

LEAK DETECTOR KIT USER MANUAL



Read Carefully Before Use
Keep for Future Reference

Safety Information

Warning!

- Use this product **ONLY** in accordance with these instructions and for its intended purpose. Do not allow people unfamiliar with this product or these instructions to operate it. Do not let children or persons with compromised physical or mental capabilities use this product.
- Keep your area clean and well lit. Cluttered or dark areas invite accidents.
- Keep children and bystanders away while using this product.
- **DO NOT** use this product while you are tired or under the influence of drugs, alcohol, or medication.
- Use with appropriate personal protective equipment including a dust mask, goggles, and the provided work gloves in a well-ventilated place. For air-conditioning systems, **FULLY** evacuate them before use as the remaining refrigerant can come out, irritating your eyes, nose, throat, and skin or causing frostbite, heart arrhythmia, unconsciousness, and even death. If you begin to develop symptoms such as headaches, dizziness, or nausea during use of this product, get fresh air **IMMEDIATELY**. Do not continue work until the vehicle has been moved to an area with better ventilation.
- Before use, confirm that the vehicle is on firm level ground, its parking brake is activated, and its engine is turned off. Secure the vehicle in place with chocks, jacks, stands, etc. according to its manufacturer's service and repair manual.
- **DO NOT** overreach. Keep proper footing and balance at all times.
- **DO NOT** leave this product unattended during use.
- **DO NOT** operate this product if it is damaged or shows signs of malfunction. Repair or replace damaged components before further use. Never replace any parts with nonidentical ones.
- **ALWAYS** turn off this product and disconnect it from its power source after each use and before refilling, cleaning, replacement, servicing, or other maintenance. Exercise extreme caution while connecting and disconnecting the clamps to and from your vehicle's battery.

Specifications

Rated Power	120 W	
Compatible Power Source	12V DC Automotive Battery	
Compatible Fluids	Baby Oil	
Reservoir Capacity	1 fl. oz.	30 mL
Supply Volume	0.21 cfm	6 L/min.
Operational Pressure	15 psi	1 Bar
Pressure Gauge Range	0–29 psi	0–2 Bars
Dimensions	8.3×6.1×4.9 in.	21×15.5×12.5 cm
Smoke Hose Length	4 ft. 11 in.	1.5 m
Power Cord Length	4 ft. 11 in.	1.5 m
Net Weight	4.6 lb.	2.1 kg

Product Diagram


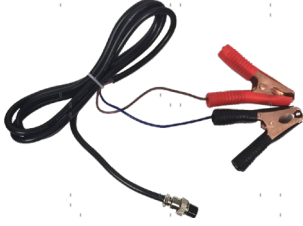





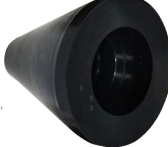







Front View



Back View



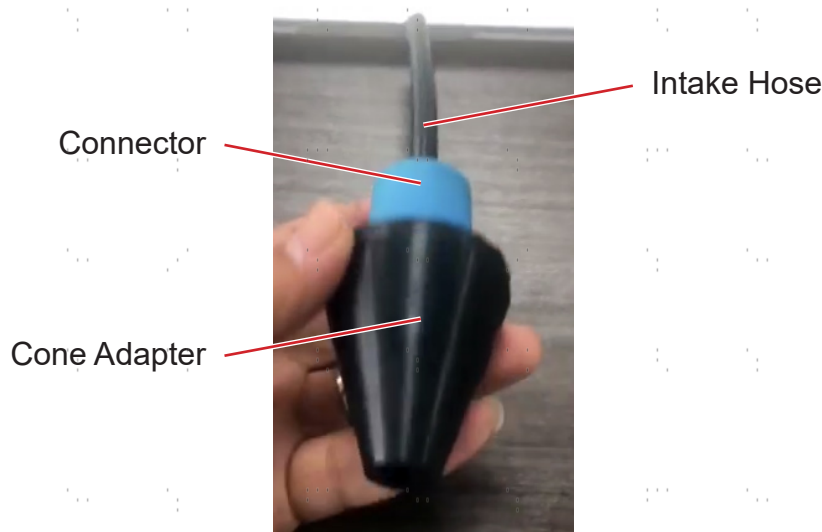
Package List

<p>A Smoke Machine</p>  <p style="text-align: right;">× 1</p>	<p>B Power Cord with Clamps</p>  <p style="text-align: right;">× 1</p>	<p>C Smoke Hose</p>  <p style="text-align: right;">× 1</p>
<p>D Airbag Adapter</p>  <p style="text-align: right;">× 1</p>	<p>E Spare Airbag Plug</p>  <p style="text-align: right;">× 1</p>	<p>F Spare Airbag Plug Clamp</p>  <p style="text-align: right;">× 1</p>
<p>G Large Cone Adapter</p>  <p style="text-align: right;">× 1</p>	<p>H Medium Cone Adapter</p>  <p style="text-align: right;">× 1</p>	<p>I Small Cone Adapter</p>  <p style="text-align: right;">× 1</p>
<p>J Cone Adapter Base</p>  <p style="text-align: right;">× 1</p>	<p>K Cap Plugs</p>  <p style="text-align: right;">× 24</p>	<p>L Core Wrench</p>  <p style="text-align: right;">× 1</p>
<p>M Smoke Machine Fluid</p>  <p style="text-align: right;">× 1</p>	<p>N Dropper Bottle</p>  <p style="text-align: right;">× 1</p>	<p>O Work Gloves</p>  <p style="text-align: right;">× 2</p>

Operation

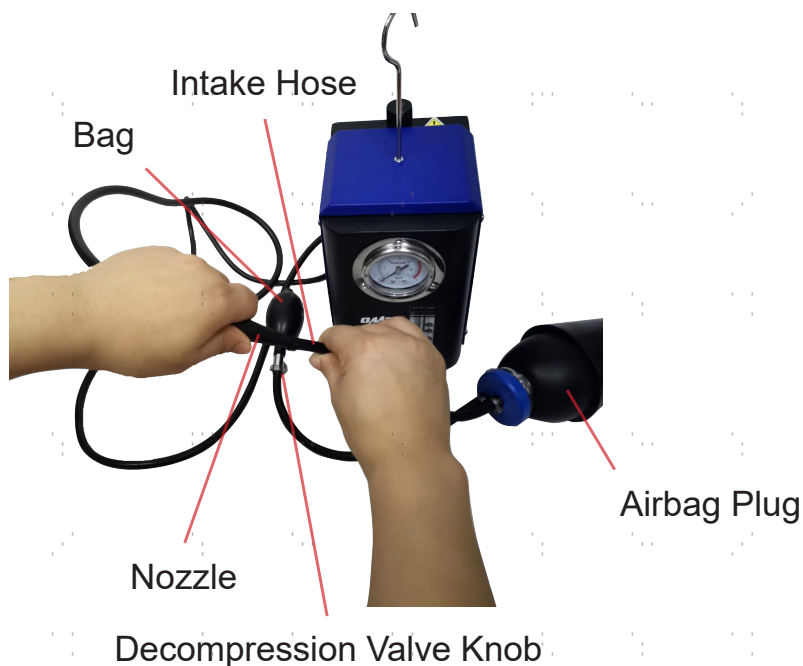
1. Park your vehicle on firm level ground, activate its parking brake, and turn off its engine. Allow your vehicle to cool if it has become hot through recent use.
2. Open your vehicle's hood and/or jack up the vehicle with one or more jack stands or other appropriate supporting equipment as needed.
3. Expose the auto part that you wish to test for leaks, leaving only one port open. For an EVAP service port, remove its Schrader valve using the core wrench (L). Block any other exposed ports using matching cap plugs (K) as needed.
4. Fill up the dropper bottle (N) with the provided smoke machine fluid (M). Unscrew the fluid inlet cap on the top of the smoke machine (A), empty the fluid into the inlet, and replace the cap.
5. Connect the power cord (B) to the power inlet behind the smoke machine.
6. Connect the red clamp on the other end of the power cord to the positive terminal on your vehicle's battery. Connect the black clamp to its negative terminal. Confirm that the power indicator light on the smoke machine comes on. If it does not, adjust the connections as necessary or remove any built up corrosion from the terminals. If it is necessary to run your vehicle to recharge your battery, remove the smoke machine and its cables, recharge the battery, and then wait for the engine to cool before resuming your work.
7. Place the machine near the part to be tested, hanging it from a stable and firm position with the attached hook if necessary. Confirm that the vehicle's hood can support the extra weight, adding an additional prop rod if necessary.
8. Connect the threaded end of the smoke hose (C) to the smoke outlet behind the machine, screwing it into place.
9. Attach the smoke hose to the auto part using the best matching adapter, which should **COMPLETELY** block the exposed port.

To use the medium or small cone adapter (H or I), fit it onto the blue connector of the cone adapter base (J), connect the smoke hose's nozzle into its intake hose, and fit its vertex into the port.



To use the large cone adapter (G), insert the smoke hose's nozzle into its intake hose underneath its curved surface and attach its vertex to the port. You can also remove its intake hose and then use the cone adapter base in the fashion above.

To use the airbag adapter (D), close its decompression valve by turning the knob beside the bag completely clockwise. Cram the airbag plug into the port, continuously pumping the bag to inflate the plug until it fully occupies the port. Insert the nozzle of the smoke hose into its intake hose.



10. Check that the flow adjustment knob is completely counterclockwise. If the flow meter's ball rises and the pressure gauge remains zero while other exits are well sealed, there is a leak.
11. Flip the smoke switch to **I** to begin heating the fluid. This is a gradual process, with peak smoke production requiring a minute or two.
12. Adjust the smoke intensity using the adjustment knob as needed. If too much smoke is being emitted, turn it clockwise.
13. Find the locations where smoke rises from the sealed system. Patch them as you work or mark them for later repair.
14. When finished, flip the smoke switch to **O** and turn the flow adjustment knob completely clockwise. Disconnect the power cord from the machine and the negative and positive terminals.
15. Remove the smoke hose, the adapter, and any cap plugs from the part. For the airbag adapter, open its decompression valve by turning its knob counterclockwise. Remove it after the airbag plug has contracted.

Maintenance

- Disconnect this machine from all power prior to any cleaning or other maintenance.
- Check the machine and its accessories for any wear or damage after use. Repair any problematic parts or replace them with identical ones before further use.
- Clean the exterior of the machine and its accessories using a soft damp cloth as needed. Do not use abrasive cleaners or caustic chemicals.
- If the machine will not be used for an extended period of time, unscrew the drain cap and pour out any remaining fluid into an appropriate disposal container before storing the machine in a cool dry place away from direct sunlight and inaccessible to children.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at support@orionmotortech.com and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code to the right.

