INSTRUCTION MANUAL

GREENLEE®

GT13 Voltage Detector

52087541 REV1 10/19

Description

The Greenlee GT13 Voltage Detector is intended to check for the presence of AC voltage, signaling the user with an intermittent tone and flashing LED. The GT13 has a Self Test feature that continuously tests the integrity of the entire unit including the antenna. The GT13 also features low battery indication, an auto power off feature and a flashlight.

This tool is protected by U.S. Patent No. 7,733,078 and Canadian Patent No. 2,607,922.

Safety

Safety is essential in the use and maintenance of Greenlee tools and equipment. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

Purpose of This Manual

This instruction manual is intended to familiarize all personnel with the safe operation and maintenance procedures for the Greenlee GT13 Voltage Detector.

Keep this manual available to all personnel. Replacement manuals are available upon request at no charge at www.greenlee.com.

Do not discard this product or throw away!
For recycling information, go to www.greenlee.com.

All specifications are nominal and may change as design improvements occur. Greenlee Tools, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

® Registered: The color green for electrical test instruments is a registered trademark of Greenlee Tools, Inc.

ROMEX is a registered trademark of Southwire Company.

Symbols on the Unit

Warning—Read the instruction manual

Double insulation

Important Safety Information

⚠WARNING

Read and **understand** this material before operating or servicing this equipment. Failure to understand how to safely operate this tool could result in an accident causing serious injury or death.

⚠WARNING

Electric shock hazard:

Wear appropriate personal protective equipment, including eye protection and other PPE as required by your employer.

Contact with live circuits could result in severe injury or death.

⚠WARNING

Electric shock hazard:

- **Do not assume that no voltage indication means that the circuit is de-energized.**
- **Follow the 3-point safety method as described in the "Operation" section (steps 3, 4, and 5).**
- Do not use the unit if it is wet or damaged.
- Do not apply more than the rated voltage between the tip and earth ground.
- Do not operate with the case open.
- This tester will not detect voltage through metal conduit, on armored or shielded cable, on sheathed nonmetallic cable that is saturated with water, or at a distance such as through walls.
- Using this unit near equipment that generates electromagnetic interference can result in unstable or inaccurate readings.

Failure to observe these warnings could result in severe injury or death.

⚠CAUTION

Electric shock hazard:

- Do not attempt to repair this unit. It contains no user-serviceable parts.
- Do not attempt to repair or reshape the antenna if it becomes bent or deformed. The unit must be replaced.
- Do not expose the unit to extremes in temperature or high humidity. Refer to "Specifications."

Failure to observe these precautions may result in injury and can damage the unit.

Operation

The Greenlee GT13 is useful for identifying hot and neutral conductors, finding a break in a wire, and detecting the presence of AC voltage at outlets, switches, circuit breakers, fuses, and wires and cables, including ROMEX® nonmetallic building electrical wire.

Note: Round cords may have twisted conductors. Check for hot conductors by sliding the unit along the cord.

Note: The GT13 can be used to find a break in a wire:

- *To find a break in a hot conductor, trace the wire until the signal stops.*
- *To find a break in a neutral conductor, connect a load between the hot and neutral. Trace the wire until the signal stops.*

1. Wear appropriate personal protective equipment, including eye protection and other PPE as required by your employer.
2. Turn the unit on by pressing the ON/OFF button. The flashlight can be turned on by pressing the flashlight button. **Note:** The flashlight can only be turned on after the unit is powered on.
   - The unit will turn off automatically if the self-test fails. Do not use the unit.
   - The LED will remain on continuously if the batteries are low. Replace the batteries as soon as possible.
3. **Test the unit on a known live circuit before each use.**
   - The LED will flash to indicate the presence of voltage (50 to 1000 VAC). The beeper will also sound.
   - If the unit does not function as expected on a known live circuit, replace the batteries.
   - If the unit still does not function as expected, call Greenlee for technical assistance at 800-435-0786.
4. Place the tip on or near the circuit or unit to be tested. The LED will flash to indicate the presence of voltage (50 to 1000 VAC). The beeper will also sound.
5. Test again on a known live circuit after use to verify proper operation.

Specifications

Indicators: LED and Tone
Voltage Range: 50 VAC to 1000 VAC
Frequency Range: 50/60 Hz
Measurement Category: Category IV, 1000 V per UL 61010-1
Operating Conditions:
Temperature: -10 °C to 50 °C (14 °F to 122 °F)
Less than 80% relative humidity (noncondensing)
Altitude: 2000 m (6500') maximum
Indoor use only.
Pollution Degree: 2
Battery: Two 1.5 volt batteries (AAA, IEC R30P)

Measurement Categories

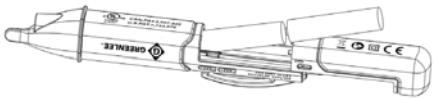
This definition was derived from the international safety standard for insulation coordination as it applies to measurement, control, and laboratory equipment. These measurement categories are explained in more detail by the International Electrotechnical Commission; refer to either of their publications: IEC 61010-1 or IEC 60664.

Measurement Category IV: Primary supply level. Overhead lines and other cable systems. Some examples include cables, meters, transformers, and other exterior equipment owned by the power utility.

Maintenance

Battery Replacement

1. Pull back on the battery door to slide it open and reveal the batteries.
2. Replace the batteries (observe polarity).
3. Line up the rails on the body and battery door. Slide the door forward until it latches.



Cleaning

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents.

Statement of Conformity

Greenlee Tools, Inc. is certified in accordance with ISO 9001: 2008 for our Quality Management Systems.

The instrument enclosed has been checked and/or calibrated using equipment that is traceable to the National Institute for Standards and Technology (NIST).

Lifetime Limited Warranty

Greenlee Tools, Inc. warrants to the original purchaser of these goods for use that these products will be free from defects in workmanship and material for their useful life, excepting normal wear and abuse. This warranty is subject to the same terms and conditions contained in Greenlee Tools, Inc.'s standard one-year limited warranty.

For items not covered under warranty (such as items dropped, abused, etc.), a repair cost quote is available upon request.

Note: Prior to returning any test instrument, please check replaceable batteries or make sure the battery is at full charge.

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