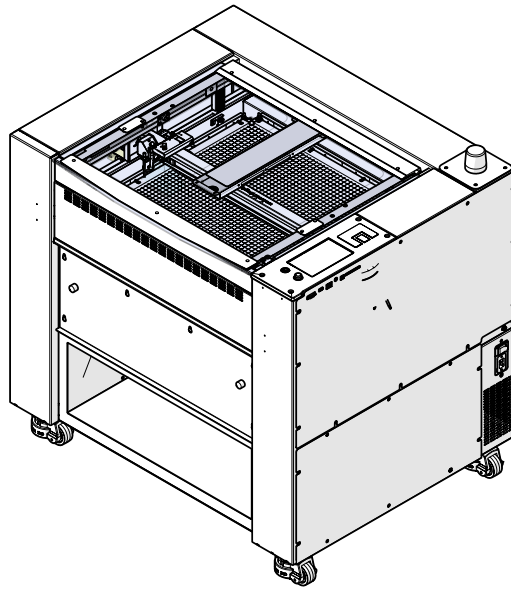


Carriage Camera Replacement Fusion Pro 24 & 36



Parts Required

- LC0240 - Assy, Camera, X-Axis

Tools Required

- 5/32" Allen wrench
- Phillips head screwdriver



An anti-static strap is required when working with any PCB in the Fusion Pro engraver. This strap prevents the buildup and accidental discharge of static electricity which can damage sensitive electronic components.

17000 Carriage Camera Replacement

Using the Anti-Static Strap

An anti-static strap is required when working with any PCB in the Fusion Pro engraver. This strap prevents the buildup and accidental discharge of static electricity which can damage sensitive electronic components.

1. Remove the anti-static strap from packaging.
2. Place the strap around your wrist and adjust the strap to be tight but comfortable.
3. After sizing the strap, ensure that the adjustment clamp is in the closed position:

Clamp Closed



Clamp Open



There is a small metal plate on the inside of the anti-static strap. Ensure that this metal plate is in contact with your skin.

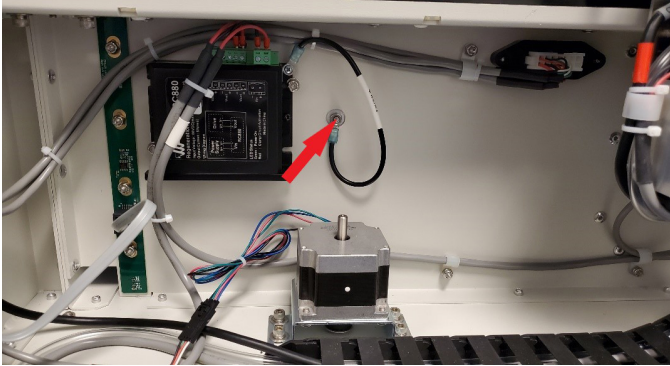
4. The image below shows the correct way to wear the anti-static strap:



5. Once the strap is secure to your wrist, attach the alligator clip to a bare metal surface in the engraver. Common locations include screw through holes, engraver side panel tabs, or the chassis.

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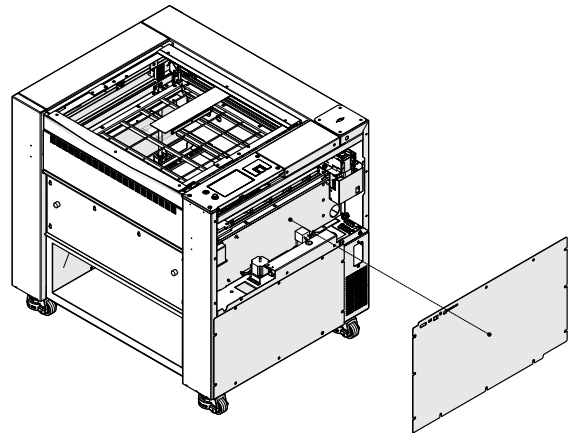
6. The preferred location to attach the alligator clip is the chassis bolt that connects to the ground from the regenerative clamp, located behind the right panel of the engraver:



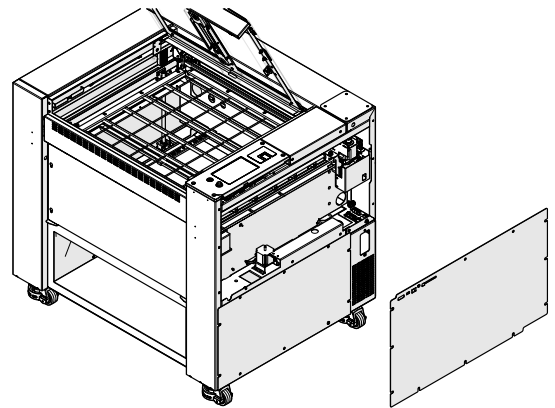
Carriage Camera Replacement

Carriage Camera Removal

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

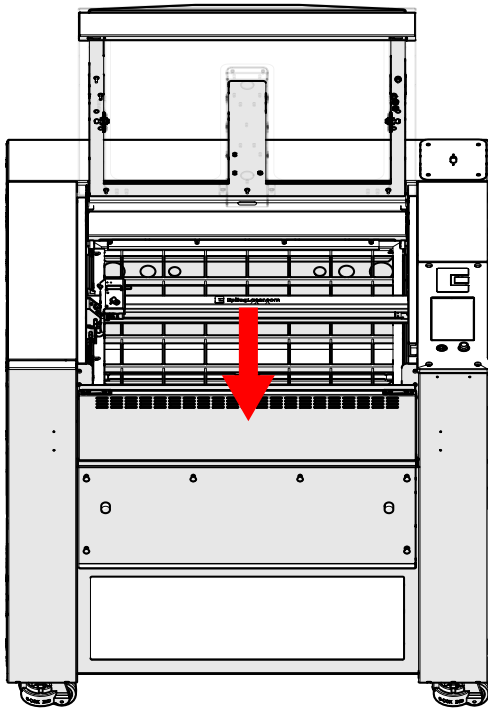


4. Open the top door of the engraver:

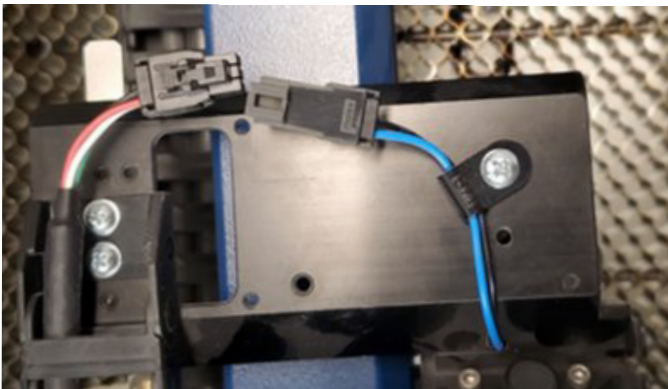


17000 Carriage Camera Replacement

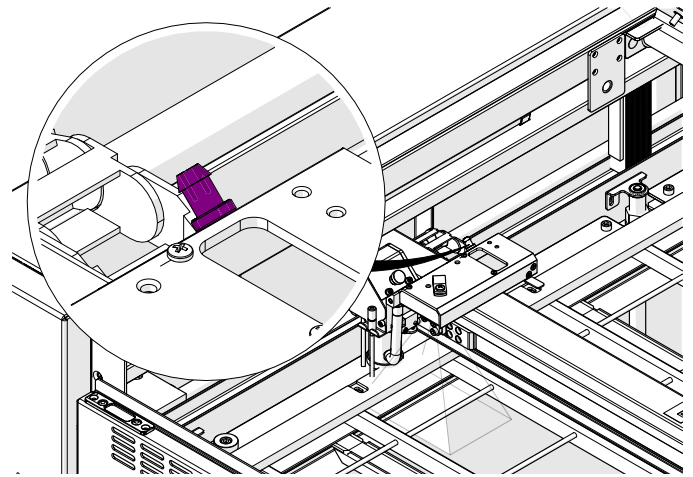
5. Manually move the x-axis assembly to the middle of the engraver:



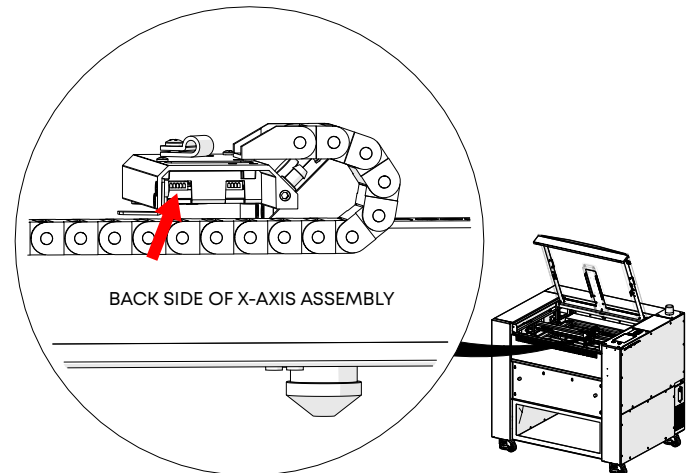
6. Disconnect the autofocus switch electrical harness:



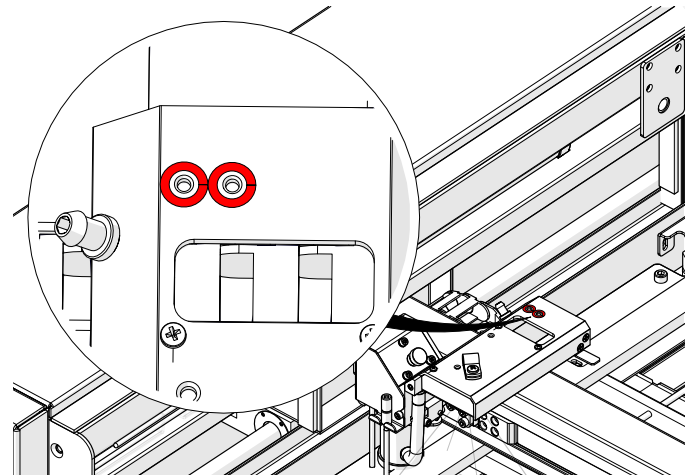
7. Disconnect the air assist tubing from the camera bridge:



8. Disconnect the electrical harness from the carriage camera PCB:

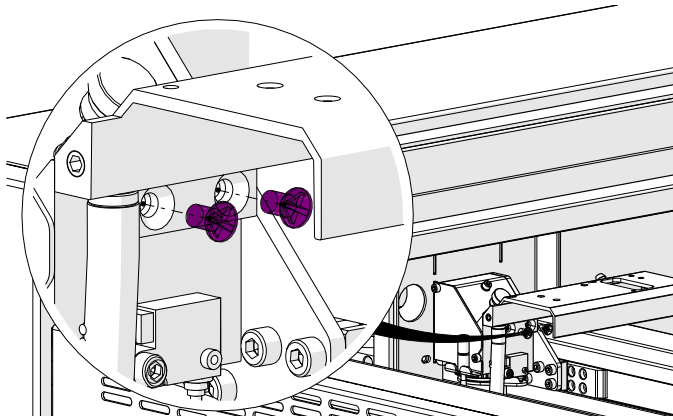


9. Loosen and remove the two (2) Phillips screws that secure the cable track to the carriage assembly:

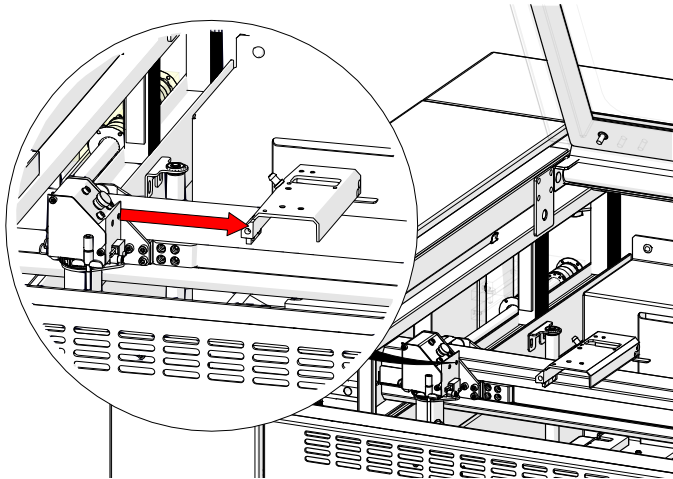


17000 Carriage Camera Replacement

10. Loosen and remove the two (2) Phillips screws that secure the camera bridge to the carriage assembly:

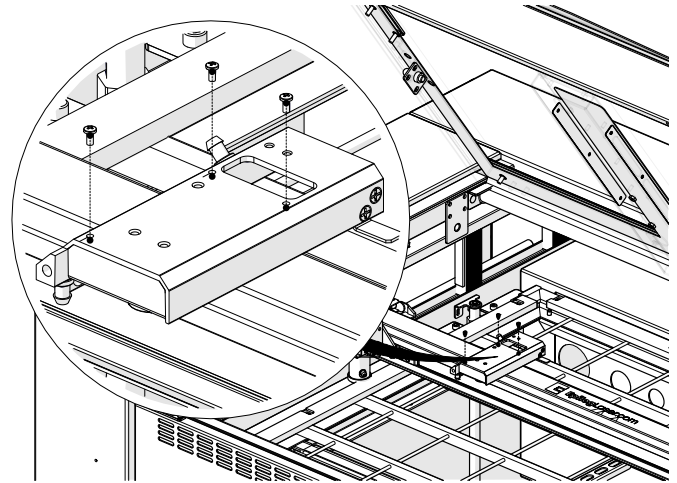


11. Move the camera bridge to the right:

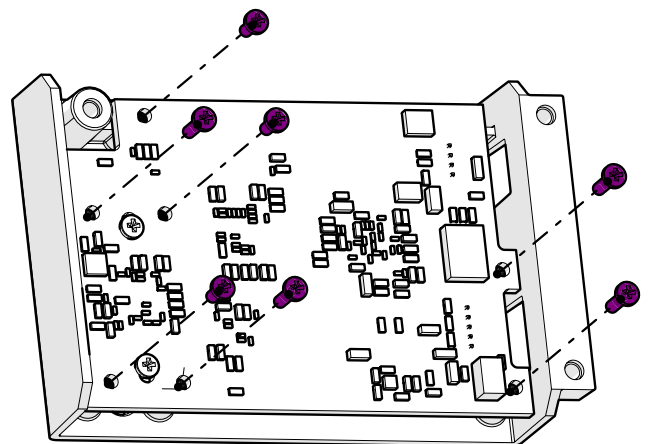


12. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface in the machine.

13. Hold the carriage camera housing to ensure it does not fall and become damaged. Loosen and remove the three (3) Phillips screws that secure the carriage camera board housing to the camera bridge:

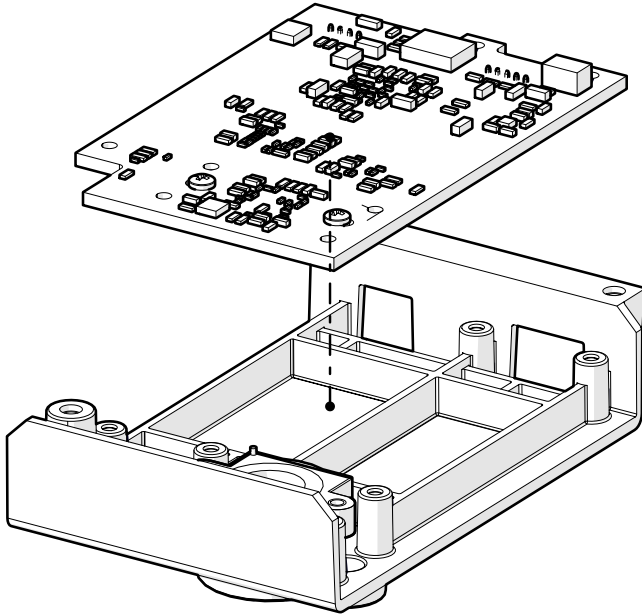


14. Loosen and remove the seven (7) Phillips screws that secure the carriage camera board to the carriage camera housing:

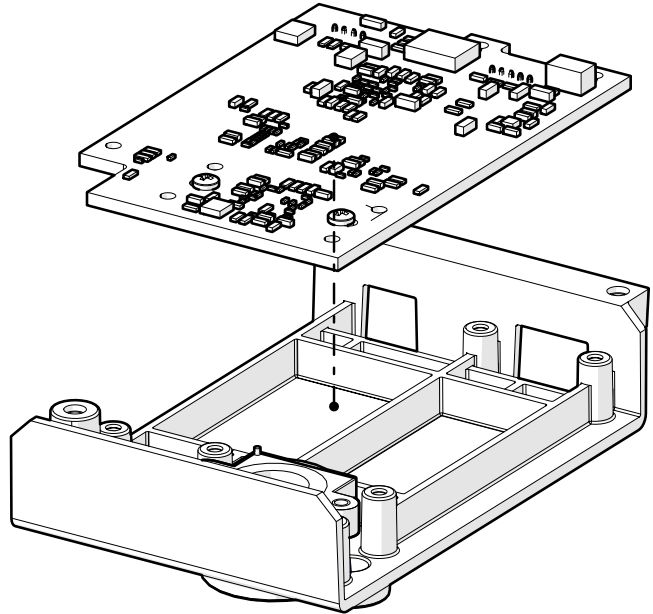


17000 Carriage Camera Replacement

15. Remove the carriage camera board from the carriage camera housing:



2. Place the carriage camera board in the carriage camera housing:

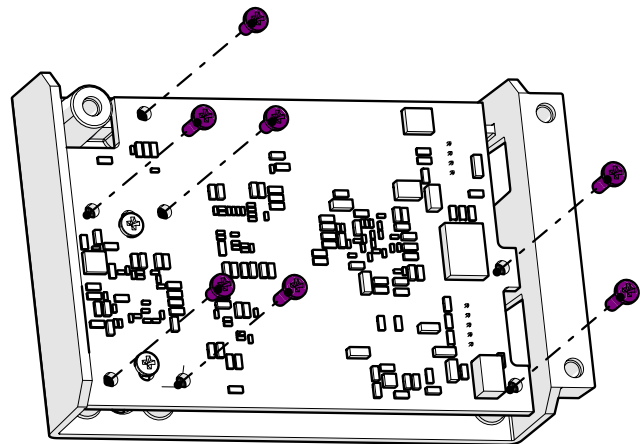


Carriage Camera Installation



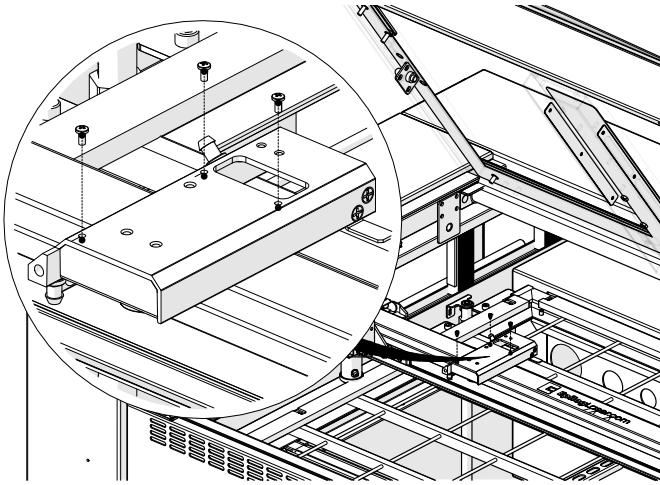
1. Place the anti-static strap around your wrist and attach the clamp to a bare metal surface in the machine.

3. Install and tighten the seven (7) Phillips screws that secure the carriage camera board to the carriage camera housing:

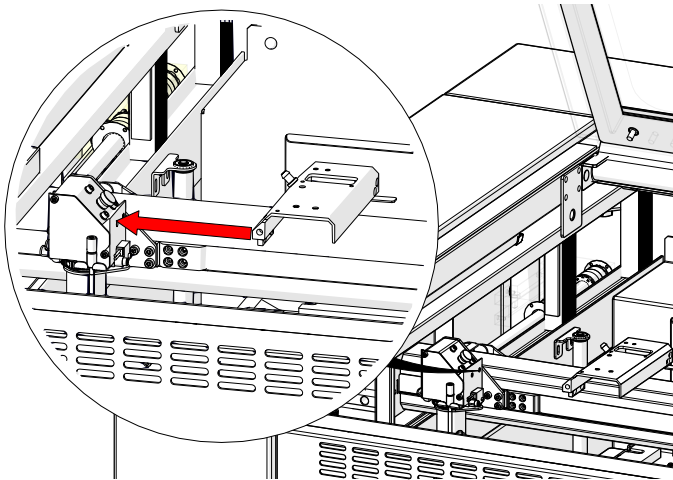


17000 Carriage Camera Replacement

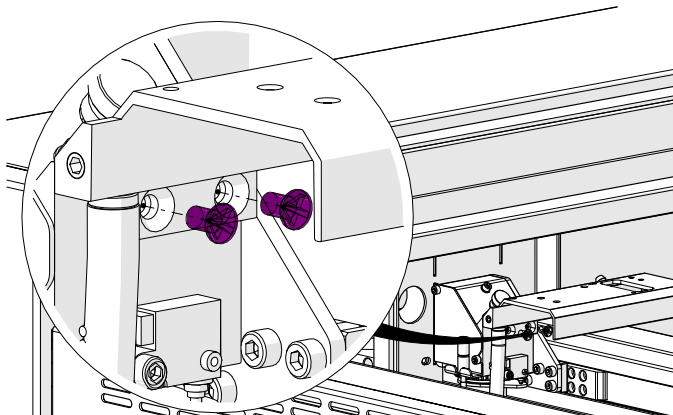
4. Place the carriage camera housing in the camera bridge. Install and tighten the three (3) Phillips screws that secure it:



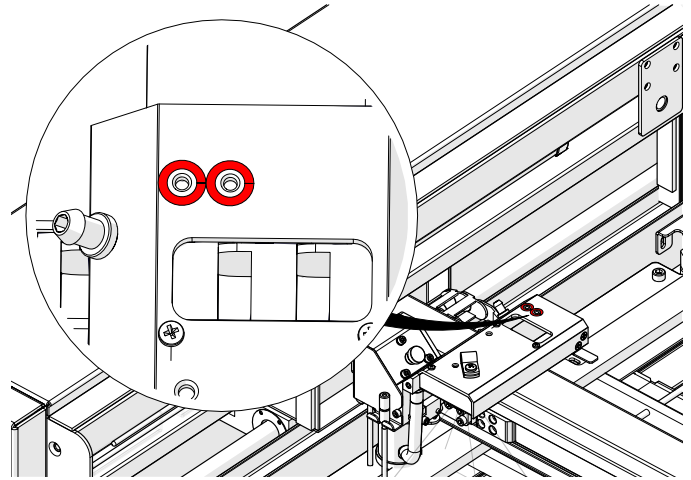
5. Move the camera bridge to the left:



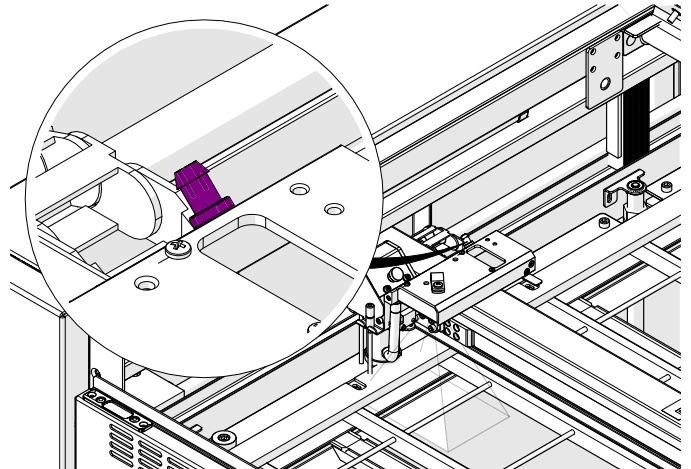
6. Install and tighten the two (2) Phillips screws that secure the camera bridge to the carriage assembly:



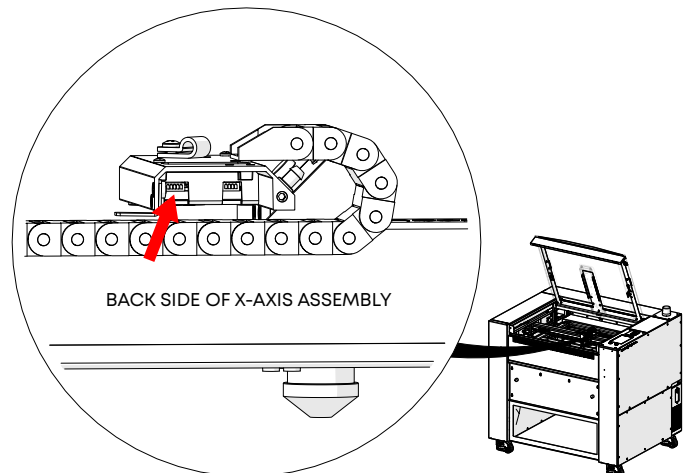
7. Install and tighten the two (2) Phillips screws that secure the cable track to the carriage assembly:



8. Connect the air assist tubing to the camera bridge:



9. Connect the electrical harness to the carriage camera PCB:



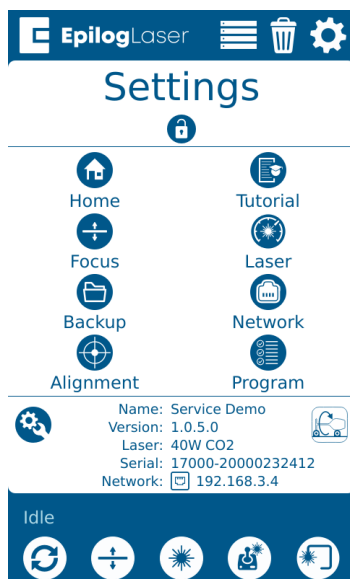
17000 Carriage Camera Replacement

Programming the Lens Camera Board

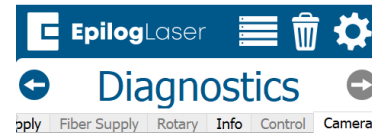
1. Reconnect to power and turn on the engraver.
2. At the display panel, press the gear icon in the upper right-hand corner of the display to open the Settings menu:



3. Press and hold the word “Settings” on the display to gain access to the Advanced Settings menu:

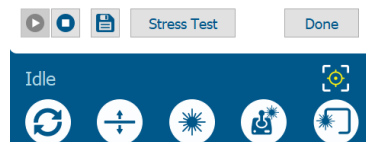


4. Once in the Advanced Settings menu, enter the Diagnostics menu and use the arrow keys to scroll to the Camera tab:



Test & Update

Stream



5. Press the Test & Update button and follow the on-screen prompts to update the carriage camera.
6. Once the update has completed, exit the Diagnostics menu.
7. After replacing the carriage camera, complete the focus calibration and camera calibration procedures outlined in the Fusion Pro User's Manual, available here:
 - <https://www.epiloglaser.com/assets/downloads/manuals/fusionseries-manual-web.pdf>

if further assistance is required, please contact Epilog Tech Support by phone at 303-215-9171, or by email at tech@epiloglaser.com.