# Vacuum Leak Testing Kit Model PVLD-3000

## **Operations Manual**



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Powermaster Industrial Supplies LTD

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#### **Introduction**

Powermaster Industrial Supplies Leak Detector (PVLD-3000) is an ingenious yet simple test instrument used to identify leaking tubes ranging in size from 1/4-inch to 3-inch outer diameter. Manufacturers and users of condensers, heat exchangers and other tubular apparatus can depend on the Vacuum Leak Detector to accurately pinpoint costly leaks the first time, every time.

Tube sizes can range from 1/4" (6mm) OD up to 3.0" (76mm) OD.

#### **Safety Instructions**

WARNING; ANY OTHER USE OF THIS TEST EQUIPMENT OTHER THAN IT IS INTENDED PURPOSE COULD CAUSE DAMAGE TO THE EQUIPMENT AND OPERATOR.

Wear eye protection at all times.

Use clean, dry filtered, and lubricated air to operate this test equipment.

Do not use any other gases or liquids to operate this equipment.

Do not use higher pressures than those recommended for this model. Refer to specifications section.

#### How the Vacuum Leak Detector Works

One man can easily do the job. He just seals the far end of each tube with a snap-type tube plug, presses the Vacuum Leak Detector's rubber-coated nozzle into the near end of the tube and depresses the trigger.

Compressed air flows through a venturi chamber to produce a vacuum in the tested tube. When this vacuum reaches a satisfactory level, he releases the trigger. A steady gauge reading indicates a good tube. A falling vacuum indicates a leaky tube. For example, using 90 psi dry, clean air, it only takes six to eight seconds to test a typical tube (1-inch Outer Diameter x 20 gauge and 20 feet long) with the Vacuum Leak Detector. The tool weighs 2 1/4 lbs. and is equipped with a muffler, so it operates quietly even in confined areas.



#### **Equipment Specifications**

Tube Capacity:	1/4" (6.3mm) to 3.0" (76.2mm)		
Air Pressure required:	90 psi (6.0 Bar)		
Air Consumption:	26 cfm 720 L/Min		
Max Vacuum:	80%		
Temperature Range:	-20 to 50C		
Weight:	2.0 lbs		
Dimensions:	230 x 120 x 170 mm		
Contents:	Powermaster Model PVLD-3000 Leak Detector Test Kit		
	Vacuum Gun Tube Seal and Nozzles T Handle with plugging nozzle and plugging seal 2 Mtr pneumatic hose Compact carrying case		
	(Kit Includes seals and nozzles for the full range)		

#### Tube Seals Available

Model (Seals)	Tube Size		
P-750	1/4" (6.3mm) 3/4" (19.05mm)		
P-1250	5/8" (15.9mm) – 1.1/4" (31.7mm)		
P-2000	1.1/8" (28.6mm) – 2.0" (50.8mm)		
P-3000	1.7/8" (47.6MM) – 3.0" (76.2mm)		



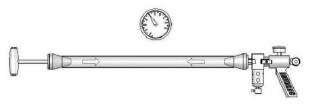
#### **Operating Instructions:**



Connect air supply to the gun Plug both ends of the tube to be tested with Plugging 'T' handle at one end and vacuum gun at other end.



Operate slide valve and allow creation of a vacuum in the tube.



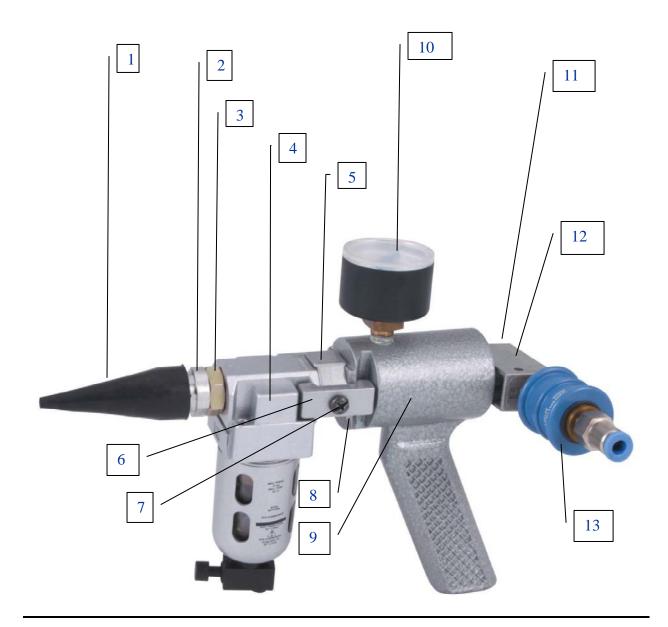
Shut off the slide value when vacuum gauge reaches to the desire pressure. Hold for a few seconds. If gauge shows steady pressure there is no leak.



If there is a pressure drop, it indicates a tube with a leak.



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### Parts List

1	Rubber Seal	9	Main Body
2	Nozzle	10	Vacuum Gauge
3	Adaptor 1/4 x 1/4 M	11	Silencer
4	Filter	12	Vacuum Generator
5	Spacer	13	Slide Valve
6	Locking Plate		
7	Locking Screw		
8	O Ring		



#### **Limited Warranty**

All products are warranted against defects of material or workmanship for a period of 12 months from the date of shipment from our Canadian head quarters in Ontario. All equipment must be used with the specifications and within the service it is designed for use. Under no circumstances will the company assume responsibility for equipment or defects not of our manufacture or supply. The warranty is limited to replacement without charge, of parts, labor, expense or other loss damage occasioned such a defect of material or workmanship. No unauthorized back charges will accepted. This warranty does not cover deterioration by corrosion or any other failure other than defect of material and workmanship.

Date Purchased and Shipped:

Serial Number:

This page to be returned with all warranty claims.

