Canister Build Guide

SeaPerch Competition Course Component Build Guide

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Specifications:

- 1. Small Canister 1.68" Diameter (Golf ball size)
 - Weights: 7 each, 3/8-16 Stainless Steel Hex Nut (42 grams)
 - Note: Hot glue used to lock hex nuts in place has a density of .9 1.0 g/cm³
 - Rope: 1/4" Polypropylene x 10" long
 - Total weight in air: 66 grams
 - Apparent weight in water: 38 grams
- 2. Medium Canister 2.86" Diameter (Baseball size)
 - Weights: 6 each, 1/4" x 1.5" Stainless Steel Fender Washer (73 grams). Actual size .055" thick, 1.50" Outside diameter, .281" diameter hole.
 - Rope: 1/4" Polypropylene x 12" long
 - *Total weight in air*: 103 grams
 - Apparent weight in water: 63 grams
- 3. Large Canister 3.82" Diameter (Softball size)
 - Weights: 6 each, 1/4" x 1.5" Stainless Steel Fender Washer (73 grams). Actual size .055" thick, 1.50" Outside diameter, .281" diameter hole.
 - Rope: 1/4" Polypropylene x 14" long
 - Total weight in air: 126 grams
 - Apparent weight in water: 61 grams



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Small Canister (Golf Ball Size Wiffle Ball)

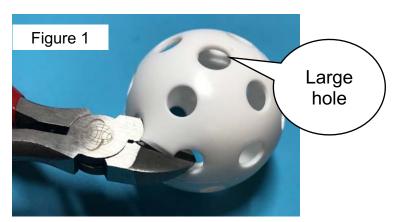
1. Hot glue the holes in the hex nuts. This prevents air entrapment which will affect the apparent weight in water.



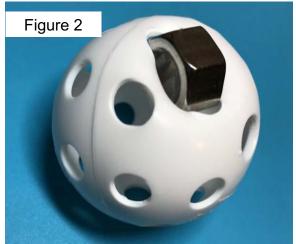




Small Canister (Golf Ball Size Wiffle Ball) - continued



2. Make a slit between two of the holes (Figure 1).

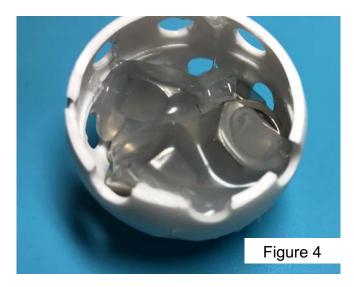


3. Insert 7 nuts (Figure 2).

Squirt enough hot glue into Wiffle ball to coat hex nuts (Figure 3). This prevents hex nuts from moving. Figure 4 is for illustration purpose only to show hex nuts covered with glue - DO NOT cut your ball as shown.

> Use safety precautions when using hot glue.







Small Canister (Golf Ball Size Wiffle Ball) - continued



- 5. Overlap the rope ends 3/4" to 1" and fasten using an 8" to 10" long cable tie.
- 6. Cut off end of cable tie as close to lock as possible.

(Instructions typical for all rope hoops.)



- 5. Connect the rope hoop to the Wiffle ball (center over large hole with hex nuts on bottom) as shown using an 8" to 10" long cable tie.
- 6. Assure that the cut off end of cable tie as close to lock as possible.



Medium & Large Canisters (Baseball & Softball Size Wiffle Ball)



1. Cut a slit on both ends of any slot using diagonal cutting. The slit must be large enough to allow the fender washers to be inserted.

Please remember to use safety precautions when cutting the slit.

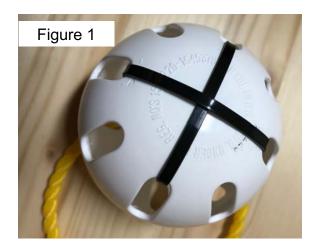


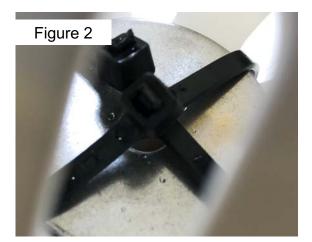
2. Insert 6 washers.



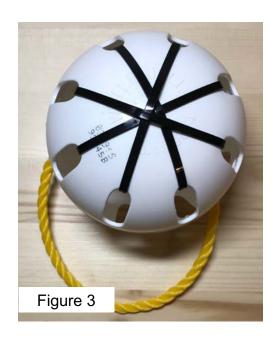
Medium & Large Canisters (Baseball & Softball Size Wiffle Ball) - continued

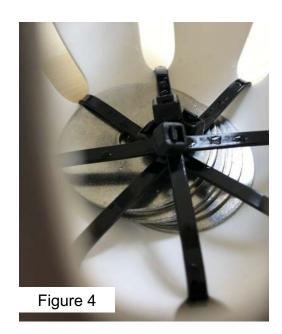
3. For Medium Canisters (Baseball size Wiffle Ball): Lock the washers in place using two 8" to 10" long cable ties (*Figure 1 & Figure 2*)





4. For Large Canisters (Softball size Wiffle Ball): Lock the washers in place using three 8" to 10" long cable ties (*Figure 3 & Figure 4*).







Medium & Large Canisters (Baseball & Softball Size Wiffle Ball) - continued



4. Insert the rope through two opposite slots and fasten the ends as shown using an 8" to 10" long cable tie. The ends should overlap 3/4" to 1".



- 5. Push the ends through the slot so the connection is inside of the ball.
- 6. The rope hoop must be at the top of the ball with the washers at the bottom.