

Kestrel Set up 2022 Revision



ramona

julia@ramonaoptics.com | help@ramonaoptics.com

Kestrel 2022 Revision



Behavior Only



Behavior +
Screening

These instructions only apply to the Kestrel 2022 Revision shown in the image above. They do not apply to the Kestrel 2024 Revision shown on the right



Tools Needed

You will need an **Metric** hex driver (or Allen Key) set.

If you are unsure if you have a **Metric** or imperial hex driver set, look at the labels on the package. Metric sets will be denoted by numbers using decimal notation like: "4", or "2.5", while imperial drivers will be denoted by fractions like 3/16.



Step 0 | Unboxing Overview



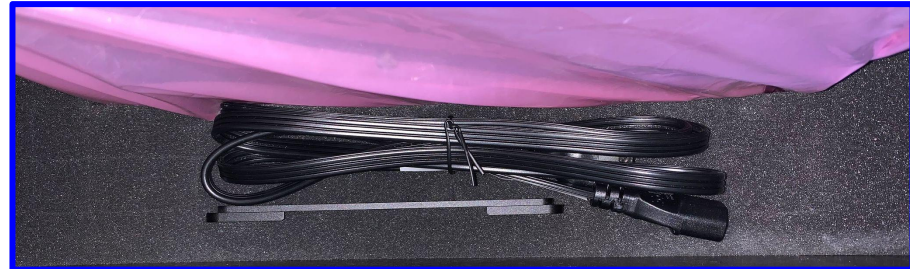
PCIe
(ribbon)
cable



Diffuser



ASI
insert +
power
cable



Step 1 | Remove Head

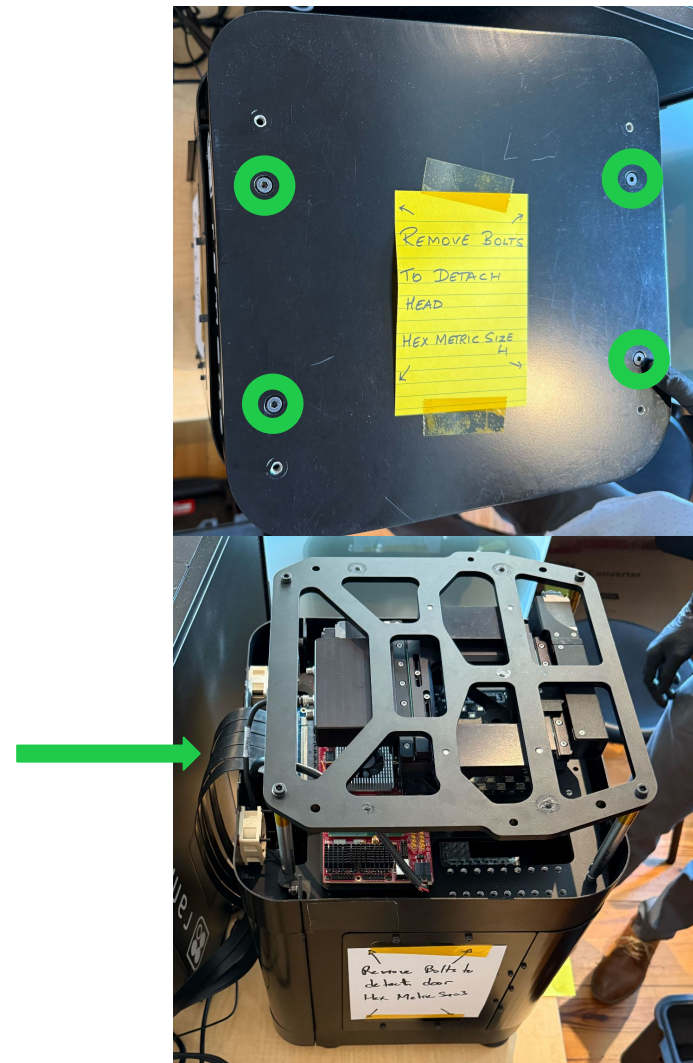
You will need to remove the head of Kestrel to plug the PCIe cable in, to connect the MCAM to the computer

Dual Kestrel Models

- Remove the 4 bolts outlined with the green circles in the image
- Use a hex metric size 4
- Once the hex screws have been removed, lift the head off of the system
- The bottom image is what your system should look like with the head removed
- The green arrow points to the PCIe cable that you will plug in the next step

Behavior Only Kestrel Models

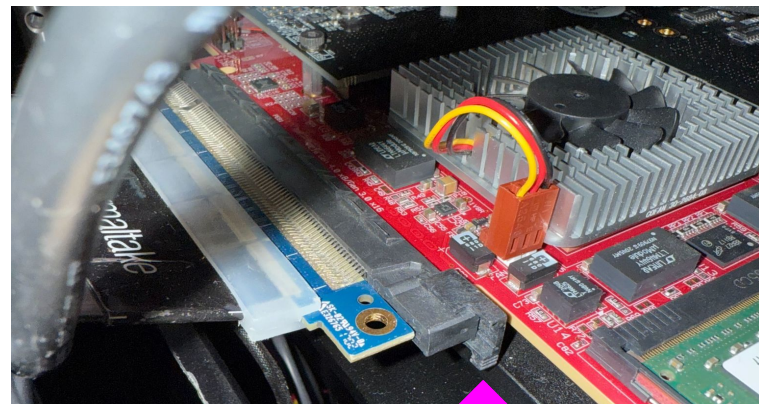
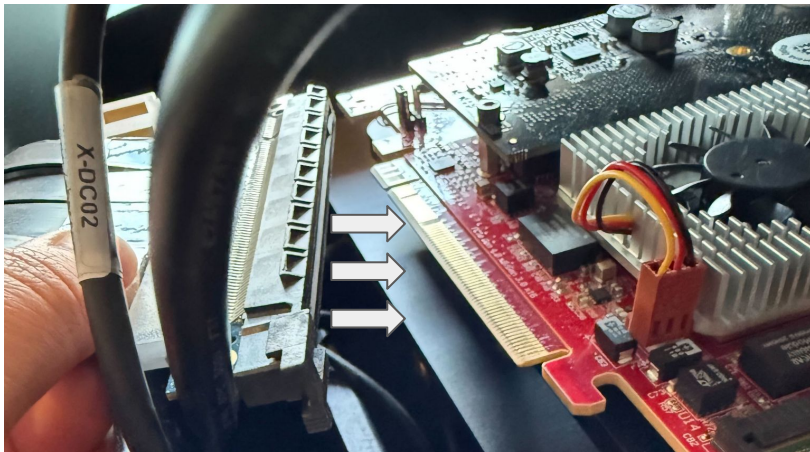
- Remove the 3 bolts next to the image capture optics. You will need a hex driver.
- Removing these 3 bolts should allow you to remove the top cover of the system.



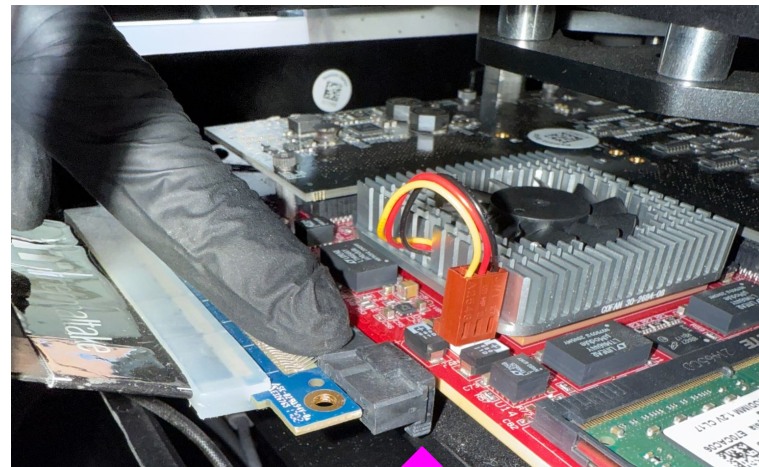
Step 2 | Plug in **PCIe cable to MCAM**

The PCIe cable is labelled with **MCAM** or **computer** indicating which side will be plugged into which motherboard (white arrows)

- Plug the side labelled MCAM of the PCIe cable into the MCAM motherboard (see image)
- To lock the PCIe cable in place, slide the tab on the right side in (see pink arrows)



unlocked



locked

Step 3 | Replace Head

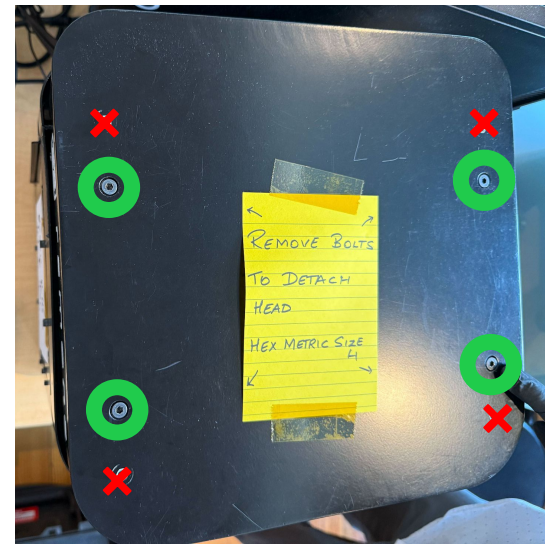
Replace the head of Kestrel

Dual Kestrel Models

- Align the L-shaped lip of the Kestrel head with the back of the system (green arrow)
- Replace the 4 bolts outlined with the green circles in the image
- Use a hex metric size 4
- **Note:** When replacing the head do not screw into the holes marked with the red x

Behavior Only Kestrel Models

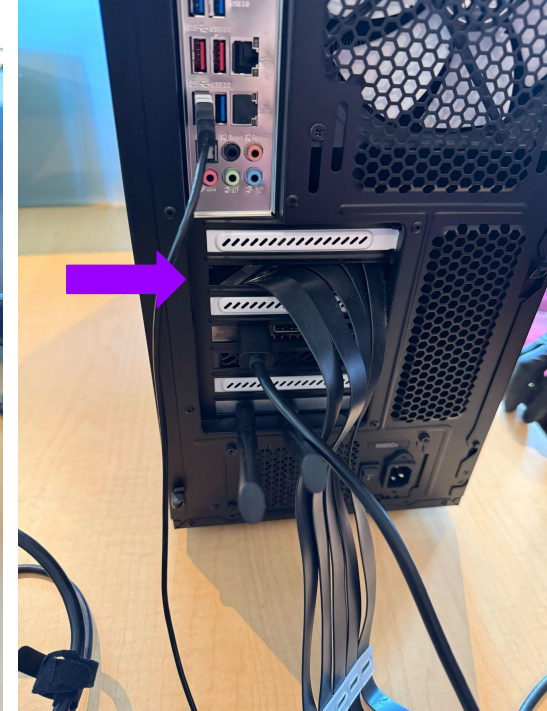
- Carefully place the head on the top of the system.
- Install the 3 bolts you removed in **Step 1**.



Step 4 | Plug in PCIe cable to computer

You will need to open the computer and thread the PCIe cable into the computer to plug it in

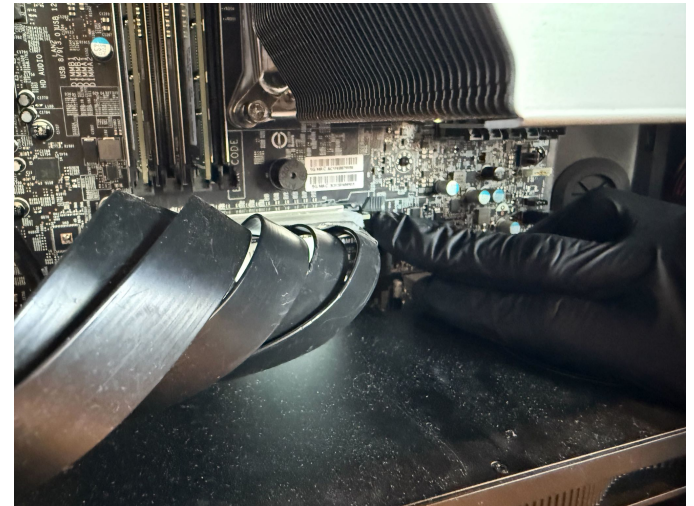
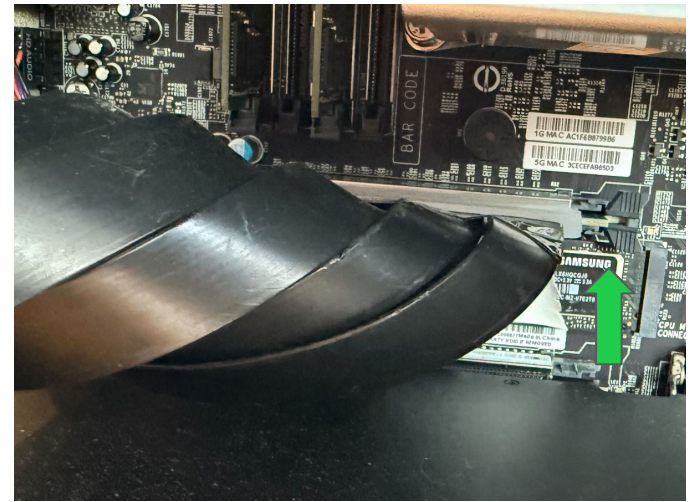
- Open the computer by pressing down the tab on the back right side of the computer (see white arrow), the computer side panel should pop off
- Carefully thread the computer side of the PCIe cable through the panel in the back of the computer (see purple arrow)
- Be gentle to ensure that the PCIe cable is not twisted



Step 5 | Plug in PCIe cable to computer

Once you have the computer open and the computer side of the PCIe cable threaded through the back panel, you are ready to plug in the cable

- Carefully orient the PCIe cable to plug into the computer motherboard, in a similar fashion as you see in the images to the right
- The lock will “pop up” (green arrow) when the cable is completely plugged in (top image)
- **Note:** You can unlock the plug by pushing down on the lock (bottom image)



Step 6 | Turn on **MCAM first**

Once you have the MCAM plugged into your computer, close the computer

- Plug in the rest of the components you have been provided
 - Power cables
 - Wifi sticks
 - Ethernet cable
 - Computer monitor
 - White diffuser (place over LED's, green arrow)
- **Ensure you turn on the MCAM first**
- Once you have turned on the MCAM, you can turn on the computer

