

Tubing Kit, Capillaries and Injection Loop Installation / Replacement on G7158B Preparative Open-Bed Sampler/Collector

Technical Note

This Technical Note describes the installation/replacement of injection loops, tubing kits, and capillaries on the G7158B Open-Bed Sampler/Collector.

The illustrations only show the installation. For the replacement, the procedures must first be carried out in reverse order (removal).

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Overview of Connections at the 1290 Infinity II Preparative Open-Bed Sampler/Collector

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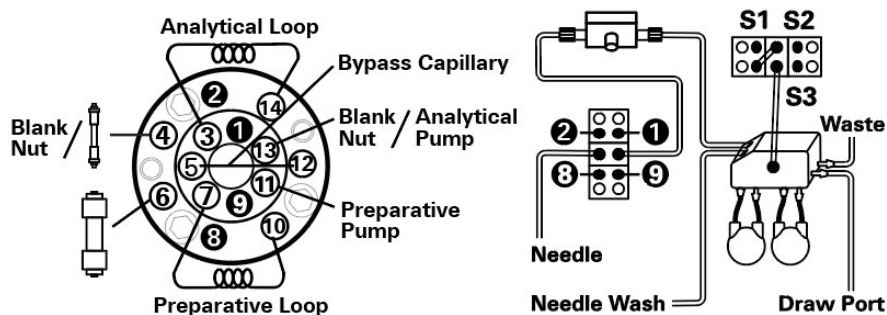
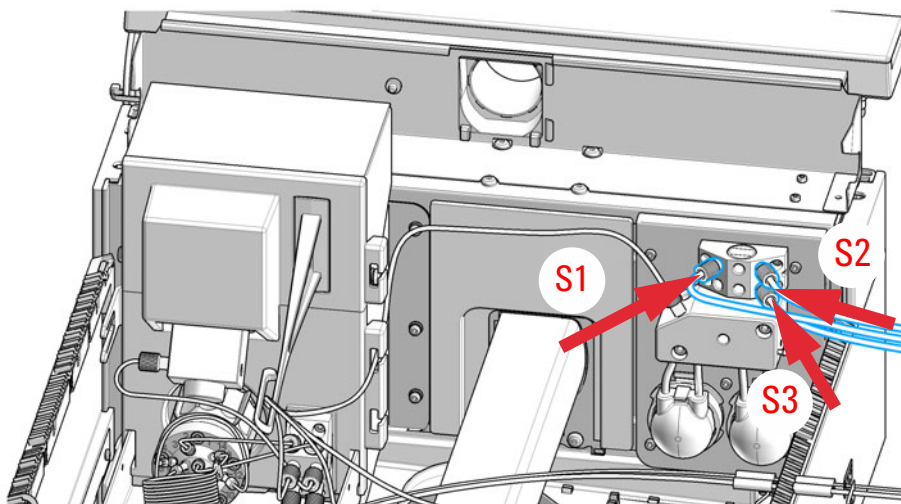


Figure 1 Overview of connections at the 1290 Infinity II Preparative Open-Bed Sampler/Collector

Install or Replace the Solvent Distribution Tubing

Tools required	p/n	Description
	5043-1471	Fitting Handle
Parts required	p/n	Description
	G7120-60007	Bottle Head Assembly
	5500-1429	Solvent Distribution Tubing Kit

- 1 Install Bottle Head Assemblies (G7120-60007).



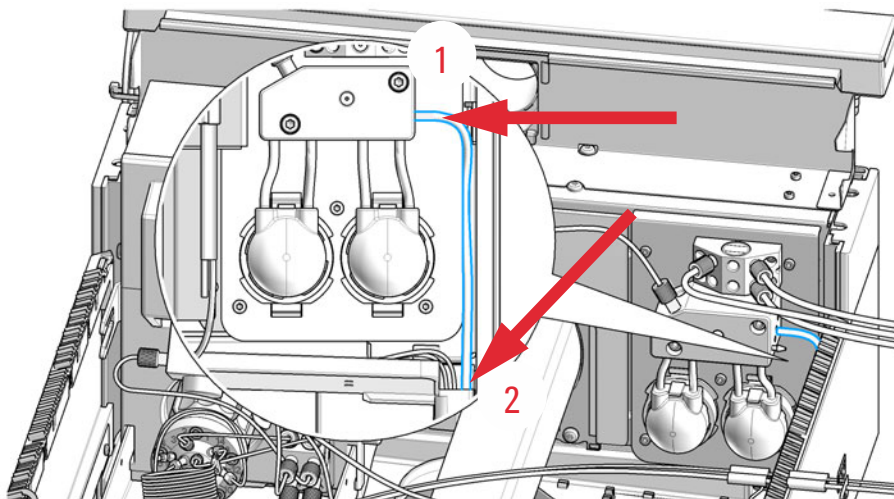
NOTE

Connect up to three Bottle Head Assemblies to the three inlet ports.

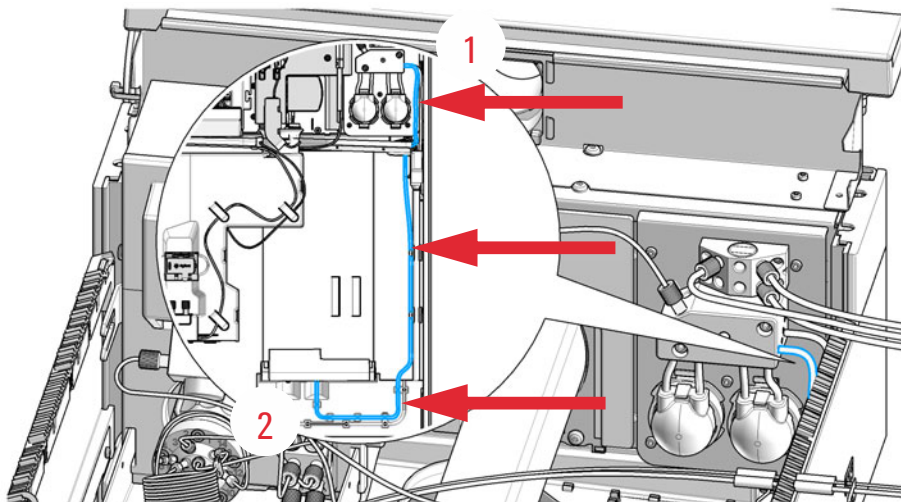
S1 is required to be the draw solvent.

Install or Replace the Solvent Distribution Tubing

- 2 Install the short silicon tubing to the rear exit port of the solvent divider block (1). Guide the end of the tubing to the waste port of the upper leak plane (2).

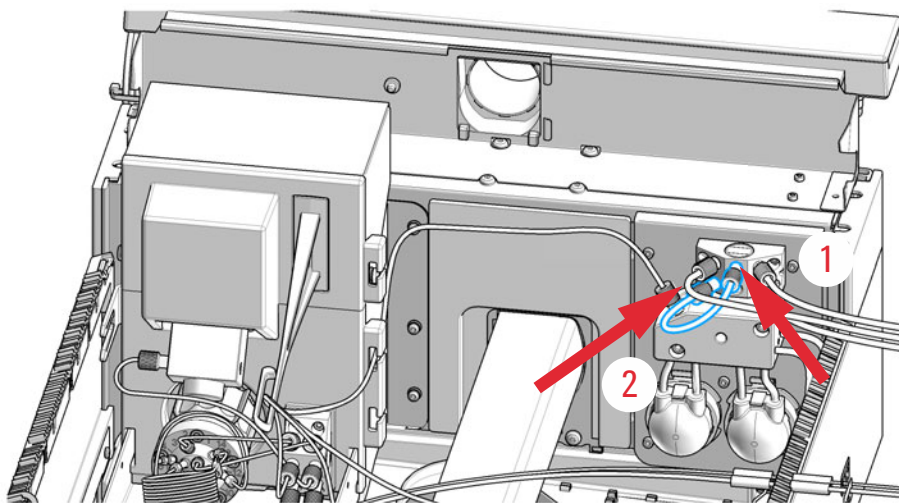


- 3 Install the long silicon tubing to the front exit port of the solvent divider block (1). Guide the end of the tubing to the draw port (2).

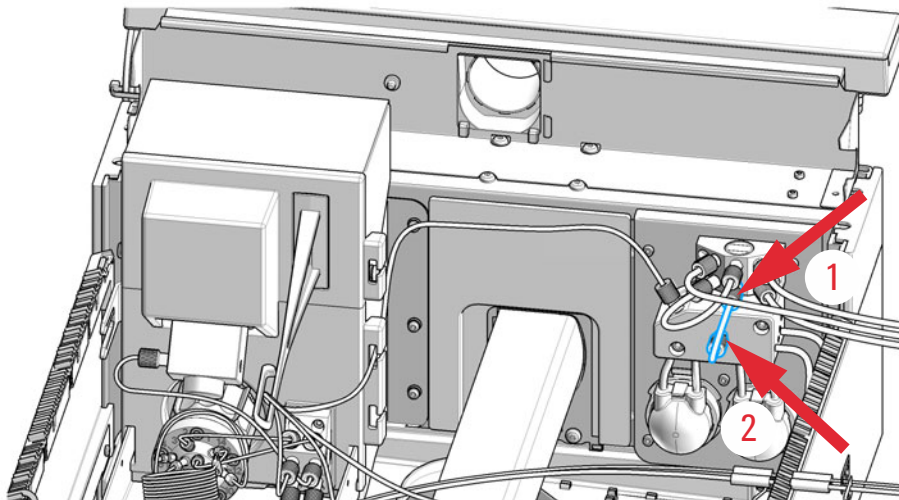


Install or Replace the Solvent Distribution Tubing

- 4 Install the 1st tubing between upper outlet (1) and lower left inlet (2) of the solvent selection valve (bridge, Solvent Distribution tubing).

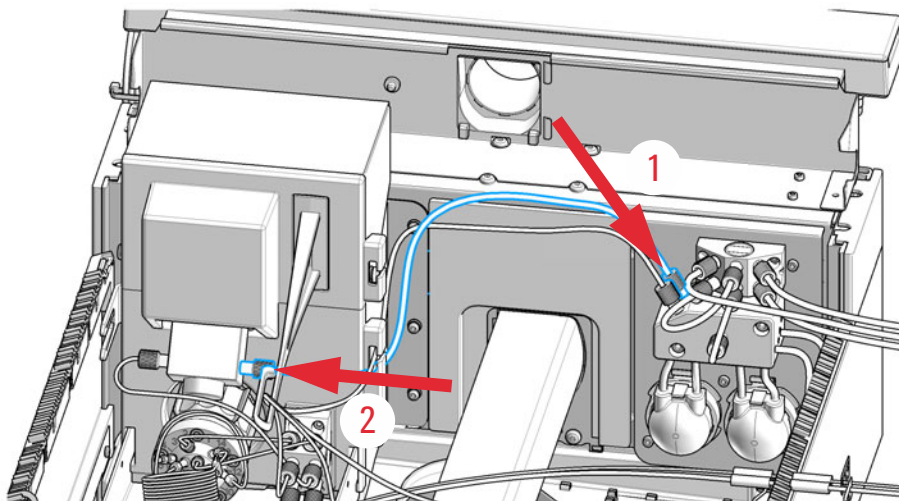


- 5 Install the 2nd tubing between lower outlet of the Solvent Selection Valve (1) to front of the Solvent Divider Block (2) (Solvent Distribution tubing).



Install or Replace the Solvent Distribution Tubing

- 6 Install the long tubing between the left rear connector of the Solvent Divider Block (1) to the inlet of the Metering Pump (2).



Install or Replace the Sampling Unit Tubing

Tools required	p/n 5043-1471	Description Fitting Handle
Parts required	p/n G9321-68006	Description Sampling Unit Tubing Kit Contains Sample Tubing Short (5500-1417), and Sample Tubing Long (5500-1418)

Preparations Use Lab Advisor to move the needle to the waste position.

- 1 Lift up and remove the leak plane.
- 2 Identify the four short sample tubings and the one long sample tubing. Use finger-tight fittings provided for the connection of short tubings to the valve. Do not use any further tools to tighten these fittings.
- 3 Connect the sample tubes as shown in [Figure 2](#) on page 7.

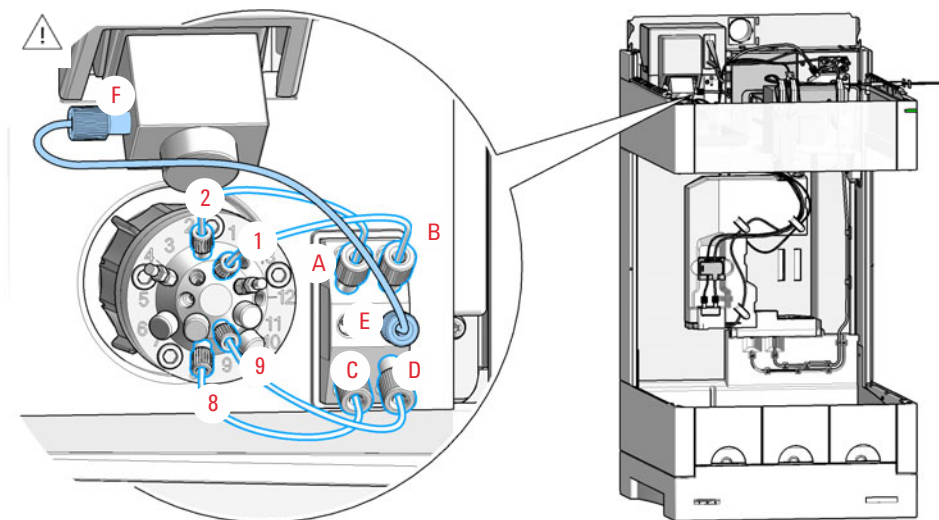


Figure 2 Plumbing connections

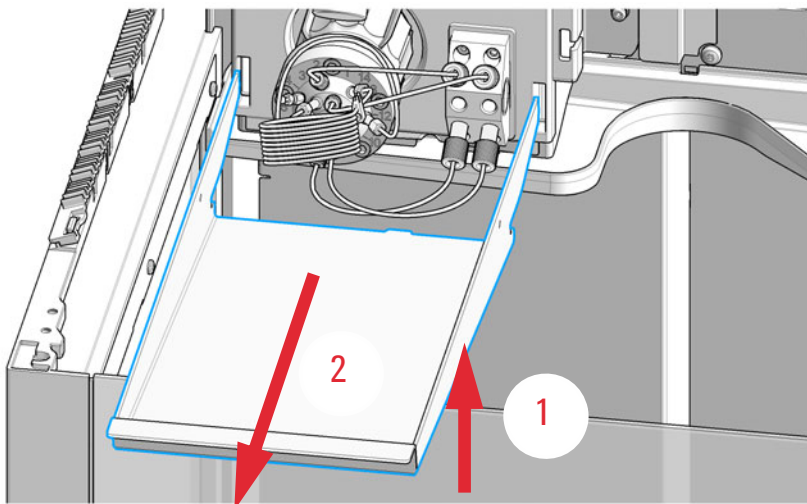
Install or Replace the Analytical Loop

Tools required	p/n	Description
	5810-0000	Hex driver SW-5 slitted
	5023-2500	Spanner double open ended SW-5

Parts required	p/n	Description
	5068-0348	Analytical sample loop

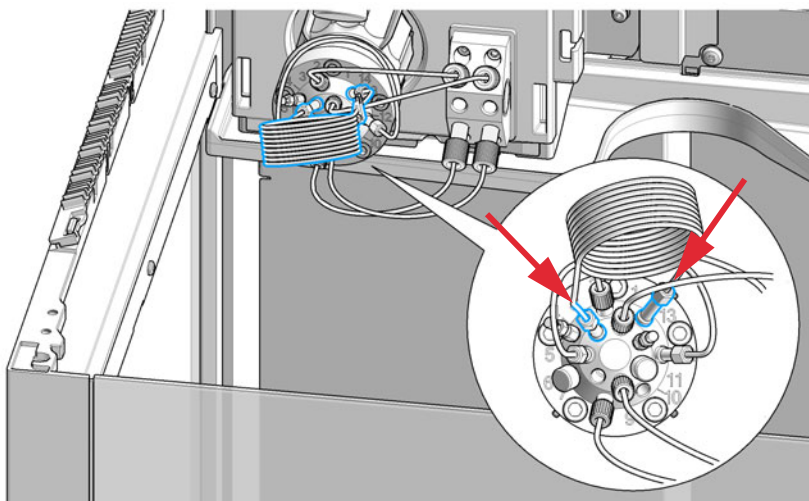
Preparations Use LabAdvisor to move needle to waste position.

- 1 Lift up (1) and remove (2) the leak plane.

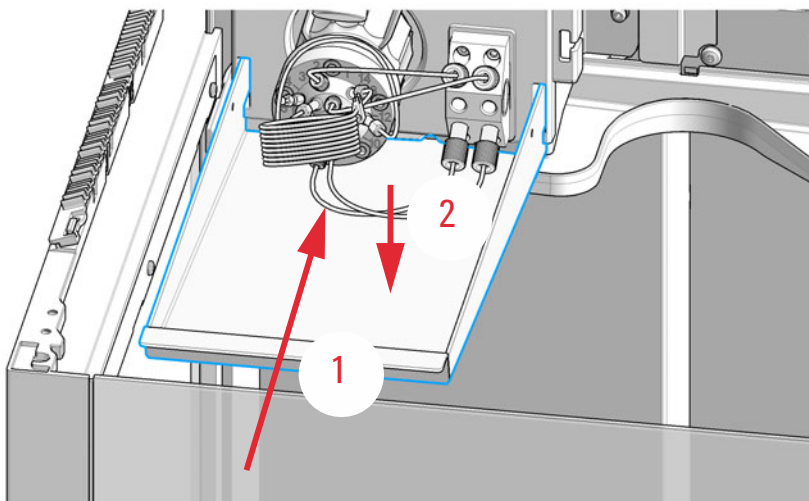


Install or Replace the Analytical Loop

- 2 Use Hex driver SW-5 slitted (5810-0000) to install or replace the analytical loop from port 3 to port 14.



- 3 Insert (1) and push down (2) the leak plane.

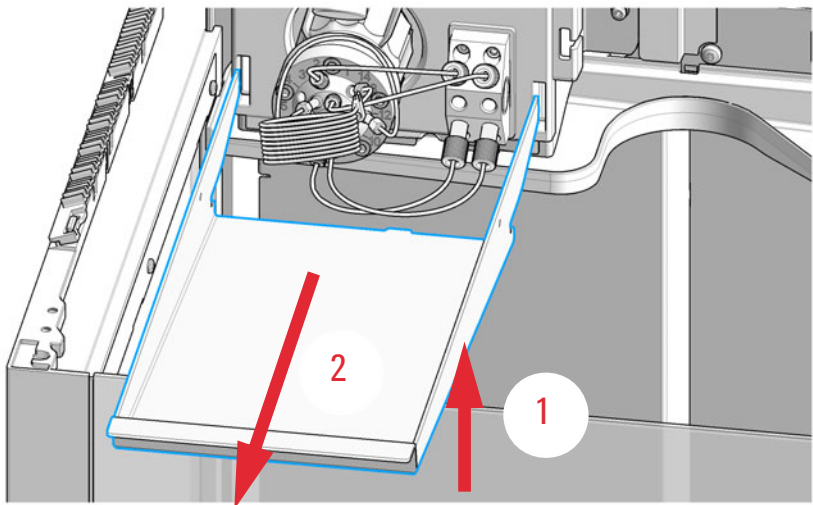


Install the Preparative Loop

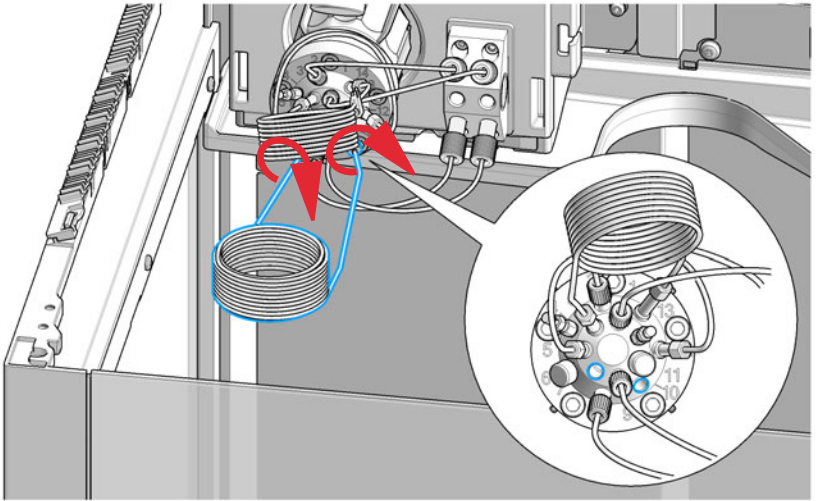
Install a 1/16" Preparative Loop

Tools required		p/n	Description	
		5810-0000	Hex driver SW-5 slitted	
		5023-2500	Spanner double open ended SW-5	
Parts required		#	p/n	Description
		1	5068-0350	Preparative sample loop, stainless steel, 2 mL
OR		1	5068-0351	Preparative sample loop, stainless steel, 5 mL, 1/16 inch

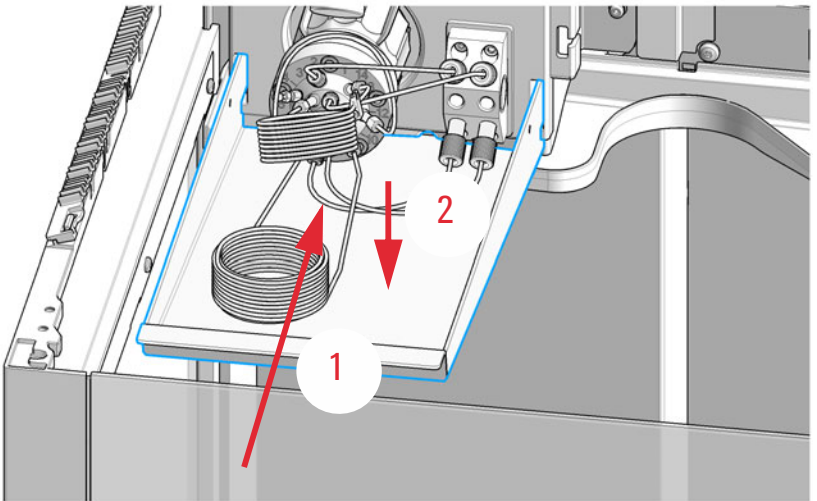
- 1 Lift (1) and remove (2) the leak plane.



- 2 Install the preparative loop from port 7 to port 10 using an SW5 wrench or SW5 driver.



- 3 Insert (1) and push down (2) the leak plane.



Install a 1/8" Preparative Loop

Tools required		p/n	Description	
		8710-0510	Open-end wrench 1/4 – 5/16 inch	
		8710-0972	Open-end wrench 7/16 inch	
		5810-0000	Hex driver SW-5 slitted	
		5023-2500	Spanner double open ended SW-5	
Parts required		#	p/n	Description
		1	5068-0334	Preparative sample loop, stainless steel, 5 mL
OR		1	5068-0335	Preparative sample loop, stainless steel, 10 mL
OR		1	5068-0336	Preparative sample loop, stainless steel, 20 mL

Each sample loop is shipped including Extension Kit (G9321-68013).

CAUTION

Heavy weight of the loops

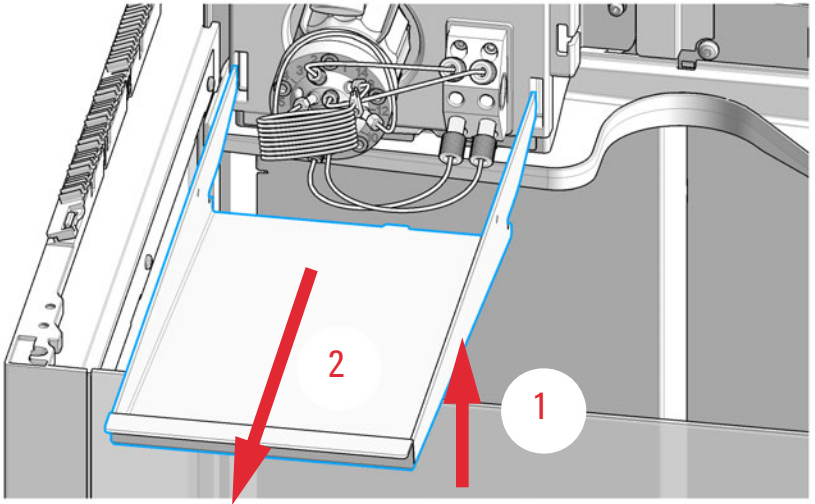
The extension capillaries cannot support the weight of the loops and can be damaged.

- ✓ For installation of the loops, use the Sample Loop Bracket to hold the preparative sample loop.

NOTE

The illustrations only show the installation. For the replacement, the procedure must first be carried out in reverse order (removal).

- 1 Lift (1) and remove (2) the leak plane.



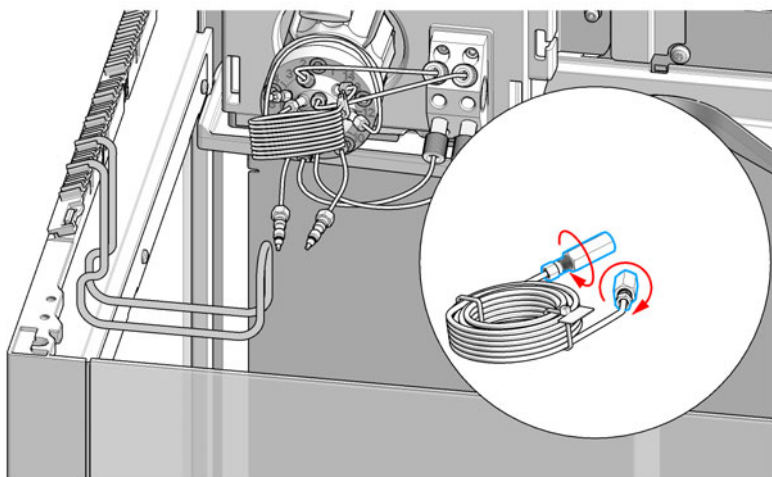
Install the Preparative Loop

2 Install the unions to the loop.

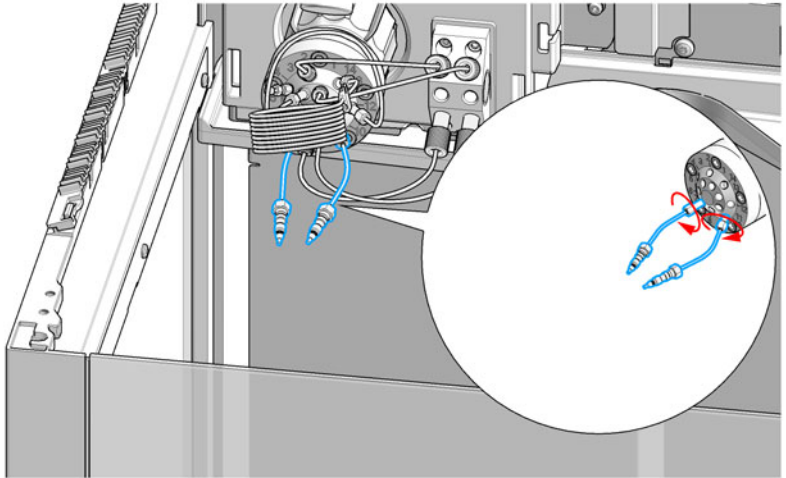
NOTE

To achieve maximale pressure tightness, always use Ferrule 1/8-in-TBG-DIA SST (0100-1488).

- a** If another ferrule than Ferrule 1/8-in-TBG-DIA SST (0100-1488) is installed, remove this ferrule from the loop.
- b** Attach Ferrule 1/8-in-TBG-DIA SST (0100-1488) in front of the loop fitting.
- c** Swage the loop to the union.
 - Use the 7/16" wrench for the union.
 - Use the 5/16" wrench for the loop.

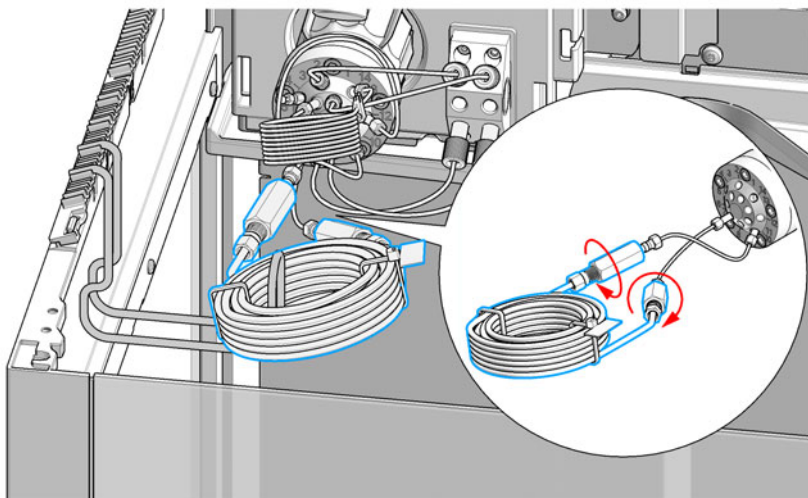


- 3** Install the extension capillaries.
 - a** Swage the extension capillaries to the unions.
 - Use the 7/16" wrench for the unions.
 - Use the 1/4" wrench for the capillary.
 - b** Remove the extension capillaries again from the union.
 - c** Install the extension capillaries finger-tight and oriented in the intended direction to the adapter-valve assembly.

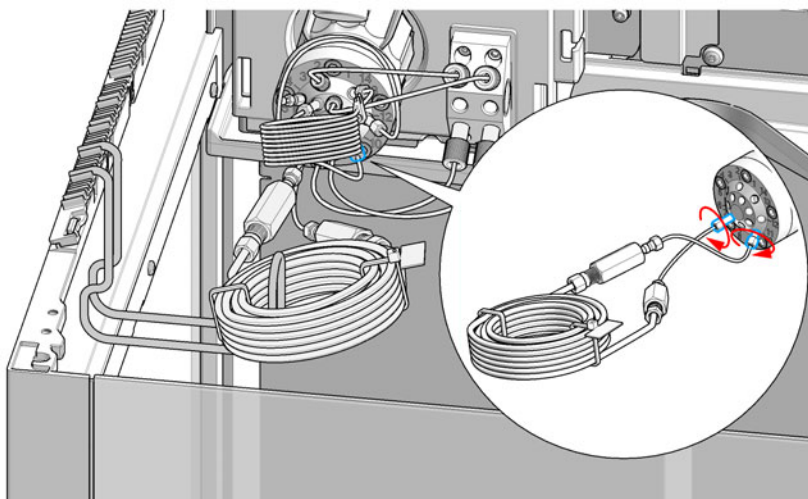


Install the Preparative Loop

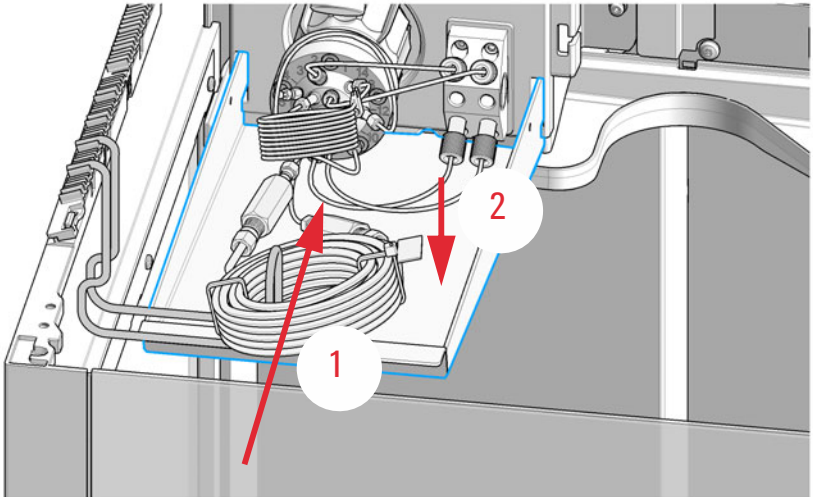
- 4 Fix the union-loop assembly to the extension capillary-valve assembly.



- 5 Tighten the fittings to the valve using the SW5 wrench or SW5 driver.



- 6 Install the leak plane.



Install or Replace the Needle Tubing

Tools required	p/n	Description
	5043-1471	Fitting Handle
	5067-7028	Z-Axis Maintenance Tool

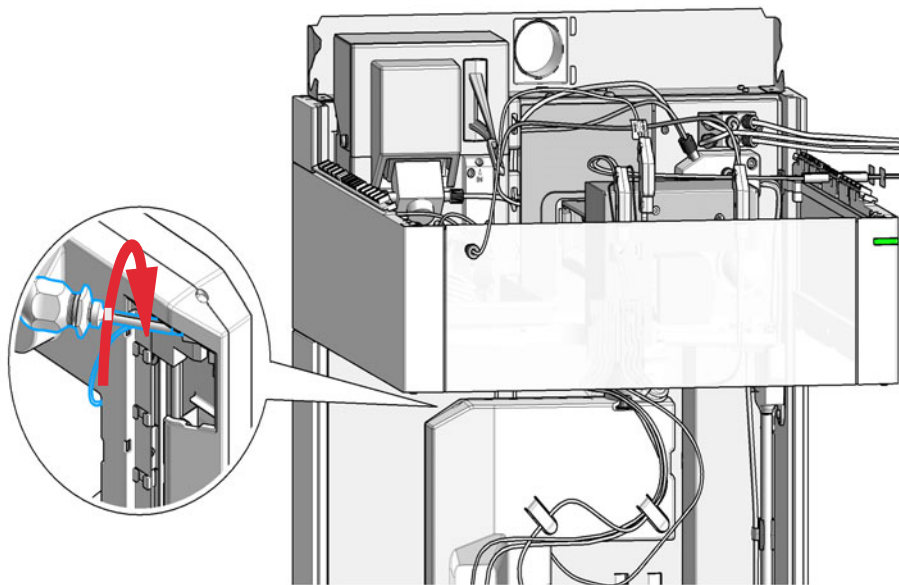
Parts required	p/n	Description
	G9321-68735	Needle Tubing Kit

Preparations Use Lab Advisor procedure "Change needle or needle tubing" and follow the on-screen instructions.

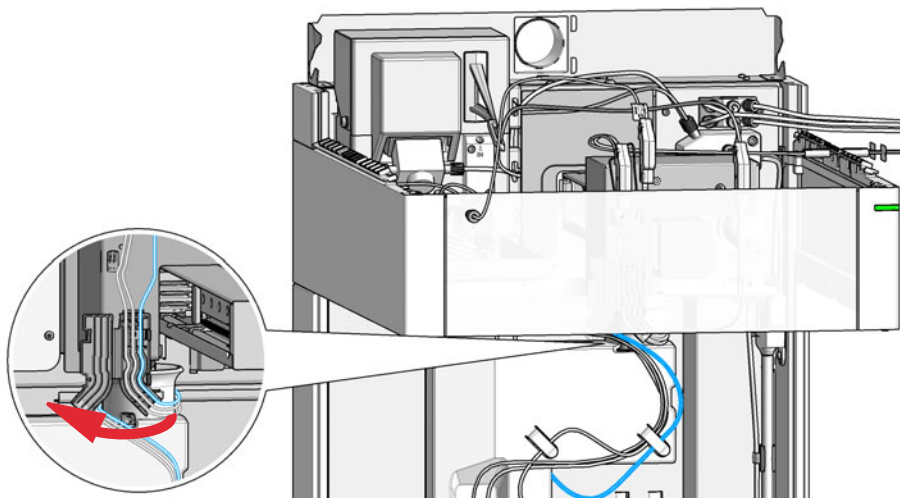
NOTE

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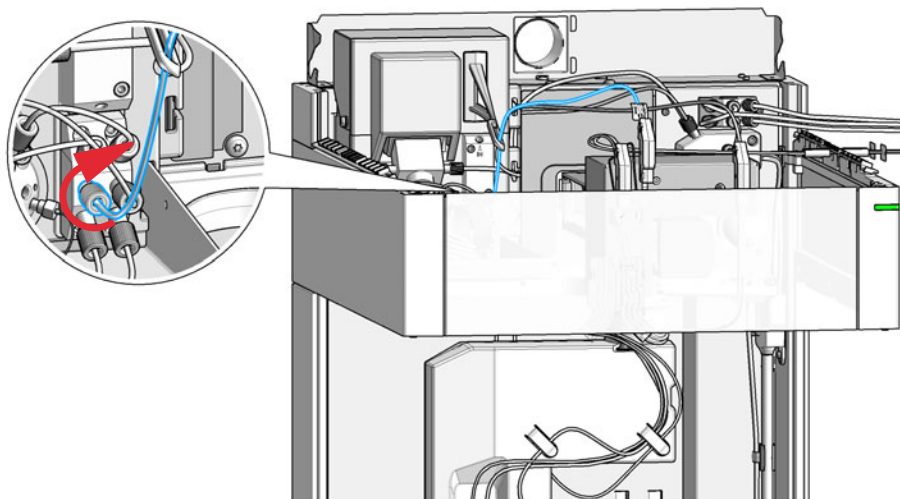
- 1 To install the needle tubing on the needle, connect the tubing first finger tight and then add one 1/4 turn with the Z-Axis Maintenance Tool (5067-7028).



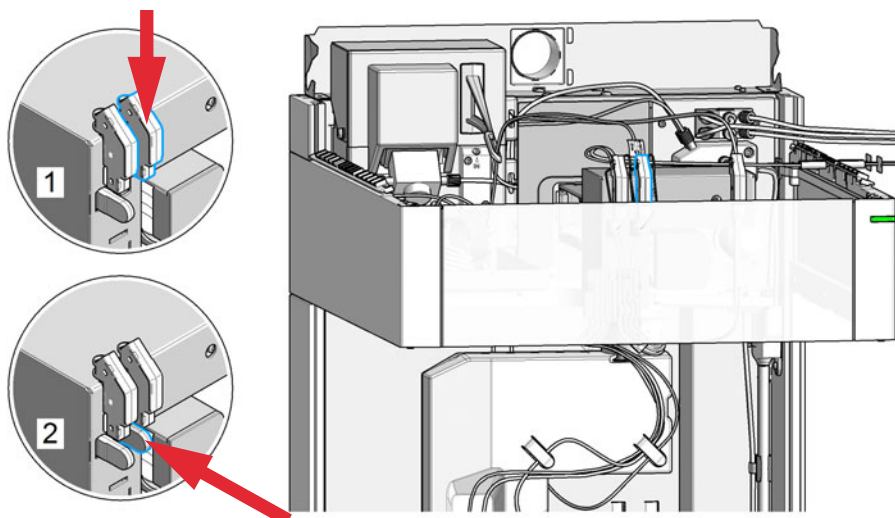
- 2 Guide the tubing around the robot arm and through the tube holder.



- 3 Connect the fitting on the solvent selection valve left outlet position with Fitting Handle (5043-1471).



- 4 Mount the black clip in the middle position (second slot on the left side) on the Theta housing and insert the dongle.



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Printed in Germany

Edition: 10/2021



Part No: G9321-90170 Rev. D

Document No: D0000573 Rev. D

