



# Charger Replacement

Models applicable:	☐ EC-100	⊠ EC-200	⊠ EC-200EU □ EC-300
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40 min.

### **SKILLS REQUIRED:**

OOLS and EQUIPMENT REQUIRED:							
Allen wrenches:	Open end wrenches:	Other tools:					
☐ 2mm ☐ 3mm ☐ 4mm ☐ 5mm	(V) 8mm 10mm 12mm						
☐ 6mm	☐ 13mm						

#### **PARTS REQUIRED:**

New 5 or 6 amp Onboard eGO charger

## **OVERVIEW:**

- Open the battery door and the dash
- Remove batteries.
- Remove and reinstall a new onboard charger.
- 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 Onboard Charger:

- 1. With the 3mm allen wrench remove the six machine screws from the sides of the Dash panel
- 2. Remove the Dash FYI The CHARGER is the black box to the Left of the blue CONTROLLER
- 3. On the inside of the dash, disconnect the BLACK,WHITE, and GREEN wires from the AC input connector
- 4. Gently pull the LED lights out of their rubber housings (Green/Orange/Yellow & Red/Blue wires)
- 5. With a 10mm wrench remove the nut holding the Red wires to "B+" terminal on the Controller
- 6. With a 10mm wrench remove the nut holding the Black wires to "B-" terminal on the Controller
- 7. Remove the Charger BLACK wire from the "B-" post
- 8. Remove the Charger RED wire from the "B+" post
- 9. The charger is now free to be removed. It is attached to the chassis by double sided tape or by mounting screws in the corners.

#### C) Install New Onboard Charger:

- 1. Remove backing tape and press the NEW charger into place with the fan end UP. If your charger is mounted by screws, place the NEW charger with the fan end up and screw in corners of the charger until snug.
- 2. Attach the Black wire (with the ring terminal) to the "B-" post on the Controller and secure the holding nut

- 3. Attach the Red wire (with the ring terminal) to the "B+" post on the Controller and secure the holding nut
- 4. Gently replace the LED lights into their rubber covers in the dash. The green/orange/yellow wires connect to the Red LED and should be installed in the left cover. The red/blue wires connecto to the Amber LED and should be installed in the right cover. To fully insert the LEDs into the rubber covers, you may need to push on the back of the LED body with a small screwdriver or other blunt tipped probe.
- 5. Replace the Black, White, and Green wires from the charger to the AC input connector. These wires end in 'fast-on' style connectors and will push connect to the flat tabs on the back of the charger inlet receptical at the back of the dash Looking at the connector tabs Black on Left, Green on Middle, White on Right
- **D) Install the Batteries:** Follow Step 'B' of the 'Battery Removal / Installation' procedure

#### Testing:

- Before closing the dash cover, Plug the AC Power Cord into any 110 wall plug and connect the other end to the charger recepticle on the cycle dash
- 2. Verify the LED's are illuminated and are oriented correctly:

RED - Leftside = charger is powered AMBER/GREEN - Rightside = charger is in bulk charging mode

(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 Check battery connections
- No charger indicator lights when I connect the charging cord to a working outlet:
- 1. Check the 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.