



Toy Microscope Teardown

How is a microscope made? If you're wondering, this teardown is made for you.

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INTRODUCTION

My microscope is old (**very** old) and before throwing it away, why not teardown it?

NB: If you notice that there's too many errors (in language, mostly), please correct me. Thanks.

TOOLS:

- [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
 - [Phillips #0 Screwdriver](#) (1)
 - [Flush Wire Cutters](#) (1)
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Step 1 — Toy Microscope Teardown



- The microscope package (that's right, some items were lost and the box suffered)
- The back of the box with all its items.
- The useful piece of the microscope package: the microscope (not very surprising...)

Step 2



- Now, let's begin the operation: we'll begin with the pedestal. No need for screwdrivers, you just have to pull it.
- After this, there's a screw. Let's remove it.
- Once you did it, the battery compartment can be removed.
 - Note: if you want to remove the pedestal completely, you may need to cut the both wires.
- ⚠ Note 2: from now on, the microscope will be more difficult to reassemble.

Step 3



- Then, this rotative piece is, in a side, a mirror and in the another, a lamp (hence the 1.5x2 batteries in the step 2).
- To remove it, you need pull a side. The rest will come alone.
- The picture is a little fuzzy but we can see:
 - The bulb.
 - The support of this rotative piece.
 - The battery.
 - The cover which prevents the bulb to fall.
 - The mirror and the bulb location

Step 4



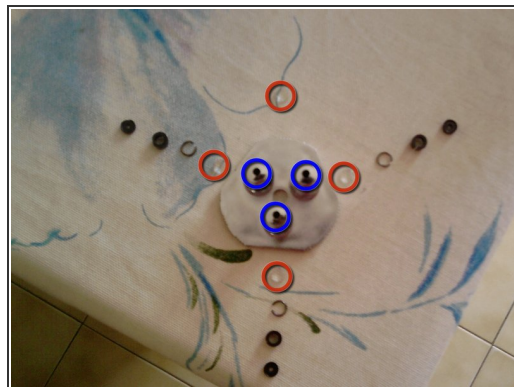
- Now, remove the big Phillips screw here (actually, you can loosen it then remove the nut in the other side). Don't be worried if it's a little hard to pull the screw.

Step 5



- Next step: remove the plate (it's here that you put the item to analyze): 2 Phillips screws.

Step 6



- This piece allows you to change the growth. 1 screw.
- If you turn this piece, the growth will be modified thanks to these magnifying glasses (red circles)
- To remove them, you need to use a sharp piece (e.g a pen) and press on the 3 holes marked on blue.

Step 7



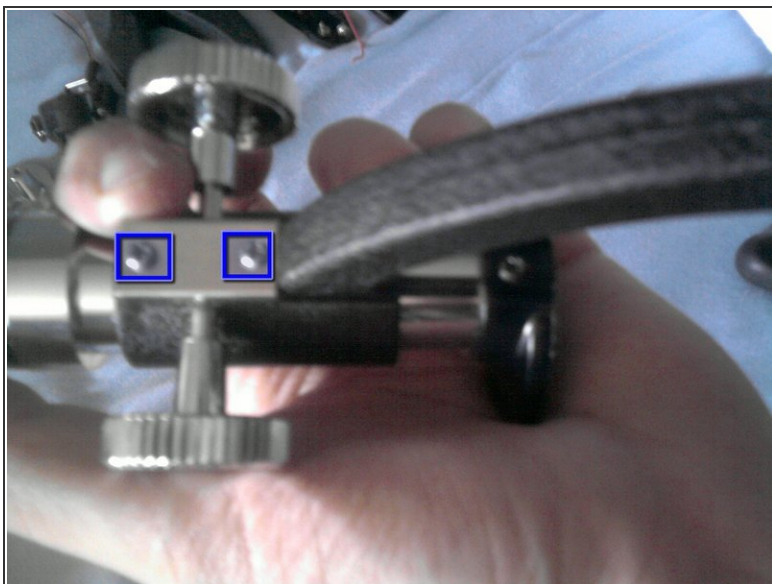
- You can easily pull off the black part.

Step 8



- After removing the black part (step 6), turn the wheel until you withdraw the lens.

Step 9



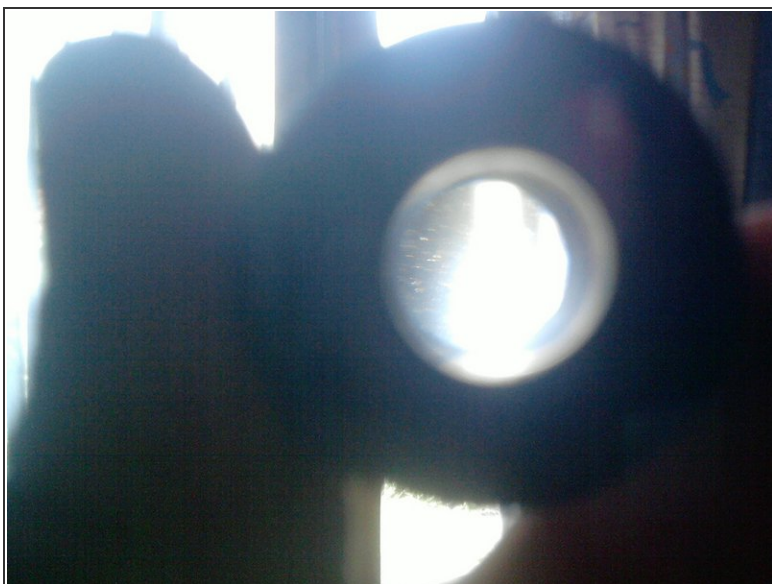
- This mechanical wheel allows you to hang over or hold off the lens in order to improve the clearness.
- If you like unscrew whatever you find, there are 2 screws.

Step 10



- Now, let's analyze the lens.
- You just have to pull the different parts.

Step 11



- The lens which enlarges the item to analyze from 12 to 18 times.
- A tube, without magnifiers.

Step 12



- Here, that was the consequences when you lend me a microscope. RIP.
- In the bottom right corner, you can see the perpetrators of this teardown.

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