Technical Bulletin

Place a copy of this bulletin in the front of each Blueprints Manual. Redline drawings as needed and include a TB reference note. Reference TB implementation on site Action Item Box-chart and/or tool CSR history.

Number: 075
Date Issued: 01/22/09
Expiration Date: N/A

Subject/Key Words:	Akrion Systems In-line Resistive Heater Leak			
Classification:	■ Informational	❑ Mandatory	❑ Safety Alert	■ PM Impact
	❑ Warranty Impact	❑ Purchase Parts	❑ No Charge For Parts For _____ Days After Issue Date.	
Parts/Reference Documents:	GF Single Wafer Part Numbers - 4130570, 4130571 GAMA/V3 Part Numbers – 212496-001, 222991-001, 229058-001, 232939-001, 230843-001, 230844-001, 230845-001, 230917-001			

Issue: Akrion Systems In-line resistive heaters and heat exchangers may leak from the flange.

Field data has been reported only in Single Wafer applications to date.

Symptoms: Leak detect alarms in chemical dispense cabinet or plenum. Liquid dripping from flange cover on heater.

Test/Validate Inspect heater flange cover for leaks during routine preventative maintenance.

Solution: If a leak is found, perform the following steps to re-torque the heater flange . These instructions are illustrated on page 2 of this technical bulletin.

1. Remove the flange cover to gain access to the flange.
2. Using a 3/16” Allen Wrench, “loosen” the flange bolts 1 full turn.
3. Using a torque wrench with a 3/16” X 3” square drive hex-bit socket, torque the flange bolts (1 through 8) to 30in/lbs.
4. Using a torque wrench with a 3/16” X 3” square drive hex-bit socket, torque the flange bolts (1 through 8) to 50 in/lbs.
5. Re-secure the flange cover.
6. Re-install the heater and test for leaks.

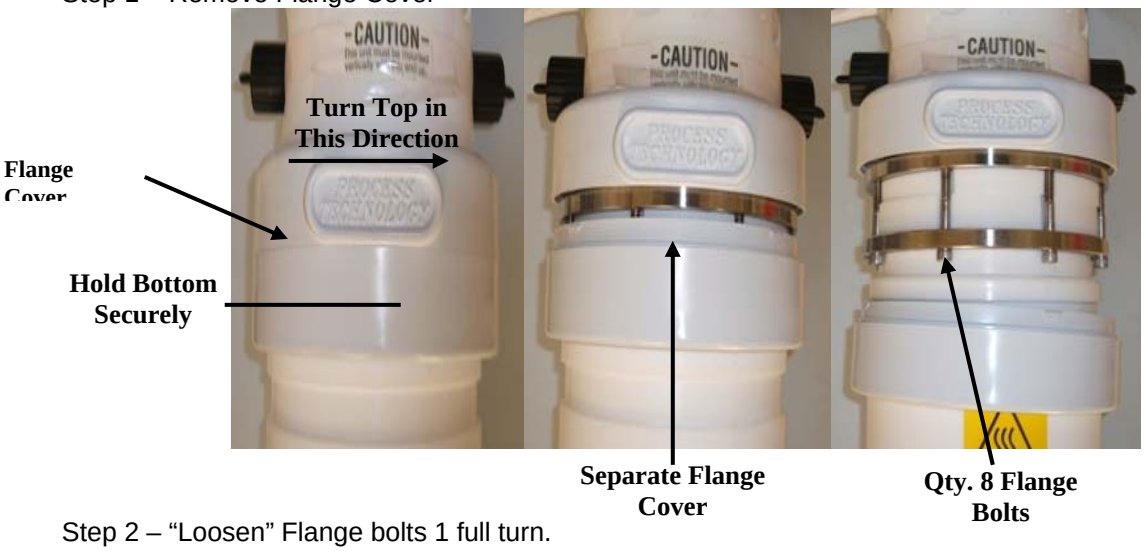
If leak continues after re-torquing, the heater must be replaced and returned to Akrion Systems for analysis.

If you have technical questions or require more information, please contact Akrion Systems Technical Support Department via e-mail at techsupport@Akrionsystems.com. Authorized service personnel can obtain copies of the latest Akrion Systems procedures and controlled documents from the Akrion Systems Document Control department at doccontrol@Akrionsystems.com. Customers must direct all inquires to their local Akrion Systems field service representative. (Form QA1656F1A)

Instructions

NOTE: You may need to remove the heater from the system in order to gain access to all the flange bolts.

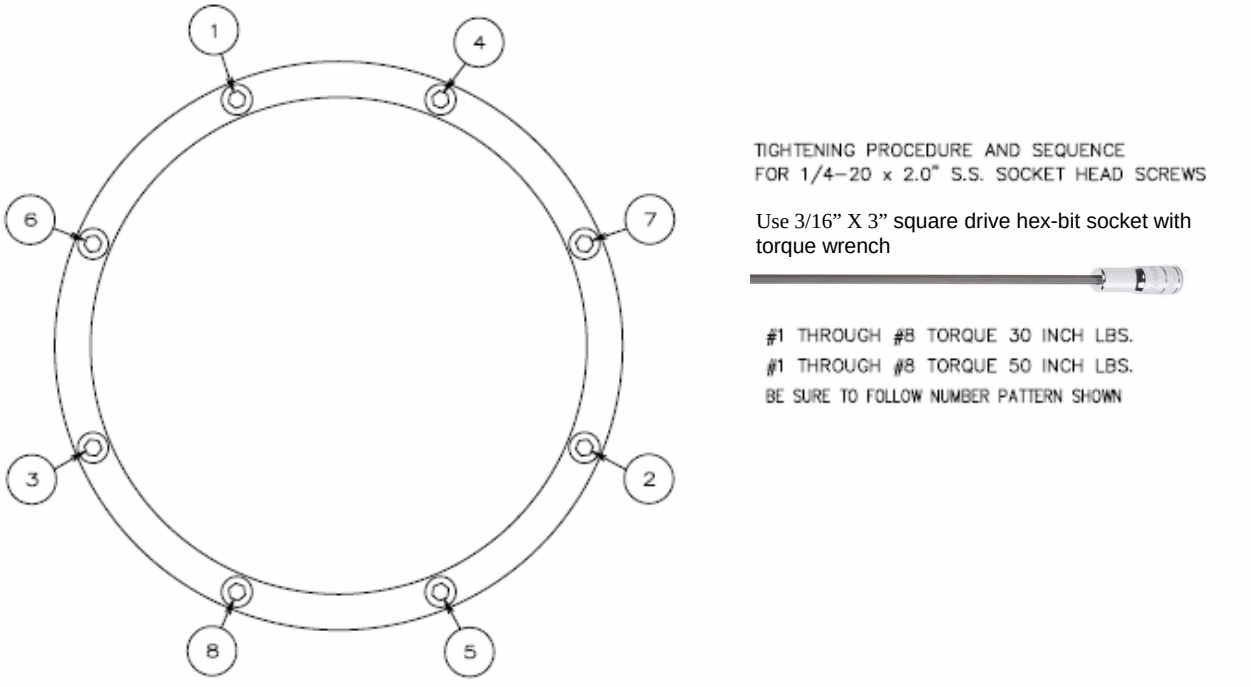
Step 1 – Remove Flange Cover



Step 2 – "Loosen" Flange bolts 1 full turn.

Step 3 – Torque to 30in/lbs. Follow number pattern for torque sequence.

Step 4 – Torque to 50in/lbs. Follow number pattern for torque sequence.



Step 5 – Re-Secure flange cover by reversing step 1.

Step 6 – Re-install the heater. Fill with liquid and heat to process temperature to test for leaks.