# **OPERATION MANUAL**



# PORTABLE LEAK DETECTOR

697-95-070/S





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# **SPECIFICATIONS**

LxWxH	8 x 10 x 12.5 in. (20 x 25 x 32 cm)
Weight	10.8 lbs. (4.9 kg)
Shipping Weight	18 lbs. (8.2 kg)
Power Supply	12 Volts DC
Power Consumption	8 amps
Output Pressure	0.47 PSI / 12-14 in. H20 / 0.032 bar
Operating Temperature	30°F to 140°F (-1°C to 60°C)
Operating Humidity	No Restrictions
Operating Altitude	No Restrictions
Smoke Output Hose	10 ft. (3 m)
Power Supply Cables	15 ft. (5 m)
Operating Modes	Smoke Test Cycle
	Air Only Test Cycle
Pressure Supply	Onboard Micro Air compressor
Micro-compressor Duty Cycle	100%
Housing Material	High-Impact PC/ABS Polycarbonate
Smoke Chamber Material	Billet Aluminum
Smoke Chamber Assembly	Bolted
Smoke Chamber Warranty	Lifetime



# **REFERENCE GUIDE: FRONT VIEW**

## **A Compound Pressure Gauge**

Indicates amount of pressure or vacuum in system being tested Allows for Decay / Leak Down test to confirm repair is 100% complete

#### **B** Flow Meter

Indicates Air / Vapor flow into system under test. Measures leaks down to 0.010"

#### **C** Flow Control Valve

Open to release vapor/ pressure into system by opening the flow control valve Close flow control valve to lock out system for pressure decay testing

## **D** Power Indicator Light

Green light indicates adequate power

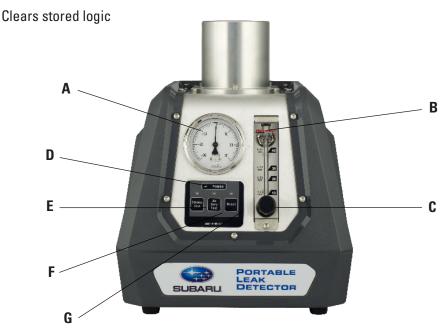
#### E Smoke Test Button

Push to begin 5-minute smoke test cycle Red light indicates smoke is being generated Push again to stop testing

## F Air-Only Test Button

Push to begin 5-minute air-only test cycle without smoke Blue light indicates machine is generating air-only for pressure test

## **G** Reset Button



# **REFERENCE GUIDE: BACK VIEW**



#### **H** Fluid Fill Port

Use Hex Key to remove fluid fill plug

## Battery Power Cables

Connect to 12-Volt DC battery(+) and chassis ground(-)

J Smoke Output Hose

## **SAFETY**

The procedures in this operation manual are intended to be basic guidelines for users to practice using this diagnostic leak detector

This operation manual is not intended to be used in place of common sense:

- Use this equipment in the manner specified by the manufacturer
- Understand operating procedures
- Follow all safety precautions

#### SAFETY PRECAUTIONS

- All diagnostic work should be performed with the engine off
- Do not leave a vehicle unattended while equipment is connected or operating
- When working with the fuel system, work in a well-ventilated area
- Always wear the appropriate safety protection



Always use a supplemental hood support or prop rod whenever hanging unit under a hood

# **ACCESSORIES INCLUDED**

**Handle / Hook** 697-96-0053

To properly carry PLD and hang under hood or chassis



**Hex Key** 697-80-0009 To remove/ replace fluid fill plug

**Subaru-Approved Smoke Agent** 697-96-0039 To perform over 500 typical tests per bottle IMPORTANT: Contains NO Dye / Contaminants



**EVAP Service Port Adapter Kit** 697-96-0003 Schrader Valve Removal Tool and EVAP Service Port Adapter

**Halogen Inspection Light** 697-96-0011 Bright white beam finds the tiniest leaks

**Cap Plug Kit** 697-96-0007 Seals a variety of openings for testing



**Standard Cone Adapter** 697-96-0004 To introduce smoke into exhaust / induction systems



Accessory Storage Case 697-91-0011



# **ACCESSORIES INCLUDED (CONT.)**

**EVAP Line Sleeve Plug** 697-15-0083 To plug EVAP line when disconnected



**EVAP Line Sleeve Plug with Passthrough** 697-15-0084

To introduce smoke / pressure into disconnected **EVAP** line



Fuel Cap Adapter (Single Start) 697-15-0085 To introduce smoke / pressure through fuel filler neck



Fuel Cap Adapter (Dual Start) 697-15-0089 To introduce smoke / pressure through fuel filler neck



**EVAP Line Sleeve Sealing Cap** 697-80-0025

To seal off EVAP control module after removing EVAP line



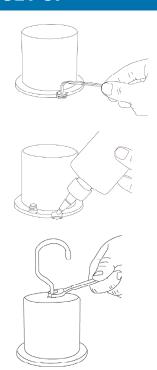




**EVAP Line Sleeve Plug with Passthrough** 697-96-0104 To introduce smoke / pressure into disconnected

**EVAP** line

# **SET UP**



## 1. FILL/ ADD SMOKE PRODUCING FLUID

Remove Fluid Fill Plug with hex key
Pour Subaru-Approved Smoke Agent into Fluid
Fill Port until fluid level is near top of fill port
Replace Fluid Fill Plug



Do not overfill

Takes up to 2 fluid ounces to refill when empty



Do not use dye or UV dye in any Subaru Intake, Exhaust, or EVAP system because it may coat or harm critical sensors

#### 2. INSTALL HANDLE-HOOK

Use a wrench to tighten jam nut

# **HOOK UP**

#### 3. CONNECT TO POWER

This machine runs on a fully-charged 12-Volt battery Connect red lead (+) to battery's positive terminal Connect black lead (-) to chassis ground



Do not connect to battery charger or jumper box

#### **POWER INDICATOR:**

- Green Light: Machine has adequate power
- ,-, Flashing Green Light: Improper Power, Power is too high or too low
- No Light: No Power, See Troubleshooting

# **TROUBLESHOOTING**

PROBLEM	SOLUTION
No Green Light	Check polarity Ensure 12-Volt battery is fully-charged Reconnect power cables
Green Light Flashing	Power supply must be between 10V-14V DC Connect to a fully-charged 12-Volt battery Never use battery charger / booster as power source
Amber or Red Light Flashing	Open Circuit/ internal component Contact Technical Support
No Air Flow	Open the flow control valve Check hoses are not kinked or pushed into machine
Not Enough Smoke	Check Fluid Level Open the flow control valve Check hoses are not kinked or pushed into machine
Flow Meter Ball Sticking	Clean Flow Meter
Gauge Bouncing Flow Meter Bouncing	Oil in Smoke Hose, Drain Hose (Takes only five minutes)
High Pressure Reading	Check hoses are not kinked or pushed into machine

# **WARRANTY**

The manufacturer, Redline Detection, LLC. ("Redline") warrants this product to be free from defects in workmanship and material under normal use and service for a period of one-year from the date of purchase. Redline's liability under this warranty is limited to: (1) repair or replacement of any parts or product which are determined to be defective; or at Redline's sole option (2) refund of the purchase price. In either event, product to be returned shipping prepaid within the one year warranty period. Additionally, the smoke chamber in any Redline product has a lifetime warranty as to its structural integrity: Any Redline-manufactured smoke chamber that leaks, cracks, or separates in any way shall be repaired or replaced by Redline at no charge. Products are only to be used by persons having skill and knowledge in the automotive repair field, and improper use or maintenance may cause serious injury. In no event shall Redline be liable beyond replacement of product or refund of the purchase price. This warranty shall void if a product is improperly maintained, altered, abused or otherwise misused in any way.

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# Technical Support: Bosch Automotive Service Solutions, LLC 1 800-328-6657

Additional equipment and consumables are available through the Subaru Equipment Program www.subarudealersolutions.com/equipment click the Diagnostic Tools tab.



# PORTABLE LEAK DETECTOR

697-95-0075



**Manufactured by Redline Detection, LLC** 

Made in the USA \*with global components