

Column Manager and Column Heater/Cooler

ACQUITY UPLC System

3 Column Management Configurations

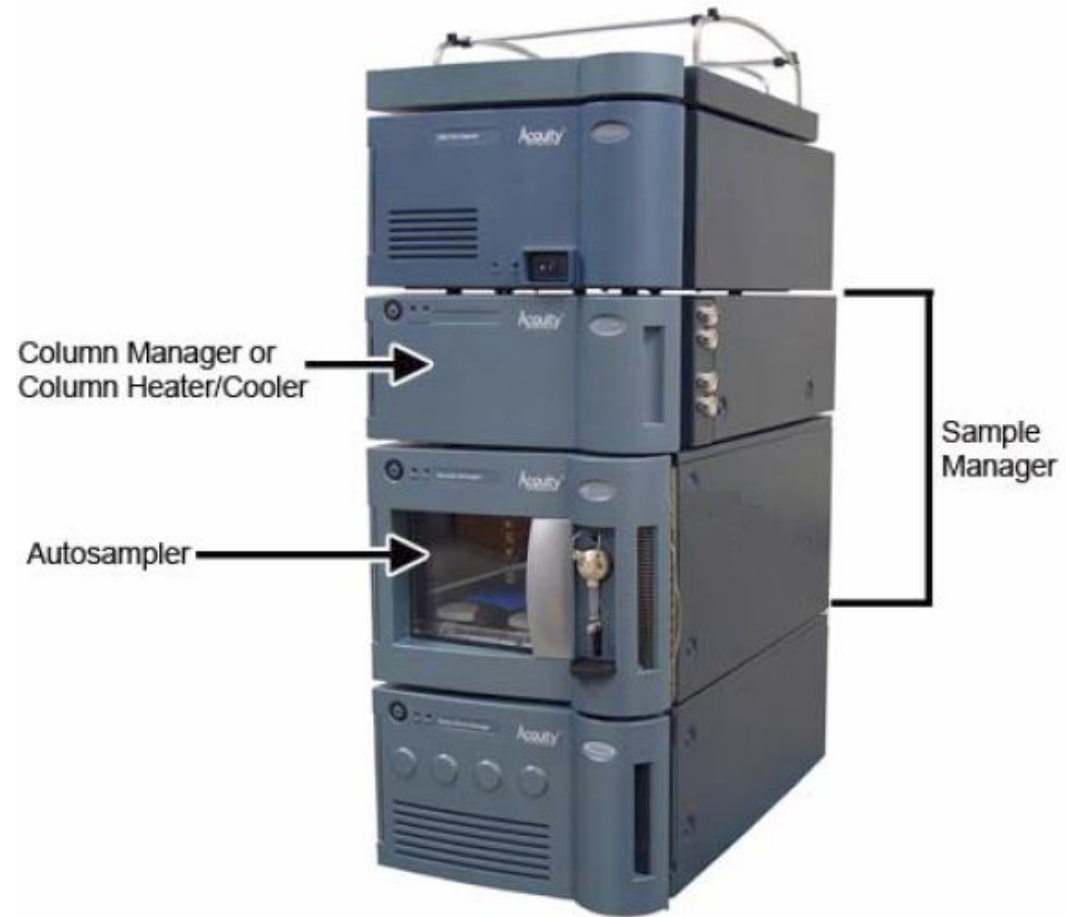
1. Sample Manager w/ Column Heater Module
 - Heating only- Ambient to 90°C
 2. Sample Manager w/ Column Heater/Cooler Module
 - Heating and cooling- 10°C to 90°C
 3. Sample Manager w/ Column Manager
 - Heating and cooling 10°C to 90°C + 2 valves
 - 4 column selection
 - Bypass column and divert to waste
- ACQUITY UPLC 30 cm Column Heater/Cooler
 - Accessory with the three system option above



HT Column Heater

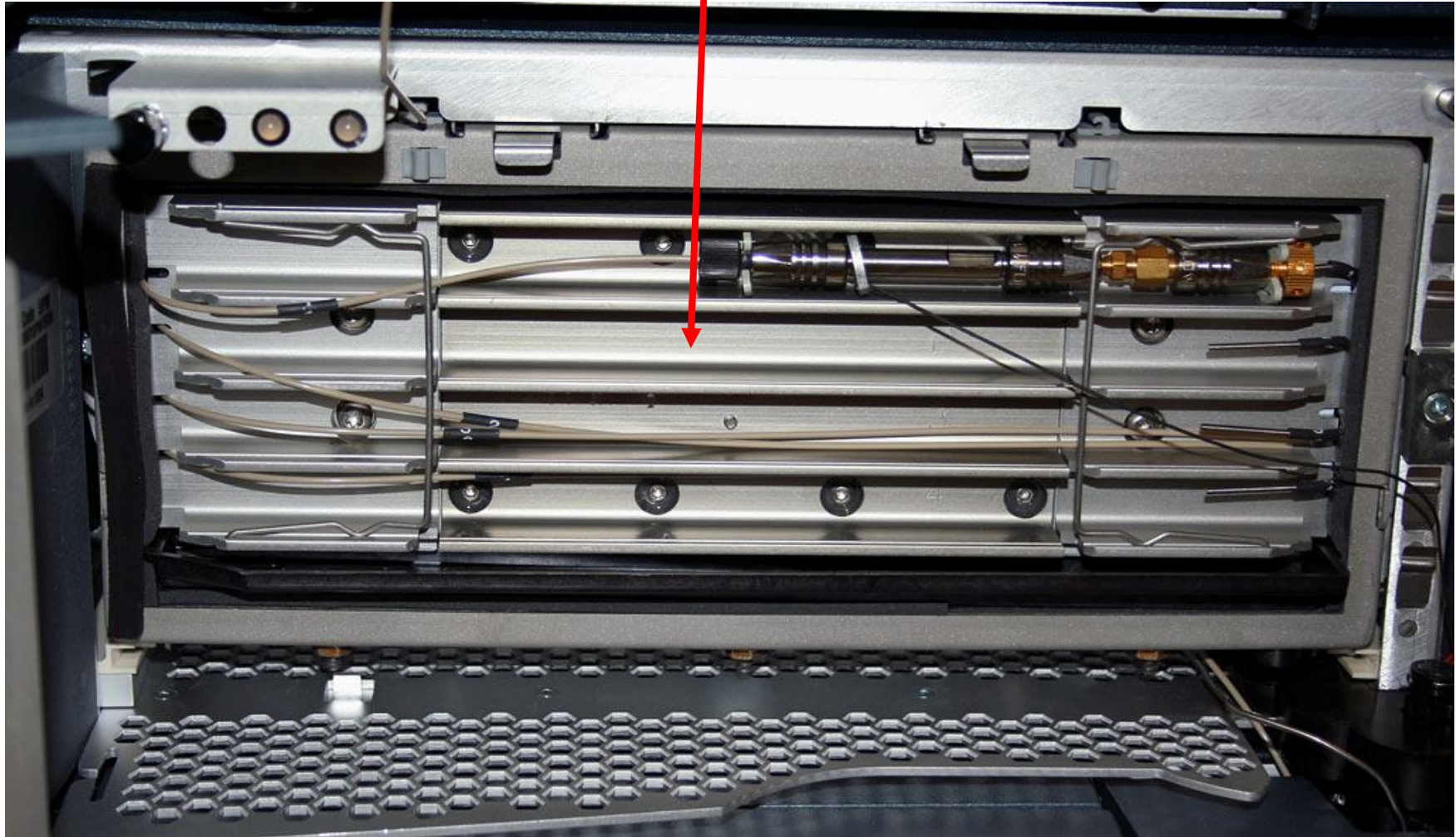


ACQUITY System



Column Manager

Four Separate Column Compartments



Two Switching Valves (internally mounted)

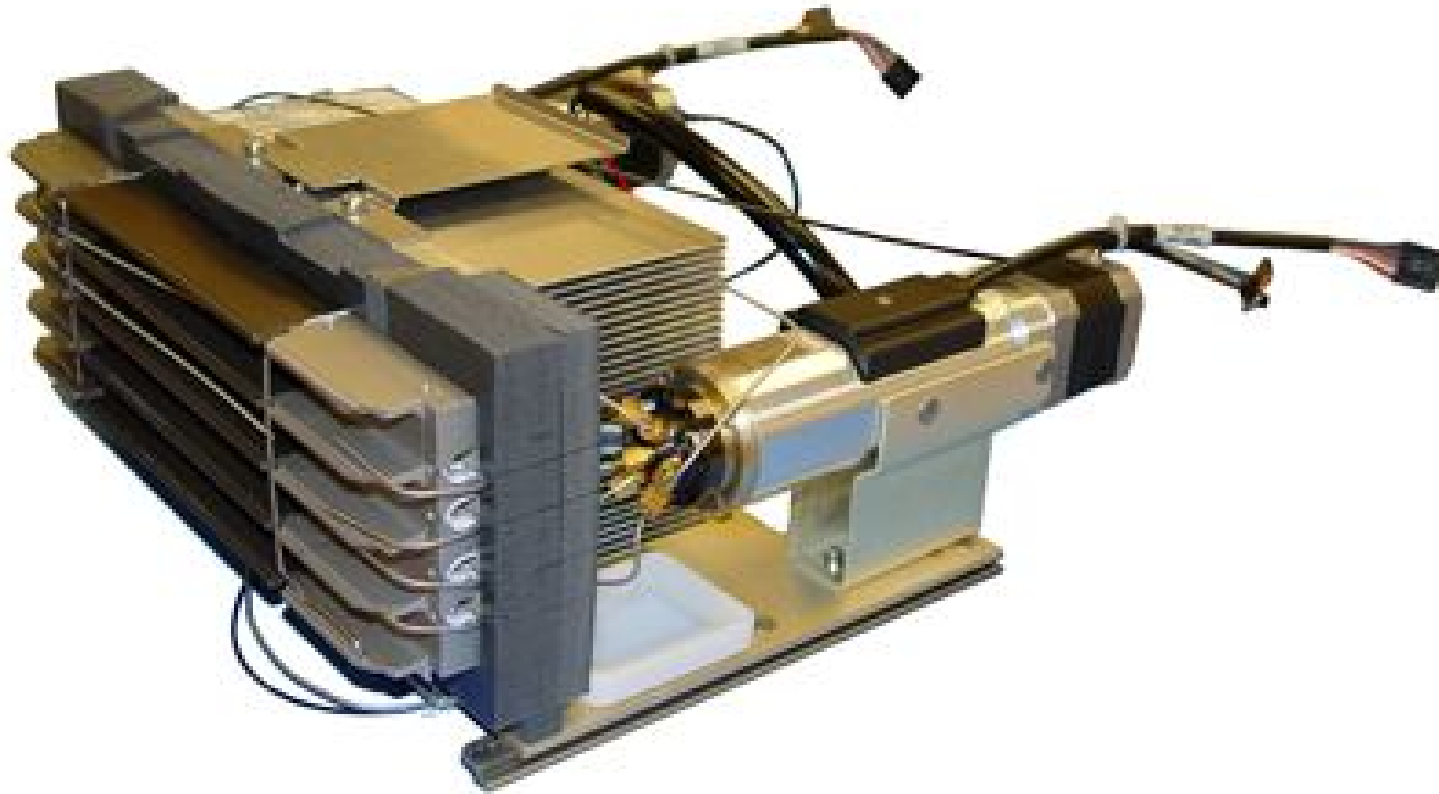
Column Manager eCord Readers



Column Manager- Top View

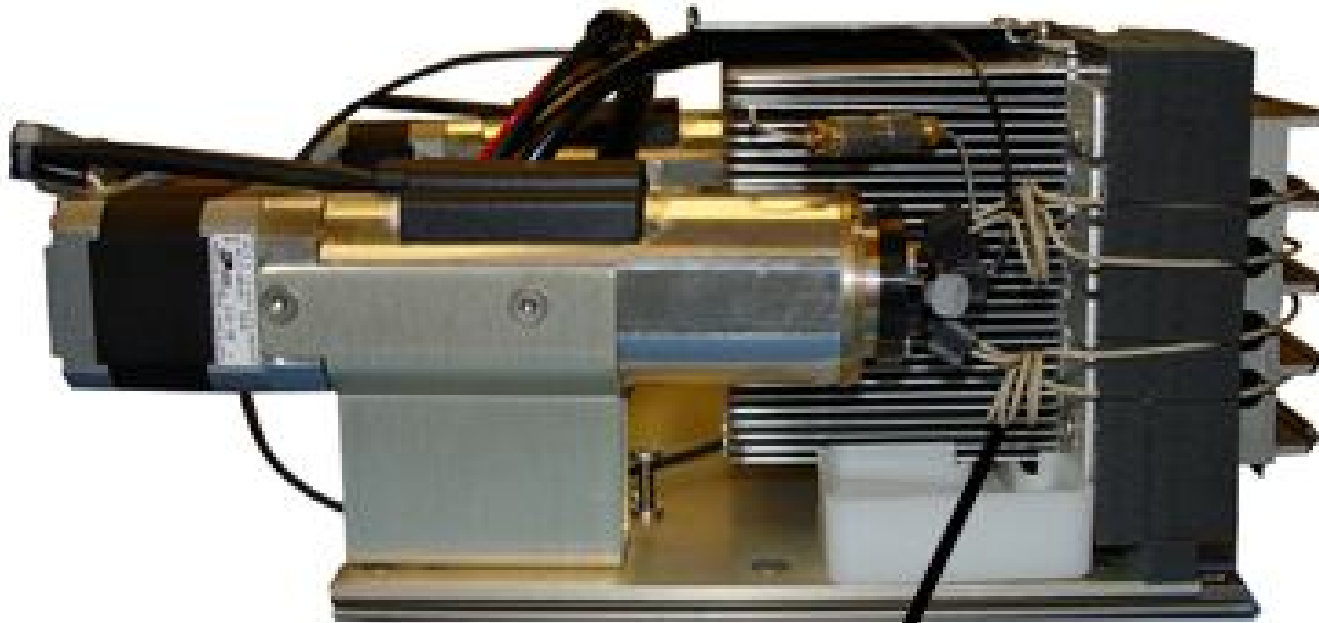


Column Manager- Left Side View



Column Manager- Right Side View

Right inlet drawer assembly (left side)

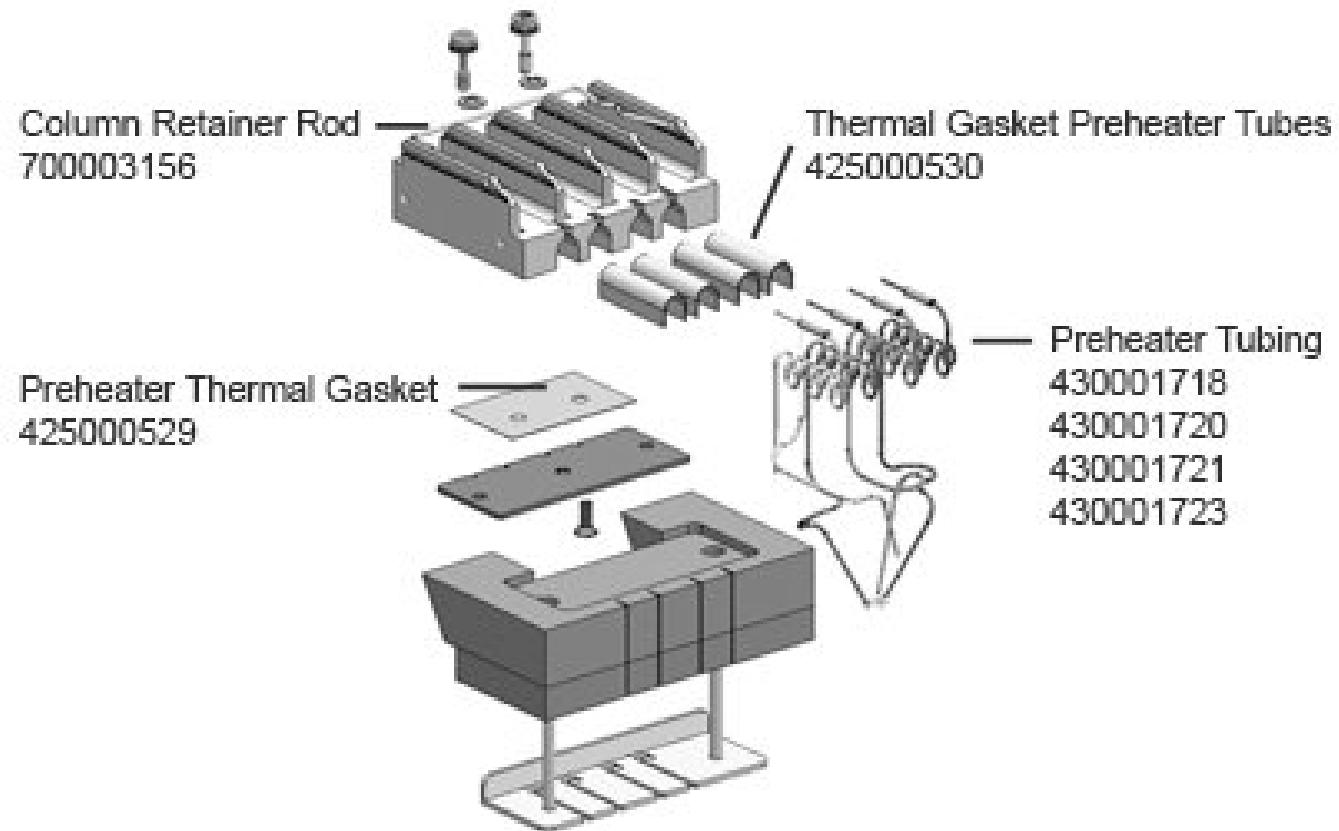


Post-heater tube set

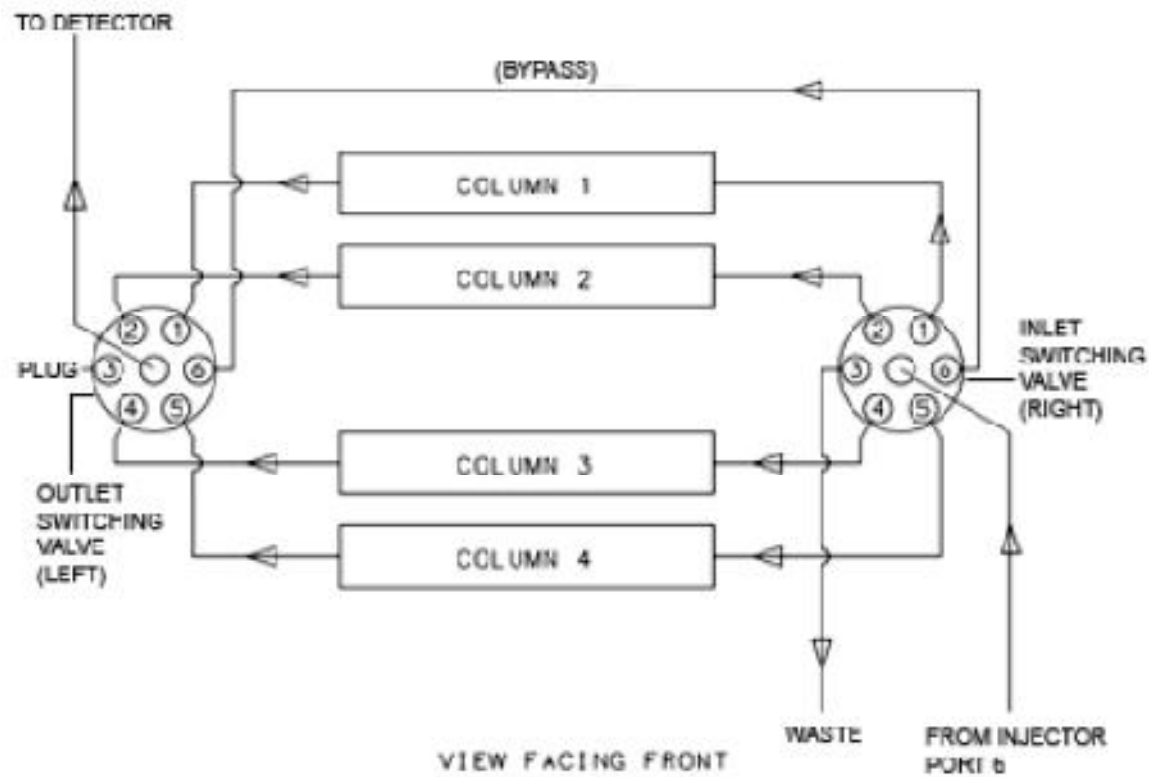
Column Manager- Rear View



Inlet and Outlet Tubing Diagram



Column Manager Fluidic Path



Sample Manager Method Editor

Modify ACQUITY Sample Manager Instrument Method

Acquity Sample Manager
Ultra Performance LC

Run Time: 1.00 min

General | Data | Events | Column Manager

Sample Loop Option [Please Read!](#)

☐ Partial Loop
☒ Partial Loop With Needle Overfill
☐ Full Loop

Loop Offline: Disable min
☐ Load Ahead

Wash Solvents

Weak: 10/90 ACN/Water 600 µL
Strong: 100% Acetonitrile 200 µL

Temperature

Column: Off °C Alarm Band: ☐ ± 5.0 °C
Sample: 25.0 °C ☒ ± 5 °C

Comment:

OK Cancel

Column Manager Method Editor

Modify ACQUITY Sample Manager Instrument Method

Acquity Sample Manager
Ultra Performance LC

Run Time: 1.00 min

General | Data | Events | **Column Manager**

Heater

Temperature: 25.0 °C

☒ Alarm Band: ± 5.0 °C

Column Selection

Valve Position: Column 1

Equilibration Time: 0.1 min

☐ Acquire column temperature data channel

OK Cancel

Run LED

- Off - The instrument is idle, not doing any injections or processing any diagnostic requests, and appears in good health.
- On Green - The system is currently running, attempting to complete any outstanding samples or diagnostic requests.
- Flashing Green (2 Hz) – This indicates that the system is waiting for itself to reach operational condition (e.g. in this case, reach temperature set point).
 - Note that the Column Manager when powered on will flash green until Empower or Masslynx establishes communication with it, after which it initializes and the LED state goes to Off.
- Flashing Red (2 Hz) - This indicates that the system has stopped on an error and is no longer processing any samples or other maintenance requests.
- On Red - Indicates a serious system failure that prevents further operation and possibly communications to the PC.
- Flashes Red and Green (3 Hz) - This sequence is used by the Console to visually identify instruments.

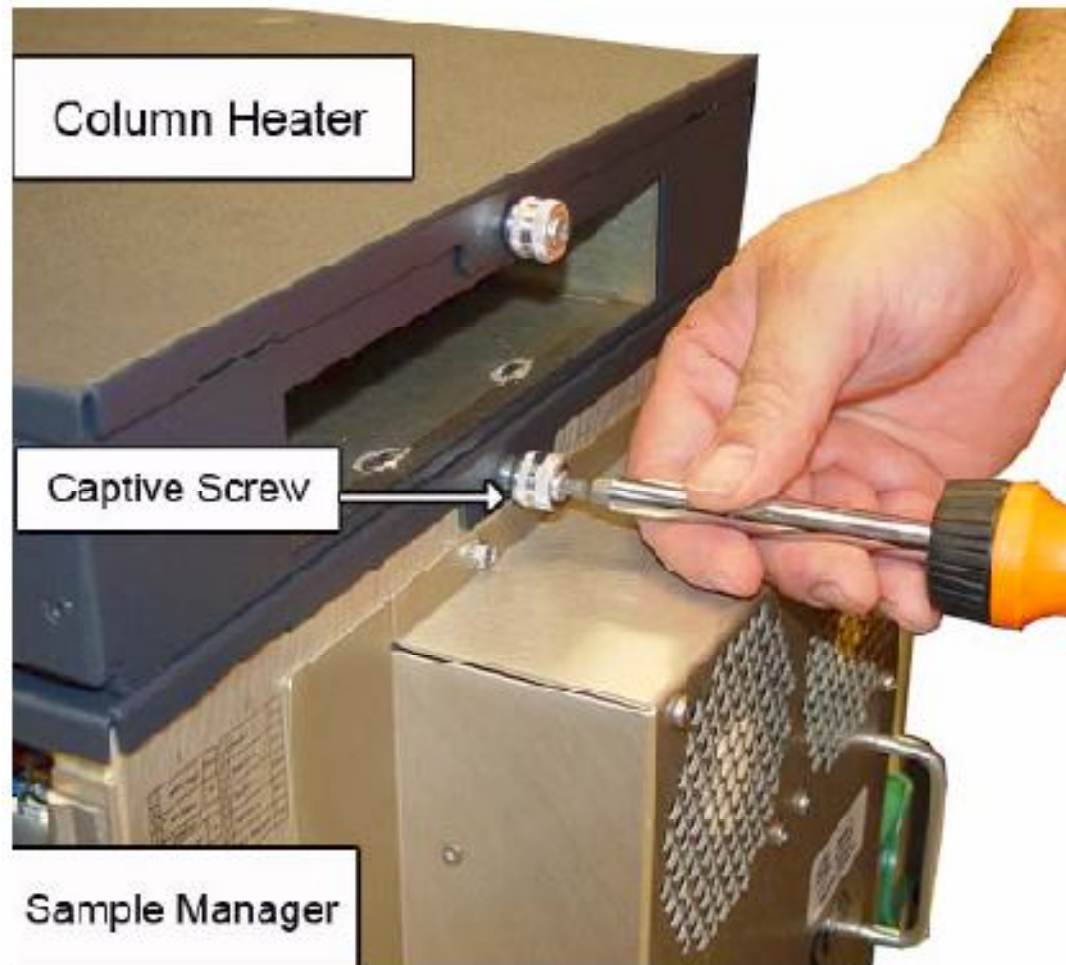
eCord LED

- Off – The eCord is currently not connected
- On Green – The eCord is connected
- Flashing Green (2 Hz) – This indicates that the column corresponding to this eCord is the one that is currently selected
 - Only one of these four LEDs can be blinking green at any time
- On Red – This indicates that an error has occurred while reading or writing data to the eCord.
- Flashing Red (2 Hz) – This indicates that the column position has been selected, but the eCord is not plugged in



Upgrade and Set Up

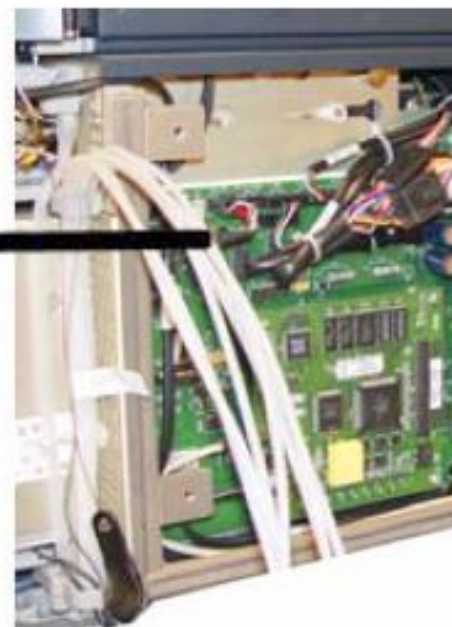
Removal of Column Heater



Remove C/H Cables from Sample Manager

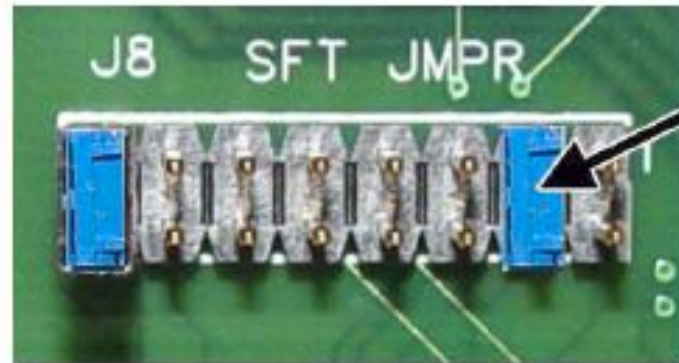


Personality PCB



Right side of
autosampler

Add SFT JUMPER to SM PCB



Add Jumper
PN WAT072940
to Pin 2

*Note : This jumper is located
in the SM Top Panel Kit*

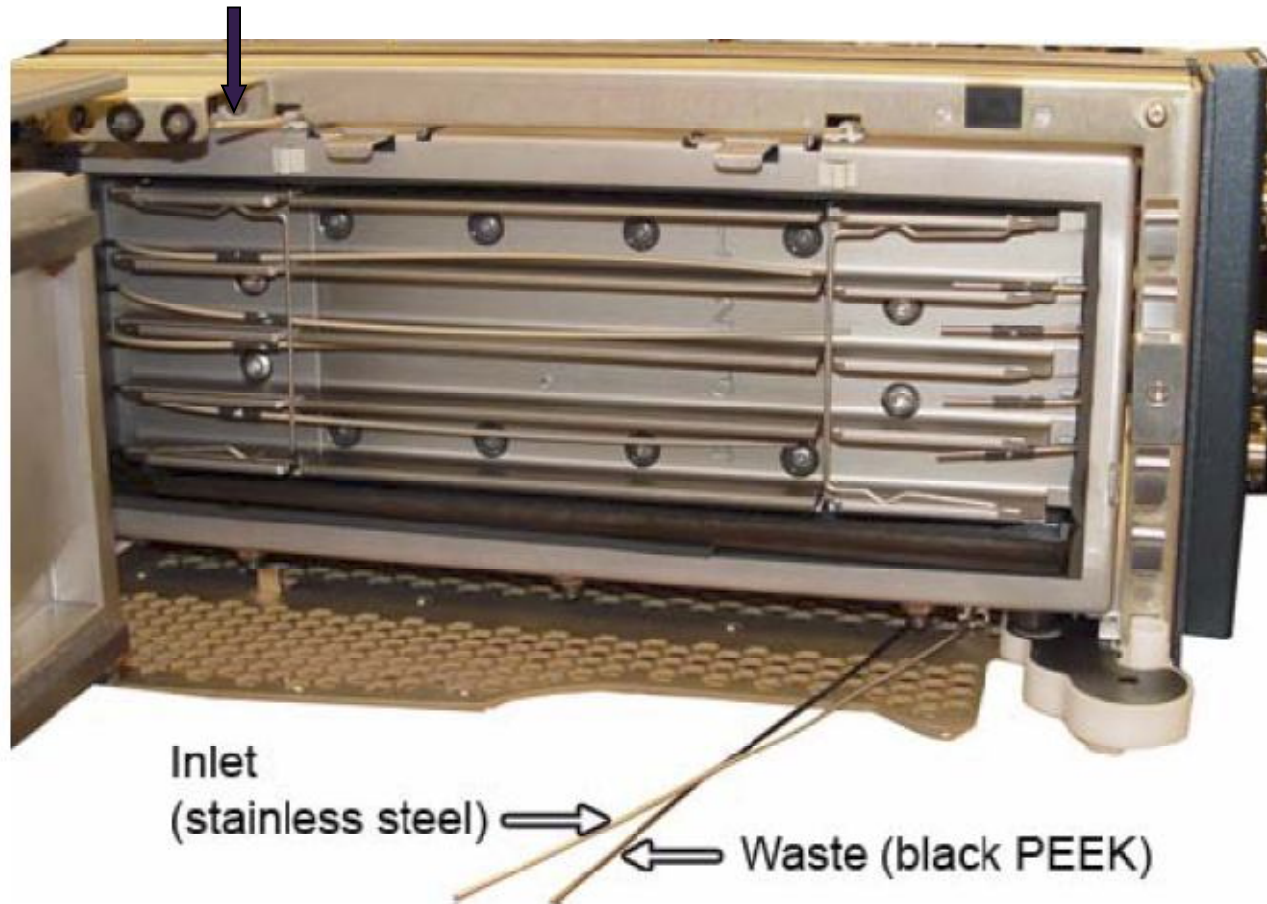


Personality PCB

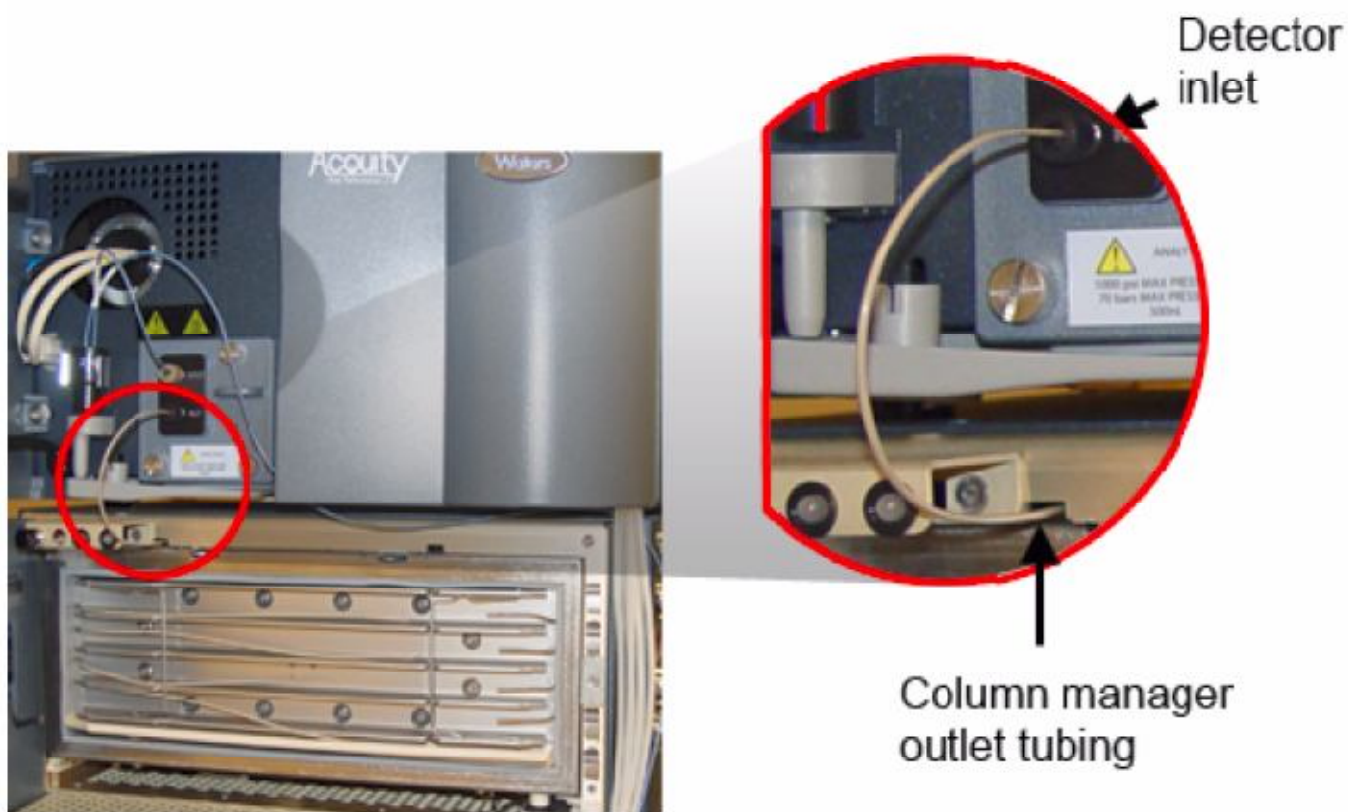
Connector J8

Locate all Tubes for Plumbing

Outlet Tube to Detector



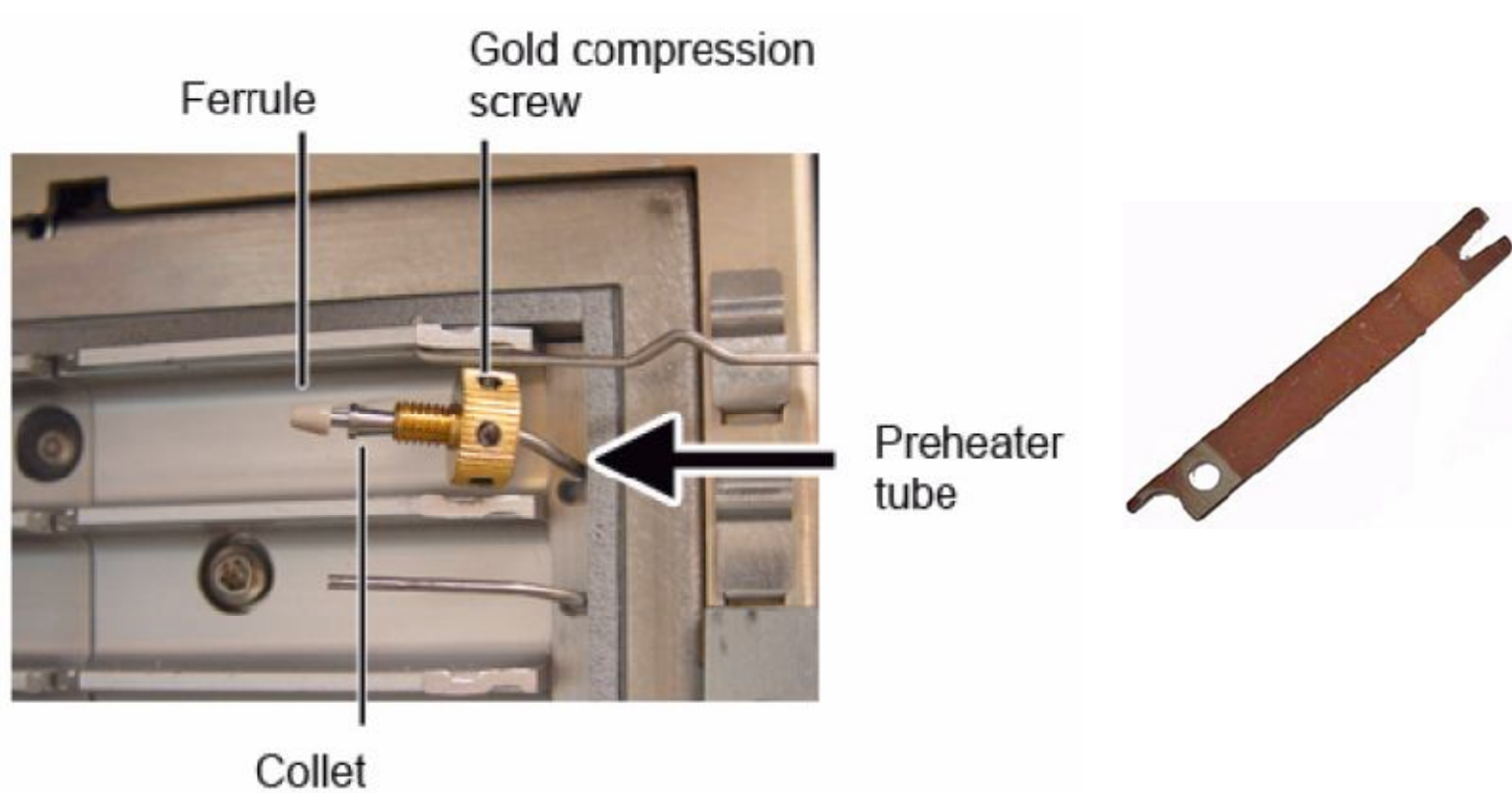
Plumb Outlet Tube to Detector



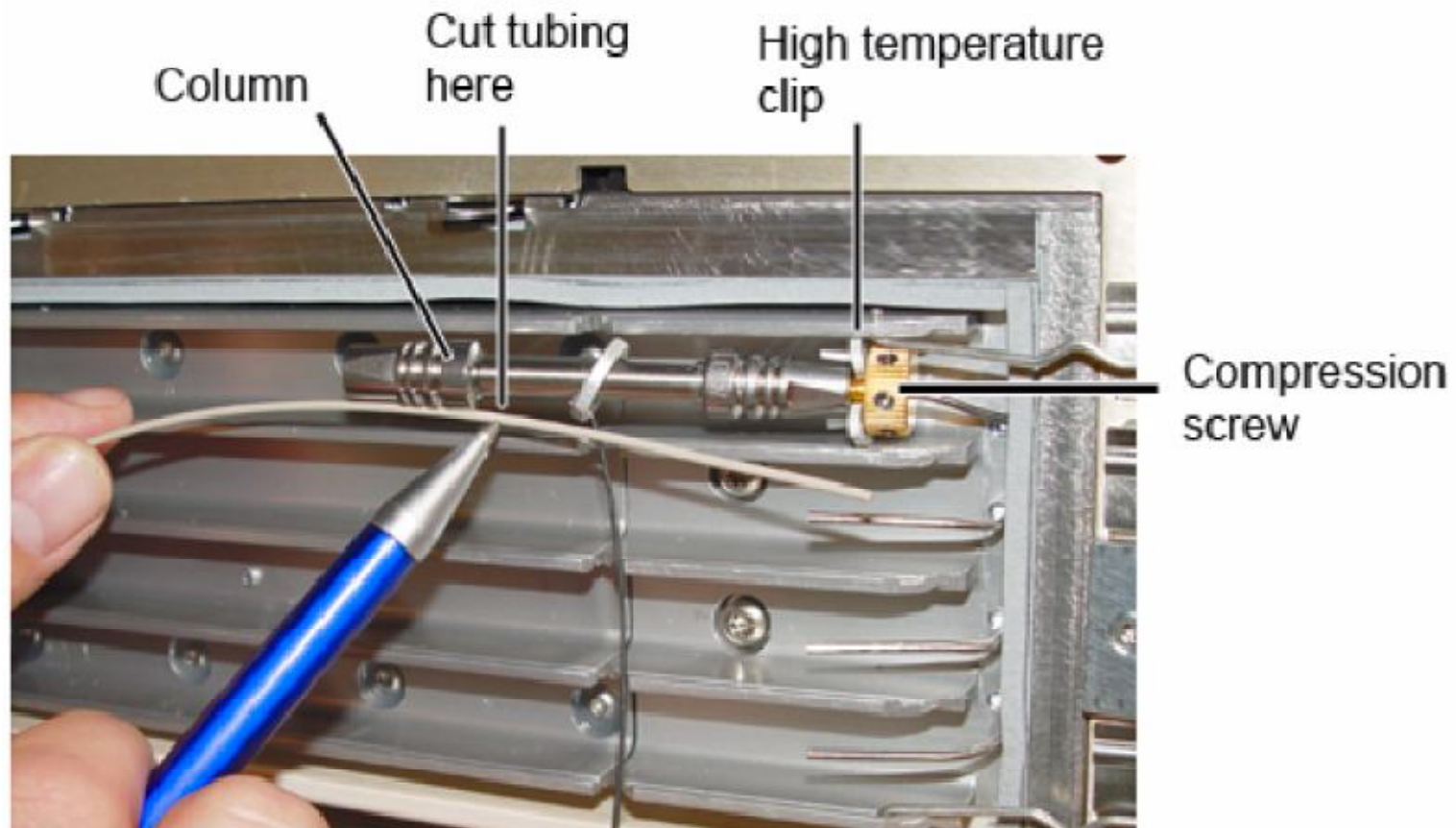
Plumb SS Inlet Tube to Injector



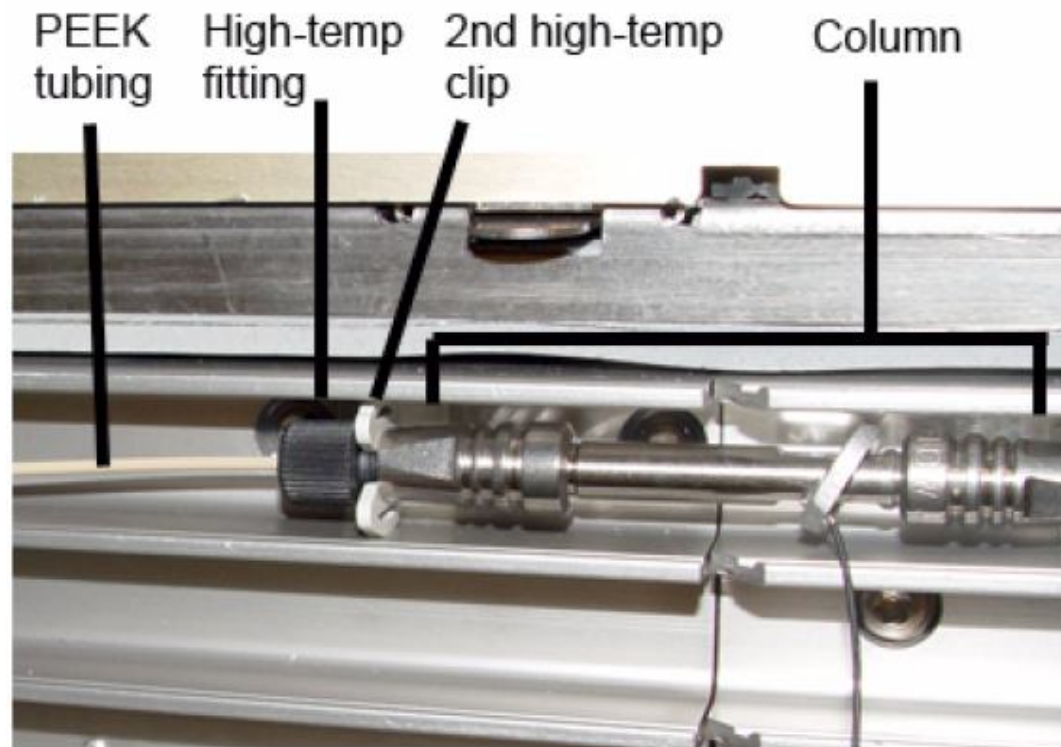
Fingertight Fitting to Column Inlet



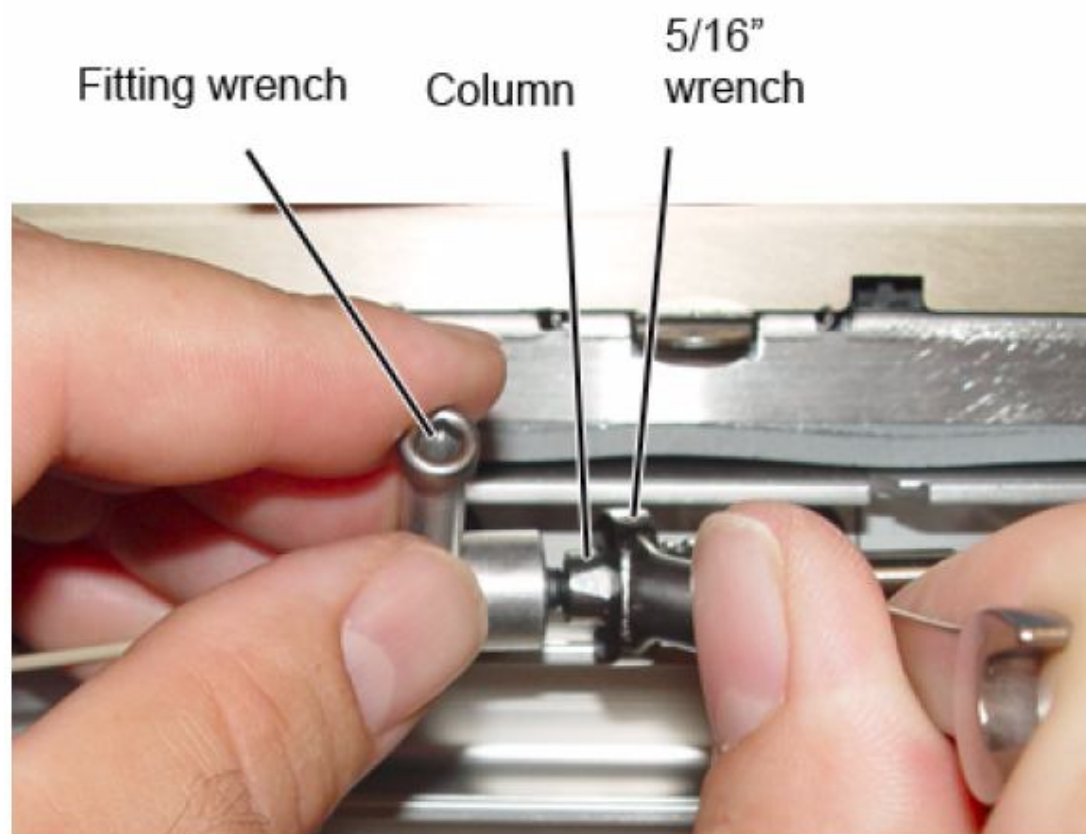
Cut Column Outlet Tube as needed



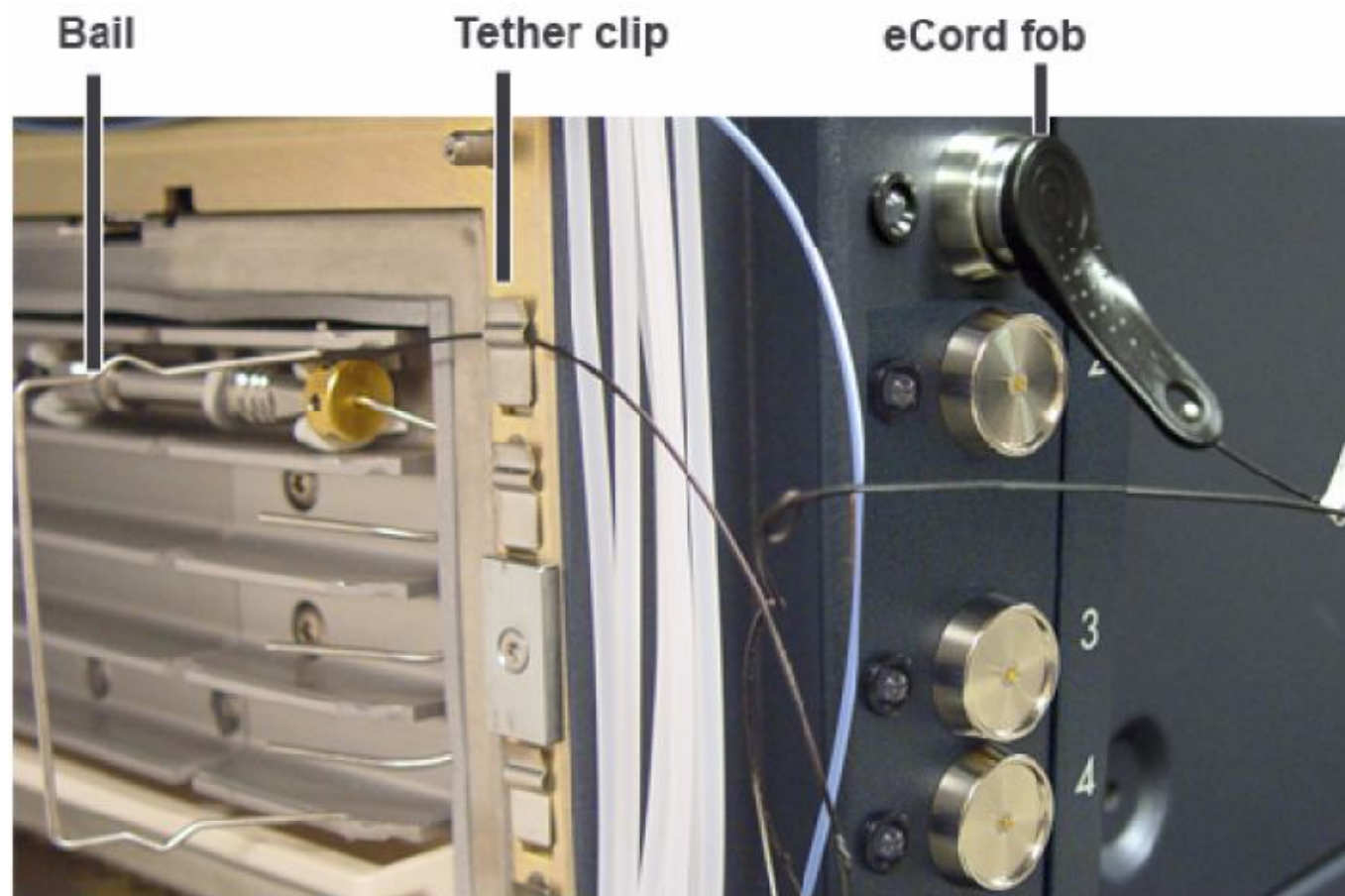
Use One-Piece Outlet fitting



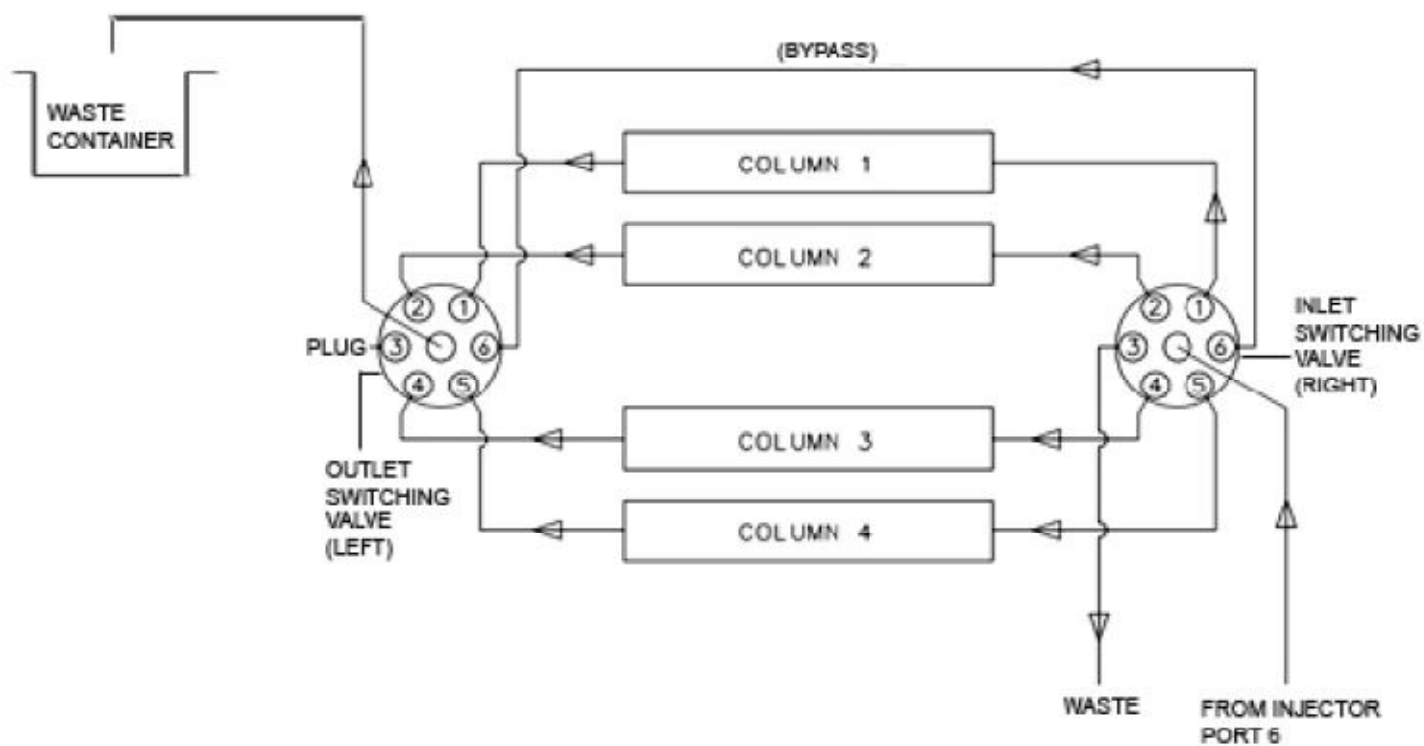
Use Right-Angle Wrench to tighten



Connect eCord



Flush to waste before flow to columns



Console View

ACQUITY UPLC Console (Local) - [Column Manager Column 1]

Control **Configure** Maintain Troubleshoot Help

eCord removed

column

Part Number, Serial Number:

usage counters

Injections Column 1

0 injections

0

Total Samples on Column

0 samples

0

Total Sample Sets on Column

0 sample sets

0

environment

Maximum Pressure:

First Injection:

Maximum Temperature:

Last Injection:

Refresh

Print

Home

System Status

TUV Detector: Peak not found

column history

#	Date Started	Sample Set Name	User Name	System Name	Injections	Samples	Max psi	Max %C
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Found New Hardware

30cm Column Heater/Cooler

To accommodate two 30cm HPLC Columns



Y-Cable

For 30cm Column Heater and HTCH

- Y-Cable and CH PCB Upgrade
 - 205000621
 - PCB for 30cm CH's below March (timeframe TBD)
- Y-Cable
 - 441000873
 - 30cm CH's manufactured after March (timeframe TBD) will not need PCB upgrade
- Requires V1.40 ICS
- Operation
 - 1st priority recognition is 30cm C/H, then HTCH.
 - 30cm C/H operation - Power on the 30cm C/H then the sample Manager.
 - For HTCH operation - Turn off 30cm C/H, repower the Sample Manager
 - Multiple UPLC systems using ICS 1.3 heater recognition may be an issue depending on which system is booted up first, if this happens reboot the work station
 - Corrected in 1.40

