

## Red Shipping Lock for the LS720 Deck Removal and Installation

**Warning: You must remove red shipping lock before plugging LS20 into power!! If not removed, the LS720 will be damaged!!**

### Red Shipping Lock Removal

1. Fig. 1 shows how the LS720 arrives with the red shipping lock installed. Using the supplied 3 mm hex wrench, loosen the 2 set screws on the top of the installed shipping lock (Fig 2). Loosen the 2 set screws (smaller and more internal) on the bottom of the lock (Fig. 3).
2. Unscrew the 2 larger screws on the bottom of the shipping lock (Fig. 3) completely. Slide the shipping lock toward you to remove.
3. Keep the 4 set screws screwed into the shipping lock and place in a secure place along with the 2 loose 1-inch screws and 3 mm hex wrench.

**Warning: You must install red shipping lock before placing into shipping carton!! If not installed, the LS720 can be damaged!!**

### Red Shipping Lock Installation

1. The red shipping lock comes with 4 nylon-tipped set screws inserted from the outside so tips face each other (Fig 4). If screws were removed previously, insert them. Adjust so each set screw tip is flush with the inside metal surface (screw heads will extend on the outside). There should be two 1-inch screws as well.
2. Raise top deck, remove objective from the LS720 optics block and install the lens cap (or cover with tape if a lens cap is not available). Do NOT leave the optics block uncovered. Lower the top deck onto the subdeck and lock with thumbscrew. In Lumaview, open Manual XYZ, and set Z to 0 (bottom of travel).
3. There are 2 versions of the LS720 deck/subdeck. Version 1 has a subdeck with a square shape (Fig 5). Version 2 has a subdeck with a triangular shape (Fig 6) and there are 2 vertical alignment marks on

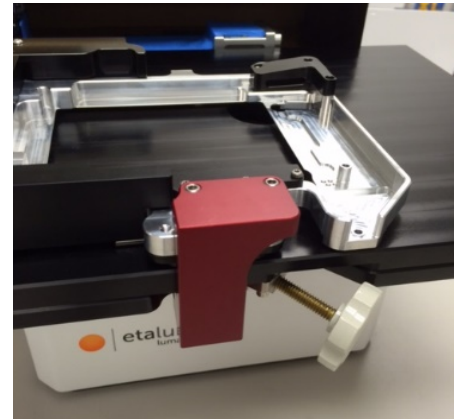


Fig 1. Shipping lock installed on LS720

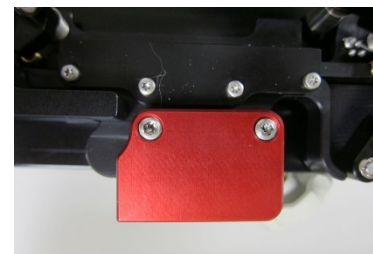


Fig 2. Installed shipping lock from top showing 2 set screws

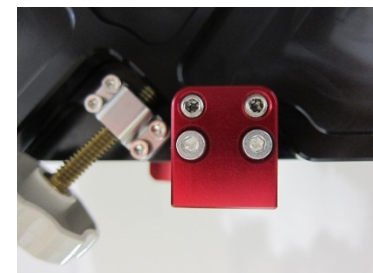


Fig 3. Installed shipping lock from bottom showing 2 set screws (smaller heads) and two 1-inch screws (larger heads)



Fig 4. Shipping lock with screws & wrench

the front edge of the plate carrier (near the thumbscrew) and the top deck front edge (Fig 7). Version 1 has no alignment marks.

4.
  - a. **Version 1 deck/subdeck:** Set step size to 10 mm, and move plate carrier toward front until end of travel. If carrier overhangs the deck, change step size to 0.5 mm and move back until there is no overhang. Repeat for side positioning by setting step size to 10 mm and moving carrier to left until end of travel. Change step size to 5.5 mm and press left arrow one time to move carrier slightly right.
  - b. **Version 2 deck/subdeck:** Set step size to 10 mm, and move plate carrier toward front until end of travel. Plate carrier should stop a few mm away from the front edge of the deck. Move the plate carrier to the right or left so that the vertical marks on the plate carrier and top deck are aligned (Fig 7). Adjust the step size as needed. This is in a different position compared to the LS720 with a version 1 deck/subdeck.
5. Unplug the power and USB cable from the LS720. Slide shipping lock into position at front of deck just left of the Deck Knob (Fig 1) so the 2 holes in the shipping lock line up with 2 holes on the front underside of the deck. Screw in the two 1-inch screws (Fig 3) until tight using the supplied 3 mm hex wrench (official torque is 16 in-pounds).
6. Tighten the 4 set screws in the shipping lock with the 3 mm hex wrench until they are just touching the plate carrier, then tighten a further quarter turn (top 2 screws, Fig 2) and deck surface (bottom 2 screws, Fig 3). Do NOT over tighten. Set screw heads will be approximately even with shipping lock surface.
7. Test by gently trying to lift plate carrier at front where it is being held by shipping lock. If plate carrier can be lifted at front, tighten the two 1-inch screws and then the 4 set screws a little more until plate carrier is securely locked. (Plate carrier may still be movable a small amount in areas where shipping lock is not located.)
8. **If the LS720 is being shipped to another end user, attach the sticker or a piece of removable tape over the power supply with a warning note to first remove shipping lock.**

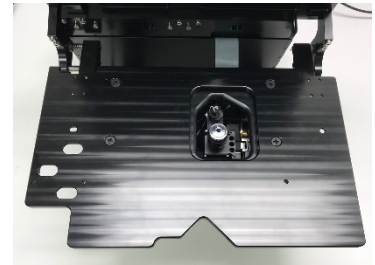


Fig 5. LS720 subdeck Version 1

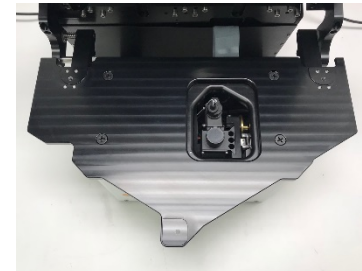


Fig 6. LS720 subdeck Version 2



Fig 7. Alignment marks on LS720 plate carrier and top deck on instruments with subdeck Version 2