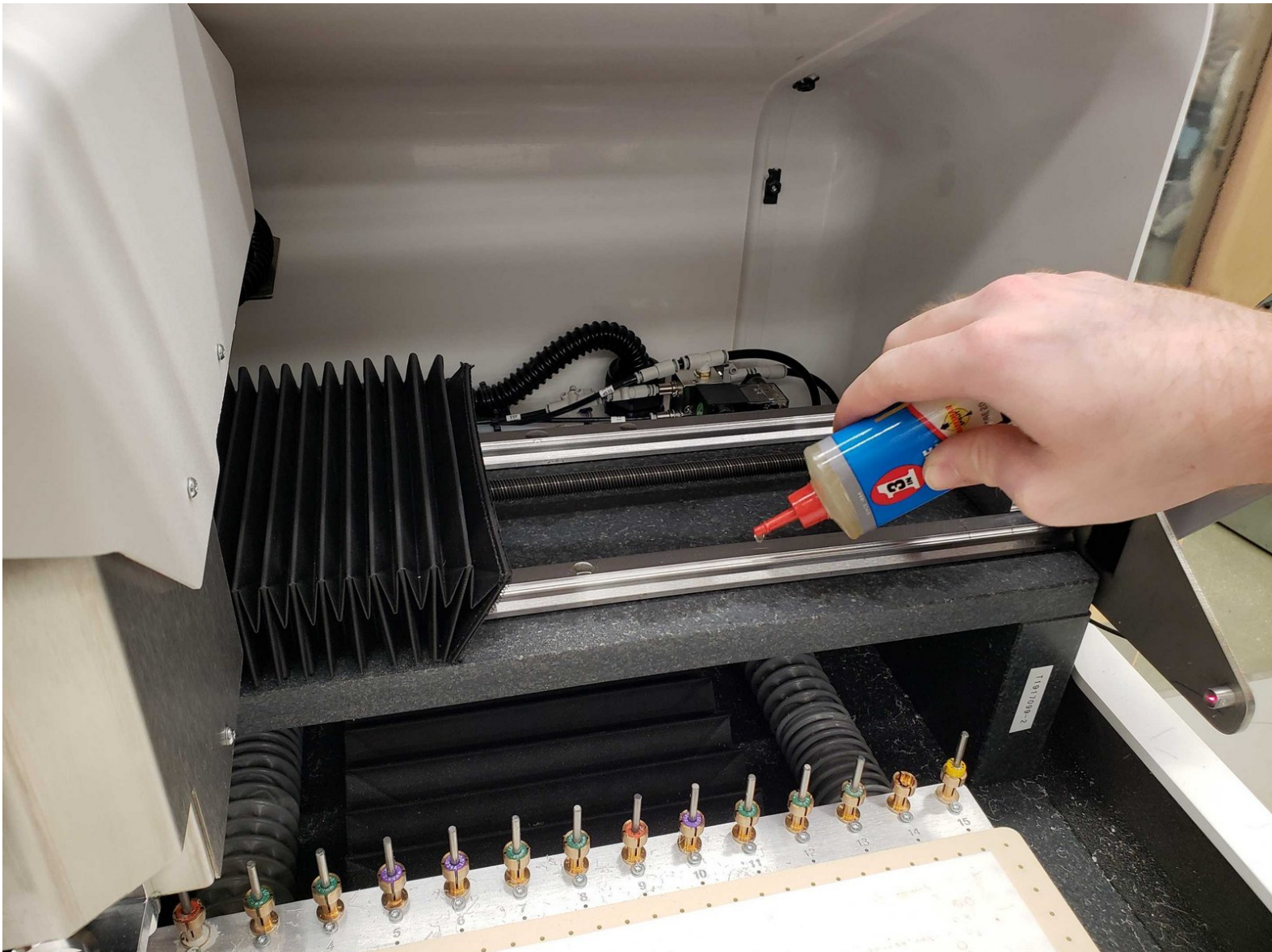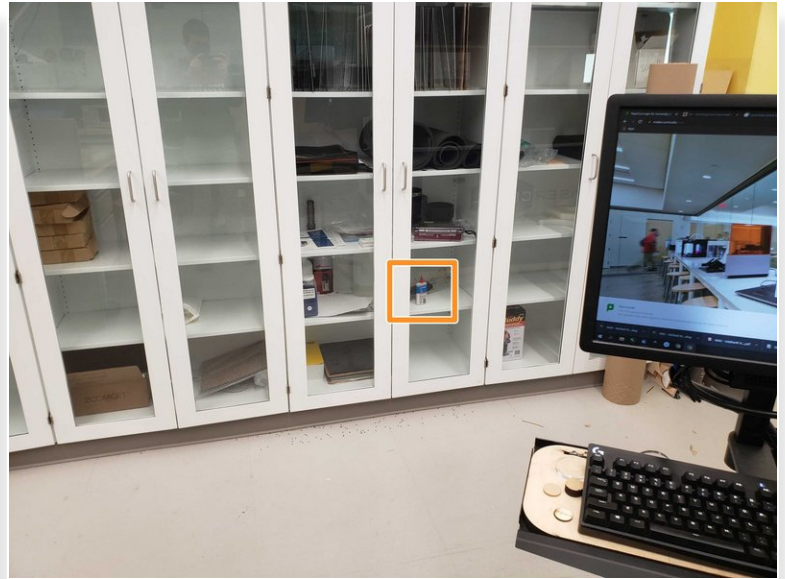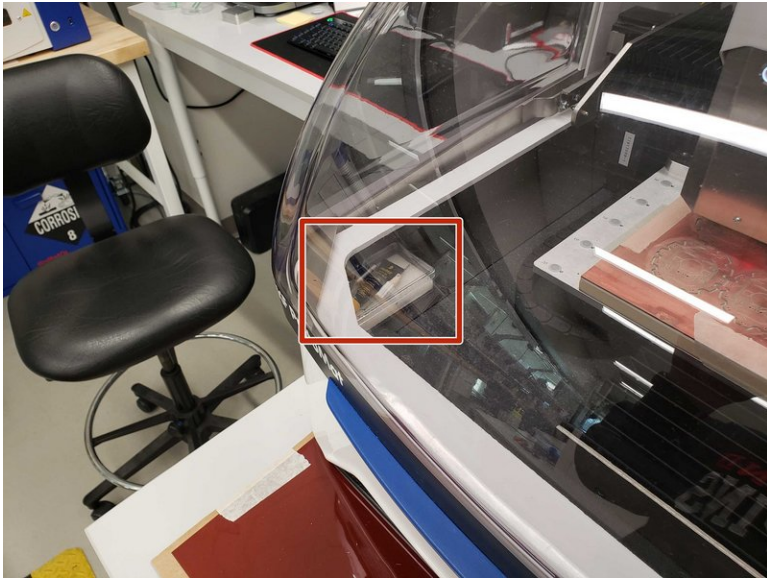# ProtoMat S64 Maintenance: Lubricating the Linear Rails and Collet

How to lubricate the moving parts on the ProtoMat S64.

Written By: Cosimos Sivan Cendo

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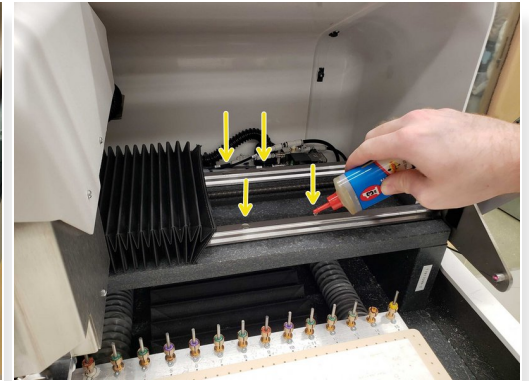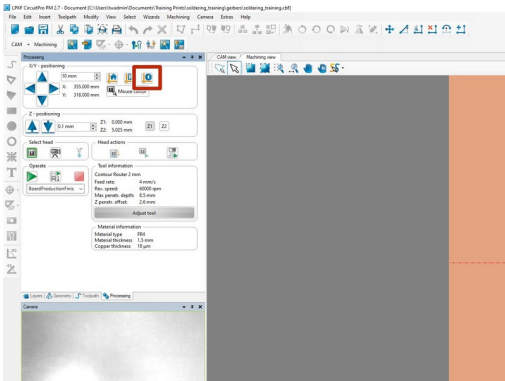
Step 1 — Materials

- Grease for the collet is located inside the ProtoMat on the left

- Oil for the linear rails is located in the cabinet next to the Kern
  - ⓘ This oil is also used for the Kern, so keep it in this cabinet

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Step 2 — X axis rails

- Move the head to the **0** position using CircuitPro

- Peel back the cover of the X-axis linear rails, which is held in place with velcro

- Place two drops on each rail and pull the cover back over

- (i) If the rails are exceptionally dirty, you may want to wipe them with a cloth before adding oil
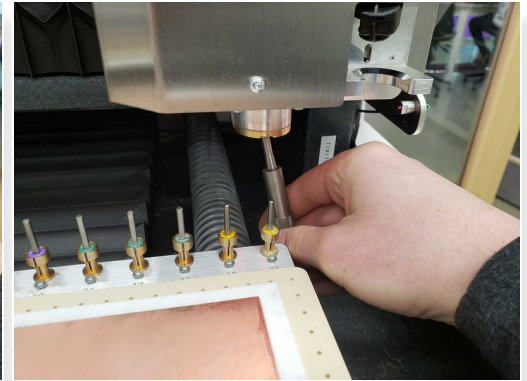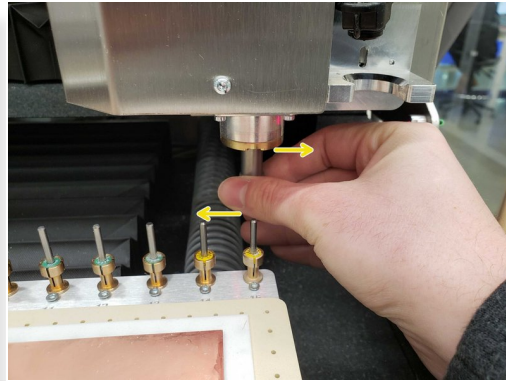
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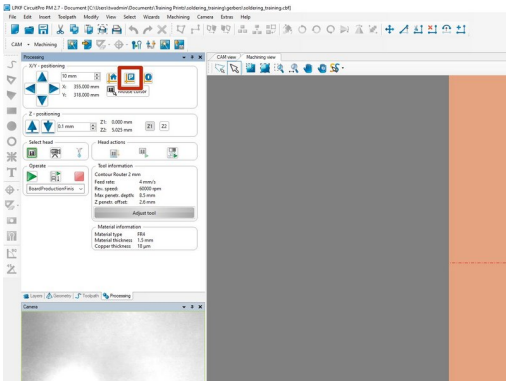© 2022   dozuki.umd.edu/   Page 3 of 7

Step 3 — Y axis rails

- Do the same for the Y axis rails

- ⓘ It's a good idea to vacuum beforehand so no shavings get onto the rails

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Step 4 — Take out the collet
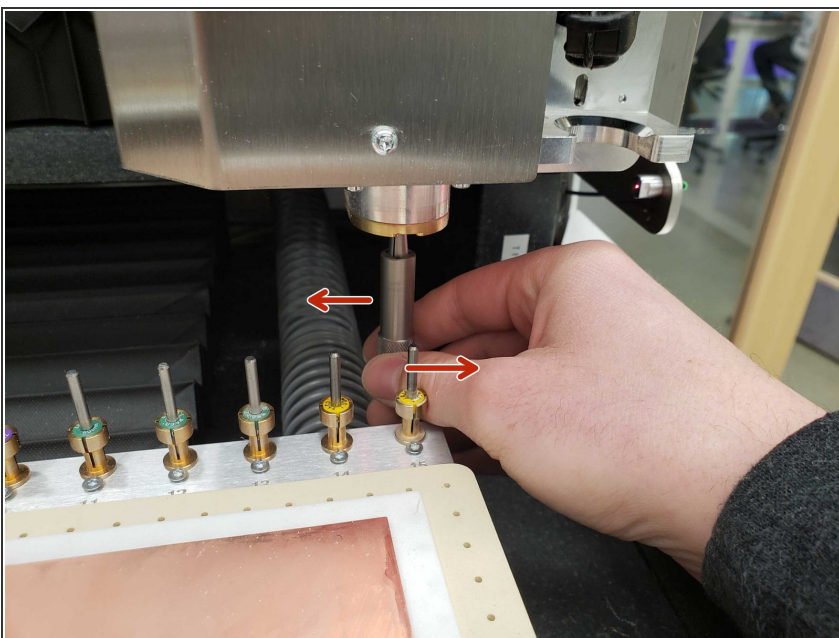

ⓘ If there is a tool in the collet, unload it

● Move the head to the **P** position using CircuitPro

● Insert the collet tool from the box into the spindle

● Twist counterclockwise (as if you were looking up into the spindle) to unscrew the collet

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Step 5 — Grease the collet

- Put some grease on the foam spreader

- Spread a thin layer all around the collet

Step 6 — Place the collet back in

- Push the collet back into the spindle and twist clockwise to lock it back in place

- ⓘ Next time CircuitPro asks you to perform these maintenance tasks, click the button confirming to did them to reset the internal timer

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