

## Vacuum Products Division

# IDP 7 / IDP 10 Gas Ballast Installation Kit

INSTRUCTION MANUAL



Manual No. X3807-90016 Rev. A February 2017

## **Preface**

## **Documentation Conventions**

This manual uses the following documentation conventions:

WARNING



Warnings indicate a procedure or practice, which if not followed correctly, could lead to serious injury.

**CAUTION** 



Cautions indicate a procedure or practice, which if not followed, could cause damage to the equipment.

NOTE



Notes contain important information.

Before operating or servicing equipment, read and thoroughly understand all operation/maintenance manuals provided by Agilent. Be aware of the hazards associated with this equipment, know how to recognize potentially hazardous conditions, and how to avoid them. Read carefully and strictly observe all cautions and warnings. The consequences of unskilled, improper, or careless operation of the equipment can be serious.

In addition, consult local, state, and national agencies regarding specific requirements and regulations. Address any safety, operation, and/or maintenance questions to your nearest Agilent office.

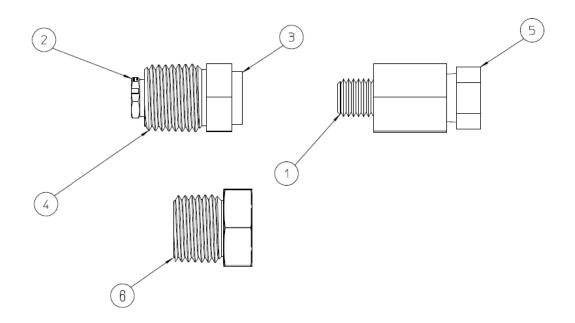
## **Parts Included:**

Table 1 - Parts List

ITEM	QTY.	PART/MATERIAL DESCRIPTION
1	2	Adapter, SAE J1926 to 1/8 NPT
2	2	Gas Ballast Restrictor
3	2	Gas Ballast Plug
4	2	Adapter, 1/4 NPT to SAE J1926
5	2	Filter, Breather Vent 1/8 NPT
6	2	Filter, Breather Vent 1/4 NPT
n/a	1	Sealant, Pipe, Loctite 567, 6mL



**NOTE:** Filter, Breather Vent 1/4 NPT (6) is provided for maximum water handling. If desired it can be installed into either gas ballast port directly. This should only be used when low inlet pressure is required.



**Table 2 - Recommended Tools Required** 

Flat Head Screwdriver	
Adjustable Wrench or 9/16 Socket Wrench	
M3 Allen Key	

## Installation:



**NOTE**: To ensure proper operation, and to prevent damage, the kit must be installed and operated only as specified. Loctite 567 is to be applied to all NPT connections as indicated. **In Figure 1**, **the front cowling is removed for illustration purposes only**.

- 1. Remove existing fittings from both gas ballast ports (GB #1 and GB #2)
- 2. For GB #1 Installation
  - i. Assemble Gas Ballast Restrictor (2) into Adapter, 1/4 NPT to SAE J1926 (4) using flat head screwdriver.
  - ii. Assemble Gas Ballast Plug (3) into Adapter, 1/4 NPT to SAE J1926(4) using M3 Allen Key.
  - iii. Apply Loctite 567 to pipe threads
  - iv. Insert assembled fitting into Gas Ballast port and tighten with adjustable wrench or 9/16 socket wrench.
- 3. For GB #2 Installation Repeat step 2 without installing the Gas Ballast Restrictor (2)

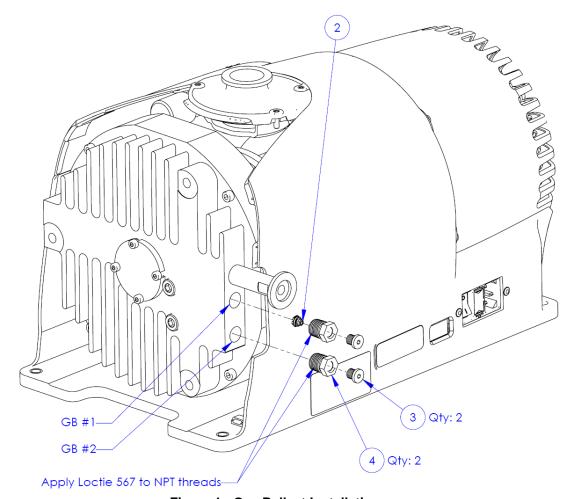


Figure 1 - Gas Ballast Installation



NOTE: When balancing water vapor handling and inlet pressure requirements different size restrictors can be applied to either gas ballast port. Contact the factory for more information.



# Vacuum Products Division Instructions for returning products

Dear Customer:

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

- 1) Complete the attached Request for Return form and send it to Agilent Technologies (see below), taking particular care to identify all products that have pumped or been exposed to any toxic or hazardous materials.
- 2) 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).
- 3) Important steps for the shipment of returning product:
  - x Remove all accessories from the core product (e.g. inlet screens, vent valves).
  - x Prior to shipment, drain any oils or other liquids, purge or flush all gasses, and wipe off any excess residue.
  - x If ordering an Advance Exchange product, <u>please use the packaging from the Advance Exchange to return the defective</u> product.
  - x Seal the product in a plastic bag, and package product carefully to avoid damage in transit. You are responsible for loss in transit.
  - x Agilent Technologies is not responsible for returning customer provided packaging or containers.
  - x Clearlylabel 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.
- 4) Return only products for which the RA was issued.
- 5) Product being returned under a RA must be received within 15 business days.
- 6) Ship to the location specified on the printablelabel, 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.
- 7) Return shipments must comply with all applicable Shipping Regulations (IATA, DOT, etc.) and carrier requirements.

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

EUROPE: NORTH AMERICA: PACIFIC RIM:

Fax: 00390119979330 Fax Free: 00 800 345 345 00 Toll Free: 080023423400 vpt-customercare@agilent.com

Fax: 17818609252 TollFree: 8008827426, Option 3

vpl-ra@agilent.com

please visit our website for individual office information <a href="http://www.DJLOHQW.com">http://www.DJLOHQW.com</a>



## **Vacuum Products Division Request for Return Form** (Health and Safety Certification)

Please read important policy information on Page 3 that applies to all returns.

Company Name:		Contact Name:	
Tel: Email:		Fax:	
Customer Ship To:		Customer Bill To:	
Europe only: VAT reg. Numb	er:	USA/Canada only:	Taxable Non-taxable
PRODUCT IDENTIFICATION			
Product Description	Agilent P/N	Agilent S/N	Original Purchasing Reference
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## Vacuum Products Division Request for Return Form (Health and Safety Certification)

### Please use these Failure Mode to describe the concern about the product on Page 2.

### **TURBO PUMPS and TURBO CONTROLLERS**

APPARENT DEFECT/MALFUNCTION	N	POSITION	PARAMETERS	
- Does not start	- Noise	- Vertical	Power:	Rotational Speed:
- Does not spin freely	- Vibrations	-Horizontal	Current:	Inlet Pressure:
- Does not reach full speed	-Leak	-Upside-down	Temp 1:	Foreline Pressure:
- Mechanical Contact	-Overtemperature	-Other:	Temp 2:	Purge flow:
- Cooling defective	-Clogging		OPERATING TIME:	

### ON PUMPS/CONTROLLERS

- Bad feedthrough	- Poorvacuum
- Vacuumleak	- High voltage problem
- Error code on display	- Other

### LEAK DETECTORS

- Cannot calibrate	-No zero/high background
- Vacuum systemunstable	- Cannot reach testmode
- Failedto start	- Other

### **SCROLL AND ROTARY VANE PUMPS**

- Pump seized	- Other
- Doesn't reach vacuum	- Over temperature
<ul> <li>Pump doesn't start</li> </ul>	<ul> <li>Noisy pump (describe)</li> </ul>

### VALVES/COMPONENTS

- Main seal leak	-Bellows leak
- Solenoidfailure	- Damagedflange
- Damagedsealingarea	-Other

### **INSTRUMENTS**

- Gaugetubenotworking	- Displayproblem
- Communication failure	-Degasnot working
- Errorcodeondisplay	- Other

### **DIFFUSION PUMPS**

- Heater failure	- Electrical problem	
- Doesn't reach vacuum	<ul> <li>Cooling coil damage</li> </ul>	
- Vacuumleak	- Other	

### Section 6) ADDITIONAL TERMS

## 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.

- x Customer is responsible for the freight charges for the returning product. Returnshipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.
- x Customers receiving an Advance Exchange product agree to return the defective, rebuildable part to Agilent Technologies within15businessdays. Failuretodoso, or returning a non-rebuildable part (crashed), will result in an invoice for the non-returned/non-rebuildable part.
- x 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.
- v Units returned for evaluation will be evaluated, and a quotefor repair will be issued. If you choose to have the unit repaired, the cost of the evaluation will be deducted from 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.
- x A Special Cleaning fee will apply to all exposed products per Section 4 of this document.
- x If requesting a calibration service, units must be functionally capable of being calibrated.

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