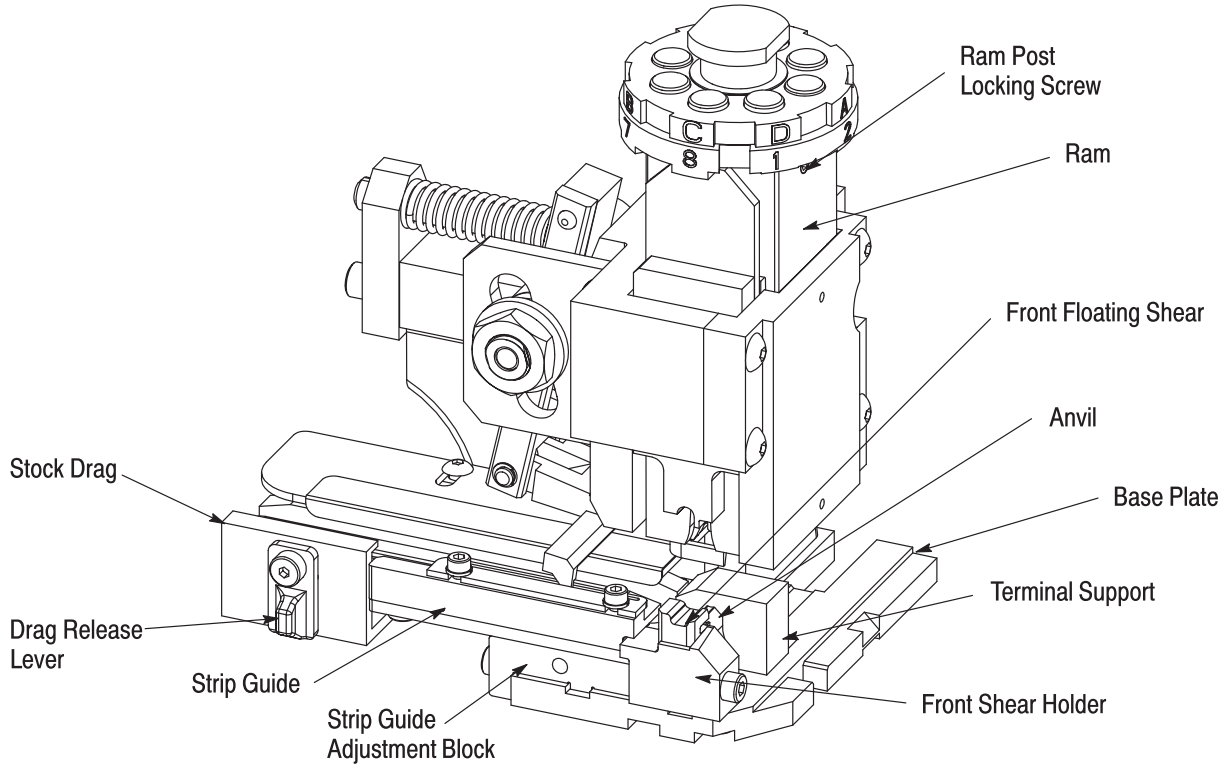

Figure 1

1. INTRODUCTION

The Heavy Duty Industrial (HD–I) Side–Feed Type Applicator applies side–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. Some terminals have two carrier strips, others just one.

These instructions, the parts lists and exploded view drawings packaged with the machine, and the appropriate machine manual (409–5128 for the Basic AMP–O–LECTRIC* Machine; 409–5207 or 409–5289 for the Model "T" Terminating Unit; or 409–5842 for the Model "G" Terminating 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, 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 — *Dimensions in this document are in metric units.*

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

2. APPLICATOR DESCRIPTION

This applicator is similar in design and function to the Heavy Duty Miniature Quick–Change Type applicator. The strip guide area has been re–designed and the applicator uses metric hardware.

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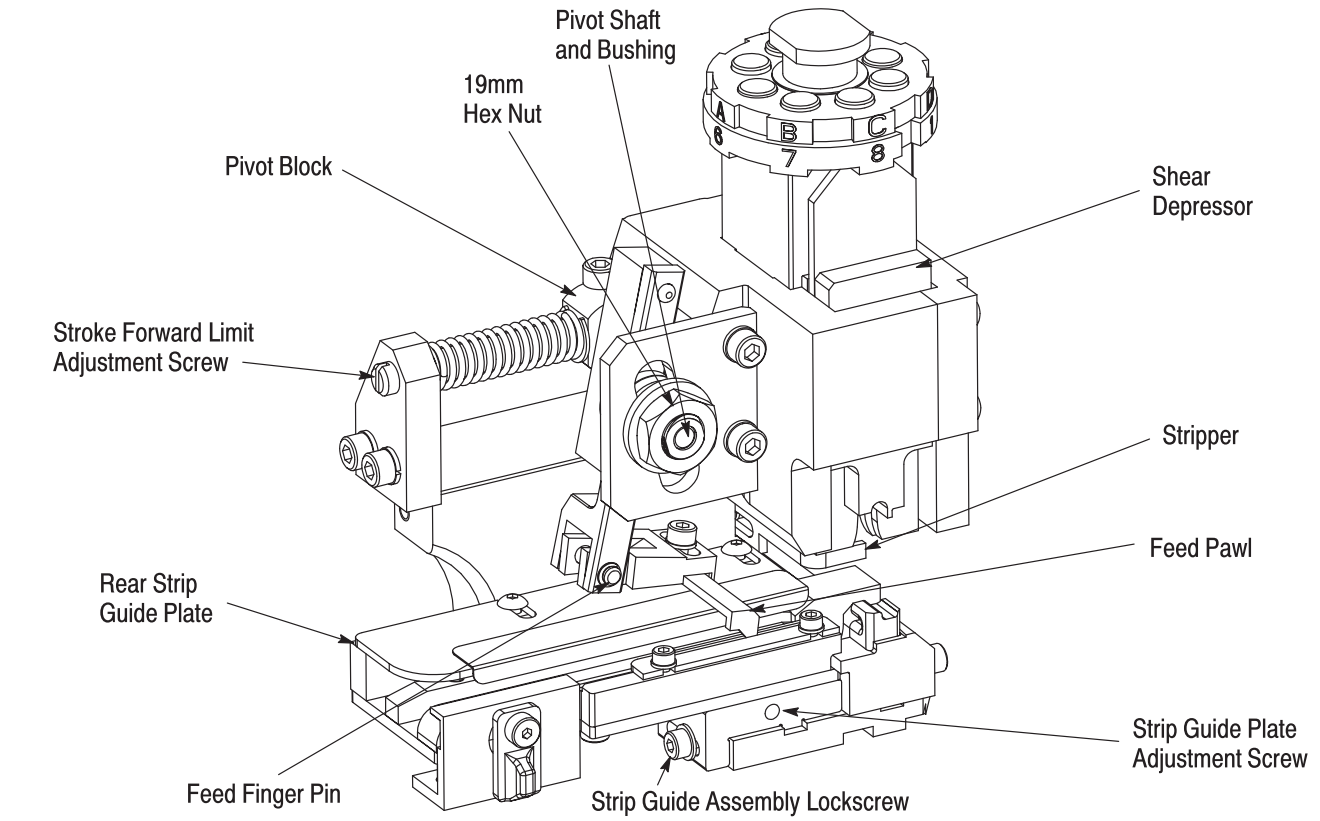


Figure 2

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

HD–I applicators can 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 either 30 or 40mm stroke terminating machines by adjusting the position of the feed cam.

The main components of the applicators are identified in Figures 1 and 2. The ram assembly is shown in detail in Figure 3.

The terminal strip is fed into the applicator, from left to right, with the wire barrel facing upward and the insulation barrel facing toward the operator. The strip passes under the strip drag as well as the front and rear strip guides. The rear strip guide aligns with *front* edge of the wire barrel. The lead terminal is positioned over the anvil (for pre–feed applicators) or one terminal pitch from the anvil (for post–feed applicators). Pre–feed applicators (normally used for bench machines) feed terminals as the ram moves up. Post–feed applicators (normally used for lead–maker applications) feed terminals as the ram moves down. The feed pawl feeds one terminal during each cycle of the terminating machine. The terminals are fed by the action of the feed cam and a series of rods and levers which move the feed pawl.

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 disk and the insulation crimp disk. The wire disk has as many as four pairs of pins installed, depending on the number of different wire sizes the terminals will accept. Each pair of pins has a different height. By rotating the disk, each pair of pins can be lined up with the two bosses on the ram post adapter (see Figure 3) to change the applicator crimp height. Some terminals accept more than four wire sizes. Terminating additional wire sizes will require adding or replacing pins in the wire disk. Refer to the applicator assembly drawing and Paragraph 7.6 for more information. The insulation crimp disk contains eight pads of different heights. When this disk is turned, the pads line up with the top of the insulation crimper to change the insulation crimp height.

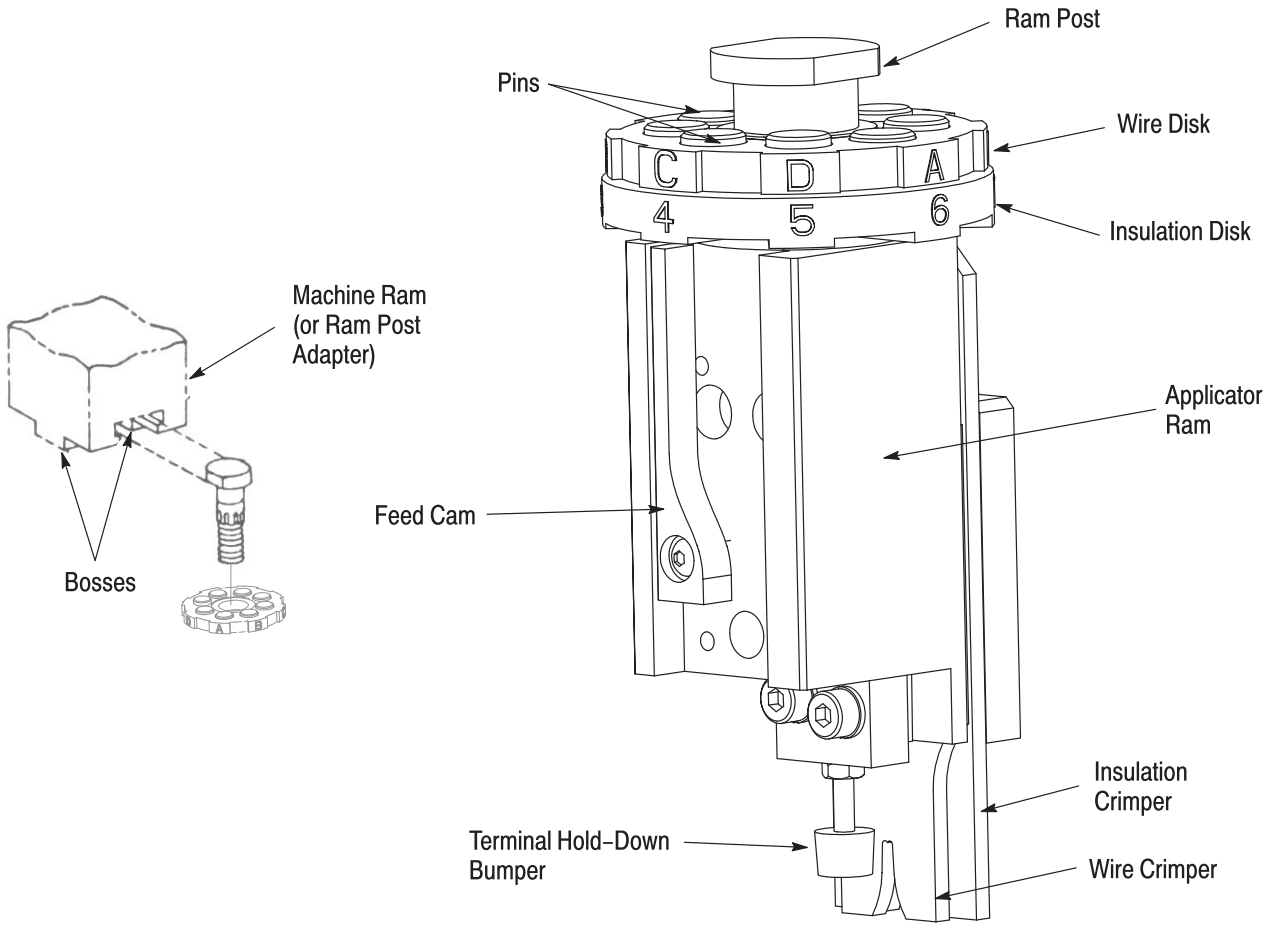


Figure 3

The wire crimper is located by two pins on the ram assembly and is held by the crimper bolt. The insulation crimper and the front shear depressor are also held by the crimper bolt. The insulation crimper is free to move up and down so the insulation crimp can be changed. The front shear depressor pushes the front floating shear down to cut the crimped terminal from the strip.

The hold–down bumper is attached to the ram and holds the terminal in place during the crimping and shearing process. (Note: Some applicators have a solid metal hold–down that may require adjustment when changing the wire size and/or crimp height.)

Terminals with dual carrier strips require a rear shear depressor, spacer, and shear holder. These parts are attached to the feed cam side of the ram assembly. The rear shear depressor pushes the rear floating shear down to cut the terminal from the rear carrier strip, and the terminal holder keeps the terminal from raising during the crimping and shearing process. The rear floating shear and rear shear holder are mounted on the base plate.

The applicator's mounting surface is its base plate. The anvil, the front shear holder, the rear shear holder (if used), the terminal support, the 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.

This applicator can be used in terminating machines which have either a 30mm or 40mm feed stroke. The position of the feed cam must be changed to accommodate the terminating machine being used. See the applicator log drawing (shipped with the applicator) for the proper position of the cam (either post–feed or pre–feed).

NOTE

Consult applicator log when adjusting the position of the cam

.

3. APPLICATOR INSTALLATION AND REMOVAL

DANGER

To avoid personal injury, be sure power to the machine is turned "off" and power cord is 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; otherwise, the tooling may be damaged.

3.1. AMP–O–LECTRIC Machine

A. Installation

This machine must be equipped with Machine Conversion Kit 690675–2, to adapt it for use with the these applicators. The kit includes Applicator Instruction Sheet 408–8022, which explains how an applicator is installed and removed from the terminating machine.

B. Removal

1. Turn machine “off” and disconnect power cord.
2. Remove the shroud and guard assembly from the machine.
3. Unload applicator as described in Section 4. Remove hold–down bracket and movable stop, then slide applicator away from stop on base mount until ram post is clear of machine ram.

3.2. Model “T” Terminating Machine

A. Installation

1. Turn “off” or disconnect power to terminating unit.
2. Push IN release bar on the base plate. Locking latch will pivot downward.
3. Place applicator on 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.

B. Removal

1. Disconnect power cord.
2. Cut terminal strip one or two terminals from end of applicator.
3. Push IN release bar on 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. Other Terminating Machines

Refer to the customer documentation supplied with the machine.

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 terminal to be applied. Compare terminal number on reel with numbers listed on applicator parts list.

DANGER

To avoid personal injury, be sure power to the machine is turned “off” and power cord is disconnected.

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 the terminating machine manual for hand–cycling instructions.)
3. Remove applicator/terminator guard assembly.
4. Raise stock drag by turning drag release lever upward. Remove length of terminal strip left in applicator by grasping terminals with long–nose pliers at the strip guide entry, raising the feed pawl, and pulling strip straight out of 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 barrel (insulation) end toward the stock drag and the open side up.

6. Raise feed pawl and continue to feed terminal strip until lead terminal is over anvil and feed pawl engages hole in carrier strip.
7. If terminals are post–fed, lift feed pawl and pull the strip back one terminal pitch. The lead terminal will then be moved over the anvil on the downward stroke of the ram assembly.
8. Turn drag release lever downward to lower the stock drag.
9. Be sure tip of feed pawl is in feed hole in carrier strip.

NOTE

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

10. Hand–cycle the machine several times to make sure the applicator is properly adjusted as described in Section 5.

11. Re–install applicator/terminator guard assembly.

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, turn drag release lever upward to raise stock drag, lift the feed pawl, and move the lead terminal over the anvil.

4.3. Terminal Lubrication

NOTE

HD–I applicators are not supplied with terminal lubricators.

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 local field representative.

If your application warrants the use of a terminal lubricator, the recommended lubricant is Stoner Mechanical Lubricant E805, available from:

STONER, INC.
1–800–227–5538

5. ADJUSTMENTS

5.1. Feed Cam Adjustment

All side–feed applicators are setup at the factory to meet the customer's stroke requirements. Use the following procedure to convert the applicator from 30mm to 40mm stroke, or from 40mm to 30mm stroke.

DANGER

To avoid personal injury, be sure power to machine is turned "off" and power cord 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 screw securing the cam.

4. Locate the feed cam on the ram. See Figure 4.

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 Adjustment

1. Select pad letter (A, B, C, or D) from data plate for wire size to be used.

2. Turn wire disk (upper disk) to line up selected pad letter with the bosses on the machine ram (or ram post adapter). See Figure 3. This provides the right crimp height for that wire size.

3. 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 parts list for wire size being used. Record crimp height dimensions for reference.

NOTE

Refer to 408–7424 for information concerning crimp height measurement.

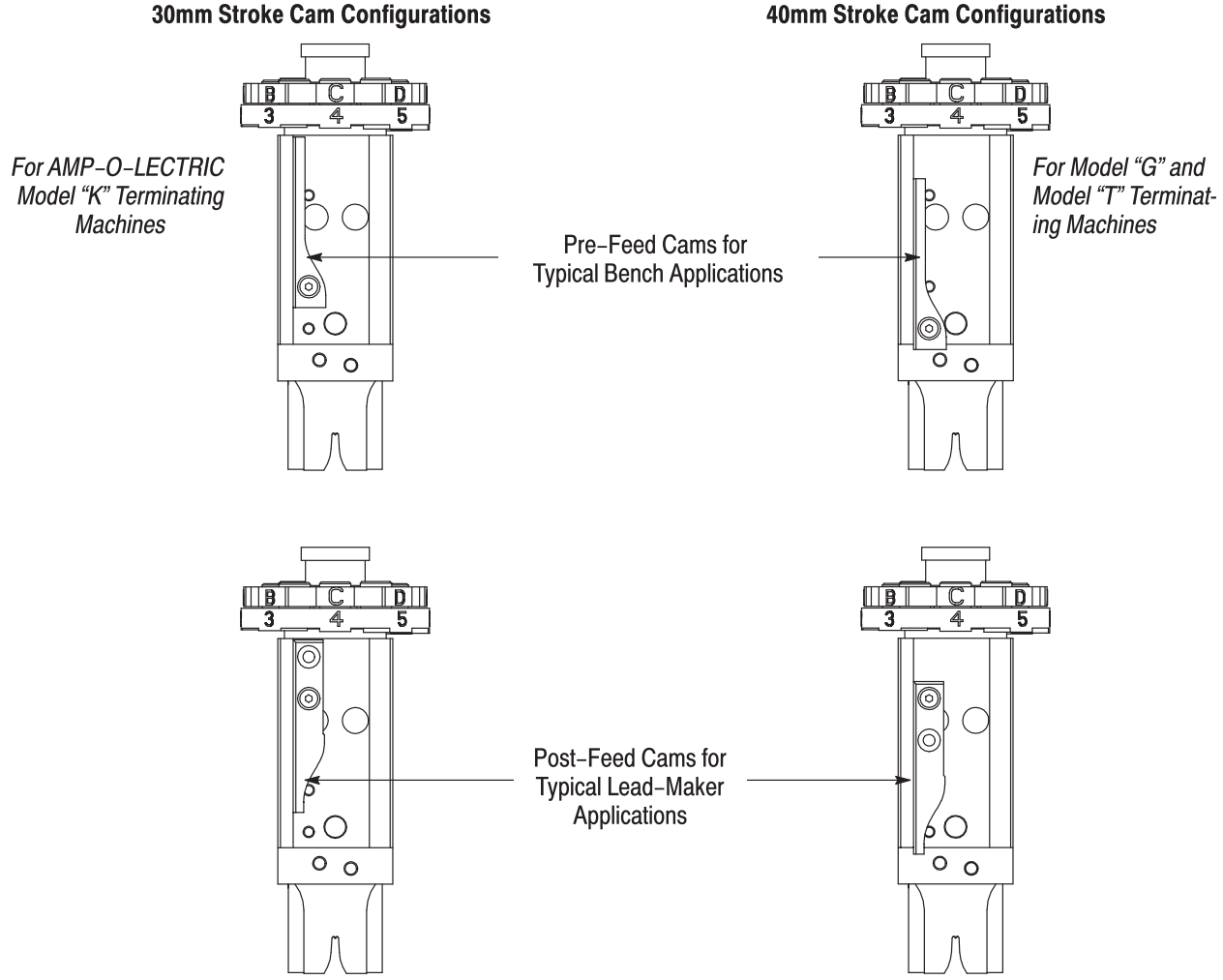


Figure 4

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, Adjustable Crimp Height Repair.

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

5.3. Insulation Crimp Adjustment

To adjust insulation crimp height, turn insulation crimp disk (lower disk) 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. 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.

5.4. Terminal Strip Feed Adjustment

1. With terminal strip properly loaded, check position of lead terminal over anvil by actuating the applicator to move the feed pawl to the forward limit of its stroke. Lead terminal must be centered on anvil.

2. If the lead terminal is centered on the anvil, the forward limit adjustment is correct. Go on to Step 5. If not centered, continue with Step 3.

3. Loosen screw on top of pivot block (see Figure 2). Turn the stroke forward limit adjustment screw counterclockwise to move the forward limit toward anvil, or clockwise to move the forward limit away from anvil. Tighten screw on top of pivot block.

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

5. Watch the feed pawl as the machine is hand–cycled several times. It should have enough — but not too much — overtravel on the backstroke to pick up the next terminal.

NOTE

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

6. If feed pawl stroke length is satisfactory, feed adjustments are complete. If not, continue with Step 7.

7. Loosen slightly the 19mm hex nut, on side of applicator, to allow the bushing to move in slot (see Figure 2).

8. Move the bushing (in small increments) upward to lengthen the stroke and downward to shorten the stroke.

9. Tighten the 19mm hex nut. Repeat Step 5 to check stroke length.

10. Repeat Steps 7 through 9 until stroke length is correct.

5.5. Strip Guide Plate and Feed Pawl Adjustments

This adjustment is made to change the terminal bellmouth and rear cut–off 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.

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 3mm hex wrench to loosen the screw that holds the strip guide assembly lockscrew. See Figure 2.

2. With the lead terminal centered over anvil, lift and hold (or block) the feed pawl up to clear the front strip guide.

3. Turn strip guide assembly adjustment screw clockwise to move strip guide assembly ***toward front,*** or counterclockwise to move it ***toward rear***. It is necessary to push the assembly back until the adjustment screw touches the applicator frame. Tighten screw to hold strip guide assembly in position.

4. Loosen screw holding feed pawl to feed finger (feed pawl holder). Move feed pawl until its tip drops into slot in front strip guide. Retighten screw.

5. Hand–cycle terminating unit, checking for proper terminal feed and strip guide plate alignment.

5.6. Strip Guide Adjustment

This adjustment is not used very often, because it is only needed when the rear strip guide is not parallel to the strip guide plate, 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 adjustment. Do not use this procedure for front–to–rear positioning of strip — refer to Paragraph 5.5, Strip Guide Plate and Feed Pawl Adjustments.

DANGER

To avoid personal injury, turn "off" the power to the terminating unit and disconnect the power cord before removing the applicator.

1. Remove the applicator as described in Section 3, INSTALLATION and REMOVAL.

2. Lift and hold (or block) the feed pawl 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 pawl into the slot and carefully move the feed linkage through its motion. The feed pawl should be centered in the slot throughout its range of motion.

NOTE

If feed pawl 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 lead terminal centered over anvil, check to see if 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 to the terminating unit and disconnect the power cord 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 0.025mm 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 two screws that hold the rear shear holder to the base plate.

3. With the terminal strip inserted into applicator, and the lead terminal centered over the anvil, move the rear shear holder in the direction required to obtain the proper cutoff tab.

4. Check that the shear is square to the end of the terminal, and then tighten the holding 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. PREVENTIVE MAINTENANCE

DANGER

To avoid personal injury, be sure power to the terminating unit is turned "off" and the power cord is disconnected before removing the applicator for preventive 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, be sure power to the terminating unit is turned "off" and the power cord is disconnected.

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 feed finger to release ram assembly. ***Do not remove tooling from ram.***

3. Wipe 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 to the terminating unit is turned "off" and the power cord is disconnected.

1. Remove the applicator as described in Section 3, INSTALLATION and REMOVAL.

2. Remove ram 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. Don't put lubricants between wire and insulation crimp disks.

DANGER

To avoid personal injury, be sure power to the terminating unit is turned "off" and the power cord 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 a good grade grease to each corner of ram and to feed cam.

3. Carefully lay applicator on its side and put one drop of a good grade oil on feed finger pin. Wipe feed finger pin to remove excess oil.

4. Set the applicator upright and put a drop of a good grade oil on each of the following: the stroke forward limit adjustment screw, the feed rod (into which this screw is turned), and the bushing inside the 19mm hex nut. Wipe off excess oil.

5. 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, be sure power to machine is turned "off" and the power cord is disconnected before taking the applicator out of the machine. 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 to machine is turned "off" and the power cord 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 pawl, 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 re–aligned. 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 to the terminating machine is turned "off" and the power cord is disconnected.

NOTE

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

1. Turn drag release lever upward, raise feed pawl, 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 pawl 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, be sure power to machine is turned "off" and the power cord is disconnected before taking the applicator out of the machine. 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 front shear depressor, front shear depressor spacer, tubular spacer, insulation crimper, crimper spacer, and wire crimper in place on the ram assembly. Note position of parts for re–installation.

4. Re–install parts using reversed procedure. The upper end of the wire crimper must be up against the pins on the ram assembly, and the top hole on the crimper must mate with the roll pin in the ram assembly. Tighten the crimper bolt only finger tight.

NOTE

Insulation crimpers with legs of equal length, that are identical front and back, may be positioned with either side out. All other insulation crimpers must be positioned with part number facing the direction noted during removal. If new parts are used, be sure part numbers agree with numbers on parts list.

5. Put ram assembly back into applicator, and install applicator in machine.

6. Lift feed pawl 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 Pawl Replacement

DANGER

To avoid personal injury, be sure power to the terminating machine is turned "off" and the power cord is disconnected.

1. Remove the adjustment screw which holds the feed pawl to the feed finger (feed pawl holder).

2. Replace feed pawl using reversed procedure. If new pawl is installed, be SURE the part number agrees with the number on the parts list.

3. Adjust feed pawl as described in Paragraph 5.5.

7.5. Adjustable Crimp Height Repair

Under the insulation crimp disk is a laminated washer which may break or compress after extensive use. This could cause the applicator to produce terminations with a different crimp height than specified. To correct this problem, use the following procedure.

DANGER

To avoid personal injury, be sure power to the machine is turned "off" and the power cord is disconnected BEFORE removing the applicator.

1. Remove the applicator as described in Section 3, INSTALLATION and REMOVAL.

2. Subtract specified nominal crimp height from average crimp height recorded as a part of Paragraph 5.2, Wire Crimp Adjustment. This difference will be the thickness of washer(s) (PN 690125–1) to be added under the insulation crimp disk.

NOTE

Washer 690125–1 is a set of four steel shim washers that are 0.05mm, 0.076mm, 0.127mm, and 0.254mm thick.

3. Remove ram assembly from applicator, and loosen ram post locking screw in the side of applicator ram (see Figure 1).

4. Hold ram assembly with ram post pointing down, and unscrew ram from ram post, leaving

wire disk and insulation crimp disk in place. If necessary, the end of the ram post may be placed in a vise to free both hands for turning ram.

CAUTION

DO NOT REMOVE wire disk and insulation crimp disk from ram post. Detent ball and spring will pop out and may become lost if disks are removed.

5. Place washer(s) of thickness determined in Step 2 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 2), and select new washer(s) of this thickness. Place new washer(s) on ram post.

6. Hold ram with hole facing downward, screw ram post into ram, and tighten by hand until snug.

7. Be sure letters on wire disk and numbers on insulation crimp disk line up properly over the top of the insulation crimper. disks are held in position by detents. If necessary, turn ram post back slightly until numbers and letters line up, then tighten ram post locking screw to hold ram post in position.

NOTE

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

8. Put ram assembly back into applicator.

9. 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.

7.6. Wire Disk Pin Removal and Installation

The upper crimp height disk (Figure 5) consists of a plastic carrier and up to eight hardened pins which engage the post adapter on the termination machine ram. When the carrier is rotated, the pins are indexed into position as required to change the final applicator crimp height.

Removal and replacement of the pins in the carrier is rarely required. However, in some cases, it is necessary, such as when the applicator is asked to perform additional crimp heights not included in the original four as shipped with the applicator. To remove and replace these pins, proceed as follows.

DANGER

To avoid personal injury be sure power to machine is turned "off" and the power cord is disconnected before taking the applicator out of the machine,. The machine ram should be in the raised position.

1. Remove the applicator as described in Section 3, INSTALLATION and REMOVAL.

2. Remove the ram assembly from the applicator.

3. Loosen the setscrew on the side of the ram to unlock the ram post. See Figure 5.

4. Remove (as a unit) the ram post, wire adjustment disk, and insulation crimp adjustment disk.

NOTE

Do not allow the insulation crimp disk to slide off the ram post until you have completed Step 5.

5. Holding the ram post and insulation adjustment disks as a unit in your hands, remove the screw from the side of the insulation crimp disk and carefully remove the spring and ball. See Figure 6.

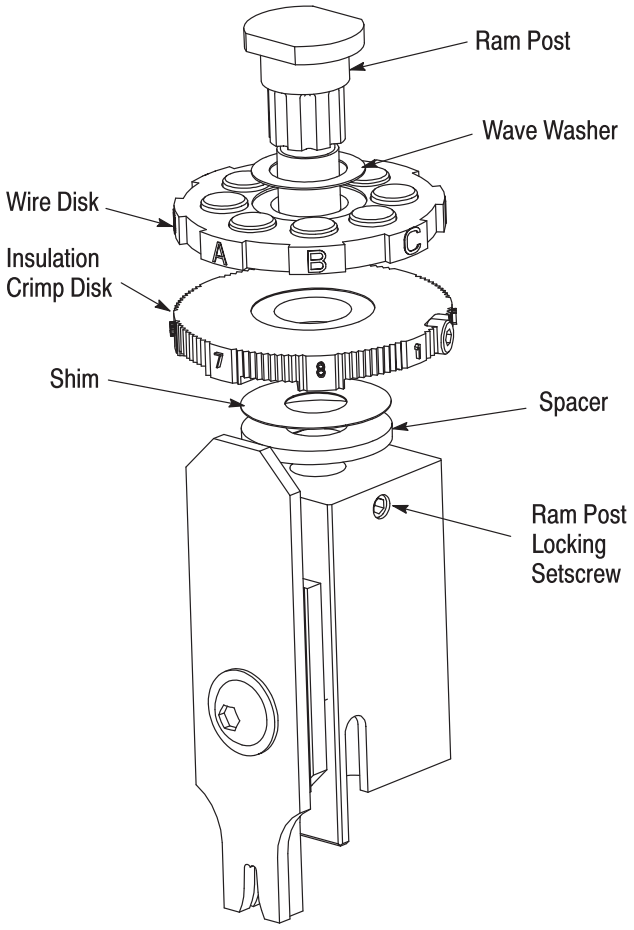


Figure 5

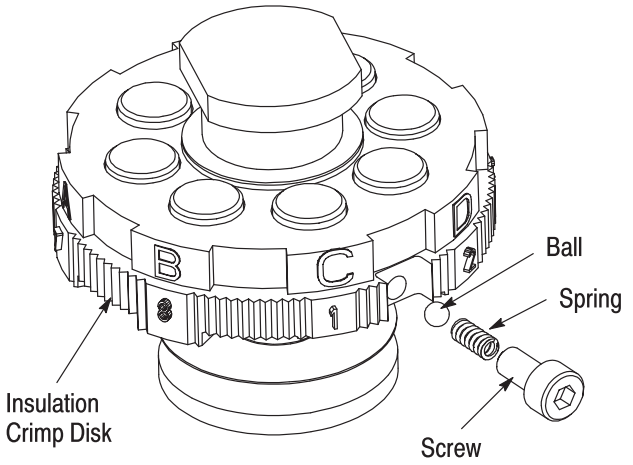


Figure 6

Inspect the spring for damage and replace if necessary.

6. Remove the wire and insulation crimp disks from the ram post.

7. Remove the “snap–fitted” pins from the wire disk by pushing them from the top. See Figure 7. The chamfers on the pins and in the holes of the plastic carrier insure that they can move in only one direction. Remove pins that you need to replace, being careful to note the position of the A, B, C, or D legend molded into the plastic outer edge.

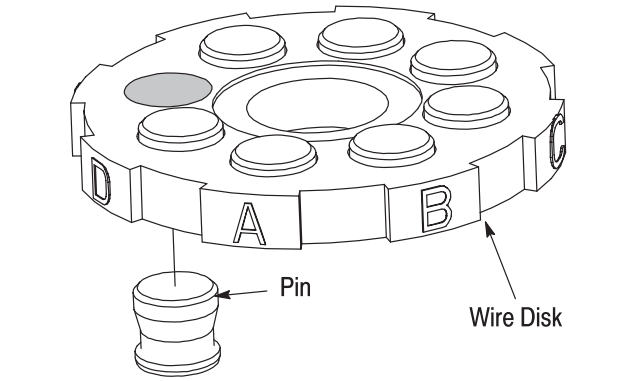


Figure 7

8. Replace the disks, washers, and spacers, on the ram post and install them as a unit into the hole on top of the ram. Thread the post in until it is tight; then back it out until a letter pad on the wire disk aligns with the position of the crimper.

9. Insert the new pins from the top and push them “in” until you hear and feel them snap into position.

10. Tighten the setscrew in the side of the ram to lock the ram post in position.

11. Insert the ball, spring, and screw back into the side of the insulation crimp disk. Tighten the screw.

12. Replace the ram assembly in the applicator and re–install the applicator in the terminating machine.

13. Slowly hand–cycle the terminating machine several times to make sure there is no binding or tooling interference.

14. Make several test crimps and measure the crimp height of the finished terminal. If necessary, correct any problem.

8. APPLICATOR STORAGE

CAUTION

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

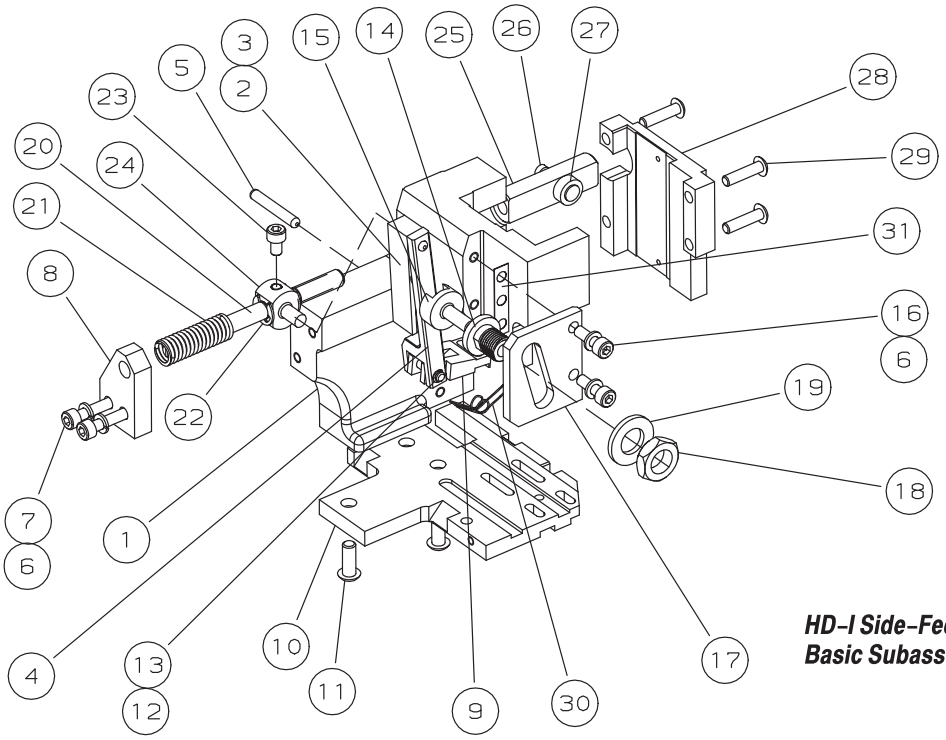
9. APPLICATOR ASSEMBLY AND SUBASSEMBLY

Figure 8 shows the basic Side–Feed Applicator Subassembly. Figure 9 contains the HD–I Side–Feed Applicator Assembly.

These illustrations, which contain parts 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

Since the previous release of this instruction sheet, the logo was updated.



HD-I Side-Feed Applicator Basic Subassembly

	SPACER	31
	SPRING, FEED FINGER	30
	SCR, BTN SKT HD CAP (M5 X 20)	29
	CAP, RAM	28
	ROLLER, CAM	27
	PIN, CAM ROLLER	26
	ROD, FEED	25
	BLOCK, PIVOT	24
	SCR, SKT HD CAP M5 X 8.0	23
	E-RING (EXT. RETAIN. RING) METRIC	22
	SPRING, COMPRESSION	21
	SCREW, ADJUSTMENT	20
	WASHER, FLAT, REG M12	19
	NUT, HEX, THIN M12 X 1.25	18
	PLATE, ADJUSTING	17
	SCR, SKT HD CAP M5 X 16	16
	SHAFT, PIVOT	15
	BUSHING	14
	PIN, FEED FINGER	13
	RING, RETAINING, EXTERN, 3/16 CRESCENT	12
	SCR, BTN SKT HD CAP (M6 X 16)	11
	PLATE, BASE	10
	HOLDER, FEED FINGER	9
	GUIDE, FEED ROD	8
	SCR, SKT HD CAP M5 X 20	7
	WASHER, SPRG LOCK, REG M5	6
	PIN, DOWEL .1875 X 1.250	5
	ARM, FEED	4
	PIN, DOWEL .1875 X .500	3
	LEVER, INTERMEDIATE	2
	HOUSING, SIDE FEED	1
Description (Translation)	**Description**	**Item No.**

Figure 8

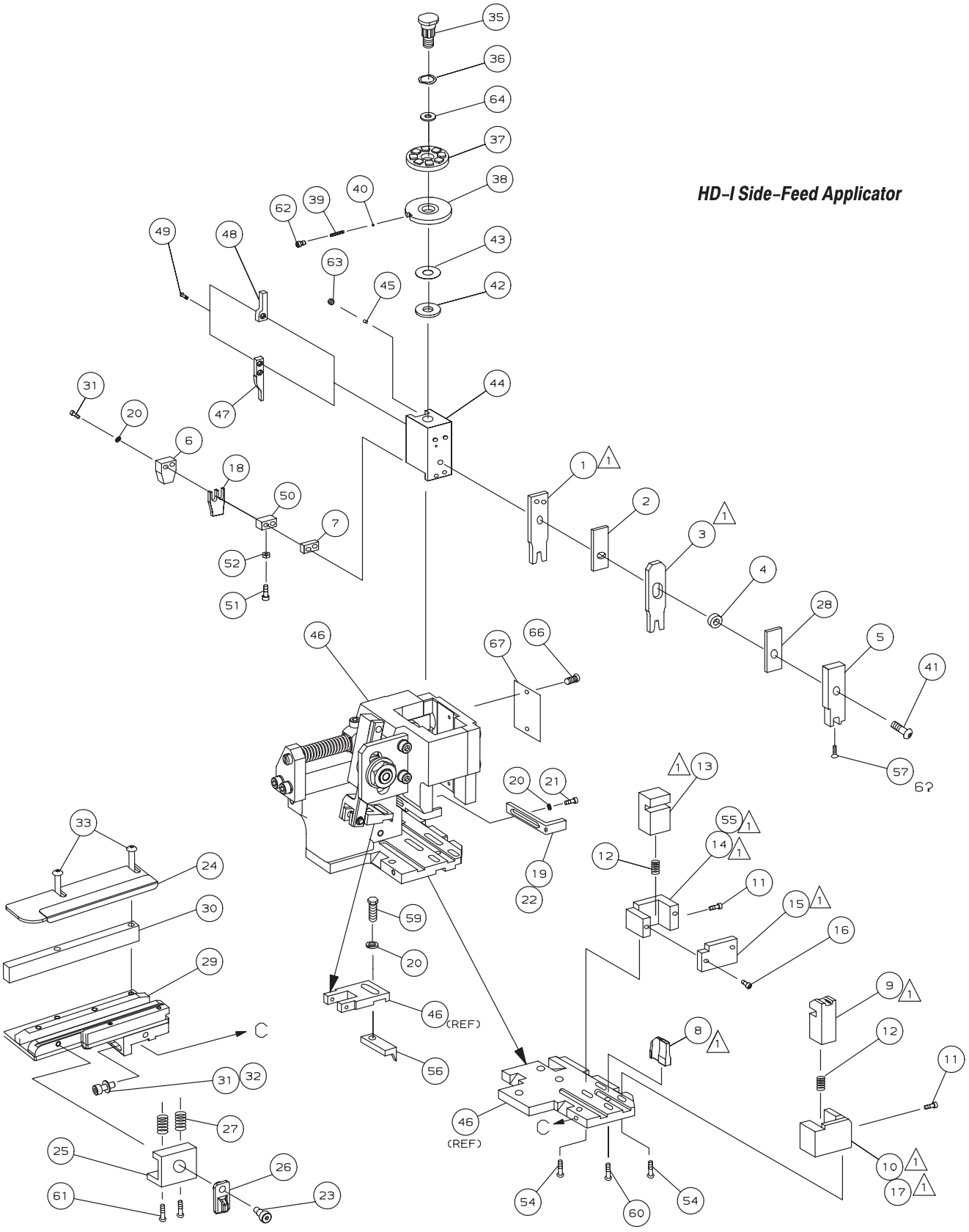


Figure 9 (Sheet 1 of 2)

HD-I Side-Feed Applicator

	Description (Translation)	Description	Item No.
		PRINT, APPLICATOR LOG SHEET	72
		DOCUMENTATION PACKAGE	71
		PLATE, IDENTIFICATION	67
		SCR,DRIVE(#2x.19)ID PLATE	66
		WASHER, FLAT PRECISION	64
		SCREW, SET M6x8	63
		SCREW, SKT HD M4x8	62
		SCREW, BTN HD M5x20	61
		SCREW, BTN HD M4x10	60
		SCREW, HX HD M4x8	59
		SCREW, FLT HD M3x10	57
		PAWL, FEED	56
		REAR SHEAR HOLDER (NO CUT)	55
		SCREW, BTN HD M4x12	54
		NUT, HEX M3	52
		BUMPER, HOLDDOWN	51
		SPACER, TONKER	50
		SCREW, BTN HD M3x10	49
		CAM, PRE FEED 30 & 40 mm ST	48
		CAM, POST FEED 30 & 40 mm ST	47
		APPLICATOR BASIC SUBASSY	46
		PLUG, NYLON	45
		RAM	44
		WASHER, LAMINATED	43
		WASHER, RAM	42
		SCREW, BTN HD M8x25	41
		BALL, STEEL	40
		SPRING, COMPRESSION	39
		DISC, INSULATION	38
		WIRE DISC, PLASTIC	37
		WASHER, SPRING	36
		POST, RAM	35
		SCREW, BTN HD M4x20	33
		WASHER, FLAT(M4)	32
		SCREW, SKT HD M4x12	31
		SPACER, STRIP GUIDE	30
		STRIP GUIDE PLATE ASSY	29
		SPACER, FRONT SHEAR DEP	28
		SPRING, DRAG	27
		LEVER, DRAG RELEASE	26
		DRAG, TERMINAL	25
		GUIDE, STRIP (REAR)	24
		SCR,SHC SHLD	23
		STRIPPER	22
		SCREW, SKT HD M4x10	21
		WASHER, LOCK M4	20
		STRIPPER	19
		HOLDER, TERMINAL	18
△1		FRONT SHEAR HOLDER (NON-CUTTING)	17
		SCREW, SKT HD M3x6	16
		PLATE, SHEAR (REAR)	15
		REAR SHEAR HOLDER (CUTTING)	14
		SHEAR, FLOAT (REAR)	13
		SPRING, SHEAR	12
		STOP, SHEAR	11
△1		FRONT SHEAR HOLDER (CUTTING)	10
△1		SHEAR, FLOAT (FRONT)	9
△1		ANVIL	8
		SPACER, DEPRESSOR (REAR)	7
		DEPRESSOR, SHEAR (REAR)	6
		DEPRESSOR, SHEAR (FRONT)	5
		SPACER, BLOCK CRIMPER	4
△1		CRIMPER, INSULATION	3
		SPACER, CRIMPER	2
△1		CRIMPER, WIRE	1

△1 RECOMMENDED SPARE PARTS.

Figure 9 (Sheet 2 of 2)

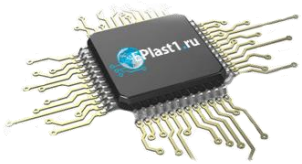
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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