

Ego battery lawn mower safety switch connector replacement

Ego mower safety switch connector diagnosis and repair.

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INTRODUCTION

If your <u>EGO battery-powered lawn mower</u> will not start or sometimes stops while running, the connector for handle safety switch might be defective.

TOOLS:

- Phillips #3 Screwdriver (1)
- 10mm Socket (1)
- Soldering Workstation (1)
- 6 Inch C-Clamp (1)

PARTS:

- heatshrink tubing (1)
- Molex connector, 3-pin SPOX female (1)

Step 1 — Disassembly



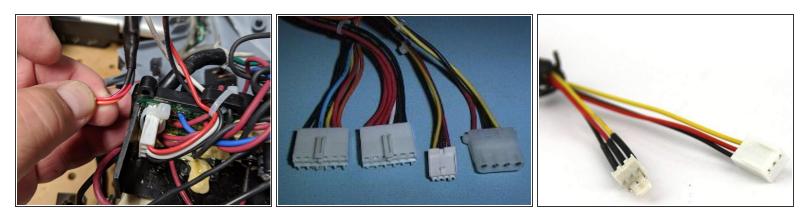
- Remove the battery
- Get a container to hold all the screws you will be removing. There are many!
- Remove the 6 screws that hold the battery box in place. Use a marking pen to indicate the colors of the 3 wires connected to the battery box. (red, blue, black)
- Disconnect the ribbon cable from the bottom of the control panel where the headlight switch and warning lamps are located.
- Turn the mower on its side and remove the blade.
- Remove all the screws from the bottom panel of the mower.
- Remove the height adjustment knob
- Remove the top cover. If it isn't coming off, check to see if you've removed all the screws.

Step 2 — Check the safety switch wiring and connector



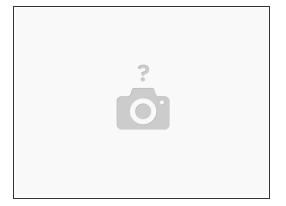
- Use a small clamp to push down the safety switch that detects that the top cover has been removed. The mower will not run if this switch isn't pushed.
- Extend the mower handle to the operating position. The mower will not run if handle isn't extended.
 There's a micro switch in the handle latch assembly, on the side with the cable.
- Connect the battery box. Be sure to put the correct wires on each of the 3 terminals.
- Insert the battery. Push down hard until it clicks.
- Start the mower with the handle switch.
- Locate the 3-wire cable and connector on the logic board that connects to the safety switch in the handle. (See the video) Wiggle this cable to see if the motor starts or stops.

Step 3 — Replace the connector



- Make note of the colors of the 3 wires on the connector. (It's a <u>3-pin Molex SPOX female</u> <u>connector, with a 3.96 mm pitch.</u>)
- Cut the wires close to the connector.
- Install a replacement connector. I used a Molex connector from a PC power supply cable in my junk collection. Cut down the connector to 3 wires.
- You could also adapt a PC fan extension cable. Like this <u>VCOM 12-Inch VC-POW3EXT 3-PIn to 3-</u> <u>Pin Fan Extension Cable (CE311-12INCH)</u>
- Solder the wires and use heat-shrink tubing for a secure connection.

Step 4 — Test and reassemble



- Check that the replaced connector is working correctly, using the same process used in the diagnosis step.
- Reassemble the mower.

To reassemble your device, follow these instructions in reverse order.