Patternning Wheels

Idle wheel and pulley

4" slotted wheel

Idle wheel and pulley

Note: Place string over these pulleys, do not wrap it around them.
Restring Leo II

Thread the string through the back spool on the patterning wheels. The ball side of the string must be to the front side of the spool.

Bring the non-ball end of the string down to the mechanism from the rear upper spool.

Thread this end of the string through the small hole in the back of the slotted wheel. Thread from the inside of the slot towards the back. I use a dental floss threader to do this. The hole may be clogged with glue. It can be cleaned out with a pin. Tie a knot in the end of the string.

Turn the double slot mechanism wheel about 1.5 turns counter-clockwise and hold it so the lever attached to it points to 6 o’clock. The string should slide through the upper spool as you do this and remain taught. Hold the slotted wheel in this orientation. This establishes the approximately correct length for the string from the mechanism to the patterning wheel spool.

Wrap the ball and string attached to the front slot of the slot wheel a 2 turns counter-clockwise so it hangs from the left hand side of the slot wheel.

The remaining string going from the patterning wheel spool to the right-hand ball now must be wrapped around the front patterning wheel spool in a counter-clockwise direction. The number of times is not fixed but 15 is a good place to start.

Final adjustment

Turn the double slot wheel counter-clockwise until it can’t go any further. The lever attached to it should point to about 6 o’clock. Pull the knot holding the string in the rear slot towards the wall while allowing the double slot wheel to rotate clockwise. Tie another knot in this string so that the lever points to about 9 o’clock.

Start the sculpture. Adjust the length of string to the balls by adding and removing loops of string from front patterning wheel spool for the right-hand ball or the front slotted wheel slot for the left hand ball. There should not be any slack in the strings at any time but the balls should not rise so far as to hit the mechanism.