Thermo SCIENTIFIC

Dionex ICS-5000 Detector/Chromatography Module and ICS-5000 Thermal Compartment Preventive Maintenance Procedure

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Revision 01 released July 2010
Revision 02 released October 2012; new part numbers assigned

For Research Use Only. Not for use in diagnostic procedures.

DC/TC Preventive Maintenance

1 Overview

This manual describes a preventive maintenance procedure for high-pressure valves installed in the Thermo Scientific Dionex™ ICS-5000 Detector/ Chromatography Module (DC) or Dionex ICS-5000 Thermal Compartment (TC). The procedure consists of rebuilding each high-pressure valve. Thermo Fisher Scientific recommends performing this procedure annually. No other annual preventive maintenance procedures are required for the DC or TC.

The following kits are available:

- 0.4 µL Internal Loop High-Pressure Valve Maintenance Kit (P/N 075040)
- 6-Port High-Pressure Valve Maintenance Kit (P/N 075041)
- 10-Port High-Pressure Valve Maintenance Kit (P/N 075042)

Preventive Maintenance Checklist

For your convenience, a Preventive Maintenance Checklist is provided in Section 5. While performing preventive maintenance, record information on the checklist whenever instructed to do so. When you finish, save the checklist. The completed checklist verifies that DC/TC maintenance is performed at regularly scheduled intervals.

Time Required

45 to 60 minutes

2 Parts Required

Before starting the preventive maintenance procedure, verify that all of the parts listed in this section are on hand.

IMPORTANT **Substitution of non-Thermo Scientific/Dionex parts may impair the performance of the DC/TC and void the product warranty. For details, see the warranty statement in the Dionex Terms and Conditions.**

Included Parts

Each valve maintenance kit includes the following items:

Item	Part Number	Quantity
NEXT DUE DATE label	062823	1
Dionex ICS-5000 Detector/Chromatography Module and Dionex ICS-5000 Thermal Compartment Preventive Maintenance Procedure	065395	1
Valve Rebuild Kit:		1
• For 0.4 µL internal loop high-pressure valve	074698	
• For 6-port high-pressure valve	057896	
• For 10-port high-pressure valve	AAA-061759	

Additional Items Required

If more than one valve is installed in the DC or TC, order a separate valve maintenance kit for each additional valve.

3 Rebuilding a High-Pressure (Injection) Valve

NOTE Follow these instructions to rebuild either a 0.4 µL internal loop, 6-port, or 10-port high-pressure valve.

1. Turn off the pump flow from the **Pump** panel on the Thermo Scientific Dionex Chromeleon™ 7 ePanel Set or Thermo Scientific Dionex Chromeleon 6.8 panel tabset, or press **PUMP FLOW** on the front of the pump.
2. Press the **POWER** button on the front of the DC/TC to turn off the power to the module.
3. Open the front door of the DC/TC.
4. Disconnect each liquid line connected to the valve.
5. Follow the instructions provided in the Valve Rebuild Kit to rebuild the valve.

6. Reconnect all liquid lines to the injection valve. Refer to the following figures.

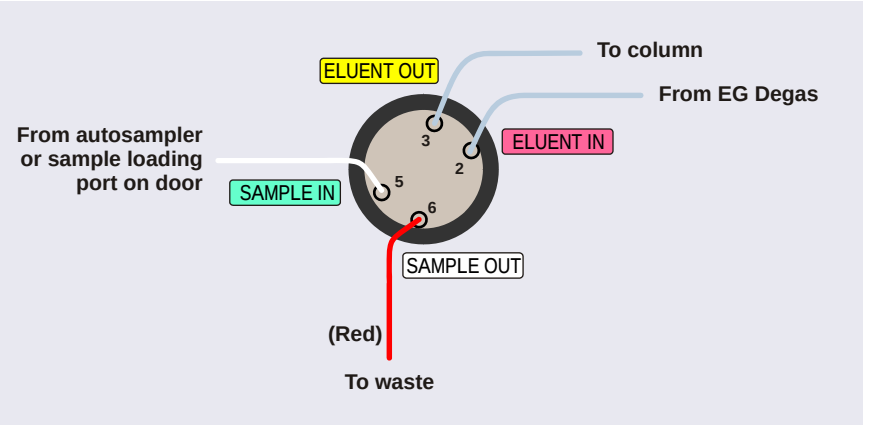

Figure 1. *DC High-Pressure Valve Plumbing (0.4 µL Port Valve)*

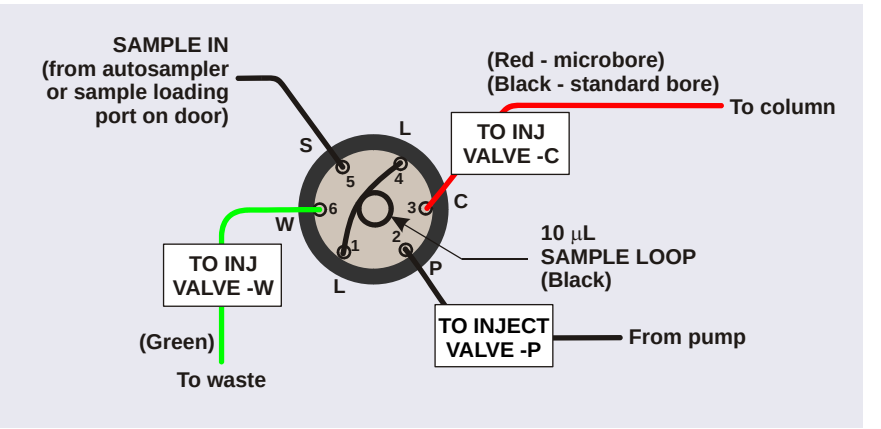

Figure 2. *DC High-Pressure Valve Plumbing (6-Port Valve)*

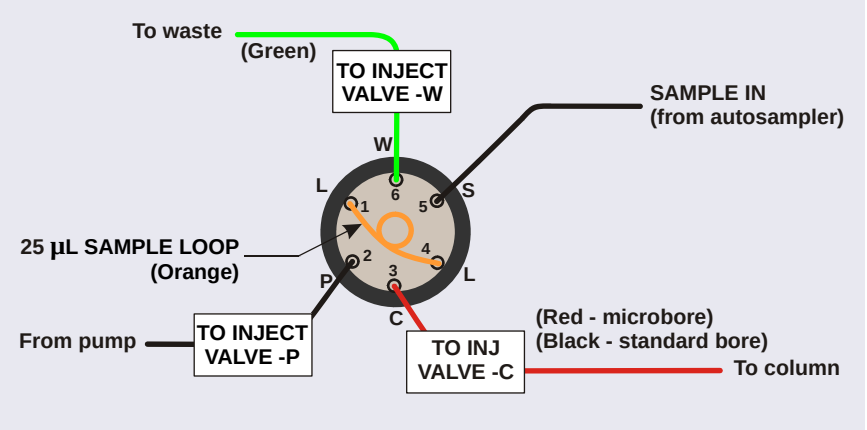

Figure 3. *TC High-Pressure Valve Plumbing (6-Port Valve)*

☑ Record the completed steps on the Preventive Maintenance Checklist.

4 Completing the Preventive Maintenance Procedure

1. Check for leaking fittings and tighten as needed.
2. Record the date for the next preventive maintenance on the **NEXT DUE DATE** label (P/N 062823). Apply the label to a convenient place on the exterior of the DC/TC.
3. Complete the Preventive Maintenance Checklist.

5 DC/TC Preventive Maintenance Checklist

☐ Dionex ICS-5000 Detector/Chromatography Module (DC)
☐ Dionex ICS-5000 Thermal Compartment (TC)

High-pressure valve rebuild (see Section 3)	
☐ Rebuilt analytical injection valve #1 ☐ Not installed	☐ Reconnected liquid lines to the valve
☐ Rebuilt analytical injection valve #2 ☐ Not installed	☐ Reconnected liquid lines to the valve
☐ Rebuilt capillary injection valve #1 ☐ Not installed	☐ Reconnected liquid lines to the valve
☐ Rebuilt capillary injection valve #2 ☐ Not installed	☐ Reconnected liquid lines to the valve
☐ Rebuilt Automation Manager (AM) high-pressure valve #1 ☐ Not installed	☐ Reconnected liquid lines to the valve
☐ Rebuilt AM high-pressure valve #2 ☐ Not installed	☐ Reconnected liquid lines to the valve
Preventive maintenance completion (see Section 4)	
☐ Checked for leaks ☐ Tightened fittings as needed	☐ Recorded date for next maintenance and applied the label to the DC or TC

Comments:

_____

_____

_____

Preventive maintenance completed by:

_____
(signature)

Date: _____