

Installing the 900 μ l Injection Upgrade Kit G1363A

This note describes the installation of the 900 μ l injection upgrade kit only into a 1260 Infinity Standard Autosampler G1329B.

General Information

The injection upgrade kit can be installed into Standard Autosamplers G1329B. It extends the normal injection volume of 100 μ l for the Standard Autosampler to 900 μ l injection volume by adding a new analytical head, needle and a loop extension.

NOTE

During injection, an amount of solvent corresponding to the injection volume (i.e. up to 900 μ l) is ejected to the waste port. For that reason, the waste tube included to the autosampler accessory kit should be installed to the waste outlet of the autosampler.

NOTE

Do not connect a waste outlet directly to the plastic waste tube (connected to port 4 of the injection valve). This can lead to siphoning effects, as that will influence the precision of the autosampler.

CAUTION

If the 900 μ l extension is installed, the maximum system pressure is limited to 40 MPa (400 bar, 5900 psi). Use your Instrument Control Software for setting a pressure limit for the pump.

Performance Specification

Table 1 Performance Specification 900 μ l Injection Upgrade Kit

Type	Specification
Pressure	Operating range 40 MPa (0–400 bar, 0–5900 psi)
Injection range	0.1–900 μ l in 0.1 μ l increments (recommended 1 μ l increments) Up to 1800 μ l with multiple draw (hardware modification required)
Precision	Typically < 0.5 % RSD of peak areas from 10–900 μ l



Delivery Checklist

Make sure all parts and materials have been delivered with the upgrade kit. The delivery checklist is shown in [Table 2](#). Please report missing or damaged parts to your local Agilent sales and service office.

Table 2 900 µl Injection Upgrade Kit

Description	Quantity	Part Number
Analytical head, 900 µl (400 bar)	1	G2260-60007
*Analytical head, 900 µl (200 bar)	1	G1313-60007
Loop extension, 900 µl	1	G1313-87303
Union, loop extension	1	5022-2133
Needle, 900 µl	1	G1313-87202

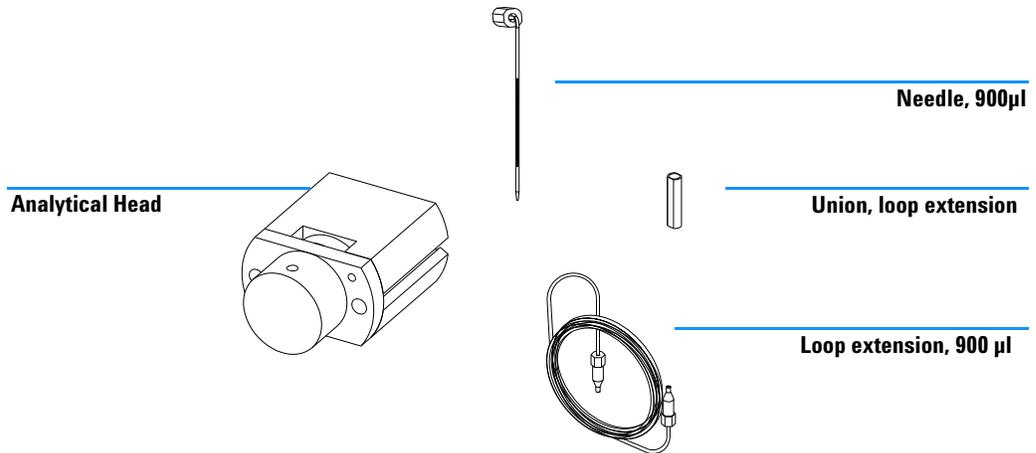


Figure 1 900 µl Injection Upgrade Kit

NOTE

*For upgrading a 1200 Standard Autosampler G1313A or G1329A with 900 ul analytical head you must order G1313-60007 (Analytical head, 900 µl 200bar) separately to be in the specification of 200 bar for both modules. This part is not set up in G1363A Upgrade kit.

Installing the 900 µl Upgrade Kit

The installation of the upgrade kit is divided into three parts, exchanging the analytical head with 900 µl injection volume, exchanging the needle, and extending the loop capillary to comply with the new injection volume and to configure the Agilent Instant pilot G4208A or LabAdvisor.

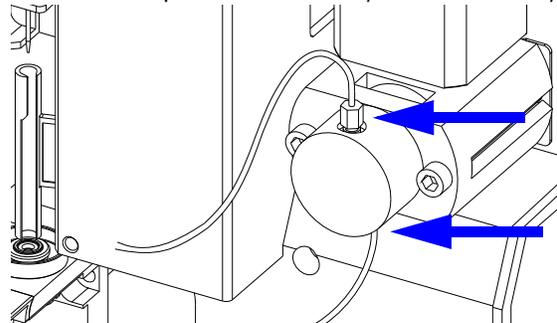
Tools required 1/4 inch wrench 2× (one supplied in the autosampler accessory kit)
2.5 mm hex key (supplied in the autosampler accessory kit)
4 mm hex key (supplied in the autosampler accessory kit)

Exchanging the Analytical Head

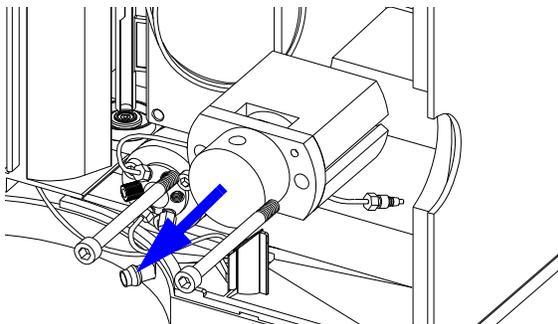
Before beginning this procedure:

- 1 Use Agilent LabAdvisor or the Instant Pilot for moving the Analytical Head to the maintenance position (function **Change piston**).
- 2 Select **Start > Change**.
- 3 Remove the front cover.

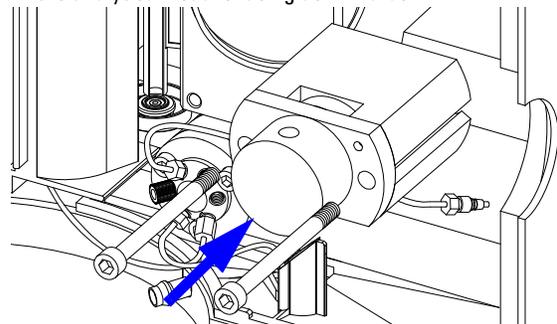
1 Remove both capillaries from the analytical head assembly.



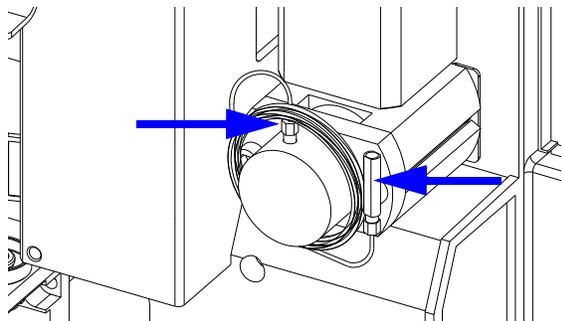
2 Remove the two fixing bolts and remove the analytical head from the autosampler.



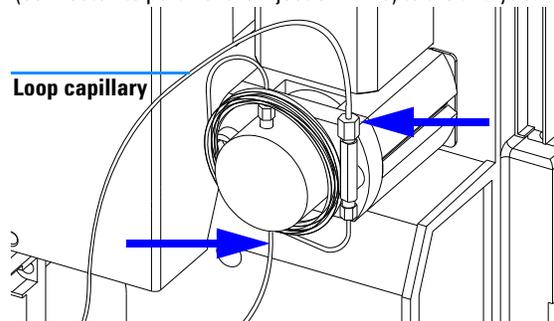
3 Install the 900 µl analytical head assembly in the autosampler (reuse screws from original assembly). Make sure the large hole in the analytical head is facing downwards.



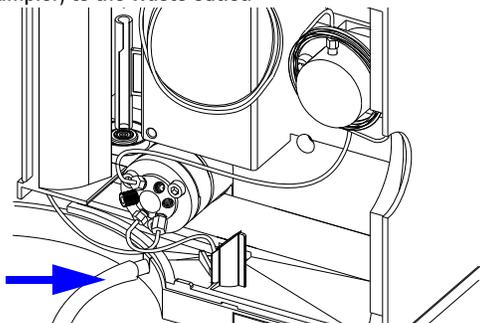
4 Connect the loop extension to the upper side of the analytical head and connect the union to the loop extension.



5 Connect the loop capillary (connected to the needle) to the union of the loop extension and reinstall the bottom capillary (connected to port 2 of the injection valve) to the analytical head.



6 Connect the waste tube (shipped with the start up kit of your autosampler) to the waste outlet.



On completion of this procedure:

- 1 Install the front cover.
- 2 Select **End > Done** in the maintenance function (Agilent LabAdvisor) or in the test function (control module).

Exchanging the Needle Assembly

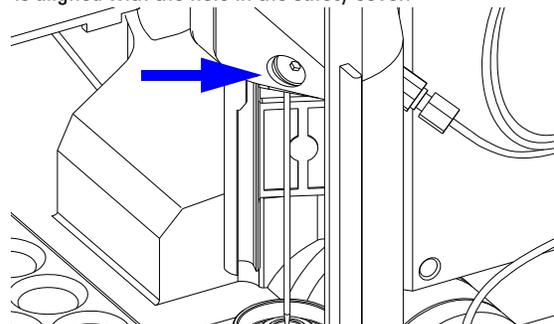
WARNING

To avoid personal injury, keep fingers away from the needle area during autosampler operation. **DO** not bend the safety flap away from its position, or attempt to insert or remove a vial from the gripper when the gripper is positioned below the needle.

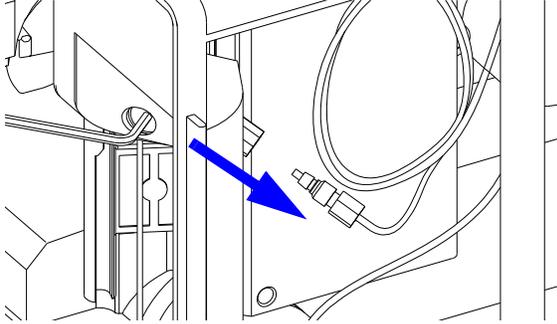
Before beginning this procedure:

- 1 Go to the maintenance function (Agilent LabAdvisor) or the test function (control module) and select Change Needle. The needle will be positioned 15 mm above the needle seat.
- 2 When the needle has reached its change position remove the front cover.

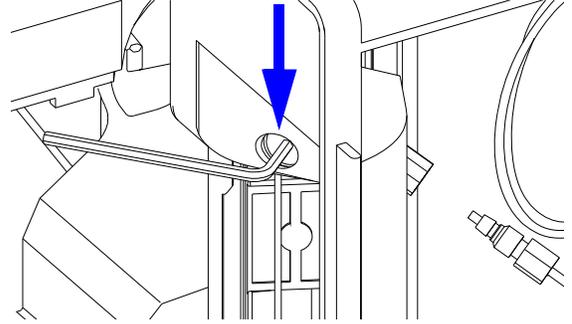
1 Select the Needle Down / Down Arrow button until the needle is aligned with the hole in the safety cover.



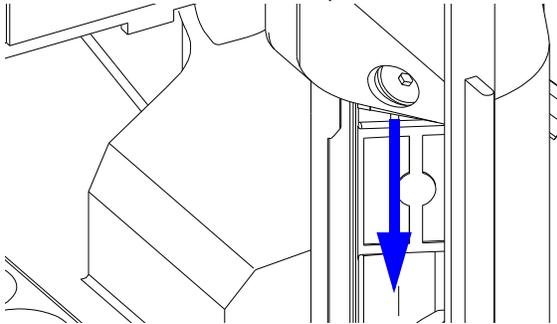
2 Remove the sample loop fitting from the needle fitting.



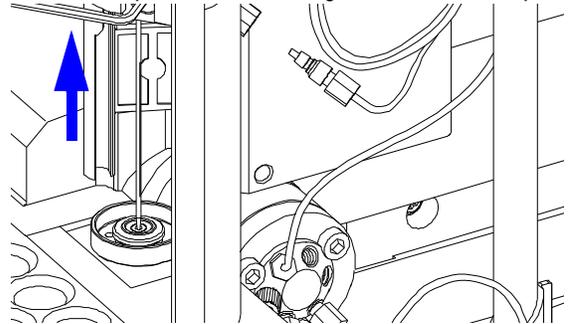
3 Loosen the fixing screw, and lift out the needle



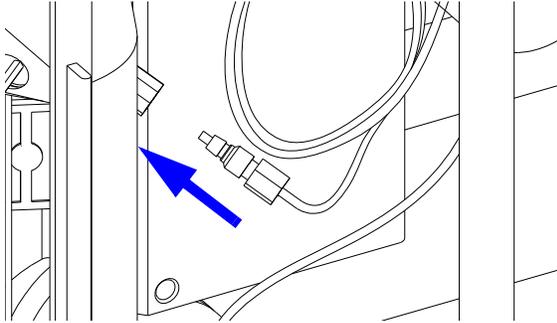
4 Select Needle Down / Down Arrow. Repeat the selection until the needle arm reaches its lowest position.



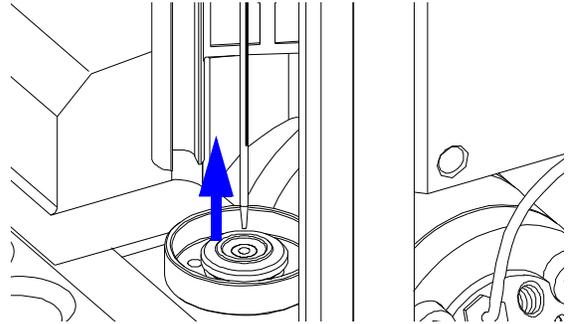
5 Insert the slitted needle from the upgrade kit. Align the needle in the seat and push it down, then tighten the screw firmly.



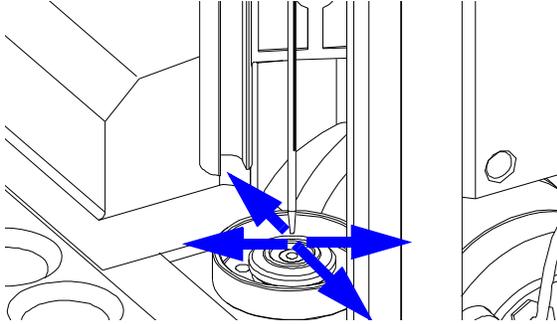
6 Reconnect the sample loop fitting to the needle fitting.



7 Use Needle Up / Up Arrow to lift the needle to a position about 2 mm above the seat.



8 Ensure the needle is aligned with the seat. If required, bend the needle slightly until the needle is aligned correctly.



On completion of this procedure:

- 1** Install the front cover.
- 2** Select **End > Done** in the maintenance function (Agilent LabAdvisor) or in the test function (control module).

Configuration of the Controller

Agilent ChemStation configuration (Classic View)

- 1 Use your instrument control software for configuring the extended injection volume.
- 2 Select More Injector in the instrument function.
- 3 Change syringe volume to 900 µl and press OK.
- 4 Select Set Up Pump in the instrument function.

Agilent ChemStation (RC.net drivers)

- 1 Go to **Instrument > Instrument Configuration**, select the autosampler in the **Selected Modules** list and click the configure button. In section **Options** choose 900 µl for the Syringe.

Control Module Configuration

- 1 Press System-Configure and select the Autosampler from the pull down menu.
- 2 Select 900 µl from the Syringe Volume pull down menu and press Done.
- 3 Press Settings and select the Agilent 1200 Series Pump from the pull down menu.

Parts Identification Analytical Head 900 µl

Table 3 Analytical Head Assembly 900 µl

Item	Description	Part Number
	Analytical head 900 µl, includes item 1–6	G2260-60007
1	Screws	0515-0850
2	Plunger assembly 900 µl	5062-8587
3	Adapter	01078-23200
4	Support seal assembly 900 µl	5001-3764
5	Metering seal 900 µl	0905-1294
6	Head body 900 µl	G2260-60007
	Screw for Metering device (M5, 60 mm)	0515-2118

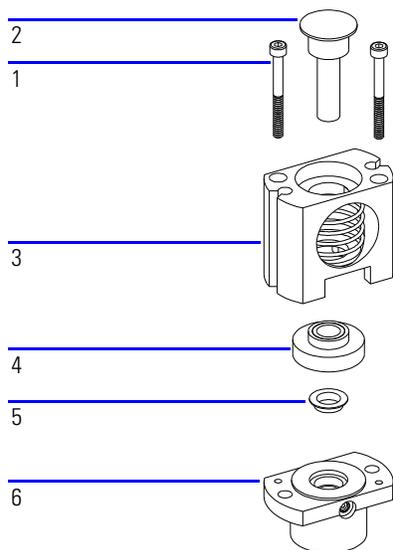


Figure 2 Analytical Head Assembly 900 µl

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G1363-90122

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