

ECHO TUBE

MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION:

When the visitor claps his or her hands at the end of the 75-foot long tube, an echo is heard about 1/5 of a second later. The echo has a strange sound unlike the original clap, making a ricochet sound due to the many different paths the sound takes inside the tube. Timing the echo of the clap can make a rough estimate of the speed of sound. You can also listen to the echo of your own voice as it traverses the tube. This makes speaking difficult due to the delay between saying a word and hearing it.

General Cleaning:

The finished or painted surfaces of the exhibit may be cleaned with a mild soap solution or general purpose cleaner. The acrylic cover should be cleaned with a plastic cleaner and a soft wipe that will not leave scratches, (we suggest Wype-All™).

Initial setup

There are four Supports for the tube sections as illustrated in the accompanying assembly drawing. Place the end support (253-1-2) marked #1 in position. Screw the 3/8" - 16 machine bolts into the hole of the support with the threaded ends pointing down. Lay section #1 of the tubing out straight, align the holes of the flange end marked # 1 with the bolts in the support and attach them together using the 3/8" nuts provided.

Next, roll the end of the tube up and over to form a loop. Line up the end of tube # 2 with a center support stand #2 (253-1-1) and align the flange ring #2 holes with the holes in the support stand. Bolt the tube to the stand. Lay the section #3 of tubing out straight and align the flange ring holes with the end of the bolts protruding from the rear of the support stand. Attach the tube with the 3/8" nuts. Roll into a loop and repeat the procedure for the next section.

Before attaching the last support stand to the tube, bolt the acrylic cover on to the End Support first. Then attach the tube with the 3/8" nuts.

The final step is to attach the upper support cables to the tubes. This is to prevent the loops from being pushed over too far and causing damage to the tube.