



CUSTOMER SERVICE BULLETIN

CSB No. : 2016-01
Title : QL3/FS Calibration Interface – Offset Noise
Affected Products : All QL3 Diagnostic Systems (Including FS models)
 All QL3 Calibration Interface Module (CIM)

Specific Models/s/n’s : 160200, 160600 & 160600E (s/n QL3-0001 to 0108)
 : 160257 (s/n 16780 through 17581)

Issue Description:

An Out of Tolerance (OOT) condition was discovered on some QL3 diagnostic systems. The condition is caused by a ground loop that can generate noise when the analog channels are interconnected during the calibration process. The noise can cause a zero offset which leads to the OOT (>+/-1% reading), as indicated on the CalQL calibration report for readings at the low end of the very lowest range (1mV or 0.1mV/V measurements).

Review of data from OOT channels confirms that the accuracy of the affected units remains well within the +/-1% of reading specification *if* the data from the channel is “zeroed” per procedure during post-test analysis. Given that the mV range on QL3 channels is used only for strain gage devices where the data is normally “zeroed”, the actual accuracy of channels with the OOT condition is typically better than +/-0.1% of reading. Therefore this is not an issue for actual QUIKLOOK-FS measurements taken in the field where the data is zeroed. Machines that have been used for DP testing where the data may not have been zeroed may require additional action if a pre DP static test was not conducted.

Reconciliation:

A modification is required to all TTS Calibration Interface Modules (p/n 160257) to eliminate the noise and will be performed by TTS at no charge. Following the modification, we recommend that “As-Found” calibrations be performed on all QL3 systems to re-set the internal zero offsets on their next scheduled calibration cycle. In some cases it may be necessary to perform grounding modifications to the QL3 itself. TTS will perform the re-set and any required grounding modifications at no additional charge at the time of the next scheduled calibration.

Customer Action Required:

Customer action required is dependent on who calibrates the QL3 units and whether or not any tests were conducted with strain gage devices in which the data for those channels was not zeroed.

Calibrations Performed By	All Zeroed Tests	Some Tests Not Zeroed
TTS	Send QL3 units to TTS on regular calibration cycle	Send QL3 to TTS ASAP
Customer/3rd Party	Send Calibration Interface to TTS for updates and perform AF cals per TTS Procedure on normal calibration cycle.	Send Calibration Interface to TTS for updates and perform AF cals per TTS Procedure ASAP or prior to DP Testing.