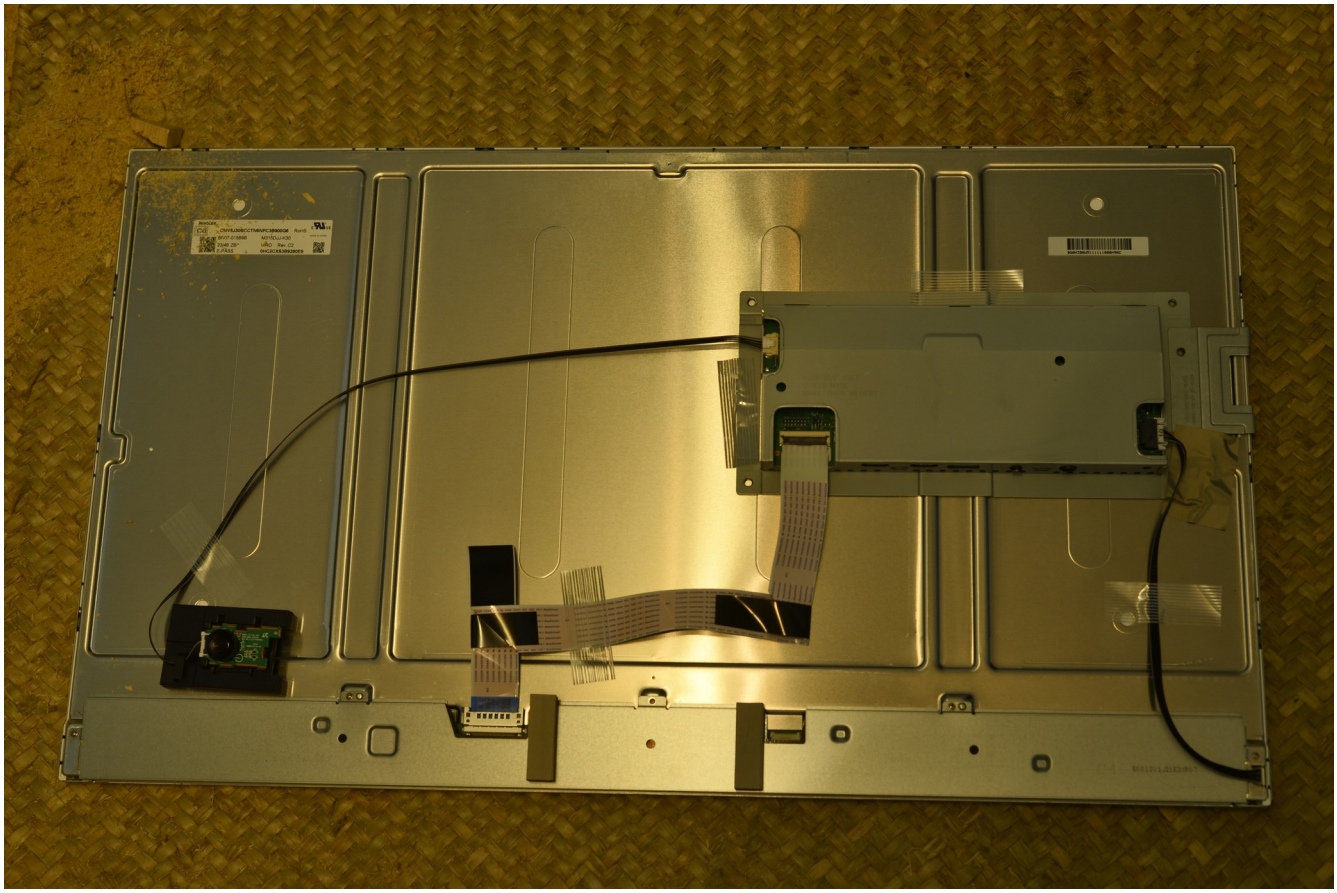
You will need these two tools, it is recommended that you first try with a discarded monitor before making a good one, as there are lots of risk involved and will take you many attempts and practice to know how to successfully do this, there is very little room for error and any minuscule damages are irreparable and permanent, needing to start with a new one. Prepare your workspace in a table or a mat, never on hard surfaces.

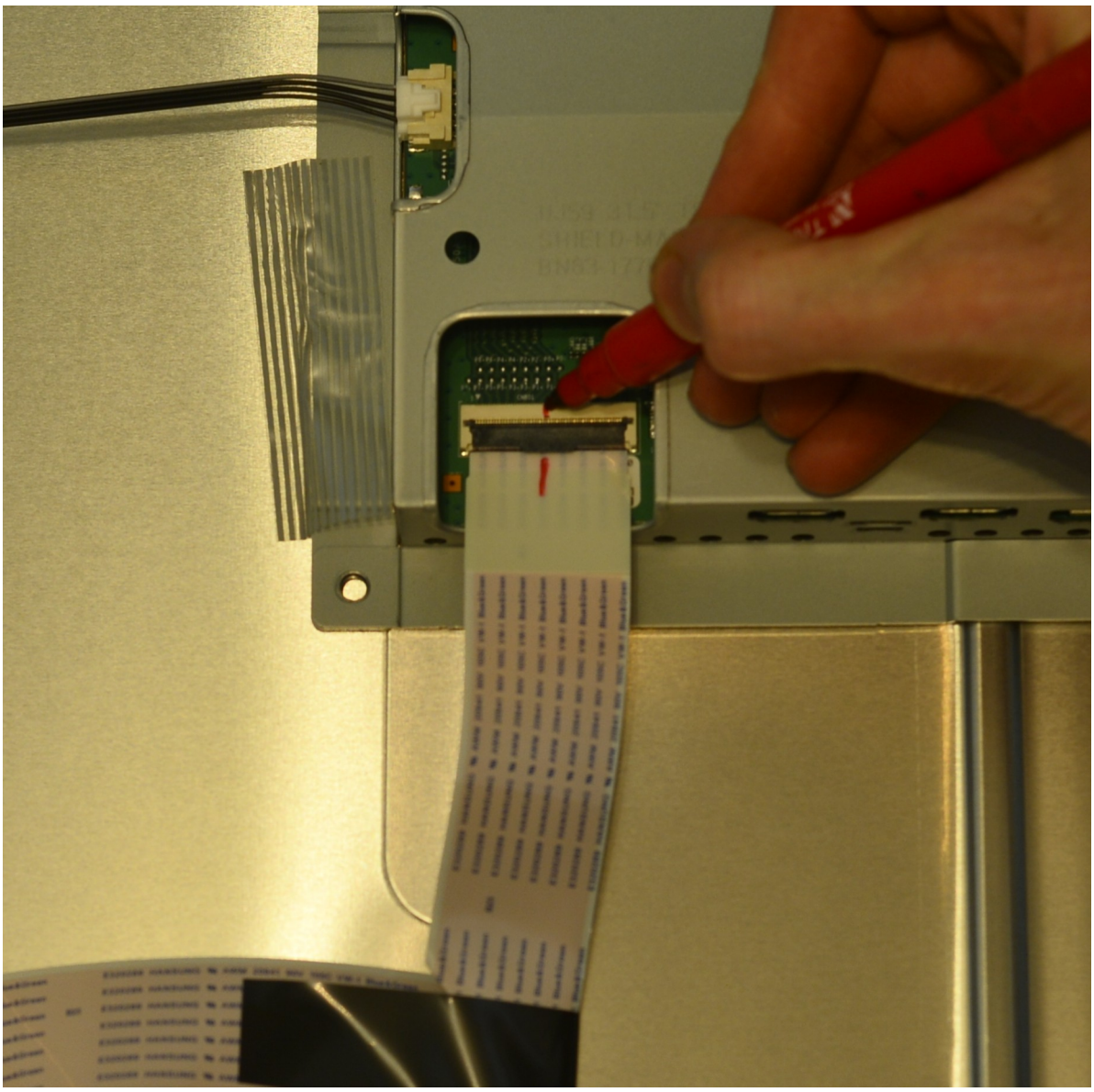
find any screws in the back and unscrew them

then find a suitable entry space in a bottom corner and start to remove the bezel carefully by a twisting action, do not to insert the tool edge too far in or you may permanently damage the components, make your way carefully little by little in one direction until you hear a snap sound and cover or bezel starts coming apart.

when all sides are open remove the back cover



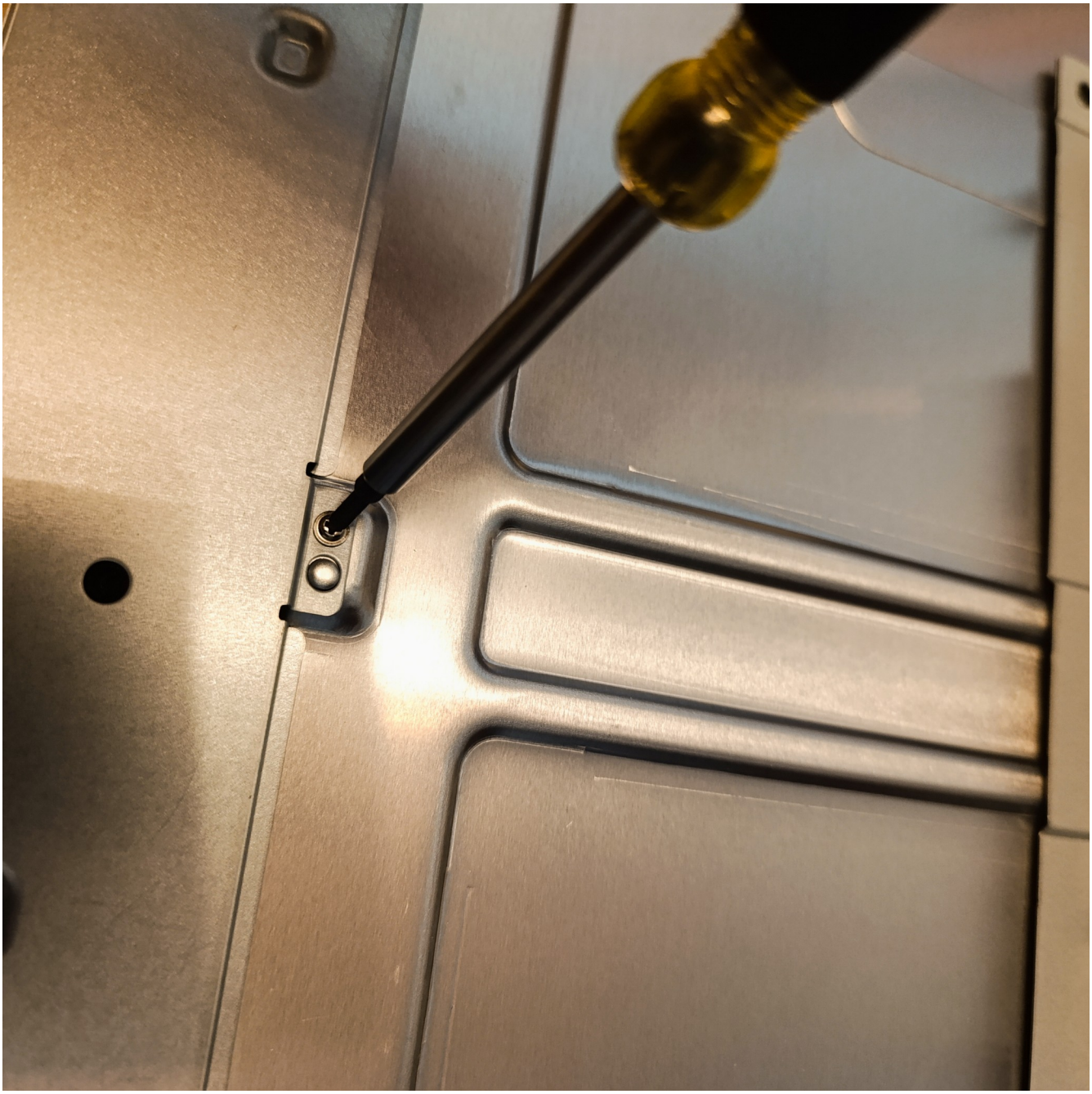
you will see something like this



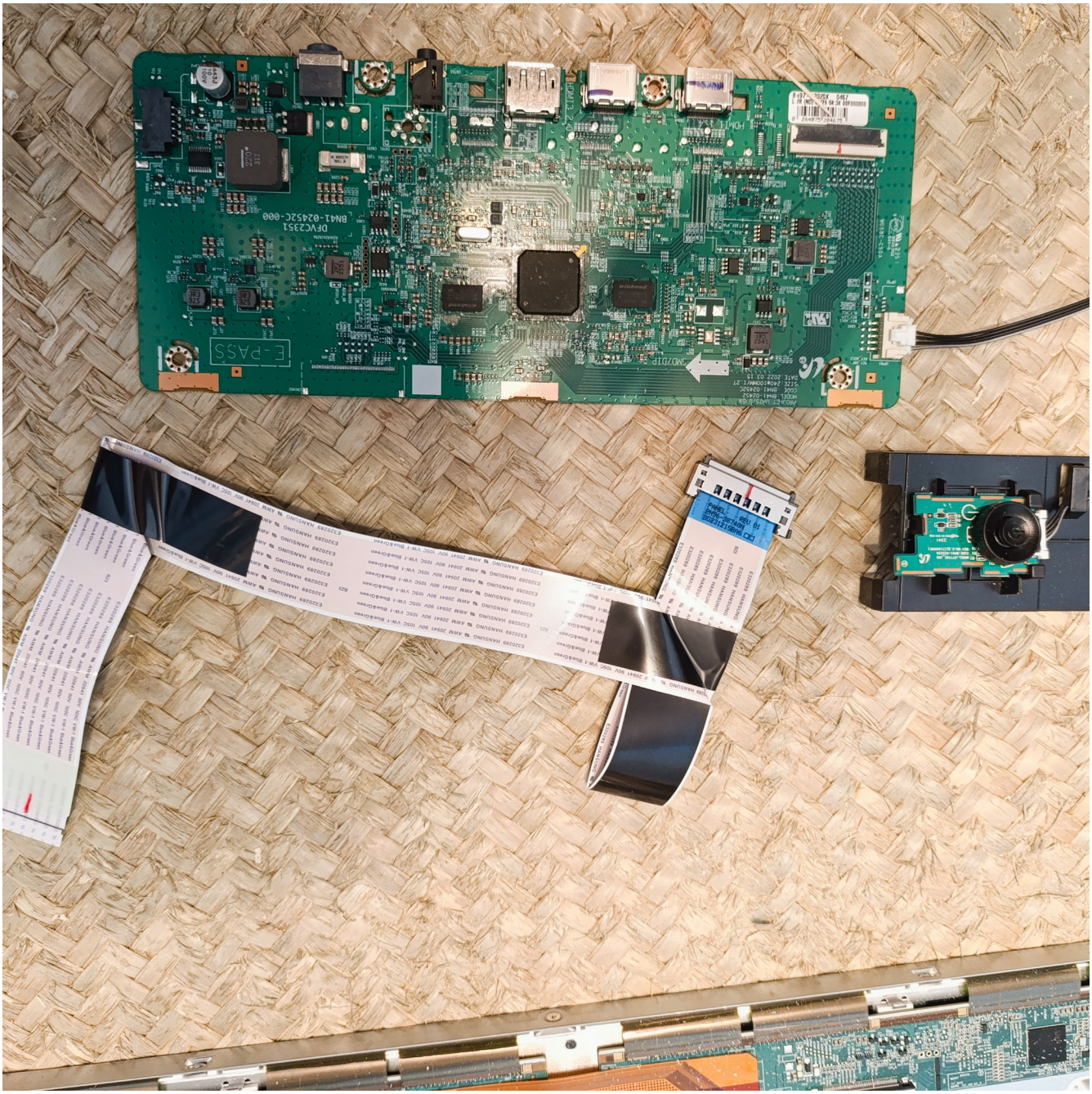
find this connector and with a marker make a line on both ends to register the position which we will need for later

Remove one and then the other, one has to be pressed sideways to get it out, the other has a latch, do it carefully and slowly, if you are not careful you will damage a microscopic pin and the monitor will not be usable

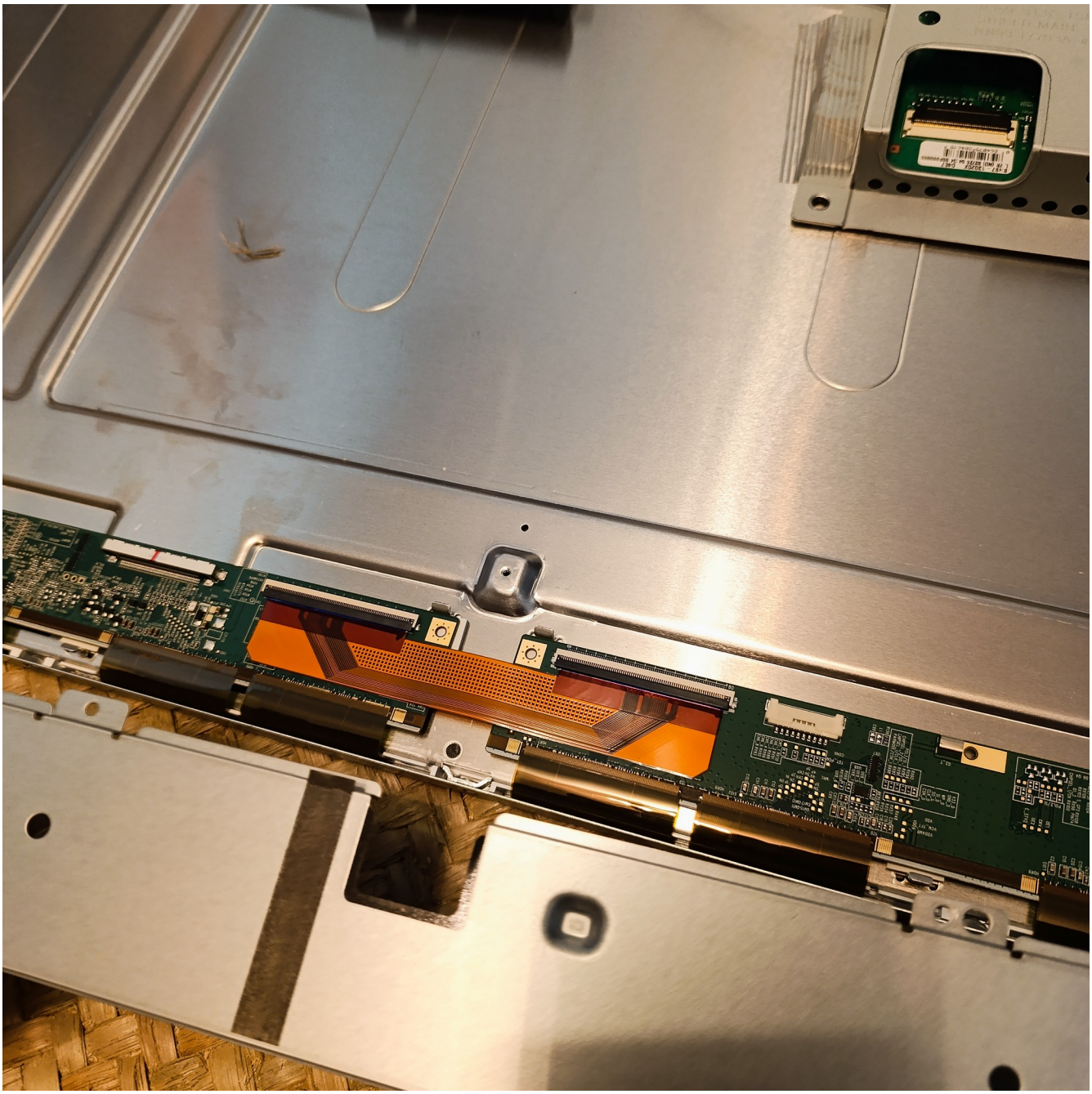
find all other connectors and unplug them, and remove all tape holding the cables as well



unscrew any other screws you may find in the bottom, and remove the cover.



and you will be able to remove these components: an electronic board with the ports, a ribbon cable and maybe a menu button, and if you have an internal power supply that as well.



be especially careful with these bottom ribbon cables, they are the most fragile thing, one misguided or not conscious movement and the monitor is irreversibly ruined, handle the card attached to the ribbon as if touching the most delicate flower petals, and place some masking tape to temporarily hold it in place while you remove the rest of things to follow

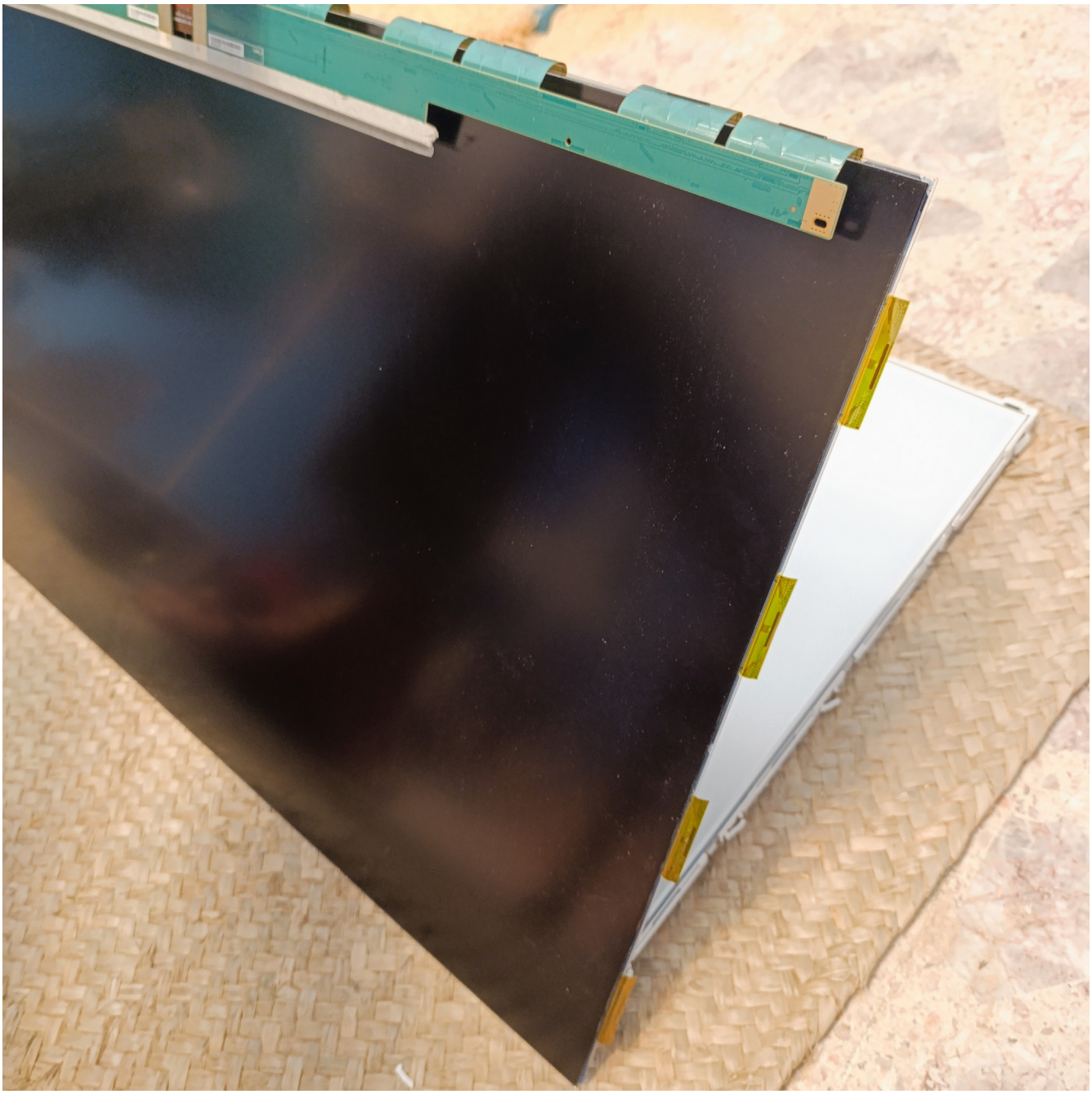
In some monitors there is no need to remove much more and the panel will just come out when placed faced down starting from the bottom, there may be a little glue holding the ribbon and card in place, but that's it. But be especially careful with the panel edges, as there may be some sticky tape holding it in place, if it does not come out effortlessly find the tape and carefully remove it, always watch the edges, if they are chipped the panel is gone.

in case your panel does not come out effortlessly when placed faced down, carefully turn the panel to the side and find any side screws and unscrew them

you may also find these locks holding a frame in place, they are easy to unlatch, and at the very last do the bottom side with the ribbon connectors with the utmost attention

you should be able to remove the metal or plastic frames effortlessly, if you are feeling that its does not come out easily, do not force anything and see what is keeping it held, there may be another inner bezel, carefully remove this as well

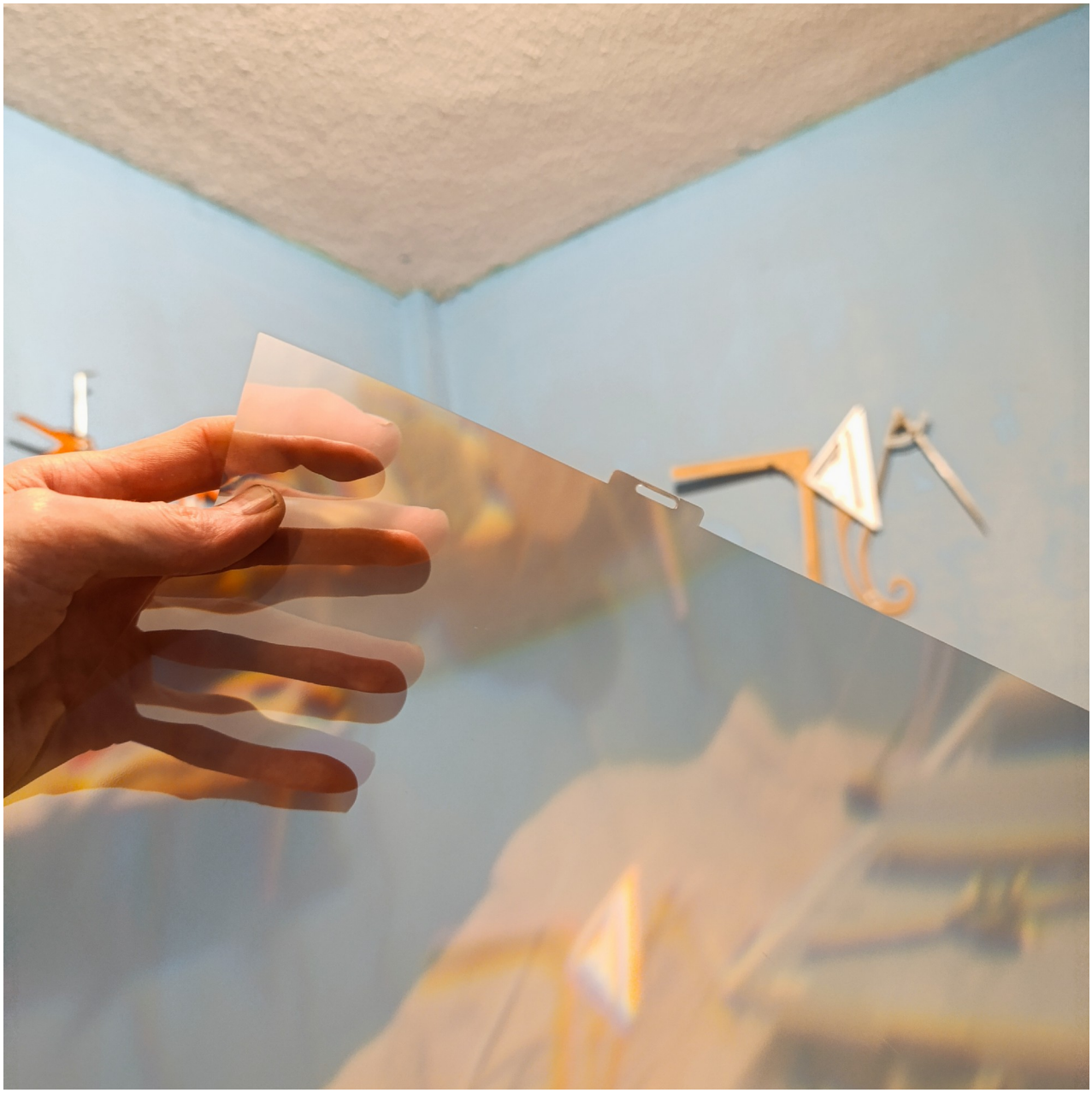
carefully snap out everything and pull apart the two panels, and inside you will find many filters



check that every side is free and loose and remove the tape and start removing the panel from the bottom, but before carefully remove the masking tape holding the ribbon cables and card in place, and now tape it in the front.

place the panel in a clean safe place face down, with utmost attention to the ribbon cables to not touch them too much, make sure there are no screws or anything in the space you will place the panel, and remove the rest of filters

find the matte sheets and save them,



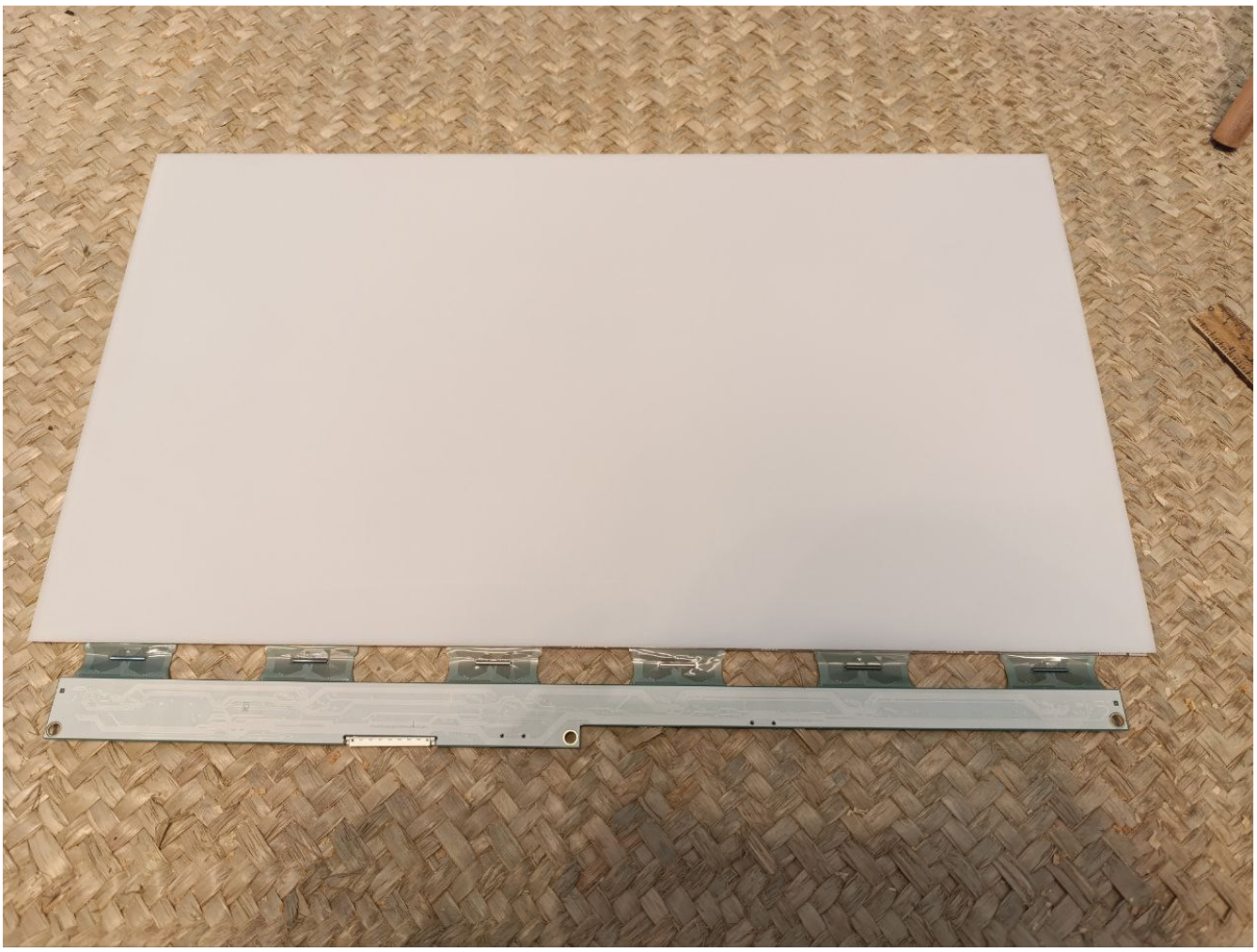
discard the prismatic looking sheets.

and put them directly into the back of the LCD panel, with the matte side facing up

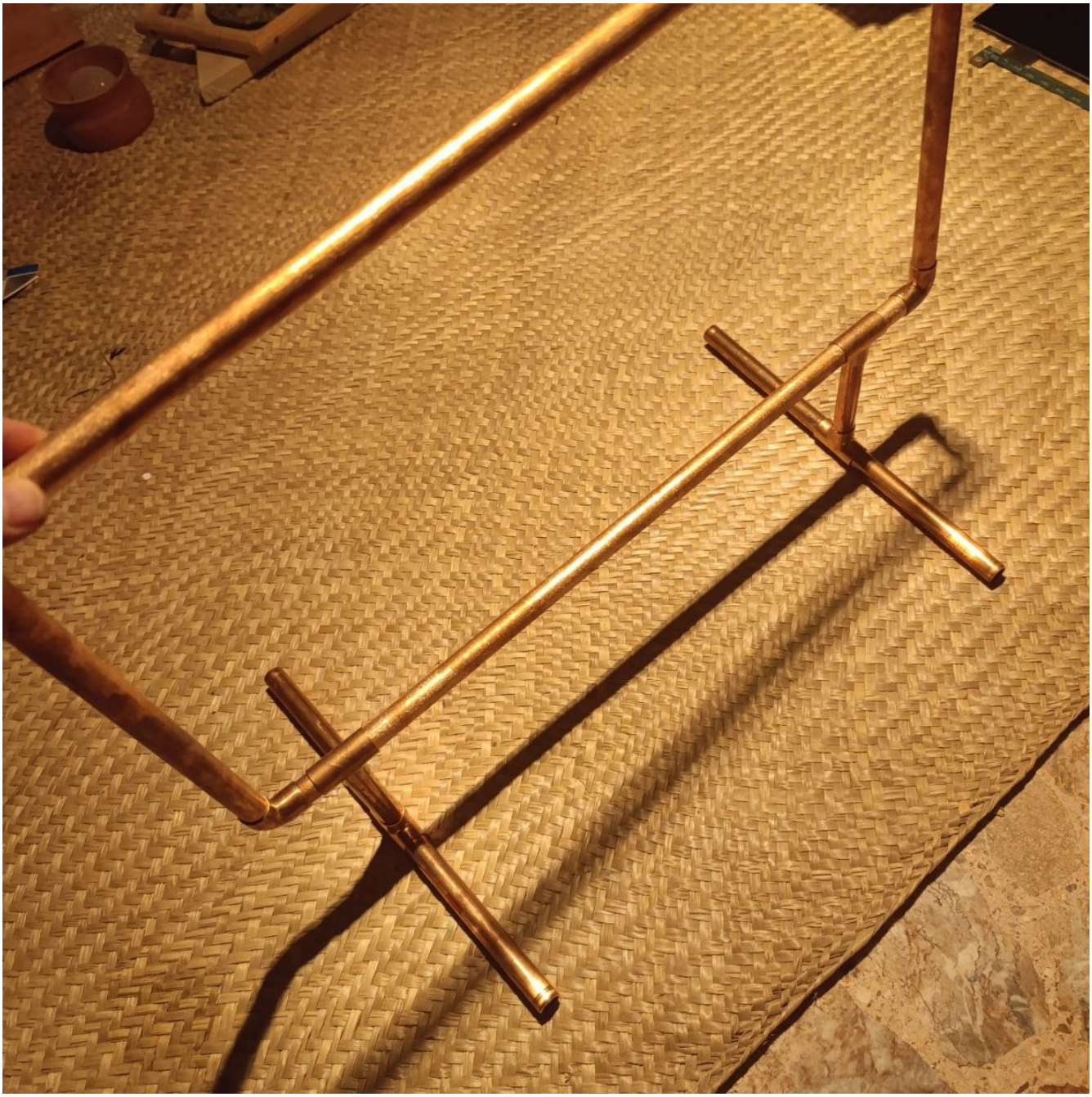
you will also find a hard acrylic sheet, either transparent, milky white, or grated, save this, and discard the last completely white sheet than you cant see through. If you will find a milky white hard acrylic sheet, then these are the best for making incandescent bulb backlit monitors and there is no need for doing anything further with these because are ready.

if you find a hard acrylic transparent sheet, then you will need to make it matte with some 80-100 grit sanding paper, these are the best for making Sun backlit monitors, but not so much for the incandescent bulb backlit. If you find a grated hard acrylic sheet, the you will also need to sand it, both faces but especially the grated side, do it with running water

it should end up looking like this



when you are finished clean the sheet well of any debris and place it in the back of the monitor, after the matte sheets, making sure there is no debris there too, if you find some never blow with your mouth, as it will make it more dirty, nor use any paper tissue as it will scratch it, blow it with pressurized air or a hand fan. This is the end of the disassembly procedure, the next procedure is the mounting of the panel and the components into a frame



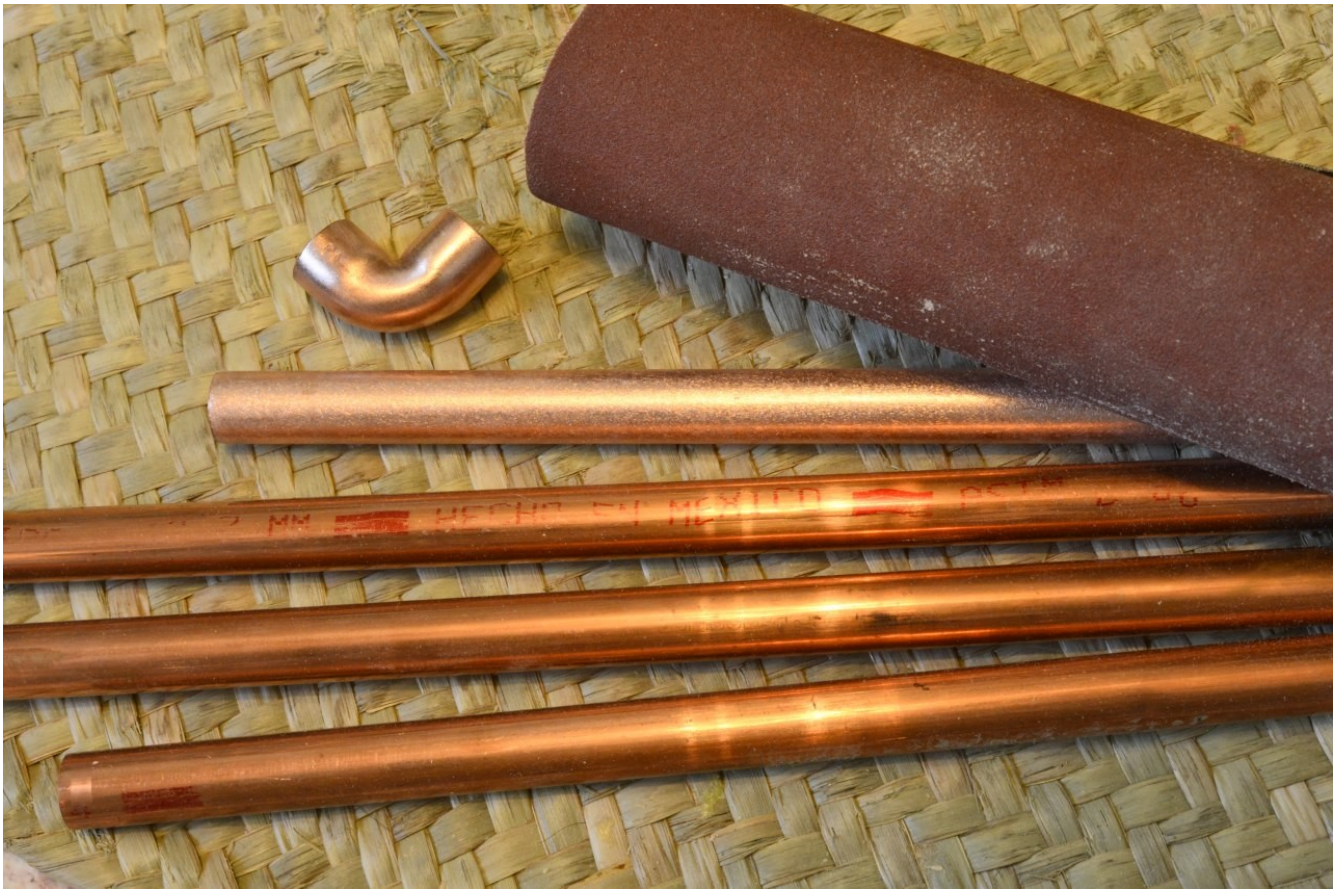
After you have the panel and all its components safely disassembled its now time to mount it in a frame, and transform it from being something very fragile into something durable and hard, there are many solutions and approaches to this step. This is the solution that I have found to be the simplest, with less tools needed and also the more robust, but exact measurements are needed.

You will need these two tools, a ruler and a copper pipe cutter

Start by measuring the panel from one side and then the other, be sure to be real accurate and aligned with an edge, and to the nearest mm, then write down this measurements, be real careful with the ribbon cables and card, always be conscious of where your hands are so you don't accidentally move it too much. Add the length of the total panel perimeter, add these sides together plus add 1 more meter, and get this length in 1/2" diameter copper pipe, four 90° joints, and four "T" joints.

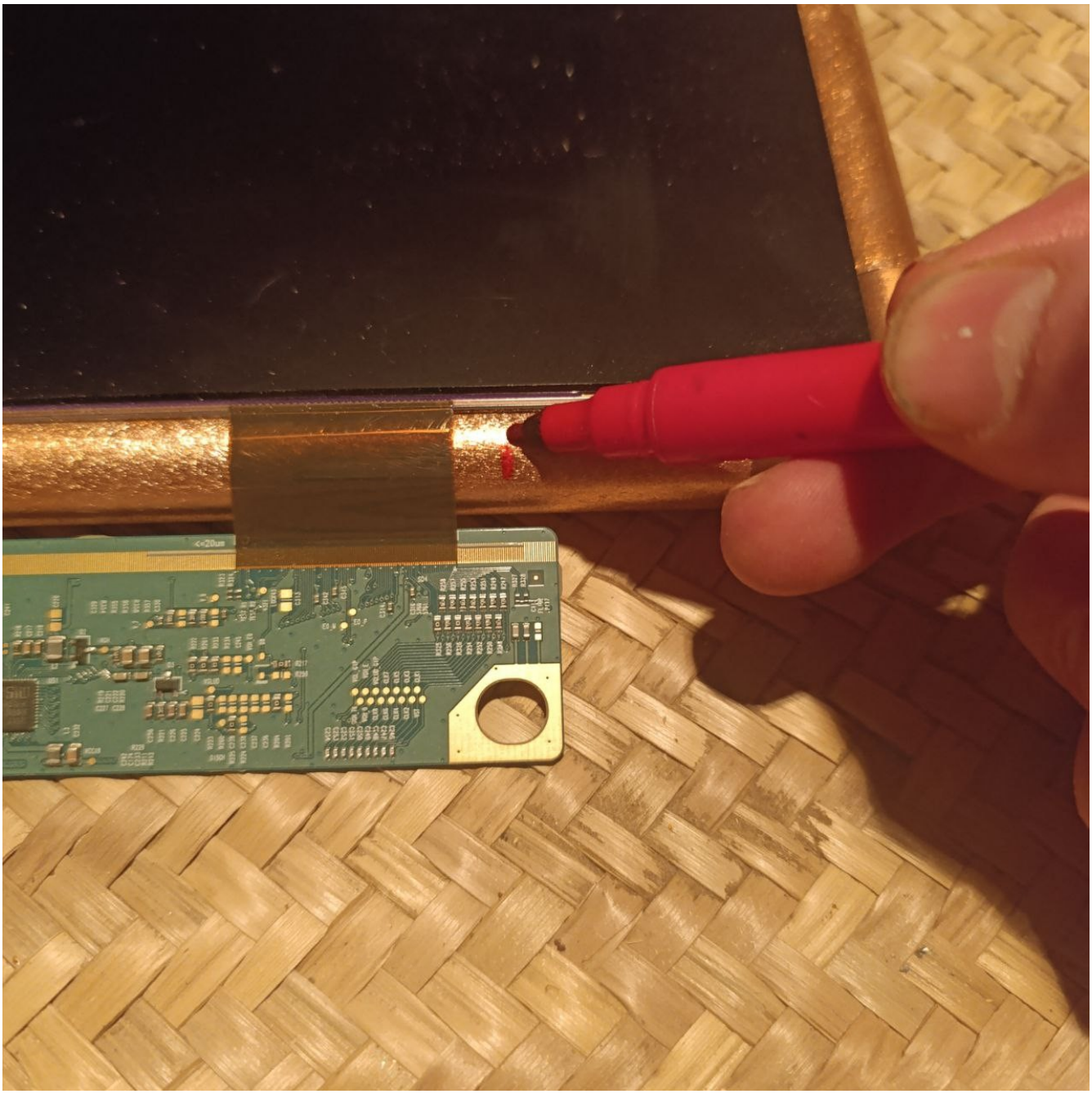
Measure the outside length of the copper pipe, this will not be 1/2" because this is the inside diameter, and outside length will vary depending on the thickness of the tube, in this case the outside length is exactly 1.6cm

Take this outer siamenter measurement and multiply it by .75 then subtract this number by the absolute length of each side of the panel, and cut the copper pipes exactly to each of the measurements with the pipe cutter.



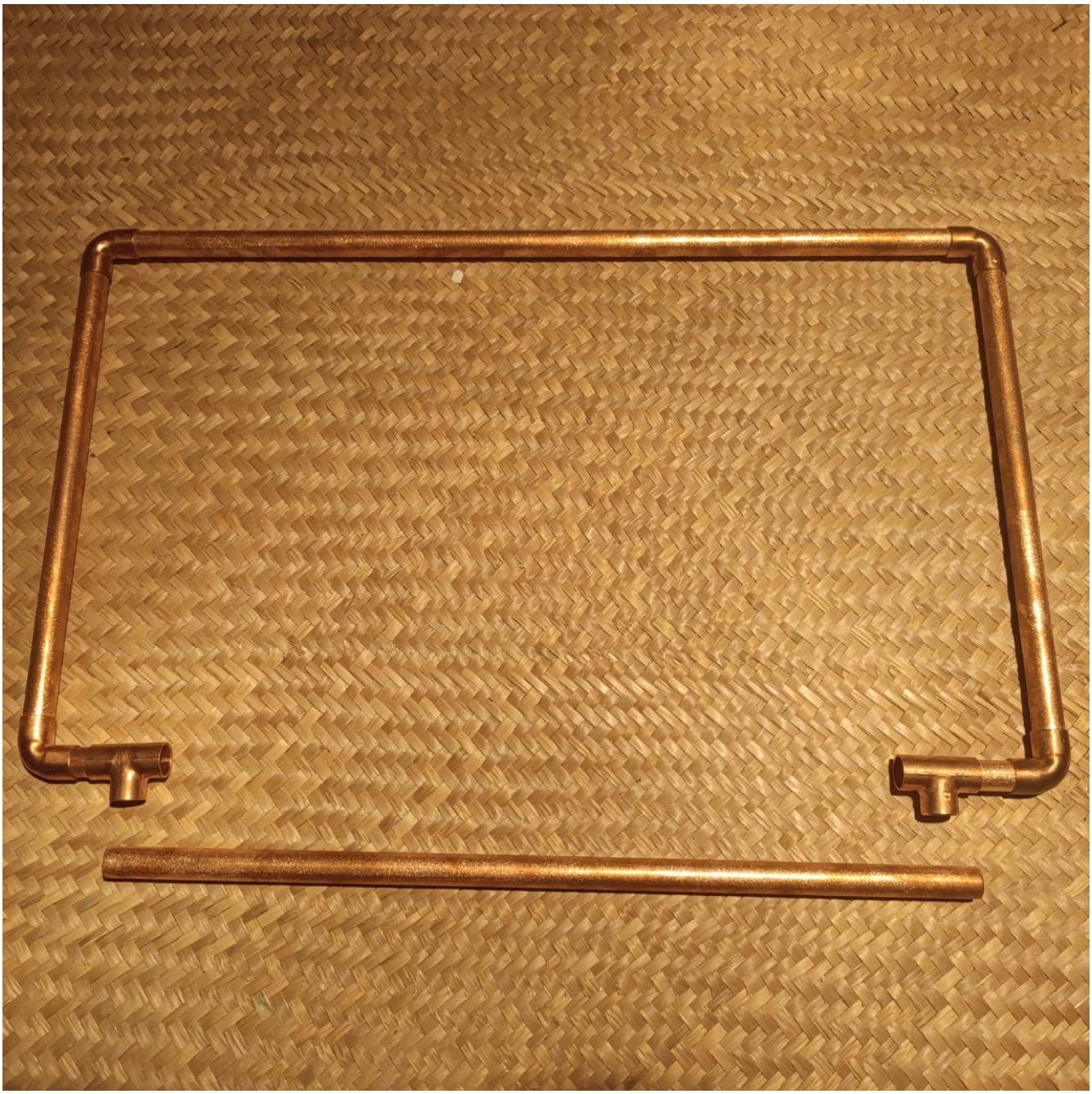
Once you have these cut, you will need to sand them with some 100 grit sand paper so the glue holds tight , both angles and tubes

Whe you are finished you can put these together and you should end up with a frame slightly bigger than the panel, but do not glue anything together yet, if you carefully place the panel in the top, the edges should be flushed with the tube, a little bit more inside than in the middle, this will help prevent shadows



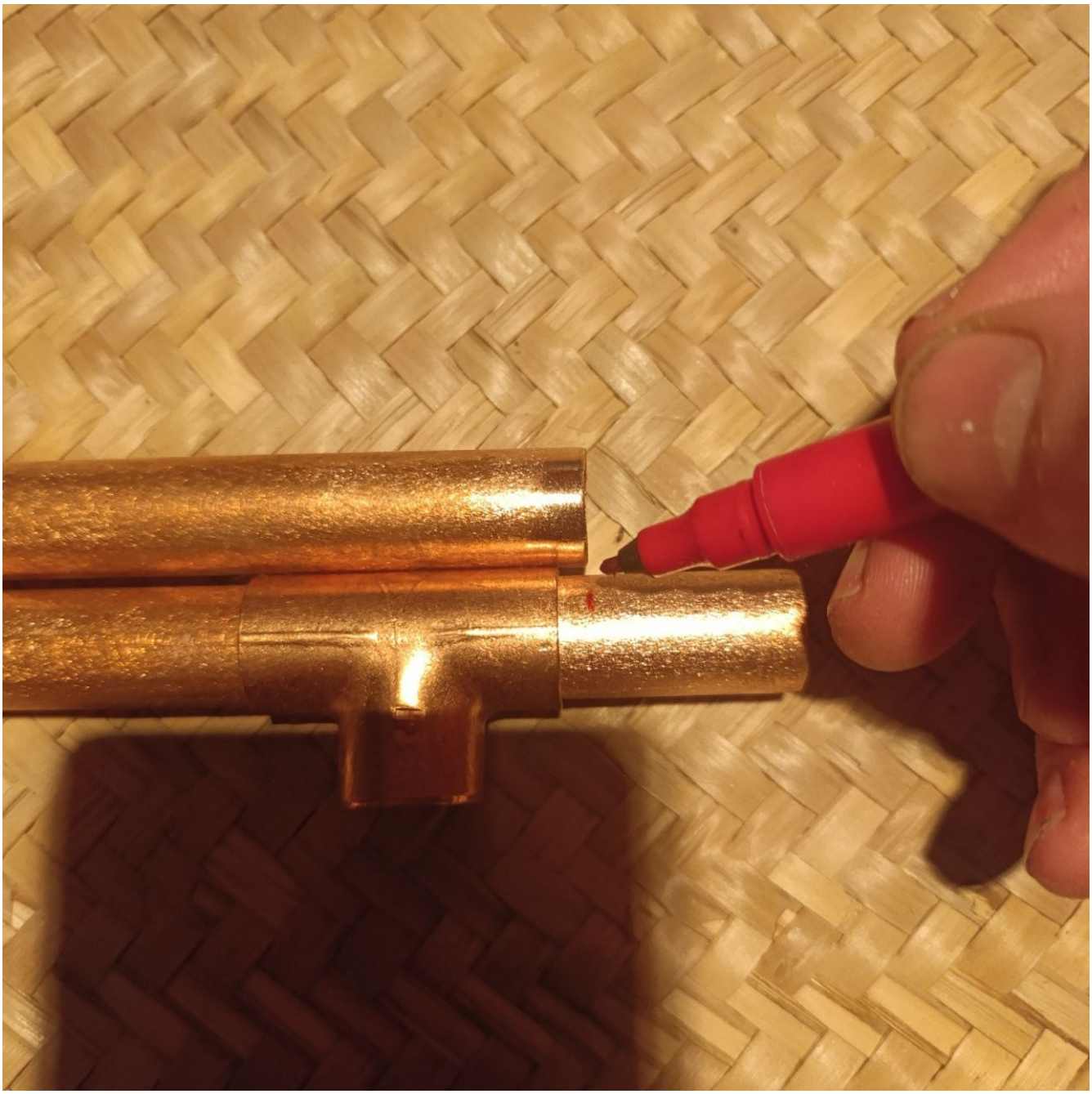
mark in the copper tube .5cm from the edge of the card, the marking has to be inside the card, make sure the frame is tight with the tubes fully inside the angles, do this for both ends

carefully remove the panel and put it in a safe place, the take that copper tube and cut it in the markings

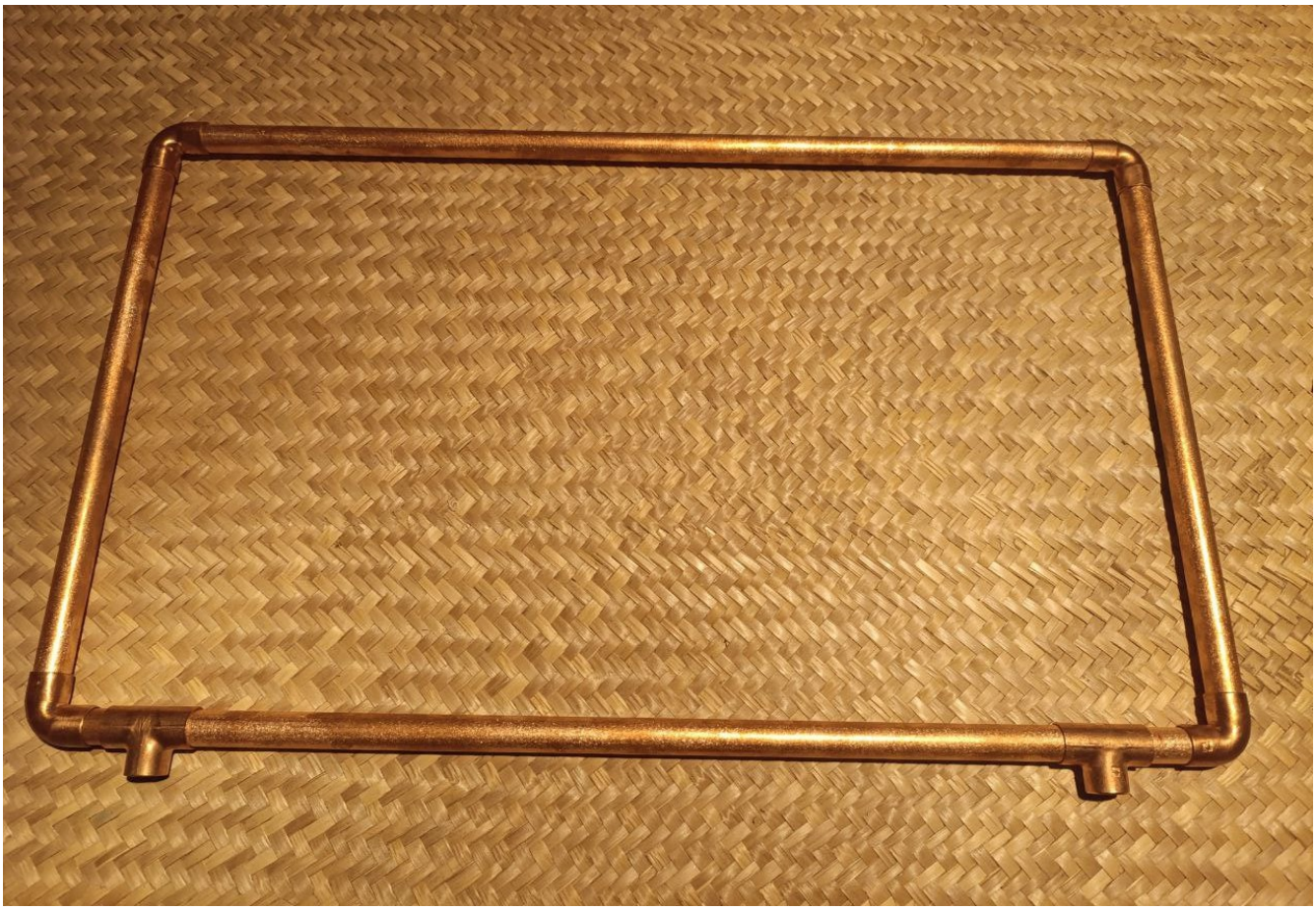


after this bottom tube cut, when you put the frame back with the “T” joints, it should look something like this, as you can see it does not fit like before, so we need to cut the top tube

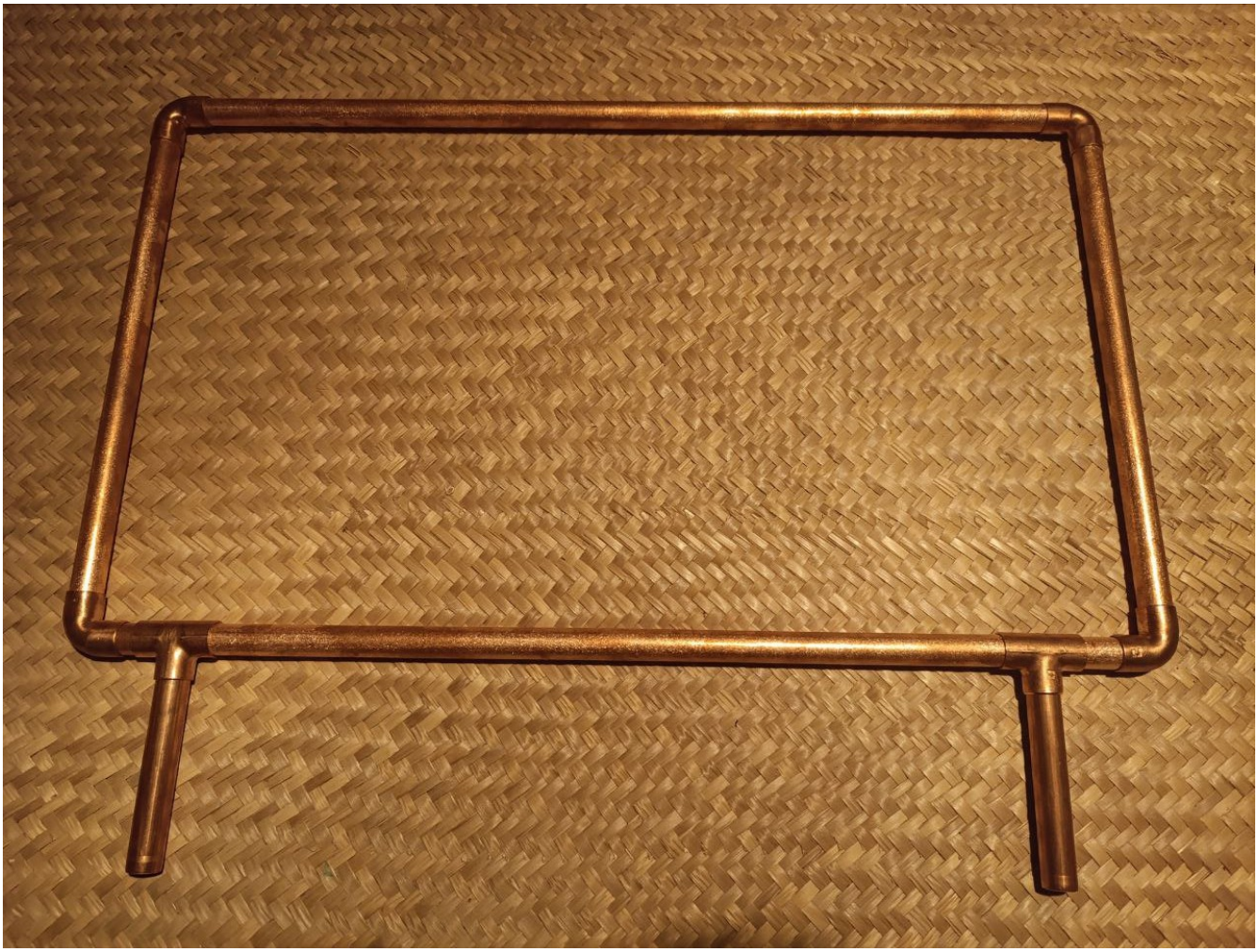
take both bottom and top tube and put them together side by side, nicely aligned, then mark where the extra length is



measure this length in the bottom tube, but remove it from the top tube



both top and bottom tubes should now be exactly the same length with the two "T" tightly fitted in the bottom



put the frame back together and now cut some 10cm to 15cm to make the stands, this length is arbitrary and will decide the height, too high will cause it to be unstable, 10 cm is a good length

Cut two the leftover tube in 4 pieces, put these pieces in the bottom and now your frame is completed, its just needs to be affixed together, but it should look something like this

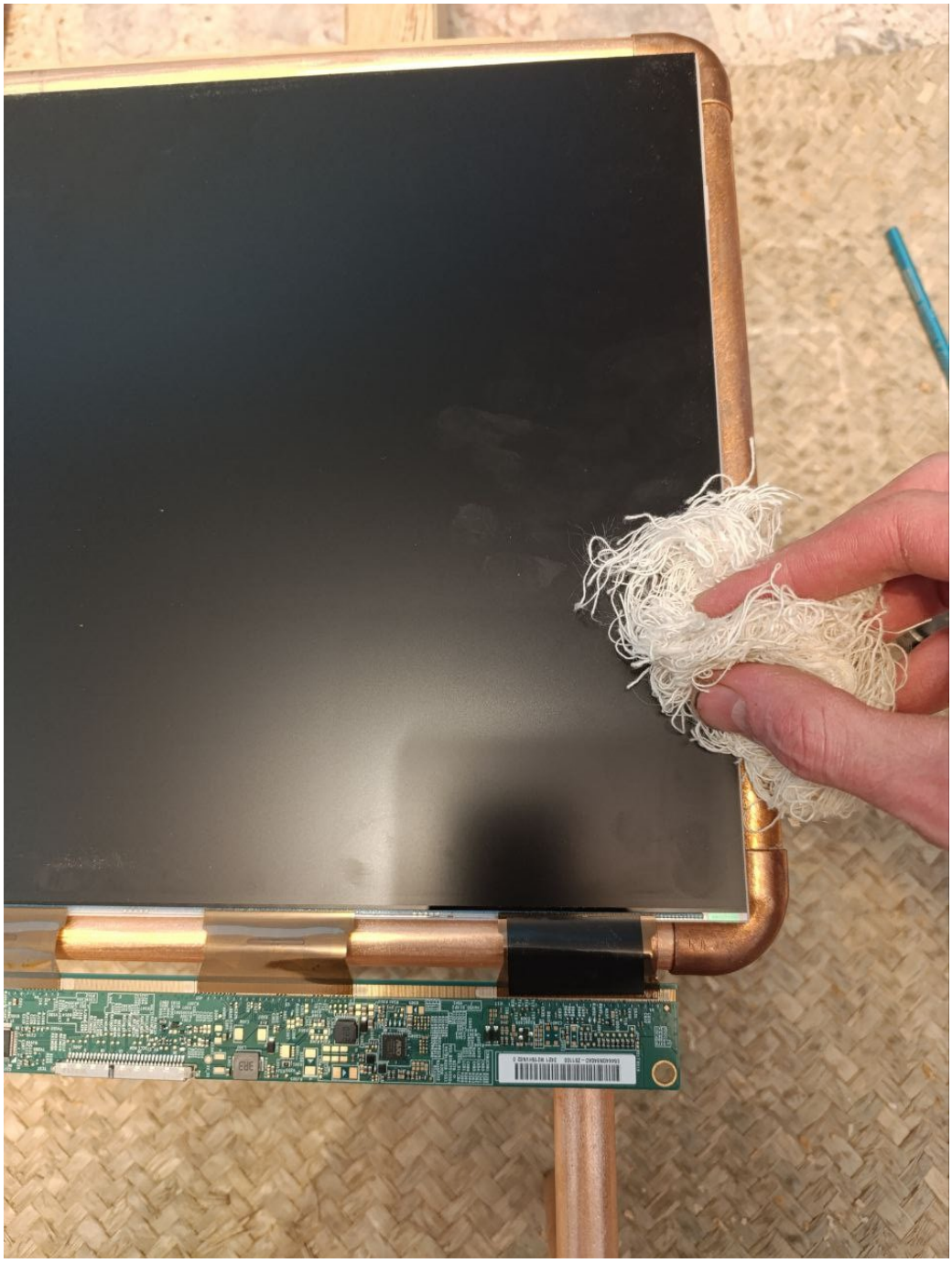
Now that you have the correct measurements, its time to glue the copper frame together, you will need some some glue, glue both inside the angles and outside the tube

with each glued joint, press hardly against the floor to be sure its all the way in, this is important as final measurements will not be right if tubes are not fully in.

Once you have all angles and "T" connections glued, press all sides firmly against a flat hard surface, and leave it overnight to complete curing. Its important that all edges and sides are touching the floor so everything is perfectly flat, make sure all tubes fully inside.

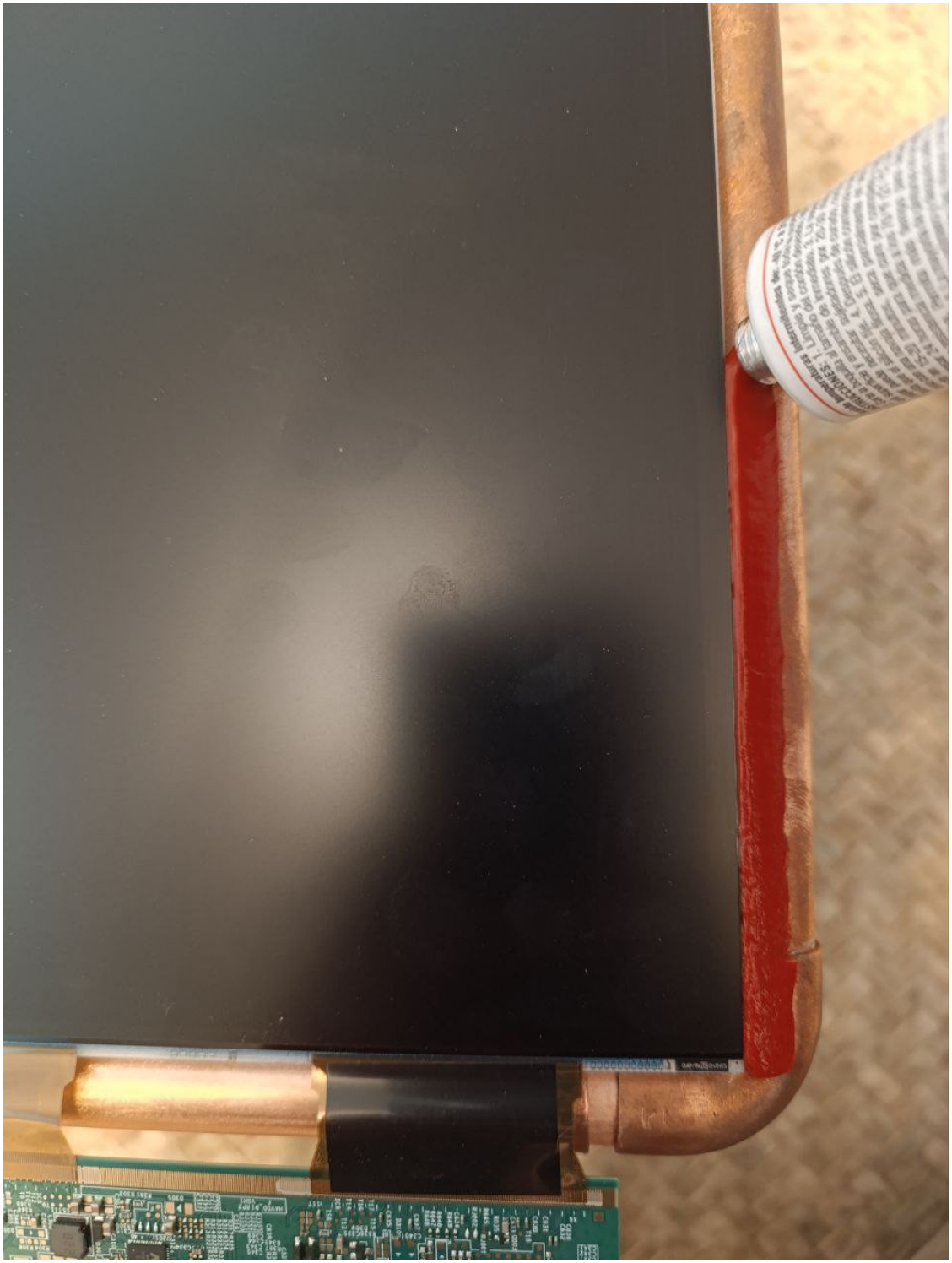
when the frame is fully cured, then its time to glue the base, glue the angles in the same way and measure you have the correct square angle by placing some square thing and aligning it with the frame, and leave this to cure for the appropriate time before moving to the next step.

When everything is cured you will have a nice solid frame that is balanced and stands all by itself



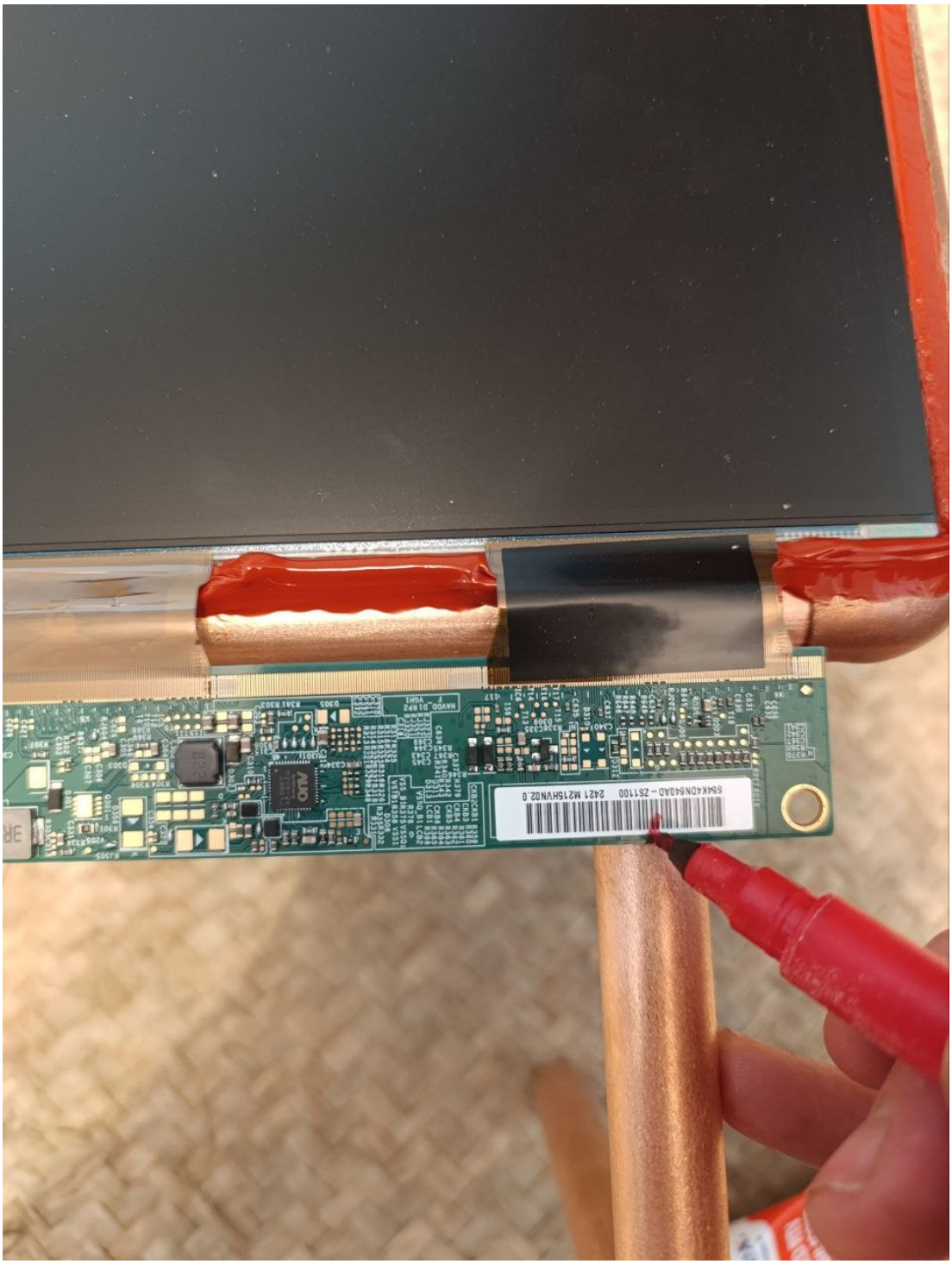
put the frame facing up with something so that is flat and stable again with the stands and take your panel and the corresponding sheets with the hardest on the top, and make sure are all aligned together, take another cloth with alcohol and wipe all the side of the panel so its free from an grease of fingertips carefully and slowly, otherwise the glue wont hold well

get some automotive high temperature silicon, these are of higher grade than the household transparent and will last much more.

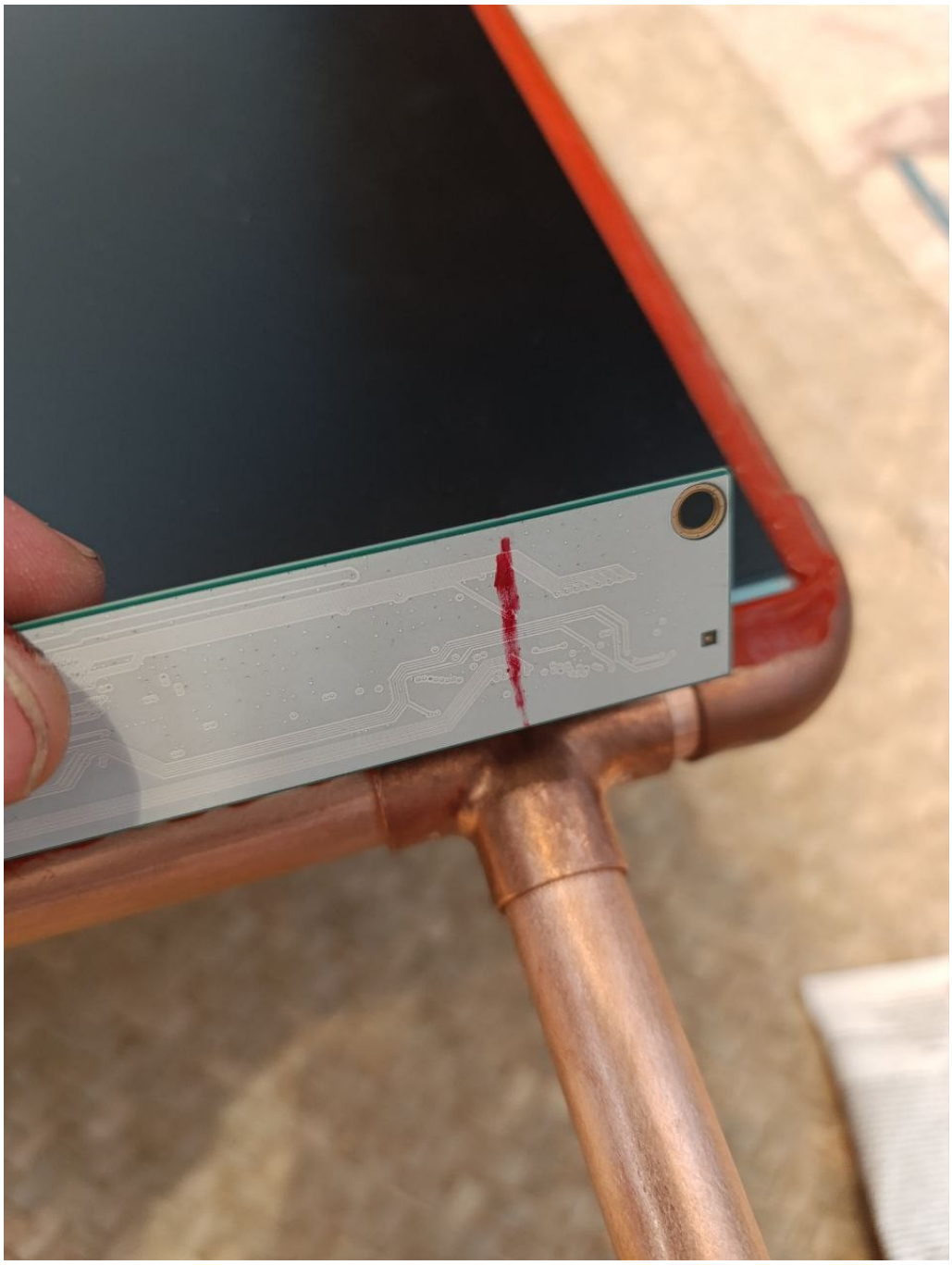


slowly apply the silicon to the edge, leave the bottom edge for the last, do this very slowly and delicately, otherwise the panel might move, no need to put your fingers on the silicon, just straight from the tube, make sure it fills inside and touches the edge of the panel

put some masking tape to hold the card to the panel, do this only in a small edge so its easy to take off, otherwise you will have trouble taking it out, and might damage the ribbon cables in the process, any mistake that pulls these ribbons too much will not reparable, and you will have throw the panel in the trash, so take your time and do it slowly and follow the process verbatim. Put the silicon under the ribbon cables, putting silicon here is very important so the panel holds tight.



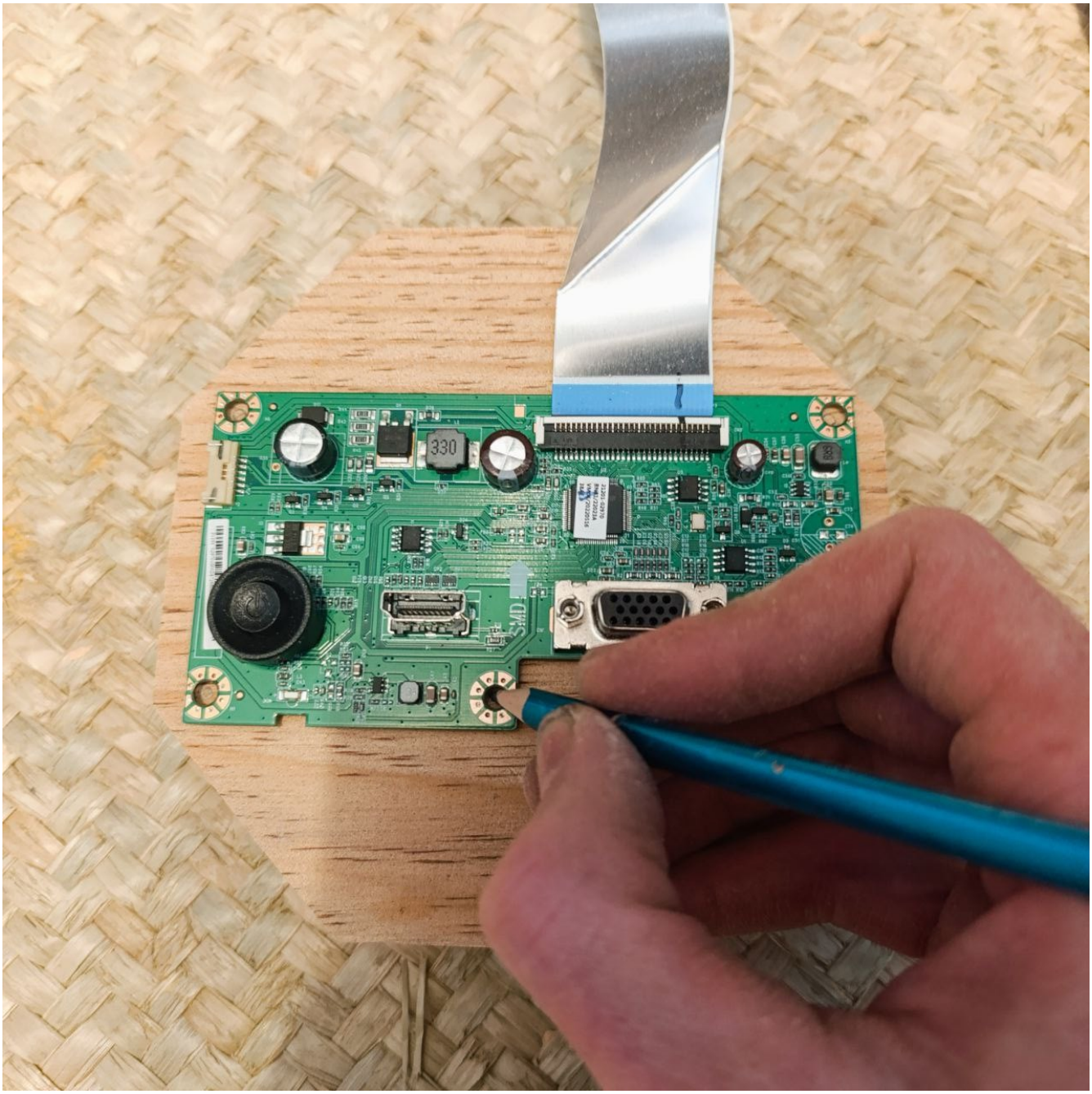
take the masking tape off and mark where the card touches the frame



and mark the bottom too and put a good amount of silicon here in both sides

let the card go and press it gently with the frame and leave all this overnight in a safe place away from potential movement

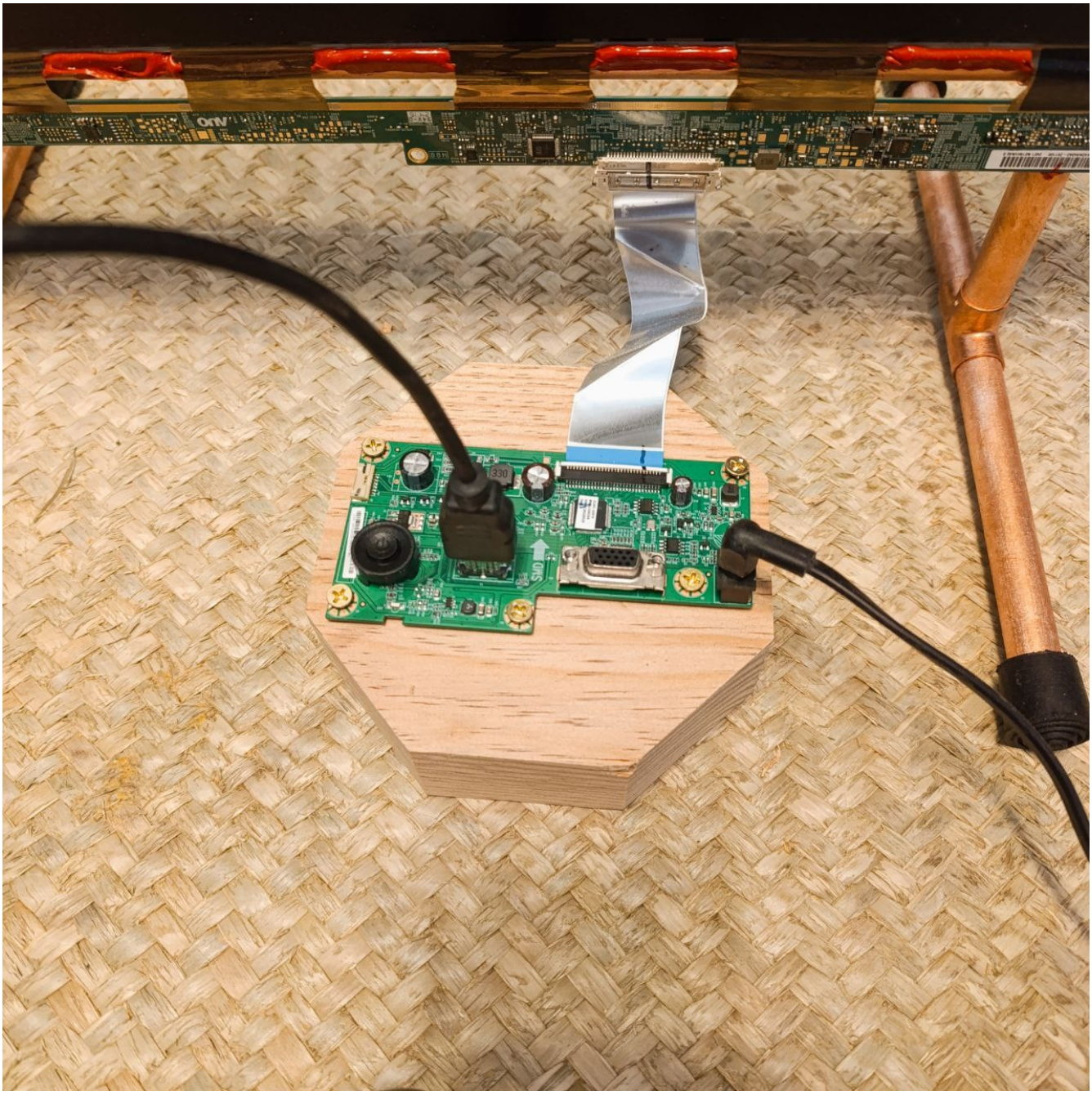
Now that the panel has been securely affixed to the frame, its time to make a nice solid base for the ports, that connects the monitor and your pc, a nice block of wood is the best.



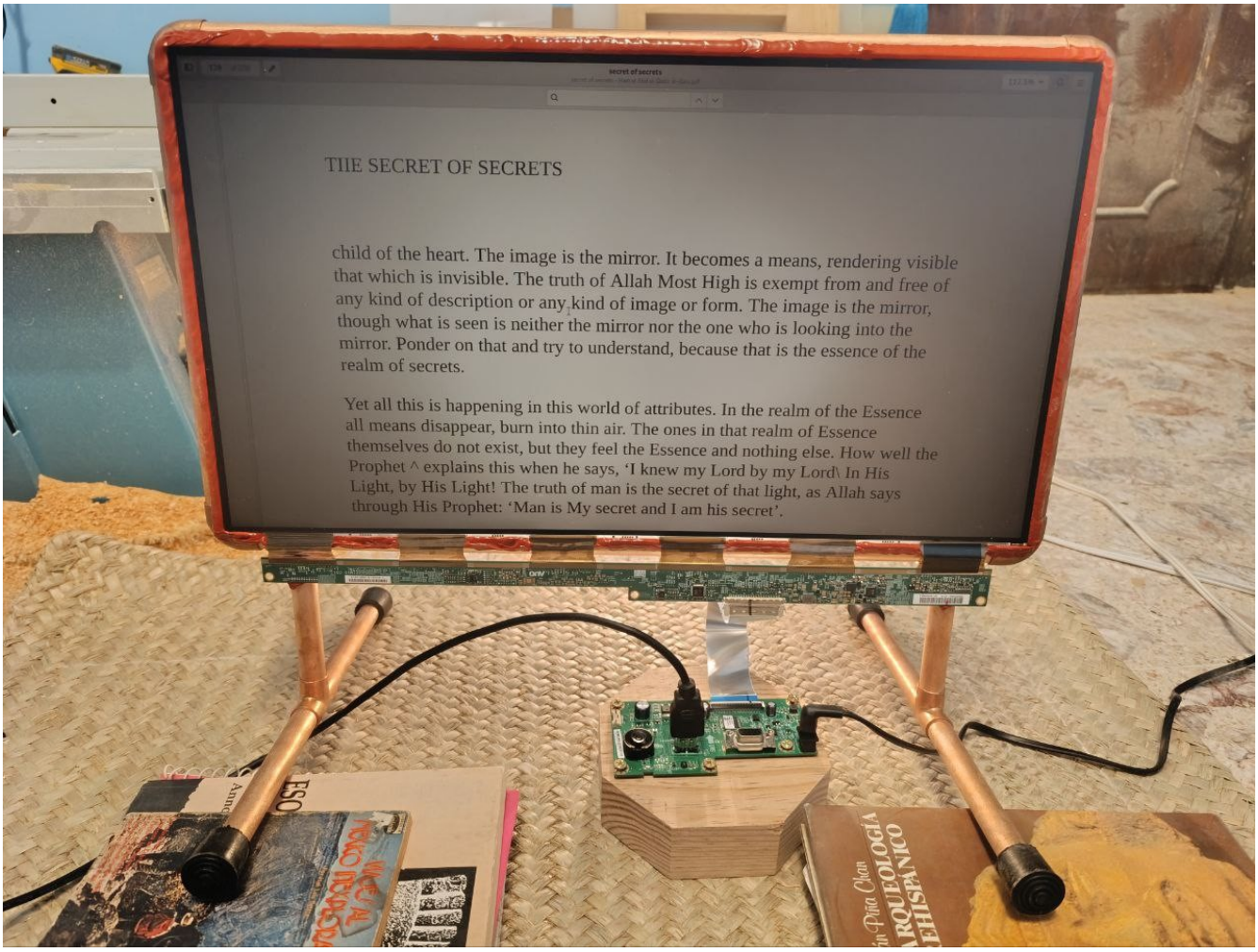
put the card over the block and align it and mark the holes, its recommended to unplug it form everything before doing this (unlike the photo!)

drill some holes for the screws

plug the main cable carefully back



card should now be held securely and firmly in its base



plug everythign together and put a desktop lamp behid with an icnandescent bulb, her Im using a 100watt bulb

enjoy a classic movie and see how everything aquires different meaning and causes no strain to your eyesight.