

Service Procedure for:
eGO[®] Cycle
Helio[™] Cycle



Controller Removal/Installation

Models
applicable:

EC-100 EC-200 EC-200EU EC-300

Revision date: 03/23/2004 10:14:05 AM

TIME NEEDED:

30 min.

SKILLS REQUIRED:

Basic Mechanical

TOOLS and EQUIPMENT REQUIRED:

Allen wrenches:

- 2mm
- 3mm
- 4mm
- 5mm
- 6mm

Open end wrenches:

- 8mm
- 10mm
- 12mm
- 13mm
- 15mm

Other tools:

PARTS REQUIRED:

Replacement Controller

OVERVIEW:

- Open the battery door and the dash
- Remove batteries.
- Remove and reinstall a new controller.
- Reinstall Batteries
- Close the battery door and dash

Preparation & Safety:

- Always wear eye protection during any service procedure
- Make sure the Key is REMOVED from the switch
- Make sure the AC charger cord is disconnected
- Remove all watches, rings, jewelry from your hands

PROCEDURE DESCRIPTION:

A) Remove the batteries: Follow step 'A' of the 'Battery Removal / Installation' procedure

B) Remove the controller: (the controller is the paper back book sized box in the lower right, forward corner of the eGO dash)

1. With the 3mm allen wrench remove the six machine screws from the sides of the Dash panel
2. Remove the Dash - **The CONTROLLER is the silver rimmed black surfaced (on older eGO 2 models, the controller is colored blue) box in the lower right, forward corner of the eGO electronics cavity.**
3. On the inside of the dash, locate and disconnect the 8 pin wire harness connector.
4. With a 10mm wrench remove the nut holding the Red wires to "B+" terminal on the Controller. With some tape - attach all of these wire terminals to each other so it will be easy to identify all the wires to be connected to the "B+" terminal of the new controller.
5. With a 10mm wrench remove the nut holding the Black wires to "B-" terminal on the Controller. With some tape - attach all of these wire terminals to each other so it will be easy to identify all the wires to be connected to the "B-" terminal of the new controller.
6. With a 10mm wrench remove the nut holding the single black wire to the "M" terminal on the Controller.
7. The controller is now free to be removed. It is attached to the chassis with two mounting bolts in the corners. Using a wrench to hold the nuts on the inside, unscrew the bolts from the outside of the chassis.

C) Install New Controller:

1. Place the NEW controller in the chassis and attach to the chassis with the nuts and bolts that were used for the old controller.
2. Attach the taped Black wire terminals to the "B-" post on the Controller and secure the holding nut firmly.
3. Attach the taped Red wire terminals to the "B+" post on the Controller and secure the holding nut firmly.
4. Attach the single black wire to the "M" terminal on the Controller.
5. Connect the 8 pin wire harness connector on the controller to the wire harness connector of the vehicle. Be sure the connector is firmly connected by giving the connector a firm tug.

D) Install the Batteries: Follow Step 'B' of the 'Battery Removal / Installation' procedure

Testing:

1. Before closing the dash cover, Plug the AC Power Cord into any 110 wall plug and connect the other end to the charger receptacle on the cycle dash
2. Verify the charger LED's are illuminated. **(Note: the Amber LED becomes GREEN when eGO is fully charged.) If Rightside LED is green immediately at plug in, check the fuse connection]**
3. Unplug AC Power cord from cycle, insert Key and turn cycle on
4. With the Back wheel elevated off the floor rotate throttle to initiate Motor/Belt response
(This will indicate proper wiring and NO open circuits)

E) Replace Dash Panel & Battery Deck:

1. Replace the Dash on the chassis and align screw holes
2. Replace the six 3mm allen screws on the sides of the Dash, do not tighten until all screws have been positioned properly
3. Secure screws

Troubleshooting:

- No response when turning Key on:
 1. Check under Dash Panel for loose or open (unplugged) wire connections at the key switch and along the wire harness.
Check battery connections.
 2. Check for diagnostic light on the controller. If operating correctly, the light should be constantly illuminated when the key is turned on. If light is flashing, count the flash pattern and consult the controller diagnostic chart.
- No charger indicator lights when I connect the charging cord to a working outlet:
 1. Check the charger fuse holder and replace fuse if necessary
 2. Check that the LED indicators are installed in the LED holders in the dash.
 3. Check that the AC input wires to the charger are properly connected to the back of the AC inlet on the dash.

- The right indicator light illuminates immediately green when I connect the charging cord
 1. Check that the batteries are properly connected
 2. Check that the charger fuse is not burned out and properly installed
 3. Check that the charger output wires (Red and Black wires from charger) are properly connected to the controller (B+ and B- respectively) terminals properly.