

HellermannTyton (Pty) Ltd

Reg. No. 66/06351/07



TEL1TLB ELCB TESTER

FEATURES:

- Ready-board compatible
- Wiring Integrity Tester(neons)
- Faulty Earth Detector(LCD)/Live on earth
- ELCB Tester(10-35mA)

BACKGROUND:

Since the predecessor(TEL1) of the TEL1TLB was introduced some fourteen-years ago it has become the industry standard for checking wiring integrity and the correct functioning of ELCB's. While the TEL1 admirably filled the purpose for which it was intended a problem arose with the introduction of ready-boards into the South-African Market. This problem arose due to the fact that some ready-boards only have two wire supply (live and neutral with NO EARTH.) See figure1. Since there is no earth the 15amp socket outlets on the ready-board have the earth and neutral solidly bonded together.

This gives rise to the very unsatisfactory situation that if the incoming line and neutral feeding the ready-board are mistakenly reversed the old TEL1, as is the case with other similar devices on the market, incorrectly shows the wiring integrity as being OK, when in fact the very serious situation exists with the incoming line being connected to neutral AND EARTH. See figure2.

THE SOLUTION:

The detection of the above unsatisfactory situation has been solved with the Introduction of the TEL1TLB ELCB tester. At first glance this tester looks very similar to its predecessor but it has the additional feature of a small LCD display which indicates when an unhealthy earth situation is present (**when the metal knob is touched**). This new feature will not only indicate faulty wiring on ready-boards but gives an additional indication in normal wiring systems when an unhealthy earth situation is present. (Earth is live.)

OPERATION INSTRUCTIONS:

1. Before inserting the tester into the socket outlet turn the knob fully anti-clockwise to the off position. Insert the tester into the socket and switch on ELCB should not trip. Ensure the three neons are lit which gives a preliminary indication that the wiring integrity is healthy.
2. Touch the knob and ensure that the LCD display remains blank-This gives a conclusive check that the wiring integrity is OK. If the LCD display indicates



Earth is live!!

-STOP test immediately and check for an earth fault.

3. If the wiring integrity is OK proceed to test the ELCB by rotating the knob clockwise until the ELCB trips.

TEL1TLB Indication During Test

SYSTEM	NEONS	LCD	STATUS
HEALTHY	3LIT	BLANK	Wiring correct. Proceed ELCB test
UNHEALTHY	3LIT		Wiring incorrect. Stop test

READY-BOARD CORRECTLY WIRED

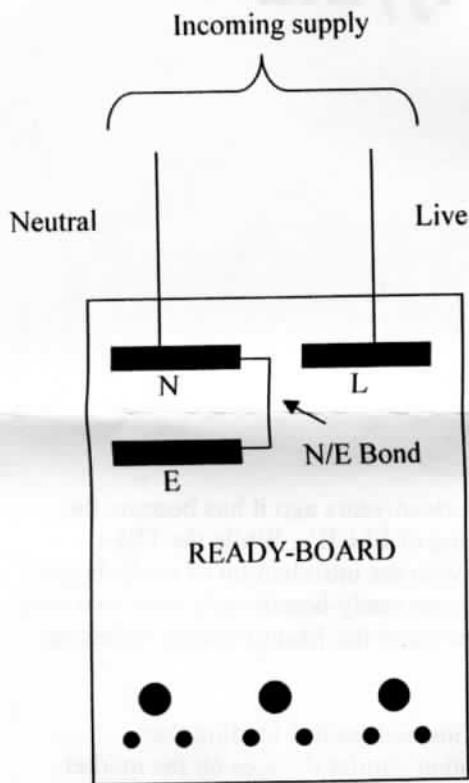


Figure 1

Indication on TEL1TLB

1. NEONS: All 3 neons lit, indicating correct polarity.
2. LCD DISPLAY: Display blank when metalknob is touched indicating a healthy earth condition.
3. Proceed with ELCB test.

READY-BOARD INCORRECTLY WIRED

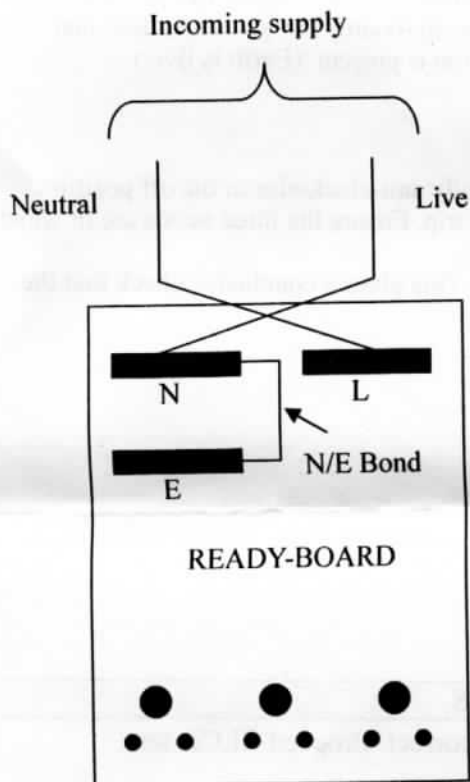



Figure 2

Indication on TEL1TLB

1. NEONS: All 3 neons lit, preliminary indication of correct polarity.
2. LCD DISPLAY: Display indicates  when the metalknob is touched.
3. Stop further testing and rectify unhealthy earth condition. (earth will be live)

NOTE: The following conditions will give

LIVE on earth warnings:

1. L/E reversed.
2. No Earth.
3. Condition as per figure 2.