



# 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  
site tool history management log.

**Number:** 026  
**Date Issued:** 09/09/03  
**Expiration Date:** 09/09/04

<b>Subject/Key Words:</b>	Quartz in-line heater flow direction must be correct to prevent quartz chamber from breaching and resultant chemical leaks.		
<b>Classification:</b>	<input checked="" type="checkbox"/> Informational	<input type="checkbox"/> Mandatory	<input checked="" type="checkbox"/> Safety Alert
	<input type="checkbox"/> PM Impact	<input checked="" type="checkbox"/> Warranty Impact	<input type="checkbox"/> Purchase Parts
	<input type="checkbox"/> No Charge For Parts expires ___ / ___ / ___. Reference this TB# when ordering NC parts.		
<b>Applicable Akrion Procedures:</b>	none		
<b>Parts/Reference Documents:</b>	none		
<b>Attachments:</b>	none		

**Issue:** An improperly plumbed, reverse flow, quartz in-line heater will trap gasses within the quartz chamber, and accelerate the etching of the quartz. The quartz will leak, activate the heater leak capacitive sensor and irreparably damage the heater.

**Symptoms:** Heaters leak internally in a matter of days or weeks after installation/use.

**Test/Validate:** The suspect flow direction error is most likely found in the flow path component configuration feeding into the heater compartment. Review any recent flow system modifications or enhancements for possible change in flow direction. The inlet flow must go to the lower heater fitting and exit the upper heater fitting to ensure gasses are not trapped within the heater. Review all associated flow documentation issued with the bench or enhancement.

**Solution:** If the Symptom exists, validate the proper flow configuration and correct the plumbing to ensure proper flow direction. Review all work performed to flow systems to prevent this issue from occurring.

If you have technical questions or require more information, please contact Akrion Technical Support Department via e-mail at [techsupport@akrion.com](mailto:techsupport@akrion.com). Authorized service personnel can obtain copies of the latest Akrion procedures and controlled documents from the Akrion Document Control department at [doccontrol@akrion.com](mailto:doccontrol@akrion.com). Customers must direct all inquires to their local Akrion field service representative. (Form QA1656F1AC)