

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

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AMESTM

I N S T R U M E N T S

58447

PEN VOLTAGE TESTER WITH GFCI DIAGNOSIS



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

Safety Warnings and Precautions

WARNING

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

1. Electrical shock can cause death or injury! NEVER TOUCH exposed conductors of electricity.
2. Inspect the Tester before use. In addition to a general inspection, look specifically for:
 - a. Pay special attention to the insulation protecting the connectors.
 - b. Check the leads for exposed metal, damaged insulation, and continuity.
 - c. Replace damaged test lead immediately, before use.
3. Do not use the Tester if:
 - a. Either of the test leads are damaged in any way.
 - b. Test leads are dirty.

- c. Near any explosive gasses or fumes.
- d. Any abnormal operation is detected. (If in doubt about the condition of the Tester, have it serviced.)
4. Use caution when working near voltages above 30 VAC rms, 42 VAC peak, or 60 VDC. Voltages this high present a risk of electric shock.
5. Hold the probes with fingers behind guards.
6. Avoid electrical shock. Use extreme caution when working near uninsulated conductors or bus bars. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and cabinet enclosures when testing voltages.
7. Observe work area conditions. Do not test voltages in damp or wet locations. Don't expose to rain. Keep work area clean and well lit.
8. Keep children away. Children must never be allowed in the work area.
9. Stay alert. Watch what you are doing, use common sense. Do not operate any Tester when you are tired.
10. Do not operate Tester if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the Tester.
11. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
12. Do not test voltage on circuits higher than rated capacity.
13. Store idle equipment. When not in use, Testers must be stored in a dry location to decrease exposure to moisture. Lock up Testers and keep out of reach of children.
14. Dress properly. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working.
15. Wear ANSI-approved safety goggles during use.
16. Only use accessories intended for use with this Tester.
17. The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
18. Avoid damaging Tester. Use only as specified in this manual.
19. Do not switch between testing modes with the Tester is in use.
20. Do not disassemble Tester; take it to a qualified technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
21. Have the Tester calibrated by a qualified technician every year. A Tester that is not calibrated yearly may not yield accurate results.



SAVE THESE INSTRUCTIONS.

Specifications

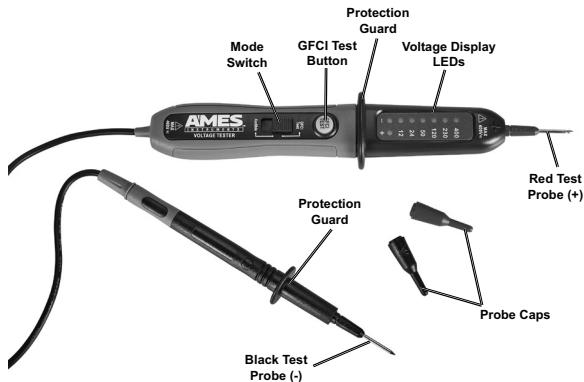
Max. Voltage	400V
AC/DC Voltage	Ranges: $\pm 12V$ / 24V / 50V / 120V / 230V / 400V
AC/DC Voltage Accuracy	30%~0% of indication
Frequency Range	50/60 Hz
Response Time	<0.1 s
Operating Temperature	Range: 14°F - 131°F (-10°C - 55°C)
Operating Humidity	<80% RH
Safety	CAT III 400V (with Probe Caps on)

Setup - Before Use:



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Functions



Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Testing 120VAC Grounded 3-Prong Outlet

⚠WARNING Electrical shock can cause death or injury! Do not touch Probes while Tester in use. Hold Probes by insulated handles, behind Protection Guards. If circuit fails any test, have it serviced by qualified electrician.

Note: The buzzer will sound if the voltage is higher than 50V.

1. Set the Mode Switch to **Audible**.
2. Remove Probe Caps from Test Probes.

WARNING! TO PREVENT SERIOUS INJURY: Removing Probe Caps reduces safety to CAT II.

3. Test Voltage:

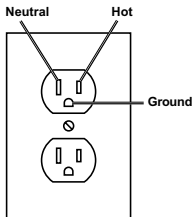
- a. Put Black Probe in Neutral receptacle first, then put Red Probe into Hot receptacle.
- b. 120 LED will light up if voltage is present.
- c. Remove Probes.
- d. If LED does not light up, have circuit serviced by qualified electrician.

4. Test Ground Path:

- a. Put Black Probe into Ground receptacle first, then put Red Probe into Hot receptacle.
- b. 120 LED will light up if ground wire has a complete path to breaker panel.
- c. Remove Probes.
- d. If 120 LED does not light up, have circuit serviced by qualified electrician.

5. Test Circuit:

- a. Put Black Probe into Neutral receptacle first, then put Red Probe into Ground receptacle.
- b. No LEDs should light up.
- c. Remove Probes.
- d. If LED lights up, have circuit serviced by qualified electrician.



Testing 12VDC Batteries

1. Set the Mode Switch to **Audible**.
2. Remove Probe Caps from Test Probes.
3. Put one Probe on each post of battery.
4. 12V LED should light up if voltage is present.

WARNING! TO PREVENT SERIOUS

INJURY: Removing Probe Caps reduces safety to CAT II.

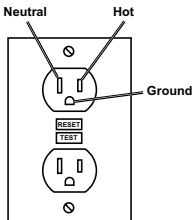
Testing 120VAC GFCI Outlet

⚠️WARNING TO PREVENT SERIOUS INJURY: Electrical shock can cause death or injury! Do not touch Probes while Tester in use. Hold Probes by insulated handles, behind Protection Guards. If circuit fails any test, have it serviced by qualified electrician.

1. Check instructions on the specific GFCI device you are testing before proceeding.
2. Set the Mode Switch to **GFCI Test**.
3. Remove Probe Caps from Test Probes.
4. **Test GFCI Outlet:**
 - a. Put Black Probe into Ground receptacle first, then put Red Probe into Hot receptacle.
 - b. 120 LED will light up if voltage is present.
 - c. Press Test button, 120 LED will go out. If 120 LED does not go out, have GFCI Outlet replaced by qualified electrician.
 - d. Press Reset button, 120 LED will light up.
 - e. Remove Probes.

WARNING! TO PREVENT SERIOUS

INJURY: Removing Probe Caps reduces safety to CAT II.



Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

Cleaning, Maintenance, and Lubrication

1. Wipe unit with a dry, lint-free cloth. Do not use solvents or abrasives.
2. Store unit in a dry location indoors out of reach of children.
3. There are no replaceable parts on this unit. **Repairs should be done by a qualified electrician.**

Record Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Reference UPC 193175439222.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

