### VanMoof S3 & X3

Wired Boost/Bell button replacement procedure





### Replacing wired Button

## Before you start:

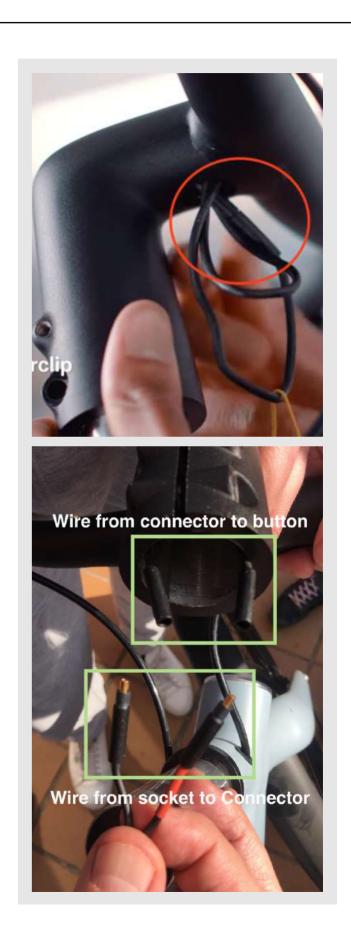
Each button has a wire that is plugged into the socket and each wire is divided into two pieces by a connector. You can access the wires and connectors through a hole under the handlebars, which is sealed by a rubber plug. This means there is no need to remove the handlebar to do any checks here, as seen in the photo below.

The connectors and wires are very fragile so whenever we are pulling them out from the handlebars, or when removing the handlebars, a lot of care needs to be taken so they do not brake.

These next 2 videos must be watched before any manipulations are done to the handlebars and wiring.

- 1 How to replace or remove play from the handlebar.
- 2 How to adjust the height of the handlebar Add Spacers.

In this procedure we will remove and replace the button, the wiring and the connectors that sit inside the handlebar.



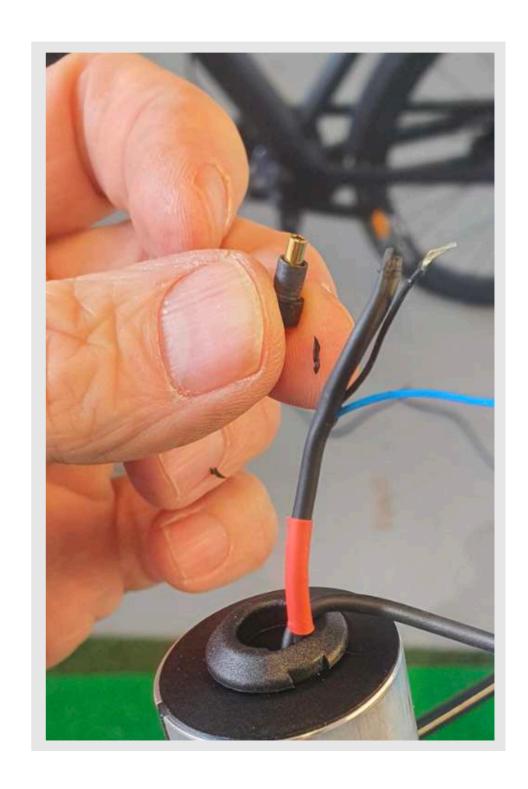
# When Connectors are Broken:

Broken connectors of the wire inside the **handlebar** have 2 possible solutions:

- 1 Replace the button and the wire.
- 2 Solder the wires. This is done by removing the connectors and cutting the wire casing back to expose the wire.

Broken wire connectors inside the **frame** have 2 possible solutions:

- 1 Solder the wires. Remove the connectors by cutting them and exposing the wire.
- 2 Book a repair with us at any service location.



### Replacing wired Button

## Tools & New Parts Needed:

#### Tools:

Paper Clip

Allen Key n°2

Allen Key n°5

Tape

Glue similar to the one we use: Bison

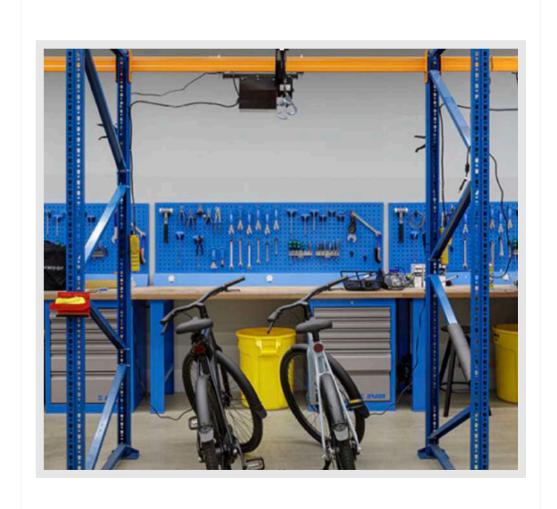
Break cleaner/degreaser.

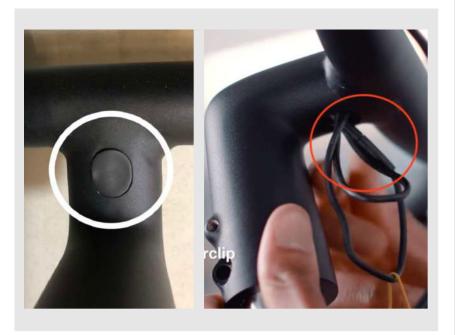
Small screwdriver.

Shoelace/string as a Guide wire to pull out the cable from the handlebar or a guide wire of your choosing.

#### New Parts:

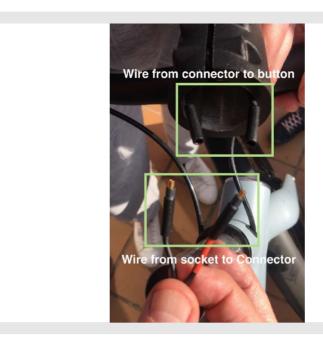
Boost/Horn Button with Cable connector ES/X3.



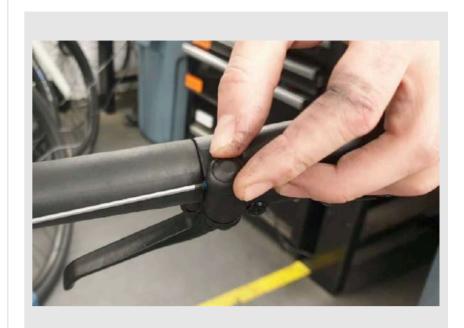


Switch off the bike, remove the rubber cover and pull out both cables with a paper clip until the connectors are exposed. In this way we prevent to extract the whole handlebar.

Here is a video example on how to do it in the step "pull the wires".



The connector with the red heat shrink is the boost. Disconnect the wire connector of the broken button. You do not need to remove the handlebar at this point. **TEST:**Connect the new buttons connector and check if it works.



If the new button works, proceed with the replacement procedure starting by loosening the button bolt with a 2mm Allen Key and keep the bolt. Try not to loosen it all the way so you do not lose it. Half a turn would be OK.



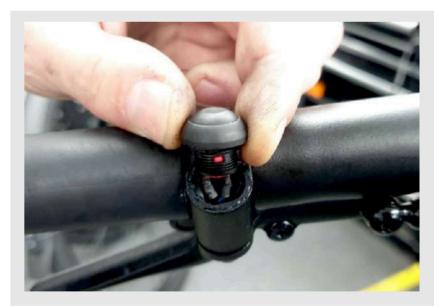
4 Break the seal of the button with a flat tool of some kind. If you find a washer you can also remove it as new buttons do not need washer.



It is important to mention that the button wires can have 2 possible routes:

BLUE ROUTE: You will be able to pull out the button without removing the grip (See Step 6).

RED ROUTE: You will not be able to pull out the button without removing the grip as well.



Gently pull out the button with the wire just 1-2 centimeters checking that the unplugged connector moves

- Button & Connector moves: BLUE ROUTE - Go to directly to step 26.

- Button does not move: RED ROUTE: Follow with step 7.



Grips are glued to the handlebar.

Insert a little flat screwdriver to pry in

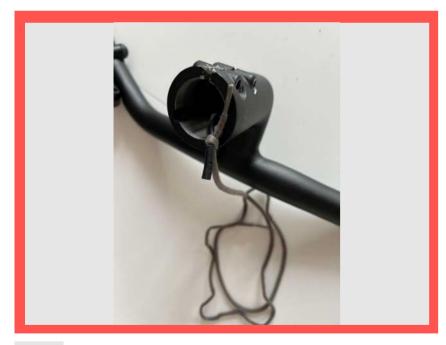
different points. Adding brake cleaner or degreaser will dissolve the glue so it will help to easy extract them. Otherwise cut the grip off.



Remove the tape and release the brake lever using an Allen key 5.



9 It is important to understand that the brake lever, handlebar and grip fit together in sync. Never force them when performing this repair.



10 Attach the Shoelace/guide to the connector. It will work as a guide wire.



Pull the button till you see the Shoelace/ guide coming out of the end of the handlebar.

Remove the old button and attach the new one. Do not need the old washer.



12 Use your guide string/wire to pull the new cable into position.

Once the cable connector reaches his original position make sure that has the same length as the other cable.



13 Connect the connector of the new wired button.

Switch on the bike and confirm that the Button still works. If it is not working book a repair in our facilities.



14 Insert the brake lever making sure that the wire goes in the slit as it was before.

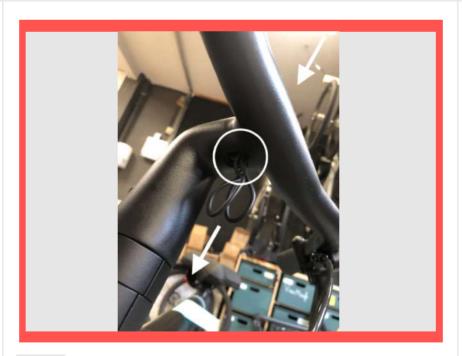


15 Tight the lever using an Allen key 5.



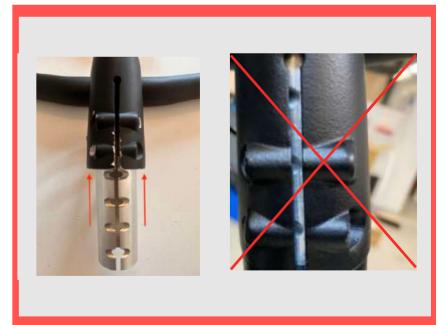
16 Cover the cable with tape. Electric tape preferred.

Mount the grip adding glue or adhesive on it.



17 \*If you extracted the handlebar: Mount the handlebar making sure to extract the wires to prevent the connectors from breaking.

Here is a <u>video example</u> on how to do this in the step "pull the wires".



Align the handlebar making sure that the aluminium sheath is properly aligned.

Here is a <u>video example</u> on how to do this.

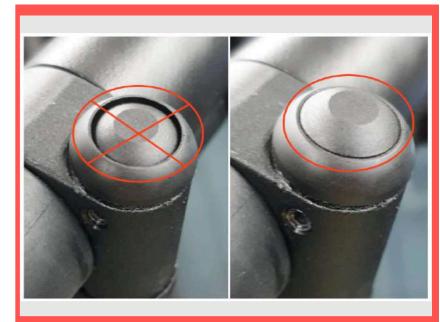


The 2 bolts should be aligned with the notches on the internal stem.



20 Insert the button making sure that the flat part is pointing up or down as the bolt should lie in the button thread.

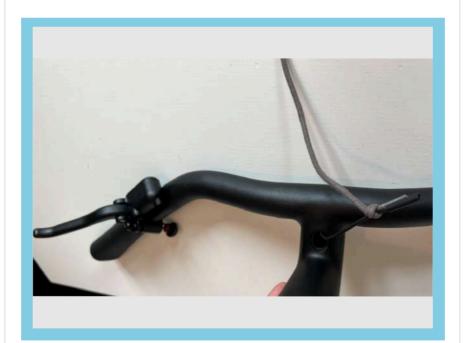
Use an Allen Key 2 to tighten the bolt.



21 Make sure that the bolt is not too tight (example of the left) as it will force the button to the pressed position.



Place the cables in the handlebar and push the rubber cover back into the hole.



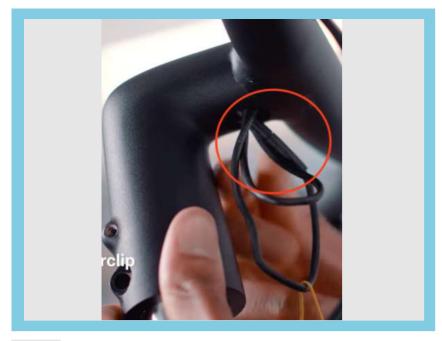
23 Attach the shoelace/guide to the connector. It will work as a guide wire.

Pull the button till you see the shoelace/ guide coming out of the button hole.



Attach the connector to the shoelace/guide.

Pull from the shoelace/guide until you get the connector and button in their original position.



25 Connect both connectors again.

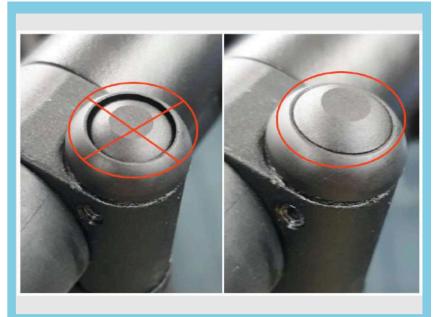
Switch on the bike and confirm that the Button works now.

If not working book a repair in our facilities.



26 Insert the button making sure that the flat part is pointing up or down as the bolt should lie in the button thread.

Use an Allen Key 2 to tighten the bolt.



Make sure that the bolt is not too tight as in the example of the left.



Place the cables in the handlebar and place the cover.



For more info please reach us by email or chat. <a href="https://www.VanMoof.com">www.VanMoof.com</a>