Power Probe PPKIT03S

Power Probe 3 Master Kit with ECT3000 User Manual

Model: PPKIT03S

Introduction

The Power Probe 3 Master Kit with ECT3000 is a comprehensive diagnostic tool designed for automotive electrical systems. This kit enables technicians and enthusiasts to quickly and accurately test circuits, power components, and locate open or short circuits. Its robust design and versatile functions make it an invaluable asset for electrical troubleshooting.

Figure 1: The Power Probe 3 Master Kit with ECT3000, including the main Power Probe unit, ECT3000 transmitter and receiver, and various cables and accessories, all housed in a durable carrying case.

What's in the Box

The PPKIT03S Master Combo Kit includes the following components:

- **Power Probe 3 (PP3CSRED):** The primary diagnostic tool for voltage, continuity, and circuit testing.
- **ECT3000 (PPECT3000):** An Electronic Circuit Tester for locating open and short circuits. This includes both the transmitter and receiver units.
- **Lead Set Accessories (PPLS01):** A collection of cables, adapters, and probes to extend the functionality of the Power Probe 3 and ECT3000.

Figure 2: Detailed view of the Power Probe 3 Master Kit contents, neatly organized within its protective case. This includes the

Power Probe 3, ECT3000 transmitter and receiver, various cables, and specialized probes.

Product Overview

Power Probe 3

The Power Probe 3 is a versatile electrical tester that allows users to apply power or ground to components, test voltage, check continuity, and measure resistance. It features a digital display for clear readings and an audible tone for quick feedback.

ECT3000 Electronic Circuit Tester

The ECT3000 consists of two main units: a Transmitter and a Receiver. The Transmitter injects a signal into a circuit, and the Receiver detects this signal to pinpoint the location of open or short circuits without damaging the wiring insulation.

Setup

1. **Power Probe 3 Connection:** Connect the Power Probe 3 to a 12-24 volt DC power source using the provided power cable. Attach the red clamp to the positive (+) battery terminal and the black clamp to the negative (-) battery terminal or a suitable chassis ground.
2. **ECT3000 Transmitter Connection:** For open circuit detection, connect the ECT3000 Transmitter to the circuit you wish to test. For short circuit detection, connect the Transmitter to a known good ground.
3. **ECT3000 Receiver Preparation:** Ensure the ECT3000 Receiver has fresh batteries installed. Turn on the unit and select the appropriate mode (Open or Short) for your diagnostic task.

Operating Instructions

Using the Power Probe 3

- **Voltage Testing:** Touch the probe tip to the circuit point. The digital display will show the voltage reading.
- **Powering Components:** Press the power switch forward for positive (+) voltage or backward for ground (-). This allows you to safely power up components for testing.
- **Continuity Testing:** Connect the probe tip to one end of the circuit and the auxiliary ground lead to the other. An audible tone and a green LED indicate continuity.
- **Resistance Testing:** Use the resistance mode to measure the ohmic value of a component or circuit.

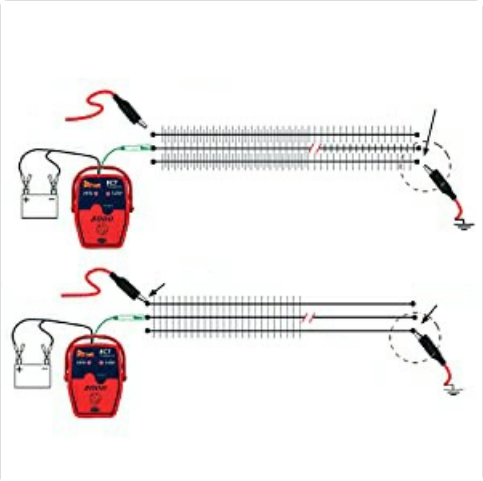

Figure 3: Diagram illustrating how to perform a voltage test using the Power Probe 3, connected to a vehicle battery.

Using the ECT3000

- **Open Circuit Detection:** Connect the Transmitter to the circuit. Use the Receiver to trace the wire. The signal will drop off at the point of the open circuit.
- **Short Circuit Detection:** Connect the Transmitter to a known good ground. The Receiver will indicate the strongest signal closest to the short.
- **Tone Generation:** The ECT3000 Transmitter can generate a tone that can be picked up by the Receiver, aiding in wire identification and tracing.

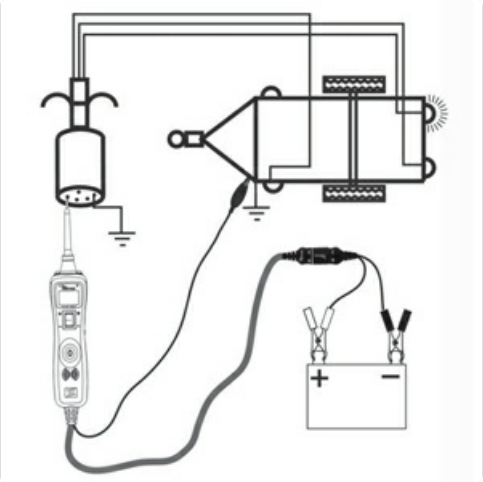

Figure 4: Diagram demonstrating the use of the ECT3000 Receiver to detect a short circuit by following the signal strength along a wire.

Maintenance

- **Cleaning:** Wipe down the tools with a clean, damp cloth after each use. Do not use abrasive cleaners or solvents.
- **Storage:** Store the kit in its original protective case in a dry, cool environment to prevent damage.
- **Battery Replacement:** Replace batteries in the ECT3000 Receiver as needed to ensure optimal performance. Refer to the ECT3000 specific manual for battery type and replacement instructions.

Troubleshooting

Problem	Possible Cause	Solution
Power Probe 3 not powering on.	Incorrect battery connection; Blown fuse in power cable.	Check battery connections; Replace fuse in power cable.
ECT3000 Receiver no signal.	Low batteries; Transmitter not connected or faulty.	Replace batteries; Verify Transmitter connection and function.
Inaccurate voltage readings.	Poor connection; Tool malfunction.	Ensure clean and secure connections; Contact support if issue persists.

Specifications

- **Brand:** Power Probe
- **Model:** PPKIT03S
- **Power Source:** Battery Powered (2 AAA batteries for ECT3000, vehicle battery for Power Probe 3)
- **Item Weight:** 6.19 pounds
- **Product Dimensions:** 14.96 x 3.62 x 12.2 inches
- **Measurement Type:** Ohmmeter, Voltmeter, Ammeter
- **Certifications:** UL, CE, FCC, IEC (Potential Values)

Warranty & Support

Power Probe products are designed for durability and performance. For specific warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official Power Probe website. Keep your purchase receipt for warranty claims.
Official Website: www.powerprobe.com
Customer Service: 800-655-3585