

# TURBINE (WATER WHEEL) INSTALLATION INSTRUCTIONS

- Materials:**
- 1 Container
  - 1 Threaded rod, plastic
  - 4 Hex Nuts, plastic
- 2 Washers, plastic
  - Turbine (constructed)
  - Glue Gun and glue



5. The turbine needs to be installed in the Clear Acrylic plastic container. The hole for the turbine shaft is pre-drilled and the bottom cut-away.
6. Place the turbine into the clear container through the access hole in the bottom of the container. The turbine should have the **concave surface of the spoons exposed to the top of the container**. This allows water entering the top of container to fill the spoons turning the turbine.
7. Slide the threaded rod through the center hole of the container, through the center of the turbine and out the other side of the container to provide a shaft for the stator and rotor that will be placed later. In earlier containers, the hole will need to be enlarged to accommodate the 3/8" threaded rod. (Insert the point of a knife blade into the hole and turn the knife until the size of the hole accommodates the threaded rod).
8. Insert a plastic washer over each end of the threaded rod. Thread two Hex Nuts onto one end of the threaded rod until second Hex Nut is flush with end of rod, then lock the two nuts. (Hold inside nut and tighten outside nut against inside nut).
9. Thread a second set of Hex Nuts onto the other end (long end) of the threaded rod. Thread both nuts up against the washer on the side of the container, adjust and lock the nuts, allowing the rod to turn free. This will keep the shaft from moving back and forth through the container as it is turned by the water flowing over the turbine.
10. Adjust the turbine to the center of the shaft (dowel) and firmly attach the turbine to the shaft (dowel) with the glue gun. Access through the bottom opening with the glue gun, and rotate the turbine shaft as you glue it solidly to the shaft.

**ALWAYS MAKE SURE THE GLUE GUN IS VERY HOT BEFORE**

**USING.** Plug in the gun 5 or more minutes before using to get full effect of glue.

