

WHAT'S ON THAT POLE?

This illustration shows the basic equipment found on electric utility poles. The equipment varies according to the location and the service they provide.

PRIMARY WIRES

Primary wires carry 7,200 volts of electricity from a substation. That voltage is 60 times higher than the voltage that runs through your home's electrical outlets!

SURGE ARRESTORS

These protect the transformer from lightning strikes.

NEUTRAL WIRE

The neutral wire acts as a line back to the substation and is tied to the ground, balancing the electricity on the system.

SECONDARY SERVICE DROP

Carries 120/240-volts of electricity to consumers' homes. It has two "hot" wires from the transformer and a bare "neutral" wire that's connected to the ground wire on the pole.

GROUND WIRE

The ground wire connects to the neutral wire to complete the circuit inside the transformer. It also directs electricity from lightning safely into the earth.

TELEPHONE, CABLE TV, AND FIBER WIRES

These are typically the lowest wires on the pole.

INSULATORS

Insulators prevent energized wires from contacting each other or the pole.



NEVER NAIL POSTERS OR OTHER ITEMS TO UTILITY POLES. THESE CREATE A SAFETY HAZARD FOR LINeworkERS.

Original illustration by Erin Binkley



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