



EPILOG LASER

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Procedure Title: Fiber Laser Replacement

Machine Type: FiberMark Laser Engraver

Tools Needed: #1 Phillip's Screwdriver



WARNING:

- **UNDER NO CIRCUMSTANCES ARE YOU TO ATTEMPT TO OPERATE THE FIBERMARK LASER ENGRAVER WITH THE SIDE PANELS REMOVED. SERIOUS and PERMANENT EYE DAMAGE MAY OCCUR.**



- **LEXAN SAFTEY GLASSES WILL NOT PROTECT YOUR EYES FROM THE FIBERMARK'S LASER BEAM.**

NOTICE

- THE FIBER OPTIC CABLE IS VERY DELICATE.
- DAMAGE TO THE OPTICAL FIBER IS NOT COVERED BY THE MANUFACTURERS WARRANTY.
- DAMAGE TO THE FIBER OPTIC CABLE IS A \$3000.00 (USD) REPAIR.
- NEVER BEND THE FIBER OPTIC CABLE TIGHTER THAN A THREE INCH RADIUS.

1. Disconnect the machine from the power source.
2. Using the #1 Phillip's Head Screw driver remove the rear panel from the machine.
3. There are five electrical connections from the power supplies that must be de-mated and one ribbon cable that must be disconnected from the laser before it can be removed. If the connections can't be removed at this time because they are hidden from view by the laser, they may be disconnected after step 10 when the laser is removed from the chassis. If you choose to disconnect them after step 10, be aware that the cables are not that long and that the laser must be set directly behind the chassis of the machine until the electrical connections are disconnected.
4. Inside the rear panel of the engraver, on the right hand side of the machine as you face the machine from the back side is the optical isolator/collimator. (Diagram 1)

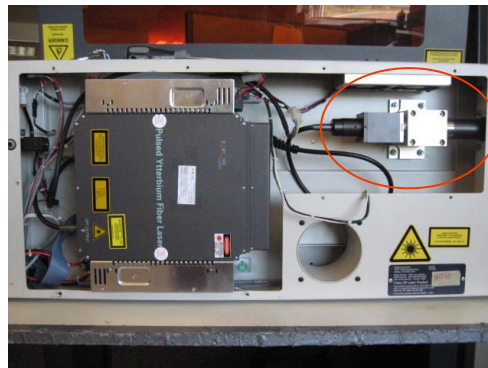


Diagram 1
Circle shows location of
Isolator/Collimator

5. There are four Allen Screws which secure the isolator/combiner in to the mount. Loosen the four mounting screws and remove all but one. It makes no difference which screw is left in the mount. You are leaving it in place to prevent the isolator/combiner from falling out before you are ready.

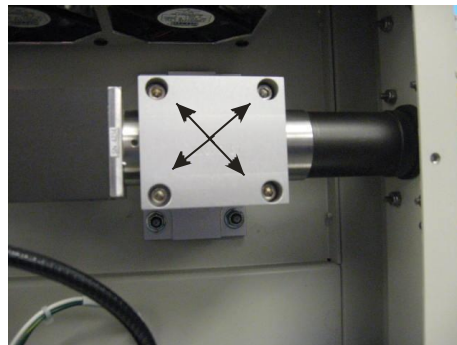


Diagram 2
Isolator/Collimator
detail

- As you remove the last Allen Screw, hold the optical isolator/combiner in your free hand. DO NOT ALLOW the isolator/combiner to drop out of the mount. Carefully set the isolator/combiner off to the right hand side of the machine.
- Locate the four captured GREEN mounting screws. The mounting screws are located at each corner of the laser assembly. (Diagram 3). Loosen all four of the Green captured screws.

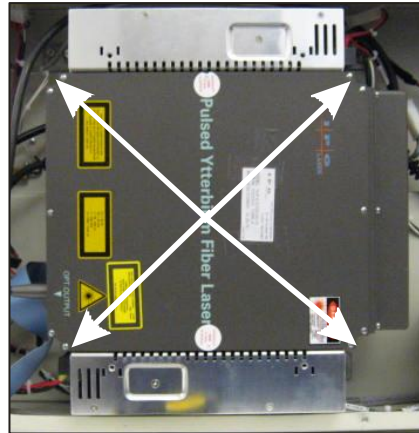


Diagram 3
Location of
Green captured
Mounting screws

- The laser rests on guide pins at the top of the laser mount. These pins will prevent the laser from falling when the captured green screws are loosened. But the pins also require that the laser is lifted slightly to remove the brackets from the guide pins. (Diagram four)



Diagram four
Mounting pin
Detail

- Lift the laser assembly up, to clear the heads of the mounting pins and then remove the laser from the machines chassis.
- If you have not disconnected all of the electrical connections from the power supplies and laser assembly do so now.
- Carefully set the laser assembly to one side.

12. Position the replacement laser assembly at the rear of the FiberMark laser engraver.
13. Reconnect the five Electrical connections and the one ribbon cable to the laser/power supply assembly.
14. Lift the laser and gently set it on the mounting pins attached to the rear of the machines chassis.
15. Tighten the four Green captured screws.
16. Carefully position the isolator/collimator on the mounting block. Be careful not to bend the fiber optic cable to less than a three-inch radius and install the four mounting Allen screws.
17. Check the alignment of the FiberMark laser engraver by completing the "Checking your FiberMark laser alignment" technical note.
18. Install the back panel on the FiberMark Laser engraver.
19. This completes "Replacing the FiberMark laser" procedure.

If you have any questions please call Epilog's Technical Support

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