

## About the Artist:

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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 100 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.

Wood   
that Works

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Jamboree • Directions

Kinetic Sculpture by David C. Roy  
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## To the Owner...

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*Hello,*

*Welcome to the world of Wood That Works. This Jamboree is a one-of-a-kind sculpture. It was made by me during March and April of 2010. I build, test and pack each sculpture myself. Designing and building kinetic sculptures like Jamboree has been my full time occupation for more than 30 years. I hope Jamboree brings you and other viewers as much enjoyment as I've found in making it.*

*Jamboree has been 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 five years. See the guarantee section of this booklet for additional details.*

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

*David C. Roy*



## Directions:

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### To Wind:

- Place a finger in the inner curve of the winding wheel and wind until you see the red warning tape. This is about 23 turns. Wind both sides. They wind opposite to each other but as you look at each winding wheel, it winds in a clockwise direction.
- 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. Do not remove the red tape.

### To Start:

- If the sculpture does not start after winding gently push either patterning wheel about a half turn. This will engage the mechanism and start the motion.
- The two sides of the sculpture will run for somewhat different elapsed time due to the nature of the mechanisms.

### Guarantee:

- My kinetic sculptures are guaranteed to the original owner for a period of five 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.

## About Jamboree:

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Jamboree is an exploration of three-dimensional space by my breaking patterning wheel forms out of the plane of motion for the first time. I built two large wheels with arc shaped spokes that ballooned outward. My goal was to create motion patterns that changed as the viewer changed perspective.

I sketched up the idea on the computer and then animated it. The animation showed that the patterns did indeed change with viewing angle but animations on a 2D screen, even 3D ones, don't always "work" in the real world.

The actual construction of the wheels turned out to be quite a challenge. Balance is critical with this type of mechanism and the wheels had to be designed so that the arc forms' mass was nearly perfectly balanced by the shapes on the other side of the wheel. I do most of this work using a computer program that I use to calculate the center of mass of a complex "system" like this wheel followed by some good old-fashioned trial and error!

I was thrilled to find that the virtual and real worlds yielded the same results. The patterns do shift dramatically as one walks around the sculpture. A side benefit that I had not realized in the virtual world is that the mass of the wheels would lead to slow graceful motion and very quiet operation.

## Specifications:

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One-of-a-kind

Size: 65"h x 45"w x 20"d

Power Source: negator spring

Approximate Run Time: 10 hours

Materials: hardwood plywood,  
bearings, string

Jamboree ©2010

## Directions:

### To Unpack and Assemble:

Jamboree ships in three boxes, a large box with the sculpture base and two smaller boxes with a patterning wheel in each. I separated the parts to keep the weight of the large box down.

- Unpack all the parts.
- Do not remove the tape holding the belts in place
- The patterning wheels are labeled A and B and each side of the shaft is labeled correspondingly. It is important to mount the correct wheel on the correct side.
- Remove the knob and light disk from one side. Remove the blue tape being sure to note if this is side A or B.
- Remove the blue tape covering the bearings on the matching wheel.
- Slide the wheel over the shaft being sure to thread the shaft through both the inner and outer bearings in the center of the wheel.
- Return the light disk and the knob to the shaft. Hand tighten the knob to hold the wheel in place making sure there is still some freedom of movement.
- Repeat with the other wheel on the other side of the sculpture.
- Remove all of the blue tape holding the belts in place.

### To Move the Sculpture:

- Use blue painter's tape and tape all belts in place.
- If you are going to pack the sculpture it is best to remove the wheels being sure to label the sides and the corresponding shafts.

