

# How to unclog a capillary

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Sometimes the gold ball can get pulled inside the capillary making re-threading impossible.

1. Remove the capillary from the wirebender.
2. Fill the ultrasonic cleaner with clean DI water, and place the capillary on the bottom floor of the ultrasonic cleaner.
3. Run the sonicator for about 15 minutes. This will loosen the gold ball stuck inside the capillary.
4. Find the tube attachment as shown in the photo in the bottom drawer under the wirebender.
5. Close the N2 valve in the fume hood, release the trapped N2 from the gun, and remove the push-to-connect tube from the gun.
6. Connect the N2 tube to the attachment, as shown in the photo.
7. The capillary is tapered. The bottom hole is smaller than the top hole. If the ball is stuck deep inside the capillary, then it is best to push it up the capillary towards the larger hole. If it is stuck just outside the tip, it may be best to push it out through the bottom.
8. Insert the capillary into the small plastic tube depending on the desired direction of removal.
9. Make sure the capillary is tightly inserted into the tube. We don't want the capillary to fly off, especially towards your face.
10. Holding the capillary away from you, turn on the N2 valve. You should not hear any gas flowing. With the sonicator still running, dip the end of the tube into the water. If you see bubbles coming out of the capillary, then the ball has been removed. If not, you have to go back to step 3 and repeat.
11. Once the capillary is clear, resist the temptation to celebrate until the next few steps are complete.
12. Reconnect the N2 gun to the line.
13. Put the tube attachment back in the drawer.
14. Turn off the sonicator and clean up your work area.
15. Now celebrate.

