TECHNICAL INSTRUCTIONS FOR JUICE EXTRACTOR Z22

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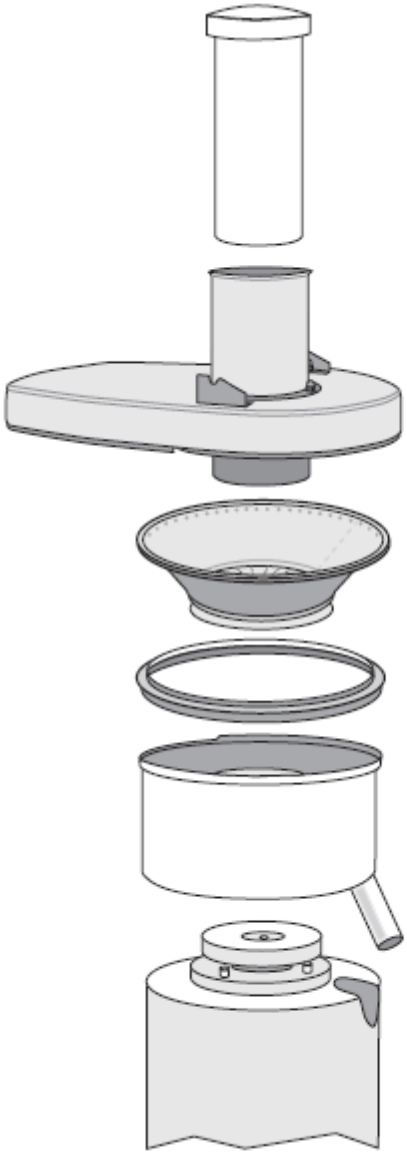
1.- Disassemble machine

1.1. This juicer machine has a metallic locking arm, that allows locking the machine up while working. When the locking arm is unlocked, turns a micro-switch off and it makes that the juicer doesn't works and we can work safety. (Otherwise we should disconnect the mains before doing anything with the machine)

1.2. When we have the locking arm unlocked we proceed to remove the juicer cover and pull the bowl out and all the pieces from the basket. Be careful for not to cut you off with the grating disc.
We should remove all the pieces as shown on the picture below:

Fig.1.

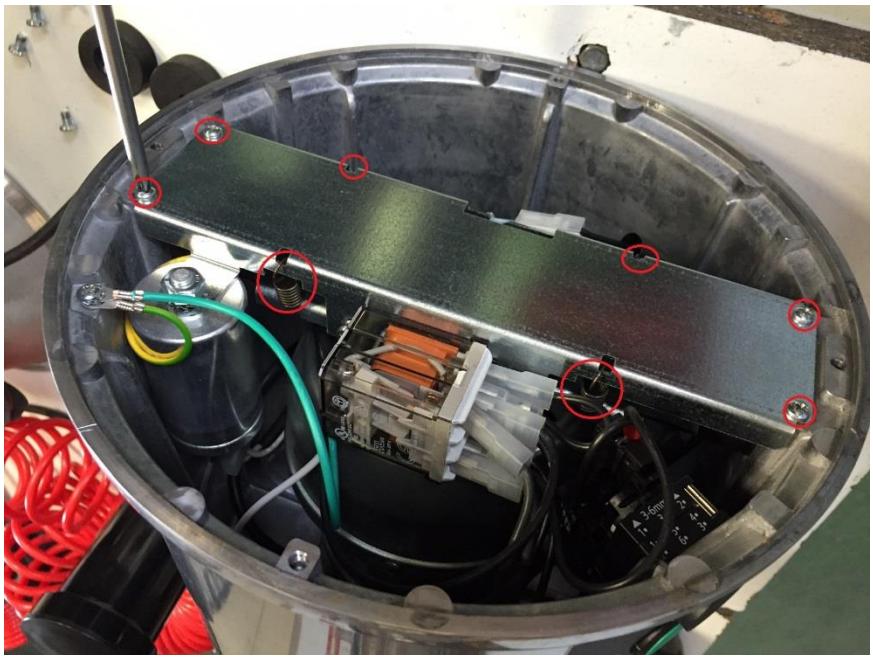


2.- Dismantling and change motor

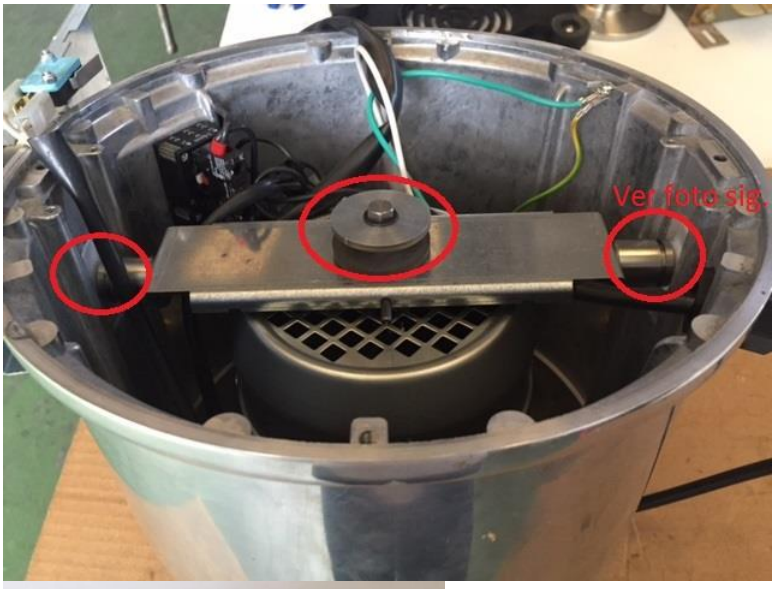
2.1.- Fist of all, we must lay the machine down and remove 4 screws that fixes the base to the housing. There are two screws that you see at first sight but another 2 are under the rubber feet. We must remove both rubber feet and we will find the other two screws, then remove them too.

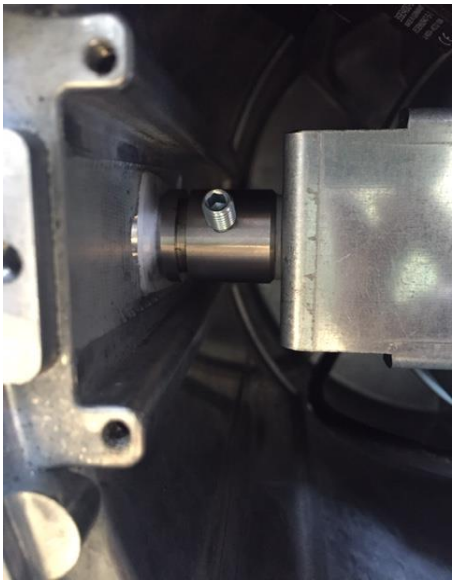
Very important; before removing the plastic base don't forget to make a reference mark that show us which is the correct position.

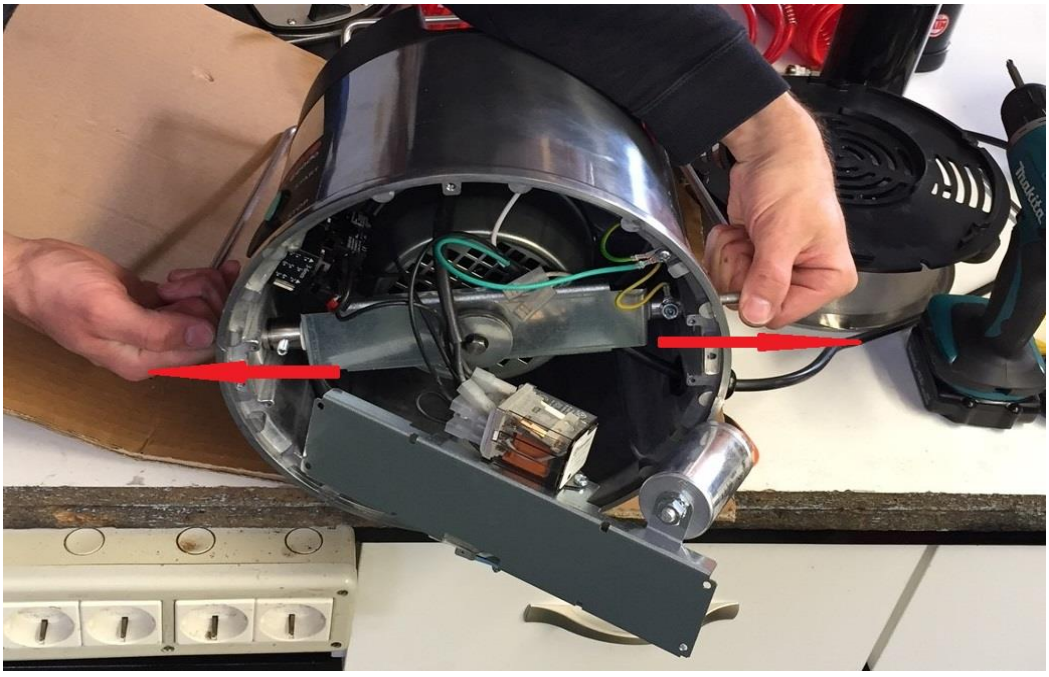

2.2. Once the base is removed we have to unscrew four screws of the fixed guideway and remove also four springs that fasten this fixed guideway to the mobile guideway just under the fixed one, that one has the micro-switch attached. After removing the springs ***(Be highly careful not to let the springs fall into the motor fan)***



2.3. Straightaway, disconnect both connectors of the capacitor and proceed for its discharge for security ***(please touch both connectors at the same time with an insulated screwdriver).*** Next step is to remove the locking arm; first we unscrew two hexagon socket screws on both sides and then by stretching both sides of the locking arm out. Upon removal of the locking arm we could be able to pull the mobile guideway out by unscrewing the bolt and the rubber washer that fix it to the motor.







2.4. Once we have the locking arm removed and the guideway that fix it too, we proceed to dismantling the motor and, before that, we need to ensure that there is nothing that disturb at the rear of the motor, so that we would have free access to handle the motor ***(it's highly important to take care that all the wires below don't disturb us before trying to dismantle the motor).***

2.5. Right after, we turn around the machine and we have to pull the drive disc out by unscrewing the hexagonal socket set screw that fix it to the motor shaft.

2.6. After removing the drive disc, we have to remove the rubber cover below the bowl. We have to stretch from the slot that we have on the side; then we have to stretch slowly for avoid that we break the cover. ***(Be extremely careful when removing the rubber cover and don't force it to much for remove it faster, it's better that you do it slowly)***

2.7. Once the rubber cover is out, we will see 4 Allen bolts that fix the motor to the motor housing. ***Be extremely careful, because when loosening the 4 bolts the motor remains free and it can fall down.*** When we have the bolts removed, we can proceed to pull the motor out from the other side; bearing in mind that we have cables on the other side that can be damaged.

Once we have done all these operations we will have the motor free and we can proceed to change it in case of breakdown.

2.8. For assembling the new motor, you should fit it in the housing and then tightening the 4 Allen screws again. Next step will be fitting again the rubber cover.
Pay attention that the cover fits on the machine; ***first on the slot*** and after on all the sides, and the with the help of a flat screwdriver fit the center of the cover in the hole of the joints.

3.- Closing the machine

3.1. After **checking that the locking arm is fitted on the right position*,** we proceed to fix it to the mobile guideway in both sides, then we put the rubber washer and the bolt that fits the guideway on the motor.

***Very important:**

When we put again the locking arm we must take a look at this picture before doing something. It only has one position.

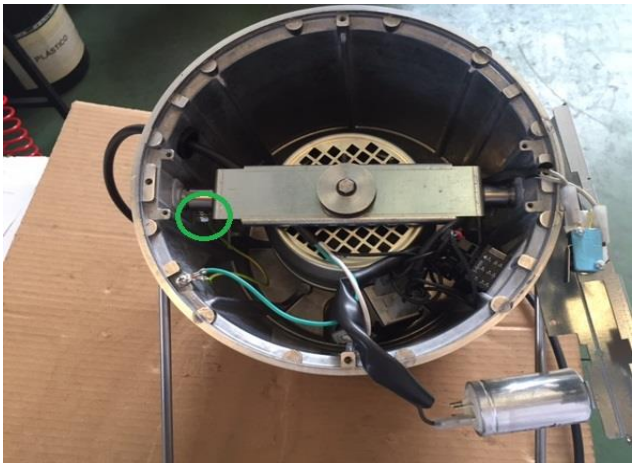
The slot (spotted in red) of the bowl must be in front of you and with the locking arm in the same position as in the picture.

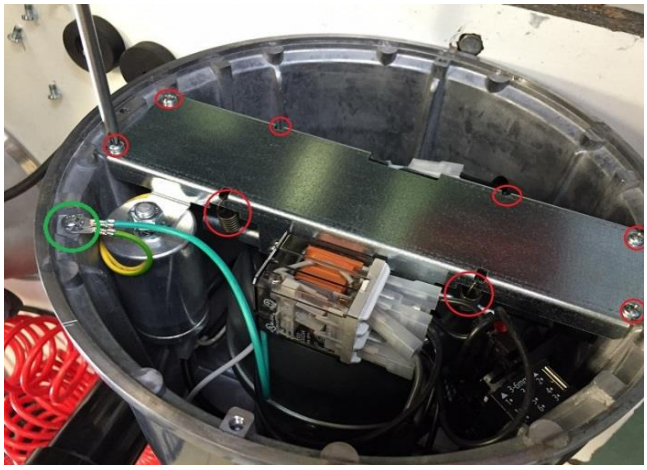
3.2 Once we have both guideways assembled, the fixed one (has 4 screws on the corners) and the mobile one (has a rubber washer and a hexagonal bolt) we proceed to assemble the plastic base and screw it to the machine. **

* Warning: Be careful before screwing this base, it only has one possible position and you can only screw it properly when you find it. The plastic piece has a slot that fits on the machine when you find the right position. In case of being wrong assembled, couldn't be able to screw the rubber feet properly.

3.3 For proceeding to assemble the main parts of the juicer we must follow the instructions shown on the graphic above at page 2. ***(Fig.1.)***

3.4 Before proceeding the machine assembling, the ground must be connected ALWAYS at the hexagon socket screw of the locking arm fitting and to the chassis also with a screw. (see green marks)

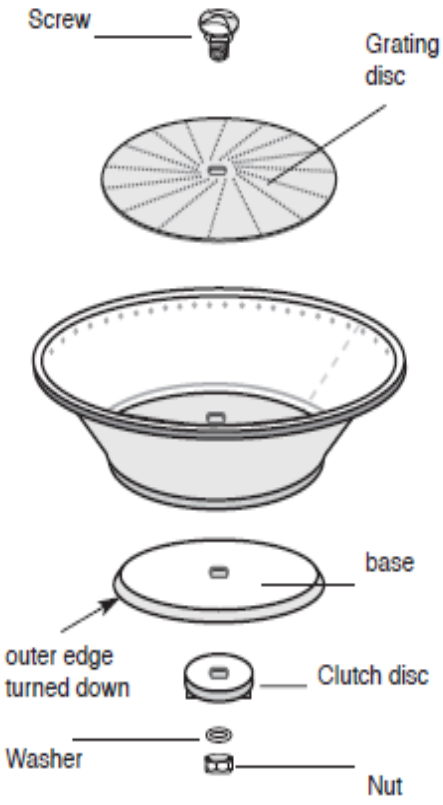




4.- Grating disc change:

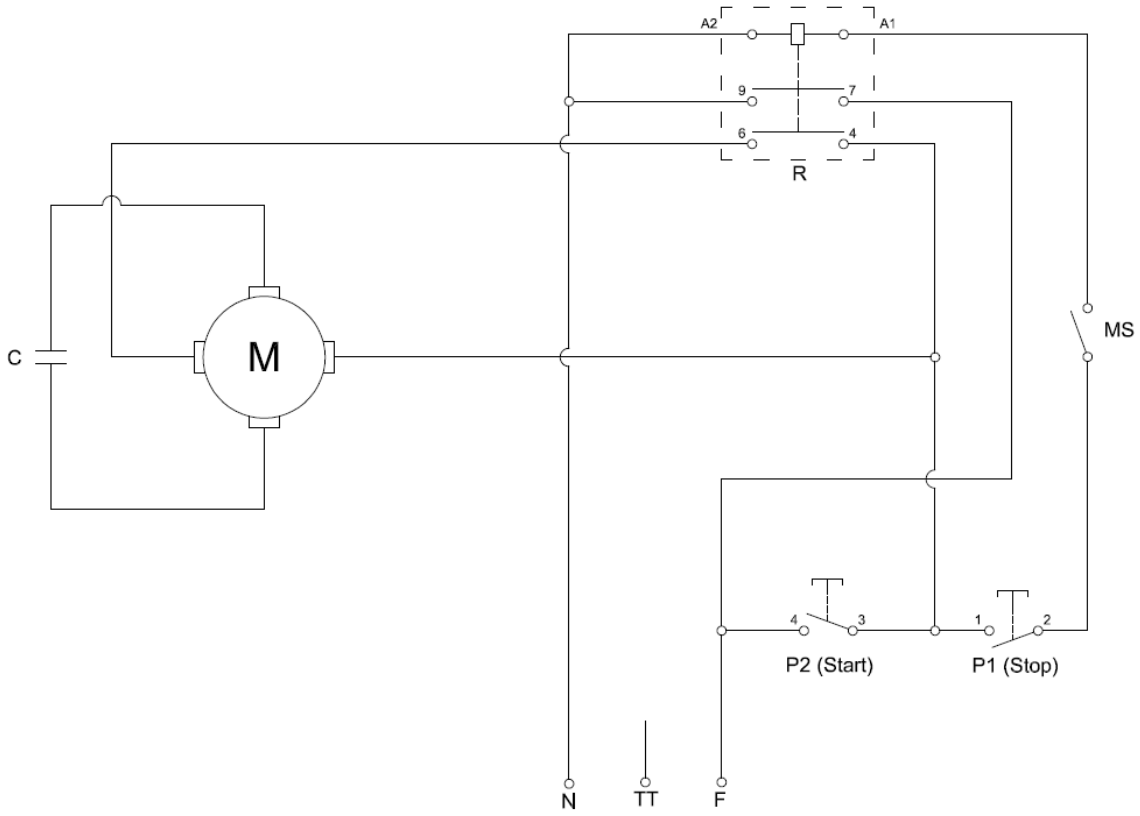
4.1.- For changing the grating disc we must disconnect the mains and then proceed to remove all the stuff of the bowl as shown on the picture below:

Fig.2.



5.- Electric diagram

Esquema Eléctrico Z22



M: MOTOR
C: CAPACITOR
MS: HANDLE SAFETY MICROSWITCH (NC)
P1: START SWITCH (NO)
P2: STOP SWITCH (NC)
R: RELAY

6.- Troubleshooting

In case that we have a breakdown at the machine Z22, we must proceed to look over the machine following next guidelines.

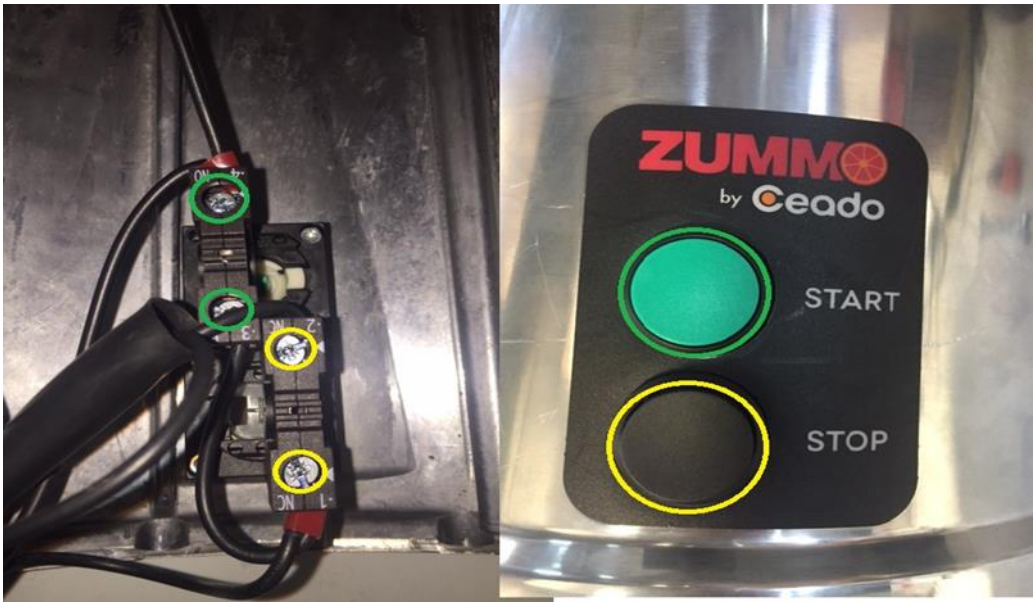
1. The motor doesn't run:

- **a.** Check if the machine is connected to the mains.
- **b.** Check over the grating disc and try to move it. (check if it's not blocked)
- **c.** Check if there's continuity between both push button (On and Off)
- **d.** Check if there's continuity between the locking arm switch
- **e.** Check the capacitor's capacity
- **f.** Check the motor winding resistance

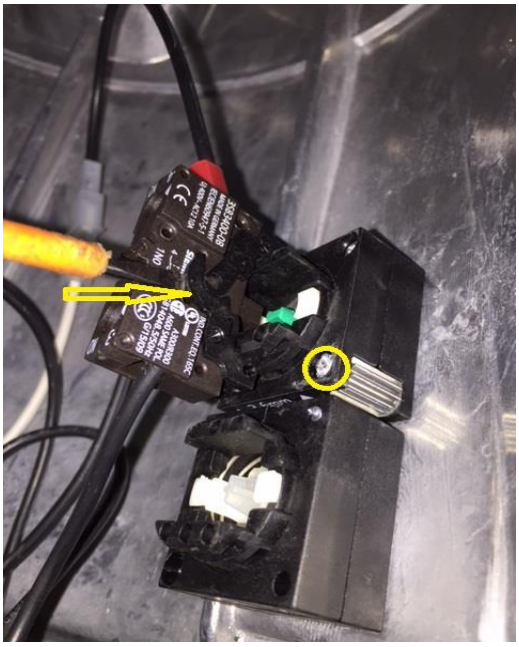
a) When the motor doesn't start working, first of all, we will check if the motor has the right voltage. We will use the voltmeter to test if we have the right voltage at the plug (220V. or 110V.)

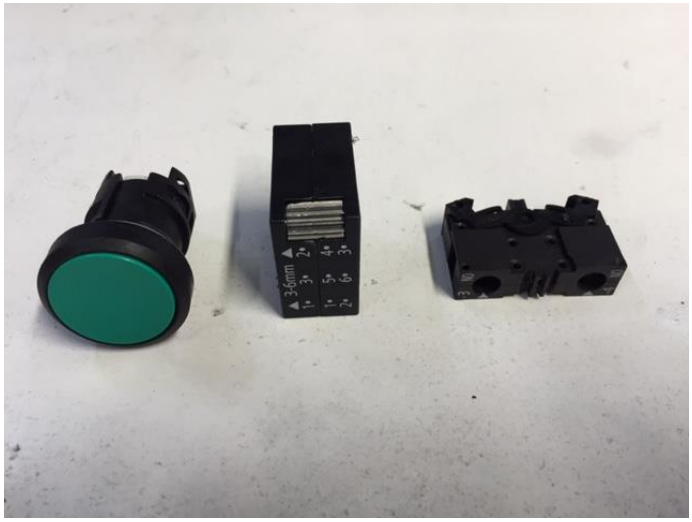
b) If the plug has voltage and it's still not working, we must try to move the grating disc carefully to check if it can be move easily with the hand. It's for ensure that the motor is not blocked. ***Proceed always with the machine disconnected from the mains.***

c) If the grating disc moves softly and it's not blocked, we will proceed to dismantle the plastic base cover for leaving visible the buttons. ***(see point 2.1)***
Once we have both buttons visible, we must check the continuity on the closed contact (OFF) and on the open contact (ON). We will use a voltmeter for check continuity between both green circles (open contact) and ensure that when we push the button we have continuity and when it releases we lose continuity; it means that the contact is ok. For check the closed contact we will check continuity between both yellow circles (closed contact) and we must have continuity without pushing it, and when pushing the button, we lose continuity. If this happens it means that both buttons are ok.

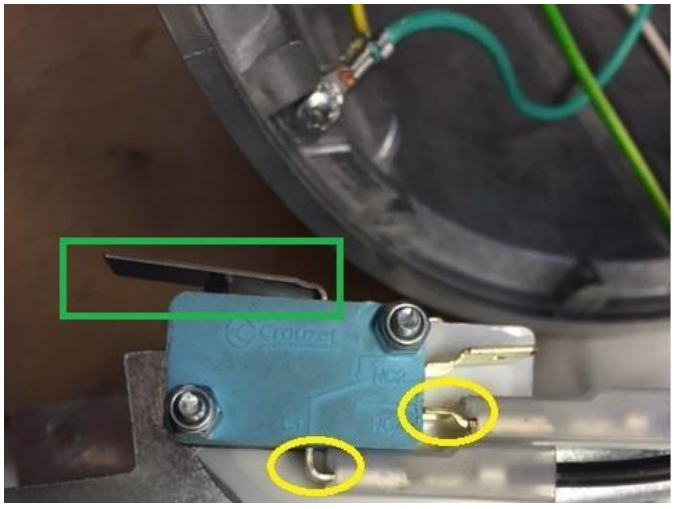


In case there will be a contact damaged we will proceed to change it with a flat screwdriver pressing down the plastic lever (yellow arrow) and the contact will drop down. After turning half a round, the small torx socket screw (yellow circle) the button could be separated from the contact box. If we have to change the button, we must pay attention that the arrow on the contact box must be in the same position as in the picture below. When the button is assembled again, then we turn half a round the torx socket screw and we have finished.





d) After doing the buttons verification we will proceed to check if the micro-switch is working properly. We will use the voltmeter and verify that there is no continuity at the open contact of the switch (yellow marks) and when we trigger the switch (green mark) we should have continuity. If it happens it means that the switch is ok.



e) If the latest steps are ok; next verification, should be to measure the capacitor's capacity to rule out if the capacitor is working properly or not. For doing this verification we will use the voltmeter with the capacity measure option (green mark) and we have to measure between both connections of the capacitor (yellow mark). When we measure it, the voltmeter will leave a value and then will measure zero (in this case it works properly). In case of it doesn't leave any value, the capacitor must be changed by another one.

f) Finally, if we ensure that all the steps we did before are correct and we didn't find any failure we must check the motor's resistance. For check the resistance we will use the voltmeter in the resistance measure position (symbol Ω). If the motor is ok the measure should be around 1,2Ω and if there's no value at the measure the motor should be changed.

g) In case of all the previous verifications have been ok and the motor resistance has been correct (+/- 1,2 Ω) and by ruling anything is damaged, the problem would be the relay and we must proceed to change it by a new one.**.

*****VERY IMPORTANT; IF THE RELAY HAS TO BE CHANGED, WE MUST ENSURE BEFORE DISCONNECT ANYTHING THAT ALL THE WIRES HAVE BEEN LABELLED.***

WE WILL LABEL 4 WIRES THAT CAME OUT OF THE MOTOR, IDENTIFYING WHERE EACH ONE ARE CONNECTED TO AVOID MISUNDERSTANDINGS.