

MOVING THE GROUND ROD

If you see meter back lash or bounce back on the receiver this is normal. When you load the detector with energy, the meter circuit needs to discharge what is left over so when the meter actuates, it is normal to see a deflection in the opposite direction. The larger pulse you receive, the larger bounce back on the meter. If the detector meter is receiving large deflection, turn down the sensitivity on an on scale deflection.

Rule 1: The only direction to pay attention to is the first direction.

Rule 2: Turn it up to 3 KV. It allows a little more current into a fault and current is what you are looking for. The method of placing 3 KV on a cable will not damage the 600 Volt insulation, but 3 KV can provide a little more current for the detector to see.

Because dry soil can be a high resistance, it will reduce current flow. Below you will find more information how to receive large detector readings in area's where you were not receiving any signal. By moving the ground rod down the route of the cable, you can always receive good information.

MAKING THE FAULT LOCATE ON STREET LIGHTS OR SECONDARY WHEN OTHER METHODS HAVE FAILED

Using wet sponges or rags, driving nails in the asphalt and many other techniques are used to make those difficult cable faults. When everything else has failed, try moving the ground rod.

The ground rod to your fault locator is the gathering point to all of the fault current leaving the point of fault. Not all of the fault current takes the same route back to the ground rod and as the fault currents scatter out to the left and right of the cable route, the fault current being located gets weaker and weaker as the locate is being made down the route of the cable.

Since the ground rod is the collector of fault currents, large detector signal is available near the ground rod. If we could move the ground rod to that spot over the cable route where the fault currents were so weak, we could not detect them, we should be able to see large fault currents at the spot.

Obtain 200 feet of number 16 insulated tracing wire. Place a connector of some type on one end of the tracing wire that will allow you to clip to the metal portion of a screwdriver.

When you have almost lost your entire fault current signal, drive a screwdriver into the ground or drive a long nail into the asphalt. Shut your fault locating transmitter off and disconnect the ground lead from your ground rod. Connect the ground lead from your fault locator to one end of your tracing wire and the other end of the tracing wire to the new ground you established down the route of the cable. Make sure the tracing wire connection to the transmitter is not in contact with the ground or grass. Fault currents leaving the cable fault have only one thing in mind. They want to go home and even though returning to the transmitter is the final destination, the ground rod is home.

Turn on the fault locating transmitter and you will again be picking up large signal indications with your detector. By moving the ground rod down the route of the cable, large signal should always be available near the ground rod and this will allow the operator to locate a fault in those areas where signal was almost non-existent.