



LEAK DETECTOR UNI

Manual

90804000



SAFETY NOTICE

To understand the functioning of the tools, it is necessary to read the manual first!

- > Read these instructions before assembling, during installation and throughout use and in the proper sequence
- > Always refer to the OEM manufacturer's instructions and service manuals for the latest data and to maintain the correct sequence
- > These work instructions and the recommended tools are meant to serve as aides only and are by no means a guarantee for certain results.
- > This tool kit is a special collection and it has been tested and used successfully on several occasions. It is of the utmost importance to maintain the correct procedure as per the instructions
- > The use of the tools should only be carried out by qualified personnel!



ATTENTION

Special caution



CORRECT



LIGHT BULB

Hint or recommendation



WRONG



SAFETY GOGGLES

Wearing safety goggles
necessary

WARNING

- If you are not a technician, please do not change, disassemble or repair the product; otherwise all the losses shall be borne by the user.
- This product is powered by electricity and should not be used as a toy for children.
- To avoid a short circuit, do not put the product in water or other liquid.
- Please use the power source and power cord supplied by the manufacturer according to the standards.
- Please do not expose the product to intense light or high temperature when it's not used.
- When doing leak detection test, keep away from the smoke sensitive parts like the headlight.
- Replace the oil in the detector regularly. Before adding the new oil, please drain out the remaining used oil in the detector.
- Selection of the detector oil: liquid paraffin and baby oil are both usable.
- Please make sure there is no water in it, and please do not use any sticky liquid.

PRODUCT INTRODUCTION

90804000 is an integrated automotive smoke detector made of aluminum alloy. It is designed with clear pressure gauge for easy detection of pipeline leaks. Moreover, it comes with two test modes: i.e. Air mode and smoke mode. With the help of air mode, it is possible to diagnose whether there is a leak through the pressure gauge with no need to output smoke. As for smoke mode, it is equipped with an independently controlled smoke generator. This mode can be activated in case a leak is found, enabling you to locate the leak precisely. Moreover, a visible flow meter can effectively observe and control the flow rate of the smoke output, while a visible pressure gauge can accurately determine if the pipe is leaking.

90804000 is suitable for all pipes of cars, motorcycles, snowmobiles, off-road vehicles, dune buggies, light trucks, and speedboats. It's recommended to use an automobile diagnosis tool to work with **90804000** to detect car engine problems more quickly.

FEATURES

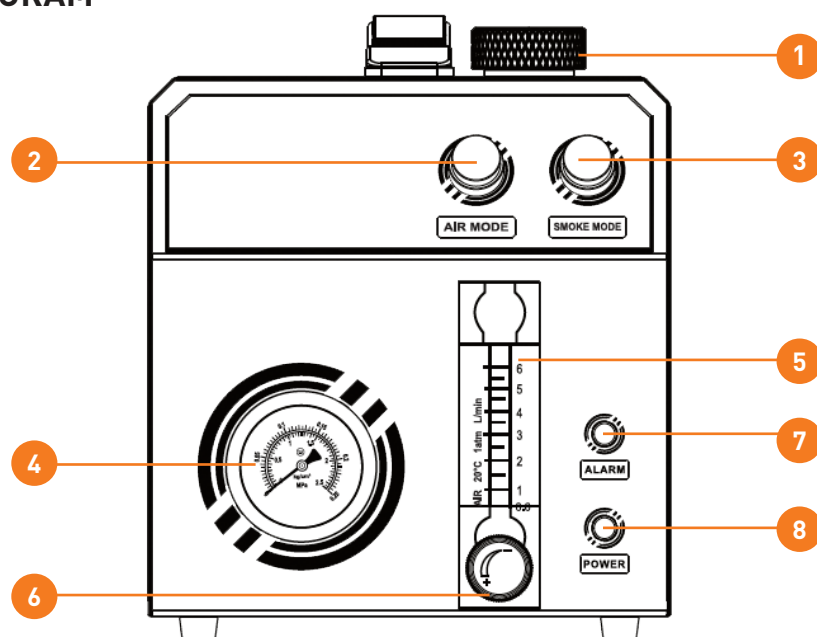
Built-in Air Pump	Yes
Overheat Protection	Yes
Pressure Gauge	Yes
Protection Indicator	Yes
Flow Meter	Yes
Flow Adjustment Knob	Yes
Oil Drain Valve	Yes
Liquid Level Gauge	None
Air Control Switch	Yes
Smoke Control Switch	Yes
Adjustable Pressure	None
Intelligent Digital Display	None

TECHNICAL PARAMETER

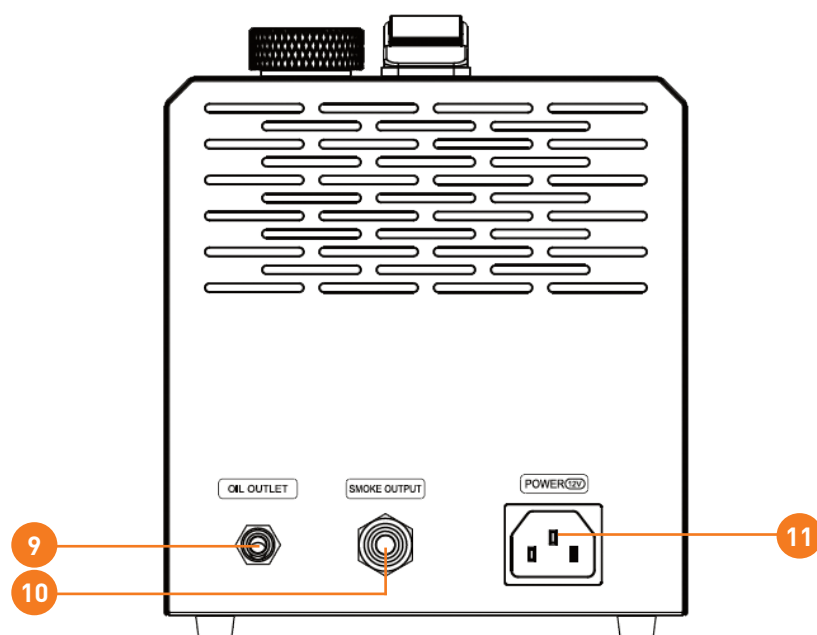
Power Supply	DC 12 V
Test Oil Filling Volume	10 - 20 ml
Rated Output Pressure	< 15psi
Rated Output Flow	< 6 l/min
Rated Power	65 W
Product Weight	3,2 kg

PRODUCT STRUCTURE

STRUCTURE DIAGRAM



1	Oil Filling Port	5	Smoke Flow Meter
2	Air Mode Switch	6	Smoke Flow Control Valve
3	Smoke Mode Switch	7	Protection Indicator
4	Pressure Gauge	8	Power Indicator



9	Oil Drain Valve
10	Smoke Outlet
11	Power Socket

OPERATIONS INSTRUCTION

PREPARATION BEFORE USE

- Place the detector on the mobile cart or under the hood.
- Open the filling cap and drain 20 ml of test liquid into the filling port (1).



If the test oil is overfilled, please drain some oil out through the oil drain outlet (9).

- After completing the first two steps, start using the **90804000**.

DETAIL OPERATION DURING USE

- Fit the smoke hose to the smoke outlet (10) and the power cord to the power socket (11).
- Connect the power clip to the DC 12V car battery and the power indicator lights up.



The red clip is connected to the positive terminal (+) and the black clip is connected to the negative terminal (-). For optimum performance of the smoke leak detector, the car battery should be fully charged in advance.

- Press the air mode switch (2) and the equipment begins to produce pressurized air.
- Press the smoke mode switch (3) and the unit begins to produce smoke.



The smoke output can be observed and controlled through the smoke flow meter (4) and the smoke flow regulating valve (5).



When the internal temperature reaches 75°C, the product will start self-protection function and stop working automatically.

- Press the smoke control switch (3) to stop the smoke output.
- It is recommended to drain out the remaining test oil for next use in case the detector is not used for a long time.

OPERATION GUIDELINES FOR AUTOMOBILE PIPELINE INSPECTION

- Turn off the engine ignition switch.



All leak detection of automobile piping systems must be performed with the engine turned off.

- Remove the intake air filter, while some models need to remove the throttle valve.
- Clean the inner wall of the test pipe and install the conical adapter of the air inlet on the test pipe.
- The smoke leak detector is powered by DC 12V car battery only.
- The cone on the smoke outlet pipe has air pressure output when press the air mode switch.
- Press the smoke control switch again, the indicator lights on, wait for about 10 seconds, insert the cone head on the smoke outlet pipe into the air inlet taper adapter when the smoke becomes thick.
- Wait for about 1 to 2 minutes, you can use a flashlight with strong light to help find the leaks in the pipeline and diagnose the leakage status.
- After the test is completed, turn off all switches, recycle and save the remaining test oil, put away all accessories, and confirm that there is no omission.



If only part of the system needs to be tested or if the system being tested has other openings that need to be sealed, a plug kit can be used, which can also be used to seal the intake manifold.



When the internal temperature reaches 75°C, the detector will start self-protection function and stop working automatically.

INSTRUCTION OF SMOKE LEAK DETECTOR PRESSURE GAUGE

- The smoke leak detector pressure gauge has two main functions, one is for machine self-test, and the other is used for leak judgment, which can be used to initially determine the leakage of piping system through the change of pressure gauge pointer. If the pointer of the pressure gauge keeps still, which represents there is a relatively serious leak in the pipeline; the pressure gauge pointer will rise to a fixed pressure value only if the area of the piping system currently being tested is relatively small. And if there is a leak, the pressure gauge pointer will drop or become unstable. In this case, you can turn on the smoke switch to output smoke to locate the leak.

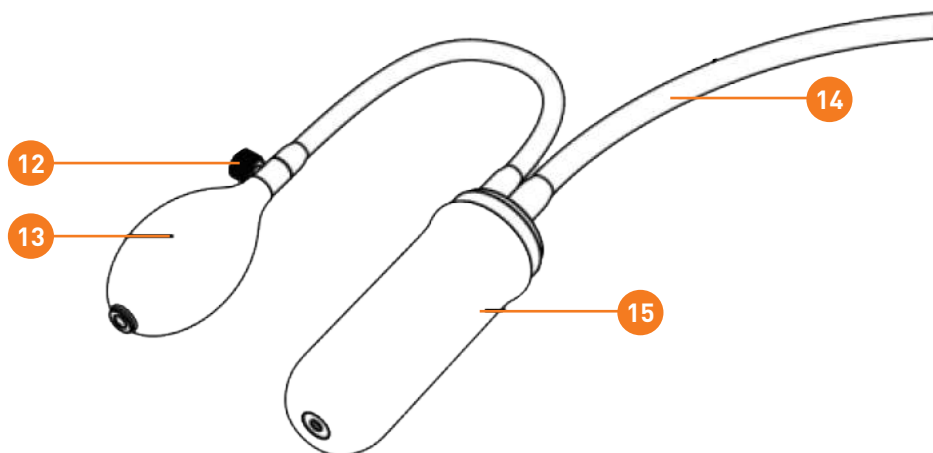
AIRBAG ADAPTER INSTRUCTIONS

Airbag adapters are suitable for non-circular connections. While for round and oval ports, please use the inlet tapered adapter for normal cases.

- Before using the airbag adapter, be sure to clean the inner wall of the intake manifold (or other test interfaces) to prevent sharp protrusions from piercing the airbag adapter.
- Put the air bag (15) into the test port.
- Press the hand pump (13) until the bladder (15) inflates and fully seals the test port.
- Connect the cone head on the smoke outlet pipe with the smoke guide pipe (14), introduce gases and smoke into the duct to be tested.
- After the test is completed, turn the pressure relief valve (12) counter clockwise, take out the car air inlet adapter from the test port, clean and save it.



Airbag adapter can not contact with corrosive oil.



12	Pressure Relief Valve	14	Smoke Duct
13	Hand Pump	15	Airbag

ABOUT SMOKE TEST OIL

- This product needs to use special test oil. It's recommend to purchase liquid paraffin or baby oil as test oil if you cannot find special test oil locally.
- It is recommended to use the filling bottle with the capacity mark in the accessories of the packing to fill in new oil.
- Too much test oil in the machine can affect smoke output, Please discharge part of the e-liquid through the oil discharge port.
- If the product is not used for a long time, it is recommended to drain out the remaining test oil for preservation.

NOTES



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