

## Electrostatic Smoke Precipitator

- **!!CAUTION--SHOCK HAZARD!!**  
Fourteen centimeter sparks have been achieved on this machine. This corresponds to voltages close to 420kV.
- The Leyden jars (capacitors) should be periodically cleaned as should the wheels be periodically wiped with alcohol.
- The brush arms should be oriented at 90 degrees from each other.
- The positive and negative terminals are indeterminate.
- Turn the handle of the Wimshurst machine clockwise lest the belts jump off their pulleys and the brushes bend backwards.
- If the smoke is not separated well, check the capacitor switch in front of the Wimshurst machine. It should be in the "cond. On" position. If the capacitors (Leyden jars) are not engaged not enough charge builds up for proper functioning.
- Place incense high enough into smoke separator such that wind from the wheel of the Wimshurst machine does not prevent smoke from entering the smoke separator.

### DIAGRAMS/EQUATIONS:

