

Service Procedure for:

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



# Key Switch 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:

- Replacement three position (on - off - on), 8 pin key switch

# OVERVIEW:

To replace the key switch - you will remove the dash, detach the wires that are connected to the back of the key switch, remove the flange nut and key switch and replace the key switch and wires.

## 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 key switch

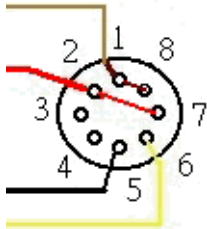
1. Using the 3mm allen wrench - remove the 6 screws that hold the dash to the chassis - set the dash aside the chassis - do not remove any wires that are connected to the dash.
2. Locate the back of the key switch - where 6 wires attach with small connectors to the pins on the back of the key switch.
3. One wire at a time - gently pull the wire connectors from the key switch until all of the wires are removed.
4. With the adjustable wrench - remove the flange nut on the back of the switch and slide the switch from the front of the dash

## B. Install the new key switch

1. Remove the flange nut from the new switch and insert the key switch into the front of the pannel. Check to be sure the key switch is installed right side up by inserting the key. If the key inserts with the flat edge up and the keyed edge down - then the switch is right side up.
2. Thread on and tighten the flange nut using the adjustable wrench.
3. Be sure the key is removed from the switch, then using the diagram below, attach the wires to the pins on the key switch (the pins are numbered on the back of the switch.)

NOTE: Be sure that the wire end connectors install properly over the key switch pins rather than the pins being stuck between the connector and the insulator.

4. After the wires are all installed - gently pull on each wire to be sure they are firmly attached. If a connector slips off - be sure it is installed properly on the pin - and if necessary - you may pinch the connector gently with a pair of pliers to tighten the connector and then install again.



Key switch

<u>Position</u>	<u>Wire Color</u>
1	Brown
2	Red
3	EMPTY
4	EMPTY
5	Black
6	Yellow
7	Red (jumper)
8	Brown (jumper)

### Testing:

1. Elevate the rear wheel clear of the ground.
2. Insert the key in the switch and turn on in the 'GO FAR' mode (key left)
3. Twist the throttle to full speed - note the pitch of the sound of the motor and wheel.
4. Return the throttle to neutral and switch the key to 'GO FAST' mode (key right)
5. Twist the throttle to full speed - note the pitch of the sound of the motor and wheel. The pitch in 'GO FAST' should be higher than the pitch in 'GO FAR' (This confirms proper wiring of the key switch.)

### C. Replace and Secure the Dash

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 installed the switch but now the eGO will not start.

1. Confirm proper switch wiring - refer to the diagram and table above

I installed the switch but now the eGO has only one speed mode.

1. Confirm proper switch wiring - refer to the diagram and table above