

## Transformer &amp; Capacitor Testers

# TILT II AND QUICK-CHECK®

Transformer Tester

Transformer and Capacitor Tester



## BENEFITS

- Tests transformers and capacitors for major defects before energizing
- Tests overhead, pad-mount and other distribution transformers as well as capacitors and capacitor banks
- Tests the primary and secondary sides of de-energized transformers without disconnecting
- Prevents line workers from installing a fuse on a shorted transformer or capacitor
- Quickly verifies the secondary connections are not shorted

## DESCRIPTION

The TILT II Transformer Testers and the Quick-Check Transformer and Capacitor Testers provide quick and easy tests for opens and shorts on power distribution systems. They operate with a single push-button and provide clear indications of open circuits, short circuits and confirmation that the test results are OK.

The TILT II (Transformer Initial Livening Tester) Transformer Tester is a versatile tool for quick and easy checks of transformers and the connections made to them. In the field, the TILT II is used to test the primary and secondary sides of a new or reworked, single or three-phase transformer installation for short circuits prior to energizing. The TILT II can test the secondary sides of transformers and all the connections made to them, up to and including the meter, prior to energizing. Unlike a simple ohmmeter, the TILT II can differentiate a true short from the low instance of a transformer winding.

In the shop, the TILT II can be used for quick screening of incoming and outgoing transformers for both primary and secondary shorts or opens (including internal fuses and breakers). The TILT II tests both 1Ø and 3Ø transformers, including potential transformers and other instrument transformers.

The Quick-Check performs all the same transformer tests as the TILT II, and also tests capacitors and capacitor banks. The Quick-Check uses the same single push-button operation as the TILT II and automatically distinguishes between transformers and capacitors. The Quick-Check tests capacitors individually or connected in capacitor banks. The Capacitor O.K. indication confirms that the capacitor is not internally shorted or open.

Both units are available with either manual self-test tabs on the side of the unit or automatic self-test. The units will automatically perform a complete self-test of the battery, lights, beeper and all electronics every time the TEST button is pushed. A magnet is also available for hands-free operation.



# HD ELECTRIC COMPANY

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## FEATURES

- Large copper alligator clips with heavy duty boots
- Heavy duty rubber insulated coiled test leads
- Compact, lightweight and easy-to-use
- Powered by a 9V lithium or alkaline battery
- Super bright LED indicators
- Audible alarm confirms successful test
- Built-in self-test feature available
- Continuous testing while button is pressed

## OPERATION

The TILT II and Quick-Check are versatile testers for a wide variety of test configurations and applications. A 3Ø overhead transformer installation is an ideal application for the TILT II or Quick-Check. After all the secondary wiring is completed and the phases are connected to the meter box, use the TILT II or Quick-Check to verify that all of the secondary connections are correct, that no phases are grounded or crossed.

They can also be used to test pad-mount transformers by testing each phase to neutral and each pair of phases for shorts or opens in the windings.

The TILT II and Quick-Check will not detect a partially shorted transformer coil or an improper transformer ratio. The Quick-Check will not detect a capacitor with a partial short or open with the wrong kVAR. The TILT II and Quick-Check are intended for quick and simple testing of transformers and capacitors for shorts or opens. The TILT II and Quick-Check should be used only on equipment known to be de-energized. The Quick-Check will not leave a significant charge on a capacitor. Using the TILT II or Quick-Check on the secondary sides of transformers may generate high voltages on the primary sides. Stay clear of all primary side connections while testing.

## SPECIFICATIONS

**SHORT:**  $\leq 10\Omega$  varies with battery voltage

**OPEN:**  $\geq 10\Omega$  varies with battery voltage

**Transformer O.K.:** Minimum inductance 800 $\mu$ H

**Capacitor O.K.:** Minimum capacitance 0.5 $\mu$ F  
Maximum capacitance 300 $\mu$ F

**Dimensions:** 5.75" x 3.5" x 1.5"  
(14.60 cm x 8.89 cm x 3.81 cm)

**Test Leads:** 21" (53.34 cm) retracted,  
54" (137.16 cm) fully extended

**Battery:** Powered by a 9V lithium or alkaline battery

**Weight:** TILT II/Quick-Check 1lb., 1oz. (0.47 kg)  
TILT II/Quick-Check with magnet 1lb., 2 oz. (0.51 kg)  
Quick-Check Patent No. 6130530

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Users must read and agree to the Limitation terms, as stated, before using the product.

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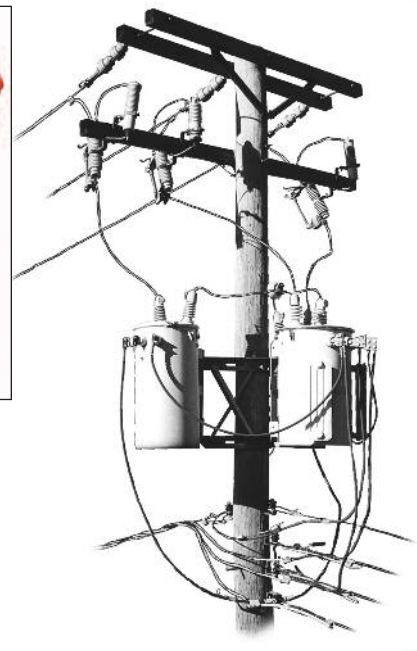
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*Single push-button operation with clear indications of open circuits, short circuits and confirmation that test results are OK.*



*Quick and simple testing of transformers and capacitors for shorts or opens.*



## ORDERING INFORMATION

<b>TL-MAN-N</b>	TILT II Transformer Tester with Manual Self-Test, Padded Carrying Bag and Instruction Manual.
<b>TL-MAN-M</b>	TILT II Transformer Tester with Manual Self-Test, Magnet, Padded Carrying Bag and Instruction Manual.
<b>TL-AST-N</b>	TILT II Transformer Tester with Automatic Self-Test, Padded Carrying Bag and Instruction Manual.
<b>TL-AST-M</b>	TILT II Transformer Tester with Automatic Self-Test, Magnet, Padded Carrying Bag and Instruction Manual.
<b>QC-MAN-N</b>	Quick-Check Transformer & Capacitor Tester with Manual Self-Test, Padded Carrying Bag and Instruction Manual.
<b>QC-MAN-M</b>	Quick-Check Transformer & Capacitor Tester with Manual Self-Test, Magnet, Padded Carrying Bag and Instruction Manual.
<b>QC-AST-N</b>	Quick-Check Transformer & Capacitor Tester with Automatic Self-Test, Padded Carrying Bag and Instruction Manual.
<b>QC-AST-M</b>	Quick-Check Transformer & Capacitor Tester with Automatic Self-Test, Magnet, Padded Carrying Bag and Instruction Manual.