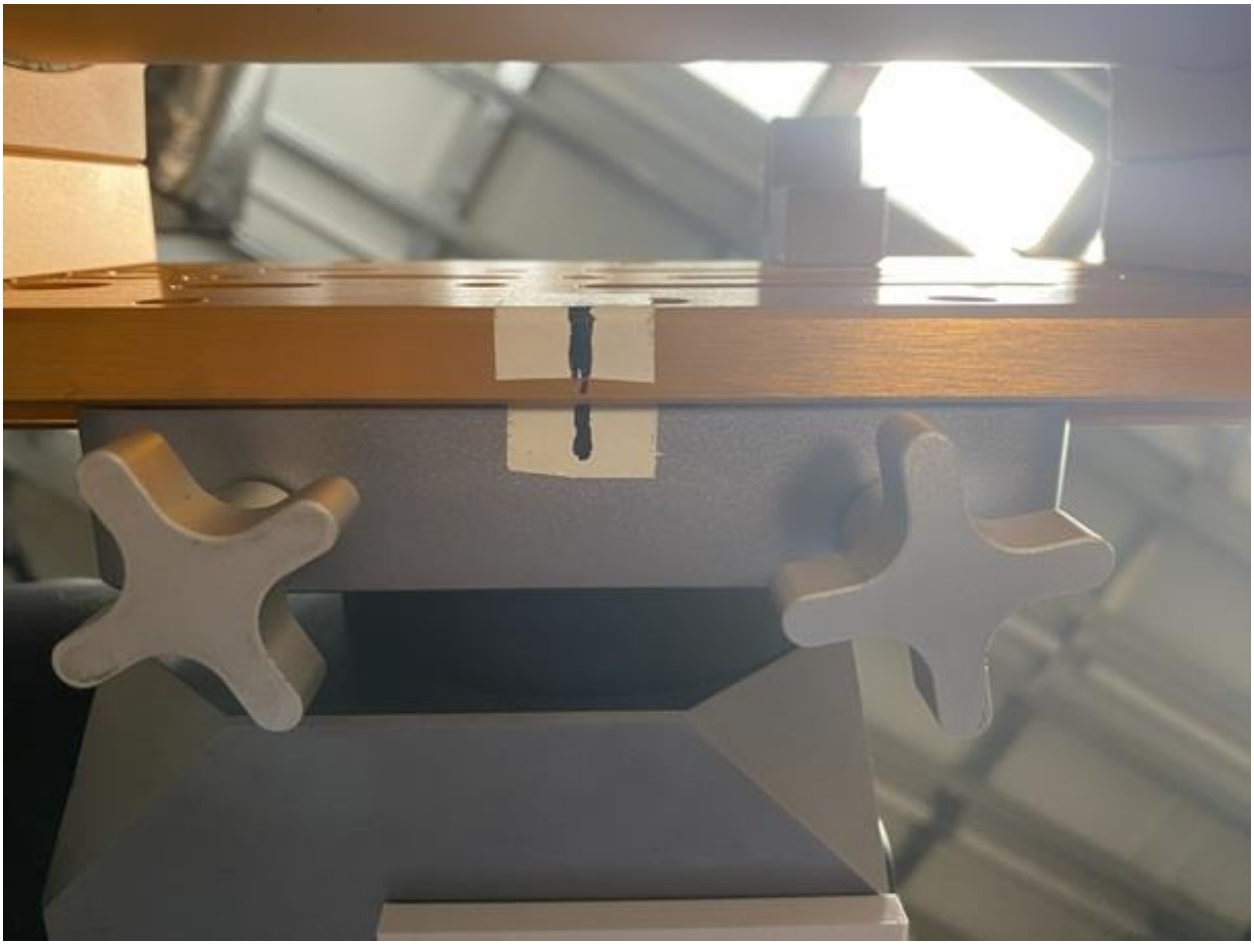
There are a total of three boxes. The large box is the telescope. The small square box is the WD20 mount, and the third box contains all the additional parts and camera.

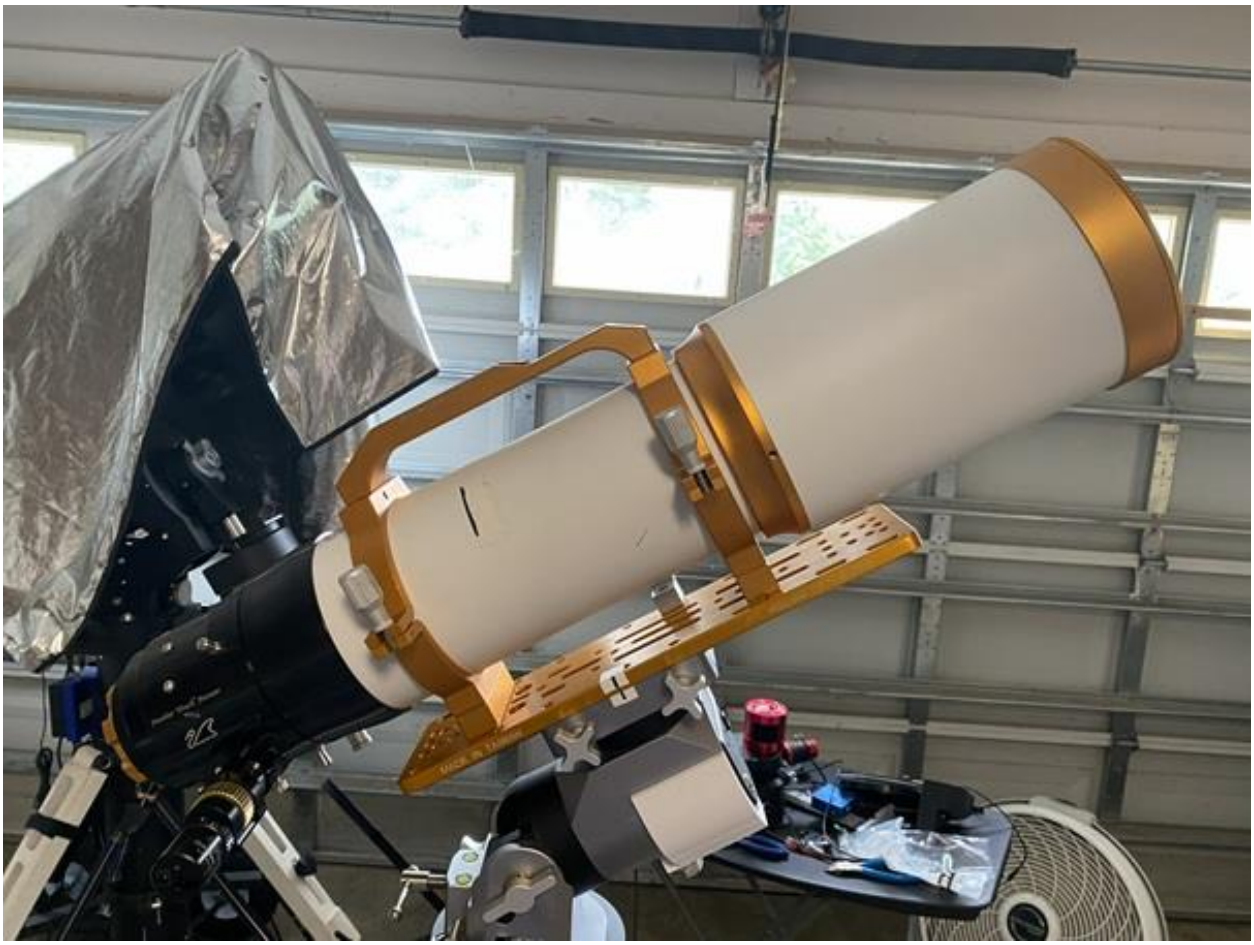
Open the telescope case and remove the foam padding. Find the top handle, screws, and hex driver.

Remove the foam cover to expose the handle, screws, and hex wrench and attach the top handle to the top of the telescope rings. Make sure that the raised rail on the handle is on the back end of the telescope. Tighten.

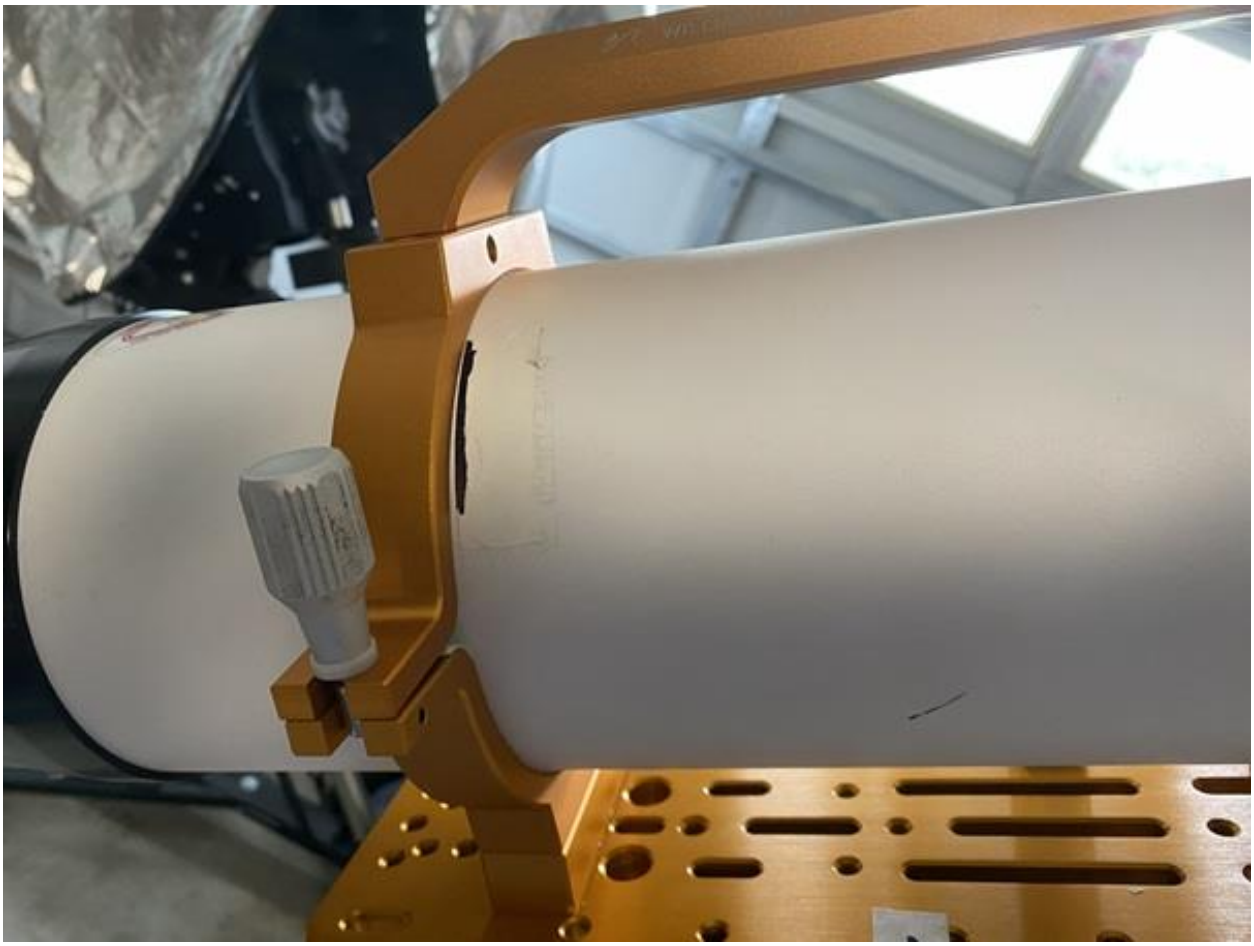

Handle raised rail in rear

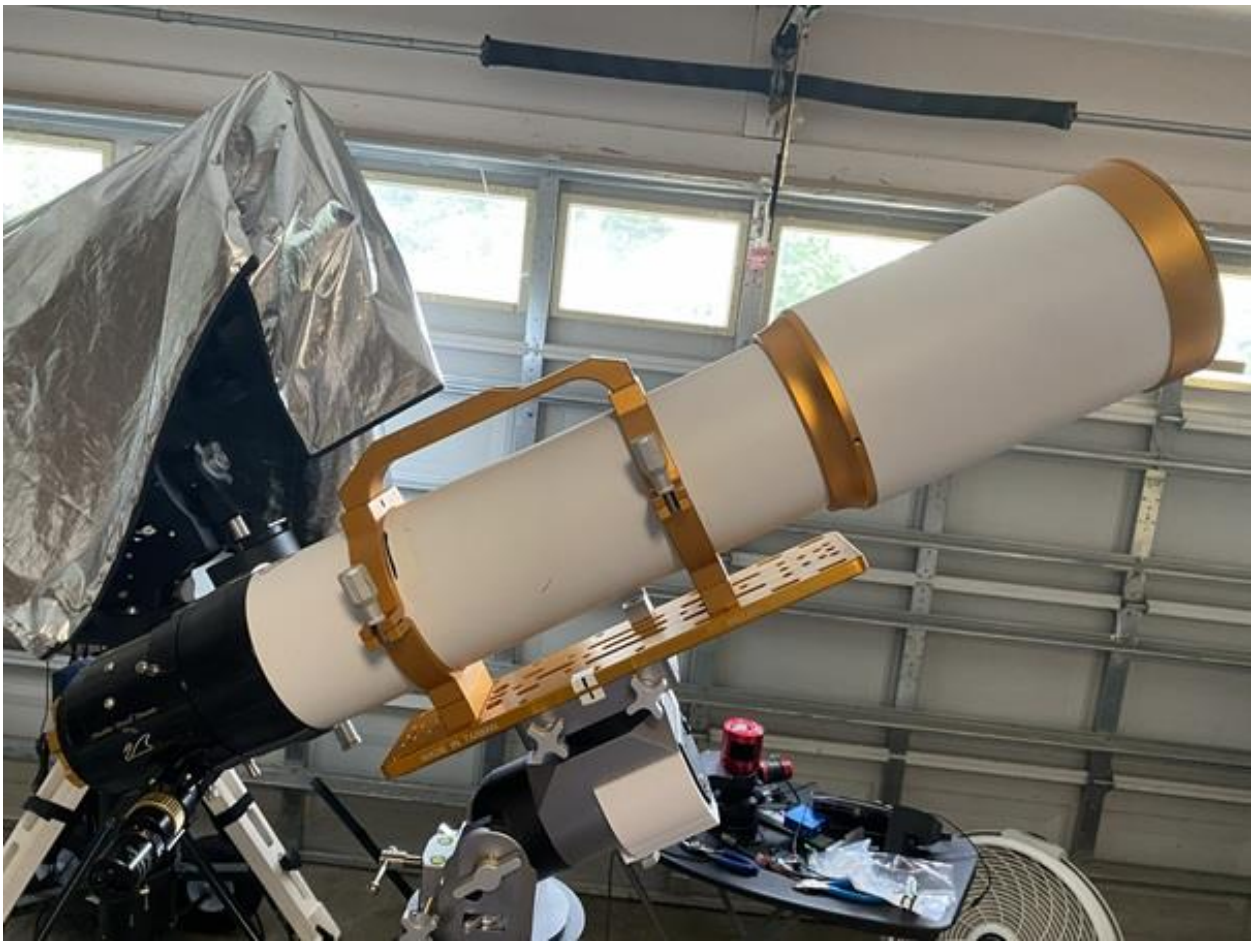
Grab the top handle and remove the telescope from the case and install onto the DEC saddle. Align tape mark on the side of the dovetail plate with tape mark on the side of the DEC saddle. This insures proper balance. Tighten the DEC saddle clamps onto the dovetail.





Extend the dew shield all the way out. Loosen the ring clamps so the telescope will move and slide the telescope towards the rear until you reach the tape mark. Tighten the ring clamps.





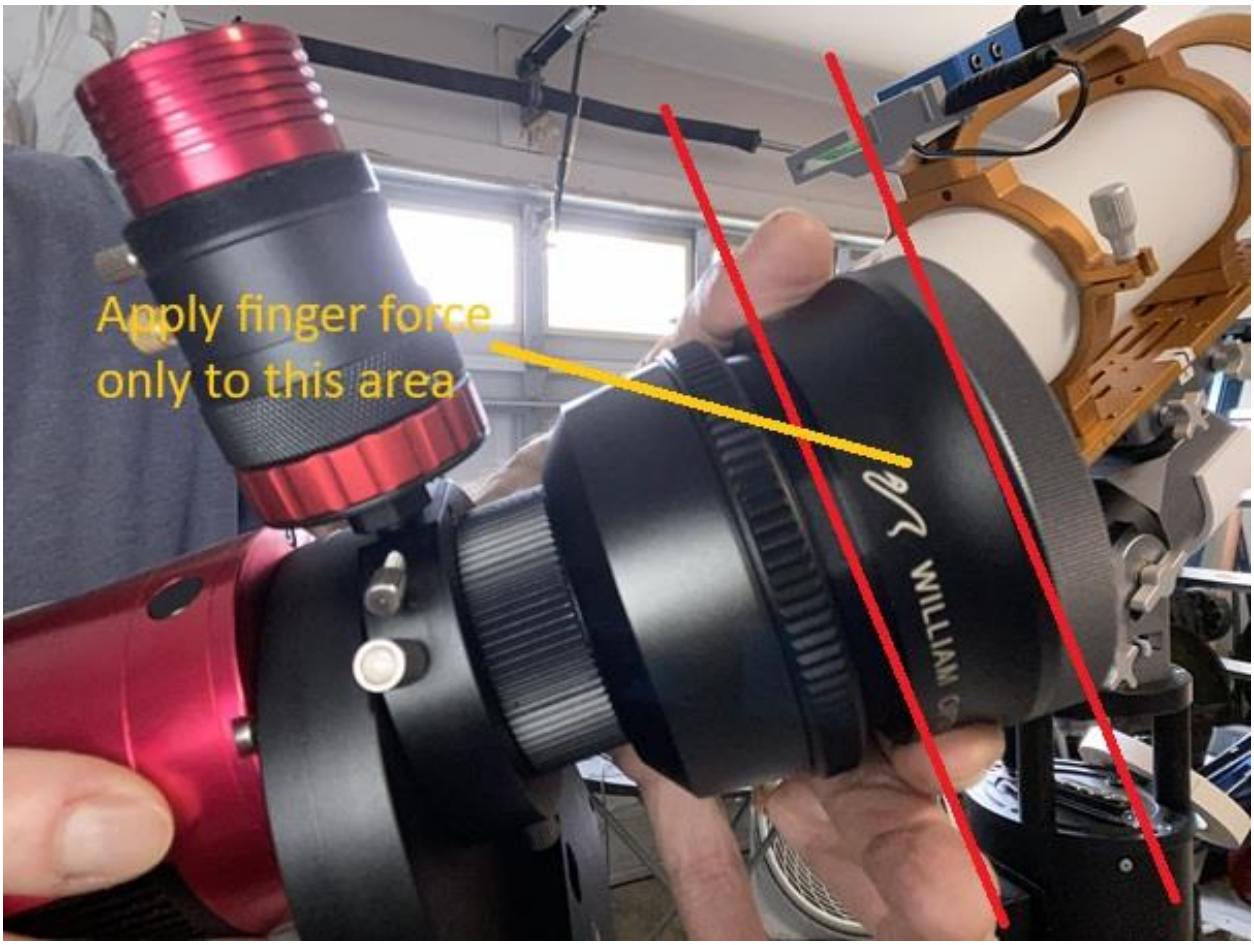
Remove the holder retaining screw from the top handle. Install the plastic USB Hub/Pegasus Power Box holder into the top handle. Make sure the holder retaining screw is not in the handle as the holder will not slide all the way in if the screw is present. Push the plastic holder into the top handle, USB hub end first, until the last screw hole in the front is even with the black mark on the top of the plastic. Screw the retaining screw into the last hole in the front of the handle and tighten. Try to hit the indent that is already created on the plastic slide.


Insert screw in last hole

Install the Alnitak Flip Flat on the front of the telescope. Snug the retaining strap back on the dew shield to pull the lamp tight against the face. When firmly mounted, twist the dew shield so the flip flat center post is vertical as shown below.

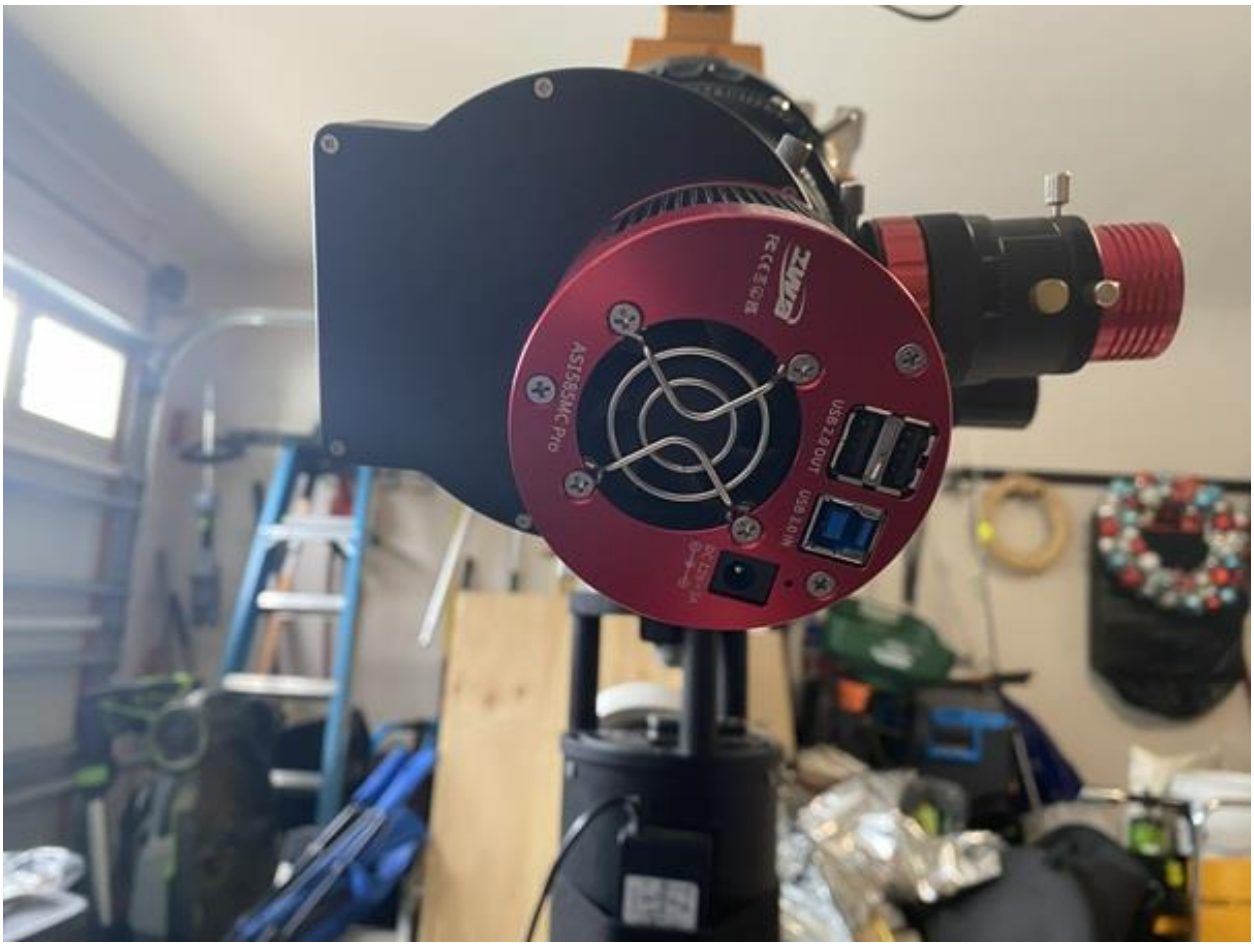

AlnitaK

Attach the image train to the rear of the telescope. The large flattener on the end that screws onto the telescope has had to have a backspace set so you cannot grab it anywhere but up next to the threads that go into the telescope. Cupping the image train at the threads with your index finger and thumb and supporting the camera end with the other hand, slowly screw the image train on by turning the flattener with your index finger and thumb. When it starts to get snug, make sure you only use your thumb and index finger to turn the train tight at the threads.

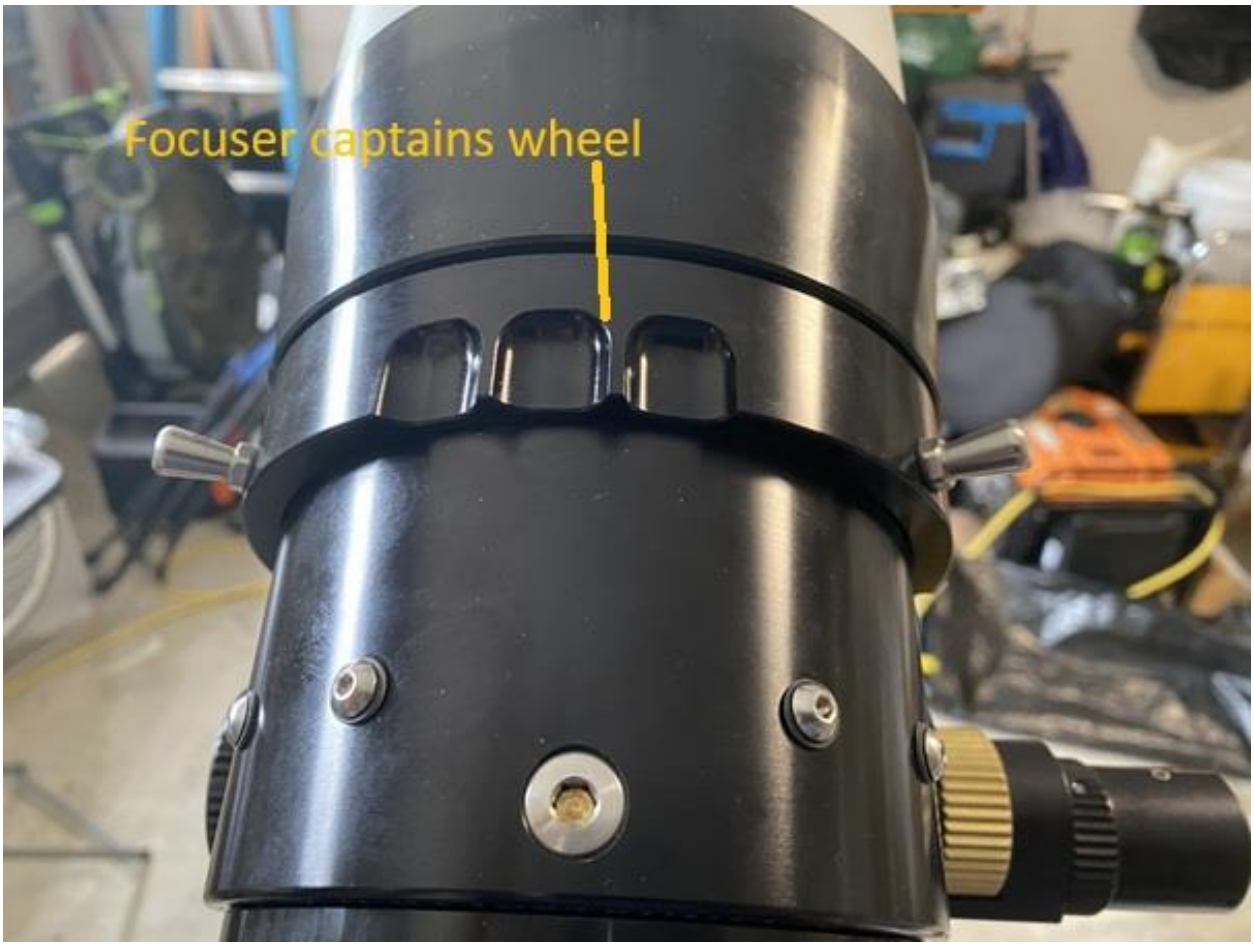

Apply finger force
only to this area


Turn here
Support here

From the rear of the camera, inspect the orientation of the camera to the telescope. It will probably look something like this.



For the camera to be oriented properly, the USB3 camera plug must be at the 3 o'clock position. If not, loosen the focuser's captain's wheel and slightly turn the focuser to orient the USB3 plug properly. Tighten the focuser's captain's wheel.




ZWO
ASI585MC Pro
USB 2.0 OUT
USB 3.0 IN
DC12V-3A

The last thing to do is to run the focuser out to its focal point. The Optec electronic focuser has a mechanical switch that will allow you to use the focuser electronically or manually using the larger fast focus knob on the opposite side of the telescope. I shipped the telescope with the focuser unlocked so the large focus know should work. If the large focuser knob is locked just grip the focuser lock/unlock switch and turn counter clockwise as shown below.

Run the focuser out to the 73 mark and then turn the focuser lock/unlock switch clockwise to lock the focuser for electronic use. Jiggle the fine focuser to make sure that the lock is seated properly as sometimes you hit mid-tooth on the lock and it does not go down all the way. The focus knobs should not move at all when locked.

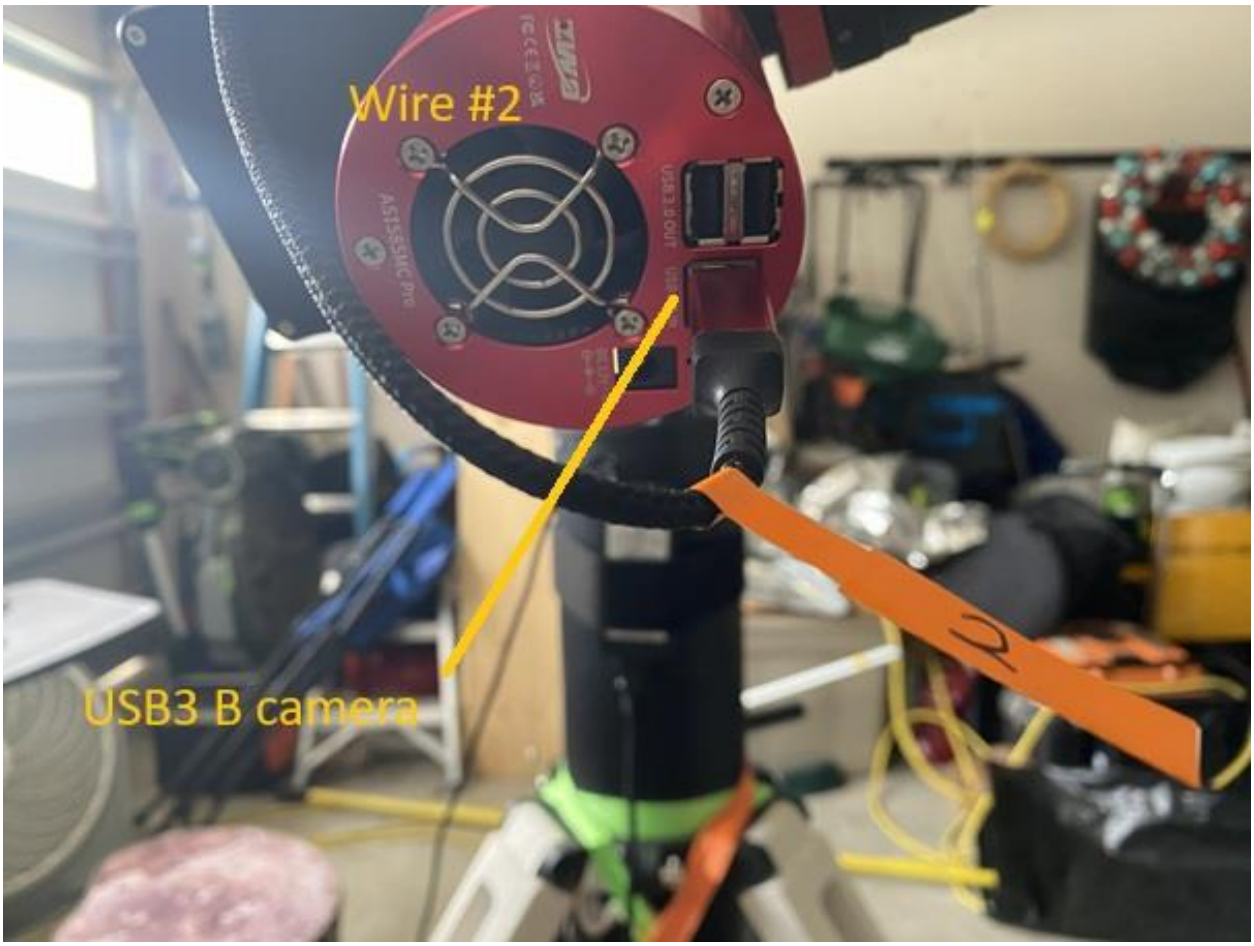

WILLIAM OPTICS
Fine focus
Focuser lock/unlock

WILLIAM OPTICS
73 mark on focuser
70
60
50
40
30

The telescope is now ready for the wiring.

Find wire 1(USB A – B) and insert one end into the flip flat and the other up and around into the USB hub as shown.

Find wire 2(ASI585 camera cable) and plug one end into the camera USB3 port and then run the wire up to the USB hub and plug the other end into this USB hub. Plug the cable into the first USB hub receptacle closest to the camera. Make sure that you loop the wire going to the USB hub into the wire holder as shown below.



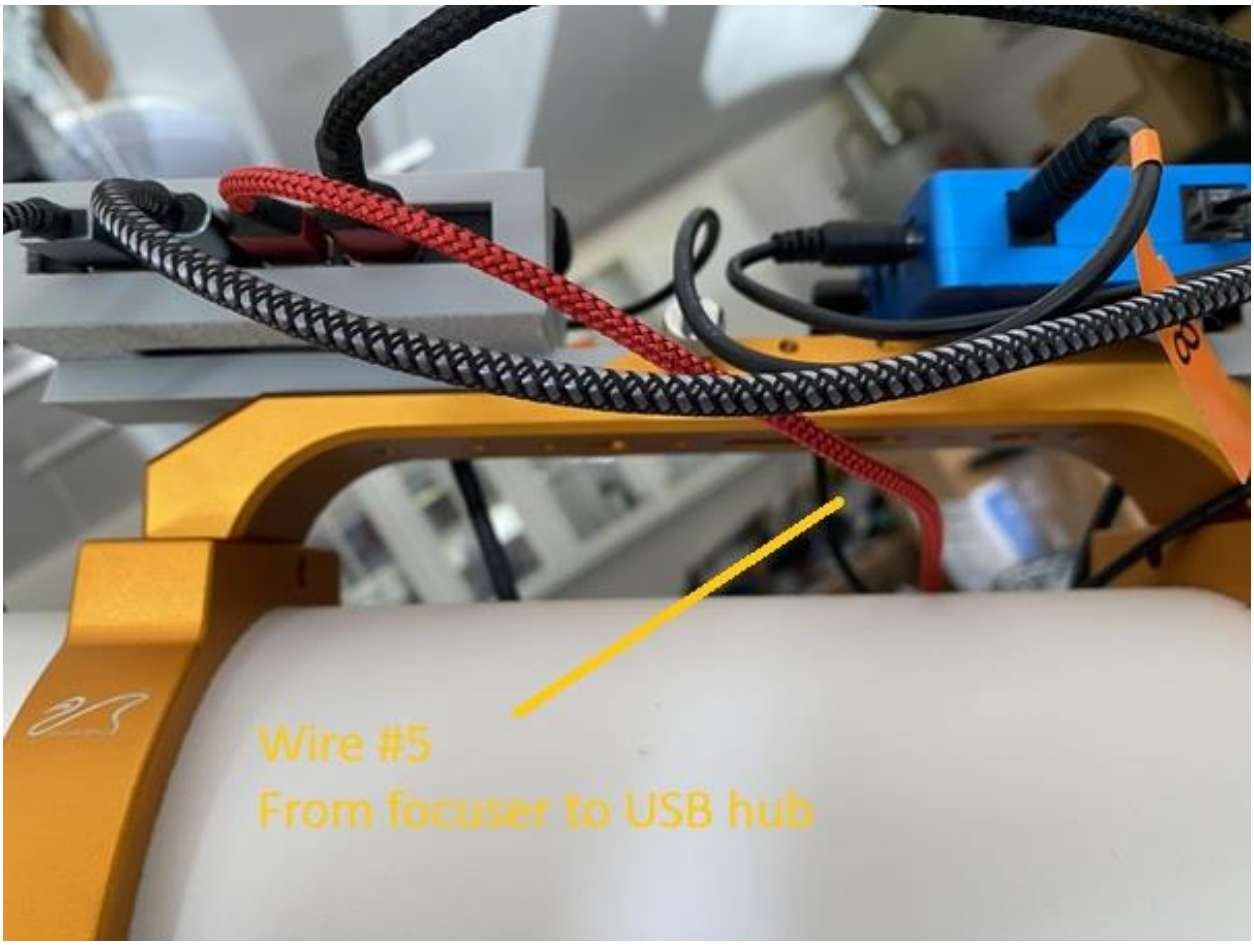

Into USB hub
Thru wire holder
Camera wire

Find wire 3(ZWO EFW cable) and plug one end into the EFW and the other end into one of the ASI585 USB slots.


Wire #3
USB2 A from EFW to camera USB port

Find wire 4(ASI174 data cable) and plug USB2 C end into the ASI174 and the USB2 A end into the USB port on the ASI585 as shown.

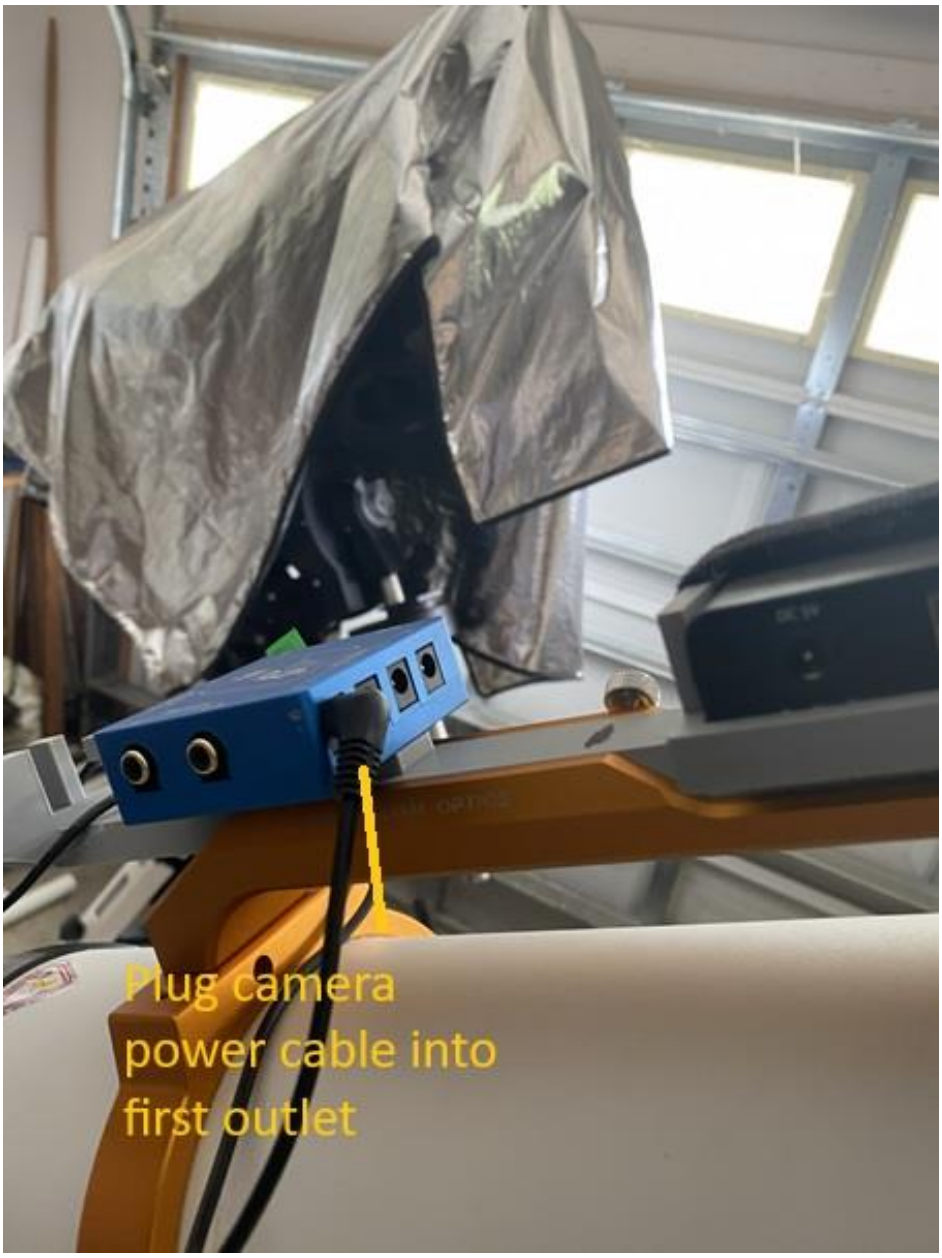
Find wire 5(Optec electronic focuser data cable) and plug USB2 C end into the focuser and the USB2 A end into the USB hub. Run the USB cable from the focuser under the handle and into the USB hub as shown.


Wire #5
From focuser to USB hub

Find wire 6(ASI585 power) and plug the 90 degree turned end into the camera power and run the other end up thru the wire holder, under the handle, and into one of the Pegasus Power box 12 volt receptacles.


Power
cable into
Pegasus
Power box
Wire #6


Run camera
power cable
under handle

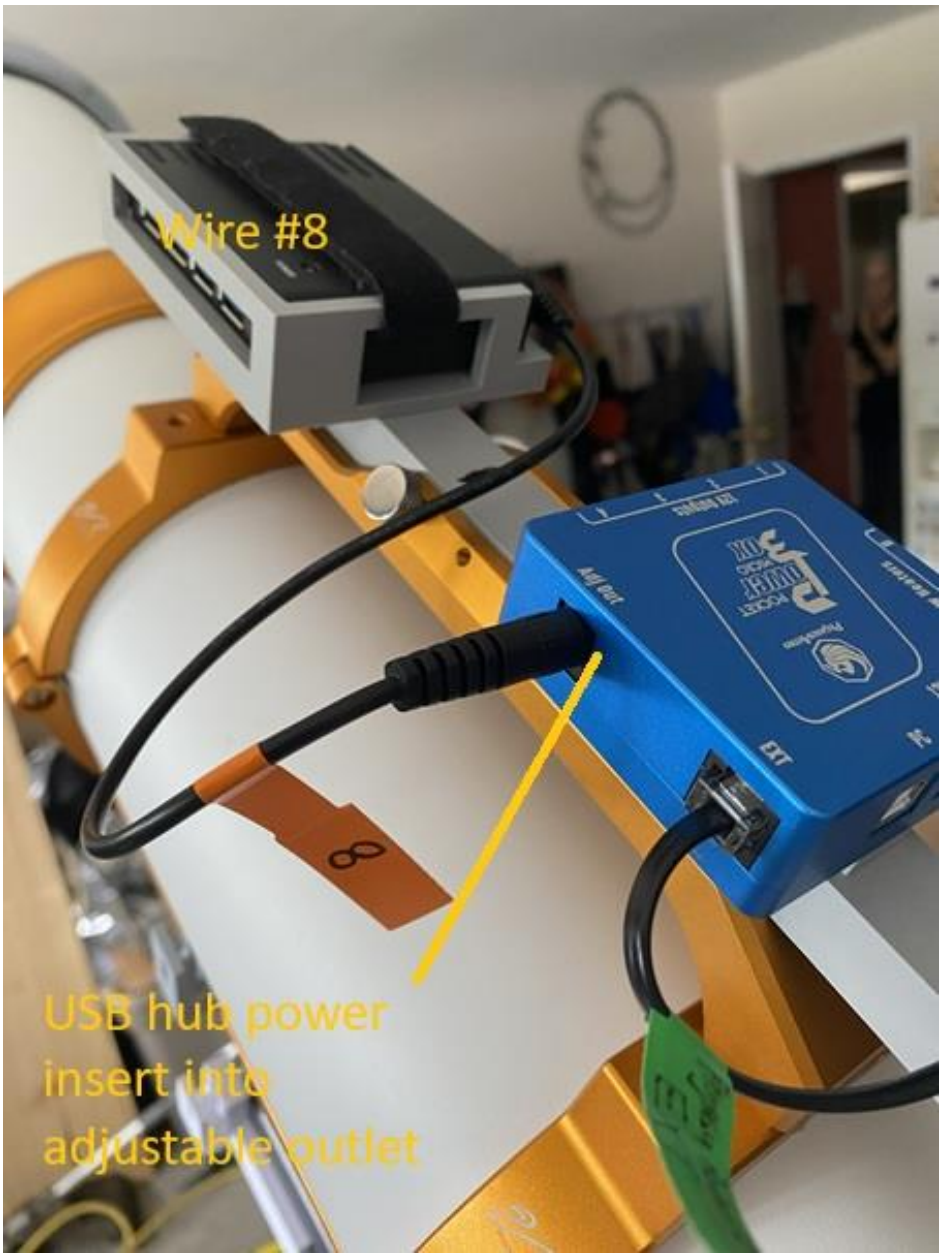

Plug camera
power cable into
first outlet

Find wire 7(Optec electronic focuser power cable) and plug the 90 degree end into the focuser and the other end into a Pegasus Power box 12 volt receptacle. Run the power cable from the focuser thru the wire holder and into the power box as shown


Wire #7
Focuser power


Focuser power

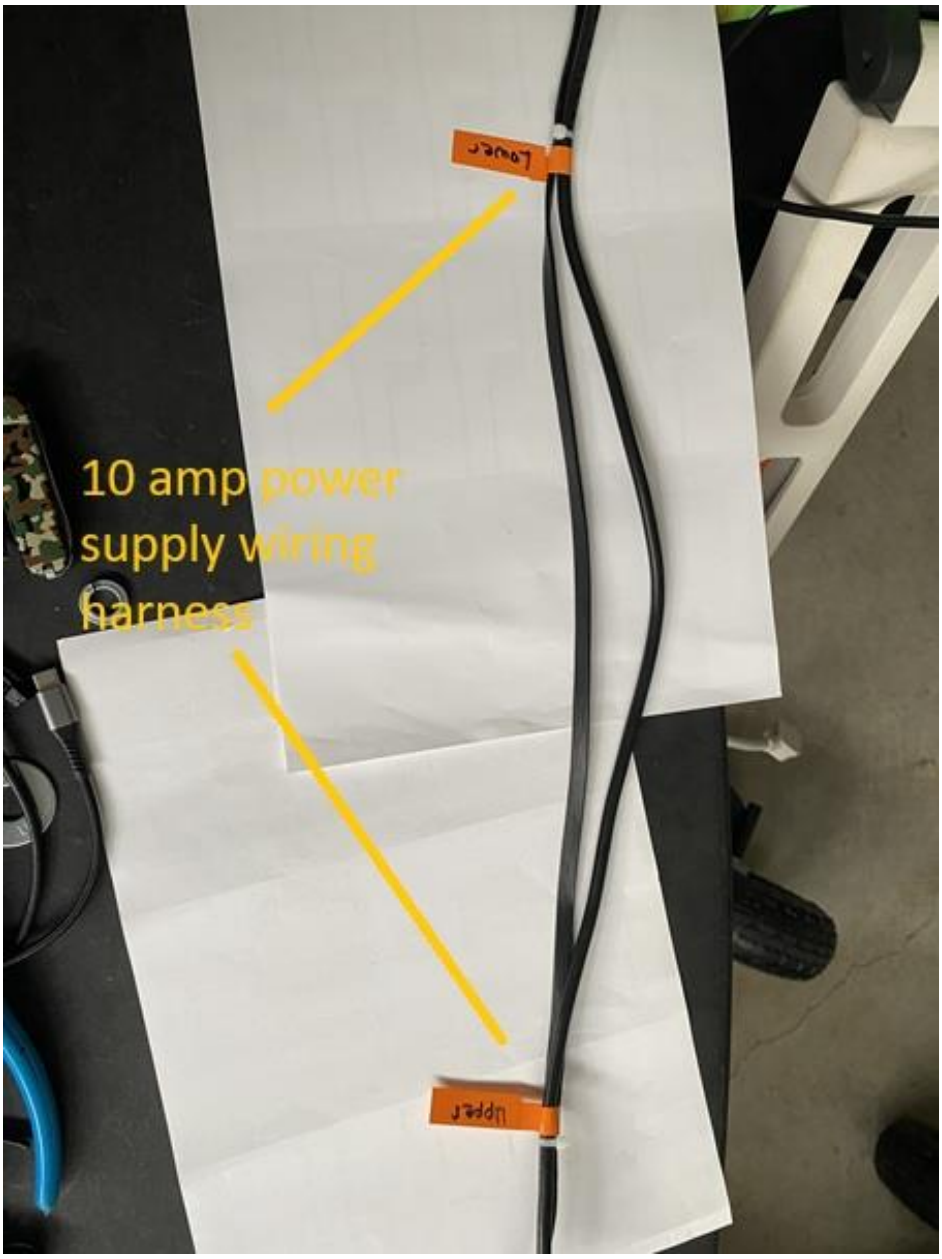
Find wire 8(USBhub box power) and connect one end to the USB hub power receptacle and the other end to the Pegasus Power box Adj Out receptacle as shown.


Wire #8
8
USB hub power
insert into
adjustable outlet

Find wire 9(Pegasus Power box data cable) and connect one end to the Pegasus Power box USB2-B port and the other end to the USB hub. Be sure to wrap the cable thru the wire holder as shown below.

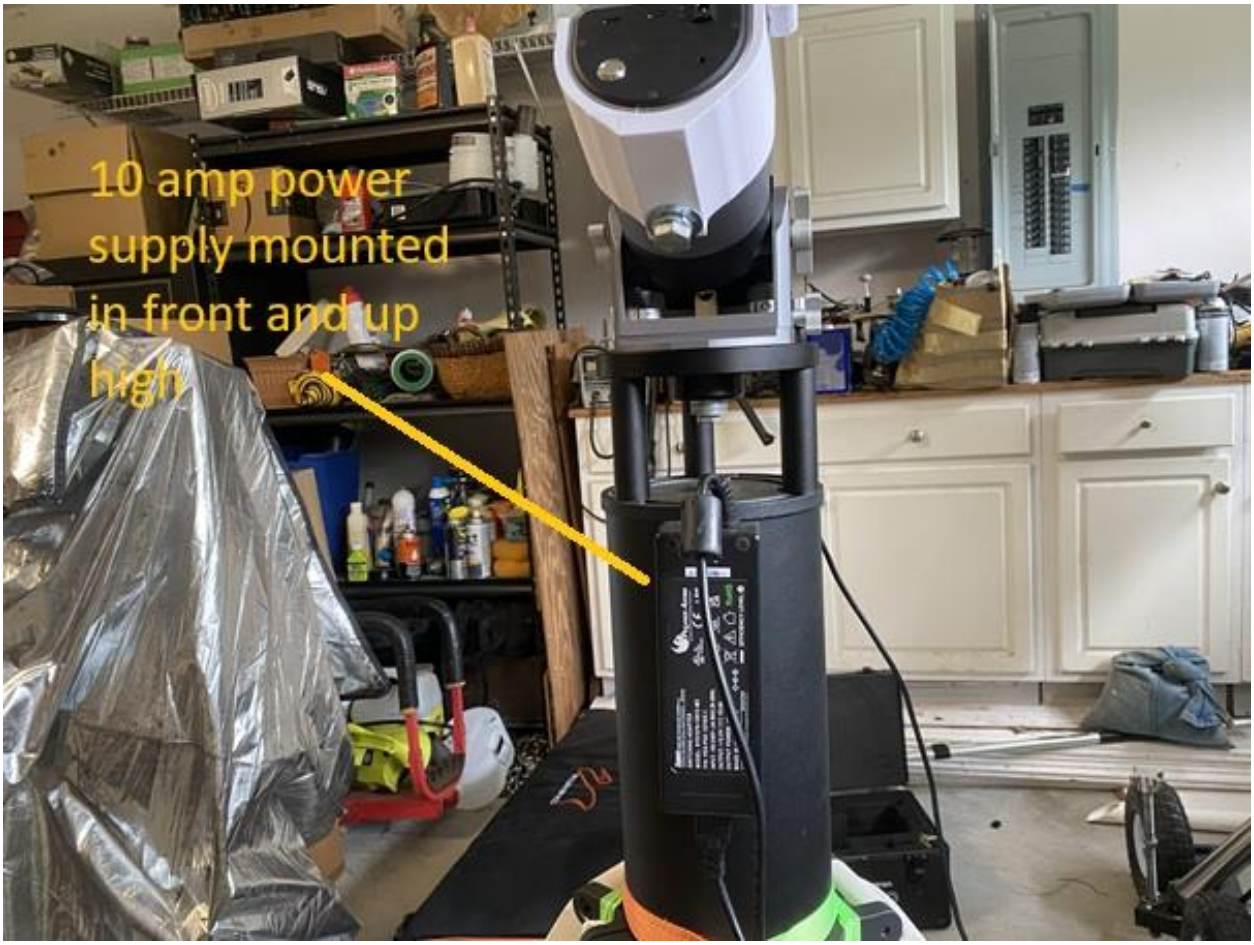
Picture.

Find the Wiring Harness. This is the power cable from the 10 amp power supply that goes to the Pegasus Power box on the telescope coupled with the USB3 cable that goes to the USB hub on the telescope. Notice the cable is bound in two places with white zip ties. Between these two ties is the location of the wire loop that jumps from the RA portion of the mount up to the DEC.



The 10 amp power supply and the power supply for the mount are both strapped to the center pier up under the WD20 mount. This is to allow the power cords some slack when the mount has to move. The 10 amp power supply is strapped to the front of the pier and the mount power supply is strapped to the back. Each power supply has a velcro patch

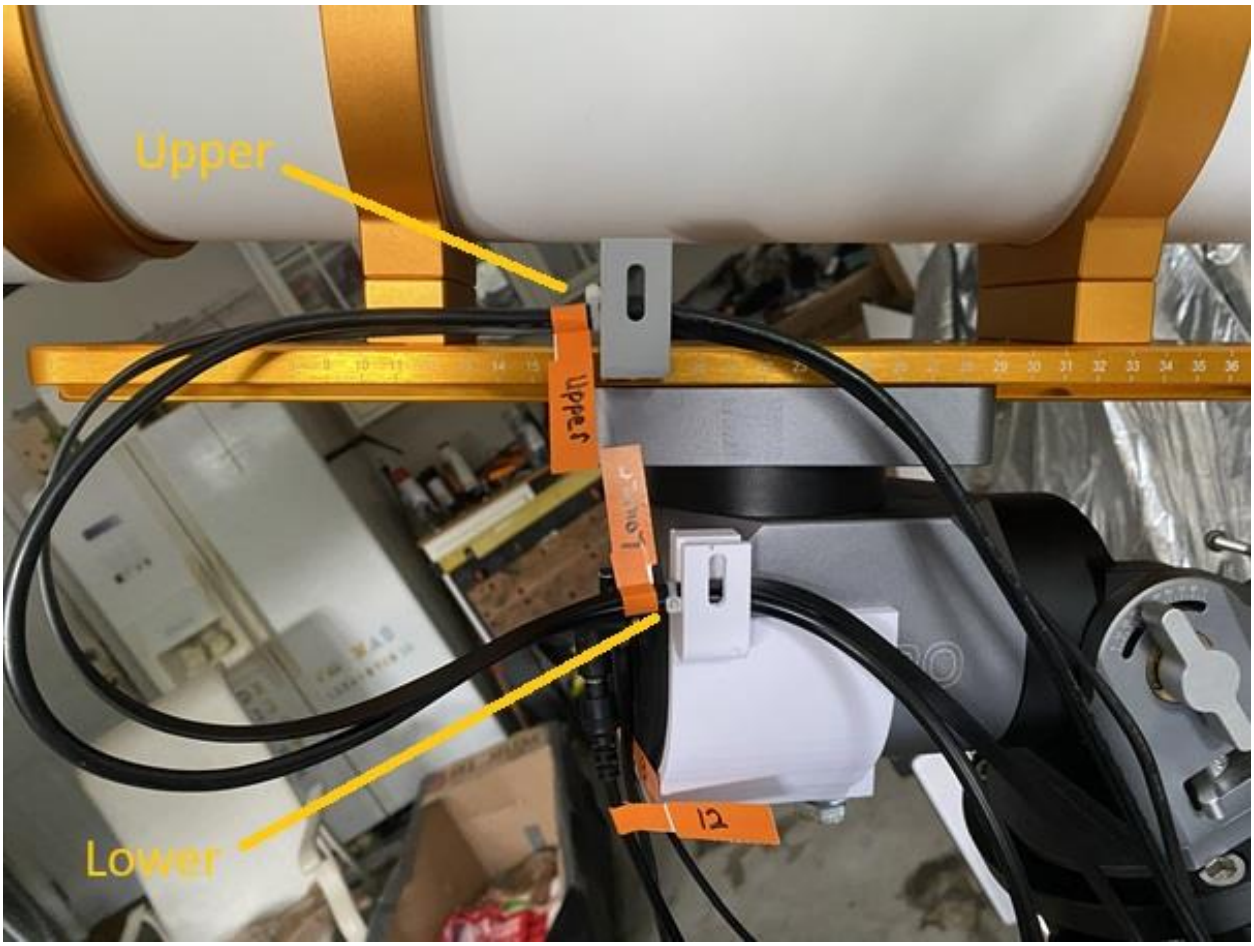
that has been attached to the back of the power supply to assist in mounting along with a length of large velcro strap to hold everything. Remove the clear plastic backing from the sticky side of the tape and press against the center post just underneath the WD20. Use the large velcro strap to then wrap around the post to hold both power supplies securely.



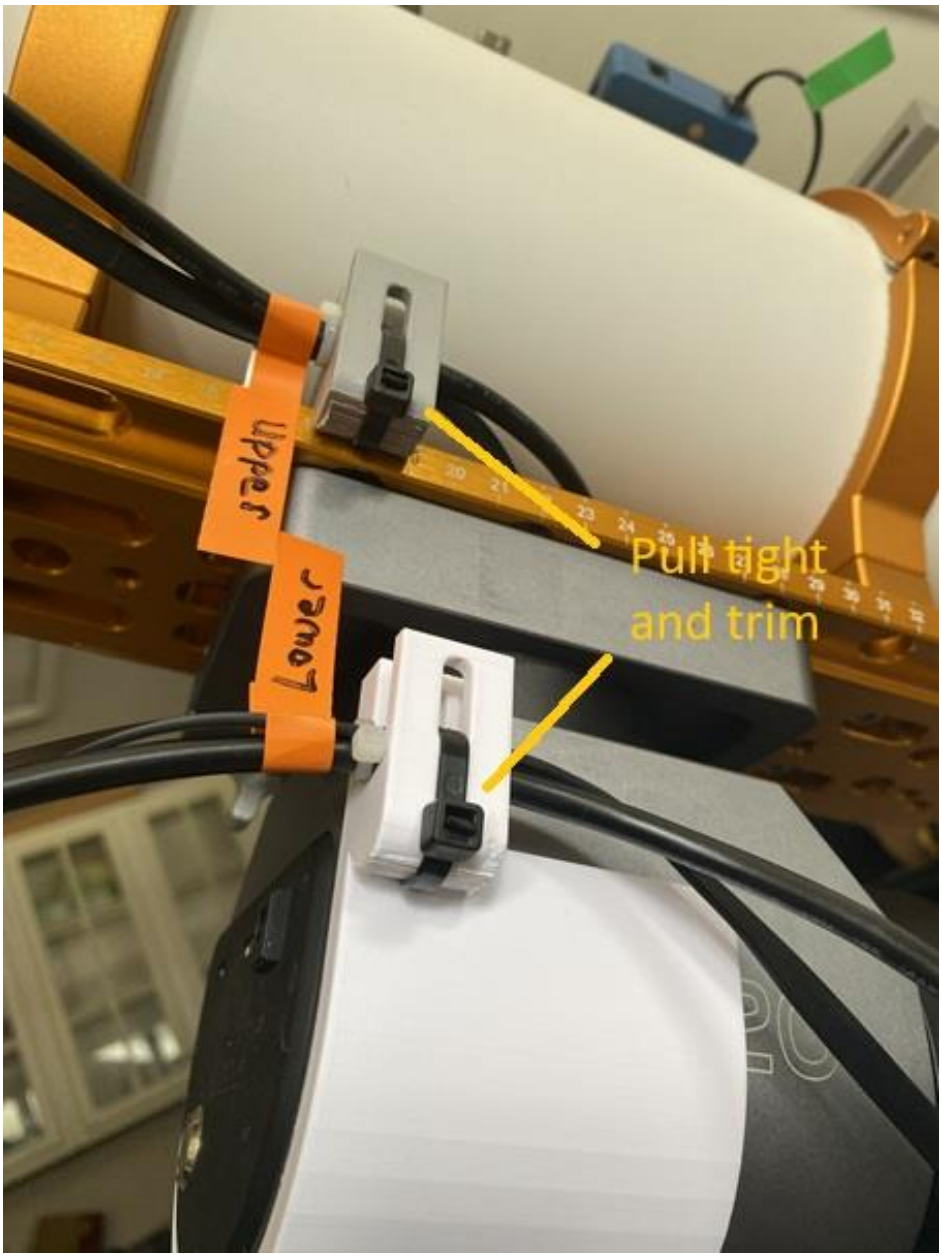

Mount power
supply


Velcro strap

Place the wiring harness into the plastic wire holders as shown below. Make sure that the white zip ties are in front of and pressed against the front of the wire holders. Make sure there are no kinks in the loop.

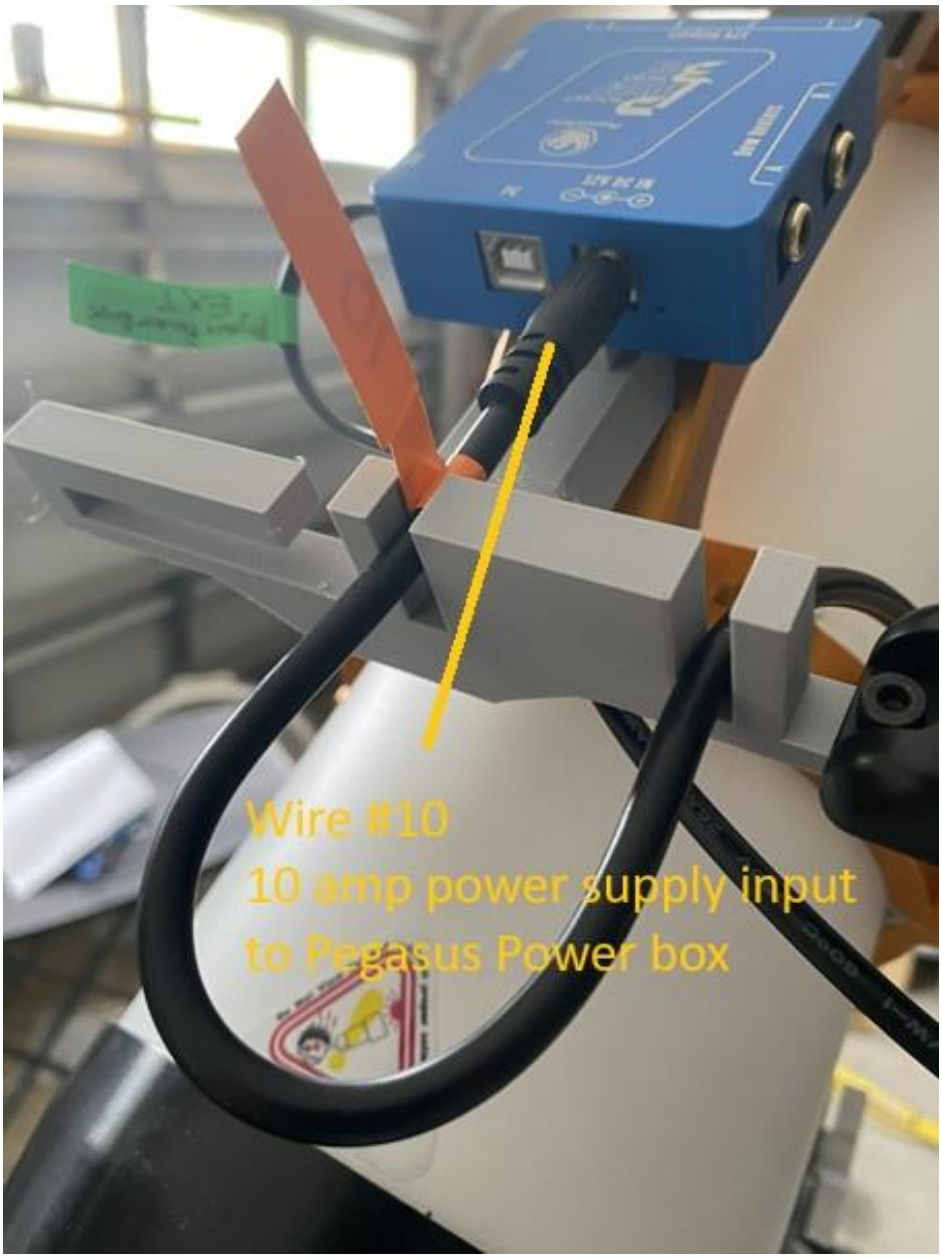


Find a black zip tie and insert it above the wires and thru the hole in front and back in both plastic wire holders. Push the zip ties thru and they will come out of the bottom so you can then pull it thru and connect it and pull it tight as shown. Cut the excess.


Upper
Lower
Pull tight
and trim

Run both the 10 amp power wire and the USB3 cable for the USB hub underneath the telescope to the other side as shown and connect to the USB hub and Pegasus Power box.

Be sure to loop the 10 amp power wire thru the wire holder as shown below

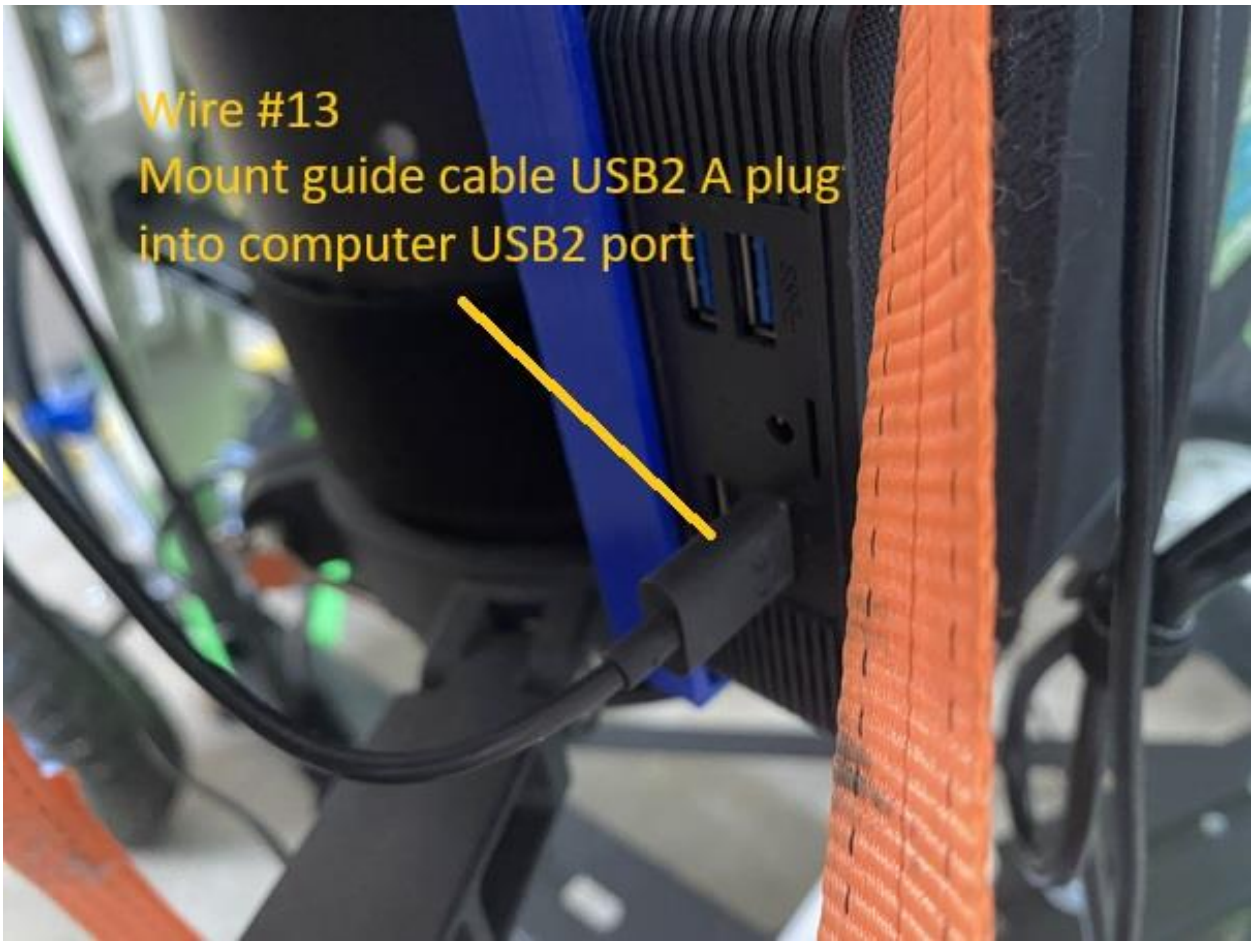


Find wire #12, mount power supply cord. Plug the mount power supply into the mount as shown.

Find wire #13, mount control cable USB2 A – C. Plug the USB C end into the mount as shown.

Locate the MeLe computer. It will be strapped into a 3D printed holder that has a groove to hold a large velcro strap. Use the large strap to secure the MeLe to the center pier and below the mount power supply and close enough for the USB hub USB3 cable and mount cable to reach.


Wire #11
USB3 B cable from USB hub
plug into computer USB3 port



Find the KASA 3 receptacle power strip. Plug the computer power supply plug into the receptacle closest to the KASA power cord. Plug the mount power supply cord into the middle KASA receptacle. Plug the 10 amp power supply into the last open receptacle.