Agilent

Vacuum Products Division

CE

Field Installation Instructions

Hot Filament Replacement

for Agilent Technologies Helium Leak Detection (G8610, G8611, or G8612)

or for VS Series Leak Detector

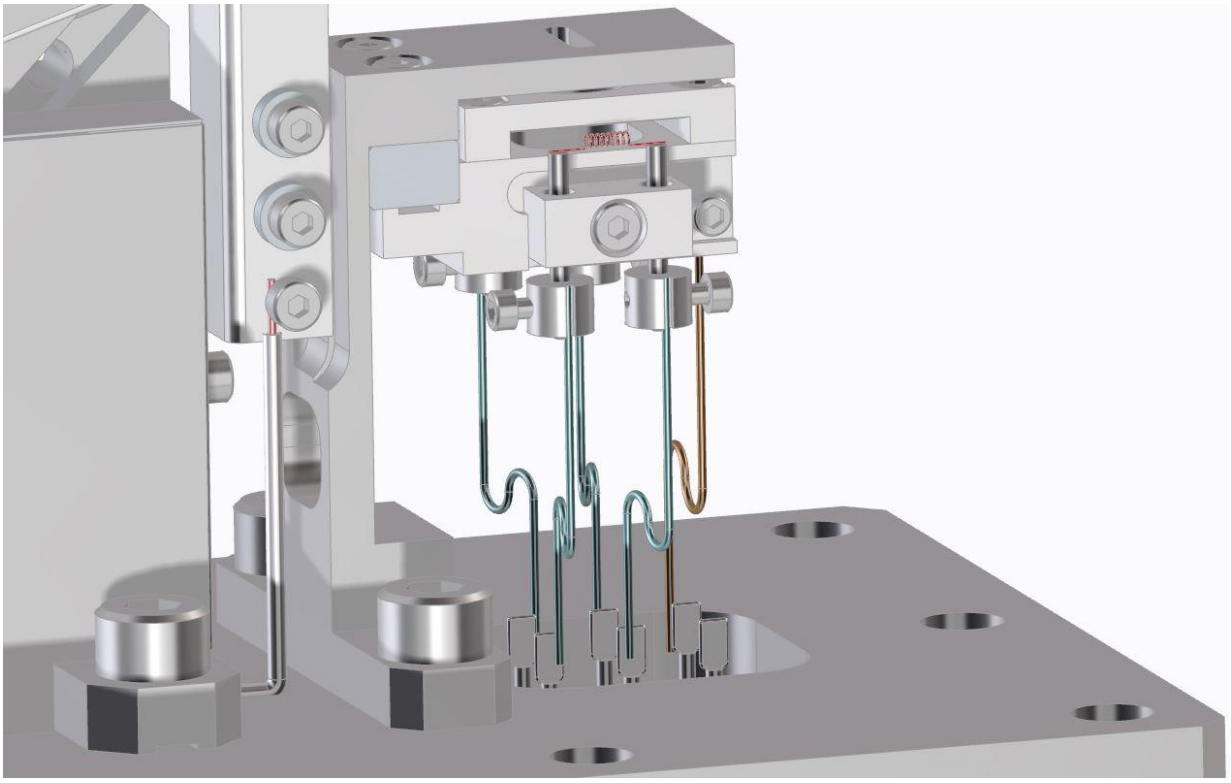
Part Number G8600-90005

Rev. A

May 2018

Agilent Vacuum Products Division

Filament Replacement for Agilent Helium Leak Detector



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Products manufactured by Seller are warranted against defects in materials and workmanship for twelve (12) months from date of shipment thereof to Customer, and Seller's liability under valid warranty claims is limited, at the option of Seller, to repair, to replace, or refund of an equitable portion of the purchase price of the Product. Items expendable in normal use are not covered by this warranty. All warranty replacement or repair of parts shall be limited to equipment malfunctions which, in the sole opinion of Seller, are due or traceable to defects in original materials or workmanship. All obligations of Seller under this warranty shall cease in the event of abuse, accident, alteration, misuse, or neglect of the equipment. In-warranty repaired or replaced parts are warranted only for the remaining unexpired portion of the original warranty period applicable to the repaired or replaced parts. After expiration of the applicable warranty period, Customer shall be charged at the then current prices for parts, labor, and transportation. Reasonable care must be used to avoid hazards. Seller expressly disclaims responsibility for loss or damage caused by use of its Products other than in accordance with proper operating procedures. Except as stated herein, Seller makes no warranty, express or implied (either in fact or by operation of law), statutory or otherwise; and, except as stated herein, Seller shall have no liability under any warranty, express or implied (either in fact or by operation of law), statutory or otherwise. Statements made by any person, including representatives of Seller, which are inconsistent or in conflict with the terms of this warranty shall not be binding upon Seller unless reduced to writing and approved by an officer of Seller.

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All claims under warranty must be made promptly after occurrence of circumstances giving rise thereto, and must be received within the applicable warranty period by Seller or its authorized representative. Such claims should include the Product serial number, the date of shipment, and a full description of the circumstances giving rise to the claim. Before any Products are returned for repair and/or adjustment, written authorization from Seller or its authorized representative for the return and instructions as to how and where these Products should be returned must be obtained. Any Product returned to Seller for examination shall be prepaid via the means of transportation indicated as acceptable by Seller. Seller reserves the right to reject any warranty claim not promptly reported and any warranty claim on any item that has been altered or has been returned by non-acceptable means of transportation. When any Product is returned for examination and inspection, or for any other reason, Customer shall be responsible for all damage resulting from improper packing or handling, and for loss in transit, notwithstanding any defect or non-conformity in the Product. In all cases, Seller has the sole responsibility for determining the cause and nature of failure, and Seller's determination with regard thereto shall be final. If it is found that Seller's Product has been returned without cause and is still serviceable, Customer will be notified and the Product returned at Customer's expense; in addition, a charge for testing and examination may be made on Products so returned.

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1 Preface

1.1 Documentation Standards

1.1.1 Symbols

This manual uses the following documentation standards:

NOTE

Notes contain important information.

CAUTION

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

WARNING

Warnings appear for a particular procedure or practice which, if not followed correctly, could lead to serious injury or death.

1.2 Hazard and Safety Information

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.

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

OFF Supply (Power)

Earth (Ground) Terminal

ON Supply (Power)

Protective Conductor Terminal

Warning, Risk of danger

Refer to documentation

Frame or Chassis Terminal

Alternating Current

Caution, Hot Surface

Direct Current

Caution, Risk of Electrical Shock

Do Not Place in Trash

1.2.1 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.

1.2.2 Vacuum Equipment and Cleanliness

Caution

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

1.2.3 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.*

1.2.4 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.*

1.2.5 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.

CAUTION

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.

2 Filament Installation: Agilent Helium Leak Detector Model G8610, G8611, or G8612

The same filament replacement kit is compatible with any model G8610, G8611, or G8612, as well as legacy Agilent model VS series leak detectors.

2.1 Equipment Required for G8610, G8611, or G8612

The following tools are suggested for assembly.

Table 2-1. Equipment required for G8610, G8611, or G8612 models

Item	Note
Filament Service Kit (PN: VSFLDHFR)	--
Slotted screw driver	Use to remove lead detector covers
Metric Allen wrench set	--
Needle nose pliers or tweezer	--
M3 Phillips head screw driver	--
Torque wrench (must be adjustable to 40 in-lbs (4.5 N-m) and 90 in-lbs (10.2 N-m))	--
Digital multimeter (Fluke 187 or equivalent)	For resistance and continuity measurements

2.2 Installation Procedure for G8610, G8611, or G8612

For clarity, some items have been omitted from views.

Figure 2-1. Covers

1. Turn off the power switch located on the back of the unit and unplug.
2. Wait 30 seconds for the high voltage to dissipate
3. Using a slotted screw driver, unfasten the captive screws holding each of the four covers. If the unit is equipped with a handle, remove the handle.

4. Detach all four covers and rotate the top lid about the display, as to give access to the spectrometer.

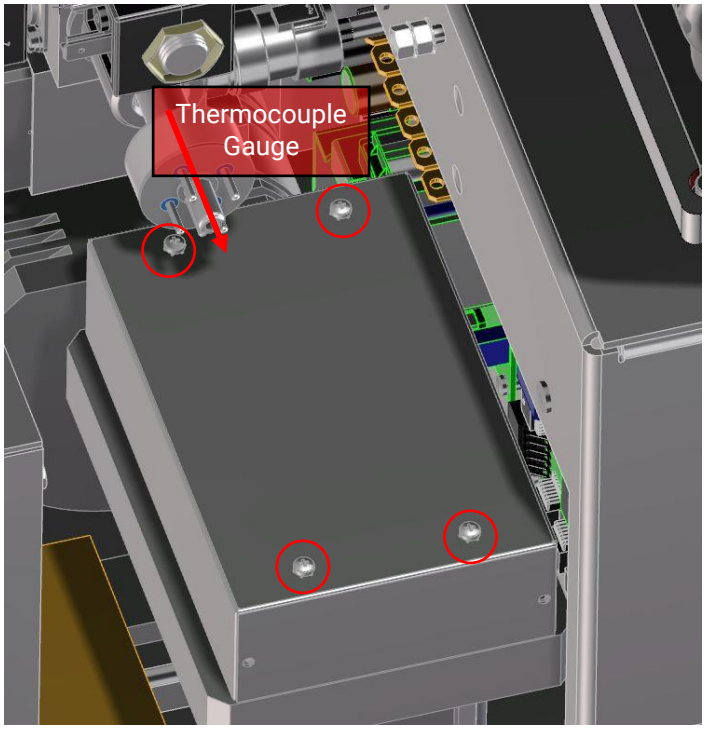

Figure 2-2. Spectrometer access

5. To remove the spectrometer top cover, it may be necessary to first pull straight out the thermocouple gauge (shown in Figure 2-2 with the red arrow. It is shown without the outside black plastic cover). Leave the thermocouple gauge connected to its wiring. Use an M3 Phillips head screw driver to remove the four screws securing the aluminum spectrometer cover. The screw shown in the top right of Figure 2-2 will be securing a grounding strap. Leave the ground strap hanging from the leak detector frame. Disconnect the two electrical cables plugged into the spectrometer board, the pre-amp RJ45 style connector on the turbo side of the spectrometer, and the ion source multi-pin connector (Cables not shown for clarity: refer to Figure 2-3). Remove the top cover, set aside with the screws.

CAUTION

Static sensitive device, ensure that personnel are properly grounded before proceeding.

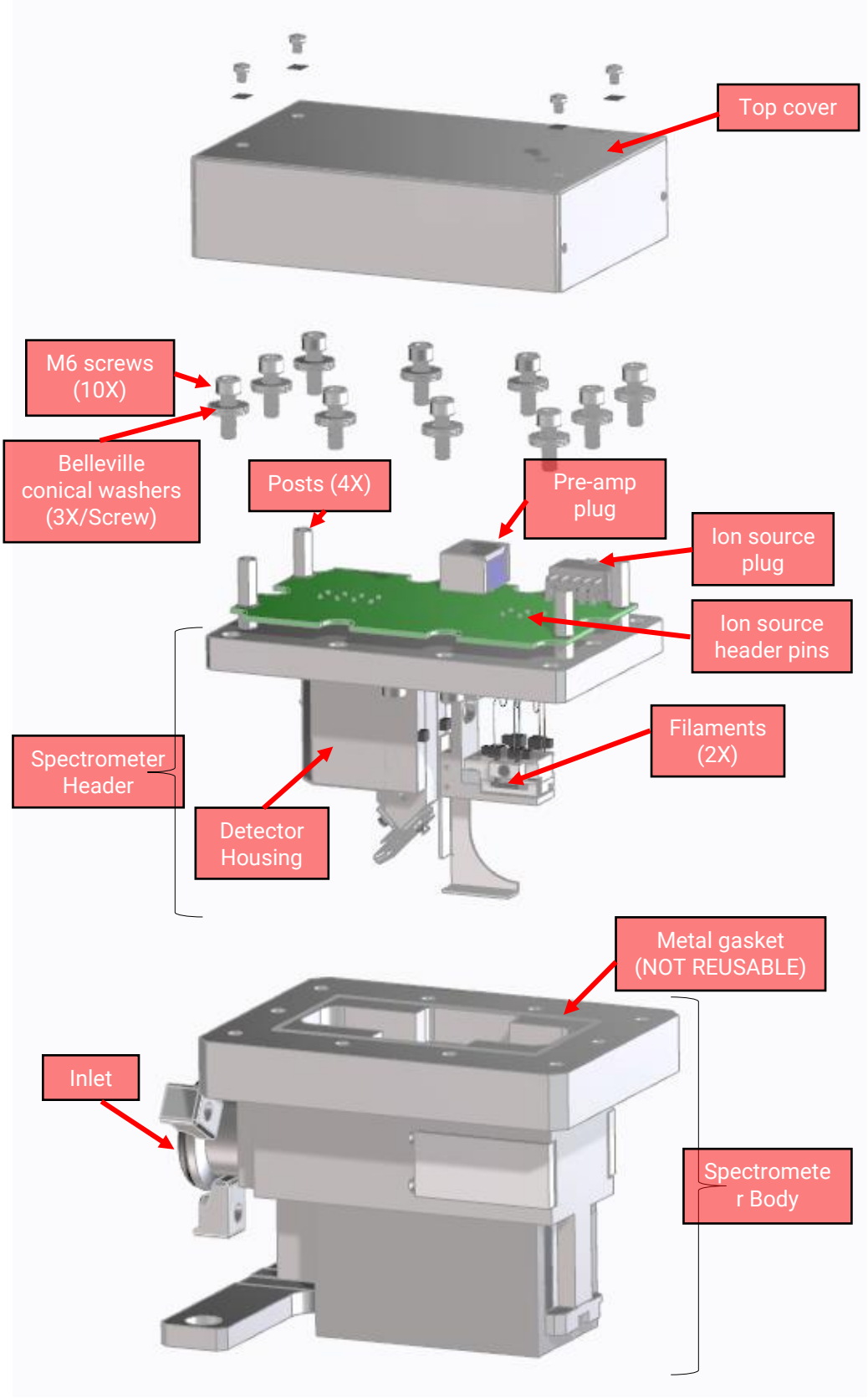
Top cover
M6 screws (10X)
Belleville conical washers (3X/Screw)
Posts (4X)
Pre-amp plug
Ion source plug
Ion source header pins
Filaments (2X)
Spectrometer Header
Detector Housing
Metal gasket (NOT REUSABLE)
Inlet
Spectrometer Body

Figure 2-3. Spectrometer exploded view

CAUTION

Wear non-powdered, ESD-safe Nitride or equivalent gloves (not included in kit) to prevent skin oils from getting on vacuum surfaces.

Refer to Figure 2-3 for disassembly of the spectrometer header.

6. Loosen screws (10X) and remove spectrometer header from spectrometer body. The vacuum system vents to atmosphere as the screws are loosened. Retain the socket head cap screws and Belleville washers. Maintain correct orientation of Belleville (conical) washers when removing.
7. Remove the spectrometer header. Rest upside-down on the four posts sticking up from the printed circuit board.
8. Remove metal gasket and discard. Do not scratch the mating surface when removing the gasket. To prevent scratching of any sealing surface, do not use metal tools for this task. Do not attempt to reuse the gasket.
9. Examine the spectrometer cavity for discolored areas. If the inside of the spectrometer body appears dirty, clean it with Vac-u-solv spectrometer cleaning kit (Agilent part number 670029096). Ensure no lint is present after cleaning.
10. On a clean work surface, remove the defective filaments(s) from the spectrometer by loosening the two coupler screws. Then loosen the M2 screw and washer and remove the defective filament(s). See Figure 2-4.

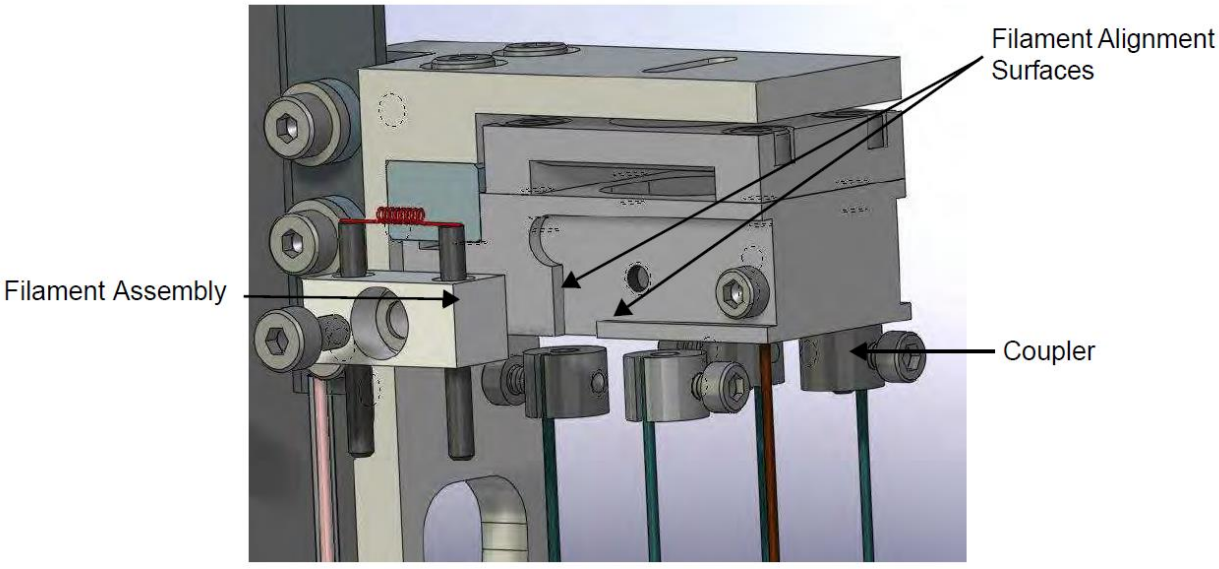

Figure 2-4. Filament removal and replacement

11. Inspect the new filament assembly for deformation, damage, and flaking of the coating prior to installation. Do not install if damaged.

12. Insert new filament assembly into the coupler.

13. Guide the ceramic against the bottom and side surfaces of the ion chamber (see Figure 2-5).

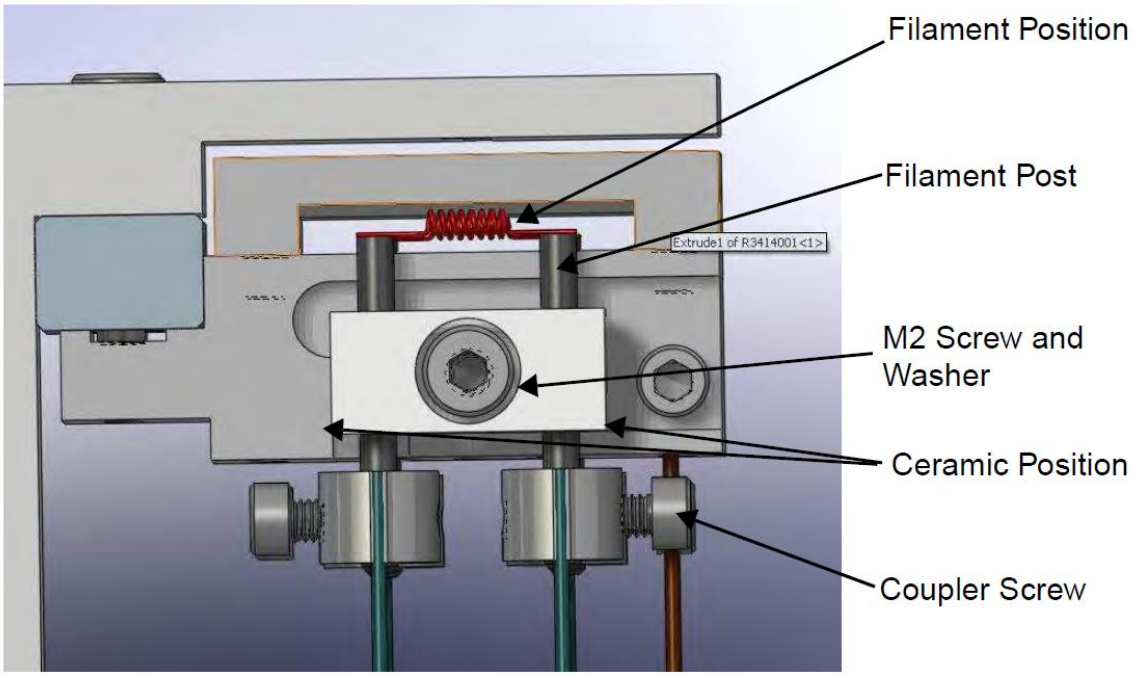

Figure 2-5. Filament positioning

14. While holding the filament in position, insert the M2 screw and washer and tighten using an Allen key.
15. Tighten the coupler screws onto the filament posts. Using small pliers, pull lightly on the extractor and chamber wires to ensure that the coupler screws are secured tightly.

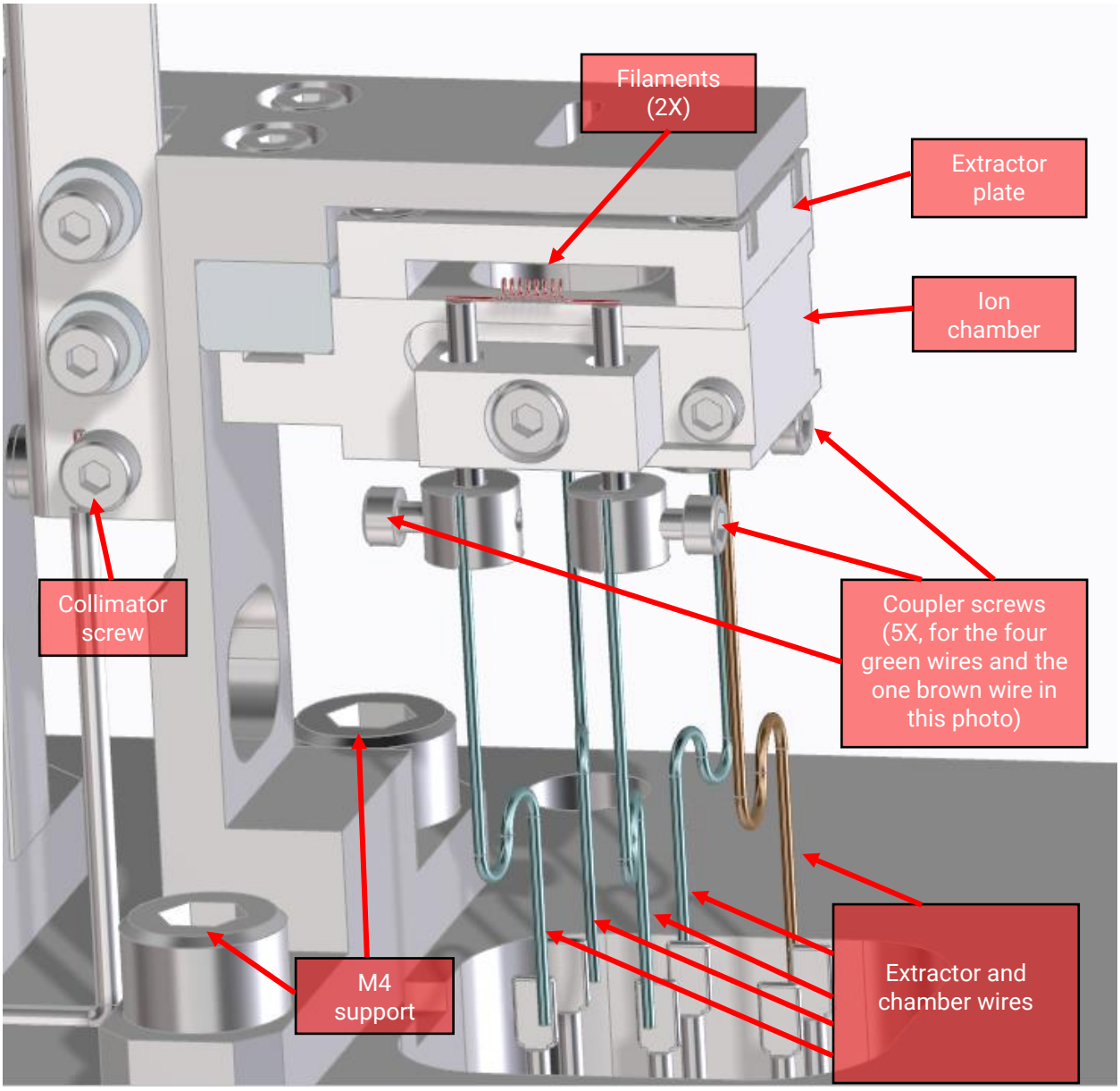

Figure 2-6. Ion support assembly

16. Visually verify ceramic is tight against the bottom and left-side ribs. Ensure that the filament is positioned in the slot of the ion source as shown in Figure 2-7.

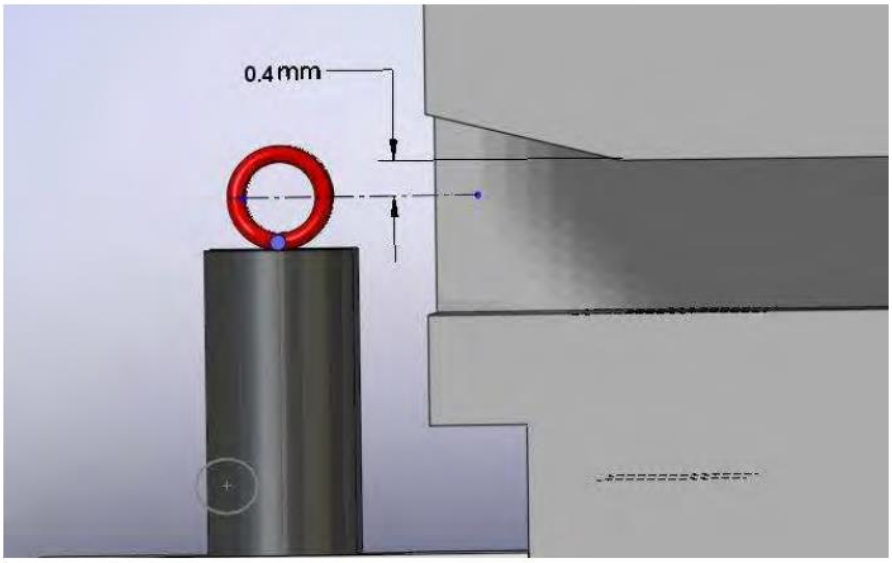

Figure 2-7. Filament alignment

17. Clean the mating surfaces of the spectrometer body and header with isopropyl alcohol and a clean lint free wipe. Agilent recommends use of the Vac-u-solv spectrometer cleaning kit (Agilent part number 670029096). Be careful to ensure no debris or lint remains in the spectrometer body after cleaning
18. Center the replacement metal gasket inside the bolt pattern and outside of the body cavity. To prevent scratching of any sealing surface, do not use metal tools for this task.
19. Guide the spectrometer header into the pocket with the detector housing closest to the inlet.

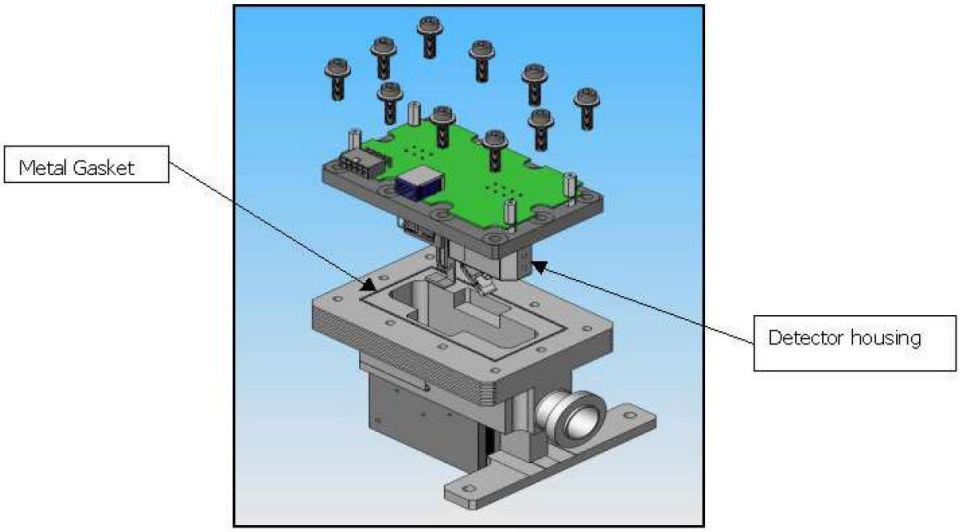

Figure 2-8. Spectrometer alignment

20. Insert a screw with three Belleville washers into each hole and finger tighten (see Figure 2-9).
21. Follow the torqueing pattern in Figure 2-9. Torque screws to 40 in-lbs (4.5 N-m).
22. Re-torque screws to 90 in-lbs (10.2 N-m) following the same pattern. Go through the entire torque pattern twice to ensure the metal gasket is firmly compressed.
23. Wait a minimum of five minutes, then torque the screws again in the same pattern (Figure 2-9) to a value of 90 in-lbs (10.2 N-m). This wait period allows the washers to decompress.

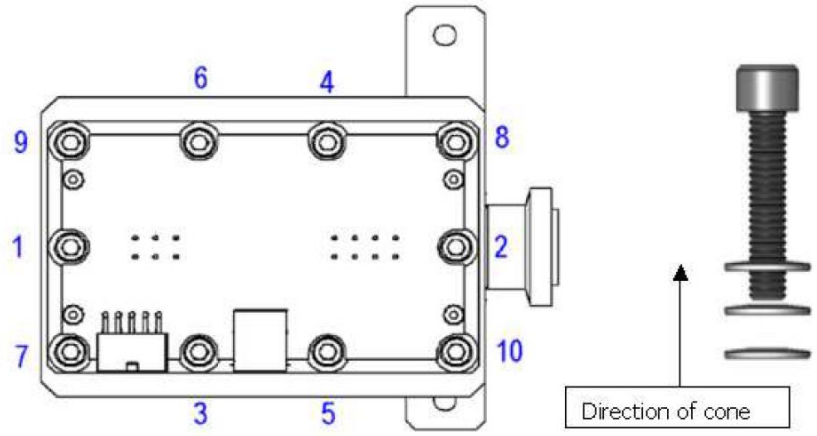

Figure 2-9. Tightening spectrometer header screws

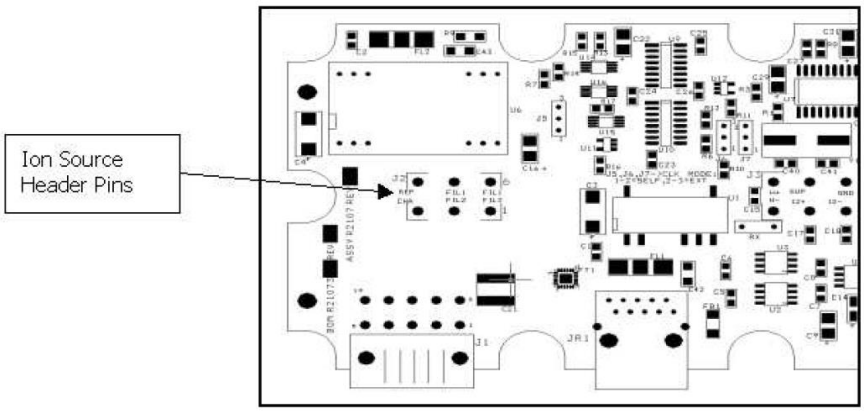

Figure 2-10. Ion source header pin schematic

24. On the PCB, use the resistance meter to verify an open circuit between any two of the six ion source header pins (except FIL-1 to FIL-1 and FIL-2 to FIL-2 which should be 0.3 Ohms or less). Also verify an open circuit between the body of the spectrometer and any of the ion source header pins (Figure 2-10). If there is continuity (short circuit) at any of the points, remove the header and inspect for shorting.

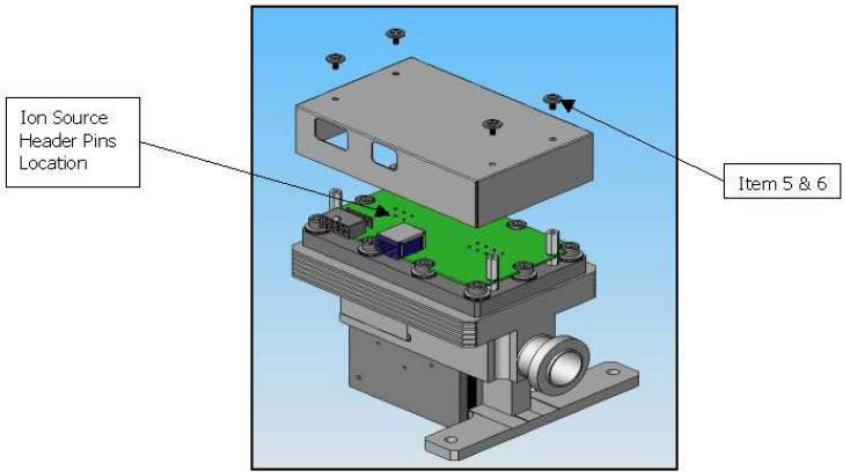

Figure 2-11. Ion source header pin locations

25. Place the spectrometer cover over the header and align the holes (Figure 2-11).
26. Install screws and washers (items 5 & 6), then tighten using a M3 Phillips screw driver (Figure 2-11). Tighten one screw over the ground strap connector.
27. Re-plug in both the pre-amp and ion source cable.
28. Reinstall the leak detector covers and fasten hardware.
29. Power up the leak detector.
30. Let the unit run for 20-30 minutes, then perform a calibration (via the I/O, front panel display, or RS232), per the user manual, to validate a successful installation. Leak check the spectrometer to ensure a leak free seal by spraying helium around the spectrometer metal seal while the leak detector is running in Test, blanked off, after calibration.

3 Filament Installation: Agilent Legacy VS Series Helium Leak Detector

The same filament replacement kit is compatible with any model G8610, G8611, or G8612, as well as legacy Agilent model VS series leak detectors.

3.1 Equipment Required for Agilent Legacy VS Series Helium Leak Detector

The following tools are suggested for assembly.

Table 3-1. Equipment required for VS models

Item	Note
Filament Service Kit (PN: VSFLDHFR)	--
Extended Length M5 Allen Wrench	--
Metric Allen wrench set	--

Needle nose pliers or tweezer	--
M3 Phillips head screw driver	--
Torque wrench (must be adjustable to 40 in-lbs (4.5 N-m) and 90 in-lbs (10.2 N-m))	--
Digital multimeter (Fluke 187 or equivalent)	For resistance and continuity measurements

3.2 Installation Procedure for Agilent Legacy VS Series Helium Leak Detector

For clarity, some items have been omitted from views.

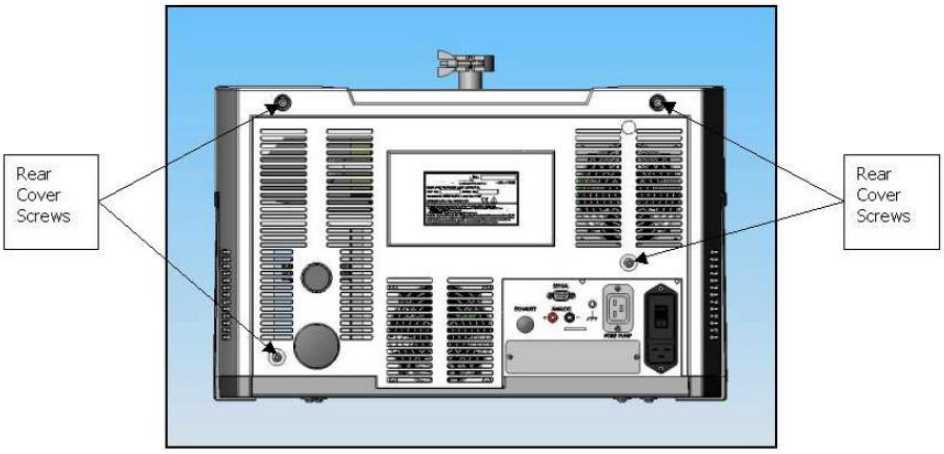

Figure 3-1. Rear screws

1. Turn off the power switch located on the back of the unit and unplug.
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 3-1).
4. Detach the rear plastic cover from the unit.

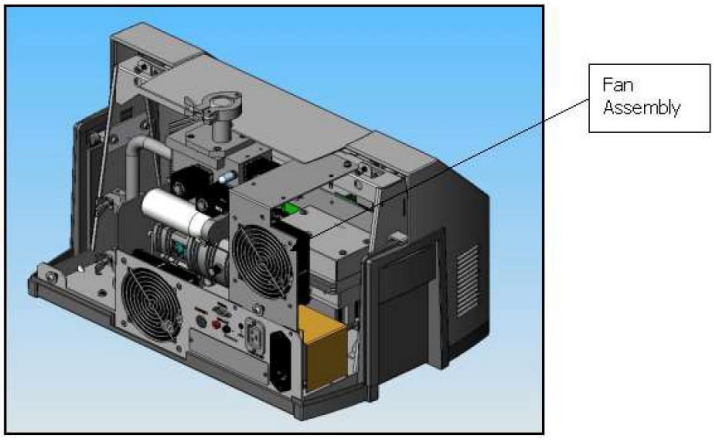

Figure 3-2. Fan assembly

5. Disconnect the fan cable and remove the fan assembly by unfastening two wing nuts and one M4 socket head cap screw (Figure 3-2).

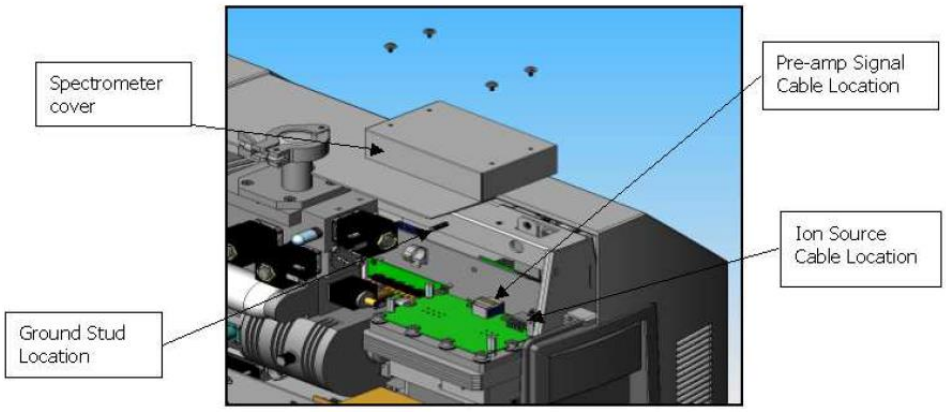

Figure 3-3. Cable locations

6. Disconnect the spectrometer ground cable, the preamp signal cable and the ion source cable from the spectrometer (Figure 3-3).

NOTE *Cables not shown for clarity.*

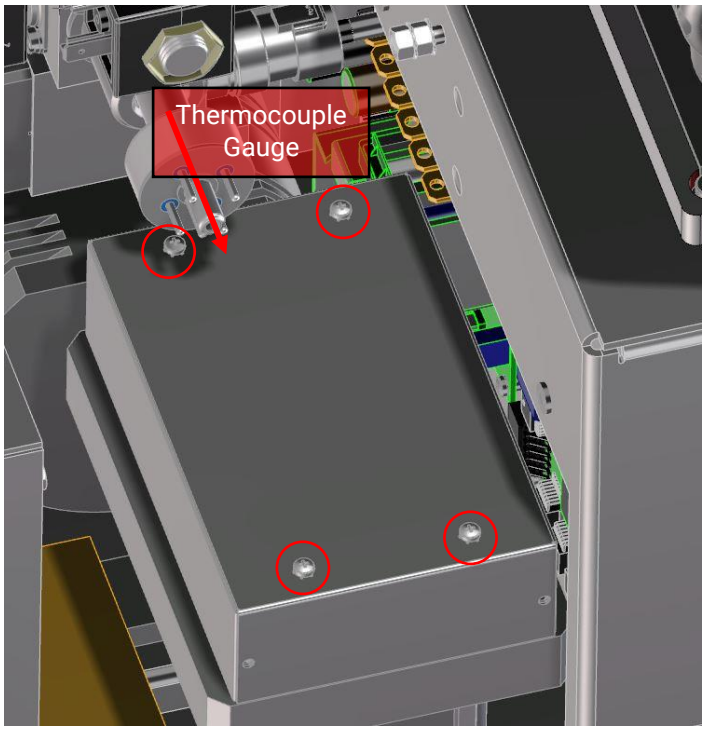

Figure 3-4. Spectrometer access

7. To remove the spectrometer top cover, it may be necessary to first pull straight out the thermocouple gauge (shown in Figure 3-4 with the red arrow. It is shown without the outside black plastic cover). Leave the thermocouple gauge connected to its wiring. Use an M3 Phillips head screw driver to remove the four screws securing the aluminum spectrometer cover. The screw shown in the top right of Figure 3-4 will be securing a grounding strap. Leave the ground strap hanging from the leak detector frame. Disconnect the two electrical cables plugged into the spectrometer board, the pre-amp RJ45 style connector on the turbo side of the spectrometer, and the ion source multi-pin connector (Cables not shown for clarity: refer to Figure 3-5). Remove the top cover, set aside with the screws.

CAUTION 

Static sensitive device, ensure that personnel are properly grounded before proceeding.

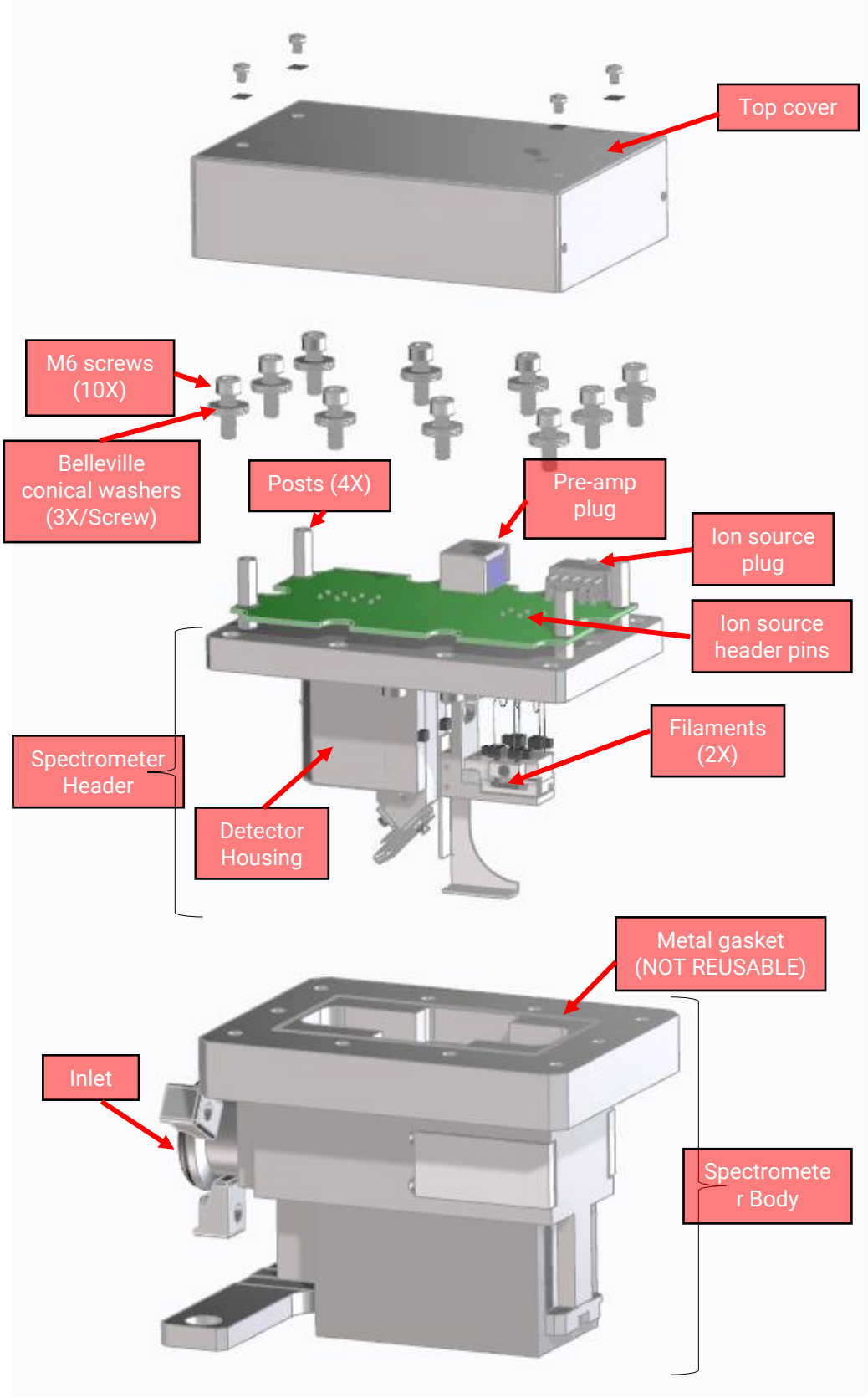
Top cover
M6 screws (10X)
Belleville conical washers (3X/Screw)
Posts (4X)
Pre-amp plug
Ion source plug
Ion source header pins
Filaments (2X)
Spectrometer Header
Detector Housing
Metal gasket (NOT REUSABLE)
Inlet
Spectrometer Body

Figure 3-5. Spectrometer exploded view

CAUTION

Wear non-powdered, ESD-safe Nitride or equivalent gloves (not included in kit) to prevent skin oils from getting on vacuum surfaces.

8. Refer to Figure 3-5 for reference in disassembly of the spectrometer header. Loosen screws (10X) and remove spectrometer header from spectrometer body. The vacuum system vents to atmosphere as the screws are loosened. Retain the socket head cap screws and Belleville washers. Maintain correct orientation of Belleville (conical) washers when removing.
9. Remove the spectrometer header. Rest upside-down on the four posts sticking up from the printed circuit board.
10. Remove metal gasket and discard. Do not scratch the mating surface when removing the gasket. To prevent scratching of any sealing surface, do not use metal tools for this task. Do not attempt to reuse the gasket.
11. Examine the spectrometer cavity for discolored areas. If the inside of the spectrometer body appears dirty, clean it with Vac-u-solv spectrometer cleaning kit (Agilent part number 670029096).
12. On a clean work surface, remove the defective filaments(s) from the spectrometer by loosening the two coupler screws. Then loosen the M2 screw and washer and remove the defective filament(s). See Figure 3-6.

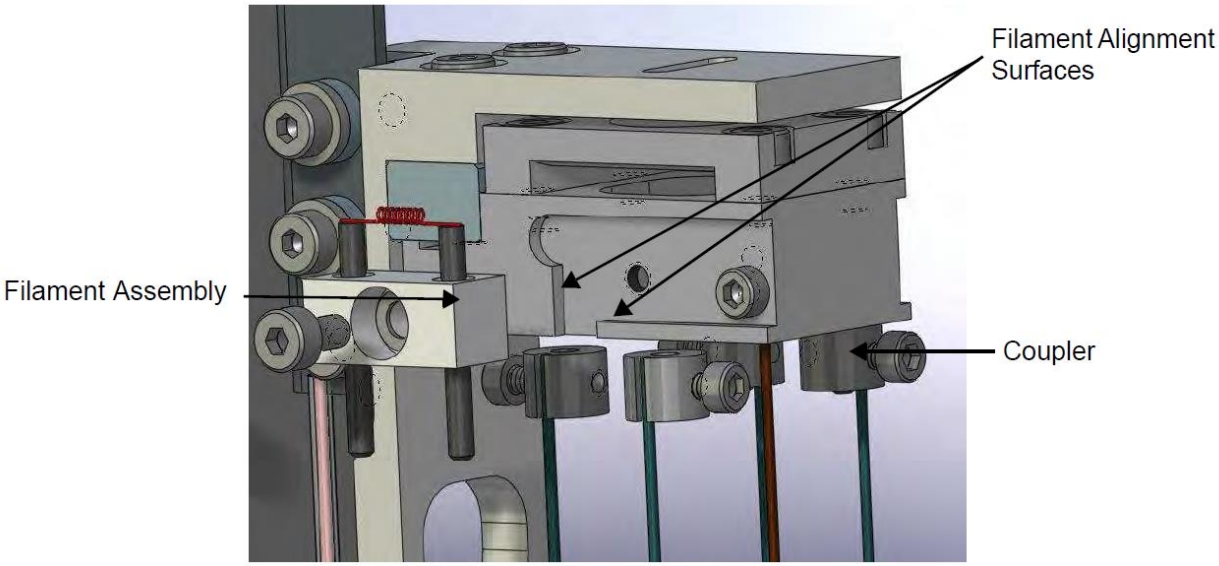

Figure 3-6. Filament removal and replacement

13. Inspect the new filament assembly for deformation, damage, and flaking of the coating prior to installation. Do not install if damaged.
14. Insert new filament assembly into the coupler.

15. Guide the ceramic against the bottom and side surfaces of the ion chamber (see Figure 3-7).

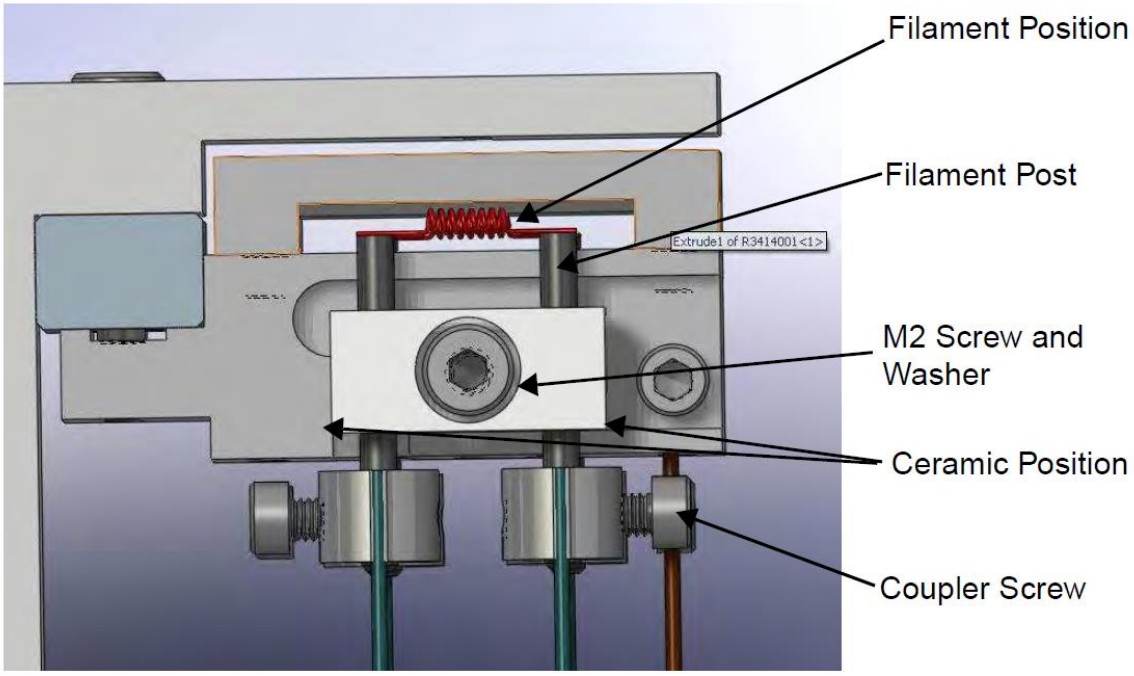

Figure 3-7. Filament positioning

16. While holding the filament in position, insert the M2 screw and washer and tighten using an Allen key.
17. Tighten the coupler screws onto the filament posts. Using small pliers, pull lightly on the extractor and chamber wires to ensure that the coupler screws are secured tightly.
18. Visually verify ceramic is tight against the bottom and left-side ribs. Ensure that the filament is positioned in the slot of the ion source as shown in Figure 3-7.

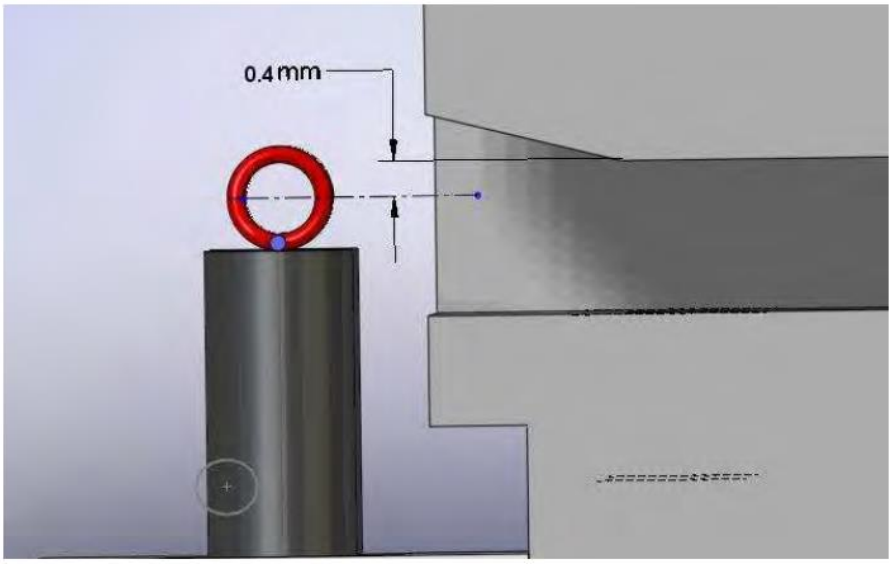

Figure 3-8. Filament alignment

19. Clean the mating surfaces of the spectrometer body and header with isopropyl alcohol and a clean lint free wipe. Agilent recommends use of the Vac-u-solv spectrometer cleaning kit (Agilent part number 670029096). Be careful to ensure no debris or lint remains in the spectrometer body after cleaning
20. Center the replacement metal gasket inside the bolt pattern and outside of the body cavity. To prevent scratching of any sealing surface, do not use metal tools for this task.
21. Guide the spectrometer header into the pocket with the detector housing closest to the inlet.

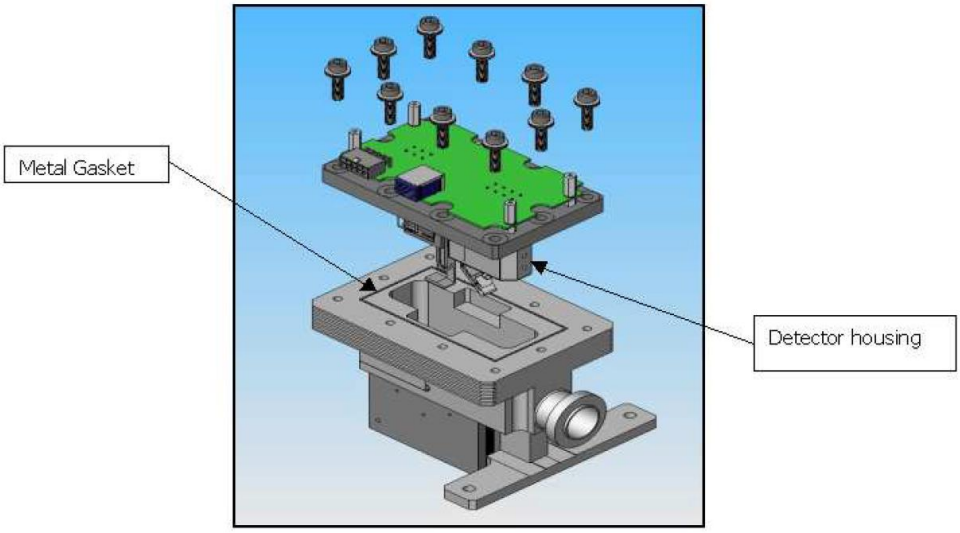

Figure 3-9. Spectrometer alignment

22. Insert a screw with three Belleville washers into each hole and finger tighten (see Figure 3-10).
23. Follow the torqueing pattern in Figure 2-9. Torque screws to 40 in-lbs (4.5 N-m).
24. Re-torque screws to 90 in-lbs (10.2 N-m) following the same pattern. Go through the entire torque pattern twice to ensure the metal gasket is firmly compressed.
25. Wait a minimum of five minutes, then torque the screws again in the same pattern (Figure 3-10) to a value of 90 in-lbs (10.2 N-m). This wait period allows the washers to decompress.

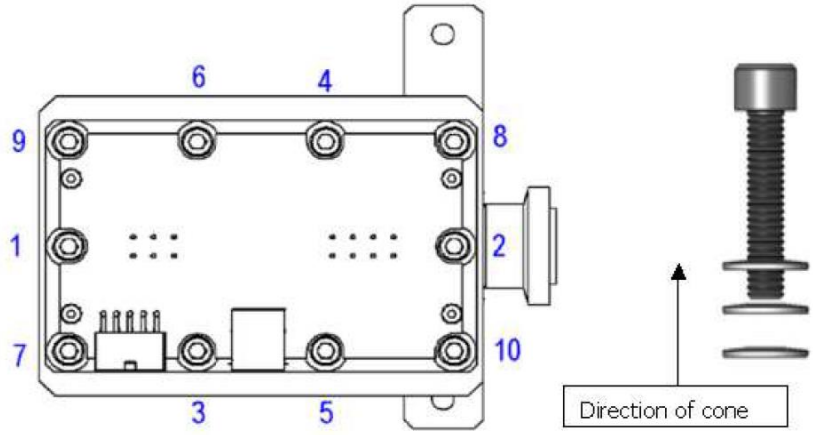

Figure 3-10. Tightening spectrometer header screws

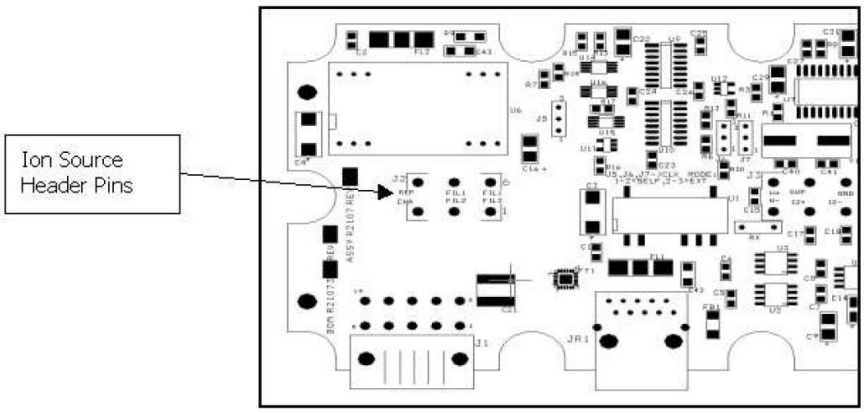

Figure 3-11. Ion source header pin schematic

26. On the PCB, use the resistance meter to verify an open circuit between any two of the six ion source header pins (except FIL-1 to FIL-1 and FIL-2 to FIL-2 which should be 0.3 Ohms or less). Also verify an open circuit between the body of the spectrometer and any of the ion source header pins (Figure 3-11). If there is continuity (short circuit) at any of the points, remove the header and inspect for shorting.

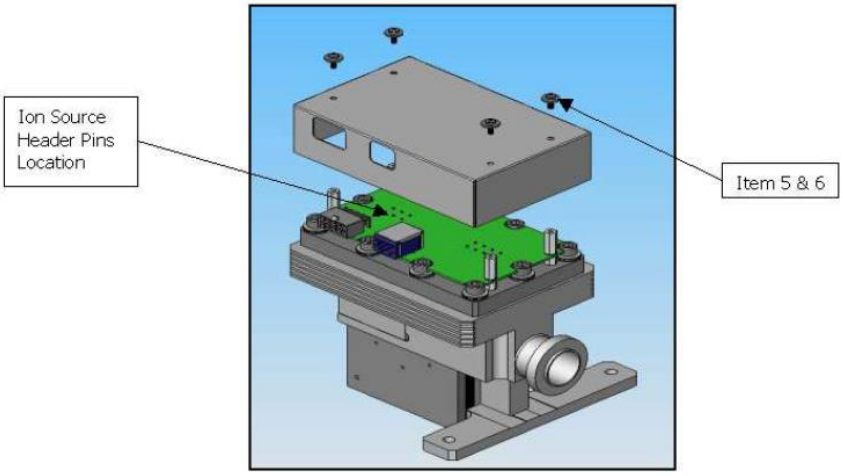

Figure 3-12. Ion source header pin locations

27. Place the spectrometer cover over the header and align the holes (Figure 3-12).
28. Install screws and washers (items 5 & 6), then tighten using a M3 Phillips screw driver (Figure 3-12). Tighten one screw over the ground strap connector.
29. Re-plug in both the pre-amp and ion source cable.
30. Reinstall the leak detector covers and fasten hardware.
31. Power up the leak detector.
32. Let the unit run for 20-30 minutes, then perform a calibration (via the I/O, front panel display, or RS232), per the user manual, to validate a successful installation. Leak check the spectrometer to ensure a leak free seal by spraying helium around the spectrometer metal seal while the leak detector is running in Test, blanked off, after calibration.

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Agilent Vacuum Products Division

Instructions for returning products

Dear Customer,

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

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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, etc.).

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- Remove all accessories from the core product (e.g. inlet screens, vent valves).
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- 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.
- 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.

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- 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.
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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.

- 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 nonreturned/ 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.
- 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.

Agilent Vacuum Products Division

Instructions for returning products

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Address:	Tel:	Fax:
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Equipment			
Product Description:	Agilent Part No.:	Agilent Serial No.:	Original Purchasing Reference:
Failure Description:		Type of Process (for which the equipment was used)	

Type of Return

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☐ Exchange ☐ Repair ☐ Upgrade ☐ Consignment/Demo ☐ Calibration ☐ Evaluation ☐ Return for Credit

Health and safety The product has been exposed to the following substances: (by selecting 'YES' you MUST complete the table to the right)		**Substances** (please refer to MSDS forms) * Agilent will not accept delivery of any product that is exposed to radioactive, biological, explosive substances or dioxins, PCB's without written evidence of decontamination.			
		Trade Name	Chemical Name	Chemical Symbol	CAS Number
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Harmful	☐ YES ☐ NO				
Corrosive	☐ YES ☐ NO				
Reactive	☐ YES ☐ NO				
Flammable	☐ YES ☐ NO				
Explosive (*)	☐ YES ☐ NO				
Radioactive (*)	☐ YES ☐ NO				
Biological (*)	☐ YES ☐ NO				
Oxidizing	☐ YES ☐ NO				
Sensitive	☐ YES ☐ NO				
Other Dangerous Substance	☐ YES ☐ NO				

Goods Preparation

If you have replied YES to one of the above questions. Has the product been purged? ☐ YES ☐ NO
If yes, which cleaning agent/method:

Has the product been drained from oil? ☐ YES ☐ NO ☐ NOT APPLICABLE

I confirm to place this declaration on the outside of the shipping box.

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