

Exchange and Focusing of HBO Lamp on ZellScanner ONE Quick Guide

Below are the guidelines outlining the exchange and focus of a new HBO lamp on ZellScanner ONE.

Note: To guarantee the best results while scanning, the HBO lamp should be exchanged after 300 hours of run time.



Burn Hazard:
Lamp must be cooled down
completely before
exchange.

Mercury Hazard:
Lamp contains mercury
(Hg), assure all proper
precautions are taken when
handling.

A. Removal of Old Lamp

1. The running time of the HBO lamp is shown in the display of the power display. When the lamp has reached >300 hours it must be exchanged.
2. Ensure that the lamp is switched off and the casing is cold to the touch.

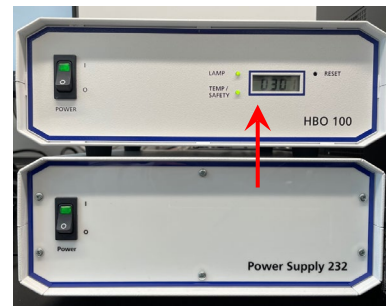


Fig. 1 | Hours Used
Location
(Step A1)

3. The HBO lamp is located behind the ZellScanner ONE.
4. To exchange the HBO lamp, unscrew the screws in the sides of the case using the 3.0mm diameter Allen/Hex Key. Turn the key in the “open”-direction. The screw is unbound when it is inside the case.
5. Repeat this for the other side as well.
6. Now carefully remove the case upward and place it off to the side.



Fig. 2 | HBO Lamp
Location
(Step A3)



Fig. 3 | Case Screw
Location
(Step A4)

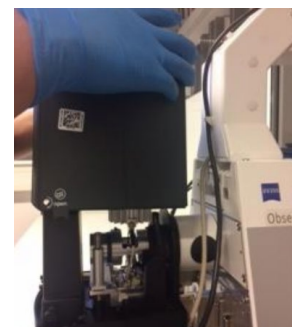


Fig. 4 | Removal of Case
(Step A6)

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A. Removal of Old Lamp Continued...

7. Remove the heat sink from the HBO lamp by pressing the level and let it hang to the rear.

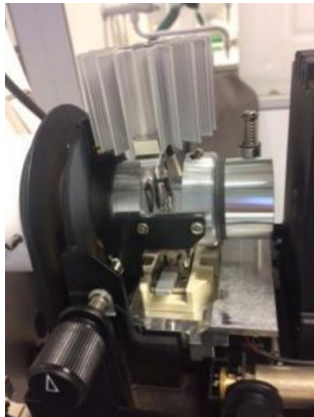


Fig. 5a | Removal of heat sink (Step A7)



Fig. 5b | Removal of heat sink (Step A7)

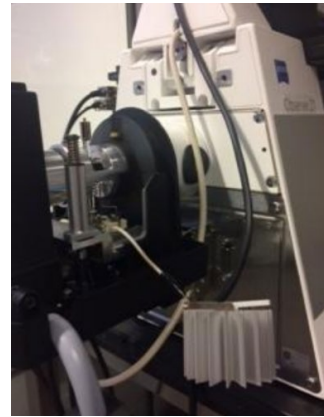


Fig. 5c | Removal of heat sink (Step A7)

8. Ensure disposable nitrile gloves are worn. Hold the narrow end of the HBO lamp using your thumb and index finger and press the lower lever with your other hand. Carefully remove HBO lamp.

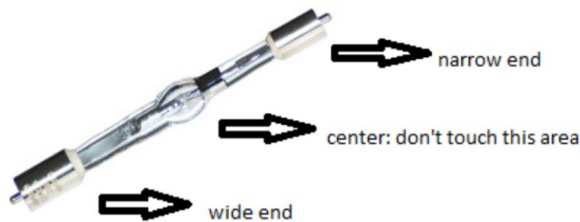


Fig. 6a | Anatomy of HBO lamp

9. Put the HBO lamp in a 50mL Falcon tube and discard the **mercury-containing lamp** according to your local standards.



Fig. 6b | Removal of HBO lamp (Step A8)

B. Installation of New Lamp

1. Unpack the new HBO lamp and make sure **not to touch the center of the lamp, only the ends of the lamp should be touched.**
2. Holding the HBO lamp with your thumb and index finger on the narrow end you can now put the new HBO lamp into the holder in the ZellScanner ONE.



Fig. 7 | Packaging of new HBO lamp

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3. Press down the lower lever with your other hand and place the wide end of the HBO lamp into the coil (Fig 8).

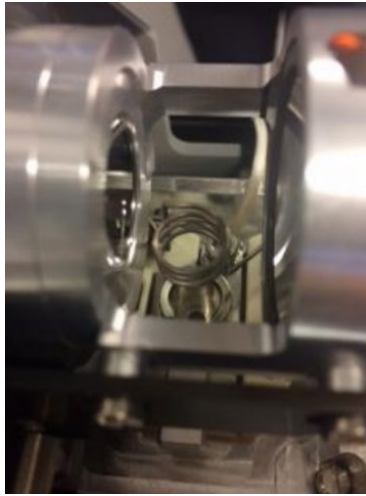


Fig. 8 | Coil location in ZellScanner ONE (Step B3)

4. Place the heat sink back on the narrow end of the HBO lamp by pressing the lever.
5. Replace the case over the HBO. Take care that no electric wire is caught between the cover and the base from ZellScanner ONE.
6. Screw down the screws on both sides against the “open”-direction until the screwheads are level with the case.
7. Do NOT touch or adjust the rotating knob shown in Fig. 9 during the entire process.
This will defocus the lamp!

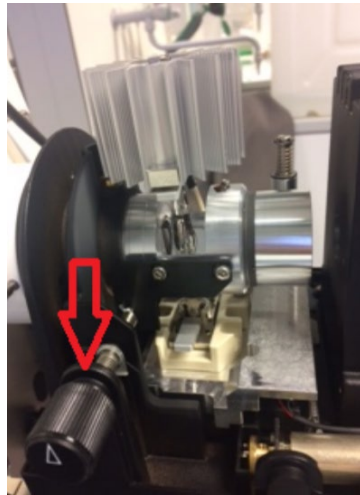


Fig. 9 | Rotating knob (Step B7)