

Harris Telescope

Filter Wheel Cleaning Procedure

Tools

You will need the 3/32in and 5/64in hex keys.



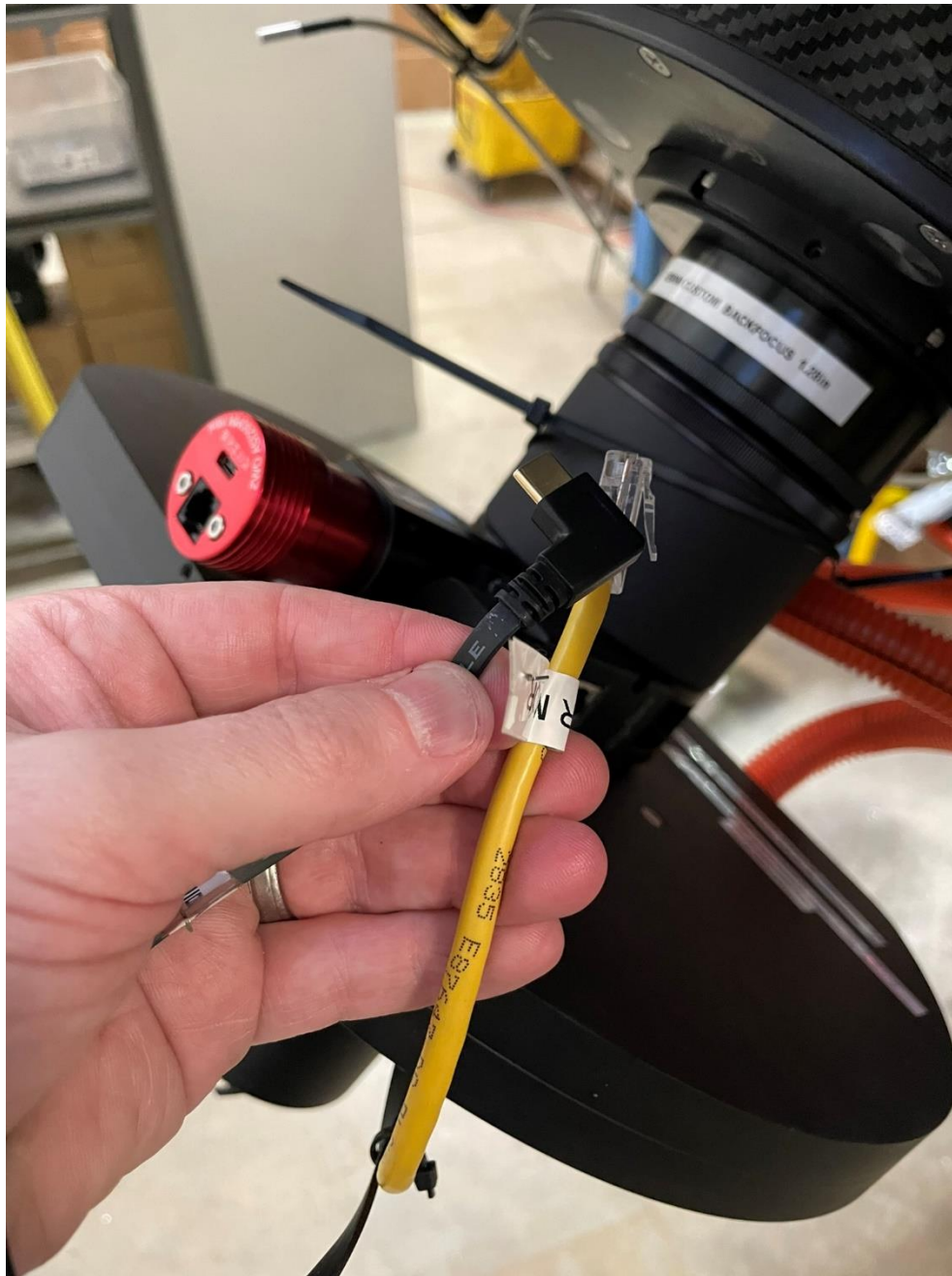
STEP 1

Put instruments in this orientation and note connections and wires. Normally this is how you will find the setup.



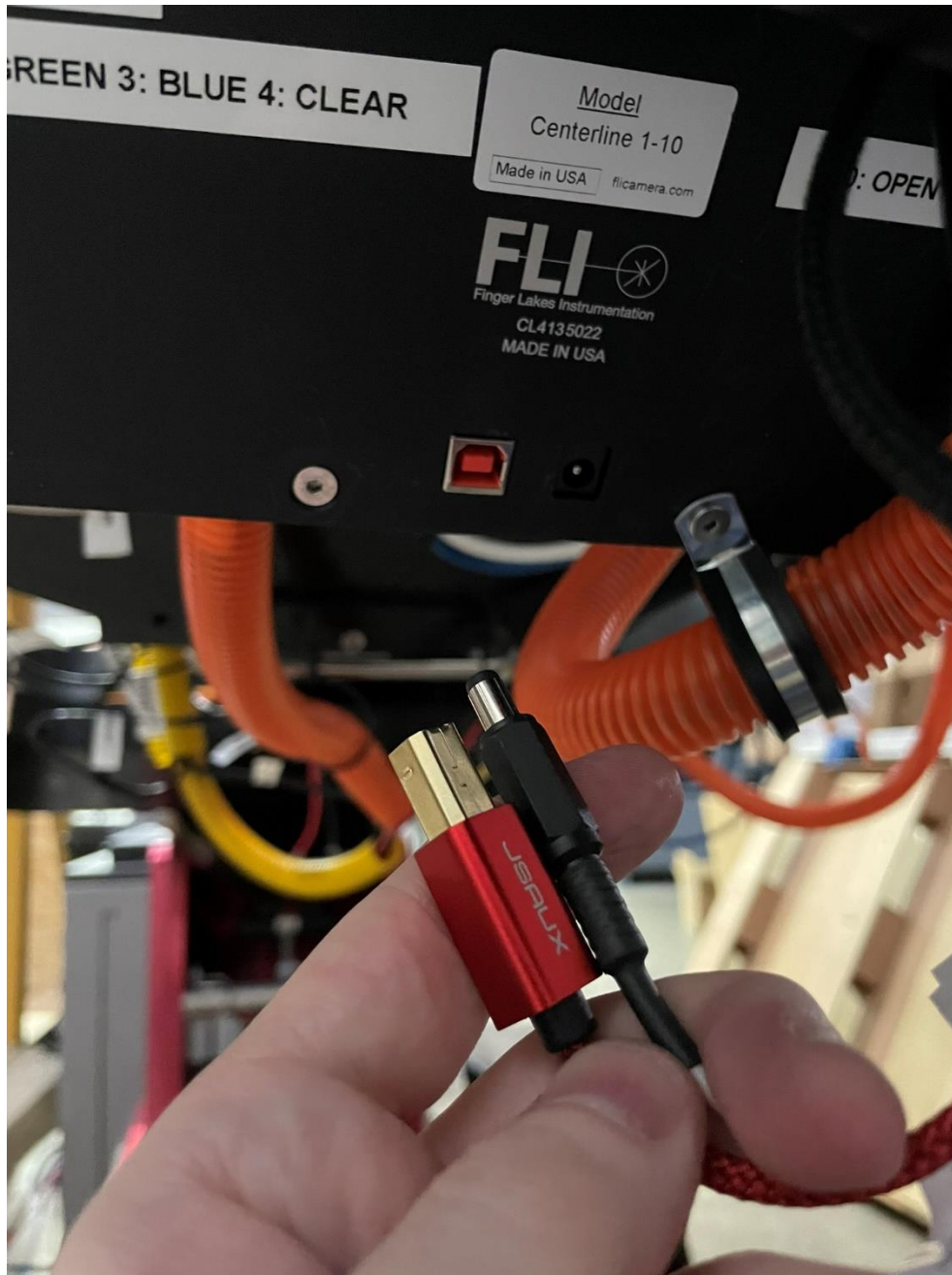
STEP 2

Unplug Guider data and motor cables.



STEP 3

Unplug Filter Wheel Cables.



STEP 4 (IMPORTANT!!)

Note Position/Bolt for the strain relief hole is immediately to the right of the cables you unplugged. This cable bundle must be returned to the position as shown.



STEP 5

Prepare a table or elevated surface as shown to set down filter wheel housing.



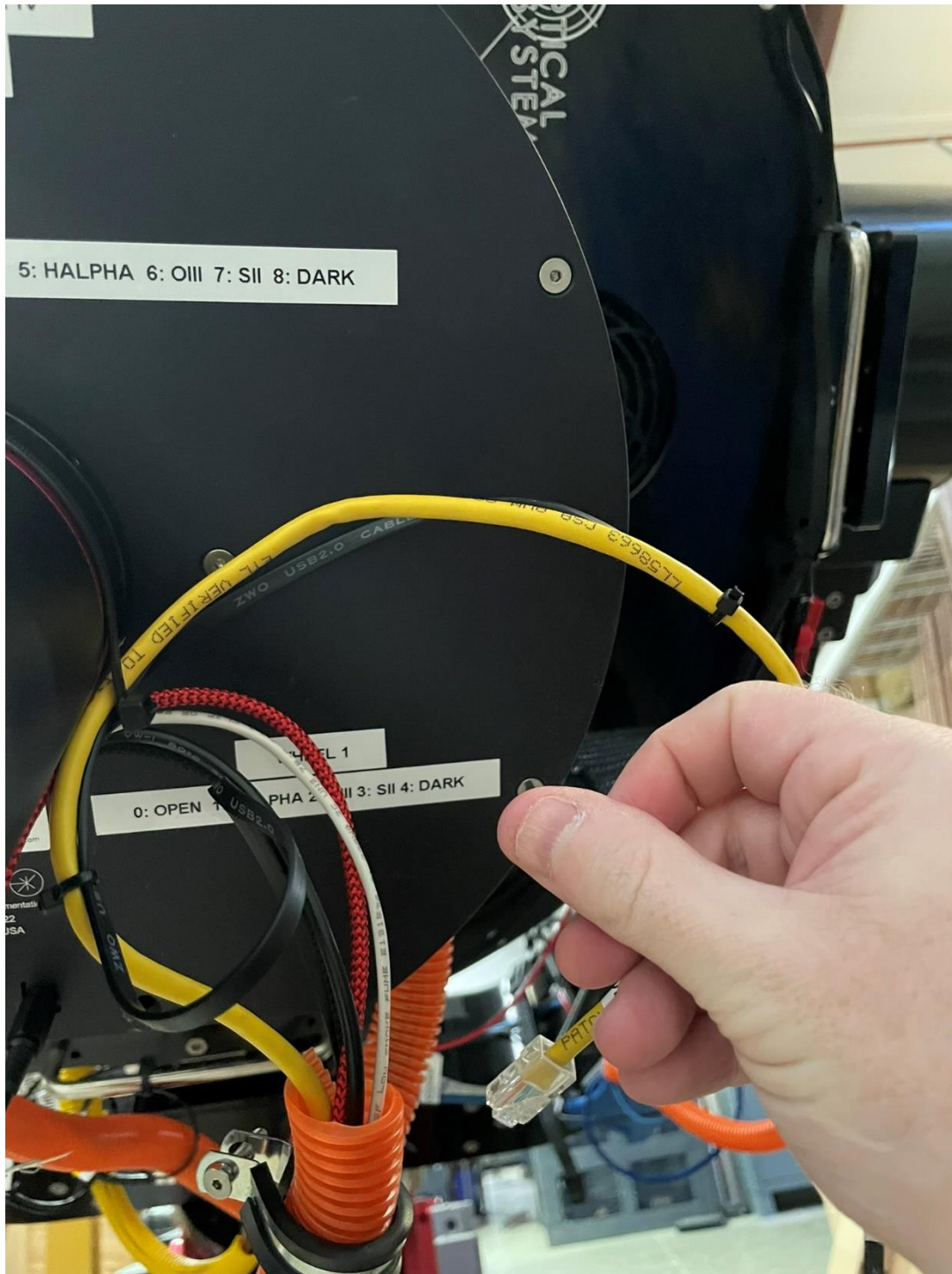
STEP 6

Remove Special Strain Relief Bolt. Do not lose it!



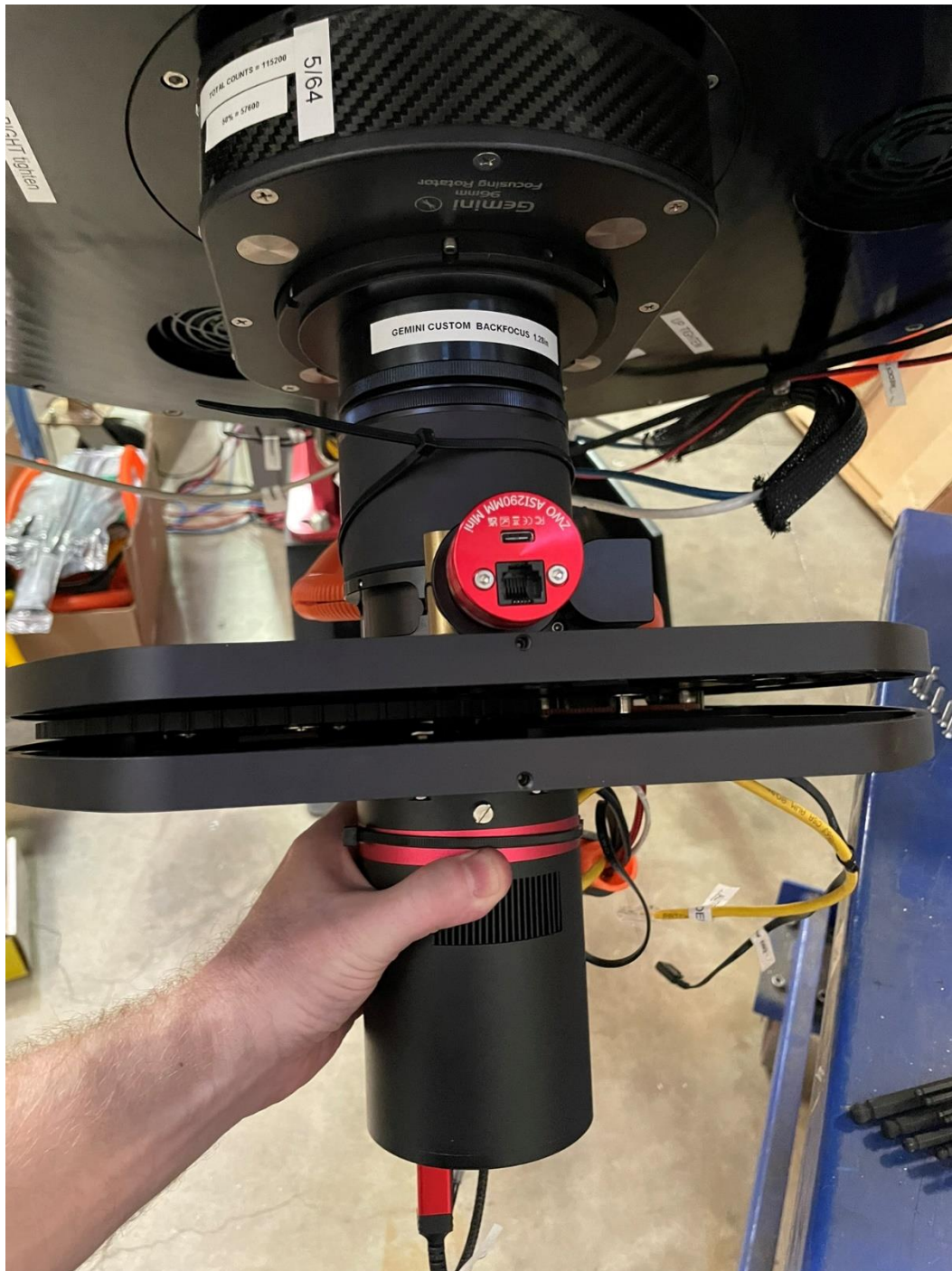
STEP 7

Remove the rest of the bolts around the circumference of the filter wheel housing.



STEP 8

Hold the camera and separate the filter wheel housing. Be careful of the filter wheel cable sockets (Step 3) behind camera cylinder in this image.



STEP 9

Place parts on table/surface.



STEP 10 IMPORTANT!!

Remove bolt that holds the outer filter wheel WHILE HOLDING FILTER WHEEL FROM THE OTHER SIDE!



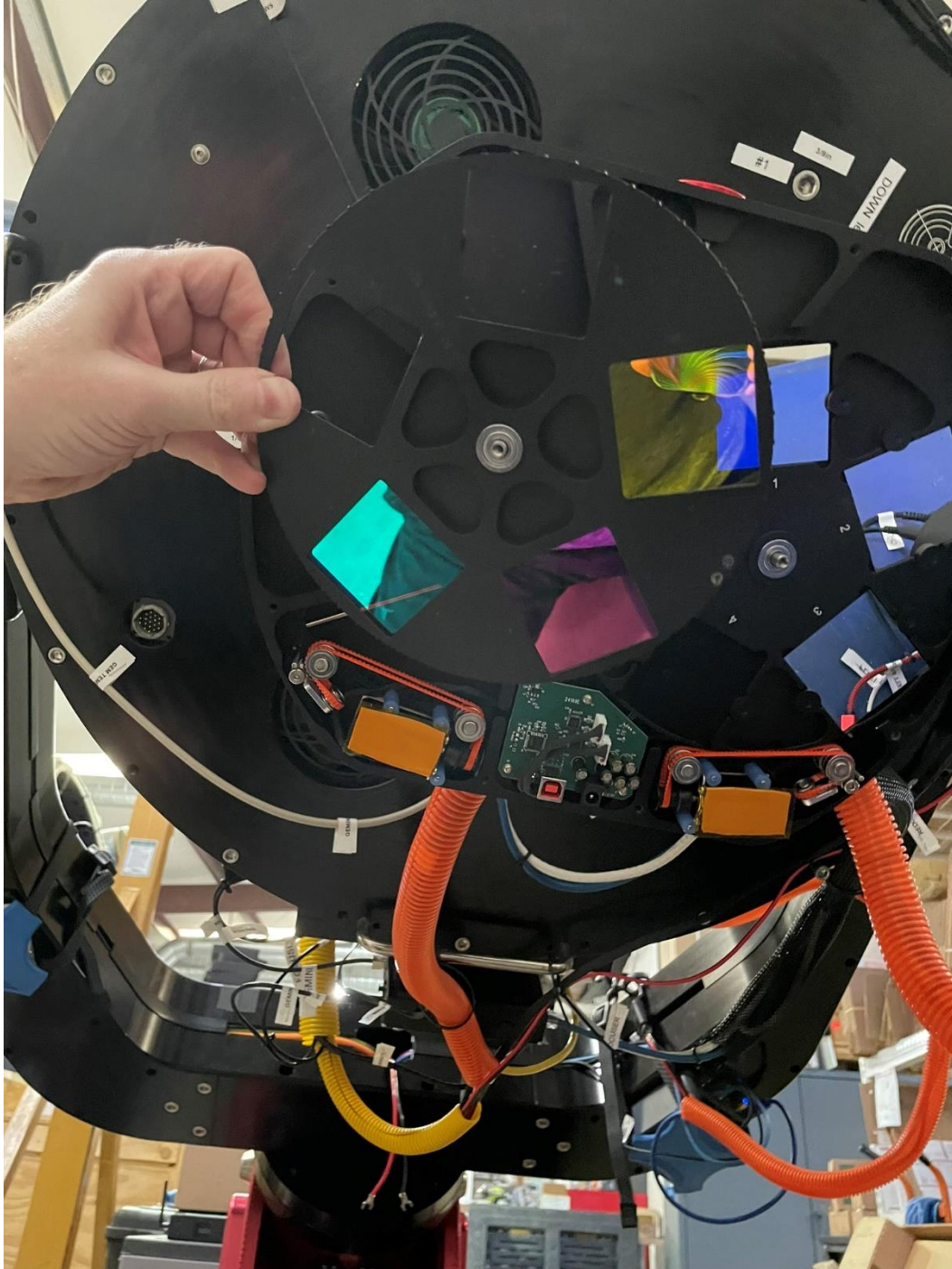
STEP 12

Shown below, holding the outer filter wheel by hub. Be careful of orange belts when removing. Note outer wheel meshes with “top” orange belt.



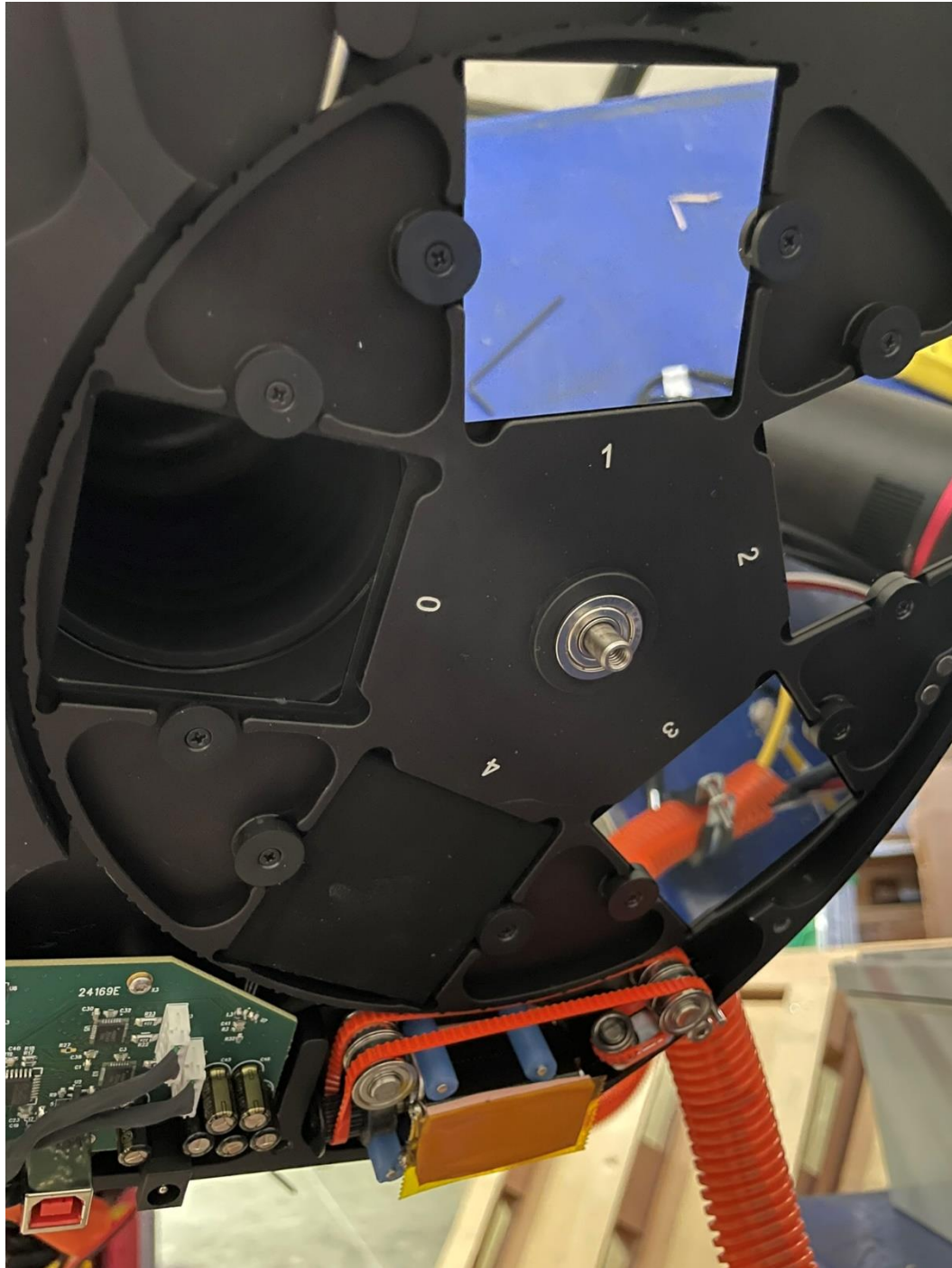
STEP 13

Clean filters (both sides) and place in safe place.



STEP 14

The inner wheel DOES NOT COME OUT!



STEP 15

This bolt for the inner wheel cannot be unscrewed.



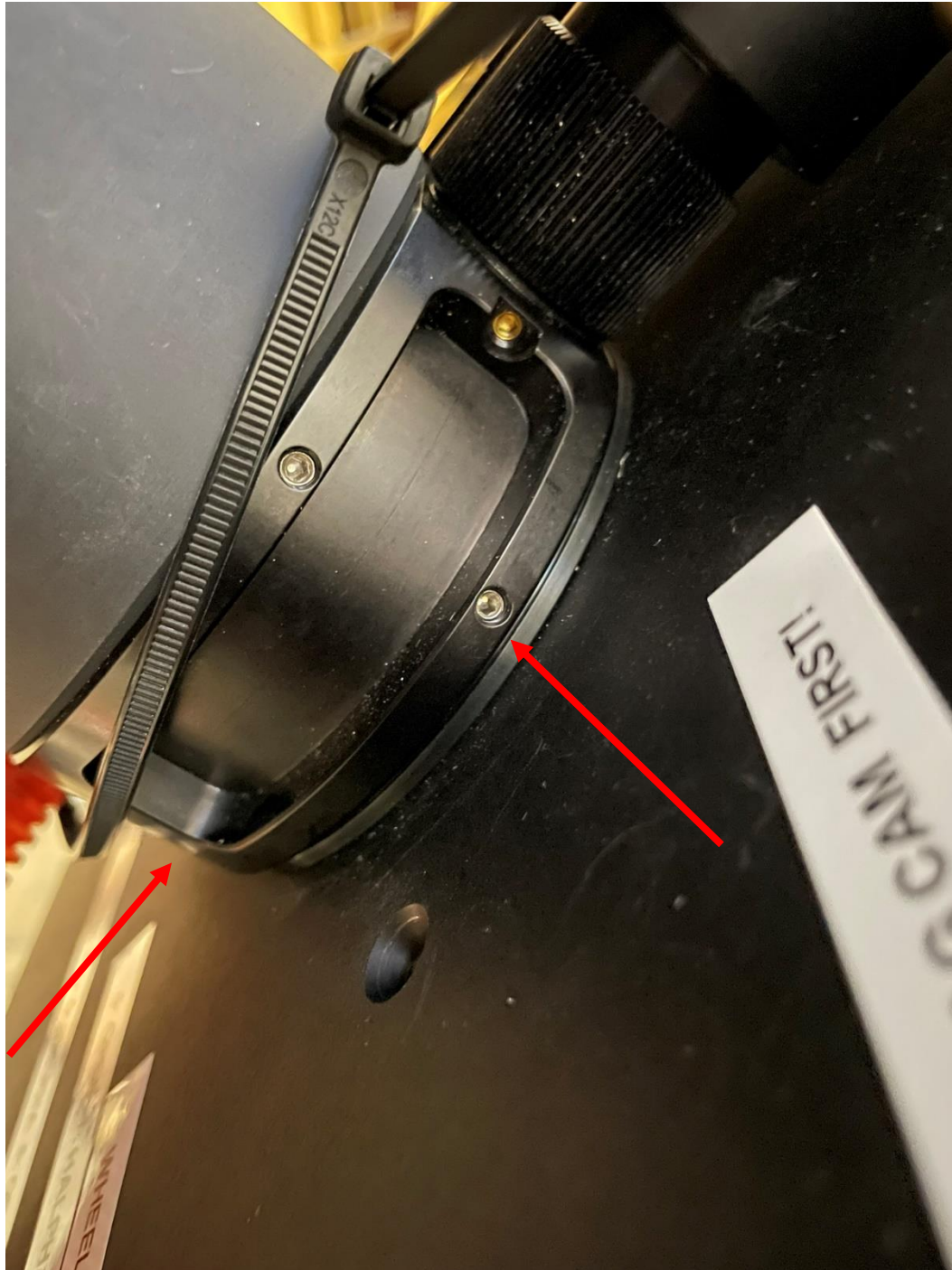
STEP 16

Loosen the 3 set screws that mate the filter wheel to the Optec Sagitta Guider body (flange). Note the “hidden” (recessed) set screw in the body of the guider. These set screws use the 5/64in hex key.



STEP 18

The other two set screws.



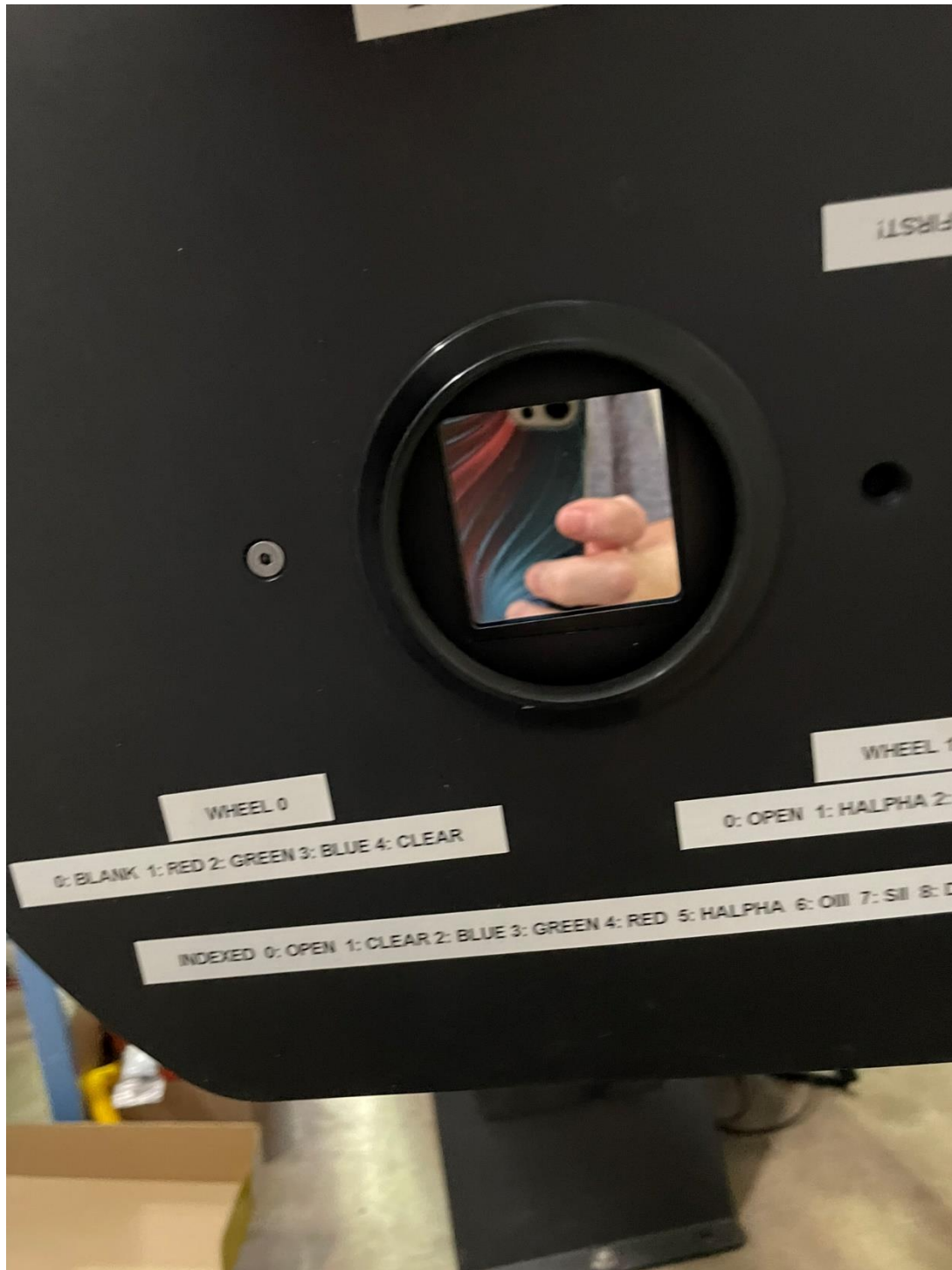
STEP 19

Once the filter wheel is removed. Clean (Step 21) the filters on both sides. The front of the filters can be cleaned by gently rotating the wheel and cleaning through the front window/aperture. Place your fingers in the triangle areas to rotate wheel.



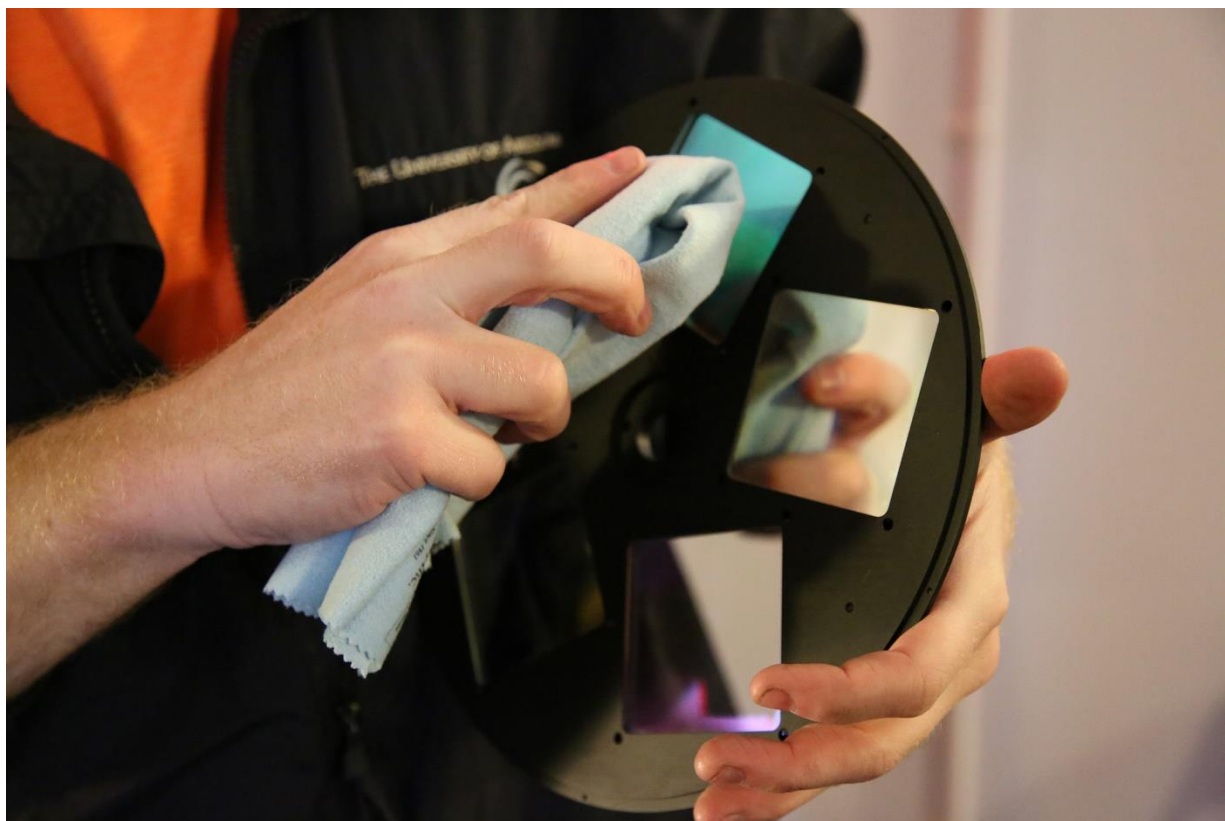
STEP 20

This is the front window to clean front surface (likely dirtiest part) of the inner wheel's filters.



STEP 21a

Filters can be cleaned using the “Adam Block gentle pull swipe method.” Use the included blue micro-fiber cloth. Pull cloth across the filter in the SAME direction once or twice. Press cloth just enough to contact surface. Treat cloth as an optical surface. Do not set it down anywhere. Always use it with clean hands. Examine it for grit before use. Put it back into sleeve immediately when done. Deep cleaning (perhaps once a year) uses distilled water, Liquinox, and Isopropyl in a procedure specified in the deep cleaning documentation.



STEP 21b

The special microfiber cloth and these instructions are found on the doors of the gray storage cabinet.

