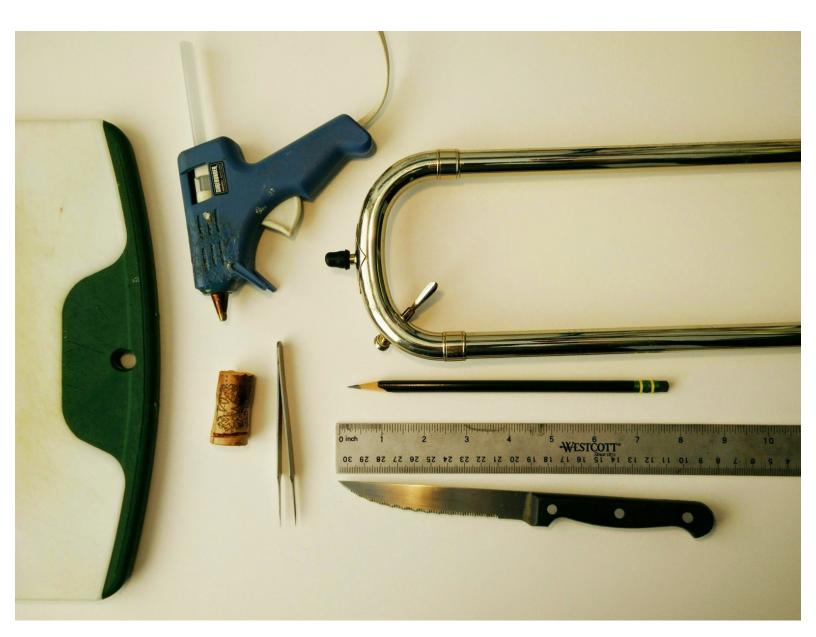


# How to Replace the Cork in a Trombone Water Key

Replace a leaky cork on a trombone water key.

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# INTRODUCTION

A leaky water key can make playing difficult and a horn sound strange. Instrument repair professionals can fix leaky water keys, but often times all a water key needs is a new cork—an easy fix you can do at home. Water key corks are inexpensive and available at most music stores and online, but a wine cork cut to the right size will work in a pinch.

## **TOOLS:**

- Ruler (1)
- Serrated Knife (1)
- Cutting Board (1)
- Glue Gun (1)
- Pencil (1)
- Tweezers (1)

**PARTS**:

- Water Key Cork (1)
- Wine Bottle Cork (1)

#### Step 1 — Water Key Cork

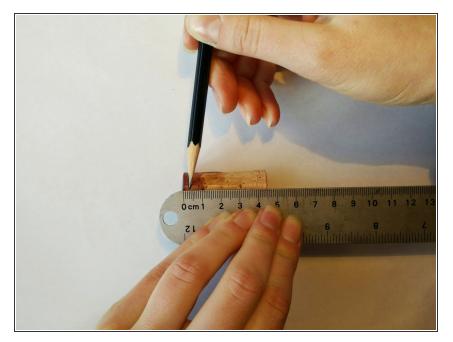


- Obtain a replacement water key cork.
  - (i) If you're in a rush and don't have a replacement cork, you can make a temporary one out of a wine bottle cork.

#### Step 2

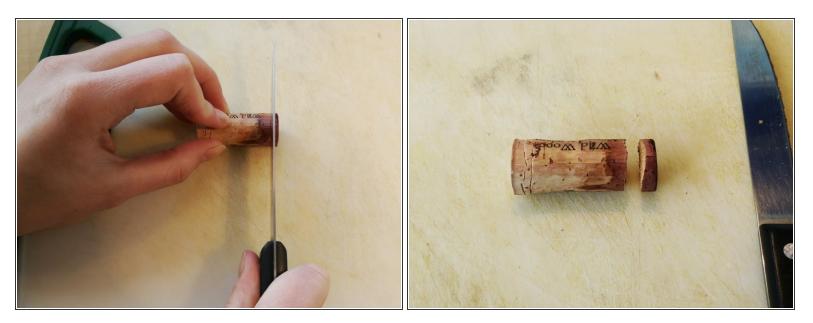


- Remove the old cork.
  - Insert a sharp tool, such as one tine of a pair of tweezers or needle-nose forceps, between the cork and the metal edge.
  - Pry up the cork using the metal edge for leverage.
  - Repeat this at several points around the cork until the cork comes free.



- If you have a replacement cork, skip to Step 10.
- If you're using a wine bottle cork to make a replacement cork, place the cork on its side and measure 3 mm from the cork edge. Mark this point.

#### Step 4

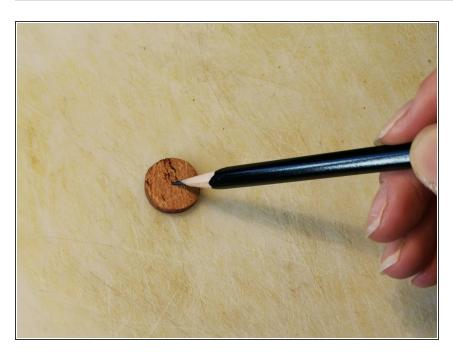


Using a serrated knife (such as a steak knife), cut the cork horizontally along your mark.
Cutting corks can be tricky. Make sure to keep fingers out of your knife's way.

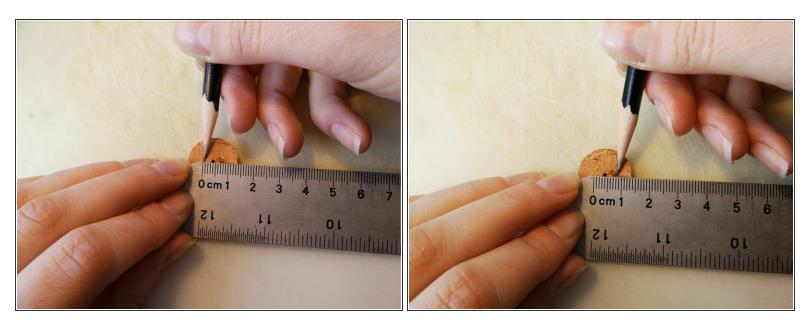


- Using a ruler, measure the diameter of the water key slot you removed the cork from in Step 2.
  - (i) Measure from inside edge to inside edge.

#### Step 6



- Place the 3mm slice you cut from the wine cork flat on a surface.
- Mark a point in the center.



• Using a ruler, measure half the diameter from Step 5 above and below the center mark.

#### Step 8



- Rotate the ruler 90 degrees and repeat Step 7.
  - (i) Your cork slice should now have four marks equidistant from the center mark.
- Draw a circle connecting the four marks around the center.



• Using your knife, cut out this circle.

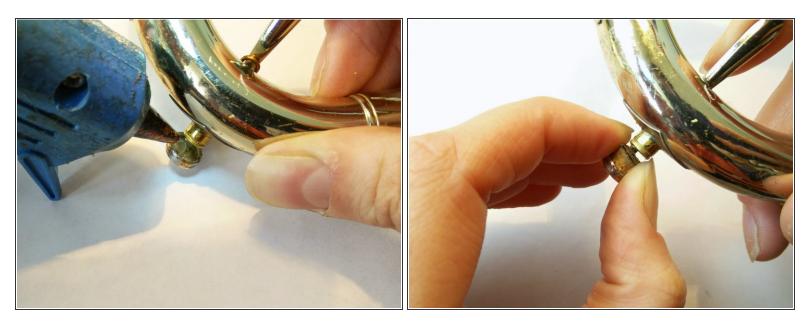
(i) It helps to slice edges off at angles, one at a time.

 This might take a few tries, so if you end up with a non-round circle cut out, repeat Steps 3-9 with the remaining wine cork.



### Step 10

- Dry fit the new cork in the water key slot to make sure it is the right size.
  - If your cork is too big, you'll need to cut it a little smaller.
  - If your cork is a little uneven, don't worry. Its job is to seal the water hole, which is much smaller than the cork itself.



- With a hot glue gun, put a drop of glue in the water key slot and place the new cork on top.
- Press firmly on the cork for a few seconds.

If your water key still leaks after replacing the cork, it may need to be bent back into place or may need a new spring. See an instrument repair professional or another online guide for help with this.