

# Tabla de Contenido

<b>How to replace Nextruder heatsink (XL Single-tool)</b> .....	3
Paso 1 - Introduction .....	4
Paso 2 - Tools necessary for this guide .....	5
Paso 3 - Additional parts .....	6
Paso 4 - Filament unloading .....	7
Paso 5 - Printer preparing .....	8
Paso 6 - Protecting the heatbed .....	8
Paso 7 - PTFE unplugging .....	9
Paso 8 - Wi-Fi antenna detaching .....	9
Paso 9 - Desconectando el cable del Nextruder .....	10
Paso 10 - Dock detaching .....	11
Paso 11 - Nextruder releasing .....	12
Paso 12 - Nextruder detaching .....	12
Paso 13 - Cable bundle removing .....	13
Paso 14 - Nextruder body removing .....	13
Paso 15 - Dwarf door opening .....	14
Paso 16 - Heatsink fan removing .....	14
Paso 17 - Nextruder idler opening .....	15
Paso 18 - Gearbox & motor assembly removing .....	16
Paso 19 - Hotend assembly removing .....	17
Paso 20 - Heatsink assembly removing .....	18
Paso 21 - Print fan removing .....	18
Paso 22 - Idler-swivel removing .....	19
Paso 23 - NTC thermistor & Hall sensor removing .....	20
Paso 24 - Filament sensor removing .....	21
Paso 25 - Heatsink: parts preparation .....	22
Paso 26 - Hall sensor installing .....	23
Paso 27 - Filament sensor installing .....	24
Paso 28 - Idler-swivel & NTC thermistor: parts preparation .....	25
Paso 29 - Idler-swivel securing .....	26
Paso 30 - NTC thermistor securing .....	27

Paso 31 - Gearbox & motor assembly: parts preparation .....	27
Paso 32 - Heatsink placing .....	28
Paso 33 - Gearbox disassembling .....	29
Paso 34 - Gearbox assembling .....	30
Paso 35 - PG-ring assembling .....	31
Paso 36 - Gearbox inserting .....	32
Paso 37 - PG assembly alignment .....	33
Paso 38 - Gears lubricating .....	34
Paso 39 - Gearbox covering .....	35
Paso 40 - Nextruder cables connecting .....	35
Paso 41 - Print fan assembly & fitting: parts preparation .....	36
Paso 42 - Print fan assembly securing .....	37
Paso 43 - Fitting securing .....	38
Paso 44 - Hotend & nextruder body: parts preparation .....	39
Paso 45 - Nozzle assembly securing .....	40
Paso 46 - Nextruder body securing .....	41
Paso 47 - Hotend fan securing .....	41
Paso 48 - Dwarf door closing .....	42
Paso 49 - Cable bundle securing .....	42
Paso 50 - Instalando el extrusor: preparación de las piezas .....	43
Paso 51 - Nextruder attaching .....	43
Paso 52 - Nextruder securing .....	44
Paso 53 - Dock securing .....	45
Paso 54 - Nextruder cable connecting .....	46
Paso 55 - Wi-Fi antenna: parts preparation .....	47
Paso 56 - Wi-Fi antenna attaching .....	47
Paso 57 - Guiando el tubo PTFE del extrusor .....	48
Paso 58 - Wizard .....	49
Paso 59 - Calibrating the Nextruder gears .....	50
Paso 60 - Well done! .....	51

# How to replace Nextruder heatsink (XL Single-tool)



[help.prusa3d.com/g389802](https://help.prusa3d.com/g389802)

Escanea el código  
QR para ver la última  
versión de este  
capítulo.



## PASO 1 Introduction



◆ This guide will take you through the replacement of the **Heatsink** on the **Original Prusa XL (Single-tool)**.



The **following instructions are intended for XL Single-tool only**, although most steps are common. If you have a Multi-tool XL, please go to **How to replace Nextruder heatsink (XL Multi-tool)**



Algunas partes pueden ser ligeramente diferentes. Sin embargo, esto no afecta el procedimiento.

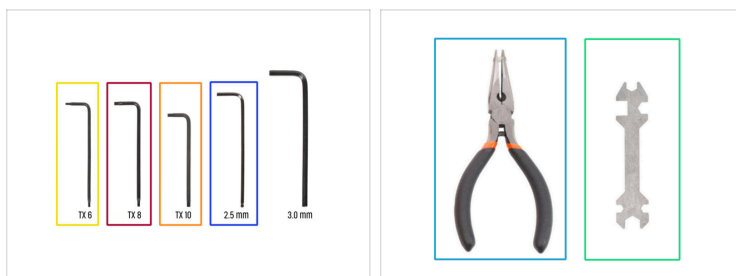


All necessary parts are available in our e-shop [prusa3d.com](http://prusa3d.com).



**The following instructions require extreme attention.** The procedure involves direct intervention in the planetary gearbox.

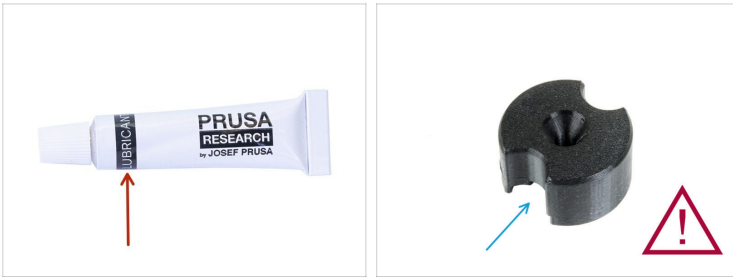
## PASO 2 Tools necessary for this guide



### ● Para esta guía, prepara:

- Torx TX10 key
- Torx TX6 key
- Torx TX8 key
- Llave Allen de 2.5 mm
- Universal wrench
- Nose pliers
- Side cutters *recommended for cutting zip ties*

## PASO 3 Additional parts



● **Para esta guía, prepara:**

- Prusa lubricant (1x) *supplied with your printer*
- PG-assembly-adapter (1x)

⚠ **The PG-assembly-adapter is not included in the box and needs to be printed. You can download the STL file from [printables.com](https://www.printables.com).**

ⓘ The STL file is located in **Parts for maintenance** section. Before proceeding, please ensure to **review the recommended print settings** provided in the caption.

⚠ **DO NOT continue without the PG-assembly-adapter. It is necessary for the assembly!**

## PASO 4 Filament unloading



- i** The following step is only necessary if you have a filament loaded in the current toolhead.
- 🔴** Unload the filament from the hotend. On the screen, navigate to *Filament* -> *Unload Filament* and select the tool, you want to working on.
- 🟢** Retira el filamento del hotend. No es necesario retirarlo completamente de la impresora. Sólo unos centímetros (pulgadas) por encima del extrusor.
- 🟠** Cool down the printer to room temperature. On the screen, navigate to *Preheat* -> *Cooldown*.
- ⚠️ CAUTION: Wait for the printer to fully cool down to room temperature before proceeding further.**

## PASO 5 Printer preparing



- Apaga el interruptor (símbolo "O").
- Desde la parte posterior de la impresora, desenchufa el cable de la fuente de alimentación.

## PASO 6 Protecting the heatbed



- Antes de continuar, te recomendamos que protejas la base calefactable.
- Make sure the heatbed is cooled down to ambient temperature. Place the empty cardboard box approximately to the front center part of the heatbed.

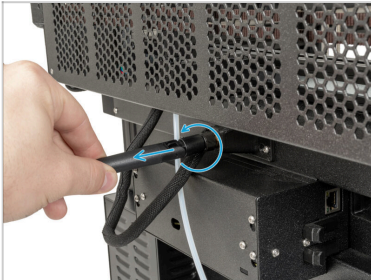
## PASO 7 PTFE unplugging



- Gira la impresora de modo que el lado izquierdo de la impresora esté orientado hacia ti.
- Empuja suavemente la presilla negra para liberar el tubo de PTFE.
- Retira el tubo PTFE.

---

## PASO 8 Wi-Fi antenna detaching



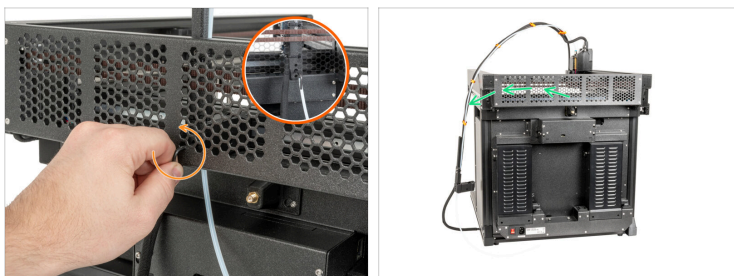
- ⓘ Este paso es solo para la impresora, que tiene una antena Wi-Fi en la parte posterior de la impresora.
- Gira la impresora, de modo que la parte posterior de la impresora esté orientada hacia ti.
- Desenrosca la antena Wi-Fi del conector de antena y colócala cerca.

## PASO 9 Desconectando el cable del Nextruder



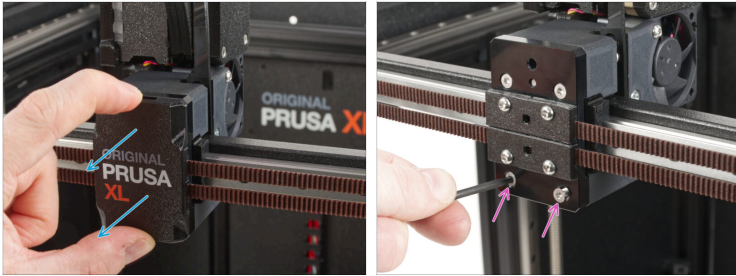
- Gira la impresora, de modo que la parte posterior de la impresora esté orientada hacia ti.
- ⚠ **Detrás del soporte de la antena hay un cable de antena, ¡no tires del conector!**
- Afloja ligeramente dos tornillos de la tapa. No es necesario quitarlos completamente. Empuja la cubierta hacia la derecha y retírala suavemente de los tornillos.
- Empuja la pestaña de seguridad y desconecta el cable del Nextruder del conector "DWARF1".
- Coloca el antenna-holder en los tornillos, empuja la cubierta hacia la izquierda y aprieta los tornillos.

## PASO 10 Dock detaching



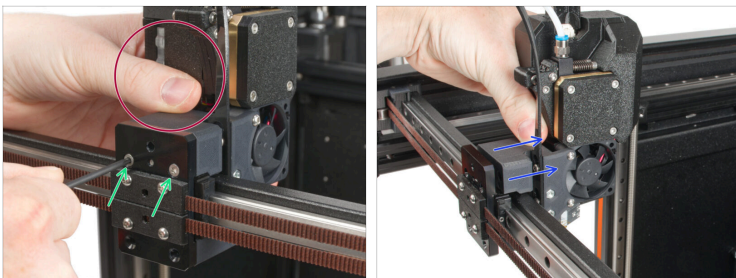
- i** For older CoreXY back covers without hexagonal cutouts (honeycomb pattern), loosen the screw in the dock as instructed. The procedure remains the same.
- 🟠** Con una llave Allen de 2.5 mm, afloja el tornillo dentro del dock (orificio central).
- 🟢** Mantén el haz de cables del Nextruder junto a la impresora.

## PASO 11 Nextruder releasing



- Gire la impresora de modo que la parte frontal quede orientada hacia ti.
- Snap off the x-carriage-cover back from the X-carriage. **Do not throw the parts away!**
- Using a T10 Torx key, remove two M3x12bT screws. **Do not throw the parts away!**

## PASO 12 Nextruder detaching



- Sujeta el Nextruder durante el desmontaje.
- Untighten two M3x12bT screws using a T10 Torx key. **Do not throw the parts away!**
- Retira el Nextruder y colócalo cerca, lo reconstruiremos en los próximos pasos.

## PASO 13 Cable bundle removing



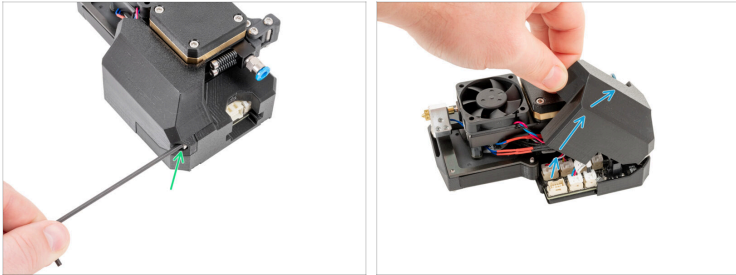
- From the front side of the Nextruder, using a T10 Torx screwdriver untighten two screws to release the cable support. **Do not remove the screws completely!**
- Press the blue fitting and pull out the PTFE tube.
- Presiona la pestaña de seguridad y retira el cable del Nextruder.

## PASO 14 Nextruder body removing



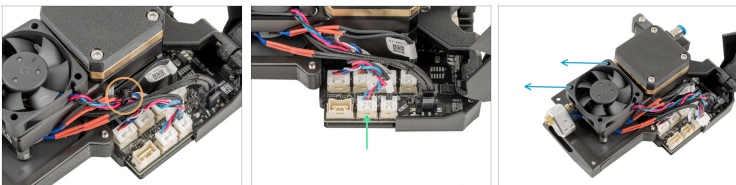
- Desde el lado derecho del Nextruder, con un destornillador Torx T10 desatornilla dos tornillos M3x20rT. **¡No los tires!**
- From the left side of the Nextruder, unscrew two screws using a 2.5 mm Allen key. **Do not throw the parts away!**
- Pull out the Nextruder body from the Nextruder. **Do not throw the parts away!**

## PASO 15 Dwarf door opening



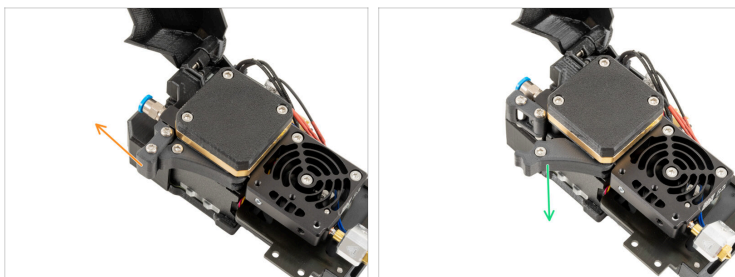
- Loosen the screw, just a few turns are enough to release the dwarf-cover-door. **No need to removing the screw completely.**
- Open the dwarf-cover-door widely.

## PASO 16 Heatsink fan removing



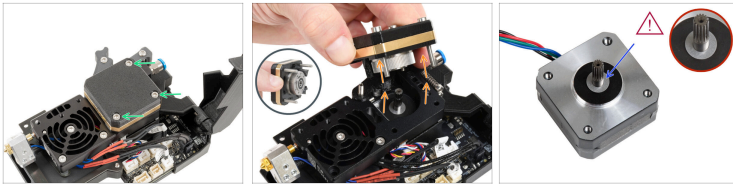
- Gently remove the zip-tie using a pliers. **Watch out for the cables!**
- By pressing the security latch, remove the heatsink fan cable from the Dwarf board.
- Remove the heatsink fan. **Do not throw the parts away!**

## PASO 17 Nextruder idler opening



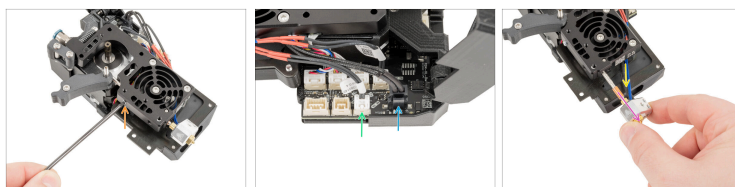
- Push the idler-swivel upward.
- Pull the idler-lever downward in order to release tension on the gearbox.

## PASO 18 Gearbox & motor assembly removing



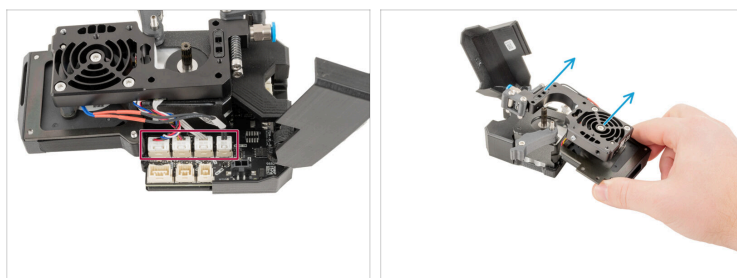
- ◆ Fully loosen three M3x25 screws from the printed gearbox cover. **Keep the screws in the assembly, don't remove them completely.**
  - ◆ Carefully slide the gearbox assembly off. **It is necessary to remove the entire assembly in one piece.** This means PG-cover (top plastic cover), PG-ring (brass ring), PG-assembly (metal gears), and main-plate (bottom plastic plate), all joined by M3x25 screws.
  - ◆ Set the gearbox assembly and the extruder motor aside.
- ⚠ Pay attention to not lose the spacer from the motor shaft.**

## PASO 19 Hotend assembly removing



- 🟠 With a Torx TX 8 key loosen the grub screw in the extruder. **Do not remove the screw completely.** A few turns are enough to release the hotend assembly in the heatsink.
- 🟢 By pressing the security latch, remove the hotend thermistor cable from the Dwarf board.
- 🟡 By pressing the security latch, remove the hotend heater cable from the Dwarf board.
- 🟣 Carefully pull the hotend assembly out of the heatsink. **Do not throw the parts away!**
- 🟠 At the same time pull the disconnected hotend cables from below the heatsink.

## PASO 20 Heatsink assembly removing



- By pressing the safety latch, unplug all remaining cables from the Dwarf board.
- Remove the heatsink assembly and set it aside.

## PASO 21 Print fan removing



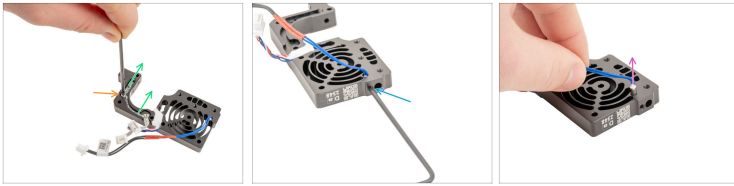
- Remove the three M3x10 screws from the heatsink. **Do not throw the parts away!**
- Separate the heatsink and the print fan assembly. **Do not throw the parts away!**

## PASO 22 Idler-swivel removing



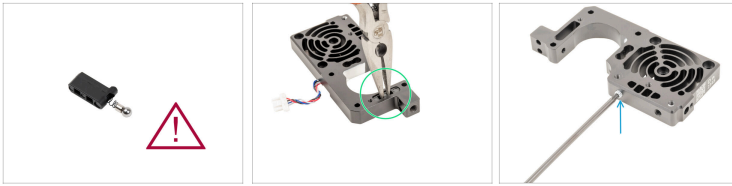
- Remove the two M3x30 screws to remove the idler-swivel from the heatsink. **Do not throw the parts away!**
- Remove the idler-swivel from the heatsink. **Do not throw the parts away!**
- Using a universal wrench, remove the Fitting QSM-M5 by turning it counter-clockwise. **Do not throw the parts away!**

## PASO 23 NTC thermistor & Hall sensor removing



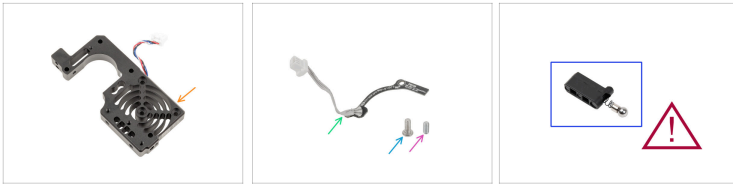
- ✦ Using a T6 Torx key, remove the M2.5x6rT screw. **Do not throw the parts away!**
- ✦ Carefully remove the Hall filament sensor. **Do not throw the parts away!**
- ✦ Using a T6 Torx key, remove the set screw from the bottom of the heatsink to remove the NTC thermistor. **Do not throw the parts away!**
- ✦ Pull out the NTC thermistor from the heatsink. **Do not throw the parts away!**

## PASO 24 Filament sensor removing



- ⚠ **BE EXTRA CAREFUL when removing the filament sensor.** The filament sensor contains a tiny parts (spring, magnet, steel ball) that tend to fall out when the sensor is removed.
- 🟢 Very carefully pull the filament sensor out from the heatsink using the needle-nose pliers.
- ⚠ **CAUTION: Avoid gripping the part firmly, as this may cause irreparable damage.**
- ⚠ **Don't lose the small parts!** You will need them again later. **Keep them aside in a safe place.**
- 🟡 Using a T6 Torx key, remove the hotend grub screw from the heatsink. **Do not throw the parts away!**
- ⬛ Now, you can throw the old heatsink into the bin.

## PASO 25 Heatsink: parts preparation

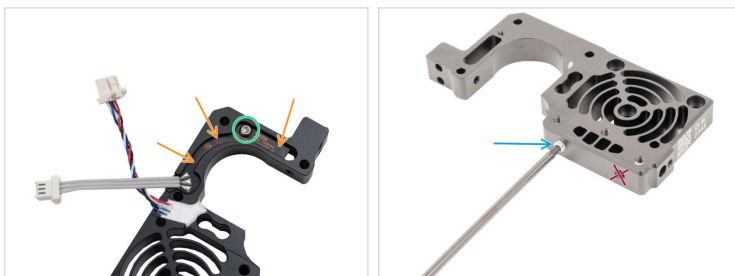


▣ **Para los siguientes pasos, por favor prepara:**

- ▣ Heatsink (1x)
- ▣ Hall filament sensor (1x) *removed in previous steps*
- ▣ M2.5x6rT screw (1x) *removed in previous steps*
- ▣ Hotend grub screw (1x) *removed in previous steps*
- ▣ Filament sensor assembly 1x) *removed in previous steps*

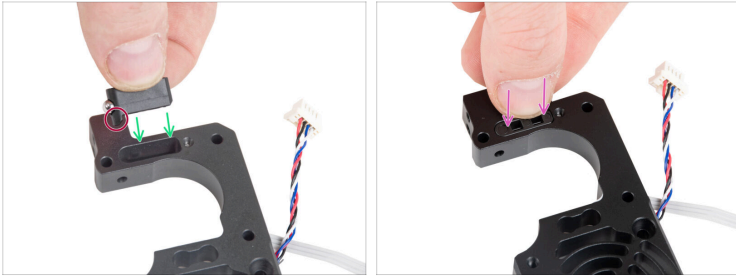
⚠ **BE EXTRA CAREFUL.** The filament sensor contains a tiny parts (spring, magnet, steel ball) that tend to fall out when the sensor is removed.

## PASO 26 Hall sensor installing



- Coloca el sensor de filamento Hall en la cavidad de forma similar del disipador térmico.
- Fíjalo con un tornillo M2.5x6T. Apriétalo con mucho cuidado, puedes romper la placa electrónica.
- Insert the grub screw into the slot closer to the bottom of the heatsink. See the picture.

## PASO 27 Filament sensor installing



- ◆ Insert the Prusa ball holder assembly into the heatsink. Make sure the steel ball part is closer to the side of the heatsink.
- ⚠ **Note the correct orientation of the Prusa ball holder assembly. There is a protrusion on the part. The protrusion must be facing down.**
- ◆ Introduce el conjunto en el disipador.

## PASO 28 Idler-swivel & NTC thermistor: parts preparation



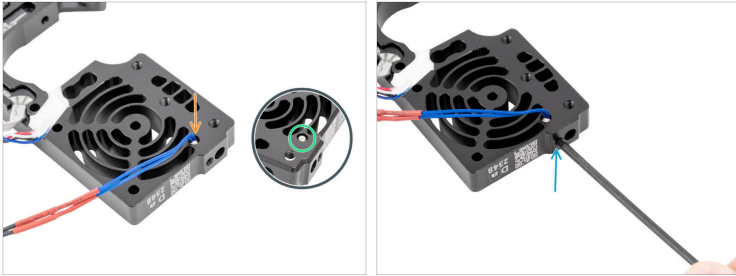
- **Para los siguientes pasos, por favor prepara:**
- Idler-swivel assembly (1x) *removed in previous steps*
  - M3x30 with spring screw (2x) *removed in previous steps*
  - NTC thermistor (1x) *removed in previous steps*
  - NTC thermistor grub screw (1x) *removed in previous steps*

## PASO 29 Idler-swivel securing



- ① The color of the idler-swivel may be different. **The part is the same.**
- Tighten the idler-swivel with two M3x30 screws.
- ① Note the correct orientation of the part. The screw heads on the idler-swivel must be facing up (like in the picture).
- The tip of each screw should be flush with the plastic part on the other side.

## PASO 30 NTC thermistor securing



- 🟠 On the extruder motor side, insert the NTC thermistor into the hole in the heatsink.
- 🟢 The NTC thermistor must be placed in the centre of the heatsink. See the picture.
- 🟡 Insert and firmly secure the M3x4T grub screw using a T6 Torx key. Screw it all the way in.  
**Applying more force may cause permanent damage to the thread.**

## PASO 31 Gearbox & motor assembly: parts preparation




- ⬛ **Para los siguientes pasos, por favor prepara:**
- 🟠 Motor assembly (1x) *removed in previous steps*
- 🟢 Gearbox assembly (1x) *removed in previous steps*
- 🟡 PG-assembly-adaptor (1x)

## PASO 32 Heatsink placing



 **Double-check that the spacer is still in place on the motor shaft!**

-  Carefully place the heatsink assembly onto the motor assembly. Look at the picture.

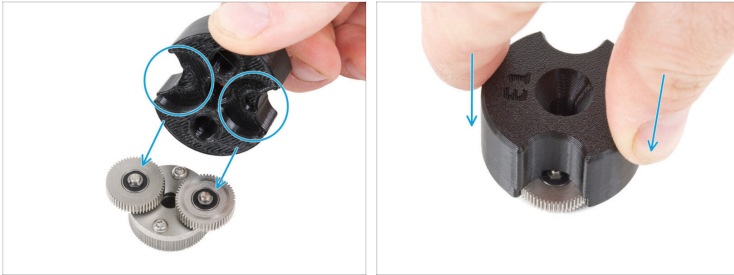
## PASO 33 Gearbox disassembling




- ◆ Dismantle the gearbox assembly into its component parts:
  - ◆ PG-ring (1x)
  - ◆ PG-assembly (1x)
  - ◆ PG-front-case (1x)
    - ⚠ **Make sure there is a plastic spacer inside the case. It can be black or white. Do not remove the plastic spacer from the case.**
  - ◆ Main-plate (1x)
  - ◆ M3x25 screw (3x)
- ◆ Using a paper towel clean all the parts from grease.

---

## PASO 34 Gearbox assembling



- En los siguientes pasos, volveremos a montar todo el conjunto de la caja de engranajes para garantizar una instalación correcta.

 **Las siguientes instrucciones deben seguirse correcta y cuidadosamente.** Consigue una mejor comprensión y un montaje satisfactorio viendo el vídeo junto a la guía: [prusa.io/PG-assembly](https://prusa.io/PG-assembly)

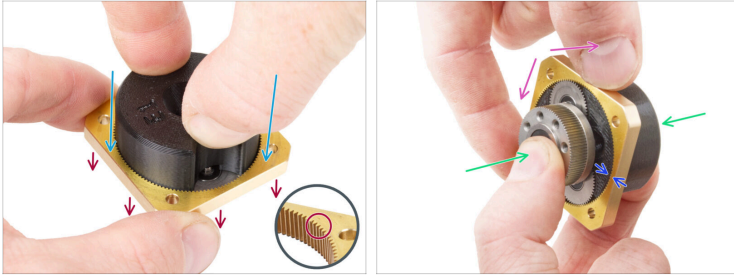
 The video is for MK4, but the procedure is identical.

- Después de ver el vídeo, sigue los pasos de esta guía.
- Coloca el PG-assembly-adaptor en el PG-assembly. Observa las cavidades para los engranajes en el adaptador.

---

## PASO 35 PG-ring assembling

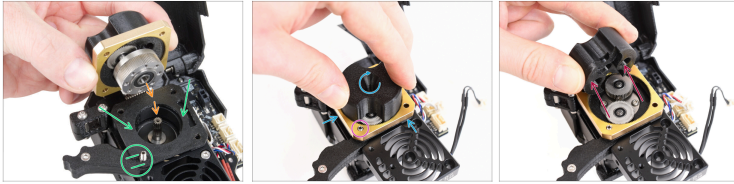
## How to replace Nextruder heatsink (XL Single-tool)








**No monte la caja de cambios sin el PG-assembly-adapter.** Esta herramienta está destinada a garantizar que los engranajes encajen correctamente.

- Desliza el PG-ring en el adaptador.
- Observa que hay un chablán en un lado de los dientes del PG-ring. Este lado debe estar orientado hacia abajo (hacia el PG-assembly).
- Sujeta todo el conjunto con una mano para poder girarlo con el PG-ring.
- Con la otra mano, desliza el PG-ring en el ensamblaje PG con un movimiento oscilante (mueva el PG-ring a izquierda y derecha repetidamente) - un cuarto de vuelta es suficiente.
- Deténte cuando las superficies de los engranajes estén aproximadamente a ras con la superficie del anillo PG.

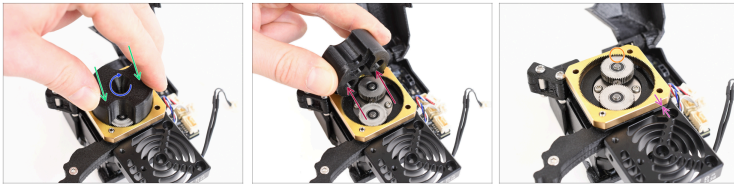
## PASO 36 Gearbox inserting



**Procede con mucho cuidado en este paso.**

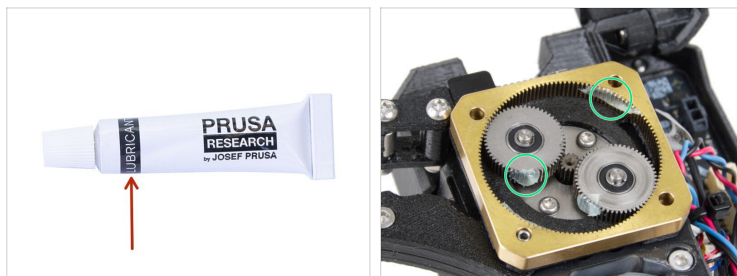
-  Attach the main-plate on the heatsink. Note the orientation of the part. Use the cutout for the socket screw as a guide (lower left corner).
-  Mantén la posición del PG-assembly y fíjalo al eje del motor del extrusor.
-  Make sure the PG-ring perfectly fits on the socket set screw.
-  Very gently and freely rotate with the whole PG assembly (PG-assembly-adapter, PG-assembly and PG-ring) until it drops down so that there is minimal gap between the assembly and the main-plate. Do not push on the assembly.
-  Remove the PG-assembly-adapter.

## PASO 37 PG assembly alignment



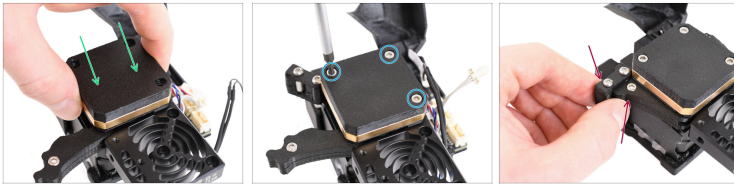
- ◆ Attach the PG-assembly-adaptor back on the PG-assembly again to verify that all parts are properly seated.
- ◆ Rotate with the PG-assembly-adaptor. The PG assembly must be easy to rotate without having to exert much force.
- ◆ Remove the PG-adaptor. You will no longer need it during assembly. We recommend keeping it for maintenance.
- ◆ Asegúrate de que el PG-assembly no sobresale sobre el PG-ring. Debe colocarse por debajo del nivel de la superficie del PG-ring o al mismo nivel que el anillo.
- ◆ No debe haber ningún espacio entre el PG-ring y la Main-plate. Si observas un hueco, retira el conjunto del engranaje planetario y vuelve a colocarlo.

## PASO 38 Gears lubricating



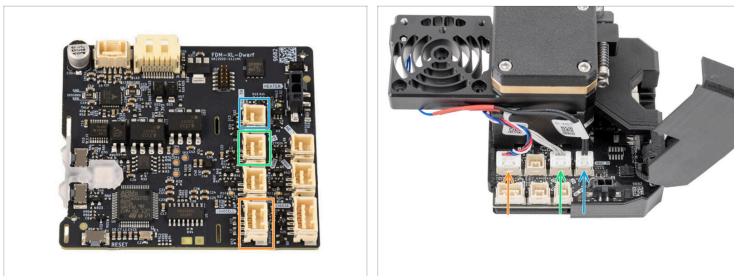
- Open the Prusa Lubricant. Using the opposite side of the cap, puncture the hole in the opening of the tube.
- Aplique una pequeña cantidad de Lubricante Prusa alrededor del PG-ring y de los dientes del PG-assembly.
- ① Tip: apply a small amount of lubricant to the tip of the zip tie and then spread the lubricant over the gears.
- Con una toalla de papel, limpia el exceso de lubricante en las superficies delanteras.

## PASO 39 Gearbox covering



- ◆ Place the PG-case on the gearbox.
- ◆ Insert three M3x25 screws into the PG-case, but do not tighten them completely. They will be tightened later.
- ◆ Close the idler-lever and lock it in position with the idler-swivel.

## PASO 40 Nextruder cables connecting



- ◆ Plug the load cell sensor cable into the Dwarf board.
- ◆ Plug the filament sensor cable into the Dwarf board.
- ◆ Plug the heatsink thermistor cable into the Dwarf board.

## PASO 41 Print fan assembly & fitting: parts preparation

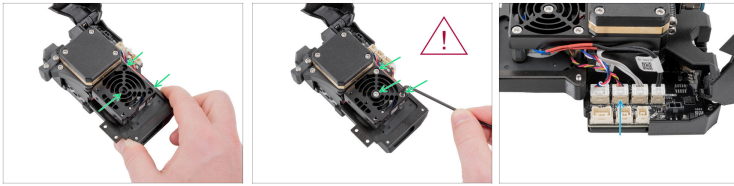


● **Para los siguientes pasos, por favor prepara:**

- Print fan assembly (1x) *removed in previous steps*
- M3x10 screw (3x) *removed in previous steps*
- Fitting QSM-M5 (1x) *removed in previous steps*

ⓘ A partir de septiembre de 2024, podrás recibir nuevos racores M5-4 negro. El montaje y la funcionalidad siguen siendo idénticos al azul.

## PASO 42 Print fan assembly securing



- Align the three metal spacers with the holes in the heatsink, make sure the board and fan cables are guided below the top spacer before you attach the heatsink, so that they are not pinched.

 **¡No pellizques ningún cable!**

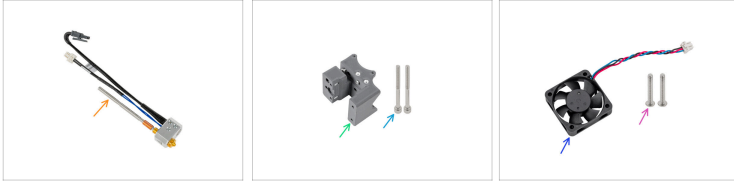
- Insert and secure three M3x10 screws. **Don't pinch any cables!**
- Connect the print fan to the print fan connector.

## PASO 43 Fitting securing



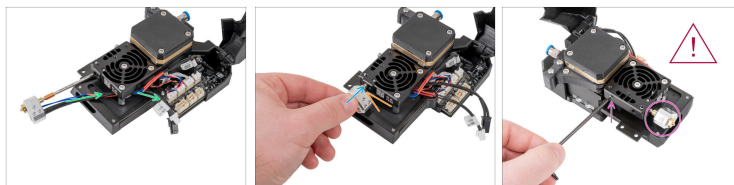
- i** A partir de septiembre de 2024, podrás recibir nuevos racores M5-4 negro. El montaje y la funcionalidad siguen siendo idénticos al azul.
- Mount the Fitting QSM-M5 on the top of the heatsink.
- Gently tighten the Fitting QSM-M5 with a uni-wrench.

## PASO 44 Hotend & nextruder body: parts preparation



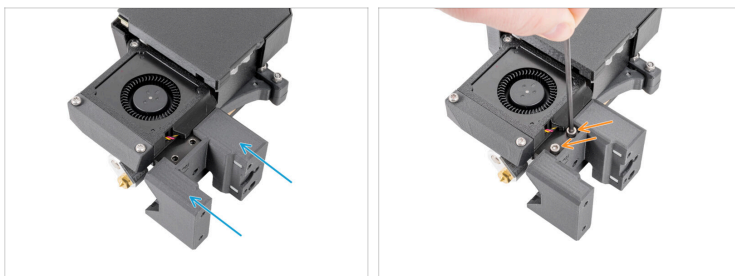
- **Para los siguientes pasos, por favor prepara:**
- Hotend assembly (1x) *removed in previous steps*
  - Hotend fan (1x) *removed in previous steps*
  - M3x20 screw (2x) *removed in previous steps*
  - Nextruder body (1x) *removed in previous steps*
  - M3x40 screw (2x) *removed in previous steps*

## PASO 45 Nozzle assembly securing



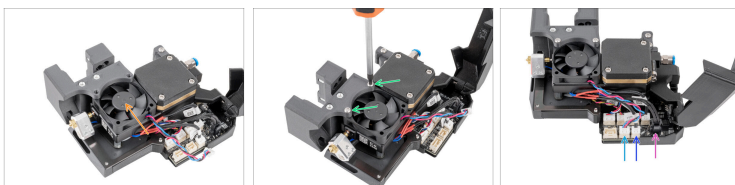
- ◆ Insert the heater and the thermistor cable under the heatsink. Look at the picture.
- ◆ Insert the nozzle into the heatsink and push it all the way into the heatsink.
- ◆ Rotate the heaterblock as in the picture. There must be approximately 35° - 40° angle to avoid damaging the hotend cables.
- ⚠ **No utilices fuerza adicional al apretar, puede dañar el tubo del hotend.**
- ◆ Mantén la posición y, con la llave Torx TX 8, aprieta el tornillo prisionero para fijar el hotend.

## PASO 46 Nextruder body securing



- Close the dwarf-cover-door and turn the Nextruder.
- Attach the nextruder-body to the Nextruder.
- Insert and secure two M3x40 screws.

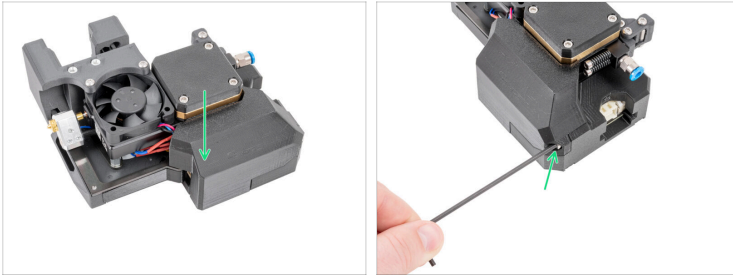
## PASO 47 Hotend fan securing



**Mind the orientation of the fan.**

- Insert the hotend fan between the heatsink and the extruder body. Look at the picture.
- Insert and secure two M3x20rT screws.
- Connect the hotend fan cable to the Dwarf board.
- Connect the hotend thermistor cable to the Dwarf board.
- Connect the hotend heater cable to the Dwarf board.

## PASO 48 Dwarf door closing



- Close the dwarf-board-cover on the Nextruder.
- Gently tighten the screw.

## PASO 49 Cable bundle securing



- Coloca el conector del cable en la parte superior del nextruder.
- Inserta el tubo de PTFE semitransparente en el racor del Nextruder. Empújalo hasta el fondo.
- Engancha los orificios de la placa flexible del haz de cables en las cabezas de los tornillos y empujalos a la posición correcta.
- Con una llave T10 aprieta los dos tornillos marcados.

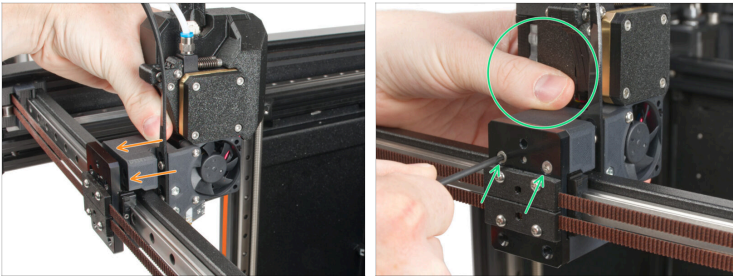
## PASO 50 Instalando el extrusor: preparación de las piezas



● Para los siguientes pasos, por favor prepara:

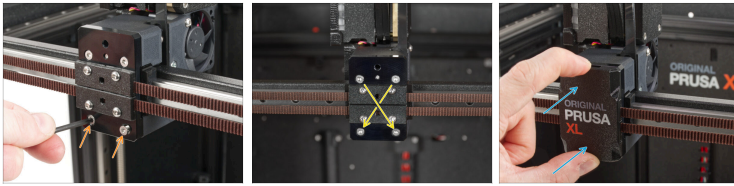
● M3x12b screw (4x) *removed in the previous step*

## PASO 51 Nextruder attaching



- Desde la parte posterior del carro X, fija el conjunto del extrusor al carro X. Observa la orientación correcta del extrusor.
- Hold the extruder and secure it by inserting and tightening two M3x12b screws into the top screw holes. Do not fully tighten the screws at the moment!

## PASO 52 Nextruder securing



- ✦ Insert and tighten two M3x12b screws to the lower holes in the X-carriage to secure the extruder assembly. Do not fully tighten the screws at the moment!
  - ✦ Fully tighten all four screws diagonally to secure the extruder assembly.
  - ✦ Vuelva a encajar la x-carriage-cover en el carro X. Debes sentir un ligero "clic" para asegurarte de que la cubierta encaja en la pieza.
- ⚠ Retira la caja de cartón de Prusament de la base calefactable.

## PASO 53 Dock securing



- Guía el haz de cables del extrusor con el tubo de PTFE libremente por encima de la impresora hacia la parte posterior.
- Gira la impresora, de modo que la parte posterior de la impresora esté orientada hacia ti.
- Locate the long metal profile (tch-mounting-insert) in the back of the top extrusion. It has five threaded openings in it.
- There is a screw protruding from the xl-dock-cable-router. The screw must be attached to the third threaded opening on the long metal profile. Look through the rear metal sheet to check if the cable holder is lined up with the correct opening.
- Introduce la llave Allen de 2.5mm hasta el fondo a través de un agujero (abajo a la izquierda en el patrón) en la chapa trasera, así como a través de la pieza de plástico hasta llegar al tornillo. Apriétalo.

## PASO 54 Nextruder cable connecting



- ⚠ **Detrás del soporte de la antena hay un cable de antena, ¡no tires del conector!**
- ⬢ Afloja ligeramente dos tornillos de la tapa. No es necesario quitarlos completamente. Empuja la cubierta hacia la derecha y retírala suavemente de los tornillos.
- ⬢ Connect the Nextruder cable to the upper slot labeled DWARF 1.
- ⬢ Coloca el antenna-holder en los tornillos, empuja la cubierta hacia la izquierda y aprieta los tornillos.

## PASO 55 Wi-Fi antenna: parts preparation

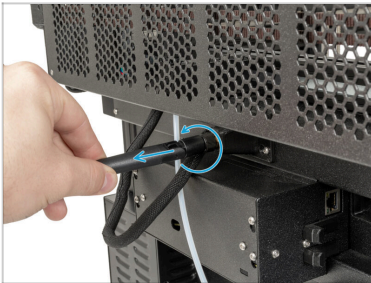


● **Para los siguientes pasos, por favor prepara:**

● Wi-Fi antenna (1x) *removed in previous step*

ⓘ La Original Prusa XL se entrega con dos versiones de la antena Wi-Fi, cada una con una forma diferente. La funcionalidad es la misma.

## PASO 56 Wi-Fi antenna attaching



ⓘ Este paso es solo para la impresora, que tiene una antena Wi-Fi en la parte posterior de la impresora.

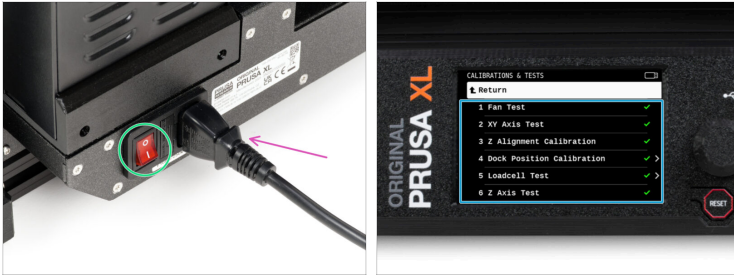
● Atornilla la antena Wi-Fi en el conector de antena. La antena se puede girar y doblar en dos direcciones.

## PASO 57 Guiando el tubo PTFE del extrusor



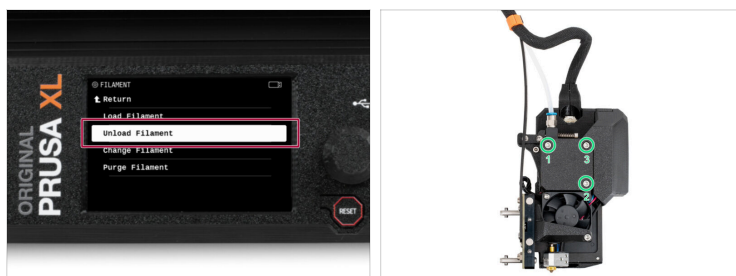
- Gira la impresora de modo que el lado izquierdo de la impresora esté orientado hacia ti.
- Insert the free extruder PTFE tube all the way into the upper hole in the part.

## PASO 58 Wizard



- ◆ Enchufa el cable de la fuente de alimentación desde la parte posterior de la impresora.
- ◆ Enciende el interruptor (símbolo "I").
- ◆ Realiza los test del menú *Control -> Calibración y Tests*.
- ⓘ El asistente probará todos los componentes importantes de la impresora. Todo el proceso dura unos minutos. Algunas partes del asistente requieren la interacción directa del usuario. Sigue las instrucciones que aparecen en pantalla.
- ⚠ **NOTA: Mientras pruebas los ejes, asegúrate de que no hay nada en la impresora que obstruya el movimiento de los ejes.**
- ⚠ **ADVERTENCIA: No toques la impresora durante el asistente a menos que se le indique. Algunas partes de la impresora pueden estar CALIENTES y moverse a gran velocidad.**

## PASO 59 Calibrating the Nextruder gears



- Conecta la impresora y enciéndela.
- Now we need to simulate the movement of the gearbox. On the LCD screen, navigate to Filament - *Unload filament*.
- As soon as the extruder's movement finishes, tighten the three M3x25 screws on the PG-case in the correct order (shown on the picture).
- Then loosen the screws slightly and repeat the process, tightening the screws in the correct order. This ensures that the gearbox is seated correctly.

## PASO 60 Well done!



- ◆ Congratulations, you have just successfully replaced the heatsink on your Original Prusa XL!



---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

