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.
To the Owner...

Hello,

Welcome to the world of Wood That Works. This Falcon is number _____ out of a possible 75 pieces. It was made by me during the month of ________________ in 2010. 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 Falcon has been my full time occupation for more than 30 years. I hope Falcon brings you and other viewers as much enjoyment as I’ve found in making it.

Falcon 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
Directions:

To Wind

• Turn the winding wheel counter-clockwise 24 turns or until you see the red tape. It helps to gently pull the back arm down before winding so that the front arm moves out of the way.

• 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

• Gently push down on which ever arm is in the upper most position.

About Falcon:

Falcon is a single bird sculpture that creates a series of elegant straight line and elliptical patterns. The long swooping arms and double ring carrying wheels are carefully designed and balanced to create a very efficient mechanism that creates its own set of interesting patterns.

Specifications:

Limited Edition of 75
Size: 44”h x 38”w x 7”d
Power Source: negator spring
Approximate Run Time: 4 hours
Materials: hardwood plywood, brass, bearings, string
Falcon © 2007
Directions:

To Mount on Wall:
- DO NOT remove the tape holding the strings in place
- Hold the backboard in the desired location against the wall. Level the bottom edge.
- Place a sharp instrument through the screw holes, marking their positions on the wall.
- Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
- Screw the sculpture to the wall.
- Remove the tape holding the strings in place.

Note:
Tape the strings in place before repacking or 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.
Restringing Falcon

Cut two pieces of string, 60lb test woven nylon squidding line, into 24 inch lengths.

Tie a knot in one end of each.

Thread the string through the rim of the back spool from the outside edge toward the center of the spool. Draw the string all the way though until stopped by the knot.

Repeat with the second string using the other rim of the spool.

The rest of the procedure is best done with the sculpture mounted on a wall. Use the template and a level to make sure the angle is correct.

Take the string furthest from the wall, I call this the front string, and thread it through the hole in the right hand side of the front arm. Thread from the front of the arm toward the back. Holding the string in the hole pull the arm out until the distance from the hub of the spool to the tip of the arm measures exactly 19 1/2 inches. Tie a knot in the string. Measure again to make sure the hub to tip of arm distance is 19 1/2 inches.

Wrap the back string 5 times around the hub of the spool. Pull the string gently down so that all the back string unwinds while the front string winds up on the spool. Thread the back string through the hole in the right side of the back arm. Measure the same tip of arm to hub of spool distance as before and tie off the string. Remeasure to make sure that the distance is correct.

Wind the winding wheel 2 turns. You should hear the little levers mounted on the arms click on the pins on the pin wheel. Release the winding wheel making sure that the lever on one of the arm catches on a pin on the pin wheel.

Gently pull down on which ever arm is up to start the sculpture.