

How to make you own DR300 Drone Retriever

1. Procure:

- a. SOLID Pool Noodle
 1. Select a YELLOW or ORANGE color as the bright color facilitates an easy visual recovery aid.
 2. Specification: procure a 2.56" [65mm] diameter noodle.
 3. Estimated cost: \$8.00 to \$12.00 each.
- b. Zip Tie
 1. We use a Pawl Release Zip Tie that allows for easy reuse.
 1. <https://ziptie.com/product/15-inch-natural-releasable-pawl-cable-tie-50-lb-tensile-strength-ul-21-listed-100-pack/>
 2. Estimated cost: delivered: \$13.47
 3. Note there are two styles marketed.
 - a. The one shown at the above link is the easiest to remove.
 - b. There is a second style which has a much larger release tab but in order to release the tab you need clearance behind the zip tie for a finger while using your thumb to push the release tab. Not quick or easy.
 2. You can procure standard 4 mm wide *single use* zip ties 14" long.
 1. Estimated cost: \$4.00 for pack of 50-100
- c. Serrated cutting knife
 1. A typical sharp kitchen bread knife will work best
 2. You could also use a sharp razer edge utility knife

2. Estimated Total Cost: \$12.00 to \$24.00

3. Fabrication:

- a. DR300
 1. Measure length of noodle 4.0 inches [102mm]
 2. Using the knife cut the noodle at 90 degrees.
- b. DR250
 1. Measure length of noodle 3.0 inches [76mm]
 2. Using the knife cut the noodle at 90 degrees

4. Weights and Measures:

- a. Materials:
 1. Float 4" weight 5.6 grams
 2. Float 3" weight 4.5 grams
 3. Zip Tie weight 1.8 grams
- b. DR300 - Added weight to Drone 7.4 grams
- c. DR250 - Added weight to Drone 6.3 grams