



NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ± 0.13 [$\pm .005$] and angles have a tolerance of $\pm 2^\circ$. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

The Manual Arbor Press with Removable Tooling Packs is designed to crimp TE Amplivar™ splice product on strip. It has two styles of Tooling Packs, one for terminating Amplivar™ splices in a through splice configuration and one for terminating Amplivar™ splices in a pig-tail splice configuration.

2. DESCRIPTION

The Manual Arbor Press with Removable Tooling Packs consists of a main Manual Arbor Press assembly 2380993-[] and pig-tail (ie 2380996-[]) or through (ie 2380997-[]) splice style Tooling Packs that can be installed and removed from the arbor press assembly. The Arbor Press and Tooling Packs are sold separately. Each Tooling Pack includes the necessary tooling to feed a specific splice, shear the splice from its carrier, and crimp each splice terminal to magnet or lead wire. The Manual Arbor Press is outfitted with a stroke limiter mechanism that requires the operator to make a full stroke of the arbor press ram before allowing the ram to return to top dead center. This feature ensures that all terminations are produced at a consistent crimp height. The Manual Arbor Press also includes a shut height coarse adjustment and fine adjustment with increments of 0.02mm/.0008". All Tooling Packs include a terminal lubricator assembly.



NOTE

Use terminal lube with this equipment to improve crimp consistency and reduce crimp forces.

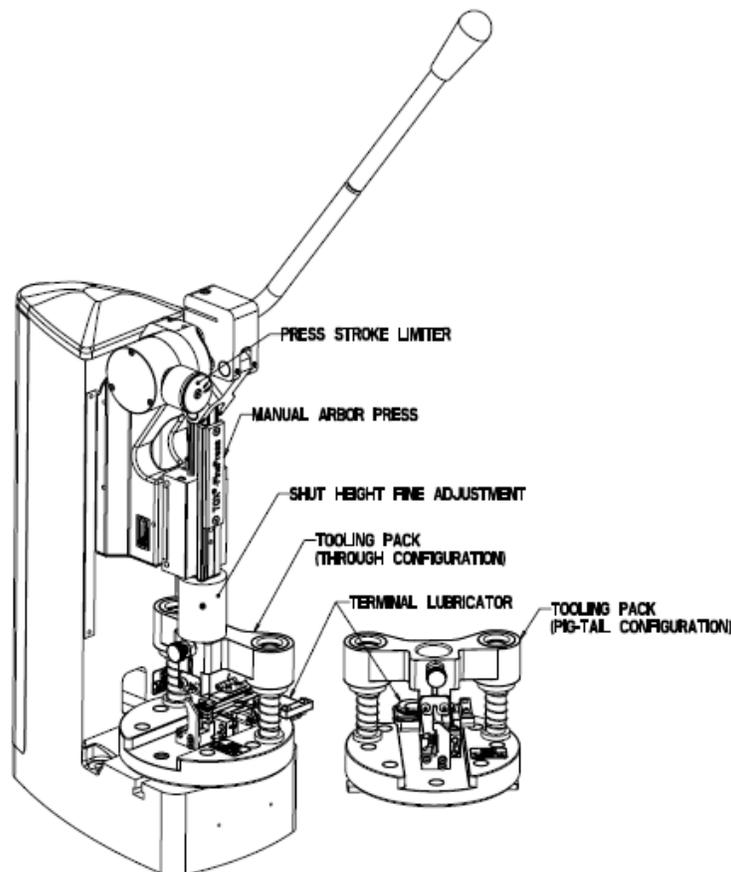


Figure 1

3. OPERATION

1. Manual Arbor Press

- a. The Manual Arbor Press has a hand lever which the operator rotates forward to move the ram from its top dead center position to its full bottom dead center position. The press stroke limiter does not allow the press to return to top dead center until it reaches its full bottom dead center position. If necessary, the stroke limiter can be overridden by pulling out its front spring-loaded knob and allowing the lever and press ram to return to their top dead center position.

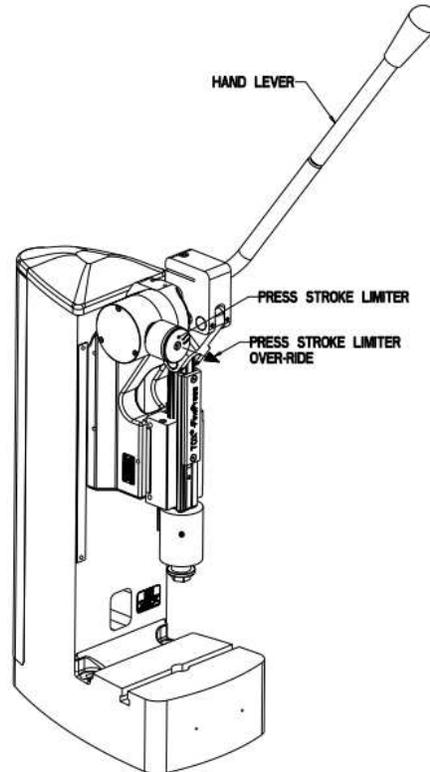


Figure 2

2. Tooling Packs

- a. The Tooling Packs are installed into the Manual Arbor Press by sliding the square nuts attached to the base plate of the Tooling Pack into the T-slot of the Arbor Press base. Before tightening the base plate screws, pull out the locking plunger and raise the top plate of the Tooling Pack until it engages the stepped ram collar. Release the locking plunger. Then tighten base plate screws to fully fasten the Tooling Pack into the Manual Arbor Press.

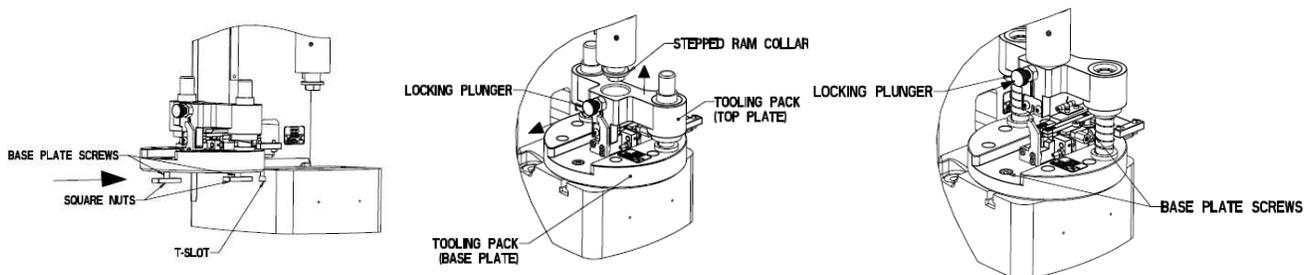


Figure 3

- b. Use terminal lube when producing terminations with this equipment. Each Tooling Pack includes a lubricator with a wick that applies terminal lubricant to the terminals before being fed through the strip guide.



NOTE

TE Connectivity recommends Stoner E805 terminal lubricant.

- c. To feed terminals into the Tooling Pack, the operator must manually release the spring-loaded drag and carefully feed the terminal strip through the strip guide until the spring-loaded feed finger snaps behind the first terminal. Pull the manual spring-loaded feed mechanism forward as many times as needed until a terminal is presented over the anvil. To feed properly, the feed mechanism must be pulled fully forward until it contacts the forward stop.
- d. To remove the terminal strip from the Tooling Pack, the operator must manually release the spring-loaded feed finger, manually release the spring loaded drag, and pull the strip of terminals out of the strip guide.

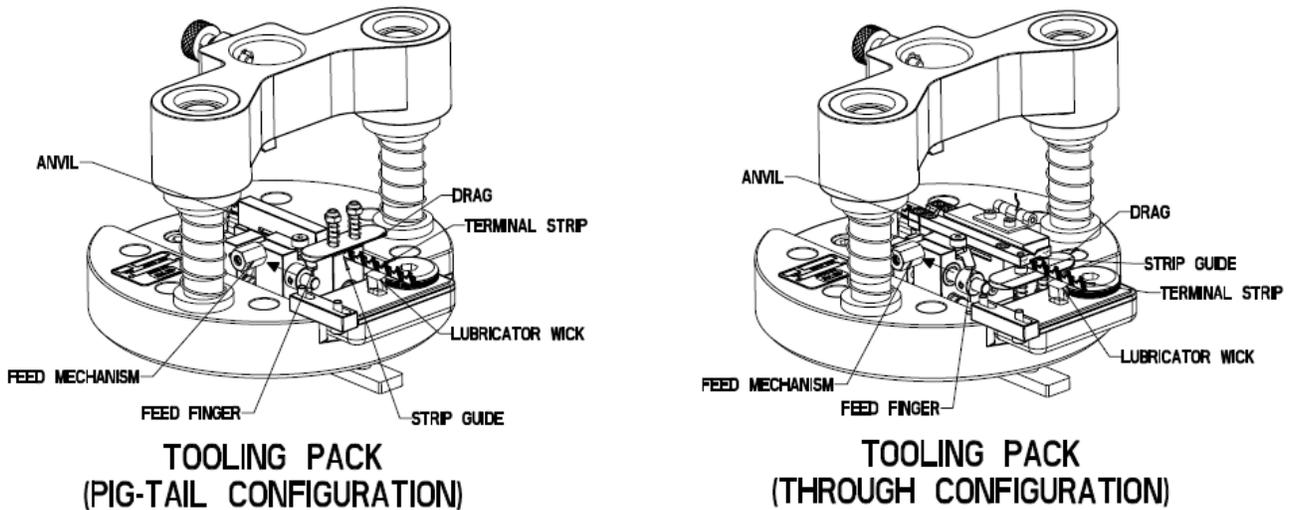


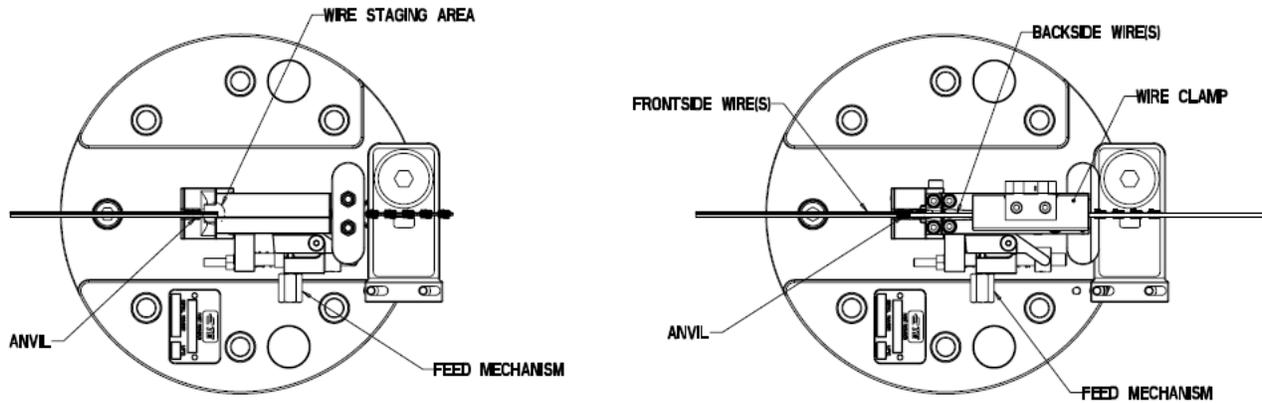
Figure 4

e. Tooling Pack (Pig-Tail Splice Configuration) Wire Termination Process

- (1) If needed, manually feed terminal strip forward over anvil using feed mechanism.
- (2) With one hand, properly position the magnet or stranded lead wires over wire staging area.
- (3) With the other hand, pull the Manual Arbor Press hand lever forward until it reaches the fully rotated position and the stroke limiter of the Arbor Press releases.
- (4) Allow the Arbor Press hand lever to release to the top dead center position and remove the terminated wire.

f. Tooling Pack (Through Splice Configuration) Wire Termination Process

- (1) If needed, use the feed mechanism to manually feed the terminal strip forward over the anvil.
- (2) Use the spring-loaded wire clamp to stage the stranded lead wire or magnet wire from the backside of tooling and properly position the end of the wire to be terminated over the crimp area.
- (3) With one hand, properly position magnet or stranded lead wires from frontside of tooling and properly position end to be terminated over crimp area.
- (4) With the other hand, pull the Manual Arbor Press hand lever forward until it reaches the fully rotated position and the stroke limiter of the Arbor Press releases.
- (5) Allow the Arbor Press hand lever to release to the top dead center position and remove the terminated wire.



**TOOLING PACK
(PIG-TAIL CONFIGURATION)**

**TOOLING PACK
(THROUGH CONFIGURATION)**

...SOME COMPONENTS HIDDEN FOR BETTER CLARITY...

Figure 5

4. ADJUSTMENTS

1. Manual Arbor Press

a. Shut Height Coarse Adjustment

- (1) Loosen the three socket head cap screws on the rear of the Arbor Press frame.
- (2) Under the top cover, attach the crank to the end of the lead screw and rotate to lift or lower the press head assembly.
- (3) When the desired height is achieved, retighten the three socket head cap screws.

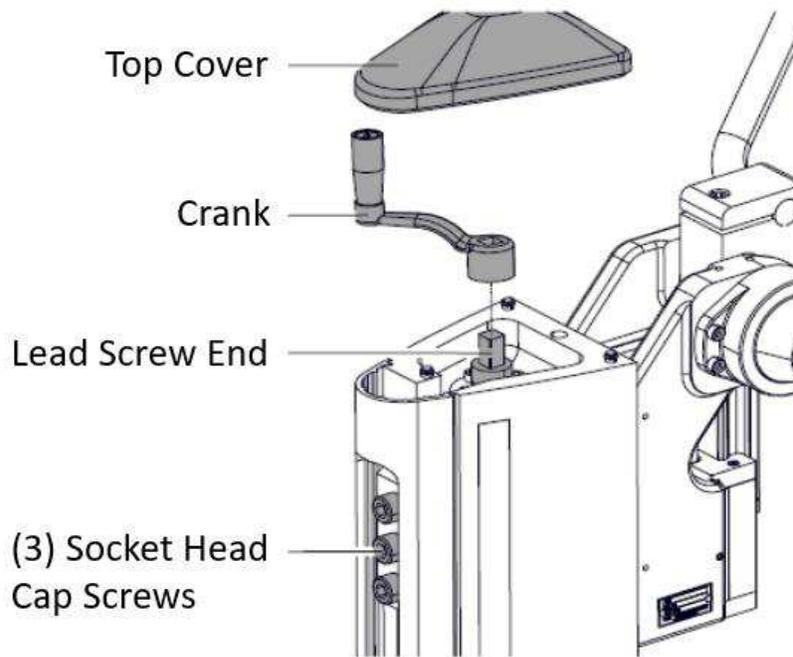


Figure 6

b. Shut Height Fine Adjustment

- (1) Loosen the fine adjust head clamping screw.
- (2) Turn the adjust ring clockwise to increase shut height or counter-clockwise to decrease shut height.
- (3) Retighten the fine adjust head clamping screw.



NOTE

Each line on the fine adjust head scale corresponds to a shut height adjustment increment of 0.02mm[.0008"].

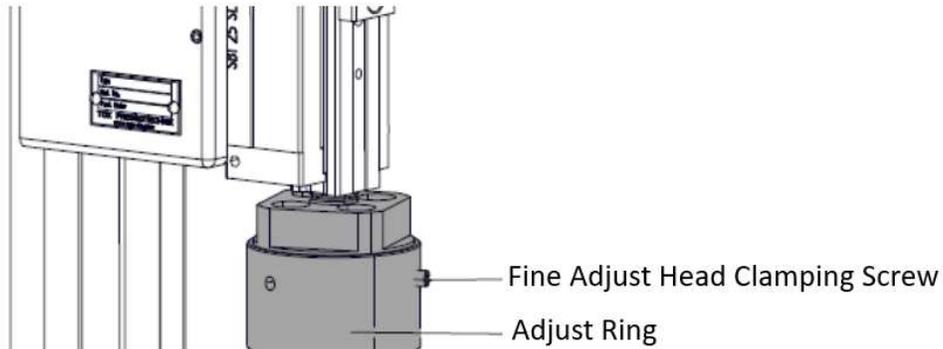


Figure 7

c. Hand Lever Angle Adjustment

- (1) Loosen the screw to release the handle spline from the split clamp.
- (2) Adjust the angle of the hand lever as needed.
- (3) Retighten the screw to clamp the handle spline in the split clamp.

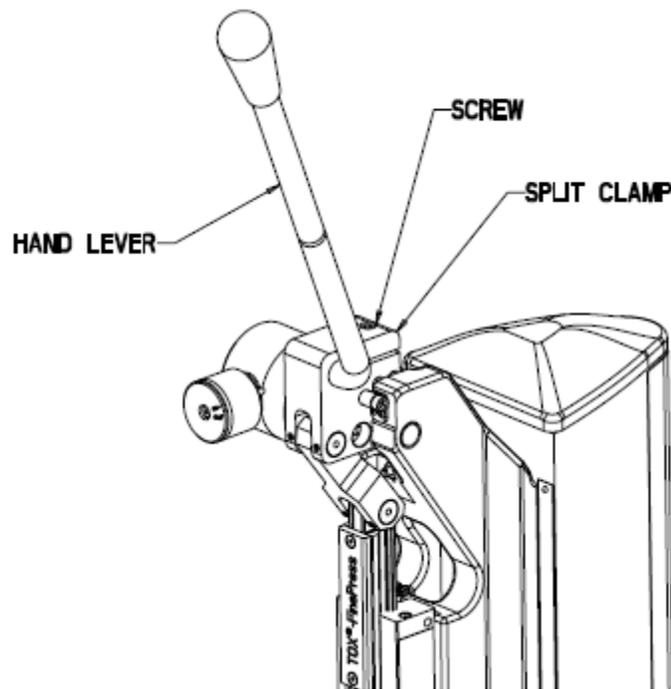


Figure 8

d. Moving Toggle Link Position



NOTE

Tooling Packs only function with the toggle link installed in position #2.

- (1) Remove the set screws from the position #1 set screw holes.
- (2) Pull out the groove pin.
- (3) Move the toggle link to line up with the position #2 groove pin hole.
- (4) Install the groove pin into the position #2 groove pin hole.
- (5) Install and tighten the set screws into the position #2 set screw holes.

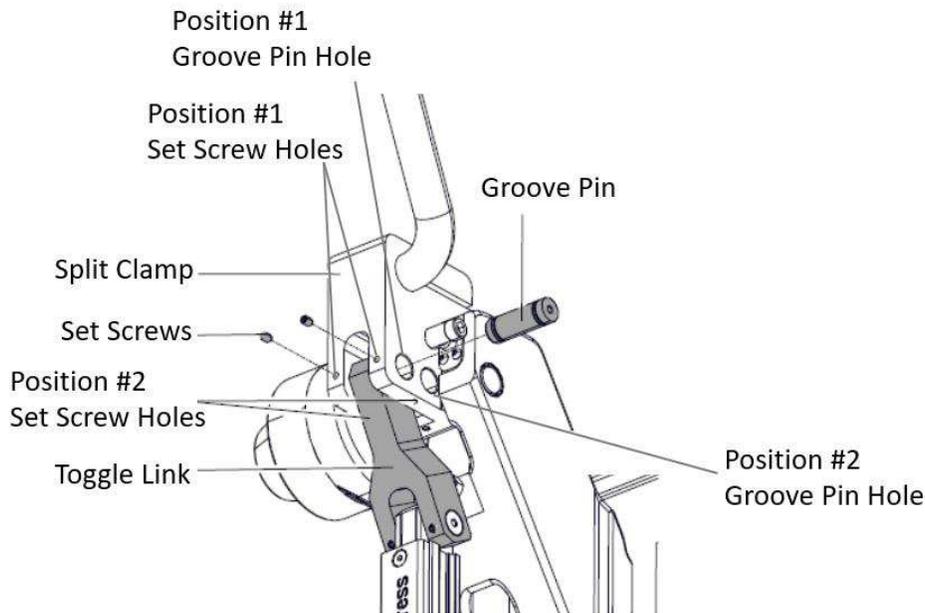


Figure 9

2. Tooling Packs

a. Terminal Drag Pressure

- (1) Drag pressure can be increased or decreased by tightening or loosening the nuts that retain the drag compression springs.

b. Terminal Feed Finger Pressure

- (1) Feed finger pressure can be increased or decreased by tightening or loosening the threaded spring plunger that biases the feed finger against the terminal strip.

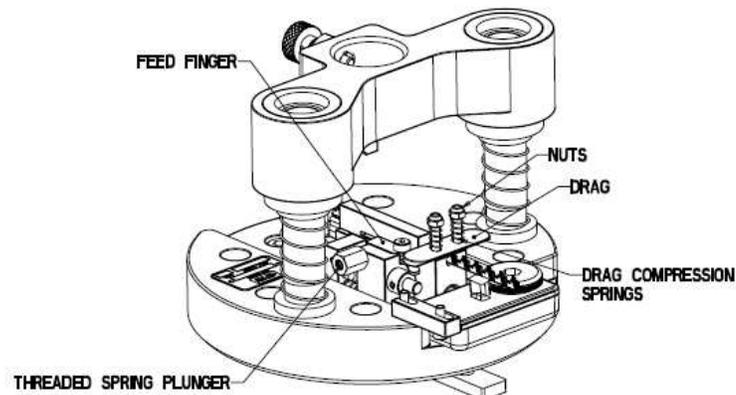


Figure 10

c. Terminal Feed Position

- (1) A strip of terminals must be loaded into the strip guide and fed forward until the end terminal is exposed out the frontside of the strip guide and over the anvil.
- (2) Adjust the forward feed mechanism stop position. To adjust, pull the manual feed mechanism handle forward until it is biased against the forward feed mechanism stop position screw. Turn the screw clockwise or counter-clockwise until terminal is visually centered over the anvil. When the desired position is achieved, lock down the forward feed mechanism stop position screw by tightening the locking nut while carefully making sure the adjustment position is maintained.
- (3) Adjust the rear limit stop collar. To adjust, loosen the set screws securing the rear limit stop collar. Manually adjust the rear limit stop collar position so that the feed mechanism has enough back stroke to pick up the next terminal when it retracts. Include some over-travel to allow the spring-loaded feed finger to snap behind the next terminal.

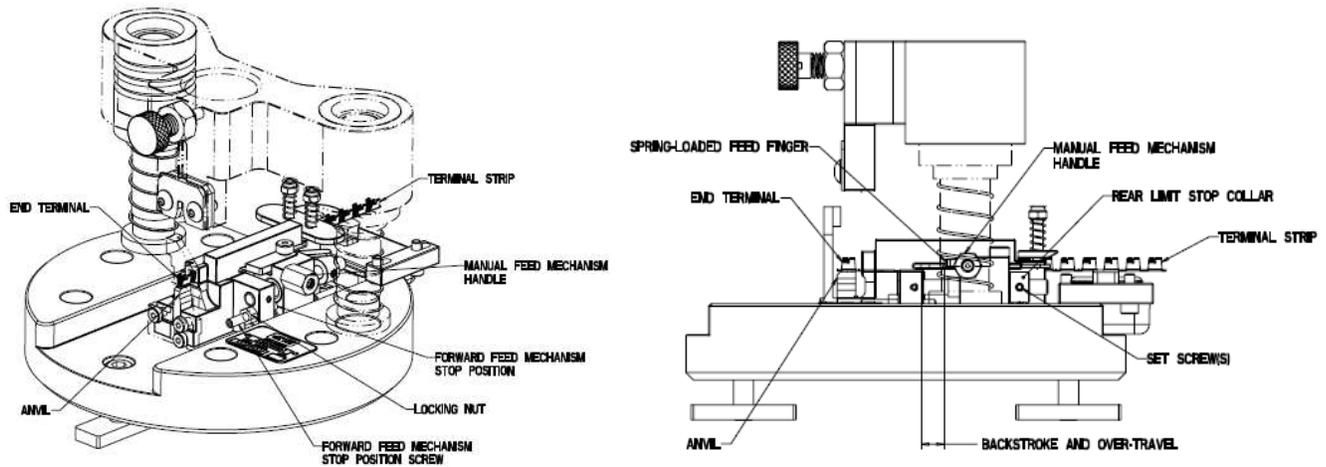


Figure 11

d. Tooling Pack Mounting Orientation



NOTE

Mounting orientation position #1 is the preferred mounting for most applications.

- (1) Four tooling pack mounting orientations are possible. The orientation can be adjusted by moving the mounting screw and square nuts to a different mounting hole location (Figure 12).

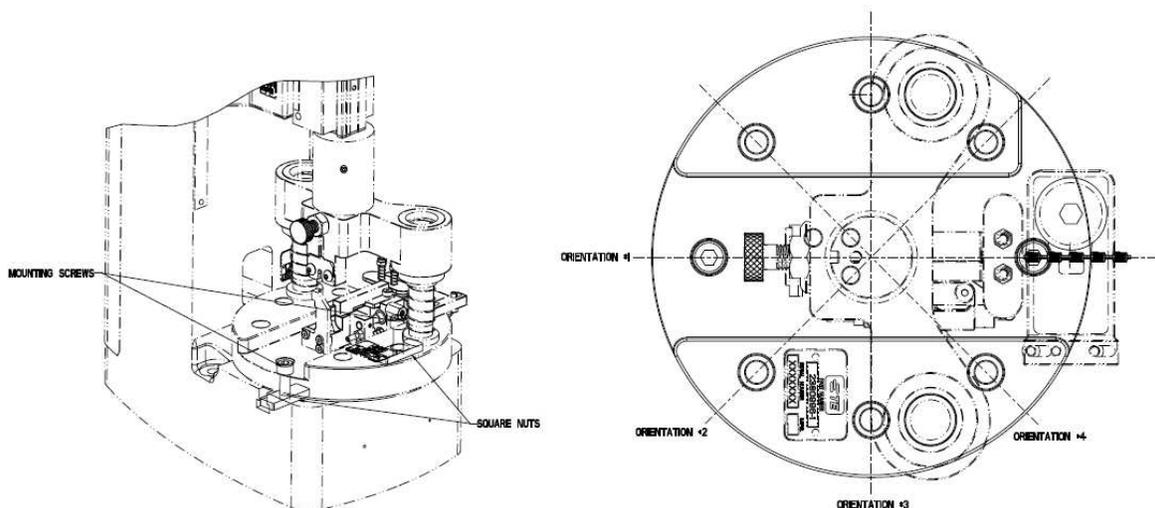


Figure 12

e. Shear Tonk (Through-Splice Configuration Tooling Packs Only)



NOTE

A shear tonk adjustment may need to be made as the crimp height is adjusted.

- (1) The shear tonk screw needs to be adjusted lower if the floating shear is not traveling far enough during the crimping cycle to shear the carrier properly. It may need to be adjusted higher if the floating shear is traveling too far and either bottoming or causing an unwanted bend in the backside through splice wire.
- (2) To adjust, loosen the shear tonk nut, turn the shear tonk screw clockwise or counter-clockwise to adjust the shear tonk height as desired, and retighten the shear tonk nut while carefully making sure the adjustment position is maintained.

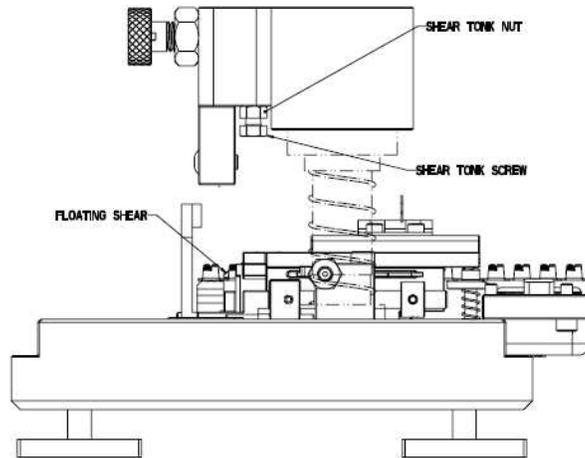


Figure 13

5. ORDERING INFORMATION/REPLACEMENT PARTS

Phone 1-800-526-5142

CUSTOMER SERVICE (038-035)

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