

Element 6

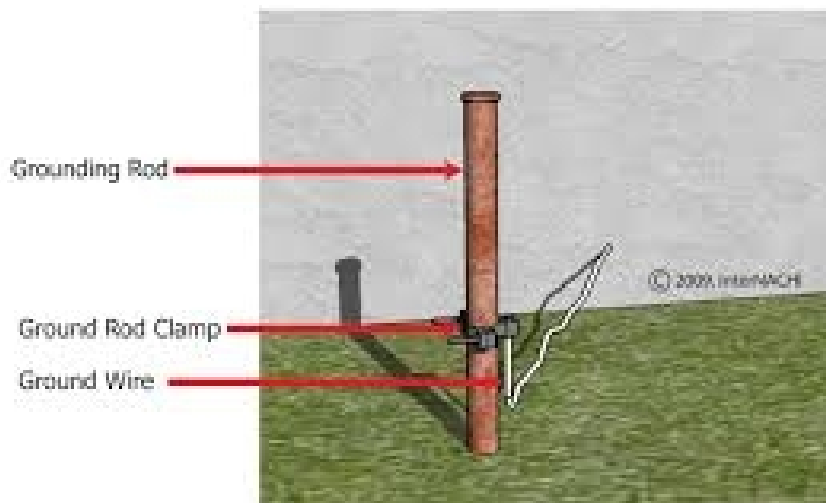
I intentionally left out the ground schematic symbol in Element 5, since it deserves its own area to explain, probably the most important item in both broadcast transmission and amateur radio transmission and reception. By the way, an amateur radio with both transmitter and receiver in the same radio is called a “Transceiver”. Most if not all modern amateur radios are transceiver.

Now onto the grounding. All radio gear, whether it is the antenna, transceiver, amplifier, tuner or any other accessory need to be grounded. You might have seen at your house a short rod sticking out of the ground with bare wire attached. That is your house ground. The electric service panel in your basement has a ground. Not only does it protect lightning strikes, but in amateur radio we are haunted with RF (Radio Frequency Harmonics) sneaking into our gear. To eliminate that we ground our gear.

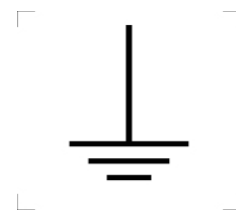
House electric begins with a service panel with two legs of 120 VAC (Volts Alternating Current) for a total of 240 VAC. Each leg supplies fuses or circuit breakers with that power and has enough amperage to kill you. When working on any radio or other appliance, make sure you have un-plugged it from the outlet. Make sure you ground your chassis of the radio when working on it. Although the transformer AC power is reduced to DC power to operate the radio or accessories, the AC power can still be active because of a capacitor. **BE CAREFUL. Not sure DON'T WORK ON IT.** Also, have another person present when you decide to build or service any equipment. **(Pages 41-43)**

Grounds look like this:

Grounding Rod



Schematic Symbols



RETURN TO BSA SCREEN