

Service Procedure for:

# eGO<sup>®</sup> Cycle Helio<sup>™</sup> Cycle



# Contactors Replacement

Models applicable:

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

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**TIME NEEDED:**

20 min.

**SKILLS REQUIRED:**

**TOOLS and EQUIPMENT REQUIRED:**

Allen wrenches:

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

Open end wrenches:

- (↺)  8mm
- 10mm
- 12mm
- 13mm
- 15mm

Other tools:

**PARTS REQUIRED:**

- 24V 100AMP continuous duty solenoid contactor

# OVERVIEW:

To replace the contactor, you will remove the battery door and the dash pannel, disconnect the batteries to power down the system. Then disconnect the wires from the contactor and remove the contactor from the chassis. Install the new contactor, replace the wires and then close the dash and battery door.

## Preparation & Safety:

- Always Wear EYE protection during any Service Procedure
- Make sure the Key is REMOVED from the switch
- Make sure the AC plug is NOT Plugged in
- Remove all watches, rings, jewelry from your hands

# PROCEDURE DESCRIPTION:

## A. Disconnect the batteries from the system.

1. Open the battery door using a 3mm hex driver (Allen wrench)
2. On the right side of the vehicle in the battery compartment (close to kickstand) locate the connector that connects the red wires from the front battery to the black wires of the rear battery. Unplug that connector by pulling the red side of the connector from the black side of on the connector.

## B. Remove the wires from the contactor (the contactor is located above the charger and controller and looks like a round fire hydrant with 4 screw bolt terminals radiating from it.)

1. Using the 3mm allen wrench - remove the 6 screws that hold the dash to the chassis - set the dash aside the chassis - do not remove any wires that are connected to the dash.
2. Using the 10mm wrench - loosen the nuts of the small terminals on the contactor and remove the small wires from the contactor.
3. Using the 13mm wrench - loosen the nuts of the large terminals on the contactor and remove the large wires from the contactor.

## C. Remove the contactor from the chassis.

1. Using the 3mm hex driver (Allen wrench) and also the 8mm wrench loosen and remove one of the contactor mounting bolts from the chassis.
2. Loosen the other mounting bolt and remove the contactor from the chassis

## D. Install the new contactor

1. Install the new contactor using the existing mounting bolts and tighten securely

## E. Connect the wires to the new contactor

1. Install the ring terminals of the large wires on the large terminals of the contactor. Tighten securely with the 13mm wrench

2. Install the ring terminals of the small wires on the small terminals of the contactor. Tighten securely with the 10mm wrench

**F. Repower the vehicle by reconnecting the battery wires**

1. On the right side of the vehicle in the battery compartment (close to kickstand) locate the connectors at the end of the red wires from the front battery and the black wires of the rear battery. Connect the two connectors by pushing the red connector and black connector together firmly.

**Testing:**

Insert Key and turn cycle on. With the Back wheel elevated off the floor rotate throttle to initiate Motor/Belt response

**(This will indicate proper wiring and NO open circuits)**

**G) 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. Tighten the screws (Note: These screws do not need to be more than snug with the 3mm allen wrench.

**Troubleshooting:**

I have replaced the contactor but the eGO still doesn't work

1. Re-check all connections made to the new contactor. All contactor posts should have one wire connected.
2. Confirm that the battery power wires have been reconnected (see step F above)
3. After turning the key on - check the LED indicator on the front of the Controller.  
If flashing - see the Diagnostic chart for next steps.  
If the LED is not illuminated green, then the controller is either not receiving power from the batteries (check battery wiring and connections to the contactor and controller) or the controller has failed.