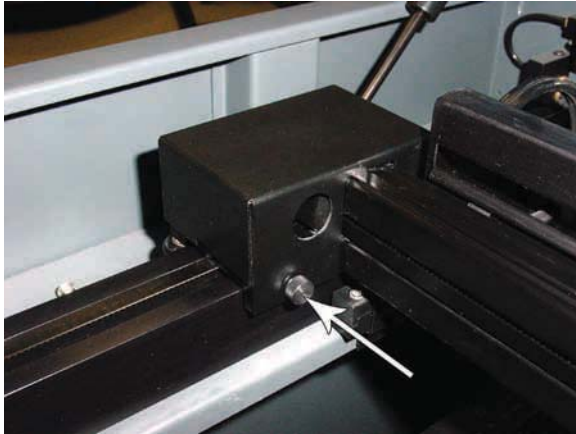


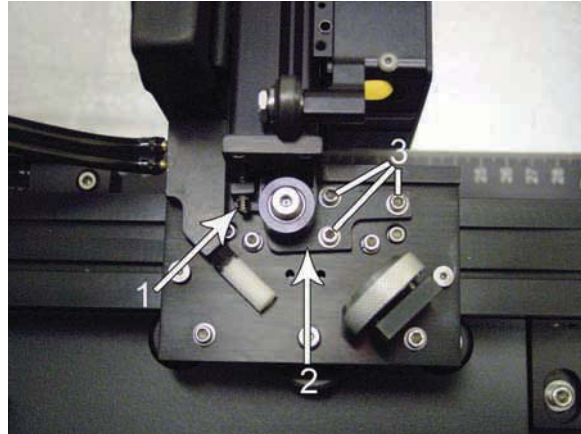
## R230 - X-Axis Motor and Drive Gear

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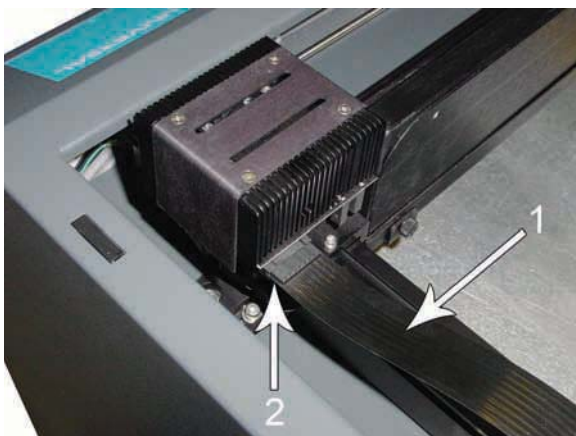
#### 1. Power Off and unplug the PLS.



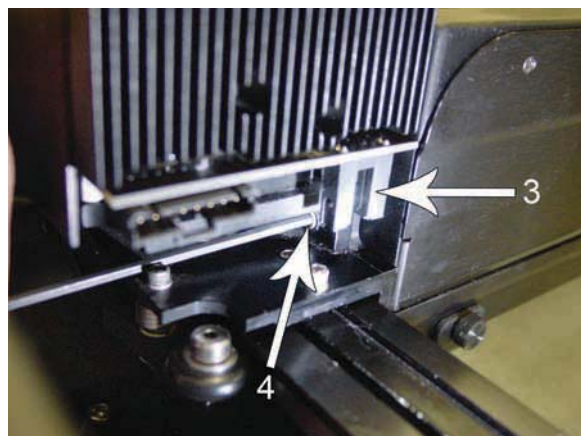
1. Remove #2 mirror cover by removing the thumbscrew and sliding the cover to the right and up.



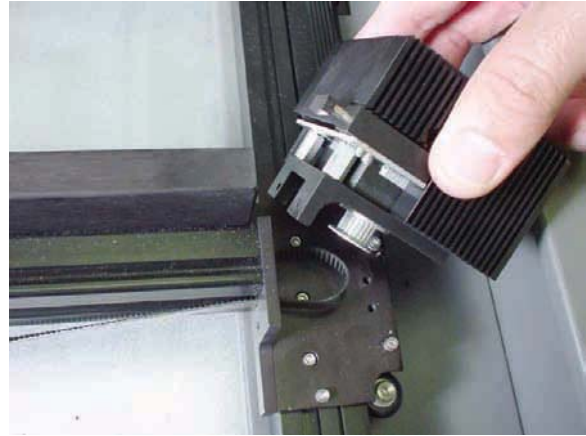
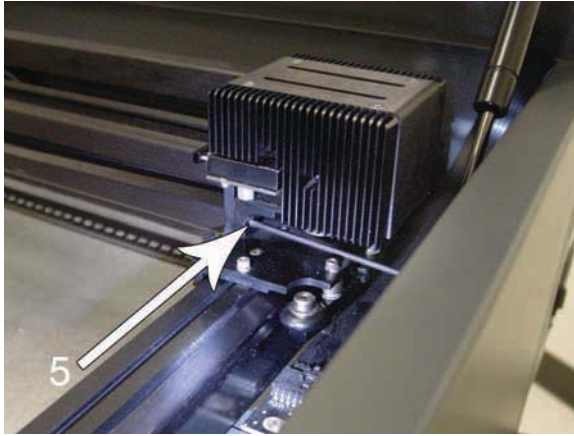
2. Loosen the three screws (3) (1/2 turn) that mount the tensioning bracket (2). Also, back off the setscrew (1) until the tip does not make contact (this will partially release the tension on the belt) but **do not** remove the screw completely.



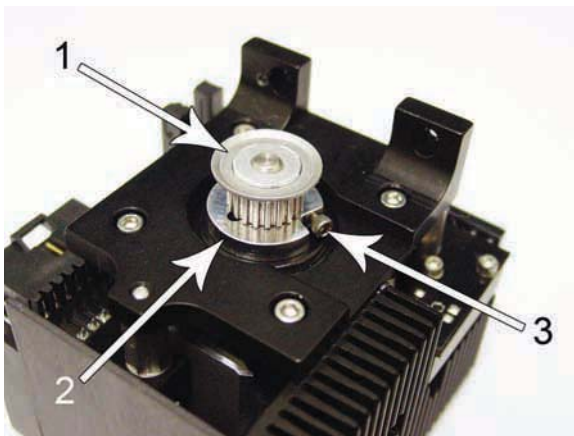
2. Once the tension is released from the X-axis belt, detach the flexible cable (1) from the X-axis motor housing by pressing your fingertip on the underside of the cable, depress the locking tab (2), and gently pull the cable out.



3. Be careful not to make contact with the Y-axis Home Sensor (3), it is made out of plastic and can easily break. Remove the mounting screw (4) with a 3/32 Allen wrench. It is a tight fit under there and is very dark so you may need to use a flashlight to see it.

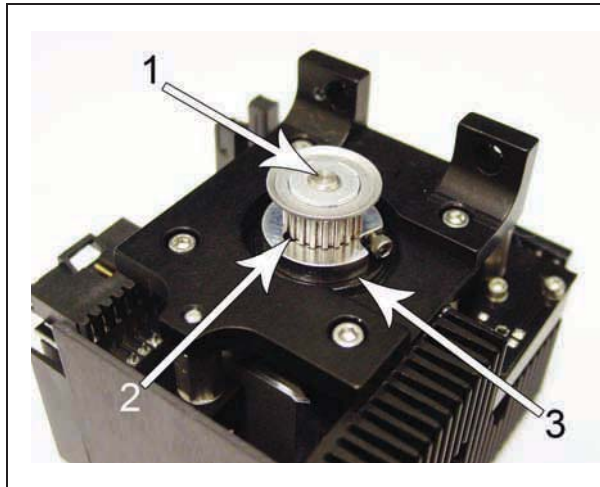


4. Remove the other mounting screw (5) is on the front side of the motor housing with a 3/32 Allen wrench. Lift the motor housing off of the arm and put it on a table in a safe place. Be careful not to drop the Motor Module or touch the Y-axis home sensor.



5. Before removing the gear, notice its position on the shaft. Working at a separate table, place the X-axis motor housing upside down. You will now see the drive gear (1), the retaining clamp (2), and its mounting screw (3). Loosen but do not remove the mounting screw from the X-Axis motor shaft. Once the screw is loose lift both the retaining clamp and drive gear and set them aside.

6. *If you are replacing the X-Axis Motor continue to step 8, if not continue to the next step.*



7. Position the new gear or clamp on the shaft so that it is approximately centered on the shaft just like it was when you took it off. There should be a small gap between the retaining clamp and the motor (3), no gap between the retainer and the gear (2), and the shaft should be slightly protruding out of the gear similar to the picture shown (1). Once the gear and retainer are in place tighten the screw.\*

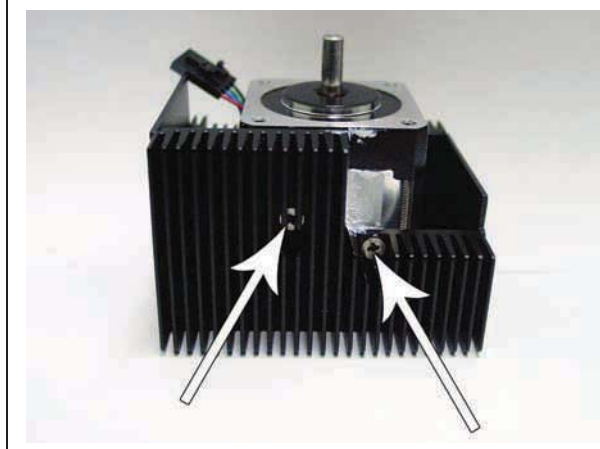
## X-Axis Motor



8. Loosen the 4 mounting bracket screws. Once you remove the screws **do not** pull on the bracket as it is still attached with a wire connector.



9. Undue the connector by pressing the connectors latch and gently pulling on the connector.



10. Located on both sides of the heat sinks are two Philip head screws. Remove the four screws and set them aside. Try not to get the Heat Sink Compound on your hands or clothes. Use more Heat Sink Compound if necessary.

11. Re-install the Motor Module onto the X-Axis rail with the 2 screws that were removed from steps 3 and 4. Make sure that the belt loops around the drive gear.

\*If you plan on replacing the motor do not install the new drive gear or retaining clap at this time.