

THIKPO SMT-108-Pro

THIKPO SMT-108-Pro Smoke Leak Detector Instruction Manual

Model: SMT-108-Pro

1. INTRODUCTION

The THIKPO SMT-108-Pro Smoke Leak Detector is a professional automotive diagnostic tool designed to quickly and accurately locate leaks in various vehicle systems. This device utilizes smoke to identify leaks in components such as throttle shafts, engine blocks, turbo test systems, crankcase systems, air intake systems, exhaust systems, fuel tank systems, EVAP systems, EGR systems, and cooling systems. Its built-in air compressor and precise gauges ensure efficient and reliable leak detection for a wide range of vehicles.



Image: The THIKPO SMT-108-Pro Smoke Leak Detector in operation, showing smoke being emitted from the hose. The unit features a pressure gauge, flow meter, and control switches.

2. SAFETY INFORMATION

Please read and understand all safety warnings and instructions before operating the THIKPO SMT-108-Pro Smoke Leak Detector. Failure to follow these instructions may result in injury or damage to the equipment or vehicle.

- **Power Supply:** Ensure the device is connected to a stable DC12V power source.
- **Operating Temperature:** The device is equipped with a smart protection system that automatically cuts off power if the working temperature exceeds safe limits. Allow the unit to cool down if this occurs.
- **Smoke Fluid:** Use only baby oil (mineral oil) as the smoke-generating fluid. This produces harmless smoke. Do not use other flammable or corrosive liquids.
- **Ventilation:** Operate the smoke leak detector in a well-ventilated area.
- **Eye Protection:** Always wear appropriate eye protection when performing automotive diagnostics.
- **System Pressure:** When testing EVAP systems or other systems requiring lower pressure (below 15 psi), an

additional low-pressure regulator is required as this unit operates at 19-23 psi.

- **Electrical Safety:** Avoid contact with live electrical components. Ensure connections are secure before powering on.

3. PRODUCT OVERVIEW AND COMPONENTS

The THIKPO SMT-108-Pro Smoke Leak Detector comes with a comprehensive set of accessories to facilitate various leak detection tasks.

Main Unit Features:

- **Built-in Air Pump:** Generates 19-23 psi air pressure for smoke injection.
- **Precise Pressure Gauge:** Displays system pressure for accurate leak assessment.
- **Adjustable Air Flow Meter:** Allows control over smoke output and helps identify leak size.
- **Power and Smoke Indicators:** LED lights to show operational status.
- **Power and Smoke Switches:** Separate controls for air pump and smoke generation.

Included Accessories:

- **Intake Bladder:** For sealing intake systems.
- **Smoke Delivery Hose:** Flexible hose for directing smoke.
- **Cone Adapters:** For various pipe sizes.
- **7 Different Sized Pipe Caps:** Tapered design for tight seals.
- **EVAP Hose & Adapter Cone:** Specific adapter for EVAP systems.
- **Valve Core Removal Wrench:** For tire valve cores or similar applications.
- **Oil Filling Bottle & Funnel:** For adding smoke fluid.
- **Hook:** For hanging the unit during operation.
- **5.12ft Long Power Cord with Durable Clips:** For connecting to a 12V vehicle battery.

COMPLETE ACCESSORIES



SMT-108-Pro Smoke Machine



Package



5.12ft Long Power Cord with Durable Clips



5.02ft Long Smoke Delivery Hose



Intake Bladder



7 Size Pipe Caps
1 Pipe Cross Plug



EVAP Hose & Adapter Cone



Valve Core Removal wrench



Oil filling bottle & Funnel



Hook

Image: The smoke leak detector unit along with its complete set of accessories, including hoses, adapters, caps, and tools.

4. SETUP

1. Prepare the Smoke Fluid:

Using the provided funnel and oil filling bottle, add 10-15ml of baby oil (mineral oil) into the smoke fluid reservoir on the top of the unit. Do not overfill. Ensure the cap is securely tightened after filling.

EASY TO OPERATE



1. Fill 10-15ml of baby oil to the detector (Oil not included).



2. Connect the power and connect smoke tube.



3. Connect the pipe that needs to test with adapter and power on, then open smoke switch.



4. The pipe will be filled with smoke, check the leak points.

Image: Step 1 of operation, illustrating the process of filling the smoke detector with 10-15ml of baby oil using the provided funnel.

2. Connect Power:

Connect the power cord clips to the vehicle's 12V battery terminals (red to positive, black to negative). The "Power" indicator light on the unit should illuminate, indicating normal power supply.

3. Connect Smoke Delivery Hose:

Attach one end of the smoke delivery hose to the output port on the smoke machine and the other end to the appropriate adapter for the system you intend to test.

4. Prepare Vehicle System:

Identify the system to be tested (e.g., intake, exhaust, EVAP). Use the appropriate adapters, such as the intake

bladder or pipe caps, to seal off the system. Ensure all openings are properly sealed to prevent smoke escape from unintended areas.

Your browser does not support the video tag.

Video: Demonstration on how to use the smoke intake bladder to seal off a vehicle's intake system for leak testing.

5. OPERATING INSTRUCTIONS

The THIKPO SMT-108-Pro offers two primary modes: Air Mode and Smoke Mode.

5.1 Air Mode (Pre-test for large leaks)

1. With the power connected and the "Power" indicator on, ensure the "Smoke" switch is OFF.
2. Turn on the "Power" switch. The air pump will start, injecting air into the sealed system.
3. Observe the pressure gauge. If the pressure does not build or drops rapidly, it indicates a significant leak. Listen for hissing sounds to pinpoint large leaks.
4. If a large leak is found, repair it before proceeding to Smoke Mode for finer detection.

5.2 Smoke Mode (Detailed Leak Detection)

1. Ensure the system is properly sealed and the unit is powered on (Air Mode may be active).
2. Flip the "Smoke" switch to the ON position. The "Smoke" indicator light will illuminate.
3. The unit will begin to generate smoke within 10 seconds. Adjust the flow meter knob to control the smoke output rate.
4. Observe the pressure gauge and flow meter:
 - **No Leak:** Pressure gauge value remains constant, and the flow meter pointer stays at the bottom of the scale.
 - **Small Leak:** Pressure gauge value drops, and the flow meter pointer slowly falls towards the bottom of the scale.
 - **Massive Leak:** Pressure gauge value is zero, and the flow meter pointer never reaches the bottom of the scale.

PROFESSIONAL & ACCURATE

Precise Pressure Gauge



Adjustable Air Flow Meter



Image: Close-up of the pressure gauge and flow meter, illustrating how to interpret readings for different leak sizes (no leak, small leak, massive leak).

5. Visually inspect the system for smoke escaping, which indicates the location of a leak.
6. Once leaks are identified, turn off the "Smoke" switch, then the "Power" switch, and disconnect the unit.

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Video: A comprehensive demonstration of the THIKPO SMT-108-Pro Smoke Machine in action, highlighting its ability to quickly find leaks in automotive systems.

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Video: A professional smoke machine leak detector quickly identifying leaks in a vehicle's engine bay.

6. MAINTENANCE

- **Fluid Management:** After each use, it is recommended to empty any remaining smoke fluid from the tank to prevent it from sitting and potentially degrading. Use the oil filling bottle and funnel for this purpose.
- **Cleaning:** Keep the unit and accessories clean and free from dirt and debris. Wipe down the exterior with a soft, dry cloth.
- **Storage:** Store the smoke leak detector in a cool, dry place away from direct sunlight and extreme temperatures.
- **Hose and Adapter Inspection:** Regularly inspect hoses and adapters for cracks, wear, or damage. Replace any damaged components to ensure proper sealing and operation.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No smoke output	◦ Insufficient smoke fluid. ◦ Smoke switch is OFF. ◦ Heating element malfunction. ◦ Over-temperature protection activated.	◦ Add 10-15ml of baby oil. ◦ Ensure smoke switch is ON and indicator light is illuminated. ◦ If the smoke indicator lights up briefly then turns off, the heating element may be faulty or the unit is overheating. Allow to cool and re-test. If problem persists, contact support. ◦ Allow the unit to cool down.
No air pressure / No smoke injection	◦ Power not connected or insufficient. ◦ Air pump malfunction. ◦ Large leak in the system being tested.	◦ Check 12V battery connections and ensure the "Power" indicator is ON. ◦ Ensure the "Power" switch is ON. If no air is felt from the hose, contact support. ◦ Identify and seal large leaks first using Air Mode before attempting Smoke Mode.
Smoke escapes from unintended areas	◦ System not properly sealed. ◦ Incorrect adapter used.	◦ Re-check all connections and seals using appropriate adapters and caps. ◦ Ensure the correct size and type of adapter is used for the specific pipe or opening.

8. SPECIFICATIONS

Feature	Detail
Model	SMT-108-Pro
Brand	THIKPO
Power Supply	DC 12V
Output Pressure	19-23 psi (Built-in Air Pump)
Smoke Output Rate	Up to 16 L/Min
Smoke Fluid Capacity	10-15ml (Baby Oil / Mineral Oil)
Item Weight	4.73 pounds
Package Dimensions	11.54 x 9.96 x 7.76 inches
Applicable Vehicle Types	Cars, Motorcycles, Snowmobiles, ATVs, Light Trucks, Speedboats (DC12V systems)

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your THIKPO SMT-108-Pro Smoke Leak Detector, please contact THIKPO US Direct. Keep your purchase receipt as proof of purchase for any warranty claims.

Contact Information: Refer to the THIKPO official website or your product packaging for the most current support contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

How do I troubleshoot my THIKPO SMT-108-Pro smoke machine when it produces no smoke, the wires get warm, and it sparks when hung?

Based on your description, your THIKPO SMT-108-Pro is experiencing a serious electrical fault. The combination of warming wires, sparking when the hook touches the vehicle (grounding), and the red light illuminating suggests a short...

[Read full answer](#)