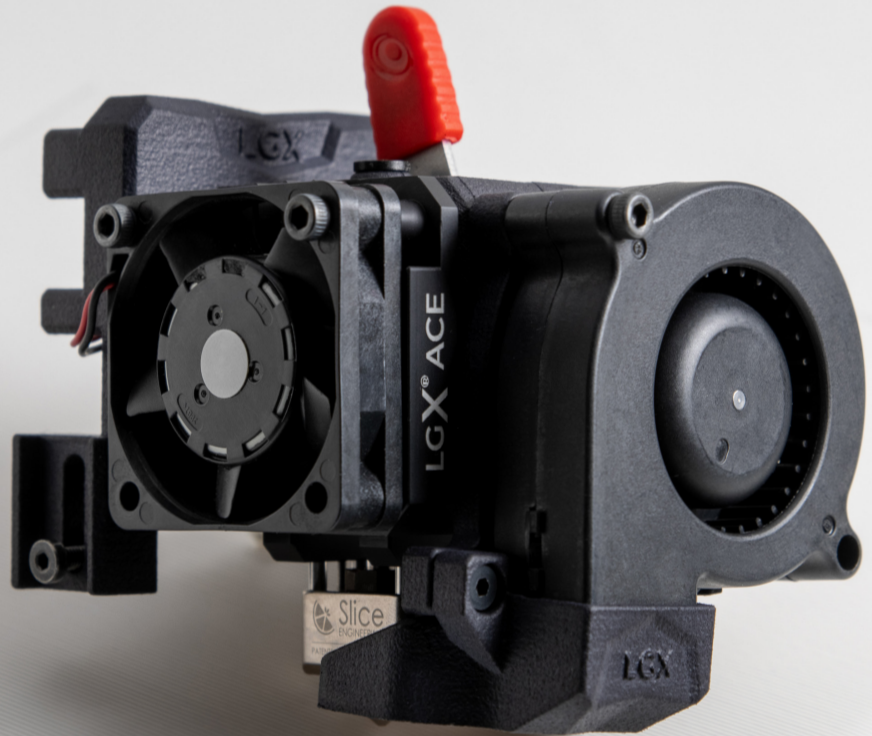


## HOW TO Install LGX® ACE on the Elegoo Neptune 3 Pro

Difficulty **Medium**  
Steps **50**  
Time Required **20 to 30 min**  
Sections **1**



## INSTRUCTIONS GUIDE

This guide is designed to be a reference manual for how to do install LGX® ACE on the Elegoo Neptune 3 Pro. Follow the instructions below or, if you prefer to watch a YouTube video with the same instructions, use the provided link below or the YouTube icon to the right:

<https://youtu.be/e7jc7aQryak>



Heat the hotend up and remove the filament.



Turn the hotend heating off and wait for it to cool down.



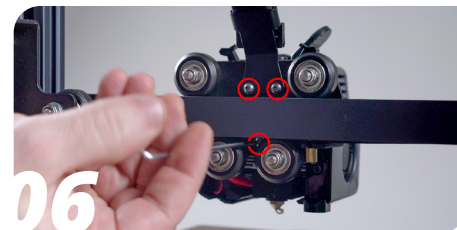
Power off and unplug the printer.



Release the ribbon cable.



Unscrew the two M3 BHCS holding the cowling using a 2 mm hex key.

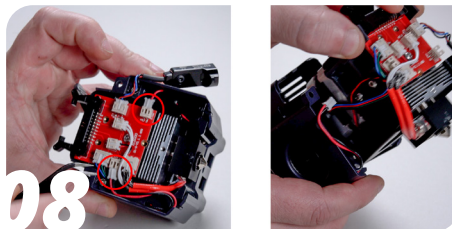


Unscrew the three M3 BHCS holding the cowling from the back.



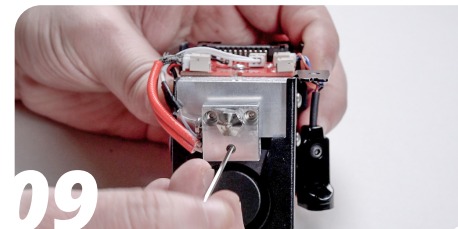
07

Unscrew the M3 BHCS holding the probe using a 2 mm hex key.



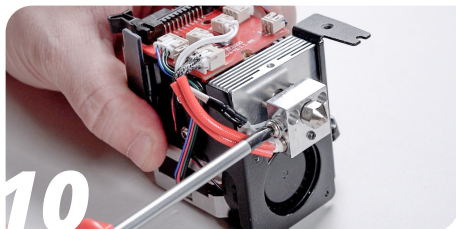
08

Disconnect the fan connectors and remove the cowling.



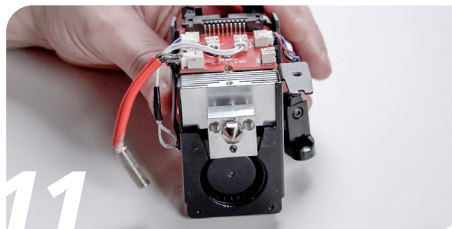
09

Loosen the set screw holding the heater cartridge in place.



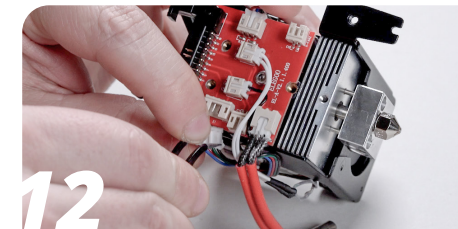
10

Loosen the philips head screw holding the thermistor in place.



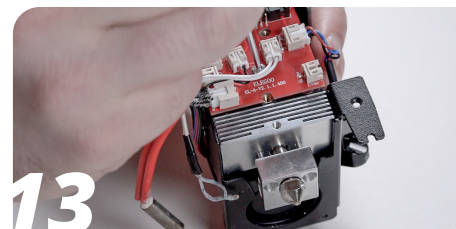
11

Remove the thermistor and heater from the hotend.



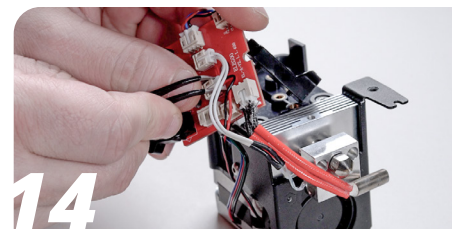
12

Disconnect the stepper motor connector from the toolhead board.



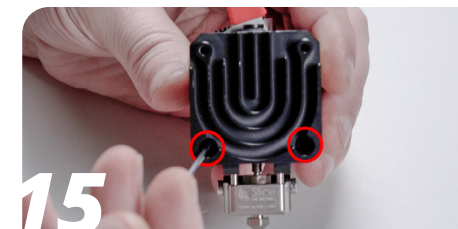
13

Unscrew the M3 BHCS holding the toolhead board using a 2 mm hex key.



14

Disconnect the hotend heatsink cooling fan.



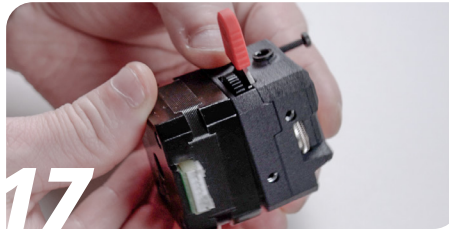
15

Take your LGX ACE and unscrew the two screws holding the hotend to the extruder from the front using a 2 mm hex key.



16

Using the same 2 mm hex key, unscrew the two top screws on the front.



17

Rotate the motor 90 degrees counter clockwise and reassemble the ACE.



18

Unscrew the top right and bottom left screws on the extruder motor as seen from the back using a Philips head screwdriver.



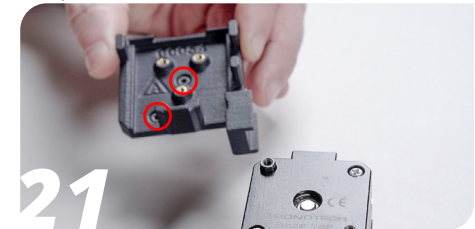
19

Add two of the included hex studs and tighten them down.



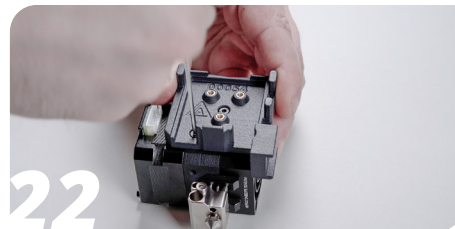
20

Carefully snug them up using an adjustable spanner.



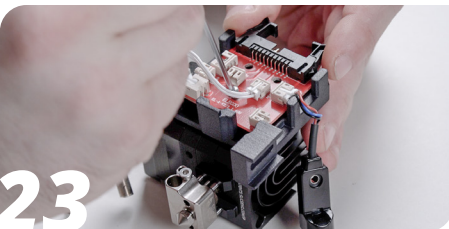
21

Add two M3x6 Low Profile screws to the LGX ACE Neptune 3 Pro Mount.



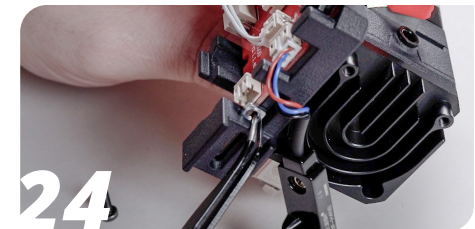
22

Add the assembly to the ACE and tighten the screws using a 2 mm hex key.



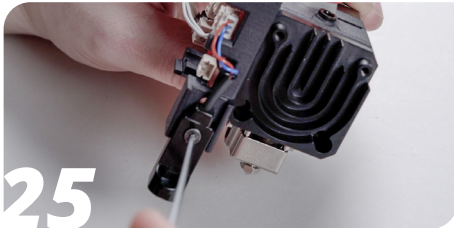
23

Add the toolhead board to the mount and tighten it down with the screw it came with, using a 2 mm hex key.



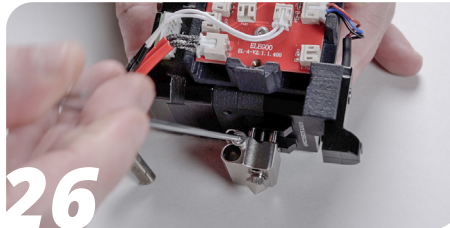
24

Insert a M3 square nut in the probe holder pocket.



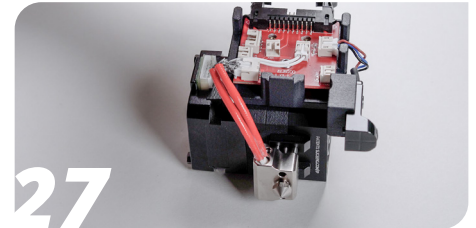
25

Fasten the probe with the screw it came with, using a 2 mm hex key.



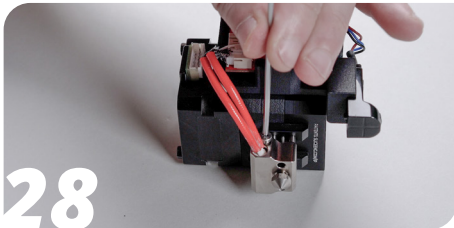
26

Undo the retaining screw on the hotend using a 2 mm hex key.



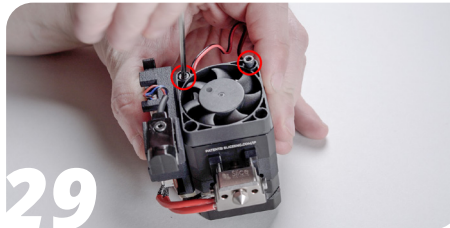
27

Add the thermistor and the heater cartridge to the hotend.



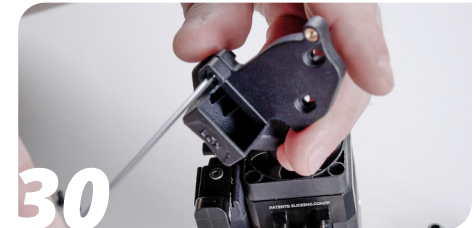
28

Fasten the retaining screw.



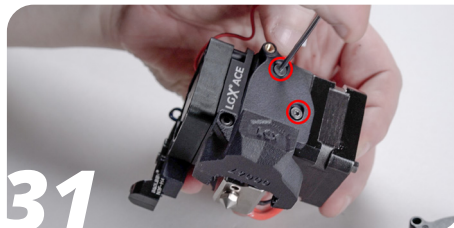
29

Add the 4010 axial fan and two M3x12 SHCS and fasten them with a 2.5 mm hex key.



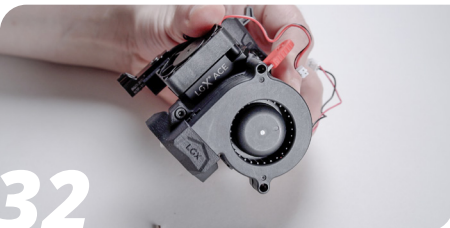
30

Add an M3x6 Low Profile screw to the fan shroud and fasten it to the fan shroud mount using a 2 mm hex key



31

Add two M3x6 Low Profile screw to the fan shroud mount and fasten it to the LGX using a 2 mm hex key.



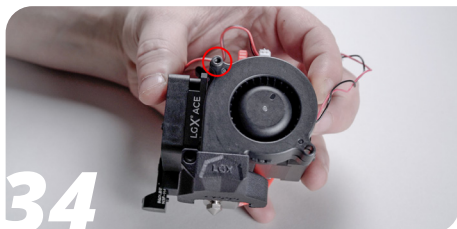
32

Add the 5015 fan to the fan shroud.



33

Add an M3x20 SHCS to the 5015 fan.



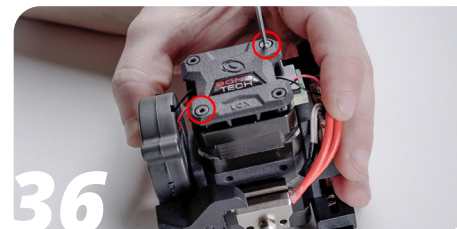
34

Tighten it carefully using a 2.5 mm hex key.



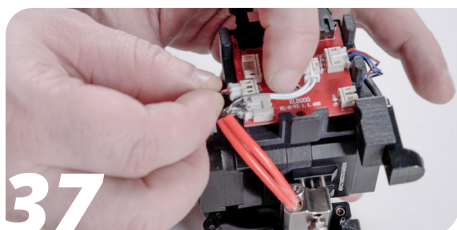
35

Add the LGX Back Cover.



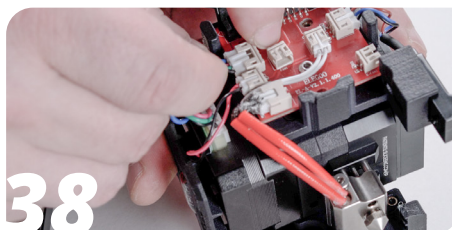
36

Add two M3x6 Low Profile and tighten them using a 2.5 mm hex key.



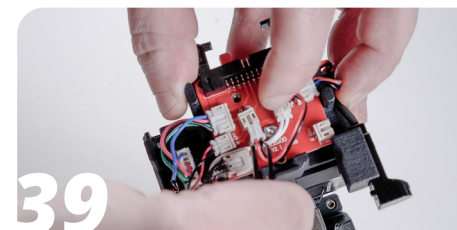
37

Connect the 5015 fan to the toolhead board.



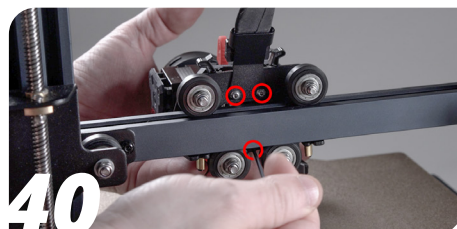
38

Add the motor connector wire to the motor and connect it to the toolhead board.



39

Connect the 4010 fan to the toolhead board.



40

Attach the assembly to the printer from the back using the same three M3 BHCS screws and a 2 mm hex key.



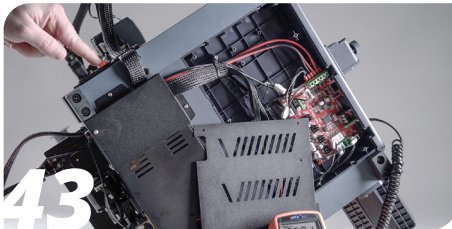
41

Insert the toolhead ribbon cable and press it down to lock it in place.



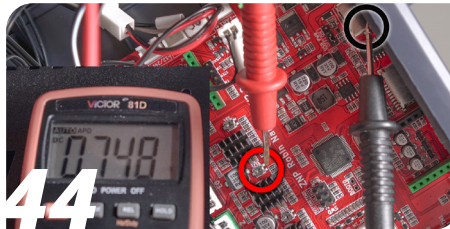
42

From the bottom of the printer, undo the six screws using a Philips head screwdriver.



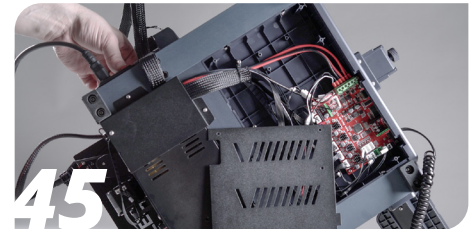
43

Connect the printer to power and turn it on.



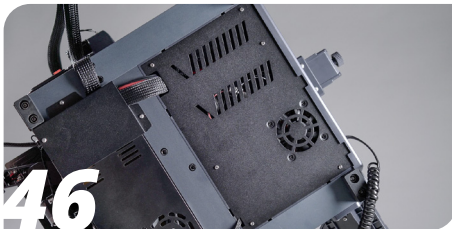
44

With a multimeter, place your COM on the USB housing for measuring GND and dial your voltage down to 0.750 volts.



45

Turn the printer off and disconnect it from power.



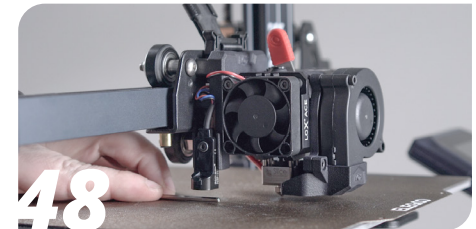
46

Close the printer back up again.



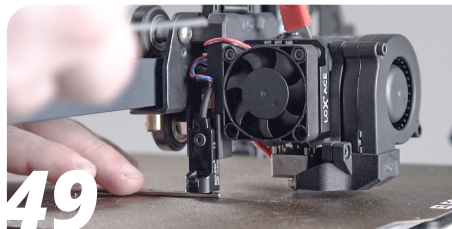
47

Drive the Z axis down, about a millimeter from the bed.



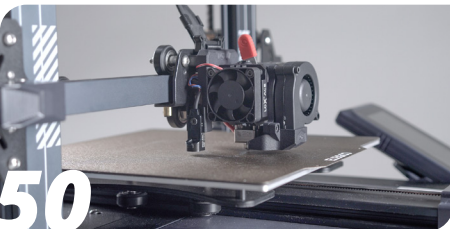
48

Place a 2.5 mm hex key below the bed probe.



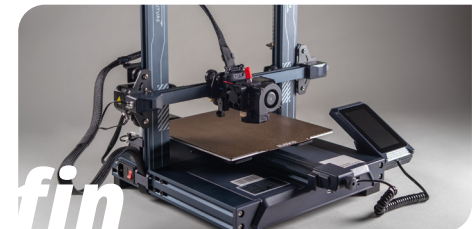
49

Loosen the bed probe with a 2 mm hex key to drop it down and then tighten it back up again.



50

Remember to redo your Z offset.



fin

Check the Quick Start Guide for printer configuration and slicer profiles.

## TAKE GOOD CARE OF IT

Every 6 months, or sooner if you have a higher than 15h per week average usage, perform the following maintenance operations:

1. With a tooth brush and alcohol:
  - a. Clean the needle bearings
2. With a fine brush and lubricant
  - a. Lubricate the needle bearings
3. With compressed air
  - a. Blow the housing plastic parts to remove dust and dirt particles

## HOW TO GET HELP

We are available to help you with any questions or issues you may have. Simply go to our website where you can access our customer support and send us your questions or follow the provided link:

[https://www.bondtech.se/contact/#tab\\_technical-support-requests](https://www.bondtech.se/contact/#tab_technical-support-requests)



