

## GSE Technical Bulletin

### SUBJECT: Firmware Issue – Current Sensor Time Out

This bulletin is to communicate a firmware issue which could affect GSE batteries made prior to February 1<sup>st</sup>, 2019.

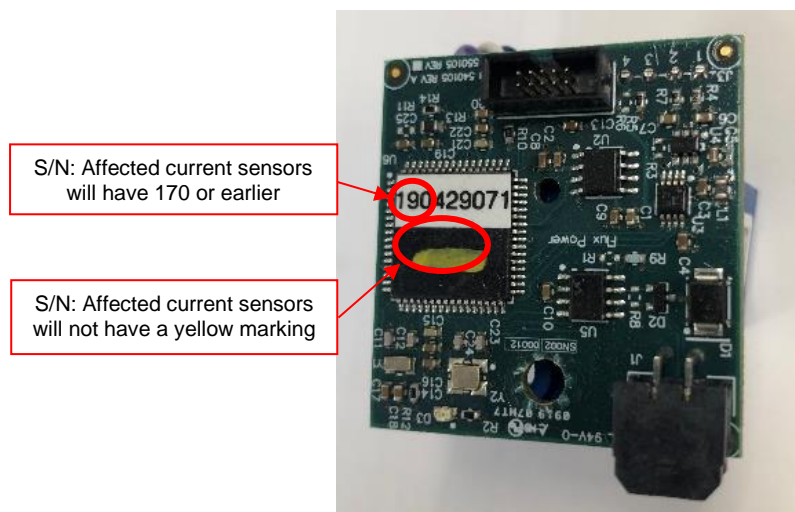
#### Identified Issue

Some GSE batteries have a firmware issue where the current sensor under the electronics cover can time out, resulting in the battery state of charge not changing during usage. This issue can be repaired in the field with a service kit provided by Flux Power.

#### Products Affected

GSE batteries shipped before February 1<sup>st</sup>, 2019 are affected if:

- The current sensor does not have a yellow marking.
- The current sensor has a serial number that begins with 17 or earlier.



#### How to Fix

In the event of the above symptom being observed, contact Flux Power to receive a service kit (P/N 200121) and connection package. Once the kit is received, use the following instructions to implement the fix.

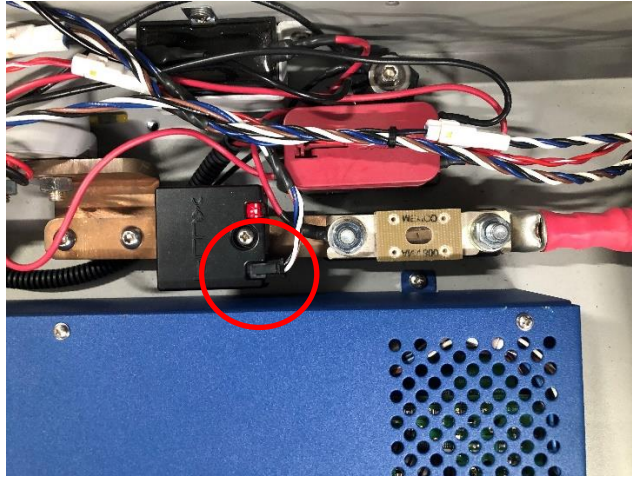
To replace the current sensor:

1. Turn battery off.
2. Remove the top lid screws, lift the top lid off the battery, and place it off to the side.
3. Disconnect orange surlock(s) from all blades connected to the power distribution.

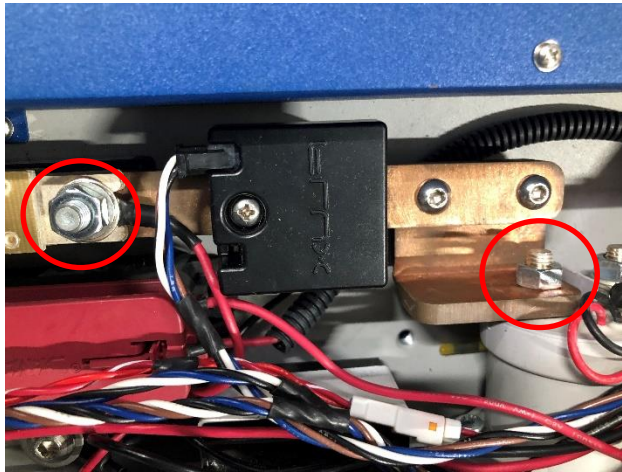


4. Remove electronics lid screws, lift the lid off the battery, and place it off to the side.

5. Locate the current sensor, remove the CAN/power harness.



6. Remove the two nuts holding the bus bar in place.



7. Replace the current sensor on the bus bar and reinstall busbar.
8. Re-Connect the CCS to CAN/power harness.
9. Re-connect orange surlock(s) to power distribution.
10. Turn battery on and connect to battery diagnostics port. Ensure the current sensor is in the correct polarity by turning on truck features (lights, heaters, etc) to draw current. Current draw will appear as a negative current in the GUI.
11. Re-install the electronics lid.
12. Re-install the top lid.

### **Additional Information**

Please remember to obtain pre-approval for any warranty work being performed. Flux Power will cover one hour of repair time. Be sure to include the battery serial number when invoicing. If you have any questions, please contact a technical support representative at:

Phone: **(877) 505-3589**

Email: [support@fluxpower.com](mailto:support@fluxpower.com)

**\*\*\*Repairs should only be performed by authorized technicians\*\*\***