Extreme Sales and Rental
Alkaline Battery Cell Voltage
Revision 1

Date: Aug 11, 2020
Applicability: XEM – XPULSE – XDS1 – XBOLT II
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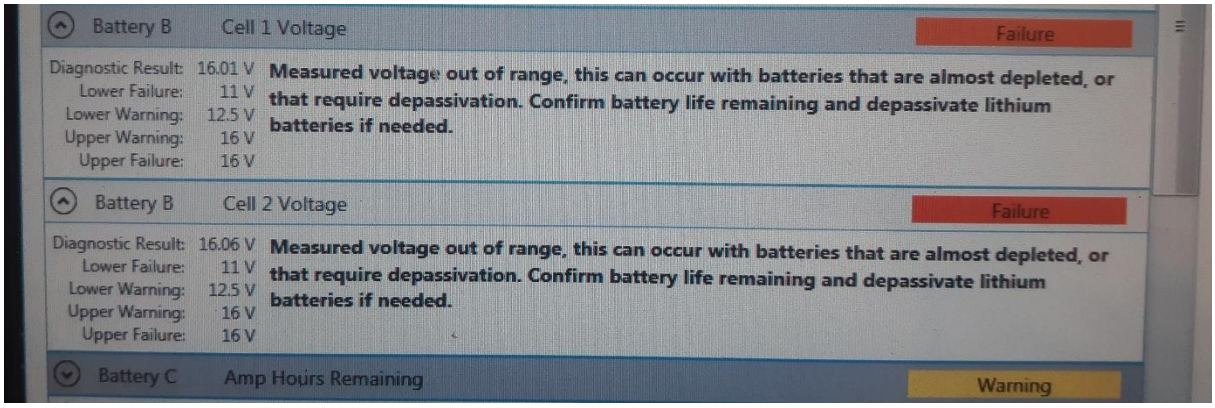
BACKGROUND

When XDirect conducts the diagnostic testing there are preset ranges for every value that can be read from each probe. For batteries, the cell voltages have had a passing range between 11V and 16V. Historically alkaline cells can see a higher cell voltage than 16V when new. This caused some bank tests to be flagged as failures. An example of this can be seen on the image below.



These failures are a false positive. Though the software is working correctly with the ranges it is given the probes in the example would be good to run down hole.

FIELD TEST SOLUTION

There will be two changes to XDirect to address this issue.

- The range given for a battery will no longer be a one size fits all. Instead each battery type will have its own specific range. XDirect can distinguish each cell type based on flags set when it is assembled. This update is planned for release the week of August 19th 2020 and can be installed as a patch to any V4 installations of XDirect.
- Alkaline voltage criteria will be changed from 11V – 16V to 11V – 16.6V for passing. The 16.6V was selected because values of up to 16.6V have been recorded on new alkaline cells at the manufacturer's facility.

MOVING FORWARD

Bank tests that show a failed voltage between 16V – 16.6V will be passed by the Extreme Command Center and should not be sent in for failure analysis.

Any surface software running V4 XDirect without the update will be notified that an upgrade is available once released. Upon release of this update all surface gear leaving the Extreme Engineering shop will be upgraded as well.