DTC P0A12 - Cell Balancing Stuck Off

Product Family	Fault Supported
Orion BMS [Original] (24 - 180 Cell)	**NO**
Orion BMS 2 (24 - 180 Cell)	**YES**
Orion JR [Original] (16 Cell)	**NO**
Orion JR 2 (16 Cell)	**YES**

FAULT DESCRIPTION

This error code indicates that the Orion BMS has determined that the internal balancing circuit on at least one cell input is not operating properly. The Orion BMS uses internal balancing resistors to intelligently bleed current from higher charged cells in order to bring them into balance with the rest of the pack. Each cell has a dedicated bleed resistor and if any of these fail to operate then the BMS will be unable to properly balance the battery pack.

Fault Code	Fault Description	Possible Trouble Area
P0A12	Cell Balancing Circuit stuck off on one or more cells.	● Battery Management System

FAULT BEHAVIOR

This fault is **Informational Only** and does not directly alter the operation of the BMS. NOTE: An ineffective balancing input will likely result in the BMS being unable to effectively balance the battery pack which would have long term implications on usable capacity of the pack.

DIAGNOSTIC STEPS

1.	**Download the freeze frame for the fault code using the BMS Utility.** The BMS will normally produce a freeze frame on the "Diagnostic Trouble Codes" screen in the BMS Utility when this fault code occurs that contains a comprehensive list of BMS data parameters at the time the fault occurred. **It is strongly recommended that the freeze frame be downloaded from the BMS and saved to disk before the fault is cleared again** as this data may assist in the future if further diagnostics are required. <u>Additionally this freeze frame data may be requested by Technical Support if further assistance is required.</u> **NOTE:** Only Fault Codes with a (F) next to them have freeze frame data available for download. If there is no (F) next to the fault, there is no stored freeze frame available and this step can be skipped. Steps to download the Freeze Frame: 1) Connect to the BMS using the Orion BMS utility. 2) Click the "Diagnostic Trouble Codes" tab at the top. 3) Select the correct fault code by clicking on the ID on the left side of the screen to initiate the Freeze Frame retrieval. 4) Once the retrieval process is complete, click the "Export (CSV)" button to save the freeze frame data to the computer disk.
2.	**Contact technical support.** **Please contact the company or reseller that the BMS was originally purchased from for additional questions, warranty claims, repair requests and technical support.**