

Fusion3

EDGE 3D Printer

MAINTENANCE: LUBRICATING THE LINEAR RAILS

Revision 5/28/2022

LUBRICATING THE LINEAR RAILS

How to lubricate the linear rails for maximum life and print quality

IMPORTANT: ONLY USE THE LUBRICANT SPECIFIED IN THIS DOCUMENT. USE OF OTHER LUBRICANTS MAY VOID YOUR WARRANTY AND CAUSE DAMAGE TO THE PRODUCT.

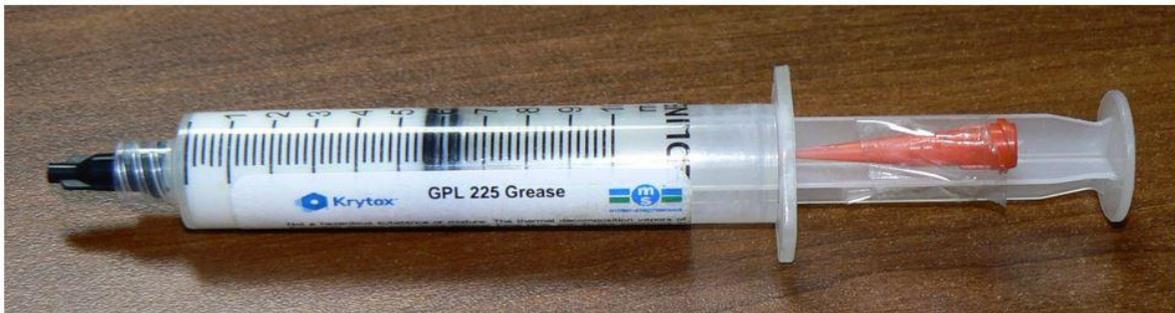
IMPORTANT: APPLY LUBRICANT EXACTLY AS DESCRIBED IN THIS DOCUMENT. OTHER LUBRICATION METHODS MAY VOID YOUR WARRANTY AND CAUSE DAMAGE TO THE PRODUCT.

IMPORTANT: LUBRICATE ALL LINEAR RAILS WHEN PROMPTED TO DO SO BY THE SYSTEM MAINTENANCE REMINDERS. FAILURE TO LUBRICATE THE RAILS ON SCHEDULE MAY VOID YOUR WARRANTY AND CAUSE DAMAGE TO THE PRODUCT.

LUBRICANT TO USE

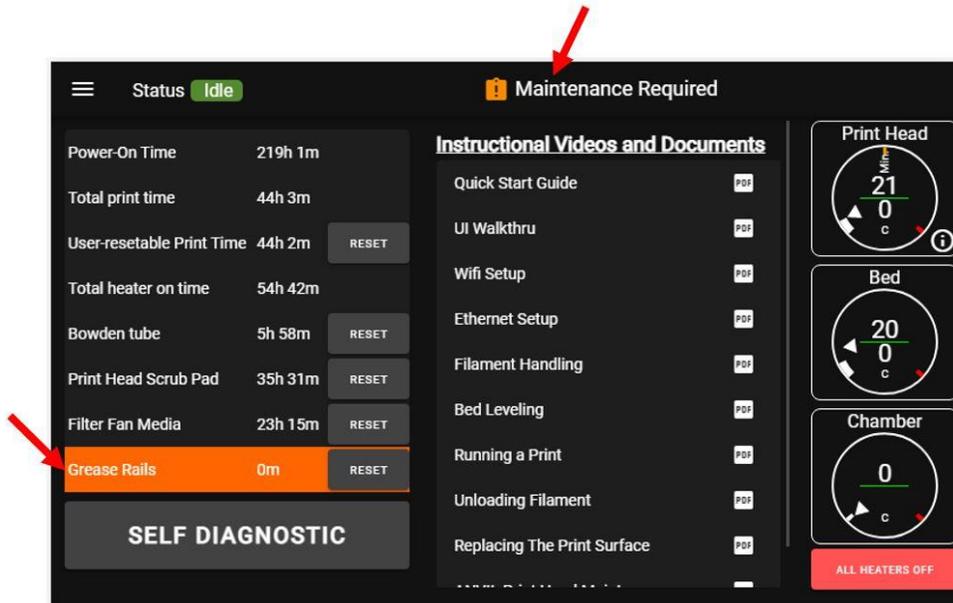
The correct lubricant to use is **Krytox GPL 225**. It's important to purchase this lubricant in a dispenser with a small syringe-like tip.

Here is an example of the correct lubricant and dispenser: <https://www.grainger.com/product/35RV08>



WHEN TO LUBRICATE

The on-board maintenance counters & reminders will prompt you when it is time to lubricate the rails. This is every 175 hours of run-time.

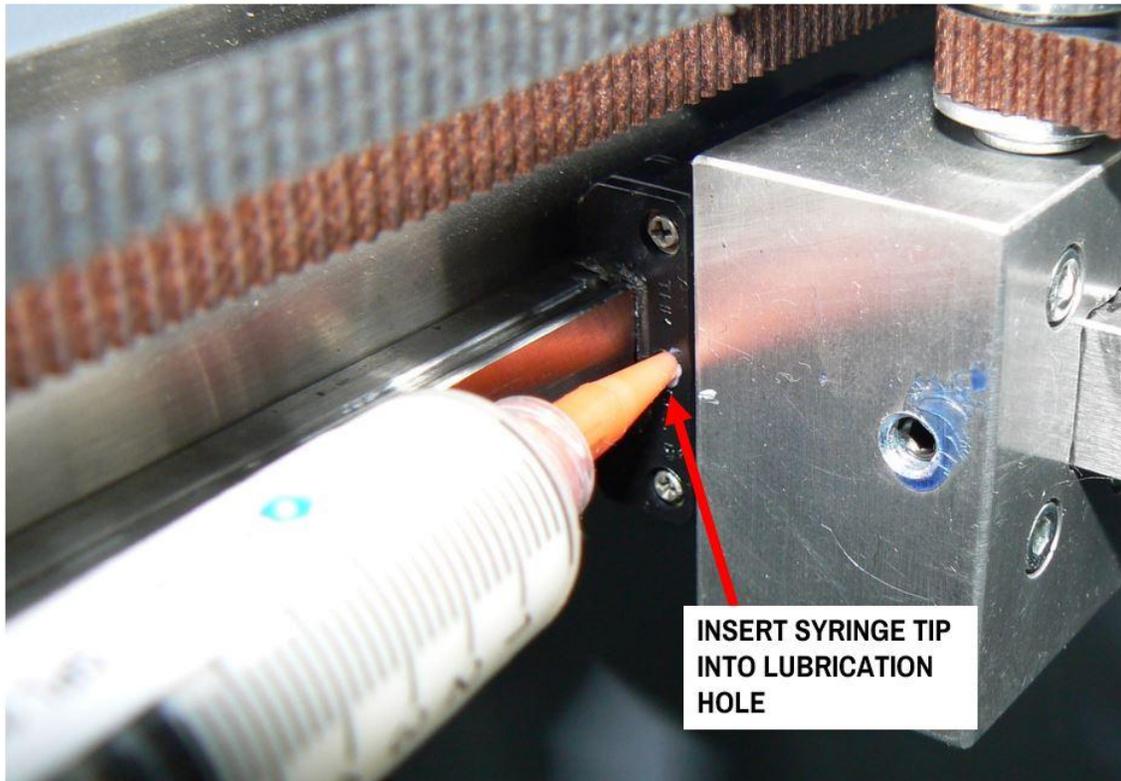
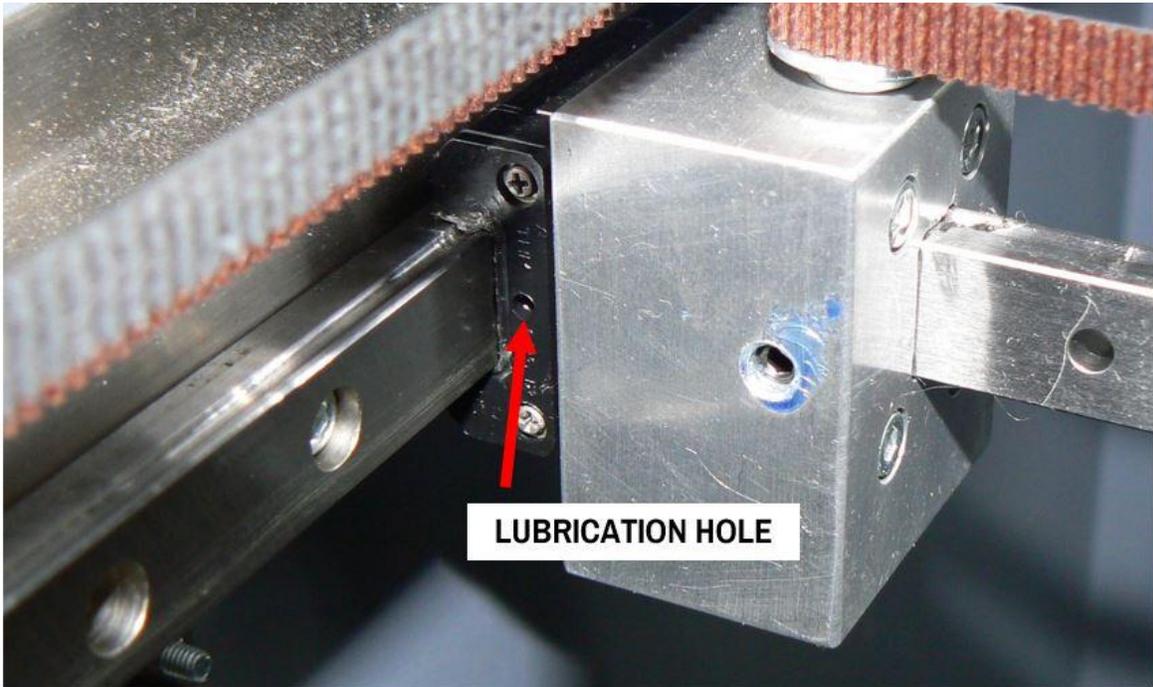


HOW TO LUBRICATE

1. Make sure the printer is idle, off, and cold. Remove the rear maintenance door and top window as needed to access all linear bearings as described here.
2. You should **grease all 5 linear bearings** at the same time (1x, 2y, 2z)
3. Install the tip into the lubricant syringe.



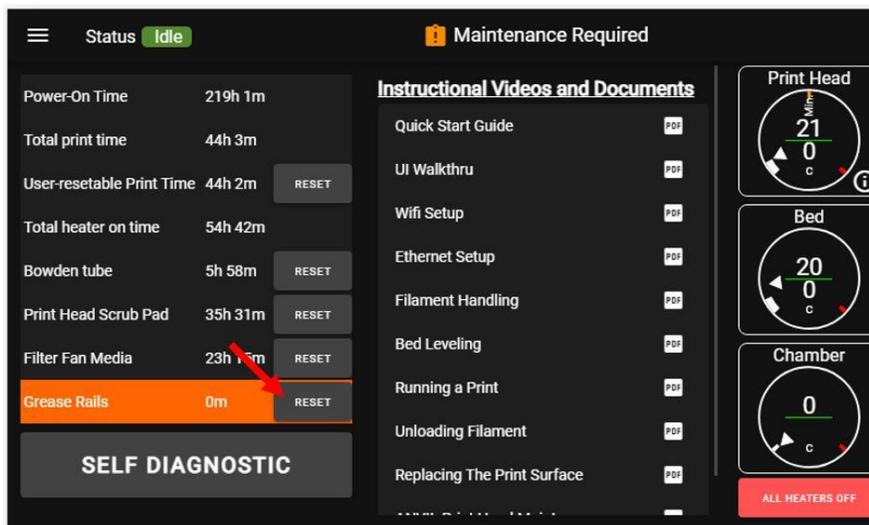
4. Locate the small hole in the center of the linear bearing endcap. Insert the tip of the syringe into the hole.



5. Gently and slowly dispense grease into the hole until you see some squirt out around the syringe tip.



6. Repeat for the other endcap on the same bearing.
7. Repeat for all bearings (5 bearings, 10 endcaps total).
8. After you have done all the bearings in the machine, power the machine on and run the axes around by hand to spread the grease out inside the bearings. You may see some excess deposited on the rails; this is normal.
9. In the user interface, navigate to the Maintenance page and locate the "Grease Rails" timer. Press the "Reset" button to reset the timer.



Related Articles / Resources:

Tags: edge, maintenance, linear rails, lubricate, lubrication