

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

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Revision history:

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
<i>Dionex ICS-5000 Detector/Chromatography Module and Dionex ICS-5000 Thermal Compartment Preventive Maintenance Procedure</i>	065395	1
Valve Rebuild Kit:		1
• For 0.4 μ L 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 μ L 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.

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

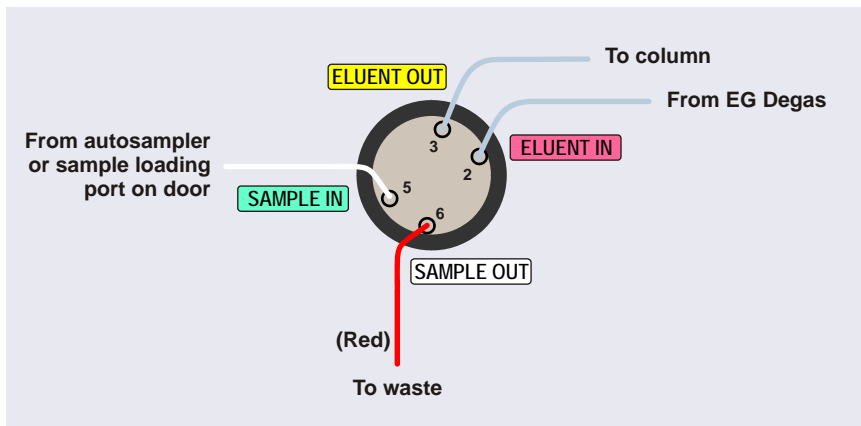


Figure 1. DC High-Pressure Valve Plumbing (0.4 μ L Port Valve)

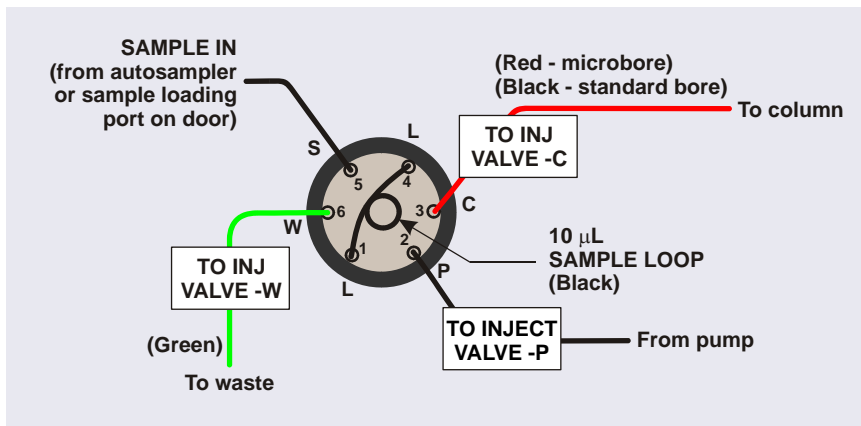


Figure 2. DC High-Pressure Valve Plumbing (6-Port Valve)

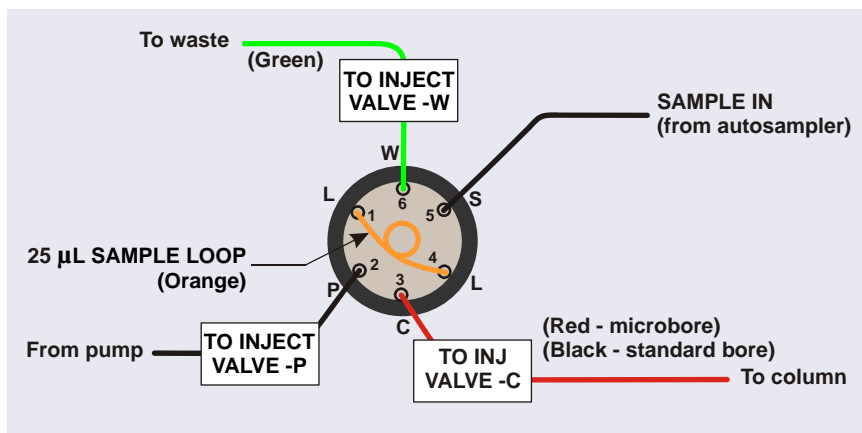


Figure 3. TC High-Pressure Valve Plumbing (6-Port Valve)

- 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)	
<input type="checkbox"/> Rebuilt analytical injection valve #1 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
<input type="checkbox"/> Rebuilt analytical injection valve #2 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
<input type="checkbox"/> Rebuilt capillary injection valve #1 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
<input type="checkbox"/> Rebuilt capillary injection valve #2 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
<input type="checkbox"/> Rebuilt Automation Manager (AM) high-pressure valve #1 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
<input type="checkbox"/> Rebuilt AM high-pressure valve #2 <input type="checkbox"/> Not installed	<input type="checkbox"/> Reconnected liquid lines to the valve
Preventive maintenance completion (see Section 4)	
<input type="checkbox"/> Checked for leaks <input type="checkbox"/> Tightened fittings as needed	<input type="checkbox"/> Recorded date for next maintenance and applied the label to the DC or TC
<p>Comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>Preventive maintenance completed by:</p> <p>_____</p> <p>(signature)</p>	
<p>Date: _____</p>	

