

## **SERVICE BULLETIN**

CBC-SB-09302014-1B  
Feb 11/2015

**SUBJECT: CLARIFICATION OF CONDITIONING CHARGE PROCEDURE**

**APPLICABILITY: ALL RG® SERIES BATTERIES**

References: a) Concorde CMM 24-30-67, Document No. 5-0167 REV D, dated 05/15/2012  
b) Concorde CMM 24-30-69, Document No. 5-0169 REV C, dated 05/06/2011  
c) Concorde CMM 24-30-71, Document No. 5-0171 REV M, dated 03/15/2012  
d) Concorde CMM 24-30-27, Document No. 5-0427 REV NC, dated 05/06/2011  
e) Concorde CMM 24-30-28, Document No. 5-0428 REV NC, dated 05/06/2011  
f) Concorde CMM 24-30-18, Document No. 5-0518 REV NC, dated 07/24/2013  
g) Concorde CMM 24-30-29, Document No. 5-0529 REV NC, dated 07/31/2013  
h) Concorde CMM 24-30-30, Document No. 5-0530 REV NC, dated 07/31/2013  
i) CMM for Concorde RG-441 Battery, Document No. 5-0173 REV A, dated 5/2/2009

### Summary

This Service Bulletin provides clarification of the instructions for conducting the conditioning charge procedure, as detailed below:

1. When conducting the conditioning charge procedure, the charging equipment must be capable of maintaining a constant current throughout the entire charge period. The battery voltage may get as high as 36 volts for 24 volt batteries (18 volts for 12 volt batteries), so the charging equipment must be capable of outputting this voltage to maintain constant current.
2. The preferred conditioning charge method is to charge at a constant current rate of C1/10 (e.g., 4.2 Amps for a battery with a C1 rating of 42 Ampere-hours) until the battery voltage reaches 31 volts (15.5 volts for 12 volt batteries), then continue charging at the same constant current rate for an additional 4 hours. The charge profile should be continuous when using this method, i.e., no pauses should be included. However, if there is an interruption (e.g., due to a local power outage), continue from where the profile left off and run to completion.

**NOTE (1): If the battery voltage exceeds 31 volts at the beginning of charge, it should drop below 31 volts within 1-2 hours. Continue charging at a constant current until the voltage reaches 31 volts a second time, then continue charging at the same constant current rate for an additional 4 hours as specified above.**

**NOTE (2): If this method does not return at least 1.6 times the rated C1 capacity (e.g., for a battery with a C1 rating of 42 Ah,  $1.6 \times 42 = 67.2\text{Ah}$ ), then use the method described below in Paragraph (3).**

3. An alternative conditioning charge method is to charge at a constant current rate of C1/10 (e.g., 4.2 Amps for a battery with a C1 rating of 42 Ampere-hours) for a total of 16 hours. The charge profile does not need to be continuous when using this method, i.e., pauses may be included. For example, an 8 hour charge on the first day and an 8 hour charge on the second day is allowable.

*The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export-controlled information.*



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## **SERVICE BULLETIN**

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### **RECORD OF REVISIONS**

| <b>Revision</b> | <b>Date</b> | <b>Description</b>                        | <b>Approved</b> |
|-----------------|-------------|---|-----------------|
| NC              | Sep 30/2014 | Initial release.                          | JBT             |
| A               | Jan 29/2015 | Added Reference (i)                       | DGV             |
| B               | Feb 11/2015 | Added Notes (1) & (2) under Paragraph (2) | DGV             |