

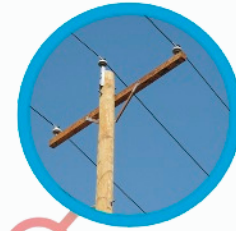
What makes up an Electric Power Pole?

This diagram is a basic distribution pole and can vary by location.

Insulators prevent energized wires from coming in contact with each other or the utility pole.



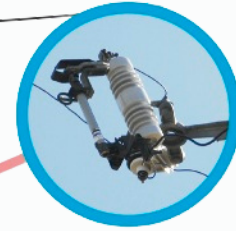
Primary wires are on top of the pole and usually carry 12,000 volts of electricity from a substation.



A **crossarm** holds the wires up on the pole.



Cutouts act like a fuse and open when there is a problem with the line or a section of it.



Lightning arrestors protect the pole and equipment from lightning strikes.



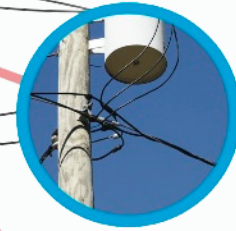
The **neutral wire** is below the transformer & acts as a line back to the substation & balances out the amount of electricity or load on the system.



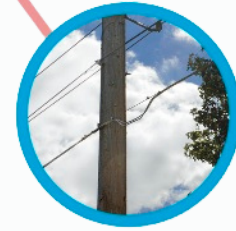
Transformers convert higher voltage electricity carried by primary wires and lowers the voltage for use by customers.



The **secondary wire** carries the lower voltage electricity after it passes through the transformer.



Telephone & cable wires are typically the lowest wires.



A **ground wire** runs the entire length of the pole. It directs any electricity on the pole safely to the earth.



Guy wires help stabilize utility poles.

