Procedure n°1:

Assembling the heating element in the valve pit

Froilabo

Precision for life

I) Required tools and preconditions

This procedure is performed in order to install a heating element in order to avoid the ice formation inside the pressure release valve.

To perform this procedure, you are going to need:

- ✓ A power drill and ø3 mm, ø5mm and ø7mm drills
- ✓ Sanitary silicone (1 tube)
- ✓ Wire stripper
- ✓ Crimping tool
- ✓ Cutting pliers
- ✓ 4mm BTR key
- ✓ Measure tape / Engineer's square (recommended)
- ✓ An Ohmmeter
- ✓ Colson collars (high temperature resistant)
- ✓ Alcohol and paper towel

It is recommended to **shut down main power and 24V** at least **6 hours** before the operation. The device must be completely thawed to perform this procedure.

The next step must be realized if the copper insert is delivered disassembled. In any cases, always **check its integrity**.

- Clean the insert using alcohol. Then dry it.
- Apply some silicone on the copper insert shouldering.
- Insert the ring on the copper tube (shouldering of the insert against the bowl of the washer)
- Let it dry 24h before mounting.

TIPS: The washer helps centering the copper insert inside the valve pit.

II) Preparation and drilling

- Remove the pressure relief valve and the two foams inside the well pit. Clean the inside of the well pit.

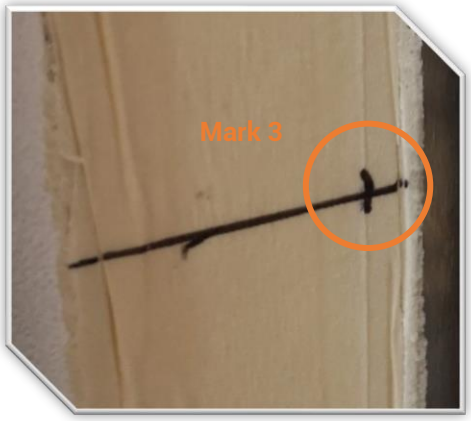
TIPS: Remove the middle wickets during the procedure and hold the door with a holder to prevent any damages on the freezer and work more easily.

- Unclip the left and bottom part of the door seal.

- Clean all silicone leftover on the door seal.
- Mark (mark 1) the axis of the valve pit (from the top of the filter cartridge).

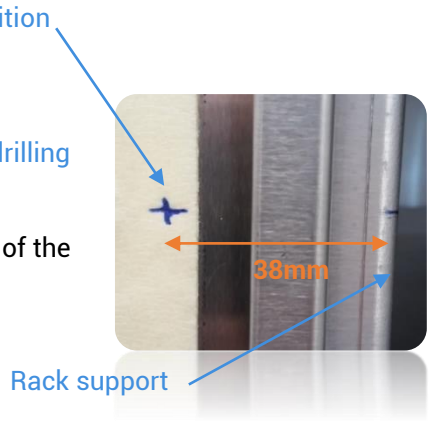
Model	Height of the valve pit
690L	720mm
515L	550mm
340L	360mm

- Place the engineer's square along the rack support of the freezer.
- Mark horizontally (mark 2) the location of the valve pit along the **mark 1**.



- Mark (mark 3) the location of the drilling position along the **mark 2**.

The drilling position is located at 38mm of the edge of the inner rack support.



- Drill the foam and the valve pit horizontally using a ø3mm drill. Enlarge gradually the opening using the ø5mm and ø7mm drills.

All the elements are tested before sending, however to validate their integrity, always test your heating element before installing it inside the valve pit:

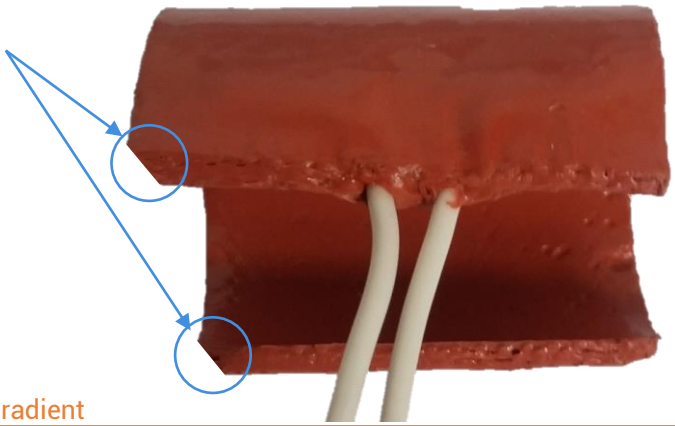
1 – Place the ohmmeter + side on one cable and the – side on the other.
2 – Check that the resistance of the heating element is around 115-140 Ω

III) Installing the heating element

Once the freezer is drilled, the heating element needs to be placed inside the valve pit.

In order to do that, position the heating element in the valve pit and pass the cable inside the previously realized hole:

External side of the freezer marked by 2 nicks.



Inner side of the freezer.

Beware of the fitting direction in the valve pit

Presence of a heating gradient

- Twist the wires to facilitate their insertion into the previously made hole.
- Carefully pass all the wires through the hole.

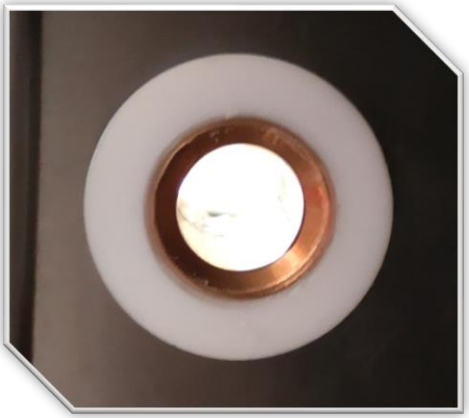
- By pinching lightly with one hand and gently pulling the wires with the other, insert the heating element into the valve pit.
- Pull the cable to remove the remaining slack.

- Silicone the driling hole.
- Some mastic can be applied above the silicone.

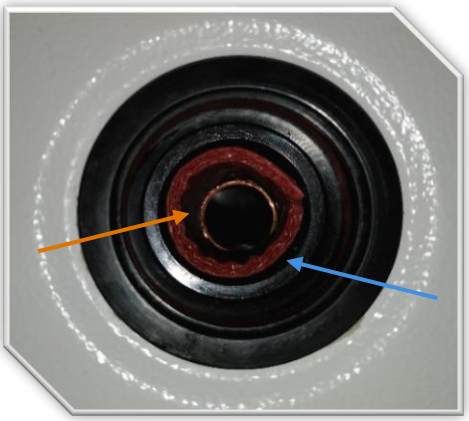
Your freezer is now ready to for the installation of the copper insert.

IV) Setting up the copper insert

● Apply silicone on the copper tube.



● Place the insert inside the valve pit. Remove the excess of silicone on the inner tank.



● Gently apply silicone in all the empty spaces between the copper tube et heating element inside the valve pit.

● Remove the excess silicone on the heating element and the copper tube.

Your freezer is now ready for connection of the heating element on the power supply.

V) Connecting the heating element

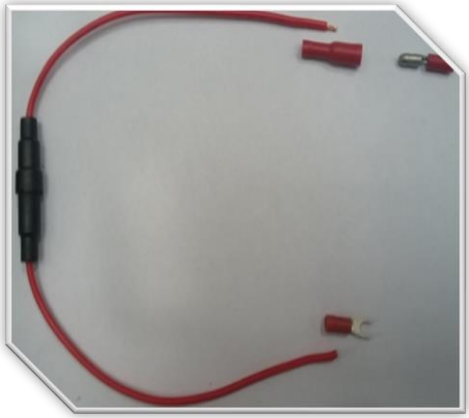
● Disassemble the right bottom part of the frame using a 4mm BTR key.

TIPS : Protect the card to avoid any damage during the procedure.

● Spot the wire junction point between the box and the frame. It is located in the lower right corner of the freezer.

● Beware, silicone presence in the junction point makes the heating cord hard to extract without any damages. It might be necessary to replace it following the ***PR-BM-002*** procedure.

● Faire passer les fils de la soupape chauffant à l'intérieur du joint de porte jusqu'au point de passage.

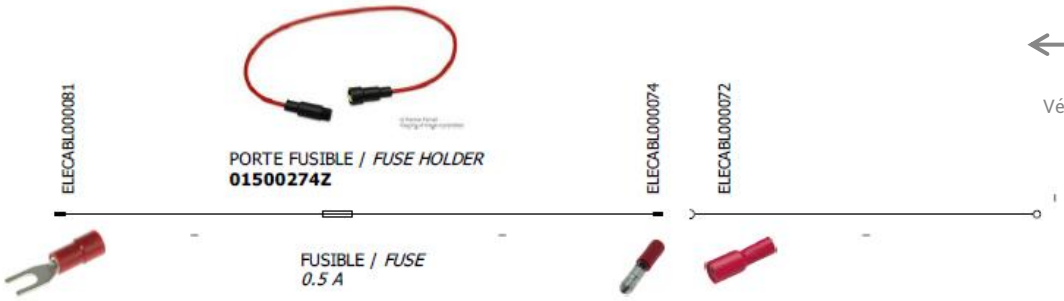


● Strip 2mm of the heating element wires and crimp a socket sleeve ELECABL*72 and a fork lug ELECABL*81indifferently on each of the wires.

● Set up the fuse ELEPROT*102 in its housing.

● Cut the fuse holder ELEPROT*101 in two equals parts.

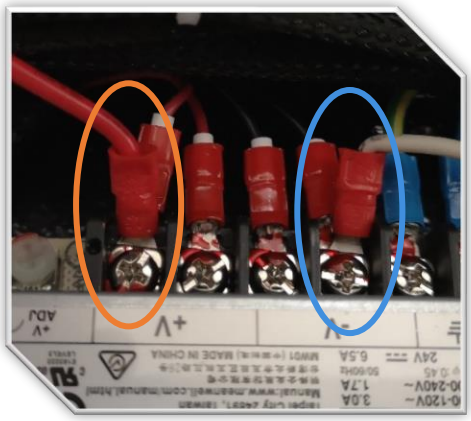
● Strip and crimp the socket sleeve ELECABL*72 and the red fork lug ELECABL*81 at both ends of the fuse holder.



COTE ALIMENTATION CONTINUE
SIDE DC SUPPLY

COTE VALVE CHAUFFANTE
SIDE HEATING VALVE

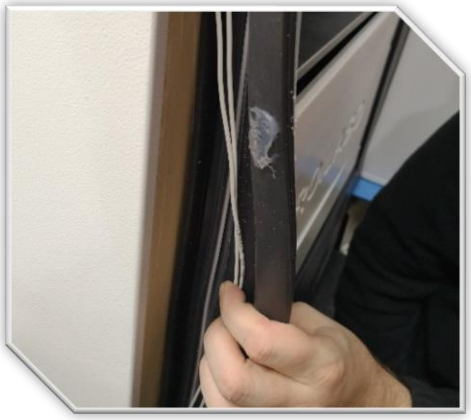
TIPS : Remember to bend the fork lugs for easier insertion and let some slack in the cables.



- Test the heating element before mounting (around 115– 140 Ω)
- Connect each wires of the heating element to the transformer like that:
  - ✓ Fuse holder wire on the « + » terminal
  - ✓ The other on « - » terminal

Wire at both ends of the + and – terminal!

VI) Reassembly the door seal



- Position the heating element wires with the heating cord in the groove of the door seal.

- Silicon junction point and door seal. Remember to siliconize the 4 corners of the chassis before replacing the door seal.

If the ***PR-BM-002*** procedure is also realized, wait until both procedures are performed before to seal the junction point.

- Insert the door seal inside the frame.
- Replace the valve adding the small foam only.
- Stick the « hot surface » label next to the valve.

Wait at least 24 hours that the silicone dries before restarting the freezer.

CAUTION: FAILURE TO FOLLOW INSTRUCTIONS ABOVE CAN DAMAGE YOUR UNIT.

Refer to « User manual » provided with the unit for more information.