CHANCE® Voltage Indicator Tester Operating Instructions Model No. PSC4033582

For use with: PSC4032915 Full Range Auto-Ranging Voltage Indicator

PSC4032916 Wireless Phasing Set (main unit only)

PSC4033710 Multi-Range Voltage Indicator PSC4033737 Proximity Voltage Indicator



NOTICE: Before operating a Chance® Voltage Indicator Tester, thoroughly read, understand and follow these instructions. Keep these instructions with the product for future reference.



Hubbell has a policy of continuous product improvement. Please visit hubbellpowersystems.com to confirm current design specifications.





Guide to Warnings within Manual

The following is a list of warnings used within this manual and should be read in their entirety to ensure safe practices.

ADANGER

A DANGER refers to operating procedures, techniques, etc., that, if not followed carefully could RESULT IN DEATH.

AWARNING

A WARNING refers to operating procedures, techniques, etc., that, if not followed carefully could RESULT IN INJURIES OR DEATH.

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A CAUTION refers to operating procedures, techniques, etc., that, if not followed carefully could RESULT IN DAMAGE TO EQUIPMENT or LOSS OF SERVICE to customers.

NOTICE

A NOTICE refers to information that is considered important but not hazard related.





Product Safety

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The equipment covered in this manual must be used and serviced only by competently trained personnel familiar with and following approved work and safety practices. This equipment is for use by such personnel and this manual is not intended as a substitute for adequate training and experience in safe procedures for this type of equipment.

These instructions neither cover all details or situations in equipment use, nor do they provide for every possible contingency to be encountered in relation to installation, operation or maintenance. Should additional information and details be desired or if situations arise which are not covered adequately for the user's purpose, the specifics should be referred to Hubbell Power Systems.

Function and Design Overview

The CHANCE® Voltage Indicator Tester, model PSC4033582, is a portable device for safely testing specific models of voltage indicators and the "MAIN" unit of the Wireless Phasing Set. Only use this device on the indicators listed below. Always test a voltage indicator before and after each use with either this device or a known energized voltage source. This device tests all components of the circuitry that are not already tested by the indicator's power-up self-test. **Do not** use this device near an energized voltage source.

The Voltage Indicator Tester can only be used on the following devices:

PSC4032915 Full Range Auto-Ranging Voltage Indicator (ARVI)

PSC4032916 Wireless Phasing Set (main unit only) (WPS)

PSC4033710 Multi-Range Voltage Indicator (MRVI)

PSC4033737 Proximity Voltage Indicator (PVI)

Accuracy

This instrument does not verify the calibration of the unit you are testing. Readings may vary depending upon battery voltage, integrity of connections, and other factors. Testing should be performed in a safe environment. To avoid erroneous readings, keep the unit as far away as practical from all system components.





Operating Instructions for PSC4032915 (ARVI)



- 1. Power-up the ARVI to be tested and verify that the automatic self-test has been successfully completed per its operating instructions.
- 2. Insert the plug of the Voltage Indicator Tester into the jack located on the back of the meter housing of the ARVI.
- 3. Connect the alligator clip onto the Shepherd Hook of the ARVI.
- 4. One of the Range LED's in the four (4) to twenty-five (25) kV range of the ARVI should begin blinking and the audible alarm should emit a beeping sound.
- 5. Leave the Voltage Indicator Tester connected to the ARVI for 15-20 seconds. The ARVI should go into the AUTO-HOLD mode. The Range LED should light continuously and the audible beeping should convert to a continuous signal for 1-2 seconds followed by 5-6 very rapid beeps, followed by 1-2 seconds of silence, and finally return to the normal audible mode until the ARVI is reset.
- 6. If the ARVI operates as described, it is operating properly. If not, replace the battery in the Voltage Indicator Tester and repeat the above procedure. If the ARVI still does not operate as described, either the ARVI or Voltage Indicator Tester may not be operating properly. Both units should be returned to the manufacturer for repair.





Operating Instructions for PSC4032916 (WPS)



- 1. Power-up only the "MAIN" unit of the WPS into the ARVI Mode (see WPS manual for details) and verify that the automatic self-test has been successfully completed per its operating instructions. The "PROBE" unit should not be turned on during this test.
- 2. Insert the plug of the Voltage Indicator Tester into the jack located on the back of the housing of the "MAIN" unit of the WPS that is in ARVI Mode.
- 3. Connect the alligator clip onto the Shepherd Hook of the "MAIN" unit of the WPS.
- 4. One of the Range LED's in the four (4) to twenty-five (25) kV range of the WPS should begin blinking and the audible alarm should emit a beeping sound.
- 5. Leave the Voltage Indicator Tester connected to the WPS for 15-20 seconds. The WPS should go into the AUTO-HOLD mode. The Range LED should light continuously and the audible beeping should convert to a continuous signal for 1-2 seconds followed by 5-6 very rapid beeps, followed by 1-2 seconds of silence, and finally return to the normal audible mode until the WPS is reset.
- 6. The Voltage Indicator Tester procedure tests all components of the circuitry on the main unit of the WPS that was not already tested by the power-up self-test. In order to test the "PROBE" unit of the WPS, follow the WPS manual to link the "MAIN" and "PROBE" and verify "In-Phase" and "Out-of-Phase" readings are correctly displayed utilizing known energized voltage sources.
- 7. If the WPS operates as described, it is operating properly. If not, replace the battery in the Voltage Indicator Tester and repeat the above procedure. If the WPS still does not operate as described, either the WPS or Voltage Indicator Tester may not be operating properly. Both units should be returned to the manufacturer for repair.





Operating Instructions for PSC4033710 (MRVI)



- 1. Power-up the MRVI to be tested and verify that the automatic self-test has been successfully completed per its operating instructions.
- 2. Insert the plug of the Voltage Indicator Tester into the jack located on the back of the meter housing.
- 3. Connect the alligator clip onto the Shepherd Hook of the MRVI.
- 4. The "Sense LED" will change from flashing to continuously illuminated, the pointer will rotate and indicate a voltage level between four (4) kV and ten (10) kV Phase-to-Phase.
- 5. If the MRVI operates as described, it is operating properly. If not, replace the battery in the Voltage Indicator Tester and repeat the above procedure. If the MRVI still does not operate as described, either the MRVI or Voltage Indicator Tester may not be operating properly. Both units should be returned to the manufacturer for repair.





Operating Instructions for PSC4033737 (PVI)



- 1. Power-up the PVI to be tested and verify that the automatic self-test has been successfully completed per its operating instructions.
- 2. Insert the plug of the Voltage Indicator Tester into the jack located on the back of the meter housing.
- 3. Safely place the insulated boot of the alligator clip next to the sensing element, which is located at the opposite end of the round universal coupling holder. Make sure that nothing but the insulated boot is touching the metal alligator clip during the test.
- 4. One or more of the LEDs in the four (4) to twenty-five (25) kV range should begin blinking and the audible alarm should emit a beeping sound.
- 5. If the PVI operates as described, it is operating properly. If not, replace the battery in the Voltage Indicator Tester and repeat the above procedure. If the PVI still does not operate as described, either the PVI or Voltage Indicator Tester may not be operating properly. Both units should be returned to the manufacturer for repair.





Battery Replacement



Alkaline batteries are recommended. To replace the battery, start by removing the gray plastisol cap, that has no protruding leads, from the orange housing. Carefully unplug the connector, taking precautions not to damage the connections to the circuit board while not short circuiting the battery. Gently pull the battery from the housing.

To install the replacement battery, insert the unconnected battery into the housing. While observing the proper polarity, connect the battery to the connector. Finish by reinstalling the gray plastisol cap.

NOTICE

This device contains no user serviceable components. Do not disassemble any further than the gray plastisol cap.

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Ensure that the wires to the battery connector are not damaged during battery replacement.





Maintenance

The CHANCE® Voltage Indicator Tester, model PSC4033582, is an electronic instrument and, if properly cared for, will provide many years of trouble-free service. Keep all parts clean and dry. **Clean only with a cloth dampened with water. Do not use chemical solvents.** Do not use CHANCE® Moisture Eater II wipes on any part of the Voltage Indicator Tester as it will cause damage.

Abuse or misuse will damage the unit. Store in a dry location, do not drop, and protect from jostling or impacts during storage, carrying, and use.

Repairs

For Hubbell Power Systems authorized repair or factory calibration, please contact:



M.W. Bevins Co. 9903 E. 54th St. Tulsa, OK 74146 (918) 627-1273 (918) 627-1294 (FAX) www.bevinsco.com

Specifications

Weight with battery: 388 g (13.7 oz) Dimensions (w/o leads): Ø 1.5" X 12" L

Battery requirements: One (1) Alkaline 9 Volt battery

Operating voltage range(s): Not to be used near energized voltage sources

Operating temperature range: -20° to +80°C Operating humidity range: 5% to 95% Rh

Storage temperature: -20° to +60°C (Recommended storage at 21°C +/- 2%°C)

Storage humidity range: 5% to 95% Rh (Recommended storage at 45% Rh +/- 8% Rh) **Limitations:** Only use this device on the indicators listed below. Always test a voltage indicator before and after each use with either this device or a known energized voltage source. This device tests all

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Hubbell has a policy of continuous product improvement. Please visit hubbellpowersystems.com to confirm current design specifications.

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