

## How to replace the teflon tube retainers?

*The goal of this procedure is to explain how to replace the teflon tube retainers both in the printing head (top) and in the cartridge holder (bottom). This should be done for the right and left tubes.*

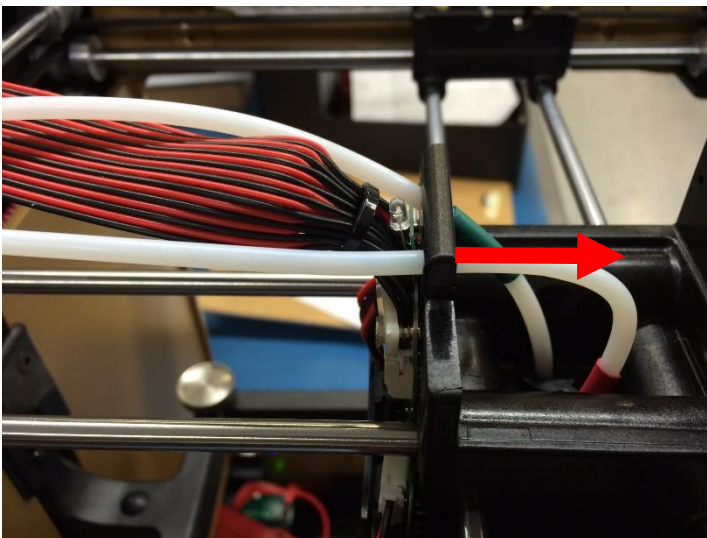
**Make sure that both sides have the cartridges unloaded and out of the printer**

### I. Replace the plastic tube retainers on the head

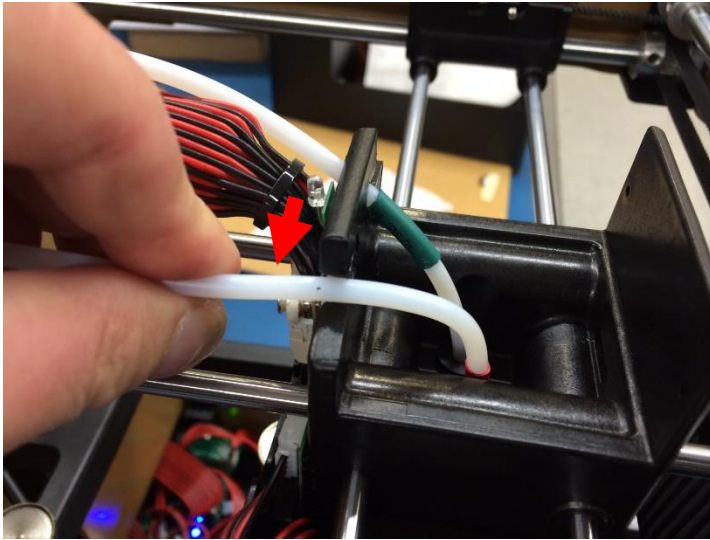
1. Remove the top Cover of zim



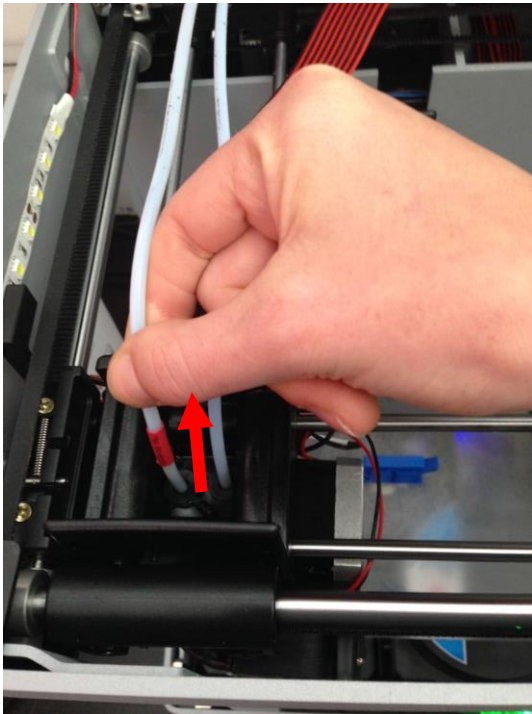
2. Push the teflon tube so that it's parallel to the rods



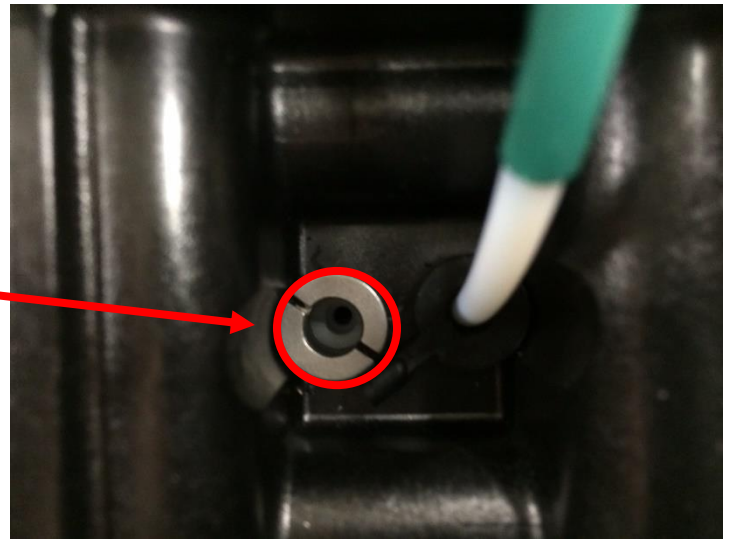
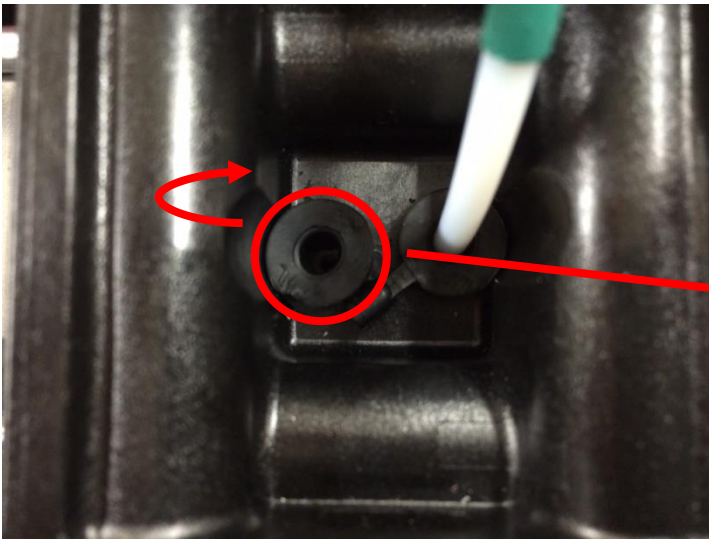
3. Pop the tube out from the head holder



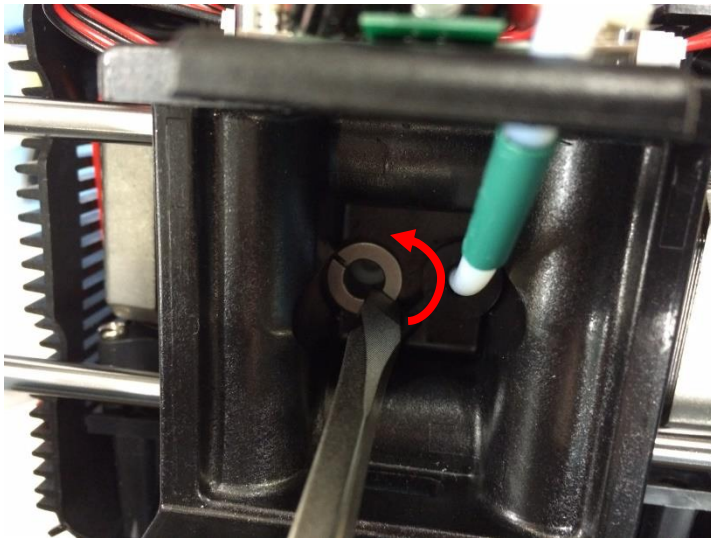
4. Pull the tube out from the filament housing retainer



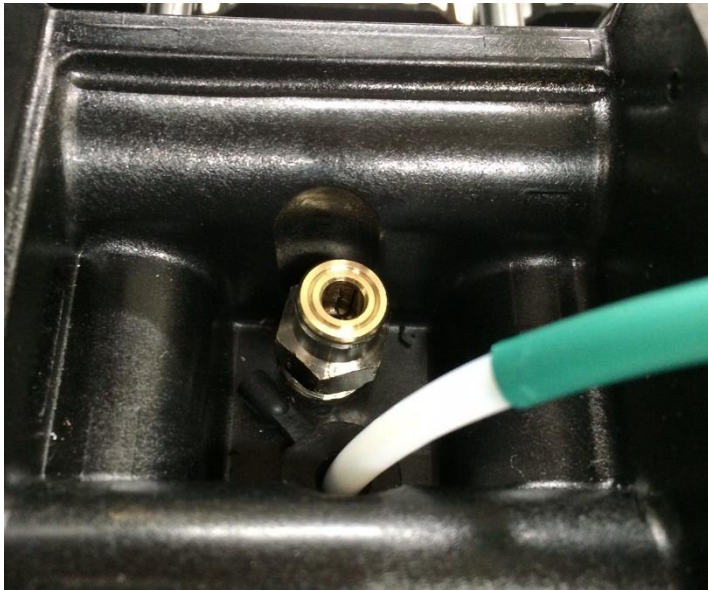
5. Remove the Filament housing retainer



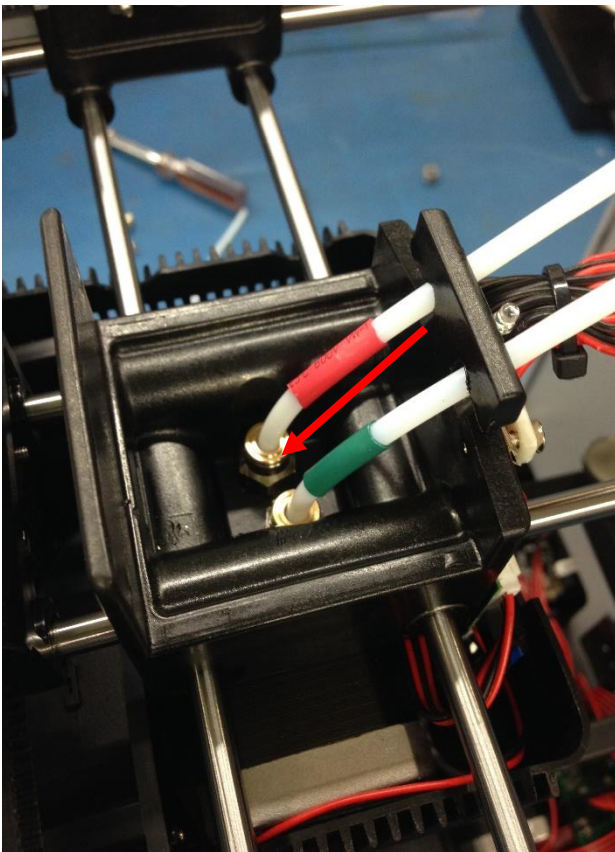
6. Remove the Head nut with a flat screwdriver. **DO NOT** remove both head nuts at the same time



7. Screw the new filament retainer using a 11mm wrench



8. Insert back the teflon tube. The teflon tube must be inserted 27.5 mm deep.



9. Repeat the same procedure on the second retainer



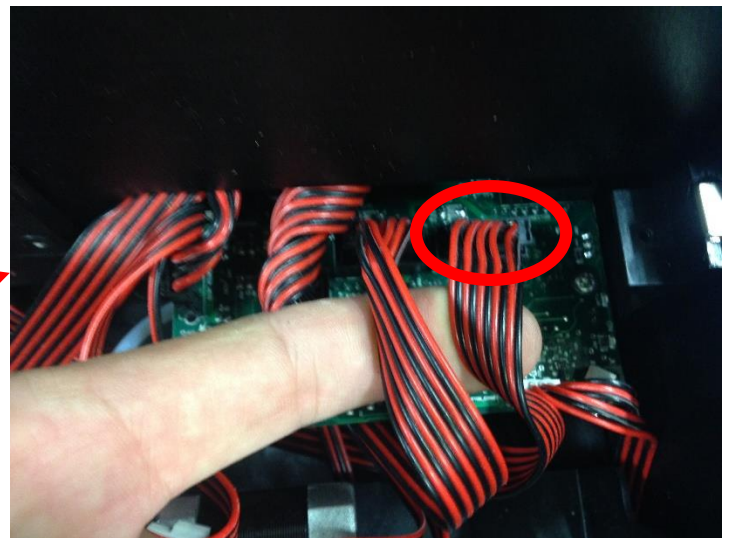
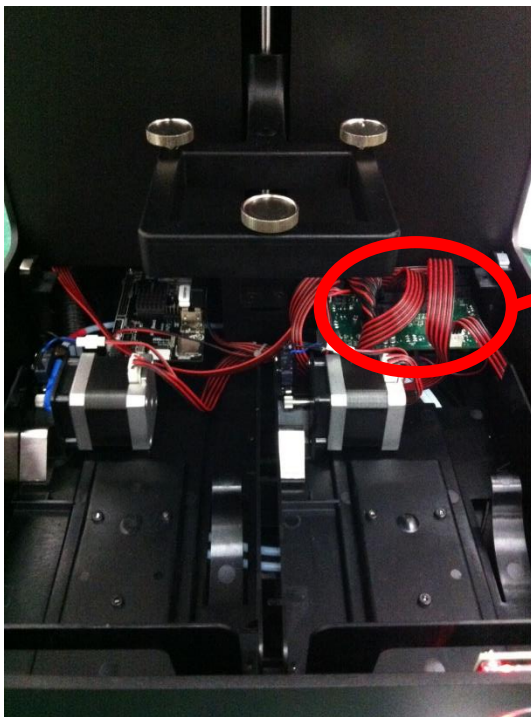
## II. Replace the plastic tube retainers in the cartridges holder

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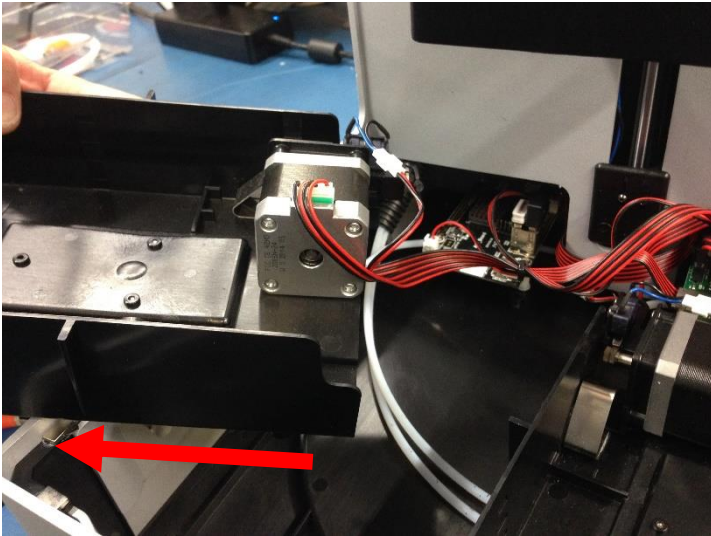
1. Lay down the zim. Unscrew the left cartridge holder



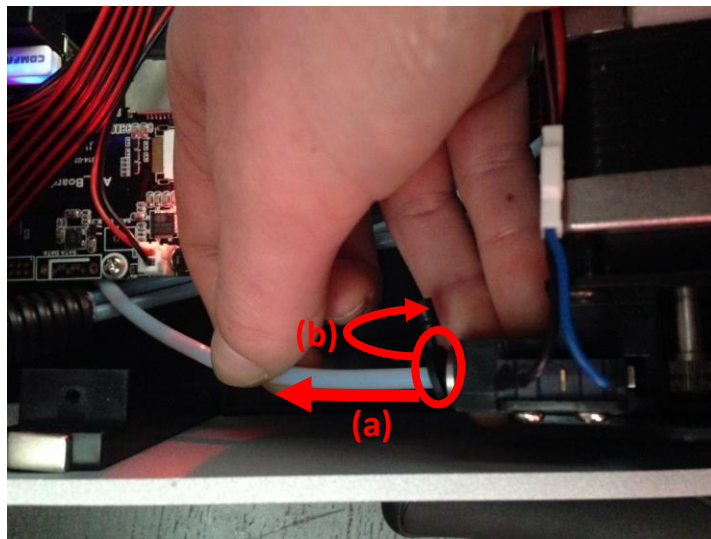
2. Remove the flat cable (Right one for Left Cartridge support) from its connector



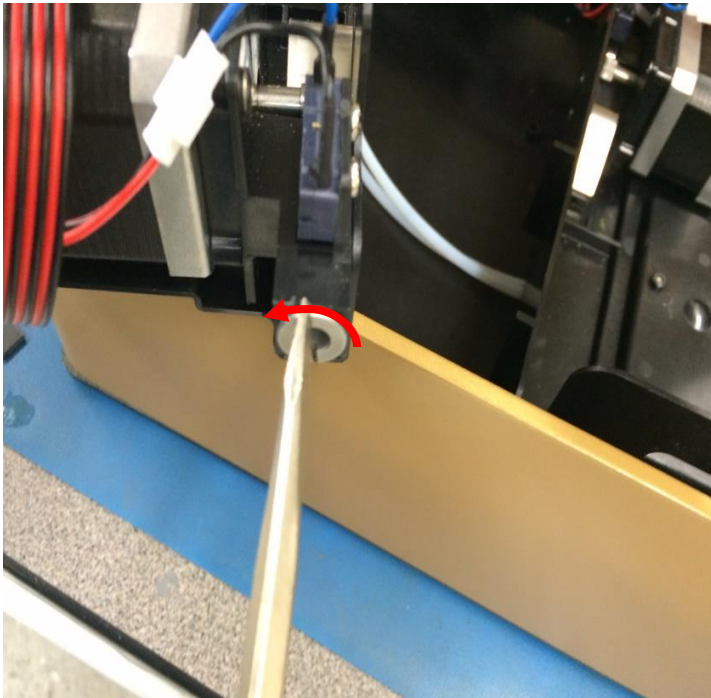
3. Remove the Cartridge holder from the base plate



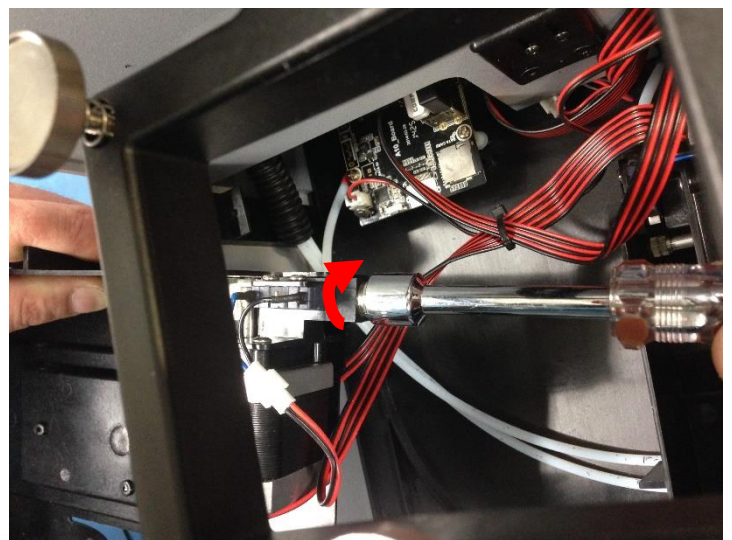
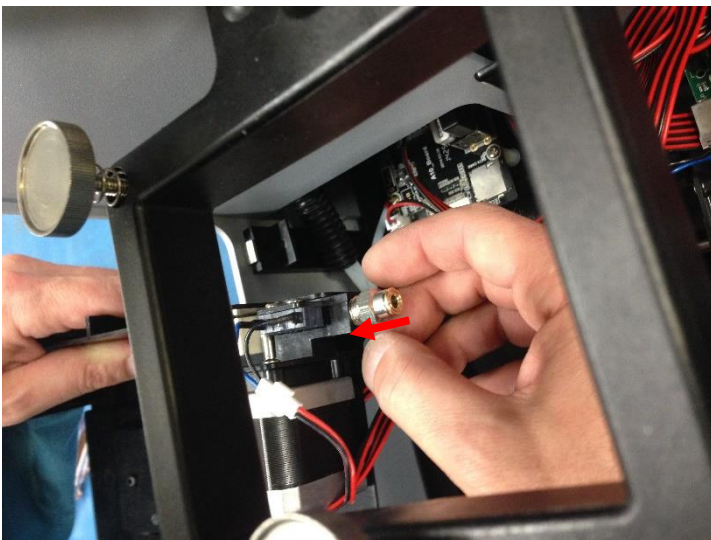
4. Remove the teflon tube (a) and the filament housing retainer (b)



5. Unscrew the filament retainer nut

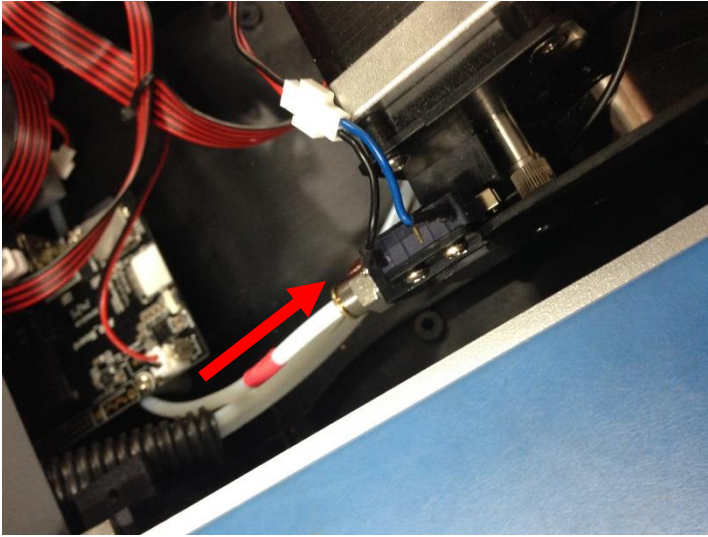


6. Screw the new teflon retainer using a 11 mm wrench





7. Put the teflon tube into the new retainer, until 36 mm are inserted.



8. Put the cartridge holder back and screw it.



Take care not pick the teflon tubes below the cartridge holder. Both teflon tubes must move freely when the printing head is moving.

III. Repeat the same procedure with the right and the left flat cable