

- |   |                                |   |                       |    |                 |
|---|--------------------------------|---|-----------------------|----|-----------------|
| 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  |

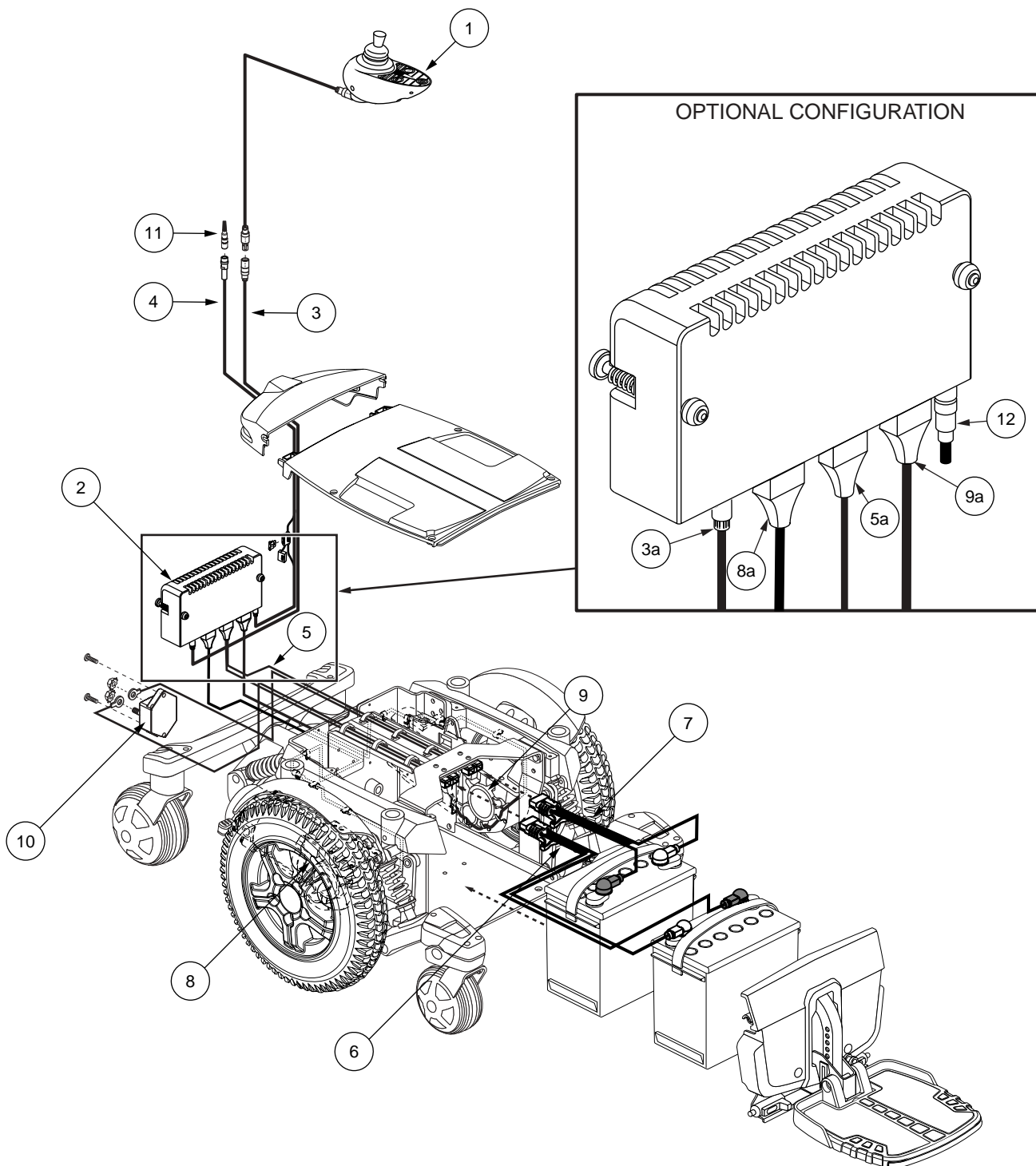


Diagram 1. Quantum 6000 Troubleshooting Key

3. Remove the motor brushes from the right motor and inspect them for wear or damage. **See figure 33.**
  - *If the motor brushes are worn below 0.25 in. or they are physically damaged, then replace the brushes and retest the system.*
  - *If the motor brushes are not worn below 0.25 in. and are not physically damaged, then replace the right motor (8) and retest the system.*

## Flash Code #5 - Right Motor Wiring Fault

### Symptoms:

There is a steady flash of five battery condition meter LEDs (three red, two yellow).

### Diagnosis:

There is a wiring fault between the right motor (8) and the brake.

### Solution:

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

1. Unplug connector 8a from connector 2d. **See diagram 3.**
2. Measure resistance from pin 1 to pin 3, then pin 1 to pin 4 on connector 8a. **See figure 36.**
  - *If your multimeter indicates an open for both tests, then replace the power module (2) and retest the system.*
  - *If your multimeter indicates less than 1 ohm for either test, then replace the right motor (8) and retest the system.*

## Flash Code #6 - Inhibit Active

### Symptoms:

There is a steady flash of six battery condition meter LEDs (three red, three yellow).

### Diagnosis:

- An off-board charger is connected to the off-board charger socket (1a).
- There is a short between pin 2 and pin 3 on the off-board charger socket (1a).

### Solution:

If the Remote Plus joystick (1) indicates an inhibit active fault and there is no off-board charger plugged into the off-board charger socket (1a), then replace the Remote Plus joystick (1) and retest the system.

## Flash Code #7 - Possible Joystick Fault

### Symptoms:

There is a steady flash of seven battery condition meter LEDs (three red, four yellow).

### Diagnosis:

The Remote Plus joystick (1) has a problem with the joystick (gimble).

**NOTE:** *If the joystick was out of the neutral (center) position when powered up, then the battery condition meter will scroll up and down twice, then display seven flashing LEDs.*

**NOTE:** *If the speed/profile LEDs are flashing along with the seven battery condition meter LEDs, then there is a communications fault between the power module (2) and the joystick (1). Check for physical damage to the Redel cable (3) and repair as necessary.*

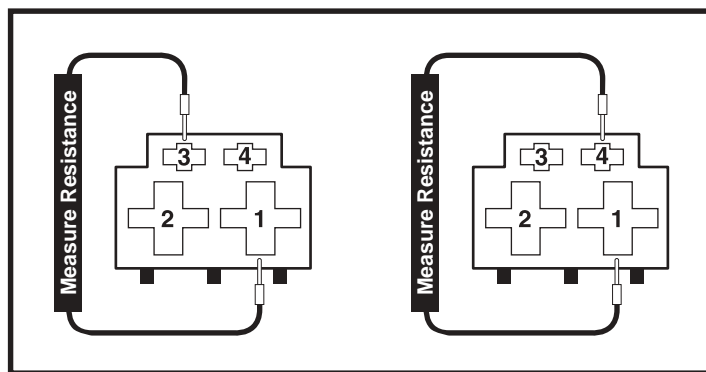


Figure 36. Connector 8a

**Solution:**

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

1. Make sure there is no physical damage to the joystick.
  2. Turn the Remote Plus off. Make sure the joystick is not being depressed in any direction.
  3. Turn the Remote Plus back on.
- *If the Remote Plus still indicates this fault, then replace the joystick and retest the system.*

**Flash Code #8 - Possible Controller Fault****Symptoms:**

There is a steady flash of eight battery condition meter LEDs (three red, four yellow, one green).

**Diagnosis:**

There may be two causes for this fault:

1. The power module (2) has a problem with the joystick (1).
2. The battery voltage is 18–19VDC when the system is powered on. This is a rare occurrence.

**Solution:**

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

1. Replace the power module (2) and retest the system.
- *If this fault occurs again, then recharge the batteries and retest the system.*
- *If this fault occurs after system retest, then contact Quantum Technical Service.*

**Flash Code #9 - Solenoid Brake Fault****Symptoms:**

There is a steady flash of nine battery condition meter LEDs (three red, four yellow, two green).

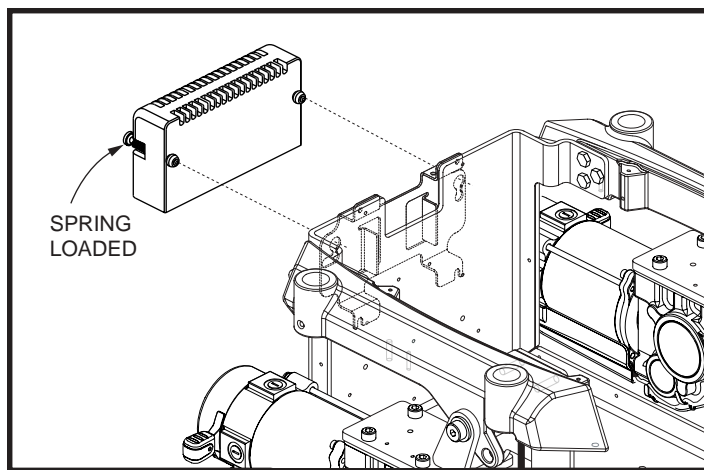
**Diagnosis:**

There is an open on the motor brakes.

**Solution:**

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

1. Place the power chair in drive mode. Refer to the power base owner's manual.
2. Remove the rear shroud cover. Refer to the power base owner's manual.
3. Disconnect the power module (2) from the module mounting bracket. **See figure 37.**
4. Unplug connector 9a from connector 2b. **See diagram 3.**



**Figure 37. Power Module Removal**