



Hasbro Bop-It Micro Series Teardown

Teardown of Hasbro's Bop-It toy on November 17, 2019.

Written By: Ethan De Guzman

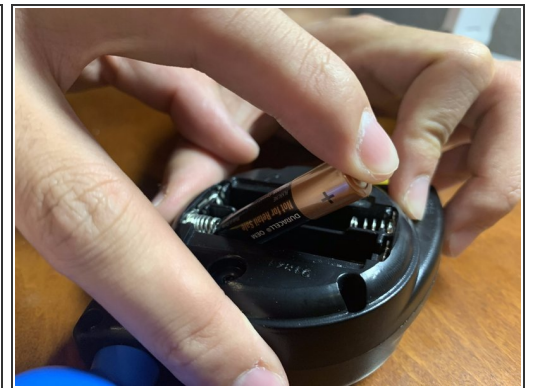
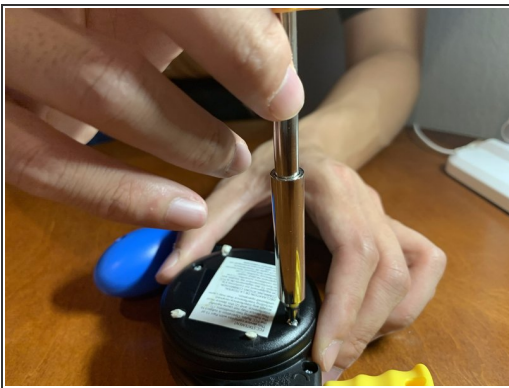


Step 1 — The Bop-It Toy



- Here's the Bop-It Toy! Compared to older versions of the game this one is more compact, thus allowing for more portability.

Step 2 — Removing the Batteries



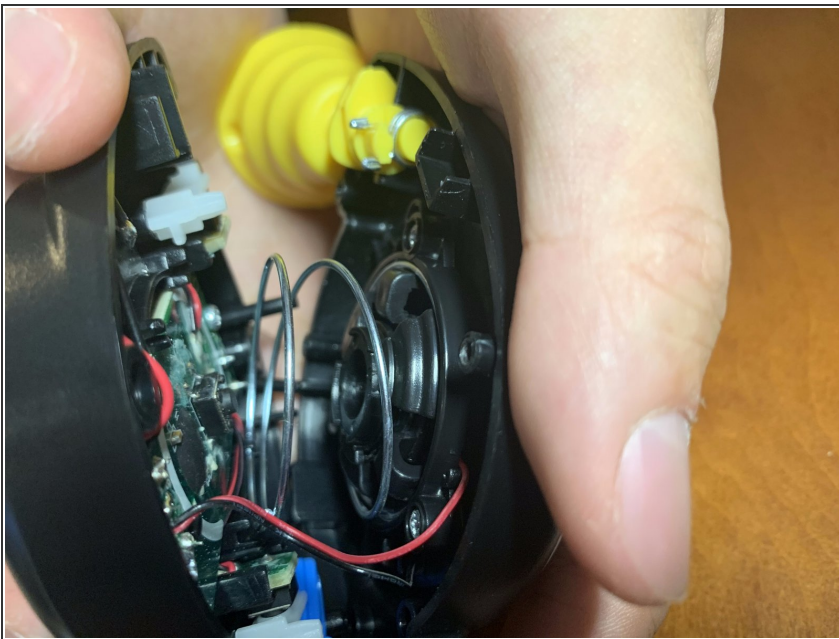
- Next we'll remove the batteries. Fortunately when purchasing the toy these batteries were included.

Step 3 — Opening the Toy



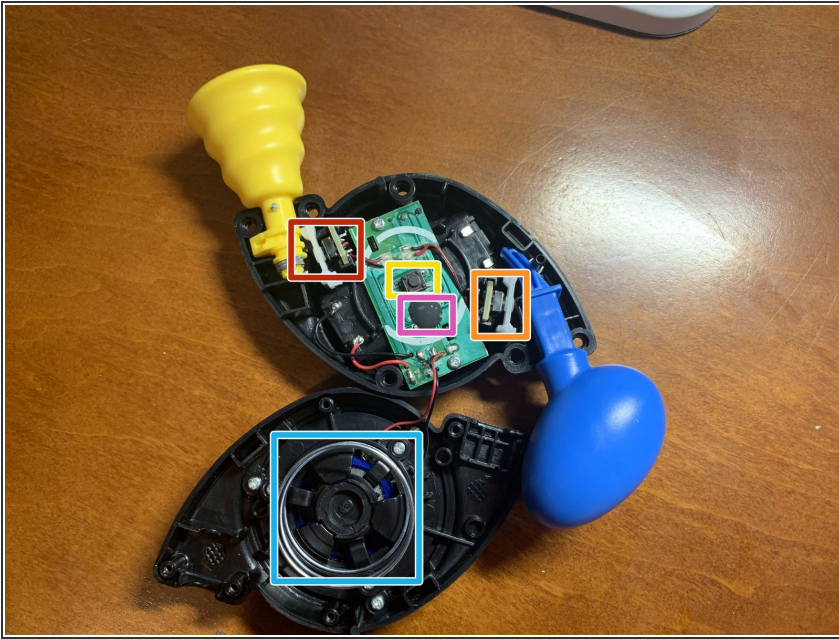
- Now we're ready to take apart the rest of the Bop-It toy.
- For the two additional screws in the middle we needed to use a thinner, longer Phillips screwdriver to reach the screws.

Step 4 — Taking the Bop-It Apart



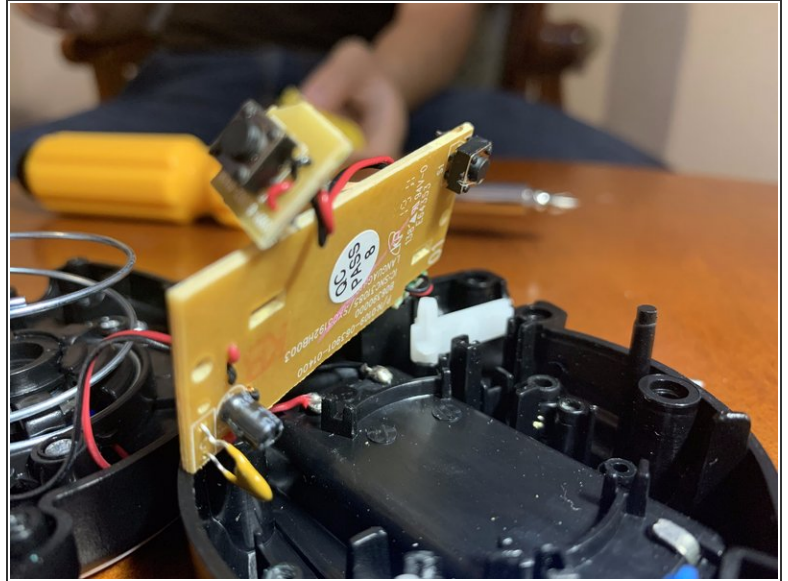
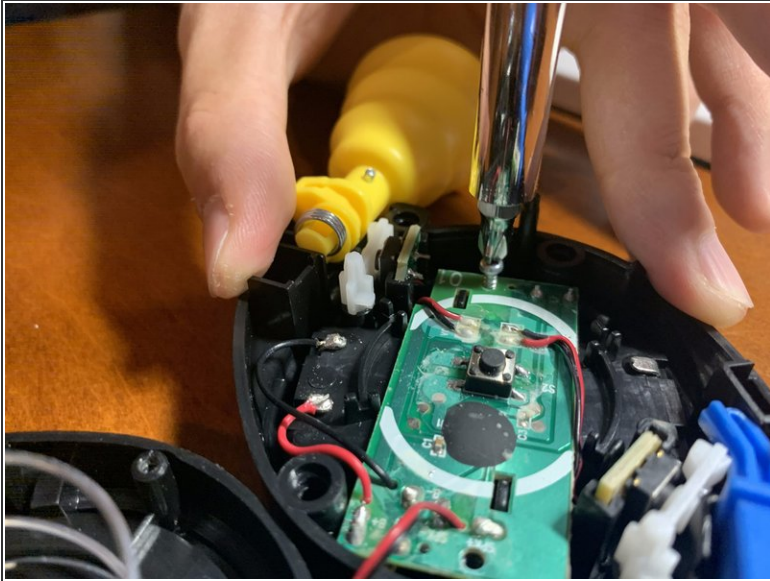
- When pulling both parts of the game apart, we made sure that no loose parts such as the spring shown fell off.

Step 5 — Taking a Look at Bop It's Parts



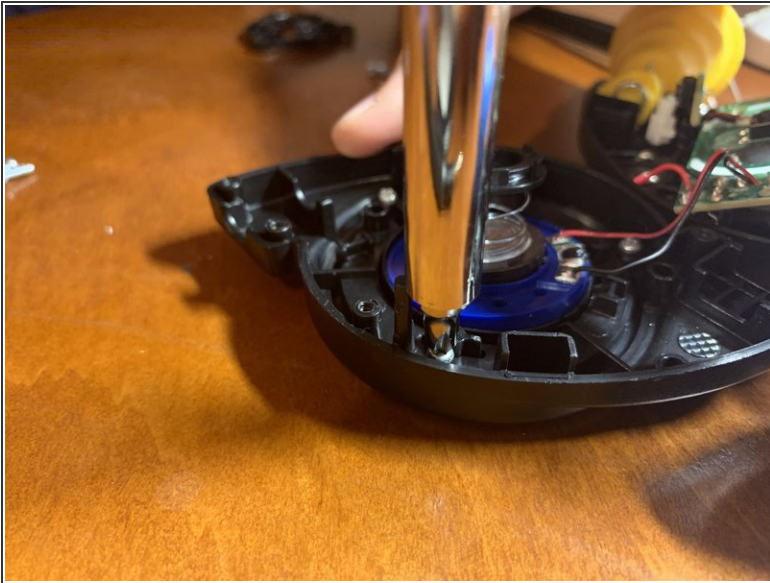
- With the Bop It opened up, we can see the different components that make the game work:
 - The button used to detect a twist. Looks like instead of using a dedicated sensor to detect a twist, the toy connects the twist to a lever to push a button. Maybe this was done to save money, but this may not make the toy as durable.
 - The button used to detect a pull. Like the twist part, this also uses a button instead of a dedicated sensor.
 - The button that detects a bop. Since a bop is just a button press, this one doesn't need any additional fancy mechanical parts.
 - The speaker. It looks like it has a spring over it that makes "bopping it" as fun as it is.
 - The microcontroller. It's covered up by a glob top, so we can't actually tell what type of microcontroller it is unfortunately.

Step 6 — Taking a Look Under the Circuit Board



- Now let's see if there's anything else under the PCB.
- Unfortunately, there wasn't really much to see beside the reset button and a few capacitors.

Step 7 — Opening Up the Speaker



- Alright, just a few more screws to go.
- Along with the speakers itself, we could also see another spring connected to it. This spring might be there to protect the speaker from any damage after "bopping it".

Step 8 — Conclusion



- Thanks for taking a look at this teardown! Special thanks to [Travis Vo](#) for helping out with the teardown.

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