Tide Clock Assembly

Parts: (clock movement and hardware not pictured)

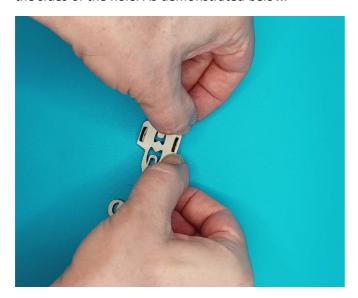
Notes: There are 3 wooden washers referred to as small, medium, and large. The circular wheel has a rubber grommet glued to the center. You can glue the wood pieces if you would like, but I would fit the parts first and then glue them in place.



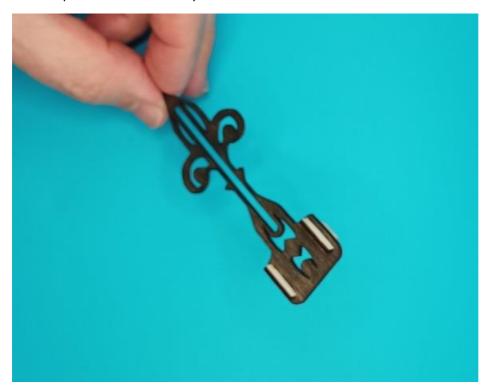
Insert the smaller supports into the paces on the end of the arrow. Be careful as these can take a little wiggling to get in place. Don't put too much pressure on these. If you are having trouble, see the next picture.



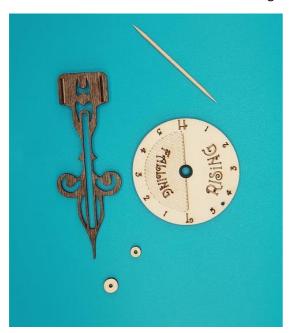
If you are having a hard time, you may want to place the support on a hard surface and press lightly on the sides of the hole. As demonstrated below.



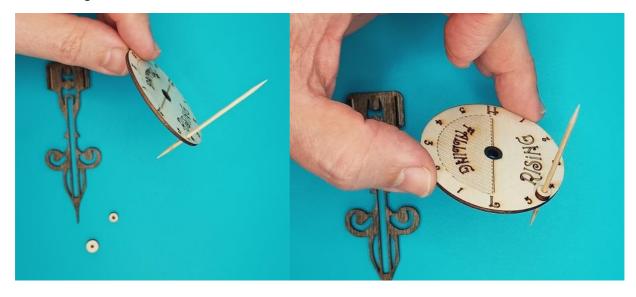
The completed arrow assembly is shown.



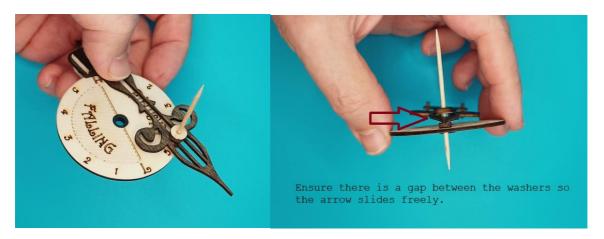
Now we will assemble the main tide tracking mechanism. Assemble the following parts:



Pass the toothpick through the small hole in the dial. Place the small washer onto the toothpick and slide it down snug to the dial as shown.



Place the large slot in the arrow onto the toothpick and add the medium washer. Do not snug this washer down but leave a gap so the slot in the arrow can slide easily between the washers.



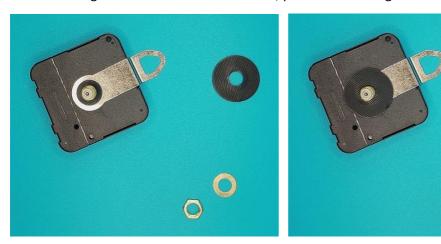
Cut off the toothpick on both sides of the dial using flush cuts, a box cutter or other method. Below shows the completed assembly.





Gather the clock mechanism and hardware. We will attach it to the main clock face panel. (The small part that looks like a thumbtack and the clock hand will not be used. You can keep these if you ever want to create your own tide clock.)

Place the hanger on to the mechanism. Then, place the rubber gasket in place.



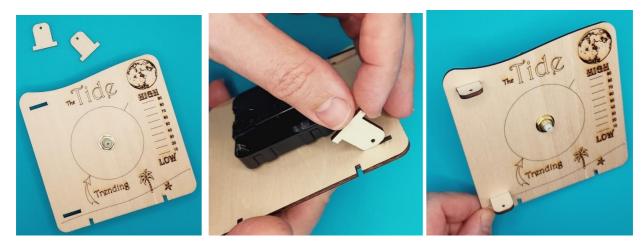
Place the clock face over the clock mechanism with the battery toward the bottom. Place the metal washer on and secure the face to the assembly with the nut. Tighten securely but don't over tighten.



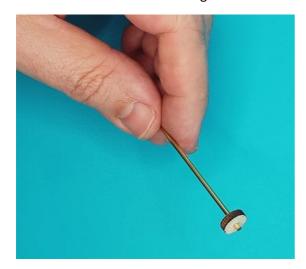
This is the assembly from the back.



Insert the larger supports into the clock face panel like you did for the arrow. Again, be careful if it is tight.



Insert the brass rod into the large washer. This will be a tight fit.



Slide the brass rod through the upper support, then through the arrow supports.

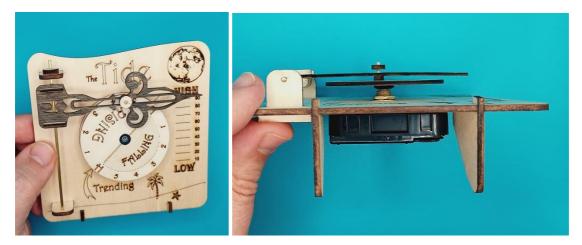


Press the brass rod into the bottom support. Ensure the arrow slides easily up and down the brass rod.



The disk can be mounted at any point. The easiest is to see when the next high or low tide is, set the dial to high or low (depending on which is next) and insert the battery at the time of the high/low tide. Alternately, you can just set the dial to high tide and use the time adjust dial on the back of the clock to advance the tide.

Press the dial onto the clock mechanism with the dial High marker lined up with the trending arrow. Make sure the dial is level with the clock face.



Insert the battery. This is a tight fit, so it is best to start with the negative side of the battery and press the top of the battery toward the negative side to help compress the negative contact and press the positive side down into the holder.

Your clock is done. Enjoy! You can now see the percentage of tide height between low and high and the trending arrow points to the approximate time to next high/low tide. There is a small line 180 degrees from the arrow. This is when for when the system is at or near low tide. The arrow may obscure the reading on the dial. You can just refer to the small line on the other side of the face which will show the same time as the arrow. You just need to remember that the arrow always points to the trend on the dial (rising or falling).

