# SECTION 3 - BATTERY CONDITION METER FLASH CODES

## Flash Code #1 - Low Battery Voltage

**Symptoms:**
There is one battery condition meter LED flashing.

**Diagnosis:**
The battery voltage to the VSI controller is low. This is most likely due to batteries that are not getting charged properly or at all.

**Solution:**
Use the following procedure to find the source of the fault:

1. Measure voltage across pin 1 (B+) and pin 2 (B-) on connector 1a. **See figure 15.**

— *If your multimeter indicates more than 22VDC*, then replace the VSI controller (1) and retest the system.
— *If your multimeter indicates less than 22VDC,* then go to the next step.

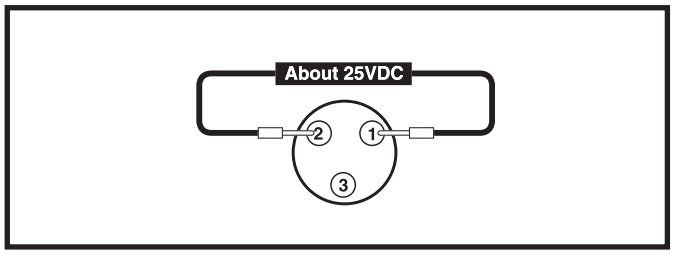

**Figure 15. Connector 1a**

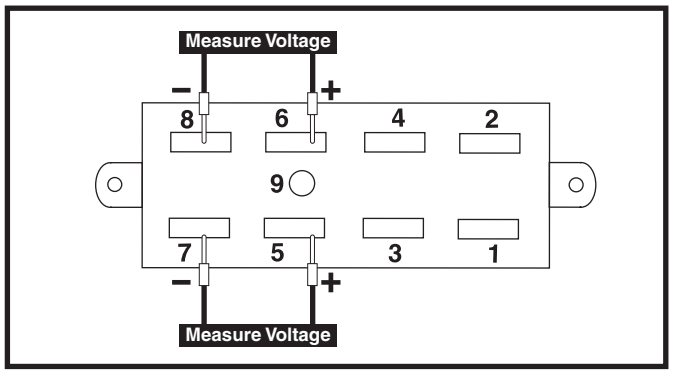

**Figure 16. Connector 2a**

2. Remove the seat and the foot platform assembly. Refer to the power base owner's manual.
3. Remove the shroud. **See figure 10.**
4. Measure voltage across connector 6b and connector 7c. *(If your multimeter indicates 0VDC, then try measuring voltage connector 6c and connector 7b.)*

— *If your multimeter indicates a different voltage from step 1 (by at least 0.2VDC),* then go to the next step.
— *If your multimeter indicates about the same voltage (within 0.2VDC),* **then go to step 14.**

5. Unplug connector 1c from connector 2a. **See diagram 2.**
6. Measure voltage across pin 6 (B+) and pin 8 (B-) and across pin 7 (B-) and pin 5 (B+) on connector 2a. **See figure 16.**

— *If your multimeter indicates a different voltage from step 1 (by at least 0.2VDC)*, then go to the next step.
— *If your multimeter indicates about the same voltage as measured in step 4,* then replace the VSI controller (1) and retest the system.

7. Unplug connector 7a from connector 2b and connector 6a from 2c. **See diagram 2.**
8. Measure voltage across connector 6b and connector 6c. **See diagram 2.**
9. Measure voltage across pin 1 and pin 2 on connector 6a. **See figure 5.**

— *If your multimeter indicates the same voltage as measured in step 8,* then go to the next step.
— *If your multimeter indicates a different voltage (by at least .2VDC),* then replace the rear battery harness (6) and retest the system.

10. Measure voltage across connector 7b and connector 7c. **See diagram 2.**
11. Measure voltage across pin 1 and pin 2 on connector 7a. **See diagram 2.**

— *If your multimeter indicates the same voltage as measured in step 10,* then go to the next step.
— *If your multimeter indicates a different voltage (by at least .2VDC),* then replace the front battery harness (7) and retest the system.

12. Unscrew the electronics tray assembly from the 1121 frame to gain access to the circuit breaker (2f). **See figure 17.**
13. Measure resistance across the two terminals on the circuit breaker (2f). **See figure 18.**

— *If your multimeter indicates less than 1 ohm,* then replace the power interface harness (2) and retest the system.
— *If your multimeter indicates an open,* then replace the circuit breaker (2f) and retest the system.

14. Measure voltage across connector 7b and connector 6c. **See diagram 2.** *(If your multimeter indicates 0VDC, then measure voltage across connector 6c and connector 7b.)*
15. Plug the battery charger into a electrical outlet and observe the battery voltage on your multimeter.

— *If the voltage does not change*, then go to the next step.
— *If the voltage increases*, the batteries are charging. Charge the batteries until the ammeter drops back down to zero and retest the system.
— *If the ammeter voltage did not increase when the battery charger was plugged into the electrical outlet, but the battery voltage increased on your multimeter*, then replace the ammeter (3c) and retest the system.

16. Unplug connector 1b from connector 3a. **See diagram 2.** Make sure that the battery charger is still plugged into the electrical outlet.
17. Measure voltage across pin 1 and pin 3 on connector 3a. **See figure 19.**

— *If your multimeter indicates 0VDC*, then go to the next step.
— *If your multimeter indicates 25 — 30VDC*, then replace the VSI controller (1) and retest the system.

18. Unplug connector 3b from connector 4b. **See diagram 2.** Make sure that the battery charger is still plugged into the electrical outlet.
19. Measure voltage across pin 1 and pin 3 on connector 4b. **See figure 20.**

— *If your multimeter indicates 0VDC*, then go to the next step.
— *If your multimeter indicates 25 — 30VDC*, **then go to step 26.**

20. Unplug connector 5a from connector 4a. **See diagram 2.**
21. Measure AC voltage across pin 1 and pin 3 on connector 5a and across pin 1 and pin 2 on connector 5a. **See figure 21.**

— *If your multimeter does not indicate 120VAC in both tests*, then go to the next step.
— *If your multimeter indicates about 120VAC in both tests*, then replace the battery charger (4) and retest the system.

22. Unplug the charger power cord from connector 5b. **See diagram 2.**

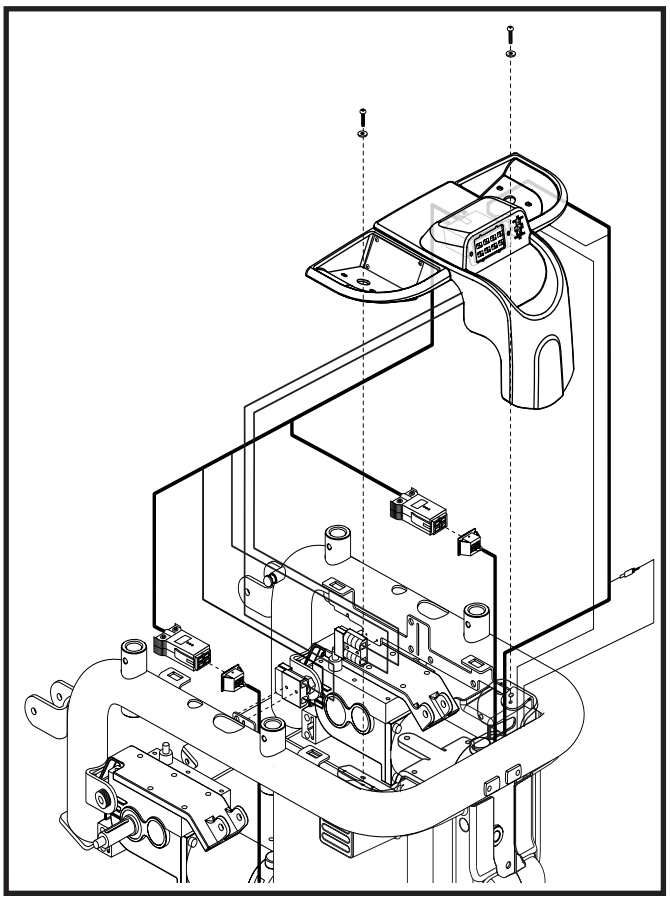

**Figure 17. Jazzy 1121 Electronics Tray Assembly/ Disassembly**

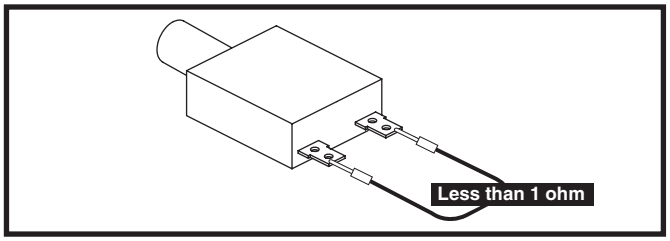


**Figure 18. Circuit Breaker (2f)**

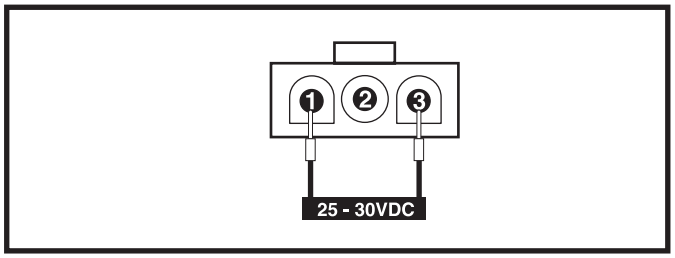


**Figure 19. Connector 3a**

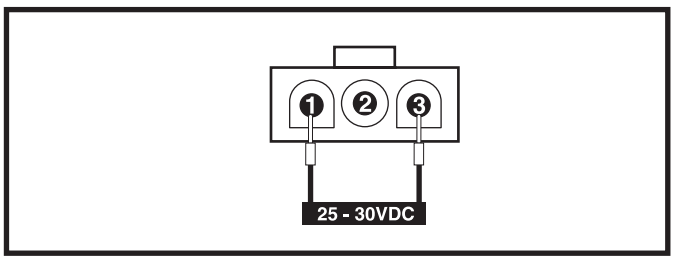


**Figure 20. Connector 4b**

23. Measure AC voltage across pin 1 and pin 2 and across pin 1 and pin 3 of the charger power cord 3-pin connector. **See figure 22.**

— *If your multimeter does not indicate 120VAC in both tests*, then go to the next step.

— *If your multimeter indicates about 120VAC in both tests*, replace the charger power interface harness (5) and retest the system.

24. Unplug the charger power cord from the electrical outlet.
25. Measure voltage across pin 2 and pin 3 and across pin 1 and pin 3 of the electrical outlet. **See figure 23.**

— *If your multimeter indicates about 120VAC for both tests*, then replace the charger power cord and retest the system.

— *If your multimeter does not indicate about 120VAC for both tests*, then try a different electrical outlet and retest the system.

26. Verify that the charger/inhibit harness (3) is connected to the fuse and ammeter (3c) properly. **See diagram 2.**

— *If they are connected properly*, then go to the next step.

— *If they are not connected properly*, then reconnect them and retest the system

27. Measure resistance across the two pins on the ammeter (3c).

— *If your multimeter indicates less than 1 ohm*, then go to the next step.

— *If your multimeter indicates an open*, then replace the ammeter (3c) and retest the system.

28. Remove the charger/inhibit harness fuse (3d). **See diagram 2.**
29. Measure resistance across the two blades of the fuse. **See figure 24.**

— *If your multimeter indicates less than 1 ohm*, then replace the charger/inhibit harness (3) and retest the system.

— *If your multimeter indicates an open*, then replace the fuse (3d) and retest the system.

**WARNING! The replacement fuse must exactly match the rating of the old fuse. Failure to use properly-rated fuses may cause damage to the electrical system and may result in personal injury.**

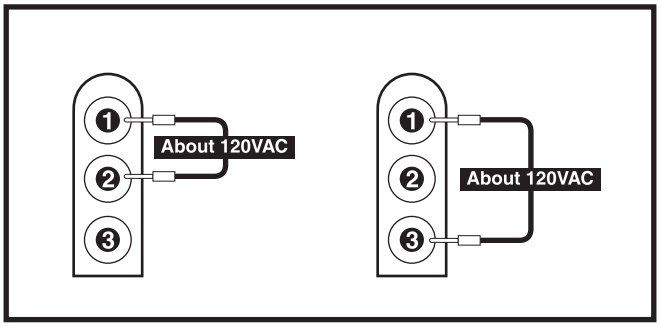


**Figure 21. Connector 5a**

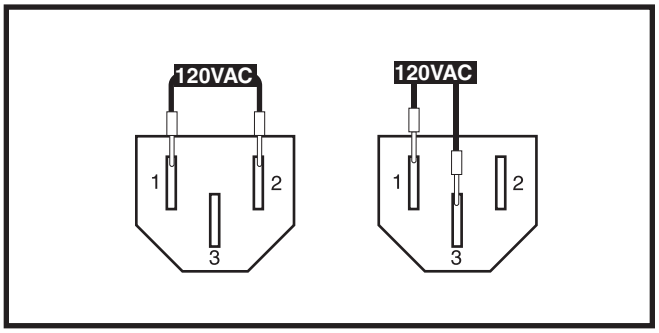


**Figure 22. Charger Power Cord 3-pin Connector**

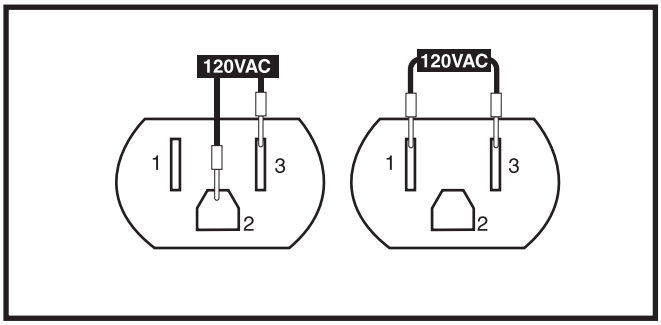


**Figure 23. Electrical outlet**

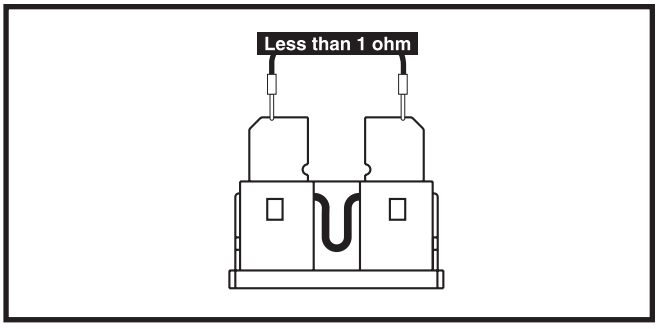


**Figure 24. Fuse 3d**