

# WIRE-BREAK LOCATOR

## A: GENERAL DESCRIPTION OF OPERATION:

The wire-break locator is designed to find breaks in your boundary wire. This is done by using the test transmitter, which transmits two different tones through the boundary wire. On one wire there will be a low tone and on the other wire there will be a higher pitched tone. The receiver is used to pick up these tones. For example, if you are walking along the boundary wire and are hearing the low-pitched tone, the volume of the tone will begin to decrease when you are nearing a break in the wire. After you have gone past the break, the high pitched tone will now be heard, in this way you can find the break within inches.

## B: PROCEDURE:

Step 1: Turn off your transmitter and disconnect the boundary wires.

Step 2: Connect the boundary wires to the Test Transmitter.

Step 3: Grounding of the Test Transmitter- **THIS IS VERY IMPORTANT.** If not correctly grounded, the Wire-Break Locator will not work properly and only **one** tone will be heard. If your current transmitter is grounded in accordance with the instructions supplied with your underground fence kit, take the ground wire from your transmitter and attach it to the black Ground Terminal on the Test Transmitter. If your current transmitter is not grounded, attach the enclosed wire to the Test Transmitter's black Ground Terminal and to a suitable earth ground (6 foot ground stake or to the grounding wire for the house which is usually located near the electric meter).

Step 4: Plug in the power adapter to the transmitter and then turn on power.

Step 5: Check to make sure there are batteries in the AM receiver.

Step 6: Turn the receiver on and tune it to approximately 530 khz. If there is a station that can be heard then slowly turn the dial to an area where there are no stations.

Step 7: To find the break in the wire, start by following the wire from the transmitter out into the yard. Where the wire is twisted together you should hear a combination of the two tones. Where the wire starts to go in two different directions, start in either direction and continue to follow the wire. You should now hear one of the two tones (orient the receiver in the direction in which the tone is heard the loudest). **Note:** If there is a break in the twisted section you may have to hold the receiver very close to the ground and you will hear only one of the tones. Where the wire begins to go in two different directions, you will hear only one tone all around the boundary provided there is only one break in the wire and it is in the twisted section.

Step 8: Continue to follow the wire until the volume of the tone begins to decrease. You may now want to bring the receiver close to the ground and then continue following the wire until the tone changes. The point where the tone changes is where the break is located (see Figure 1). If there happens to be multiple breaks in the wire, the volume of the tone will decrease and then no tone will be heard (see Figure 2).

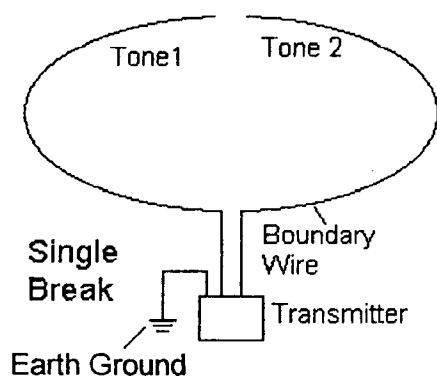


Figure 1

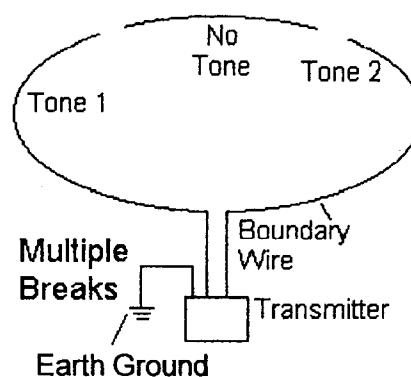


Figure 2

Step 9: Repair the break in the wire by first stripping the ends of the wires to be spliced. Insert the stripped ends into a wire nut and twist, then pull making sure of a solid connection. Apply a waterproofing compound (like silicone) in and around the wire nut. After the compound dries, you may also wrap the wires and nut with electrical tape to prevent them from pulling loose and to protect them from moisture. If there are multiple breaks in the wire then continue to repeat Steps 8 and 9 until all breaks have been repaired.

Step 10: Hook up your original transmitter to the boundary wire and check that the loop light is lit. If the loop light is not lit there maybe another break in the wire. Continue to repeat the wire-break location tests until all breaks have been found and repaired.