



## EPILOG LASER

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Golden, Colorado 80403

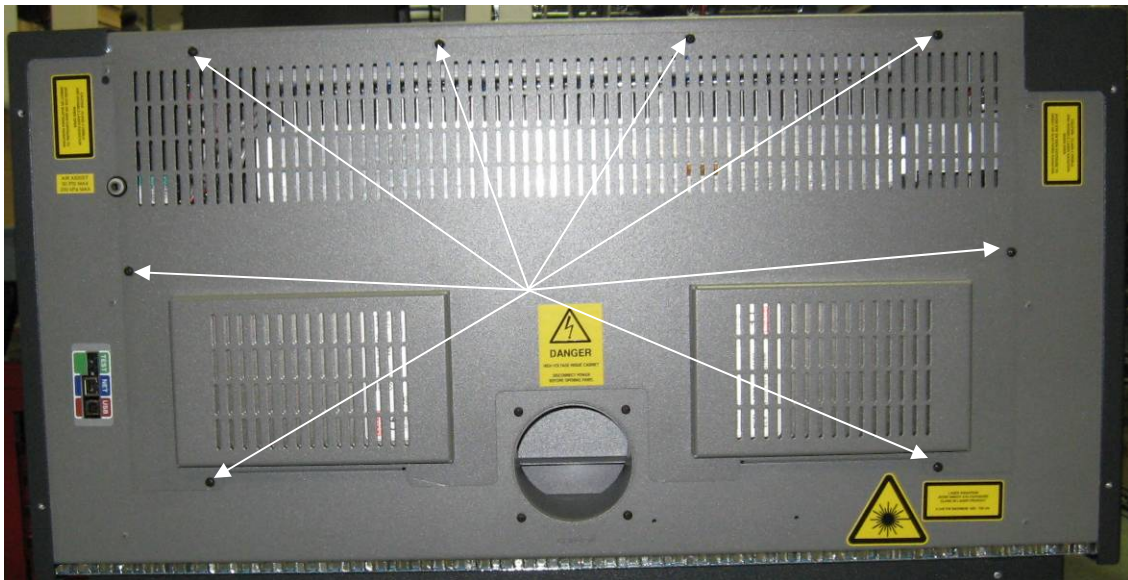
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www.epiloglaser.com

### Installing the Super-Silent fans in your Epilog Mini 24 or Helix machine

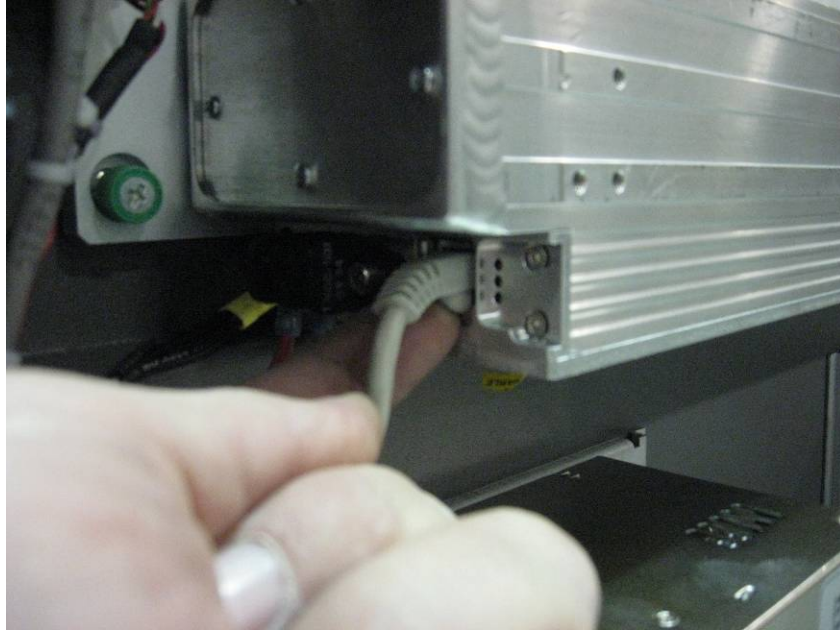
Tools needed: #1 Phillips head screwdriver  
5/16 nut driver

1. Turn engraver off and unplug the engraver from the power source.
2. Facing the rear of the machine, remove the 8 Phillips screws which secure the rear panel to the machine (Picture 1)



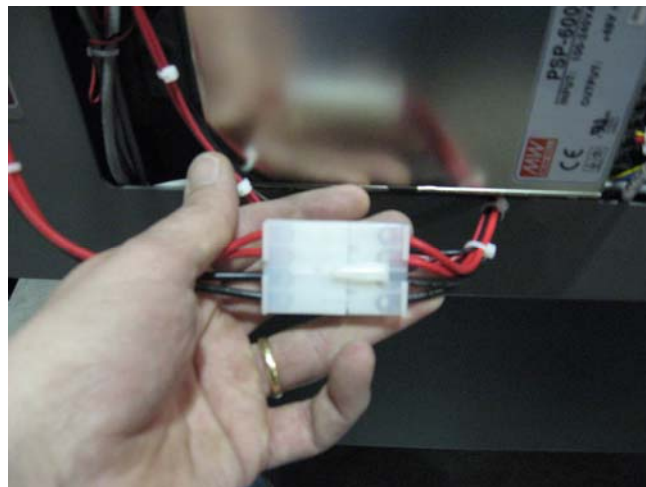
Picture 1

3. The laser tube is silver in color and sits directly above the exhaust outlet. Disconnect the gray communication cable from the left side of the laser tube by pressing the plastic tab on it and pulling it free from the laser tube itself. (Picture 2)



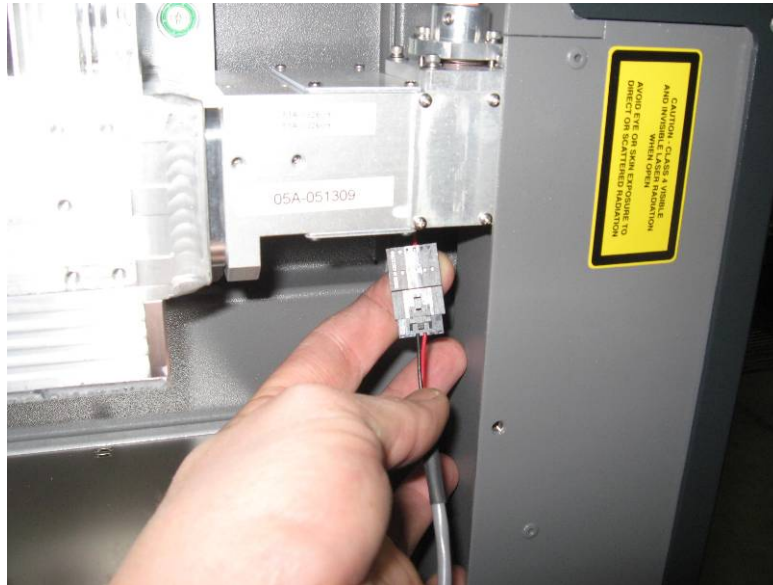
Picture 2

4. Locate the red and black electrical wires that lead from the laser. Follow the wires to the white connector and disconnect the electrical connection to the laser. To unlock the connector, press down on the plastic tab of the connector and pull free from the plug of the wiring harness. (Picture 3)



Picture 3

5. Unplug the Red Dot pointer. The red dot pointer is located on the right side of the laser tube. There is a small red and black wire that comes from the diode and connects to a black connector. Disconnect this connector by pressing on the plastic tab and pulling the connector free. (Picture 4).



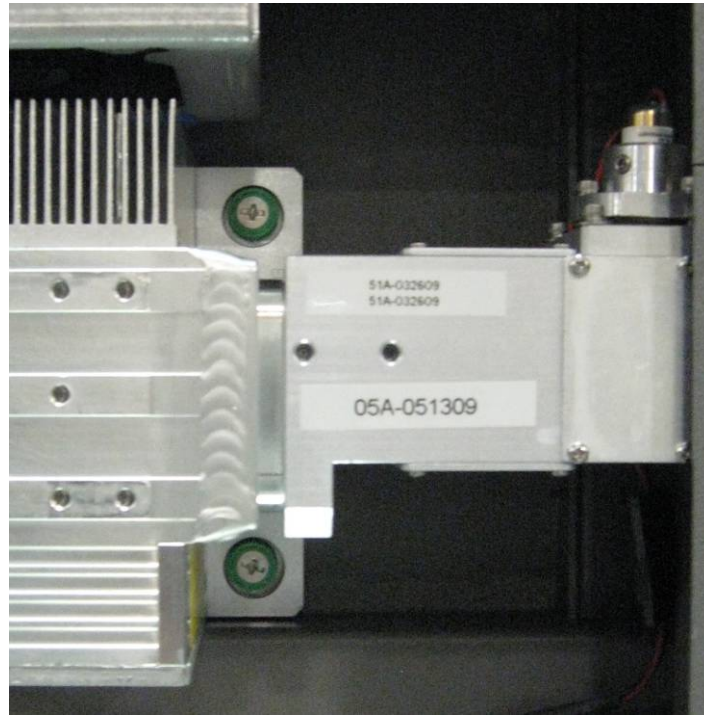
Picture 4

6. The laser is mounted via three captive screws, two on the right hand side and one on the left hand side of the laser tube and two mounting/guide pins. The pins retain the laser in the machine when the captive mounting screws are loosened. The captive mounting screws are identified by the green ring surrounding the Phillips screws. Loosen the Phillips screws all the way. The laser will loosen slightly, but the mounting pins will keep it in the machine. See pictures 5 and 6 below for location of captive screws and one of the mounting pins. The mounting/guide pin on the right hand side of the machine is hidden behind the lasers heat sinks (fins).



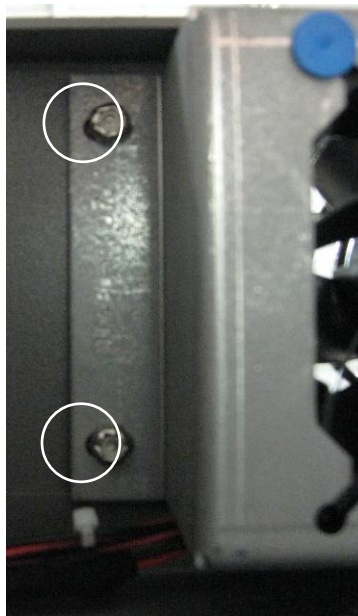
Picture 5

Shows Captive screw and mounting pin

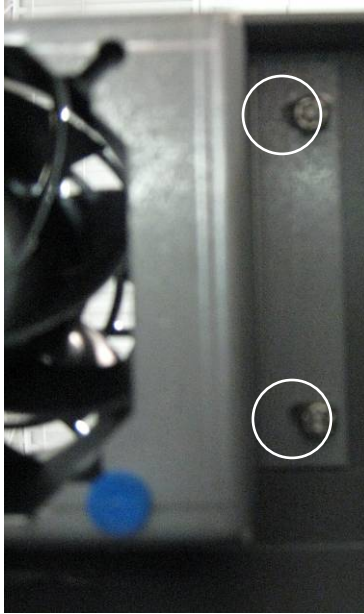


Picture 6  
Right side of laser assembly  
Shows captive screws

7. To remove the laser, gently slide the laser to the left and lift the laser off of the mounting/guide pins. The laser can now be removed from the machine. Set the laser to one side.
8. Using the 5/16 nut driver, remove the four 5/16 nuts which secure the fan panel to the machine and remove the fan panel. Pictures 7 and 8.

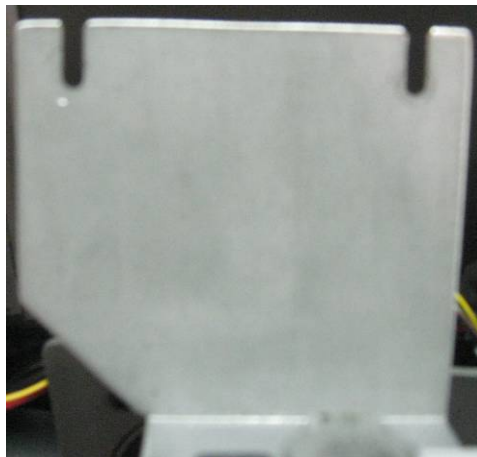


Picture 7  
Left hand side of fan panel



Picture 8  
Right hand side of fan panel

9. Install the new fan panel on the Mounting studs. **DO NOT TIGHTEN THE NUTS AT THIS TIME. ONLY START THE NUTS TWO OR THREE TURNS.**
10. Install the fan control PCB mount. The mount fits on the right hand side of the machine between the fan panel mount and the mounting screws. The fan control PCB mount has two cut outs in it, picture 9.



Picture 9  
Mounting slots fan control PCB

11. These cut outs fit over the fan panel mounting studs. To install the fan control PCB mount, push the fan panel up and slip the mount in to place. Picture 10



Picture 10

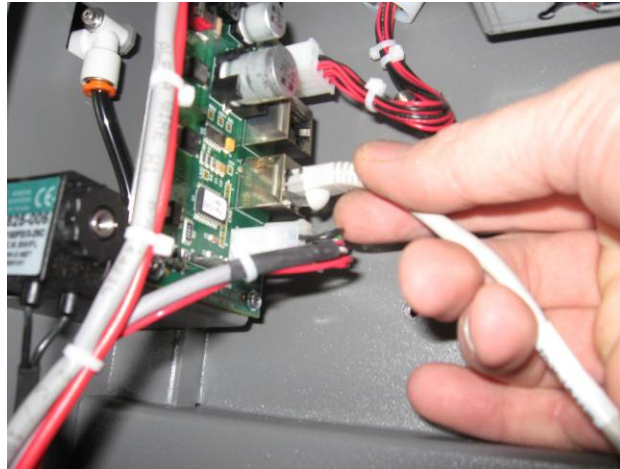
12. Gently tight the fan 5/16 nuts which secure the fan panel to the chassis. NOTE: The fan panel mounting studs are aluminum. DO NOT OVER TIGHTEN, YOU CAN BREAK THEM.

13. Plug the fan panel in to the upper white connector on the fan panel. Picture 11



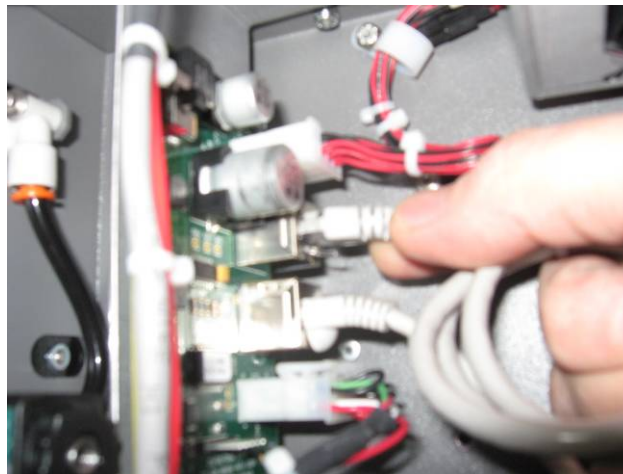
Picture 11

14. Connect the main harness data cable to the lower data port on the fan control PCB. Picture 12



Picture 12

15. Connect one end of the new data cable to the Upper data port on the fan control PCB picture 12 and connect the other end to the data port on the laser. Picture 13



Picture 13

16. Plug in the main fan harness in to the lower white connector on the fan panel PCB, Picture 14.

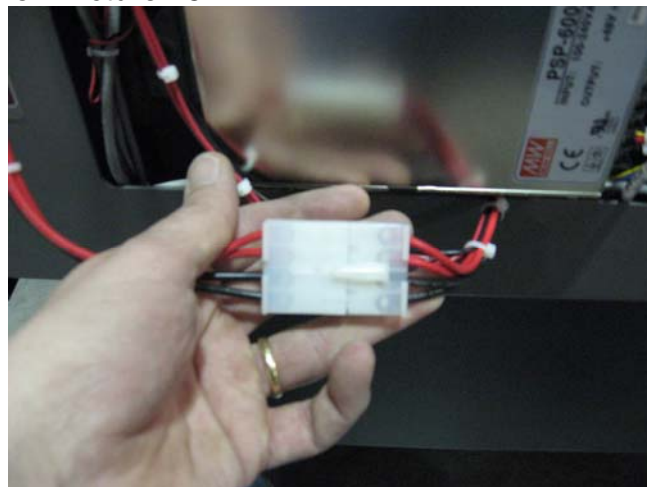


17.

18. Picture 14

19. Re-install the laser tube in to the machine. Hang the laser on the mounting guide pins. Gently slide laser to the right until it stops. Tighten the Green captive screws.

20. Connect the lasers power. Picture 15



21.

Picture 15

Laser power connection

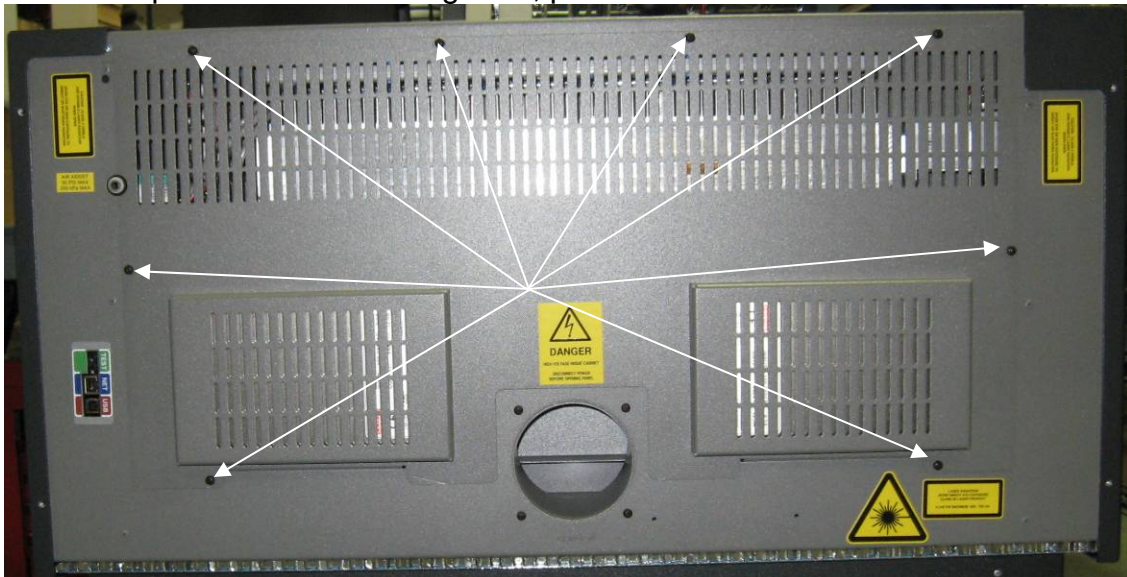


22. Connect the Red dot pointer, picture 16



Picture 16  
Red Dot pointer connection

23. Install the rear panel of the laser engraver, picture 17.



Picture 17

24. Alignment of the machine should not be necessary.

25. This completes the Super Silent fan installation in your Epilog laser engraver.

If you have any further questions regarding this procedure, please contact Epilog Technical support at the following:

Phone 303-215-9171

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Email [tech@epiloglaser.com](mailto:tech@epiloglaser.com)