



Technical Note TN-710

Shrink Wrap added to Tait Orca Battery cells.

19th April 2002

Applicability

This Technical Note applies to the TOPB200, TOPB201, TOPB202, TOPB2U0, TOPB2U1, TOPB2U2, TOPB2V0, TOPB2Z0, TOPB2Z1, TOPB500, TOPB501, TOPB502, TOPB5U0, TOPB5U1, TOPB5U2, TOPB5Z0 and TOPB5Z1 Nickel Cadmium and Nickel Metal-Hydrate battery packs.

1. Introduction

Why Change

The larger capacity battery packs that Tait produce were found to suffer from 'cell rattle' when dropped from heights in excess of the MIL-STD 810 testing. This problem was discovered just prior to August of 2001.

After investigations and testing were completed, a temporary solution was put into production. The details on this solution can be found in Technical Note TN-683.

The goal was always to have a permanent solution. The mechanical engineers completed further research and found that shrink wrapping the cells gave better stability to the cell pack. Therefore, the temporary solution has now been removed and the shrink wrap cells are now being used in production. The change details are as follows:

TOP2XX 1500mAh NiCd battery pack:

- Changed to Shrink Wrap cells on the **5th March 2002**.
- First serial number was **15205648**.

TOPB5XX 2000mAh NiMH battery pack:

- Changed to Shrink Wrap cells on the **4th April 2002**.
- First serial number was **15210833**.

2. Modification

Shrink Wrapping

Shrink wrapping of the cells is done by the cell manufacturer (Sanyo). The addition of the shrink wrap removes several process stages that were implemented as part of the temporary solution. The removal of these stages speeds up the assembly time of the battery packs.

Please note the difference in labels on the two cells. The NiMH pack has a “Twicell” label and the NiCd pack has a “Cadnica” label. The label also mentions the voltage and capacity specifications.

Figure 1 : TOPB5XX NiMH battery Pack



Figure 2: TOPB2XX NiCd battery pack.



Compliance No Compliance issues

CSO Instruction Please pass this information onto all Tait technical and sales staff. Also inform Tait accredited dealers of the change.

3. Issuing authority

Name and position of issuing officer Barry Crates
Technical Support Team Leader - Terminals

Confidentiality Confidential – This document contains proprietary information intended only for the person(s) or organisation(s) to whom it is addressed. All Recipients are legally obliged to not disclose Tait technological or business information to any persons or organizations without the written permission of Tait.