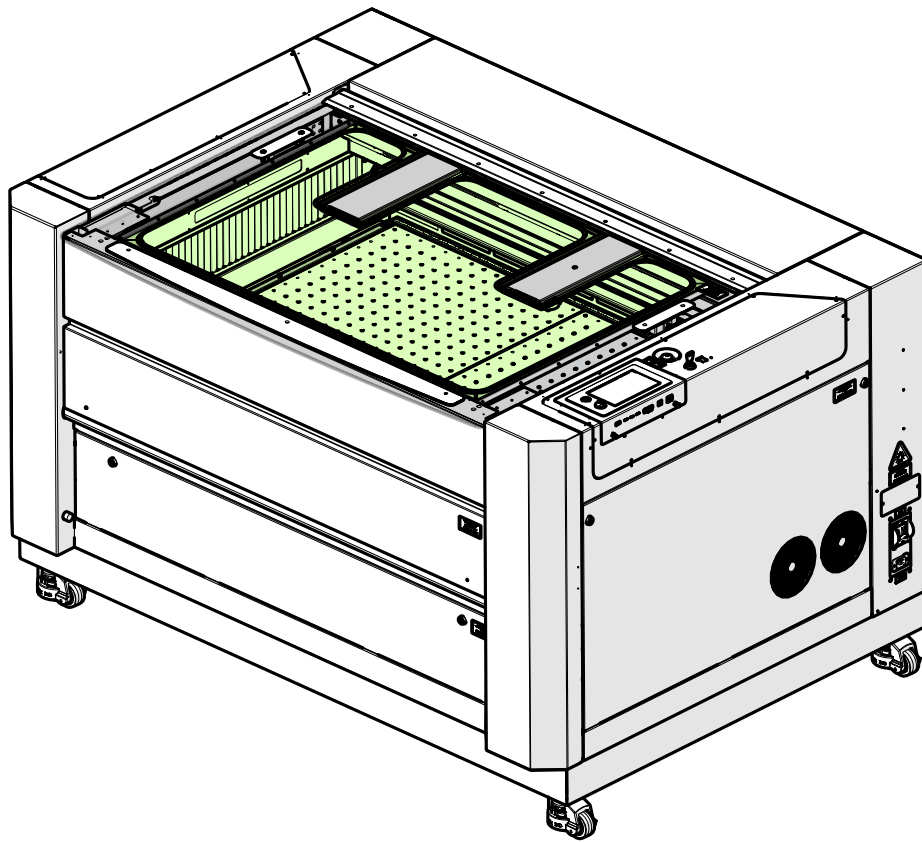


JPT 50 Watt Fiber Laser Conversion Fusion Pro 48



Parts Required

- CS1097 - JPT 50 Fiber Laser
- CS1068 - JPT Fiber Laser Mount
- CS1098 - JPT 24V Power Harness

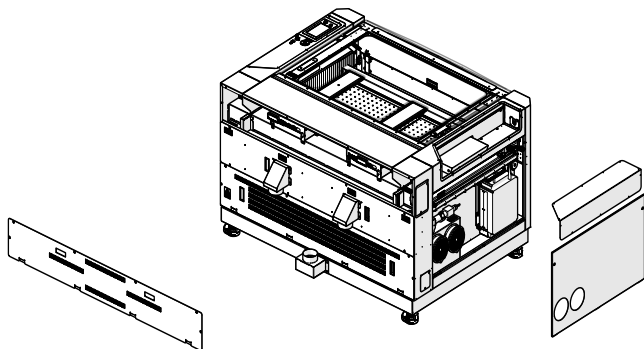
Tools/Materials Required

- 5/32", 7/64" Allen Wrench
- 5/16" Nut Driver or Adjustable Wrench
- T8 Torx Driver
- Phillips Head Screwdriver
- Wire Cutters

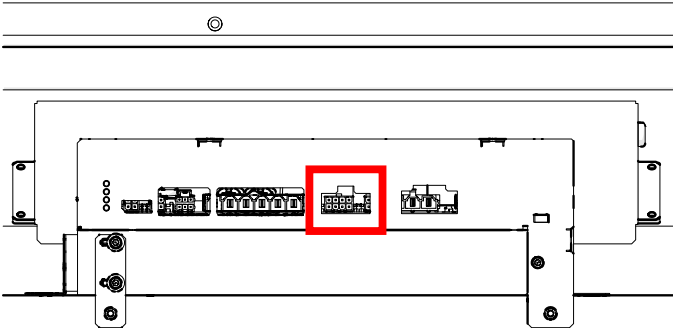
JPT 50 Watt Fiber Laser Conversion

Raycus/IPG Harness Removal

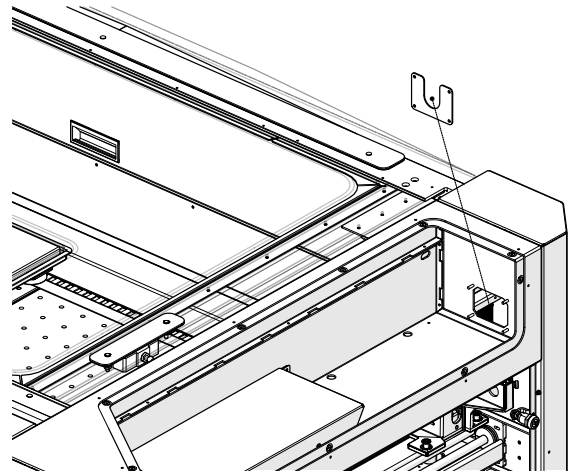
1. Turn off the engraver.
2. Disconnect engraver from power.
3. Remove the upper rear, top left corner, and left panels of the engraver:



4. Disconnect the old fiber laser power harness from the fiber power supply:

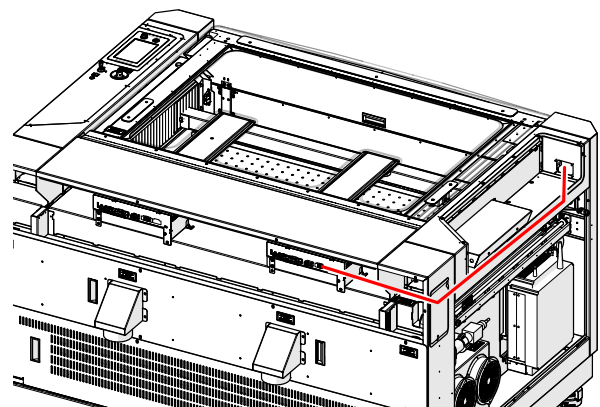


5. Remove the harness pass through plate:

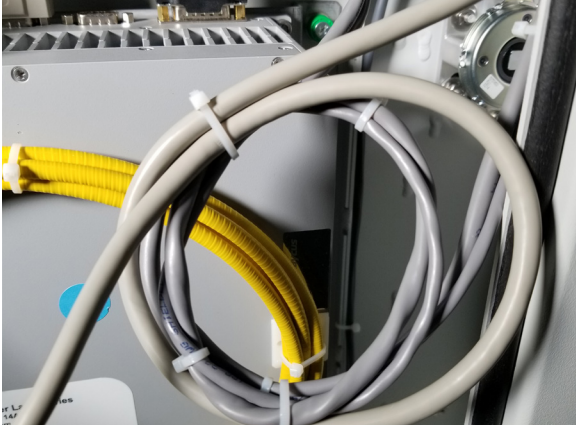


The fiber laser harness will be connected to the fiber laser data cable via cable ties. Take note and or photos of the location of the cable ties to ensure that new cable ties are reinstalled roughly in the same positions. Carefully remove the cable ties using a small set of cutters, taking care to avoid damage to the harnessing.

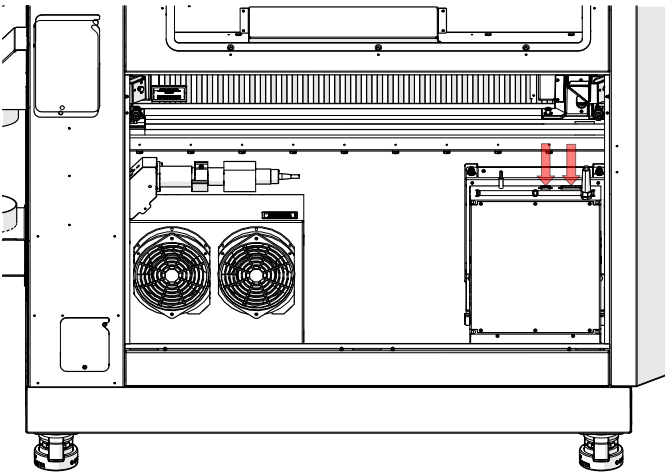
6. Carefully cut any cable ties securing the fiber laser power harness along the path shown below:



7. Carefully cut the cable ties holding the power harness and fiber harness together:



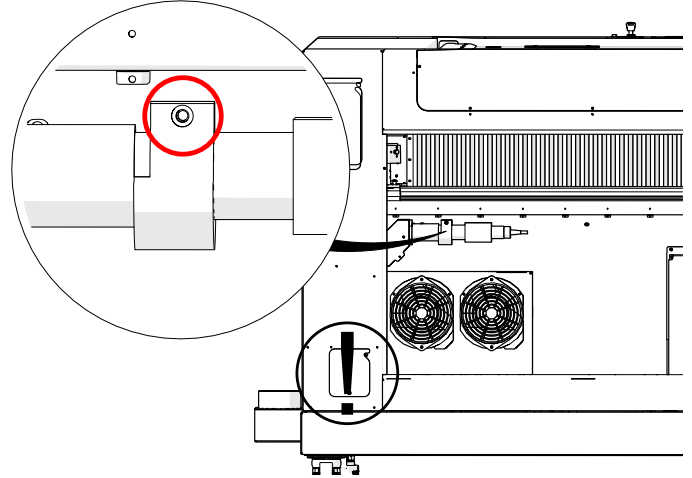
8. Disconnect the fiber laser data cable and fiber laser power harness:



9. Remove the fiber laser power harness from the engraver.

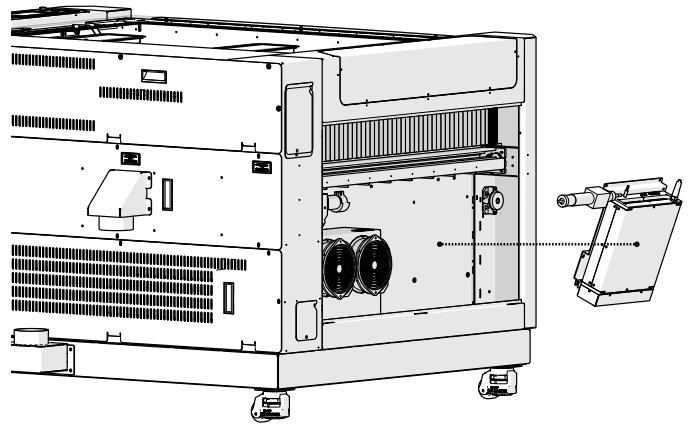
Raycus/IPG Fiber Laser Removal

1. Loosen and remove the fiber laser head clamp screw:



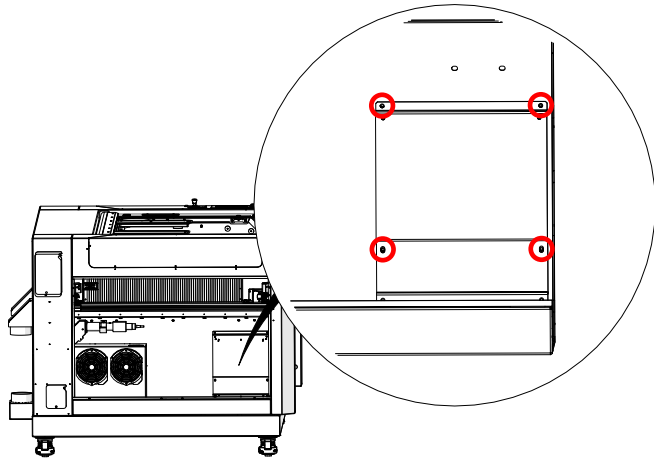
Do not bend the yellow fiber optic cable to a radius of less than 2" (50mm) or it may become damaged.

2. Gently pull the top of the fiber laser assembly away from the engraver chassis and remove the assembly:



16000 - JPT 50 Fiber Conversion

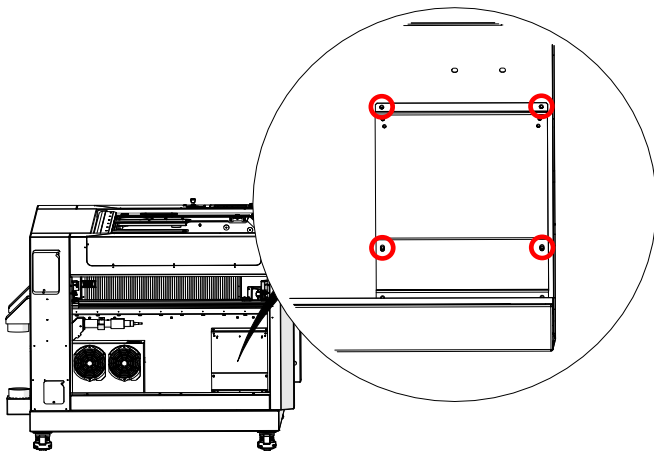
3. Loosen and remove the four (4) Phillips or 5/32" hex screws that secure the old fiber mounting bracket:



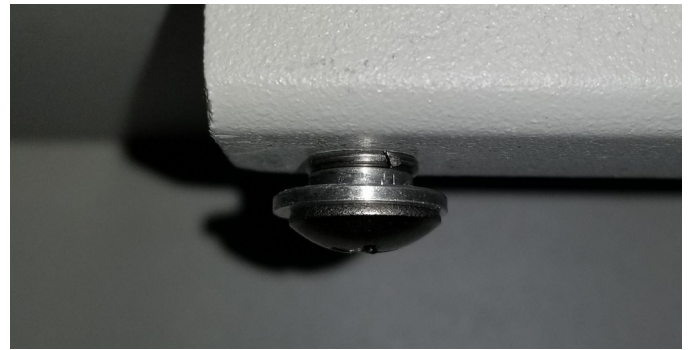
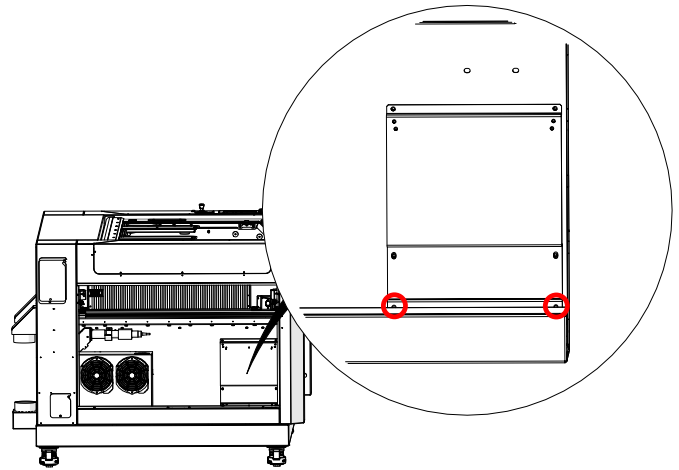
4. Remove the fiber laser mounting bracket.

JPT Fiber Laser Installation

1. Position the replacement fiber laser mounting bracket in the engraver. Install and tighten the four (4) Phillips or 5/32" hex screws:

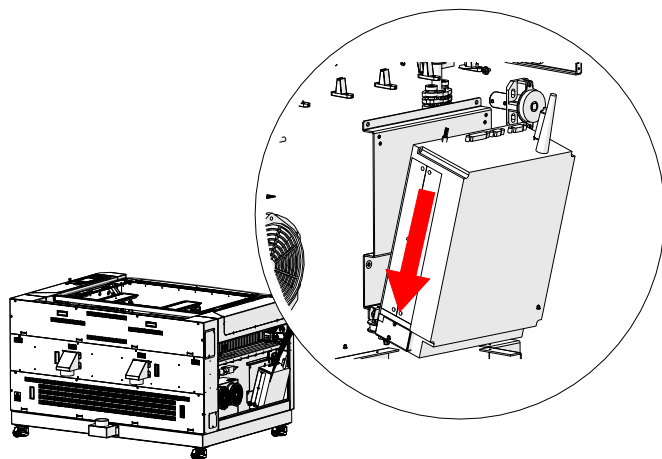
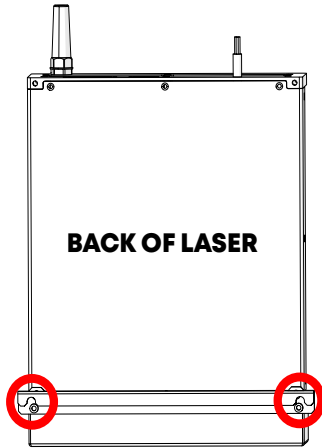


2. Install and tighten the two Phillips pan head screws, spacers, and washers from the included hardware pack in the orientation shown below:

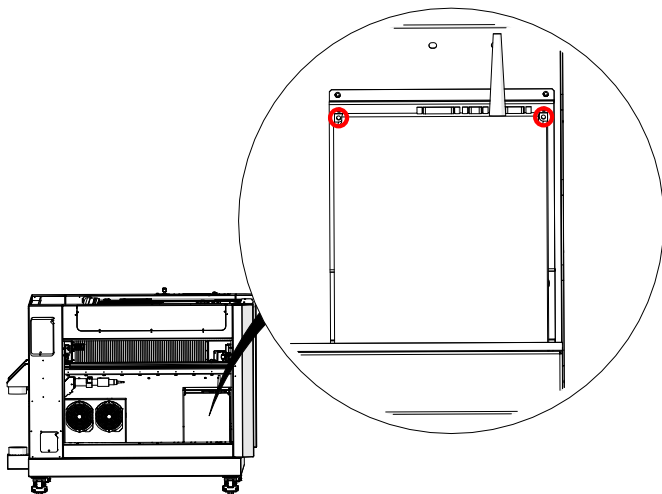


16000 - JPT 50 Fiber Conversion

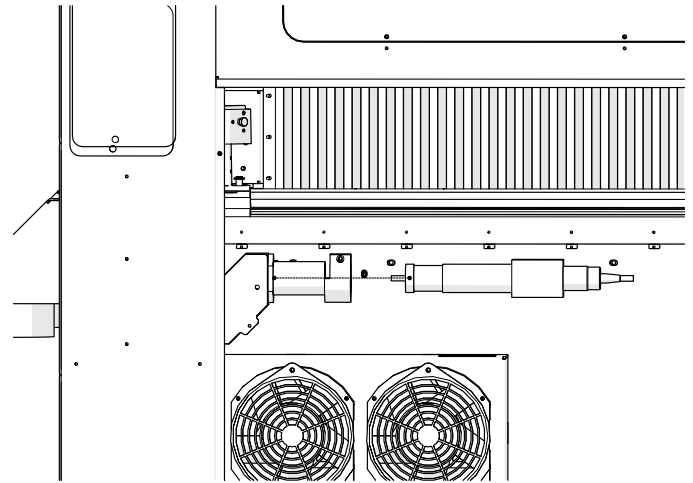
3. Mount the fiber laser in the engraver, ensuring that the two semi-circle cutouts on the back side of the laser assembly rest on the two Phillips screws installed on step #2:



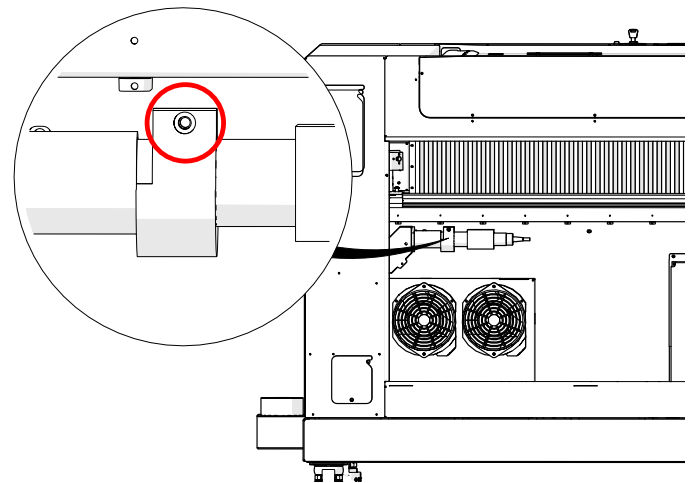
4. Install and tighten the two Phillips screws to secure the top of the fiber laser assembly:



5. Gently place the fiber laser head in the head clamp:

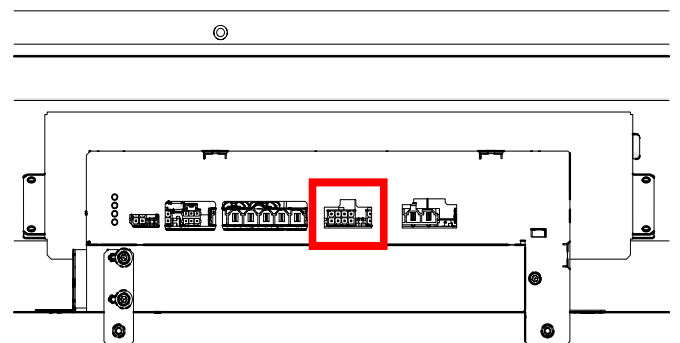


6. Tighten the 7/64" Allen screw on fiber laser head clamp:



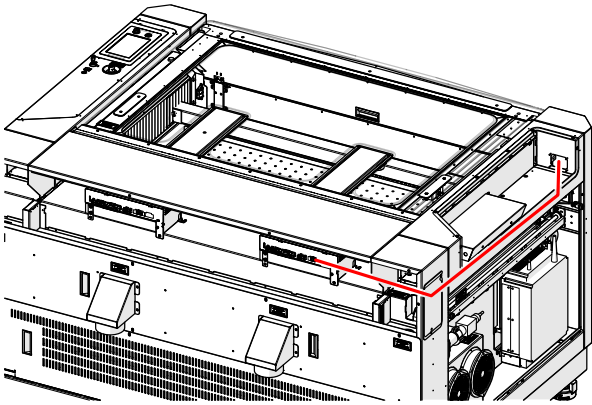
JPT Harness Installation

1. Connect the fiber laser power harness to the fiber laser power supply:



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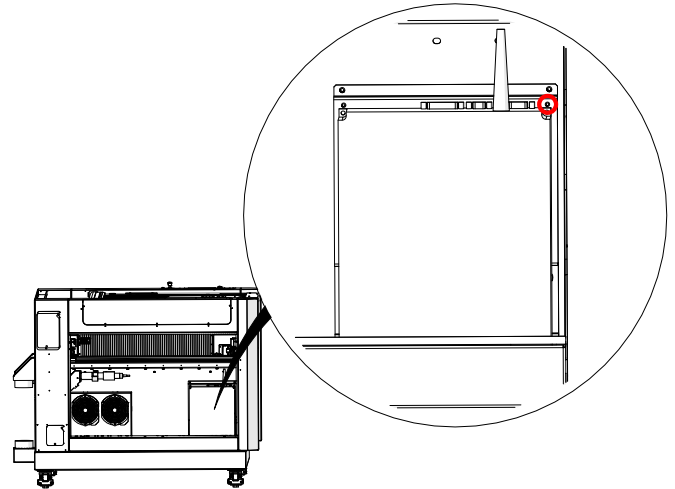
2. Route the harness through the pass through at the rear of the engraver, and the front of the engraver following the path shown below:



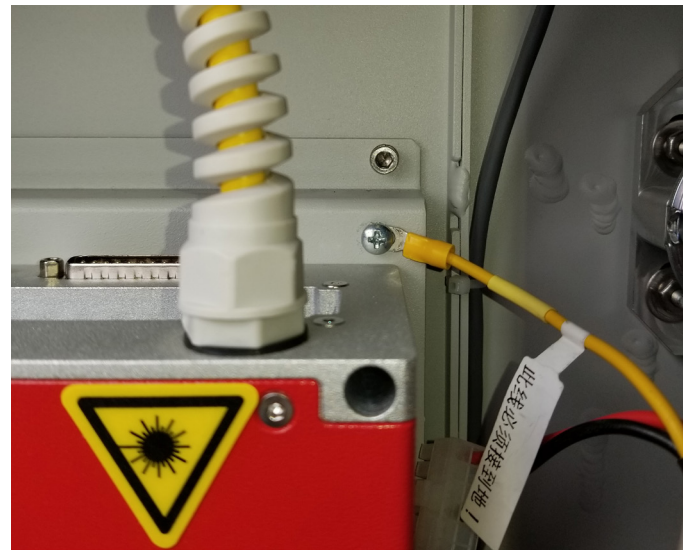
3. Use the cable ties from the included hardware pack to secure the new harnessing in the engraver.
4. Coil the replacement power harness and the fiber laser harness together and use cable ties from the included hardware pack to secure them. Ensure that enough length is left to connect the fiber ground and fiber power harness:



5. Install, but do not fully tighten the additional Phillip head screw and lock washer from the included hardware pack into the upper-right opening on the fiber laser mounting bracket:



6. Position the fiber laser ground cable around the Phillips screw installed on step # 5 and tighten the screw:

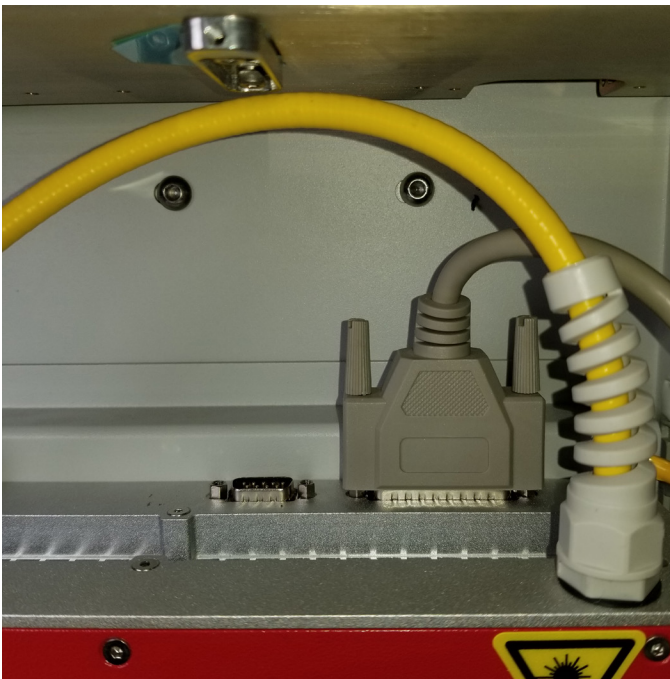


16000 - JPT 50 Fiber Conversion

7. Connect the fiber laser power harness:



8. Connect the fiber laser data cable and tighten the connector thumbscrews:



9. Replace the upper rear, top left corner, and left panels of the engraver.

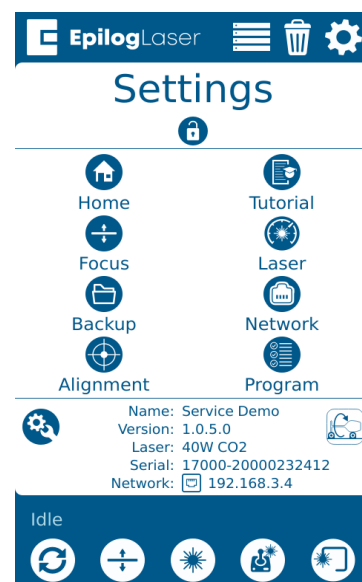
10. Reconnect to power and turn on the engraver.

Programming the JPT Fiber Laser

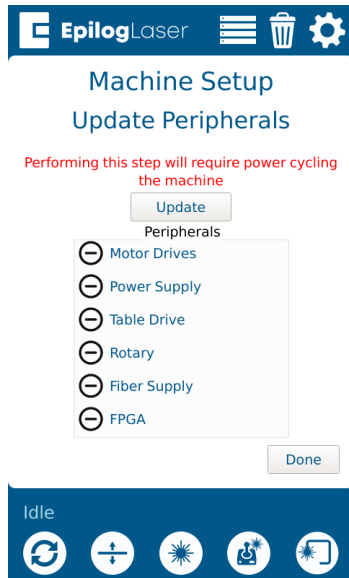
1. At the display panel, press the gear icon in the upper right-hand corner of the display to open the Settings menu:



2. Press Program to enter the Peripheral Update menu:



3. Once in the Peripheral Update menu, select Fiber Laser, Power Supplies, and FPGA, then press Update:



4. Allow the engraver to run the update process.

When running a peripheral update, do not power off the engraver. During a peripheral update it is common for the display to power off. Once the update has been applied, the engraver will prompt to restart.

5. Once the engraver prompts you to restart, power cycle the engraver.