

Black and Decker LDX 120C Safety switch and trigger chip Replacement

Replacement of safety switch and trigger chip on Black and Decker LDX 120C drill.

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INTRODUCTION

One of the reasons you would replace the safety switch is if it does not alternate between the on and off position. The switch could be stuck or jammed, If this is the case then we would need to replace it. Some of the tools needed to repair this will be a soldering iron and soldering flux. In order to complete this repair, some soldering skills will be required.



TOOLS:

- IFixit Pro Tech Toolkit (1)
- Phillips #1 Screwdriver (1)
- iFixit Opening Tools (1)
- Wire cutters/side cutters (1)
- Soldering Iron (1)
- Solder (1)

Step 1 — Outer Case



- (i) For this guide we will need to use a 1.0 mm phillips #1 screw.
- There are a total of thirteen screws that need to be removed in order to open the drill and access the interior components.

Step 2



 Remove the four screws on the back top side of the drill.



 Remove the four screws that connect the chuck to the drill.

Step 4

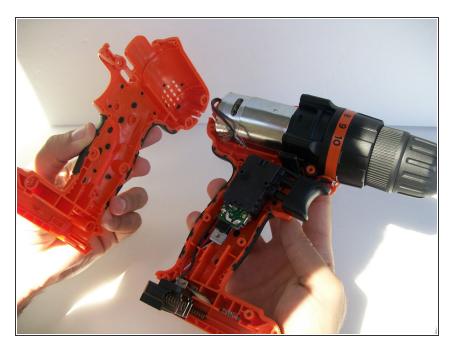


 Remove the five screws on the front side of the drill.



 Gently grab both sides of the drill casing, and separate both sides from each other.

Step 6



 At this point you should be able to separate both as illustrated.



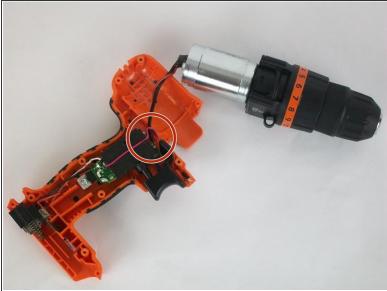
Now all the components of the drill are visible and can be accessed.

Step 8 — Safety switch and trigger chip



 After following the prerequisite guide, the interior components of the drill can now be accessed.





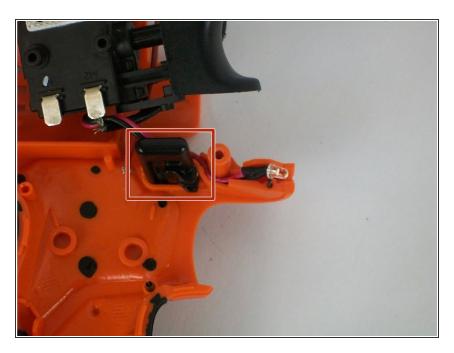
- Gently remove the chuck and motor assembly from the drill case.
- Disconnect the wire connecting the motor and trigger chip.

Do not damage wire connections

Step 10

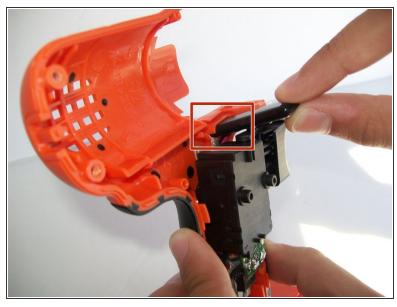


- Remove the trigger chip assembly from the drill.
- Do not remove the safety switch yet.



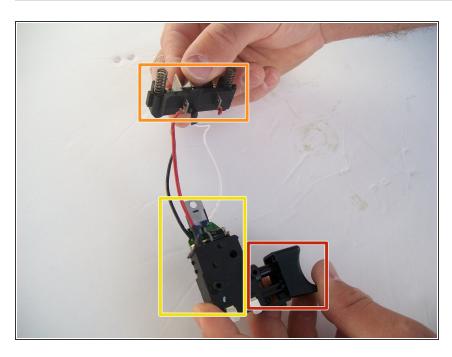
- Check if the safety switch is jammed or broken.
 - If jammed, move any wires or other objects blocking the switch's path.
 - If broken, replace the safety switch.

Step 12



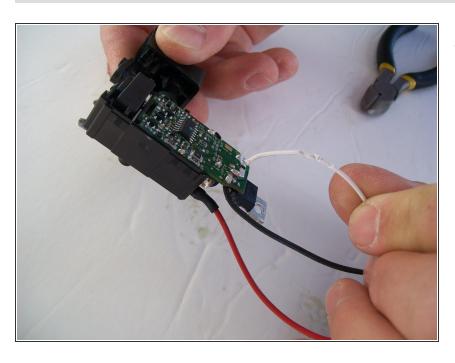


- To replace, gently remove the old safety switch from the drill casing.
- After the old safety switch has been removed, a new one may be inserted.

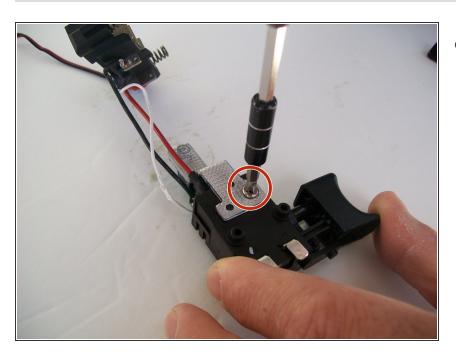


- The trigger is indicated by the red box.
- The battery connector is indicated by the orange box.
- The trigger chip is indicated by the yellow box.

Step 14

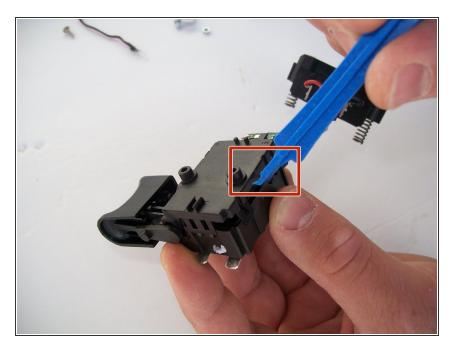


 Check that all visible wire connections are intact.

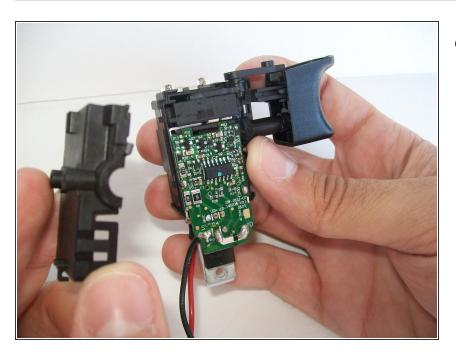


- Remove trigger chip panel to access wire connections to the chip.
 - Using a Phillips head screwdriver, remove the screws as indicated.

Step 16

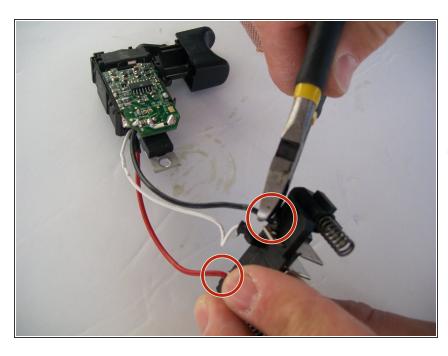


 Use a plastic pry tool to gently pry open the trigger chip compartment.

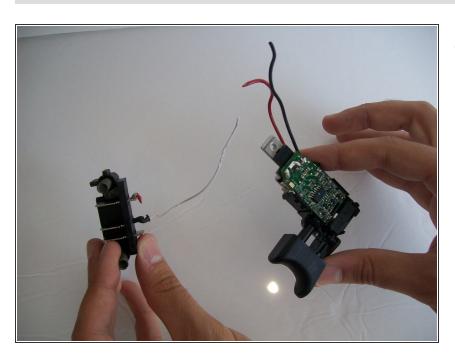


- After prying open the chip compartment, the connections will be visible.
 - Check the connections for damage or disconnection.
 Reattach as necessary.
 - If the connections do not seem to be damaged, the chip itself may be broken and must be replaced.

Step 18



- To replace trigger chip, remove wire connections between battery connector and trigger chip using a pair of sidecutters.
- To prevent damage to the trigger chip, desolder the wires instead of cutting them. Learn more about desoldering <u>here.</u>



 With wires removed, the trigger chip may be replaced.

To reassemble your device, follow these instructions in reverse order, re-soldering wires where necessary.