



simplest AAA Battery Holder for your Caliper



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updated 24. 7. 2024 | published 24. 7. 2024

Summary

Battery Holder for cheap calipers that eat coin cells for breakfast. For a single AAA cell. Based on a friction fit.

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Tags: [holder](#) [battery](#) [caliper](#)

Your cheap calipers drain batteries?

I know, I know, I know! There are already almost thousands of solutions for your cheap calipers.

- There are **plenty** of **battery covers** (people tend to lose them when they try to preserve the battery from draining).
- There are “**battery savers**”, that **try to disconnect** one battery terminal while preserving the shape of the caliper.
- There are coin cell **to** coin cell Adapters.
- There are additional Battery cases, that introduce wiring to replace the coin cell **with** an **AAA** or **another AAA** cell or even a **Lipo cell**.
- There is even the **dead-bug style Capacitor** solution, which gave us the insight that when the calipers are “off” they are actually still draining the battery.

Above are some **very smart and minimalist solutions**, I however present to you a solution with **an actual physical “switch”** for **AAA cells** that does not involve wires, **only 3D printing**.

This design is based on three things:

1. A friction fit between the Battery and the 3D printed tube
2. The fact that alkaline batteries have their positive contact right next to the negative contact. It is usually covered by an insulating label.
3. A partial removal of above mentioned label that then serves as a switch.

Update: please print Version 3! It is slightly elliptical and hence more adaptive to different battery diameters.

Preparation/Printing:

1. Print the STL-File, it does not need supports
2. Partially remove the isolating label from the battery close to the negative contact. See the pictures for reference. Give it a “testfit” in the caliper to see if it turns on.
3. Insert the battery in the tube. It should be handtight. If it is not, you could either reprint, select another battery type, or (even more pragmatic) wrap the battery in scotch tape to make it thicker. If it is too tight, you could cut off the upper part of the tube.
4. Slide the AAA-Batteryholder in place and push on the battery so that it slides in the cavity where the coin cell used to be.
5. Mark the on-position with a sharpie.

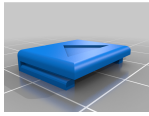
Usage

6. Turn on/off by rotating the battery. You could also just keep it in the on position as the capacity of the AAA cell typically is way larger than of a button cell.

This is designed for the model shown in the picture. The concept certainly is adaptable. Remixes are welcome.

- A freecad file (Version 1, not shown in the pictures) is available, as is
- an **Onshape** recreation or the attached step file with the same dimensions

This remix is based on



Caliper Battery Lid

by Sashkoiv

Model files



caliper_aaa_holder_v3.stl

☐ V3 - Print this! elliptical shape



caliper_aaa_holder_v2.stl

☐ V2 - Needs Tape to wrap battery to correct diameter



caliper_aaa_holder_v1.stl

☐ OLD V1, (With stiffening ribs, print the other one)

caliper_aaa_holder_v1.fcstd

☐ OLD V1, (With stiffening ribs,)

caliper_aaa_holder_v2.step

☐ V2, export from onshape

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