

Star Shadow

Directions

Kinetic Sculpture by
David C. Roy
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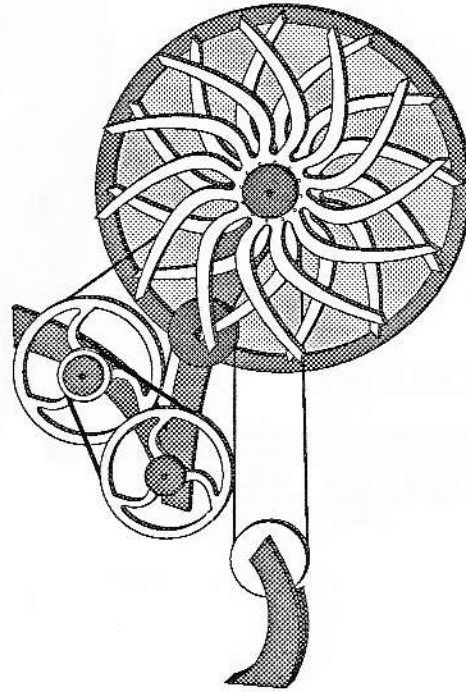
Directions

Set-up

1. DO NOT remove the tape holding the strings in place.
2. Hold the backboard in the desired location against the wall. Level the bottom edge.
3. Place a sharp instrument through the screw holes, marking their positions on the wall.
4. Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
5. Screw the sculpture to the wall using only the 2 lower mounting holes.
6. Slide the color ring behind the patterning wheels and upper portion of the base.
7. Center the ring behind the wheels with the notch in the ring spanning the base.
8. Screw the upper portion of the sculpture into place.
9. Remove the tape holding the string in place.
10. Remove the cardboard spacer from the lower loop of the string and replace it with the weight.
11. The string is one continuous loop. Check to see that it has not come off any of the pulleys by comparing it to the diagram below/right.
12. Special note: The weight provides tension to the string and keeps it from slipping on the pulleys. Lifting the weight while the sculpture is wound will release the tension and cause the spring to rapidly unwind. To prevent this I have put a special stop lever behind the belt pulley. This will engage if the belt pulley begins to spin too fast. To release this lever simply turn the belt pulley 1/2 turn in a clockwise direction. If you find that the sculpture has stopped unexpectedly first check this lever to see that it is not engaged.

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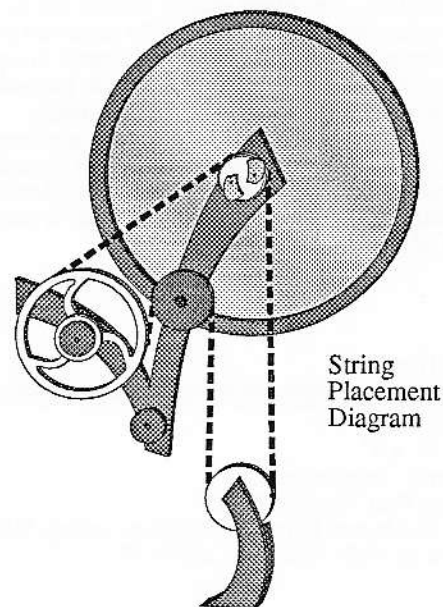
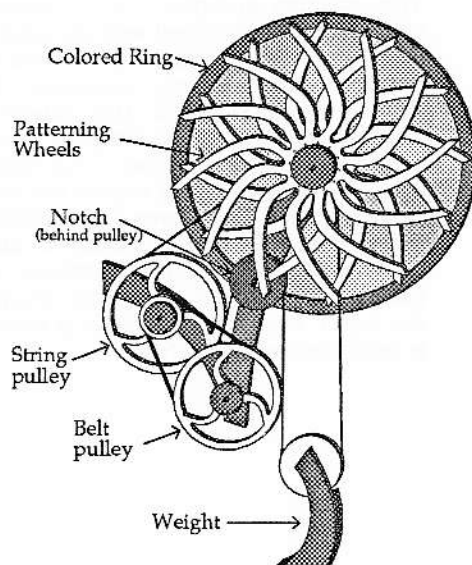
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To Wind

Turn the belt pulley wheel clockwise 20 turns.

To Start

Gently push the patterning wheels counter-clockwise.



About Star Shadow:

The patterning action between two counter-rotating wheels is usually very dramatic and eye-catching. I like it and use it extensively in my work. As I've "played" with different wheel designs I've found that some designs exhibit even more interesting and intricate patterns when turned in the same direction at slightly different speeds. Such is the case with Star Shadow. The wheel design started out as one I thought would work well when counter-rotated but the expected patterning just wasn't there. As I continued playing with the wheels to try and determine why they didn't "work" I found I liked what happened when they were turned in the same direction at a fairly slow pace.

The problem I faced then was to design a mechanism that would turn the wheels in the same direction at different speeds while avoiding the counter-rotating effects. The "one-way" mechanism of Star Shadow does just that but with an added side benefit. It runs for nearly 4 hours, the longest of any of my sculptures to date.

Specifications:

Limited Edition of 150

Size: 40"x 24"x 5"

Power Source: negator spring

Approximate Run Time: 4 hours

Materials: Hardwood Plywood, bearings, string, fabric

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About The Artist:

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 60 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 eastern Connecticut.