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› [ANCEL](#) /

› [ANCEL L8000 Automotive Smoke Machine Instruction Manual](#)

ANCEL L8000

ANCEL L8000 Automotive Smoke Machine Instruction Manual

Dual Mode Diagnostic Leak Tester for EVAP & Turbo Systems

1. INTRODUCTION

The ANCEL L8000 Automotive Smoke Machine is a diagnostic tool designed to detect leaks in various vehicle systems. It features dual operating modes for both low-pressure evaporative emissions (EVAP) and high-pressure boosted (Turbo) systems. Equipped with a built-in air pump and a color LCD, it offers adjustable pressure and run time settings for precise diagnostics.



Figure 1: ANCEL L8000 Automotive Smoke Machine.

2. SAFETY INFORMATION

Always operate the device in a well-ventilated area. Ensure the vehicle engine is off and cool before connecting the device. Use only recommended smoke-producing fluid (baby oil or mineral oil) to prevent damage to the device or vehicle components. Avoid direct contact with smoke. Wear appropriate personal protective equipment, including eye protection.

3. PACKAGE CONTENTS

The ANCEL L8000 package includes the following items:

- 1*L8000 Smoke Machine
- 23*Set of block off caps
- Exhaust cone
- Evap accessories

- Air Intake Bladder



Figure 2: Contents included in the ANCEL L8000 package.

4. SETUP

1. **Add Smoke Oil:** Unscrew the oil cap and use the provided funnel to fill 10-20ml of baby oil (not included) into the oil fill port. Ensure the oil level is between the MIN and MAX marks on the gauge.
2. **Attach Smoke Hose:** Connect the smoke hose to the Smoke Outlet port on the device.
3. **Connect Power Supply:** Attach the power clamps to the vehicle's 12V DC battery (red to positive, black to negative).
4. **Power On:** Turn on the device. The LCD screen will display the main menu.



Figure 3: Four quick and easy steps for setting up the ANCEL L8000.

5. OPERATING INSTRUCTIONS

5.1 Dual Mode Operation

The L8000 offers two primary diagnostic modes: High Pressure (Turbo) and Low Pressure (EVAP). This allows for comprehensive leak detection across various automotive systems.

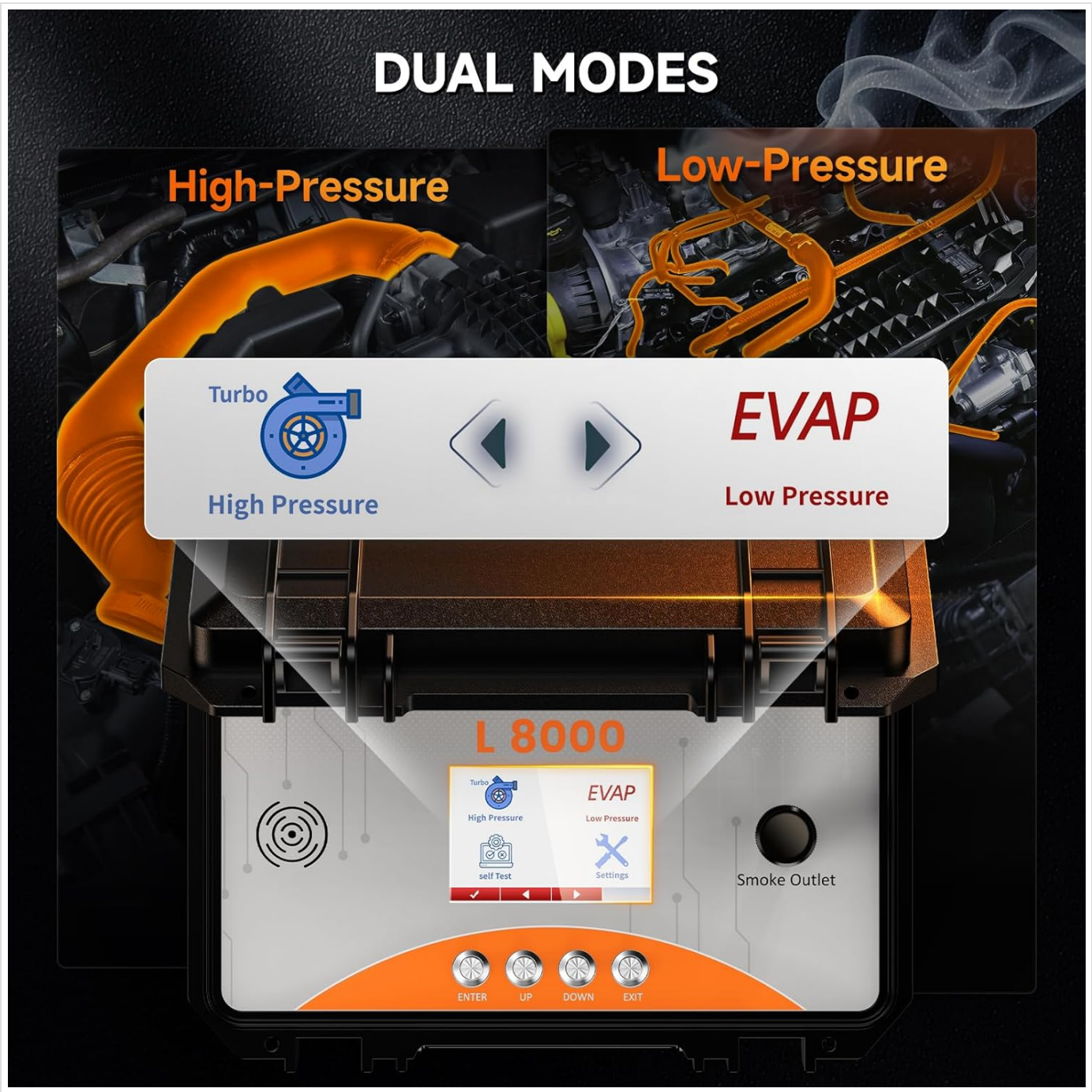


Figure 4: The device supports both High-Pressure (Turbo) and Low-Pressure (EVAP) modes.

5.2 Built-in Air Pump

The device features a built-in air pump, eliminating the need for external air sources. This enhances portability and allows for mobile repairs. The pump operates with stable pressure and low noise.



Figure 5: The ANCEL L8000 features a built-in air pump for convenience.

5.3 User-Friendly Interface and Adjustable Settings

The L8000 is equipped with a 4-inch color LCD display for real-time monitoring and user-friendly operation. You can adjust test duration and pressure settings to suit specific diagnostic needs. The device also supports multiple languages.



Figure 6: The user interface allows for easy navigation and adjustment of test parameters.

5.4 Self-Test Function

Before performing a vehicle test, utilize the self-test function to ensure the device itself is free of leaks and operating correctly. This helps guarantee accurate diagnostic results.



Figure 7: The self-test function verifies the device's integrity before use.

5.5 Full-System Leak Detection

The ANCEL L8000 is capable of detecting leaks in a wide range of automotive systems, including EVAP, Turbo, Fuel Tank, Exhaust, Intake, HVAC, Crankcase, and various pipe fittings. It can also be used for car sealing and cabin air leak detection.



Figure 8: Diagram illustrating various vehicle systems where leaks can be detected.

5.6 Cabin Air Leak Detection

To detect leaks in the passenger compartment (windows, sunroofs, cabins), start the car, enable AC recirculation, shut all doors and windows, and then run smoke around all seams and windows. Avoid testing in windy environments.



Figure 9: Steps for performing cabin air leak detection.

5.7 Versatile Adapters

The device comes with a complete set of rubber cone adapters and various-sized connectors to ensure a perfect fit and tight seal for different vehicle systems. These plugs allow you to seal open ports, focusing smoke for accurate leak detection.



Figure 10: A selection of versatile adapters included with the device.

5.8 Operational Environment

The ANCEL L8000 is designed to operate effectively in a wide range of temperatures, from 0°F to 140°F, making it suitable for various working conditions.



Figure 11: The device is designed for operation in diverse temperature conditions.

5.9 Official Product Videos

Discover the ANCEL L8000 Dual Mode Automotive Smoke Machine

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Video 1: An overview of the ANCEL L8000's dual-mode capabilities and features.

Master Automotive Leak Detection with ANCEL Smoke Machines

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Video 2: Demonstrates effective leak detection techniques using ANCEL smoke machines.

Real Dual Models Automotive Smoke Machine Applications

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Video 3: Showcases practical applications of the dual-mode smoke machine in various automotive scenarios.

6. MAINTENANCE

Regularly check the smoke oil level and refill when it drops below the minimum line. Ensure all connections are secure and hoses are free from kinks or damage. Store the device in its robust storage case when not in use to protect it from environmental factors.

7. TROUBLESHOOTING

Problem	Solution
No Display	Ensure that the power is properly connected.
No Air Flow	<ul style="list-style-type: none">• Check the air pump.• Check that the hoses are not kinked or pushed into the machine.
Not Enough Smoke	<ul style="list-style-type: none">• Check the fluid level to make sure enough oil (unscrew the oil cap to see if the fluid level is reaching the black mark of the dipstick).• Check that the hoses are not kinked or pulled into the machine.• Ensure that the pump is turned on and working.• Turn the unit off. Wait 10-15 minutes then start again (Overheating temperature control might be working).

Problem	Solution
Poor Smoke Density or Volume	<ul style="list-style-type: none"> • Insufficient smoke producing fluid: Refill. • Smoke output hose is kinked.

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Figure 12: Troubleshooting guide for common issues.

8. SPECIFICATIONS

- **Manufacturer:** ANCEL
- **Model:** L8000
- **Item Weight:** 7 pounds
- **Package Dimensions:** 11 x 10 x 10 inches
- **Low Pressure:** 0.5 PSI

- **High Pressure:** 20 PSI
- **Smoke Output:** 6-8L/min
- **Power Supply:** 12V DC car battery
- **Protections:** Over-pressure protection, Over-temperature protection
- **First Available:** April 27, 2024





Figure 13: Key technical specifications of the ANCEL L8000.






9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the contact details provided in the product packaging or visit the official ANCEL website. Please note that the LCD display is protected by a thin film to prevent scratches during shipping. Gently peel off the film to reveal the flawless screen underneath.

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Related Documents - L8000

	<p>ANCEL Automotive Diagnostic Smoke Leak Detector User Manual</p> <p>Comprehensive user manual for the ancel Automotive Diagnostic Smoke Leak Detector, covering operation, specifications, troubleshooting, and warranty information. Learn how to effectively test various vehicle pipeline systems for leaks.</p>
	<p>Automotive Diagnostic Smoke Leak Detector User Manual - Ancel S200/S300</p> <p>Comprehensive user manual for the Ancel Automotive Diagnostic Smoke Leak Detector (models S200 and S300). Learn about its features, specifications, parts, operation, troubleshooting, and warranty for effective vehicle leak detection.</p>

<div><p>User's Manual</p><p>Automotive Diagnostic Smoke Leak Detector</p><p><small>©2019 ANCEL TECHNOLOGY CO., LTD. Model: AD310 Scan & EVAP Detector Email: sales@ancel.com.cn Website: www.ancel.com.cn</small></p></div>	<p>ANCEL Automotive Diagnostic Smoke Leak Detector User's Manual</p> <p>Comprehensive user manual for the ANCEL Automotive Diagnostic Smoke Leak Detector, covering its features, operation, accessories, specifications, troubleshooting, and EVAP system knowledge.</p>
<div><p>Automotive Diagnostic Leak Detector</p><p>User Manual</p></div>	<p>ANCEL Automotive Diagnostic Leak Detector User Manual</p> <p>User manual for the ANCEL Automotive Diagnostic Leak Detector, detailing its specifications, packing list, components, operation, and warranty.</p>
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<div><p>AD310</p><p>User's Manual</p></div>	<p>ANCEL AD310 OBD II Scan Tool User Manual</p> <p>Comprehensive user manual for the ANCEL AD310 OBD II scan tool, detailing its features, operation, safety precautions, diagnostic functions, and warranty information.</p>