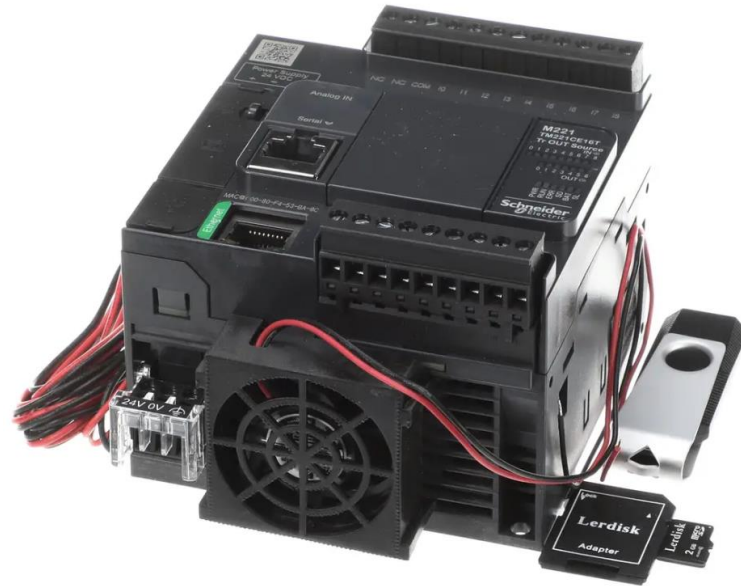


# How to replace PLC ( HR11-0046-A)

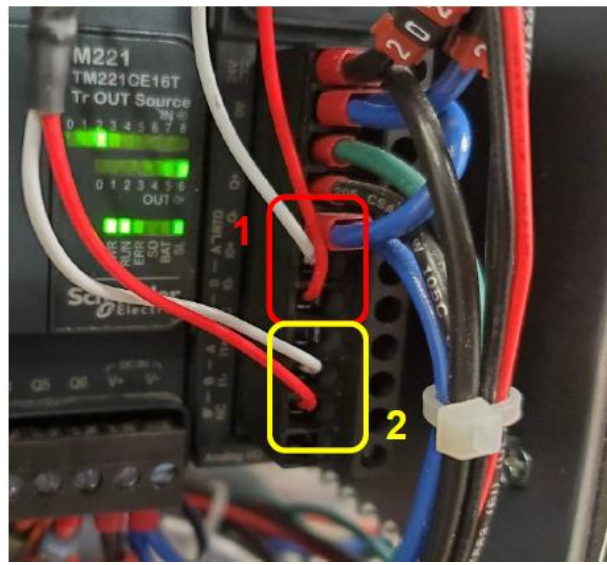




# Step 1

Confirm the software version the unit is operated on, to do so there is 2 choice :

1. If the screen is usable then power on the unit, press on the wrench and select "about", you will find the software on the bottom of this page
2. If the screen is NOT usable then open up the electrical panels and verify if the thermocouples are connected into the PLC1 or PLC2



The version will be updated to :

- A) If the version is >2,8 or the thermocouples are connected into the PLC1 then the version 2,308 is the latest compatible
- B) If the version is 2,9 or great or you've found the thermocouple on the PLC2 then 2,309 will be the latest compatible version

## Step 2

Verify the files in the SD and USB card

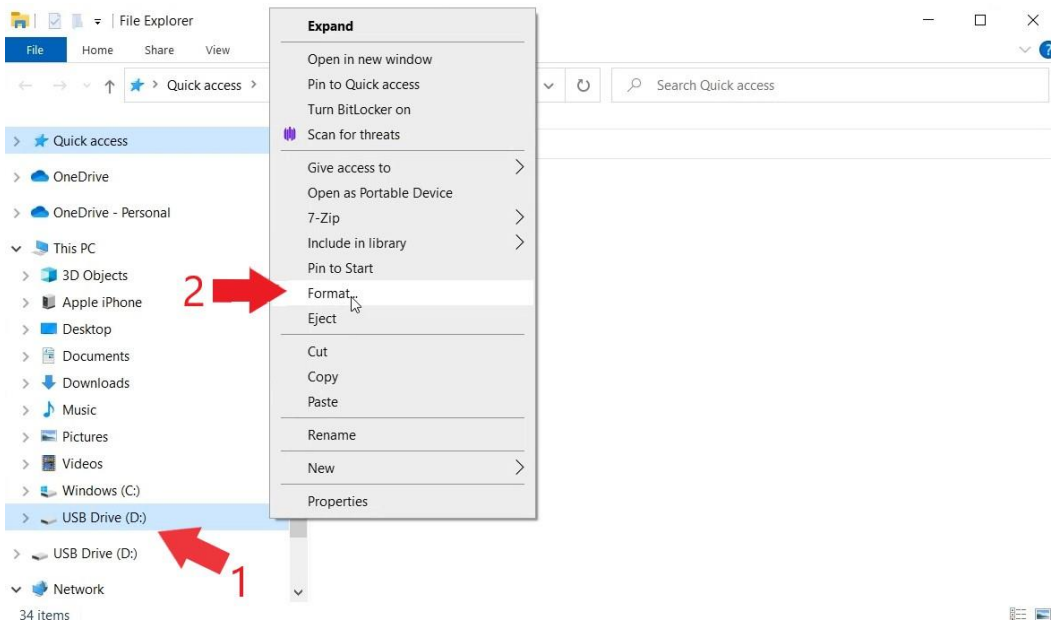
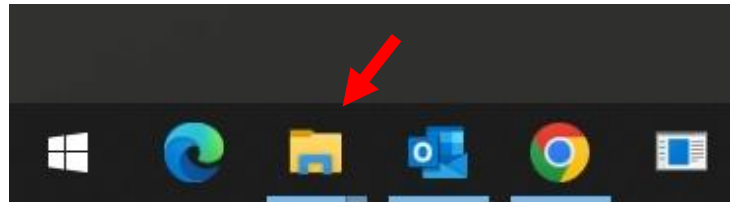
Use a PC to sort the files on the SD card and keep only the correct ones on the USB key

First, insert them into your computer  
Then you must have the USB key and microSD card formatted to FAT32 To do this, follow the instructions below

Click on the FILE EXPLORER icon near of the Windows ICON

1 - Find your USB Drive on the left menu.  
Usually it's the letter (D:)

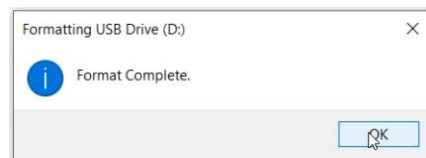
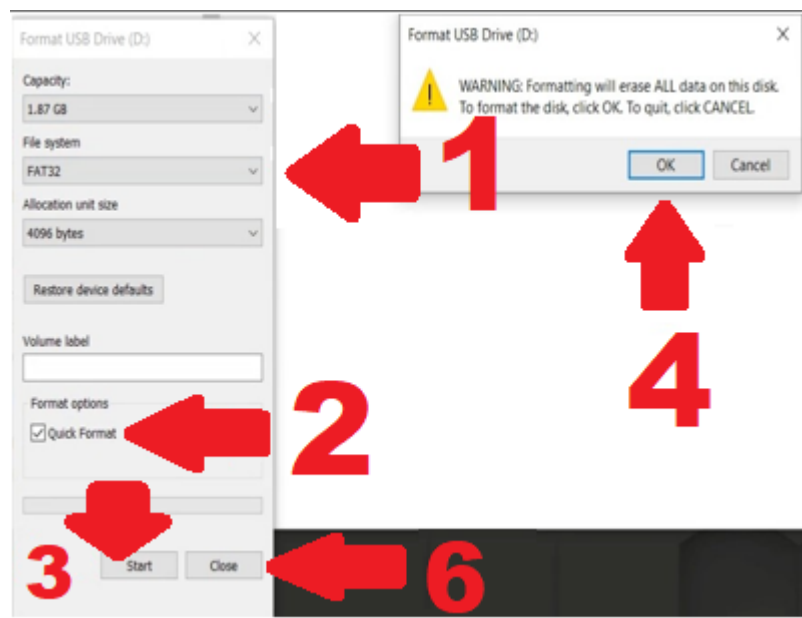
2- By clicking the right mouse button, a menu of options appears. Select the FORMAT menu



# Step 3

In the FORMAT menu

1. Make sure FAT32 has been selected from the drop-down menu
2. Check the box “QUICK FORMAT”
3. Click START
4. Click OK
5. After some time, a window will appear to indicate that everything is complete Click OK
6. To exit the FORMAT menu, click on CLOSE



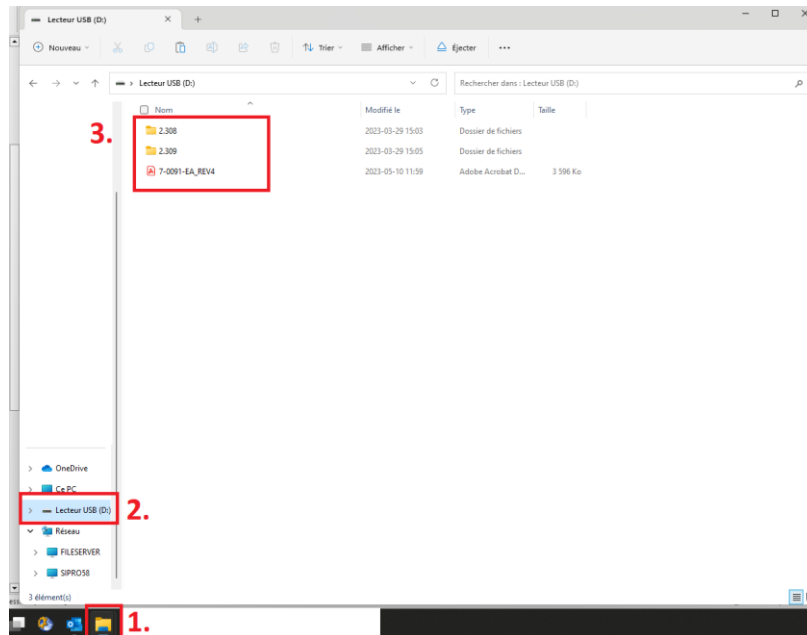
# Step 4

Put the USB in the port of your PC

1-Click on the FILE EXPLORER icon

2- Select the USB Drive




3- Inside you will find all the files for both versions, you will need to choose according to the one present in your oven









The version will be updated to :

- A) If the version is  $>2,8$  or the thermocouples are connected into the PLC1 then the version 2,308 is the latest compatible
- B) If the version is 2,9 or great or you've found the thermocouple on the PLC2 then 2,309 will be the latest compatible version




You may get the latest versions on our website  
<https://hotrocksoven.com/downloads/>











1.  2.308  
 2.309  
 7-0091-EA\_REV4

2.  HMI USB V2.308  
 PLC SD V2.308  
 2.308

3.  HMI USB V2.308  
  PLC SD V2.308  
 2.308

4.  sys  
 usr  
 script

5.   HMI USB V2.308  
 PLC SD V2.308  
 2.308

6.  FDATA  
 PUBLIC  
 SITEMANAGER  
 AGP.SYS  
 BSP.OSC  
 LDML.SYS  
 MAIN.SYS  
 SPLASH  
 STUP.SYS  
 VERSION.SYS

## Step 5

**Example.: 2,308 is the version needed**

1. Move all the files in the USB onto your computer (Unless they were downloaded from our website)

1. Double click on the version needed

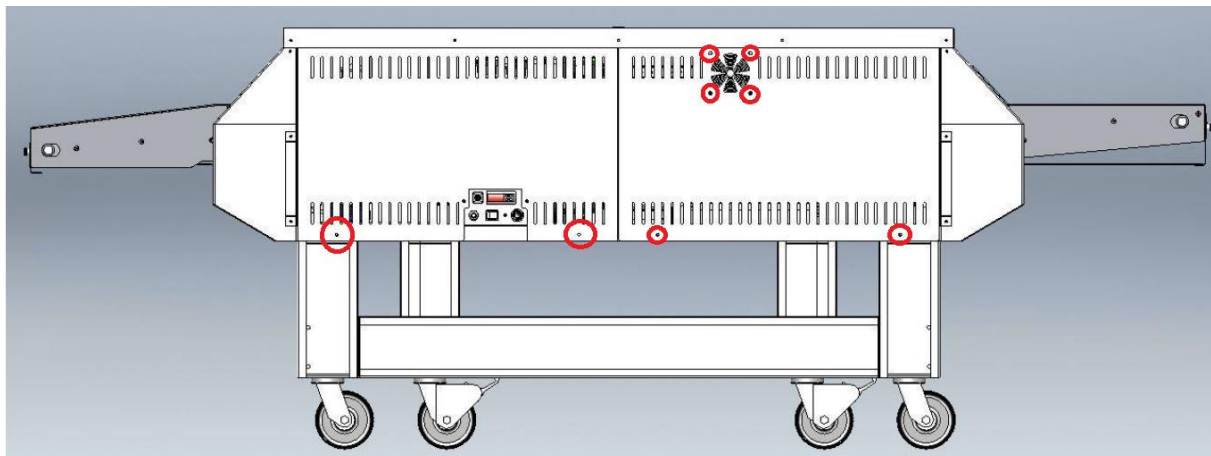
2. Connect the SD card onto your PC and double click on the PLC SD V2.308 folder

3. Open the SD card directory in your PC and transfer the files as displayed. (Make sure that they are the only files inside the SD card)

4. Go back to the 2 folders and double click on the HMI USB V2.308

5. Open the directory of the USB and transfer the files as displayed. (Make sure that they are the only files inside the USB stick)

You are now ready to update the unit and replace the PLC



## Step 6

Unplug the electrical connection.  
Make sure that the oven is not  
powered.

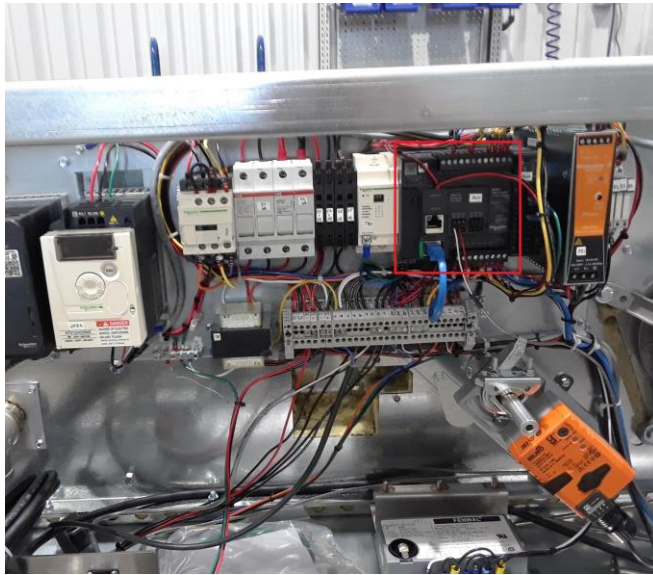
This is for your safety.

Take off the side panels.

You will be able to do so after moving  
the oven off the wall.

You will need to remove the screws  
holding it in place (phillips head)

When taking off the side panel, be  
careful about the fan connected to  
one of them.



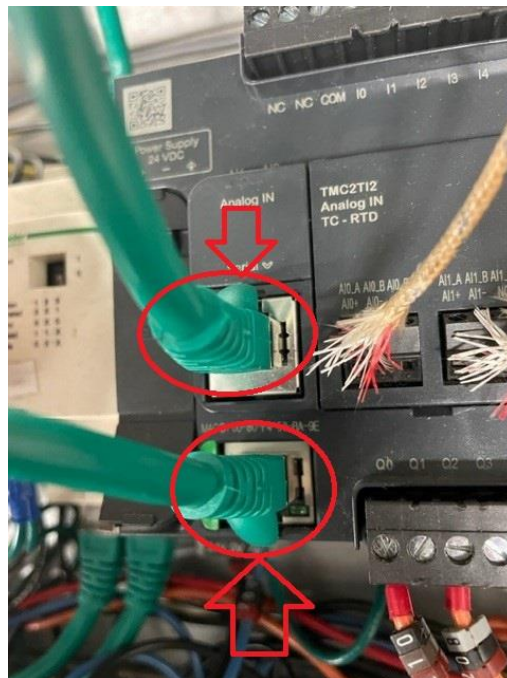
# Step 7

Find the PLC in the unit

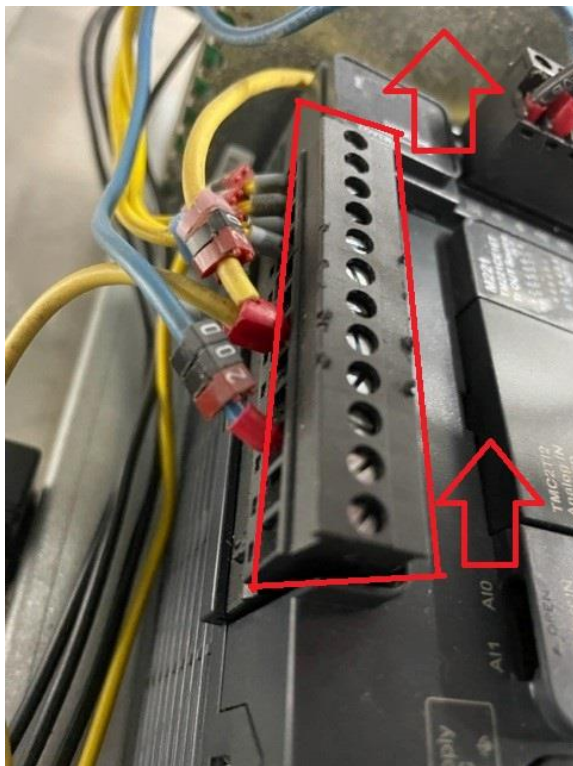
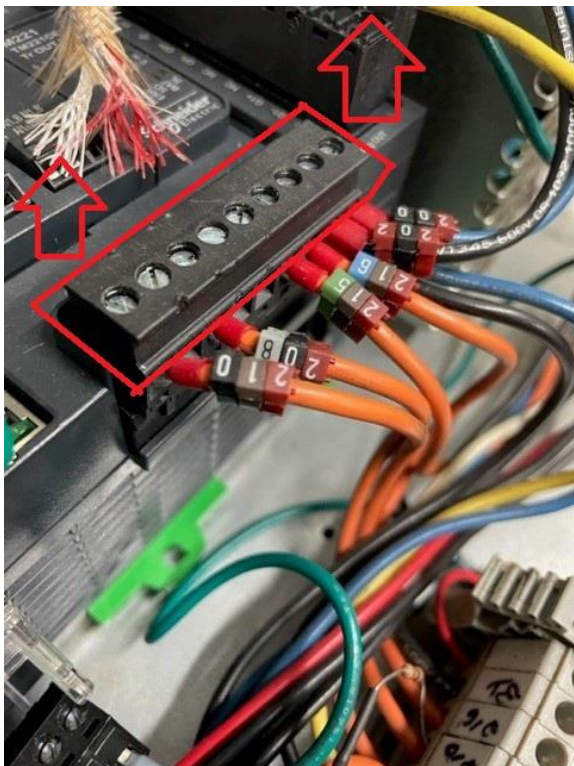
It will be necessary to remove it from the rail.

1) Start by disconnecting the Ethernet cables

1)



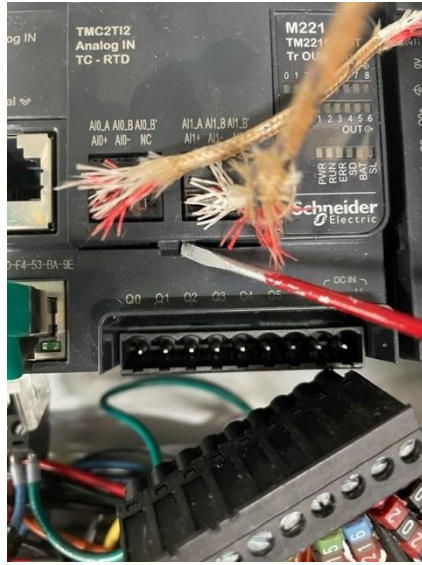
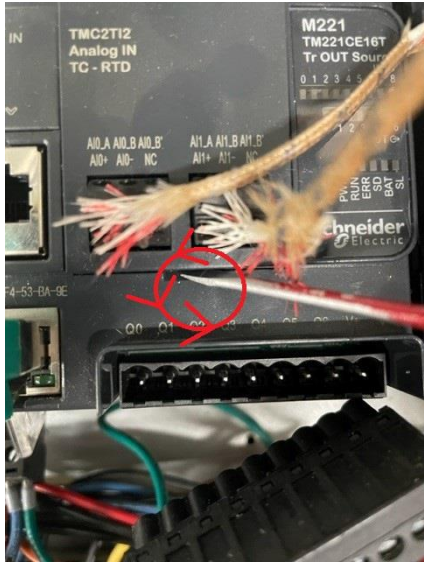
2)



## Step 8

2) Then take off the wire strips  
To do so you may wiggle them as  
you pull upwards

3)



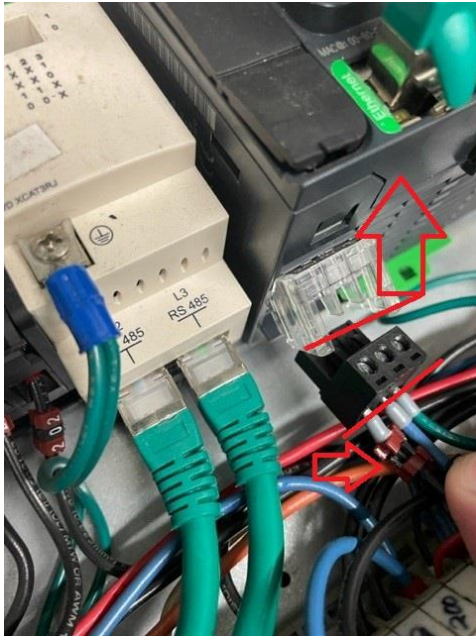
## Step 9

3) Take off the temperature card (if there is one, it will depend on the version of the unit, otherwise skip to step 4)

The best way to do so is by prying the card off using a flathead screwdriver as displayed on the pictures (on both the top and bottom portion)

It will then be removable by simply pulling

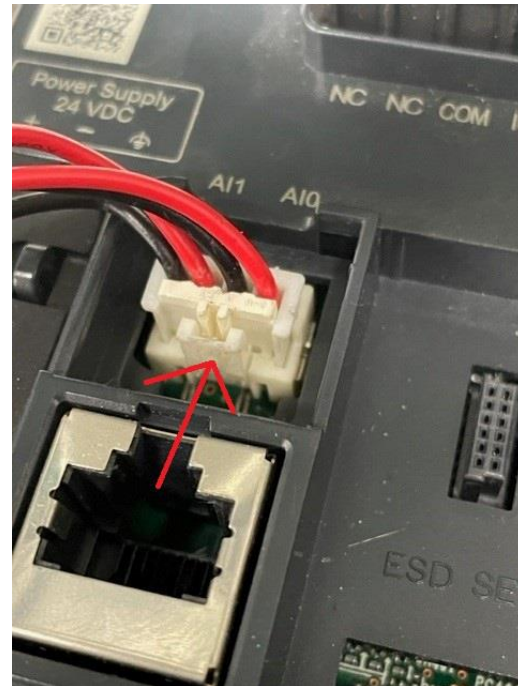
4)



## Step 10

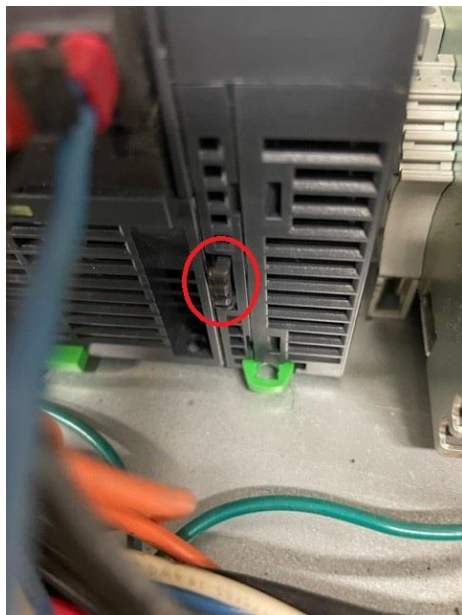
4) Flip the plastic cover upwards and pull the power connector out

5)



5) Pry the cover off and remove the analog connector

6)



## Step 11

6) Disconnect the PLC external module by pushing the clip underneath upwards. Then simply widen a gap between the PLC and external.

7)



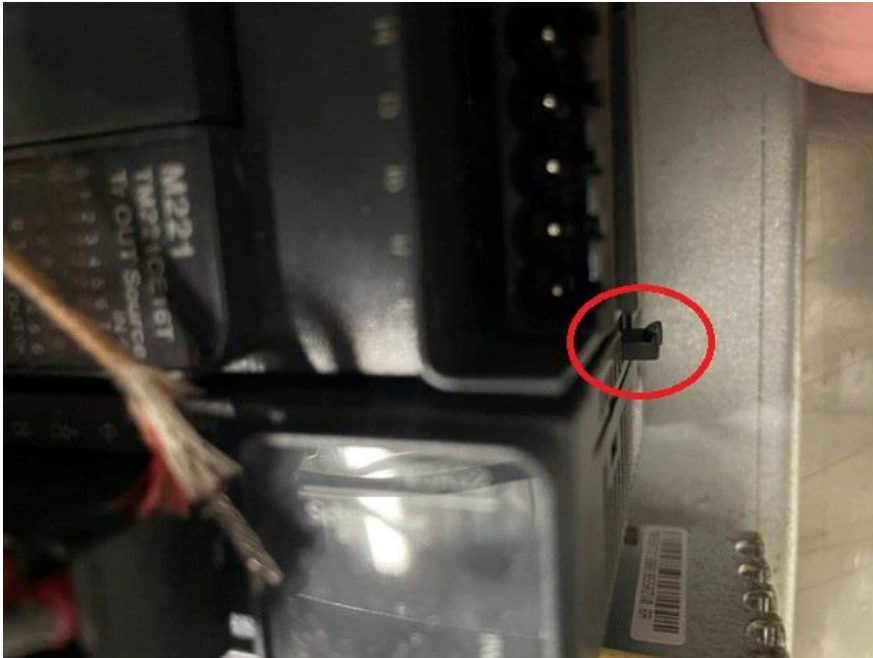
7) Pull the clip down to unlock the PLC from the rail

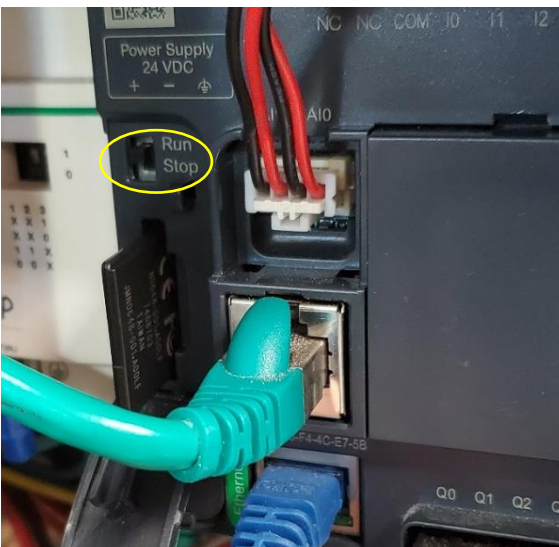
# Step 12

You may now remove the PLC and replace it for the new one

Perform step 11 to step 7 backwards in order to reconnect everything back in place

Note that for the step 11 #6 A the pin was pushed and is now located on top

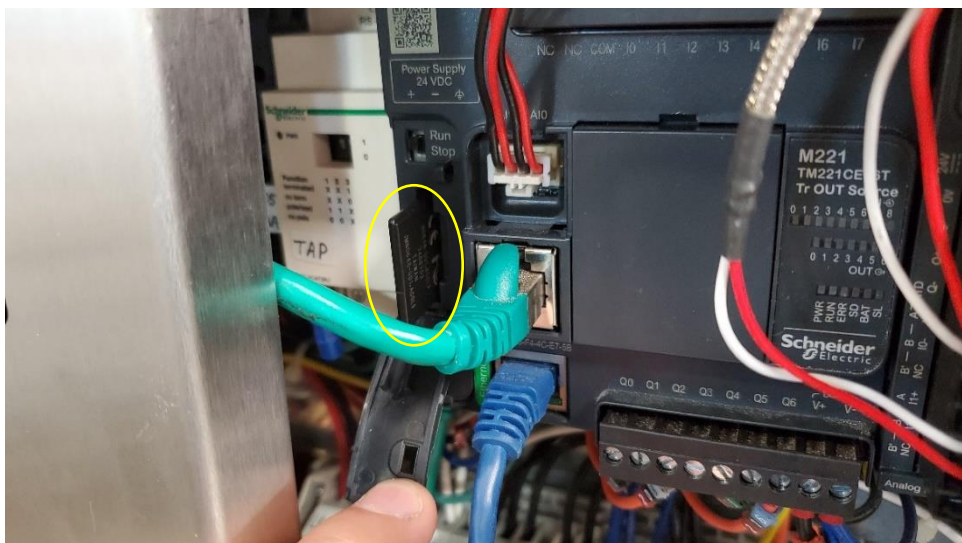




## Step 13

Now that all the connections are back on we will need to update the PLC

- Set the PLC switch to the “STOP” position.
- Insert the SD card into the PLC SD Card slot.



# Step 14

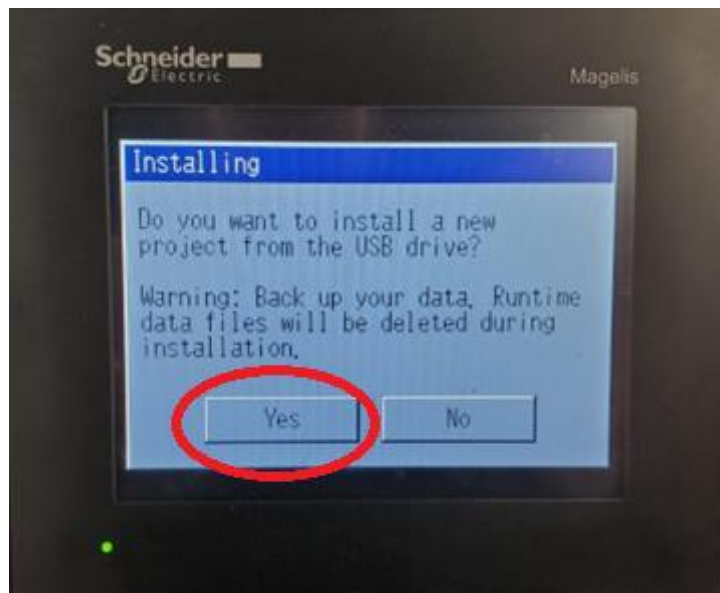
- Turn on the main electrical switch on the unit.
- Wait 5 minutes until the program is fully transferred. (The SD light will stop flashing when the program has finished loading.)
- Turn off the main electrical switch on the unit.
- Remove the SD card from the PLC (push to release)
- Turn on the main electrical switch on the unit and wait until the HMI is fully booted.
- Set the PLC switch to the "RUN" position

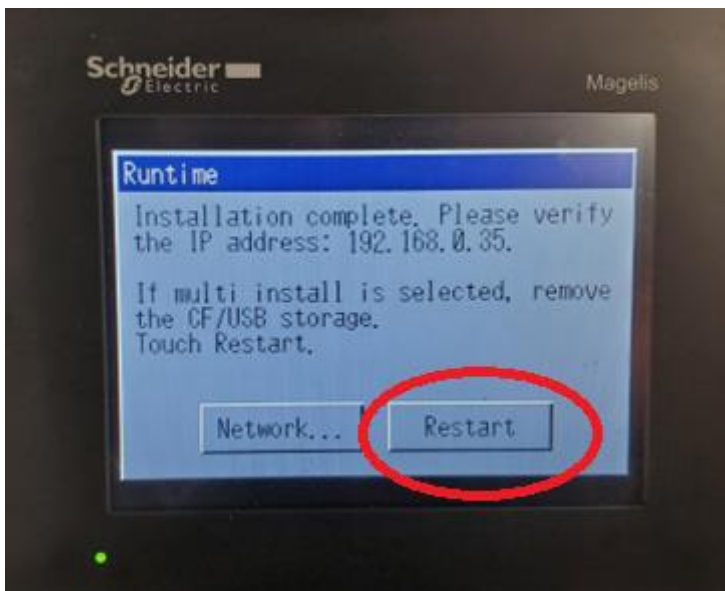
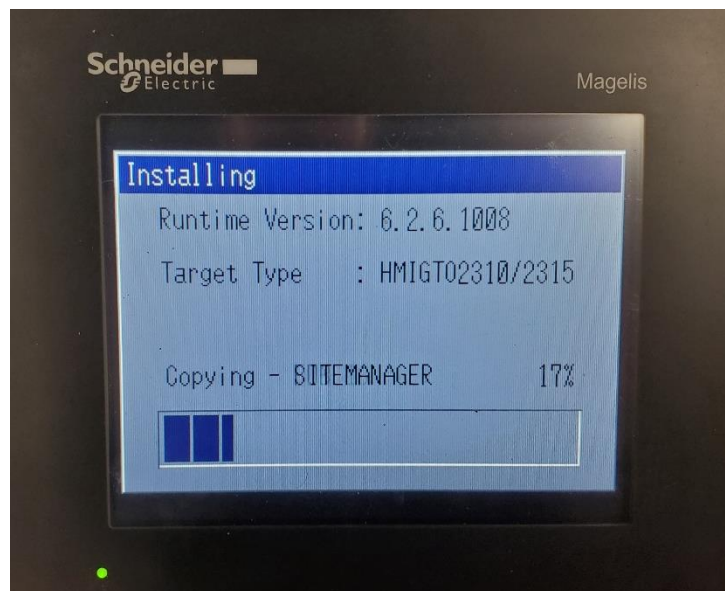




# Step 15

- Turn off the main electrical switch on the unit once more.
- Insert the USB thumb drive into the USB slot on the HMI and put power ON.
- Accept the USB transfer on the HMI screen.





## Step 16

- Wait until the program is fully transferred and the screen is booted into the new version
- Remove the USB thumb drive from the USB slot on the HMI and press restart.

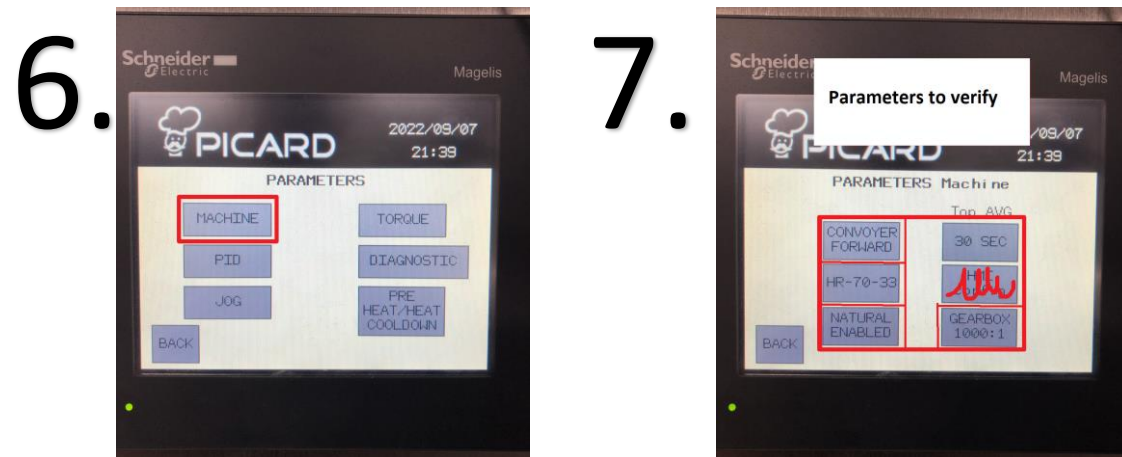
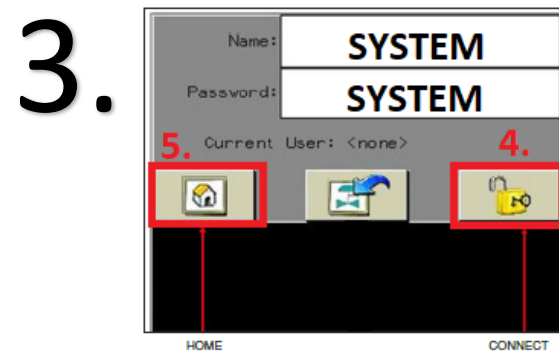
# Step 17

- Press the **setting** button then the **about** button and make sure the expected version is installed.



Lastly you will need to set the parameters to the unit

To do so you will have to log into the SYSTEM user



# Step 18

1. Select the wrench
2. Press on "Param"
3. Login as SYSTEM user, (Name: SYSTEM, password : SYSTEM).
4. Press on the Padlock
5. Then press on the house icon
6. Repeat step 1&2 then select "Machine"
7. Make sure the setting match the unit information :

-Conveyor direction (forward being left to right looking at the front door or Reverse, the opposite)

-HR-XX-XX (Matching the model number)

-XXXXX Enabled (Gas type, natural or propane)

-Gearbox XXXX:1 (Most units are 1000:1, timing the conveyor using the main page setting is the best way to confirm)