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|---|--------------------------------|---|-----------------------|----|-----------------|
| 1 | REMOTE PLUS JOYSTICK | 5 | BATTERY CABLE | 9 | LEFT MOTOR |
| 2 | POWER MODULE | 6 | FRONT BATTERY HARNESS | 10 | CIRCUIT BREAKER |
| 3 | REDEL CABLE | 7 | REAR BATTERY HARNESS | 11 | RUN PLUG |
| 4 | POWER TAKE-OFF/INHIBIT HARNESS | 8 | RIGHT MOTOR | 12 | REDEL RUN PLUG |

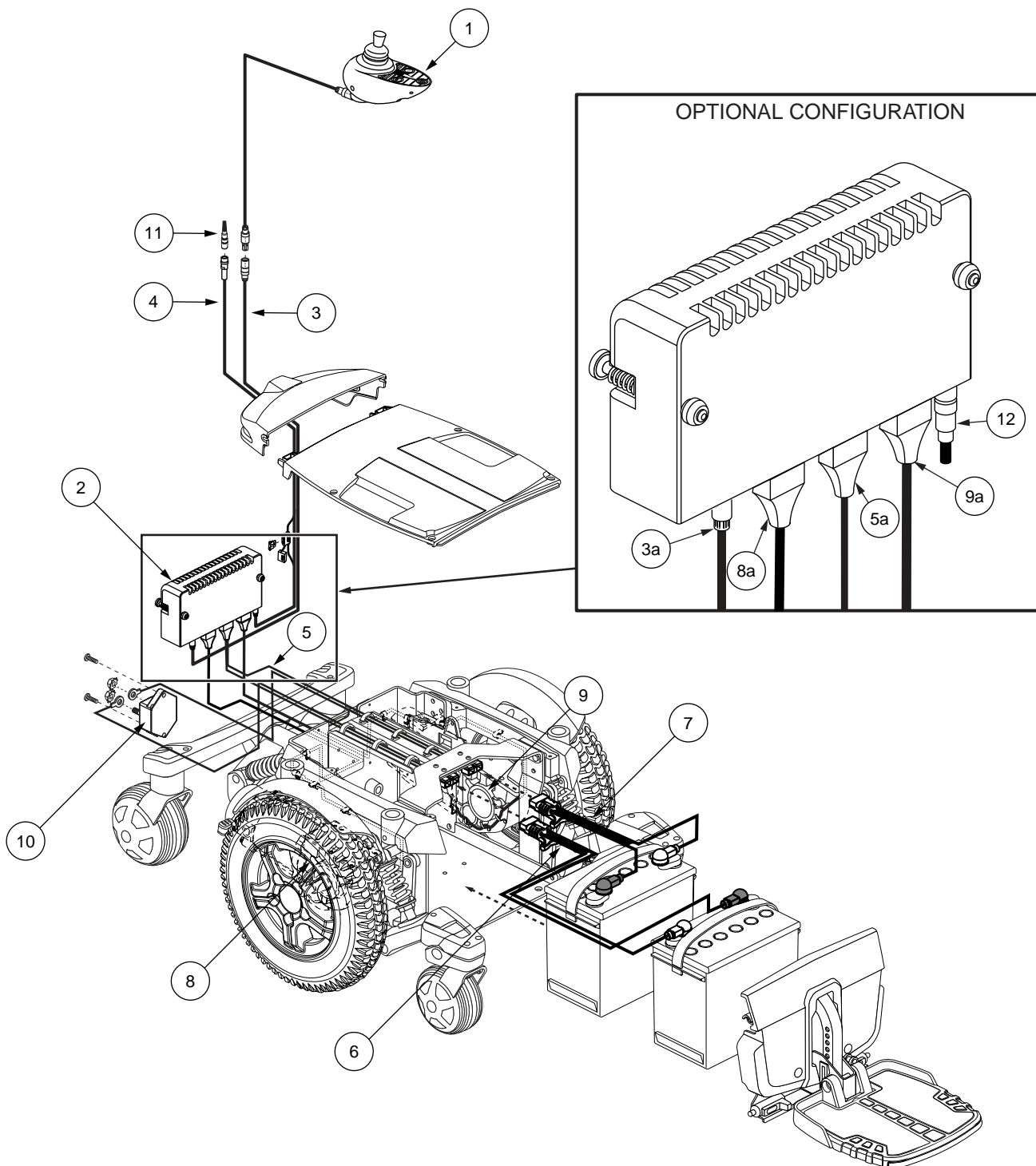


Diagram 1. Quantum 6000 Troubleshooting Key

15. Measure resistance from pin 1 on connector 3a to pin 1 on connector 3b. **See figure 12.**
 16. Measure resistance from pin 2 on connector 3a to pin 2 on connector 3b. **See figure 13.**
- *If your multimeter indicates less than 1 ohm for each test, then replace the Remote Plus joystick (1) and retest the system.*
 - *If your multimeter indicates an open for either test, then replace the Redel cable (3) and retest the system.*

SECTION 2 - POWER IS ON, BUT POWER CHAIR WILL NOT DRIVE

Symptoms:

- The battery condition meter LEDs light up.
- The power chair will not drive.
- The battery condition meter is not emitting any flash codes.

Diagnosis:

There is an open in the inhibit circuit.

Solution:

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

1. Locate the power take-off/inhibit harness or Redel run plug. **See diagram 2.**
 - *If the unit is not equipped with a power positioning system or a power take-off/inhibit harness, then go to step 7.*
 - *If the unit has a power positioning system or a power take-off/inhibit harness, then go to the next step.*
2. Unplug connector 4a from the run plug or power positioning system. **See diagram 2.**
3. Place a jumper between pin 3 and pin 4 of connector 4a. **See figure 14.**
 - *If the unit drives and is not equipped with a power positioning system, then replace the run plug and retest system.*
 - *If the unit drives and is equipped with a power positioning system, then refer to the troubleshooting guide for that specific seating system.*
 - *If the unit does not drive, then go to the next step.*
4. Unplug connector 4b from connector 2e. **See diagram 3.**
5. Measure resistance from pin 3 on connector 4a to pin 2 on connector 4b. **See figure 15.**
 - *If your multimeter indicates less than 1 ohm, then go to the next step.*
 - *If your multimeter indicates an open, then replace the power take-off/inhibit harness (4) and retest the system.*
6. Measure resistance from pin 4 on connector 4a to pin 6 on connector 4b. **See figure 16.**
 - *If your multimeter indicates less than 1 ohm, then replace the power module (2) and retest the system.*
 - *If your multimeter indicates an open, then replace the power take-off/inhibit harness (4) and retest the system.*

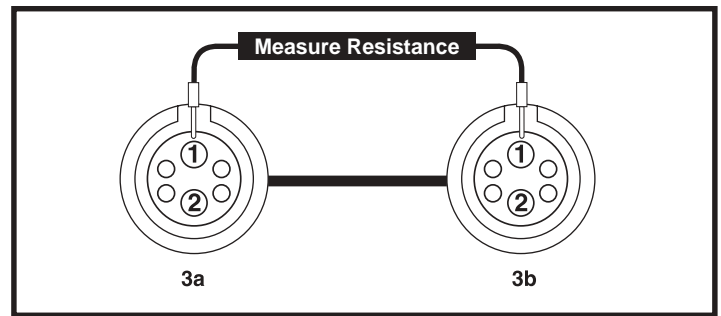


Figure 12. Connectors 3a and 3b

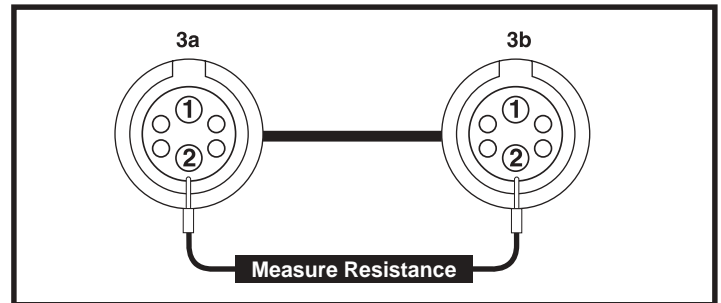


Figure 13. Connectors 3a and 3b

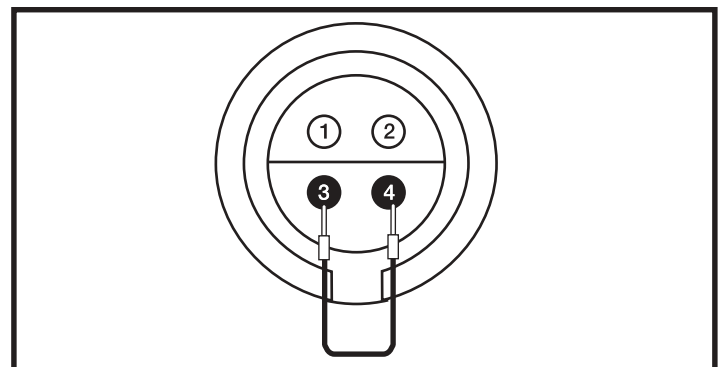


Figure 14. Connector 4a

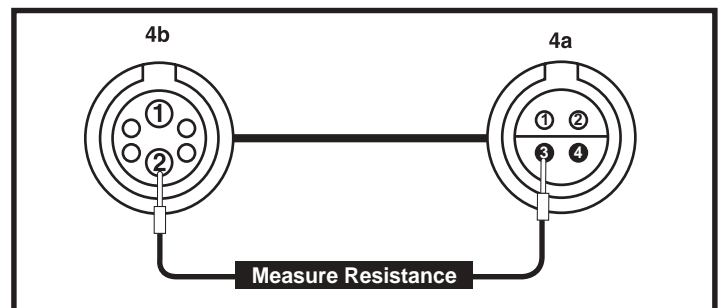


Figure 15. Connectors 4a and 4b

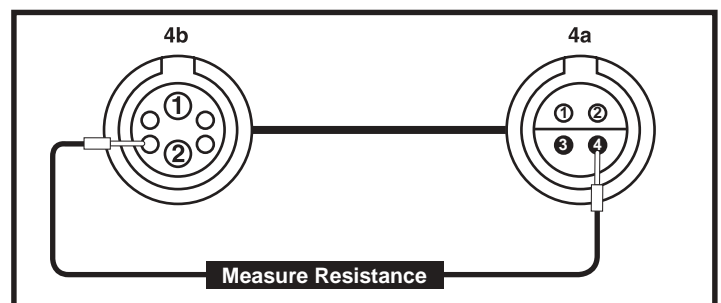


Figure 16. Connectors 4a and 4b

From step 1

7. Swap connector 3a and the Redel run plug (12). See **diagram 2**.
 - If the unit runs, replace the power module and retest the system.
 - If the unit does not run, replace the run plug and retest the system.

SECTION 3 - FLASH CODE DIAGNOSTICS

Flash Code #1 - Low Battery Voltage

Symptoms:

There is a steady flash of one battery condition meter LED (red).

Diagnosis:

Voltage at the power module is below 22VDC.

Solution:

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

1. Measure voltage across pin 1 (B+) and pin 2 (B-) of the off-board charger socket (connector 1a). See **diagram 2** and **figure 17**.
 - If your multimeter indicates less than 16VDC (but not 0VDC), then go to step 8.
 - If your multimeter indicates 0VDC, then replace the Remote Plus joystick and retest the system.
 - If your multimeter indicates greater than 16VDC, then go to
2. Plug the off-board charger into connector 1a and then plug the charger power cord into a standard electrical outlet.
3. Observe the status indicator lights on the off-board charger to determine if it has power and is charging.

NOTE: Refer to the charger's user's guide or owner's manual for status indicator light information.

- If the off-board charger status indicator lights do not turn on, then go to the next step.
 - If the off-board charger status indicator lights turn on and indicate that the charger is charging, allow the batteries to charge for 8-14 hours and retest system.
 - If the off-board charger status indicator lights indicate that the charger has power but is not charging, then replace the charger and retest the system.
4. Unplug the charger power cord from the off-board charger. If the off-board charger power cord cannot be unplugged from the charger, then go to step 6.
 5. Measure the AC voltage across pin 1 and pin 2 and then across pin 1 and pin 3 of the power cord. See **figure 18**.
 - If your multimeter indicates about 120 VAC for both tests, then replace the off-board charger and retest the system.
 - If your multimeter does not indicate 120 VAC for both tests, then go to the next system.

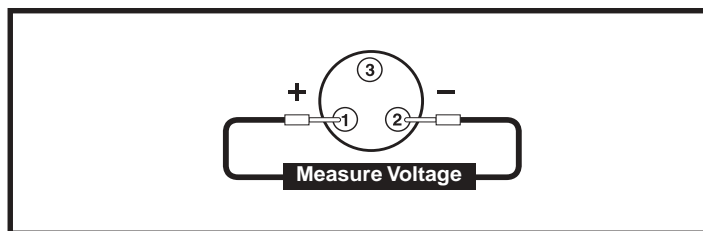


Figure 17. Connector 1a

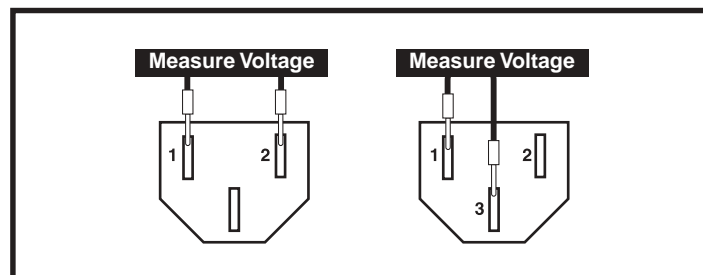


Figure 18. Power cord