



## Tech20170427-2-0

# Guidelines for Cleaning & Maintenance of the Cellwatch System

All the Cellwatch system components are designed with the intention of being low maintenance. It is recommended systems with Cellwatch have a yearly visual inspection, torque checking (battery) and discharge test if one hasn't occurred during the year (Reference IEEE 1188 for VLRA batteries).

# **Cleaning and Visual Inspection**

In normal use Cellwatch will not require cleaning. In the event that any of the components become damaged by acid, water, debris or other conductive or corrosive substance they should be isolated from electrical power immediately and returned to your Cellwatch supplier for service. The Control Unit and Battery Monitoring Unit cabinets can be cleaned EXTERNALLY to remove dust and light debris with a soft cloth and light use of a dust gathering agent, or non-abrasive all-purpose cleaner. Care should be taken to ensure that there is no liquid material ingress into either of the cabinets.

If necessary, clean DCMs using a dry cloth. DCMs are connected to the battery which, even if isolated, will remain energized. Do not use liquids near the DCM or battery.

Visually inspect each component of the Cellwatch system. Look for corrosive buildup on the tab washer connection points and the DCM Fast-On Quick Connects. If corrosion is found, contact your battery service technician to clean the battery terminals and inspect the tab washer for degradation. Also inspect the IBMU filters (if available) and fans (if available) and remove dust or debris with compressed air.

#### **DCM6 Harness Maintenance**

As with all electronic components, the DCM 6 is not designed to come into contact with acid. While the case and wires may be acid-resistant, there are still potential points of entry for acid to enter the DCM and damage the module. When mounting DCM6 series components, ensure the harness connector is facing down, left, or right so acid does not wick into the DCM housing through the wire harness. DCM wires should be dressed to allow for a drip point so that any battery acid that travels down the wire will have a safe space to fall. This drip point should not be above any other DCMs. If the DCM6 harness comes into contact with battery acid, immediately clean the wires with an acid neutralizing agent and wipe clean.





### **Installation Maintenance**

Although the Cellwatch system will not need servicing, the battery will require regular maintenance, and NDSL recommends that safety procedures and safe working practices as described in the appropriate battery maintenance manual, be followed closely.

Whenever replacing a jar, mono-bloc, cell, or associated link it's important to totally remove any Cellwatch unit which is connected. If a battery link is removed anywhere on the battery, the risk is present of abnormally high voltages. This high voltage could damage the Cellwatch Data Collection Module. This high voltage can be extremely dangerous for any technician working on these cells.

It is always recommended that the DCM unit be disconnected prior to opening and subsequent removal of a battery link.

Particular attention must be paid if a link connects between two levels or tiers of batteries on the racking system as a module may span the two end cells /mono-blocs. After servicing the battery, any removed links must be fitted and reconnected with the original tab washer configuration before the Cellwatch modules are reconnected. Failure to do this may result in the Cellwatch module being damaged.

Always check the Cellwatch system after such servicing to ensure the system can scan all components of the battery.

## Backup

During the annual inspection NDSL recommends at least a yearly backup of the important Cellwatch data on the Cellwatch IBMU. This backup can be performed by copying the files from C:\ProgramData\Cellwatch to a USB thumb drive. The following files should be included all backups:

All History.his files (history2021.his, history2022.his, etc.) Cellwatch.ini Logfiles folder

More frequent backups can be beneficial.

Cellwatch version 5 and higher includes an integrated backup tool that will accelerate the backup process. This tool can be accessed by stopping the system and going to the "Configuration" menu and selecting "Download System Data. This will open dialog box prompting you to select a location to save the .ZIP folder containing the Cellwatch data.