



**General  
Service  
Bulletin**

**RTHB-SB-3**

Library	Service Literature
Product Section	Refrigeration
Product	Rotary Liquid Chillers-W/C
Model	RTHB
Literature Type	General Service Bulletin
Sequence	3
Date	March 4, 1996
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Supersedes	Service Alert No. 161

**Subject: RTHB Starter Module Bracket**

**Introduction:**

The purpose of this service bulletin is to provide directions to install a retrofit starter module bracket to reduce vibrations experienced by the 2U1 starter module components, if a failure to the 2U1 module occurs.

**Discussion:**

Some starter panels on the RTHB units experience a level of vibration that can have a detrimental effect on the 2U1 starter modules. The mode of failure is generally associated with a breakdown of the start and stop contacts on the module itself, resulting in *Phase Loss* diagnostics. Although the start and stop contacts seem to be the first to fail, other components may experience premature failure depending on the vibration level of the starter panel. Other component failures can result in unaccountable diagnostics of: *Phase Reversal*; *Phase Sequence Monitor*; *Starter*; *Loss of Communication with Chiller*, or *Phase Reversal*.

Service Alert No. 161 referred to the addition of a jumper being installed on the 2U1 module between the J8-1 and J8-2 terminals as a temporary repair measure for eliminating nuisance *Phase Loss* diagnostics. **The retrofit bracket eliminates the need for a jumper, and the practice of jumping the J8-1 and J8-2 terminals must be discontinued immediately.**

**NOTE: Do not use the jumper between J8-1 and J8-2 terminals on retrofitted units.**

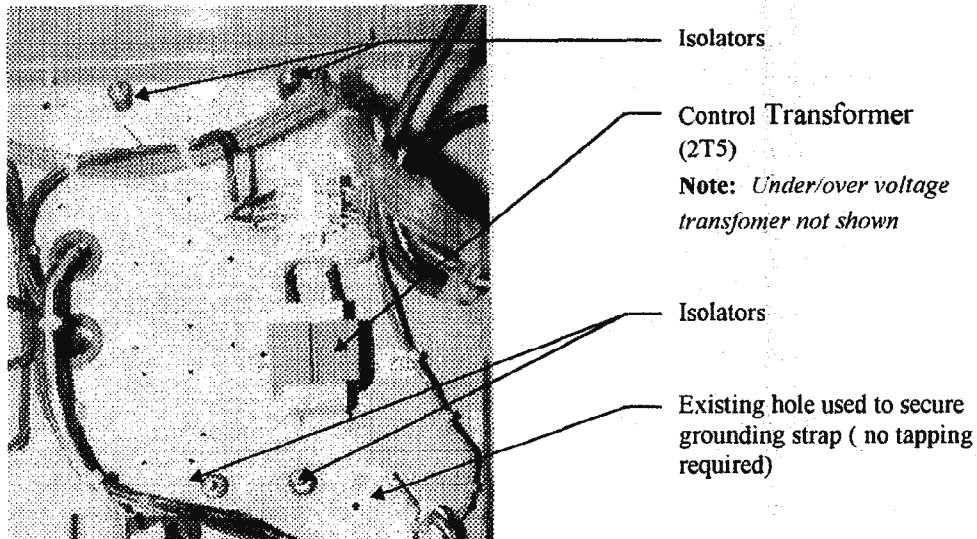
### **Corrective Action:**

The following section includes instructions for replacing the existing starter module bracket with the new bracket to eliminate the excessive vibration to the 2U1 starter module.

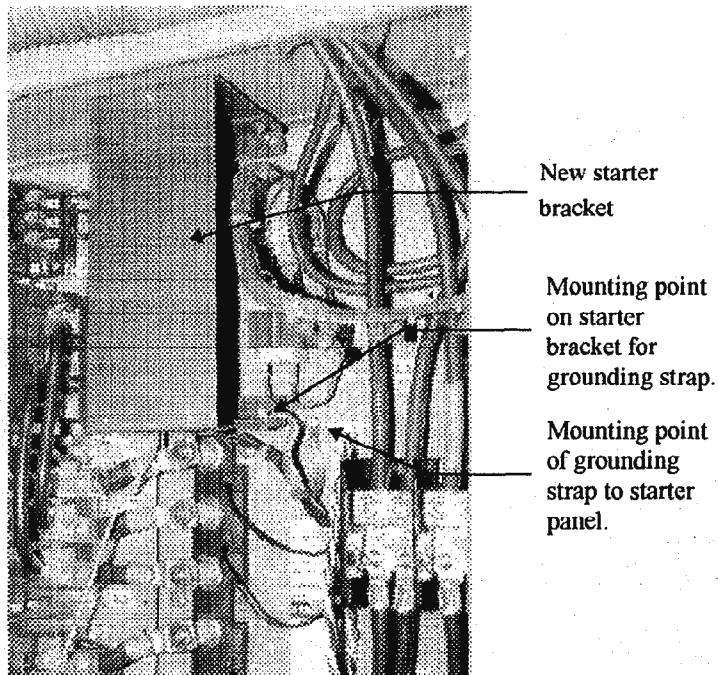


**CAUTION: Open disconnect to remove all power from the control panel.**

1. Press Stop to cycle chiller off line.
2. Pull disconnect to remove electrical power from the chiller.
3. Open the starter panel.
4. Label and tag all wiring connecting to the 2U1 module.
5. Disconnect all communication and power links from the 2U1 module.
6. Remove the 2U1 board.
7. Remove the original bracket.  
**NOTE:** Mark original holes on starter cabinet used for mounting the original bracket. Refer to figure 1.
8. Using rags or other protective shielding, cover the contactors and wiring.
9. Using a #7 drill bit, enlarge the four (4) original bracket mounting holes.
10. Tap the four (4) holes using a 1/4 - 20 tap.
11. Finger tighten the four (4) isolators into the tapped holes of the original bracket location. Refer to figure 1.  
**NOTE:** DO NOT tighten with a wrench or other such tool.
12. Remove an area of paint approximately the size of a quarter from the hole on the lower right side of the starter cabinet and the hole in the lower right corner of the starter bracket. Emery cloth or sandpaper works well to remove the paint. The two holes are used for securing the grounding strap. Refer to figure 1 and figure 2.
13. Wipe the two areas with a cleaning solvent to remove all debris.
14. Mount the new bracket to the isolators and tighten with a wrench.  
**NOTE:** Area must be clean to provide a satisfactory ground for the starter module.
15. Connect the grounding strap to the cleaned, lower right hand corner of the starter bracket angle iron with the bolt enclosed in the kit. Refer to fig. 2.
16. Attach the opposite end of the strap to the cleaned hole on the starter cabinet using the size 10 self tapping screw included in the kit.  
**NOTE:** Do not remove slack from the grounding strap. The loop is to avoid creating a path for the vibration.
17. Mount the 2U1 starter module to the new bracket.
18. Reconnect the communication and power links to the 2U1 starter module.  
**NOTE: Remove the J8-1 to J8-2 jumpers if previously installed.**
19. Secure the twisted pair harness to the bottom of the new bracket using adhesive backed wire-tie mounting pads.
20. Close and secure the starter panel and re-energize the chiller.



**Figure 1: Isolator Location Points**



**Figure 2: New Starter Bracket Installed**

**Units Affected:**

Units manufactured after February 1, 1996 have the modified starter bracket installed. Some RTHB units with serial numbers prior to U96B\*\*\*\*\* will need the modified starter bracket if the 2U1 module fails.

## **Parts Ordering Information**

One starter bracket retrofit kit and one starter module is required for each affected RTHB unit.  
Contact your local Trane Parts Center to obtain parts.

**KIT 3379** = Starter bracket retrofit kit

**MOD 0351** = Starter module