

Replacing the Column Heater Front End

This procedure describes how to replace the column heater front end (Figure 1) in the ACQUITY UltraPerformance LC® System.

NOTE: To be certain you have the latest version of this procedure, please visit the Waters Support Center (<http://www.waters.com>).

NOTE: This procedure covers replacement of the column heater front end only. For instructions on performing an original installation of the column heater assembly (front end plus chassis), see the Addendum to Revision C of the ACQUITY UPLC System Operator's Guide (PN 71500148606).

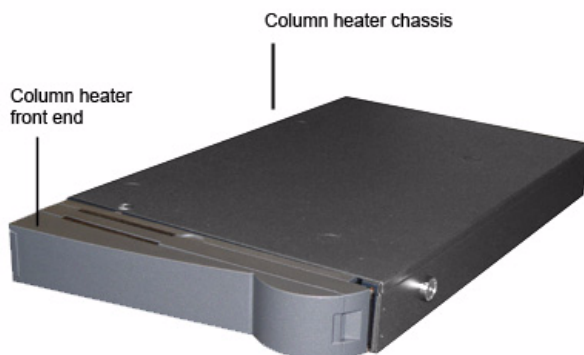


Figure 1 - Column Heater Assembly Components

Parts Required

Table 1: Parts Required

Part Number	Description	Quantity
279001390	High-temperature Column Heater Kit	1
71500148606	Addendum to Revision C of the ACQUITY UPLC System Operator's Guide	1

Tools/Materials Required

- T20 Torx screwdriver
- 2-mm hex screwdriver
- Sterile, nitrile gloves

Procedure

This document includes two procedures:

1. Replacing the 65° C column heater with a 90° C (high-temperature, or HT) column heater
2. Replacing the HT column heater

Depending on which column heater you are replacing, you will need to perform only one of these procedures.

Replacing the Column Heater with a HT Column Heater

NOTE: Perform this procedure when replacing a 65° C column heater with a HT (90° C) column heater.

NOTE: You must have ACQUITY UPLC Instrument Control Option Pack (ICOP) and firmware version **1.23** or later installed to perform this procedure.

1. Remove power to the sample manager and column heater assembly.
2. To gain access to the column heater, remove the solvent tray and detector modules from the ACQUITY UPLC System stack.
3. With a T20 Torx screwdriver, remove the panel from the right side of the sample manager.
4. Disconnect the column heater cable from the sample manager personality PCB at J5 (Figure 2).

CAUTION: PC BOARDS ARE SENSITIVE TO DIRT AND OILS. TO AVOID DAMAGING THE PC BOARD, DO NOT TOUCH ANY OF ITS COMPONENTS UNLESS YOU ARE WEARING GLOVES OR FINGER COTS.

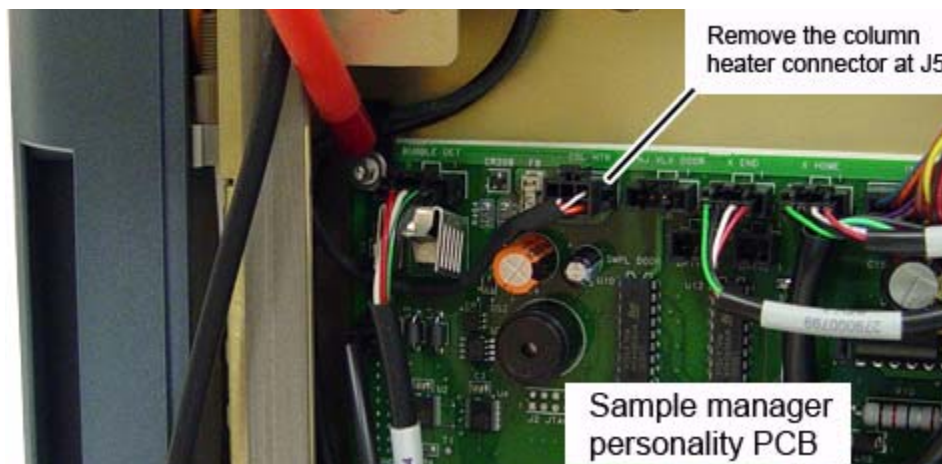


Figure 2 - Removing the J5 Connector

5. Using the 2-mm hex screwdriver, remove the two shoulder screws on the top and bottom of the hinge located on the right side of the column heater front end (Figure 3).

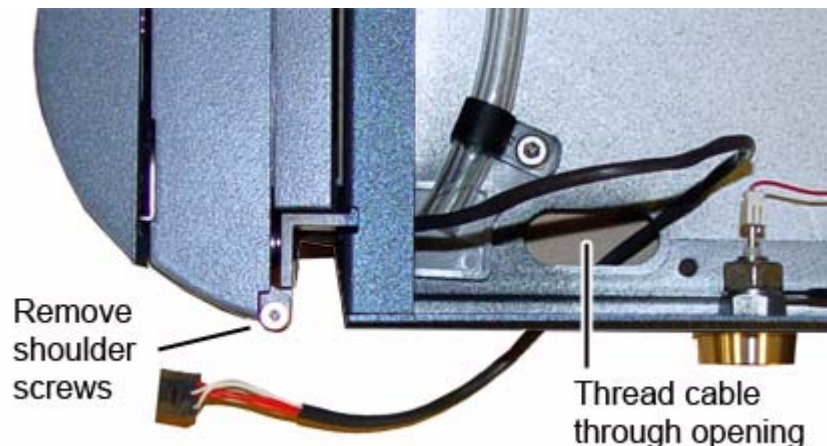


Figure 3 - Removing the Column Heater

6. Remove the chassis cover from the column heater assembly.
7. Remove the column heater front end, carefully pulling the cable through the hole on the bottom right side of the column heater chassis ([Figure 3](#)).
8. Install the new HT column heater front end, threading its cable down through the hole in the column heater chassis.
9. Attach the 6-pin jumper cable (441000851) provided in the kit to the column heater cable ([Figure 4](#)).

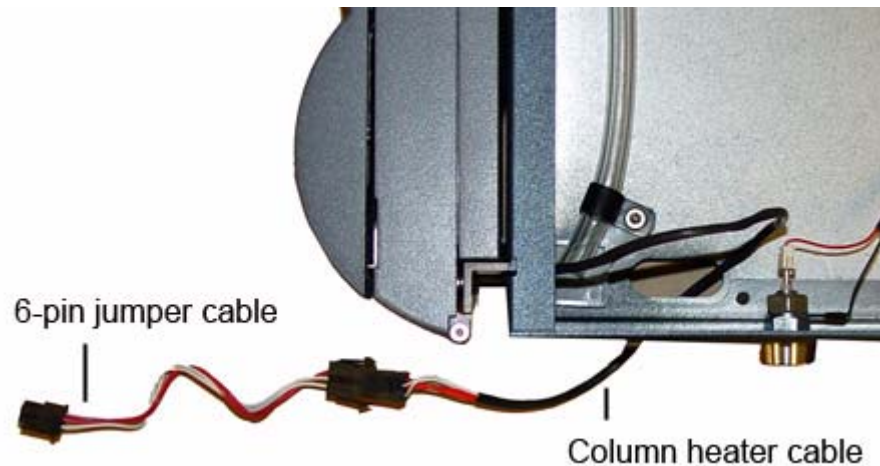


Figure 4 - Attaching the Jumper Cable to the Column Heater Cable

10. Attach the other end of the jumper cable to J5 on the sample manager personality PCB ([Figure 2](#)).
11. Install the column stabilizer assembly, following the instructions in the *Addendum to Revision C of the ACQUITY UPLC System Operator's Guide* (PN 71500148606).

Replacing the HT Column Heater

NOTE: Perform this procedure when replacing an old HT column heater with a new HT column heater.

NOTE: You must have ICOP and firmware version **1.3** or later installed to perform this procedure.

1. Remove power to the column heater assembly.
2. To gain access to the column heater, remove the solvent tray and detector modules from the ACQUITY UPLC System stack.
3. Remove the chassis cover from the column heater assembly.
4. Remove the tie clips securing the column heater cable to the chassis floor (Figure 5).
5. Disconnect the column heater cable from the rear panel column heater PCB (Figure 5).

CAUTION: PC BOARDS ARE SENSITIVE TO DIRT AND OILS. TO AVOID DAMAGING THE PC BOARD, DO NOT TOUCH ANY OF ITS COMPONENTS UNLESS YOU ARE WEARING GLOVES OR FINGER COTS.

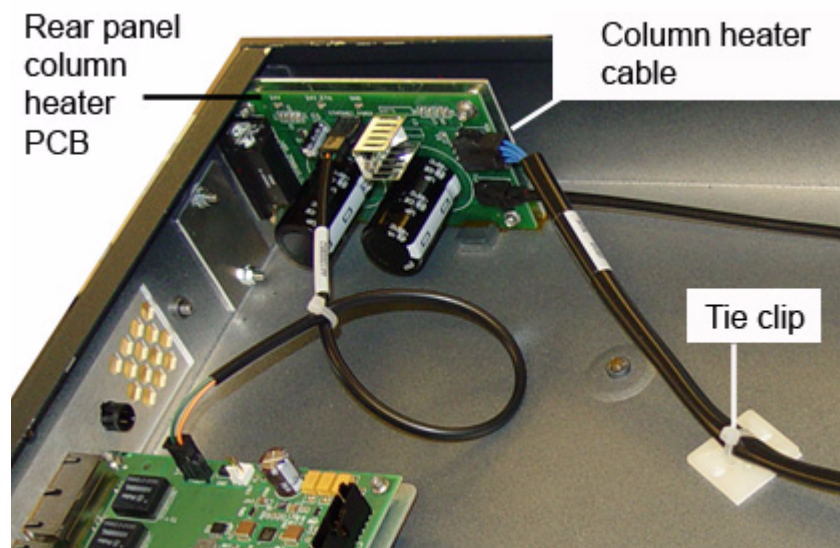


Figure 5 - Column Heater Cable Connector on Rear Panel PCB

- Using the 2-mm hex screwdriver, remove the two shoulder screws on the top and bottom of the hinge located on the right side of the column heater front end (Figure 6).

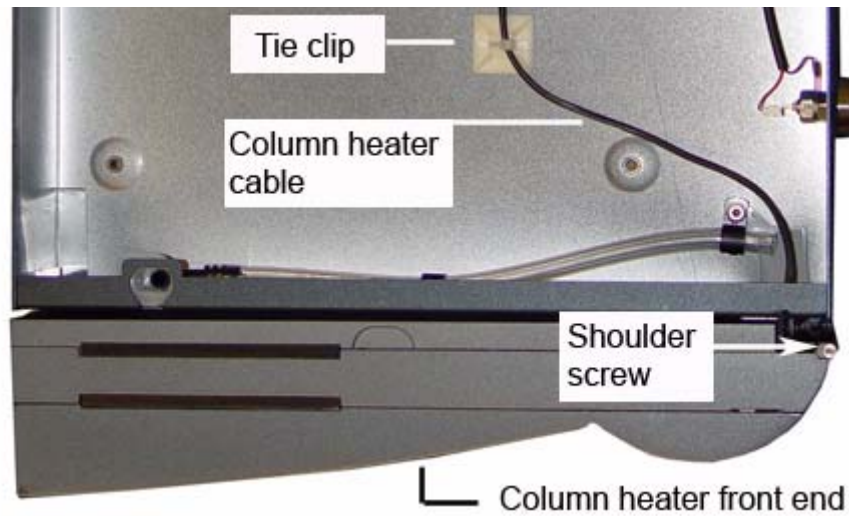


Figure 6 - Removing the Shoulder Screws

- Remove the column heater front end.
- Install the new HT column heater front end, reversing steps 1 through 6.
- Install the column stabilizer assembly, following the instructions in the *Addendum to Revision C of the ACQUITY UPLC System Operator's Guide* (PN 71500148606).
- If necessary, update the firmware to version 1.3 or later, following the instructions in the release notes.