

# SERVICE BULLETIN

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**Bulletin Part Number:** 294963-B1

**Product:** Bose<sup>®</sup> FreeSpace<sup>®</sup> 4400 Business Music System

**Subject:** 34 Pin Power Supply/Amplifier Module to DSP PCB Ribbon Cable becomes unseated.

**Disposition:** On all units built before xxxx that exhibit the below symptom or that come in for repair, perform the below procedure to prevent the 34 pin ribbon cable from becoming unseated.

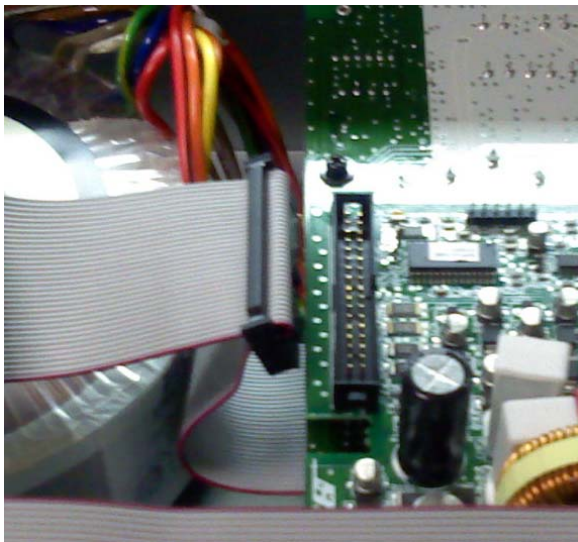
**Symptom:** Front panel amplifier channel(s) failure LED's lit or dead unit.

**Reason:** Due to tension at the bend of the 34 Pin ribbon cable it can become unseated at either the upper or lower amplifier PCB, or both. Refer to Figure 1 below.

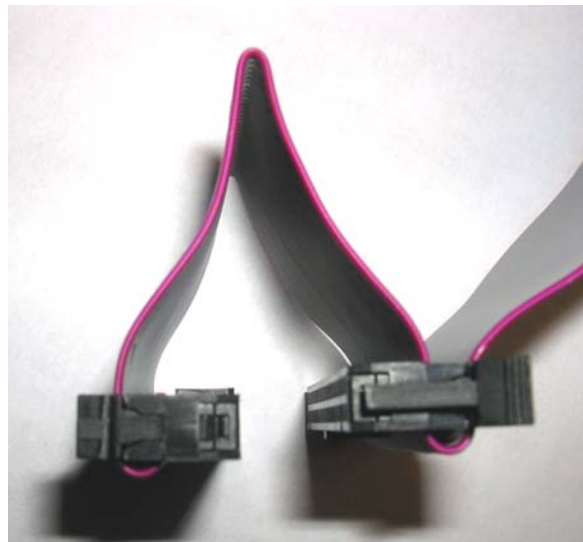
**Solution:** Perform the below procedure to relieve the tension at the bend in the cable and to prevent it from becoming unseated in the future.

**Procedure:**

1. With the AC mains to the unit disconnected, remove the top cover of the amplifier.
2. Locate the end of the 34 pin ribbon cable that plugs into the upper and lower power supply/amplifier PCB assemblies. There is one connection on the cable for each of the boards, upper and lower.
3. Ensure that the two connectors are properly seated in the connectors for their respective PCB's.
4. Using your fingers, pinch the portion of the cable that runs between the upper PCB and the lower PCB as shown in Figure 2 below. This will relieve the stress inherent in the cable due to it's tight bend.
5. Apply a small bead of a removable adhesive along the mating edge where the cable plugs into the connector. This will ensure that the cable remains seated in the connector in the event of any vibration. You can use RTV or similar as an adhesive. Be sure to not use an adhesive that will damage the plastic connectors.
6. Replace the top cover and ensure that the system operates properly. Refer to the Service manual, reference number 294963-SM located on the Professional Products page at <http://serviceops.bose.com> for test procedures.



**Figure 1. Cable Unseated**



**Figure 2. Cable Pinch at Bend**

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