POLARITY, AND WHY STEP 2 CAN'T PROVE IT

WHICH STEPS PROVE POLARITY ON A RING?

Worth asking twice — most people say yes both times. The answer is **no**.

> ✋ **Step 2 on its own does not prove polarity.** Step 2 finds a line or neutral swapped with the cpc: that socket reads open circuit. But line to neutral is a **continuous loop** round the ring, so swap the line and neutral at a socket and step 2 still gives a perfectly respectable reading. Step 3 finds that one.

WHAT STEP 3 ADDS

The socket outlet adapter has the line, earth and neutral pins in fixed positions, and your test leads plug into it. So on **step 3**, when you test **line to CPC**:

> ⚡ If the line conductor **isn't in the line terminal** — if a neutral has been put there instead — you get an **open circuit**. That is the swap step 2 misses. But a line and CPC swapped with each other still reads at step 3 — step 2 is the one that finds that.

> 3 **On a ring final circuit, polarity gets its tick once steps 2 and 3 are both done.** Step 2 finds a line or neutral swapped with the CPC; step 3 finds a neutral in the line terminal. Neither proves it on its own.

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