

## NEO TOOLS 94-006

# NEO TOOLS 94-006 8-in-1 AC/DC Voltage Tester User Manual

## 1. INTRODUCTION AND OVERVIEW

The NEO TOOLS 94-006 8-in-1 AC/DC Voltage Tester is a versatile and essential tool designed for electricians, mechanics, and anyone working with electrical installations. This device allows for safe and precise measurement of electrical voltage, helping to prevent accidents and ensure correct wiring. It supports a wide voltage range from 6 to 380 V AC/DC.

Equipped with two practical probes and an 80 cm cable, this tester offers eight distinct functions within a single unit, optimizing space in your toolkit. A key feature is its battery-free operation, ensuring readiness without the need for external power. It provides options to verify the presence and value of voltage in both AC and DC circuits, check for zero points in automotive wiring harnesses, and identify phases in electrical panels, facilitating easy error location and correction.

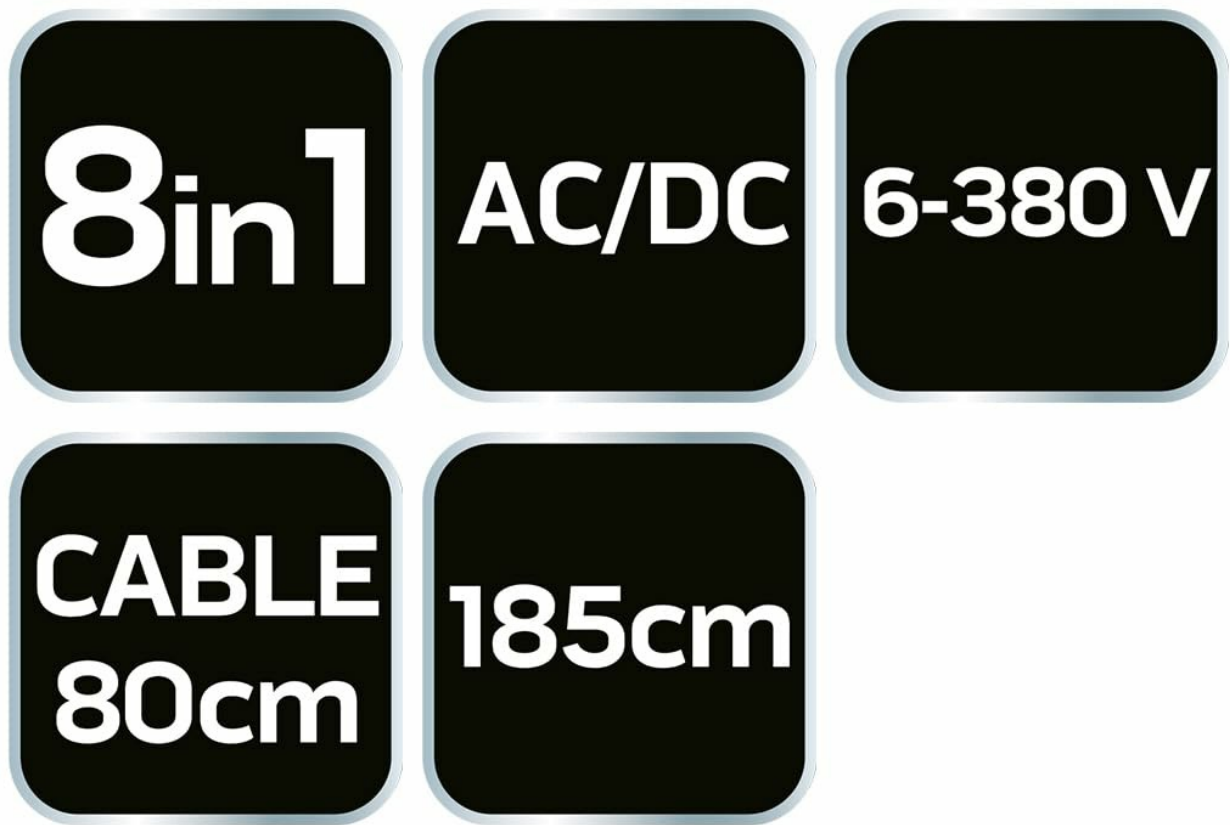


Figure 1: NEO TOOLS 94-006 8-in-1 AC/DC Voltage Tester with probes and cable.

## 2. SAFETY INFORMATION

**WARNING: Always prioritize safety when working with electricity. Failure to follow these safety guidelines may result in electric shock, injury, or death.**

- Always inspect the tester for any damage before use. Do not use if the probes, cable, or housing are damaged.
- Ensure your hands are dry and you are standing on a non-conductive surface.
- Do not exceed the maximum rated voltage of 380 V AC/DC.
- Wear appropriate personal protective equipment (PPE), such as insulated gloves and safety glasses.
- Do not attempt to open or modify the device. There are no user-serviceable parts inside.
- Use the tester only for its intended purpose as described in this manual.
- Keep out of reach of children.

## 3. PRODUCT FEATURES

The NEO TOOLS 94-006 voltage tester offers a range of functionalities for comprehensive electrical diagnostics:

- **8-in-1 Multifunctionality:** Combines multiple testing capabilities into a single device.
- **Wide Voltage Range:** Measures AC and DC voltage from 6 V to 380 V.
- **LED Display:** Clear indication of voltage levels (6V, 12V, 24V, 50V, 110V, 220V, 380V).
- **Two Probes:** Facilitates measurement between two points.
- **80 cm Cable:** Provides adequate reach for various applications.
- **Battery-Free Operation:** No batteries required, ensuring reliability and convenience.
- **Zero Point Verification:** Useful for checking wiring harnesses in vehicles.
- **Phase Testing:** Enables identification of live phases in electrical panels.



Figure 2: Key features of the NEO TOOLS 94-006 tester, including 8-in-1 functionality, AC/DC compatibility, 6-380V range, and cable length.

## 4. SETUP

The NEO TOOLS 94-006 voltage tester is designed for immediate use without complex setup procedures. As it operates without batteries, there is no need for battery installation or charging.

1. **Unpack the Tester:** Carefully remove the tester from its packaging.
2. **Inspect for Damage:** Before first use, visually inspect the entire device, including the probes, insulation, and cable, for any signs of damage, cracks, or exposed wires. If any damage is found, do not use the tester and contact customer support.
3. **Familiarize Yourself:** Observe the LED display and the two probes. Understand how the probes connect to the main unit via the cable.



Figure 3: The NEO TOOLS 94-006 Voltage Tester as it appears in its packaging.

## 5. OPERATING INSTRUCTIONS

The NEO TOOLS 94-006 tester is straightforward to operate. Follow these steps for various testing scenarios:

### 5.1. General Voltage Measurement (AC/DC)

1. Ensure the area is safe and you are wearing appropriate PPE.
2. Hold the main body of the tester firmly.
3. Carefully touch one probe to the first point of the circuit to be tested and the other probe to the second point.
4. Observe the LED display. The LEDs will illuminate to indicate the detected voltage level (e.g., 6V, 12V, 24V, 50V, 110V, 220V, 380V). The highest illuminated LED indicates the approximate voltage.
5. For DC voltage, the '+' and '-' indicators on the tester will show the polarity.



Figure 4: Close-up of the tester's LED display indicating voltage levels.

### 5.2. Automotive Applications (Zero Point Check)

This function is particularly useful for diagnosing electrical systems in vehicles.

1. Connect one probe to a known good ground point (e.g., vehicle chassis).
2. Use the other probe to touch various points in the wiring harness where you suspect a zero point or ground connection issue.
3. If a voltage is detected, it indicates that the point is not at zero potential or has a fault.



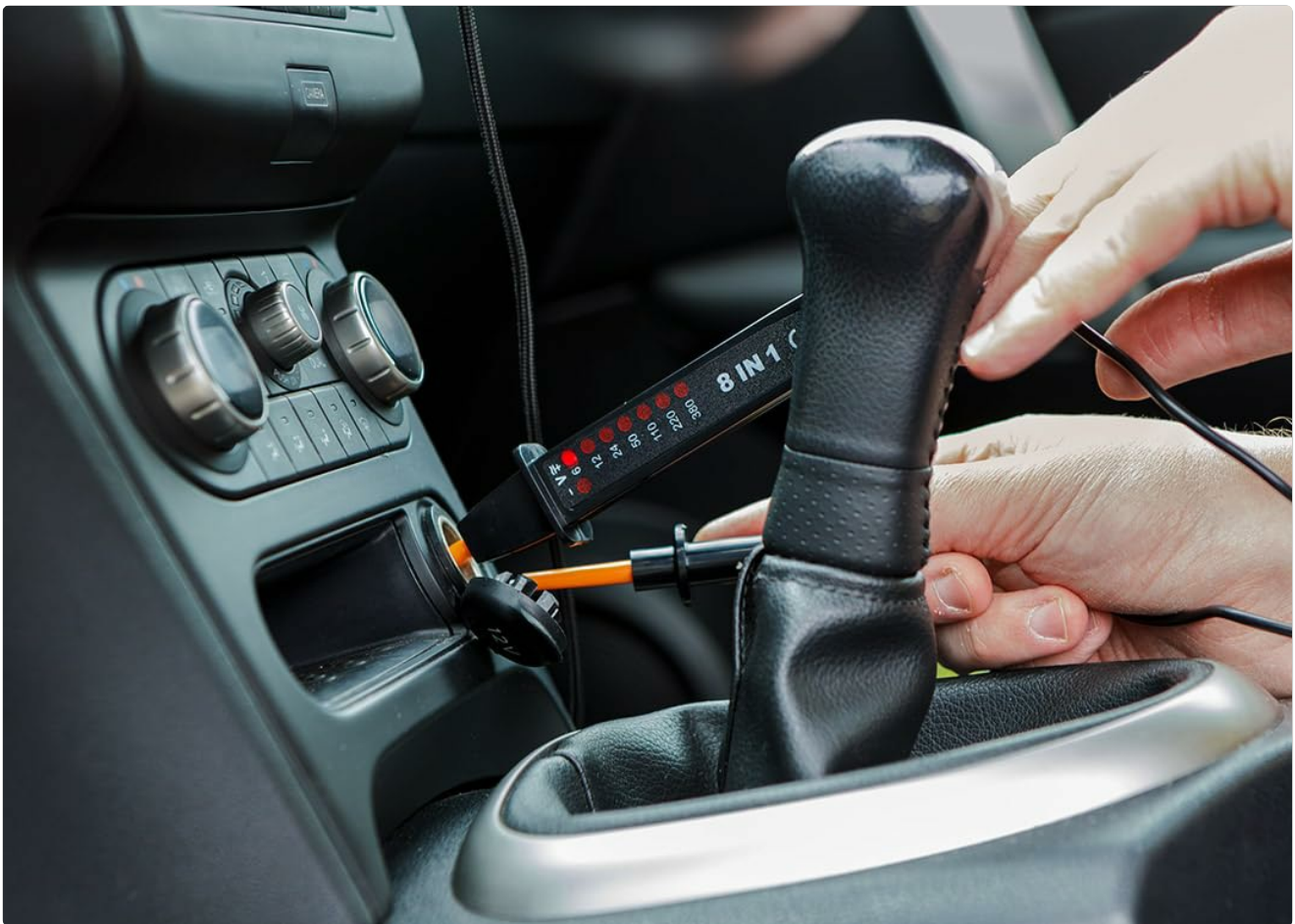


Figure 5: Using the tester to check voltage in a car's accessory socket.



Figure 6: Using the tester to check voltage on a car battery.

### 5.3. Phase Testing in Electrical Panels

To identify live phases in electrical distribution panels:

1. Ensure all safety precautions are in place.
2. Touch one probe to a known neutral or ground point.
3. Carefully touch the other probe to the terminal or wire you wish to test for a live phase.
4. If a voltage is detected and the corresponding LED illuminates, it indicates a live phase.



Figure 7: The voltage tester being used to check connections within an electrical panel.

## 6. MAINTENANCE

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Proper maintenance ensures the longevity and accuracy of your NEO TOOLS 94-006 voltage tester.

- **Cleaning:** Wipe the device with a dry, soft cloth. Do not use abrasive cleaners or solvents. Ensure no moisture enters the device.
- **Storage:** Store the tester in a clean, dry place, away from direct sunlight and extreme temperatures. Keep the probes protected to prevent damage.
- **Regular Inspection:** Periodically inspect the probes, cable, and housing for any signs of wear, cuts, or damage. Replace the device if any damage is observed to ensure safety and accurate readings.

## 7. TROUBLESHOOTING

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If you encounter issues with your NEO TOOLS 94-006 voltage tester, consider the following common problems and solutions:

- **No LED Indication:**
  - Ensure both probes are making good contact with the test points.
  - Verify that there is actual voltage present in the circuit. Test on a known live circuit if possible.
  - Check for any visible damage to the probes or cable that might interrupt the circuit.
- **Inconsistent Readings:**
  - Ensure stable contact with the test points.

- Clean the probe tips if they appear dirty or corroded.
  - The tester provides approximate voltage levels via LED. For precise measurements, a digital multimeter may be required.
- **Physical Damage:**
    - If the housing, probes, or cable are physically damaged, discontinue use immediately. Using a damaged electrical tester can be hazardous.

If troubleshooting steps do not resolve the issue, contact customer support for further assistance.

## 8. SPECIFICATIONS

Specification	Value
Model Number	94-006
Brand	NEO TOOLS
Manufacturer	GRUPA TOPEX
Voltage Range	6 - 380 V AC/DC
Display Type	LED (6V, 12V, 24V, 50V, 110V, 220V, 380V)
Number of Probes	2
Cable Length	80 cm
Total Tool Length	195 mm
Power Source	Battery-free operation

## 9. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation provided with your purchase or visit the official NEO TOOLS website. Keep your proof of purchase for any warranty claims.

If you have questions regarding the operation, maintenance, or troubleshooting of your NEO TOOLS 94-006 voltage tester, please contact NEO TOOLS customer service.