



**Agilent Technologies**

*Vacuum Products Division*

# ***ConvecTorr Simulator***

*FIELD INSTRUCTION SHEET*

Manual No. 699908311

Revision A

December 1998



# Agilent Field Instruction Sheet

## ConvecTorr Simulator (P & E type)

### Description

The ConvecTorr Simulator (L7382-101 E type, and L7382-301 P type) is intended to be a convenient tool for verifying proper operation of the ConvecTorr control unit. For those cases when the target gauge tube cannot be brought to proper pressure levels for true in-situ calibration, the simulator can be used to at least ensure the control unit is calibrated to the average tube.

### Operation

Normally, the simulator would be plugged into the target gauge cable at the sensor end. When the switch is set the ATM the controller should read approximately  $1 \times 10^5$  Pa (760 Torr, 1000mBar). If desired, the controller may be *calibrated* by pressing the <ATM> button on MultiGauge or the <CAL> button on SenTorr. Sliding the switch to VAC should cause the controller to read approximately  $1.33 \times 10^{-1}$  Pa (1 mT,  $1.3 \times 10^{-3}$  mBar). Again, the controller may be *calibrated* by pressing the appropriate button on the controller keypad.

### NOTE



**The Simulator is not intended to take the place on NIST-traceable calibration. The product is intended to verify the functionality of control electronics. For those situation requiring NIST-traceable calibration, Agilent offers the comprehensive STARRS program. Contact Agilent for more information.**

Important: E type controllers require L7382-101 with Blue label; P type controllers require L7382-301 with Black label.



## 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:**
  - Remove all accessories from the core product (e.g. inlet screens, vent valves).
  - Prior to shipment, drain any oils or other liquids, purge or flush all gasses, and wipe off any excess residue.
  - 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.
  - Agilent Technologies is not responsible for returning customer provided packaging or containers.
  - **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: 00 39 011 9979 330  
Fax Free: 00 800 345 345 00  
Toll Free: 00 800 234 234 00  
[vpt-customer@agilent.com](mailto:vpt-customer@agilent.com)

**NORTH AMERICA:**  
Fax: 1 781 860 9252  
Toll Free: 800 882 7426, Option 3  
[vpl-ra@agilent.com](mailto:vpl-ra@agilent.com)

**PACIFIC RIM:**  
please visit our website for individual  
office information  
<http://www.agilent.com>



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

**1) CUSTOMER INFORMATION**

<b>Company Name:</b>		<b>Contact Name:</b>	
<b>Tel:</b>	<b>Email:</b>	<b>Fax:</b>	
<b>Customer Ship To:</b>		<b>Customer Bill To:</b>	
Europe only: <b>VAT reg. Number:</b>		USA/Canada only: <input type="checkbox"/> <b>Taxable</b> <input type="checkbox"/> <b>Non-taxable</b>	

**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. Check boxes for all materials 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:**

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**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):

<b>I understand and agree to the terms of Section 6, Page 3/3.</b>		
<b>Print Name:</b>	<b>Authorized Signature:</b> .....	<b>Date:</b>



**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:

**ION PUMPS/CONTROLLERS**

- Bad feedthrough - Vacuum leak - Error code on display	- Poor vacuum - High voltage problem - Other
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**VALVES/COMPONENTS**

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

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

- Gauge tube not working - Communication failure - Error code on display	- Display problem - Degas not working - Other
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**SCROLL AND ROTARY VANE PUMPS**

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

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

- 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.
- 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.
- 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.
- 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.
- A Special Cleaning fee will apply to all exposed products per Section 4 of this document.
- If requesting a calibration service, units must be functionally capable of being calibrated.

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