

BALANCING BALL

MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION:

A ball is balanced in a column of air provided by a large blower mounted on a swivel. The blower can accommodate thin wall inflatable ball sizes from a few inches to a few feet in diameter. If the performance of the blower seems diminished, check the inlet screen for air flow obstruction. The steel base is entirely epoxy powder coated and may be cleaned with soap & water.

Initial setup:

Wire in the exhibit, turn on the breaker. Blow up the beach ball. Locate the free standing graphics pedestal and place near the exhibit.

Cleaning the Screen:

The large steel inlet cover is retained with one cap screw located on the bottom. Removing this screw allows the cover to turn and unscrew from the central coupling nut that supports it. The inlet to the fan is covered with a wire screen that can be cleaned with a brush or vacuum.

CAUTION: THIS EXHIBIT MUST NOT BE RUN WITHOUT THE EXHAUST SCREEN IN PLACE OR SEVERE INJURY MAY RESULT!

Motor & Pivot Inspection:

The entire motor, blower and pivot can be removed in one piece by removing two button head cap screws from under the steel elbow. The bearing assembly which the motor pivots on, is a cartridge that slides out of the elbow. The entire assembly weighs about fifty pounds and is somewhat awkward to handle, but leaving it in one piece makes it easier to access the motor connections or adjust the bearing. This assembly can, however, be lightened substantially by removing the inlet cover and the nozzle at the exhaust flange.

To re-attach the motor unit to the housing, clasp the aluminum pivot so that the two tapped holes for the retaining screws can be felt with the finger tips. The holes should point down and be equidistant from center. Align the two tapped holes up with the edges of the vent cut-outs on the elbow as the pivot slides into the elbow. Push the assembly all the way in until it seats. Check to see if the screws will start in their holes. If necessary, jiggle the blower to aid in starting the screws .

Motor Control:

The exhibit uses a DC motor to accommodate 50 & 60 Hz installations. The is accessed from an opening in the base of the exhibit. The controller can be set at its maximum for the most air flow. This allows the exhibit to lift heavier balls. The motor control can also be turned down if noise needs to be kept to a minimum. ()

The current limit can be set with the aid of a DC ammeter to limit start-up current to between the name-plate current (5 Amp) and running current (2.5 Amp).

Cone Replacement:

To remove the cone assembly remove the screws in the collar and lift up the cone. The collar, flange and screen bezel each have a punch mark to align the match drilled holes when reassembling. There is no need to remove the exhaust screen to replace the filter. If it is removed for any reason, caution must be taken that the exhibit not be used until it is replaced.

Nozzel Replacement:

The exhibit comes with a replacement neoprene nozzle tip. Mark the bottom of the old nozzle with a piece of masking tape. Carefully peel the old nozzle off of the cone. Remove any remaining rubber. Wash the new nozzle tip and dry thoroughly, then slide the replacement nozzle down to the tape mark on the orange cone. Roll the bottom edge back until three and a half inches of orange cone are exposed. Paint a coat of neoprene cement onto both the cone and the exposed nozzle, following the instructions on the cement container. Carefully roll the nozzle back down.