

## Van de Graaff Generator



### Toys

**Purpose:** To do something in the presence of large fields.

We have several accessories for playing with high voltage.

- A) Whirligigs: The points in the conductor produce large  $E$  fields which ionize the air. The ions are repelled and the conductor twirls.
- B) Streamer: Place it on top of the Van de Graaff's sphere. As the ribbons collect charge, they repel each other. This is a student-less version of the customary hair trick.
- C) Volta's Hailstorm: The vermiculite bits hop up and down like mad as they exchange charge from ground to the voltage source. You can also demonstrate smoke scrubbing. See Cenco's instructions (Volta's hailstorm).
- D) Pie Pans\*\*\*: Take the stack of aluminum pie pans and place them atop the Van de Graaff generator. As the charge builds up, the plates will blow off one by one. This trick is most visible and most popular!

**Note:**

**Extra Equipment:** None

**Location:** Van de Graff Cart