

# 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.

## INSULATORS

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

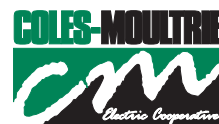
## TELEPHONE, CABLE TV, AND FIBER WIRES

These are typically the lowest wires on 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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