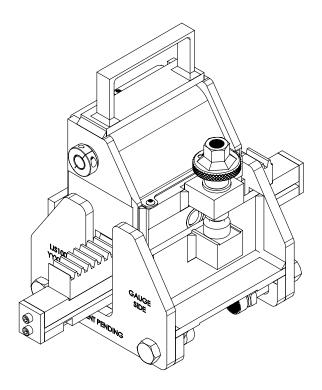
INSULATED JOINT SLOTTER IJS100



Recommended Tools:

- 18V / 20V Cordless Drill (Not Included)
- 2. 3.
- 15/16" 6 point socket with drill attachment 15/16" 6 point socket with ratcheting hand tool
- 4. 7/16" 6 point socket
- 5. 1/8" hex key
- 5/32" hex key 3/16" hex key 6. 7.

- WARNING:
 ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative.
 ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
 All instructions must be completely followed to ensure proper and safe installation and performance.
 Improper installation, misuse, misapplication or other failure to completely followe ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

SAFETY INSTRUCTIONS:
All governing codes and regulations and those required by the job site must be observed.
Allways use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

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Joint Alignment Calibration:

- Confirm that the tab on the joint alignment bracket is aligned with the cutting tool (**Figure 1**). If the tab is not aligned (**Figure 2**), use a 5/32" hex bit to loosen the joint alignment bracket screws and align the tab on the joint alignment bracket to the cutting tool. 1. 2.
- 3. Retighten the screws to 25 in-lb [2.8 N-m].

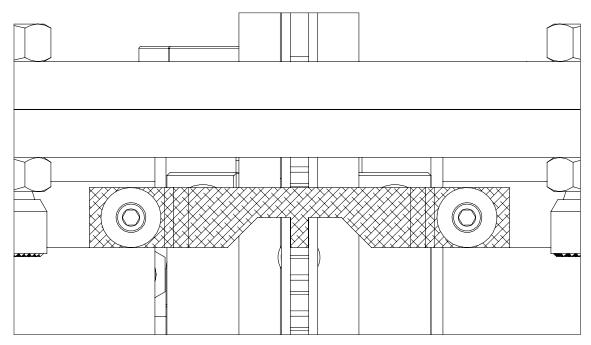


Figure 1: Properly calibrated joint alignment bracket

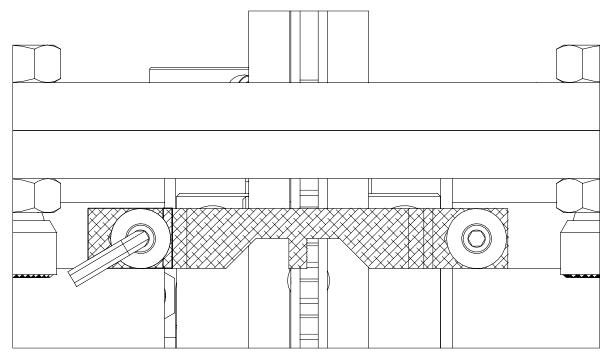


Figure 2: Joint alignment bracket in need of calibration.

Cutting Tool Installation:

- 1. Use a 1/8" hex bit to loosen the cutting tool setscrews (**Figure 3**).
- 2. Install the cutting tool into the slot of the tool holder. The cutting tool should be fully seated in the slot and its teeth oriented in the correct direction (**Figure 4**).
- 3. Retighten the setscrews to 25 in-lb [2.8 N-m] (**Figure 5**).

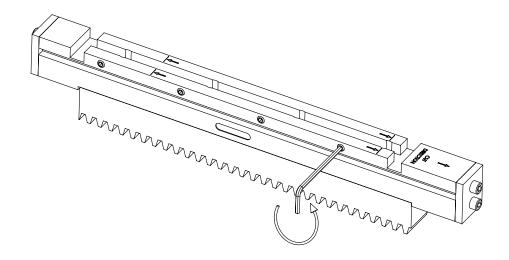


Figure 3: Loosen tool holder setscrews to install the cutting tool

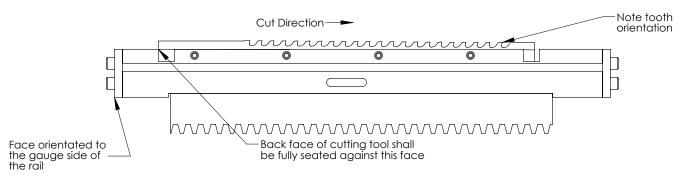


Figure 4: Cutting tool orientation and seating

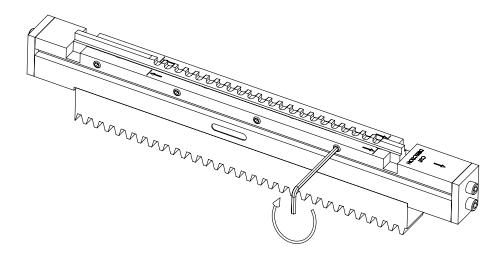


Figure 5: Tighten tool holder setscrews to hold cutting tool



Side Plate Adjustment:

- 1. Attempt to move the gearbox side-to-side and front-to-back within the base assembly. There should be no noticeable movement relative to the two assemblies. If relative movement is visible, continue to **Step 2**.
- 2. For each side plate, use a 7/16" socket to remove the setscrew lock nuts (**Figure 6**).
- 3. Use a 1/8" hex bit to loosen the setscrews, thereby pulling the side plates away from the surface of the gearbox (**Figure 7**)

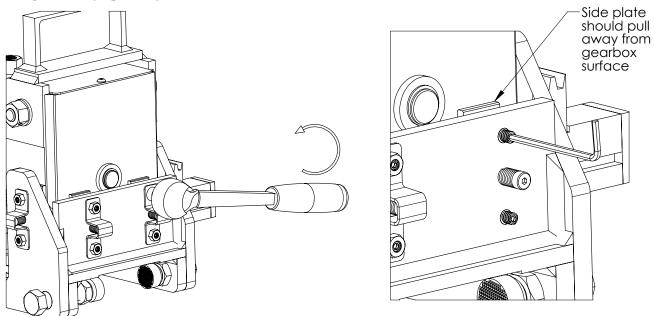
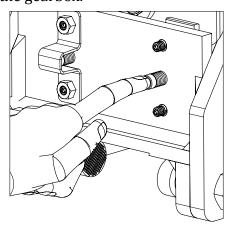


Figure 6 and 7: Removal of lock nuts and loosening of setscrews

- 4. Position the gearbox such that the vertical surface opposite the plate being adjusted is flush against its mating surface on the base assembly. Hold in this position while performing **Step 5**.
- 5. Push the head of the side plate spring pin so the side plate is flush against the gearbox (**Figure 8**). Use your fingers to tighten both the upper and lower setscrews (**Figure 9**) to hold the side plate in place. Be careful not to over tighten because doing so may restrict the vertical movement of the gearbox.



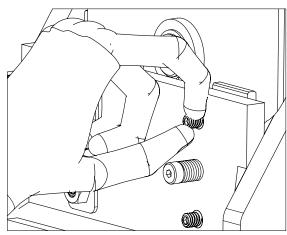


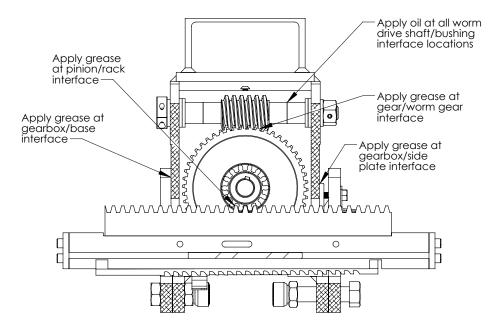
Figure 8 and 9: Pushing the spring pin while finger tightening screws

- 6. Repeat **Steps 2** through **5** on the remaining side plates until all relative movement is removed.
- 7. Reinstall the lock nuts on to the setscrews and tighten to 25 in-lbs [2.8 N-m].



Periodic Maintenance:

- 1. Apply white grease as needed (**Figures 10** and **11**).
- 2. Tighten setscrews as needed.



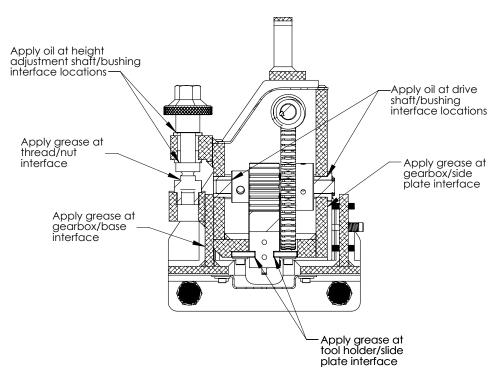


Figure 10 and 11: Lubrication points on Insulated Joint Slotter

Installation Instructions:

- 1. Completely read the instructions before attempting to operate this device.
- 2. Remove the gearbox from the base assembly.
 - a. Turn the height adjustment knob counter-clockwise until the screw thread disengages from the brass nut (**Figure 12**).
 - b. Lift the gearbox straight up from the base assembly (**Figure 13**).
 - c. Return the gearbox assembly to the carrying case until needed. Do not place the gearbox onto the ground as the cutting tool may become dull or damaged.

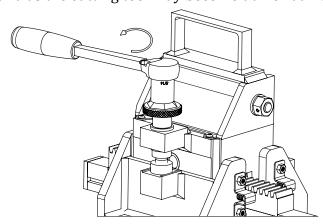


Figure 12: Turn the height adjustment knob to disengage the screw thread

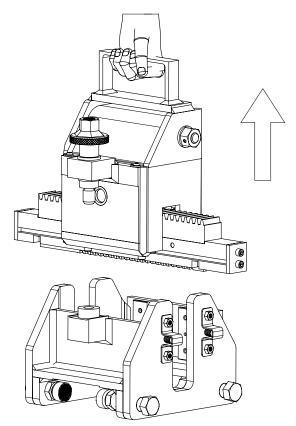


Figure 13: Lift gearbox from base assembly

3. Place the base assembly on to the insulated joint. The base should be oriented with the stationary pads touching the gauge side of the rail (**Figure 14**). The bottom surface of the base assembly should rest on the head of the rail. ERICO recommends that the operator should always be positioned on the field side of the rail when installing, operating, and removing this device.



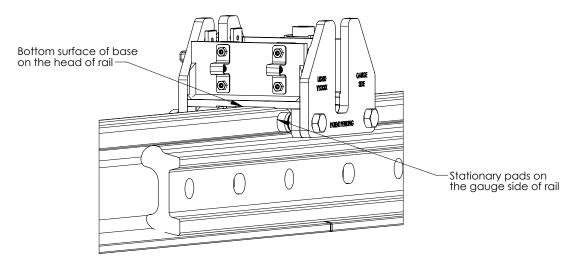


Figure 14: Base properly seated on the head of rail

4. Use the joint alignment bracket to align the base assembly over the insulated joint end post (Figure 15). Tighten the adjustable clamping pads to finger tight (Figure 16). Confirm that the base has not shifted and is aligned properly. Apply 20 ft-lb to each of the clamp pads using a 15/16" hex socket (Figure 17).

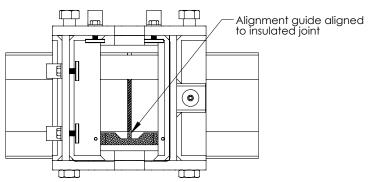


Figure 15: Alignment guide oriented with the insulated joint end post

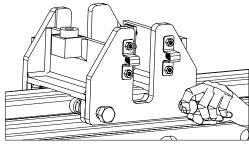


Figure 16: Finger tighten the adjustable clamping pads

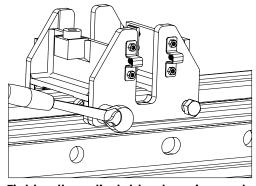


Figure 17: Tighten the adjustable clamping pads with wrench



- 5. Install the gearbox into the base assembly.
 - a. Lower the gearbox into the base assembly until the height adjustment screw engages the brass nut in the base (**Figure 18**).
 - b. Hand turn the height adjustment knob clockwise until the cutting tool is resting on the head of the rail (**Figure 19**).

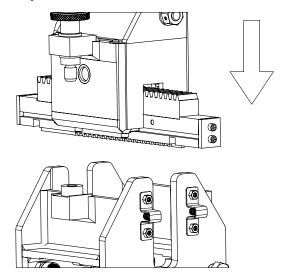


Figure 18: Lower the gearbox into the base assembly

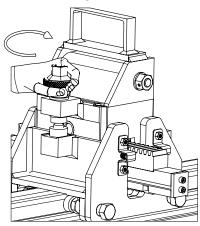


Figure 19: Turn the height adjustment knob clockwise to lower the gearbox

6. Hand turn the height adjustment knob counter-clockwise a half turn to lift the cutting tool off the head of the rail (**Figure 20**) in preparation for moving the gear rack.

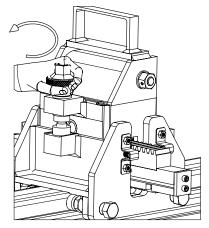


Figure 20: Half turn counterclockwise to lift the cutting tool off the rail



- 7. Move the gear rack back to the beginning of cut position
 - a. Turn the worm drive shaft clockwise (**Figure 21**) until the gear rack has moved to the beginning of cut position (**Figure 22**). Care should be taken that the rack gently reaches its end of travel position, as the drill will twist abruptly.

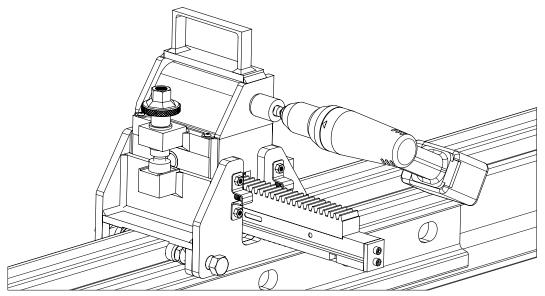


Figure 21: Move the gear rack to beginning of cut position

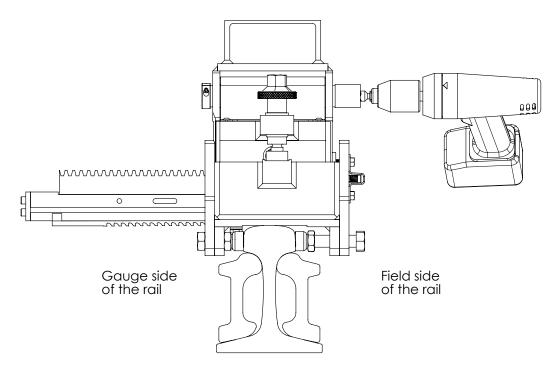


Figure 22: Beginning of cut position

8. Turn the height adjustment knob clockwise until the cutting tool is resting on the head of the rail (**Figure 23**). The Insulated Joint Slotter is now ready to cut.

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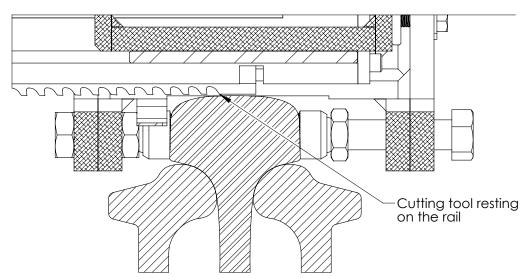


Figure 23: Cutting tool ready to cut

9. Turn the worm drive shaft counter-clockwise to move the cutting tool from the gauge side of the rail to the field side. The gear rack should continue to the end of cut position (**Figure 24**). Care should be taken that the rack gently reaches its end of travel position, as the drill will twist abruptly.

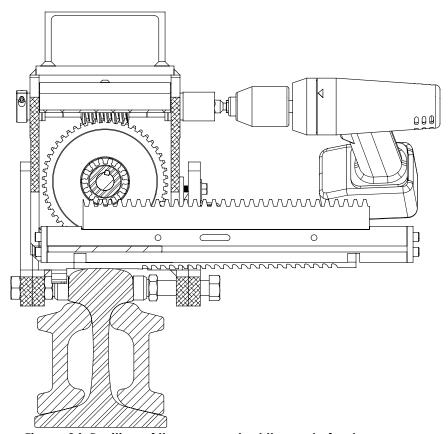


Figure 24: Position of the gear rack at the end of cut

- 10. Repeat **Steps 6** through **9** until the insulated joint is adequately cleaned.
- 11. To check the depth and the quality of the cut, the operator can remove the gearbox by performing **Step 2**. Perform **Step 5** to install the gearbox back into the base. Proceed to follow **Steps 6** through **9**.
- 12. Once completed, loosen the adjustable clamping pads with a 15/16" hex socket and lift the device off of the rail.

