Bio-inert Multidraw Upgrade Kit G5667-68711

Installation Note

This note describes how to install the Bio-inert Multidraw Upgrade Kit (G5667-68711) in an Agilent 1260 Infinity Bio-inert Autosampler (G5667A) or an Agilent 1260 Infinity III Bio-inert Multisampler (G5668A).

Contents

Agilent Technologies

General Information

The Multidraw Upgrade Kit can be installed in any Agilent 1260 Infinity Bio-inert Autosampler or Agilent 1260 Infinity III Bio-inert Multisampler. With the kit, you can add a maximum of 250 µL or 1000 µL to the injection volume (100 µL analytical head) of your injector. The total injection volume is then 350 µL or 1100 µL for 100 µL analytical head.

NOTE

The delay volume of your autosampler is extended when using the extended seat capillaries from the multidraw kit. When calculating the delay volume of the autosampler you have to double the volume of the extended capillaries (used in partial filling mode). The delay volume can be reduced by bypassing the autosampler once the sample has reached the head of the column, see your *User Manual* for more information.

When using the autosampler in multidraw mode the syringe ejects an equivalent of the injected volume into waste. Therefore it is recommended to install a separate waste tube (shipped with the start-up kit of your autosampler or Waste tube, 5 m (reorder pack) (5062-2461)) to the waste outlet of the autosampler.

Sample loop 2 mL (0101-1234) and Sample loop 500 µL (0101-1236) comprising the Multidraw Upgrade Kit are made of PEEK and have lower pressure limit than stainless-steel clad PEEK capillaries installed in other parts of the Agilent 1260 Infinity Bio-inert and Agilent 1260 Infinity III Bio-inert system. Table 1 on page 2 lists the pressure limit depending on the solvent.

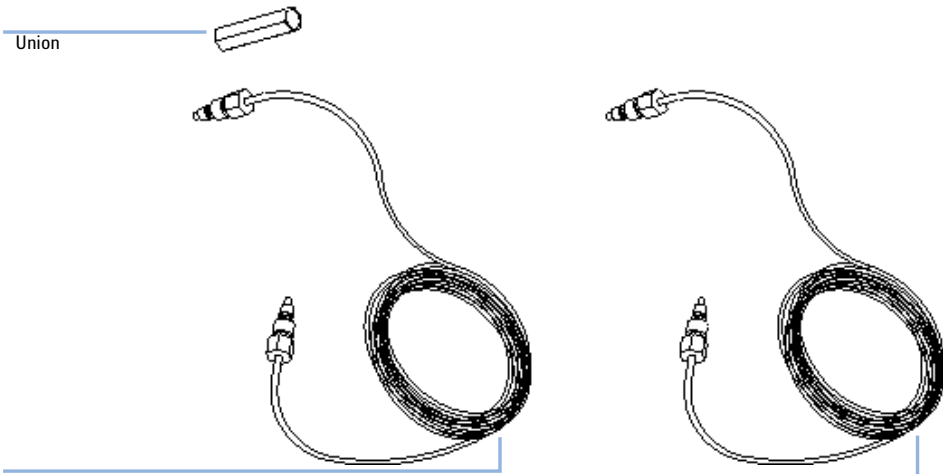
Table 1 Sample loop pressure limits depending on solvents

	Sample loop 2 mL (0101-1234)	Sample loop 500 µL (0101-1236)
Acetonitrile	200 bar	200 bar
Water	240 bar	240 bar
Isopropanol	275 bar	275 bar

Delivery Checklist

Make sure all parts and materials have been delivered with the upgrade kit. Please report missing or damaged parts to your local Agilent Technologies sales and service office.

p/n	Description
5067-4741	ZDV union (Bio-inert) 600 bar
0101-1234	Sample loop 2 mL PEEK
0101-1236	Sample loop 500 µL PEEK



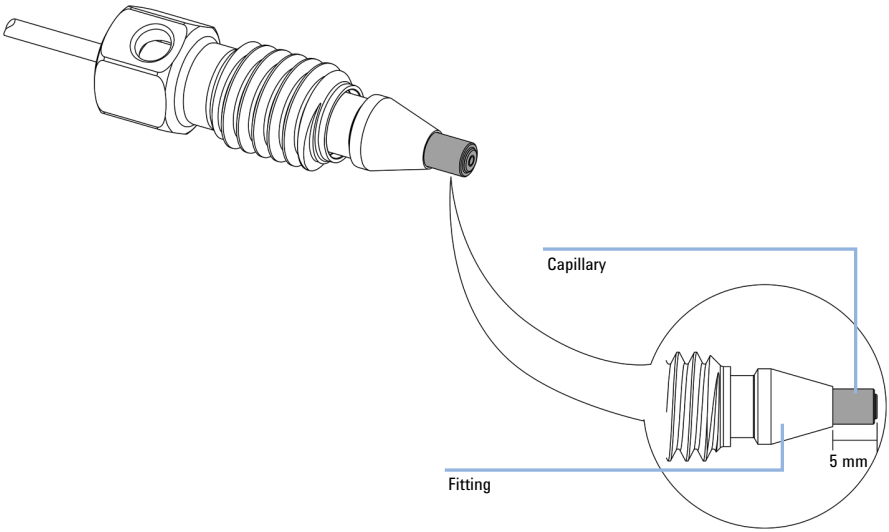
Installing Capillaries

Installing UHP-FF Fittings

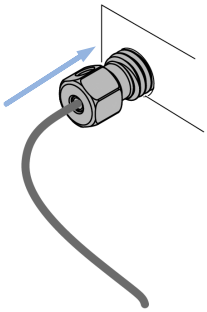
Tools required	p/n	Description
	5043-0915	Fitting mounting tool

Parts required	p/n	Description
	Capillaries and Fittings	For details refer to the part section of the manual.

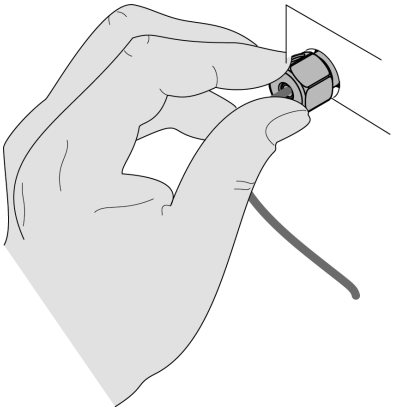
1 Slide the fitting on the capillary. Let the capillary jut out 5 mm.



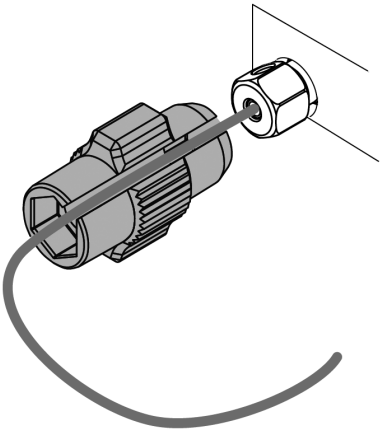
2 Insert the fitting to the receiving port and push the capillary to the bottom of the port.



3 Finger tighten the nut into the port until snug.



4 Use Fitting mounting tool (5043-0915) or a 5 mm hex wrench for fixing the fitting (maximum torque 0.8 Nm).



CAUTION Potential damage of capillaries

➔ Do not remove fittings from used capillaries.

5 When using UHP-FF fittings with bio-inert capillaries, do not try to remove fittings from these capillaries. Bio-inert capillaries are using a PEEK front end, which may expand under pressure especially when being in contact with some organic solvents. If a fitting is moved across an expanded PEEK end, there is a risk of damaging the capillary by ripping off its end. Before re-installing such capillaries, push the ferrule towards the rear site for a small distance.

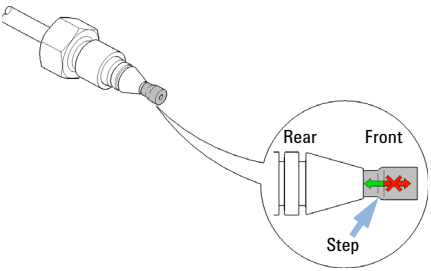


Figure 1 Capillary fitting

Installation of the Bio-inert Zero Dead Volume (ZDV) Union

The Bio-inert ZDV (p/n 5067-4741) union has two different connectors where capillaries need to be installed in the correct sequence. Otherwise, an inset of the union may be damaged and the connection may not be tight.

CAUTION

Potential leak or damage of the Bio-inert ZDV Union.

➔ To avoid leaks or a damage to the Bio-inert ZDV union, follow the procedure below in the prescribed sequence.

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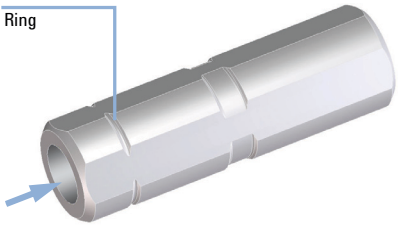
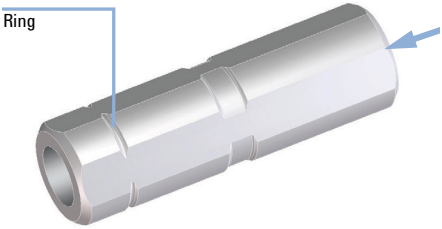
1 Install the capillary at the end marked with a ring/indentation.



2 Install the second capillary at the other end.



Installing the Bio-inert Multidraw Upgrade Kit for G5667A

Tools required	p/n	Description
	Wrench, 1/4 inch	¼ inch wrench (one supplied in the autosampler accessory kit)

CAUTION

Wrong installation of waste capillary

Connecting a waste outlet directly to the plastic waste tube can lead to siphoning effects, which can result in a loss of injection precision.

➔ Connect the waste tube from port 4 of the injection valve to the waste tube holder of autsampler wash port.

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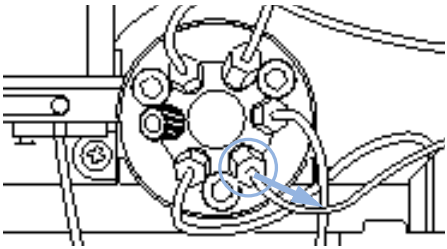
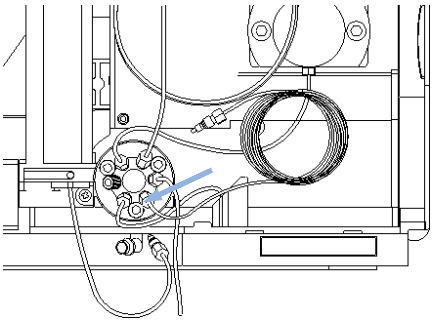
1 Remove the front cover.

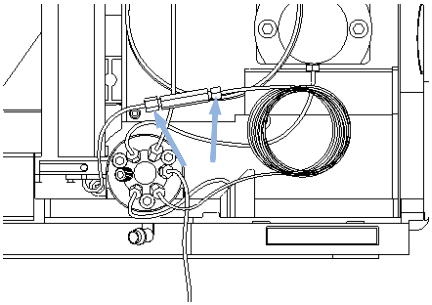
2 Disconnect the seat-capillary fitting from the injection valve (port 5).



3 Install the seat extension loop (longer side) to the injection valve (port 5).



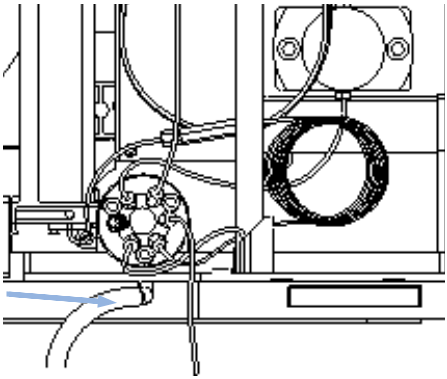
4 Install the union between the seat capillary and the other side of the seat extension loop. Store the extension loop in the leak tray.



5 Connect the injection waste tube to the waste outlet into the injection valve (port 4).

6 Install the front cover.

7 Connect the waste tube.

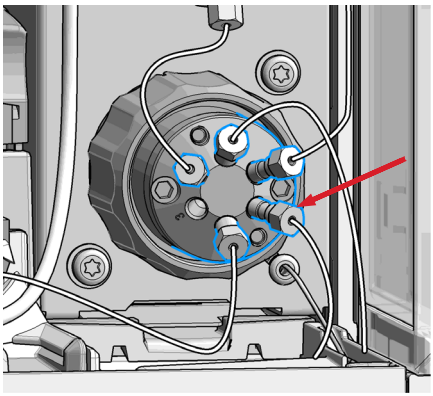


Installing the Bio-inert Multidraw Upgrade Kit for G5668A

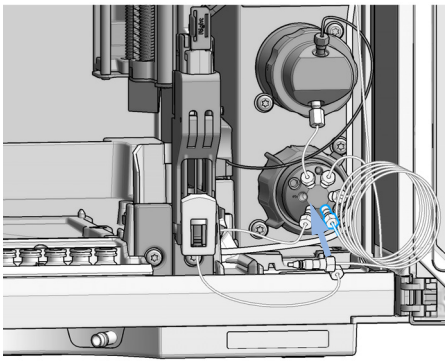
Tools required	p/n	Description
	Wrench, 1/4 inch	¼ inch wrench (one supplied in the autosampler accessory kit)

1 Open the front door.

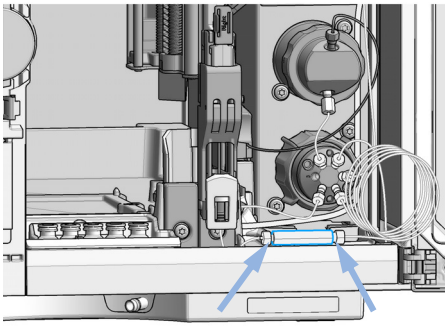
2 Disconnect the seat-capillary fitting from the injection valve (port 5).



3 Install the seat extension loop (longer side) to the injection valve (port 5).



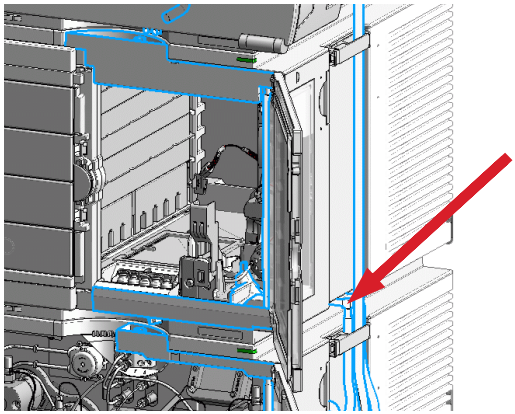
4 Install the union between the seat capillary and the other side of the seat extension loop. Store the extension loop in the leak tray.



5 Connect the injection waste tube to the waste guidance.

6 Close the front door.

7 Connect the waste tube.



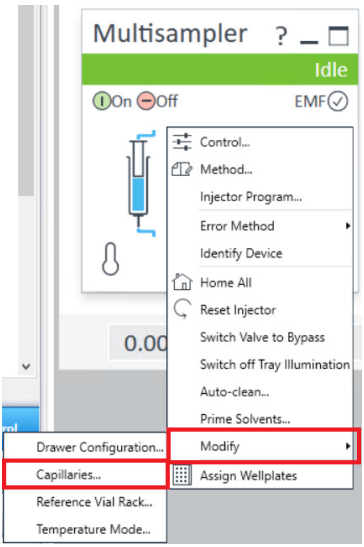
Configuration of the Controller

The configuration of your controller is necessary to enable the multidraw mode.

When setting an injection larger as the configured injection volume the multidraw mode is active. Multiples of the injection syringe volume are stored in the extended seat capillary prior to switching the injection valve.

OpenLab CDS ChemStation C.01.10 Update 3 and OpenLab 2.5 and above

1 Select **Capillaries** in the instrument function.



2 In In the **Configuration** menu, change seat capillary to the value of the installed extended seat capillary and click **OK**.

Lab Advisor B.02.16 and above

1 Connect to the stack in **System Overview**.

2 Select **Instrument Control** and open **Controls** of the Multisampler.

3 On the **Configuration** tab, select the volume for your installed extended seat capillary from the **Set Capillary** drop-down menu.

Legacy CDS systems for instant ChemStation Configuration

1 Select **More Injector** in the instrument function.

2 In the configuration menu, change seat capillary to the value of the installed extended seat capillary and click **OK**.

Instant Pilot

1 In the startup screen select **More > 1 Configure**.

2 Then select **Autosampler** and specify the **Seat** extension via **Capillaries Right** option.

The information in this document also applies to Infinity II modules.

G5667-90123

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