MAINTENANCE INSTRUCTIONS

EN

Translation of the Original

ASM 306S

Leak detector

PFEIFFER VACUUM

Disclaimer of liability

These operating instructions describe all models and variants of your product. Note that your product may not be equipped with all features described in this document. Pfeiffer Vacuum constantly adapts its products to the latest state of the art without prior notice. Please take into account that online operating instructions can deviate from the printed operating instructions supplied with your product.

Furthermore, Pfeiffer Vacuum assumes no responsibility or liability for damage resulting from the use of the product that contradicts its proper use or is explicitly defined as foreseeable misuse.

Copyright

Table of contents

1 About this manual

IMPORTANT
Read carefully before use.
Keep the manual for future consultation.

1.1 Validity

This Maintenance manual is intended for Pfeiffer Vacuum customers. It describes the product maintenance operations which can be performed by the customer on the product concerned. **This documentation must be used with the Operating Instructions of the product of the same name.**

1.1.1 Products concerned

This document applies to products with the following part numbers:

Part Number	Description
RSAS00AxMM9A • x: variable according to the “Interface” option selected	ASM 306S

1.1.2 Applicable documents

Document	Part Number
ASM 306S Operating Instructions	127443O*
ASM 306S Condensed Manual	127443C*
Sniffer Probe Condensed Manual	127828C*
MVP 010-3 DC Diaphragm Pump Operating Instructions	PU0071B*

*also available at www.pfeiffer-vacuum.com

1.2 Conventions

1.2.1 Pictographs

Pictographs used in the document indicate useful information.

Note

Tip

Check a key point on the graphic.

Apply the stated tightening torque.

Respect the chronological order of operations and/or assembly/disassembly direction.

Correct, right choice.

Incorrect, wrong choice.

1.2.2 User target group

This maintenance manual is intended for all persons responsible for product maintenance, for the following operations:

- disassembly
- maintenance
- cleaning

The work described in this document must **only** be carried out by persons with suitable technical training (e.g. maintenance technicians) and have completed the necessary training as provided by Pfeiffer Vacuum.

1.2.3 Instructions in the text

Usage instructions in the document follow a general structure that is complete in itself. The required action is indicated by an individual step or multi-part action steps.

Individual action step

A horizontal, solid triangle indicates the only step in an action.

► This is an individual action step.

Sequence of multi-part action steps

The numerical list indicates an action with multiple necessary steps.

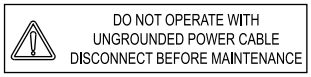
1. Step 1
2. Step 2
3. ...

1.2.4 Labels

INPUTS/OUTPUTS	Inputs/Outputs Interface connector
SERIAL	D-Sub 9 pins RS-232 connector
NETWORK	Ethernet plug
USB	USB plug

1 

This label guarantees to the user that the product packaging has not been opened since leaving the factory.

2 

This label indicates that some of the internal parts are electrically live and could cause electrical shock in case of contact.

- Do not use the product if the power cable is not earthed.
- Disconnect the power cable from the product before servicing the product.

3 

This label indicates that some of the internal parts are electrically live and could cause electrical shock in case of contact.

- Disconnect the power cable from the product before removing the cover.

4 

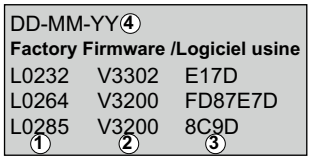
This label indicates the grounding point on the product.

5 

This label indicates that the product has been customized at the customer's request.

6 

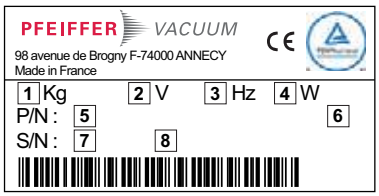
This label indicates that the product has been certified compliant with quality control upon leaving the factory.

9 

This label provides information regarding software installed in the product.

1 Firmware name
2 Firmware version
3 Firmware checksum
4 Publication date

10



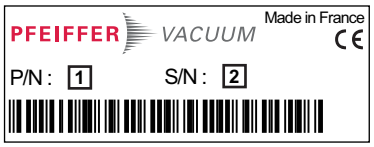
Product identification label.

1	Weight	5	Part Number
2	Operating voltage	6	Description
3	Operating frequency	7	Serial number
4	Maximum power consumption	8	Date of manufacture

11

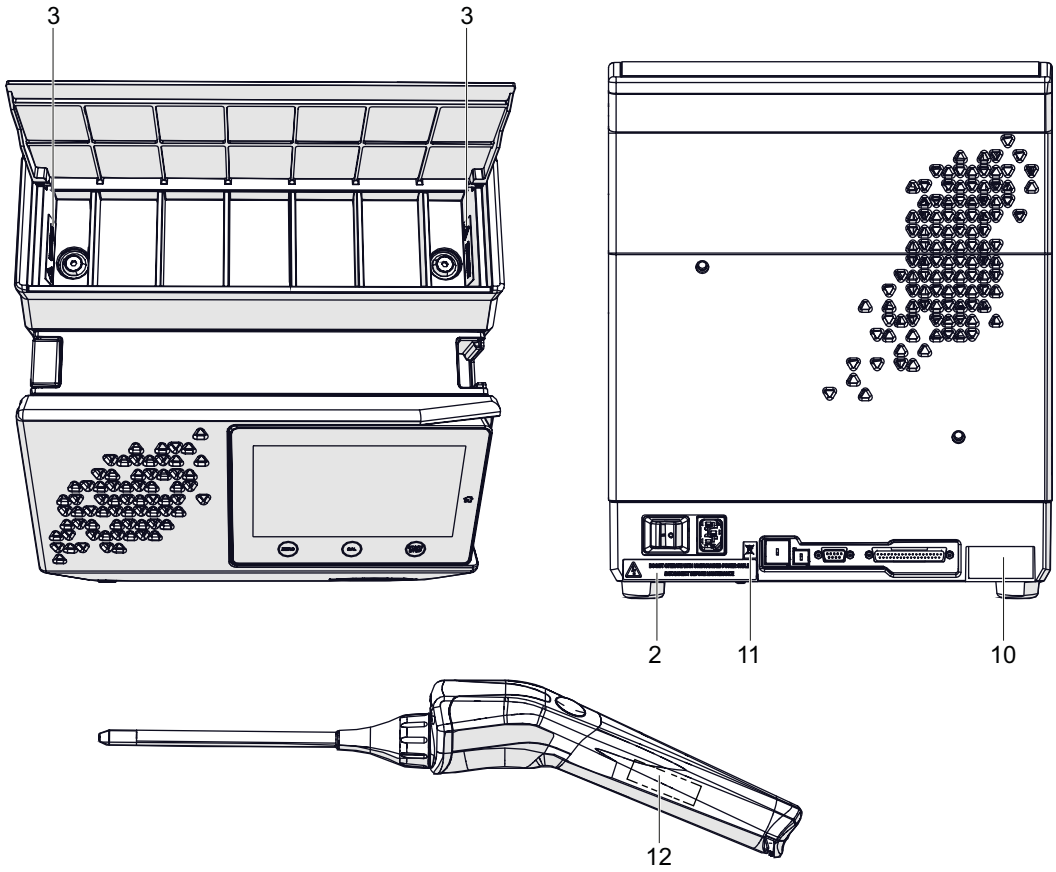
This label indicates that the product is subject to regulations for the treatment of electrical and electronic equipment waste (see the EC declaration of product conformity).

12



Sniffer probe identification label (accessory).

1	Part Number	2	Serial number



1.2.5 Abbreviations

I/O	Input/Output
^{4}He	Helium 4
^{3}He	Helium 3
H_2	Hydrogen
[XXXXXX]	Control panel menus and settings e.g. **[Measure] [Tracer Gas]** to select the tracer gas used for the test.

2 Safety

2.1 General safety information

The following 4 risk levels and 1 information level are taken into account in this document.

⚠ DANGER

Immediately pending danger

Indicates an immediately pending danger that will result in death or serious injury if not observed.

► Instructions to avoid the danger situation

⚠ WARNING

Potential pending danger

Indicates a pending danger that could result in death or serious injury if not observed.

► Instructions to avoid the danger situation

⚠ CAUTION

Potential pending danger

Indicates a pending danger that could result in minor injuries if not observed.

► Instructions to avoid the danger situation

NOTICE

Danger of damage to property

Is used to highlight actions that are not associated with personal injury.

► Instructions to avoid damage to property

Notes, tips or examples indicate important information about the product or about this document.

2.1.1 Safety instructions

All safety instructions in this document are based on the results of the risk assessment carried out in accordance with Low-Voltage Directive 2014/35/EU regarding electrical safety. Where applicable, all life cycle phases of the product were taken into account.

⚠ WARNING

Risk of electric shock due to non-compliant electrical installations

This product uses mains voltage for its electrical supply. Non-compliant electrical installations or installations not done to professional standards may endanger the user's life.

► Only qualified technicians trained in the relevant electrical safety and EMC regulations are authorized to work on the electrical installation.
► This product must not be modified or converted arbitrarily.

⚠ WARNING

Risk of electric shock in case of contact with products that are not electrically isolated

When powering off _mains switch to **O**_, certain components located between the mains connection and the circuit breaker will still contain an electric charge (live). There is a risk of electric shock in case of contact.

► Make sure that the mains connection is always visible and accessible so that it can be unplugged at any time.
► Disconnect the mains cable from the electrical network before working on the product.
► Wait for the control panel screen to turn off completely before working on the product and/or removing the cover(s).

⚠ WARNING

Risk of serious injury due to falling objects

When transporting parts/items by hand, there is a danger of loads slipping and falling down.

- ► Carry small and medium-size parts/items with two hands.
- ► Wear safety shoes with steel toe according to directive EN 347.

⚠ WARNING

Risk of burns in case of contact with hot surfaces

For the operator's safety, the products are designed to avoid thermal risk. However, specific operating conditions may exist that require extra caution on the part of the operator due to the high temperatures (surfaces > 70 °C for parts inside the cover(s)).

- ► Wait for the product to fully cool down before working on it.
- ► Protective gloves must be worn in accordance with standard EN 420.

⚠ CAUTION

Risk of crushing related to product tilting

Although the product fully complies with EEC safety regulations, there is a risk of tilting when the product is not correctly installed or used.

- ► Place the product on a flat, hard floor.
- ► Keep the product on its 4 feet.

⚠ CAUTION

Risk of pinching when handling the storage box cover

- ► Be careful not to leave your fingers under the cover when closing.

⚠ DANGER

Health hazard in case of contact with components contaminated

The components of the pumping circuit and the analyzer cell are contaminated with the gases pumped through the tested parts. These gases may be toxic, corrosive and/or reactive. Any contact with the contaminated parts or by-products generated by the process may be injurious to health.

- ► Wear appropriate protective equipment when performing maintenance on the components of the pumping line, vacuum block and analyzer cell.
- ► Ventilate the area thoroughly or carry out the maintenance under an extraction hood.
- ► Do not eliminate the by-products/residue as common waste; have them destroyed by a qualified company where necessary.

⚠ WARNING

Poisoning risk in case of gas leakage after maintenance

When connecting/disconnecting pumping line components (pumps, analyzer cell, vacuum block, pipework, valves, etc.) for maintenance, the leaktightness of the installation is broken, potentially causing leakage of hazardous residual gases (pumped gases for parts to be tested).

- ► During disassembly, always protect the bearing surfaces of the connecting flanges between the pumping line components.
- ► After reassembly, perform a leak test on the pumping line of the detection system.

2.1.2 Precautions

Duty to provide information on potential dangers

The product holder or user is obliged to make all operating personnel aware of dangers posed by this product.

Every person who is involved in the installation, operation or maintenance of the product must read, understand and adhere to the safety-related parts of this document.

Infringement of conformity due to modifications to the product

The Declaration of Conformity from the manufacturer is no longer valid if the operator changes the original product or installs additional equipment.

- Following the installation into a system, the operator is required to check and re-evaluate the conformity of the overall system in the context of the relevant European Directives, before commissioning that system.

Only qualified personnel trained in safety regulations (EMC, electrical safety, chemical pollution) are authorized to carry out the installation and maintenance described in this manual. Our service centers can provide the necessary training.

- ► Do not expose any part of the human body to the vacuum.
- ► Follow the safety and accident prevention requirements.
- ► Regularly check compliance with all precautionary measures.
- ► Do not turn on the product if the cover is not in place.

3 General information

3.1 Spare parts

Replacement of defective parts

The initial safety conditions of the product call into question if non-original parts are used.

- Use only spare parts available for order from Pfeiffer Vacuum Service (see chapter “Spare parts”, page 28).
- To identify the product and communicate with Pfeiffer Vacuum look at the product's identification label.

3.2 Preparatory work

The detector does not require any maintenance at the customer’s premises, except for the sub-assembly maintenance described in this manual. All other maintenance must be carried out by our service center (see chapter “Service solutions by Pfeiffer Vacuum”, page 26).

NOTICE

Damage to the equipment if a detector is handled while switched on

If it is necessary to move or work on the product, the user must first make sure that the detector is fully shut down, otherwise there is a risk of damage to some of the detector components. When the main switch/circuit breaker is set to **O**:

- ► Unplug the power cable.
- ► Wait for the control panel screen to turn off completely before working on the product and/or removing the cover(s).
- ► Wait 5 minutes after power-off before working on the product.

Procedure

To ensure the proper operation of the detector after on-site maintenance, follow the recommendations provided below:

- ► Handle the detector so it can be moved in the maintenance area (see chapter “Handling” of the Operating instructions.)
  - – Clean, dust-free room.
- ► Wear suitable protective equipment.
- ► Use the recommended tools for each maintenance operation.
  - – If necessary, a maintenance set is available to order (see chapter “Tools”).
- ► Always protect the surfaces of connecting flanges (analyzer cell, pumps and pipework).
- ► After reassembly, perform a leak test on the entire pumping line of the detection system: **leak rate < 1 · 10^{-7} mbar·l/s** (1 · 10^{-8} Pa·m^3/s).

4 Maintenance intervals and responsibilities

Maintenance operations for levels 1 and 2 of the interval table are described in this manual.

Level 3 overhaul operations require a technician from the Pfeiffer Vacuum Service network.

Operation	Number of hours in use	Level [1)]	Site [2)]
Analyzer cell			
Seal replacement	As needed	II	OS
Filament replacement	As needed	II	OS
Overhaul of analyser cell	As needed	III	OS
Sniffer probe (accessory)			
Filter replacement	According to conditions of operation.	I	OS
SplitFlow 30 turbomolecular pump			
TC 110 electronic unit replacement	As needed	II	OS
Oil reservoir replacement	4 years	III	OS
Pump replacement	4 years	III	OS
MVP 010-3 DC diaphragm pump			
Diaphragm replacement	15000 h	II	OS
Pump replacement	As needed	II	OS
Fan			
Fan replacement	As needed	II	OS
Replacement of the fan air filter	As needed	I	OS
Calibrated leak (accessory)			
Calibrated leak replacement	Every 2 years	II	OS
Valves			
Solenoid valves replacement	As needed	II	OS
Leak detector			
Overhaul of the detector	According to conditions of operation. Every 4 years (recommended).	III	OS/WS

1) Maintenance level
- I: Operator
- II: Technician with Pfeiffer Vacuum training
- III: Pfeiffer Vacuum service technician

2) Maintenance site
- OS: on customer site
- WS: Pfeiffer Vacuum service center

Maintenance time monitoring

The diaphragm pump and turbomolecular pump maintenance counters alert the operator that a maintenance operation must be performed (see chapter “Timers before next maintenance” of the operating instructions).

How to contact us

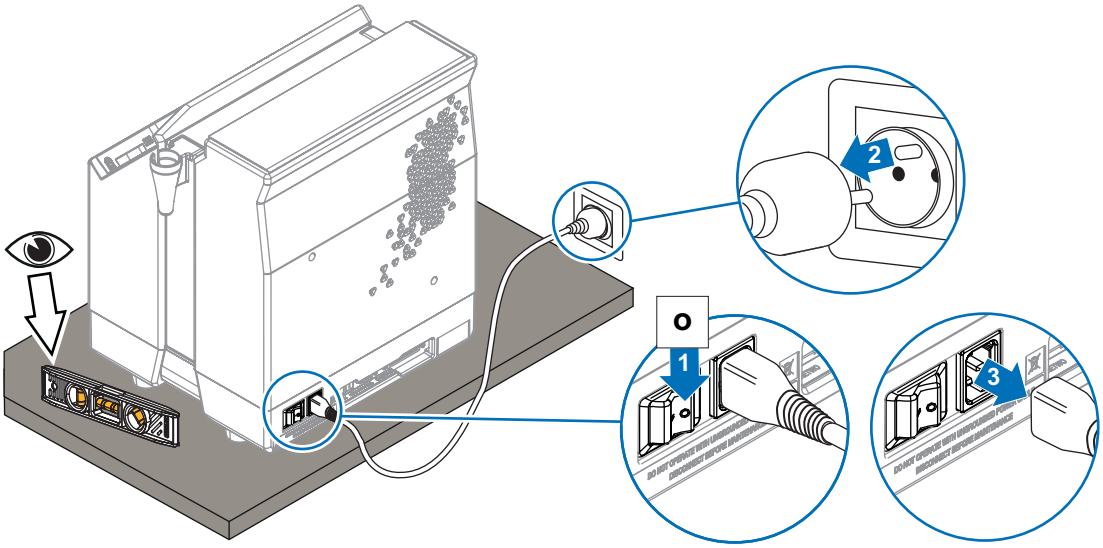
Product overhauls must be carried out by personnel with manufacturer training. Contact our nearest service center at the following e-mail address: Pfeiffer Vacuum Service Support.

5 Service - Maintenance

5.1 Cleaning

► Clean the cover using a clean, lint-free cloth and a product that will not damage the screen-printed surfaces or adhesive labels.

5.2 Powering off

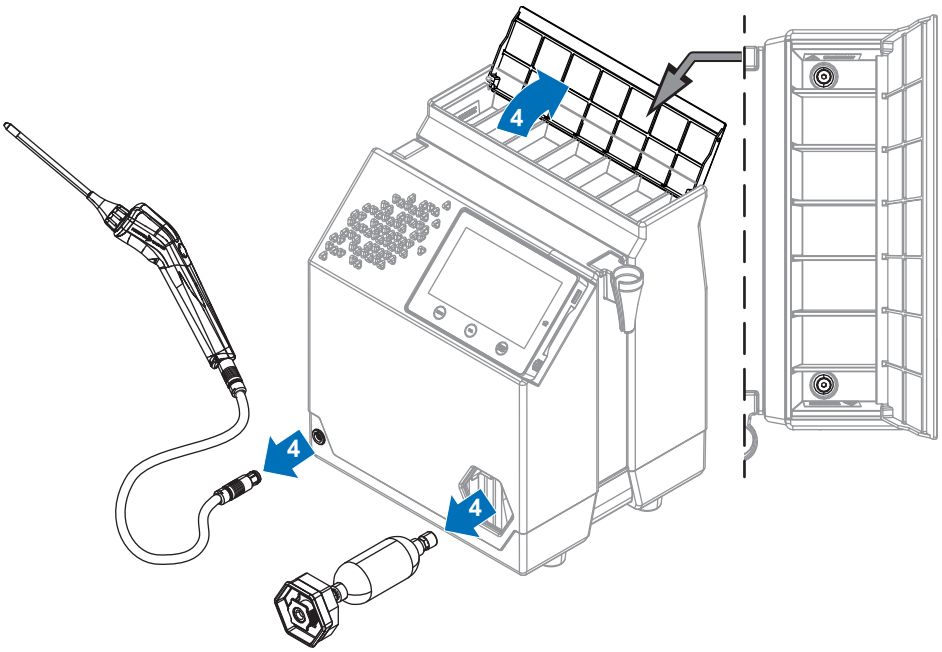


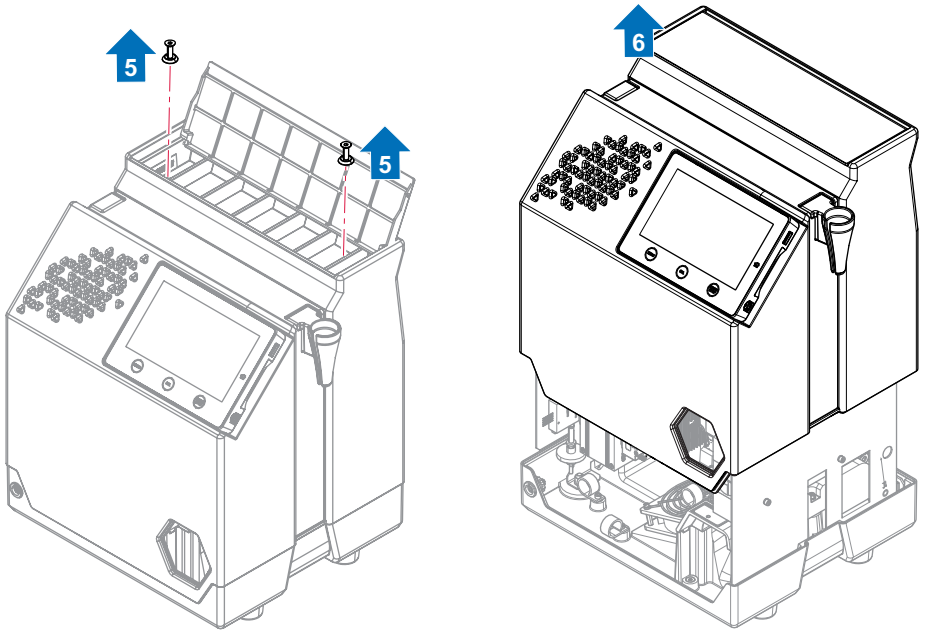
The detector is installed on a **horizontal** work surface.

5.3 Cover disassembly/reassembly

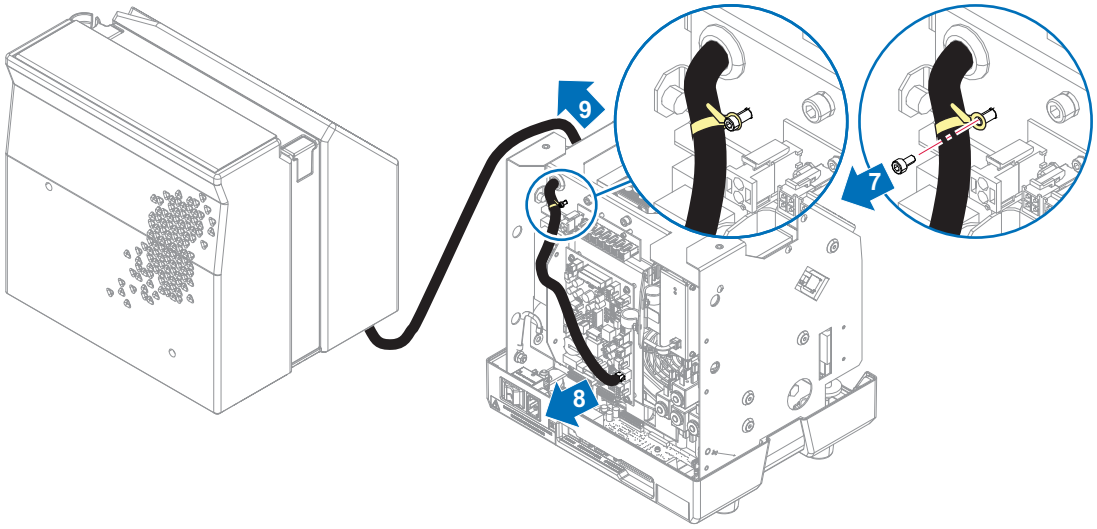
Disassembly

► Power off the leak detector (see chapter “Powering Off”).





The cover can be removed without disconnecting the control panel, the cable is long enough. To fully release the cover, disconnect the cable and remove the control panel connector.



Reassembly

1. Connect the control panel connector to the supervisor board and attach the cable with the screw as indicated in the diagram.
2. Follow the disassembly steps in reverse.

5.4 Calibrated leak replacement (accessory)

A spare calibrated leak is recommended.

► Every time a calibrated leak is replaced, update the calibrated leak setting (see chapter “Calibrated leak setting” in the Operating Instructions.)

This operation can be carried out with the information featured on the calibrated leak identification label or the calibrated leak certificate supplied with the leak.

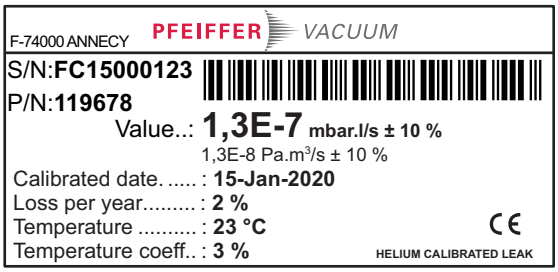


Fig. 1: Example of calibrated leak identification label

5.5 Analyzer cell maintenance

Vacuum component maintenance conditions

During vacuum component maintenance operations, avoid any contamination which could subsequently result in the degassing of the parts. Special caution must be exercised to ensure cleanliness. To avoid this:

- Perform the maintenance in an appropriate area (clean, dust-free and ventilated).
- Use non-woven materials.
- Dust the parts with filtered dry air.
- Wear unpowdered vinyl gloves (clean room gloves).

5.5.1 Disassembly/reassembly of the analyzer cell

⚠ WARNING

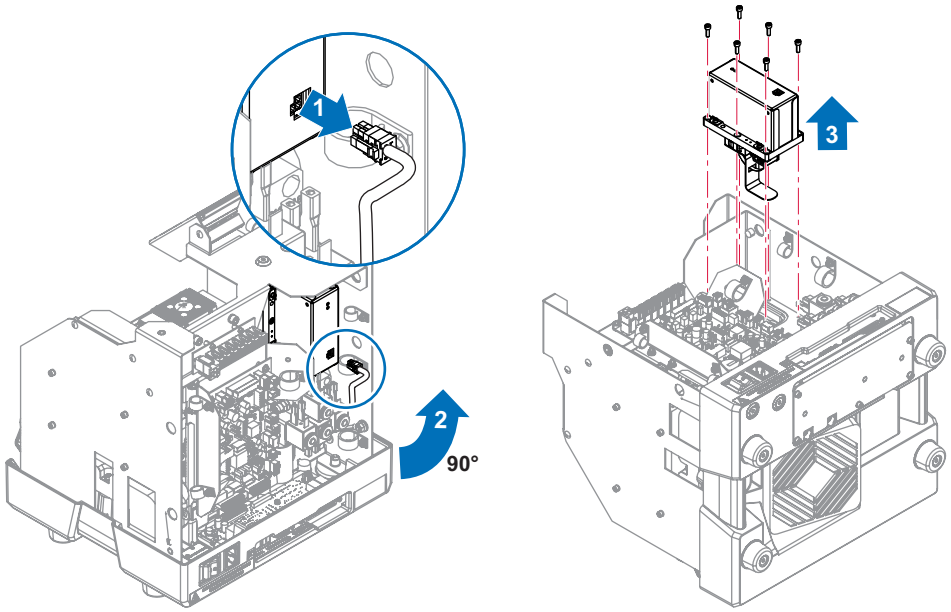
Risk of burns in case of contact with hot surfaces

For the operator's safety, the products are designed to avoid thermal risk. However, specific operating conditions may exist that require extra caution on the part of the operator due to the high temperatures (surfaces > 70 °C for parts inside the cover(s)).

► Wait for the product to fully cool down before working on it.
► Protective gloves must be worn in accordance with standard EN 420.

Disassembly

1. Create an air inlet on the analyzer cell from the menu **[Maintenance] [Maintenance turbo pump & cell] [Stop and vent]** (see chapter "Information" in the operating instructions).
2. Power off the leak detector (see chapter "Powering Off").
3. Remove the cover (see chapter "Cover disassembly/reassembly").



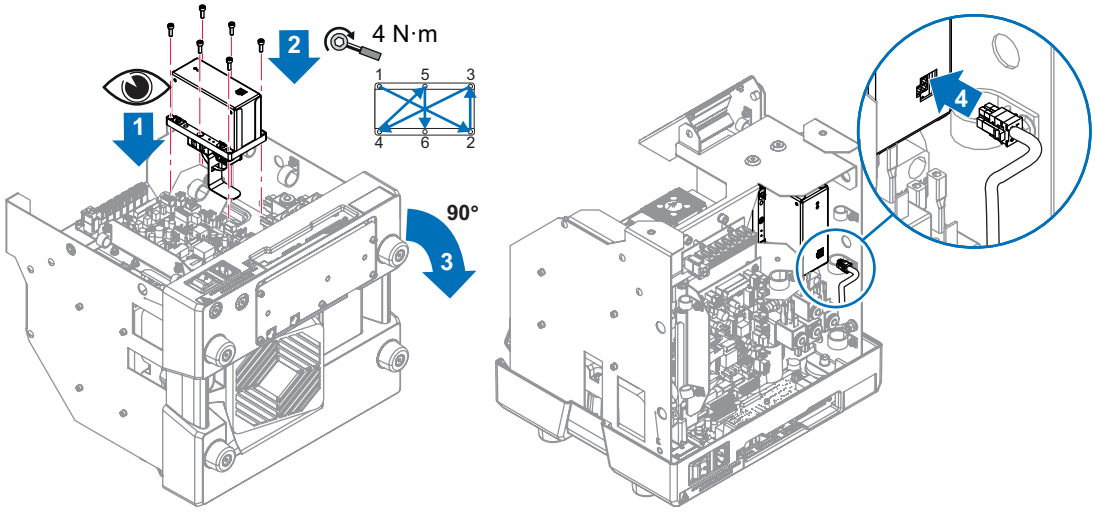
Reassembly

Distortion of the measurement results with non-compliant analyser cell

When it leaves the factory, the analysis cell is configured for the product in which it is installed.

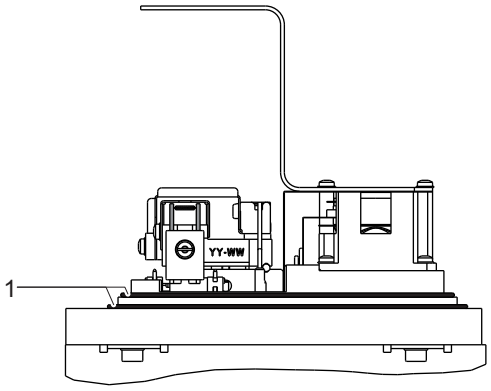
The use of an analysis cell different from the original component requires adjustments. Without these settings, the measurements made by the product are not correct. Only a Pfeiffer Vacuum service center can make these adjustments.

It is mandatory to reassemble the original analysis cell.



The reassembled analyzer cell is the original analyzer cell of the detector, which was previously dismantled.

5.5.2 Seal replacement



1 Seals

1. Remove the detector analyzer cell (see chapter “Disassembly/reassembly of the analyzer cell”).
2. Check the condition of the seals: change them if necessary.
3. Replace the 2 seals (see chapter “Leak detector spare parts”). **Never lubricate the seals.**

5.5.3 Filament replacement

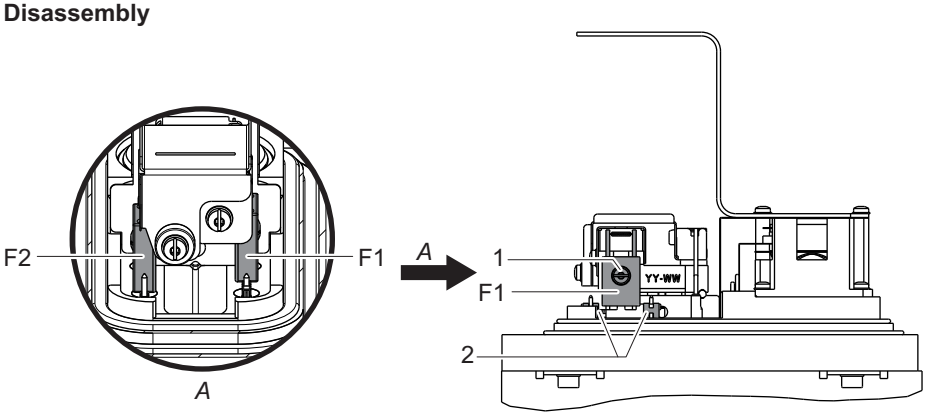
NOTICE

Distortion of product performance due to damaged filament

Oxydation of the iridium filament is normal. Contact of the filament with other materials or hands may damage it..

- ► Do not touch the filament with fingers.
- ► Do not dust the filament with pressurized air or by blowing on it.

Disassembly

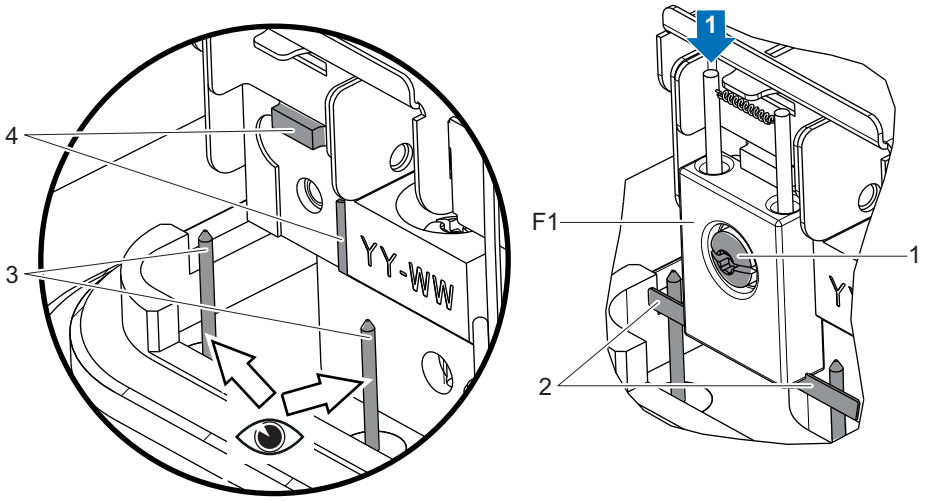


F1 Filament 1
F2 Filament 2

1 Fixing screw and washer
2 Fastening clips

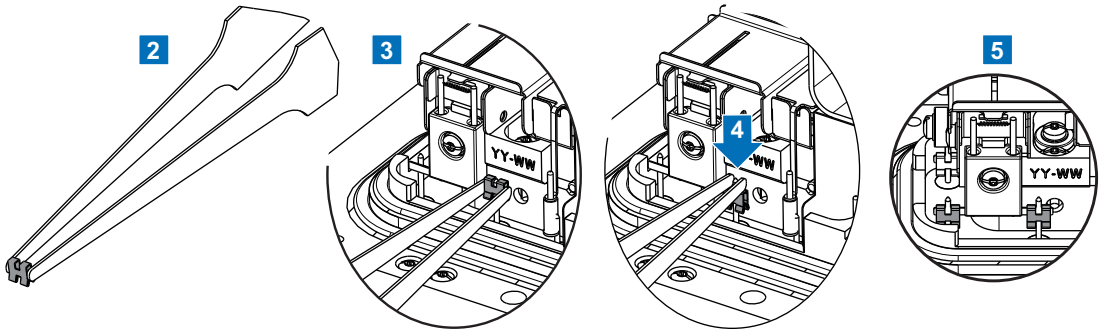
1. Remove the detector analyzer cell (see chapter “Disassembly/reassembly of the analyzer cell”).
2. Remove the fixing screw and washer of the defective filament.
3. Remove the 2 fastening clips using flat pliers (2 new clips are supplied with the spare filament) (see chapter “Leak detector spare parts”).

Reassembly



F1 Filament 1
1 Fixing screw and washer
2 Filament strip
3 Connectors
4 Centering stops

The connectors are perpendicular to the supporting surface and parallel to each other.

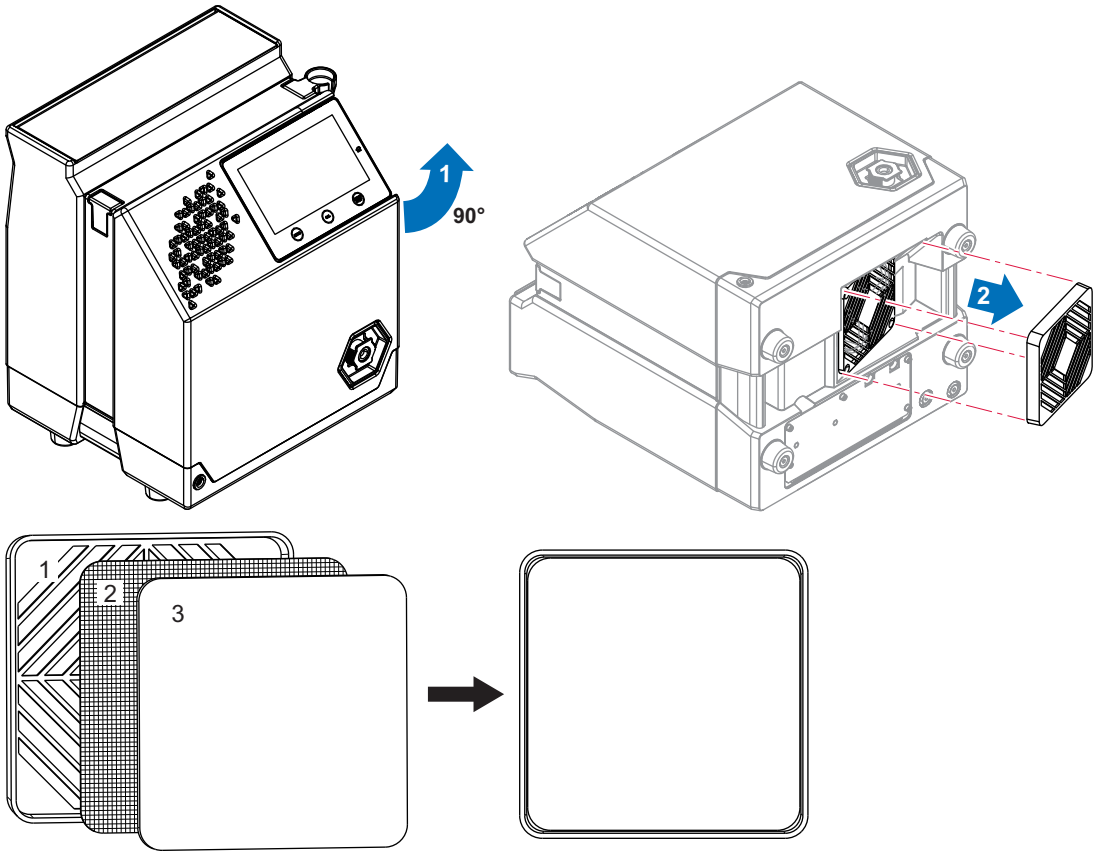


1. Place the new filament on its housing against both centering stops. Fix it with the screw and washer provided with the filament.
2. Fit the fastening clips on the connectors on each side of the filament.
3. Reassemble the analyzer cell (see chapter “Disassembly/reassembly of the analyzer cell”).
4. Update the replaced filament maintenance counter from the menu **[Maintenance] [Information] [Analyzer Cell] [Filament #1]/[Filament #2] [Reset time]** (see chapter “Information” of the Operating Instructions).

5.6 Fan maintenance

5.6.1 Air filter replacement

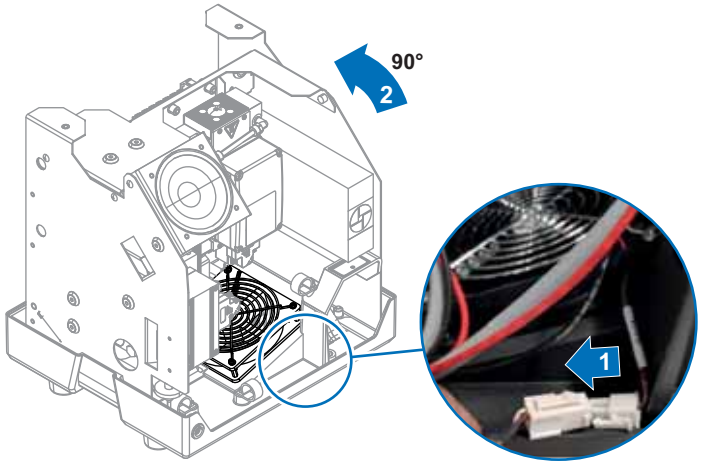
► Power off the leak detector (see chapter “Powering Off”).

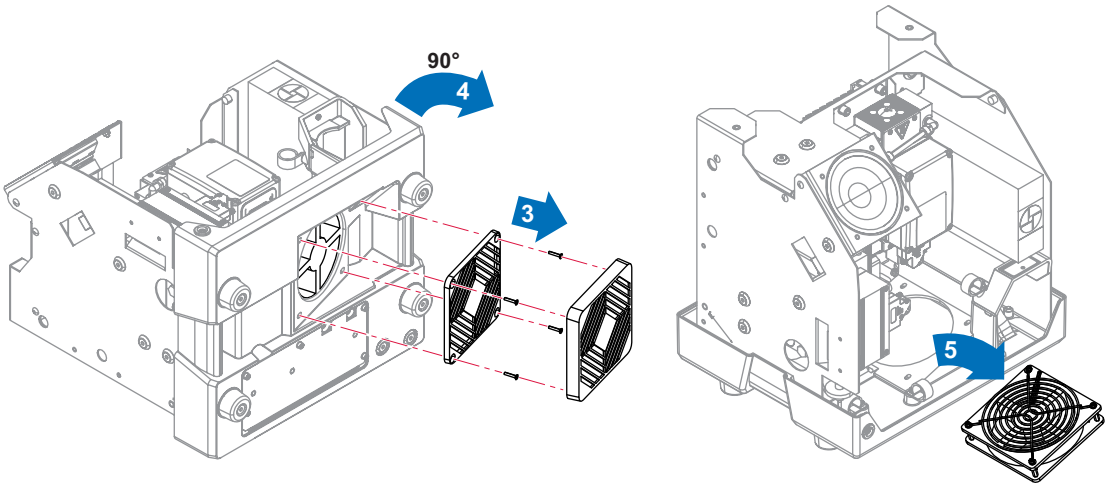


5.6.2 Fan replacement

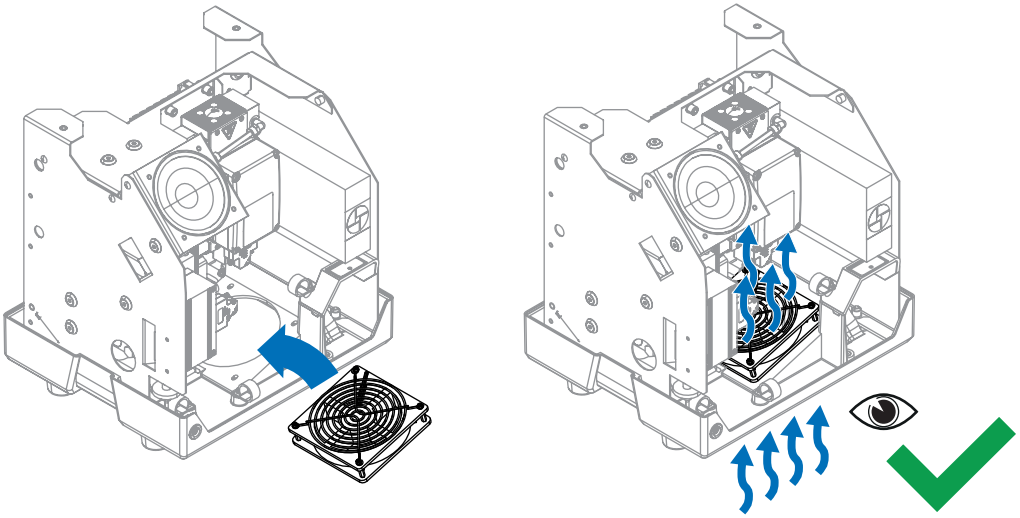
Disassembly

1. Power off the leak detector (see chapter “Powering Off”).
2. Remove the cover (see chapter “Cover disassembly/reassembly.”)





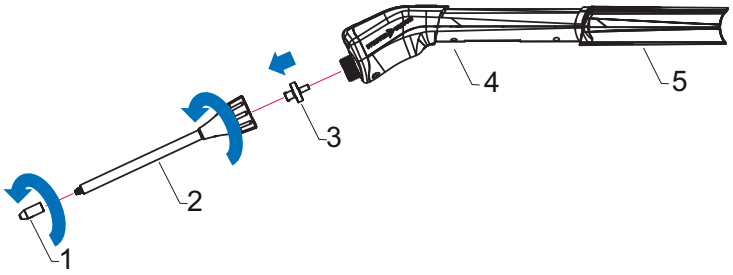
Reassembly



The fan propels air from the exterior to the interior of the detector.

► Follow the disassembly steps in reverse.

5.7 Sniffer probe maintenance (accessory)



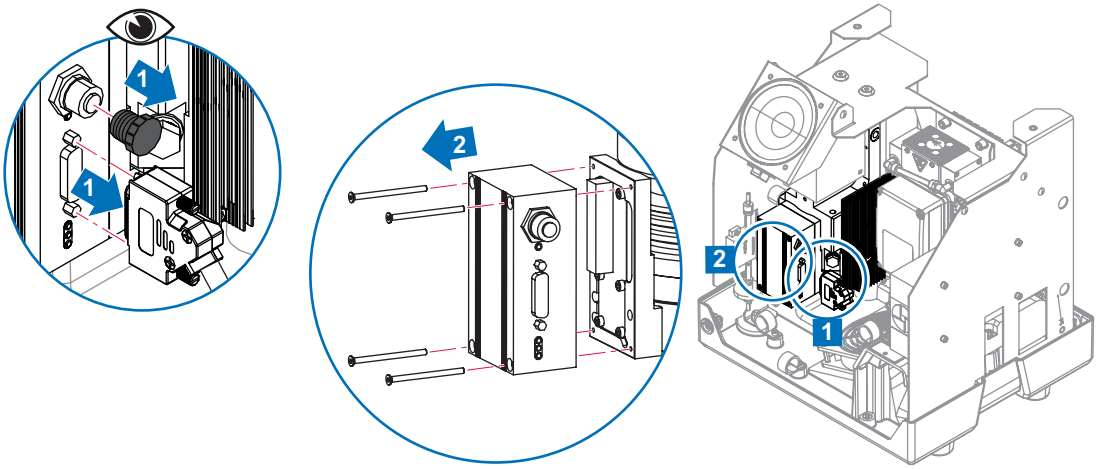
1 Tip filter
2 Rod
3 Intermediate filter for small particles
4 Probe body
5 Sleeve

(See chapter “Accessory spare parts”).

5.8 Replacement of TC 110 electronic unit of the turbomolecular pump

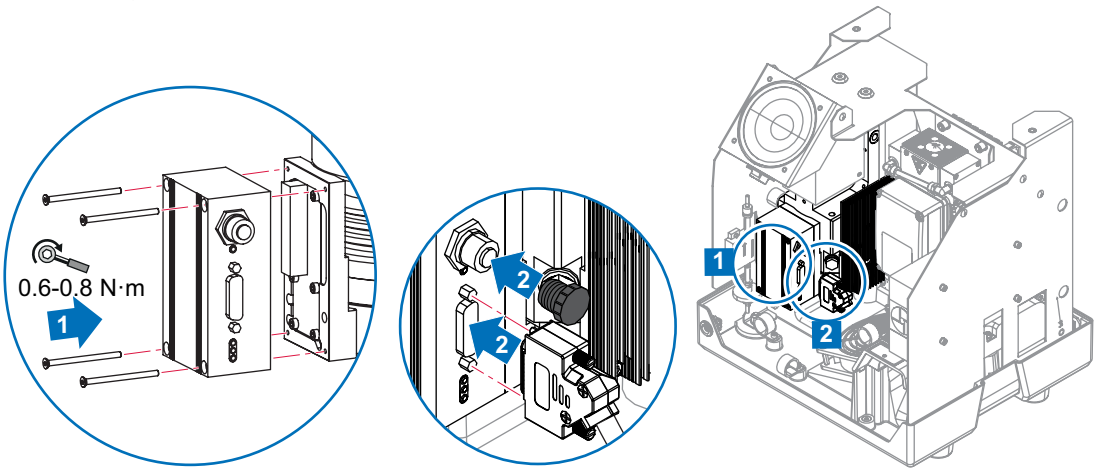
Disassembly

1. Create an air inlet on the analyzer cell from the menu **[Maintenance] [Maintenance turbo pump & cell] [Stop and vent]** (see chapter “Maintenance turbo pump & cell” in the operating manual).
2. Power off the leak detector (see chapter “Powering Off”).
3. Remove the cover (see chapter “Cover disassembly/reassembly”).



The black plug **must** be kept, as it is not provided with the new component.

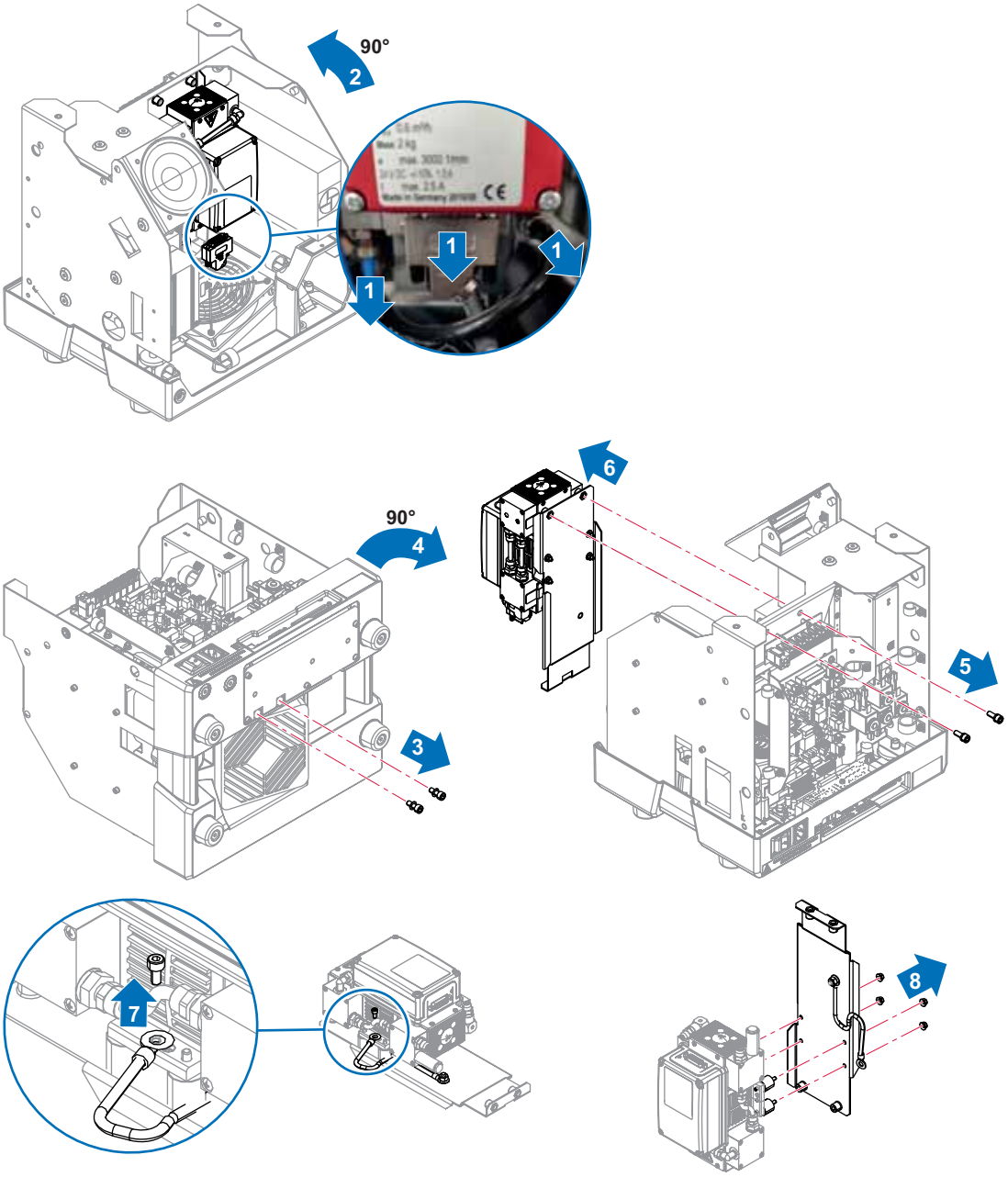
Reassembly



5.9 Diaphragm pump replacement

Disassembly

1. Create an air inlet on the analyzer cell from the menu **[Maintenance] [Maintenance turbo pump & cell] [Stop and vent]** (see chapter “Maintenance turbo pump & cell” in the operating manual).
2. Power off the leak detector (see chapter “Powering Off”).
3. Remove the cover (see chapter “Cover disassembly/reassembly”).



Reassembly

1. Follow the disassembly steps in reverse.
2. Update the diaphragm pump maintenance counter from the menu **[Maintenance] [Information] [Backing Pump] [Reset timer]** (see chapter “Information” of the operating manual).

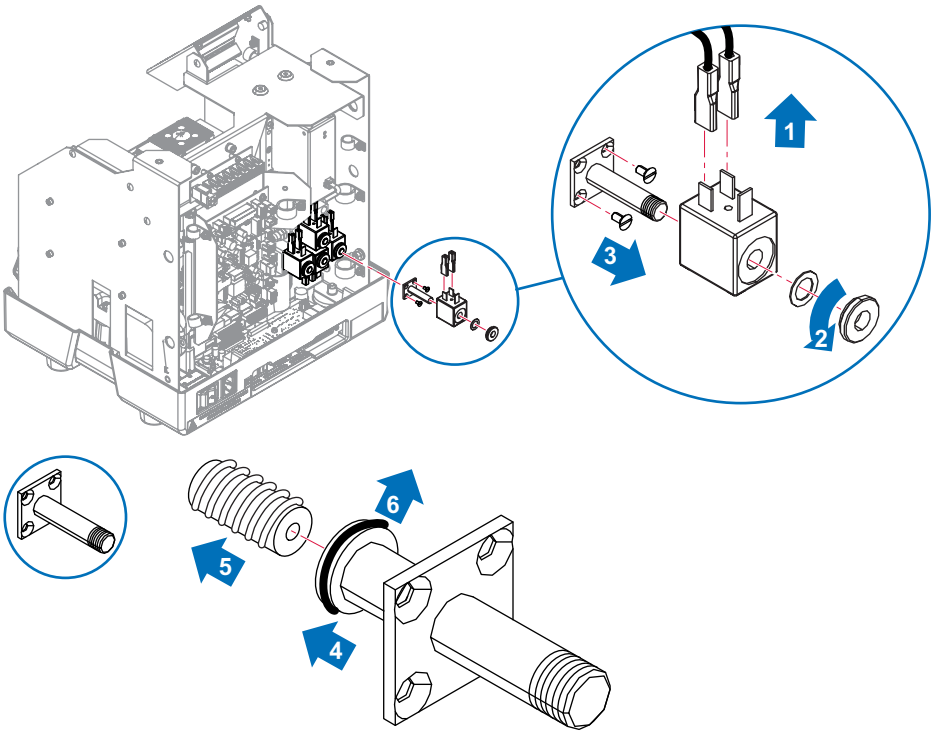
Diaphragm replacement

► See the diaphragm pump Operating Instructions (see chapter “Applicable Documents”).

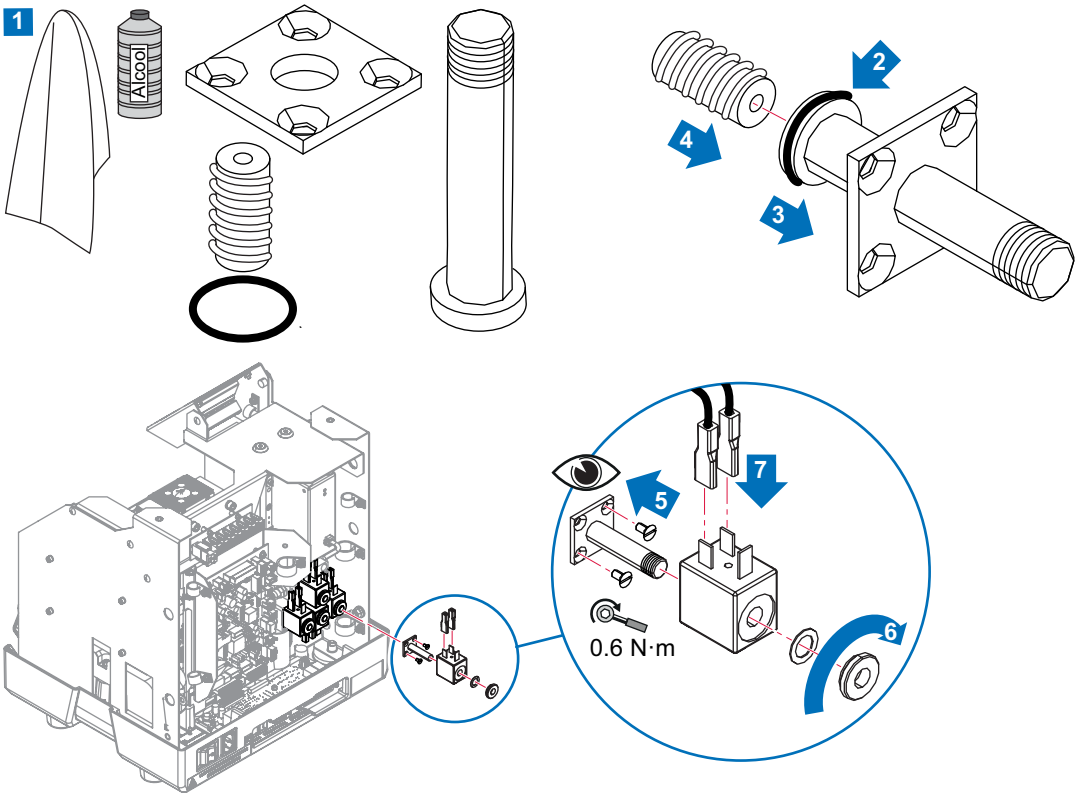
5.10 Solenoid valve replacement

Disassembly

1. Create an air inlet on the analyzer cell from the menu **[Maintenance] [Maintenance turbo pump & cell] [Stop and vent]** (see chapter “Maintenance turbo pump & cell” in the operating manual).
2. Power off the leak detector (see chapter “Powering Off”).
3. Remove the cover (see chapter “Cover disassembly/reassembly”).



Remontage



The o-ring must stay in the valve groove. **Be careful not to pinch the o-ring** when reassembling the solenoid valve on the vacuum block.

6 Decommissioning

6.1 Shutting down for longer periods

If the detector must be shut down for an extended period of time, after use it is recommended that you:

1. Apply the extended storage procedure (see chapter “Storage” of the Operating Instructions).
2. Keep the detector in its original packaging or under its protective cover in a dust-free environment.
3. Recommission according to the instructions in the chapter “Operation” of the Operating Instructions. If a problem occurs, contact your Pfeiffer Vacuum service center.

6.2 Disposal

Environmental protection

The product and its components **must be disposed of in accordance with the applicable regulations relating to environmental protection and human health**, with a view to reducing natural resource wastage and preventing pollution.

Our products contain various recyclable materials: iron, steel, stainless steel, cast iron, brass, aluminum, nickel, copper, PTFE, FEP.

Familiarize yourself with the service request procedure and fill in the declaration of contamination when returning products to our service centers (see chapter “Service solutions by Pfeiffer Vacuum”, page 26).

6.2.1 Restriction of Hazardous Substances (RoHS)

The ‘Restriction of Hazardous Substances’ (RoHS) directive

The R.O.H.S. directive lays down rules on the restriction of the use of hazardous substances in electrical and electronic equipment (EEE) with a view to contributing to the protection of human health and the environment, including the environmentally sound recovery and disposal of WEEE.

The manufacturer must ensure that EEE placed on the market, including cables and spare parts intended for repair, reuse, update or capacity building, contain hazardous substances subject to limitation to the extent permitted by law.

6.2.2 Electrical and Electronic Equipment (EEE)

Electrical and Electronic Equipment (EEE) contain polluting material (electronic boards, batteries, screens, capacitors, mercury, etc.)

Depollution and subsequent recycling of this equipment are necessary to preserve our natural resources and particularly strategic raw materials.

This product bears the identification logo because it is subject to regulations on the management of Waste from EEE.

The manufacturer shall only be required to take back EEE marked adixen or Pfeiffer Vacuum sold by Pfeiffer Vacuum:

- EEE subject to applicable regulations for recycling end-of-life products;
- Complete, non modified EEE using original Pfeiffer Vacuum spare parts and including all of their assemblies and sub-assemblies, excluding batteries.

Product on sale on French soil

In the absence of any specific contract and pursuant to current applicable legislation (and Articles R543-172 et seq. of the Environment Code in particular), all EEEs sold by Pfeiffer Vacuum on French soil are covered by the organization and financing of removal and treatment of waste from EEEs provided by Pfeiffer Vacuum.

In order to fulfill its obligations, Pfeiffer Vacuum finances the collection and recycling of waste from EEE by subscribing to **Récylum**. This voluntary arrangement enables owners of EEEs on French soil to benefit from easy, free solutions to ensure that EEEs subject to the regulations are recycled.

To find out more about the collection solutions, contact Récylum who will inform you of the best collection solution for your needs: www.recylum.com.

For further details, consult the General Conditions of Sale available in French on the Pfeiffer Vacuum website.

Product on sale outside of France

In the absence of any specific contract and pursuant to Directive 2012/19/EC on the treatment of waste from EEE, for all EEE sold by Pfeiffer Vacuum outside of France (European Union and third countries), the owner shall be exclusively responsible for organizing and financing the collection and treatment of waste from EEE sold by Pfeiffer Vacuum.

The owner is exclusively responsible, in particular, for its collection (gathering, sorting and storage of waste for its transportation to the treatment site), recycling, recovery and/or disposal, unless otherwise required by legal provisions applicable in the country where the owner is located, which must be reported to Pfeiffer Vacuum by the owner.

7 Malfunctions

7.1 Operation monitoring

During operation, the user is notified of an incident on the detector control panel and on the sniffer probe.

Type of fault	Control panel		Sniffer probe [1]
Warning	i Next	Click on the **i Next** pictograph to display the fault.	**'Standby' mode** ● LED status ● LED bargraph **'Measurement' mode** ● LED status ● LED bargraph : color according to the reject set point value
Error	! i Next	Message display. Click on the **i Next** pictograph to display the fault.	● LED status ● LED bargraph
Critical error	✕	Display of a "Critical error - E244" message. Contact a service center.	● LED status ● LED bargraph

1) LED display coding: see chapter "Description of the sniffer probe" of the operating instructions.

Tbl. 1: Operation monitoring

7.2 Fault display

The fault is displayed by pressing on the **i Next** pictograph.

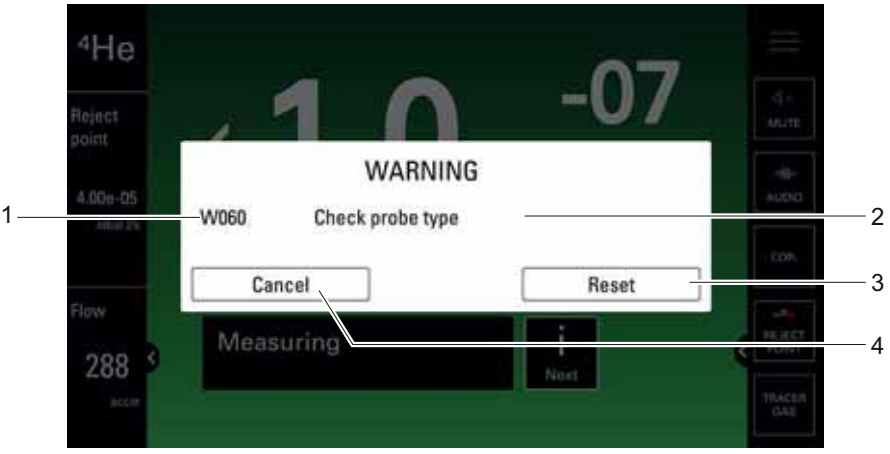


Fig. 2: Warning window

1. Fault code
2. Fault description
3. To delete the warning: it will be displayed again if the problem has not been solved.
4. To exit the display without eliminating the fault.

8 Service solutions by Pfeiffer Vacuum

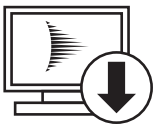
We offer first-class service
High vacuum component service life, in combination with low downtime, are clear expectations that you place on us. We meet your needs with efficient products and outstanding service.

We are always focused on perfecting our core competence – servicing of vacuum components. Once you have purchased a product from Pfeiffer Vacuum, our service is far from over. This is often exactly where service begins. Obviously, in proven Pfeiffer Vacuum quality.

Our professional sales and service employees are available to provide you with reliable assistance, worldwide. Pfeiffer Vacuum offers an entire range of services, from original replacement parts to service contracts.

Make use of Pfeiffer Vacuum service
Whether preventive, on-site service carried out by our field service, fast replacement with mint condition replacement products, or repair carried out in a Service Center near you – you have various options for maintaining your equipment availability. You can find more detailed information and addresses on our homepage, in the Pfeiffer Vacuum Service section.

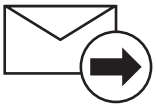
You can obtain advice on the optimal solution for you, from your Pfeiffer Vacuum representative.
For fast and smooth service process handling, we recommend the following:



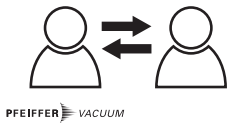
1. Download the up-to-date form templates.
   - Explanations of service requests
   - Service requests
   - Contamination declaration

a) Remove and store all accessories (all external parts, such as valves, protective screens, etc.).
b) If necessary, drain operating fluid/lubricant.
c) If necessary, drain coolant.

2. Complete the service request and contamination declaration.

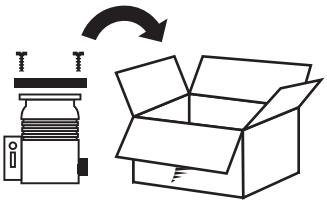


3. Send the forms by email, fax, or post to your local Service Center.

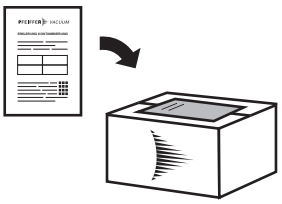


4. You will receive an acknowledgment from Pfeiffer Vacuum.

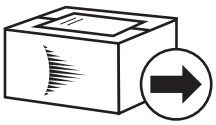
Submission of contaminated products
No microbiological, explosive, or radiologically contaminated products will be accepted. Where products are contaminated, or the contamination declaration is missing, Pfeiffer Vacuum will contact you before starting service work. Depending on the product and degree of pollution, **additional decontamination costs** may be incurred.



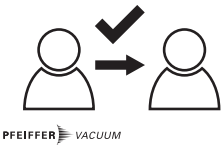
5. Prepare the product for transport in accordance with the provisions in the contamination declaration.
a) Neutralize the product with nitrogen or dry air.
b) Seal all openings with blind flanges, so that they are airtight.
c) Shrink-wrap the product in suitable protective foil.
d) Package the product in suitable, stable transport containers only.
e) Maintain applicable transport conditions.



6. Attach the contamination declaration to the **outside** of the packaging.



7. Now send your product to your local Service Center.



8. You will receive an acknowledgment/quotation, from Pfeiffer Vacuum.

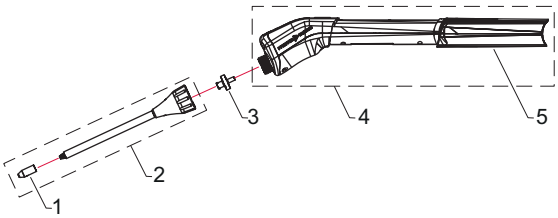
Our sales and delivery conditions and repair and maintenance conditions for vacuum devices and components apply to all service orders.

9 Spare parts

9.1 Tools

Description	Qty	Part Number
The maintenance set contains:		**114718**
Box-shank nut spinner	1	-
Screwdriver for TORX® 6x35 screws	1	-
CHC M4x80 screws	1	-
CHC M4x12 screws	3	-
M4 washer	3	-
CHC M3x6 screws	4	-
M3 washer	4	-
2.5 mm male hex wrench	1	-
3 mm male hex wrench	1	-
4 mm male hex wrench	1	-
5 mm male hex wrench	1	-
3G analyzer cell seal	2	-
ANXR 20x100 screwdriver	1	-

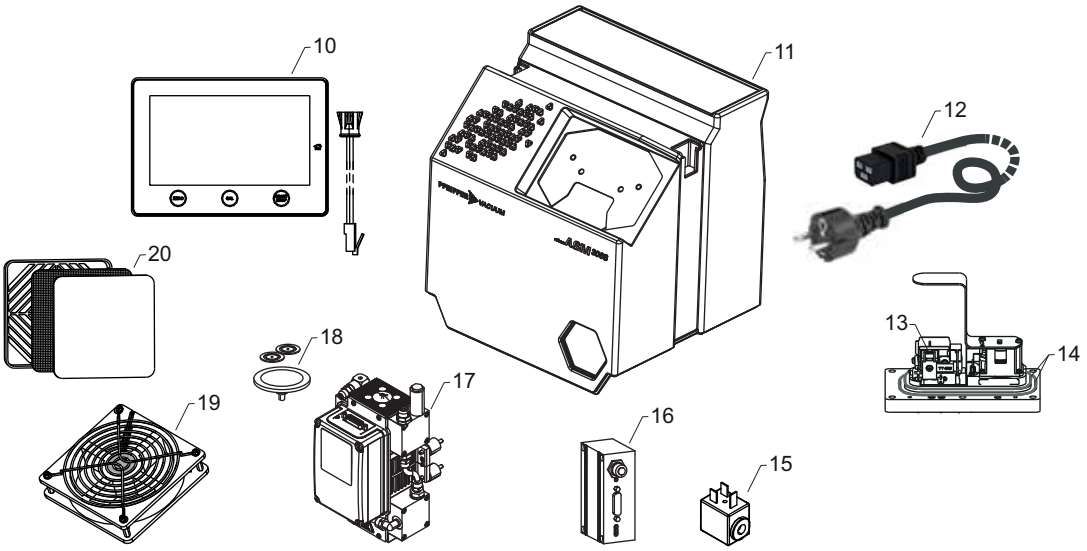
9.2 Accessory spare parts



Item	Description		Qty	Part Number
1	Tip filter	Set of 25 parts	1	127829S
2	Rod + tip filter set		1	128302
3	Intermediate filter for small particles	Set of 25 parts	1	128051
4	Probe body + sleeve set		1	128036S
5	Probe sleeve		1	A602007

Item	Description	Qty	Part Number
6	2 m sniffer probe cable	1	A604523
	5 m sniffer probe cable	1	A602086
	10 m sniffer probe cable	1	A602106

9.3 Leak detector spare parts



Rep.	Description	Qty	Part Number
10	Control panel (without cable) - ASM 306S	1	127325S
	5 m RJ9 cable	1	123909
11	Equipped cover set (without probe sheath) - ASM 306S	1	127298
12	2 m mono A/J power cable	1	103567
	2 m Europe power cable	1	103566
13	Filament - analyzer cell	2	114864S
14	NPB seal - analyzer cell	2	114346
15	2/2 NC 24 VDC/8 W MINISOL solenoid valve	4	101303
16	TC 110 electronic unit for SplitFlow	1	PM C01 790 A
17	MVP 010-3 DC diaphragm pump	1	127383
18	Maintenance set - MVP 010-3 DC diaphragm pump	1	128156
19	Equipped fan	1	A603070
20	Grill + filter set for fan	1	104754

VACUUM SOLUTIONS FROM A SINGLE SOURCE

Pfeiffer Vacuum stands for innovative and custom vacuum solutions worldwide, technological perfection, competent advice and reliable service.

COMPLETE RANGE OF PRODUCTS

From a single component to complex systems:
We are the only supplier of vacuum technology that provides a complete product portfolio.

COMPETENCE IN THEORY AND PRACTICE

Benefit from our know-how and our portfolio of training opportunities!
We support you with your plant layout and provide first-class on-site service worldwide.

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Are you looking for a perfect vacuum solution? Please contact us

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