

DCX/NCX

This troubleshooting guide provides general steps that our tech department uses to determine a problem. During testing procedures follow proper safety rules and guidelines (ie raise the rear wheels, disconnect battery power when removing or installing components)

General Troubleshooting

Issue	Solution
<ul style="list-style-type: none"> Controller is not powering up (No LED) 	<ul style="list-style-type: none"> Verify power on both sides of the Tow/Run switch Check for pack voltage on pins 6, 9 & 10 when the cart is in Run and the key switch is in the On position.
<ul style="list-style-type: none"> LED continually flashes red 	Open throttle alarm <ul style="list-style-type: none"> Check for a break in throttle wires or bad crimps Replace throttle assembly
<ul style="list-style-type: none"> LED blinks 3 times red 	High Pedal disable alarm. <ul style="list-style-type: none"> Remove foot from throttle on power up Throttle out of range, replace throttle or recalibrate throttle for 0 output. Disable HPD switch in ControllerPro
<ul style="list-style-type: none"> LED blinks 6 times red on controller power up. 	Undervoltage Alarm <ul style="list-style-type: none"> Charge batteries Load test batteries, replace any bad batteries. Check the B- and M- wires are connected to the correct bus bars. Verify all connections are tight.
<ul style="list-style-type: none"> LED blinks 6 times red on when throttle is depressed. 	Undervoltage Alarm <ul style="list-style-type: none"> Charge batteries Load test batteries, replace any bad batteries. Check voltage between Controller B+ and B-. Voltage should be $\pm 5V$ of the pack voltage. <ul style="list-style-type: none"> If voltage is low, replace solenoid. If voltage ok, call Alltrax Technical Support
<ul style="list-style-type: none"> LED blinks 7 times red on controller power up. 	Overvoltage Alarm <ul style="list-style-type: none"> Check voltage between Controller B+ and B-. Voltage should be $\pm 5V$ of the pack voltage. <ul style="list-style-type: none"> If voltage is high, make sure short wire from solenoid to Controller B+ is not broken. If voltage is ok, call Alltrax Technical Support Check the B- and M- wires are connected to the correct bus bars Verify Charger is not overcharging the batteries.

General Troubleshooting (cont)

<ul style="list-style-type: none"> LED blinks 7 times red when throttle is depressed 	<p>Overvoltage Alarm</p> <ul style="list-style-type: none"> Check voltage between Controller B+ and B-. Voltage should be $\pm 5V$ of the pack voltage. <ul style="list-style-type: none"> If voltage is high, make sure short wire from solenoid to Controller B+ is not broken. If voltage is ok, call Alltrax Technical Support
<ul style="list-style-type: none"> Cart runs slow 	<ul style="list-style-type: none"> Charge batteries Verify correct wire and solenoid sizing for Controller amperage (See Tech Note 10 for more information.) Jumper large terminals of the solenoid together <ul style="list-style-type: none"> If cart works normally, replace w/ correct sized solenoid. Verify LED changes to Amber/Yellow when the throttle is fully depressed. <ul style="list-style-type: none"> If LED doesn't change color, check throttle, replace if necessary. Wrong Field Map, contact Tech Support for details.
<ul style="list-style-type: none"> Cart goes wide open when the key switch is turned on, LED stays green. 	<ul style="list-style-type: none"> Verify B- and M- are wired to the correct spots.
<ul style="list-style-type: none"> Controller turns on when the tow/run switch is in run and key is off 	<ul style="list-style-type: none"> Disconnect B+ and M- wires from controller and connect a 500W bulb to the B+ and M-. <ul style="list-style-type: none"> If Controller powers with tow/run switch, replace controller If Controller powers up with keyswitch, replace motor
<ul style="list-style-type: none"> Cart "shutters" as it drives 	<ul style="list-style-type: none"> Possible incorrect field map. Contact Alltrax Technical Support with Vehicle Make/Model and Motor Make/Model. Check for broken or worn brush
<ul style="list-style-type: none"> Motor and/or Battery wires getting hot. 	<ul style="list-style-type: none"> Check for bad wire crimps and terminations. Upgrade wire size to a large size. (see Tech Note 10 for more details)
<ul style="list-style-type: none"> Controller pops and smokes when turned on 	<ul style="list-style-type: none"> Controller is Bad! Do not power up anymore. Replace controller. Disconnect battery power immediately. Check and replace solenoid.

PDS/DCS

Issue	Solution
<ul style="list-style-type: none">• Controller is not powering up (No LED)	<ul style="list-style-type: none">• Check reed switch coming out of charger port. Connect Red/White wire to Battery B+.<ul style="list-style-type: none">◦ If controller powers up, replace reed switch in the charger port plug
<ul style="list-style-type: none">• Cart drives fine from a stop, but jerks violently when the throttle is depressed and the cart is rolling. (1995 and Newer)	<ul style="list-style-type: none">• Check/replace suppression diode on the small terminals of the solenoid.
<ul style="list-style-type: none">• Cart jerks or shutters on takeoff, but once at full speed it drives smoothly. (1995 and Newer)	<ul style="list-style-type: none">• Check for water in the ITS throttle box. Drill weep hole if necessary.• Bad ITS throttle, replace toroid core• Adjust the collar on the ITS slug so the microswitch activates before the slug enters the toroid.
<ul style="list-style-type: none">• Cart goes to full power when the throttle is depressed.	<ul style="list-style-type: none">• Verify throttle setting is for an ITS throttle (4 green Blinks)
<ul style="list-style-type: none">• Cart goes in reverse no matter what the F/R position is. (PDS Carts)	<ul style="list-style-type: none">• The adapter cable between the wire harness and controller is wet. Remove and allow to air dry or with use high pressure air.• Replace PDXA Adapter harness• Apply Vaseline to pins.
<ul style="list-style-type: none">• The cart beeps sometimes when switching direction.	<ul style="list-style-type: none">• Check F/R switch and connectors for corrosion• The adapter cable between the wire harness and controller is wet. Remove and allow to air dry or with use high pressure air.• Replace PDXA Adapter harness• Apply petroleum jelly to pins.

Club Car IQ/Precedent

Issue	Solution
<ul style="list-style-type: none"> Controller powers up, but solenoid does not engage 	<ul style="list-style-type: none"> Reboot OBC (See Tech Note 11) Replace the OBC Remove wire from solenoid that goes to the OBC (Typically the yellow wire). Jumper from that post to B- and see if solenoid works. <ul style="list-style-type: none"> If solenoid works, replace OBC. If solenoid doesn't work, replace solenoid. Verify the polarity of the suppression diode on solenoid coil.
<ul style="list-style-type: none"> A left over 4 pin connector when installing an Alltrax Controller. 	<ul style="list-style-type: none"> That is the stock controller's programming line. It is not used on Alltrax controllers.
<ul style="list-style-type: none"> Cart runs slow and it doesn't move until the throttle is pushed down about 1/2 way down. (2001-2006) 	<ul style="list-style-type: none"> Rod connecting MCOR and throttle pedal twisted out of shape. <ul style="list-style-type: none"> Using 2 vice grips, twist the throttle pedal side of the rod towards the back of the car. If that doesn't fix the problem, replace rod Replace MCOR

Club Car PD+ (Regen 2)

Issue	Solution
<ul style="list-style-type: none"> Controller is always on when the Tow/Run Switch is turned to run 	<ul style="list-style-type: none"> Check the wire slice that contains the 12" blue wire, the 33" blue wire and the wire from the solenoid. If there are 4 wires connected there, cut the blue wire from the wire harness.
<ul style="list-style-type: none"> Controller powers up, but solenoid does not engage 	<ul style="list-style-type: none"> Reboot OBC (See Tech Note 11) Replace the OBC Remove wire from solenoid that goes to the OBC (Typically the yellow wire). Jumper from that post to B- and see if solenoid works. <ul style="list-style-type: none"> If solenoid works, replace OBC. If solenoid doesn't work, replace solenoid. Verify the polarity of the suppression diode on solenoid coil.

ALLTRAX Inc., Company History:

The company founder developed our core technology at the race track for high power electric vehicles. Throughout the 90's, the market demanded robust and high performance electronic controllers. In 2001 ALLTRAX was formed based on the E-race car developed technology.

Today, Power Conversion Engineering (PCE) is the research and development arm of ALLTRAX and provides the industry a powerful and robust controller to meet all your recreational, industrial, and commercial electrical vehicle needs.

For more information please go to <http://www.alltraxinc.com>



"The company was founded at the track"