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|---|--|---|-----------------------|----|-----------------|
| 1 | Q-LOGIC JOYSTICK | 5 | BATTERY CABLE | 9 | LEFT MOTOR |
| 2 | POWER MODULE | 6 | FRONT BATTERY HARNESS | 10 | CIRCUIT BREAKER |
| 3 | BUS CABLE | 7 | REAR BATTERY HARNESS | 11 | RUN PLUG |
| 4 | POWER TAKE-OFF/INHIBIT HARNESS
(OR 14-PIN RUN PLUG) | 8 | RIGHT MOTOR | | |

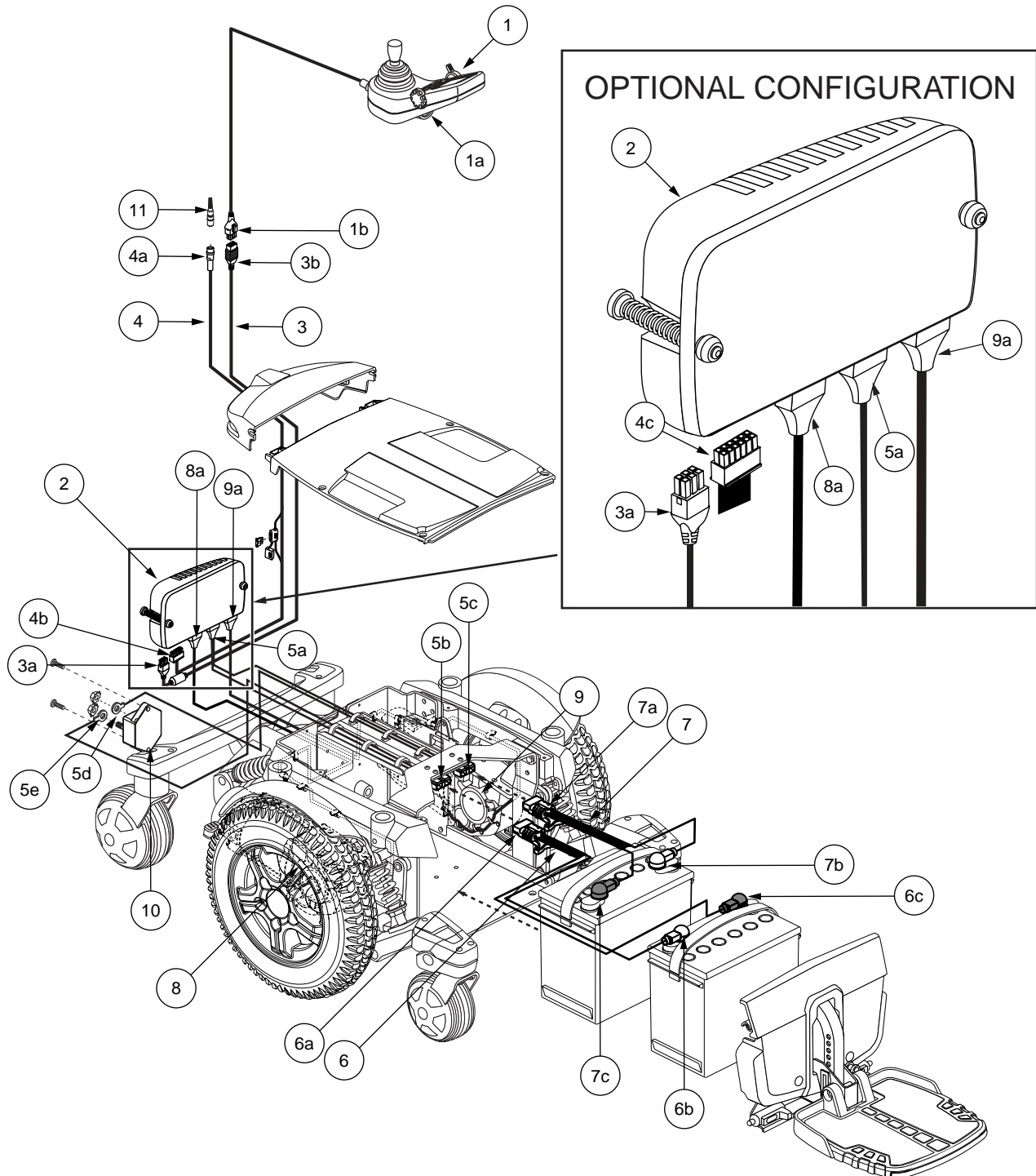


Diagram 1. Quantum 6000 Q-Logic Troubleshooting Key

SECTION 1 - NO POWER

Symptoms:

- The batteries are fully charged.
- All electrical components are connected correctly.
- The power does not turn on when the on/off lever is deflected.

Diagnosis:

The power has been interrupted somewhere in the system.

Solution:

Use the following procedure to find the source of the interruption:

1. Measure voltage across pin 1 (B+) and pin 2 (B-) of the off-board charger socket (1a). **See diagram 2 and figure 2.**
 - If your multimeter indicates about 25VDC (with correct polarity), then replace the Q-Logic joystick (1) and retest the system.
 - If your multimeter indicates less than 18VDC but greater than 0VDC, then recharge the batteries and retest the system.
 - If your multimeter indicates 0VDC, then go to the next step.
2. Remove the foot platform assembly. Refer to the power base owner's manual.
3. Remove the shroud. Refer to the power base owner's manual.
4. Unplug connector 6a from connector 5b and connector 7a from connector 5c. **See diagram 2.**
5. Measure voltage across pin 1 and pin 2 on connector 6a. **See figure 3.**
 - If your multimeter indicates 0VDC, then go to the next step.
 - If your multimeter indicates greater than 0VDC, then plug 6a back into 5b and go to step 7.
6. Measure voltage across connectors 6b and 6c. **See figure 4.**
 - If your multimeter indicates greater than 0VDC, then replace the battery harness (6) and retest system.
 - If your multimeter indicates 0VDC, then replace the batteries.

From step 5

7. Measure voltage across pin 1 and pin 2 on connector 7a. **See figure 5.**
 - If your multimeter indicates 0VDC, then go to the next step.
 - If your multimeter indicates greater than 0VDC, then plug 7a back into 5c and go to step 9.
8. Measure voltage across connectors 7b and 7c. **See figure 6.**
 - If your multimeter indicates greater than 0VDC, then replace the rear battery harness (7) and retest system.
 - If your multimeter indicates 0VDC, then replace the batteries.

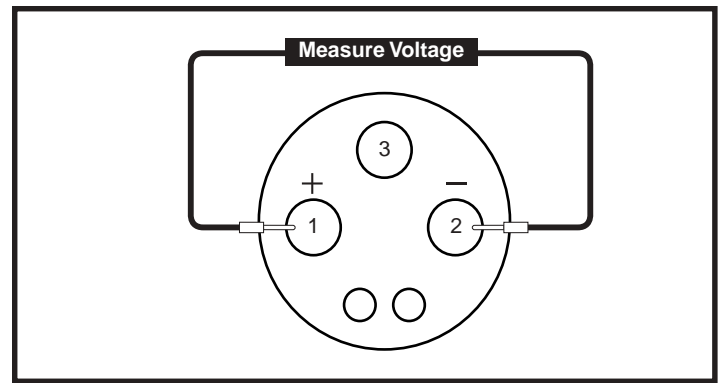


Figure 2. Off-board Charger Socket 1a

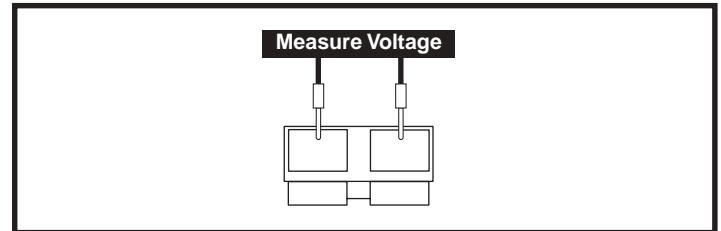


Figure 3. Connector 6a

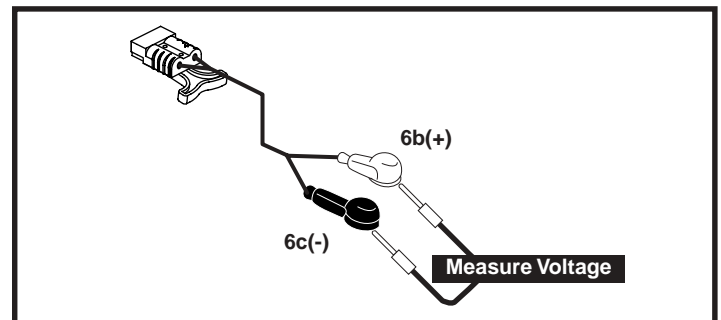


Figure 4. Connectors 6b and 6c

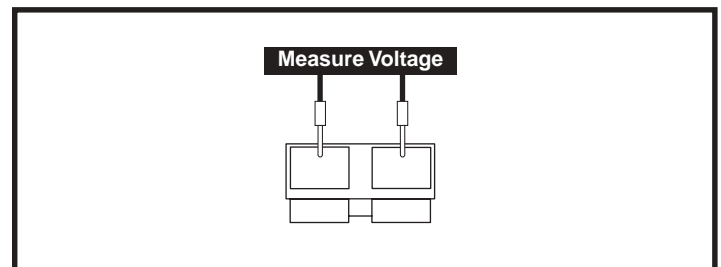


Figure 5. Connector 7a

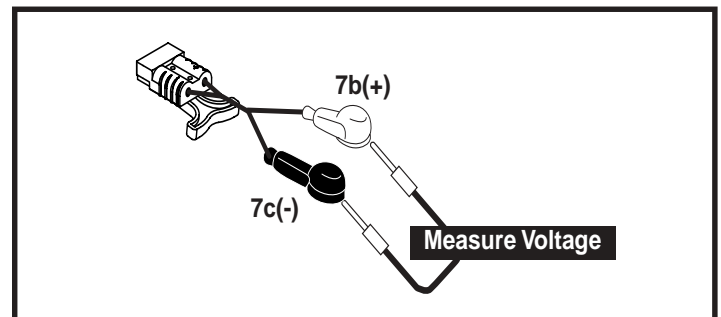


Figure 6. Connectors 7b and 7c

From step 7

9. Disconnect the power module (2) from the module mounting bracket. **See figure 7.**
10. Unplug connector 5a from the power module connector 2c. **See diagram 3.**
11. Measure voltage across pin 1 and pin 2 of connector 5a. **See figure 8.**
 - If your multimeter indicates 0VDC, then go to the next step.
 - If your multimeter indicates greater than 0VDC, plug 5a back into 2c, then go to step 13.
12. Measure resistance across the two terminals of the circuit breaker (10). **See figure 9.**
 - If your multimeter indicates less than 1 ohm, then replace the battery cable (5) and retest the system.
 - If your multimeter indicates greater than 1 ohm, then replace the circuit breaker (10) and retest the system.

From step 11

13. Unplug connector 3a from the power module connector 2a. **See diagram 3.**
14. Measure voltage across pin 1 and pin 4 of connector 2a. **See figure 10.**
 - If your multimeter indicates 0VDC, then replace the power module (2) and retest the system.
 - If your multimeter indicates greater than 0VDC, plug 3a back into 2a, then go to the next step.
15. Unplug 3b from 1b. **See diagram 3.**

NOTE: If the chair is equipped with a power positioning system, refer to the troubleshooting guide for that particular power positioning system.

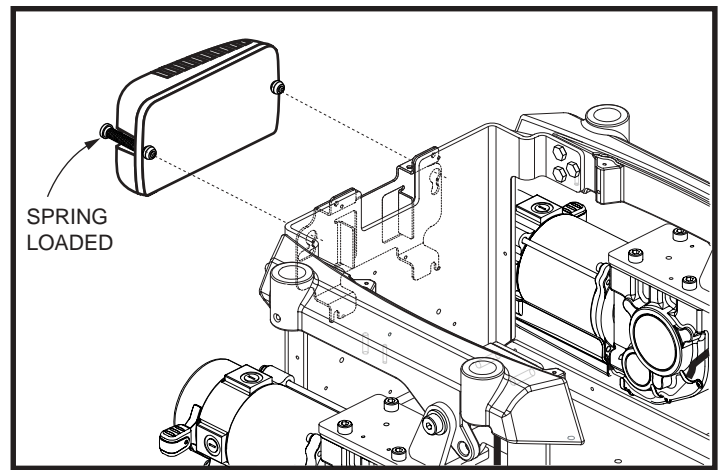


Figure 7. Disconnecting Power Module (2)

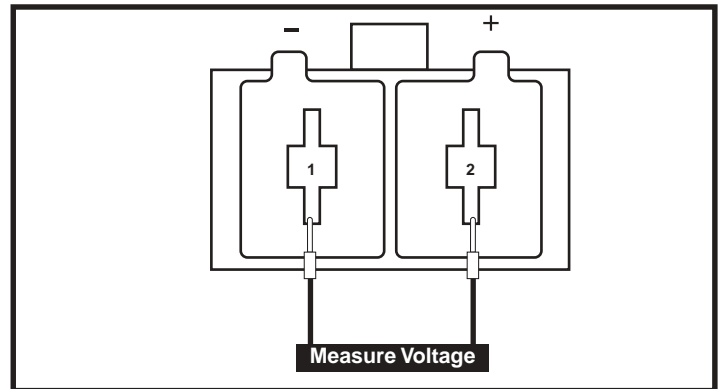


Figure 8. Connector 5a

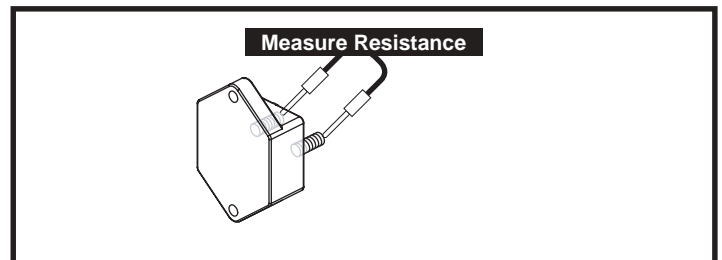


Figure 9. Circuit Breaker (10)

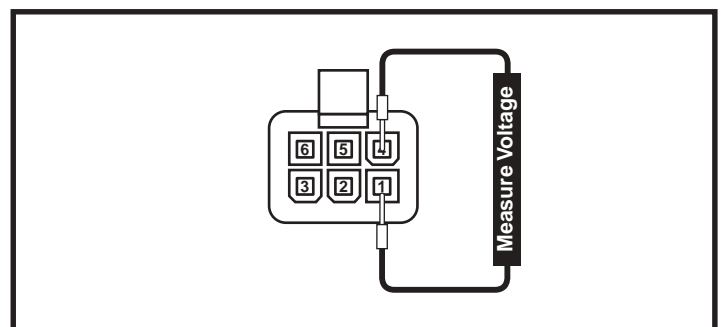


Figure 10. Connector 2a

16. Measure voltage across pin 1 and pin 4 of connector 3b. See **figure 11**.
- *If your multimeter indicates 0VDC, then replace the bus cable (3) and retest the system.*
 - *If your multimeter indicates greater than 0VDC, then replace the Q-Logic joystick (1).*

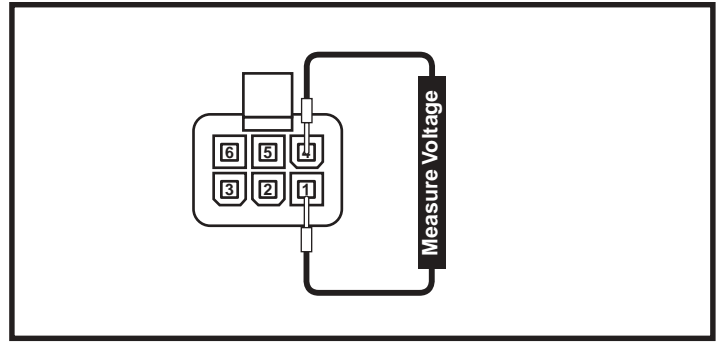


Figure 11. Connector 3b