

Reminder guide to setting up the Nordson

Assemble your flex on the dispensing jig. Turn on vacuum.

Turn on at the wall. Turn on the PC fitted on the Nordson.

As the Nordson PC boots into the Windows desktop ignore all the messages on the screen (Including the one about resizing the screen)

On the Windows Taskbar open the DispenseMotion App.

The Nordson operating app will be present.



Click "Move to home"

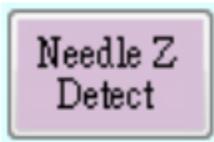
Fit the glue syringe as shown:

Tighten in place with the Allen key.



Open file (The correct file may already be loaded)

Press the Purge button on the front of the machine to purge the glue. Then wipe the excess glue that comes out.



Click Needle Z Detect.

This will perform a sequence to determine the X, Y and Z position of the dispense tip.

On the Z Difference prompt click Yes.

It will then dispense a spot of glue for the X Y alignment check.

On the prompt “Do you want to find next marks” click Manual. On the next prompt click OK.

Then use the X Y buttons to move the camera view so the crosshair aligns over the glue dot.

Click Continue.

On the prompt “Do you want to update Offset” click Yes.

Wipe the now dispensed glue off the X, Y and Z alignment surfaces.

Press the Purge button on the front of the machine once again and clean it.

Press the Start button on the front of the machine or click the “Run” button (On the screen) to start the dispense run.

Reminder guide to adjusting the Needle to Surface gap on the Nordson

This adjustment should only be required if there has been a thickness change of the flex.

This should be done with the compressed air valve turned off. It can be done after a dispense run but be aware that glue may be deposited onto the flex surface.



Click the CCD Mode to change it to the Tip Mode



This will now allow you to point the needle tip at the position where it will be dispensing onto the flex surface.

Due to the way the dispensing program works you will only be able to point the needle tip at the first ABC five dot pattern. However as all five ABC dot patterns are identical this is not an issue. For the HCC three dot pattern there is only one pattern present so you can only point the dispense tip at that area.

To select the HCC dot pattern click on and select any step from 31 to 33.

To select the ABC dot pattern click on and select any step from 39 to 43.



Click Move to Dispense Point (With the relevant step above highlighted)

If there is a significant increase in height of the flex of more than 0.5 mm then remove then seek advice for additional steps. This is unlikely to happen so probably falls outside the scope of this Reminder Guide.



Click on activate (Xbox) controller (This icon is from the manual and does not match what you see on the screen)

Using the buttons on the controller you can now raise (Green A button) or lower (Blue X button) the dispense needle tip. The Z value increasing means the tip is going down and vice versa.

You can track Z (As an absolute value) by observing the value in the X,Y and Z coordinate display:



Now use a Windows select with shift or control to select the steps that need changing:

HCC five dot pattern select steps from 31 to 33.

ABC three dot pattern select steps from 39 to 43.

With these highlighted



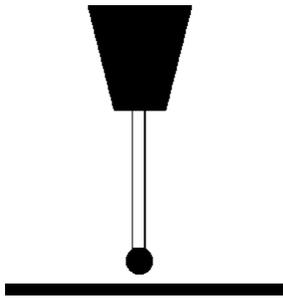
Click on Change Z value.

A small window will now appear and allow you to type an absolute value into the Z value box. You can also use this window to check (Or correct) that you have included the correct steps for this change. Then click ok.

Once these adjustments are made some glue trials are required. If you make small adjustments (Is it best to make adjustments in 0.1 mm steps. Smaller values will be below the Z step resolution) then you should be safe to do this “As you go” when dispensing on real objects.

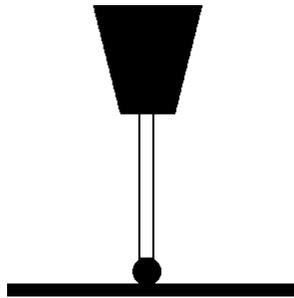
This requires some practise and experience to do well. If you wish to have a go at practising this then there is a microscope glass slide holder available.

A rough guide to checking that the needle tip to surface gap is correct.



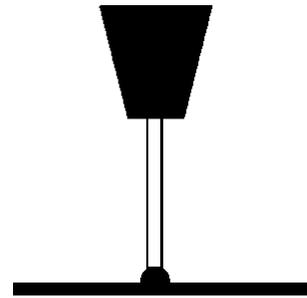
Too high.

Glue will stay
on needle tip and
build-up.



Correct.

Glue will transfer
from tip to surface
during dispensing.



Too low.

Needle may be too close
to surface and reduce
glue flow or even
become blocked.

General rule: The lower the viscosity the smaller the gap required.

Check variation of surface height. e.g. A glass slide varies in thickness by 0.2mm

Some trial and error is required.

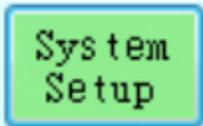
Reminder guide to Turning off the Nordson

Due to potential poor design of the interface the exit program button is hidden.



Press the home button to move the dispense head to the home position.

Then remove the syringe.



Click on System Setup

Then select the "Exit" button (Top right)

Then decide if you want to save the current dispensing program (Very likely No if you are just working as an operator and have not made changes you wish to keep)

Once the Nordson application has shut down then shut down Windows and power down the Nordson completely.