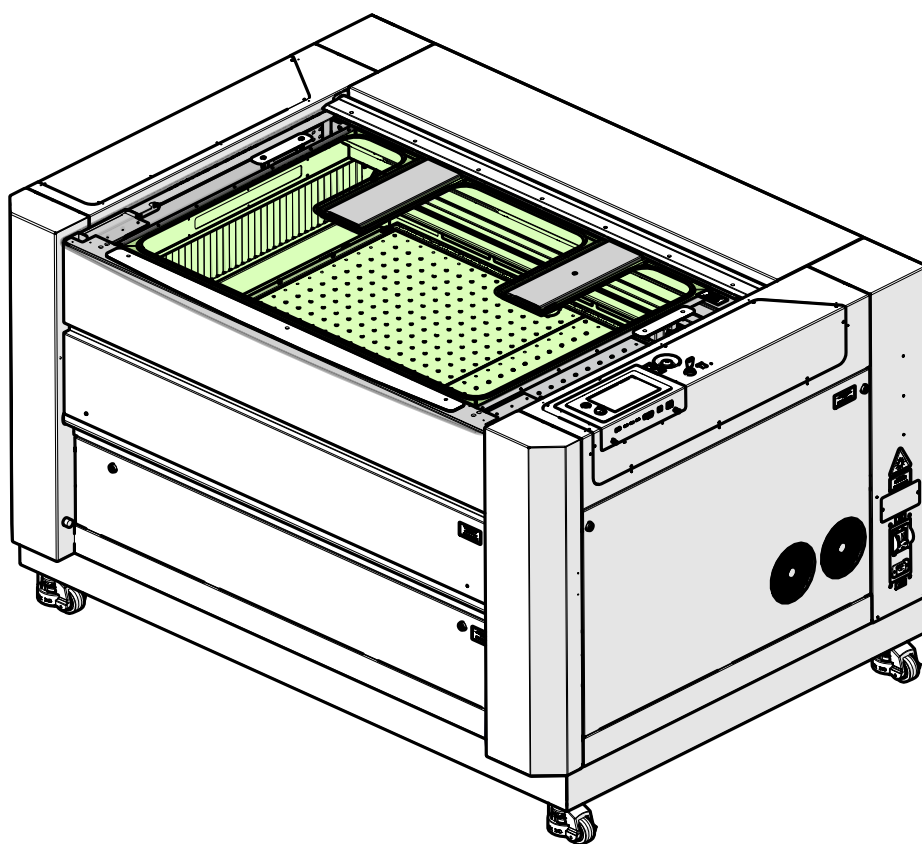


Y-Axis Actuator Replacement Fusion Pro 32 & 48



Parts Required

- CS1130 - Assy, Actuator, Y-Axis, Right, 32x20
- CS1140 - Assy, Actuator, Y-Axis, Left, 32x20
- CS0500 - Assy, Actuator, Y-Axis, Right, 48x36
- CS0520 - Assy, Actuator, Y-Axis, Left, 48x36

Tools/Materials Required

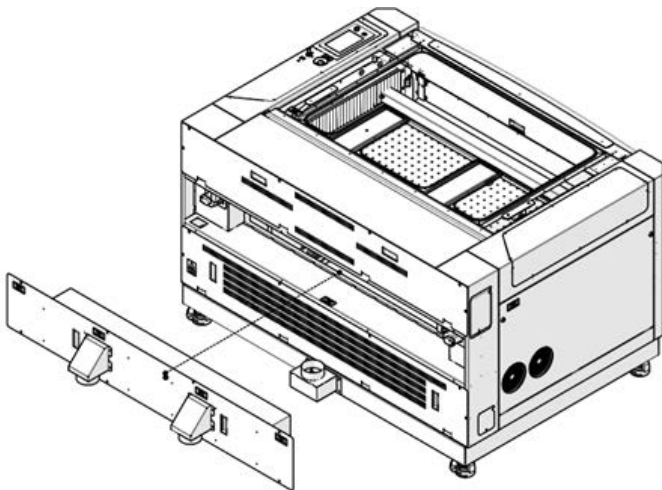
- 5/32", 7/64" Allen Wrench
- Phillips Head Screwdriver
- Anti-Static Strap

This document outlines the replacement of the CS0520 - Assy, Actuator, Y-Axis, Left, 48x36; however, the process is similar for all y-axis actuators in the Fusion Pro 32 and 48.

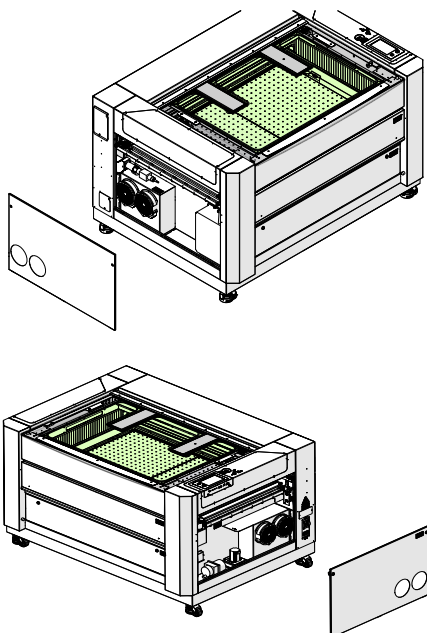
Y-Axis Actuator Replacement

Y-Axis Actuator Removal

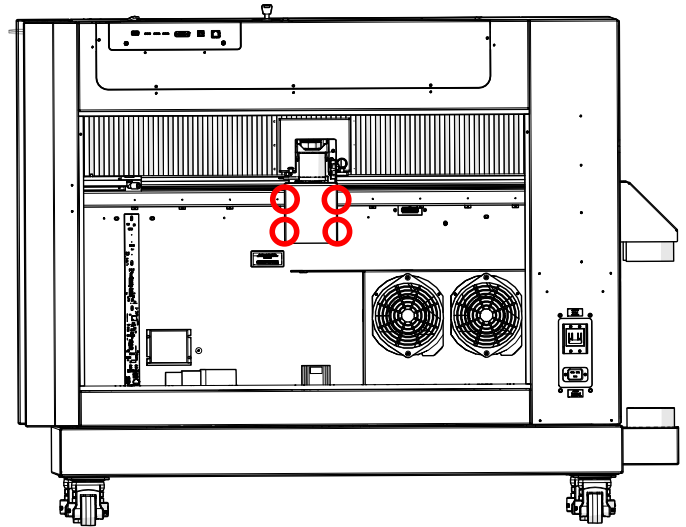
1. Turn off the engraver.
2. Disconnect engraver from power source.
3. Remove the exhaust plenum from the engraver:



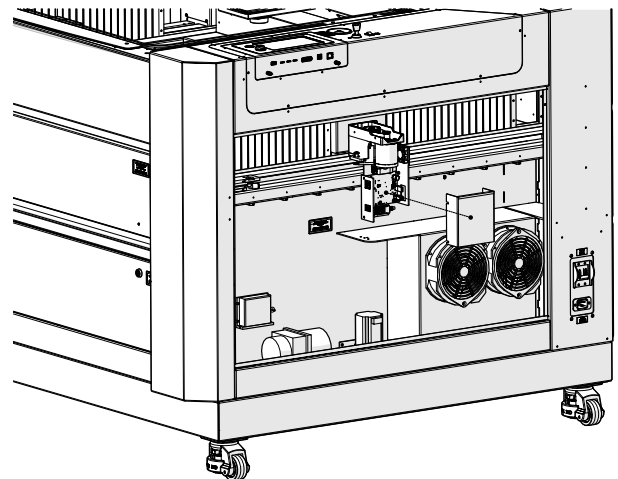
4. Remove the left and right panels of the engraver:



5. Loosen, but do not remove the four (4) Phillips screws on the x-axis drive board cover:



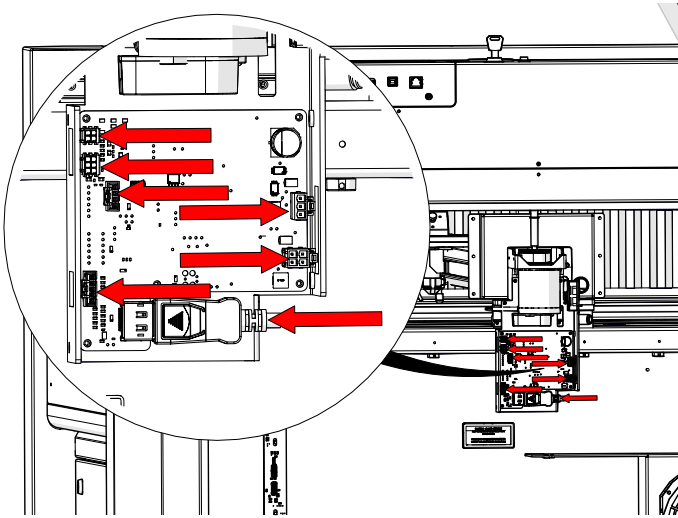
6. Remove the x-axis drive board cover:



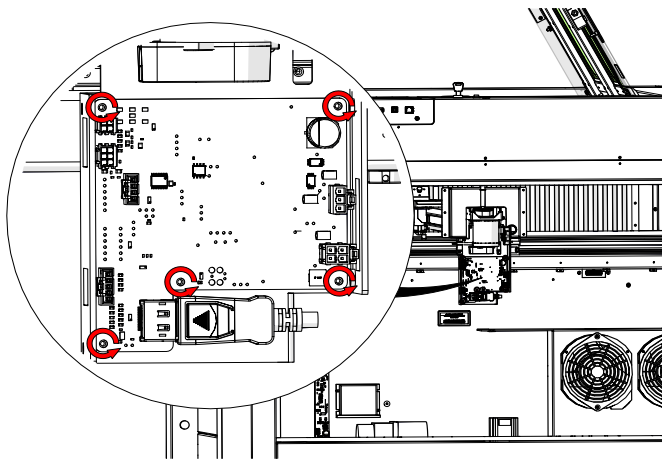
7. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface in the engraver.

16000 - Y-Actuator Replacement

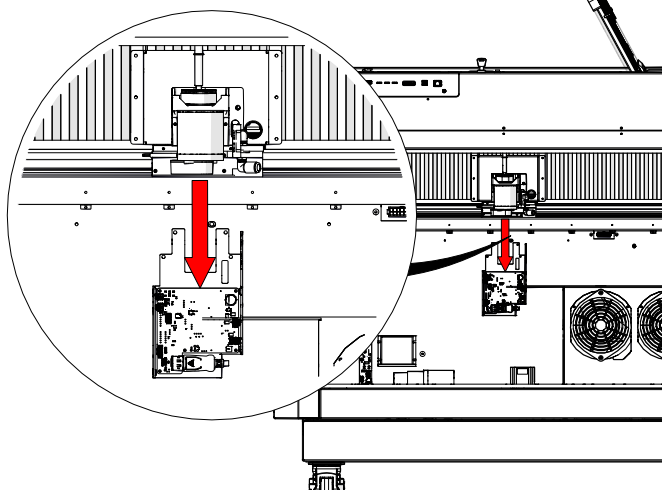
8. Remove the seven (7) electrical connections on the drive board:



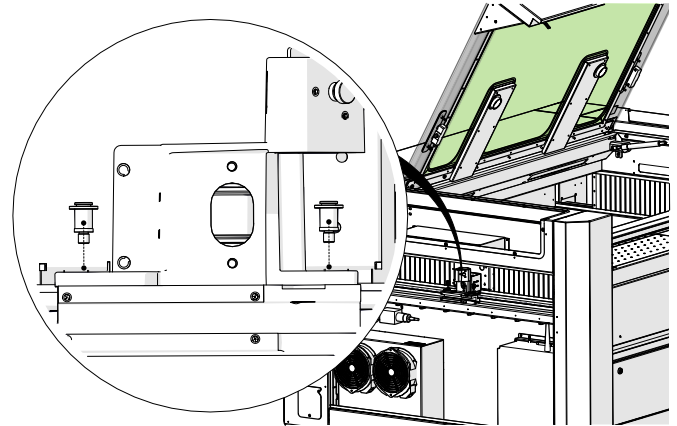
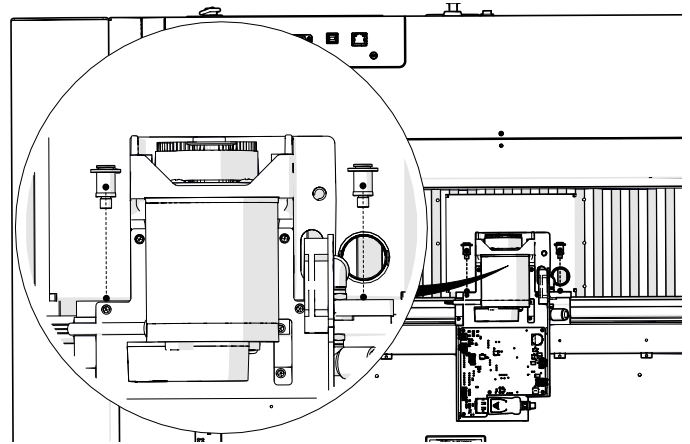
9. Loosen and remove the five (5) Phillips screws that secure the drive board to the housing:



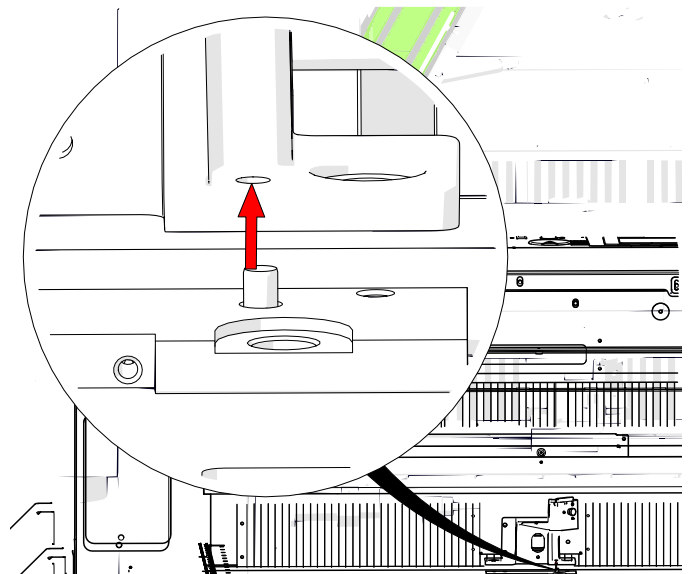
10. Remove the x-axis drive board housing:



11. Remove and or loosen the four (4) 5/32" fasteners that secure the x-axis assembly to the y-axis bearings. There are two (2) on the right side and two (2) on the left side:

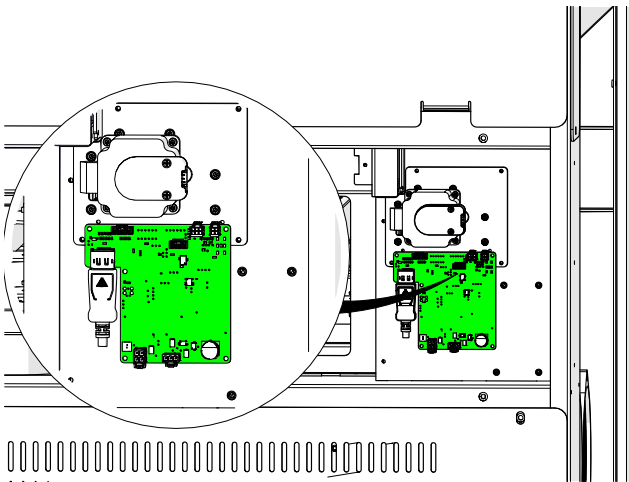


12. Lift the x-axis assembly upwards to clear the locator pins on the left and right y-axis bearing blocks:

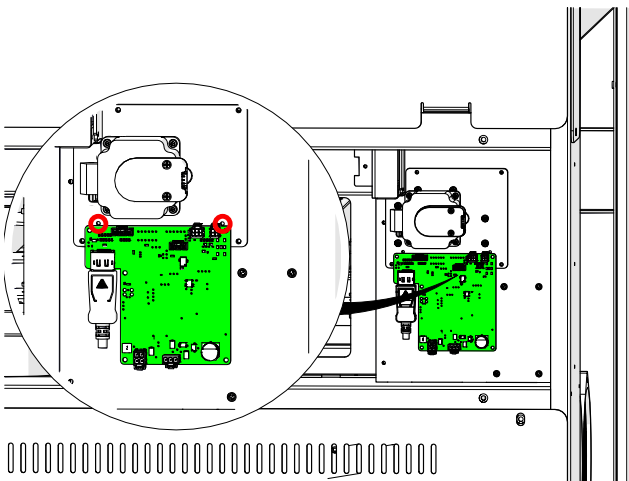




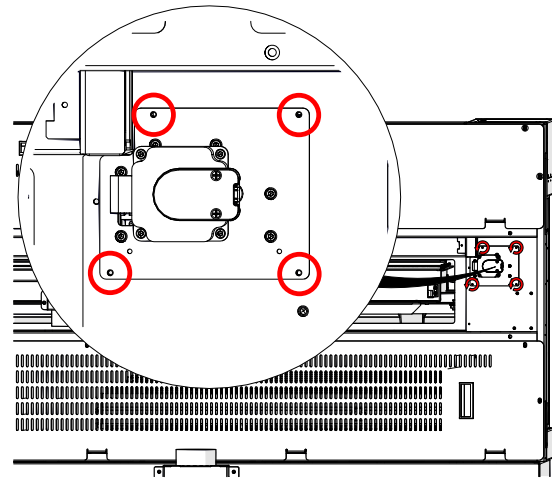
13. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface on the engraver.
14. Disconnect the seven (7) electrical connectors from the drive board located at the rear of the actuator that is being replaced:



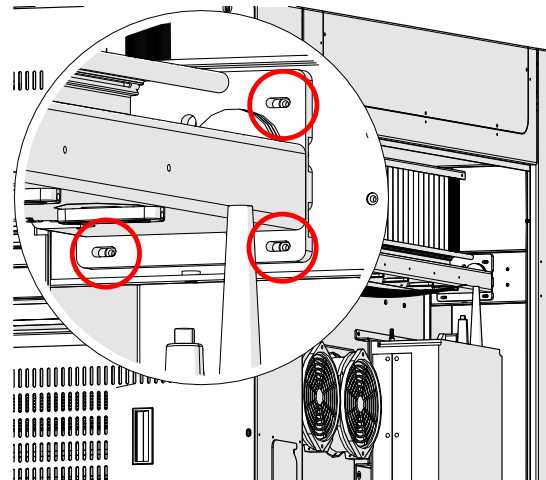
15. Loosen and remove the two (2) Phillips screws that secure the drive board assembly to the y-axis actuator:



16. Loosen and remove the four (4) 7/64" Allen screws that secure the y-axis actuator to the rear of the engraver chassis:

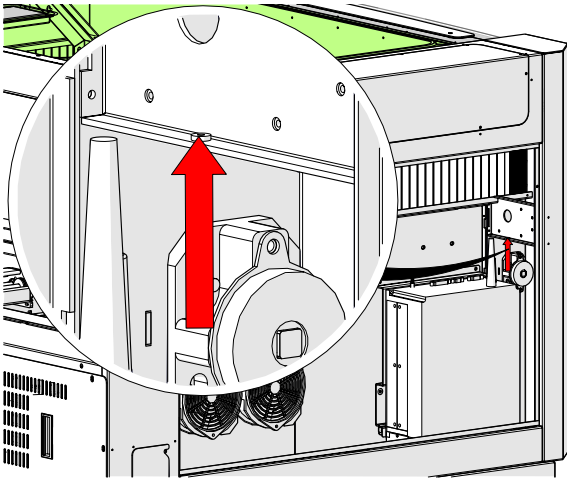


17. Loosen and remove the three (3) 7/64" Allen screws that secure the y-axis actuator to the front of the machine chassis:

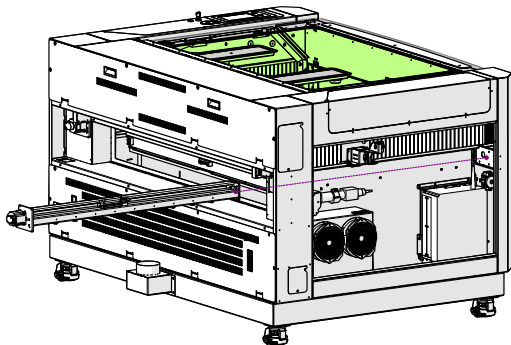




Do not make adjustments to the screw depicted in the following image. This screw sets the height of the y-axis actuator at the front of the engraver and should not be adjusted.

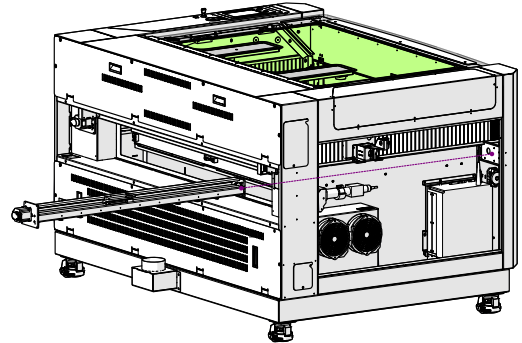


18. Slide the y-axis actuator out through the rear of the engraver:

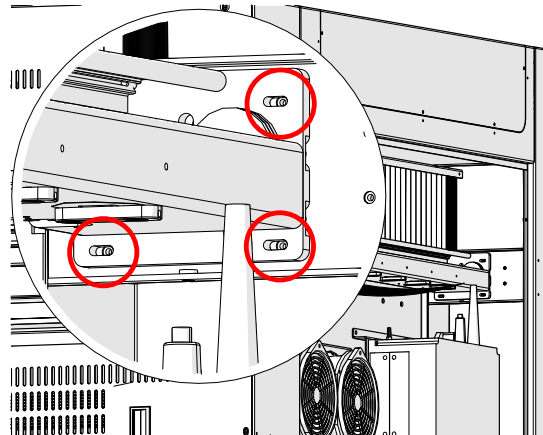


Y-Axis Actuator Installation

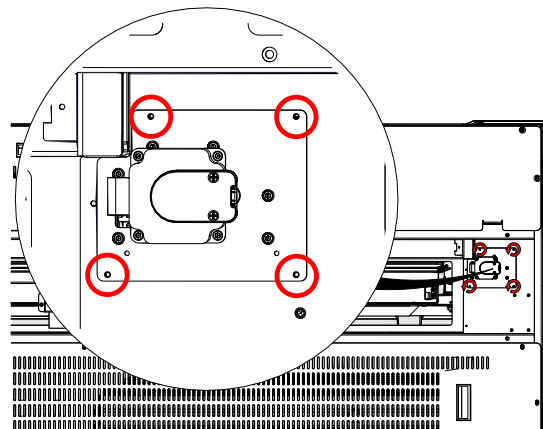
1. Slide the y-axis actuator through the rear of the engraver:



2. Install, but do not fully tighten the three (3) 7/64" Allen screws that secure the y-axis actuator to the front of the machine chassis:

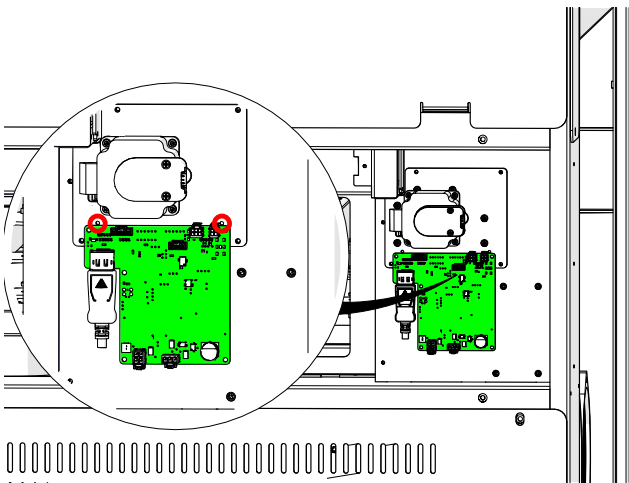


3. Install, but do not fully tighten the four (4) 7/64" Allen screws that secure the y-axis actuator to the rear of the engraver chassis:

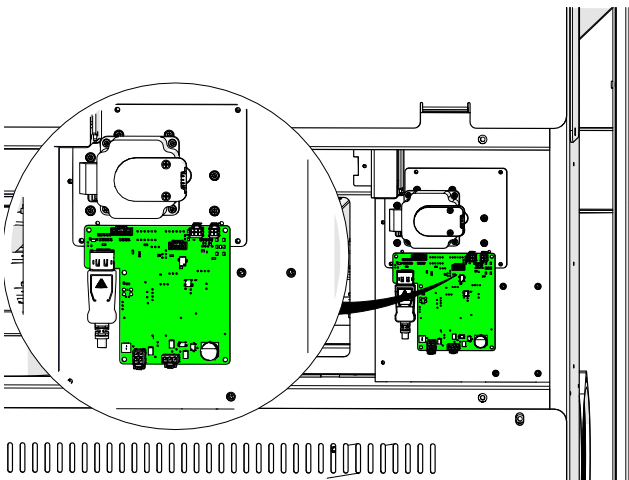




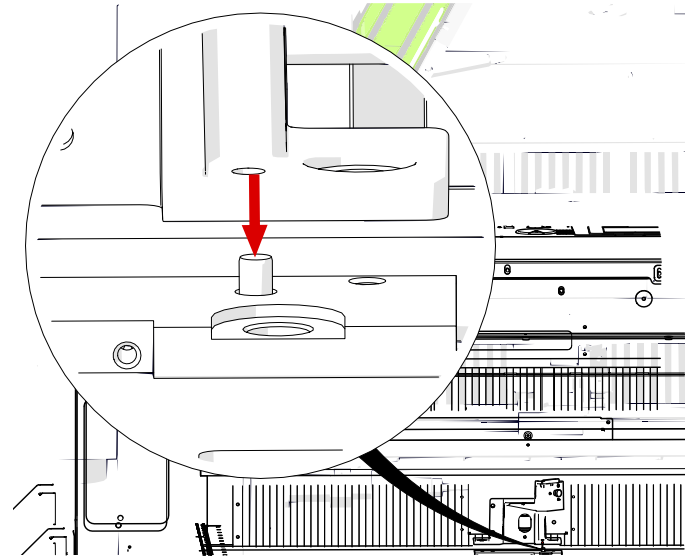
4. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface on the engraver..
5. Place the drive board assembly in the engraver. Install and tighten the two (2) Phillips screws that secure the drive board assembly to the y-axis actuator:



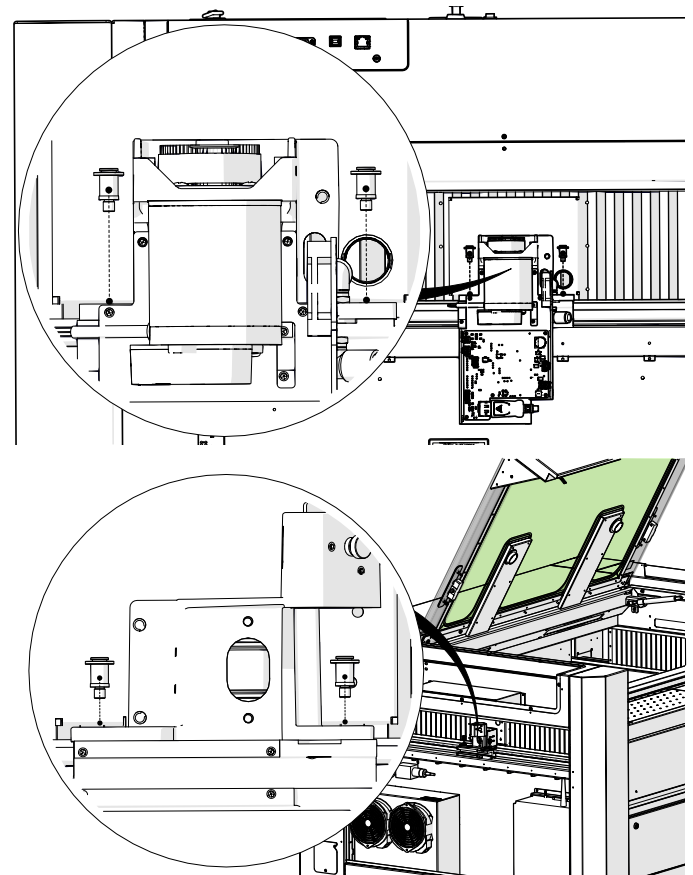
6. Connect the seven (7) electrical connectors to the drive board located at the rear of the actuator:



7. Place the x-axis assembly on the y-axis bearing blocks, ensuring that the locator pins enter the upper bearing block assembly:

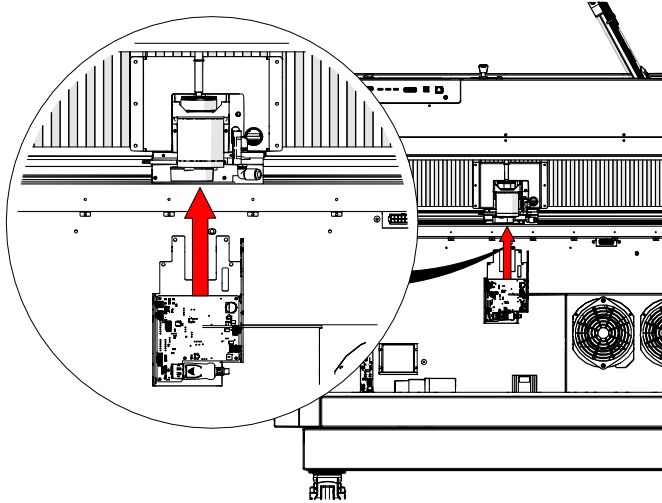


8. Install and tighten the four (4) 5/32" fasteners that secure the x-axis assembly to the y-axis bearings. There are two (2) on the right side and two (2) on the left side:

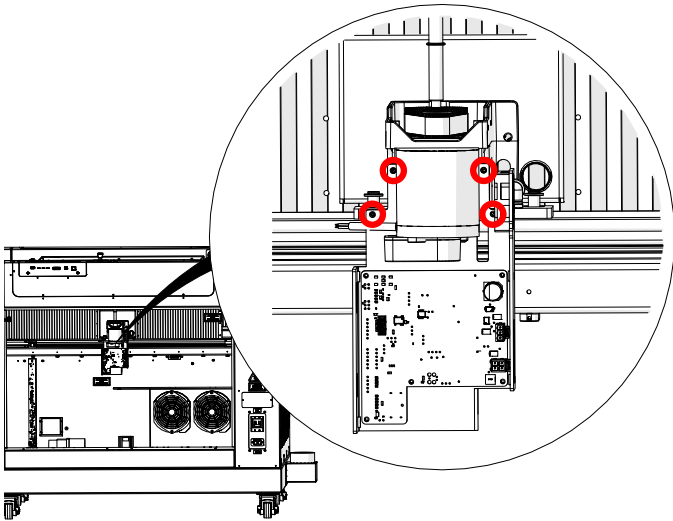




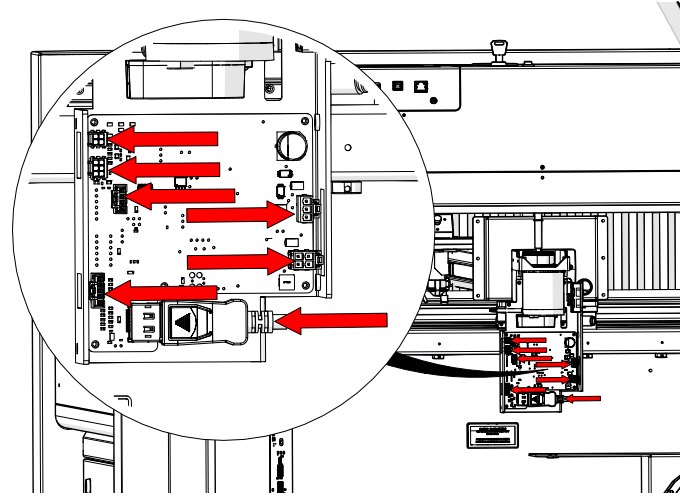
9. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface on the machine.
10. Position the x-axis drive board housing over the mounting holes:



11. Install and tighten the four (4) 7/64" hex screws that hold the x-axis drive board housing:

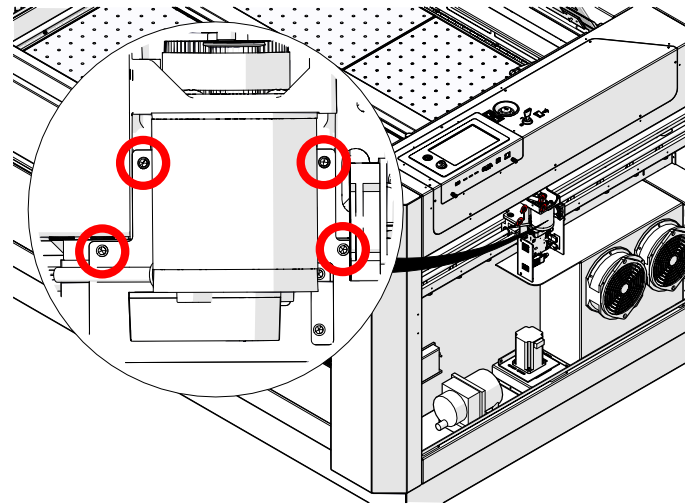


12. Connect the seven (7) electrical connectors to the drive board:



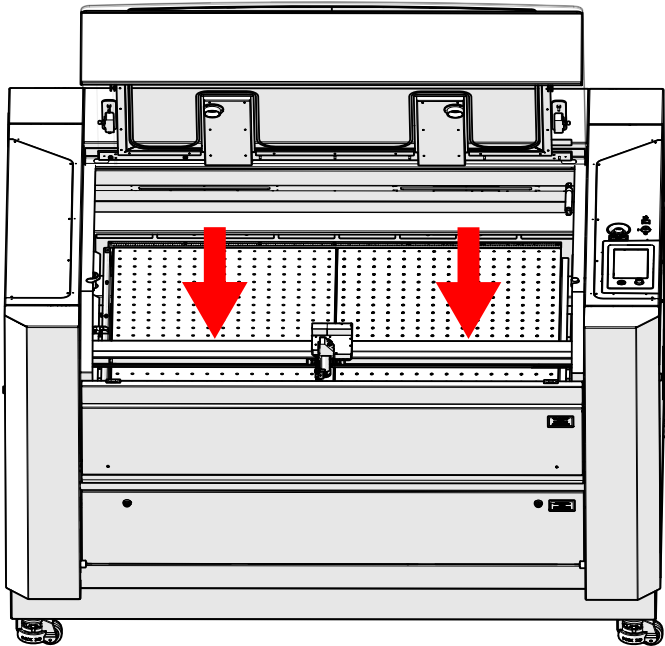
The electrical connectors on the drive board are all unique and will only fit into one receptacle.

13. Install the x-axis drive board cover and tighten the four (4) Phillips screws:

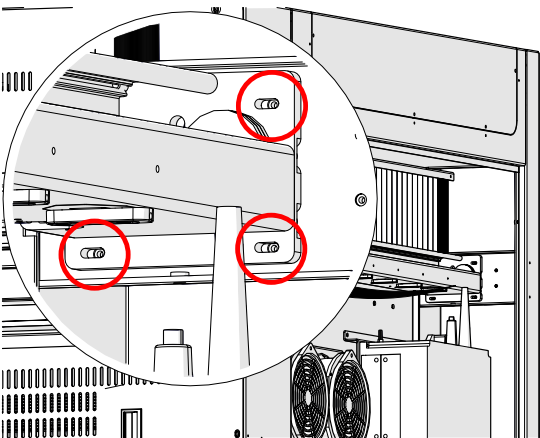


Squaring the Y-Axis Actuators

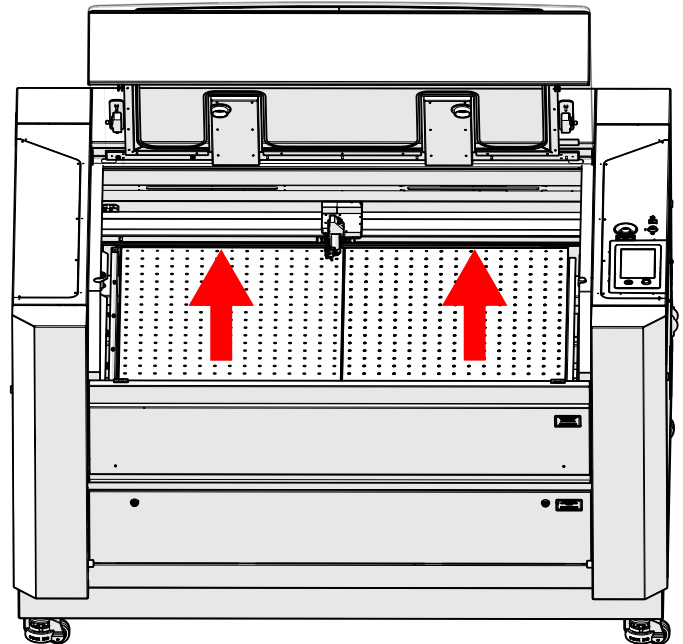
1. Ensure that the mounting screws on the replacement y-axis actuator have not been fully tightened.
4. Manually move the x-axis assembly to the front of the engraver, ensuring that it is square to the front of the machine:



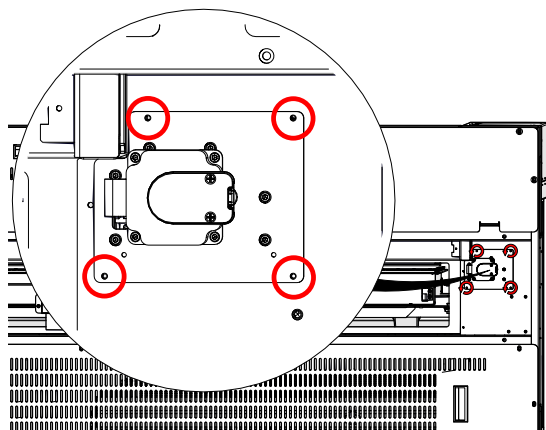
5. Tighten the three (3) 7/64" screws that secure the y-axis actuator to the chassis to the front of the engraver:



6. Manually move the x-axis assembly to the rear of the engraver, ensuring that it is square to the rear of the machine:



7. Tighten the three (3) 7/64" screws that secure the y-axis actuator to the chassis to the rear of the engraver:



If further assistance is required, contact Epilog Laser Technical Support by phone at 303-215-9171, or by email at tech@epiloglaser.com.