



Agilent Technologies

Innovating the HP Way

Chemical Analysis Group

1100 Series Liquid Chromatograph

1100 Series Autosampler Needle and Seat Change
Document 25302

Needle Assembly

Frequency	When the needle is visibly damaged When the needle is blocked
Tools required	¼ inch wrench (supplied in accessory kit). 2.5mm Hex key (supplied in accessory kit).
Parts required	Needle assembly, G1313-87201

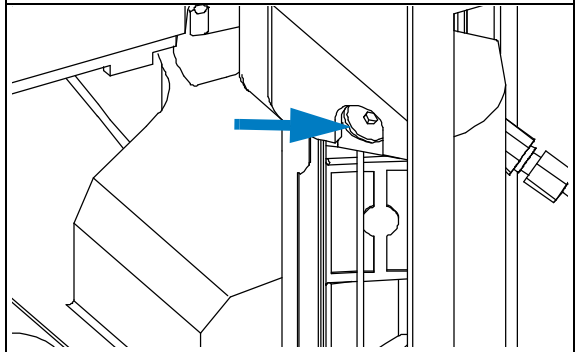
WARNING

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 Select “Start” in the maintenance function “Change Needle” (see page 85).
- 2 When the needle is positioned 15mm above the needle seat, remove the front cover.

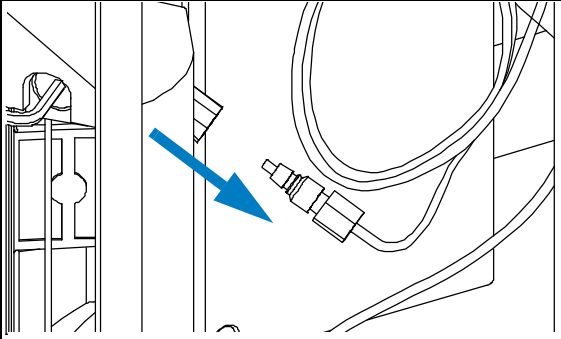
- 1 Select the “Needle Down” button until the needle screw is aligned with the hole in the safety cover.



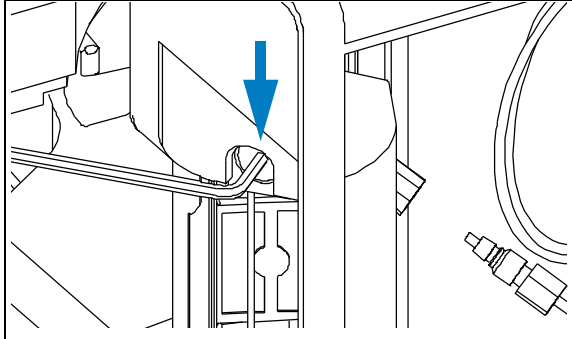
Repairing the Autosampler

Needle Assembly

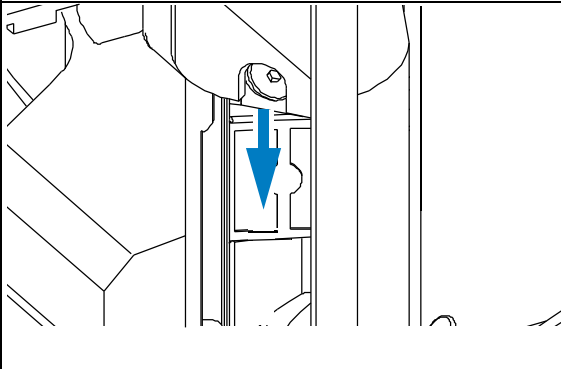
- 2** Remove the sample-loop fitting from the needle fitting.



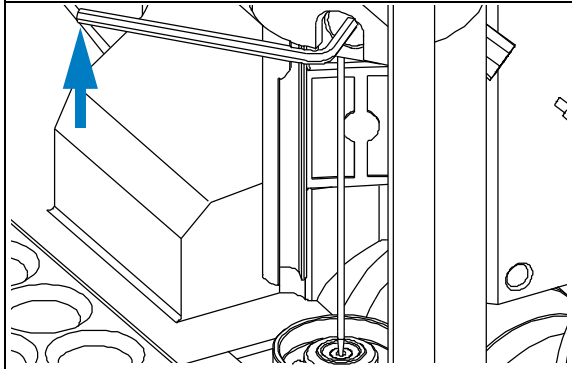
- 3** Loosen the fixing screw, and lift out the needle.



- 4** Select "Needle Down". Repeat the selection until the needle arm reaches its lowest position.

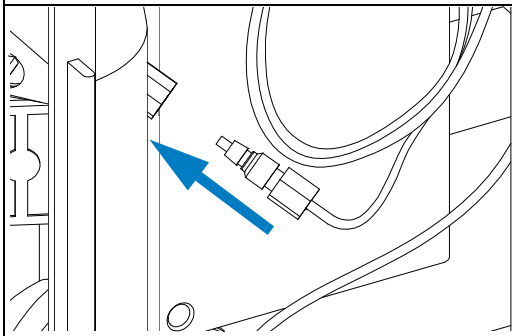


- 5** Insert the new needle. Align the needle in the seat, then tighten the screw firmly.

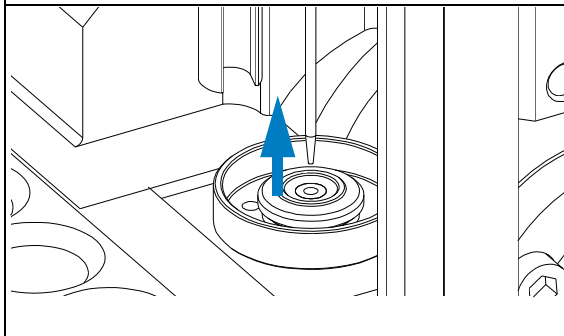


Needle Assembly

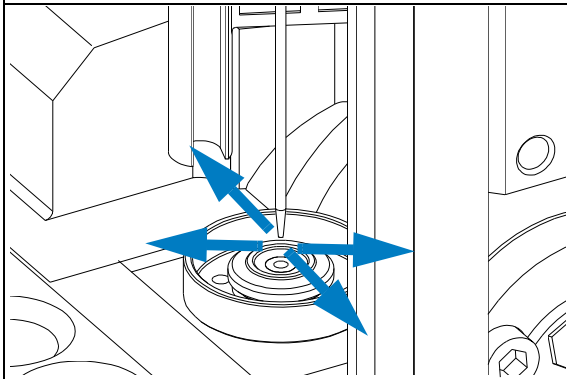
- 6** Reconnect the sample-loop fitting to the needle fitting.



- 7** Use “Needle Up” to lift the needle to a position approximately 2mm 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” in the maintenance function “Change Needle” (see page 85).

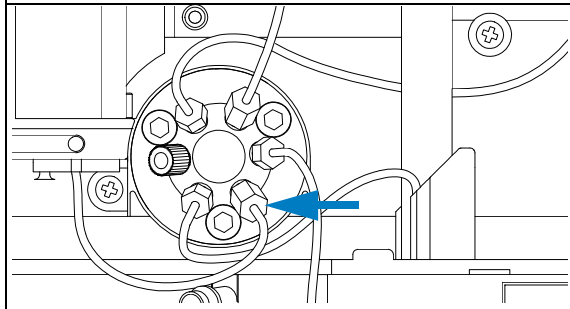
Needle-Seat Assembly

Frequency	When the seat is visibly damaged When the seat capillary is blocked
Tools required	1/4 inch wrench (supplied in accessory kit). Flat-head screwdriver.
Parts required	Needle-seat assembly, G1313-87101

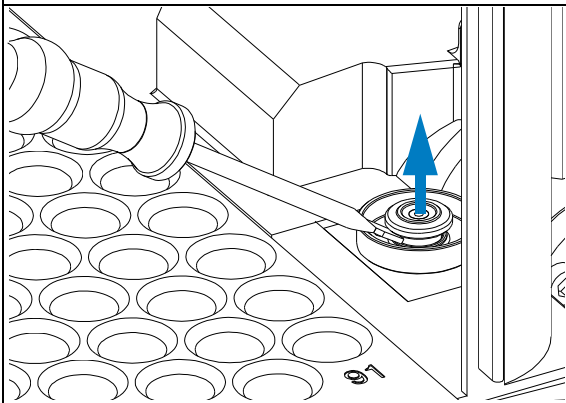
Before beginning this procedure:

- 1 Select “Start” in the maintenance function “Change Needle” (see page 85).
- 2 Remove the front cover.
- 3 Use the “Needle Up” command in the “Change Needle” function to lift the needle an addition 1cm.

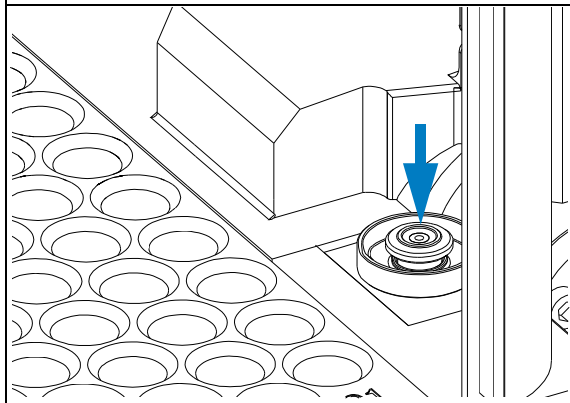
- 1 Disconnect the seat-capillary fitting from the injection valve (port 5).



- 2 Use a small flat-head screwdriver to ease out the needle seat.



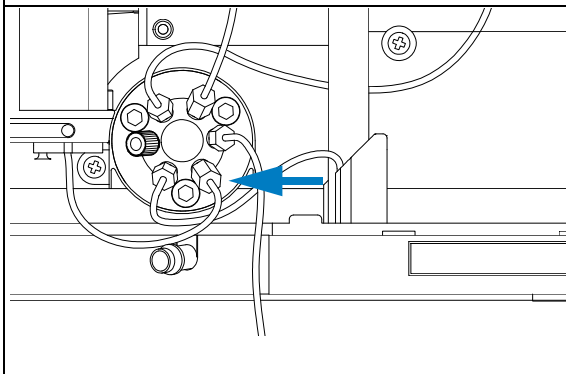
- 3 Insert the new needle-seat assembly. Press the seat firmly into position.



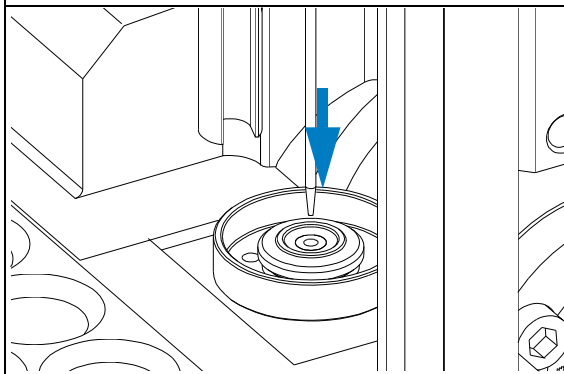
Repairing the Autosampler

Needle-Seat Assembly

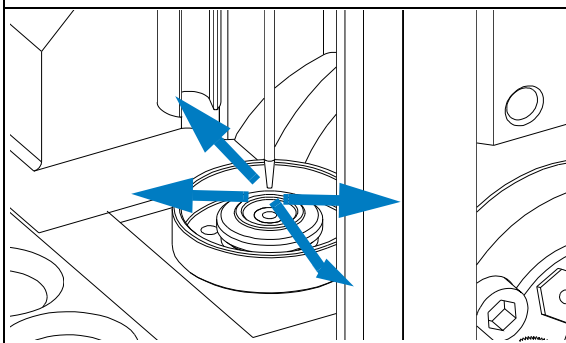
- 4** Connect the seat-capillary fitting to port 5 of the injection valve.



- 5** Use the “Down” button to position the needle approximately 2 mm above the seat



- 6** 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” in the maintenance function “Change Needle” (see page 85).