

## Technical Bulletin: ZT Load Cell PM Visit Checklist

**Product:** ZT Digital Load Cell

**Issue:** 1

**Date Created:** Sep, 2023

### Introduction

This guide provides a checklist of inspections and actions to be performed when attending a ZT Digital Cell preventive maintenance visit or service visit. Your attention to these key aspects of maintenance will help optimize the functionality, accuracy, and lifespan of the ZT Digital Load Cells.

### Preventative Maintenance / Visit Inspection Checklist

**Alignment**

Verify the vertical and horizontal alignment of the load cells to ensure accurate measurements.

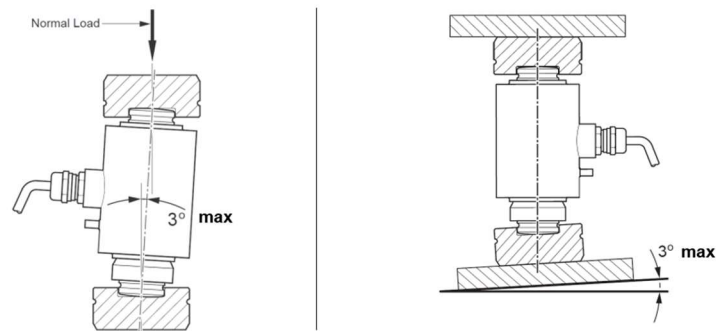
**Locking Cam and Earthing Strap**

Inspect the locking cam (restraints) and earthing strap secured to the stud and rod/base plate to maintain proper grounding and stability.

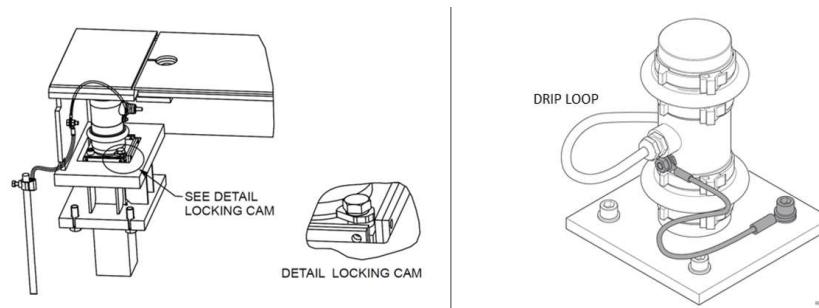
**Drip Loop**

Verify the drip loops (1 m stub) to confirm they allow the cells to move freely and are off the ground.

Position the drip loop in a way that prevents water stagnation and pulling stress on the T-connectors.



*The sum of the vertical and horizontal angles must not exceed 4 degrees.*



*Load cell locking cam, drip loop and earthing strap (left: BMS (-T) pedestal, right: base plate)*

**☑ Rubber Gaiter Bellows and Load Buttons**

Inspect the rubber gaiter bellows and buttons for any signs of wear, cracking, or damage. Replace it if necessary to ensure accurate readings. Ensure the strap is securely fastened and regrease each load button with 50g of grease if required. (Grease, Castrol AP3)

**☑ Conduit and Cables**

Inspect conduits and cables for any visible damage, wear, or fraying. Make sure they are properly secured to the decks and off the ground. Replace cables as needed. Seal the conduits with silicone or any other method to prevent water and rodent ingress.

**☑ Cells Cleaning**

Carefully wash the load cells and base plate periodically (**do not jet wash the connectors**) to prevent the accumulation of debris or contaminants that could affect their functioning.

**☑ Connector Housing Cleaning**

Gently brush the connector housing using a soft brush and clean water to prevent debris accumulation. Pay special attention to the collar area. Utilize dry air for spraying to facilitate thorough drying or allow for proper drying.

**Do not open the connectors unless you have ensured that the housing is both clean and completely dry. This applies at all times, including during installation.**

Use exclusively clean water and pressurized dry air to eliminate any residues and moisture that may have accumulated inside the connector during cleaning.

**☑ Check Connector Positioning & Locking**

Make certain the connectors are lifted off the floor and out of harm's way i.e., not sitting on the floor.

Ensure the arrows on the connector housing are aligned - if not, adjust them manually by twisting the collar if necessary. Replace T-connectors as needed.

**☑ Firmware Updates**

Stay up to date with the latest software and firmware updates provided by Avery Weigh-Tronix to ensure optimal performance and compatibility.

**☑ Environmental Factors**

Monitor the load cells for exposure to harsh environmental conditions, such as extreme temperatures, moisture, or corrosive substances. Assess the load cells for exposure to excessive vibrations or shocks that could compromise their accuracy. Open the ZT Diagnostic Menu to identify and address any significant external factors.

Take measures to protect the load cells, cables and connectors as needed.

Remember, the frequency of these tasks may vary based on usage, environmental conditions, and applications. It's important to create a maintenance schedule tailored to specific site needs.

If you have any question, please contact [exptechsupport@awtx-itw.com](mailto:exptechsupport@awtx-itw.com)