

Vacuum Products Division

Compression Port Adapter Kit for VS Series and (G8610, G8611, or G8612) Series Leak Detectors

FIELD INSTALLATION INSTRUCTIONS

Part Number 699909997 Rev. B July 2017



Agilent Field Instruction Sheet

Compression Port Adapter Kit for VS Series and (G8610, G8611, or G8612) Series Leak Detectors

Preface

This document comes shipped with material VSFLDCP, 1-1/8" compression test port accessory kit. Section One is for use with a VS Series leak detector. Section Two is for use with a G8610, G8611, or G8612 Series leak detector.

Documentation Standards

This manual uses the following documentation standards:

NOTE

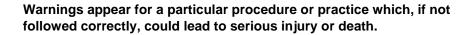
Notes contain important information.





Cautions appear before instructions, which if not followed, could cause damage to the equipment or data loss.







Hazard and Safety Information

The common international symbols used in this manual and on the equipment are defined below.

ON Supply (Power)

OFF Supply (Power)



Earth (Ground) Terminal



Caution, Hot Surface



AC – Alternating Current



Caution, Risk of Electrical Shock



Warning, Risk of danger



Protective Conductor Terminal



Frame or chassis Terminal

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Operators and service personnel must be aware of all hazards associated with this equipment. They must know how to recognize hazardous and potentially hazardous conditions, and know how to avoid them. The consequences of unskilled, improper, or careless operation of the equipment can be serious. Every operator or service person must read and thoroughly understand operation/maintenance manuals and any additional information provided by Agilent. All warning and cautions must be read carefully and strictly observed. Consult local, state, and national agencies regarding specific requirements and regulations. Address any safety, operation, and/or maintenance questions to your nearest Agilent office.

Solvents

WARNING



The mechanical components of leak detectors may be cleaned with one of the recommended solvents. When heated, sprayed, or exposed to high-temperature equipment, these solvents become flammable and explosive, causing serious injury or death. Do not use these solvents near a high-temperature source. Ventilate the working area with a blower and work in a large, well-ventilated room.

Solvents are irritants, narcotics, depressants and/or carcinogens. Their inhalation and/or ingestion may produce serious side effects. Prolonged or continued contact with the skin results in absorption through the skin and moderate toxicity. Always ensure that cleaning operations are carried out in large, well-ventilated rooms, and wear eye shields, gloves, and protective clothing.

Due to the effective cleaning nature of VacuSolv solvent and its residue-free properties, Agilent' Component and Spectrometer Cleaning Kit (Part Number 670029096), used in accordance with the kit instructions, is recommended for cleaning spectrometer components. The kit can also be used for fine cleaning of other parts in the leak detector's vacuum system such as valves and fittings. No rinsing steps or high-temperature drying is required following cleaning with VacuSolv. Although appropriate precautions are advised, VacuSolv is compatible with most materials and does not contain toxic chemicals or CFCs (chlorofluorocarbons). Other acceptable solvents are isopropyl alcohol (IPA) or Dow Corning OS-20.

To clean the leak detector plastic enclosure, the LCD display and Front Panel buttons, use only a soft cloth slightly dampened with water or a mild soap.

Do NOT use excess water or cleaning solvents of any kind.

Avoid splashing any cleaning solvents into the unit through the ventilation openings or Front Panel buttons. Wipe the surface with a dry lint-free cloth.

Vacuum Equipment and Cleanliness

Cleanliness is vital when servicing the leak detector or any vacuum equipment. There are some techniques that are more important in leak detector servicing than in general vacuum work:

CAUTION



Wear non-powdered, ESD-safe Nitride or equivalent gloves to prevent skin oils from getting on spectrometer internal components.

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O-ring Care

When removing, checking or replacing O-rings, keep in mind the following:

NOTE



Agilent recommends replacing all O-rings during routine maintenance or during any maintenance procedure requiring that O-rings be removed.

CAUTION



Remove O-rings carefully with your fingers. Do not use metal tools for this task; this prevents scratching of any sealing surfaces.

- Wipe all O-rings clean with a lint-free cloth before installation to ensure that no foreign matter is present to impair the seal.
- Do not use grease or any other substance on O-rings that will come in contact with the vacuum surfaces.
- Do not use alcohol, methanol or other solvents on O-rings. Doing so causes deterioration and reduces their ability to hold a vacuum.
- Agilent does not recommend the use of vacuum grease. If applicable, apply a small amount of Apiezon [®] L grease and wipe the O-rings shiny dry.

Metal Seal Care

CAUTION



Metal Seals must be replaced any time a spectrometer is opened. All fasteners must be installed and torqued per assembly procedure specifications. Remove Metal Seals carefully with your fingers or a soft tool. Metal tools scratch sealing surfaces.

- Metal Seals are supplied in pre-cleaned condition. No cleaning is required. If
 necessary, Metal Seals can be cleaned using the recommended solvents. Wipe
 Metal Seals clean with a lint-free cloth before installation to ensure that no foreign matter impairs the seal.
- Do not use grease or any other substance on Metal Seals that will come in contact with the spectrometer.

Spectrometer

CAUTION



Store the Ion Source/Preamplifier sub-assembly in a cool, dry area in a tightly sealed, ESD protected container. Wear non-powdered, ESD-safe Nitride or equivalent gloves when handling the spectrometer. Wash hands thoroughly after handling the spectrometer filaments and especially before smoking or eating.

The spectrometer and PCB's are static sensitive devices. Wear a grounding strap when performing any maintenance on these units and especially when performing maintenance of static sensitive parts.

The spectrometer operates at a very high vacuum produced by the high vacuum turbomolecular pump. Service of the spectrometer requires that this vacuum be vented to the atmosphere.

CAUTION



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Section One: VS Series Leak Detector

Equipment Required

- Extended Length M5 Allen Wrench
- · Metric Allen Wrench Set
- Compression Port Adapter Kit (P/N VSFLDCP)

Installation Procedure

For clarity, some items have been omitted from views.

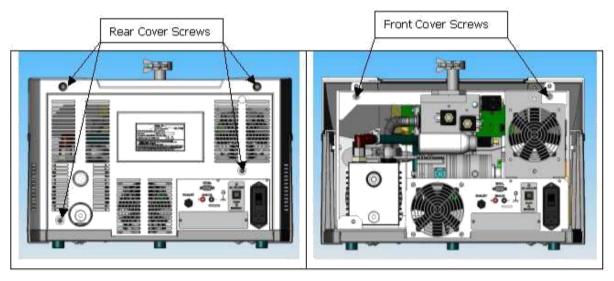


Figure 1: Rear and Front Cover Screws

WARNING



Disconnect power from the unit before performing any maintenance procedure that requires physically disconnecting any part of the system.

- 1. Turn off the power switch located on the back of the unit and unplug cord from outlet.
- 2. Wait 30 seconds for the high voltage to dissipate.
- 3. Using an extended length M5 Allen wrench, remove the four screws holding the rear plastic cover (Figure 1: Rear and Front Cover Screws) and detach the rear plastic cover from the unit.
- 4. Remove the four screws holding the front plastic cover and detach the cover from the unit. Two screws are situated at the front of the unit (not shown) and two screws are positioned inside the unit (Figure 1: Rear and Front Cover Screws).

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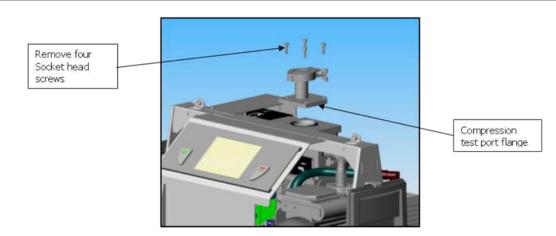


Figure 2: Compression Test Port Flange

NOTE

Cables not shown for clarity.



5. Using an M5 allen wrench remove the four screws and disconnect the compression test port flange (Figure 2: Compression Test Port Flange). Do not discard hardware.

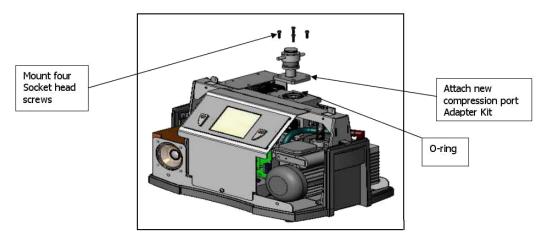


Figure 3: Compression Port Adapter Kit

NOTE

Cables not shown for clarity.



6. Attach new compression port adapter kit using existing hardware and O-ring (Figure 3: Compression Port Adapter Kit).

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 Attach the front cover and secure to the unit using existing hardware. Leak test the Compression Port Adapter to ensure a leak free joint. Attach the rear cover and secure to the unit using existing hardware. Connect the power cord and power up the unit. Watch the home screen to verify that the <i>Spectube Pressure Wait</i> message progres and <i>System Ready</i> within ten minutes. Refer to the operator's manual if the system fails to reach the <i>System Ready</i> mode. Agilent recommends a full calibration of the unit prior to leak test operations. 		n Wait
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Section Two: G8610, G8611, or G8612 Series Leak Detector

Equipment Required

- · Slotted Screw Driver Set
- Metric Allen Wrench Set
- Compression Port Adapter Kit (P/N VSFLDCP)

Installation Procedure

For clarity, some items have been omitted from views.

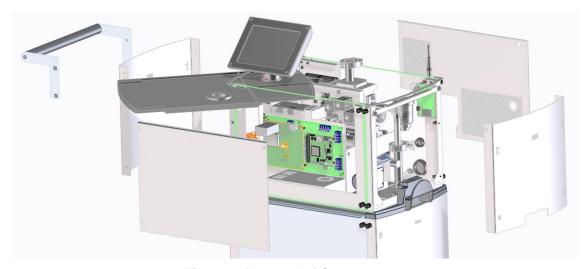


Figure 1: Removal of Covers

WARNING



Disconnect power from the unit before performing any maintenance procedure that requires physically disconnecting any part of the system.

- 1. Turn off the power switch located on the back of the unit and unplug the power cord from the outlet.
- 2. Wait 30 seconds for the high voltage to dissipate.
- 3. Using a slotted screw driver, unfasten screws holding each cover (Figure 1: Removal of Covers) and detach each cover. If the unit has the handle option, the handle must be removed to detach the front cover. Before detaching the front face cover, the push handle must be removed using a metric Allen wrench.
- 4. Without removing the screen, gently left and rotate the lid over the inlet test port to gain access to the inlet test port of the leak detector.

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Figure 2: Compression Test Port Flange

5. Using an M5 Allen wrench remove the four screws and disconnect the original inlet port flange. keep hardware and set aside. Screw in the new compression port adapter in the same place, noting the same position of the slot on the base. Unscrew the top portion of the compression port (Figure 2: Compression Test Port Flange), rotate the leak detector cover lid back over the compression port, and screw back on the compression port top. Replace NW40 O-ring and fasten assembly into place using socket head screws.



Figure 3: Mounting New Kit

6. Return covers to leak detector sides.

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7. If the unit has the handle option, reattach handle to front of leak detector.8. Leak test the Compression Port Adapter to ensure a leak free joint.		
9. Connect the power cord and power up the unit.		
10.Watch the home screen to verify that the Spectube Pressure Wait message progres and System Ready within ten minutes.	ses to <i>Stabilizatio</i>	n Wait
Refer to the operator's manual if the system fails to reach the System Ready mode.		
11.Agilent recommends a full calibration of the unit prior to leak test operations.		
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Vacuum Products Division Instructions for returning products

Dear Customer,

Please follow these instructions whenever one of our products needs to be returned.

Complete the attached Request for Return form and send it to Agilent Technologies (see below), taking particular care to include the completed Health and Safety declaration Section. No work can be started on your unit until we receive a completed copy of this form.

After evaluating the information, Agilent Technologies will provide you with a **Return Authorization (RA) number** via email or fax, as requested. Note: Depending on the type of return, a Purchase Order may be required at the time the **Request for Return is submitted**. We will quote any necessary services (evaluation, repair, special cleaning, eg).

Product preparation

- Remove all accessories from the core product (e.g. inlet screens, vent valves).
- o Prior to shipment and if applicable for your product, drain any oils or other liquids, purge or flush all gasses, and wipe off any excess residue.
- o If ordering an Advance Exchange product, please use the packaging from the Advance Exchange to return the defective product.
- Seal the product in a plastic bag, and package product carefully to avoid damage in transit. You are responsible for loss or damage in transit.
- Include a copy of the Health and Safety Declaration in the shipping documentation on the outside of the shipping box of your returning product.
- O Clearly label package with RA number. Using the shipping label provided will ensure the proper address and RA number are on the package. Packages shipped to Agilent without a RA clearly written on the outside cannot be accepted and will be returned.
- Return only products for which the RA was issued.

Shipping

- Ship to the location specified on the printable label, which will be sent, along with the RA number, as soon as we have received all of the required information. Customer is responsible for freight charges on returning product.
- o Return shipments must comply with all applicable Shipping Regulations (IATA, DOT, ADR, etc.) and carrier requirements.

RETURN THE COMPLETED **REQUEST FOR RETURN** FORM TO YOUR NEAREST LOCATION:

EURUPE:	NORTH AMERICA:	PACIFIC RIM:
Fax: 00 39 011 9979 330		
Fax Free: 00 800 345 345 00	Fax: 1 781 860 9252	please visit our website for individual
Toll Free: 00 800 234 234 00	Toll Free: 800 882 7426	office information
vpt-customercare@agilent.com	vpl-ra@agilent.com_	http://www.agilent.com_



Vacuum Products Division Terms and conditions

TERMS AND CONDITIONS

Please read the terms and conditions below as they apply to all returns and are in addition to the Agilent Technologies Vacuum Product Division – Products and Services Terms of Sale.

- O Unless otherwise pre-negotiated, customer is responsible for the freight charges for the returning product. Return shipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.
- Agilent Technologies is not responsible for returning customer provided packaging or containers.
- Customers receiving an Advance Exchange product agree to return the defective, rebuildable part to Agilent Technologies within 15 business days. Failure to do so, or returning a non-rebuildable part (crashed), will result in an invoice for the non-returned/non-rebuildable part.
- o Returns for credit toward the purchase of new or refurbished Products are subject to prior Agilent approval and may incur a restocking fee. Please reference the original purchase order number.
- O Units returned for evaluation will be evaluated, and a quote for repair will be issued. If you choose to have the unit repaired, the cost of the evaluation will be deducted from the final repair pricing. A Purchase Order for the final repair price should be issued within 3 weeks of quotation date. Units without a Purchase Order for repair will be returned to the customer, and the evaluation fee will be invoiced.
- o Products returned that have not been drained from oil will be disposed.
- A Special Cleaning fee will apply to all exposed products
- If requesting a calibration service, units must be functionally capable of being calibrated.



Vacuum Products Division Request for Return Form

Customer information					
Company:		Contact Name:			
Address:		Tel:		Fax:	
		Email:			
Equipment					
Product description	Agilent PartNo	Agilent Serial No		Original Purchasing	Reference
Failure description		Type of process (fo	or which the equi	pment was used)	
Type of return					
☐ Non Billable ☐ Billable ■ New	PO # (hard copy must be su	hmitted with this form):			
				ation 🔲 Return fo	r Cradit
☐ Exchange ☐ Repair ☐ Upgra	ade 🗌 Consignment/[JII 🗀 EValua		i Credit
Health and safety Substances (please refer to MSDS forms)					
The product has been exposed to the	following substances:			duct that is exposed to radio	
(by selecting 'YES' you MUST complete the table to the right)		explosive substances or d	Chemical name	nout written evidence of deco	CAS Number
Toxic	☐ YES ☐ NO	Trade name	Chemical name	e Chemical Symbol	CAS Number
Harmful	YES NO				
Corrosive	☐ YES ☐ NO			-	
Reactive	YES NO				
Flammable	☐ YES ☐ NO				
Explosive (*)	☐ YES ☐ NO				
Radioactive (*)	☐ YES ☐ NO				
Biological (*)	☐ YES ☐ NO				
Oxidizing	☐ YES ☐ NO				
Sensitizer	☐ YES ☐ NO				
Other dangerous substances	☐ YES ☐ NO				
Goods preparation					
If you have replied YES to one of the above	e guestions. Has the prod	uct been purged?		☐ YES ☐ NO)
If yes, which cleaning agent/method:					
Has the product been drained from oil?)T APPLICABLE		
I confirm to place this declaration on the outside of the shipping box.					
I declare that the ab	ovo information is true a	nd complete to the he	net of my know	lodge and helief	
I declare that the above information is true and complete to the best of my knowledge and belief. I understand and agree to the terms and conditions on page 2 of this document.					
Name:	Authorized Signature:				
Position:					
Date:					
NOTE : If a product is received at Agilent we responsible for all costs incurred to ensure the					

party occurring as a result of exposure to toxic or hazardous materials present in the product.

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