

AGILENT 1100/1200 SERIES Purification System LAB EXERCISE

LAB TITLE

Getting Acquainted with the G1364A,B,C Fraction Collectors

Revision: 3.0 March, 2011

LAB OBJECTIVES

The purpose of this lab is to familiarize you with the installation, operation, maintenance functions and repair of the G1364A,B,C Fraction Collectors.

The Lab is divided into three parts:

- A. Fraction Collector Disassembly and Re-assembly
- B. Maintenance Functions using ChemStation Diagnostics
- C. Optional Advanced Familiarization

A. Fraction Collector Disassembly and Re-assembly

Use your G1364-90102 Service Manual as a guide for the following procedures:

1. Replacing the Inlet / Waste Tubings pg. 88
2. Replacing the Valve to Needle Tubings pg. 95
3. Exchanging the Preparative Needle Assembly pg. 99
4. Exchanging the Analytical Needle Assembly pg. 101
5. Exchanging the Needle-Carrier Assembly pg. 105
6. Exchanging the Diverter Valve pg. 110
7. Exchanging the Internal Tray pg. 113
8. Repairing or exchanging a funnel of the internal tray (PS) 115
9. Exchanging the Leak Sensor pg. 120
10. Replacing the Transport Unit Assembly pg. 131
11. Exchanging the Fraction Collector Main Board (MTP board) pg. 134
12. Exchanging the Fraction Collector Safety Lock Board (SLF-Board) pg. 139
13. Exchanging the Main Fan pg. 142
14. Exchanging the Exhaust Fan pg. 144
15. Exchanging the Power Supply pg. 146.

Now, carefully reassemble your fraction collector!
Re-install and turn on your fraction collector.
Turn on and initialization should be normal.

B. Maintenance Functions Using ChemStation Diagnostics

IMPORTANT!

When you replace the existing transport unit with a new transport unit,
always reset the alignment parameters to their default values!

Perform a Transport Unit Self Alignment as described on pg. 48 in the manual.

Parts Exchange Position

This maintenance position move the transport unit upwards and the needle carrier assembly to the front center and then turns off the theta motor to allow free rotation of the theta arm. This position enables easy access to the transport unit to change:

- The needle assembly.
- The needle carrier assembly.
- The valve to needle tubing.
- The diverter valve.

Home Position

This maintenance function moves the arm up and to the right rear for better access and exchange of the trays.

Park Arm

This maintenance position moves the arm to the park position at the upper rear left side of the tray for transporting or shipping the fraction collector.

IMPORTANT! When the fraction collector is being shipped, you must Park the Arm. If you do not, it's very likely that the fraction collector will suffer damage during shipment.

C. Advanced Familiarization

Work yourself through the following menus in your ChemStation SW / Control Module interface:

Settings – Control – Configure – Auxiliary - Tests/Diagnostics

Pay particular attention to the following tasks:

Manual trigger, configuring trays, configuring fractions, fraction delays, filling orders, reserved and recovery locations, change parts.

Delay Calibration, Setup, Control and Configuration of the AFC are practiced separately in more detail!