot block.

b. Applicator with air feed systems (see Figure 4)

- (1) Slightly loosen the feed cylinder locking screw on top of feed cylinder bracket (see Figure 5).
- (2) Turn on-off valve to the "off" position (AMP-O-LECTRIC machine), or disconnect air supply to feed cylinder (automatic equipment). Feed finger should retract.
- (3) Turn feed adjustment screw CLOCKWISE to RETRACT forward limit or COUNTERCLOCKWISE to EXTEND forward limit of stroke.
- (4) Retighten feed cylinder locking screw, turn on-off valve to "on" position (AMP-O-LECTRIC machine) or reconnect air supply to feed cylinder (automatic equipment).

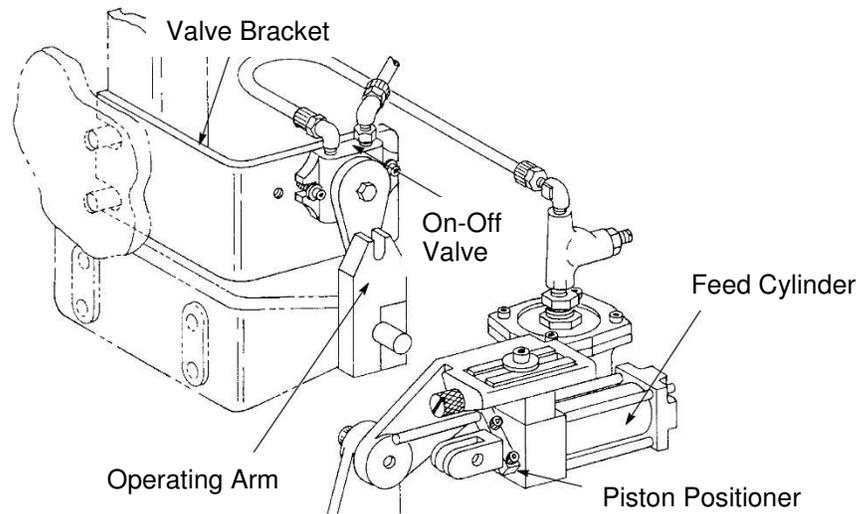


Figure 4

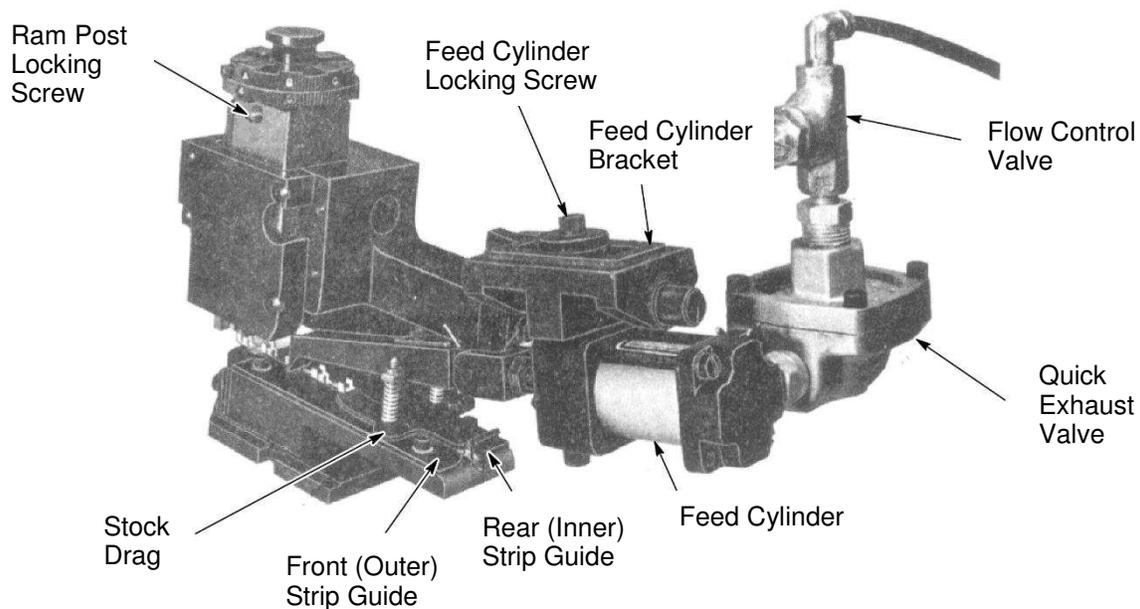


Figure 5

4. Repeat Steps 1, 2, and 3 as required. When adjustment is correct, go on to Step 5.

5. Watch feed finger as machine is hand-cycled several times. It should have enough - but not too much over-travel on backstroke to pick up next terminal.

**NOTE**

If pick-up point is contact end of wire barrel, backstroke over-travel should be about equal to the distance between wire barrel and contact part of terminal (see Figure 6). For other types of terminals (e.g., ring tongue), over-travel should be about the same, depending on contact features and configurations (e.g., stud hole).

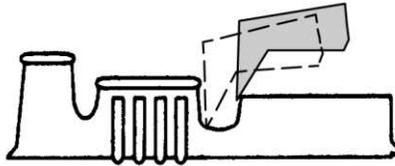


Figure 6

**NOTE**

If feed finger stroke length is satisfactory, go on to Step 7; if not, continue with Step 6.

6. Adjust feed finger stroke length as follows:
  - a. Applicators with mechanical feed systems (reference Figure 2)
    - (1) Loosen 3/4-in. hex nut slightly to allow pivot shaft to move in slot.
    - (2) Loosen locknut on stroke length adjustment screw, and turn screw **CLOCKWISE** to **SHORTEN** stroke or **COUNTERCLOCKWISE** to **LENGTHEN** stroke. Tighten locknut.
    - (3) Confirm that pivot shaft bushing is **UP AGAINST** stroke length adjustment screw, then tighten 3/4-in. hex nut. Repeat Step 5 to check for proper stroke length.
  - b. Applicator with air feed systems (reference Figure 4)
    - (1) With machine at rest and feed finger extended, loosen two screws holding positioner to feed cylinder shaft and move positioner in required direction on shaft.
    - (2) Re-tighten screws.
    - (3) Repeat Step 5 to check stroke length.
7. Repeat Steps 5 and 6 until stroke length is correct. Recheck Step 1 (forward limit) before going on to Step 8.
8. Hand-cycle machine several times, and check side-to-side centering of lead terminal on anvil. If centered, adjustments are complete; if not, continue with Step 9.
9. Loosen screws holding strip guides, and move both guides in desired direction. Tighten screws and check to be sure guides are parallel and that the terminal strip can move freely without excessive side clearance. Recheck side-to-side centering by repeating Step 8.

#### 5.4. Stock Drag Adjustment

Stock drag must be adjusted to apply **ONLY** enough pressure to terminal strip such that it will stop at end of feed finger stroke.

1. Turn stock drag adjustment nuts (reference Figure 2) **DOWN** to **INCREASE** drag or **UP** to **DECREASE** drag.
2. Cycle machine under power to be sure drag is properly adjusted.

## 6. 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**

*Be SURE the power and air supplies to the machine are disconnected BEFORE repair or replacement of parts. Machine ram should be in the raised position.*



### **NOTE**

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

### 6.1. Anvil Replacement

1. From bottom of applicator base plate, remove screw which holds anvil in place.
2. Remove anvil from groove in top of base plate.



### **NOTE**

*If section of terminal strip is in the way, lift stock drag and feed finger and pull strip back so lead terminal is between strip guides.*

3. Install anvil using reversed procedure. If a new anvil is needed, be sure part number of new anvil agrees with number on applicator parts list.
4. Remove ram assembly from applicator, loosen crimper bolt until just snug, then re-align crimpers as described in Steps 4 and 5 of paragraph 6.3.

### 6.2. Shear Plate Replacement

1. Lift stock drag and feed finger and pull section of terminal strip back so lead terminal is between strip guides.
2. Remove two screws which fasten shear plates and spacers (if used) to strip guide plate.
3. Remove parts from applicator. Note position of front and rear shear plates, so they can be reinstalled correctly.
4. Check worn plate(s) to see if it can be repositioned to provide another usable shearing edge as follows:
  - a. Rear Shear Plate - Most rear plates are same front and rear. If so, and if second side is not worn, turn plate front-to-rear, making sure that widest part of chip clearance groove is at bottom.
  - b. Front Shear Plate - If front plate is COMPLETELY symmetrical, turn it so that any unused edge is at top rear. If front plate does NOT require spacers, and is same top and bottom, it can be turned top-to-bottom (if bottom edge is not already worn). Be sure grooves are facing rear shear plate.
5. With old plates repositioned, or new plates properly positioned, re-install shear plates and spacers (if used), and fasten them in place with the two screws.
6. Hold top of ram assembly with one hand, while you move feed finger with the other. This allows you to lower ram assembly SLOWLY to check alignment of slug blade with shear plates.
7. If side-to-side alignment is needed, loosen two screws holding shear plates, and move plates to line them up properly. Retighten screws.
8. If front-to-back alignment is needed, lay applicator carefully on its side and slightly loosen the four screws which hold strip guide plate to base plate. Move strip guide plate in required direction until slug blade can pass freely between shear plates. With slug blade between shear plates, retighten the four screws.

9. Set applicator upright, and raise ram assembly until slug blade is clear of shear plates. Then lower and raise ram assembly several times to be sure that slug blade moves in and out of shear plates freely.
10. Lift stock drag and feed finger and slide terminal strip section forward until lead terminal is over anvil.

### 6.3. Crimper Replacement

1. Remove ram assembly from applicator by pulling upward. It may be necessary to move feed finger to release ram assembly.
2. Remove crimper bolt which holds insulation crimper, tubular spacer, insulation spacer, and wire crimper to ram assembly. Note position of parts for re-installation.
3. Re-install parts using reversed procedure. Tighten crimper bolt only finger tight until specified. The two holes in upper end of wire crimper MUST mate with pins on ram assembly.



#### NOTE

*Except for some splices and flag-type terminals, insulation crimpers may be positioned with either side out. Insulation crimpers for some splices and flag-type terminals have legs of different lengths and can be installed in only one way.*

4. Place ram assembly back in applicator, and install applicator in machine. Lift feed finger and pull terminal strip back until lead terminal is between strip guides.
5. Form a piece of heavy paper over anvil, and then hand-cycle machine while watching alignment of crimpers with anvil. When ram assembly has reached bottom of stroke, tighten crimper bolt.

### 6.4. Slug Blade Replacement

1. Remove ram assembly from applicator by pulling upward. It may be necessary to move feed finger to release ram assembly.
2. Remove two screws which fasten hold-down (if used), spacer, and slug blade to ram assembly.
3. Remove parts, noting their positions for reinstallation.
4. Re-install parts using reversed procedure. Slug blade can only be installed in one way because of its offset holes. It MUST NOT stick out past edge of recessed area for cam follower, and must be squarely seated against ram.
5. Place ram assembly back in applicator. Lift stock drag and feed finger, and pull section of terminal strip back so that lead terminal is between strip guides.
6. Hold top of ram assembly with one hand, while you move feed finger with the other. This allows you to lower the ram assembly SLOWLY to check alignment of slug blade with shear plates.
7. If side-to-side alignment is required, loosen two screws holding shear plates, and move plates to line them up properly. Retighten screws.
8. If front-to-back alignment is needed, lay applicator carefully on its side, and loosen slightly the four screws which hold strip guide plate to base plate. Move strip guide plate in required direction until slug blade can pass freely between shear plates. With slug blade between shear plates, retighten the four screws.
9. Set applicator upright, and raise ram assembly until slug blade is clear of shear plates. Then lower and raise ram assembly several times to be sure that slug blade moves in and out of shear plates freely.
10. Lift stock drag and feed finger, and slide strip section forward until lead terminal is over anvil.

## 6.5. Adjustable Crimp Height Repair

Under the insulation disc is a laminated washer which may break or compress after extensive use, causing applicator to produce terminations with a different crimp height than specified. To correct this problem, perform the following steps:

1. Subtract specified nominal crimp height from average crimp height recorded as a part of paragraph 5.1, Wire Crimp Adjustment. This difference will be the thickness of washer(s) (PN 690125-1) to be ADDED under insulation disc.



### NOTE

*Washer PN 690125-1 is a peel-type, laminated washer consisting of five layers, with each layer being 0.05 mm [.002 in.] thick.*

2. Remove ram assembly from applicator, and loosen ram post locking screw (in side of applicator ram).
3. Hold ram assembly with ram post pointing down, and unscrew ram from ram post, leaving wire disc and insulation disc in place. If necessary, end of ram post may be placed in a vise to free both hands for turning ram.



### NOTE

*DO NOT REMOVE wire disc and insulation disc from ram post. Detent balls and springs will pop out and may become lost if discs are removed.*

4. Place washer(s) of thickness determined in Step 1 on ram post. If old washer is broken and must be replaced, measure thickness of broken washer with a micrometer. Add this measurement to amount to be added (determined in Step 1), and select new washer(s) of this thickness. Place new washer(s) on ram post.
5. Hold ram with hole facing downward, screw ram post into ram, and tighten by hand until snug.
6. Check that numbers on wire disc and letters on insulation disc line up properly over top of insulation crimper. Discs are held in position by ball detents. If necessary, turn ram back slightly until numbers and letters line up, then tighten ram post locking screw to fasten ram post in position.



### NOTE

*Turn wire and insulation discs to other positions. When "click" of detent ball is heard, check for centering of number or letter over insulation crimper.*

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.

## 7. FINE ADJUST ASSEMBLY FOR HEAVY DUTY MINIS

Some applicators may contain Fine Adjust Assembly PN 879103-[ ] used in conjunction with the end-feed applicators to provide a greater number of crimp height options without the necessity of changing parts.

The Fine Adjust Assembly PN 879103-[ ] consists of a ram post, a wire crimp height adjustment disc, and an insulation crimp height adjustment disc (reference Figure 1), which replace the ram post, wave washer, wire disc, insulation crimp disc, and shim on the applicators. In addition, Fine Adjust Assembly PN 879103-[ ] uses a spacer that replaces the normal production spacer.

### 7.1. Wire Crimp Height Adjustment Disc

The wire crimp height adjustment disc in this assembly is an adjustable plate with fifty-four increment notches. Each increment represents a change in crimp height of 0.015 [.0006]. Turning the crimp height adjustment disc clockwise decreases the crimp height; turning the disc counterclockwise increases the crimp height.

**i** **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.

### 7.2. Insulation Crimp Height Adjustment Disc

The insulation crimp height adjustment disc in this assembly is a plate with twelve variable pad heights. Each pad represents a change in insulation crimp height of 0.15 [.006]. Turning the lower disc clockwise decreases the insulation crimp height; turning the disc counterclockwise increases the insulation crimp height.

**i** **NOTE** Insulation crimp height is normally a non-measured dimension and varies according to the diameter of insulation being used.

### 7.3. Fine Adjust Removal and Re-Assembly

Fine Adjust Assembly PN 879103-[ ] is factory installed and should require no further adjustment. If the assembly must be removed from the ram, be sure to loosen ram post locking set screw (reference Figure 5). The ram post can then be removed. Upon re-assembly, be sure that the two ball detents on the fine adjust assembly are aligned with the centerline of the insulation crimper and oriented relative to the front of the tooling (as shown in Figure 7). Ensure that the correct spacer (as per the appropriate applicator log) is re-assembled. Be sure that the ram post and ram post locking set screw are tight before re-installing the applicator into the appropriate terminating unit.

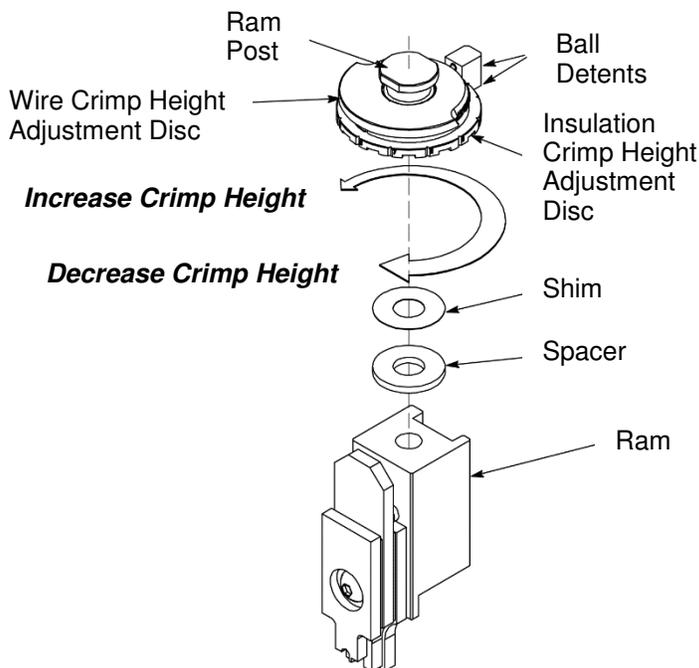


Figure 7

## 8. CLEANING AND LUBRICATION

For best performance and minimum downtime, applicator should be cleaned, inspected, and lubricated; refer to Instruction Sheet 408-8059 for daily and monthly cleaning.

## 9. APPLICATOR STORAGE

For proper applicator storage, refer to Instruction Sheet 408-8059.

## 10. REVISION SUMMARY

Updated document to corporate requirements

Deleted and added text in Sections 8 and 9

Added Lubricant applicator info and recommended lubricant after paragraph 4

Changed locations and references to Figures 4, 5, and 6