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| <b>CLASS<br/>FM</b> | <b>DWG NO.</b> |
|---------------------|----------------|

| REVISIONS |                 |                               |      |
|-----------|-----------------|-------------------------------|------|
| REV       | DESCRIPTION     | ENG                           | DATE |
| 00        | INITIAL RELEASE | PETE CORTESE/<br>PAUL COLLINS | 4/09 |
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| SIGNATURES REQUIRED |  | PRINT NAME   | SIGNATURE |
|---------------------|--|--------------|-----------|
| TSG REPRESENTATIVE  |  | PAUL COLLINS |           |
| CELL LEAD           |  | DAVID MIKEL  |           |
| REPAIR SUPERVISOR   |  | KEVIN KING   |           |
| OTHER(_____)        |  |              |           |
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| <b>TSG TECHNICIAN</b><br>Pete<br>Cortese | <b>DATE</b><br>4/09 | <b><i>BOSE</i></b> <sup>®</sup><br>FRAMINGHAM, MA 01701-9168 |
|--|---------------------|--|

|   |  |                             |                           |                             |                         |
|---|--|-----------------------------|---------------------------|-----------------------------|-------------------------|
| <b>APPLICABLE DOCUMENTS:</b><br><br>SERVICE MANUAL: 290177-SM | <b>DESCRIPTION</b><br><b>Companion® 5 Multimedia Speaker System<br/>Troubleshooting Tips</b> |                             |                           |                             |                         |
|   | <b>SIZE</b><br><b>A</b>  | <b>FSCM</b><br><b>32108</b> | <b>CLASS</b><br><b>FM</b> | <b>DWG NO.</b><br>290177-TT | <b>REV</b><br><b>01</b> |

## Troubleshooting Tips

### Companion® 5 Multimedia Speaker System

Refer to the Companion® 5 Multimedia Speaker System service manual reference number 290177-SM for schematics, PCB layouts and parts lists located on service web site.

#### Preventative Repair Measures

**Note:** Perform the following on all units returned for repair.

| Product     | Check   | Action   |
|-------------|---|--|
| Companion 5 | Upgrade the Companion 5 firmware to ensure compatibility with Microsoft Vista operating systems | Applies to systems built before June, 2007 (DOM 7152). Upgrade the Companion 5 firmware. Refer to the Bose Service Operation's web site for software update information.<br><br>Service Bulletin: <b>290177-B1</b> |
| *           | Check to see if the DOM is between 4/23/07 (7113) and 6/3/07 (7154)                             | Replace C48 (on the DSP PCB) with a new part, using p/n: 261614-472HB3.<br><br>Service Bulletin: <b>290177-B2</b>  |

## Troubleshooting Tips

| Product                  | Symptom                                      | Check   | Action  |                          |  |   |     |   |       |   |       |
|--------------------------|--|---|---|--------------------------|--|---|-----|---|-------|---|-------|
| Companion 5              | The LED won't switch to green                | Check L50 on the DSP PCB for 1.2 Vdc                      | Check L50 or pin 25 on U7000 for 1.2Vdc. If the 1.2V is missing and Vsub (26V) is present, replace U50 and U51 with part numbers 288281-001, and 289259-001, respectively.  |                          |  |   |     |   |       |   |       |
| Companion 5              | Dead unit                                    | Check F1 on the I/O PCB                                   | Using a multi-meter to check F1 for continuity. If there is no continuity, replace the fuse with p/n: 269855-02000.   |                          |  |   |     |   |       |   |       |
| Companion 5              | No audio or volume control from the computer | Make sure the computer and the Companion are synchronized | If all cables are connected and seated properly, try closing and reopening Windows Media Player, to ensure detection and synchronization between the PC and the Companion 5. Also, make sure the volume is turned up at least half way in Windows Media Player.   |                          |  |   |     |   |       |   |       |
| Companion 5              | No volume control from the control pod       | Check the control pod                                     | Try rotating the outer ring of the control pod clockwise, and then counter clockwise. Listen for change in the volume. If the volume does not change, reseal the control pods connector into the bass module. If the control pod is not connected, the bass module defaults to full volume. If the control pod is defective, replace the control pod with p/n: 294599-001.                                      |                          |  |   |     |   |       |   |       |
| Companion 5              | No audio from speakers or headphones         | Check Q10 on the DSP PCB                                  | Check Q10 voltages referencing the table below. If the output voltage is missing (Vraw 14.6V), replace Q10 with p/n: 271765-002.<br><br><table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">Q10 voltages in circuit.</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>21V</td> </tr> <tr> <td>G</td> <td>17.3V</td> </tr> <tr> <td>D</td> <td>14.6V</td> </tr> </tbody> </table> | Q10 voltages in circuit. |  | S | 21V | G | 17.3V | D | 14.6V |
| Q10 voltages in circuit. |  |   |   |                          |  |   |     |   |       |   |       |
| S                        | 21V  |   |   |                          |  |   |     |   |       |   |       |
| G                        | 17.3V  |   |   |                          |  |   |     |   |       |   |       |
| D                        | 14.6V  |   |   |                          |  |   |     |   |       |   |       |