

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

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

ICS-5000⁺ DC/TC Preventive Maintenance

1 Overview

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

Preventive Maintenance Checklist

For your convenience, a Preventive Maintenance Checklist is provided in [Section 5](#) of this manual. 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.

Estimated 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

The following maintenance 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 075974)
- 10-Port High-Pressure Valve Maintenance Kit (P/N 079053)

Each valve maintenance kit includes the following items:

Item	Part Number	Quantity
NEXT DUE DATE label	062823	1
<i>Dionex ICS-5000⁺ Dual Pump and Dionex ICS-5000⁺ Single Pump Preventive Maintenance Procedure</i>	065484	1
Valve Rebuild Kit:		1
• For 0.4 µL internal loop high-pressure valve	074698	
• For 6-port high-pressure valve	075973	
• For 10-port high-pressure valve	079054	

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 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.

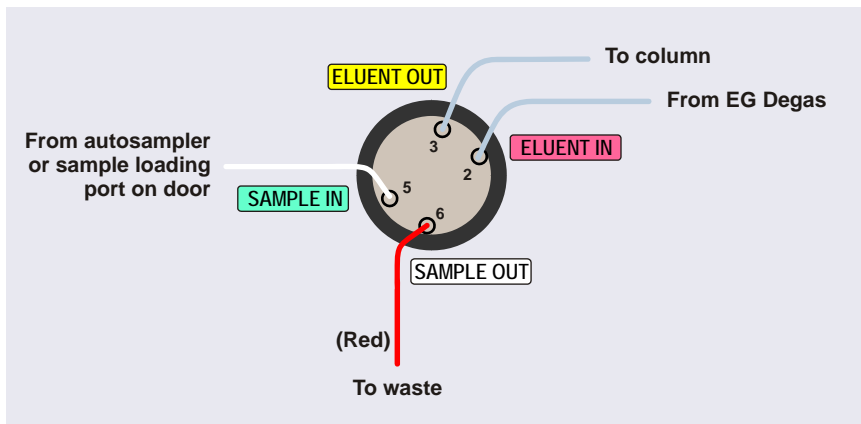


Figure 1. DC High-Pressure Valve Plumbing (0.4 µL Port Valve)

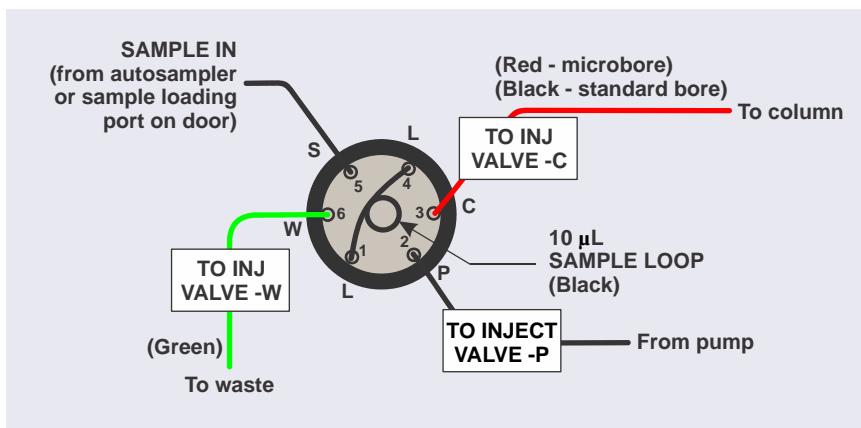


Figure 2. DC High-Pressure Valve Plumbing (6-Port Valve)

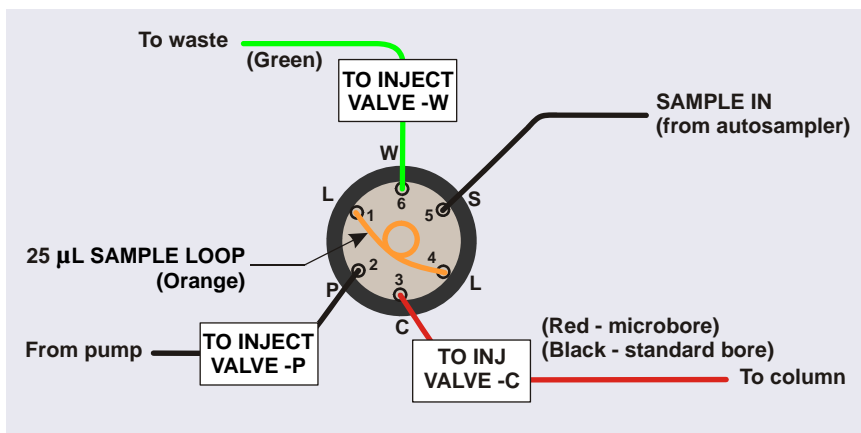


Figure 3. TC High-Pressure Valve Plumbing (6-Port Valve)

- ☒ 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 ICS-5000⁺ 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 |
|---|---|

Comments:

Preventive maintenance completed by:

 (signature)

Date: _____

