

Replacing the Syringe

This procedure explains how to replace the syringe in the Alliance 2695 Separations Module.

When to Perform

You should replace the syringe under the following conditions:

- When you want to install the optional syringe sizes for large- or small-volume injections
- If the plunger tip becomes worn as indicated by erratic reproducibility or increased RSD
- Annually as recommended by the maintenance schedule

Parts Required

Table 1: Parts Required

Part Number	Description	Quantity
WAT073109	Syringe, 250 μ L	1
WAT077343	Syringe, 25 μ L	1
WAT077342	Syringe, 2500 μ L	1

Tools/Materials Required

None

Procedure

Preparing the Instrument

1. Turn the Separations Module on.
2. Press the **Menu/Status** key to access the Control screen.
3. Check to make sure the solvent flow is off and there is no backpressure in the system.

Removing the Syringe

1. Open the syringe compartment door.

2. Remove the knurled knob from the end of the syringe plunger (Figure 1).

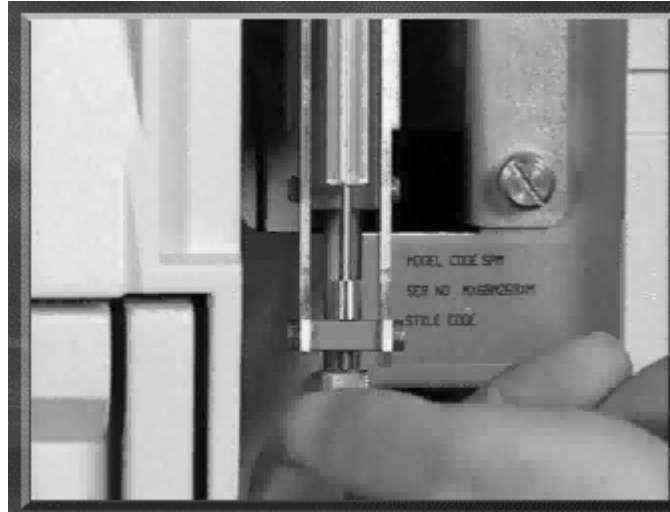


Figure 1 - Removing the Syringe

3. Press the **Menu/Status** key to return to the Main menu, then press the **Diagnostics** screen key.
4. Press the **Other Tests** screen key and select **Motors & Valves** from the list of available tests.
5. Press the arrow keys to select **V3** and press any numeric key to switch the valve to the Open position.
6. Press **Enter** to save this change.
7. Unscrew the syringe from the syringe drive mounting block and remove the syringe from the compartment.

Installing the Syringe

1. Screw the new syringe partially into the syringe drive mounting block.
2. Slide the syringe plunger down and insert the end of the plunger through the syringe guide bracket.
3. Now you can tighten the syringe into the mounting block.

Purging the Syringe

After installing a syringe, you must purge all air from the syringe. To do this:

1. Press the **Normal States** screen key to return all components to their Home position.
2. Press the **Menu/Status** key to access the Control screen.
3. Enter a flow rate of 1 milliliter per minute and press **Enter**.
4. Press the **Menu/Status** key again to return to the Main menu, then press the **Diagnostics** screen key.
5. Press the **Other Tests** screen key and select **Motors & Valves** from the list of available tests.
6. Highlight **V3** and press any numeric key to open the valve. (Opening Valve 3 vents the syringe to waste.)

7. Highlight **V2** and press any numeric key to open this valve. (This directs the solvent flow toward the syringe.)
8. Manually move the syringe plunger all the way up inside the syringe barrel, then move the plunger all the way down.
9. Check to make sure there are no air bubbles inside the syringe.
10. If air bubbles are present, repeat the manual purge to remove them.
11. Once the air is removed, install the knurled knob onto the end of the syringe plunger.
12. Next, highlight the **Syringe Position** field and press **Enter**.
13. Select **Full** and press **Enter** again. While the syringe is being filled with solvent, visually check again to make sure there are no air bubbles inside the syringe.
14. Press the **Normal States** screen key to return all components to their Home position.

Configuring the Syringe

If the syringe you installed is a different size, you must change the syringe size on the Configuration screen. To do this:

1. Press the **Configure** screen key on the Main menu to display the Configuration screen.
2. With the Syringe Size highlighted, press **Enter** and use the arrow keys to select the correct syringe size; then press **Enter**.
3. Press the **Exit** key to return to the Main menu.

NOTE: *Once you have installed a new syringe, you must purge the sample management system to remove any bubbles that may exist in the system. Follow the instructions outlined in the operator's manual.*