

Addendum to the Waters Micromass Quattro Premier XE Mass Spectrometer Operator's Guide

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You can reach us at tech_comm@waters.com.



Addendum to the Waters Micromass Quattro Premier XE Mass Spectrometer Operator's Guide

This addendum details changes that have been made to the Waters[®] Micromass[®] Quattro Premier[™] XE Mass Spectrometer Operator's Guide (71500104102 Revision B).

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Safety Information

Solvent Leakage Hazard

Replace the warning and first paragraph in this section with:



Warning: To confirm the integrity of the source exhaust system, the items identified in [Section 7.3](#) must be renewed at intervals not exceeding one year.

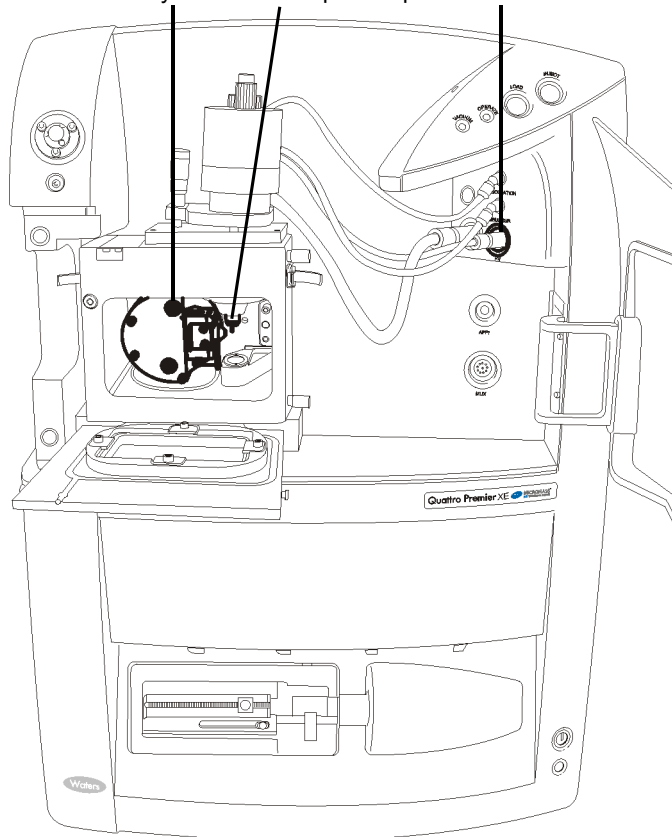
High Voltage Hazard

Replace **Figure 1 Quattro Premier XE High Voltage Hazards - ESI Operation** with the following:

Ion block and cone assembly

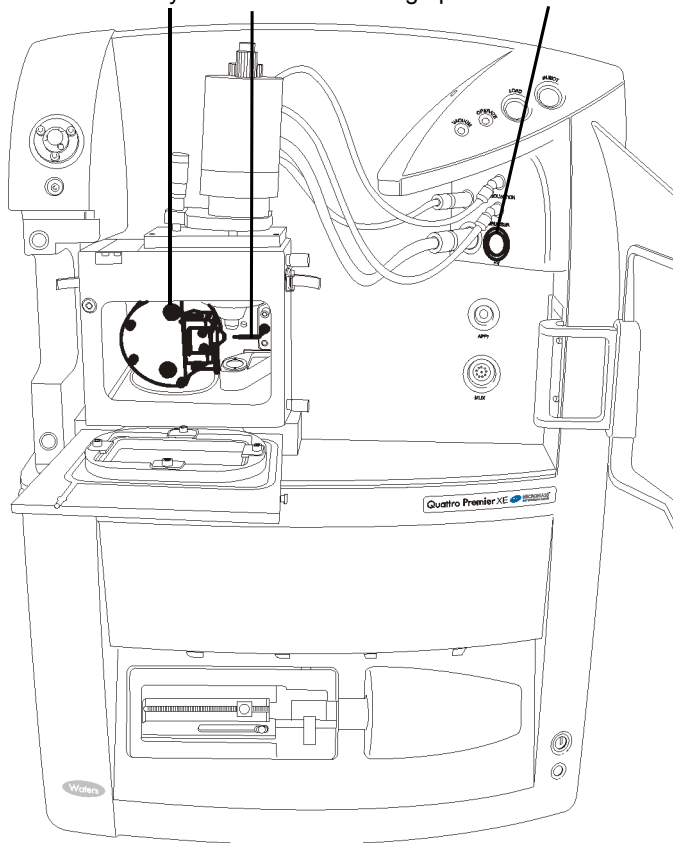
ESI probe tip

HV connector



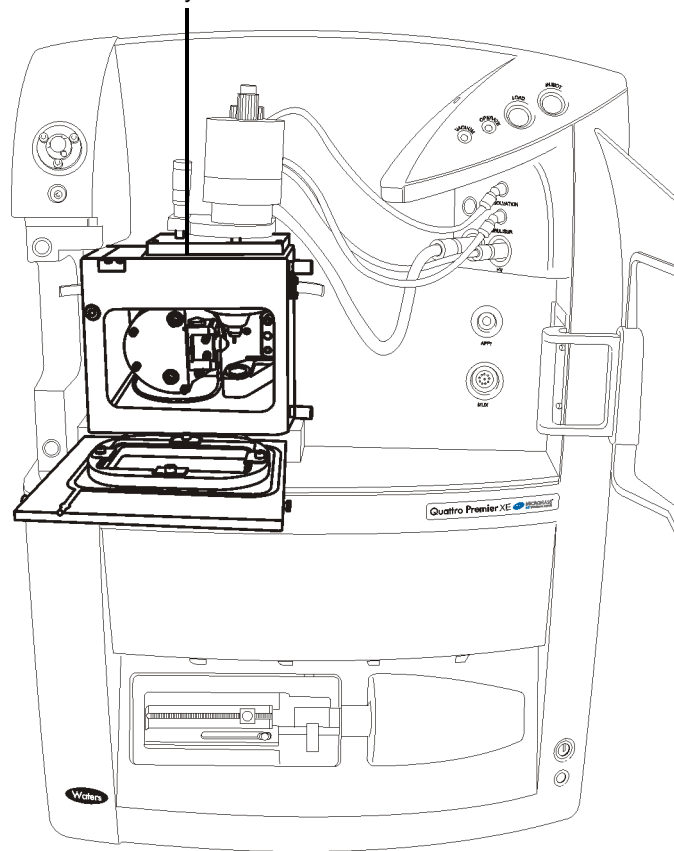
Replace Figure 2 Quattro Premier XE High Voltage Hazards - APcI Operation with the following:

Ion block and cone assembly Corona discharge pin HV connector



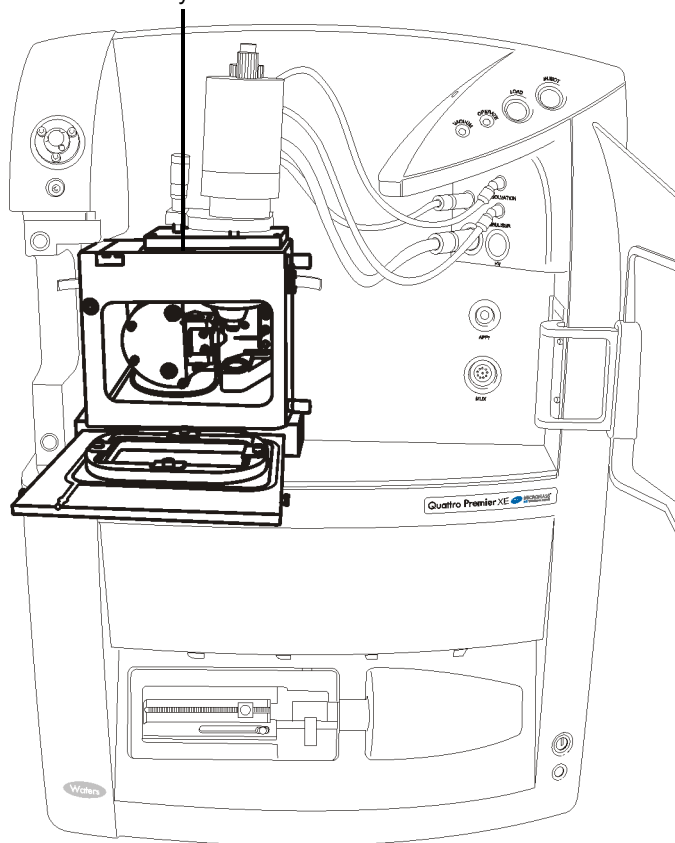
Replace Figure 3 Quattro Premier XE High Temperature Hazard - ESI Operation with the following:

Source enclosure assembly



Replace Figure 4 Quattro Premier XE High Temperature Hazard - APci Operation with the following:

Source enclosure assembly



Risque de fuite de solvant

Replace the warning and first paragraph in this section with:



Avertissement: Afin de vérifier l'intégrité du système d'évacuation source, les éléments identifiés dans la [Section 7.3](#) doivent être renouvelés à des intervalles inférieurs à un an.

Quattro Premier XE Mass Spectrometer Information

Add the following section after the “Intended Use” section:

IVD Authorized Representative

EU General *in vitro* Diagnostic Device Directive 98/79/EC

Waters Corporation (Micromass UK Limited) is registered in the United Kingdom with the Medicine and Healthcare Products Regulatory Agency (MHRA) at Hannibal House, Elephant and Castle, London, SE1 6TQ. The reference number is: IVD000167.

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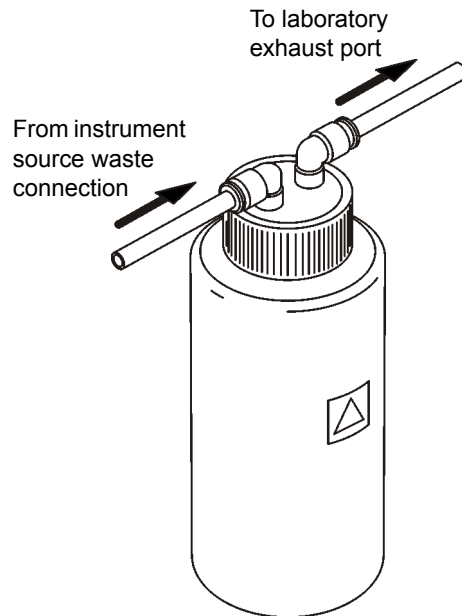
Contact: Quality Manager

Chapter 1 Instrument Description

1.6 Rear Panel Connections

1.6.11 Exhaust

Replace Figure 1-9 Nitrogen Exhaust Waste Bottle with:



Chapter 2 Setting-Up and Tuning for ESI

2.1 Setting-Up

2.1.2 Removing the APCI Corona Discharge Pin

Add the following before step 2:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

2.2 Tuning via Sample Infusion

2.2.1 Tuning for MS Operation

Add the following before step 3b:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

Chapter 3 Setting-Up and Tuning for APCI

3.1 Setting-Up

3.1.2 Installing the APCI Corona Discharge Pin

Add the following before step 2:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

3.2 Tuning via Sample Infusion

3.2.1 Tuning for MS Operation

Add the following before step 3b:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

Chapter 7 Maintenance Procedures

7.3 Replacing the Source Enclosure and Probe O-rings

Replace the warning and first paragraph in this section with:



Warning: To confirm the integrity of the source exhaust system, the O-rings listed below must be renewed at intervals not exceeding one year.

To confirm the integrity of the source exhaust system, the following O-rings must be renewed at intervals not exceeding one year:

Add the following before step 4:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

Replace step 9 with:

Caution: To avoid damage, do not use a metal tool to remove the following O-rings.

9. Use a suitable tool to carefully remove the following from the source enclosure (see Figures 7-1 and 7-2):

Replace Figure 7-1 Source Enclosure and Probe Adjustment Flange with the following two figures:

Figure 7-1a Source Enclosure Door O-rings

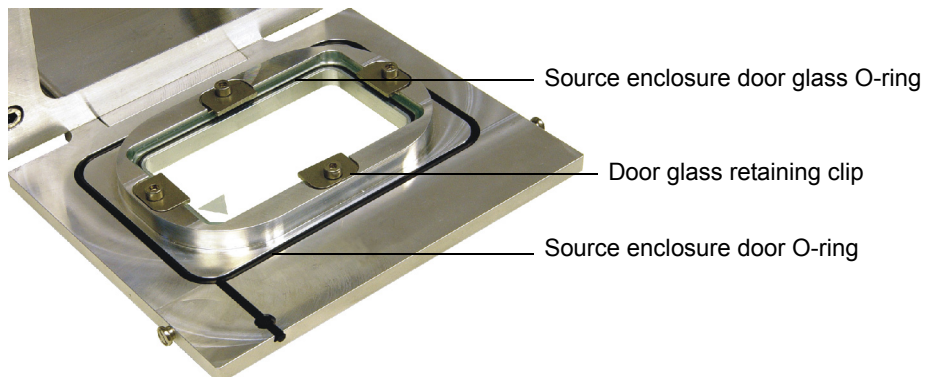
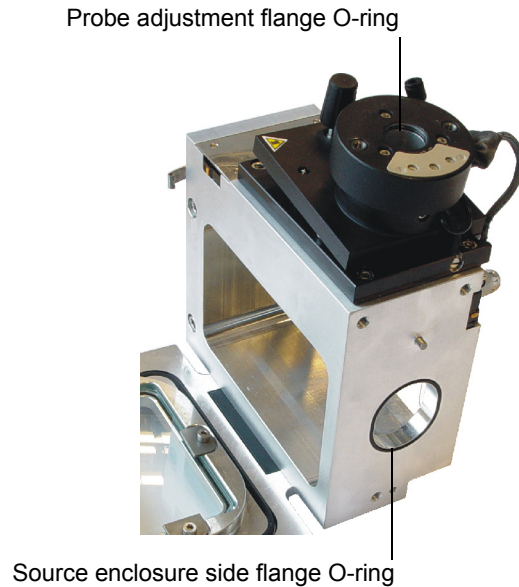


Figure 7-1b Source Enclosure Side Flange and Probe Adjustment Flange O-rings



Replace steps 13 and 14 with:

13. Use a suitable tool to carefully remove the source enclosure door glass O-ring from the source enclosure door.
14. Use a suitable tool to carefully remove the probe adjustment flange O-ring from the probe adjustment flange (see [Figure 7-1b](#)).

Add the following before step 22:

Caution: Ensure that the source enclosure door O-ring tail is correctly located in its groove when fitting the O-ring to the source enclosure door.


Replace steps 23 and 24 with:

23. Fit the source enclosure side flange to the source enclosure.

Caution: The source enclosure side flange securing thumbscrews must each be sequentially tightened a small amount until they are all fully tight; this ensures that the side flange is uniformly seated on the source enclosure.

24. Fit and tighten the three thumbscrews that secure the source enclosure side flange to the source enclosure.

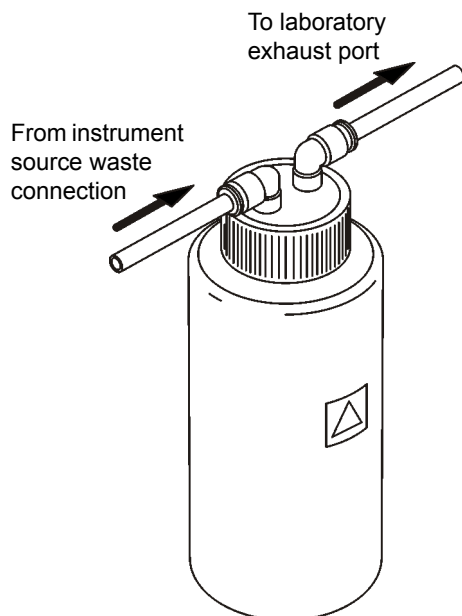
Replace step 34 and its associated warning with:

 **Warning:** To confirm the integrity of the source exhaust system, a source pressure test must be performed, as described in the Waters Micromass Source Pressure Test Unit Operator's Guide.


34. Perform a source pressure test.

7.4 Emptying the Nitrogen Exhaust Waste Bottle

Replace Figure 7-3 Nitrogen Exhaust Waste Bottle with:



Replace step 9 and its associated warning with:

 **Warning:** To confirm the integrity of the source exhaust system, the following leak test must be performed.

Caution: To avoid damage to the instrument, Snoop[®] (or equivalent) leak detector liquid must only be used only for the purpose described in the following step; it must not be used on any other part of the instrument.

9. Use Snoop (or equivalent) leak detector liquid to ensure that there are no leaks at the instrument exhaust and laboratory exhaust system line connections.

7.9 Cleaning the Source Components

7.9.4 Removing the Sample Cone

Add the following before step 1:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

7.9.18 Fitting the Ion Block and Ion Source Enclosure

Replace the Warning before step 1 with:



Warning: To confirm the integrity of the source exhaust system, perform the procedure as described in this section.

Replace step 11 and its associated warning with:



Warning: To confirm the integrity of the source exhaust system, if any O-ring detailed in [Section 7.3](#) has been replaced, you must perform a pressure test on the source, as described in the Waters Micromass Source Pressure Test Unit Operator's Guide.

11. If any O-ring detailed in [Section 7.3](#) has been replaced, perform a pressure test on the source.

7.11 Cleaning or Replacing the Corona Discharge Pin

7.11.2 Procedure

Add the following before step 2:

Caution: To avoid damage, do not apply any force to the source enclosure door while the door is open.

7.13 Replacing the Ion Block Cartridge Heater

7.13.2 Procedure

Delete step 22 and renumber steps 23 to 32 to steps 22 to 31 respectively.

Add the following before step 27 (previously step 28):

Caution: The source enclosure securing bolts must each be sequentially tightened a small amount until they are all fully tight; this ensures that the source enclosure is uniformly seated on the pumping block.

Delete the note after step 27 (previously step 28).

Delete step 31 (previously step 32) and its associated warning, and replace with:



Warning: To confirm the integrity of the source exhaust system, if any O-ring detailed in [Section 7.3](#) has been replaced, you must perform a pressure test on the source, as described in the Waters Micromass Source Pressure Test Unit Operator's Guide.

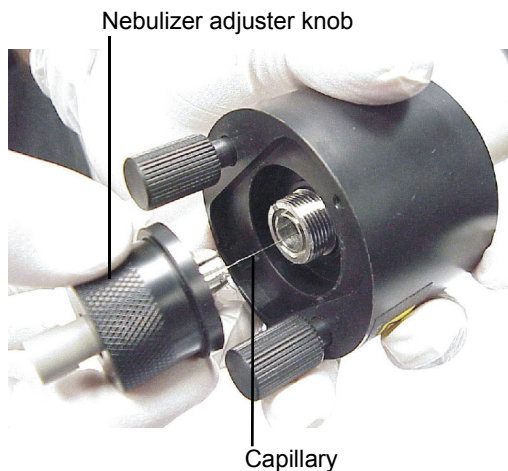
31. If any O-ring detailed in [Section 7.3](#) has been replaced, perform a pressure test on the source.

7.14 Replacing the ESI Probe Sample Capillary

7.14.2 Removing the Existing Capillary

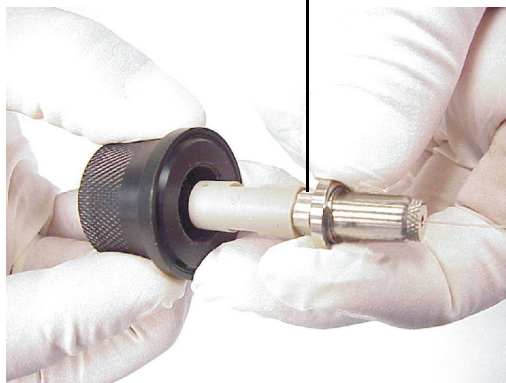
Delete steps 4 to 7 and the associated figures, and replace with the following:

4. Unscrew and remove the nebulizer adjuster knob to reveal a PEEK™ union/UNF coupling assembly and the capillary.



5. Remove the nebulizer adjuster knob, PEEK union/UNF coupling assembly and capillary from the probe.
6. Remove the PEEK union/UNF coupling assembly and capillary from the nebulizer adjuster knob.

PEEK union/UNF assembly



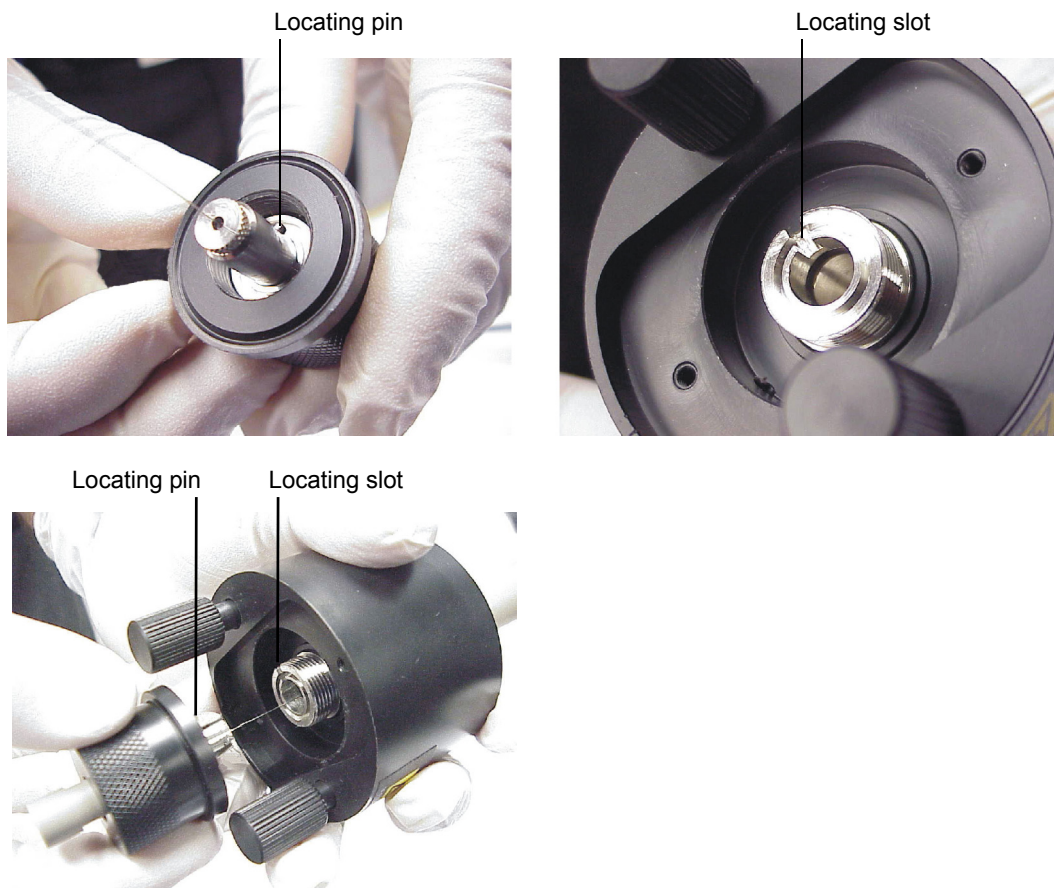
Renumber steps 8 to 13 to steps 7 to 12 respectively.

7.14.3 Installing the New Capillary

Delete step 15 and the associated figure.

Renumber steps 16 and 17 to steps 15 and 16.

Renumber step 18 to step 17, replace the associated figures with the following:



Renumber steps 19 to 22 to steps 18 to 21 respectively.

Delete step 23 and replace with:

22. Fit the probe to the instrument.

Renumber steps 24 and 25 to steps 23 and 24.

Delete step 26 and replace with:

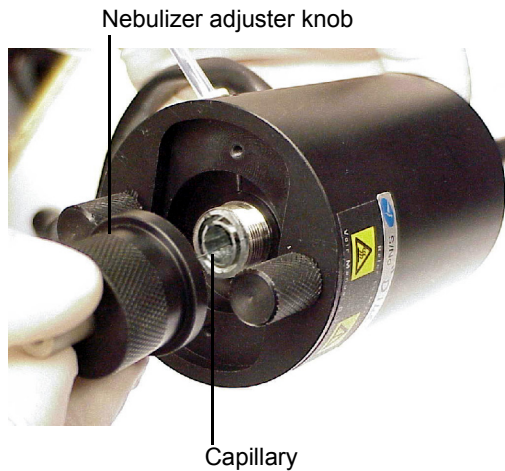
25. Use the probe adjuster knob to adjust the capillary so that the capillary protrudes approximately 0.5 mm from the end of the probe.
26. While infusing a known compound, tune the capillary length to the position that gives the best sensitivity.

7.15 Replacing the APCI Probe Capillary

7.15.2 Removing the Existing Capillary

Delete steps 4 to 7 and the associated figures, and replace with the following:

4. Unscrew and remove the nebulizer adjuster knob to reveal a PEEK union/UNF coupling assembly and the capillary.



5. Remove the nebulizer adjuster knob, PEEK union/UNF coupling assembly and capillary from the probe.
6. Remove the PEEK union/UNF coupling assembly and capillary from the nebulizer adjuster knob.



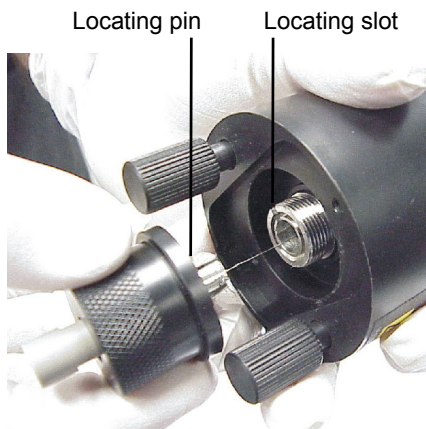
Renumber steps 8 to 11 to steps 7 to 10 respectively.

7.15.3 Installing the New Capillary

Delete step 16.


Renumber step 17 to 16.

Renumber step 18 to step 17, replace the associated figure with the following:



Renumber steps 19 to 24 to steps 18 to 23 respectively.

Delete steps 25 and 26 and replace with:


24. Refit the probe to the instrument.
25. Attach the nebulizer gas connection, and start the nitrogen flow by clicking  in the MassLynx™ Tune window.
26. Use the probe adjuster knob to adjust the capillary so that the capillary protrudes approximately 0.5 mm from the end of the probe.

7.16 Replacing the APCI Probe Heater

7.16.2 Procedure

Delete steps 8 and 9 and replace with:

8. Fit the probe to the instrument.

9. Attach the nebulizer gas connection, and start the nitrogen flow by clicking  in the MassLynx Tune window.
10. Use the probe adjuster knob to adjust the capillary so that the capillary protrudes approximately 0.5 mm from the end of the probe.

Chapter 8 Troubleshooting

8.4 Component Hardware Troubleshooting

8.4.7 Leaking Nitrogen

Under “Corrective Action”, replace:

Examine the condition of the encapsulated O-rings.

With:

Examine the condition of the O-rings listed in [Section 7.3](#). Replace any O-ring that is damaged.



Warning: To confirm the integrity of the source exhaust system, if any O-ring detailed in [Section 7.3](#) has been replaced, you must perform a pressure test on the source, as described in the Waters Micromass Source Pressure Test Unit Operator’s Guide.

If any O-ring detailed in [Section 7.3](#) has been replaced, perform a pressure test on the source.

