Alignment of Plate Fly-off Sensor

Context

ThermoFlex

Background

During normal operation, the plate fly-off sensor on the ThermoFlex halts drum rotation immediately upon detection of a plate fly-off. Current sensors are Class II laser devices.

This alignment procedure is to be used with units that contain drum mount inner side plates(57-8265A) that have been modified (M5 holes drilled into them) in accordance with non-conformance report A756. This label will appear on the plates. The previous revision of plates had the alignment holes drilled in the wrong place. This modification allows the laser to hit the sensor. All revision B plates have the alignment holes drilled in the right place, allowing for the proper alignment procedure 73-3627A to be used.

Tools and parts

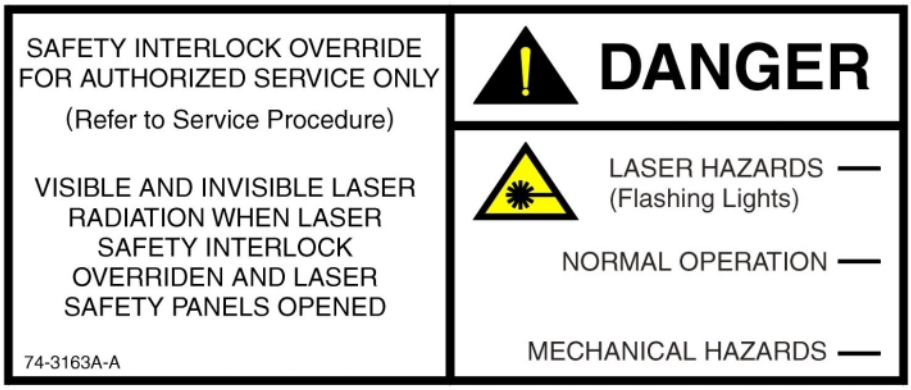
- Slot screwdrivers
- Hex drive set
- Socket wrench set

Procedure

1. Turn on the ThermoFlex machine

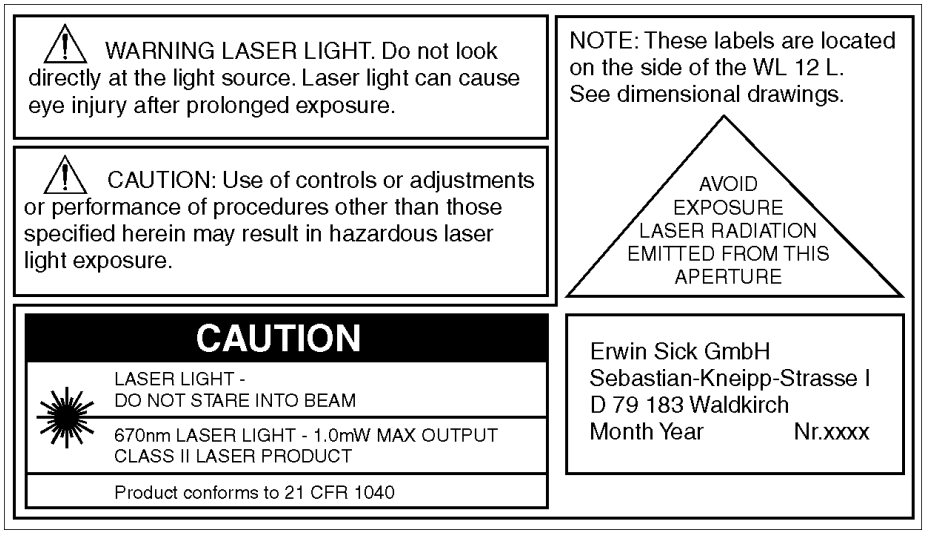
DANGER: PROCEED ONLY WITH PROPER EYE PROTECTION OR EXTREME CAUTION! EXPOSURE TO THE FLY-OFF LASER COULD RESULT IN PERMANENT EYE DAMAGE.

2. Open the top front and right side access panels
3. Remove the power box access panel
4. Insert the service key into the safety interlock override switch and turn it to the **LASER HAZARDS** position as shown below



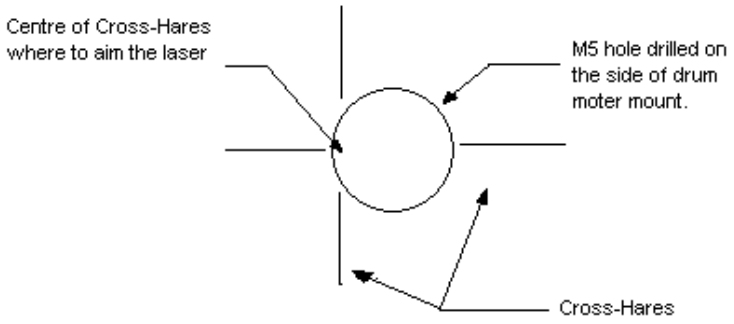
Note: A spare key is located at the panel under the key switch and can be removed using a 3mm hex key (notify the customer and CreoScitex support if the key is missing).

DANGER: DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. PROLONGED EXPOSURE MAY CAUSE EYE DAMAGE.



5. Remove the Drum Belt Guard from the Drum Motor Mount.
   The fly-off receiver is located inside the drum mount and the fly-off receiver hole is only visible once the drum belt guard is removed.
6. Place the fly-off laser alignment guide on the right hand side of the drum. Screw the guide onto the drum from the side with a M6 screw at a location near the fly-off laser.
   The guide is aligned properly when the bottom hole is inline with the edge of the drum and it sits perfectly perpendicular with the edge of the drum.
7. Place the fly-off laser inside the bracket and tighten the two M5 screws until the laser can only be moved in the slightest way.
8. Rotate the drum until the guide is lined up with the laser.
9. Loosen the M8 screws on the fly-off adapter plate and slide the plate until the laser lines up with the top hole on the guide.
10. Tighten the M8 screws on the adapter plate once the laser seems to be lined up with the hole.

11. Adjust the laser itself until the beam goes through the hole and lines up with the cross-hares scribed on the drum motor mount on the other side of the machine. Refer to diagram below:



12. Tighten the M5 screws holding the laser until it is firmly secured.
13. Verify that the indicator beam on the sensor is lit while the beam hits the receiver.
14. Verify status indicator on sensor extinguishes while interrupting laser beam with your finger.
    Alignment procedure is complete.
15. Turn the service key on the safety interlock override switch to the **NORMAL OPERATION** position. Remove the key and screw it back into place in it's original location.
16. Remove the fly-off laser alignment guide.
17. Replace the Drum Belt Guard and ensure that it does not trip the laser.
18. Replace all panels that were removed.
19. Resume normal operation.