

| ERROR CODE | DIAGNOSIS | SOLUTION | SEE TROUBLESHOOTING ADDENDUM |
|--|---|---|------------------------------|
| #1-34 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #35 - Joystick Center Fault | Joystick disconnected or defective. | Check if joystick is connected. Replace joystick. Replace power module. | Joystick Error |
| #36 - Joystick Not Centered | Joystick out of center position for >5 sec after power up. | Release joystick or other input command. Cycle on/off switch. | Joystick Error |
| #37 - Joystick Connection | Joystick disconnected or defective. | Check if joystick is connected. Replace joystick. Replace power module. | Joystick Error |
| #38-48 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #49 - Motor 1 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #50 - Motor 2 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #51 - Motor 3 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #52 - Motor 4 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #53 - Motor 5 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #54-73 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |

Table 1. Quantum 6000 Q-Logic Error Codes

| ERROR CODE | DIAGNOSIS | SOLUTION | SEE TROUBLESHOOTING ADDENDUM |
|---|--|---|------------------------------|
| #74 - Left Motor Disconnected: left motor current is too low | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #75 - Right Motor Disconnected: right motor current is too low | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #80 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #81 - Left Motor Shorted | Short in motor or wiring. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #82 - Right Motor Shorted | Short in motor or wiring. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #83 - Left Brake Disconnected: left brake current is too low | Motor connector unplugged; brake wiring open; brake defective; or brake voltage set too low. | Check motor brake connector. Check brake wiring. Check brake resistance | Solenoid Brake Error |
| #84 - Right Brake Disconnected: right brake current is too low | Motor connector unplugged; brake wiring open; brake defective; or brake voltage set too low. | Check motor brake connector. Check brake wiring. Check brake resistance. | Solenoid Brake Error |
| #85 - Left Brake Overload: left brake current is too high | Brake wiring shorted; or brake defective. | Check motor brake connector. Check brake wiring. Check brake resistance Replace Motor. | Solenoid Brake Error |
| #86 - Right Brake Overload: right brake current is too high | Brake wiring shorted; or brake defective. | Check motor brake connector. Check brake wiring. Check brake resistance Replace Motor. | Solenoid Brake Error |
| #87 - Left Brake Not Released: left brake voltage is too low | Brake wiring open; brake defective; batter voltage below nominal operating range limit; or brake voltage is set too low. | Check motor brake connector. Check brake wiring. Check brake resistance. Charge battery. Replace brake. | Solenoid Brake Error |
| #88 - Left Brake Not Released: left brake voltage is too low | Brake wiring open; brake defective; batter voltage below nominal operating range limit; or brake voltage is set too low. | Check motor brake connector. Check brake wiring. Check brake resistance. Charge battery. Replace brake. | Solenoid Brake Error |

Table 1. Quantum 6000 Q-Logic Error Codes Continued

| ERROR CODE | DIAGNOSIS | SOLUTION | SEE TROUBLESHOOTING ADDENDUM |
|---|--|---|---|
| #89 - Left Brake Fault: voltage too high | Motor connector unplugged; brake wiring open or shorted; brake defective. | Check motor-brake connector. Check brake wiring. Check brake resistance. Replace brake. | Solenoid Brake Error |
| #90 - Right Brake Fault: voltage too high | Motor connector unplugged; brake wiring open or shorted; brake defective. | Check motor-brake connector. Check brake wiring. Check brake resistance. Replace brake. | Solenoid Brake Error |
| #94-100 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #101 - Battery Undervoltage | Battery voltage below the lower operating range limit or empty. | Charge battery (This error is at the Warning level). | See owner's manual for charging batteries |
| #102-104 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #105 - Low Battery Voltage | Battery voltage below the lower operating range limit or empty. (Unit will still drive.) | Charge battery (This error is at the Recoverable Fault level). | See owner's manual for charging batteries |
| #110-176 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #177 - Motor 6 Not Connected: resistance too high | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #181-191 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #192 - Motor 1 Disconnected | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. Replace motor. | Right/Left Motor Error |

Table 1. Quantum 6000 Q-Logic Error Codes Continued

| ERROR CODE | DIAGNOSIS | SOLUTION | SEE TROUBLESHOOTING ADDENDUM |
|--|--|--|------------------------------|
| #193 - Motor 2 Disconnected | Motor connector unplugged; motor wiring open; or defective motor. | Check motor brake connector. Check motor wiring. Check motor resistance and current. Replace motor. | Right/Left Motor Error |
| #194 Motor 1 Shorted | Short in motor or wiring. | Check motor brake connector. Check motor wiring. Check motor resistance and current. | Right/Left Motor Error |
| #196-199 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #200 - Motor 1 Output Fault: output voltage is incorrect | Motor connector unplugged; motor wiring open; short in motor or wiring; or controller failure. | Check motor wiring. Replace power module. Replace motor. | Right/Left Motor Error |
| #201 - Motor 2 Output Fault: output voltage is incorrect | Motor connector unplugged; motor wiring open; short in motor or wiring; or controller failure. | Check motor wiring. Replace power module. Replace motor. | Right/Left Motor Error |
| #203 - Brake 1 Disconnected | Motor connector unplugged; brake wiring open; brake defective; or brake voltage set too low. | Check motor brake controller. Check brake wiring. Check brake resistance. | Solenoid Brake Error |
| #204 - Brake 2 Disconnected | Motor connector unplugged; brake wiring open; brake defective; or brake voltage set too low. | Check motor brake controller. Check brake wiring. Check brake resistance. | Solenoid Brake Error |
| #205-207 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |
| #208 - Brake 1 Overload: current too high | Brake wiring shorted; or brake defective. | Check motor brake connector. Check brake wiring. Check brake resistance. Replace brake. | Solenoid Brake Error |
| #208 - Brake 2 Overload: current too high | Brake wiring shorted; or brake defective. | Check motor brake connector. Check brake wiring. Check brake resistance. Replace brake. | Solenoid Brake Error |
| #210-229 | _____ | If error code is within this range, contact Quantum Technical Service for further assistance. | _____ |

Table 1. Quantum 6000 Q-Logic Error Codes Continued