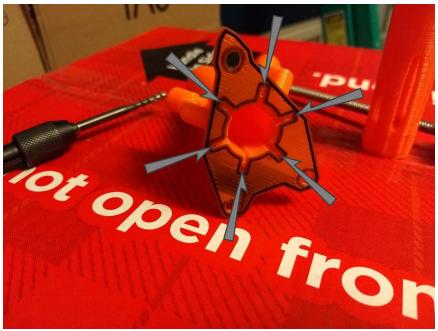
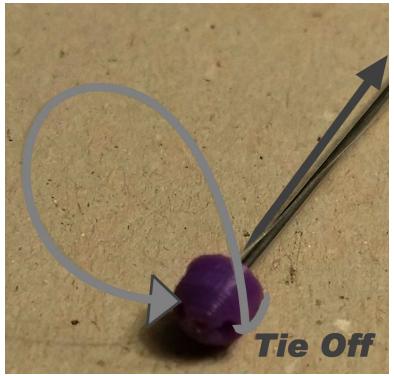
## Nerf Caliburn – SCAR Barrel Kit Instructions

**Supplies**: Printed Parts, 0.25mm fishing line,  $10-32 \times \frac{1}{4}$  screws (optional),  $\frac{1}{16}$  weld rod or a 10 inch length of  $\frac{3}{8}$  diameter wooden dowel with two  $\frac{1}{16}$  holes drilled into the side of one end.

**Tools required:** Scissors, Screwdriver, Round Needle File, Hobby Knife, UNF 10-32 Tap in tapping wrench (optional), ample amount of light to see what you are doing, 1/16" drill bit (or a similarly small one)



If the holes in the back of the rear half of the print did not print unobstructed, drill them out with a 1/16" drill bit.



Glue the printed tool onto the end of a 10-inch length of weld rod, or drill two holes in the side of a 10-inch length of 3/8" OD wooden down. Cut a 14 inch length of fishing line and tie it off to one of the holes. Feed the free end of the fishing line through the other hole. This is your "Noose Wand".



A: Add a thread to each of the three holes with a UNF 10-32 tap. (optional)

B: Check the fit of the two halves. You may need to use a flat or round needle file to clean up this portion of the back half of the print in order for them to fit together.

C: You also may need to use a Hobby Knife to deburr the inside edge of the front half.

If the retraction settings of your printer are incorrect, you may also need to use a Round Needle File/Rasp to remove all of the "hairs" from the inside of both halves of the print.



Add three 10-32 x  $\frac{1}{4}$  length screws. Do not completely tighten them. Use Scissors to cut three 24 inch long pieces of fishing line.



Combined the two halves of the barrel. Line up the notch in the front half of the barrel with the topmost notch of the back half of the barrel.



A: Take one length of fishing line and feed a loose end in through the back of one of the holes in the rear half then clamp down on it with the screw. Alternatively just tie it off around this post.

B: Feed the Noose Wand in through the barrel from the opposite end, and feed the remaining loose end of the fishing line by pulling on the Noose Wand's string. This will tighten the Noose onto the loose fishing line end.

C: Pull the Noose Wand out the opposite end of the barrel.



A: Remove the loose end from the Noose Wand then feed the loose end of the fishing line out the top hole at the end of the barrel, then feed it back in through the next hole in sequence.

B: Tighten the Noose of the Noose Wand onto the free end again and feed it through to the back end of the barrel.

C: Remove the free end from the Noose and feed it through the next hole in sequence on the back plate, then loosen the screw. Wind both now loose ends around the screw until you've pulled up any slack, then tighten it. Alternatively just tie the free end off around this post after pulling up any slack.



A: Repeat the prior two steps with the next lengths of fishing line and the next holes in sequence.

B: Trim the excess fishing line with Scissors.

C: Your SCAR barrel is complete. Attach it to the front of you Caliburn by removing the three acorn nuts at the front of the blaster, slide it over those and the barrel, then secure it with the acorn nuts (or more locking hex nuts. You will need to test it with your darts then adjust the twist one half or one full notch at a time and test again.