

AUTOMOTIVE SMOKE User Manual **M A C H I N E**

FXTUL

This Automotive Diagnostic Leak Detector is designed for testing leaks in vehicle pipe systems. It could be used on all cars, motorcycles, snowmobiles, ATV, light trucks, boats, etc.

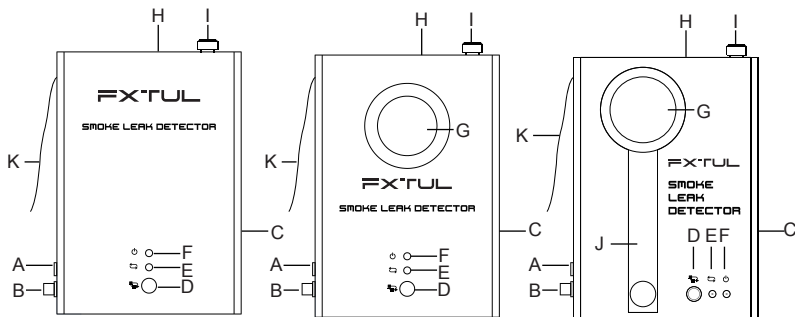
Technical Data

- Power Supply: 12V Vehicle Battery, <8Amp
- Output Pressure: <1.2bar
- Flow Rate: <7L/Min
- Length of Smoke Hose: 2.5Meters
- Length of Power Cord: 2.5Meters
- Working Cycle: 5 Min auto-stop

Parts list

- Main Unit: x1
- Hook: x1
- Universal Intake Bladder: x1
- Intake Bladder Replacement Rubber: x1
- Smoke Hose: x1
- Power Cord: x1
- Funnel: x1

Device Schematic



- A-Power Socket; B- Smoke Outlet; C- Oil Level Gauge; D- Start/Stop Button;
 E- Power LED; F- Working Cycle LED; G- Pressure Gauge;
 H- Hook Port; I-Oil Refill Port; J- Flow Meter; K- Velcro Strap.

Preparation

- Mount the Hook to the Hook Port (H), used for carrying the unit around or hanging somewhere under the hood.
- Open the Oil Refill Port (I), fill the smoke oil into the reservoir and note the Oil Level Gauge (C), make sure the oil level will NOT exceed 2cm above the bottom of the gauge. If the oil level is close to the bottom before use, the unit will need a refill.

Note: If the smoke oil is overfilled, turn the unit upside down to drain some oil out.

- Now the unit is ready to use.

Smoke Test

- Mount the Smoke Hose to the Smoke Outlet (A) and the Power Cord to the Power Socket (B).
- Connect the Power Cord to 12V vehicle battery. Note: Red clamp to Positive (+), Black clamp to Negative (-). For best performance, the vehicle battery shall be fully charged. Do NOT use a DC12V switch power supply. Note: ONLY 12V vehicle battery is allowed to be used as power supply for the unit.
- Now the Power LED (E) is ON and the unit starts generating pressurized air.
- Press Start/Stop Button (D), the Working Cycle LED (F) will be ON. The unit will start generating smoke and stop automatically when a 5 minutes* working cycle is finished.

To stop the unit from generating smoke manually, simply press Start/Stop Button (D) again within any working cycle. Leave the unit to blow the residual smoke out of the smoke nozzle.

Generic Operation

- Turn OFF the ignition of the vehicle.
- LEAK TEST OF VEHICLE SYSTEMS REQUIRES THE ENGINE TO BE OFF.
- Dismantle the air filter and the throttle connections.
 - Clean the inner wall of the intake opening to avoid sharp objects and put the Universal Intake Adapter into the opening.
 - Mount the Smoke Hose to the Smoke Outlet (A) and the Power Cord to the Power Socket (B).
 - Connect the Power Cord to 12V vehicle battery.

- Now the Power LED (E) is ON and the unit starts generating pressurized air.
- Introduce the smoke nozzle into the system via the Cone Adapter.
- Wait for 30 seconds until the system is pressurized, and check the Pressure Gauge (G)& Flow Meter(J) reading for leak status.
- Pull off the smoke nozzle from the Cone Adapter. Press the Start/Stop Button (D), the Working Cycle LED (F) will be ON. The unit will start generating smoke for an auto-stop 5 minutes working cycle.
- Plug the smoke nozzle back into the Cone Adapter, when there's obvious smoke coming out of the smoke nozzle.
- The system will be ready for leak check in 2 minutes. Use a bright light torch or working lamp to assist.
- After test, if the Working Cycle LED (F) is still ON, press the Start/Stop Button (D) again to stop the unit from generating smoke.
- Collect the Smoke Hose and the Power Cord with the Velcro Straps for storage. Hang the unit make it stand in UPRIGHT position only. Do NOT lay it down.

Note:

Cap Stoppers (Optional) could be used to block off various openings, if a test on partial of the whole system is required. It also could be used to block off the intake opening, the smoke nozzle connects to the system via other openings available.

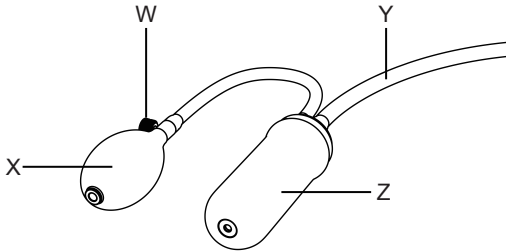
Instruction on Universal Intake Bladder

The Universal Intake Bladder is used to fit the intake opening which is not rounded-shape.

- Clean the inner wall of the intake opening while the air filter and the throttle connections are removed, so as not to scratch the rubber component of Universal Intake Bladder.
- Put the Rubber Component (Z) into the intake opening.
- Press the Hand Pump (X) to inflate Rubber Component (Z) x until the intake opening is tightly sealed.
- Plug the smoke nozzle into the Tube Opening (Y) to introduce air/smoke into the system.

5. After the test, pull off the smoke nozzle and long-press the Pressure Relief Valve (W) to release the inflated air. Clean the Universal Intake Bladder for storage.

Note: Never contact with corrosive liquids.



Chemical

- This unit uses Paraffin Wax/Baby Oil/Mineral as smoke oil, available in supermarket or pharmacy.
- Use a needle-tip-bottle or a funnel to refill the smoke oil.
- Only when the smoke oil is overfilled, turn the unit upside down to drain some oil out.
- Every three months, DO drain all the old oil out and refill new.