

OPERATING INSTRUCTIONS

Bell in Vacuum Jar No. 31701

1. Purpose

To effectively demonstrate that sound waves do not travel in a vacuum.

2. Description

A bell and motor-driven clapper are suspended by electrical wire through a stopper at the top of a bell jar. The wiring is attached to two five-way binding posts at the stopper top.

3. Operation

(You will need an AC transformer, a vacuum pump with plate included or a separate pump and plate, and vacuum grease. If you do not have these items available see Sec. 6 for recommendations).

Grease and insert the stopper into the bell jar. Attach a vacuum pump hose to the concentric-ringed nozzle of the plate (if the plate is a separate piece of equipment from the vacuum pump). Attach a 6-VAC power supply to the binding posts of the Bell in Vacuum Jar device. Turn on the power supply to hear the bell ring, and then set the bell jar onto the plate. The sound will be muffled. Turn on the vacuum pump. The motor-driven clapper will continue to vibrate but the sound will become fainter and fainter until it is non-existent in the absence of a medium.

5. Maintenance

The Bell in Vacuum Jar needs no special maintenance and should provide trouble-free service. However, if any difficulty develops with this device, contact Central Scientific Company, giving details of the problem. So that we can serve you better, please do not return any item to Central Scientific Company until we have sent you a written authorization.

6. Accessories

<u>Description</u>	<u>Cat. No.</u>
Air Pump Plate	94205
Vacuum Sealing Wax	11456
18 Amp. Transformer	80305-01

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