

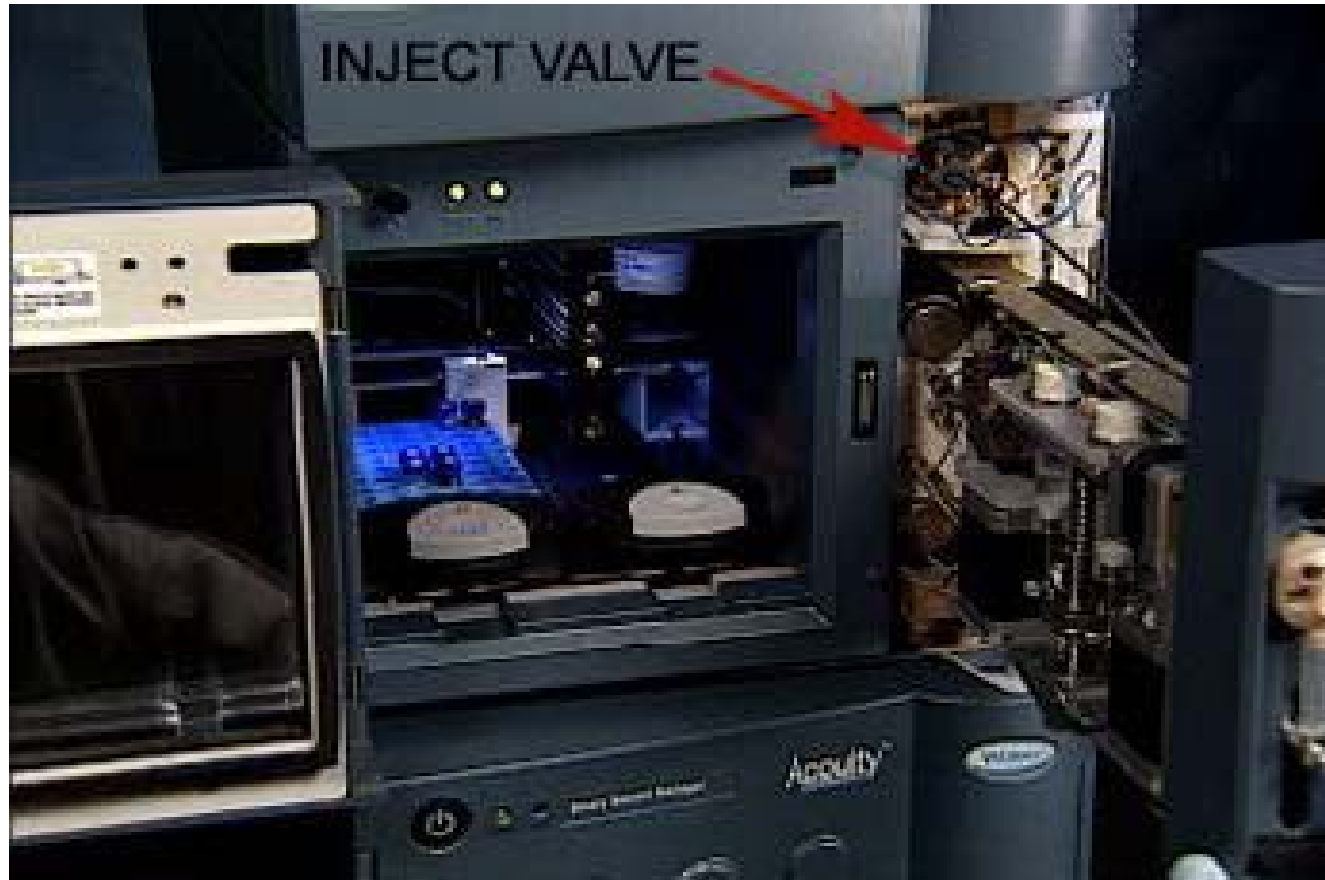
Chapter Eight

Replacing the Inject Valve Cartridge and Sample Loop

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

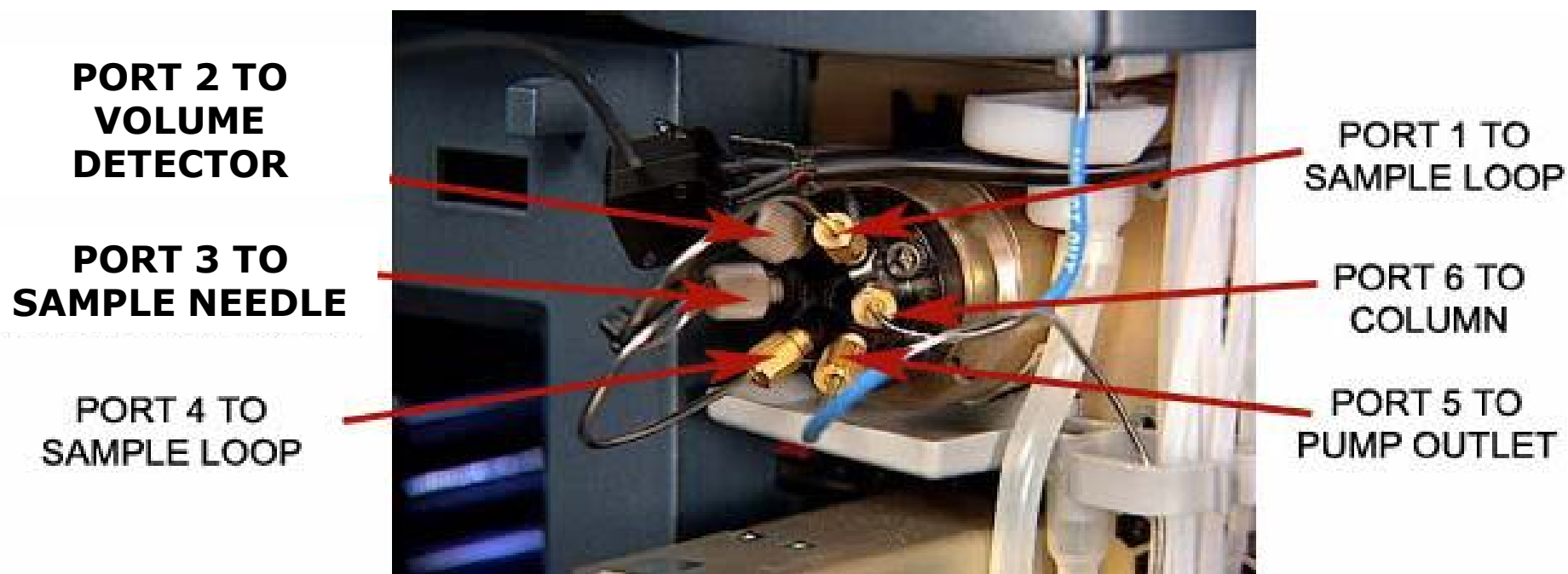
- Replacing the inject valve cartridge.
- Replacing the sample loop.

Replacing the Inject Valve Cartridge



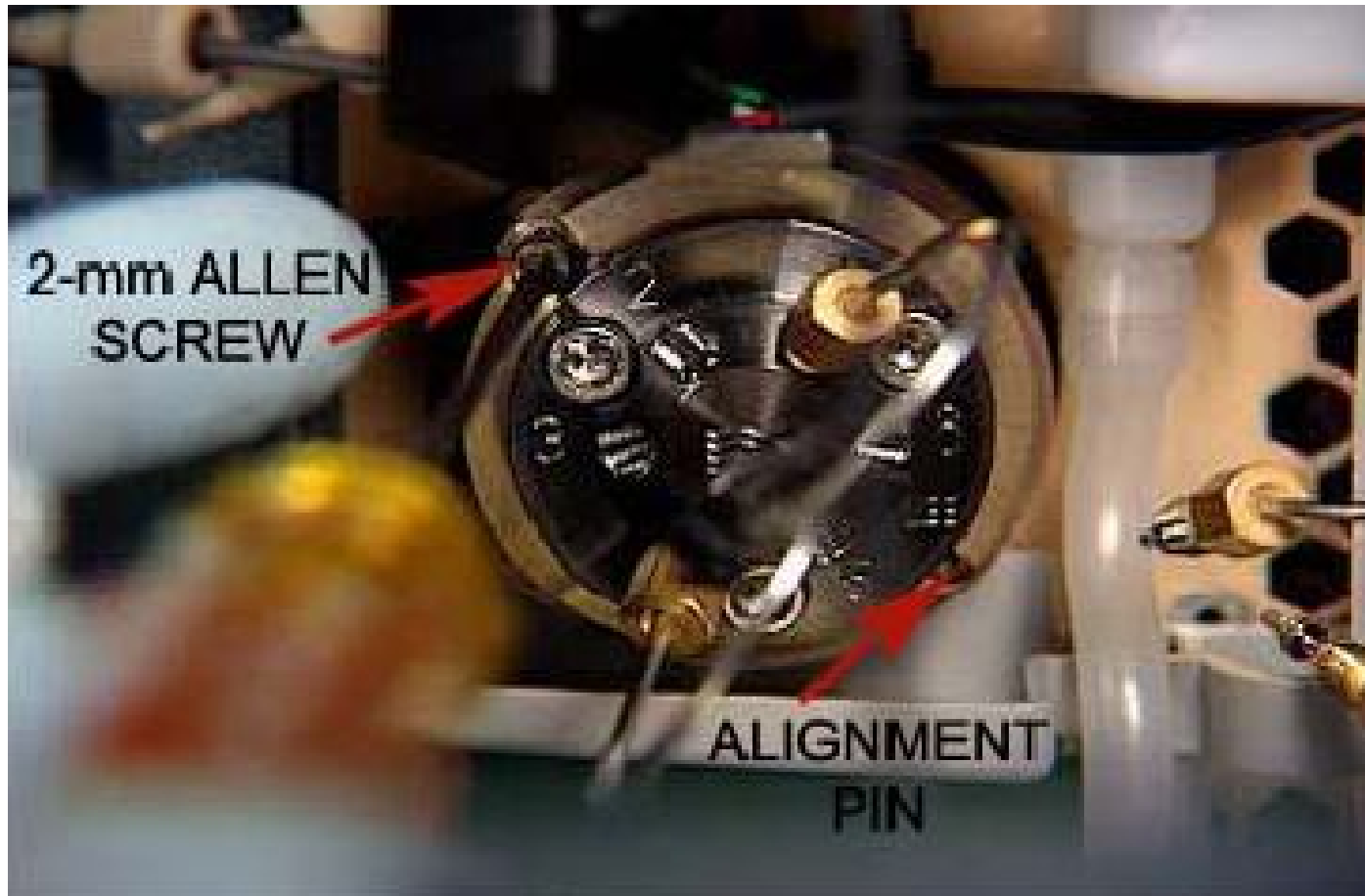
Location of Inject Valve Cartridge

Replacing the Inject Valve Cartridge



Inject Valve

Replacing the Inject Valve Cartridge



Location of 2-mm Allen Screw and Alignment Pin

Replacing the Inject Valve Cartridge

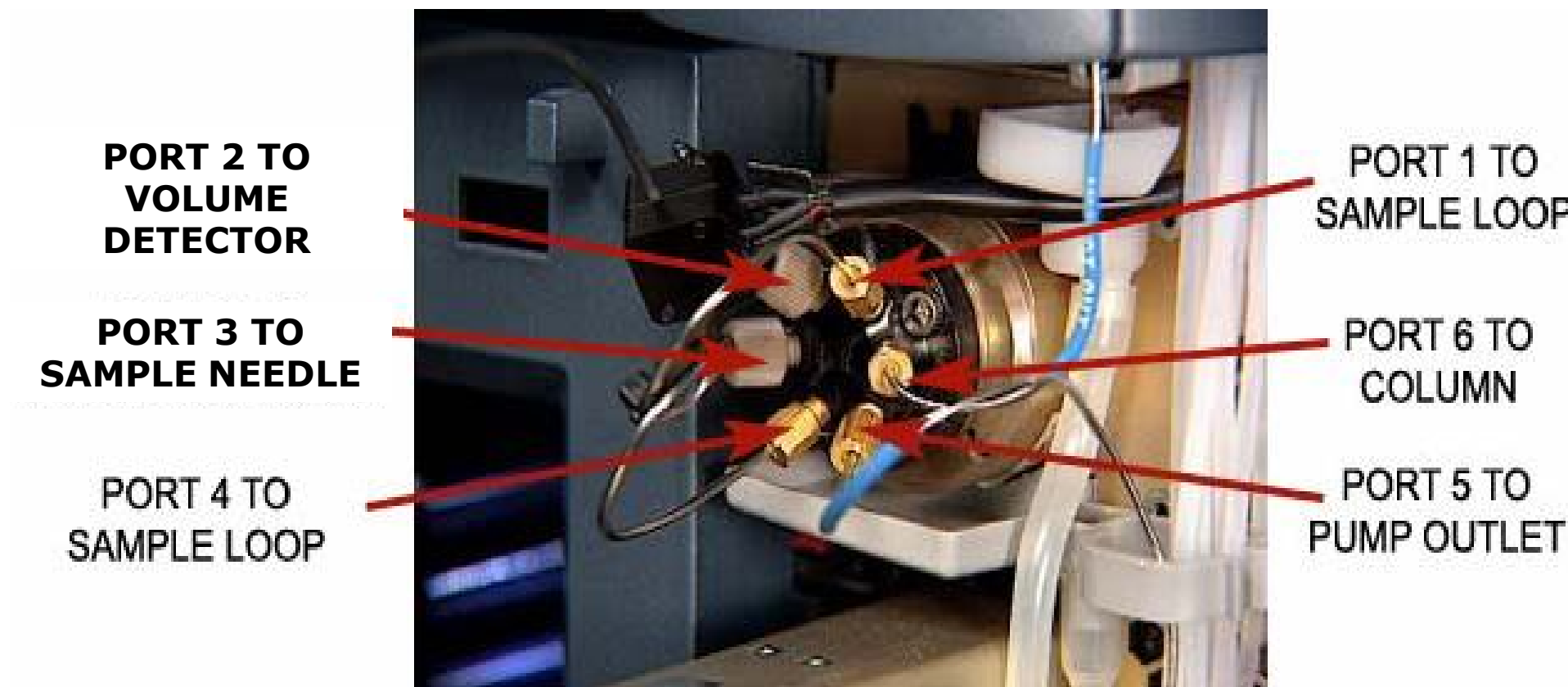


Alignment of Grooves

Replacing the Sample Loop



Replacing the Sample Loop



Inject Valve

Replacing the Sample Loop



Characterize Needle and Loop Volumes

The screenshot displays the ACQUITY UPLC Console for System ISMM on Node WATERS-KKGF4Y - [Sample Manager]. The interface includes a left sidebar with a tree view containing 'ACQUITY UPLC System', 'Binary Solvent Manager', 'Sample Manager' (selected), 'Column', 'Plots', 'Maintenance Counters', and 'Logs'. The main area is divided into several sections: 'Control' and 'Configure' tabs, a 'Maintain' dropdown menu, and a 'Troubleshoot' section. The 'Maintain' menu is open, showing options like 'Characterize', 'Replace', 'Calibrate needle Z axis...', 'Leak test', 'Back pressure regulator test...', 'Disable motors', 'Park injection valve', 'Defrost', 'Reset injection count...', and 'Create log entry...'. The 'Characterize' option is selected, leading to the 'Characterize Needle and Loop Volumes' dialog box. This dialog box shows the 'Nominal Configuration' with 'Loop volume: 20.0 µL' and 'Needle volume: 26.0 µL'. It also includes a 'Run time' field set to '0.0 min' and buttons for 'Start', 'Results >>', and 'Close'. In the background, the 'Sample Manager' section shows 'Sample Pressure: 0 psi' and 'Injector Valve: Inject'. A plot at the bottom left shows 'Column Heater Temperature' and 'Room Temperature' over time, with the x-axis labeled 'Minutes' ranging from -10.00 to 0.00.

ACQUITY UPLC Console for System ISMM on Node WATERS-KKGF4Y - [Sample Manager]

Control Configure Maintain Troubleshoot Help

Characterize Needle and loop volumes... Needle seal...

Replace Calibrate needle Z axis... Leak test Back pressure regulator test... Disable motors Park injection valve Defrost Reset injection count... Create log entry...

Sample Pressure: 0 psi

Injector Valve: Inject

Sample Manager

Binary Solvent Manager

Column

Plots

Maintenance Counters

Logs

System Status

Column Heater Temperature

Room Temperature

Minutes

Characterize Needle and Loop Volumes

Nominal Configuration

Loop volume: 20.0 µL

Needle volume: 26.0 µL

Run time: 0.0 min

Start

Results >>

Close