## Mark II Foucault Pendulum Owners Manual

Manufactured by Academy Pendulum Sales El Cerrito, CA. 94530 (510)-215-0446 <cponchione@netzero.com>

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### **Operating & caring for your Foucault pendulum**

#### Starting your Pendulum

Turn on the power at the control panel.

Grasp the cable just above the ball, and pull the ball all the way to its maximum swing position. Hold the ball in this position until the ball is still, and slowly release the cable to avoid making the ball wobble.

# New installations or changing adjustments of the control settings:

"Time-on" controls the period of time the magnet is energized. Getting the proper setting of this control will stabilize the cable wobble at the top of the cable.

The magnet is automatically triggered on when the pendulum passes through the center of its swing. Set the "time-on" control to turn the magnet off when the ball begins to return from end of the swing.

To assist you in knowing when the magnet is energized, turn on the audio switch at the bottom of the panel. This will activate a tone device which sounds a tone signal whenever the magnet is energized. If the panel has been installed in a proper place, you should be able to watch the ball and hear the tone at the same time. When the ball reaches maximum swing and has begun its return swing the magnet needs to turn off. Look at the top of the cable and make minor adjustments to the time control to eliminate the cable wobble. Turn the tone off when adjustments have been completed.

#### Amplitude Control:

"Amplitude" controls the amount of power supplied to the magnet. To increase the distance of the swing, turn the control clockwise. For adjustment reference turn on the ammeter on to see increases or decreases in power adjustments. Make only minor adjustments then let the pendulum stabilize for a half hour.

In order for your pendulum to operate properly it must swing far enough for the O'rings on the armature and safety hub to contact the magnet and safety ring. On new installations start the amplitude at a meter reading of 300, and add or subtract power to adjustments to the swing as needed

#### Adjustments:

No adjustments of the controls should be necessary for daily operations unless the ball needs to travel further or less.

Turn the meter and tone off when adjustments have been completed.

#### Maintenance:

A maintenance schedule should be established to inspect the cable and O' rings on an annual basis. Inspect the cable at the point where it bends under the pivot. Look or feel for frayed wires. If fraying is found replace the cable.

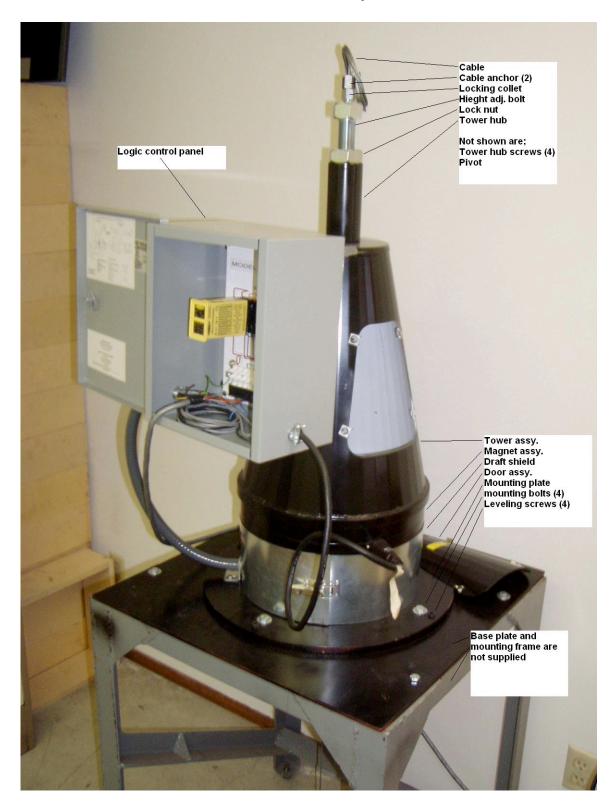
Inspect the O' rings for cracking and replace if necessary. Cable and O' rings should exceed 10 years of normal operation.

#### Pendulum Ball:

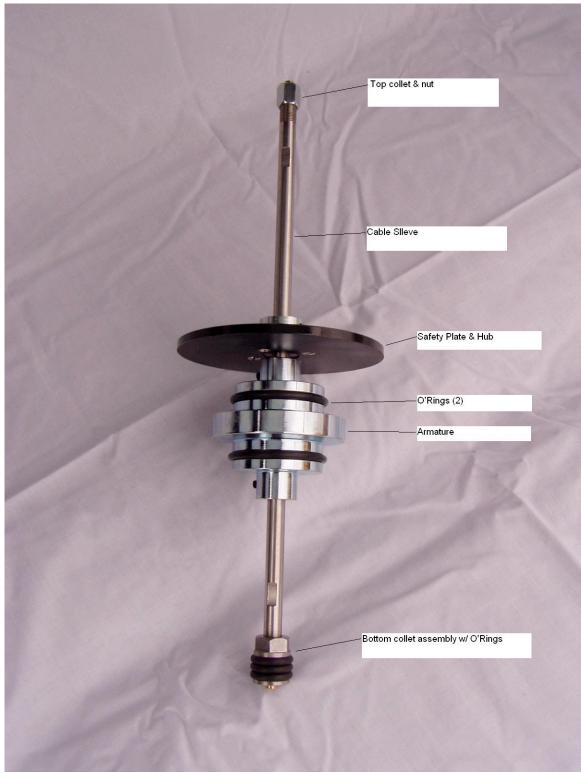
The pendulum balls are made of solid brass. Brass is a soft metal and therefore is easily scratched unless proper care is taken. Use only soft materials to wipe the ball such as baby diapers, or soft flannels. To remove any oxidation use products such as Brasso brass cleaner. To remove minor scratching from the surface, use products with a fine abrasive in them. Magnesium wheel polishes or brass polishes work well.

For questions about the pendulum, parts or its maintenance contact; Academy Pendulum sales at; Email; <cponchione@netzero.com> Phone (510)-215-0446 El Cerrito CA. 94530

#### Tower assembly



Cable sleeve and armature assembly



Ball assembly

