

How to Build a TOGA Tidal Tumbler 2020



What you need

- *Main wire panel, 38" long, 36" wide
- Hatch cover wire panel, 20" long, 11" wide
- PVC cement and primer
- Thin wall 4" PVC pipe, 33.5" long
- 2 each 4" PVC caps
- 2 each 24" cable ties
- 2 each 5 gallon paint can lids (Home Depot)
- Large $\frac{3}{4}$ " stainless pig rings
- Small $\frac{1}{2}$ " stainless pig rings
- Bungee cord, 12"
- Crabpot line, 5 ' (ends burned)
- Clamps, 2
- Wire cutter
- Pig ring pliers
- Wire bender

Not shown in photo

- Plastic hook
- Drill with small bit
- Rubber hammer
- Screwdriver

*The main wire panel is 38" long (wrap direction) and 36" wide. When wrapping, there is a 2" overlap which results in a 36" circumference.



Prime and glue the pipe caps. Be sure to hold the second cap on for 15 seconds (because of the air pressure).



Complete PVC float.



Clamp one end of the wire panel with 3" hanging out beyond the table edge. Create the wire cylinder by pig ringing the other end 2" inside the clamped end. Use large pig rings and connect them loosely (that is, don't clamp down hard).



Pig ring it loosely on each end and in the middle. **The loose $\frac{3}{4}$ " rings will allow you to slip the lid on easily.**



Repeat the pig ringing on the end of the wire, also loosely. This will create a the wire cylinder.



Place and seat the lid on the wire cylinder. Avoiding the overlap section, drill small holes at 12, 2, 4, 6, 8 and 10 o'clock to allow the large pig rings to slip under the end wire.



Pig ring through the 6 holes around the lid. Flip the cage over and make sure the rings are around the wire.



The attached lids at each end should look like this.



Now tighten the seam by firmly clamping 1/2 " pig rings every 4 inches along the outside edge of the overlap.



Starting 5 inches below the overlapped seam, Cut an opening 18 inches long by 6 inches deep. The edges of the opening will "puff" out a little, so bend the edges gently with a screw driver.



The hatch cover panel is 11" by 20". Bend the long edges 120° twice to form a triangle.



The hatch cover with edges bent



Use a rubber hammer to curve the hatch cover to conform to the cylindrical shape of the cage.



Attach the hatch cover with pig rings along the bottom edge, and use bungee cord and a hook to hold the cover closed.



Close up of bungee and hook arrangement



Attach the PVC float along the overlapped seam with 24" cable ties. Cut off excess ends on the cable ties.



Use a 5 foot piece of crabpot line to create a harness which is attached opposite from the PVC float. Use 2 large pig rings for the loop at the apex and to attach the ends. **This is the complete Tidal Tumbler.**



This photo shows a variation on how to attach the lids (left), and a different type of lid that is acceptable (right).