



**Product Code . JL-PI-401**

## **Ladder Climbing Arc Apparatus Deluxe JLab**

### **Description**

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#### **Ladder Climbing Arc Apparatus Deluxe**

The apparatus consists of a pair of long metal electrodes, 13 inch (330mm) tall, connected to a high voltage power source.

The electrodes are fully enclosed in a transparent acrylic tube 16 inch (410mm) Long x 2.13 inch (55mm) dia., and the transformer in a plastic base, 6.3inch (160mm) x 4.6 inch (119mm) x 2.6 inch (67mm).

Total height 19 inch (490mm).

The base has an on/off button to start the formation of the arc.

Operates on 110V, with the help of an adapter, included.

This apparatus is useful to demonstrate how this affects power transmission, and this arcing has to be avoided.

After the unit has been in operation for a few minutes, the oxides of nitrogen which form in the tube can be collected/ aspirated for chemical analysis.

This can be a dramatic illustration of the FIXATION of atmospheric nitrogen by lightning discharges.

#### **Precautions:**

Continuous arc formation can be hazardous to health, as the arc ionizes oxygen and nitrogen, which react to form ozone and nitric oxide.

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Do not smell the top of the tubes with holes.

Make sure there is air circulation in the room and the room is well ventilated.

A preview of the included instructions can be found at the bottom of this listing.

Measurements are approximate.

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