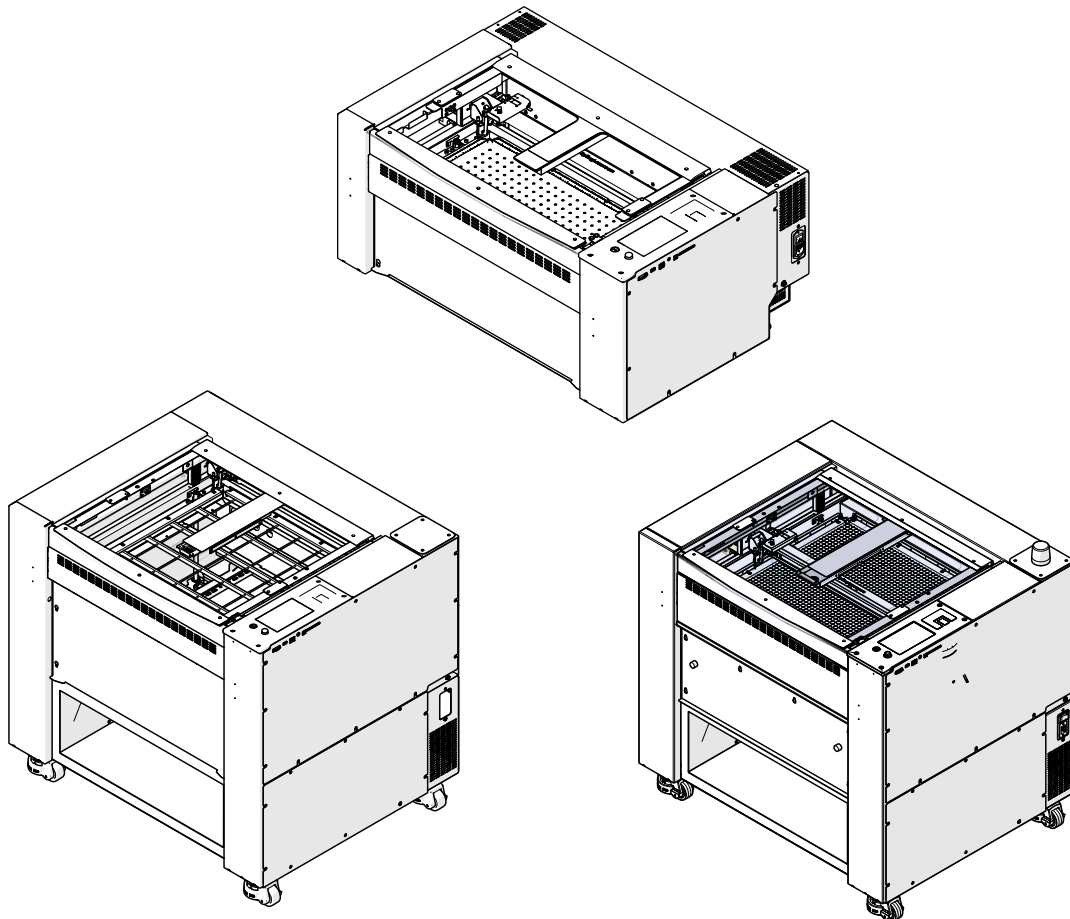


## Lead Screw Replacement

Fusion Maker - Fusion Edge - Fusion Pro 24 & 36



### Parts Required

- RC0612 - Lead Screw Assy Z Axis
  - Some 24 x 12 tables
- LC0792 - Assy, Lead Screw, Table
  - Some 24 x 12 tables, all 24 x 24 and 36 x 24 tables

### Tools/ Materials Required

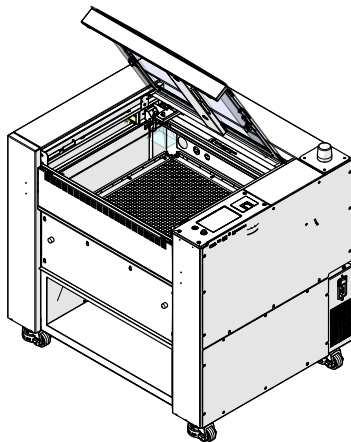
- 5/32" Allen Wrench
- Phillips Head Screwdriver
- 9/16" Wrench
- 11/16" Wrench
- Pencil or marker

# Lead Screw Replacement

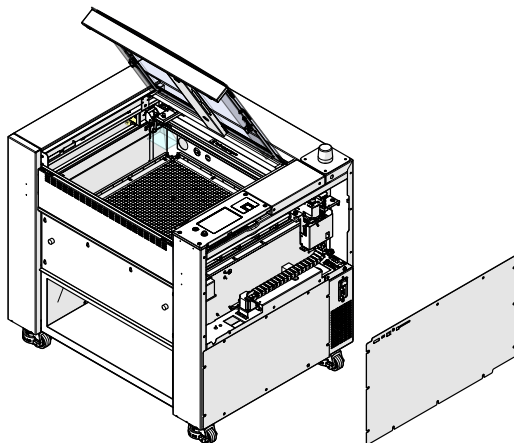
This procedure contains several steps for specific models which will be noted as such. If not noted for a specific model, steps apply to all models.

## Lead Screw Removal

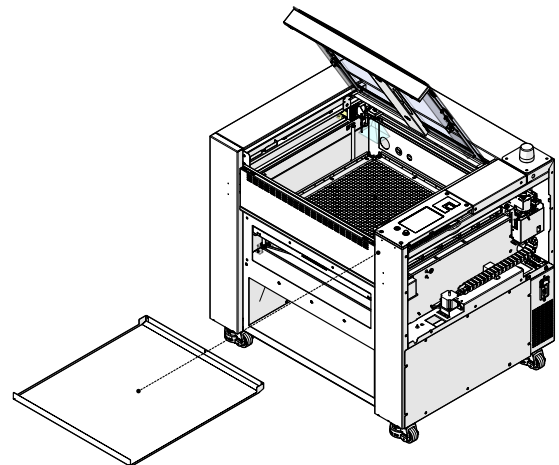
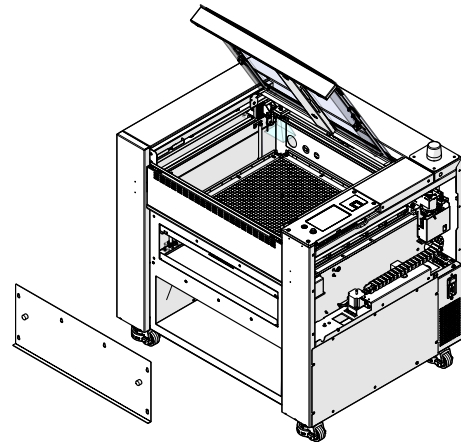
1. Turn the engraver on and use the Focus menu to lower the table to the middle of the cabinet:



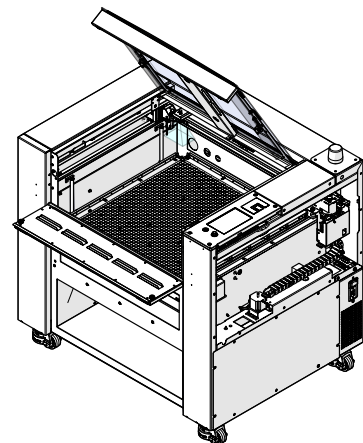
2. Turn off the engraver.
3. Disconnect the engraver from power.
4. Remove the right panel of the engraver:



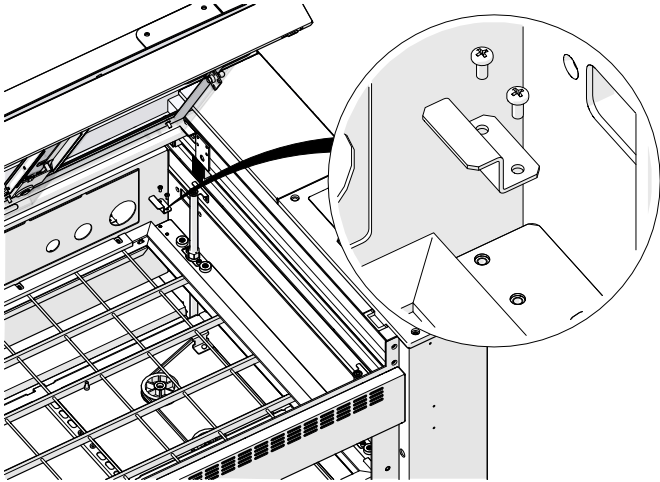
5. Remove the front access panel and the crumb tray of the engraver:



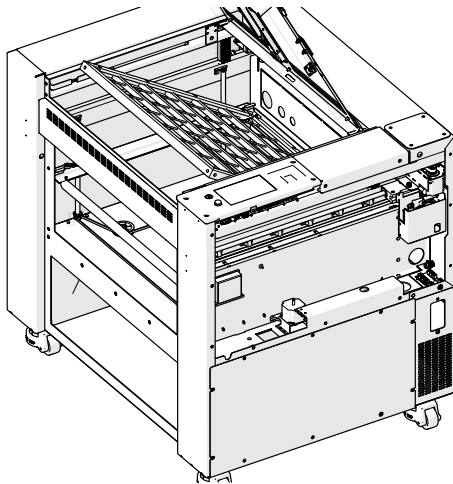
6. **Pro only-** lower the front drop down door:



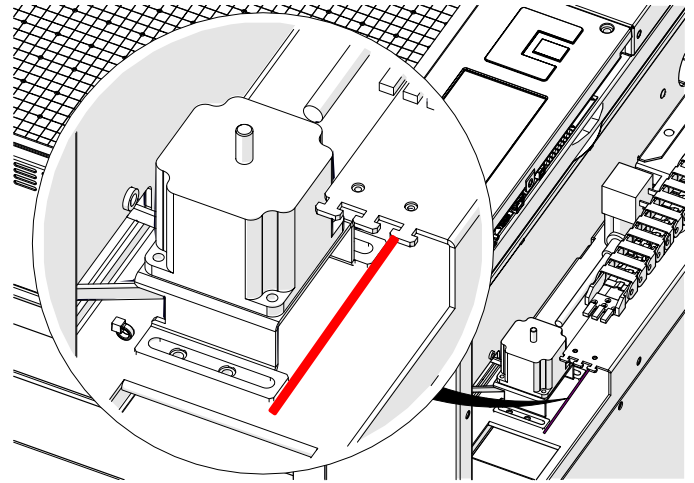
7. **Edge and Maker only**- loosen and remove the two (2) Phillips screws that secure the table clamps to the table support structure at each corner of the table:



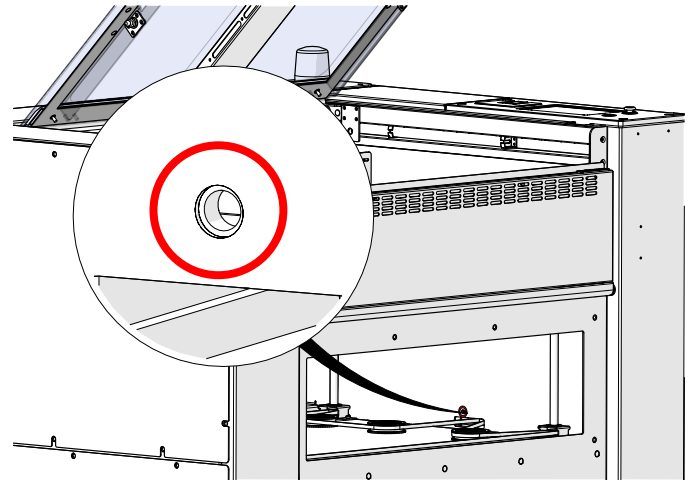
8. Lift the table up to clear the table locator pins then angle the front of the table upward and remove the table from the engraver:



9. Using a pencil, make a mark on the engraver chassis that corresponds with the leading edge of the z-axis motor body. This will help to ensure the correct z-axis belt tension is applied when the new z-axis motor is installed:

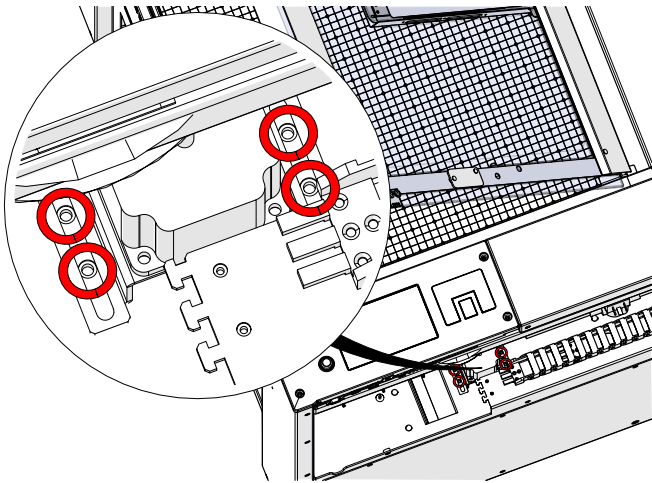


10. Disconnect the z-axis motor electrical harness.
11. Loosen, but do not remove the z-axis motor tensioner thumbscrew to release the tension on the z-axis belt:

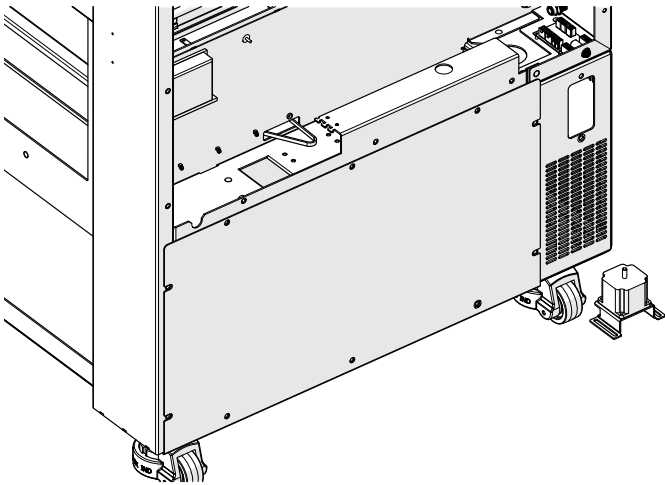


## 17000 - Lead Screw Replacement

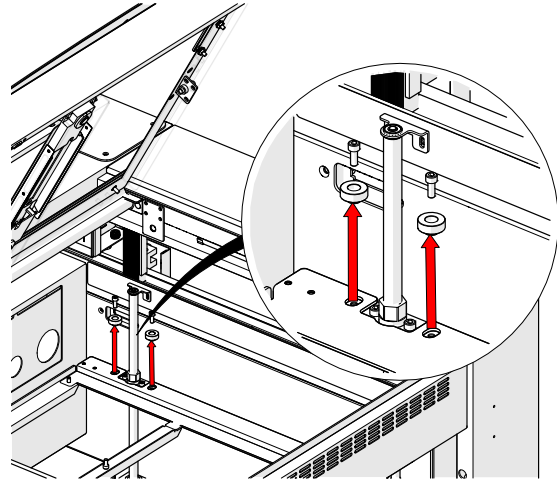
12. Loosen and remove the four (4) 5/32" Allen screws on the z-axis motor mount:



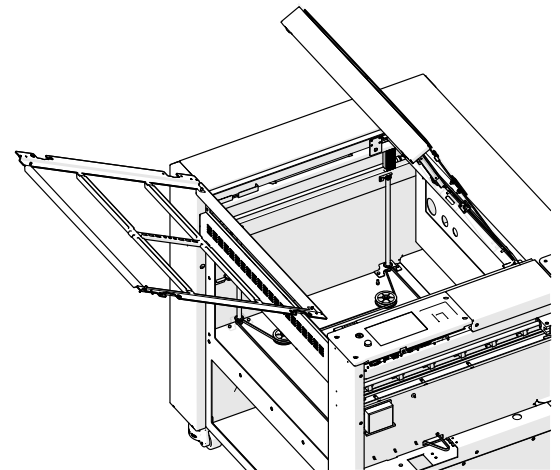
13. Remove the z-axis motor assembly:



14. Loosen and remove the two (2) 5/32" Allen screws and Delrin bumpers that secure the table levelers to the table support structure at each corner of the table:

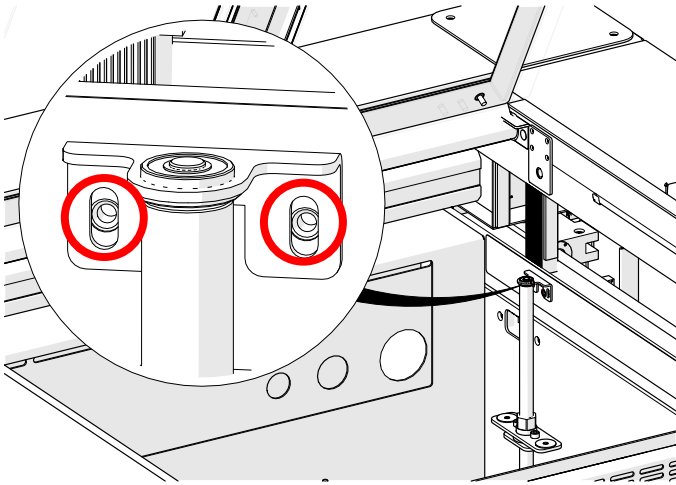


15. **Pro only** - Remove the table support structure from the engraver:

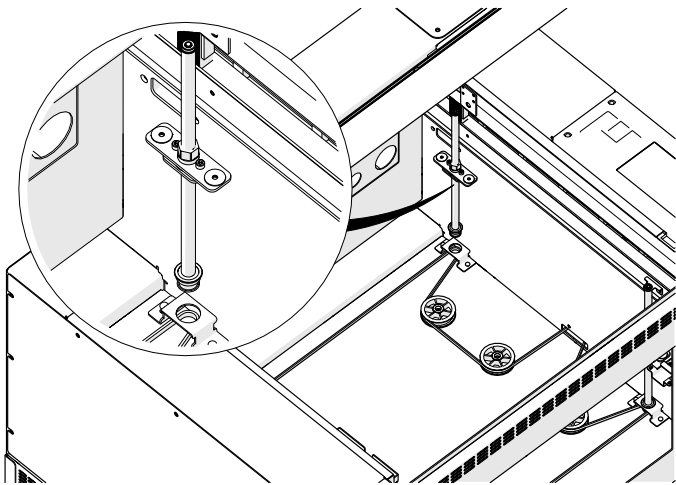


## 17000 - Lead Screw Replacement

16. Loosen and remove the two (2) Phillips screws that secure the lead screws to the chassis of the engraver at each corner of the table:

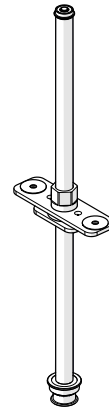


17. Remove the upper lead screw bracket at each corner of the table:
18. Remove the lead screw assembly at each corner of the table:

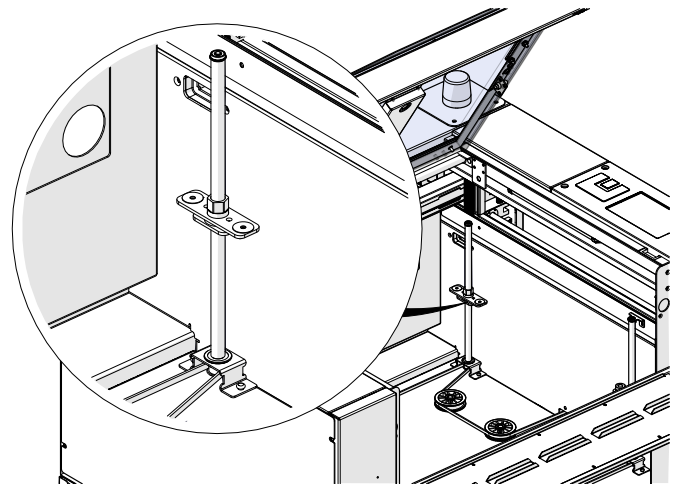


## Lead Screw Installation

1. Position the lead screw table support bracket in the middle of the lead screw assembly:



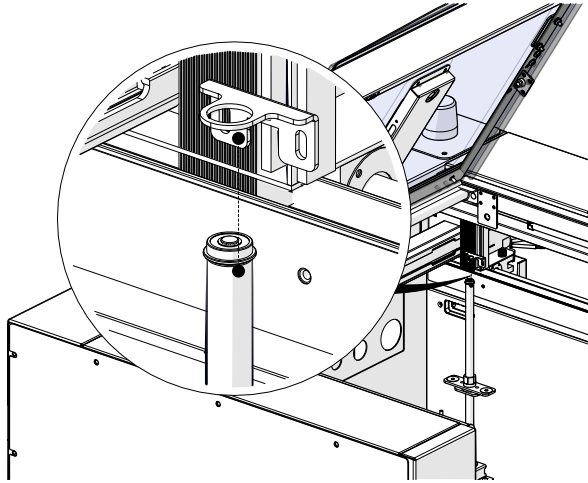
2. Install the lead screw assembly into the lower lead screw bracket at each corner of the table, ensuring that the z-axis belt wraps around the lead screw pulley:



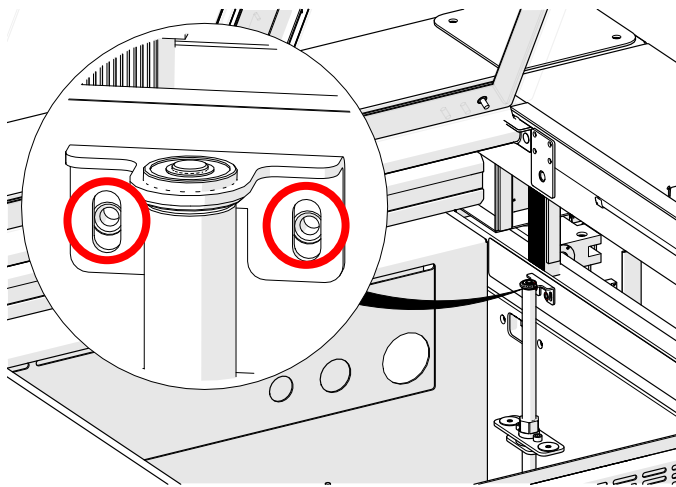


## 17000 - Lead Screw Replacement

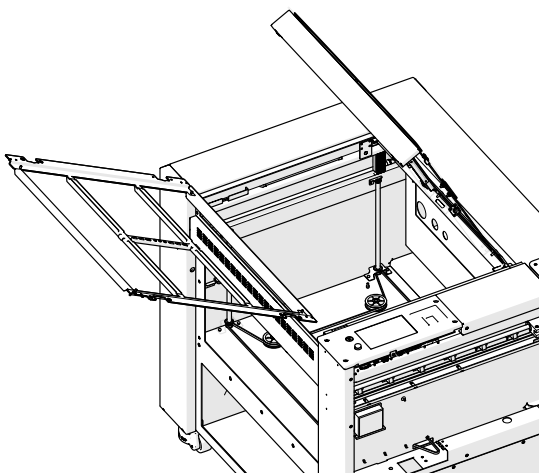
3. Install the upper lead screw bracket over the lead screw at each corner of the table:



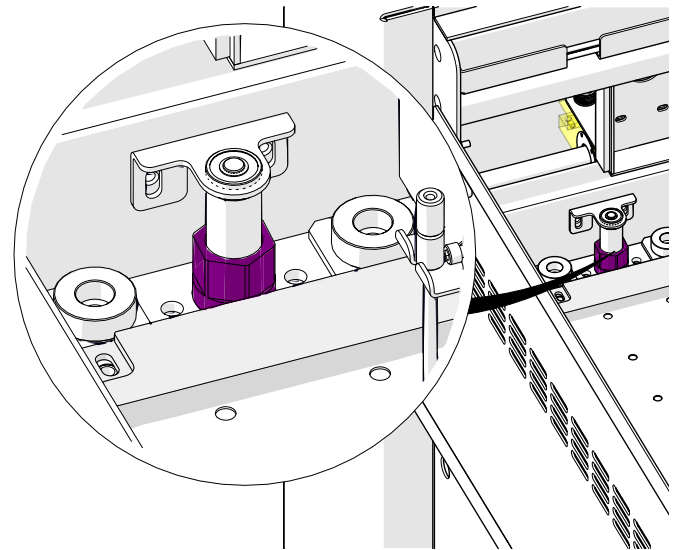
4. Install and tighten the two (2) Phillips screws that secure the lead screws to the chassis of the engraver at each corner of the table:



5. **Pro only-** Place the table support structure in the engraver:

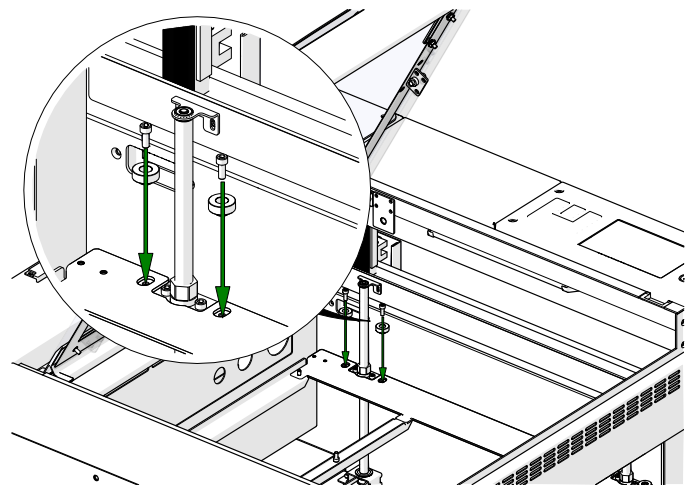


6. Use the 9/16" or 11/16" (depending on model) lead nut on the lead screw to level the table support structure:



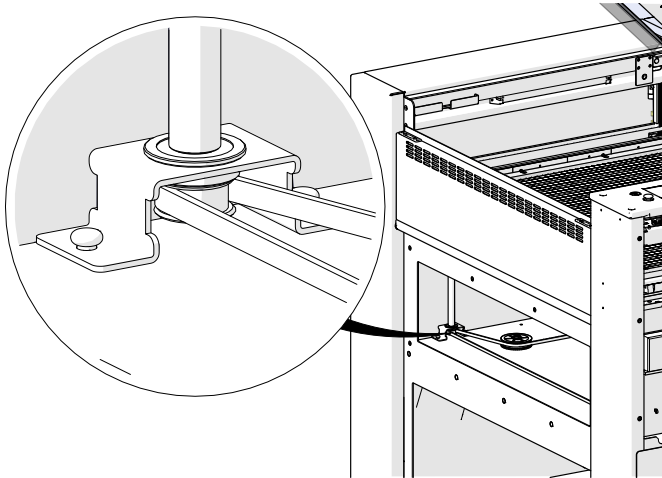
When leveling the table in step 6, choose a stationary point of reference in the cabinet of the engraver and adjust all lead screws to align with it.

7. Install and tighten the two (2) 5/32" Allen screws and Delrin bumpers that secure the table levelers to the table support structure at each corner of the table:

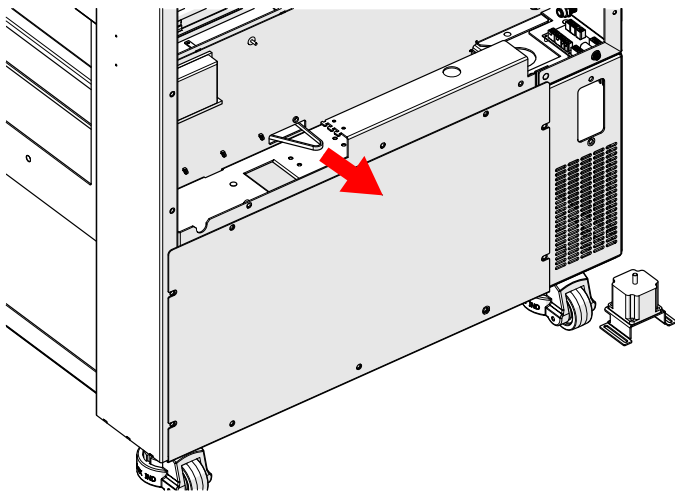


## 17000 - Lead Screw Replacement

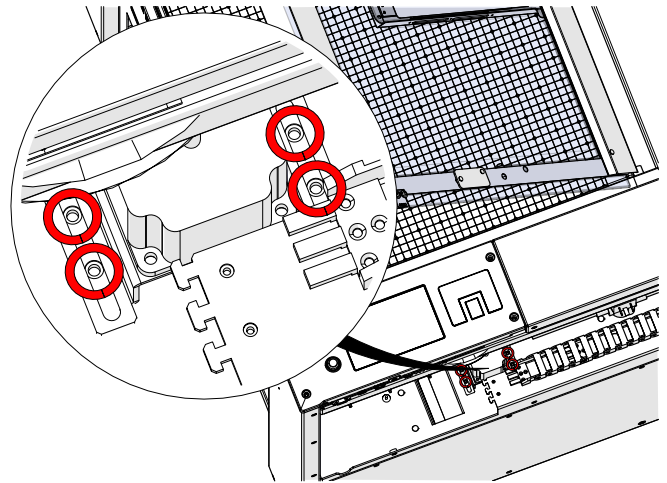
8. Inspect each lead screw pulley in the engraver to ensure that the z-axis belt has remained in place. If the z-axis belt has fallen below any of the lead screw pulleys, reposition the belt around the pulley:



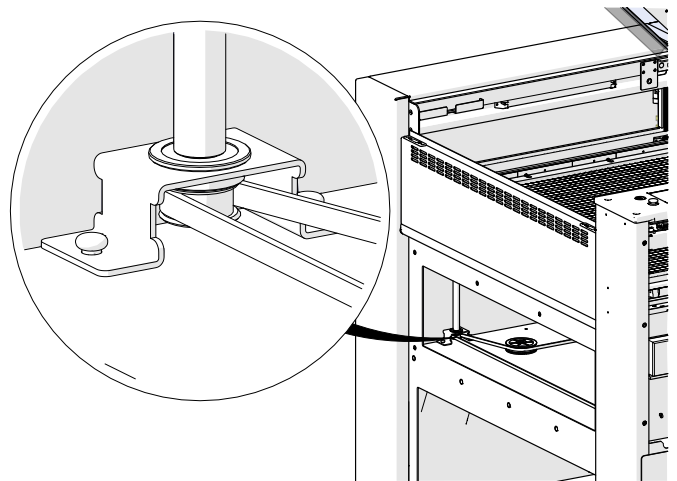
9. Pull the z-axis belt away from the machine to ensure that the belt wraps around z-axis motor drive pulley when installing the z-axis motor:



10. Place the z-axis motor into the z-axis motor housing and install, but do not fully tighten the four (4) 5/32" Allen screws on the motor mount:

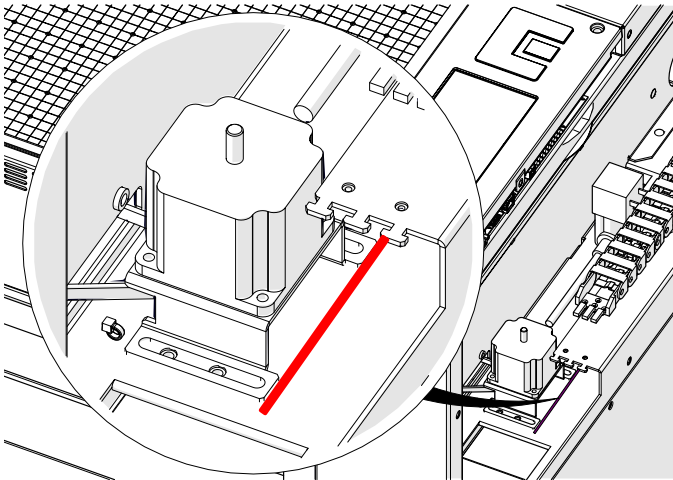


11. Inspect each lead screw pulley in the engraver to ensure that the z-axis belt has remained in place. If the z-axis belt has fallen below any of the lead screw pulleys, reposition the belt around the pulley:

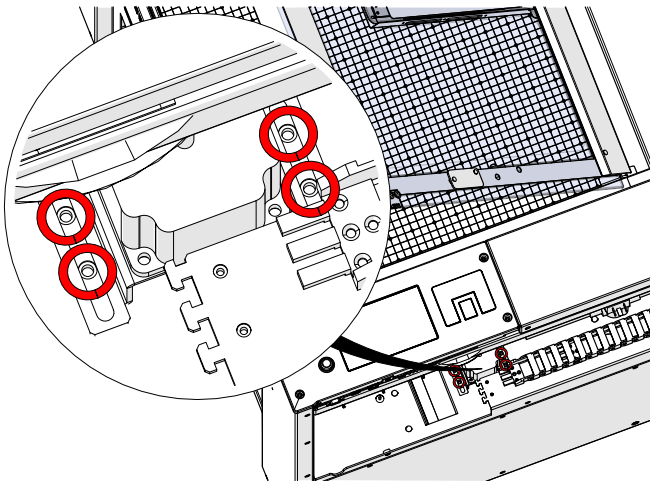


## 17000 - Lead Screw Replacement

12. Tighten the z-axis motor tensioner thumbscrew until the leading edge of the z-axis motor assembly is aligned with the pencil mark created in the removal procedure:



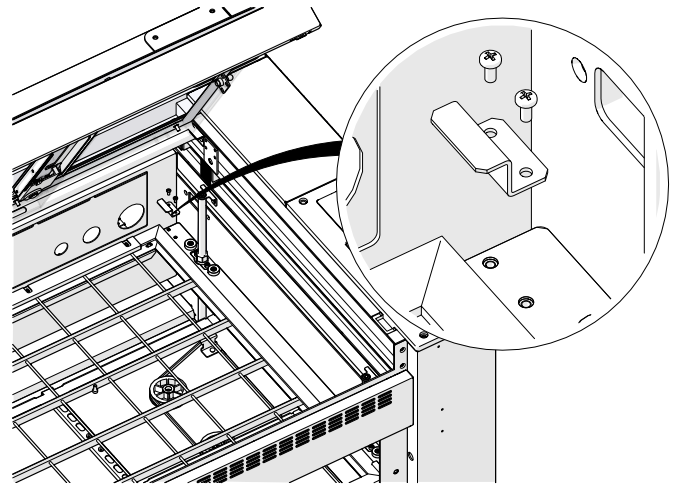
13. Tighten the four (4) 5/32" Allen screws on the z-axis motor mount:



14. Reconnect the z-axis motor electrical harness.

15. Insert the vector grid or raster table into the table support structure.

16. **Edge only-** Install the table clamps. Install and tighten the two (2) Phillips screws that secure the table clamps to the table support structure at each corner of the table:



17. Install the crumb tray, front access panel, and side panel of the engraver.

If further assistance is required, please contact Epilog Laser Technical Support by phone at 303-215-9171, or by email at [tech@epiloglaser.com](mailto:tech@epiloglaser.com)