

## SECTION 1 - NO POWER

### Symptoms:

Press the on/off key and the battery condition meter LEDs do not light up.

### Diagnosis:

There is a power interrupt in the system.

### Solution:

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

**NOTE: The circuit breaker harness (7) connects the circuit breaker directly to the batteries. If this harness is NOT CONNECTED TO THE POSITIVE TERMINAL OF ONE BATTERY AND THE NEGATIVE TERMINAL OF THE OTHER BATTERY, THE POWER CHAIR WILL NOT POWER UP AND THE CIRCUIT BREAKER WILL TRIP. Make sure that this harness is connected correctly before proceeding.**

1. Measure voltage across pin 1 (B+) and pin 2 (B-) of the off-board charger socket (connector 1a). See diagram 3 and figure 2.
  - If your multimeter indicates 0VDC, then go to the next step.
  - If your multimeter indicates about 25VDC, then replace the FLIGHT controller (1) and retest the system.
  - If your multimeter indicates below 18VDC (but not 0VDC), then recharge the batteries and retest the system.
2. Remove the seat. Refer to the power base owner's manual.
3. Remove the rear shroud. See figure 3.
4. Remove the center shroud. See figure 3.
5. Unplug connector 2a from connector 3a. See diagram 3.
6. Measure voltage across pin 1 and pin 2 on connector 3a. See figure 4.
  - If your multimeter indicates less than 18VDC, then go to the next step.
  - If your multimeter indicates more than 18VDC, then go to step 10.
7. Measure voltage across 3b and 3c. See diagram 3.
  - If your multimeter indicates 0VDC, then go to the next step.
  - If your multimeter indicates more than 18VDC, then replace the battery harness (3) and retest the system.
  - If your multimeter indicates between 0VDC and 18VDC, then recharge the batteries and retest the system.

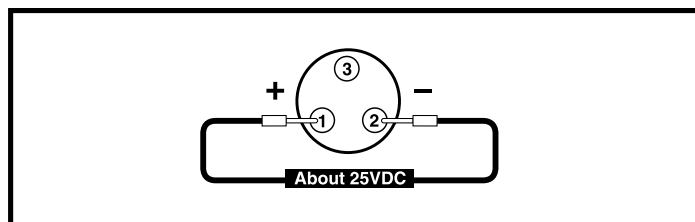


Figure 2. Connector 1a

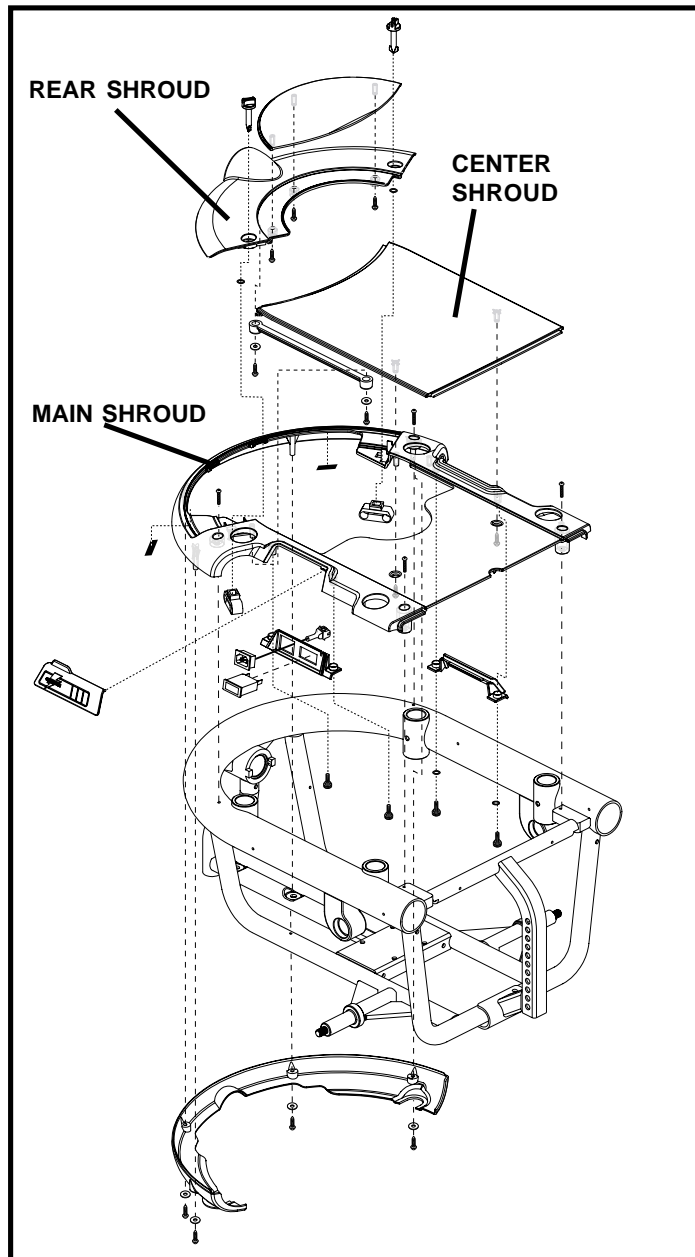


Figure 3. Shroud Assembly

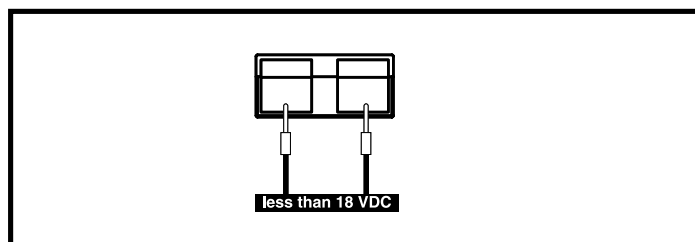
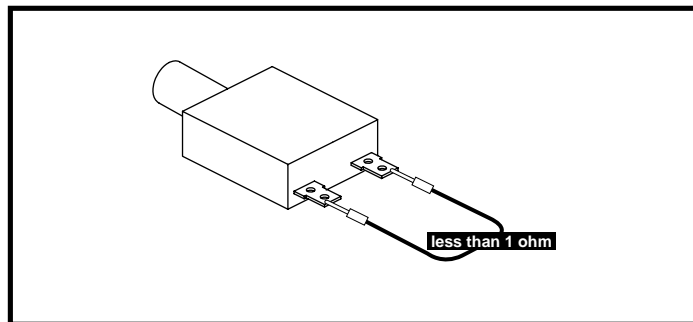
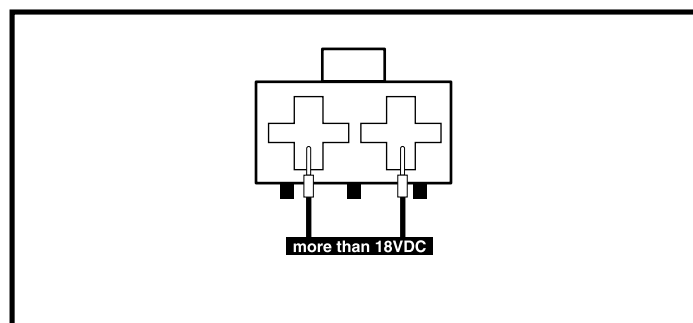


Figure 4. Connector 3a

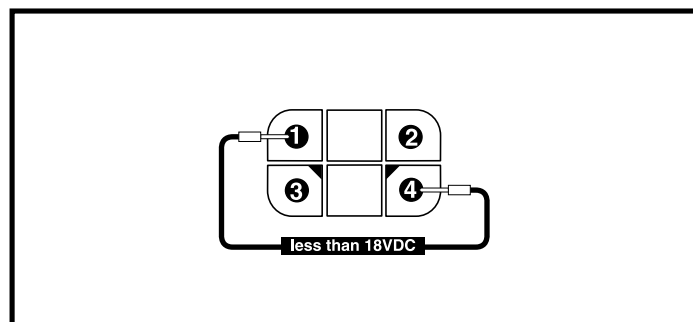
8. With connector 2a and connector 3a still unplugged, measure resistance across connector 7a and connector 7b. See diagram 3.
  - *If your multimeter indicates an open*, then go to the next step.
  - *If your multimeter indicates less than 1 ohm*, then try to recharge the batteries and retest the system.
9. Measure resistance across the two terminals on the circuit breaker (7c). See figure 4.
  - *If your multimeter indicates less than 1 ohm*, then replace the circuit breaker harness (7) and retest the system.
  - *If your multimeter indicates an open*, then make sure that the circuit breaker (7c) is not tripped.
  - *If the breaker is not tripped*, then replace the circuit breaker (7c) and retest the system.
10. Plug connector 3a back into connector 2a. See diagram 3.
11. Unplug connector 2b from the power module (6). See diagram 3.
12. Measure voltage across pin 1 and pin 2 on connector 2b. See figure 6.
  - *If your multimeter indicates more than 18VDC*, then go to next step.
  - *If your multimeter indicates less than 18VDC*, then replace the power interface harness (2) and retest the system.
13. Unplug connector 8b from the power module (6). See diagram 3.
14. Measure voltage across pin 1 and pin 4 of the power module's 4-pin bus connector (6a). See diagram 2 and figure 7.
  - *If your multimeter indicates less than 18VDC*, then replace the power module (6) and retest the system.
  - *If your multimeter indicates more than 18VDC*, then go to next step.
15. Plug connector 8b back into the power module (6). See diagram 3.
16. Unplug connector 8a from connector 1b. See diagram 3.
17. Measure voltage across pin 1 and pin 4 of connector 8a. See figure 8.
  - *If your multimeter indicates less than 18VDC*, then replace the controller harness (8) and retest the system.
  - *If your multimeter indicates more than 18VDC*, then replace the FLIGHT controller (1) and retest the system.



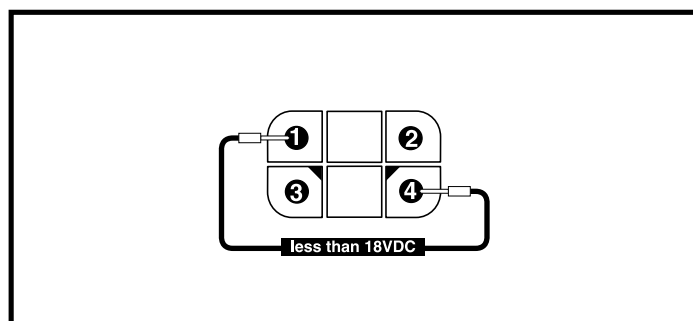
**Figure 5. Circuit Breaker**



**Figure 6. Connector 2b**



**Figure 7. Power Module 4-pin Bus Connector (6a)**



**Figure 8. Connector 8a**

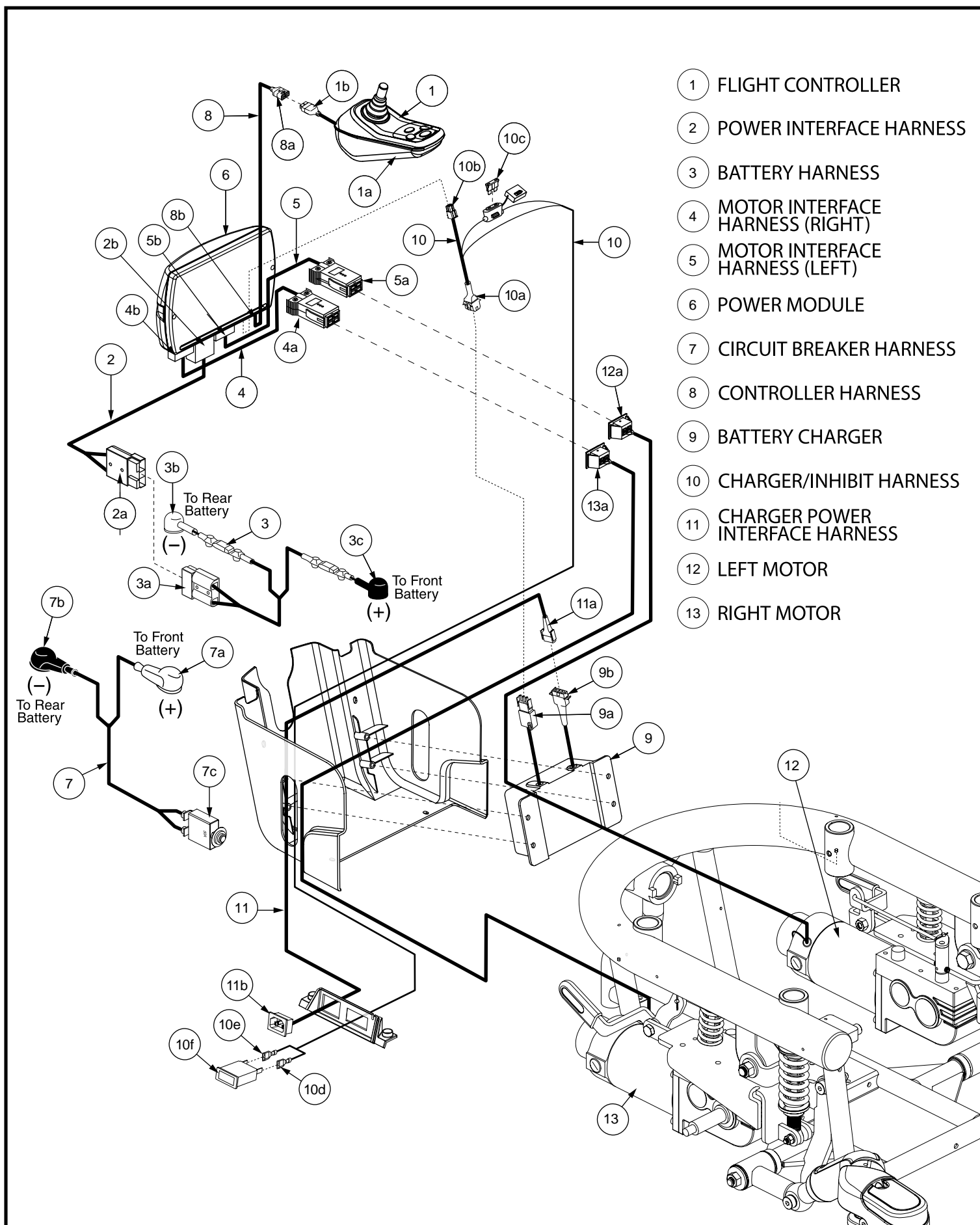


Diagram 2.