## Wood <br> that $W$ orks

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my David C. Roy 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 200 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.

Sun Dance • Directions
Kinetic Sculpture by David C. Roy
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## To the Owner...

## Hello,

Welcome to the world of Wood That Works. This Sun Dance is number $\qquad$ out of a possible 75 pieces. It was made by me during the month of $\qquad$ in 2008. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Sun Dance has been my full time occupation for more than 30 years. I hope Sun Dance brings you and other viewers as much enjoyment as I've found in making it.

Sun Dance has been mounted on a wall in my shop and running for at least 2 complete windings (several 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

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:

## To Wind:

- Turn the winding wheel clockwise 24 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.


## To Start:

- If the sculpture does not start by itself after winding, gently push both dark patterning wheels in a counterclockwise direction.


## To Stop:

- Slow the motion of dark the patterning wheels with your hand and let them come to rest with their heavy sides down.


## Before Moving Sculpture:

- 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.
- See the diagram for the best tape locations.
- Never lay the sculpture on a horizontal surface for a long period of time without supporting the spokes of the patterning wheels. I use crumpled newspaper to support and separate the wheels when packing the sculpture.


## About Sun Dance:

The idea for Sun Dance came to me as I was working on Sky Dance. I was playing with the Sky Dance fan shaped carrying wheels when I noticed the way a fan seemed to spread and collapse when the wheels were oriented in the same direction. I went back to the computer and started exploring ways to use the "fan effect." A surprise spiral patterning effect showed up in the animations when I drew in a fixed orientation circular floating "bird" made up of arcs that, although thinner, matched the carrying wheel arcs.

I love "discovering" new visual patterning effects and end up spending many hours studying and staring when I find one. My understanding of the patterns then helps me to develop a mechanism to show them to best effect.

## Specifications:

Limited Edition of 75
Size: 42 "h x $33^{\prime \prime}$ w x 8 " d
Power Source: negator spring
Approximate Run Time: 6 hours
Materials: hardwood plywood,
brass, bearings, string
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Patent No. 4637152

## Directions:

## To Mount on Wall:

- DO NOT remove the tape holding the spring-belts in place.
- Hold the mounting template in the desired location against a wall. The diagram shows the relationship of the template to the sculpture to guide you in positioning the sculpture on the wall.
- Level the bottom edge of the template. Important! Use a level.
- Place a sharp instrument through the screw holes, marking their positions on the wall. Remove and save the template.
- Drill pilot holes. If the wall is sheet rock or plaster use plastic anchors.
- Screw the sculpture to the wall.
- Remove the tape holding the springin place.
- Remove the knob from the top shaft of the base.

- Slide the upper mechanism onto the upper shaft. Note: There are two bearings in the upper mechanism that have to slide over the upper shaft. Keep the upper mechanism properly aligned as you slide it in place. Jiggle the ratchet piece so it doesn't hook on the brass pins.
- Screw the knob back in place. You can
 reach it from the right side as shown in the photo. Finger tighten only! The wheel assembly should be able to slide back and forth on the shaft. If you over tighten the piece will bind and not operate properly.



Tape Locations

