TOTALFLOW
Technical Bulletin 83

Potential Problem with 6700 Flow Computer Charger Circuit

Totalflow Technical Bulletin

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1. **Purpose**

To describe a potential charging problem with the 6700 Flow Computer Unit. This bulletin will describe the charging problem symptoms and the steps to correct the problem.

2. **Description**

The 6700 Flow Computer Unit is shipped from the factory with a shield plate mounted over the main electronics board (CB-181 board P/N 2015382-001 or –002). The shield plate protects the electronics from EMI/RFI interference.

It was discovered that some number of shield plates were making contact with the electronic board’s charger heat sink (see picture below). If contact is made between the shield and heat sink, the charger will short to ground. This shorted condition will keep the battery from charging. The symptom will be that the charger voltage will display around 8-9 volts DC instead of somewhere between 12-15 volts DC. The normal charging voltage should be slightly higher than the battery voltage, if charging. There will be periods of time that the charging voltage will read open circuit voltage (around 20 volts DC for solar panel). This is normal and indicates that the battery is fully charged.

Locations where the heat sink could come into contact with the CB-181 shield plate.
3. **Conclusion**

To correct the problem, first disconnect the charger and then disconnect the main battery pack. Loosen the standoffs that secure the shield plate and then re-position the shield so that none of heat sink fins come into contact with the shield plate. Tighten the standoffs and finally re-connect the battery and then the re-connect the charger. Using a PCCU or PCCU laptop software, check the charging voltage and verify the voltage is equal to or higher than the battery voltage. If you have any questions concerning this bulletin call me at (918) 338-4819 or 1 (800) 442-3097 option 2, 2.