

### **Electromagnetic related question**

An electron beam generator (CRT-type), and a capacitor are installed inside a vacuum chamber.

An electrons beam is being generated, and then accelerated between the capacitor plates. As a result of the acceleration process: an electromagnetic wave is created.

A positively charged plate is placed in some distance outside the vacuum chamber.

What shall the positively charged plate experience due to the fact that the electrons are accelerated in one direction, and the electrons electric field lines must be continuous before and after the acceleration process.

Will the positively charged plate experience a force pushing it upward, downward, to both directions, or no force at all ?

(See figure on next page...)

