



Agilent Technologies

Vacuum Products Division

IDP 7 / IDP 10 Purge Kit

INSTRUCTION MANUAL

Manual No. X3807-90006
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.

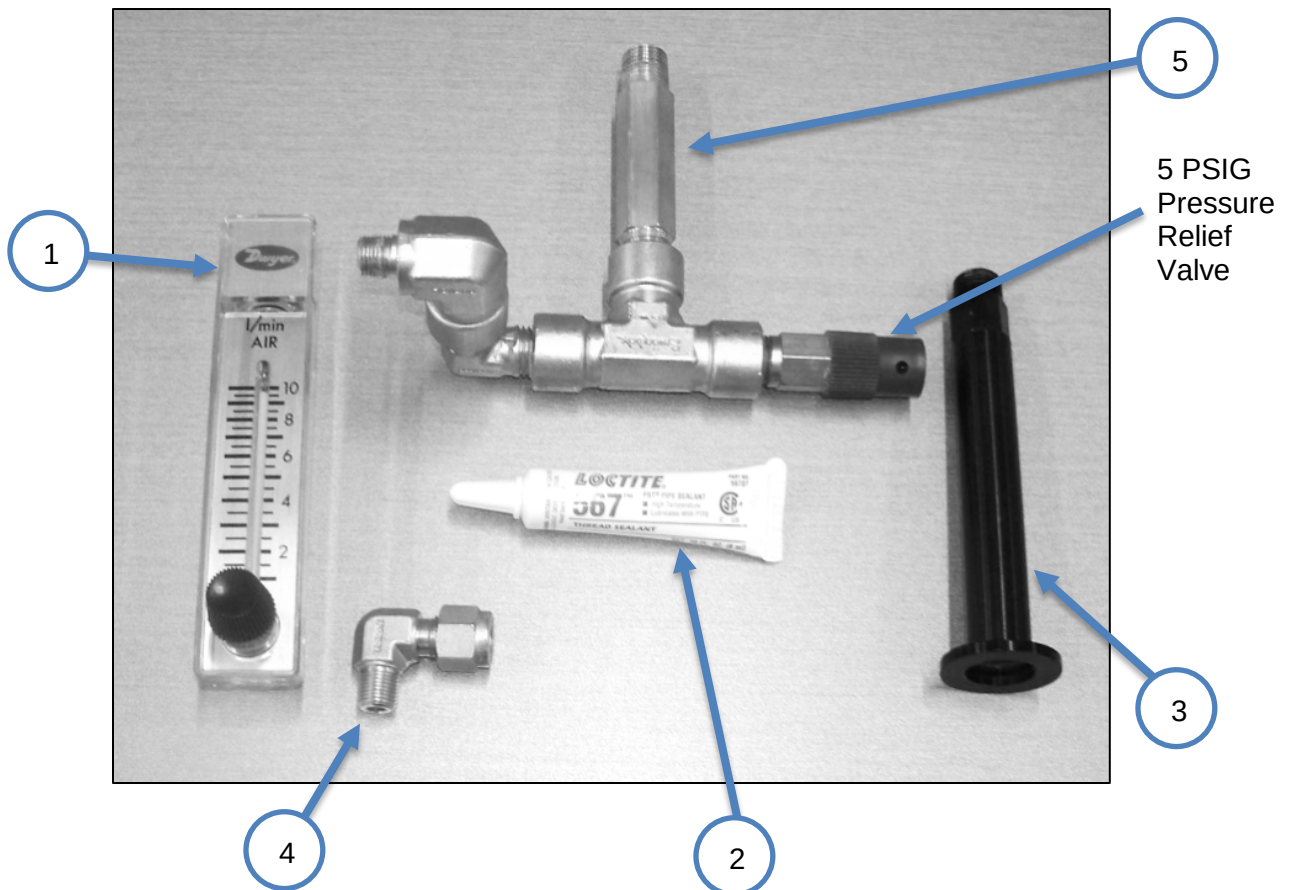
Before operating or servicing equipment, read and thoroughly understand all operation/maintenance manuals provided by Agilent. Be aware of the hazards associated with this equipment, know how to recognize potentially hazardous conditions, and how to avoid them. Read carefully and strictly observe all 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	1	Flow Meter 0 – 10 LPM Air Dwyer RMA-21-SSV
2	1	Loctite 567 Pipe Sealant
3	1	Exhaust Fitting, Aluminum NW16, 4.56 Inches
4	1	Male Elbow Brass ¼ Inch OD – 1/8 Inch NPT
5	1	Assembled Manifold – Includes 5 PSIG pressure relief valve



IDP 7 / IDP 10 Purge Kit



Figure 1 - Recommended Tools

Table 2 - Recommended Tools Required

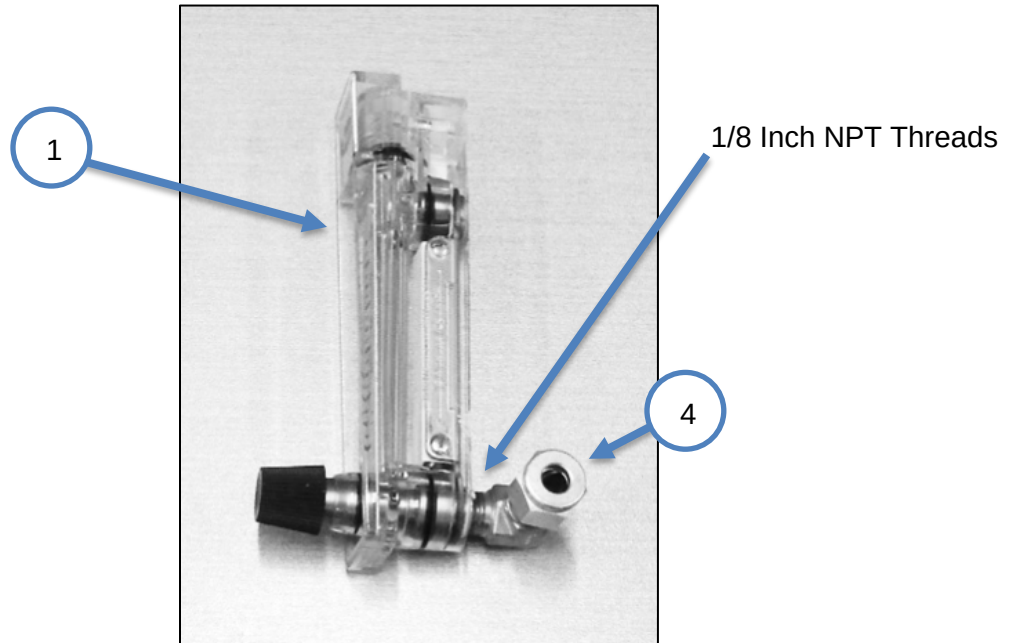
Loctite 567 Pipe Sealant.
1/2 Inch Open End Wrench or adjustable Wrench
9/16 Inch Open End Wrench.
3/8 Inch Drive Ratchet.
9/16 Socket - 3/8 Inch Drive
6 MM Allen Wrench

Installation:

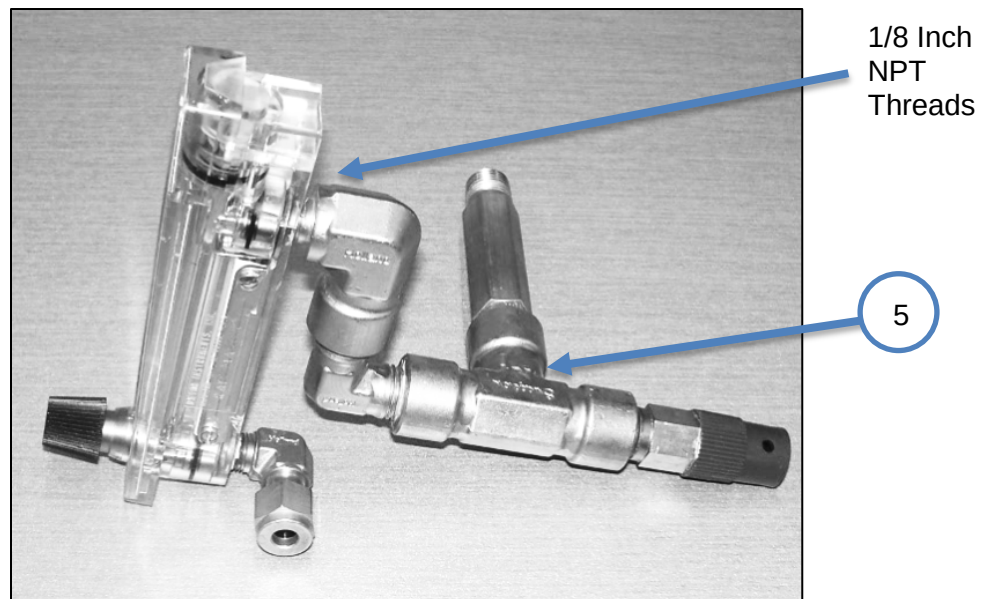


NOTE : To ensure proper operation, and to prevent damage, the kit must be installed and operated only as specified. Loctite 567 is to be applied to all NPT connections as indicated.

1. Apply Loctite to the (4) Male Elbow 1/8 Inch NPT threads. Install into the (1) Flow Meter using $\frac{1}{2}$ Inch open end wrench in position as shown.

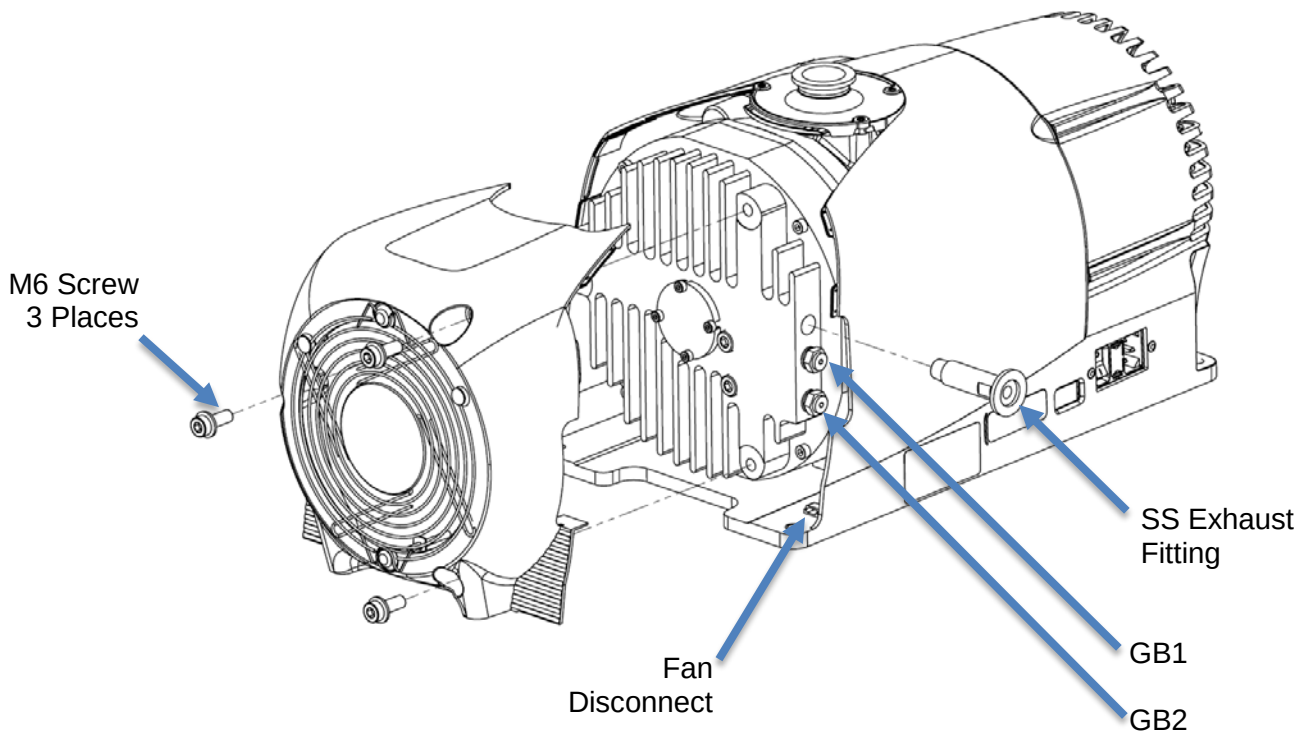


2. Apply Loctite to the Male Elbow 1/8 Inch NPT threads and install (5) Manifold Assembly into Flow Meter using $\frac{9}{16}$ Inch open end wrench and position as shown.

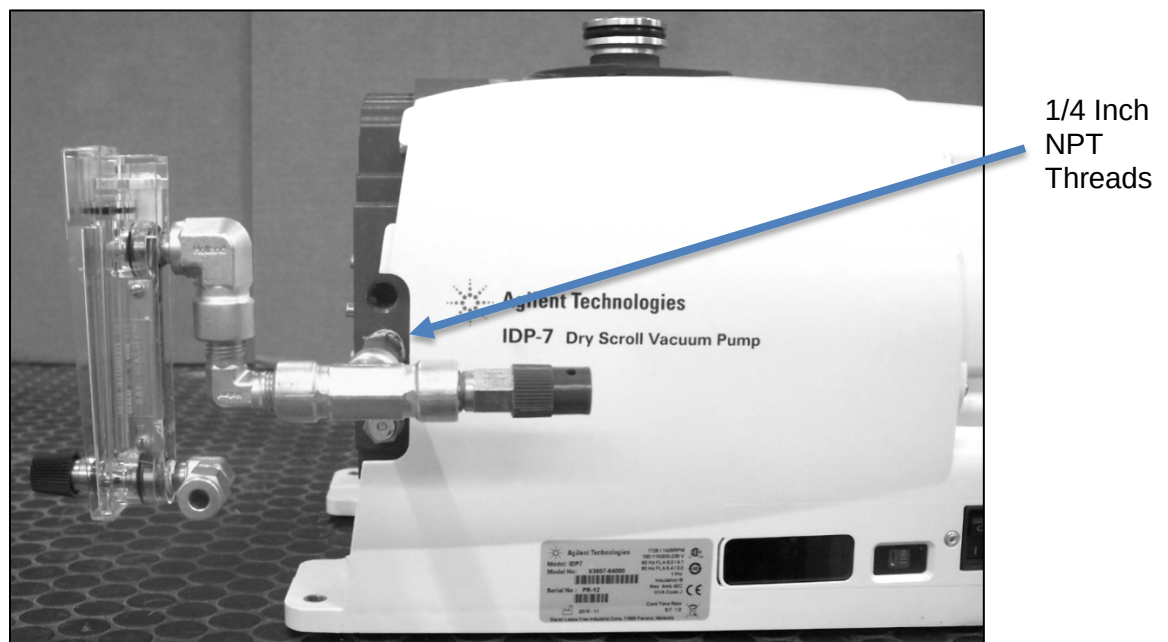


IDP 7 / IDP 10 Purge Kit

3. Remove Fan cowling screws (Qty. 3) using 6 MM Allen Wrench. Disconnect Fan wire harness.
4. Remove stainless steel exhaust fitting using 9/16 Inch open end wrench.
5. Remove GB1 or GB2 using 9/16 socket- 3/8 Inch Drive Ratchet.

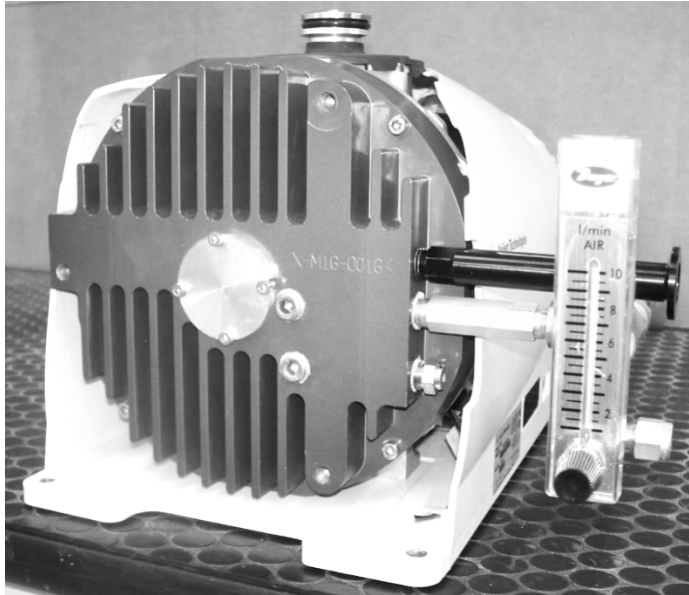


6. Apply Loctite to the 2½ Inch-Long Brass Nipple ¼ Inch NPT threads and install into desired GB port (GB1 shown) turning clockwise. For easier installation position the pump at the side of a work bench to allow for the manifold to rotate freely when installing.

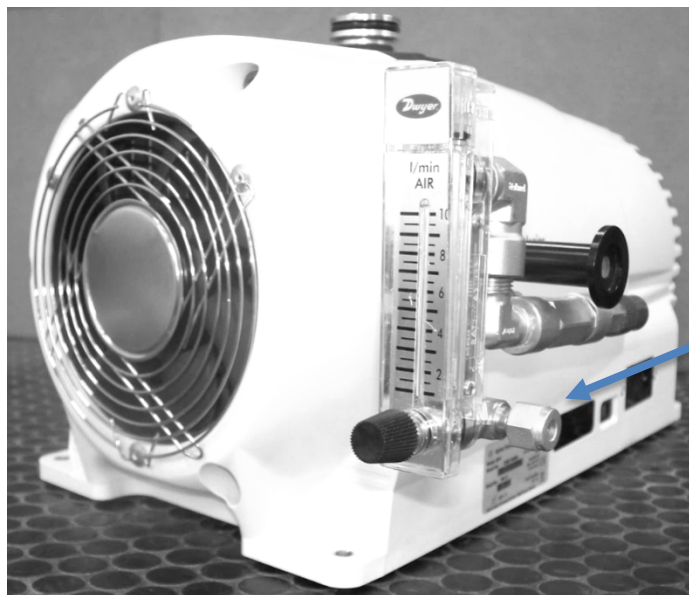


IDP 7 / IDP 10 Purge Kit

7. Apply Loctite to the Aluminum NW16 Exhaust Fitting $\frac{1}{4}$ Inch NPT threads and install into exhaust port using $\frac{9}{16}$ Inch open end wrench.



8. Reconnect Fan and reassemble Fan cowling back onto pump with (3) screws using 6 MM Allen wrench. Attach a purge gas line to the $\frac{1}{4}$ inch Swagelok fitting at the flowmeter inlet.



1/4 Inch
Swagelok



NOTE: The flowmeter must be positioned vertically to read accurately



WARNING: The purge gas pressure must be regulated to 5 PSIG or less



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, please use the packaging from the Advance Exchange to return the defective product.
 - x Seal the product in a plastic bag, and package product carefully to avoid damage in transit. You are responsible for loss damage in transit.
 - x Agilent Technologies is not responsible for returning customer provided packaging or containers.
 - x 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.
- 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 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.
- 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:

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

NORTH AMERICA:

Fax: 17818609252
Toll Free: 800 882 7426, Option 3
vpl-ra@agilent.com

PACIFIC RIM:

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



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

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

1) CUSTOMER INFORMATION

Company Name:		Contact Name:	
Tel:	Email:	Fax:	
Customer Ship To:		Customer Bill To:	
Europe only: VAT reg. Number:		USA/Canada only: ☐ Taxable ☐ Non-taxable	

2) PRODUCT IDENTIFICATION

Product Description	Agilent P/N	Agilent S/N	Original Purchasing Reference

3) TYPE OF RETURN (Choose one from each row and supply Purchase Order if requesting a billable service)

- 3A.** ☐ Non-Billable ☐ Billable ➡ **New PO #** (hard copy must be submitted with this form):
- 3B.** ☐ Exchange ☐ Repair ☐ Upgrade ☐ Consignment/Demo ☐ Calibration ☐ Evaluation ☐ Return for Credit

4) HEALTH and SAFETY CERTIFICATION

AGILENT TECHNOLOGIES CANNOT ACCEPT ANY PRODUCTS CONTAMINATED WITH BIOLOGICAL OR EXPLOSIVE HAZARDS, RADIOACTIVE MATERIAL, OR MERCURY AT ITS FACILITY.

Call Agilent Technologies to discuss alternatives if this requirement presents a problem.

The equipment listed above (check one):

- ☐ **HAS NOT** pumped or been exposed to any toxic or hazardous materials. OR
- ☐ **HAS** pumped or been exposed to the following toxic or hazardous materials. If this box is checked, the following information must also be filled out. Checkboxes for all material(s) to which product(s) pumped or was exposed:

☐ Toxic ☐ Corrosive ☐ Reactive ☐ Flammable ☐ Explosive ☐ Biological ☐ Radioactive

List all toxic/hazardous materials. Include product name, chemical name, and chemical symbol or formula:

NOTE: If a product is received at Agilent which is contaminated with a toxic or hazardous material that was not disclosed, the customer will be held responsible for all costs incurred to ensure the safe handling of the product, and is liable for any harm or injury to Agilent employees as well as to any third party occurring as a result of exposure to toxic or hazardous materials present in the product.

Print Name: _____ **Authorized Signature:** _____ **Date:** _____

5) FAILURE INFORMATION:

Failure Mode (REQUIRED FIELD. See next page for suggestions of failure terms):

Detailed Description of Malfunction: (Please provide the error message)

Application (system and model):

I understand and agree to the terms of Section 6, Page 3/3.

Print Name: _____ **Authorized Signature:** _____ **Date:** _____

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

ON PUMPS/CONTROLLERS

- Bad feedthrough - Vacuum leak - Error code on display	- Poor vacuum - High voltage problem - Other
---	--

VALVES/COMPONENTS

- Main seal leak - Solenoid failure - Damaged sealing area	- Bellows leak - Damaged flange - Other
--	---

LEAK DETECTORS

- Cannot calibrate - Vacuum system unstable - Failed to start	- No zero/high background - Cannot reach test mode - Other
---	--

INSTRUMENTS

- Gauge tube not working - Communication failure - Error code on display	- Display problem - Degas not working - Other
--	---

SCROLL AND ROTARY VANE PUMPS

- Pump doesn't start - Doesn't reach vacuum - Pump seized	- Noisy pump (describe) - Over temperature - Other
---	--

DIFFUSION PUMPS

- Heater failure - Doesn't reach vacuum - Vacuum leak	- Electrical problem - Cooling coil damage - 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. Return shipments 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 **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.**
- 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.
- x 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.
- 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.

Agilent Technologies

Vacuum Product Division

United States & Canada

Agilent Technologies
Vacuum Products Division
121 Hartwell Avenue
Lexington, MA 02421 USA
Tel: +1 781 861 7200
Toll-Free: +1 800 882 7426
Fax: +1 871 860 5437

Benelux

Agilent Technologies
Vacuum Products Division
Herculesweg 8
4338 PL Middelburg
THE NETHERLANDS
Tel: +31 118 671570
Fax: +31 118 671569

China

Agilent Technologies
Vacuum Products Division
Room 1648
Central Tower South Wing
Beijing Junefield Plaza
No. 10 XuanWuMenWai Street
Beijing 100052 P.R. CHINA
Tel.: +86 (10) 6310 8550
Toll-Free: 800 820 6556
Fax: +86 (10) 6310 0141

France

Agilent Technologies
Vacuum Products Division
7 avenue des Tropiques
Z.A. de Courtaboeuf - B.P. 12
91941 Les Ulis cedex FRANCE
Tel.: +33 (0) 1 69 86 38 84
Fax: +33 (0) 1 69 86 29 88

Germany & Austria

Agilent Technologies
Vacuum Products Division
Alsfelder Strasse 6
Postfach 11 14 35
64289 Darmstadt GERMANY
Tel.: +49 (0) 6151 703 353
Fax: +49 (0) 6151 703 302

India

Agilent Technologies
Vacuum Product Division
205-A, "A" wing of Galleria,
2nd floor, Hiranandani Gardens,
Powai, Mumbai-400 076, India Tel.:
+91 22-2570 8595 / 8597
Fax: +91 22- 2570 8599

Italy

Agilent Technologies
Vacuum Products Division
via F.lli Varian 54
10040 Leini, (Torino) ITALY
Tel.: +39 011 997 9111
Toll-Free: 00 800 234 234 00
Fax: +39 011 997 9350

Japan

Agilent Technologies
Vacuum Products Division
Sumitomo Shibaura Building 4-16-36
8th Floor
4-16-36 Shibaura Minato-ku
Tokyo 108 JAPAN
Tel.: +81 3 5232 1253
Toll-Free: 0120 655 040
Fax: +81 3 5232 1710

Korea

Agilent Technologies
Vacuum Products Division
Shinsa 2nd Bldg. 2F 966-5
Daechi-dong
Kangnam-gu, Seoul
KOREA 135-280
Tel.: +82 2 3452 2452
Toll-Free: 080 222 2452
Fax: +82 2 3452 2451

Mexico

Agilent Technologies
Vacuum Products Division
Concepcion Beistegui No 109
Col Del Valle C.P. 03100
MEXICO, D.F.
Tel.: +52 5 523 9465
Fax: +52 5 523 9472

Southeast Asia

Agilent Technologies
Vacuum Products Division
South East Asia (SEA) - Alex Ho
H/P: +601 2213 1253
Fax: +603 6733 8121

Singapore

Agilent Technologies
Vacuum Products Division
Singapore
Unit 10-04 Helios
Biopolis @ one-north
11 Biopolis Way, 138667
Singapore
H/P.: +65 92364988
Fax: +65 64789603

Taiwan

Agilent Technologies
Vacuum Products Division
14F-6, No. 77, Hsin Tai Wu Road,
Sec. 1
Hsi chih, Taipei Hsien, Taiwan,
R.O.C.
Tel.: +886 2 2698 9555
Toll Free: 0800 051 342
Fax: +886 2 2698 9678

UK & Ireland

Agilent Technologies
Vacuum Products Division
6 Mead Road
Oxford Industrial Park Tel.:
Tel: +44 (0) 1865 291570
Fax: +44 (0) 1865 291



Agilent Technologies