

Service Procedure for:

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



# Primary Belt Installation

Models applicable:

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

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**TIME NEEDED:**

**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:

- New 5mm eGO Primary Belt (if replacing)

# OVERVIEW:

To remove and reinstall a new 5mm Primary Belt you will remove the rear wheel and the batteries, then remove the motor mount from the chassis. After removing the motor mount you will loosen the motor allowing belt to be removed and replaced. Finish by tightening the belt and reinstalling the motor mount, batteries and rear wheel.

## 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:

**Begin by placing the eGO on a stand to support the eGO securely and conveniently with the rear wheel off the ground.**

**A) Remove the batteries:** Follow the instructions in the 'Battery Removal/Installation Procedure'

**B) Remove the rear wheel:** Follow the instructions in the 'Rear Wheel Removal and Installation Procedure'

**D) Remove the motor motor mount from chassis:** Follow the 'Motor Mount Removal and Installation Procedure'

**E) Remove the 5mm primary belt: (if you are adjusting the belt tension only - proceed to step G)**

1. Loosen (don't remove) the two 13mm nuts that hold the motor in position on the motor mount - swing the motor toward the large pulley to loosen the belt, remove the belt.
2. While the belt is removed - inspect the pulley on the motor shaft for excessive wear (the teeth should be uniform and symmetrical in shape with no obvious wear.) If the pulley appears worn, replace the motor shaft pulley at this time. See the 'Motor Pulley Replacement Procedure.'

**F) Install the 5mm primary belt:**

1. Place the new belt on the motor pulley then slide it over the large pulley (you may need to turn the motor shaft by hand to 'roll the belt' onto the larger pulley.)
2. Rotate the motor away from the large pulley to tension the belt. Snug-up the two 13mm nuts/bolts to hold the motor in place on the mount. (Do not tighten fully yet

- final position must still be set in step 'G'.)

**G) Adjust the belt tension:**

1. Check the belt tension by pushing down on the belt with your thumb at the center of the belt's span between the pulleys. The belt should deflect 3/8" when pushed with your thumb using about the pressure that you would use to seal a stamp to an envelope. Too TIGHT is BAD and will produce a strain on the motor (noisy), too LOOSE will allow the belt to skip during acceleration and/or deceleration. Adjust the position of the motor on the mount by pivoting the motor around the lower mounting bolt. If you have access to a belt tension meter - adjust the belt tension to 55lbs (using the lbs for 1/64 per inch deflection method.)
2. Tighten the two 13mm motor mounting bolts (or nuts) when you have achieved the proper belt tension.

Note: When riding your eGO - if the belt skips (popping noise) STOP IMMEDIATELY - tighten the belt slightly or ride gently to a location where you can diagnose the skipping belt and tighten the primary belt using the procedure provided above. Belt skipping can lead to immediate belt failure.

**H) Install the motor mount assembly:** Follow the 'Motor Mount Removal and Installation Procedure'

**I) Install the rear wheel:** Follow the instructions in the 'Rear Wheel Removal and Installation Procedure'

**J) Install the batteries:** Follow the instructions in the 'Battery Removal/Installation Procedure'

**Testing:**

Test ride the cycle and perform a rapid deceleration from full speed using only the automatic braking. If you hear any belt skipping (sharp pop or skip noise) ride gently to a location where you can diagnose the skipping belt and tighten the primary belt using the provided above.

**Troubleshooting:**

If after you have replaced the belt and tightened it appropriately - but it still skips:

1. Carefully examine the primary pulley for wear. Often belt skipping left uncorrected will lead to pulley failure.
2. Check the tension of the secondary belt. A skipping secondary belt is often mistaken for a skipping primary belt.

If your eGO does not start or run after re-assembling - please see the troubleshooting sections of the 'Rear Wheel Removal and Installation Procedure' and the 'Battery Removal/Installation Procedure'