

Fusion3

EDGE 3D Printer

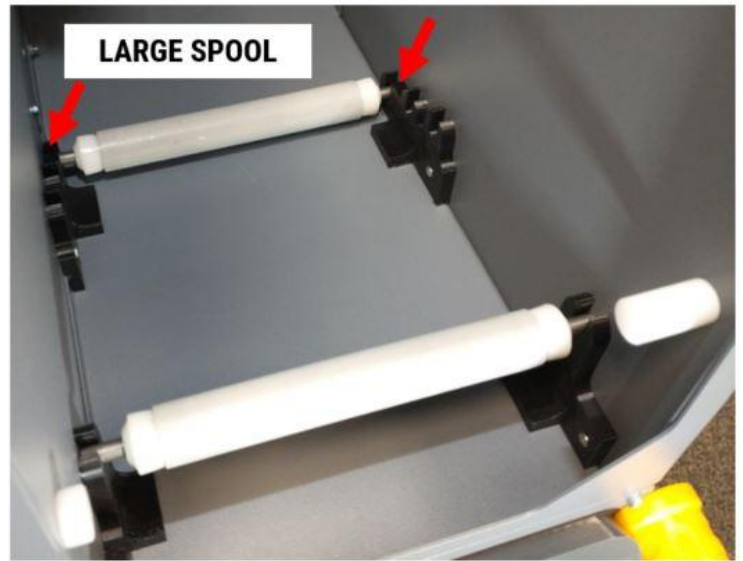
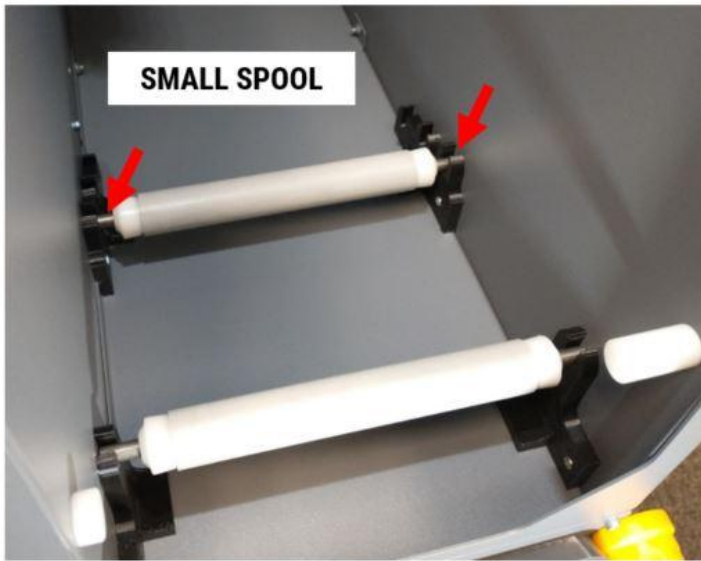
LOADING FILAMENT

Revision 5/28/2022

EDGE - LOADING FILAMENT

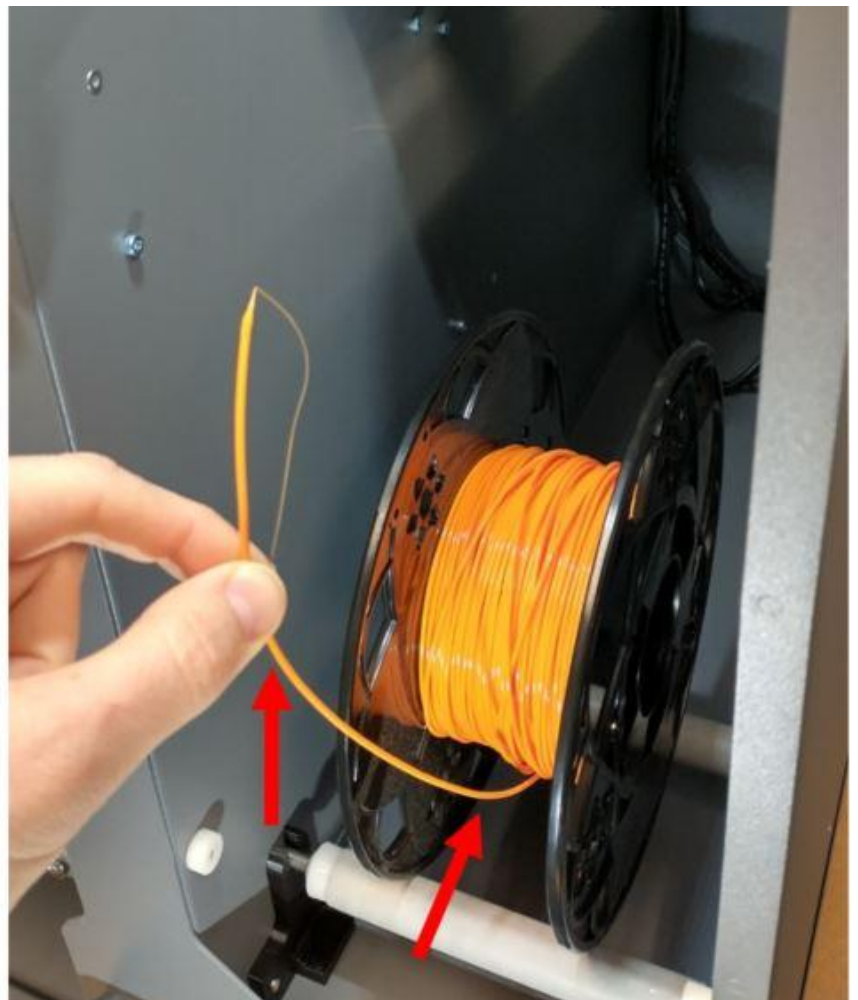
How to load filament into your EDGE 3D printer

1. Depending on the size of the spool, adjust the rear spool roller to fit the size of spool you are loading.

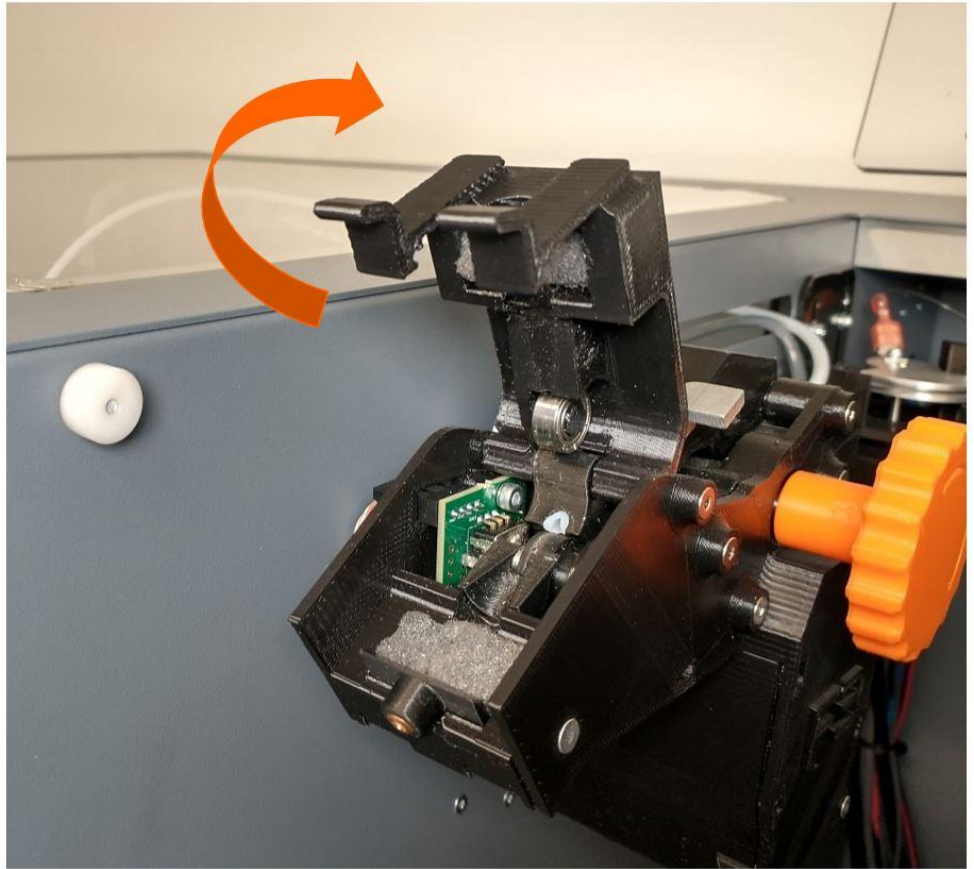


2. Place the filament spool onto the rollers with the free end of filament paying off the front and pointing up.

IMPORTANT: NEVER allow the free end of the filament to get loose and out of control. When this happens it can wrap under itself on the spool and cause a tangle later. This is rarely obvious immediately after it happens, and inevitably shows up in the middle of a 20+ hour print job and causes a feed issue.



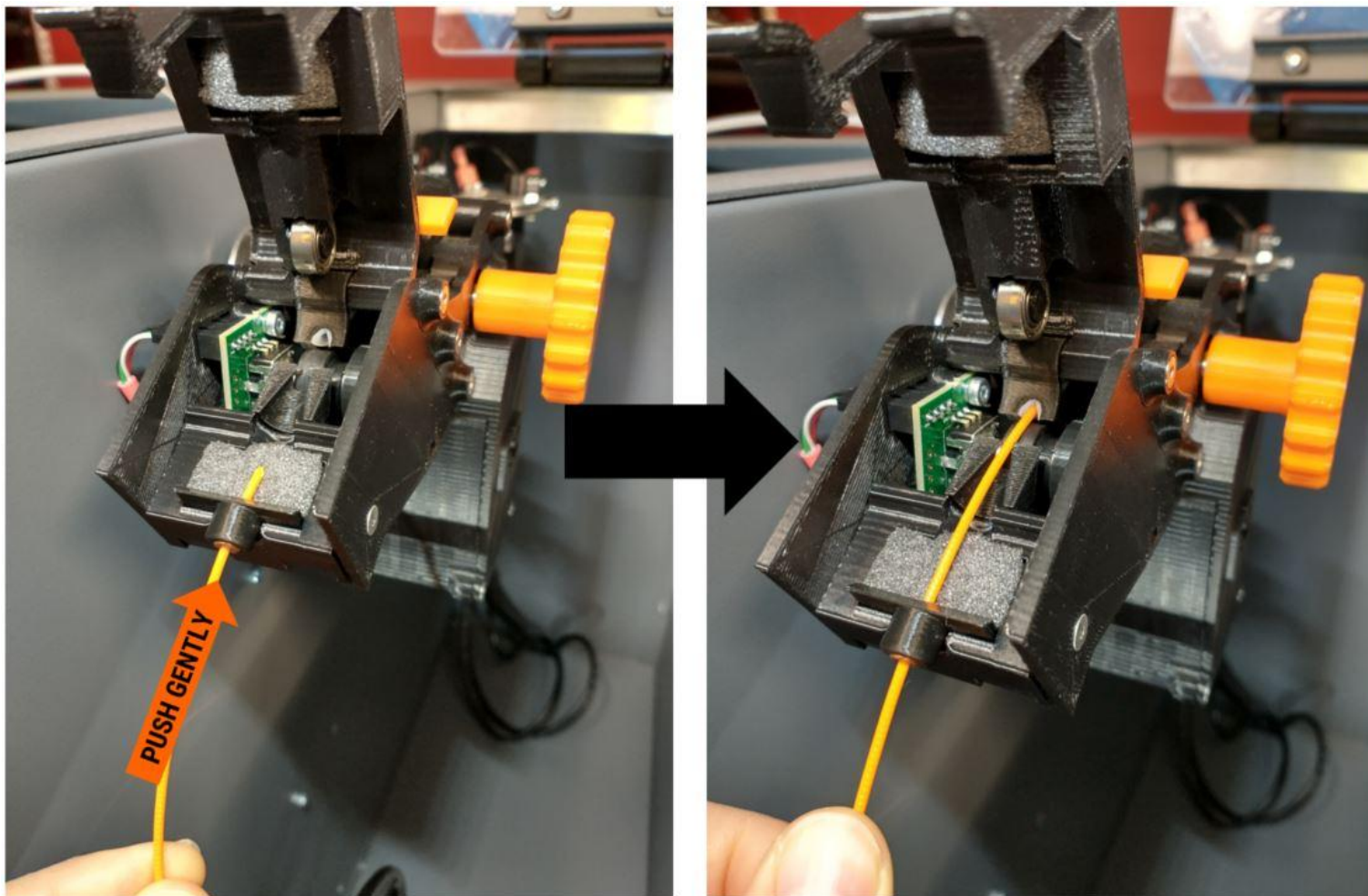
3. Open the filament monitoring door on the extruder.



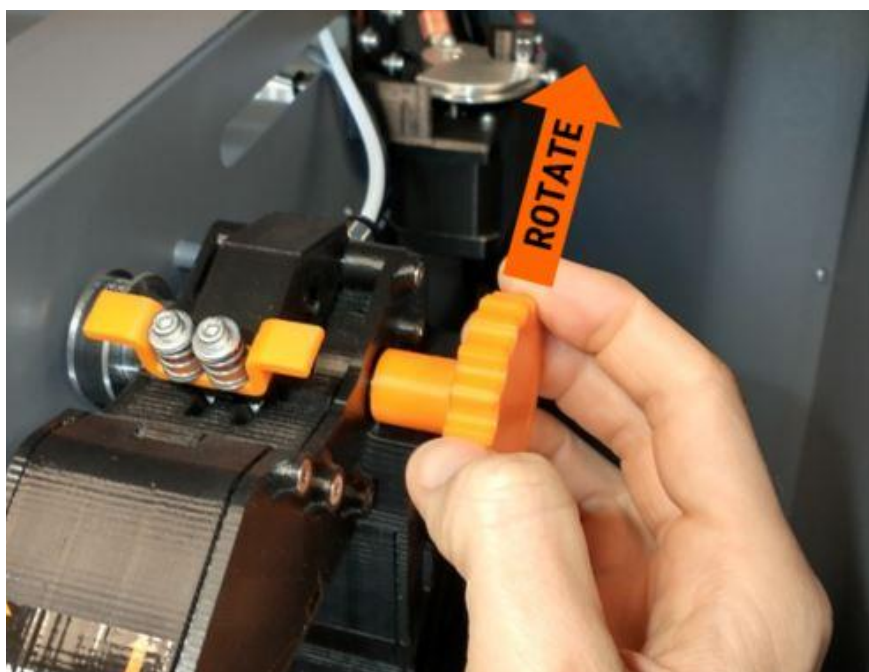
4. Loosen the free end of filament from the spool. Trim the end at a diagonal as shown.



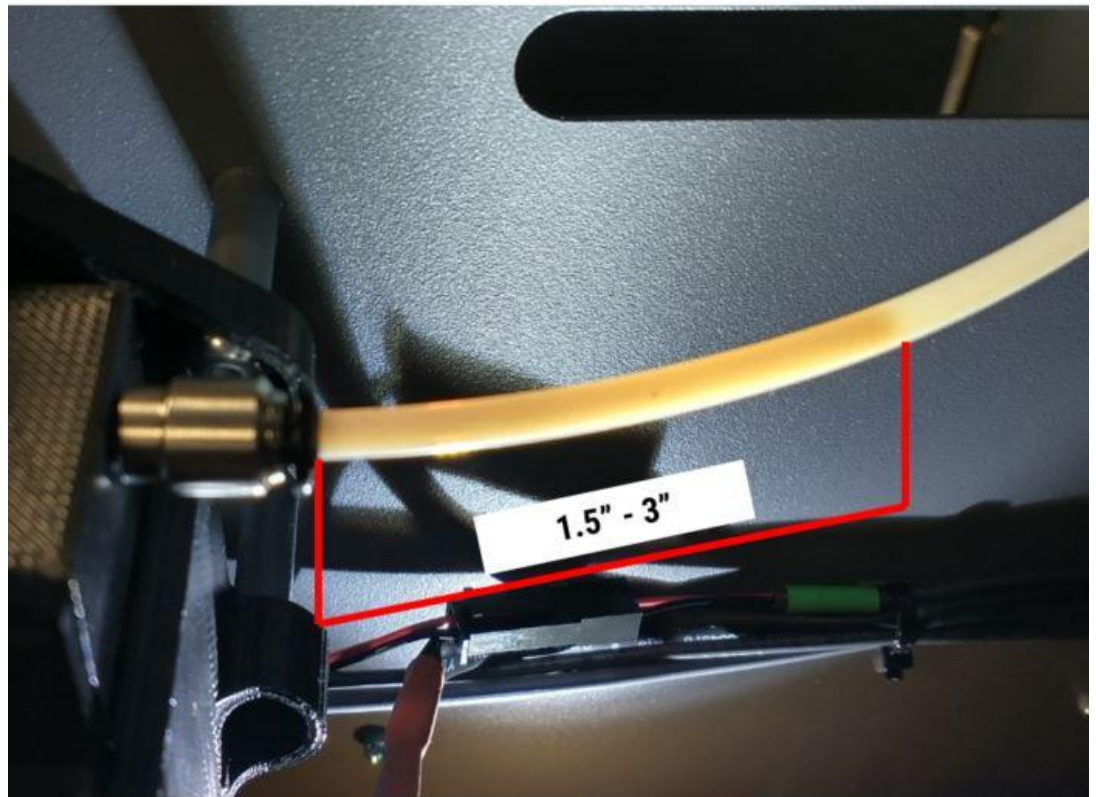
5. Feed the end into the extruder, through the inlet guide, over the wiper, over the monitoring wheel, and into the liner. Gently push until you feel it bottom out.



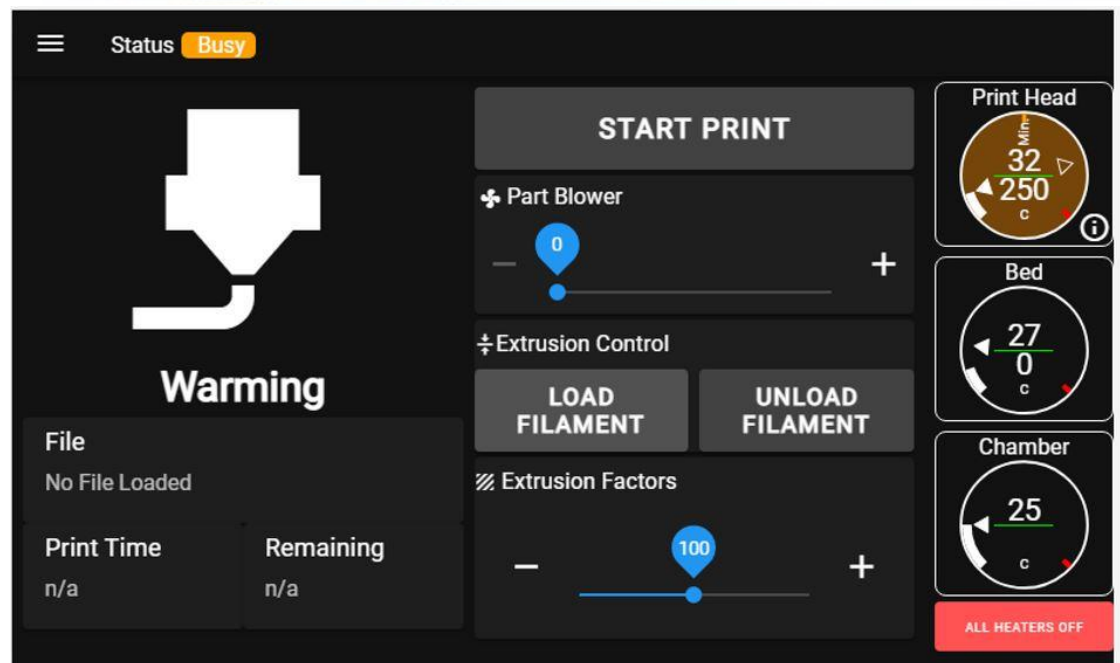
6. Grasp the manual advance knob on the side of the extruder, and rotate it slowly away from you as you continue to push on the filament. You should feel the feed gear engage the filament. When this happens, the idler bar will shift up slightly.



7. Continue to turn the manual advance wheel until you see the filament protrude into the bowden tube at the exit of the extruder. You need to see 1.5-3 inches protruding into the tube.

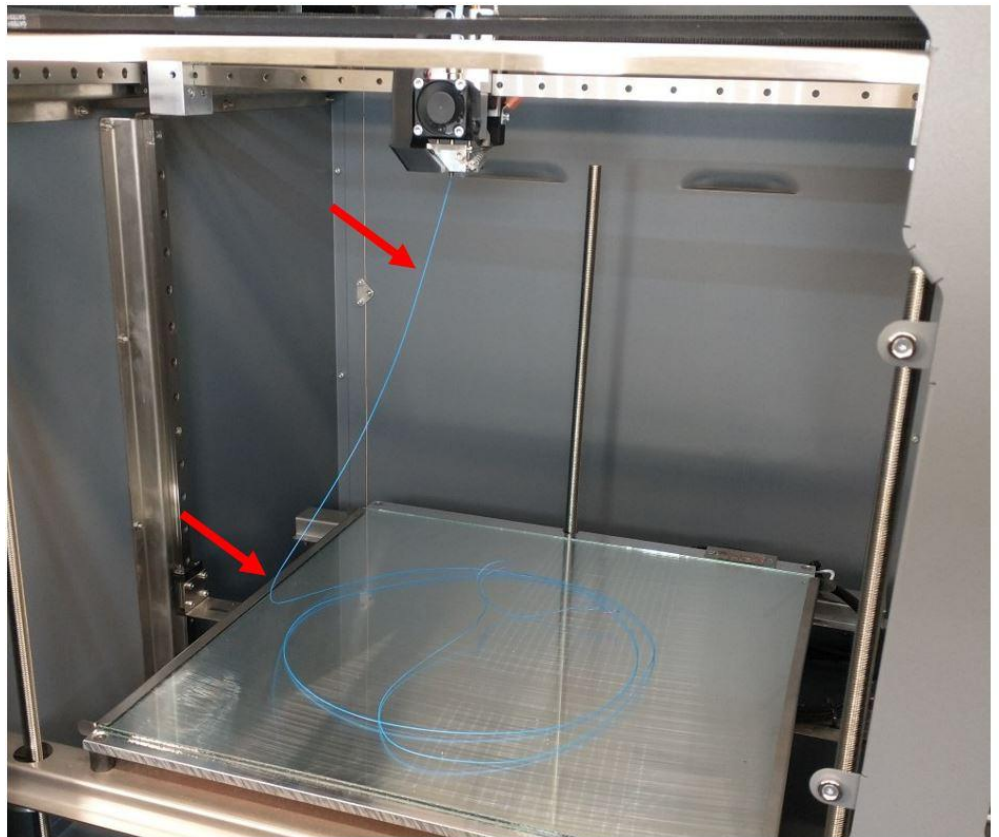


8. On the control panel, select the "Load Filament" button on the main screen. The printer will begin its load filament sequence by heating the head and moving the bed down away from the print head. It can take 1-2 minutes to heat the print head and it will look like nothing is happening; please be patient.



9. Once the head is up to temperature, the extruder will begin to feed filament through the tube and up to the print head. Once the filament reaches the print head, it will extrude out several feet to clear out any old material that might be loaded into it.
10. After the load is complete, the extruder will reverse slightly and the print head will shut off. **CAUTION:** The head will remain hot for several minutes.

11. Remove the string of filament from below the print head.



IF YOU ENCOUNTER ISSUES LOADING FILAMENT

In most circumstances you do not need to open the idler bar to load filament. If you encounter stiff resistance and the filament stops feeding into the extruder, then you should open the idler bar and make sure the filament is passing over the feed gear correctly.

SPECIAL CASES

Flexible Filaments

Flexible filaments (TPU, TPE) are more prone to issues during the load filament sequence, since they are so flexible.

In some cases you may need to feed these up to the print head manually instead of using the automatic sequence. Simply manually heat the print head and use the manual advance wheel to advance the filament up through the bowden tube.

If you're changing from a high temperature material (such as PC, PC-PBT) to a flexible, this is a situation where your odds of encountering a misfeed are higher. One workaround is to load PLA, then unload it, then load your flexible.

Tags: edge, load filament

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