



Kidde 4010 Series Teardown/Battery Replacement. 10 Year "Worry Free" Wireless Alarms

Tear-down and replace the non-replaceable batteries, on units that die earlier than the ten year lifetime. Kidde 4010 series wireless smoke CO fire alarms.

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INTRODUCTION

Wireless 10 year battery alarms are great... but....

I've had several of these alarms start giving a low battery chirp after months, not the full ten years. Kidde has been good about sending replacements under the 10 year warranty, but I thought maybe I can keep these units out of the landfill....

Models P4010ACS-W P4010ACSCO-W P4010DCS-W P4010ACSCO-W P4010LACS-W
P4010LDCS-W.

TOOLS:

- [Y1 Tri-point Screwdriver](#) (1)
- [Wire cutters/side cutters](#) (1)
- [Soldering Workstation](#) (1)
- [Phillips #1 Screwdriver](#) (1)
- [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)

PARTS:

- [BR-2/3A Battery With PC Tabs](#) (2)
Lithium
Example Mouser 658-BR-2/3AE5SPN

Step 1 — Disassembly



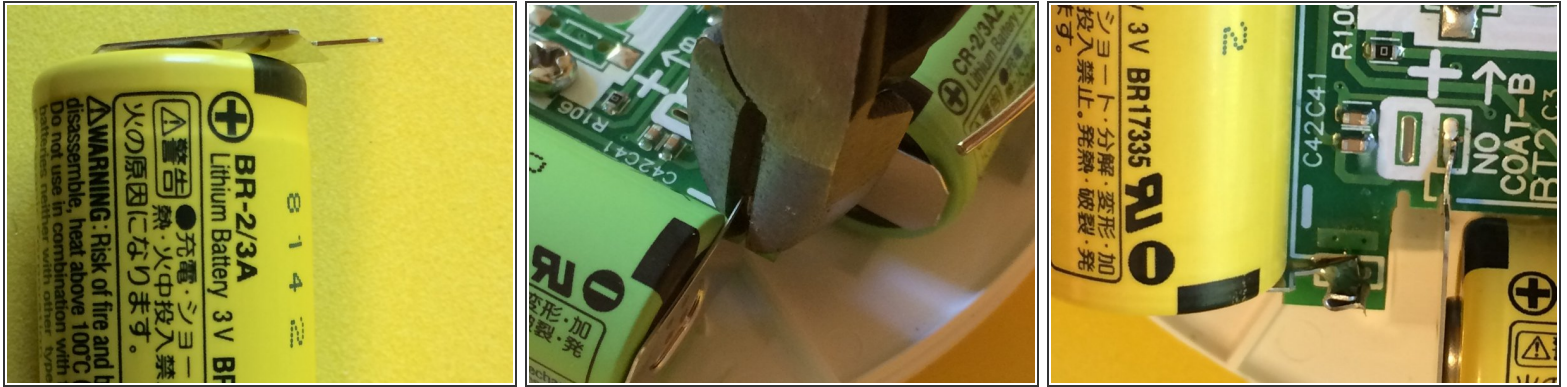
- First, figure out a screw management scheme. This one's not so complicated, but it's a good habit.
- Rotate the power switch to the unmarked "off" position. Don't worry, this is safe.
- Remove three tri-wing screws.

Step 2 — Disassemble



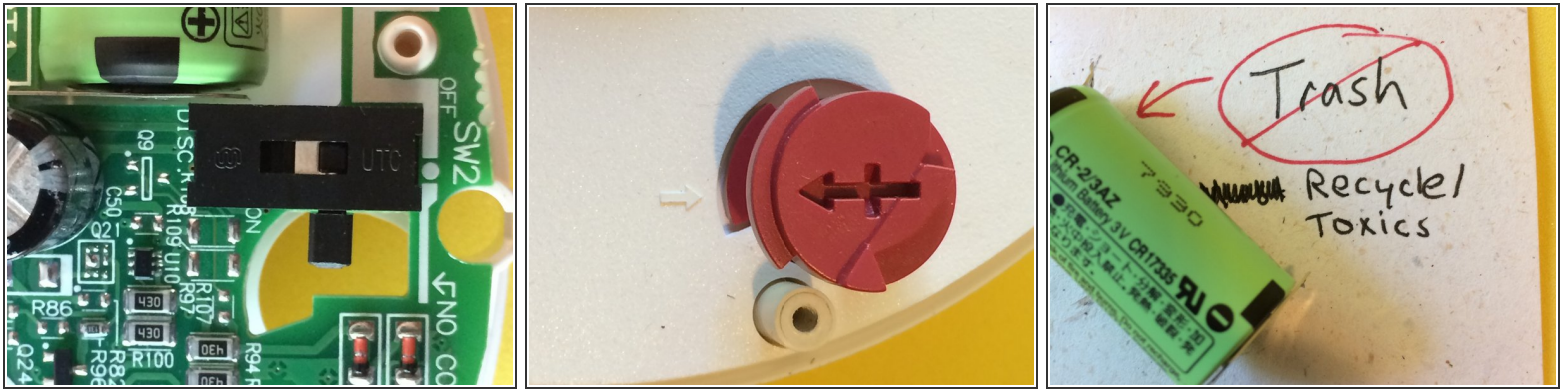
- Remove bottom cover and set aside the red power switch.
- Open the inner case, using a flat blade screwdriver to open three plastic latches. Expose the circuit board and batteries.
- Measure and record the old battery voltages, with the power switch firmly OFF. A new battery is about 3.3 volts, the bad ones seem to be about 2.8 volts.

Step 3 — Replace Batteries



- Hopefully you've already obtained replacement batteries. Anything with a tab can be made to work. Here it's a 2/3A size battery with PC board pins. Not an exact match, but close enough.
- To cut the old battery out: use strong side cutters and a back and forth motion. Leave enough of the tab you can solder to it later.
- To remove using a hot/powerful iron: take out three more screws to remove the circuit board. Heat up each tab in turn and pull up on the battery. Leave as much solder as possible in the hole for later.
- Double check the power switch is off, and the polarity. Finally, solder the new battery in.

Step 4 — Wrapping up



- Double check the polarity of the batteries! If you get it wrong, the battery will probably catch fire.
- Flip the power switch to the middle "ON" position. Be careful, the third position is "drain battery and discard unit".
- Hold the center button until you hear one... two... three beeps. Release, and your unit will be reset to defaults.
- Flip that power switch back off for safety.
- Yikes, it sure makes a forlorn sound when you flip the power off, eh? Reassemble. The only tricky part is the switch, but there's a little arrow to help you get it lined up.
- Properly dispose of the battery. That means, not in the trash. Google it. Or see <https://greencitizen.com/lithium-ion-bat...> or in the USA <https://www.call2recycle.org/>

You saved an expensive detector from the landfill. Yay!