



How to get tungsten from a coin design vibration motor

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INTRODUCTION

This is a dismantling manual for a coin design vibration motor on the basis of the Sony Xperia M4 Aqua, according to get the tungsten.

Step 1 — How to get tungsten from a coin design vibration motor



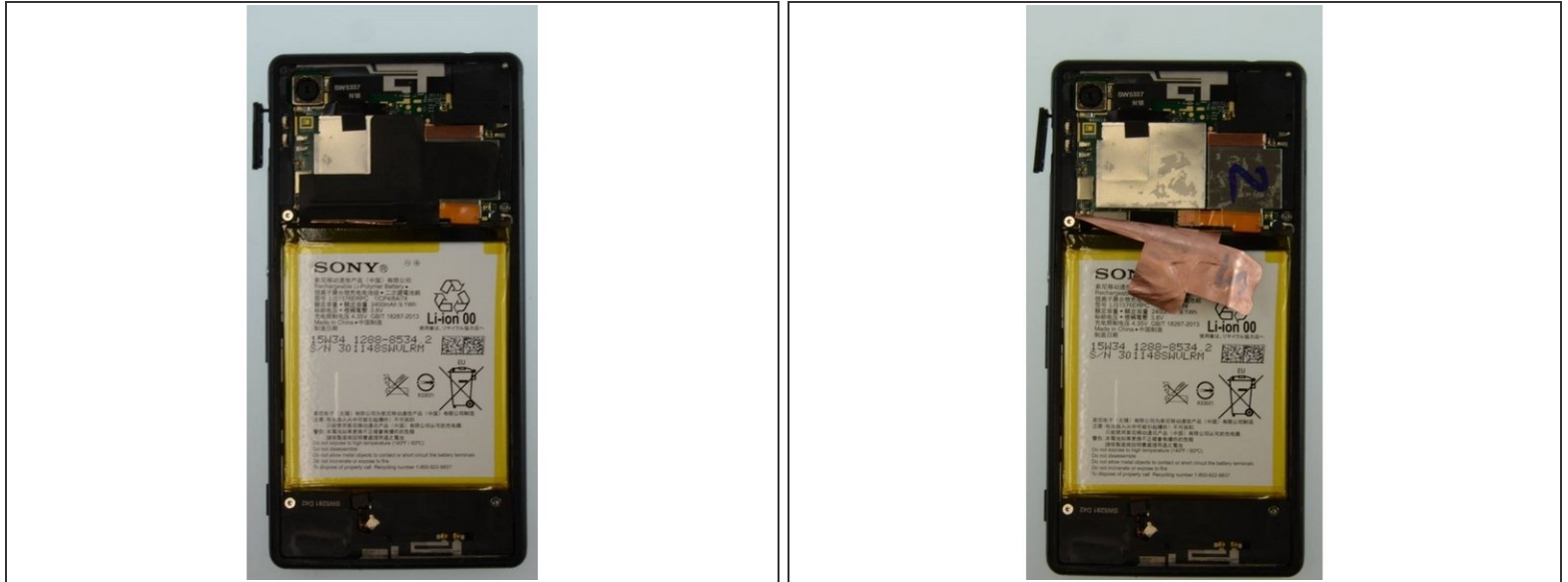
- You see the front and the back of the Sony Xperia M4 Aqua

Step 2



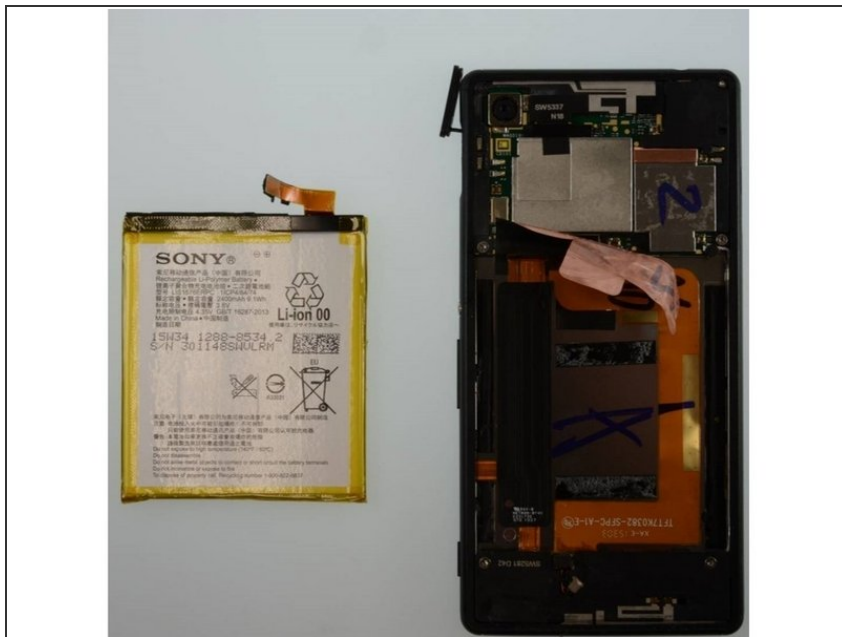
- Place the phone face down, and use a hair dryer or heat gun to heat the back Surface, to soften the adhesive.
- Attach a suction cup to the back of the phone by pushing down on it near the top of the phone.
- While Pulling on the suction cup, slide a thin object between the back cover and the phone. Slide it around the edges to break the adhesive seal.
- Remove the back cover by pulling it from the phone

Step 3



- Take off the copperband

Step 4



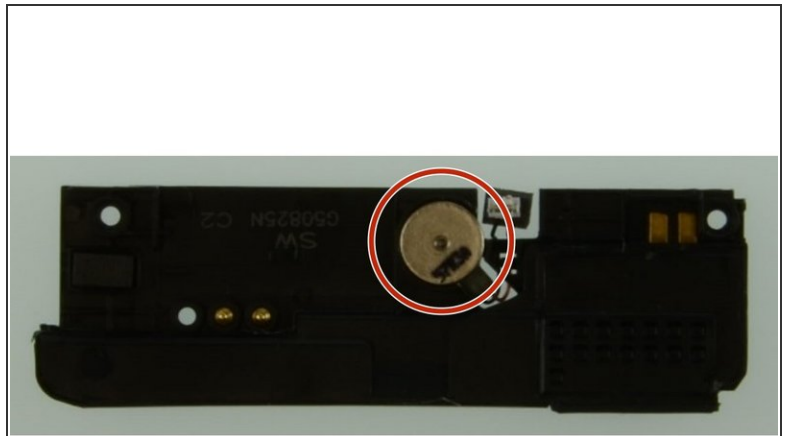
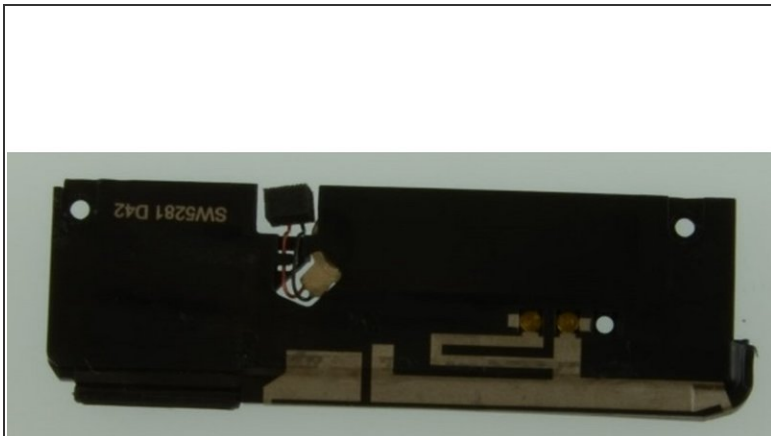
- Unhook the battery connector
- Pry the battery from the phone with a thin tool. There is a small amount of adhesive underneath the battery, so a bit of force is required
- Remove the battery

Step 5



- Close to the bottom of the phone, unscrew the two phillips head screws
- Remove the black plastic strip to reveal the speaker assembly and the vibrating motor. They are hooked underneath the circuit board beneath, force will be required to pry it out.
- Unplug the microphone connector
- Remove the whole module

Step 6



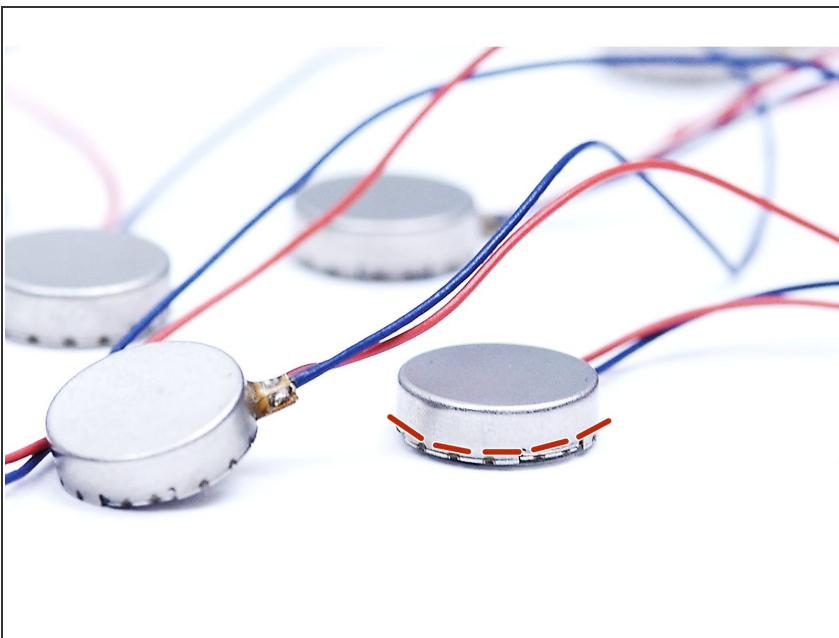
- If you flip over the module, you will see the cylindrical design vibration motor
- Remove it from the module

Step 7



- Now you have the single vibrating motor
- To get the tungsten, you have to open the metalcase

Step 8



- Erase the adhesive foil from the bottom metal housing
- Open the metal housing by clamping the housing into metal pliers, see red dashed line
- Get between the opened case with a thin screwdriver and remove the upper metal housing from the bottom metal casing

Step 9



- Here you see from left to right the upper metal housing, tungsten ring counterweight, wave spring, neodymium boron magnet, bottom metal housing with contacts and copper coil, adhesive foil
- After removing the case, the tungsten ring is wedged on the bottom housing
- Take off the tungsten ring with a sharp thin tool and withdraw the coil (using a pincer) which is mounted on the tungsten counterweight