

Level II Trouble Shooting Guide

Amigo Diagnostic Code Chart – Hi/Low & Touchtron* Controllers

Under normal operating conditions, the battery gauge LED will flash continuously to indicate three different situations:

1. To indicate a low battery condition when driving.
2. To indicate that you have started the battery charging cycle (Continuous blinking for 30 sec. solid light indicates charging mode)
3. To indicate when the batteries are fully charged during the charging cycle. (Light goes from a solid state to blinking again)

This controller has a built-in diagnostic feature that will cause the battery gauge LED (turn signal LED on the Touchtron handle) to flash a numeric code to indicate when there is a service problem.

When indicating a service problem, the battery gauge LED will flash, hesitate for a moment, and then flash again. Follow the code listings below to determine the problem. If the code indicates a service problem, contact your local representative or the Amigo Service Department at 1-800-248-9131 for instructions to verify the problem.

CODE	CAUSE	SOLUTION
1-1	EM Brake windings or connections are shorted	<ol style="list-style-type: none"> (1) Unplug handle cable and plug back in (2) Check all wiring connections and output (3) Disconnect brake and cycle key, if code changes to 1-2, replace brake (4) Replace Controller
1-2	EM Brake windings or connections are open	<ol style="list-style-type: none"> (1) Unplug handle cable and plug back in (2) Check all wiring connections and output (3) Replace brake (4) Replace Controller
2-1	Motor windings or connections are shorted	<ol style="list-style-type: none"> (1) Check motor wiring connections (2) Check running light (shorts) (3) Disconnect brake and cycle key, if code changes to 2-2, replace motor (4) Replace Controller
2-2	Motor windings or connections are open	<ol style="list-style-type: none"> (1) Ensure EM brake lever is in drive position (2) Check motor wiring connections (3) Replace motor (4) Replace Controller
2-3	Power relay short	<ol style="list-style-type: none"> (1) Check / Replace Batteries (2) Check / Replace Controller
2-4	PSL Motor short	<ol style="list-style-type: none"> (1) Unplug handle cable and plug back in (2) Check PSL wiring and connections (3) Disconnect motor and cycle key, if code goes away, replace motor (4) Check / Replace Controller
3-1	Over temperature condition	<ol style="list-style-type: none"> (1) Allow to sit idle for 15 minutes, restart and see if code disappears (2) Ensure EM brake and / or motor is not causing excessive amperage draw (3) Replace Controller
4-1	Charger is supplying too much voltage during the battery charge cycle	<ol style="list-style-type: none"> (1) Replace battery charger if voltage is 32 volts or higher (2) If 31 volts or lower, replace Controller
4-2	Charger not dropping back into “float mode” during battery charge cycle	<ol style="list-style-type: none"> (1) Replace charger wiring (2) Replace battery charger (3) Replace Controller
5-1	Controller drive FETS shorted	<ol style="list-style-type: none"> (1) Replace Controller
5-2	Controller regenerative braking FETS shorted	<ol style="list-style-type: none"> (1) Replace Controller
5-3	Throttle potentiometer or throttle circuitry reading fail band fault	<ol style="list-style-type: none"> (1) Check to ensure handle cable is in good condition (2) Check that throttle lever moves freely and returns to center (3) Replace throttle potentiometer
5-4	Bad software revision	<ol style="list-style-type: none"> (1) Replace Controller
5-5	Controller not limiting electrical current to the motor	<ol style="list-style-type: none"> (1) Replace Controller