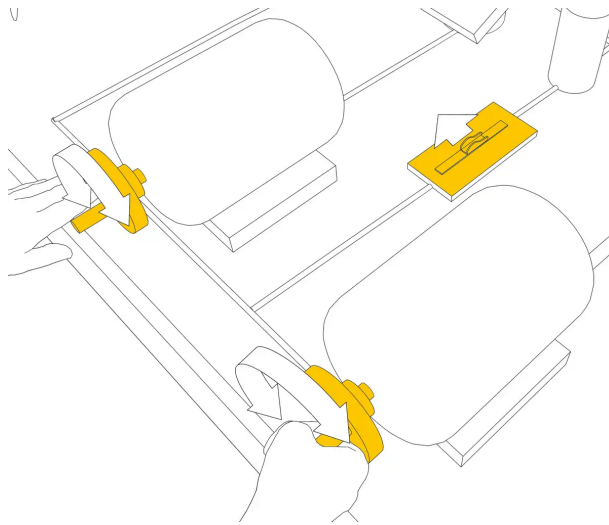


Generator and Motor

What happens if you turn one of the two handles?



Open the copper switch.

Turn one of the two handles.

Close the copper switch and turn the handle again.

Did anything change when you turned the handle after you closed the copper switch?

When you turn one handle, the other handle turns too. If the switch is closed, the bulb lights, and it is harder to turn the handle.

The machines are identical. Turning one handle makes electricity that drives the other machine - each can be a generator (electricity from motion) or a motor (motion from electricity).

By closing the switch you connect the bulb. Thus you need to produce extra power to light the bulb, so it gets harder to turn the handle.