



Ego battery lawn mower safety switch connector replacement

Ego mower safety switch connector diagnosis and repair.

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INTRODUCTION

If your [EGO battery-powered lawn mower](#) 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 [3-pin Molex SPOX female connector, with a 3.96 mm pitch.](#))
- 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 [VCOM 12-Inch VC-POW3EXT 3-PIn to 3-Pin Fan Extension Cable \(CE311-12INCH\)](#)
- 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.