About the Artist:

David C. Roy

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started "Wood That Works" and I became a full time sculptor. Since then I have designed and handcrafted over 150 different limited edition and one-of-a-kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural northeastern Connecticut.



Boomerang • Directions

Kinetic Sculpture by David C. Roy ©2021



To the Owner...

Hello,

Welcome to the world of Wood That Works. This Boomerang is number ______ out of a possible 95 pieces. It was made by me during the month of ______ in 2021 . I build, test and pack each sculpture myself, doing 6-9 pieces of an edition at a time. Designing and building kinetic sculptures like Boomerang has been my full time occupation since 1975. I hope Boomerang brings you and other viewers as much enjoyment as I've found in making it.

Boomerang has been mounted on a wall in my shop and running for at least 2 complete windings (many hours) before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem free for years to come. I use only the finest materials. Of course, problems can still occur no matter how hard I try to prevent them. My answer to this is a warranty to the original owner against defects in materials and workmanship for three years. See the guarantee section of this booklet for details.

It leaves me happy and satisfied to find that my work has made its way into new lives. I hope it brings you years of enjoyment.

David C. Roy

Subsequent windings:

- Turn the winding wheel in a clockwise direction 23 turns.
- Pay close attention to the top of the light colored wood spool directly behind the winding wheel. Stop winding as soon as you see the red tape appear on the metal band. This is placed about 1 turn from the end. *Winding beyond this point may damage the sculpture.*
- The ratchet pawl at the top of the mechanism keeps the spring from unwinding rapidly. NEVER touch the ratchet pawl after the sculpture is wound. the spring will release and damage will probably result.

Before Moving Sculpture:

- Make sure the power spring is unwound.
- Always tape the spring belts in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again. Blue Painter's tape works well.
- It is safest to pack if you remove the patterning wheels. Reverse the steps for installation. Be sure to save the spacer. Tape it back on the shaft before screw the knob on.
- Make sure you keep the wheels flat during storage or transportation. They can warp if not supported.

Guarantee:

- My kinetic sculptures are guaranteed to the original owner for a period of three years. All warranties expire with transfer of ownership from the original owner. Damage of the sculpture from exposure to extremes of high or low humidity, or to adverse hot or cold temperatures, or damage caused by normal wear and tear, accidents, misuse, or modification will not be covered by the warranty. Shipping and insurance to and from Wood That Works is the responsibility of the purchaser.
- I will charge a reasonable repair fee if the sculpture was damaged by misuse or needs refurbishment from normal wear and tear.

Directions:



Important First Time winding instructions:

• The first time you wind up this sculpture after unpacking requires special attention. Shipping may have caused parts to move unexpectedly.

• First look for obvious things that might have come out of alignment in shipping. (Belts out of pulleys, strings out of slots, etc.)

• Only turn the winding wheel TWO turns for the

first run.

- Turn the winding wheel in a clockwise direction.
- Make sure the metal band is winding inside the larger spool walls. If it isn't, shift it so that it does. It should be fine for all future windings. A short run will show you if parts slid out of alignment during shipping.

To Start

- If the sculpture doesn't start moving on its own when you finish winding, gently push both patterning wheels in a clock-wise direction.
- If it doesn't run as expected email David at <u>david@woodthatworks.com</u>.

About Boomerang:

I started experimenting with "switchback arms" in my patterning wheels as early as the 1980's with sculptures like Star Shadow and Crystal. It wasn't until Illusion in 2005 that this pattern started to come together. This led to Radiance in 2007 and Shimmer in 2009 which were smaller more accessible sculptures that basically used the same patterning wheel with completely different mechanisms. In 2018 I returned to the switchback spoke for Deja Vu because I had a new mechanism to try with a large patterning wheel. This concept generates seemingly endless pattern variations with just a small tweak in the spoke's shape.

Boomerang is an extension of this design path. This sculpture creates yet another interesting pattern by using a shape reminiscent of a boomerang as the switchback spoke. The variations are endless. I liked this one because it creates a pattern that is both familiar and completely new. It reminds me of gentle waves in a small pond that are growing and shrinking at the same time as they interfere with each other.

This is a long running sculpture (around 18 hours) that uses only a single spring. I designed a simple symmetrical base and winder system the lets the pattern do all the talking.

Specifications:

Size: 47"h x 32"w x 6"d Power Source: negator spring Approximate Run Time: approx. 18 hours Materials: hardwood plywood, bearings, Boomerang © 2021

Directions:

To Mount on Wall:

- Do not remove the blue tape until instructed to do so.
- Boomerang does not need a template to set up.
- Hold the base up against the wall. Position the top center hole. This needs to have 16" clearance to the left and right, 13" above and 35" below this top hole.
- Hold the sculpture in the desired location and screw the top center screw in place temporarily securing the sculpture base to the wall. Shift the dark base so that the screw is top center and base shaft is vertical. Screw all the screws in marking their exact location on the wall.
 - Now take the sculpture down by removing the screws. Gently hammer the provided plastic anchors into the screw holes making sure the top collars are flush with the wall. Screw the sculpture base back into position again starting with the top center screw.
 - Remove the knob on the top shaft. Remove all the blue tape here and slide the first brown spacer taped in place off the shaft. Place in a safe place. It is essential. There may be another spacer against the nut in front of the cog. Do not remove this one.

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- Handle the patterning wheels with care. The spokes are fragile.
- Slide the back patterning wheel onto the shaft as shown. It has 2 bearings that need to be lined up. It should slide onto the shaft easily. See diagrams
- Slide the brown spacer **Spacer** back onto the shaft and up against the bearing at the back wheel center.
- Slide the front patterning wheel onto the shaft. As you see the shaft start to appear in the front bearing start rotating the wheel clockwise. This will push the small lever on the back wheel out of the way and properly seat the wheel.
- Screw the knob back in place. Tighten just enough to secure it in place. Do not over tighten. The front patterning wheel should be free to move back and forth on the shaft about 1/16 inch.
- Remove the blue tape securing the belts.





