



# 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:** 030  
**Date Issued:** 10/06/03  
**Expiration Date:** 10/06/04

<b>Subject/Key Words:</b>	Preventing NT Computer Hardware Failures Due to CPU Cooling Fan Problems			
<b>Classification:</b>	<input checked="" type="checkbox"/> Informational	<input checked="" type="checkbox"/> Mandatory	<input 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>	<b>212132-001</b> GAMA Single Channel NT Computer <b>212643-001</b> GAMA Dual Channel NT Computer <b>218423-001</b> RMR FLD NT Computer <b>30004</b> V3 NT Computer			
<b>Attachments:</b>	None			

**Issue:** CPU cooling fans are secured to the computer motherboard using a clip. This clip can become loose or dislodged during shipment, impairing the fan’s ability to cool the CPU. Software engineering reports that computers have failed due to problems caused by a loose or dislodged CPU cooling fan.

**Symptoms:** When the CPU overheats it can be permanently damaged. You may also experience recoverable failures of the CPU such as intermittent computer lockups or shutdowns, or the inability to boot.the computer.

**Test/Validate:** All computers shipped prior to November 1<sup>st</sup>, 2003 must be inspected before installation and power up. Remove the computer’s top cover and ensure the CPU fan is seated securely on top of the CPU. If it is not, perform the solution provided in the second paragraph below.

**Solution:** As per Supplier Corrective Action Request (SCAR 383), a permanent solution has been engineered by the supplier and is implemented on all computers shipped after November 1, 2003.

When a CPU fan is found unsecured , it is recommended that the Motherboard be removed from the computer for easier fan attachment. When re-attaching the fan to the CPU, do not touch the “white” heat sink compound, and be sure not to wipe it away. Re-install the Motherboard into the same slot it was pulled from and ensure all connections are secured to the Motherboard.

**CAUTION:** perform proper Electro Static Discharge (ESD) prevention to safeguard against damage to active components.

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)