

Diagnostic Leak Detector

User Manual



ALT400

Prompt:

1. Please make sure that there is no hard thing inside the pipe before assembly to avoid scratching the inflatable adaptor
2. Please make sure of the power supply with enough voltage within 10 and 14 V and current 8 A.

Packing List(Standard configuration):

- | |
|-----------------------------|
| - 01 Main Unit *1 |
| - 02 Inflatable Adaptor *1 |
| - 03 Power Cords *1 |
| - 04 Smoke Tube *1 |
| - 05 Hook*1 |
| - 06 Intake Adaptor Core *1 |
| - 07 Funnel*1 |
| - 08 EVAP test suite *1 |
| - 09 Sealing plugs *1 |
| - 10 User Manual *1 |

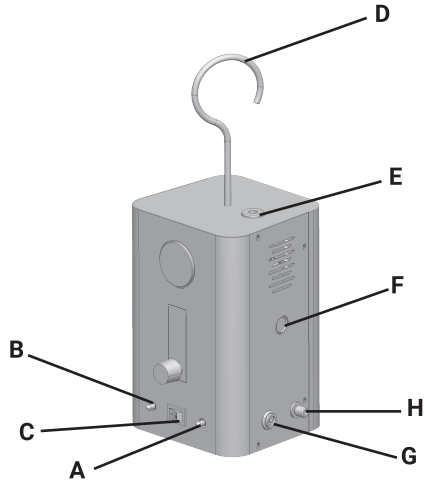
This Automotive Diagnostic is designed for detecting the leakage in vehicle pipe systems. It could be used on all cars, motorcycles, snowmobiles, ATV, light trucks, boats, etc.

We reserve the right to modify and improve the product and without notice

CE FC RoHS

Notice: Please read the manual before operation.

Start



► Preparation

1. Mount the hook to the D screw hole.
 2. Plug the power cords in the G socket on side of main unit. Red to red black to black.
 3. Mount the smoke tube to the H vent on the main unit.
 4. Unscrew the E cap and fill amount of smoke oil and view the oil level through the F window to make sure the oil within the rank of scale.
- Attention: more oil will inundate the hydro-cylinder and less oil make less smoke or thin

► Test Run

1. Connect 12V vehicle battery with the clamps on the Power Cords. The Power Indicator will be ON and the unit will start generating air pressure.

Note: **red** clamp to positive (+), and black clamp to negative (-).

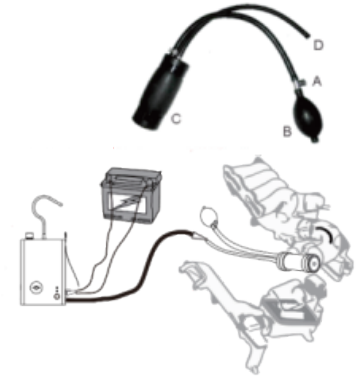
2. Block off the smoke nozzle on the Smoke Tube with fingertip, the Pressure Gauge will indicate the real time output pressure.
3. Switch on the smoke mode switch, the smoke mode indicator will be ON. The unit will start producing smoke.

► Equipment protection

The equipment will be in self-protection after to avoid the smoke maker overheated, and the A indicator. The equipment will stop making smoke until the temperature is back to the safety level. You can cool the equipment with the air pump. Do not fill oil during the operation. Until the temperature become safety level, can cool the equipment with the air pump. Do not fill oil as working.

► Instruction on Inflatable Intake Adaptor (the picture is reference only the actual maybe slight differ)

1. Clean the inner wall of the intake opening while the Air Filter, and the Throttle connections are removed, so as not to scratch the adaptor.
2. Close the Pressure Relief Valve (A) next to the Hand Pump (B).
3. Put the Rubber Component(C) into the intake opening.
4. Inflate the Rubber Component(C) by pressing the Hand Pump (B) till the intake opening is tightly sealed.
5. Now the system is ready to test, introduce air/smoke into the system by plug the smoke nozzle into the Tube Opening (D).
6. After test, pull off the smoke nozzle, release the inflated air by open the Pressure Relief Valve (A) next to the Hand Pump(B).
7. Clean the adaptor for storage, avoid contact with corrosive liquids.



► General operating guide

1. Turn OFF the ignition of the vehicle. **LEAK TEST OF VEHICLE SYSTEMS KEEP THE ENGINE OFF.**
2. Disassemble the Air Filter. Disassemble the Throttle valve in some type of car.
3. Put the Intake Adaptor Cone (or the Universal Intake Adaptor) into the test vent.
4. Connect Power Cords to 12V vehicle battery then the red indicator lamp on the equipment operate board will be on and the air pump start working.
5. Turn the switch on the equipment operate board the green indicator lamp will be on, then the equipment will make produce smoke.
6. Put the smoke nozzle into the Intake Adaptor to lead the smoke into the system while the smoke is thick.
7. Few seconds later until the system full of smoke then locate the leakage with the flashlight.
8. After leak test, collect the Power Cords and Smoke Tube, clean the Intake Adaptor Cone (or the Universal Intake Adaptor) before storage.

► Attention

1. Seal the system hole with conical adapter and the inflatable adapter to test partly system.
2. Seal the air intake pipe to make the smoke into the system by other way e.g. vacuum tube.
3. if it is inconvenient to connect the air inlet branch pipe or seal the air inlet branch pipe, the smoke can be introduced into the test system from other related pipelines (such as vacuum pipe).
4. Do not test the parts unsuitable oil e.g. the headlamps and other pneumatic parts.
5. Please detect the mini hole less than 0.2 mm with UV because of the soft tube maybe seal the hole by itself.

► EVAP / EGR

American cars after 1996 and European cars after 2000 are equipped with EVAP service port. Usually, the EVAP service port is located in the engine compartment, but there are a few exceptions. OBD trouble codes related to EVAP system include p0443-0457/p0465-0469. If such trouble codes are detected, EVAP system should be tested.

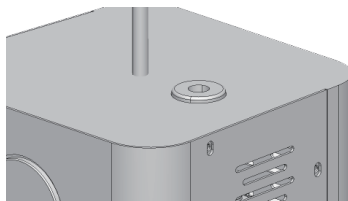
1. EVAP system: find the EVAP service port (usually there is a green cover on the service port), use the special tools for EVAP valve to remove the valve core inside the service port (please note that the valve core is reverse thread), install the EVAP service port test adapter, and connect the smoke tube.
2. EGR valve / carbon canister: disconnect the quick connector connecting the pipeline, select the test connector and tee connector of the same specification in the test kit to connect them in series, and connect the bypass test pipe to the smoke cone of the smoke tube.
3. Switch on the main unit and it start produce smoke, and lead the smoke into the service port while thick smoke.
4. Few moment later start to detect the leakage.

► Smoke oil

ADVISED to use the special smoke oil.

Also this unit can use Baby Oil as smoke oil, available in supermarket or pharmacy.

Overfill: Turn the unit upside down to drain some oil out.



► Product Information

Power Supply: DC12V /6A

Flow Rate: about <10L/Min

Working time: 10 minutes a work period.

► Warranty

1. The main unit is entitled with a warranty period since the date of purchasing up to 12 months.
2. For warranty issue concerning the accessories, please make inquiry to the distributor.
3. Any damage to the machine caused by misuse, or improper operation, is not covered by warranty.

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