

# Tabla de Contenido

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| <b>1. Introduction</b>                                                   | 9  |
| Paso 1 - Preparing the kit                                               | 10 |
| Paso 2 - Cómo navegar por el manual                                      | 10 |
| Paso 3 - Ver imágenes de alta resolución                                 | 11 |
| Paso 4 - Todas las herramientas necesarias están incluidas               | 11 |
| Paso 5 - Utilidades adicionales para esta guía                           | 12 |
| Paso 6 - Labels guide                                                    | 12 |
| Paso 7 - Spare bag                                                       | 13 |
| Paso 8 - Piezas impresas - versión                                       | 13 |
| Paso 9 - ¡Estamos aquí para atenderte!                                   | 14 |
| Paso 10 - Consejo pro: introduciendo las tuercas                         | 15 |
| Paso 11 - Important: Electronics protection                              | 16 |
| Paso 12 - Reward yourself                                                | 17 |
| Paso 13 - Cómo terminar con éxito el montaje                             | 18 |
| Paso 14 - Instalando los complementos y mejoras                          | 19 |
| Paso 15 - Prepare your desk                                              | 20 |
| <b>2. Base assembly</b>                                                  | 21 |
| Paso 1 - Herramientas necesarias para este capítulo                      | 22 |
| Paso 2 - Conjunto de la base: preparación de las piezas                  | 22 |
| Paso 3 - Inserción de las bridas                                         | 23 |
| Paso 4 - Conjunto de la base: preparación de las piezas (parte 1)        | 23 |
| Paso 5 - Conjunto de la base: preparación de las piezas (parte 2)        | 24 |
| Paso 6 - Instalando los soportes de motor                                | 24 |
| Paso 7 - Instalando el motor trasero                                     | 25 |
| Paso 8 - Asegurando el motor trasero                                     | 25 |
| Paso 9 - Instalando el motor delantero derecho                           | 26 |
| Paso 10 - Instalando el motor delantero izquierdo                        | 26 |
| Paso 11 - Bastidor inferior: preparación de las piezas                   | 27 |
| Paso 12 - Montando el perfil inferior: delantero + izquierdo             | 28 |
| Paso 13 - Montando el perfil inferior: izquierdo + trasero               | 28 |
| Paso 14 - Montando el perfil inferior: derecho                           | 29 |
| Paso 15 - Insertando los pines espaciadores                              | 29 |
| Paso 16 - Pies antivibraciones: preparación de piezas                    | 30 |
| Paso 17 - Instalando los pies antivibración                              | 30 |
| Paso 18 - Instalando el bastidor inferior                                | 31 |
| Paso 19 - Montaje del bastidor inferior: lado derecho                    | 31 |
| Paso 20 - Montaje del bastidor inferior: trasera + izquierda + delantera | 32 |
| Paso 21 - Haribo time                                                    | 32 |
| Paso 22 - Done                                                           | 33 |
| <b>3. Back assembly</b>                                                  | 34 |
| Paso 1 - Tools necessary for this chapter                                | 35 |
| Paso 2 - PSU assembly: parts preparation                                 | 35 |
| Paso 3 - Preparing the PSU                                               | 36 |
| Paso 4 - Power cables info                                               | 37 |
| Paso 5 - Connecting the PSU                                              | 38 |
| Paso 6 - xBuddy: parts preparation I.                                    | 38 |
| Paso 7 - xBuddy: parts preparation II.                                   | 39 |
| Paso 8 - Applying the thermal pads                                       | 39 |
| Paso 9 - Installing the xBuddy                                           | 40 |
| Paso 10 - Installing the xBuddy extension                                | 40 |

|                                                                          |           |
|--------------------------------------------------------------------------|-----------|
| Paso 11 - Installing zip ties .....                                      | 41        |
| Paso 12 - Connecting the xBuddy extension board .....                    | 41        |
| Paso 13 - Inserting grommets: xBuddy box .....                           | 42        |
| Paso 14 - Wi-Fi: parts preparation .....                                 | 42        |
| Paso 15 - Assembling the Wi-Fi .....                                     | 43        |
| Paso 16 - Installing the Wi-Fi assembly .....                            | 43        |
| Paso 17 - Back panel: parts preparation .....                            | 44        |
| Paso 18 - Installing grommets: back panel top .....                      | 44        |
| Paso 19 - Installing grommets: sides + bottom .....                      | 45        |
| Paso 20 - Aligning the PSU .....                                         | 45        |
| Paso 21 - Mounting the PSU .....                                         | 46        |
| Paso 22 - Aligning the xBuddy box assembly .....                         | 46        |
| Paso 23 - Mounting the xBuddy box .....                                  | 47        |
| Paso 24 - Power cables cover: parts preparation .....                    | 47        |
| Paso 25 - Connecting the power cables .....                              | 48        |
| Paso 26 - Preparing the PSU-cable-cover .....                            | 49        |
| Paso 27 - Covering the PSU cables .....                                  | 49        |
| Paso 28 - Chamber fans: parts preparation .....                          | 50        |
| Paso 29 - Assembling the fan grid .....                                  | 50        |
| Paso 30 - Attaching the fans .....                                       | 51        |
| Paso 31 - Covering the cooling fans .....                                | 51        |
| Paso 32 - Rear profiles: parts preparation .....                         | 52        |
| Paso 33 - Installing the rear profiles .....                             | 52        |
| Paso 34 - Mounting the back panel .....                                  | 53        |
| Paso 35 - Stepper splitter: parts preparation .....                      | 53        |
| Paso 36 - Guiding the Stepper splitter cable .....                       | 54        |
| Paso 37 - Connecting the Stepper splitter .....                          | 54        |
| Paso 38 - Mounting the Stepper Splitter .....                            | 55        |
| Paso 39 - LCD cable: parts preparation .....                             | 55        |
| Paso 40 - Guiding the LCD cable .....                                    | 56        |
| Paso 41 - Main FE cable INFO .....                                       | 56        |
| Paso 42 - Conectando el cable FE (nº 3.) .....                           | 57        |
| Paso 43 - Guiding the FE cable (no. 2) .....                             | 57        |
| Paso 44 - Guiding the FE cable (no. 1) .....                             | 58        |
| Paso 45 - Guiding the FE cable (no. 4 and 5) .....                       | 58        |
| Paso 46 - Cable FE - xBuddy: preparación de piezas .....                 | 59        |
| Paso 47 - Conectando el cable FE: xBuddy .....                           | 59        |
| Paso 48 - Conectando el cable xLCD .....                                 | 60        |
| Paso 49 - PSU-cover: parts preparation .....                             | 60        |
| Paso 50 - Conectando el cable FE: fuente de alimentación .....           | 61        |
| Paso 51 - Haribo time .....                                              | 61        |
| Paso 52 - Done .....                                                     | 62        |
| <b>4. Montaje de la base calefactable .....</b>                          | <b>63</b> |
| Paso 1 - Tools necessary for this chapter .....                          | 64        |
| Paso 2 - Base calefactable: preparación de las piezas .....              | 65        |
| Paso 3 - Montaje del cable de la base calefactable (parte 1) .....       | 65        |
| Paso 4 - Montaje de cables de la base calefactable (segunda parte) ..... | 66        |
| Paso 5 - Bed-cable-cover-bottom: preparación de las piezas .....         | 66        |
| Paso 6 - Colocando la cubierta del cable .....                           | 67        |
| Paso 7 - Carro base calefactable: preparación de las piezas .....        | 67        |
| Paso 8 - Instalando los tornillos de las juntas de expansión .....       | 68        |
| Paso 9 - Instalando las juntas de expansión .....                        | 68        |
| Paso 10 - Tira LED RGB: preparación de las piezas .....                  | 69        |
| Paso 11 - Instalando la tira LED .....                                   | 69        |



|                                                                             |           |
|-----------------------------------------------------------------------------|-----------|
| Paso 12 - Colocando el difusor de la tira LED .....                         | 70        |
| Paso 13 - Cubriendo la tira LED RGB .....                                   | 70        |
| Paso 14 - Guiding the RGB LED strip cable .....                             | 71        |
| Paso 15 - Bed mounts: parts preparation .....                               | 71        |
| Paso 16 - Montando los soportes de la cama .....                            | 72        |
| Paso 17 - Asegurando los soportes de la base .....                          | 72        |
| Paso 18 - Soportes de cama: introduciendo las tuercas .....                 | 73        |
| Paso 19 - Montaje de la CORE-One-bed-spacer-rear .....                      | 73        |
| Paso 20 - Instalando la bed-mount-right .....                               | 73        |
| Paso 21 - Instalando el bed-mount-left .....                                | 74        |
| Paso 22 - Mounting the heatbed: parts preparation .....                     | 74        |
| Paso 23 - Asegurando la base calefactable .....                             | 75        |
| Paso 24 - Alineador junta expansión .....                                   | 75        |
| Paso 25 - Alineación de la junta de expansión delantera .....               | 76        |
| Paso 26 - Alineación de la junta de expansión delantera izquierda .....     | 76        |
| Paso 27 - Alineación de la junta de expansión izquierda .....               | 77        |
| Paso 28 - Alineación de la junta de expansión trasera izquierda .....       | 77        |
| Paso 29 - Alineación de la junta de expansión trasera central .....         | 78        |
| Paso 30 - Alineación de la junta de expansión trasera derecha .....         | 78        |
| Paso 31 - Alineación de la junta de expansión derecha .....                 | 79        |
| Paso 32 - Alineación de la junta de expansión delantera derecha .....       | 79        |
| Paso 33 - Fijando la base calefactable .....                                | 80        |
| Paso 34 - Cubriendo los cables: preparación de las piezas .....             | 80        |
| Paso 35 - Guiando los cables de la base calefactable .....                  | 81        |
| Paso 36 - Cubriendo los cables de la base calefactable .....                | 81        |
| Paso 37 - Conjunto limpiador boquilla: preparación de las piezas .....      | 82        |
| Paso 38 - Ensamblando el limpiador de boquilla .....                        | 82        |
| Paso 39 - Montando el limpiador de boquilla .....                           | 83        |
| Paso 40 - Pegando la almohadilla limpiadora .....                           | 83        |
| Paso 41 - Montando la base calefactable: preparación de las piezas .....    | 84        |
| Paso 42 - Colocando el conjunto de la base calefactable .....               | 84        |
| Paso 43 - Montando el conjunto de la base calefactable: motor trasero ..... | 85        |
| Paso 44 - Mounting the heatbed assembly: front motor left .....             | 86        |
| Paso 45 - Mounting the heatbed assembly: front motor right .....            | 86        |
| Paso 46 - Attaching the heatbed cables I. ....                              | 87        |
| Paso 47 - Attaching the heatbed cables II. ....                             | 87        |
| Paso 48 - Securing the heatbed cables: parts preparation .....              | 88        |
| Paso 49 - Securing the textile sleeve .....                                 | 88        |
| Paso 50 - Guiding the heatbed assembly cables .....                         | 89        |
| Paso 51 - Connecting the heatbed power cables .....                         | 89        |
| Paso 52 - Momento Haribo .....                                              | 90        |
| Paso 53 - Listo .....                                                       | 90        |
| <b>5. CoreXY assembly .....</b>                                             | <b>91</b> |
| Paso 1 - Tools necessary for this chapter .....                             | 92        |
| Paso 2 - Rod holders: parts preparation .....                               | 92        |
| Paso 3 - Assembling the rod holders .....                                   | 93        |
| Paso 4 - Preparing the front rod holders .....                              | 93        |
| Paso 5 - Installing the front rod holders .....                             | 94        |
| Paso 6 - XY carriage: parts preparation .....                               | 94        |
| Paso 7 - Assembling the XY-carriages .....                                  | 95        |
| Paso 8 - Assembling the linear holder left .....                            | 95        |
| Paso 9 - Assembling the linear holder right .....                           | 96        |
| Paso 10 - Attaching the linear holder assemblies .....                      | 96        |
| Paso 11 - Smooth rods INFO .....                                            | 97        |

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| Paso 12 - Mounting the smooth rods .....                          | 97  |
| Paso 13 - Securing the rear rod holders .....                     | 98  |
| Paso 14 - Securing the front rod holders .....                    | 98  |
| Paso 15 - Motor mounts: parts preparation .....                   | 99  |
| Paso 16 - Motor mounts: part preparation .....                    | 99  |
| Paso 17 - Assembling the XY-motor-mount-right I. ....             | 100 |
| Paso 18 - Assembling the XY-motor-mount-right II. ....            | 100 |
| Paso 19 - Assembling the XY-motor-mount-left I. ....              | 101 |
| Paso 20 - Assembling the XY-motor-mount-left II. ....             | 101 |
| Paso 21 - Belt tensioners: parts preparation I. ....              | 102 |
| Paso 22 - Belt tensioners: parts preparation II. ....             | 102 |
| Paso 23 - Preparing the tensioner pulleys .....                   | 103 |
| Paso 24 - Assembling the belt tensioner left I. ....              | 103 |
| Paso 25 - Assembling the belt tensioner left II. ....             | 104 |
| Paso 26 - Assembling the belt tensioner right .....               | 104 |
| Paso 27 - Installing the belt tensioners: parts preparation ..... | 105 |
| Paso 28 - Installing the motor mount left .....                   | 105 |
| Paso 29 - Installing the motor mount right .....                  | 106 |
| Paso 30 - Installing the belt-tensioner-left .....                | 106 |
| Paso 31 - Installing the belt-tensioner-right .....               | 107 |
| Paso 32 - Linear rail: parts preparation .....                    | 107 |
| Paso 33 - Attaching the linear rail .....                         | 108 |
| Paso 34 - Securing the linear rail .....                          | 108 |
| Paso 35 - Installing the linear rail: parts preparation .....     | 109 |
| Paso 36 - Installing the linear rail assembly .....               | 109 |
| Paso 37 - Linear rail: removing the safety pins .....             | 110 |
| Paso 38 - Bed-stop: parts preparation .....                       | 110 |
| Paso 39 - Assembling the bed-stop .....                           | 110 |
| Paso 40 - Mounting the bed-stop .....                             | 111 |
| Paso 41 - X&Y motors: parts preparation .....                     | 111 |
| Paso 42 - Installing the X-axis pulley .....                      | 112 |
| Paso 43 - Installing the Y-axis pulley .....                      | 113 |
| Paso 44 - XY belts: parts preparation .....                       | 114 |
| Paso 45 - XY belts INFO .....                                     | 114 |
| Paso 46 - Y belt guiding: Y motor pulley .....                    | 115 |
| Paso 47 - Securing the Y-axis motor .....                         | 115 |
| Paso 48 - Y belt guiding: Y motor mount .....                     | 116 |
| Paso 49 - Y belt guiding: belt tensioner .....                    | 116 |
| Paso 50 - Y belt guiding: X motor mount .....                     | 117 |
| Paso 51 - Y belt guiding: securing the belt .....                 | 117 |
| Paso 52 - X belt guiding: X motor pulley .....                    | 118 |
| Paso 53 - Securing the X-axis motor .....                         | 118 |
| Paso 54 - Y belt guiding: X motor mount .....                     | 119 |
| Paso 55 - X belt guiding: belt tensioner .....                    | 119 |
| Paso 56 - X belt guiding: Y motor mount .....                     | 120 |
| Paso 57 - X belt guiding: securing the belt .....                 | 120 |
| Paso 58 - Checking the belt guidance .....                        | 121 |
| Paso 59 - Bowden guide: parts preparation .....                   | 121 |
| Paso 60 - Securing the Nextruder holder .....                     | 122 |
| Paso 61 - Securing the Y motor cable .....                        | 122 |
| Paso 62 - Securing the X motor cable .....                        | 123 |
| Paso 63 - Installing the bowden guide .....                       | 123 |
| Paso 64 - White LED strip: parts preparation .....                | 124 |
| Paso 65 - Sticking the White LED strip .....                      | 124 |
| Paso 66 - Installing the white LED assembly .....                 | 125 |

|                                                                  |            |
|------------------------------------------------------------------|------------|
| Paso 67 - Door sensor & White LED strip: parts preparation ..... | 125        |
| Paso 68 - Inserting the zip ties .....                           | 126        |
| Paso 69 - Installing the door sensor .....                       | 126        |
| Paso 70 - Securing the door sensor cable .....                   | 127        |
| Paso 71 - Guiding the cables: LED and door sensor .....          | 127        |
| Paso 72 - Buddy3D Camera Note .....                              | 128        |
| Paso 73 - Smooth rods: parts preparation .....                   | 128        |
| Paso 74 - Installing the CoreXY assembly .....                   | 129        |
| Paso 75 - Securing the smooth rods .....                         | 129        |
| Paso 76 - Aligning the linear rail .....                         | 130        |
| Paso 77 - Guiding the corexy cables .....                        | 130        |
| Paso 78 - Guiding the cooling fan cables .....                   | 131        |
| Paso 79 - Fixing the bed-stop .....                              | 131        |
| Paso 80 - Connecting the cooling fans cables .....               | 132        |
| Paso 81 - Connecting the corexy cables .....                     | 132        |
| Paso 82 - Haribo time .....                                      | 133        |
| Paso 83 - Done .....                                             | 133        |
| <b>6. Montaje Nextruder .....</b>                                | <b>134</b> |
| Paso 1 - Tool necessary for this chapter .....                   | 135        |
| Paso 2 - Nextruder idler assembly: parts preparation .....       | 136        |
| Paso 3 - Assembling the extruder idler .....                     | 137        |
| Paso 4 - Assembling the extruder: parts preparation I. ....      | 137        |
| Paso 5 - Assembling the extruder: parts preparation II. ....     | 138        |
| Paso 6 - Ensamblando el extrusor .....                           | 138        |
| Paso 7 - Montando la caja de engranajes .....                    | 139        |
| Paso 8 - Montando el PG-ring .....                               | 139        |
| Paso 9 - Montando el PG-assembly .....                           | 140        |
| Paso 10 - Comprobando el PG-assembly .....                       | 140        |
| Paso 11 - Assembling the Nextruder idler .....                   | 141        |
| Paso 12 - Gear lubrication: parts preparation .....              | 141        |
| Paso 13 - Lubricando el engranaje .....                          | 142        |
| Paso 14 - Covering the planetary gear .....                      | 142        |
| Paso 15 - Assembling the Idler-swivel: parts preparation .....   | 143        |
| Paso 16 - Montaje del Idler-swivel .....                         | 143        |
| Paso 17 - Montaje de la Idler-nut .....                          | 144        |
| Paso 18 - Mounting the Idler-swivel assembly .....               | 144        |
| Paso 19 - NTC thermistor: parts preparation .....                | 145        |
| Paso 20 - Assembling the NTC thermistor .....                    | 145        |
| Paso 21 - Mounting the Nextruder: parts preparation .....        | 146        |
| Paso 22 - Protegiendo la base calefactable .....                 | 146        |
| Paso 23 - Montando el Nextruder .....                            | 147        |
| Paso 24 - Hotend fan: parts preparation .....                    | 147        |
| Paso 25 - Installing the Hotend fan .....                        | 148        |
| Paso 26 - Guiding the Hotend fan cables .....                    | 148        |
| Paso 27 - LoveBoard: parts preparation I. ....                   | 149        |
| Paso 28 - LoveBoard: parts preparation II. ....                  | 149        |
| Paso 29 - Ensamblaje de la Loveboard-mount .....                 | 150        |
| Paso 30 - Ensamblando la Printhead-cover .....                   | 150        |
| Paso 31 - Ensamblaje de la LoveBoard .....                       | 151        |
| Paso 32 - Guiding the main cable .....                           | 151        |
| Paso 33 - Cubriendo la LoveBoard .....                           | 152        |
| Paso 34 - Swingarm: parts preparation I. ....                    | 152        |
| Paso 35 - Swingarm: parts preparation II. ....                   | 153        |
| Paso 36 - Guiding the main cable .....                           | 153        |

|                                                               |            |
|---------------------------------------------------------------|------------|
| Paso 37 - Mounting the main cable .....                       | 154        |
| Paso 38 - Attaching the LoveBoard assembly .....              | 154        |
| Paso 39 - Montando el brazo oscilante .....                   | 155        |
| Paso 40 - Attaching the main cable .....                      | 155        |
| Paso 41 - Inserting the PTFE tube .....                       | 156        |
| Paso 42 - Securing the PTFE tube .....                        | 156        |
| Paso 43 - Comprobando el movimiento .....                     | 157        |
| Paso 44 - Print fan: parts preparation .....                  | 157        |
| Paso 45 - Montaje del fan-shroud .....                        | 158        |
| Paso 46 - Installing the print fan assembly .....             | 158        |
| Paso 47 - Hotend: preparación de las piezas .....             | 159        |
| Paso 48 - Instalando el hotend .....                          | 159        |
| Paso 49 - Connecting the heatsink cables .....                | 160        |
| Paso 50 - Connecting the hotend cables .....                  | 160        |
| Paso 51 - Connecting the print fan cable .....                | 160        |
| Paso 52 - Conecta el cable del E-motor .....                  | 161        |
| Paso 53 - LoveBoard covers: parts preparation .....           | 161        |
| Paso 54 - LoveBoard: Comprobación del cableado .....          | 162        |
| Paso 55 - Cubriendo la LoveBoard .....                        | 162        |
| Paso 56 - Conectando el cable principal .....                 | 163        |
| Paso 57 - Momento Haribo .....                                | 163        |
| Paso 58 - Listo .....                                         | 164        |
| <b>7. Estructura y Electrónica .....</b>                      | <b>165</b> |
| Paso 1 - Tools necessary for this chapter .....               | 166        |
| Paso 2 - Front profiles: parts preparation .....              | 166        |
| Paso 3 - Installing the front right profile .....             | 167        |
| Paso 4 - Instalando el perfil delantero izquierdo .....       | 167        |
| Paso 5 - Perfiles superiores: preparación de las piezas ..... | 168        |
| Paso 6 - Montaje de los perfiles superiores I. ....           | 169        |
| Paso 7 - Montaje de los perfiles superiores II. ....          | 170        |
| Paso 8 - Alineando los perfiles superiores .....              | 170        |
| Paso 9 - Instalando los perfiles superiores .....             | 171        |
| Paso 10 - CoreXY fixing screws: parts preparation .....       | 171        |
| Paso 11 - Fixing the CoreXY assembly .....                    | 172        |
| Paso 12 - Side sensor base: parts preparation .....           | 172        |
| Paso 13 - Assembling the side sensor base .....               | 173        |
| Paso 14 - Probando la palanca .....                           | 173        |
| Paso 15 - Montaje del interruptor .....                       | 174        |
| Paso 16 - IR Sensor: parts preparation .....                  | 174        |
| Paso 17 - Connecting the IR sensor .....                      | 175        |
| Paso 18 - Installing the IR sensor .....                      | 175        |
| Paso 19 - Installing the side sensor cover .....              | 176        |
| Paso 20 - Side filament sensor: parts preparation .....       | 176        |
| Paso 21 - Installing the side filament sensor .....           | 177        |
| Paso 22 - Guide the filament sensor cable .....               | 177        |
| Paso 23 - Connecting the side filament sensor .....           | 178        |
| Paso 24 - NFC Antenna: parts preparation .....                | 178        |
| Paso 25 - Applying the adhesive film .....                    | 179        |
| Paso 26 - Installing the NFC Coil .....                       | 179        |
| Paso 27 - Connecting the NFC Coil .....                       | 180        |
| Paso 28 - Comprobación del cableado .....                     | 180        |
| Paso 29 - Preparing the electronics cover .....               | 181        |
| Paso 30 - Installing the electronics cover .....              | 181        |
| Paso 31 - Nota Cámara Buddy3D .....                           | 182        |

|                                                          |            |
|----------------------------------------------------------|------------|
| Paso 32 - xBuddy cover: parts preparation .....          | 182        |
| Paso 33 - Installing the xBuddy cover .....              | 183        |
| Paso 34 - Installing the rear cover .....                | 183        |
| Paso 35 - Right side: parts preparation .....            | 184        |
| Paso 36 - Instalando el Puck-universal .....             | 184        |
| Paso 37 - Right handle: parts preparation .....          | 185        |
| Paso 38 - Instalando la presilla .....                   | 185        |
| Paso 39 - Montando el asa .....                          | 186        |
| Paso 40 - Fixing the right side .....                    | 186        |
| Paso 41 - Left side: parts preparation .....             | 187        |
| Paso 42 - Installing the left side .....                 | 187        |
| Paso 43 - Momento Haribo .....                           | 188        |
| Paso 44 - Listo .....                                    | 188        |
| <b>8. Trim, Door &amp; xLCD .....</b>                    | <b>189</b> |
| Paso 1 - Tools necessary for this chapter .....          | 190        |
| Paso 2 - Top cover: parts preparation I. ....            | 190        |
| Paso 3 - Top cover: parts preparation II. ....           | 191        |
| Paso 4 - Removing the foil .....                         | 191        |
| Paso 5 - Test-fitting the top cover .....                | 192        |
| Paso 6 - Assembling the top cover I. ....                | 192        |
| Paso 7 - Assembling the top cover II. ....               | 193        |
| Paso 8 - Assembling the top cover III. ....              | 194        |
| Paso 9 - Installing the top cover .....                  | 194        |
| Paso 10 - Side covers: parts preparation .....           | 195        |
| Paso 11 - Removing the foil .....                        | 195        |
| Paso 12 - Covering the left side .....                   | 196        |
| Paso 13 - Covering the right side .....                  | 196        |
| Paso 14 - xLCD: parts preparation .....                  | 197        |
| Paso 15 - Assembling the xLCD I. ....                    | 197        |
| Paso 16 - Assembling the xLCD II. ....                   | 198        |
| Paso 17 - Installing the FE Faston connector .....       | 198        |
| Paso 18 - Installing the LCD knob .....                  | 199        |
| Paso 19 - xLCD bezel: parts preparation .....            | 199        |
| Paso 20 - Mounting the xLCD I. ....                      | 200        |
| Paso 21 - Mounting the xLCD II. ....                     | 200        |
| Paso 22 - Installing the xLCD assembly .....             | 201        |
| Paso 23 - Securing the xLCD assembly .....               | 201        |
| Paso 24 - Door seal: parts preparation .....             | 202        |
| Paso 25 - Attaching the top seal .....                   | 202        |
| Paso 26 - Attaching the side seals .....                 | 203        |
| Paso 27 - Magnet holders: parts preparation .....        | 203        |
| Paso 28 - Assembling the magnet holders .....            | 204        |
| Paso 29 - Installing the magnet holders .....            | 204        |
| Paso 30 - Hinges: parts preparation .....                | 205        |
| Paso 31 - Installing the door-hinge-in parts .....       | 205        |
| Paso 32 - Installing the door-hinge-out I. ....          | 206        |
| Paso 33 - Installing the door-hinge-out II. ....         | 206        |
| Paso 34 - Door panel: parts preparation .....            | 207        |
| Paso 35 - Installing the door handle .....               | 207        |
| Paso 36 - Securing the handle .....                      | 208        |
| Paso 37 - Installing the door panel .....                | 208        |
| Paso 38 - Attaching the sticker: Parts preparation ..... | 209        |
| Paso 39 - Attaching the sticker .....                    | 209        |
| Paso 40 - Haribo time .....                              | 210        |

|                                                              |            |
|--------------------------------------------------------------|------------|
| Paso 41 - Done .....                                         | 210        |
| <b>9. Calibration &amp; First run .....</b>                  | <b>211</b> |
| Paso 1 - Belt tensioning .....                               | 212        |
| Paso 2 - Installing the spoolholder: Parts preparation ..... | 212        |
| Paso 3 - Attaching the print sheet and spoolholder .....     | 213        |
| Paso 4 - Firmware update .....                               | 213        |
| Paso 5 - Turning on the printer .....                        | 214        |
| Paso 6 - Setting up the printer: Intro .....                 | 214        |
| Paso 7 - Setting up the printer: Network setup .....         | 215        |
| Paso 8 - Wizard: Intro .....                                 | 215        |
| Paso 9 - Wizard: Door Sensor Calibration .....               | 216        |
| Paso 10 - Wizard: Loadcell Test .....                        | 216        |
| Paso 11 - Wizard: Gearbox Alignment .....                    | 217        |
| Paso 12 - Wizard: Filament Sensor Calibration .....          | 217        |
| Paso 13 - Wizard complete .....                              | 218        |
| Paso 14 - Haribo time .....                                  | 218        |
| Paso 15 - Handbook .....                                     | 219        |
| Paso 16 - Give us feedback .....                             | 219        |
| Paso 17 - Prusa knowledge base .....                         | 220        |
| Paso 18 - Join Printables! .....                             | 220        |

# 1. Introduction

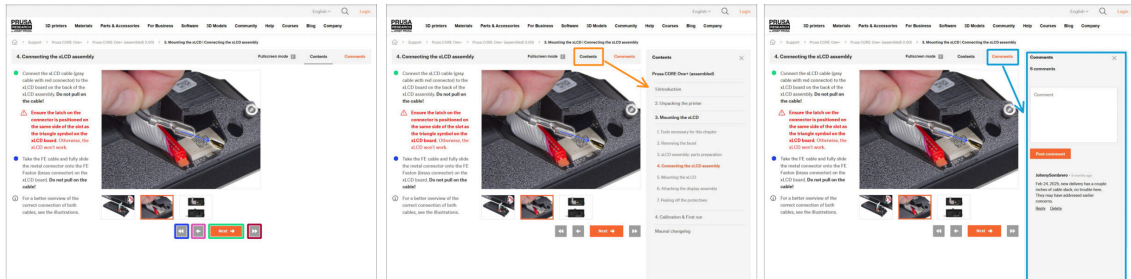


## PASO 1 Preparing the kit



- 
**Welcome to the guide for assembling and setting up your Prusa CORE One+ (Gen 2) kit.** Follow these steps to ensure your printer is ready for its first print.
- 
**Por favor, prepara el kit recibido de Prusa Research.**
- 
**No es necesario soldar o crimpar cables.**

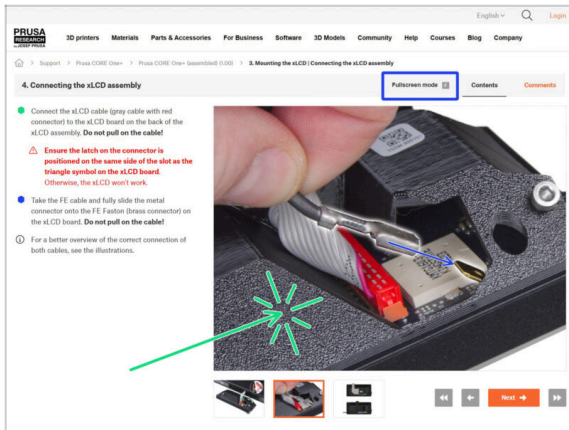
## PASO 2 Cómo navegar por el manual



- 
**Utiliza los botones gráficos de navegación de la esquina inferior derecha o las teclas de flecha del teclado:**
- 
**Botón de reproducción hacia atrás / Flecha arriba** -Va al paso anterior.
- 
**Botón de flecha izquierda / Tecla de flecha izquierda** - Se mueve a la imagen anterior, o al paso anterior si es la primera imagen del paso.
- 
**Botón siguiente / Tecla de flecha derecha** - Pasa a la siguiente imagen, o al siguiente paso si es la última imagen del paso.
- 
**Botón de reproducción hacia adelante (Siguiente) / Tecla de flecha abajo** - Se mueve al siguiente paso.
- 
**Haz clic en **Contenidos**** para ampliar la lista completa de pasos de esta guía. Esto te permite saltar a cualquier paso independientemente de la secuencia.
- 
**Haz clic en **Comentarios**** para abrir el debate sobre un paso concreto y dejar tu opinión.

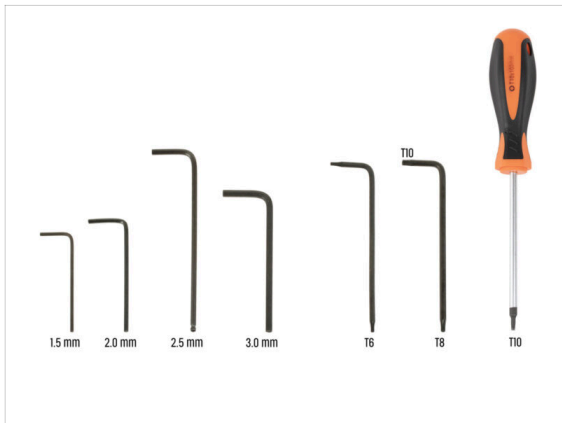
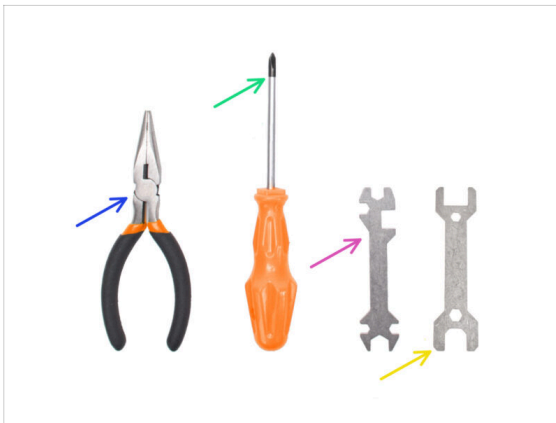


## PASO 3 Ver imágenes de alta resolución



- Cuando utilices el manual en la web [manual.prusa3d.com](http://manual.prusa3d.com), puedes ver las imágenes originales en mayor resolución para mejor claridad.
- Haz clic en la imagen para abrirla en alta resolución y verla en detalle.
- Haz clic en el modo **Pantalla completa** o pulsa la tecla F para maximizar el espacio de tu pantalla y centrarte por completo en las instrucciones.

## PASO 4 Todas las herramientas necesarias están incluidas



### ● Tool package includes:

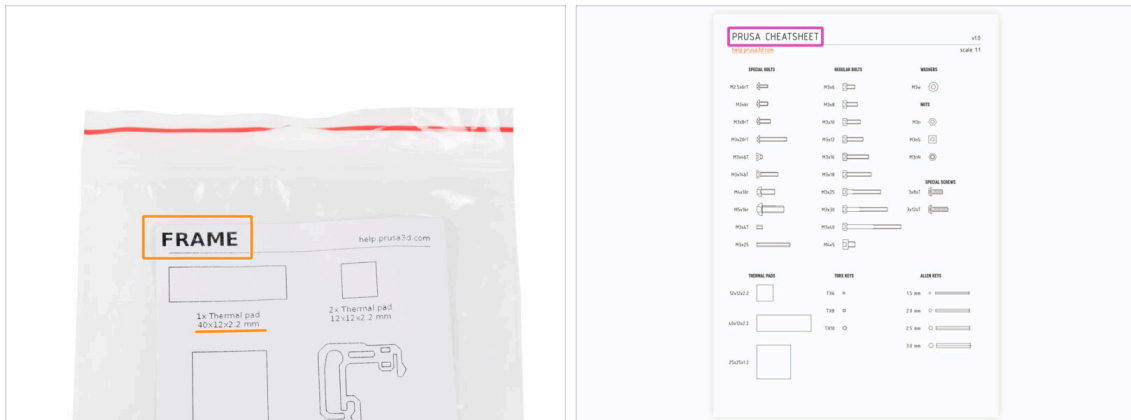
- Las herramientas se pueden encontrar en *el paquete de Electronics & Fasteners*
- Needle-nose pliers (1x)
- Destornillador Philips (PH2) (1x)
- Universal wrench (1x)
- Llave tamaño 13-16 mm (1x)
- Allen key set
- Torx key set

## PASO 5 Utilidades adicionales para esta guía



- ◆ **Algunos pasos del manual requieren algunos elementos que te ayudarán en el montaje (no incluidos en el kit):**
- ◆ Toallas de papel o un trozo de tela - Para limpiar el aceite conservante de las varillas lisas y el raíl lineal.
- ◆ Tijeras - Para cortar una bolsa con rodamientos
- ◆ Lubricante (incluido en el kit) - Para lubricar el engranaje planetario del Nextruder (cabezal de impresión).

## PASO 6 Labels guide



- ◆ Todas las cajas y bolsas incluyendo las piezas para el montaje están etiquetadas.
- ◆ Las etiquetas incluyen la lista de contenidos y el recuento de piezas.
- ◆ Puede descargar una **Cheatsheet** con dibujos de elementos de tornillería escala 1:1 de nuestro sitio web [prusa.io/core-one-cheatsheet](https://prusa.io/core-one-cheatsheet). Imprímelo al 100 %, no lo reescales, de lo contrario, no funcionará.
- i Para veteranos de PRUSA: La tornillería se divide en bolsas individuales según su tipo. No en paquetes para capítulos individuales, como ocurría con las impresoras anteriores.
- P Las instrucciones especificarán el paquete para cada pieza, con la excepción de los elementos de fijación, que siempre se encuentran en el paquete Fasteners.

## PASO 7 Spare bag



- ◆ En cada bolsa de elementos de fijación se incluyen elementos de fijación de repuesto. La cantidad de repuesto siempre se incluye en el número total indicado en la bolsa.
- ◆ Del mismo modo, algunas piezas pueden incluir una pieza adicional en la misma bolsa.

## PASO 8 Piezas impresas - versión



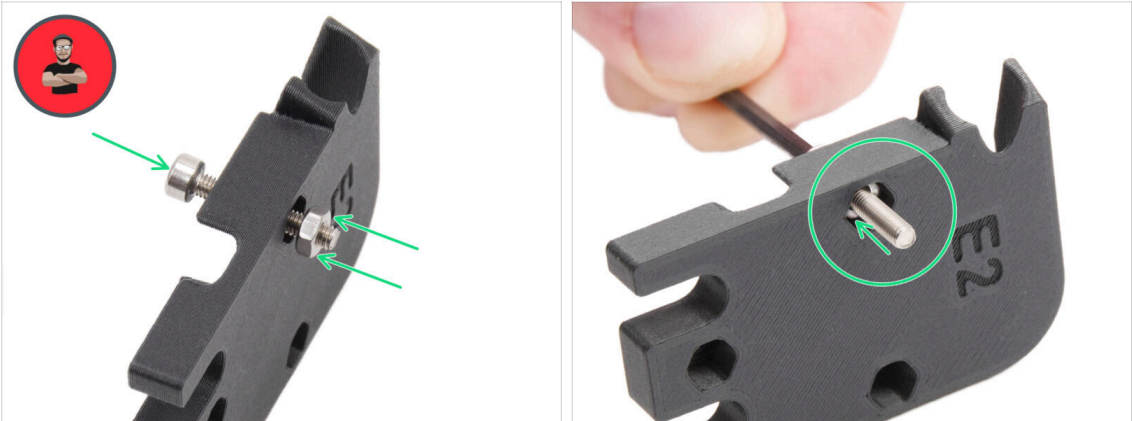
- ◆ La mayoría de las piezas impresas de la Prusa CORE One+ están marcadas con su versión.
  - ◆ **Serie E,F y G** (por ejemplo E1) - esas piezas están impresas en la granja de Prusa Research y distribuidas con el kit.
  - ◆ **Serie R, S y Tx** (por ejemplo R1) - estas piezas están disponibles para descargar en [printables.com](https://www.printables.com). Son idénticas a las de fábrica.
  - ◆ Los números indican revisiones menores que suelen implicar pequeños ajustes en el diseño. Una etiqueta diferente en el manual (por ejemplo, una versión diferente mostrada en las fotos) no afecta al montaje - todas las versiones son totalmente compatibles.
  - ◆ Sin embargo, si una revisión específica requiere un procedimiento de montaje diferente, lo indicaremos claramente en el manual y explicaremos las diferencias.
- i En caso de que tengas dudas durante el montaje con ciertas partes impresas, busca la etiqueta y contacta con nuestro equipo técnico.

## PASO 9 ¡Estamos aquí para atenderte!

The screenshot displays the Prusa 3D printer assembly guide interface. On the left, step 4 is titled 'Connecting the xLCD assembly'. It includes instructions: 'Connect the xLCD cable (gray cable with red connector) to the xLCD board on the back of the xLCD assembly. Do not pull on the cable!', 'Ensure the latch on the connector is positioned on the same side of the slot as the triangle symbol on the xLCD board. Otherwise, the xLCD won't work.', 'Take the FE cable and fully slide the metal connector into the FE Fasten (brass connector) on the xLCD board. Do not pull on the cable.', and 'For a better overview of the correct connection of both cables, see the illustrations.' A video player shows the assembly process. On the right, a comments section is visible with a 'SUBMIT' button and a 'Chat now' button. A pink arrow points from the 'Chat now' button to the right.

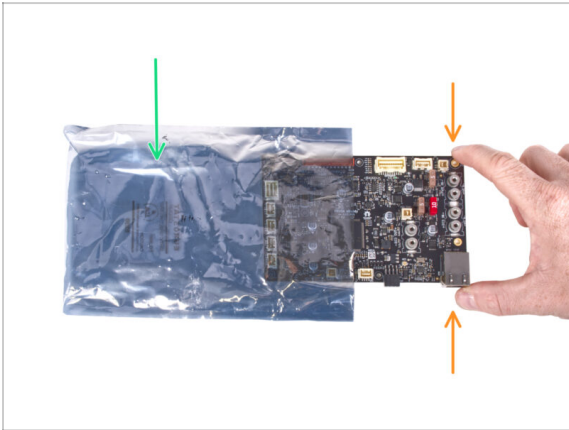
- 🛒 ¿Estás perdido en las instrucciones, falta el tornillo o la pieza impresa está rota?  
**¡Háznoslo saber!**
- 🛒 Puedes contactar con nosotros a través de los canales:
  - 🔵 Empleando los comentarios de cada paso.
  - 🟪 Usa nuestro chat 24/7 aquí en [help.prusa3d.com](https://help.prusa3d.com)
  - 🛒 Escribenos un correo a [info@prusa3d.com](mailto:info@prusa3d.com)

## PASO 10 Consejo pro: introduciendo las tuercas



- ⬢ Las piezas impresas en 3D son muy precisas, sin embargo, todavía puede haber una tolerancia en la pieza impresa y lo mismo ocurre con el tamaño de la tuerca.
- ⬢ Por lo tanto, puede suceder que la tuerca no encaje fácilmente o que se caiga. Vamos a ver, cómo solucionarlo:
  - **La tuerca no encaja:** utiliza un tornillo con una rosca en toda su longitud (normalmente: M3x10, M3x18) y atorníllalo desde el lado opuesto de la abertura. Mientras aprietas el tornillo, la tuerca se introducirá. Quita el tornillo después.
  - ⬢ **La tuerca sigue cayendo:** Usa un trozo de cinta para fijar la tuerca temporalmente en su lugar, tan pronto como insertas el tornillo, podrás quitar la cinta. *No se recomienda el uso de pegamento, ya que puede llegar parcialmente a la rosca y no podrás apretar el tornillo correctamente.*
- ⬢ Cada vez que recomendamos utilizar la "técnica del tornillo tractor", se te recordará con el avatar de Joe ;)
- ⓘ Las partes de las imágenes se utilizan como ejemplo.

## PASO 11 Important: Electronics protection



**ADVERTENCIA:** Asegúrate de **proteger la electrónica contra descargas electrostáticas (ESD)**. ¡Desempaqueta siempre los componentes electrónicos justo antes de que los necesites!



A continuación, se incluyen algunos **consejos para evitar daños en los componentes electrónicos:**



**Mantén los componentes electrónicos dentro de la bolsa ESD** hasta que se te solicite que los instale.



**Toca siempre los lados de la placa** mientras la manipulas. Evita tocar los componentes de la superficie.



**Antes de tocar los componentes electrónicos**, toca cualquier estructura conductora (de acero) cercana para neutralizar cualquier carga de electricidad electrostática.



Ten especial cuidado **en habitaciones con alfombras**, que son una fuente de energía electrostática.



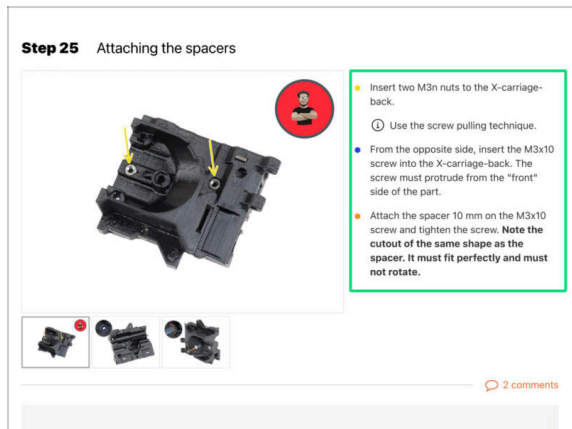
La ropa hecha de lana y ciertos tejidos sintéticos pueden acumular electricidad estática con facilidad. Es más seguro usar ropa de algodón durante el ensamblaje.

## PASO 12 Reward yourself



- Construir la CORE One+ es una experiencia gratificante. Después de terminar cada capítulo, date un capricho. **¡En la caja hay una bolsa de ositos Haribo solo para eso!**
- ⚠ **El mayor problema desde nuestra experiencia** (MK4S, MK4, MK3S+, MK3S, MK3, MK2S, ...) fue el consumo inadecuado de ositos. Muchos de vosotros no tenían suficientes ositos para todos los capítulos, ¡algunos incluso se los comieron antes de comenzar!
- Tras años de minuciosa investigación científica, hemos llegado a una solución => Al final de cada capítulo, se indicará una cantidad específica de ositos que debes consumir.
- Ingerir una cantidad incorrecta a la prescrita en el manual podría provocar un aumento repentino de energía. Consulta a un profesional en la tienda de golosinas más cercana.
- ⚠ **Esconde los Haribo por ahora** Por nuestra experiencia, una bolsa desatendida con caramelos desaparecerá de repente. Confirmado por múltiples casos en todo el mundo.

## PASO 13 Cómo terminar con éxito el montaje



**⚠ Para terminar con éxito el kit de CORE One+ por favor sigue todo esto:**

- 🟢 **Siempre lee todas las instrucciones del paso actual primero**, te ayudarán a comprender lo que tienes que hacer. ¡¡¡No cortes o ajustes nada a menos que se te indique!!!
- ⬛ **¡No sigas solo imágenes!** No es suficiente, las instrucciones escritas son lo más breves posible. **¡Léelas!**
- ⬛ Lee los comentarios de los otros usuarios, son una gran fuente de ideas. Nosotros los leemos también y, en función de los comentarios, mejoramos el manual y todo el montaje.
- ⬛ **Usa una fuerza razonable**, las piezas impresas son resistentes, pero no son irrompibles. Si no encaja, revisa como lo has montado otra vez.
- ⬛ **¡Comete los osos gomosos como te indicamos!** La desobediencia no la toleraremos :D
- ⬛ **Lo más importante: disfruta de la construcción, y diviértete** . Cooperar con tus hijos, amigos o socios.

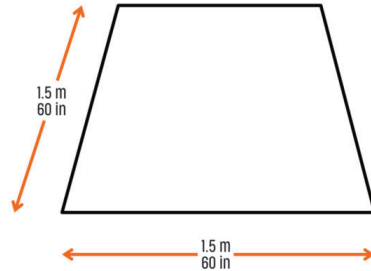


## PASO 14 Instalando los complementos y mejoras



- Esta información es aplicable a los usuarios que tengan previsto instalar actualizaciones y complementos, como Cámara Buddy, el Sistema de Filtrado Avanzado, y la MMU3 en el futuro.
- ① **Antes de instalar cualquier complemento o actualización, es esencial montar y probar completamente la impresora.** Una vez que la impresora esté completamente funcional, sigue los manuales de montaje de MMU3 o complementos para modificar la impresora para su instalación.

## PASO 15 Prepare your desk

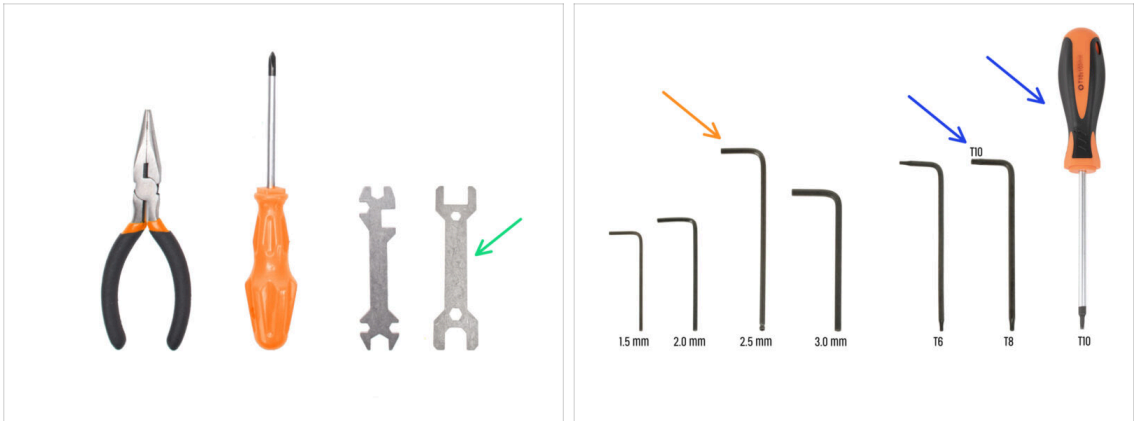


- **¡Ordena tu escritorio!** Ordenar disminuye la probabilidad de perder piezas pequeñas.
- **Despeja tu espacio de trabajo.** Asegúrate de que tienes espacio suficiente. Un buen banco de trabajo plano y despejado te dará los resultados que buscas.
- **¡Que haya luz!** Asegúrate de que estás en un entorno bien iluminado. Otra lámpara o incluso una linterna adicional probablemente te resulten útiles.
- Prepara algo para guardar las bolsas de plástico y los materiales de embalaje retirados para poder reciclarlos después. Asegúrate de que no se desecha ninguna pieza importante.
- Se recomienda un espacio de trabajo mínimo de 1.5 x 1.5 metros (60 x 60 pulgadas).
- ⚠ **Es muy recomendable colocar una almohadilla blanda en su banco de trabajo.** Algunas piezas de chapa tienen bordes afilados que podrían rayar la superficie.
- ⓘ Puedes utilizar un trozo de cartón como almohadilla protectora.
- OK, estamos listos. Empecemos. Vamos al capítulo 2. **Montaje de la estructura**

## 2. Base assembly



## PASO 1 Herramientas necesarias para este capítulo



● Para este capítulo, prepara por favor:

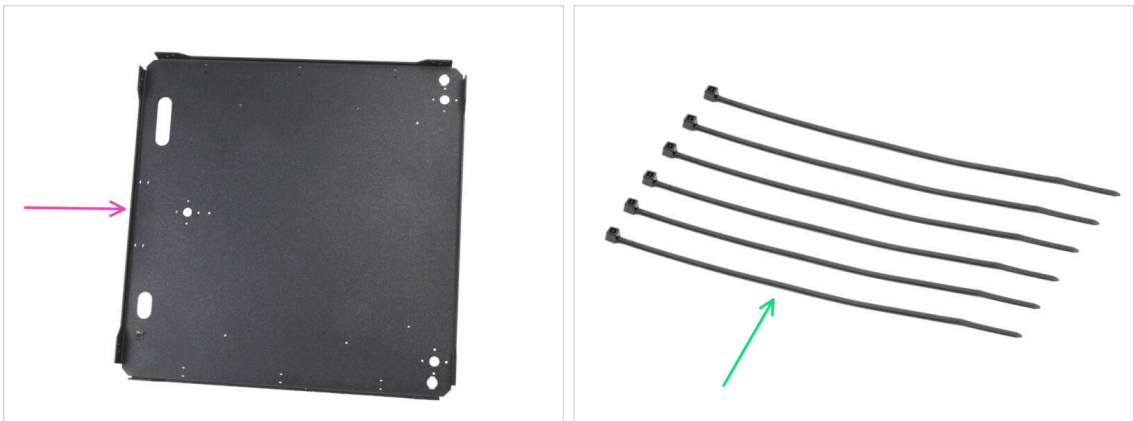
● Wrench 13-16

● 2.5mm Allen key

● Llave Torx T10 / Destornillador Torx T10

❗ Puedes encontrar las herramientas en la caja número 2. Electronics & fasteners.

## PASO 2 Conjunto de la base: preparación de las piezas

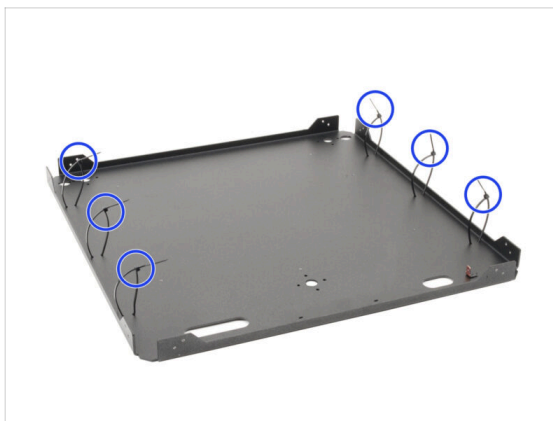


● Para los siguientes pasos, por favor prepara:

● Panel inferior (1x) que se encuentra en el paquete de Metal parts 1/3

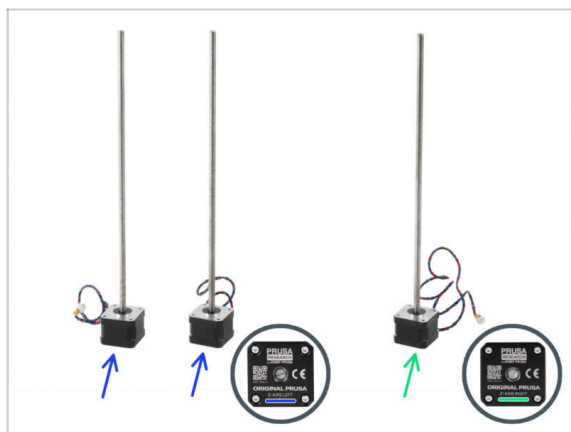
● Brida (6x) se encuentra en el paquete de Electronics & Fasteners

### PASO 3 Inserción de las bridas



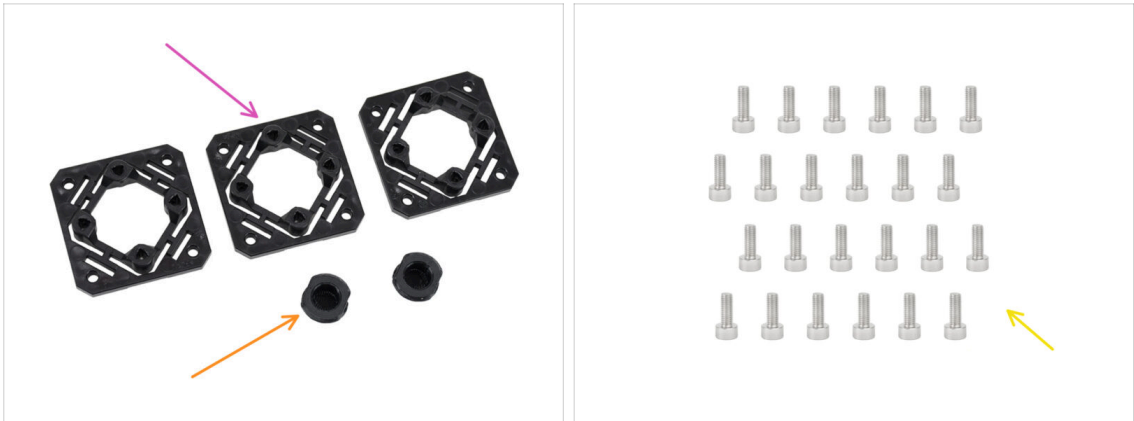
- Gira el panel inferior de modo que las curvas de la placa queden hacia arriba.
  - Observa los agujeros gemelos para las bridas alrededor del perímetro del panel.
  - Introduce seis bridas por los orificios, colocándolas a lo largo de ambos lados y apretándolas parcialmente, enganchando solo los primeros dientes.
- ⚠ **No los aprietes del todo todavía, ya que pasaremos los cables a través de ellos más adelante.**
- ⓘ Nota: La dirección de las cabezas de las bridas (en el interior o en el exterior de la pieza de chapa) es indiferente.

### PASO 4 Conjunto de la base: preparación de las piezas (parte 1)



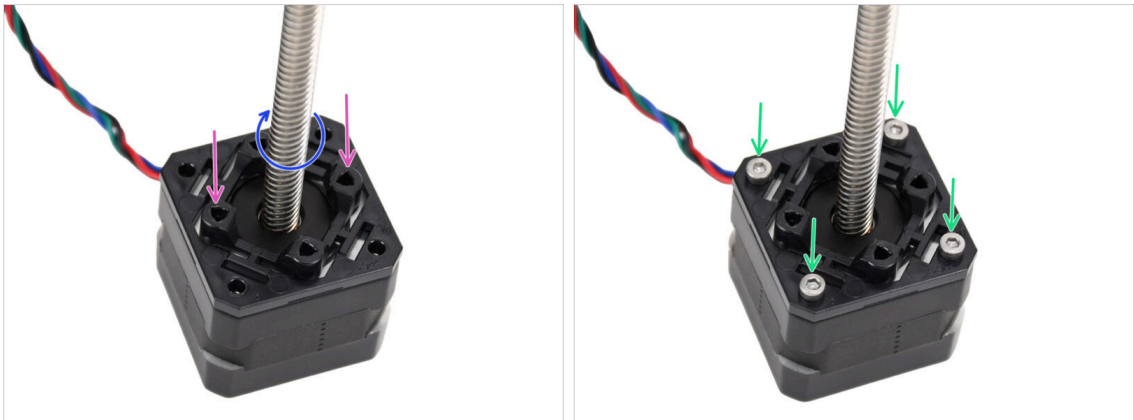
- Para los siguientes pasos, por favor prepara:
  - Z-axis left motor (2x) *found in the Motor kit package.*
- ⚠ **Un motor izquierdo del eje Z está embalado por separado en el paquete de Electronics & Chamber parts**
- ⓘ Por ahora, deja las tuercas trapezoidales en el paquete del motor.
- Motor eje Z derecho (1x) *que se encuentra en la caja Motor set.*

## PASO 5 Conjunto de la base: preparación de las piezas (parte 2)



- ◆ Z-motor-mount (3x) se encuentra en el paquete de Printed parts
- ◆ Z-rod-mount (2x) se encuentra en el paquete de Printed parts
- ◆ Tornillo M3x8 (24x) em>se encuentra en el paquete de Fasteners (3/3)

## PASO 6 Instalando los soportes de motor



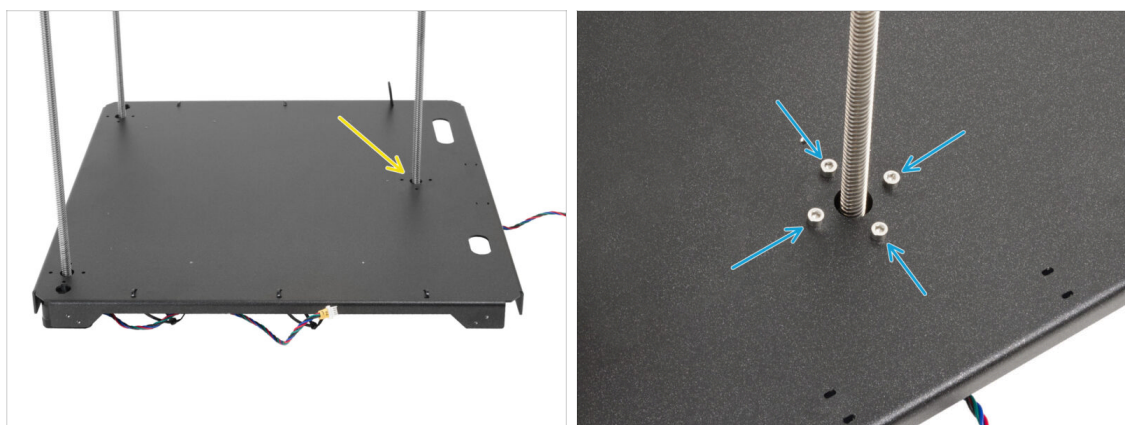
- ◆ Intenta girar las varillas roscadas de cada motor Z para asegurarte de que no estén completamente bloqueadas en su rotación.
- ◆ Place one Z-motor-mount on each motor. **The protrusions on the part must be facing upwards.**
- ◆ Alinea los agujeros con todas las piezas.
- ◆ Une todas las piezas con cuatro tornillos M3x8.
- ◆ Sigue el mismo procedimiento para todos los motores.

## PASO 7 Instalando el motor trasero



- ✦ Da la vutleta al panel inferior.
- ✦ Localiza el agujero circular en el medio de la parte trasera del panel.
- ✦ Coge el **motor Z derecho** - el motor con el cable más largo. El cable está etiquetado con ZR.
- ✦ Empuja la varilla roscada del panel y alinea los agujeros del panel con los agujeros del conjunto del motor.
- ⚠ El cable del motor debe apuntar hacia afuera (hacia ti).
- ✦ Empuje ambos motores del eje Z izquierdos a través del panel inferior.
- ✦ Los cables del motor deben apuntar hacia el lado trasero del motor.
- ⓘ En las siguientes instrucciones, nos referiremos a los lados **delantero** y **trasero** del conjunto. La **parte delantera tiene DOS motores**, mientras que **la trasera tiene UN motor**. Te lo recordaremos a lo largo del proceso, pero es bueno que lo tengas en cuenta :).

## PASO 8 Asegurando el motor trasero



- ✦ Comienza a asegurar los motores, empezando por el motor trasero.
- ✦ Inserta y aprieta a fondo cuatro tornillos M3x8 en el **motor trasero**.
- ⚠ Asegúrate de que los tornillos permanecen rectos y no se inclinan al apretarlos.
- ⚠ No aprietes demasiado los tornillos, ya que roscan directamente en la pieza de plástico. Para un apriete final, utiliza la parte más corta de la llave como asa para aplicar la cantidad correcta de par de apriete.



## PASO 9 Instalando el motor delantero derecho



**Comprueba que las piezas impresas del Z-rod-mount no presenten imperfecciones.** El interior debe estar completamente limpio para poder insertar la varilla lisa más adelante.

**i** Tenemos que asegurarnos de que las varillas lisas encajen perfectamente más adelante. Para comprobarlo, introduce ahora las varillas lisas más finas (que se encuentran en la caja *Rods*) en el Z-rod-mount.

- Inserta la Z-rod-mount en la abertura junto al motor Z delantero derecho.
- Utiliza la llave 13-16 para girar el soporte de la varilla 90 grados y bloquearlo en su sitio.
- Fija el motor con cuatro tornillos M3x8. Apriétalos completamente.

⚠ **Asegúrate de que los tornillos permanecen rectos y no se inclinan al apretarlos.**

## PASO 10 Instalando el motor delantero izquierdo



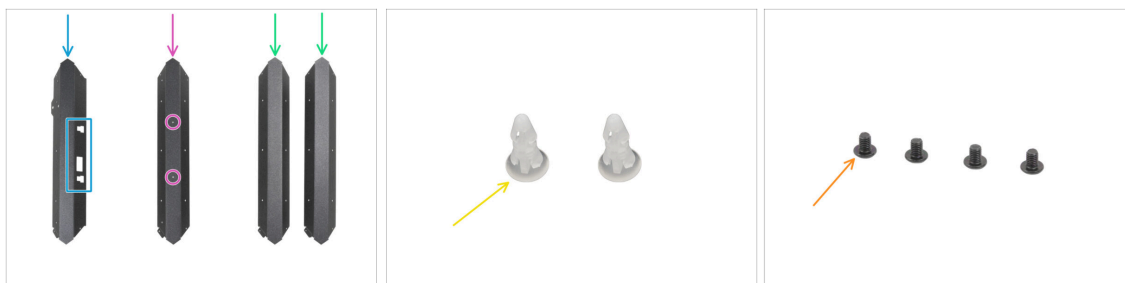
■ Pasemos al motor delantero izquierdo (desde la vista frontal).

⚠ **Asegúrate de que el cable del motor sigue apuntando hacia atrás.**

- Inserta la rod-mount en la abertura junto al motor Z delantero derecho.
  - Utiliza la llave 13-16 para girar el soporte de la varilla 90 grados y bloquearlo en su sitio.
  - Fija el motor con cuatro tornillos M3x8. Apriétalos completamente.
- ⚠ **Asegúrate de que los tornillos permanecen rectos y no se inclinan al apretarlos.**
- Coloca todo el conjunto a un lado durante un rato.



## PASO 11 Bastidor inferior: preparación de las piezas



■ Para los siguientes pasos, por favor prepara:

⚠ **Ten mucho cuidado al manipular piezas de chapa afiladas para evitar lesiones o daños.**

⚠ Los perfiles de chapa pueden parecer idénticos a primera vista, pero existen algunas diferencias. **COMPRUÉBALO** para elegir los correctos.

■ Perfil frontal (1x) **observa los recortes** - *que se encuentra en el paquete Metal parts 1/3*

■ Perfil trasero (1x) **con dos agujeros en la parte plana** - *que se encuentra en el paquete Metal parts 1/3*

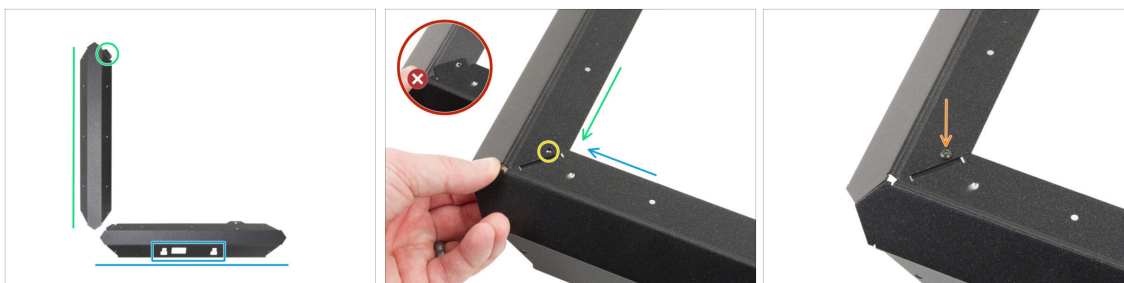
■ Perfil universal (2x) **sin agujeros en la parte plana** - *que se encuentra en el paquete Metal parts 1/3*

ⓘ You will find all of these metal profiles located at the **very bottom** of the Metal parts 1/3 package. **You may need to take out the upper layers to reach them!**

■ Pasador espaciador (2x) *se encuentra en el paquete de Electronics & Fasteners*

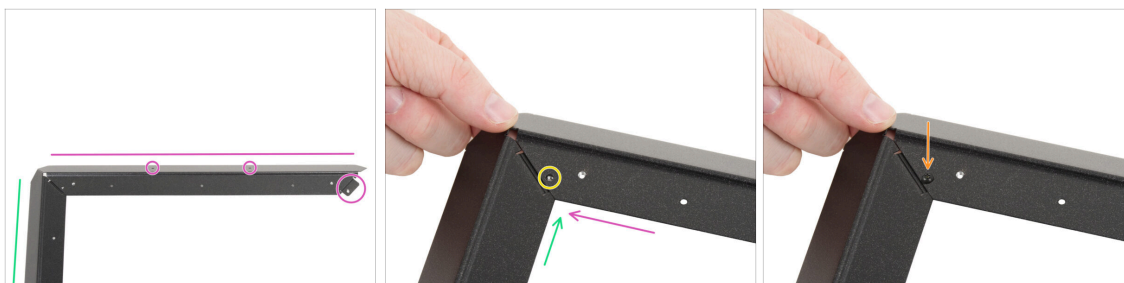
■ M3x4rT screw (4x)

## PASO 12 Montando el perfil inferior: delantero + izquierdo



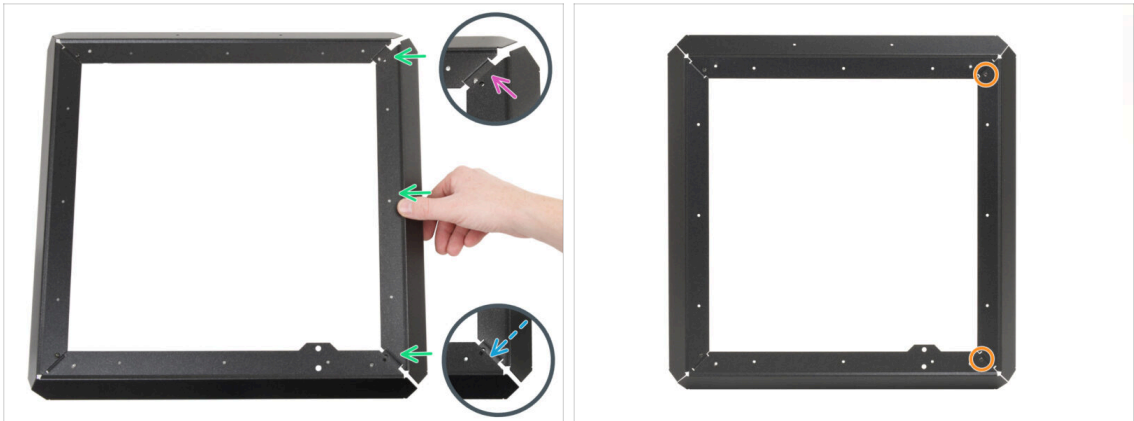
- ⚠ Ten mucho cuidado al manipular piezas de chapa afiladas para evitar lesiones o daños.
- Coloca el perfil frontal según la imagen. Los recortes deben estar orientados hacia ti.
  - Coloca uno de los perfiles universales en el lado izquierdo. Orienta la pieza según la imagen. **Utiliza la pestaña como guía.**
  - Une los dos perfiles.
    - ⚠ La pestaña de la placa frontal (flecha azul) debe insertarse **debajo** del perfil universal izquierdo (flecha verde), no encima.
  - Alinea los agujeros de ambas piezas.
  - Une ambas partes con el tornillo M3x4rT.

## PASO 13 Montando el perfil inferior: izquierdo + trasero



- De acuerdo con la imagen, coloca el perfil trasero (con dos orificios en la parte plana) en el perfil izquierdo universal. Orienta la pieza según la imagen. **Utiliza la pestaña como guía.**
- Unir el perfil trasero con el perfil izquierdo universal.
  - ⚠ Asegúrate de que la brida está **debajo** del perfil trasero, no encima.
- Alinea los agujeros de ambas piezas.
- Une ambas partes con el tornillo M3x4rT.

## PASO 14 Montando el perfil inferior: derecho



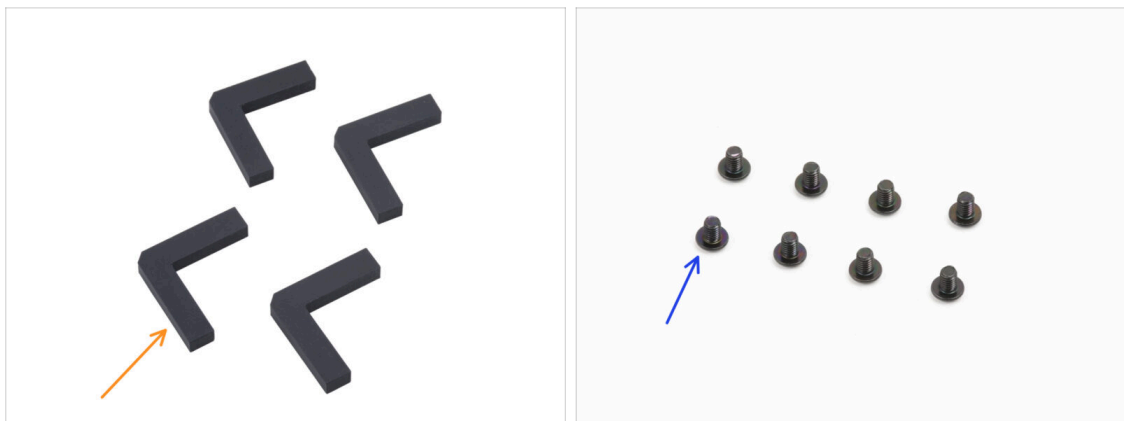
- Fija el perfil universal derecho entre el perfil trasero y el delantero. **Asegúrate de que:**
  - El final **trasero** está **sobre** la pestaña del perfil trasero.
  - La **pestaña** delantera se inserta **bajo** el perfil delantero.
- Fija el perfil izquierdo con M3x4rT en ambos extremos.

## PASO 15 Insertando los pines espaciadores



- Inserta el pasador espaciador en el orificio del saliente del perfil delantero.
- Empuja firmemente el pasador espaciador para que encaje perfectamente en el orificio.
- Sigue el mismo procedimiento para el segundo pasador espaciador.

## PASO 16 Pies antivibraciones: preparación de piezas



● Para los siguientes pasos, por favor prepara:

- Pie antivibración (4x) se encuentra en el paquete de *Electronics & Chamber parts*
- M3x4rT screw (8x)

## PASO 17 Instalando los pies antivibración



- Coloca el marco inferior según la imagen. El perfil frontal debe estar orientado hacia ti.



Antes de colocar los pies antivibración, **limpia los perfiles metálicos con alcohol isopropílico** y déjalos secar. Esto garantiza una adhesión adecuada.

- Despega la capa protectora de todas las patas antivibración.

⚠ Retira con cuidado **solo la película protectora** de cada pie antivibración. Si la capa adhesiva comienza a desprenderse con la película, detente y retira la película desde otra esquina.



En caso de que el adhesivo no sea suficiente, recomendamos instalar las patas como uno de los últimos pasos. Como alternativa, puede utilizar cinta VHB de 3M para asegurarte de que las patas se adhieran correctamente.



Pega una almohadillas antivibraciones en cada esquina del marco. Alinéala con el borde exterior del lado plano del perfil.

## PASO 18 Instalando el bastidor inferior



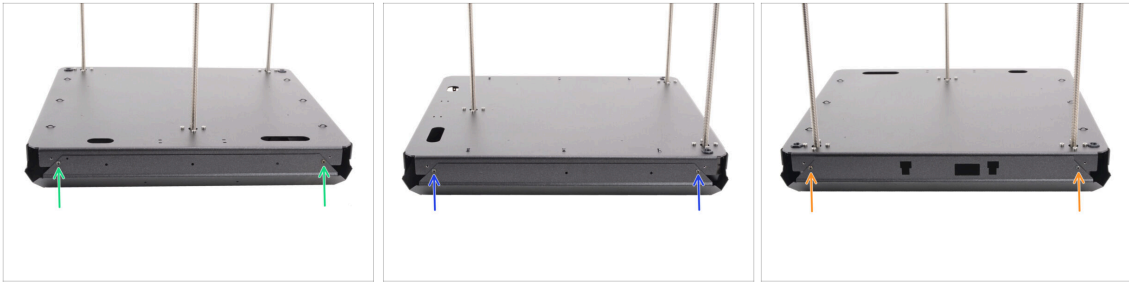
- Dale la vuelta al marco inferior. **El perfil frontal debe estar orientado hacia tí.**
- Fija la parte trasera del conjunto del panel inferior a la parte trasera del bastidor inferior.
- Asegúrate de que la parte frontal del conjunto del panel inferior (con dos motores) se alinea con el perfil frontal del bastidor inferior (con recortes).
- Coloca todos los cables del motor dentro de la zona central del bastidor inferior para evitar dañarlos.
- Baja lenta y cuidadosamente el conjunto del panel inferior en el perfil inferior.
  - Asegúrate de que el conjunto encaja completamente **dentro del perfil inferior.**
  - Asegúrate de que ninguna parte del conjunto del panel inferior sobresalga del marco inferior.
- ⚠ **Comprueba que no haya cables atrapados.**

## PASO 19 Montaje del bastidor inferior: lado derecho



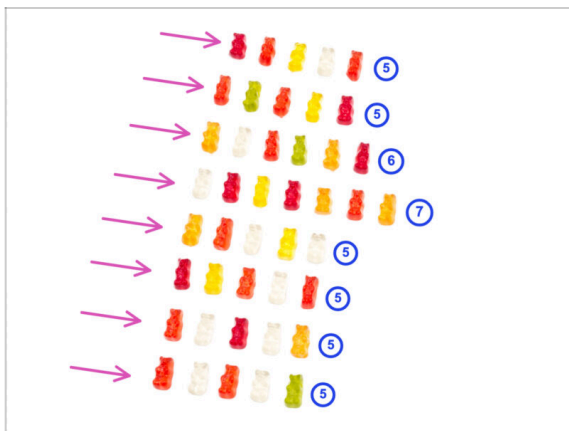
- Concéntrate en la esquina delantera derecha y en el lado derecho.
- Levanta ligeramente una de las esquinas del conjunto del panel inferior.
- Alinea el orificio roscado del panel inferior con el orificio del perfil.
- ① Para facilitar el montaje de la base, gira el conjunto hacia cada lado para comprobar la alineación de los orificios sin tener que luchar contra la gravedad. Inserta una llave Allen en el siguiente orificio para mantener la alineación.
- Une ambas partes con el tornillo M3x4rT.
- Muévete a la esquina trasera del lado derecho.
- Alinea los orificios de la base y el perfil y fíjalo con el tornillo M3x4rT.

## PASO 20 Montaje del bastidor inferior: trasera + izquierda + delantera



- Ve a la parte trasera del conjunto (lado con un motor Z).
- Alinea los orificios del conjunto de la base y el perfil y fíjalo con dos tornillos M3x4rT.
- Concéntrate en el lado izquierdo del conjunto.
- Alinea los orificios del conjunto de la base y el perfil y fíjalo con dos tornillos M3x4rT.
- Gira el conjunto con el perfil frontal hacia ti (perfil con recortes).
- Alinea los orificios del conjunto de la base con el perfil y fíjalos con dos tornillos M3x4rT.

## PASO 21 Haribo time



- ¡Date un capricho!
- Apila los ositos de gominola en ocho filas.
- Coloca el número de ositos de gominola en cada fila como se muestra en la imagen.
- ① Si no consigues el número exacto en la última fila, te recomendamos que busques la tienda de caramelos más cercana y compres los que faltan.
- Come la primera fila.

## PASO 22 Done



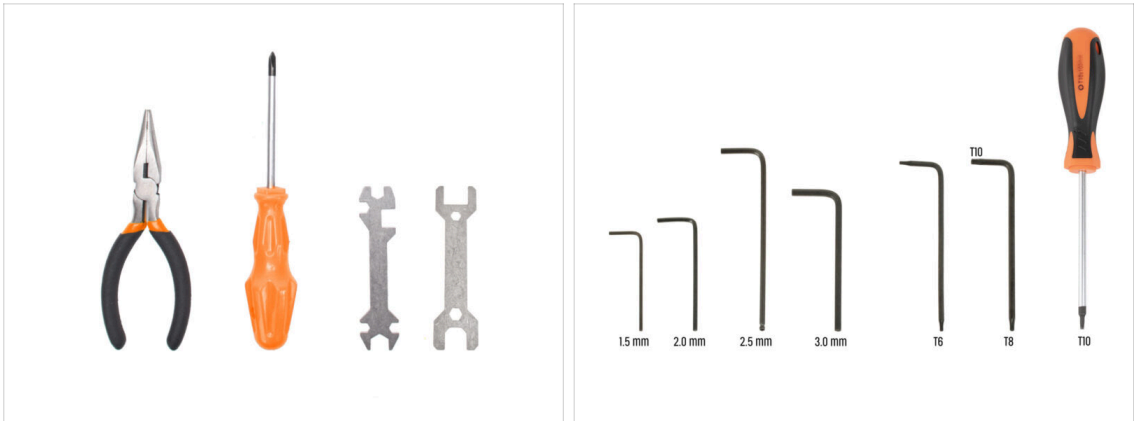
- **¡Enhorabuena!** Acabas de terminar el montaje del **conjunto de la base**.
- Dejemos el conjunto a un lado por ahora y pasemos al siguiente capítulo.

### 3. Back assembly





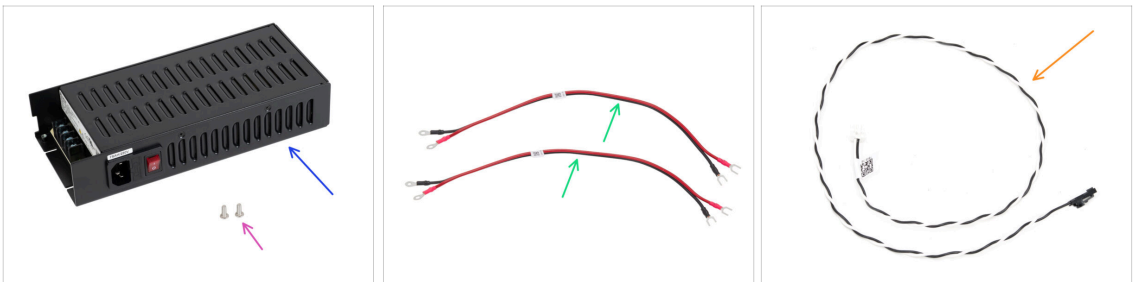
## PASO 1 Tools necessary for this chapter



● **Para este capítulo, prepara por favor:**

- Philips (PH2) screwdriver
- Needle-nose pliers
- 2.5mm Allen key
- T10 torx key / T10 torx screwdriver

## PASO 2 PSU assembly: parts preparation



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

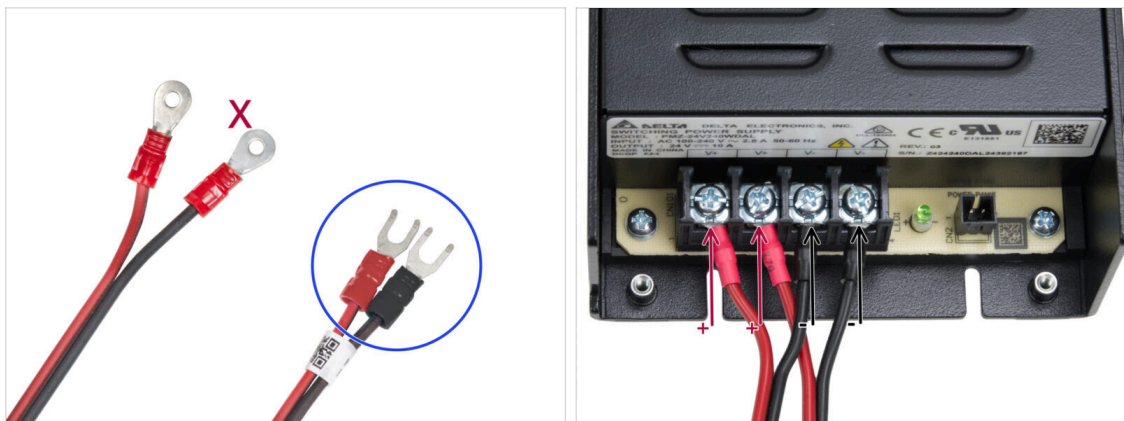
- Delta PSU 240 W 24 V (1x) *found in the Electronics package*
- M4x6r screw (2x) *found in the Fasteners 3/3 package*
- xBuddy power cables (2x) *found in the Electronics package*
- Power panic cable (1x) *found in the Electronics package*

### PASO 3 Preparing the PSU



- Inserta dos tornillos M4x6r en el lado izquierdo de la fuente de alimentación. **No los aprietes completamente.** Deja un espacio de 4 mm (0.16 in) entre la cabeza del tornillo y la fuente de alimentación.
- Afloja ligeramente los cuatro tornillos de los terminales de alimentación de la fuente de alimentación. **No los quites.** 3-4 vueltas son suficientes.

## PASO 4 Power cables info



- i** En los siguientes pasos, conectaremos los cables de alimentación uno a uno. Los tornillos de los terminales ya están instalados en la fuente de alimentación. Aflójalos pero **no los quites del todo** para que no se mezclen con el otro tipo de tornillos que se usan en el lado del cable de la placa xBuddy. Cada uno de los dos cables de alimentación tiene dos conductores. En uno de ellos prevalece el **color rojo = positivo / +**. Uno tiene un predominio del **color negro = negativo / -**.
- Ten en cuenta que los cables de alimentación tienen conectores diferentes en cada extremo. De momento, prepara los conectores en forma de U (el color del tubo de crimpado puede variar).
- Ten en cuenta que la polaridad de los terminales en la fuente de alimentación es:

  - Positive (V+)
  - Positive (V+)
  - Negative (V-)
  - Negative (V-)
- i** The red cable (positive) may have a black stripe on it. Similarly, the black cable (negative) can have a red stripe on it.

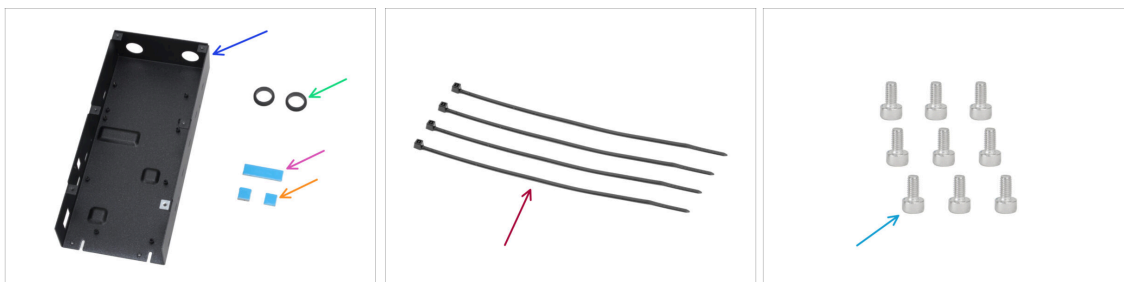
**⚠ Do not connect any cables yet, wait until you have been prompted.**

## PASO 5 Connecting the PSU



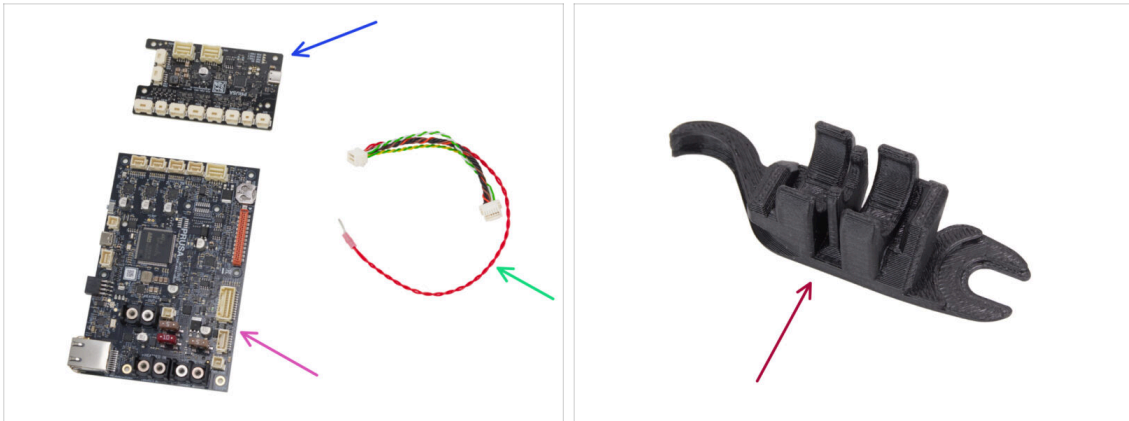
- Coje el cable ROJO y desliza el conector de horquilla hasta el final en el primer terminal (positivo) de la izquierda en la parte inferior de la fuente de alimentación. Asegúrate de que la arandela de acero está por encima del conector de "horquilla".
- Aprieta el tornillo del terminal firmemente.
- Sigue el mismo procedimiento para conectar el segundo cable rojo a la segunda ranura del terminal desde la izquierda.
- Connect two black wires to the third and fourth terminal slots using the same procedure.
- Plug the power panic cable to the right most connector.
- Put the assembly aside for a while.

## PASO 6 xBuddy: parts preparation I.



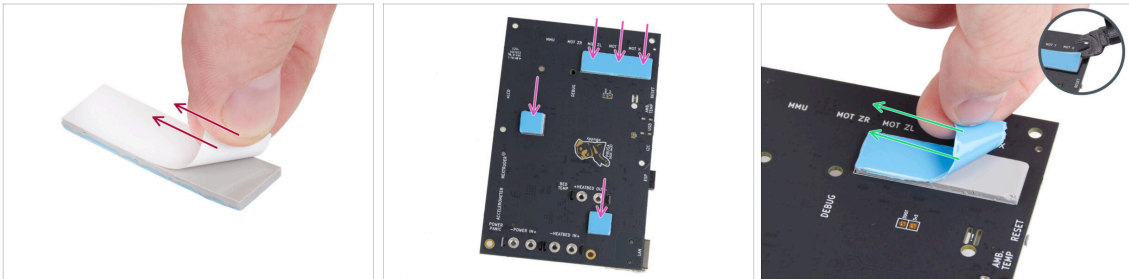
- **Para los siguientes pasos, por favor prepara:**
- Caja xBuddy CORE One (1x) *que se encuentra en el paquete de Metal parts 3/3*
- Grommet 19/16 mm (2x) *found in the Electronics & Fasteners package*
- Thermal pad 40x12x2.2 mm (1x) *found in the Electronics & Fasteners package*
- Thermal pad 12x12x2.2 mm (2x) *found in the Electronics & Fasteners package*
- Zip tie (4x)
- M3x6 screw (9x)
- i The list continues in the next step...

## PASO 7 xBuddy: parts preparation II.



- Placa extensión xBuddy (1x) se encuentra en el paquete de *Electronics & Chamber parts*
- Placa xBuddy (1x) se encuentra en el paquete de *Electronics*
- xBuddy extension cable (1x) found in the *Electronics & Fasteners* package
- Assembly-multi-tool (1x) found in the *Printed parts* package

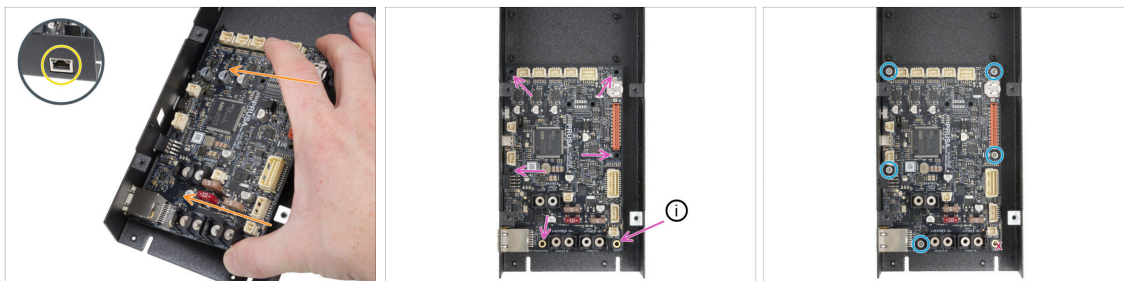
## PASO 8 Applying the thermal pads



- Retira la capa protectora blanca de todas las almohadillas térmicas.
- ⚠ **Toca siempre los lados de la placa mientras la manipulas.** Evita tocar los chips, condensadores y otras piezas de la electrónica.
- Coloca las almohadillas en la parte posterior de la placa del xBuddy. Hay marcas que indican el tamaño y las posiciones correctas.
- ⓘ The surface to which the pads are stuck must be cleaned of grease. This will ensure better adhesion.
- ⚠ **For the protection of the board's electronic components, we strongly recommend placing the xBuddy board on the soft pad. You can use the original xBuddy bubble wrap package.**
- Peel off the blue protective layer from all thermal pads.
- ⓘ Pro tip: If the edge of the layer is difficult to lift, you can use the thin side of the Assembly-multi-tool to help separate the protective layer.

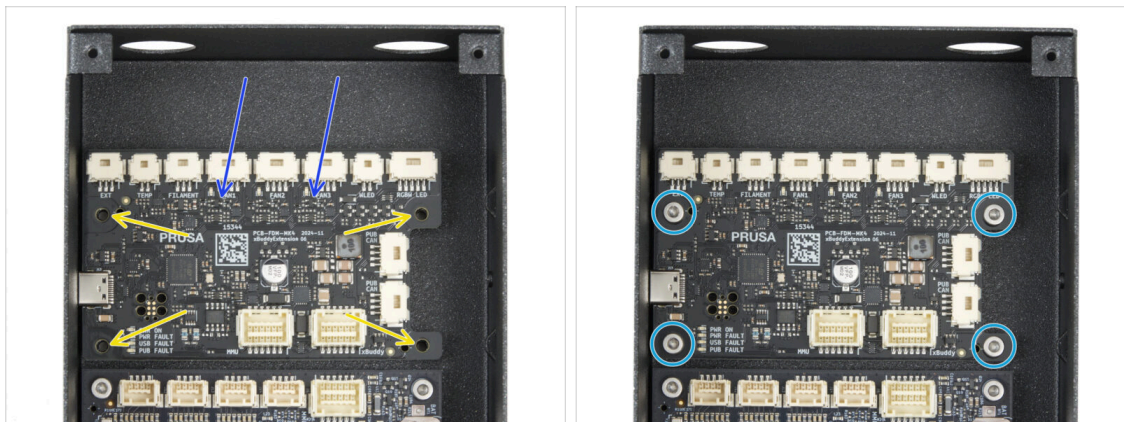


## PASO 9 Installing the xBuddy



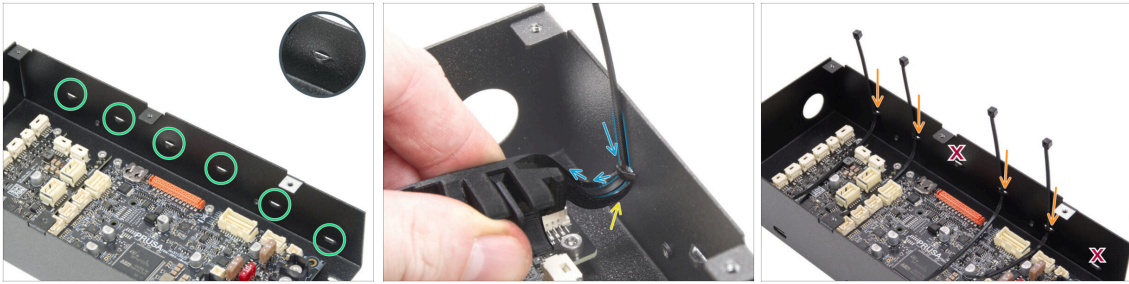
- ⚠ **Toca siempre los lados de la placa mientras la manipulas. Evita tocar los chips, condensadores y otras piezas de la electrónica.**
- 🟠 Inserta la placa xBuddy en la caja xBuddy.
- 🟡 Make sure the Ethernet connector is properly inserted into the hole in the xBuddy box.
- 🟣 **Before fully attaching it completely**, center the holes in the board with the holes (columns) in the xBuddy box
- 📄 **This opening will remain empty**; it is only highlighted for the alignment of the board.
- 🔵 Fix the position of the xBuddy board by inserting five M3x6 screws. Do not fully tighten the screws. A few turns are enough for now.
- ⚠ **Put aside your instinct and leave the hole on the bottom right empty.**
- ⬛ **Fully tighten all five screws.** But very carefully, otherwise you can damage the electronics board.

## PASO 10 Installing the xBuddy extension



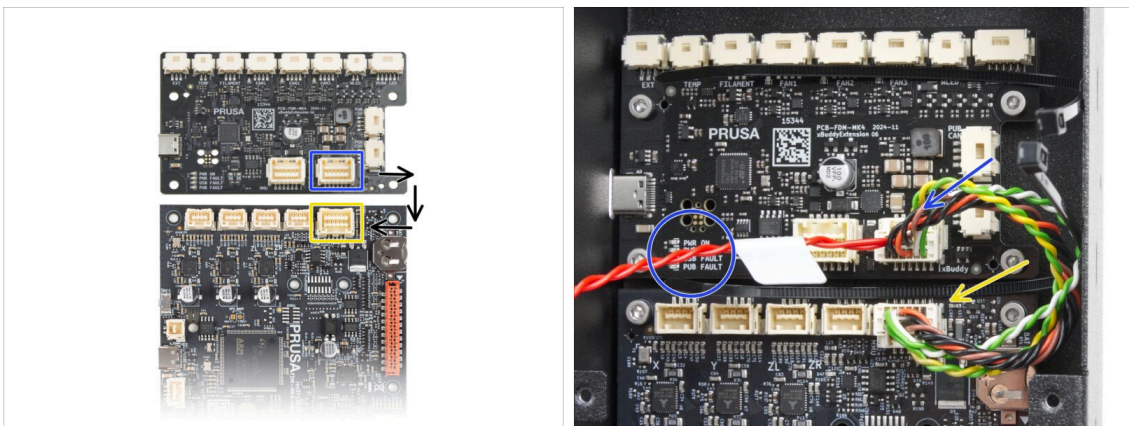
- 🔵 Inserta la placa de extensión xBuddy en la caja xBuddy encima de la placa xBuddy. Fíjate en la orientación de la pieza.
- 🟡 Antes de fijarlo completamente, centra los agujeros de la placa con los agujeros (columnas) de la caja del xBuddy
- 🔵 Fix the position of the xBuddy extension board by inserting four M3x6 screws. Tighten them completely.

## PASO 11 Installing zip ties



- Echa un vistazo a la caja de la xBuddy. Hay seis perforaciones en la caja metálica.
- ⚠ **Procede con mucho cuidado. Ten cuidado de no dañar los conectores o condensadores de la placa xBuddy.**
- Attach the hook on the Assembly-multi-tool below the first perforation on the left.
  - ⓘ Bend the tip of the zip tie slightly, approx. 30 degrees. It will be easier to insert correctly even without the Assembly-multi-tool.
- Push the zip tie through the perforation and into the Assembly-multi-tool. It will guide the zip tie into the electronics box.
- ⚠ **Note the correct orientation of the zip tie. The teeth on the zip tie must be on the visible side.**
- Repeat the process at the indicated perforations.
- Skip the third and sixth perforations.

## PASO 12 Connecting the xBuddy extension board



- Enchufa el conector de extensión xBuddy con el cable rojo libre a la placa de extensión xBuddy.
- Deja el cable rojo suelto de momento.
- Plug the other end of the xBuddy extension cable to the xBuddy board.

### PASO 13 Inserting grommets: xBuddy box



- Inserte ambos pasacables en los dos orificios circulares de la caja xBuddy.
- Comprime suavemente el pasacables y encájalo en la chapa, asegurándote de que la ranura encaja en su sitio.

### PASO 14 Wi-Fi: parts preparation



- Para los siguientes pasos, por favor prepara:
- ESP-WiFi (1x) se encuentra en el paquete de Electronics
- CORE-One-Wifi-cover (1x) found in the Printed parts package
- M3x12 screw (1x)
- M3x6 screw (2x)

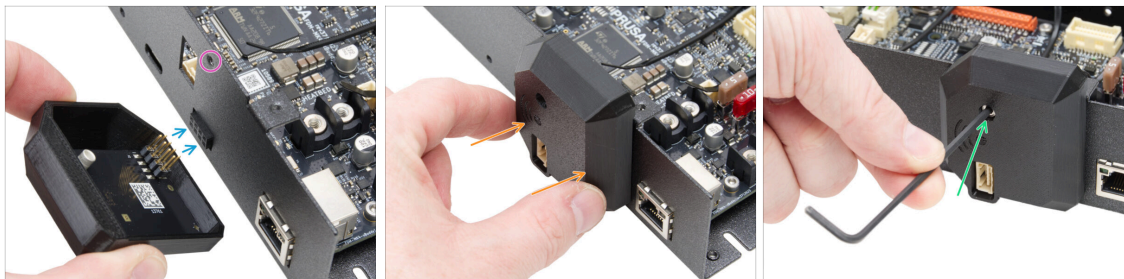


## PASO 15 Assembling the Wi-Fi



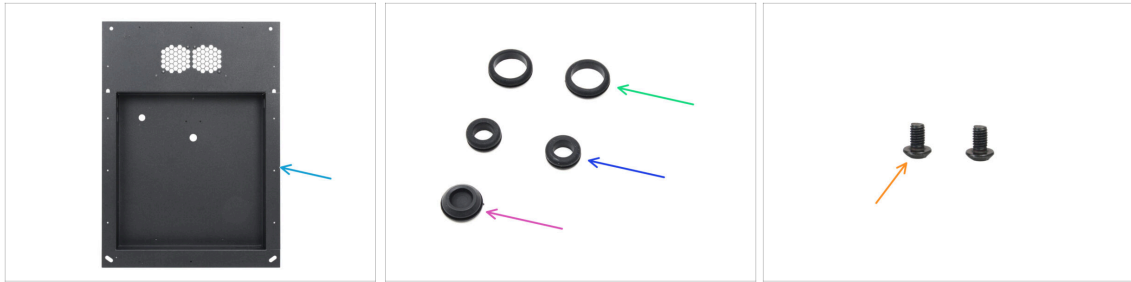
- ✚ Inserta dos tornillos M3x6 en el conjunto de la caja xBuddy desde el lado derecho. **No los apriete del todo.** Dejea al menos un espacio de 4 mm (0.16 pulgadas).
- ✚ Inserta el módulo ESP-WiFi en la WiFi-cover, colocándolo justo debajo del puente en el lado izquierdo.
- ✚ On the other side, ensure the connector fits correctly into the hole in the cover.
- ✚ Insert the M3x12 screw into this opening in the xBuddy box assembly. If it is too tight, use an Allen key/screwdriver to carefully widen it so the screw fits snugly in the next step.

## PASO 16 Installing the Wi-Fi assembly



- ⚠ **Ten mucho cuidado al manipular y conectar el módulo ESP para evitar doblar y dañar los pines.**
- ✚ En primer lugar, introduce el tornillo M3x12 en la abertura de la caja del xBuddy y apriétalo para asegurarte de que no haya problemas más adelante en este paso. A continuación, retira el tornillo.
- ✚ Then, take the WiFi cover assembly and connect the ESP module pins to the connector in the xBuddy.
- ✚ Attach the WiFi cover carefully, ensuring the pins of the ESP module are properly engaged in the connector on the xBuddy.
- ✚ Secure the cover with the M3x12 screw.
- Put the assembly aside for a while.

## PASO 17 Back panel: parts preparation



● Para los siguientes pasos, por favor prepara:

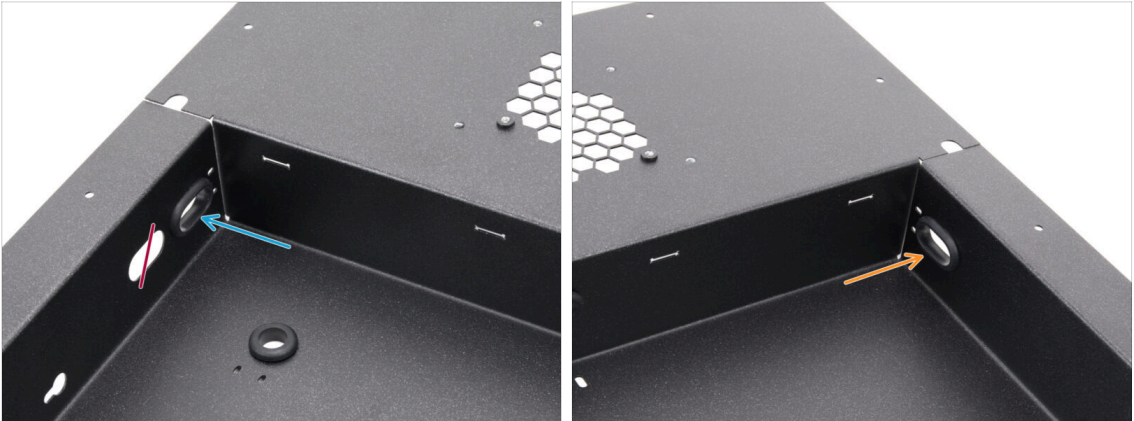
- Panel trasero (1x) *que se encuentra en el paquete de Metal parts 1/3*
- Grommet 19/16 mm (2x) *large one - found in the Electronics & Fasteners package*
- Grommet 13.5/10 mm (2x) *small one - found in the Electronics & Fasteners package*
- Sealing plug 15.5 mm (1x) *found in the Electronics & Fasteners package*
- M3x4rT screw (2x)

## PASO 18 Installing grommets: back panel top



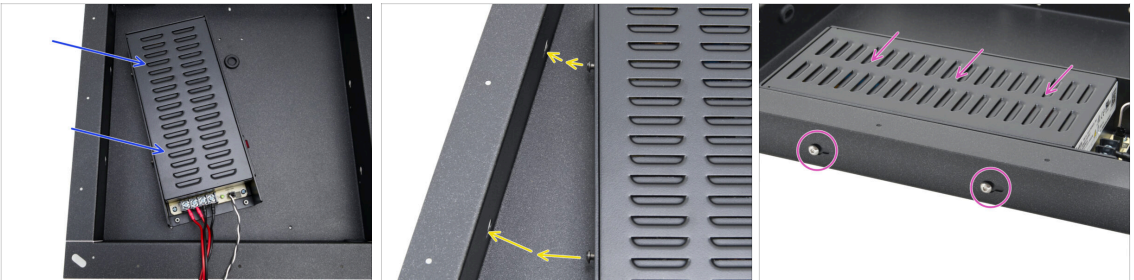
- Coloca el panel trasero como se muestra en la primera imagen. Utiliza los dos orificios ovalados como referencia.
- Inserta el tapón de sellado en el orificio central.
  - **The sealing plug is not symmetrical.** Insert the side with the smaller diameter facing downward.
- Insert one small grommet to the left circle hole.
- Insert one small grommet into the oval hole.

## PASO 19 Installing grommets: sides + bottom



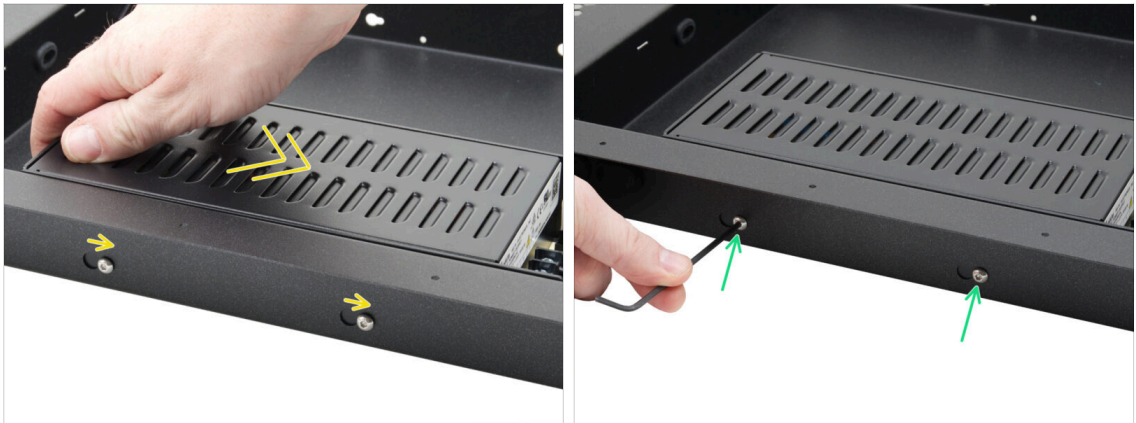
- Concéntrate en la parte superior izquierda del panel trasero y localiza dos orificios ovalados.
- Inserta un pasacables grande en el orificio ovalado más cercano a la esquina.
- Move to the right top side of the back panel and insert one large grommet to the oval hole.

## PASO 20 Aligning the PSU



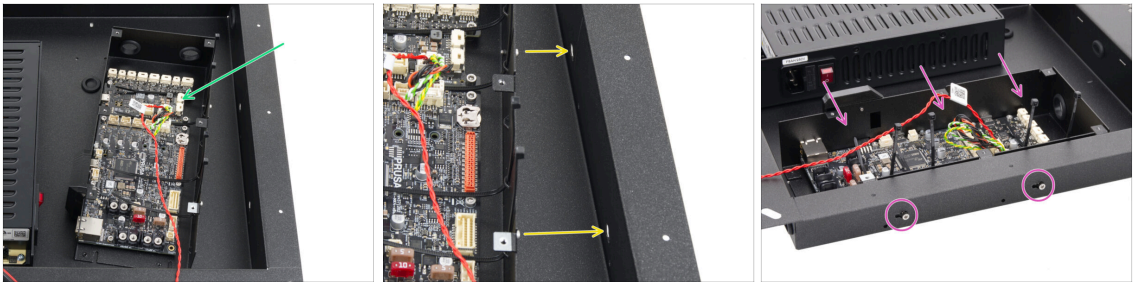
- Introduce con cuidado la fuente de alimentación en la cavidad del panel posterior.
- Alinea los tornillos de la fuente de alimentación con los orificios del lado izquierdo del panel posterior.
- Slide the PSU so that the screws go through the holes.
- ❗ Do not insert the PSU cables into any opening in the rear panel. Leave them hanging over the rear panel until you are instructed to connect them to the Buddy board later on.

## PASO 21 Mounting the PSU



- Desliza con cuidado la fuente de alimentación para que la posición de los tornillos se desplace hasta la posición final de los orificios en forma de ojo de cerradura.
- Mantén la posición de la fuente y aprieta completamente ambos tornillos.

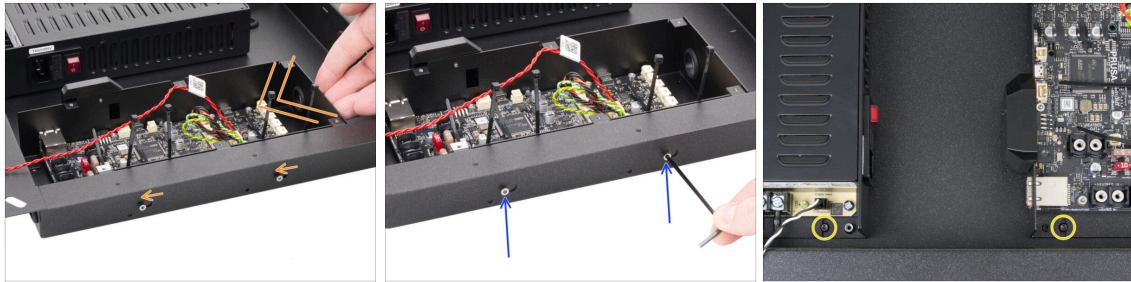
## PASO 22 Aligning the xBuddy box assembly



- Introduce con cuidado el conjunto de la caja xBuddy en la cavidad del panel posterior.
- Alinea los tornillos de la caja xBuddy con los orificios del lado derecho del panel posterior.
- Slide the xBuddy box so that the screws go through the holes.

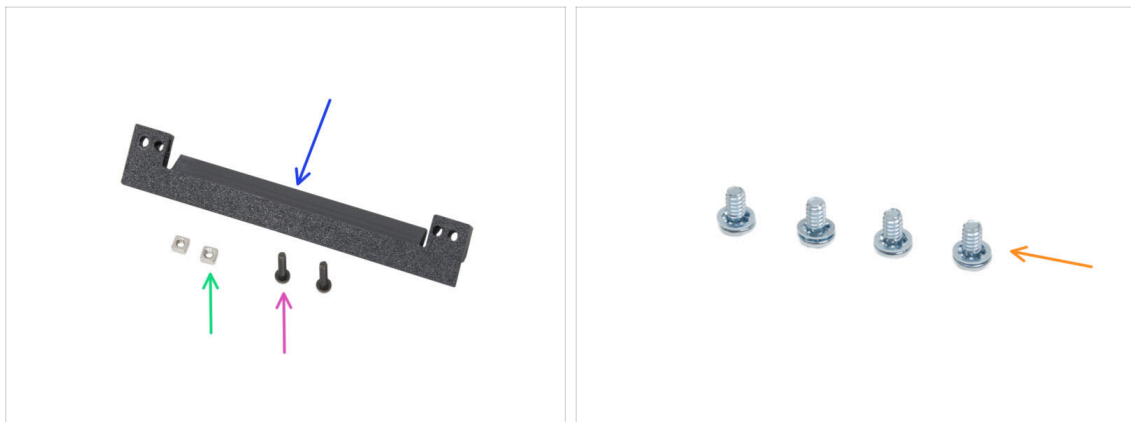


## PASO 23 Mounting the xBuddy box



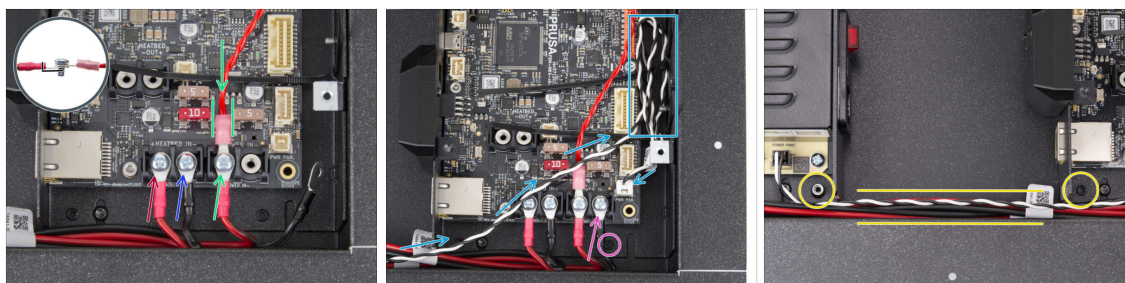
- Desliza con cuidado la caja xBuddy para que la posición de los tornillos se desplace hasta la posición final de los orificios en forma de ojo de cerradura.
- Mantén la posición de la caja xBuddy y aprieta completamente ambos tornillos.
- Fix the PSU and xBuddy box assembly to the back panel by tightening two M3x4rT screws.

## PASO 24 Power cables cover: parts preparation



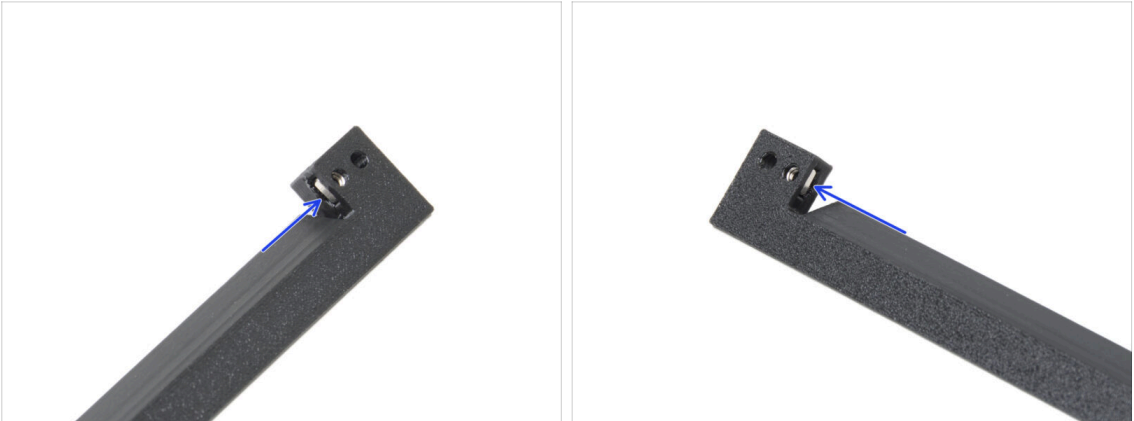
- **Para los siguientes pasos, por favor prepara:**
- PSU-cable-cover (1x) se encuentra en el paquete de *Printed parts*
- M3nS nut (2x)
- M3x10rT screw (2x)
- 6-32 Power Terminal Screw (4x)

## PASO 25 Connecting the power cables



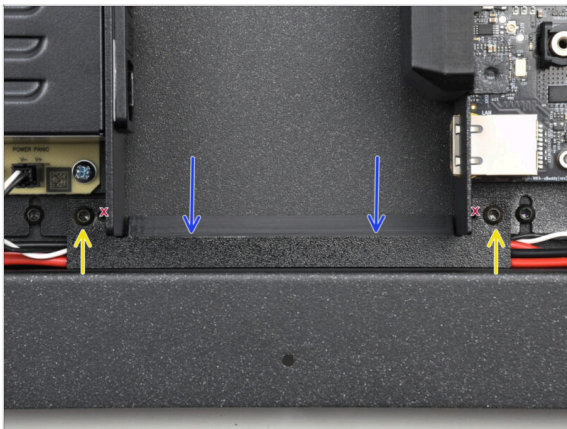
- ◆ Coge un cable rojo que sale de la fuente de alimentación y conéctalo a la primera ranura del terminal izquierdo de la placa xBuddy utilizando el tornillo del terminal de 6/32". Apriétalo con firmeza pero con cuidado.
  - ⚠ **Ten en cuenta que la forma en "L" del conector del cable siempre debe "quedar por debajo" de la cabeza del tornillo del terminal.**
- ◆ Connect the black PSU cable from the same pair as the red one to the second terminal using the 6/32" terminal screw. Tighten the screws firmly.
- ◆ Take the second red cable from the PSU and attach it to the red cable leading from the extension board. **Note the detail.** Secure these two cables with the terminal screw in the third terminal slot.
  - ◆ Guide the xBuddy extension cable carefully between the fuses, ensuring it is positioned securely without pressing against them.
- (i) **Note that from early 2025, the fuses are different.** Significantly smaller, white, and embedded in the fuse slot in the xBuddy board, so as not to obstruct the cables.
- ◆ Connect the second black PSU cable to the xBuddy, **ensuring it does not obstruct the threaded hole.**
- ◆ Route the power panic cable to the xBuddy box and connect it to the bottom right slot on the xBuddy board. Make several loops from the excess cable above the slot.
- ◆ Arrange the PSU cables as shown, ensuring that no obstructions are around the threaded holes in the PSU and xBuddy box.

## PASO 26 Preparing the PSU-cable-cover



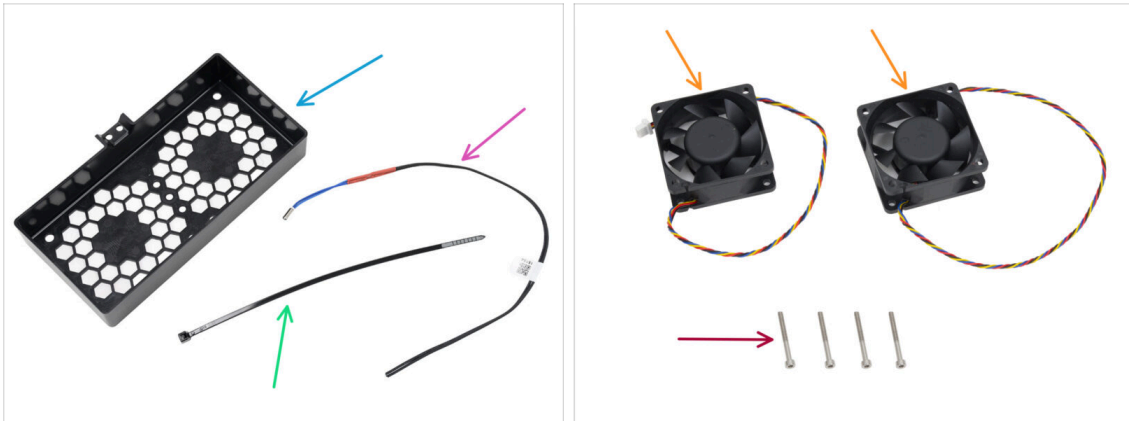
- Inserta una tuerca M3nS en el orificio de cada final del PSU-cable-cover.
- Asegúrate de que los agujeros estén alineados.

## PASO 27 Covering the PSU cables



- Coloca la PSU-cable-cover en los cables de la fuente de alimentación.
- Fija la cubierta con dos tornillos M3x10rT en los orificios más exteriores de la pieza.

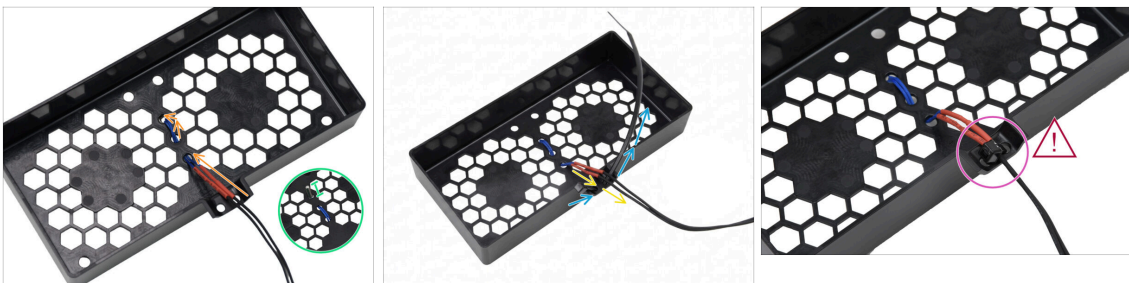
## PASO 28 Chamber fans: parts preparation



● Para los siguientes pasos, por favor prepara:

- Fan cover (1x) *found in the Electronics & Chamber parts package*
- Chamber thermistor 260 mm (1x) *found in the Electronics & Chamber parts package*
- Zip tie (1x)
- Cooling fan (2x) *found in the Electronics & Chamber parts package*
- M3x30 screw (4x)

## PASO 29 Assembling the fan grid



- Guide the thermistor cable through the holes in the center of the fan cover. Thread it in the direction shown in the picture .

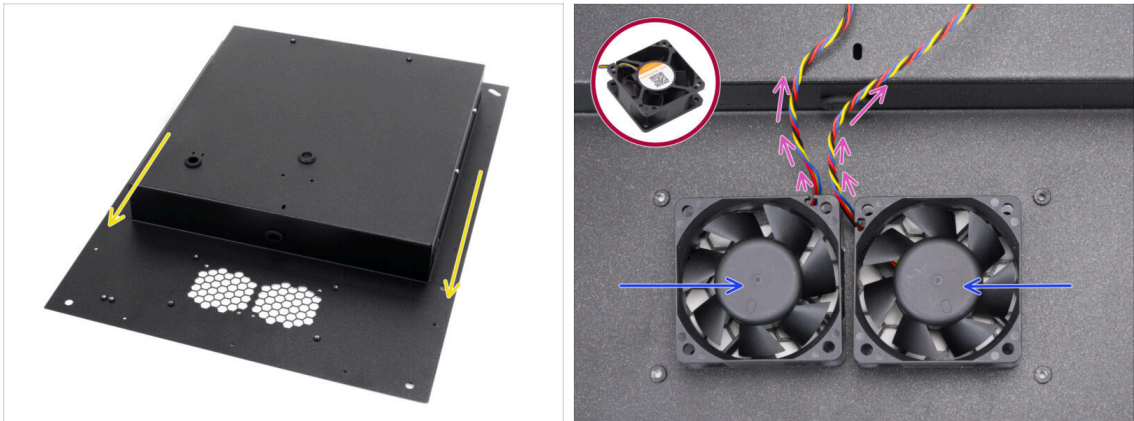
❗ **When assembling, pay close attention to the orientation. The fan cover has a specific inside and outside.**

- Leave the whole thermistor part sticking out.
- Push the zip tie through the pair of holes on the neck of the fan cover.
- Route the thermistor cable in between the zip tie parts.
- Carefully secure the thermistor cable by tightening the zip tie. **Do not use excessive force and do not overtighten the zip tie!** It may damage the cable.

⚠ **Make sure that the pawl of the zip tie is located on the inside of the fan case neck.**

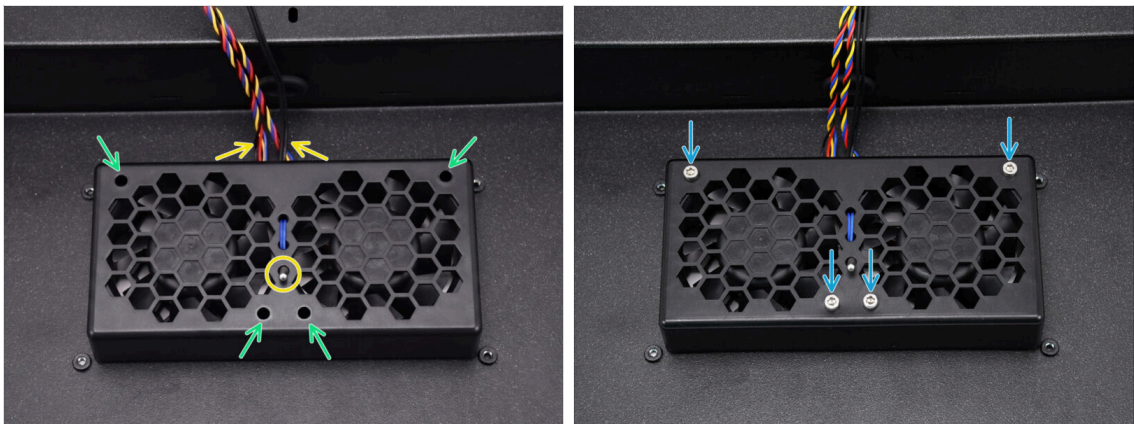


### PASO 30 Attaching the fans



- Coloca y orienta el panel trasero según la imagen. Los recortes de la rejilla deben estar orientados hacia ti.
- Coloca ambos ventiladores a la rejilla del panel trasero.
  - ⚠ **The side of the fan without the sticker must be facing up.**
  - Orient the fans so that the cables run from the corners in the centre.
  - Let the cables hang freely for now, ensuring they are not pinched during handling.

### PASO 31 Covering the cooling fans



- Place the fan cover assembly on the cooling fans.
  - ⚠ **Make sure that the fan cover assembly wraps around the fans and the thermistor is pointing up and its cable runs under the fan cover neck.**
- Align holes in the fans, fan cover and the back panel.
- Secure the fan assembly to the back panel with four M3x30 screws.
  - ⚠ **Do not overtighten the screws to avoid damaging the grid.**

## PASO 32 Rear profiles: parts preparation



● Para los siguientes pasos, por favor prepara:

● Perfil Trasero (2x) *que se encuentra en el paquete Metal parts 1/3*

❗ Take two of the longer ones.

Note that the other two longer ones differ by having cutouts.

● Nylon rivet (11x)

● M3x4rT screw (4x)

● 2.9x6.5sT self-tapping screw (1x) *from the Electronics and Fasteners Package*

## PASO 33 Installing the rear profiles



● Coge el conjunto inferior y gíralo de forma que la parte trasera (con un motor en el centro) quede mirando hacia ti.



Concéntrate en la esquina trasera derecha—el lado con la abertura ovalada más larga del panel inferior.

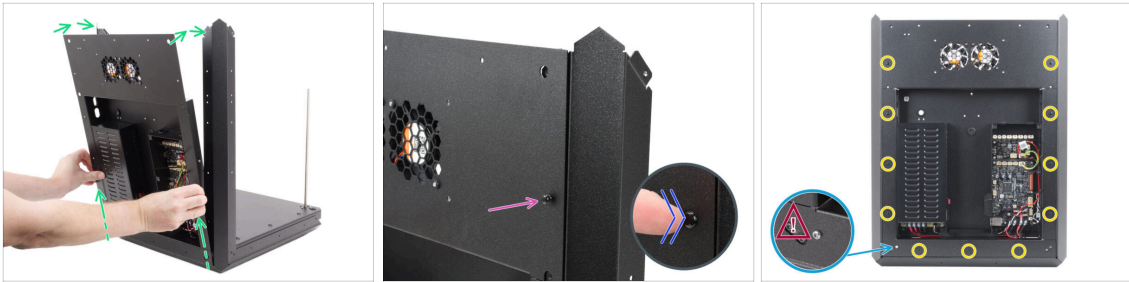
● Attach the rear profile to the right corner, using the **end without flanges**.

● Align the hole on the rear side and secure it with the M3x4rT screw.

● Secure the corner on the other side with a second M3x4rT screw - each corner will be secured with two M3x4rT screws.

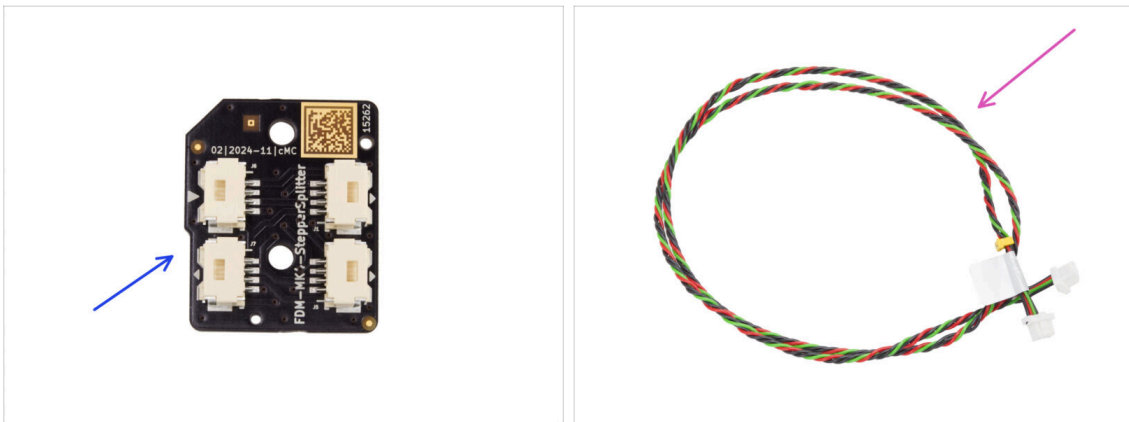
● Proceed the same with the second rear profile on the rear left corner.

## PASO 34 Mounting the back panel



- Levanta ligeramente el conjunto posterior y colócalo con cuidado sobre el conjunto de la base y los perfiles posteriores.
- Inserta un remache de nylon a través del panel trasero y el perfil trasero en la parte superior derecha.
- Push the rivet head with your finger until it is fully seated.
- Use this procedure for all eleven nylon rivets around the back panel assembly to secure it in place.
- Insert and tighten the 2.9x6.5 self-tapping screw into the back panel.
- ⚠ Do not use excessive force when tightening this screw! If you encounter resistance, use a 2mm drill to pre-drill the hole. Or leave the screw not completely tightened.**

## PASO 35 Stepper splitter: parts preparation



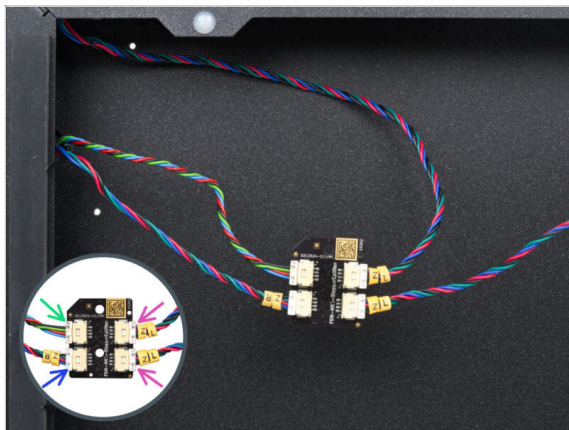
- Para los siguientes pasos, por favor prepara:
- Splitter motor (1x) se encuentra en el paquete de Electronics & Chamber parts
- Stepper splitter cable (1x) found in the Electronics & Fasteners package

## PASO 36 Guiding the Stepper splitter cable



- Gira con mucho cuidado el conjunto sobre su parte posterior (panel trasero).
  - **Se recomienda apoyar la parte trasera del conjunto** con una almohadilla blanda y elevada para evitar que se apoye en el módulo Wi-Fi que sobresale.
  - i Tip: Use the foam padding from the sheet metal parts package or an empty cardboard box.
- Guide the Stepper splitter cable through the three zip ties on the left side.
  - For now, leave the side with the label hanging freely outside.
- Guide the Z-axis motor R cable through the three zip ties on the left side.
  - ⚠ **Do not tighten the zip ties at this moment.**

## PASO 37 Connecting the Stepper splitter

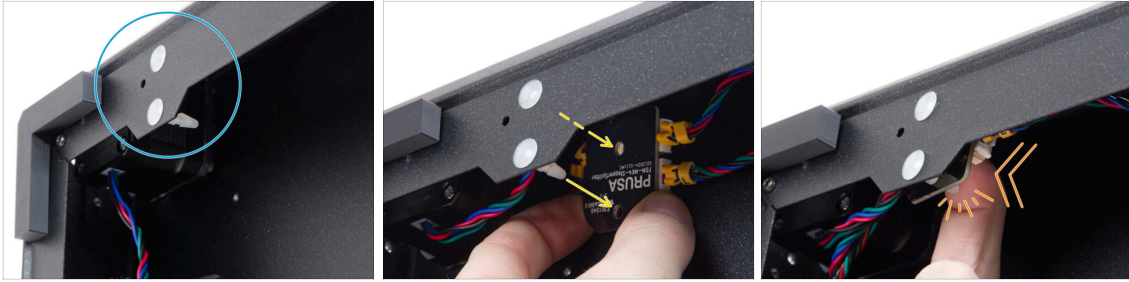


- **Conecta los cables del motor Z al stepper splitter:**

- Stepper splitter cable
- Z-axis motor R
- Z-axis motor L
- Z-axis motor L

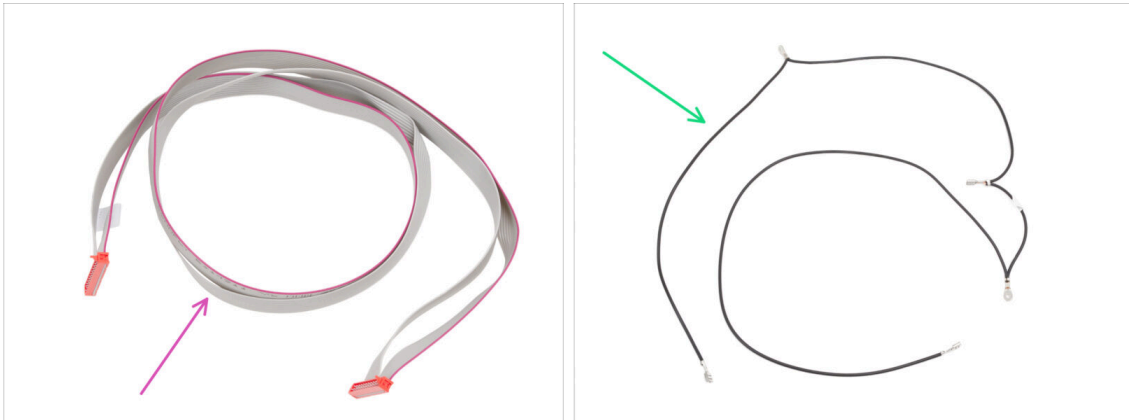


## PASO 38 Mounting the Stepper Splitter



- Localiza dos pasadores espaciadores en el bastidor inferior.
- Desde el interior del marco, prepare el Stepper splitter y fija sus orificios opuestos a los pasadores.
- Check the correct orientation of the part by the logo on the board. **The logo is upside down.**
- Push the aligned Stepper Splitter onto the pins until you feel a click - this secures the Stepper Splitter. Push in the center of the board.
- ❗ It is necessary to apply a significant pressure to seat the part in. Yet, be very careful not to damage the components.

## PASO 39 LCD cable: parts preparation



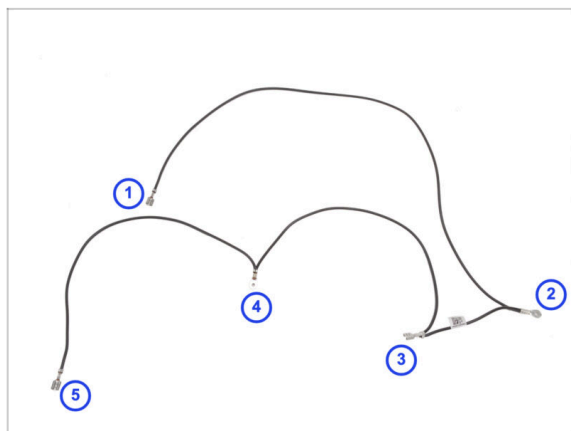
- Para los siguientes pasos, por favor prepara:
- Cable xLCD (1x) se encuentra en el paquete de Electronics & Fasteners
- Main FE cable (1x) found in the Electronics & Fasteners package

## PASO 40 Guiding the LCD cable



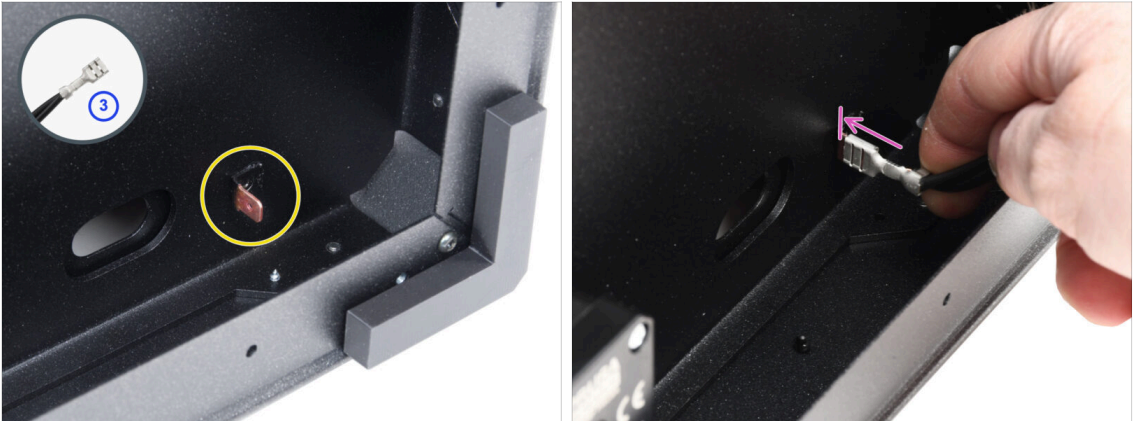
- Guía el Cable splitter motor a través del orificio ovalado hasta la electrónica.
- Coge el extremo del cable xLCD con la etiqueta del código QR.
- Push a few centimeters of the xLCD cable (the end with the QR code label) through the oval hole in the bottom panel.
- ❗ The cable must be slightly folded to pass through the hole.
- Guide the xLCD cable through the zip ties on the left side of the frame.
- Guide the xLCD cable through the rectangular opening in the front profile. Keep protruding approximately 6 cm (2.36 in).
- Leave the cable hang freely for now.

## PASO 41 Main FE cable INFO



- Lay out the Main FE cable as shown in the picture, ensuring each connector is positioned accordingly.
- Los conectores están numerados en la imagen solo como referencia. Esta numeración se utilizará en los siguientes pasos para ayudar con las conexiones correctas.
- ❗ Note: We will always indicate which connector to use in the following steps. However, it's a good idea to remember this overview for easier assembly.

## PASO 42 Conectando el cable FE (nº 3.)



- Prepara el conector número 3.
  - ⓘ Es el conector faston hembra en el centro del cable.
- Locate the male Faston connector in the bottom right corner.
- Slide the FE cable connector completely onto the Faston connector.

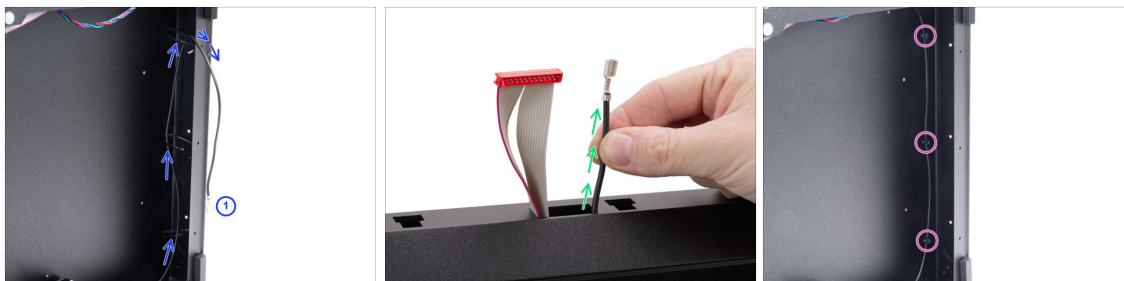
## PASO 43 Guiding the FE cable (no. 2)



- Tome el conector del cable FE número 2.
  - ⓘ El conector redondo cercano.
- Insert the connector loosely into the hole in the bottom panel.

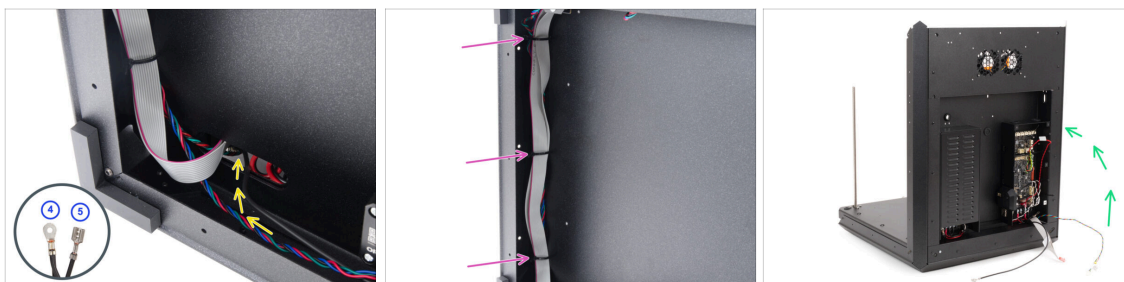


## PASO 44 Guiding the FE cable (no. 1)



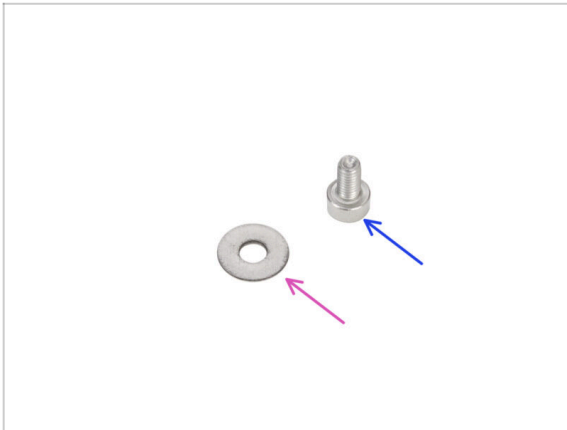
- Coge el conector número 1 y guíalo a través de las bridas de la parte derecha del cuadro.
- ⓘ Es la parte larga con un solo conector faston al final.
- Push the connector through the rectangular opening in the front profile. Keep protruding approximately 6 cm (2.36 in).
- Deja que el cable cuelgue libremente por ahora.
- Tighten all three zip ties. Cut off the excess.

## PASO 45 Guiding the FE cable (no. 4 and 5)



- Toma los conectores del cable FE número 4 y 5.
- Introduce ambos conectores por el orificio situado más a la izquierda de la parte inferior. Déjalos libres por ahora.
- Tighten all three zip ties on the left side of the frame. Cut off the excess.
- There's no need to fully tighten the zip ties. However, the cables must still be easy to move for any necessary length adjustment during connection.
- Carefully turn the printer back on its feet. Focus on the back side.

## PASO 46 Cable FE - xBuddy: preparación de piezas



● Para los siguientes pasos, por favor prepara:

● M3w washer (1x)

● M3x6 screw (1x)

## PASO 47 Conectando el cable FE: xBuddy

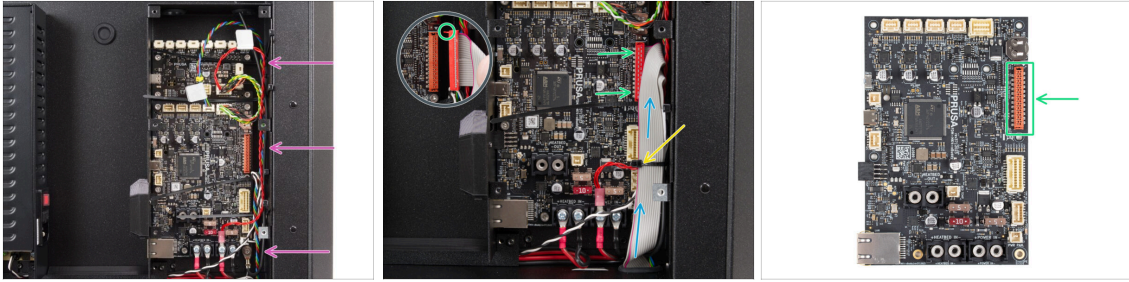


- Coge el conector número 4 y conéctalo a la xBuddy utilizando el tornillo M3x6 y la arandela M3w.

⚠ La arandela M3 debe quedar entre la cabeza del tornillo y el conector.

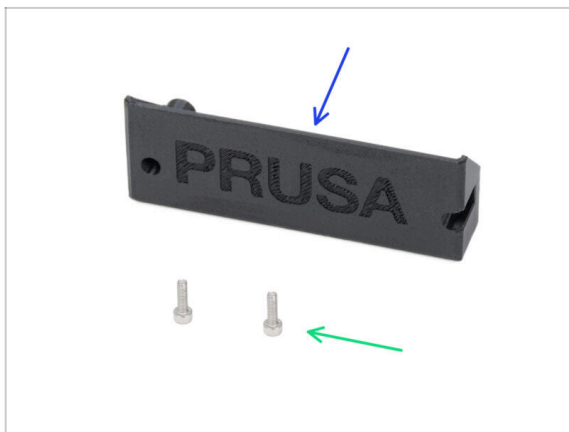
- Guide the FE cable (number 5) alongside the xBuddy box and pass it through the right-side holes out of the box.
- Guide the Stepper splitter cable alongside the xBuddy box and connect it to the second slot from the right in the top row on the xBuddy board (labeled ZR).

## PASO 48 Conectando el cable xLCD



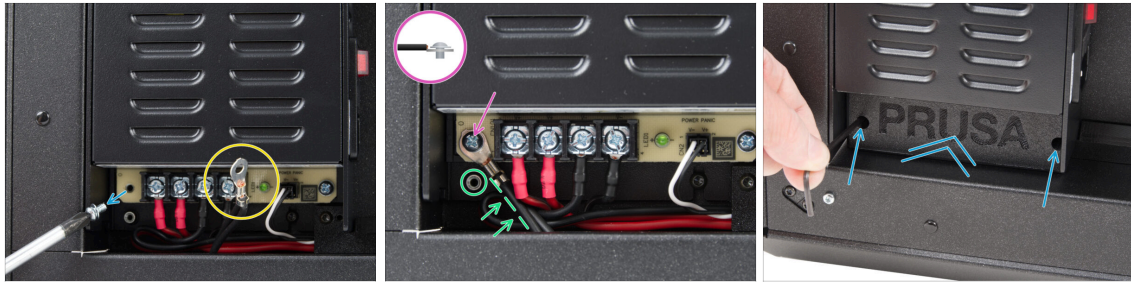
- Coloca los cables como se muestra en la ilustración - pasa todos los cables por el lado derecho de la caja xBuddy.
- ⚠ Make sure all the cables guide through the zip ties in the xBuddy box, not under them.
- Place the xLCD cable over the other cables and route it upwards.
- Connect the xLCD to the slot on the right side of the xBuddy. **Note the safety latch on the xLCD cable connector. The latch must fit into the upper side of the connector.**
- Secure the cable arrangement by tightening the bottom zip tie. **Do not tighten the three remaining zip ties!**
- ⚠ Do not overtighten the zip tie, as it may damage the wires.
- Carefully cut off the excess length of the zip tie. **Avoid cutting cables!**

## PASO 49 PSU-cover: parts preparation



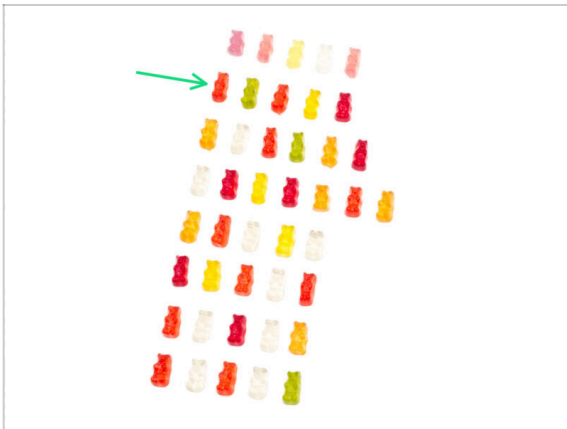
- For the following steps, please prepare:
- CORE-One-PSU-cover (1x) found in the Printed parts package
- M3x10 screw (2x)

## PASO 50 Conectando el cable FE: fuente de alimentación



- Retira el tornillo de la placa de la fuente de alimentación. **¡No los tires!**
- Ensure the FE connector (number 2) is routed into the PSU compartment.
- Insert the removed screw through the FE cable connector and screw it back to the PSU board.
- Note the correct orientation of the connector.
- Rotate the connector counter-clockwise, positioning it so it doesn't block the threaded hole underneath.
- Attach the PSU-cover over the PSU connectors and secure with two M3x10 screws.

## PASO 51 Haribo time



- ¡Es hora de recargar las pilas para el próximo capítulo!
- Eat the second row.
- ⚠ **No cheating**—eat only the number shown!

## PASO 52 Done



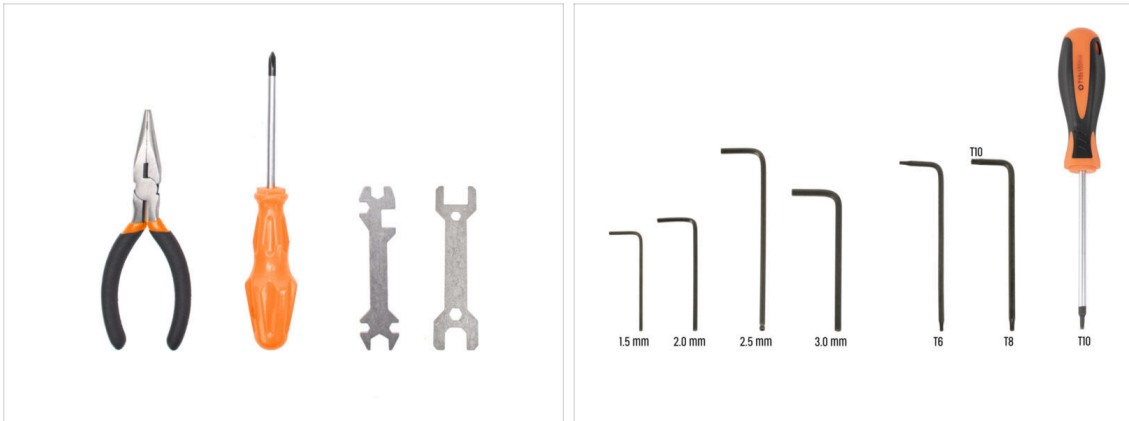
- ¡Enhorabuena! El conjunto trasero está instalado.
- Now continue to the next chapter.

## 4. Montaje de la base calefactable



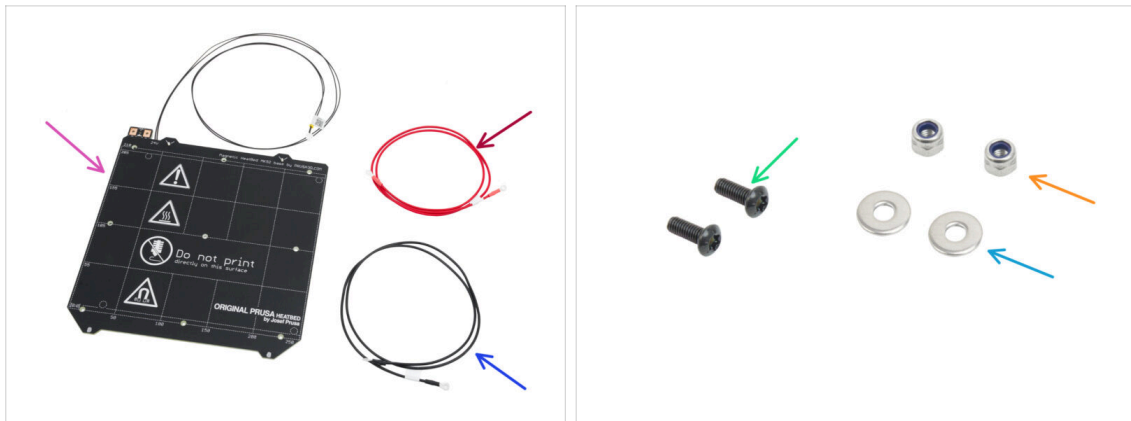


## PASO 1 Tools necessary for this chapter



- **For this chapter, please prepare:**
- Alicates de punta fina
- Llave universal
- Llave plana 13-16
- Destornillador Philips (PH2)
- Llave Allen de 2.5mm
- Llave Allen de 2.0mm
- Llave Torx T10 / Destornillador Torx T10

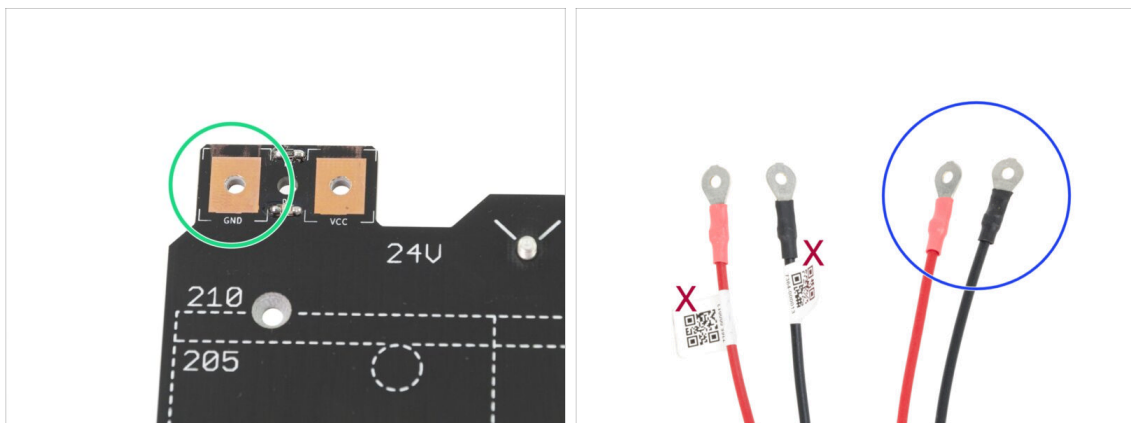
## PASO 2 Base calefactable: preparación de las piezas



### For the following step please prepare:

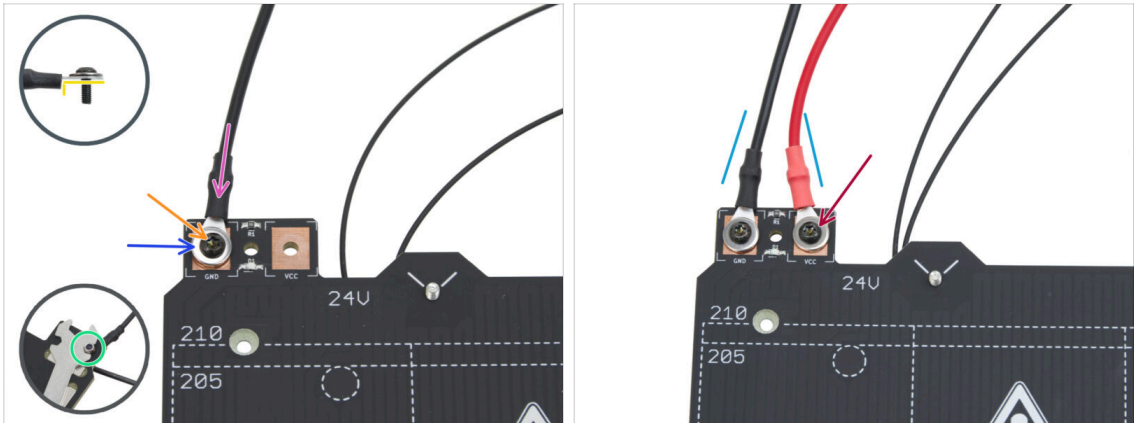
- Heatbed MK52 24V (1x) se encuentra en el paquete de CoreXY parts + Hinges set
- Cable rojo base calefactable (1x) se encuentra en el paquete de Electronics & Fasteners
- Cable negro base calefactable (1x) se encuentra en el paquete de Electronics & Fasteners
- Tornillo M3x10rT (2x)
- Tuerca M3nN (2x)
- Arandela M3w (2x)

## PASO 3 Montaje del cable de la base calefactable (parte 1)



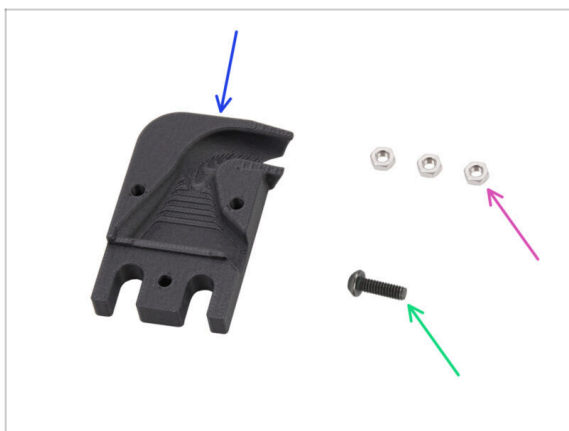
- IT IS IMPORTANT** to connect the power cable correctly. Before you start the assembly have a look at the pins. The one on the left with "GND" sign must be connected to the **BLACK WIRE**.
- Coge los dos cables de la base calefactable. Fíjate en la etiqueta de cada cable. Para los pasos siguientes, prepara los extremos de los cables **sin la etiqueta**.

## PASO 4 Montaje de cables de la base calefactable (segunda parte)



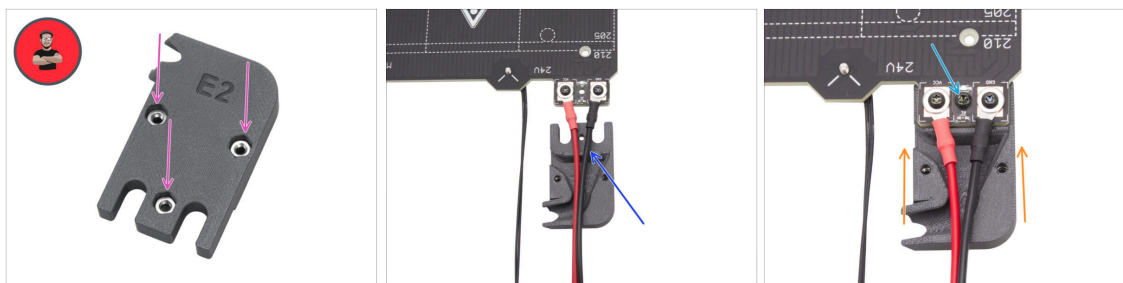
- Place the black wire above the pin with "GND" sign. **Use the end of the cable that is not labeled with QR code.** The QR code must be at the other end.
- Observa la posición correcta del terminal del cable en el detalle.
- Coloca la arandela M3w sobre el conector redondo del cable.
- Desliza el tornillo M3x10rT a través de todas las piezas.
- Sujeta el tornillo y dale la vuelta a la base poniéndola patas arriba.
- Coloca la tuerca M3nN en el tornillo M3x10rT y apriétala sólo ligeramente.
- Siguiendo el mismo procedimiento, conecta el cable rojo a la clavija "VCC" de la base calefactable.
- Guía los cables de la base calefactable ligeramente uno hacia otro (en forma de "V"). **A continuación, aprieta firmemente las tuercas desde abajo.**

## PASO 5 Bed-cable-cover-bottom: preparación de las piezas



- **For the following steps, please prepare:**
- Bed-cable-cover-bottom (1x) se encuentra en el paquete de Printed parts
- Tuerca M3n (3x)
- Tornillo M3x10rT (1x)

## PASO 6 Colocando la cubierta del cable



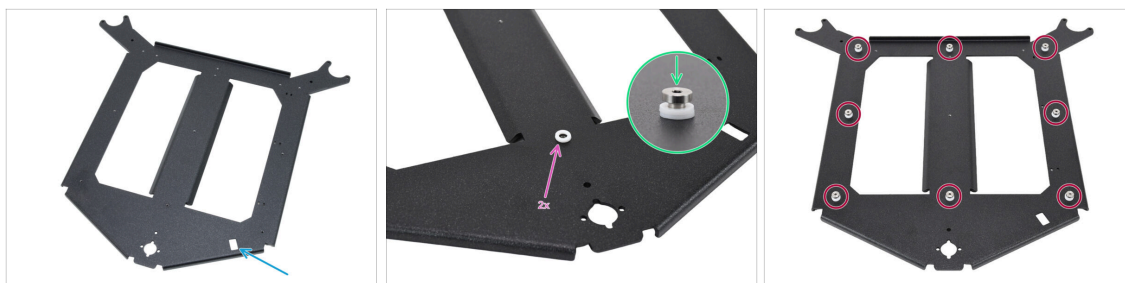
- ✦ Insert three M3n nuts into the Bed-cable-cover-bottom part.
- ❗ Consejo profesional: Usa el método de tirar con el tornillo.
- ⬛ Asegúrate de que las tuercas estén completamente insertadas y sujetas.
- ✦ Inserta el Bed-cable-cover-bottom por debajo de los conectores del cable de la base calefactable. Mira la orientación correcta en la imagen.
- ✦ Inserta el Bed-cable-cover-bottom por debajo de la unión del cable de la base calefactable.
- ✦ Alinea el orificio de la base calefactable con la cubierta del cable y fíjala con el tornillo M3x10rT.

## PASO 7 Carro base calefactable: preparación de las piezas



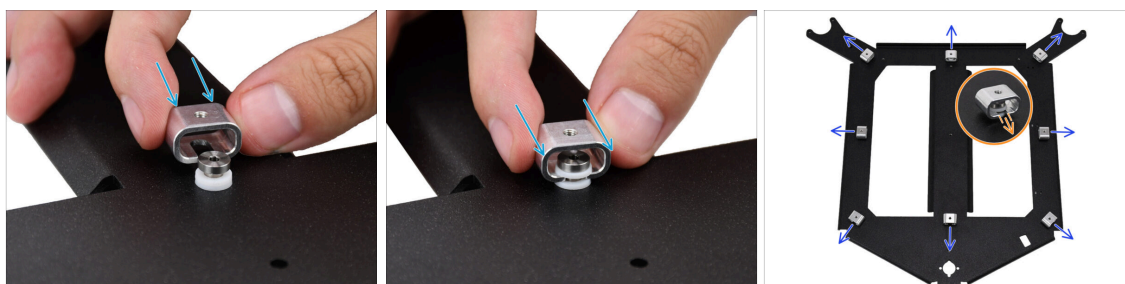
- ⬛ **For the following steps, please prepare:**
- ✦ Carro base calefactable (1x) *que se encuentra en el paquete de Metal parts 1/3*
- ✦ Junta expansión (8x) *se encuentra en el paquete de Electronics*
- ✦ Tornillo junta de expansión (8x)
- ✦ Arandela M3 PTFE (16x)

## PASO 8 Instalando los tornillos de las juntas de expansión



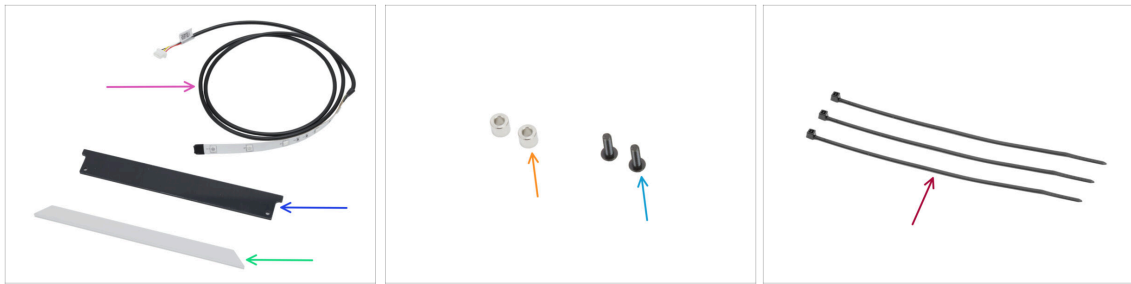
- Place the heatbed carriage in front of you in the same orientation as in the picture.
- Asegúrate de que el **corte rectangular está orientado hacia ti en el lado derecho**.
- Coloca las dos arandelas de PTFE una encima de la otra en el orificio roscado delantero del carro Z.
- Introduce el tornillo de la junta de expansión a través de las arandelas en el orificio roscado y aprieta el tornillo hasta el fondo, pero sin apretarlo en exceso.
- ⓘ Es normal que quede un pequeño espacio entre las arandelas y la cabeza del tornillo, debido a la sección sin rosca del tornillo.
- Procede de la misma manera con el resto de los orificios roscados.

## PASO 9 Instalando las juntas de expansión



- Desliza la junta de expansión, con la ranura en la parte inferior, sobre el tornillo **entre** las arandelas de PTFE.
- Orienta la junta de dilatación de manera que la ranura **quede alejada del carro Z**.
- Repite este proceso con todas las juntas de expansión restantes.
- ⓘ La posición final se ajustará siguiendo los pasos que se indican a continuación.

## PASO 10 Tira LED RGB: preparación de las piezas



For the following steps, please prepare:

- Tira LED RGB 166 mm (1x) se encuentra en el paquete de *Electronics & Fasteners*
- ⚠ Evita el contacto directo con el LED y las resistencias de la tira de LED.
- Cubierta LED estado (1x) se encuentra en el paquete de *Electronics & Chamber part* en una bolsa etiquetada *Others*
- Difusor tira LED (1x) se encuentra en el paquete de *CoreXY parts + Hinges set*
- Espaciador 3.2/6x5 mm (2x) se encuentra en el paquete de *Electronics & Fasteners*
- Tornillo M3x10rT (2x)
- Brida (3x)

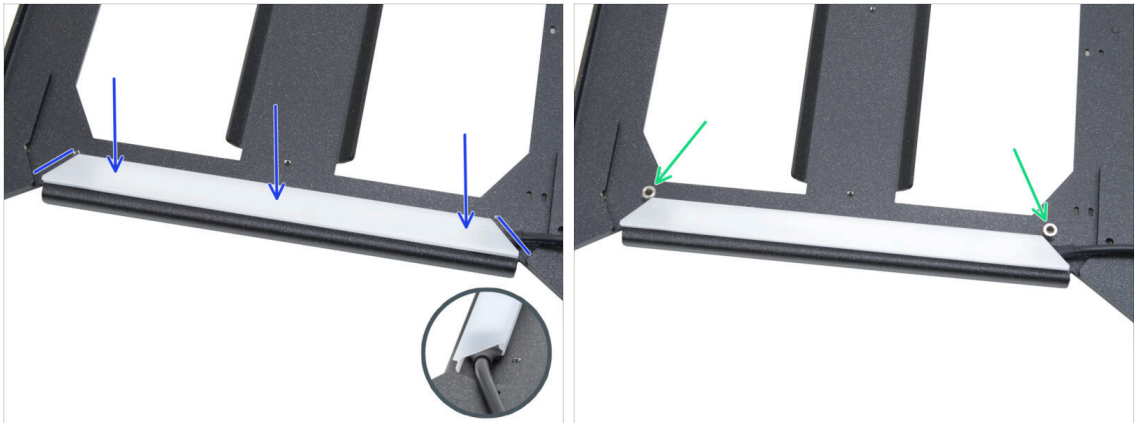
## PASO 11 Instalando la tira LED



- Place the heatbed carriage in front of you in the same orientation as in the picture.
- Asegúrate de que el **corte rectangular está orientado al contrario de ti y en el lado derecho.**
- Despega con cuidado la capa protectora (de papel) de la tira de LED RGB.
- ⚠ Tras retirar la capa protectora, la tira de LED RGB es adhesiva.
- Pega la tira de LED RGB uniformemente en la parte delantera del carro del lecho térmico, aproximadamente a 3 mm (0.12 pulgadas) del borde doblado. Alinea el LED central con el tornillo del carro.
- El **cable** de la tira LED RGB **debe apuntar hacia la derecha.**
- Después de pegarlas, presiona ligeramente sobre las zonas en blanco de la tira para asegurar la adherencia. **¡No toques los LED ni las resistencias!**

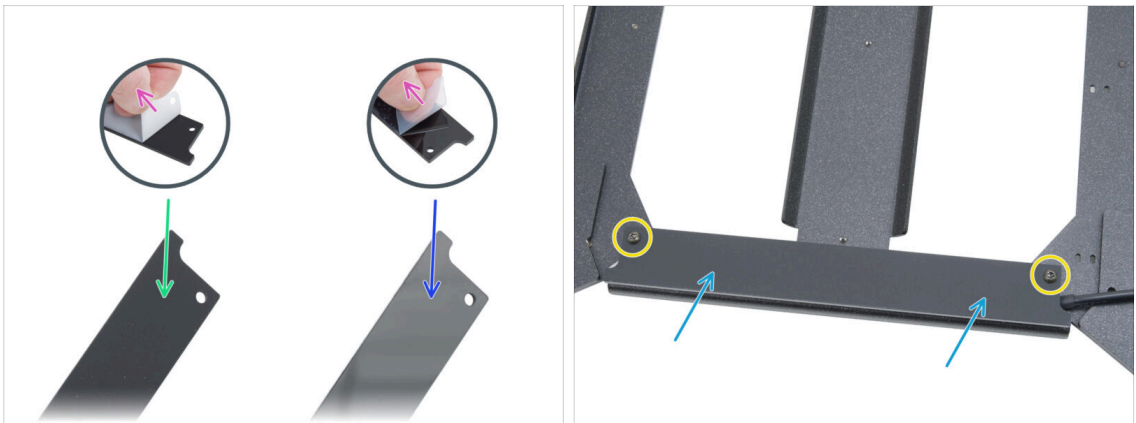


## PASO 12 Colocando el difusor de la tira LED



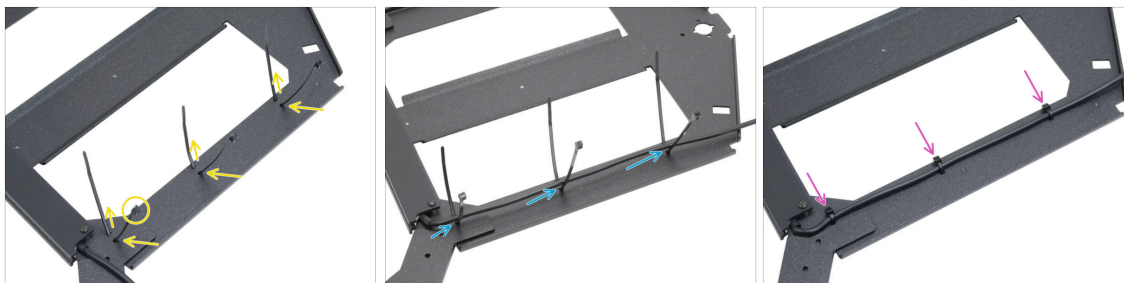
- Place the LED strip diffuser over the RGB LED strip. Note the orientation of the part - according to the beveled edges.
- Coloca dos espaciadores de 3.2/6x5 mm en los orificios de los bordes del conjunto de LED.

## PASO 13 Cubriendo la tira LED RGB



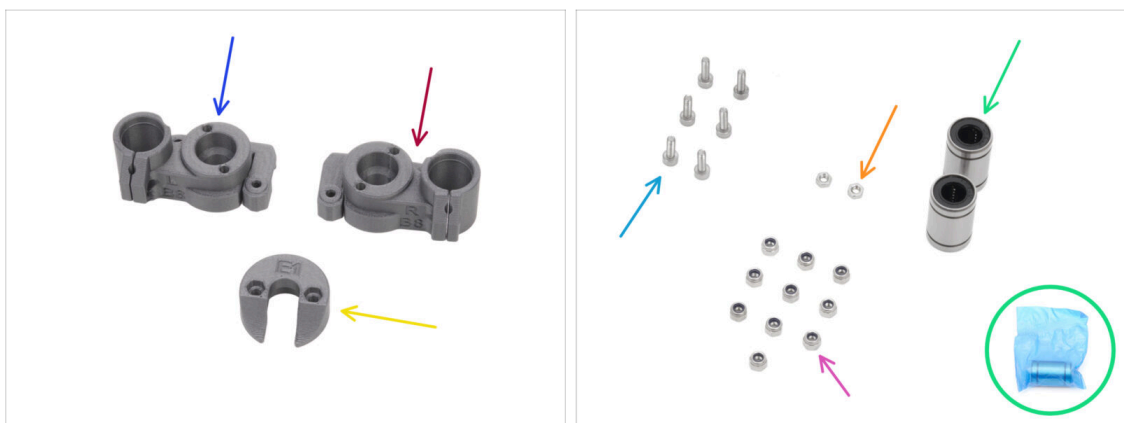
- From both sides of the LED status cover, peel off the protective layers.
- Observa que una cara de la cubierta es mate.
- La otra cara de la cubierta es brillante.
- Coloca la cubierta de la tira de LED en el conjunto, **con el lado mate hacia arriba**.
- Fija todas las piezas introduciendo y apretando dos tornillos M3x10rT. **No aprietes demasiado los tornillos**, ya que podría agrietar la cubierta.

## PASO 14 Guiding the RGB LED strip cable



- ✦ Thread the three zip ties along the **RIGHT SIDE** of the heatbed carriage. Make sure the zip tie heads are facing outward.
- ✦ Guía el cable de la tira LED RGB a través de todas las bridas.
- ✦ A continuación, aprieta las tres bridas. Corta las bridas sobrantes.

## PASO 15 Bed mounts: parts preparation



- ✦ **For the following steps, please prepare:**
- ✦ CORE-One-bed-mount-left (1x) se encuentra en el paquete de *Printed parts*
- ✦ CORE-One-bed-mount-right (1x) se encuentra en el paquete de *Printed parts*
- ✦ CORE-One-bed-spacer-rear (1x) se encuentra en el paquete de *Printed parts*
- ✦ Rodamiento LM8UU (2x) se encuentra en el paquete de *Electronics*
- ❗ Los rodamientos del kit están embalados en bolsas azules.
- ✦ Tornillo M3x10 (6x)
- ✦ Tuerca M3n (2x)
- ✦ Tuerca M3nN (10x)

## PASO 16 Montando los soportes de la cama



- Place the CORE-One-bed-mount-left onto the bearing, ensuring the correct orientation.
- Presiona la pieza sobre el rodamiento, aplicando más fuerza para asegurarse de que se desplace hasta el fondo. Sentirás un clic, indicando que la pieza de plástico y el rodamiento están correctamente asentados.
- ① Si te cuesta introducir el rodamiento, utiliza cualquier destornillador plano para ampliar con cuidado la abertura del soporte de la base.
  - ⚠ El rodamiento debe quedar totalmente encerrado dentro de la pieza y no debe sobresalir.
- Sigue el mismo procedimiento para la CORE-One-bed-mount-right.

## PASO 17 Asegurando los soportes de la base



- Insert one M3n nut into the CORE-One-bed-mount-left.
- Coloca el CORE-One-bed-mount-left según la ilustración:
  - Coloca el rodamiento de modo que dos hileras de bolas miren hacia la parte inferior de la pieza, no solo una.
- Mantén el rodamiento en la posición y fíjalo insertando y apretando un tornillo M3x10.
  - ⚠ Asegúrate de que la superficie superior del rodamiento está enrasada con la superficie superior de la pieza de plástico.
- Sigue el mismo procedimiento para la CORE-One-bed-mount-right.

## PASO 18 Soportes de cama: introduciendo las tuercas



- Insert four M3nN nuts into both bed mounts.
- Asegúrate de que se introducen completamente en el interior.

## PASO 19 Montaje de la CORE-One-bed-spacer-rear



- Insert two M3nN nuts into the CORE-One-bed-spacer-rear.
- Inserta las tuercas lo más abajo posible.

## PASO 20 Instalando la bed-mount-right



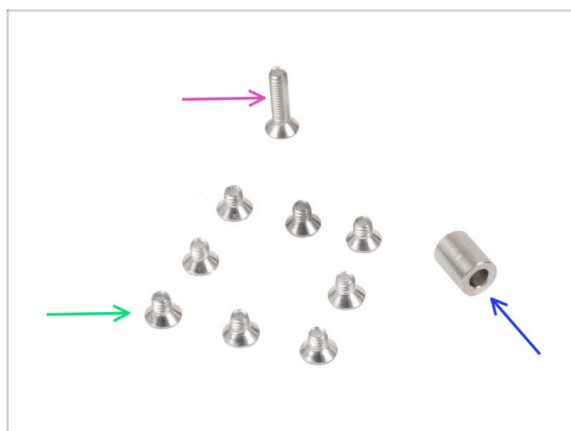
- Turn the heatbed carriage piece with the "forks" facing you and with the **expansion joints facing up**.
- Coge la pieza CORE-One-bed-mount-**right** y colócala **debajo** de la horquilla **derecha** - con el rodamiento de la derecha.
- Asegúrala con dos tornillos M3x10.

## PASO 21 Instalando el bed-mount-left



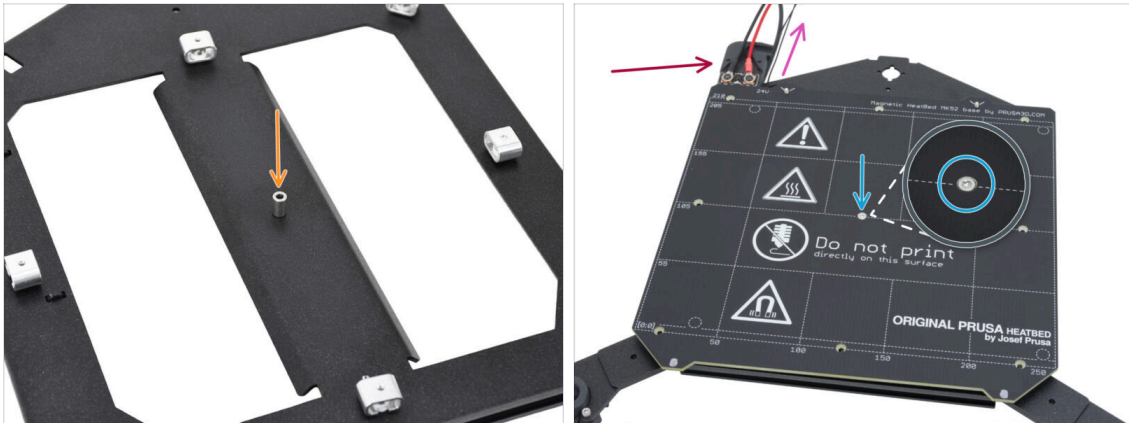
- Take the One-bed-mount-**left** part and slide it **under** the **left** fork - with the bearing on the left.
- Asegúrala con dos tornillos M3x10.

## PASO 22 Mounting the heatbed: parts preparation



- For the following steps, please prepare:
- Tornillo avellanado M3x14bT (1x)
  - Nota: El paquete puede etiquetar este tornillo como M3x14cT.
- Espaciador 6x3.1x10 mm (1x) se encuentra en el paquete de Nextruder assembly
- Tornillo avellanado M3x4bT (8x)

## PASO 23 Asegurando la base calefactable



- Place the spacer onto the heatbed carriage on the side with the expansion joints and align it with the hole in the center.
- Coloca la base calefactable en el carro de la base y fíjalo con el M3x14bT. **No apriete aún del todo el tornillo.**
  - Asegúrate de que el cable del termistor de la base calefactable (el par más fino) está guiado junto a los cables de alimentación de la base calefactable. No lo tienda alrededor o a través de juntas de expansión.
- ⚠ **Asegúrate de la orientación correcta de la pieza. Utiliza los cables de la base calefactable como guía.**

## PASO 24 Alineador junta expansión



- Prepara el **Expansion-joint-aligner** para los siguientes pasos.
- ⓘ Tu paquete incluye la **versión negra**. En esta guía se muestra la versión naranja para que se vea mejor.
- En los siguientes pasos, alinearás con precisión cada junta de expansión.
- A modo de referencia, véase la segunda imagen, en la que se muestra la orientación simplificada del alineador para una sola junta de expansión.
- La tercera imagen muestra cómo se desliza la herramienta de alineación sobre la junta de expansión a modo de referencia.
- La junta de expansión se muestra fuera de la impresora para mayor claridad. Durante la alineación, se instala debajo de la base calefactable.

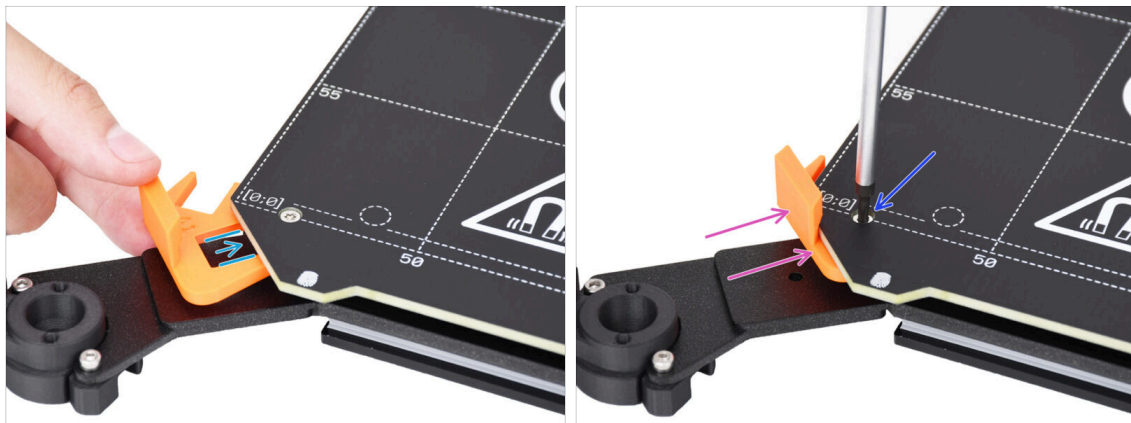


## PASO 25 Alineación de la junta de expansión delantera



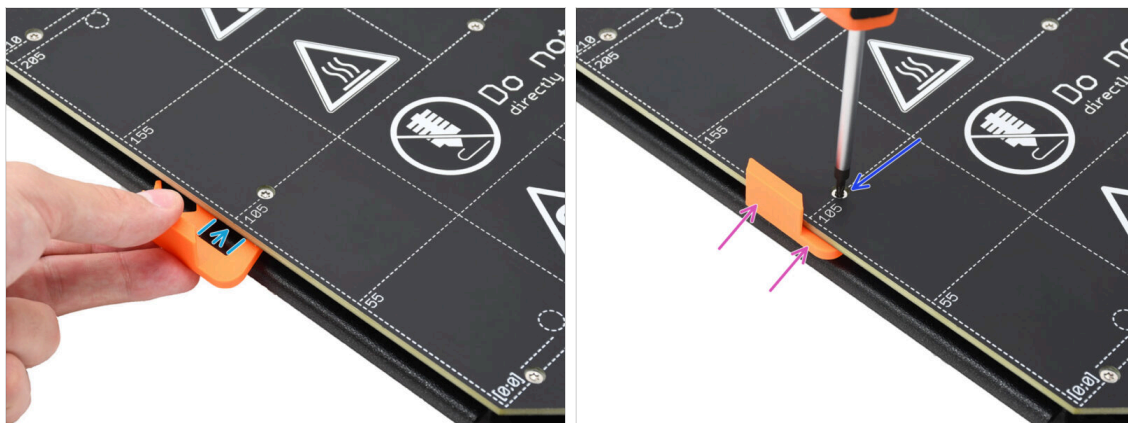
- Inserta los tornillos M3x4cT en **los ocho orificios** que hay alrededor de la base calefactable. Aprieta cada tornillo **solo una vuelta**.
- Empieza por alinear la **junta de expansión central en la parte frontal**.
  - ❶ Utiliza los símbolos de la base calefactable como referencia.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

## PASO 26 Alineación de la junta de expansión delantera izquierda



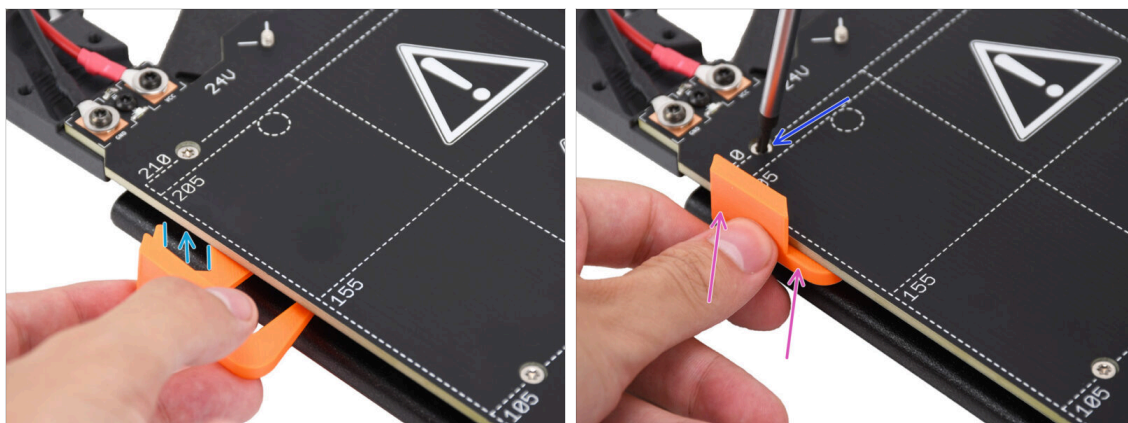
- Pasa a la **esquina izquierda**.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

## PASO 27 Alineación de la junta de expansión izquierda



- Pasa al **lado izquierdo** de la base calefactable.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

## PASO 28 Alineación de la junta de expansión trasera izquierda



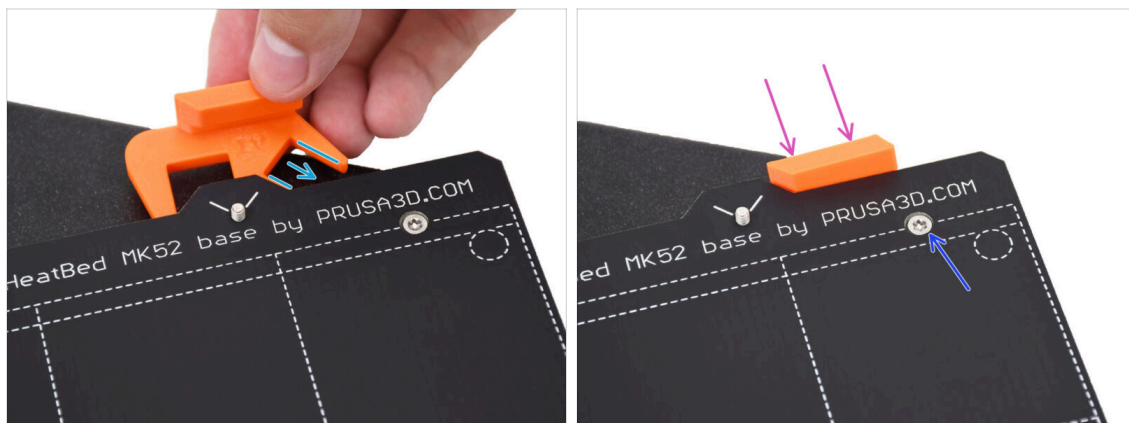
- Pasa a la **esquina trasera izquierda**.
- Desliza la horquilla **en ángulo** sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

## PASO 29 Alineación de la junta de expansión trasera central



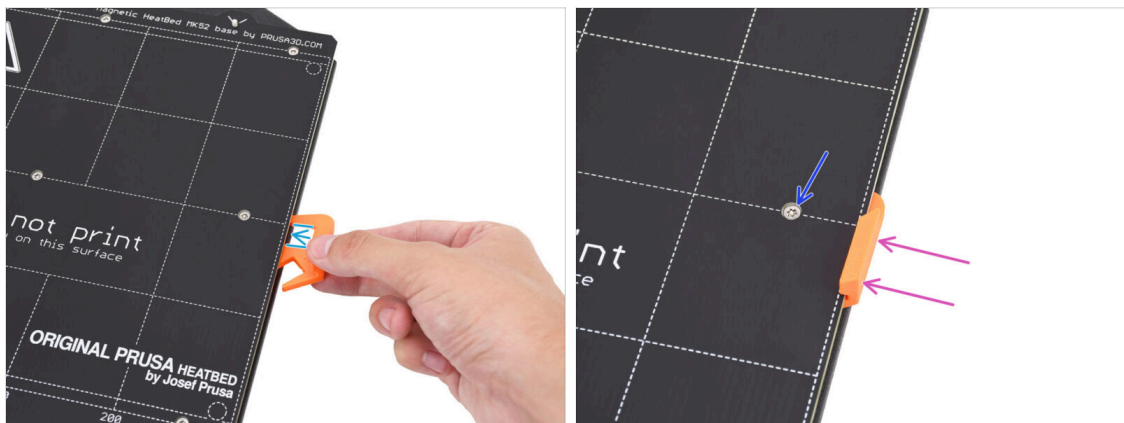
- Continúa con la junta de expansión **trasera central**.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

## PASO 30 Alineación de la junta de expansión trasera derecha



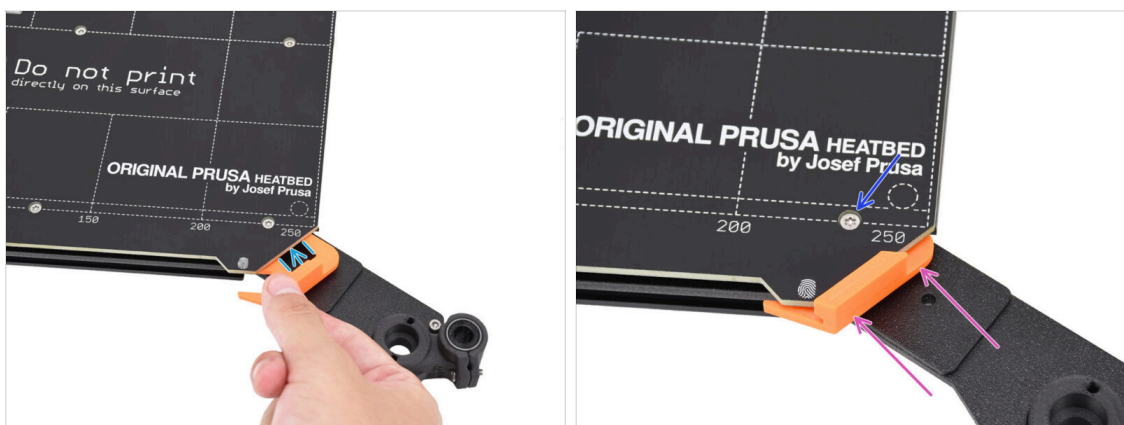
- Continúa con la **esquina trasera derecha**.
- Desliza la horquilla **en ángulo** sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

### PASO 31 Alineación de la junta de expansión derecha



- Desplázate hacia el **lado derecho** de la base calefactable.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.

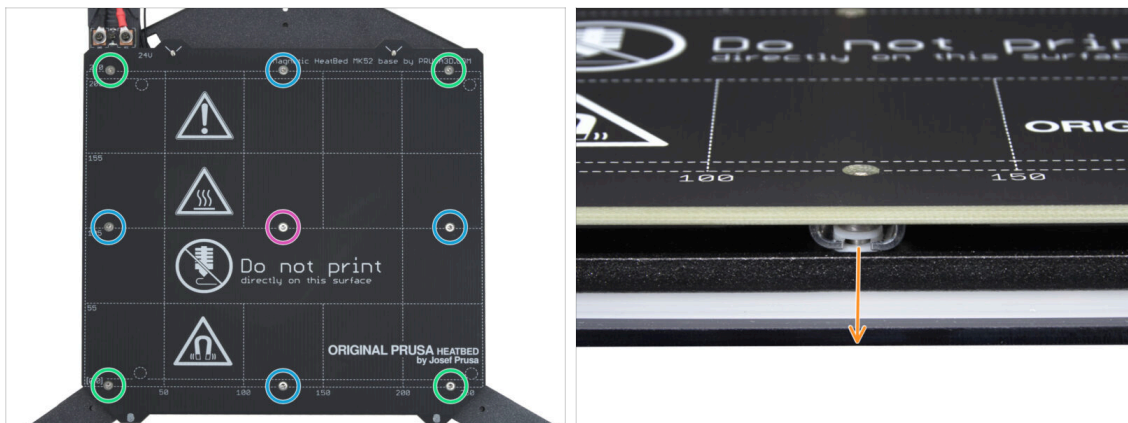
### PASO 32 Alineación de la junta de expansión delantera derecha



- Continúa con la **esquina delantera derecha**.
- Desliza la horquilla recta sobre la junta de expansión y empuja el Expansion-joint-aligner contra la base calefactable. De este modo, se alineará la junta de expansión.
- Presiona el alineador con firmeza contra el borde de la base calefactable.
- Aprieta el tornillo, pero solo un poco.



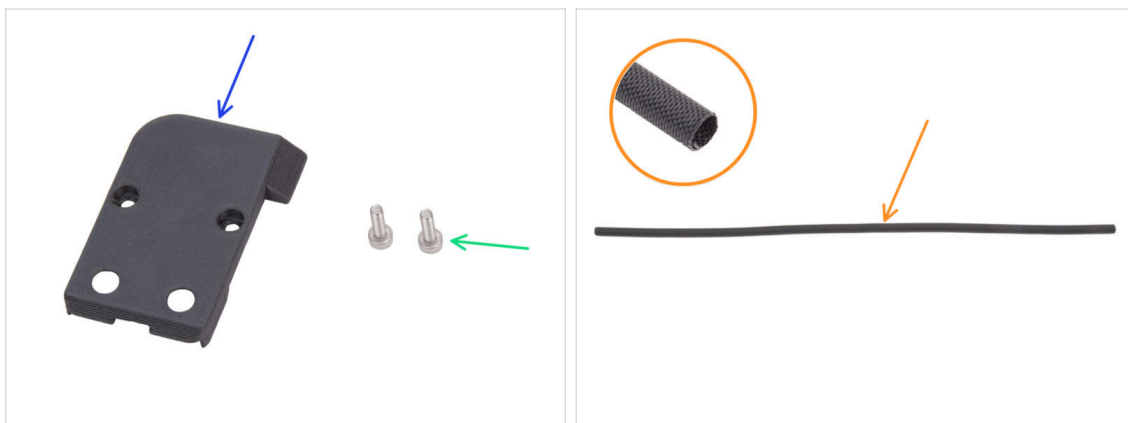
## PASO 33 Fijando la base calefactable



**⚠ IMPORTANTE:** La base calefactable debe apretarse siguiendo un orden concreto. Repite la secuencia varias veces, asegurándote de realizar el apriete final tras al menos dos rondas.

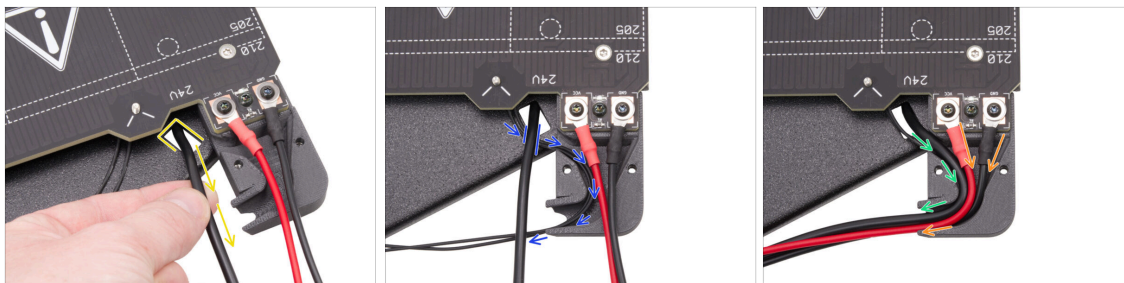
- Después de colocar todos los tornillos en su lugar, apriétalos en el siguiente orden:
  - Tornillo central
  - Primeros cuatro tornillos (bordes)
  - Últimos cuatro tornillos (esquinas)
- Aprieta los tornillos suavemente, pero con firmeza.
- Comprueba bien que la junta de expansión no se haya girado y que la ranura quede orientada hacia el exterior de la impresora.

## PASO 34 Cubriendo los cables: preparación de las piezas



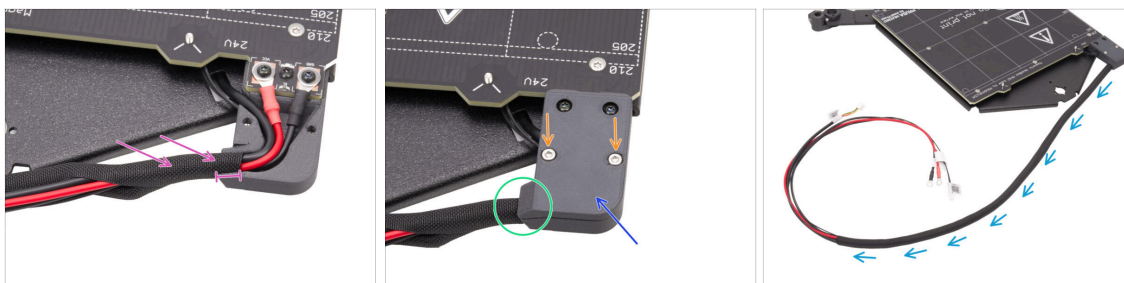
- For the following steps, please prepare:
  - CORE-One-bed-cable-cover-top (1x) se encuentra en el paquete de Printed parts
  - Tornillo M3x10 (2x)
  - Funda textil 520 x 8 mm (1x) se encuentra en el paquete de Electronics & Chamber parts

## PASO 35 Guiando los cables de la base calefactable



- Pull the RGB LED strip cable from the bottom through the rectangular cutout to the top.
- Guía el cable del termistor de la base calefactable por debajo del cable del LED RGB e inserte el cable del termistor de la base calefactable en el canal de cables de la cubierta de cables.
- Pasa el cable de la tira de LED RGB por el canal de cables.
- Guía los cables de alimentación de la base calefactable a través del canal de cables.

## PASO 36 Cubriendo los cables de la base calefactable



- Thread approximately 5 cm (2 in) of the textile sleeve onto the heatbed cable bundle and slide the textile sleeve 1 cm (0.39 in) into the cable channel.
- Coloca el CORE-One-bed-cable-cover-top sobre los cables de la base calefactable.
- Asegúrate de que la funda textil sigue en su sitio, dentro de la cubierta del cable.  
**No tires de la funda textil.**
- Fija la cubierta superior con dos tornillos M3x10.
- Enrolla el resto de la funda textil alrededor del haz de cables.



### PASO 37 Conjunto limpiador boquilla: preparación de las piezas



● Para los siguientes pasos, por favor prepara:

- Nozzle-wiper-holder (1x)
- Limpiador boquilla (1x)
- Tuerca M3nN (1x)
- Tornillo M3x6r (1x)
- Tornillo M3x10 (1x)
- Junta de expansión (1x)

### PASO 38 Ensamblando el limpiador de boquilla



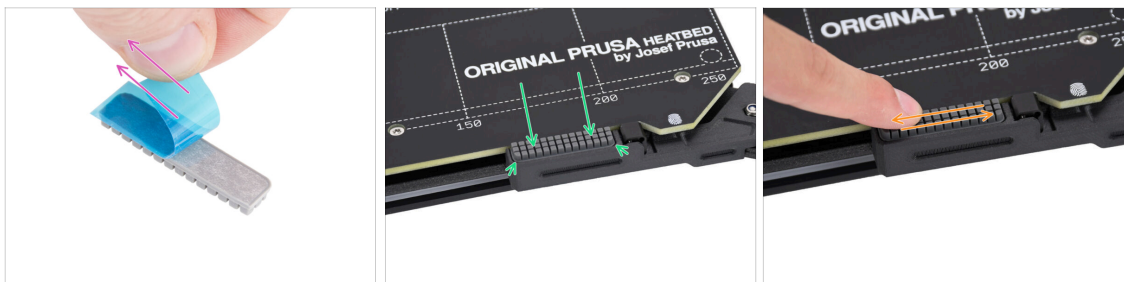
- Introduce el tornillo M3x6r en la junta de expansión, con la cabeza del tornillo por delante.
- Introduce una llave Allen de 2.0 mm por el orificio roscado para acceder al tornillo.
- Fija la junta de expansión al Nozzle-wiper-holder y aprieta el tornillo. No lo aprietes en exceso.
- Inserta la tuerca M3nN en el agujero marcado.

### PASO 39 Montando el limpiador de boquilla



- Levanta con cuidado la esquina delantera derecha de la base calefactable.
- Se recomienda apoyar la esquina por debajo con una almohadilla blanda para mantenerla elevada.
  - ❗ Consejo: Utiliza un trozo de espuma de protección del embalaje para colocarlo debajo de la esquina.
- Desliza el conjunto del limpiador de la boquilla contra la base calefactable
- Desde la parte inferior del carro en Z, introduce el tornillo M3x10 y apriétalo bien.

### PASO 40 Pegando la almohadilla limpiadora



- Retira la capa protectora de la almohadilla limpiadora de la boquilla.
  - ❗ La almohadilla es adhesiva por debajo de la capa protectora. **Evita tocar la superficie adhesiva.**
- Inserta la almohadilla limpiadora de la boquilla en el hueco correspondiente del conjunto del limpiador de la boquilla.
  - 📌 Ten en cuenta que la almohadilla tiene **esquinas redondeadas** en un lado. Haz que coincidan con la forma del hueco.
- Pasa el dedo varias veces por toda la superficie de la almohadilla limpiadora de la boquilla para asegurarte de que quede bien adherida y completamente encajada.

## PASO 41 Montando la base calefactable: preparación de las piezas



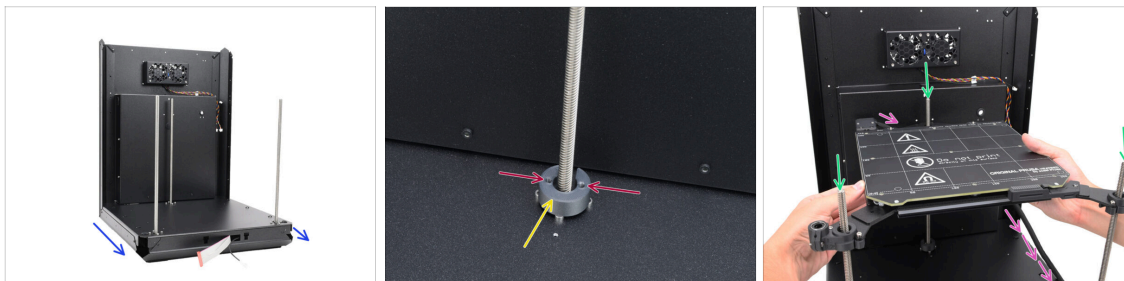
● For the following steps, please prepare:

◆ Tuerca trapezoidal (3x)

ⓘ *Dos tuercas trapezoidales se incluyen en el paquete del juego de motores, y una tuerca se encuentra en el paquete de Electronics & Chamber parts.*

◆ Tornillo M3x18 (6x)

## PASO 42 Colocando el conjunto de la base calefactable



◆ Take the back and base assembly and orient the front side towards you.

◆ Coloca la CORE-One-bed-spacer-rear en las cabezas de los tornillos traseros del motor, asegurándote de que permanece en su sitio.

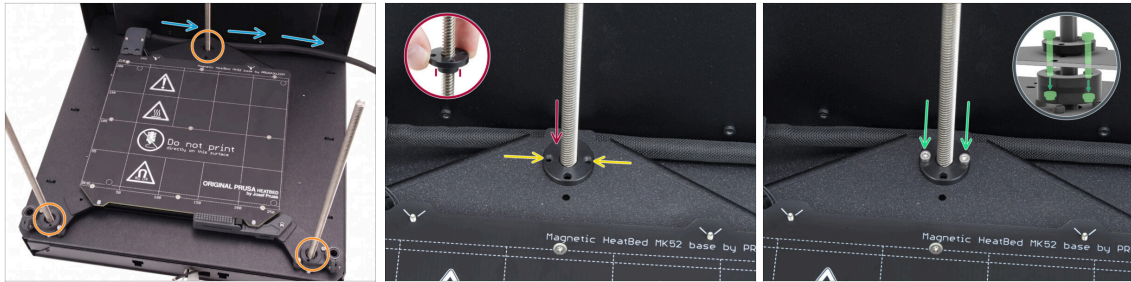
⚠ **Observa la orientación de la pieza y de los orificios como se muestra. Los orificios deben estar paralelos a las cabezas de los tornillos del motor.**

◆ Enrosca con mucho cuidado el conjunto de la base calefactable en las varillas roscadas de los motores Z y, a continuación, colócalo suavemente sobre la base.

⚠ **Asegúrate de que el cable de la base calefactable no toque el espaciador y retíralo del motor.**

◆ El cable de la base calefactable debe pasar por **debajo de la base calefactable** y por **detrás del motor trasero**.

## PASO 43 Montando el conjunto de la base calefactable: motor trasero



- Ensure the heatbed assembly is seated correctly—all threaded rods pass through the correct holes.
- Compruebe que el haz de cables de la base calefactable (funda textil) discurre correctamente—**debe pasar por debajo del conjunto de la base calefactable y por detrás de la varilla roscada** del motor trasero.
- Enrosca manualmente la tuerca trapezoidal en el motor Z trasero. Enrosca la tuerca hasta el fondo hasta que se asiente en el carro de la base calefactable.
  - ⚠ Asegúrate de que la orientación de la pieza es correcta. **La sección que sobresale debe mirar hacia abajo.**
- Alinea los orificios de la tuerca trapezoidal, el carro y el bed-spacer-rear.
  - i No importa qué agujeros utilices en la tuerca trapezoidal.
  - i Consejo: Puedes introducir una llave Allen de 1.5 mm por los agujeros de todas las piezas para alinearlas.
- Fija la tuerca trapezoidal, el carro de la base calefactable y el separador trasero de la base con dos tornillos M3x18.

## PASO 44 Mounting the heatbed assembly: front motor left



- Manually thread the trapezoidal nut onto the **left** Z motor. Screw the nut all the way down until it seats into the plastic part.
- ⚠ **Asegúrate de que la orientación de la pieza es correcta. La sección que sobresale debe mirar hacia abajo.**
- Alinea los orificios de la tuerca trapezoidal con los de la pieza de plástico. Puede utilizarse cualquier par de orificios.
- Fija todas las piezas juntas con dos tornillos M3x18.
- ⓘ Una vez apretados los tornillos, afloja cada uno de ellos un cuarto de vuelta para dejar un poco de holgura.

## PASO 45 Mounting the heatbed assembly: front motor right



- Enrosca manualmente la tuerca trapezoidal en el motor Z **derecho**. Enrosca la tuerca hasta el fondo hasta que se asiente en la pieza de plástico
- ⚠ **Asegúrate de que la orientación de la pieza es correcta. La sección que sobresale debe mirar hacia abajo.**
- Alinea los orificios de la tuerca trapezoidal con los de la pieza de plástico. Puede utilizarse cualquier par de orificios.
- Fija todas las piezas juntas con dos tornillos M3x18.

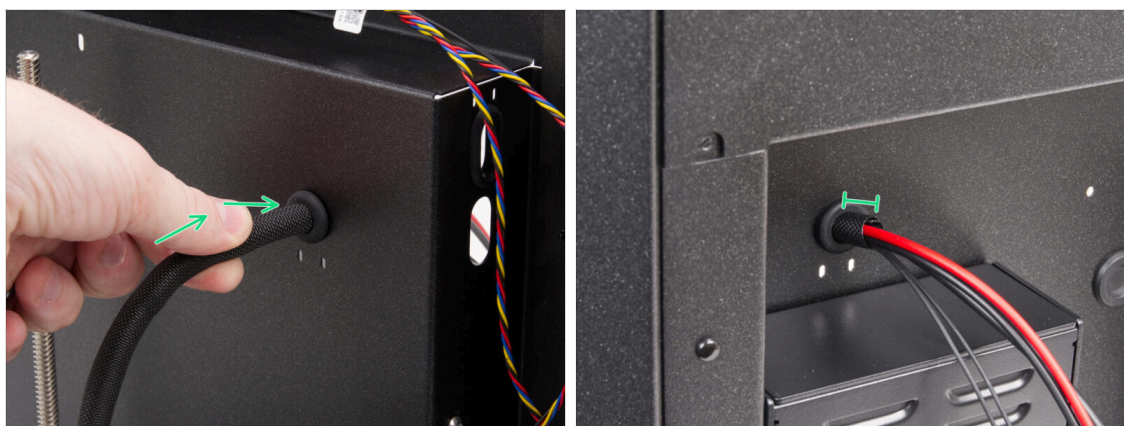


## PASO 46 Attaching the heatbed cables I.



- Localiza el orificio del pasacables en la parte superior derecha del conjunto posterior y pasa los cables de la base calefactable en el siguiente orden:
  - Guía el cable de la tira LED RGB a través del primer agujero.
  - Pasa el cable del termistor por el orificio.
  - Por último, inserta los dos cables de alimentación del orificio.

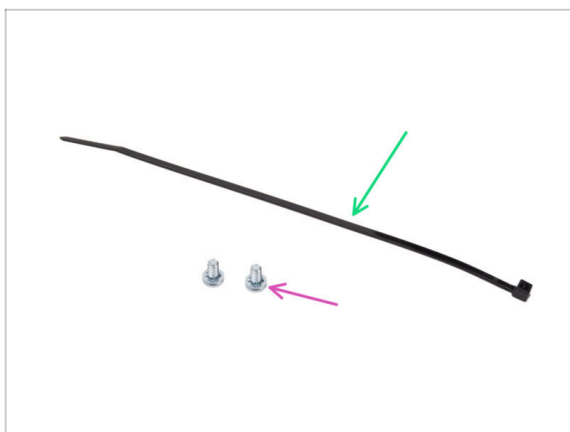
## PASO 47 Attaching the heatbed cables II.



- Pasa los cables de la base calefactable y el manguito textil por el orificio del pasacables.
- No debe sobresalir más de 1 cm (0.39 pulgadas) del manguito textil por la parte trasera.



## PASO 48 Securing the heatbed cables: parts preparation

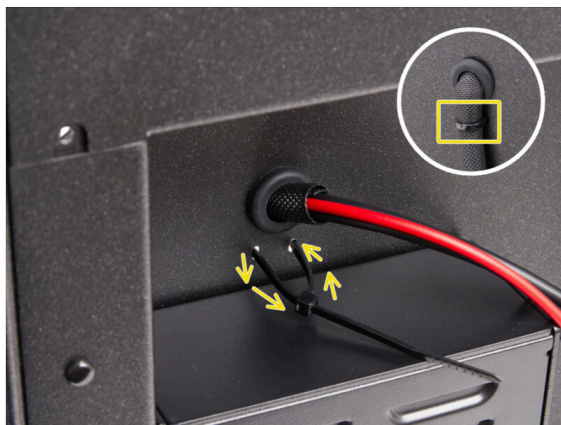


● Para los siguientes pasos, por favor prepara:

● Brida (1x)

● Tornillo del terminal de alimentación 6-32 (2x)

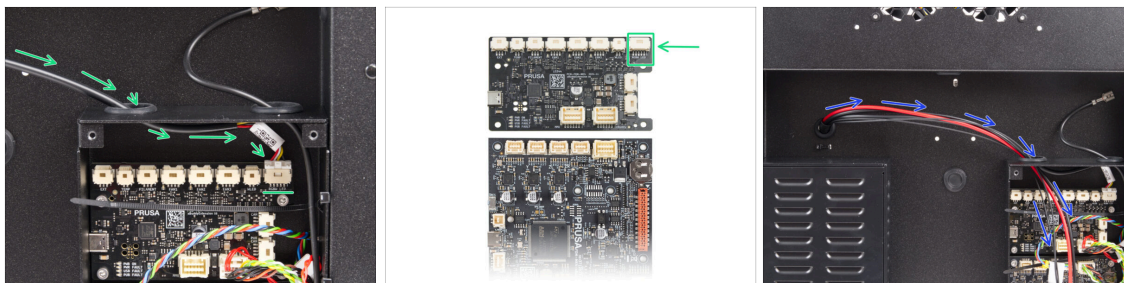
## PASO 49 Securing the textile sleeve



● Pasa la brida por los dos orificios situados debajo de los cables de la base calefactable y haz un lazo alrededor del haz de cables de la base calefactable (funda textil) por la parte interior.

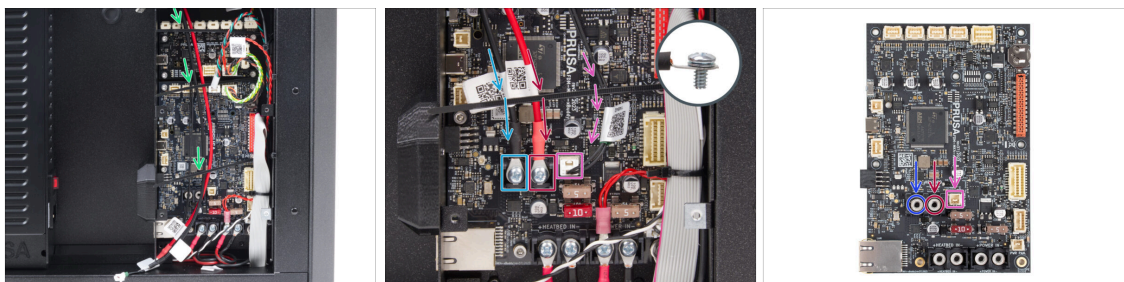
● Aprieta bien la brida y corta el sobrante.

## PASO 50 Guiding the heatbed assembly cables



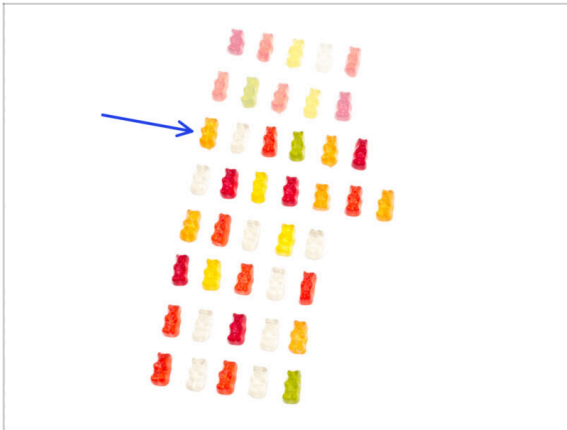
- Pasa el cable de la tira de LED RGB por el orificio izquierdo de la caja xBuddy y conéctalo a la placa xBuddy Extension etiquetada como 'RGBW LED.'
- Conéctalo a la primera ranura desde la derecha en la placa de extensión xBuddy.
- Guía los cables de alimentación de la base calefactable junto con el termistor a través del orificio izquierdo. Deja que los cables cuelguen libremente por ahora.

## PASO 51 Connecting the heatbed power cables



- Asegúrate de que ninguno de los cables de la base calefactable pasa por encima de las birdas: deben guiarse por debajo.
- Utiliza el tornillo terminal de 6/32" para conectar el cable de alimentación **negro** a la ranura terminal **izquierda** de la placa xBuddy. Aprieta firmemente.
- Utiliza el tornillo terminal de 6/32" para conectar el cable de alimentación **rojo** a la ranura terminal **derecha**. Aprieta firmemente.
- Enchufa el conector del termistor de la base calefactable en la ranura situada junto a los terminales de alimentación.

## PASO 52 Momento Haribo



- ¡Es hora de otra inyección rápida de energía!
- Come la tercera fila.
- Con un regalo extra. ¡Te lo mereces!

## PASO 53 Listo

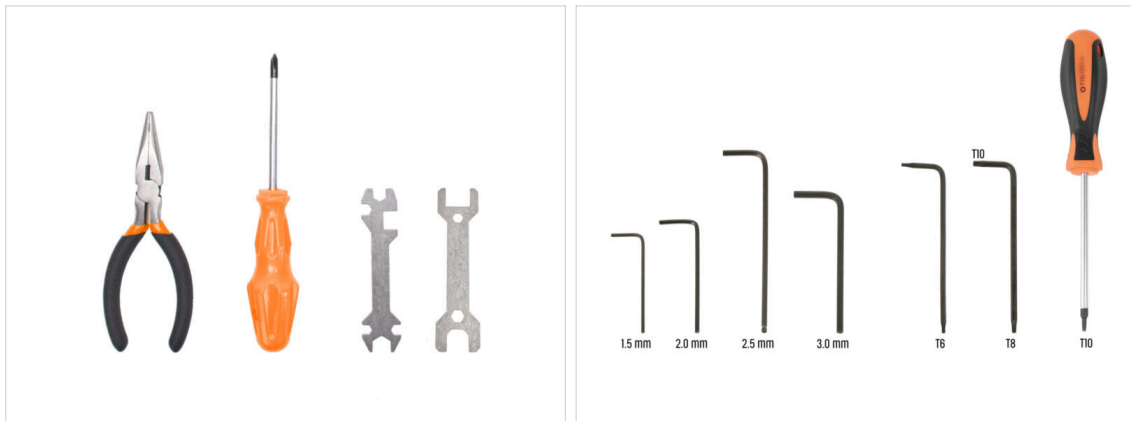


- ¡Enhorabuena! Acabas de montar e instalar la base calefactable.
- Pasemos al siguiente capítulo.

## 5. CoreXY assembly



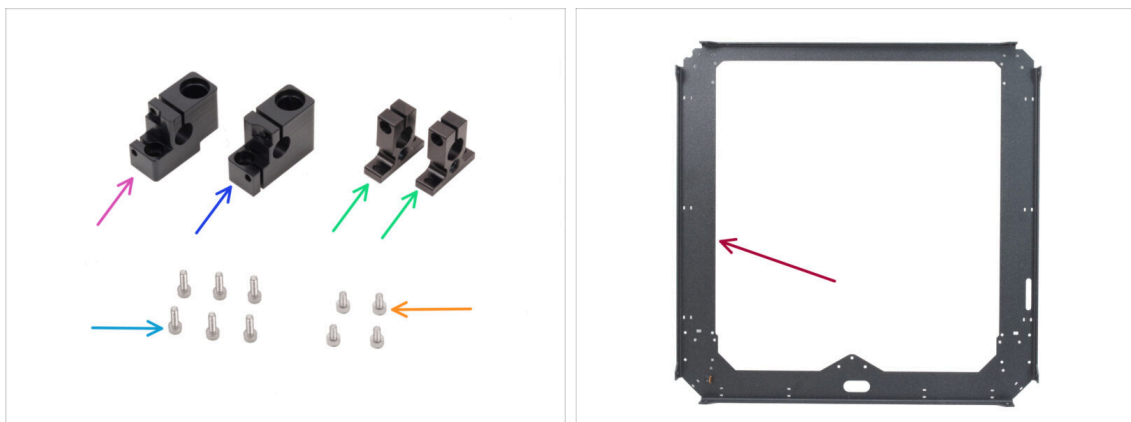
## PASO 1 Tools necessary for this chapter



### For this chapter, please prepare:

- Needle-nose pliers
- 2.0mm Allen key
- 2.5mm Allen key
- T10 torx key / T10 torxy screwdriver

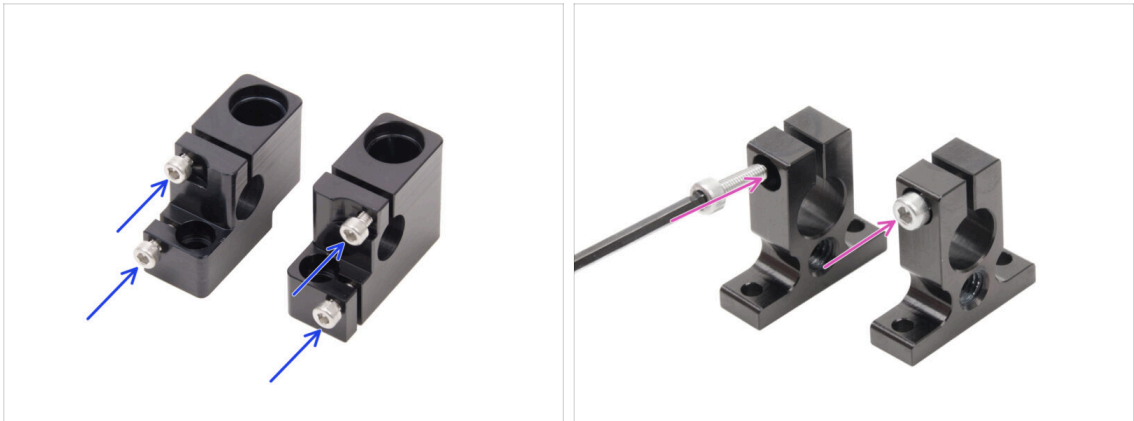
## PASO 2 Rod holders: parts preparation



### For the following steps, please prepare:

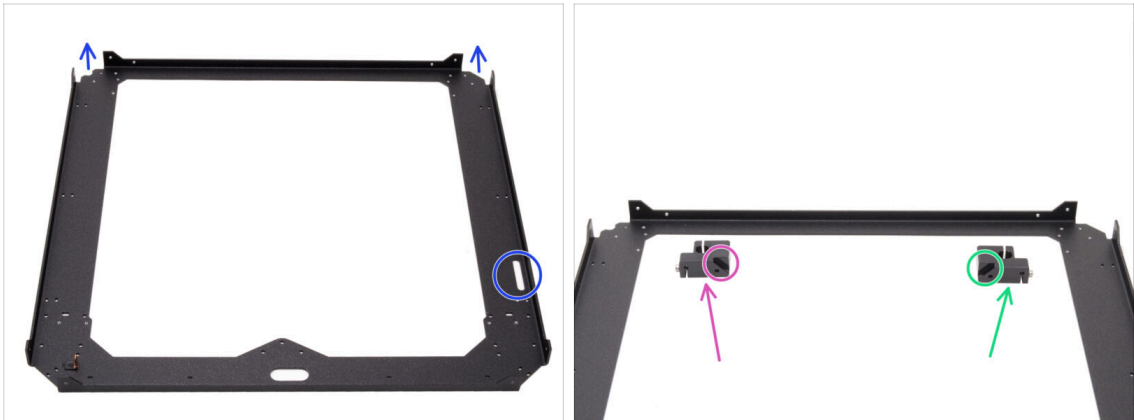
- Rod holder left (1x) *found in the CORE XY parts + hinges + HB set package*
- Rod holder right (1x) *found in the CORE XY parts + hinges + HB set package*
- Rod holder rear (2x) *found in the CORE XY parts + hinges + HB set package*
- M3x10 screw (6x)
- M3x6 screw (4x)
- CoreXY plate (1x) *found in the Metal parts 1/3 package*

### PASO 3 Assembling the rod holders



- Insert two M3x10 screws into the Rod holder left and two into the Rod holder right.
- **Do not tighten them completely**, a few turns are enough for now.
- Insert one M3x10 screw into each Rod holder rear. Insert from the **side with the screw head hole**.
- **Do not tighten them completely**, a few turns are enough for now.

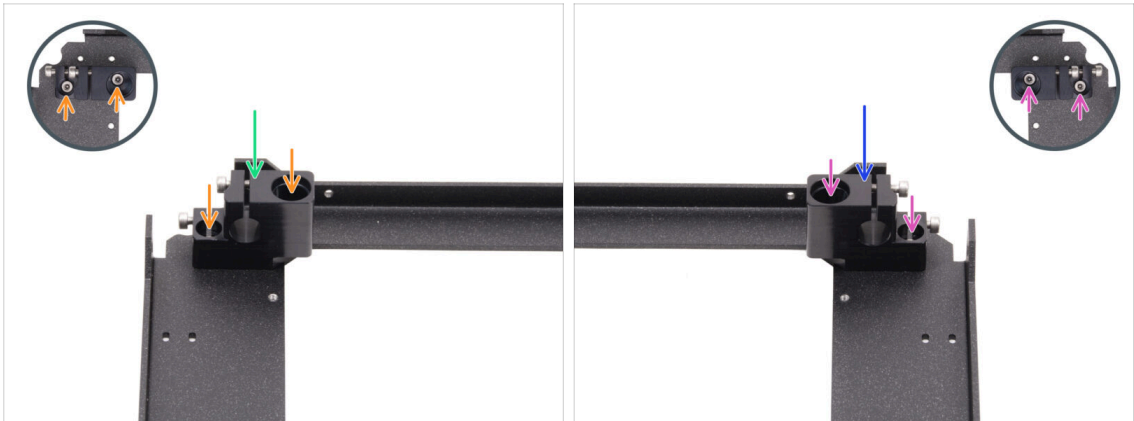
### PASO 4 Preparing the front rod holders



- Place the CoreXY plate as shown - the **bent parts of the plate must point upwards**.
- Divide the Rod holder left and the Rod holder right into the sides of the front:
  - ⚠ **Ensure you are preparing the correct part for the correct side. Use the chamfers on both parts as a reference for alignment.**
  - **Rod holder left**
  - **Rod holder right**



## PASO 5 Installing the front rod holders



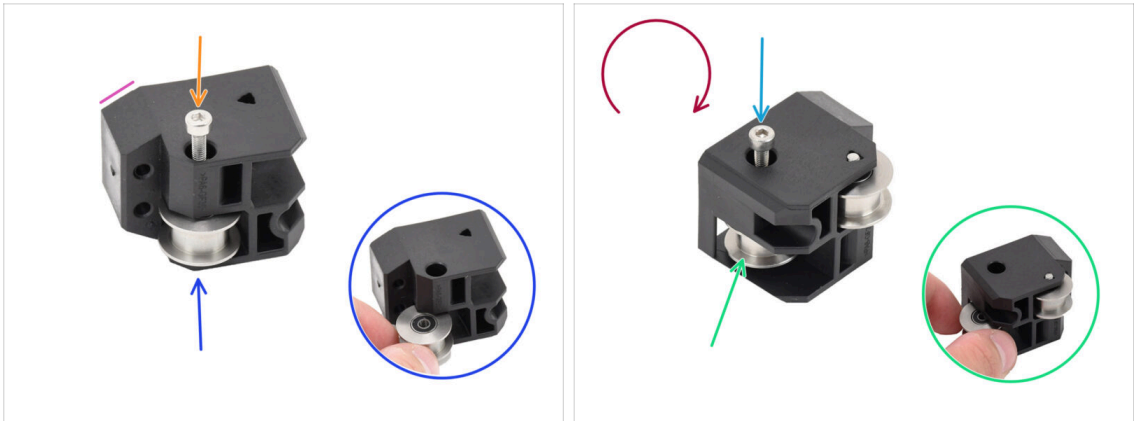
- Place the Rod holder left to the left front corner on the corresponding threaded holes.
- Secure it with two M3x6 screws.
- Place the Rod holder right to the right front corner on the corresponding threaded holes.
- Secure it with two M3x6 screws.

## PASO 6 XY carriage: parts preparation



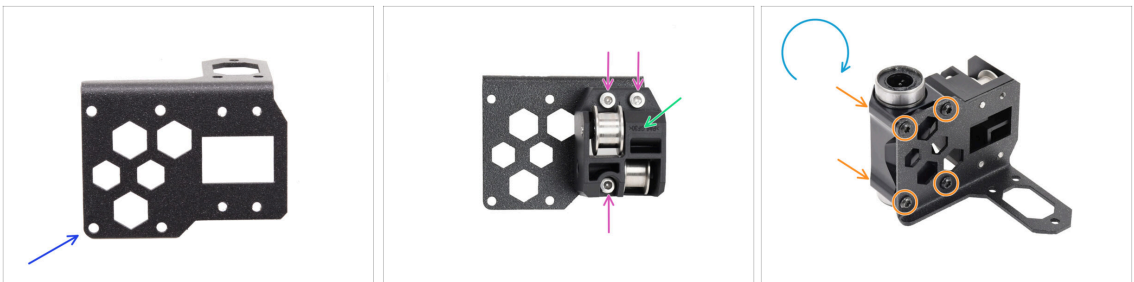
- For the following steps, please prepare:
- Linear holder left (1x) found in the Metal parts 1/3 package
  - Linear holder right (1x) found in the Metal parts 1/3 package
  - XY-carriage (2x) found in the Printed parts package
  - LM10LUU linear bearing (2x) found in the CORE XY parts + hinges + HB set package
  - GT2-20 Idler pulley (4x) found in the Electronics & Fasteners package
  - M3x8rT black screw (8x)
  - M3x18 screw (10x)

## PASO 7 Assembling the XY-carriages



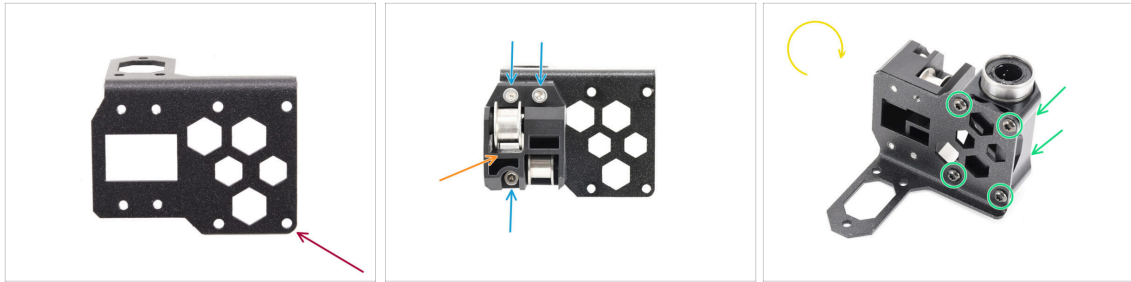
- ◆ Take one of the XY-carriage and orient it as shown. Use the beveled side as a guide.
- ◆ Insert the GT2-20 Idler pulley into the XY-carriage.
- ◆ Push one M3x18 screw through the pulley and tighten it completely down.
- ◆ Turn the part upside down.
- ◆ Insert another GT2-20 Idler pulley into the XY-carriage.
- ◆ Secure it with the M3x18 screw. Tighten it completely down.
- ◆ Repeat the same procedure with the second XY-carriage.

## PASO 8 Assembling the linear holder left



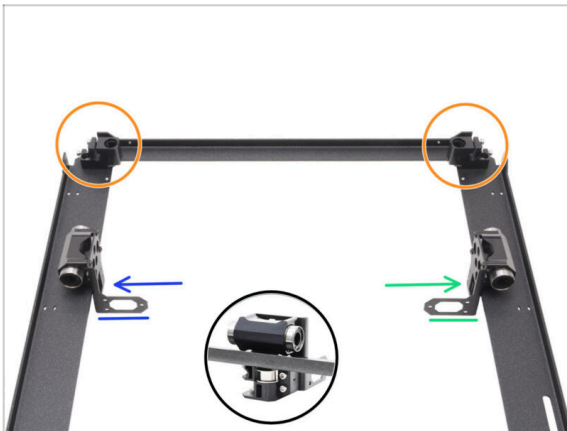
- ◆ Prepare the Linear holder **left** and position it as in the picture.
- ◆ Attach one of the XY-carriages to the Linear holder.
- ◆ Install it to the Linear holder with three M3x18 screws.
- ◆ Turn the Linear holder upside down.
- ◆ From the XY-carriage side, attach the LM10LUU linear bearing to the holder and secure it with four M3x8rT screws.

## PASO 9 Assembling the linear holder right



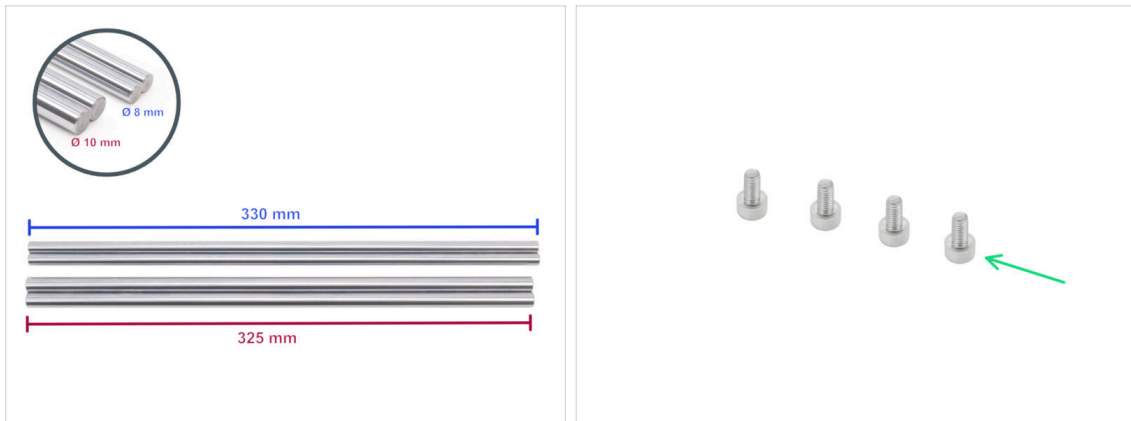
- Prepare the Linear holder **right** and position it as in the picture.
- Attach one of the XY-carriages to the Linear holder.
- Install it to the Linear holder with three M3x18 screws.
- Turn the Linear holder upside down.
- From the XY-carriage side, attach the LM10LUU linear bearing to the holder and secure it with four M3x8rT screws.

## PASO 10 Attaching the linear holder assemblies



- Position the CoreXY plate as shown in the picture, ensuring the front rod holders are facing up.
- Slightly lift the CoreXY plate and from the plate's inner side loosely attach the Linear holder of the assemblies.
- **Linear holder left**
- **Linear holder right**
- ① The linear holders are now only loosely seated.

## PASO 11 Smooth rods INFO



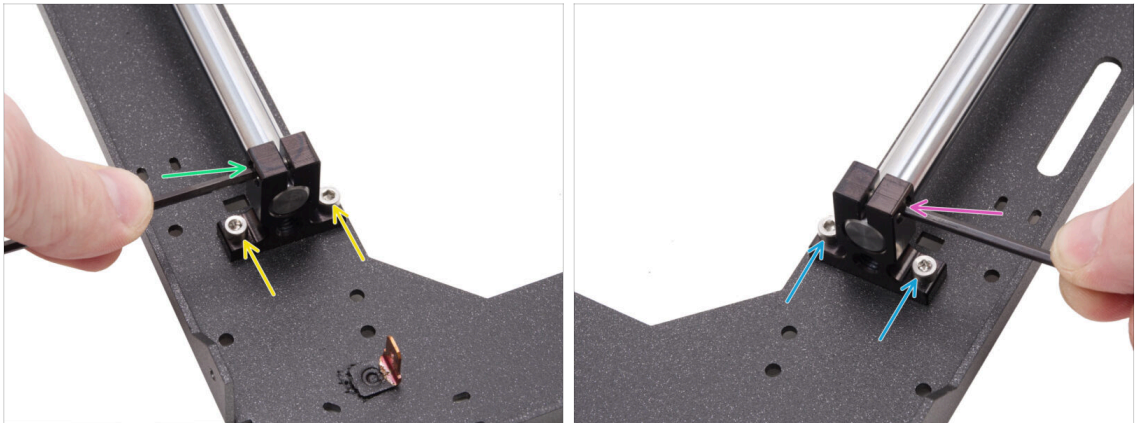
- **There are two different types of smooth rods** in the package. Compare carefully with the picture and prepare the correct ones required.
- ① Smooth rods are included in the Rods box.
  - Smooth rod 330 x 8 mm (2x)
  - Smooth rod 325 x 10 mm (2x) **required for the following steps**
- **For the following steps, please prepare:**
  - M3x6 screw (4x)

## PASO 12 Mounting the smooth rods



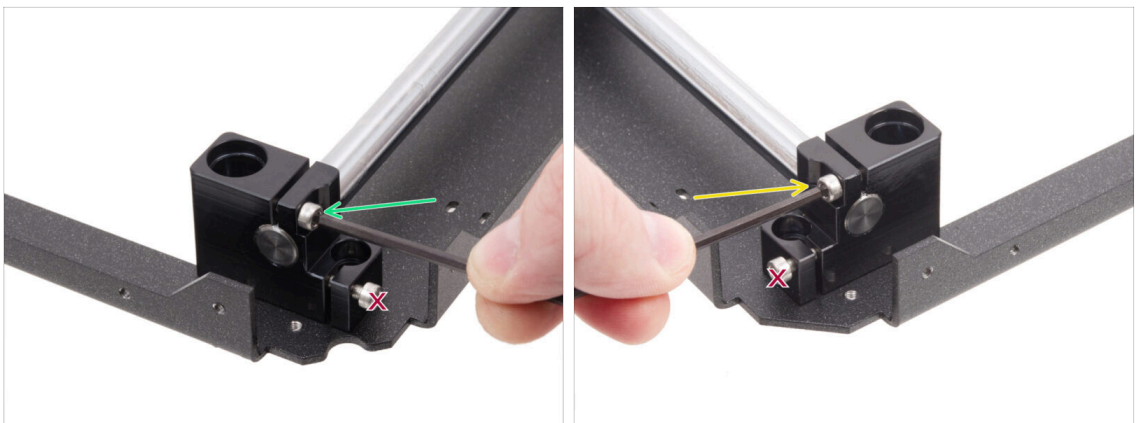
- Slide both rear rod holders onto both 10mm smooth rods.
- Line up the ends of the rods with the holders.
- Push both 10mm smooth rods through the LM10LUU bearing to the front rod holders.
- Make sure the screws on the rear rod holders are pointing out of the frame.
- Line up the front end of the 10mm smooth rods with the front rod holders.

## PASO 13 Securing the rear rod holders



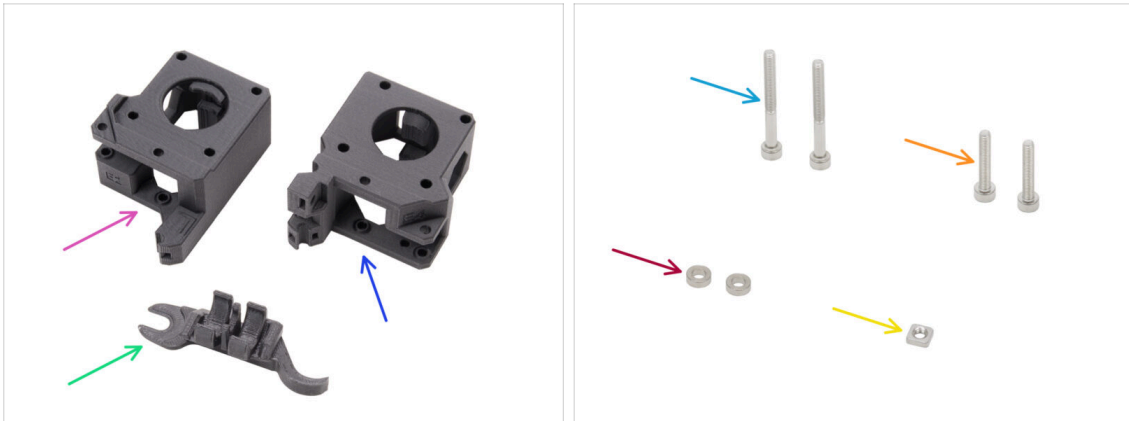
- Line up the left rear rod holder with the threaded holes in the plate.
- Fix it with two M3x6 screws.
- Firmly tighten the screw in the rod holder.
- Line up the right rear rod holder with the threaded holes in the plate.
- Fix it with two M3x6 screws.
- Firmly tighten the screw in the rod holder.

## PASO 14 Securing the front rod holders



- Focus on the front left holder (currently on the right) and secure the rod by tightening the screw in the holder.
- ⚠ **Do not tighten the bottom screw.**
- Focus on the front right holder (currently on the left) and secure the rod by tightening the screw in the holder.
- ⚠ **Do not tighten the bottom screw.**

## PASO 15 Motor mounts: parts preparation

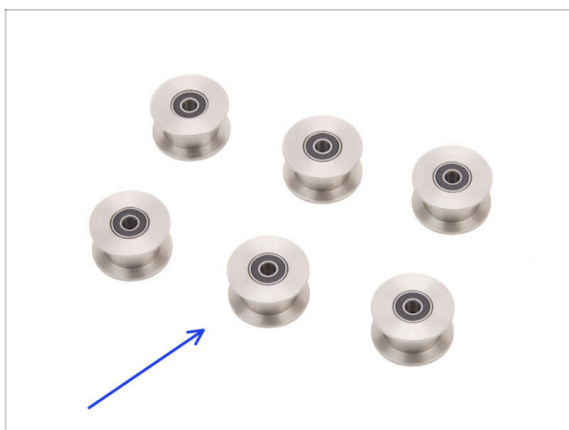


● **For the following steps, please prepare:**

- XY-motor-mount-left (1x) *found in the Printed parts package*
- XY-motor-mount-right (1x) *found in the Printed parts package*
- Assembly-multi-tool (1x) *you already used*
- M3x30 screw (2x)
- M3x18 screw (2x)
- Spacer 3.2/6x2 (2x) *found in the Small parts & fasteners bag located in the Electronics & Fasteners box.*
- M3nS nut (1x)

❗ The list continues in the next step...

## PASO 16 Motor mounts: part preparation



- GT2-20 Idler pulley (6x) *found in the Electronics & Fasteners package*



## PASO 17 Assembling the XY-motor-mount-right I.



- ◆ Insert one pulley into the lower position in the Assembly-multi-tool.
- ◆ Insert the spacer 3.2 on the pulley.
- ◆ Insert the second pulley into the Assembly-multi-tool.
- ◆ Insert the whole assembly into the XY-motor-mount-right as shown. Note the beveled corner.

## PASO 18 Assembling the XY-motor-mount-right II.



- ◆ Alinea los orificios de ambas piezas e inserta el tornillo M3x30. Aprieta el tornillo despacio y con cuidado.
- ① The plastic part has no pre-cut thread, so the screw will create it as you tighten. Slight resistance is expected.
- ◆ **Stop tightening once the M3x30 screw head reaches the XY-motor-mount.** Do not overtighten the screw!
- ◆ Remove the Assembly-multi-tool.
- ◆ Insert another pulley into the XY-motor-mount-right.
- ◆ Secure it with M3x18 screw. Do not overtighten the screw.
- ◆ Insert the M3nS nut into the XY-motor-mount-right.

## PASO 19 Assembling the XY-motor-mount-left I.



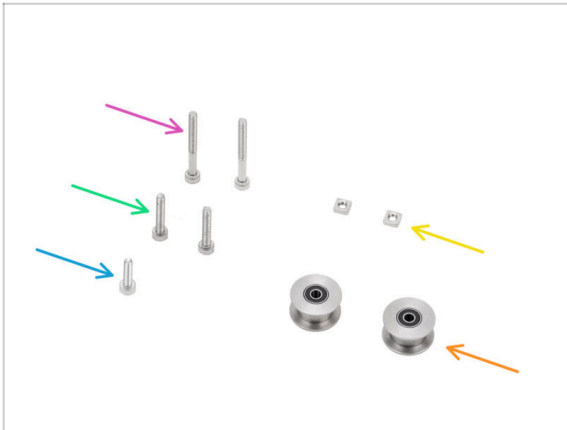
- ✿ Inserta una polea en la posición inferior del Assembly-multi-tool.
- ✿ Insert the spacer 3.2 on the pulley.
- ✿ Insert the second pulley into the Assembly-multi-tool.
- ✿ Insert the whole assembly into the XY-motor-mount-left.
- ⬛ Position the part according to the picture. Note the bevel next to the screw hole.

## PASO 20 Assembling the XY-motor-mount-left II.



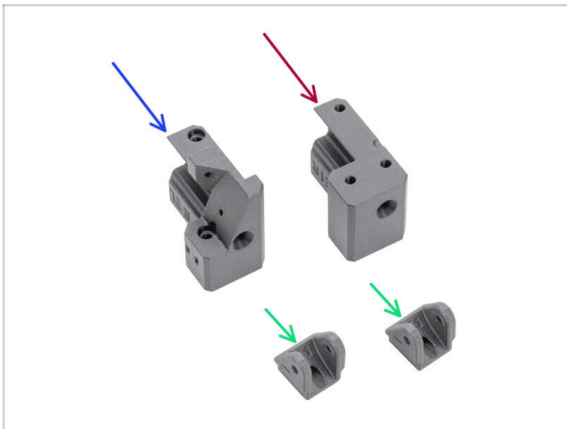
- ✿ Alinea los orificios de ambas piezas e inserta el tornillo M3x30. Aprieta el tornillo despacio y con cuidado.
- ⓘ The plastic part has no pre-cut thread, so the screw will create it as you tighten. Slight resistance is expected.
- ✿ **Stop tightening once the M3x30 screw head reaches the XY-motor-mount. Do not overtighten the screw!**
- ✿ Remove the Assembly-multi-tool.
- ✿ Insert another pulley into the part.
- ✿ Secure it with M3x18 screw. Do not overtighten the screw.

## PASO 21 Belt tensioners: parts preparation I.



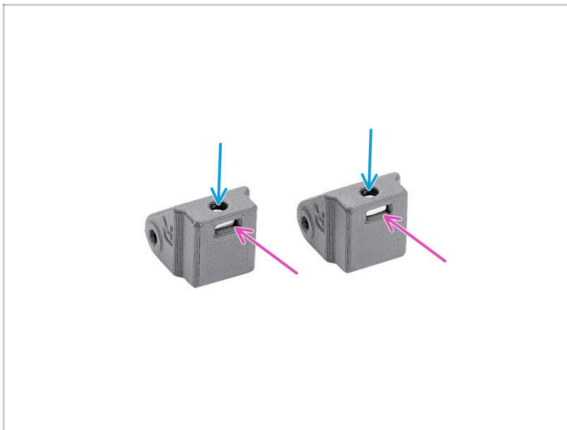
- **Para los siguientes pasos, por favor prepara:**
- GT2-20 Idler pulley (2x) *found in the Electronics package*
- M3x30 screw (2x)
- M3x18 screw (2x)
- M3x12 screw (1x)
- M3nS nut (2x)
- **i** The list continues in the next step...

## PASO 22 Belt tensioners: parts preparation II.



- **Para los siguientes pasos, por favor prepara:**
- Belt-tensioner-left (1x) *found in the Printed parts package*
- Belt-tensioner-right (1x) *found in the Printed parts package*
- Belt-tensioner-pulley (2x) *found in the Printed parts package*

## PASO 23 Preparing the tensioner pulleys



- ✦ Inserta una tuerca M3nS en cada Belt-tensioner-pulley.
- ✦ Make sure the nuts are correctly inserted into the parts. The holes in the nuts and the parts **must be aligned**.
- ✦ Keep both parts in this position.

## PASO 24 Assembling the belt tensioner left I.



- ✦ Aplica una pequeña cantidad de lubricante Prusa en la punta de ambos tornillos M3x30.
- ✦ Spread the lubricant evenly around the entire thread.
  - ⓘ Tip: Use the tip of a zip tie to spread the lubricant.
- ✦ Slide the Belt-tensioner-**left** onto the Belt-tensioner-pulley.
- ✦ **Ensure the parts are oriented correctly**, as shown.
- ✦ Insert the M3x30 screw through the Belt-tensioner-left into the Belt-tensioner-pulley. **Do not tighten completely!** 3-4 turns are sufficient.

## PASO 25 Assembling the belt tensioner left II.



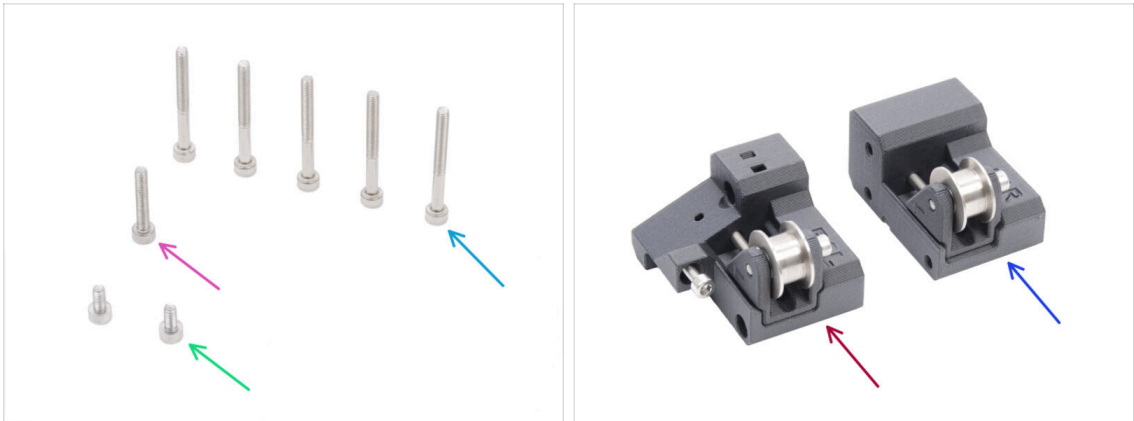
- Inserta la polea tensora GT2-20 en la Belt-tensioner-pulley.
- Secure it with the M3x18 screw.
  - ⓘ The plastic part has no pre-cut thread, so the screw will create it as you tighten. Slight resistance is expected.
- Insert the M3x12 screw into the Belt-tensioner-left. Tighten slightly—five turns are enough. It must not protrude through the other side.
  - ⓘ Note: This screw, referred to as the tensioning screw, will later be used to adjust the door sensor.

## PASO 26 Assembling the belt tensioner right



- Coloca el Belt-tensioner-**right** en el Belt-tensioner-pulley.
  - **Ensure the parts are oriented correctly**, as shown.
- Insert the M3x30 screw through the Belt-tensioner-right into the Belt-tensioner-pulley. **Do not tighten completely!** 3-4 turns are sufficient.
- Insert the GT2-20 Idler pulley pulley into the Belt-tensioner-pulley-right.
- Secure it with the M3x18 screw.
  - ⓘ The plastic part has no pre-cut thread, so the screw will create it as you tighten. Slight resistance is expected.

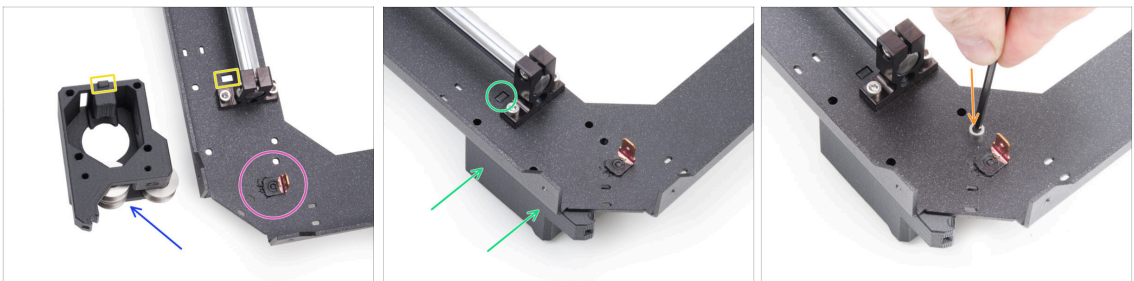
## PASO 27 Installing the belt tensioners: parts preparation



● Para los siguientes pasos, por favor prepara:

- M3x30 screw (5x)
- M3x18 screw (1x)
- M3x6 screw (2x)
- Belt tensioner left assembly (1x) *you assembled earlier*
- Belt tensioner right assembly (1x) *you assembled earlier*

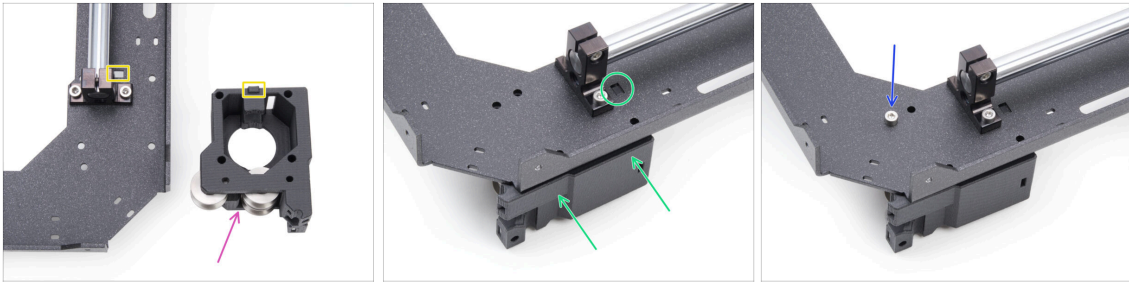
## PASO 28 Installing the motor mount left



- Locate the corner of the CoreXY plate with the Faston connector on it. It is on the underside of the assembly.
- Position the motor-mount-**left** on the CoreXY plate as shown in the picture.
- Note the rectangular protrusion on the motor-mount-left and the rectangular cutout on the CoreXY plate.
- Slide the motor-mount-left under the CoreXY plate, ensuring the rectangular protrusion fits into the cutout.
- Align the holes in both parts and secure them with an M3x6 screw in the designated hole

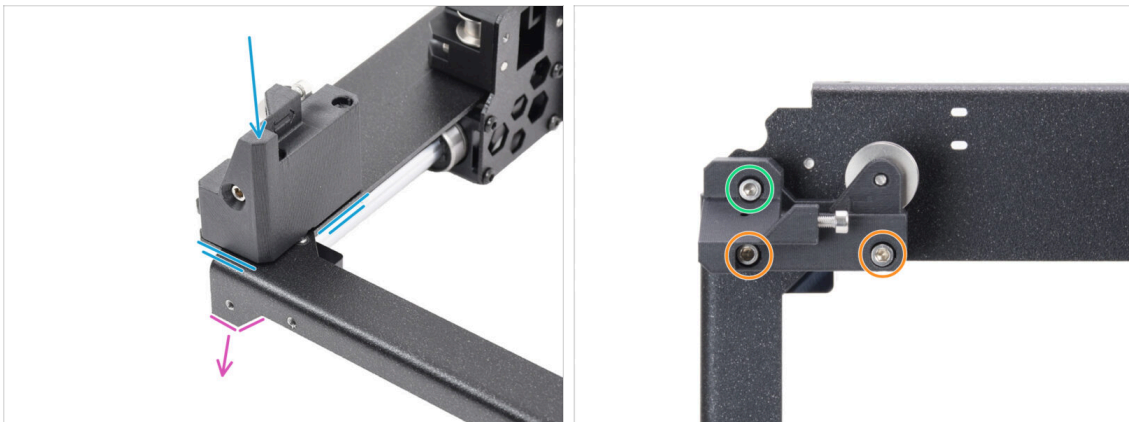


## PASO 29 Installing the motor mount right



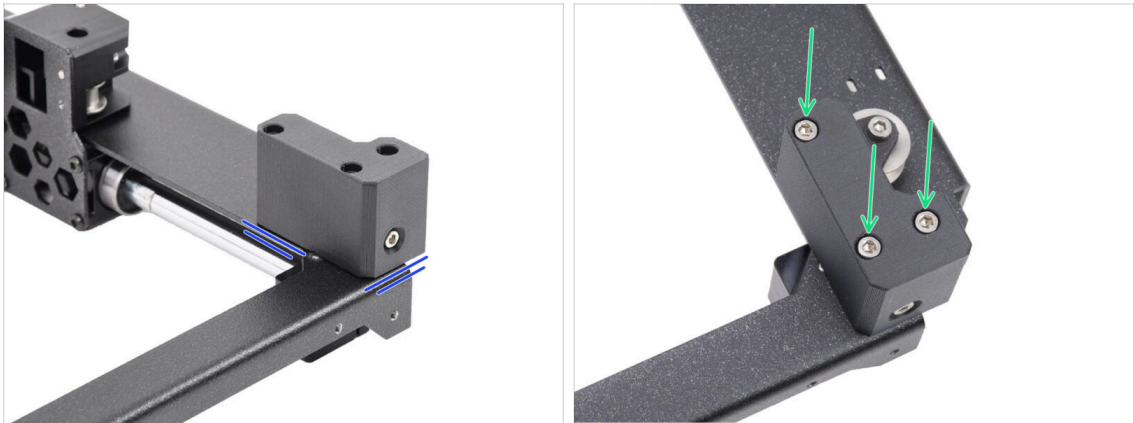
- ◆ Position the motor-mount-**right** on the CoreXY plate as shown in the picture.
- ◆ Note the rectangular protrusion on the motor-mount-right and the rectangular cutout on the CoreXY plate.
- ◆ Slide the motor-mount-right under the CoreXY plate, ensuring the rectangular protrusion fits into the cutout.
- ◆ Align the holes in both parts and secure them with an M3x6 screw in the designated hole

## PASO 30 Installing the belt-tensioner-left



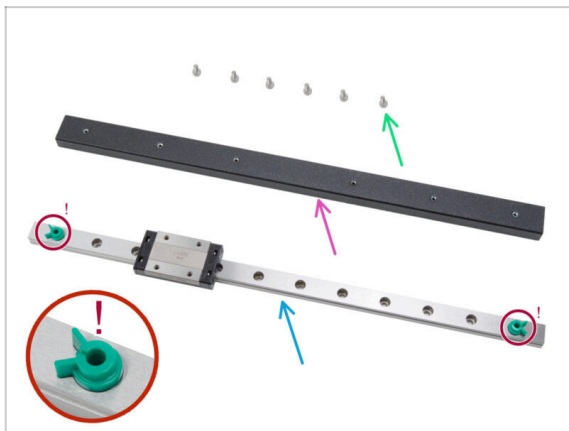
- ◆ Turn the CoreXY assembly upside down so that the bent parts face downward. Focus on the front left corner on the assembly.
- ◆ Place the belt-tensioner-**left** assembly in the front left corner of the CoreXY plate. Align it with the front and inner side edges.
  - ◆ Line up the holes in both parts.
  - ◆ Secure the part with two M3x30 screws.
  - ◆ Insert and tighten one M3x18 screw.

## PASO 31 Installing the belt-tensioner-right



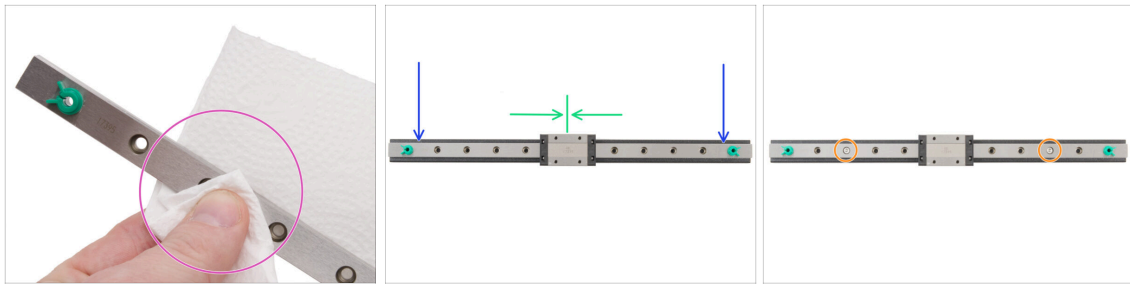
- Place the belt-tensioner-**right** assembly in the front right corner. Align it with the front and inner side edges.
- Line up the holes in both parts.
- Secure the part with three M3x30 screws.

## PASO 32 Linear rail: parts preparation



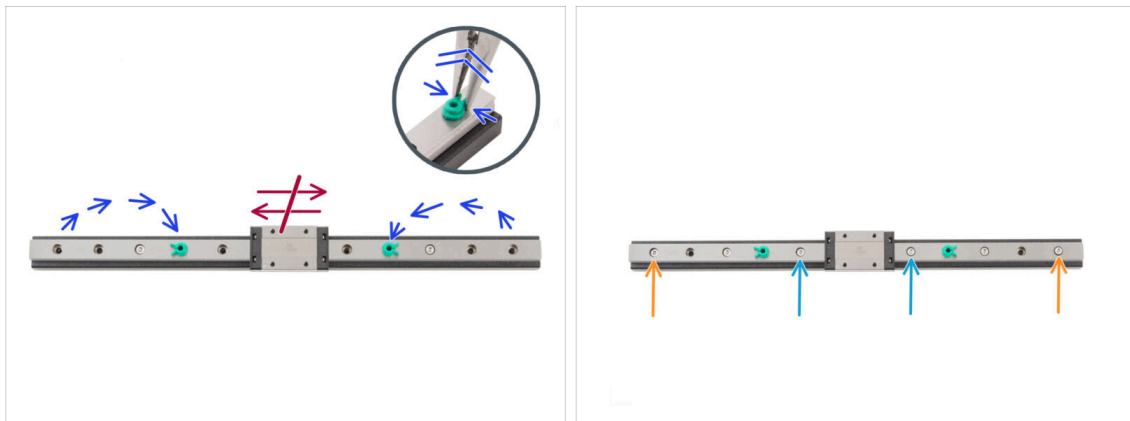
- For the following steps, please prepare:
  - M3x6 screw (6x)
  - Linear rail beam (1x) *found in the Metal parts 3/3 package*
  - Linear rail (1x) *found in the Electronics & Chamber parts package*
- ⚠ **Under no circumstances remove the anti-ejection safety pins. Wait for the prompt in the instructions.**
- Piece of cloth or a paper towels to wipe the preservative lubricant from the linear guide.

## PASO 33 Attaching the linear rail



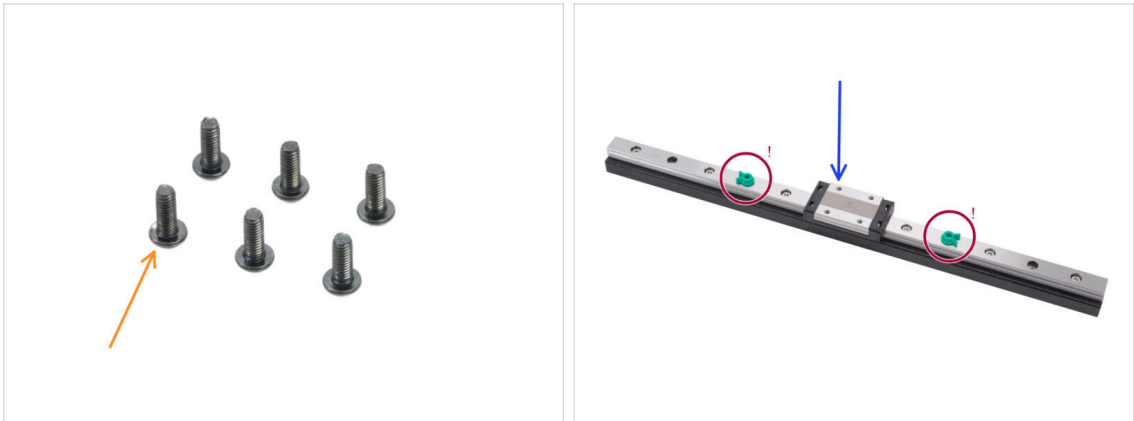
- ⚠ Under no circumstances remove the anti-ejection safety pins. Wait for the prompt in the instructions.**
- ✎ Immediately after removing the linear guide from the package, wipe off the preservative lubricant with a paper towel.
  - 🔵 Place the linear rail on the linear rail beam and line up the holes in both parts.
  - 🟢 Move the linear carriage approximately to the center of the rail.
  - 🟠 Insert and slightly tighten two M3x6 screws into the third holes from both ends.

## PASO 34 Securing the linear rail



- ⚠ Do not move the linear carriage in any way in this step.**
- 🔵 Relocate the safety pins from each end to the fourth holes from the ends of the linear rail.
  - 🔞 Gently squeeze the safety pin with needle-nose pliers and pull it out.
  - 🔵 Insert two M3x6 screws into the fifth holes from the ends of the rail. **Tighten just slightly.**
  - 🟠 Insert two M3x6 screws into the first holes in the rail. **Tighten just slightly.**
- ⚠ Do not remove the safety pins from the rail.**

## PASO 35 Installing the linear rail: parts preparation



● For the following steps, please prepare:

● M3x8rT screw (6x)

ⓘ There are both M3x8rT and M3x8 screws in the kit. Make sure you have prepared the correct ones.

● Linear rail assembly (1x) *you assembled earlier*

⚠ **Do not remove the safety pins.**

## PASO 36 Installing the linear rail assembly



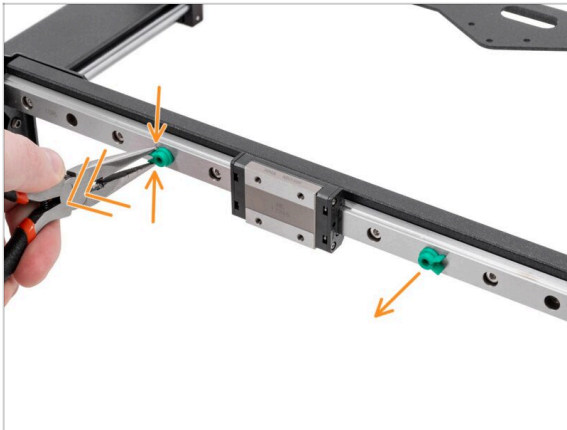
● Position the assembly with the motor mounts facing you.

● Move both linear holders approximately to the center of the Y-axis.

● Attach the linear rail assembly to the holders from the front side of the assembly.

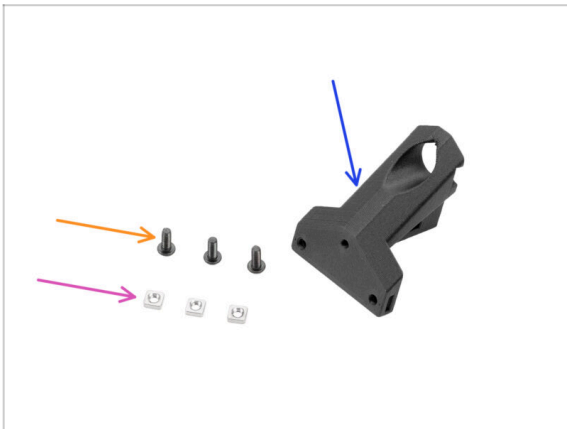
● Secure it with three M3x8rT screws from the back side on both the left and right sides.

### PASO 37 Linear rail: removing the safety pins



- Gently squeeze both safety pins with needle-nose pliers and pull them out of the linear rail.
- i You can discard the safety pins as they are no longer needed.

### PASO 38 Bed-stop: parts preparation



- **For the following steps, please prepare:**
- Bed-stop-rear (1x) *found in the Printed parts package*
- M3nS nut (3x)
- M3x8rT screw (3x)

### PASO 39 Assembling the bed-stop



- Insert two M3nS nuts into the bed-stop from one side.
- Insert one M3nS nut into the bed-stop from the other side.

## PASO 40 Mounting the bed-stop



- Position the CoreXY assembly as shown, ensuring the motor mounts face upwards.
- Focus on the triangle protrusion on the metal part.
- Insert the bed-stop-rear **under** the protrusion at the back of the CoreXY plate.
- Align all three holes in both parts.
- Secure both parts together with three M3x8rT screws.
- i** The upper screw is screwed into plastic with no pre-cut thread. It cuts the thread as it's tightened. Slight resistance is expected.

## PASO 41 X&Y motors: parts preparation



- For the following steps, please prepare:**
- Y-axis motor (1x) *found in the Motors package*
- X-axis motor (1x) *found in the Motors package*
- i** Note that the motors are marked as X and Y-axes in order to distinguish between them. We will continue to follow this marking.
- T21-1.5GT pulley (2x) *found in the Electronics package*
- Assembly-multi-tool (1x) *you already used*



## PASO 42 Installing the X-axis pulley



- Prepare the **X-axis** motor.
- Note the flat part on the motor shaft.
- ⚠ Slide the Pulley on, **note the CORRECT orientation.**
- Rotate the motor shaft with the flat part facing you.
- Using the fork on the Assembly-multi-tool set a gap between the pulley and the motor.
- Push the pulley on the tool and firmly tighten the screw against the flat part on the shaft.
- Rotate the pulley and firmly tighten the second grub screw.
- ⚠ Double-check the pulley orientation. **The toothed side of the pulley must be on the motor side.**

## PASO 43 Installing the Y-axis pulley



- Prepare the **Y-axis** motor.
- Note the flat part on the motor shaft. Rotate the motor shaft with the flat part facing you.
- ⚠ Slide the Pulley on, and **note the CORRECT orientation. The Y-axis pulley orientation is DIFFERENT from the X-axis. Make sure the pulley teeth face away from the motor. Use the wider hook on the assembly tool.**
- Using the hook on the Assembly-multi-tool, place the thicker curved part between the pulley and the motor.
- ⚠ **Do not try to hook it around the shaft.** Just rest the tool against the motor and make sure the hook tip slides between the motor and the pulley.
- Push the pulley on the tool and firmly tighten the screw against the flat part on the shaft.
- Rotate the pulley and firmly tighten the second grub screw.
- ⚠ **Double-check the pulley orientation. The teeth must face away from the motor.**

## PASO 44 XY belts: parts preparation



● For the following steps, please prepare:

- X-axis motor assembly (1x) *you assembled earlier*
- Y-axis motor assembly (1x) *you assembled earlier*
- Nexttruder holder (1x) *found in the CORE XY parts + hinges + HB set package*
- XY belt 1.5GT (2x) *found in the CORE XY parts + hinges + HB set package*
- M3x35 screw (8x)

## PASO 45 XY belts INFO

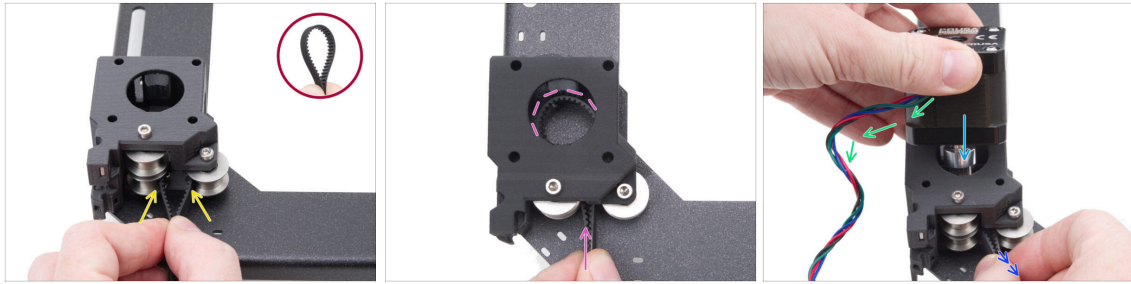


① The next steps cover belt installation and guiding on the core XY assembly. Before starting, refer to the illustration for an overview and better understanding of each belt's path.

- X-axis belt - at the **top position**
- Y-axis belt - at the **bottom position**

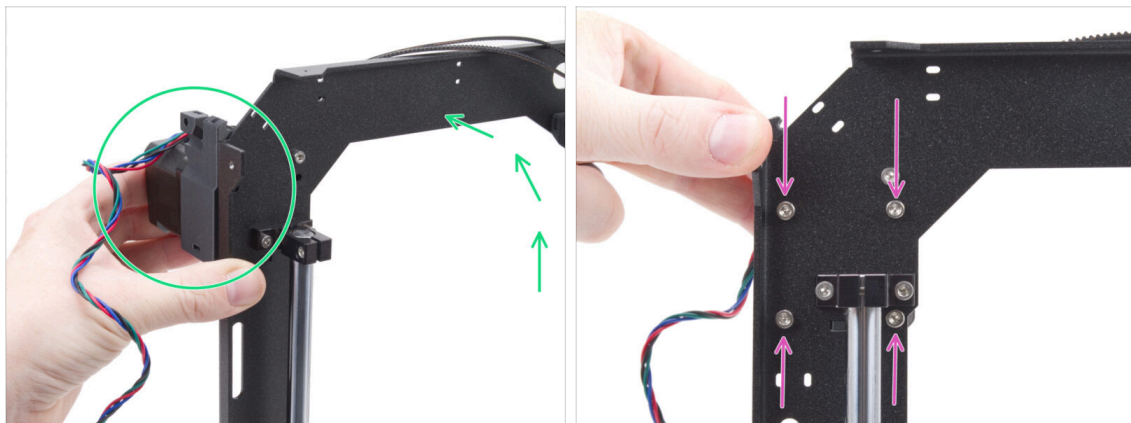
● Let's guide the belts step by step...

## PASO 46 Y belt guiding: Y motor pulley



- From the back of the CoreXY, focus on the motor-mount on the **left** side.
- Create a loop anywhere on the belt so the **belt teeth are pointing inside** the loop.
- Push this loop through the space between the lower pulleys inside the motor mount.
- Push through enough to make the loop follow the top round hole of the motor-mount as closely as possible.
- Insert the **Y** motor into the motor holder, the pulley must be in the middle of the belt loop.
- Insert the Y motor pulley into the motor mount, ensuring the pulley is centered within the belt loop.  
Fully attach the motor to the motor-mount with the motor cable facing you.
- Pull lightly on the belt loop to encircle the pulley.

## PASO 47 Securing the Y-axis motor



- Firmly grasp the Y-axis motor assembly and position the CoreXY assembly vertically. **Do not drop the motor!**
- ⚠ Be careful not to pull the entire belt out of the motor.
- Keep holding the motor with one hand. With the other hand, secure the motor using four M3x35 screws on the underside of the frame. **Tighten firmly.**
- Place the CoreXY assembly back into the horizontal position.

## PASO 48 Y belt guiding: Y motor mount



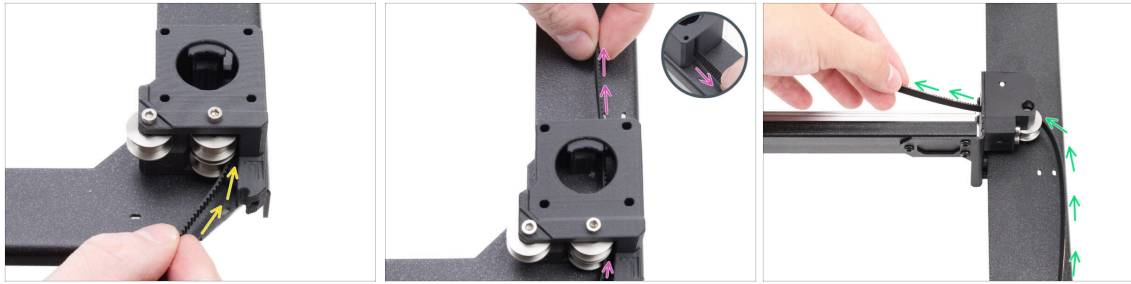
- 🟡 Guide the left end of the belt around the lower left pulley.
- 🟣 Push the belt through the part and guide it to the front of the CoreXY plate.
- ⚠️ **Don't pull too long so you don't pull the whole belt out.** Remember that the other end is loose. The whole process would then have to be repeated.

## PASO 49 Y belt guiding: belt tensioner



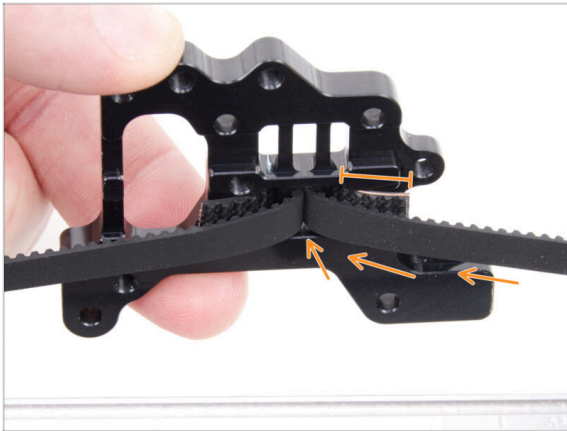
- 🟡 Guide the belt around the pulley in the belt tensioner.
- 🟣 Push the belt around the front pulley in the linear assembly.
- 🟢 Prepare the Nextruder holder in the same orientation as in the picture. Note the holes for securing the belts.
- 🔵 Push the end of the belt through the middle hole into the left hole in the bottom row - leave 4-5 teeth sticking out.
- ⬛ The belt is secured on this end. You can leave it free for now.
- 📁 If it is difficult to reach the Nextruder holder with the belt, try temporarily loosening the belt tensioner screw on the front of the assembly.

## PASO 50 Y belt guiding: X motor mount



- Back to the other end of the Y belt.
- Take the other end of the belt and guide it around the lower pulley in the X motor mount.
- Push it through the motor mount to the front.
- Route the belt around the lower right pulley in the linear rail holder.

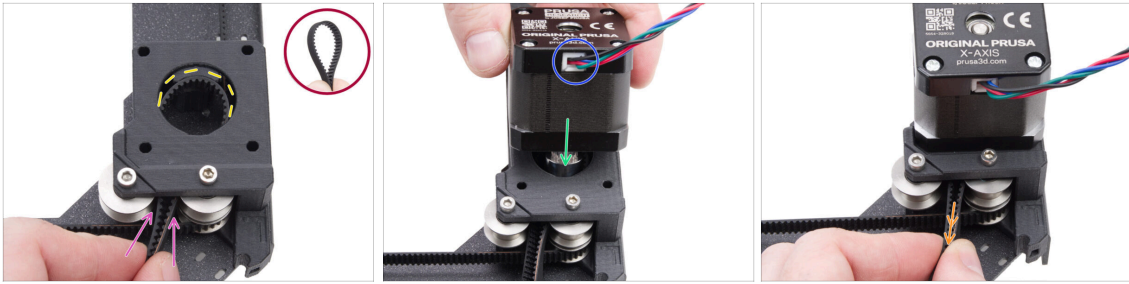
## PASO 51 Y belt guiding: securing the belt



- Push the end of the belt through the middle hole to the right hole in the bottom row of the Nextruder holder - leave 4-5 teeth sticking out.
- ⓘ If it is difficult to reach the Nextruder holder with the belt, try loosening the belt tensioner screw on the front of the assembly.
- 📌 Don't forget to adjust it back after securing the belt.

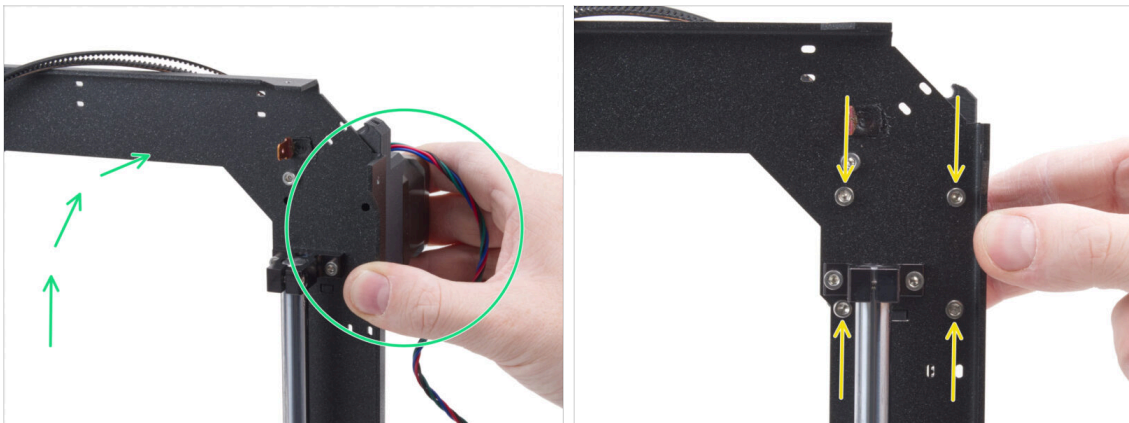


## PASO 52 X belt guiding: X motor pulley



- From the back of the CoreXY, focus on the motor-mount on the **right** side.
- Create a loop anywhere on the second belt so the belt teeth are pointing inside the loop.
- Push this loop through the space between the upper pulleys inside the motor mount.
- Push through enough to make the loop follow the top round hole of the motor-mount as closely as possible.
- Insert the **X** motor pulley into the motor mount, ensuring the pulley is centered within the belt loop.
- Ensure the motor cable is facing you (rear).
- Pull lightly on the belt loop to encircle the pulley.

## PASO 53 Securing the X-axis motor



- Firmly grasp the X-axis motor assembly and position the CoreXY assembly vertically. **Do not drop the motor!**
- ⚠ Be careful not to pull the entire belt out of the motor.
- Keep holding the motor with one hand. With the other hand, secure the motor using four M3x35 screws on the underside of the frame. **Tighten firmly.**
- Place the CoreXY assembly back into the horizontal position.

## PASO 54 Y belt guiding: X motor mount



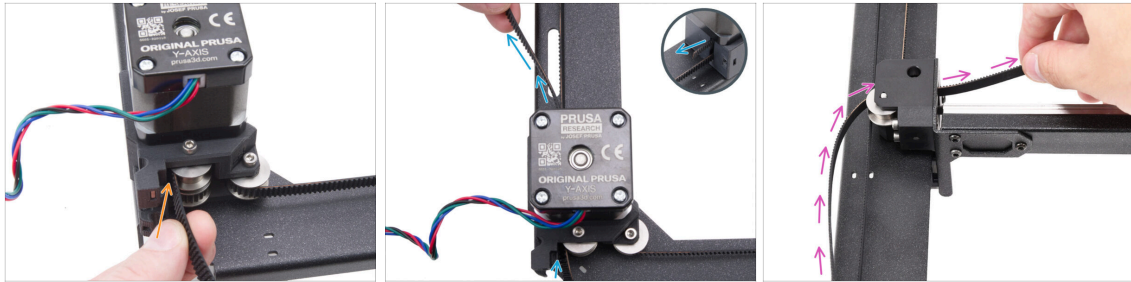
- Guide the right end of the belt around the upper right pulley.
- Push the belt through the part and guide it to the front of the CoreXY plate.
- ⚠ **Don't pull too long so you don't pull the whole belt out.** Remember that the other end is loose. The whole process would then have to be repeated.

## PASO 55 X belt guiding: belt tensioner



- Guide the belt around the pulley in the belt tensioner.
- Push the belt around the front upper pulley in the linear assembly.
- Route the end of the belt through the middle hole into the right hole - leave 4-5 teeth sticking out.
- ⓘ The belt is secured on this end. You can leave it free for now.

## PASO 56 X belt guiding: Y motor mount



- Back to the other end of the X belt.
- Take the other end of the belt and guide it around the upper pulley in the Y motor mount.
- Push the belt through the motor mount.
- Route the belt around the upper front pulley in the linear rail holder.

## PASO 57 X belt guiding: securing the belt



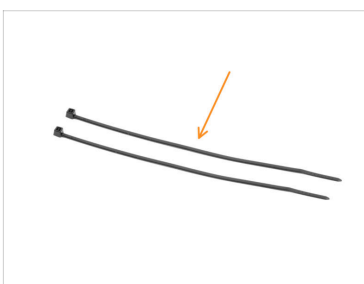
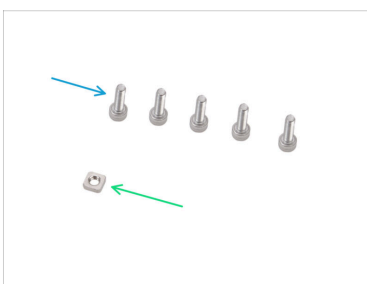
- Push the end of the belt through the middle hole to the left hole in the upper row of the Nextruder holder - leave 4-5 teeth sticking out.

## PASO 58 Checking the belt guidance



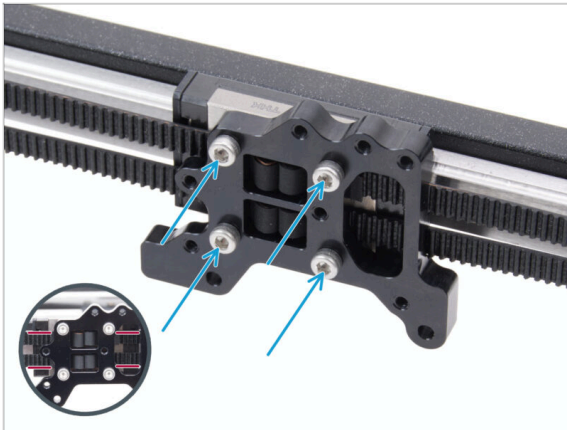
Before proceeding, recheck the belt routing according to the illustration.

## PASO 59 Bowden guide: parts preparation



- **For the following steps, please prepare:**
- Bowden-guide (1x) *found in the Printed parts package*
  - M3x10 screw (5x)
  - M3nS nut (1x)
  - Zip tie (2x)

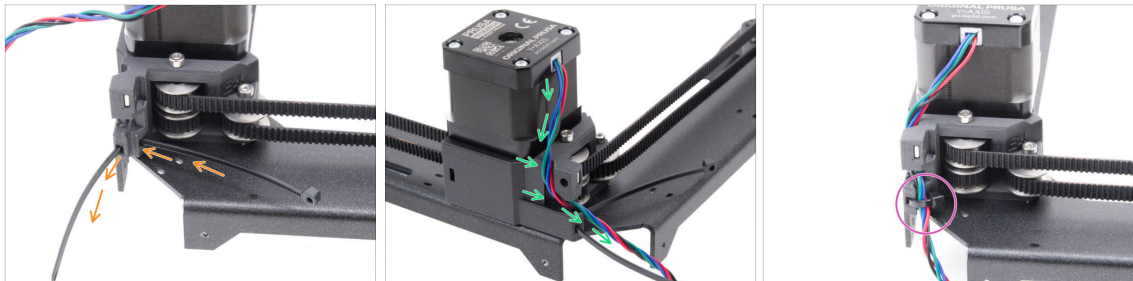
## PASO 60 Securing the Nextruder holder



- Attach the Nextruder holder to the linear rail carriage and secure it using four M3x10 screws.

**CAUTION:** Ensure no belt obstructs the screw. Avoid screwing through the belt!

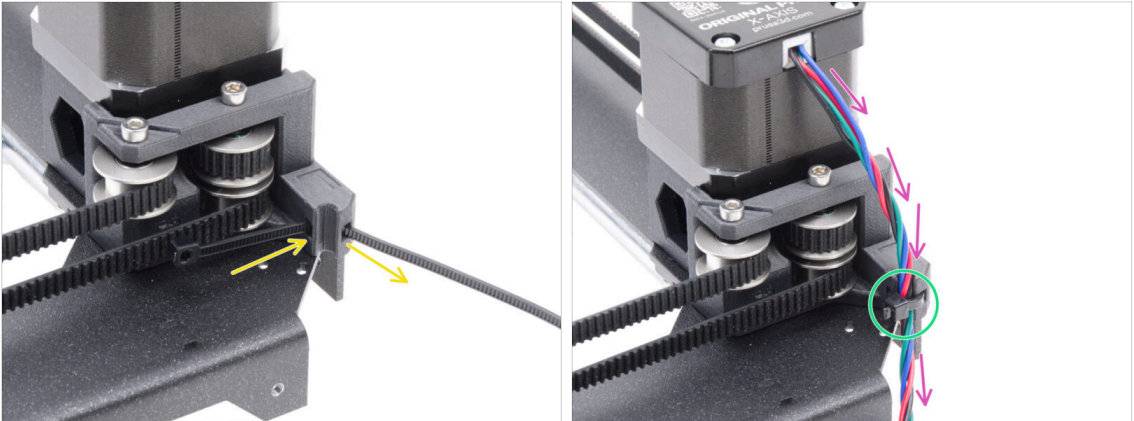
## PASO 61 Securing the Y motor cable



- Push the zip tie through the motor-mount-right.
- Route the Y motor cable through the cable channel in the motor-mount-right and over the zip tie.
- Secure the cable with a zip tie and trim the excess.



## PASO 62 Securing the X motor cable



- ✚ Push the zip tie through the motor-mount-left.
- ✚ Route the X motor cable through the cable guide in the motor-mount-left and over the zip tie.
- ✚ Secure the cable with a zip tie and trim the excess.

## PASO 63 Installing the bowden guide



- ✚ Insert the M3nS nut into the motor-mount-right.
- ✚ Attach the bowden-guide to the motor-mount-right.  
 **Note the correct orientation of the part.**
- ✚ Fix the bowden-guide in place using the M3x10 screw.



## PASO 64 White LED strip: parts preparation



● For the following steps, please prepare:

● White LED strip (1x) found in the Electronics & Fasteners package

● CoreXY strut (1x) found in the Metal parts 1/3 package

ⓘ The part is inserted in a foam cutout and may not be immediately visible at first glance.

● M3x4rT screw (2x)

## PASO 65 Sticking the White LED strip



● Carefully peel off the protective (paper) layer from the White LED strip.

⚠ After removing the protective layer, the LED strip is adhesive.

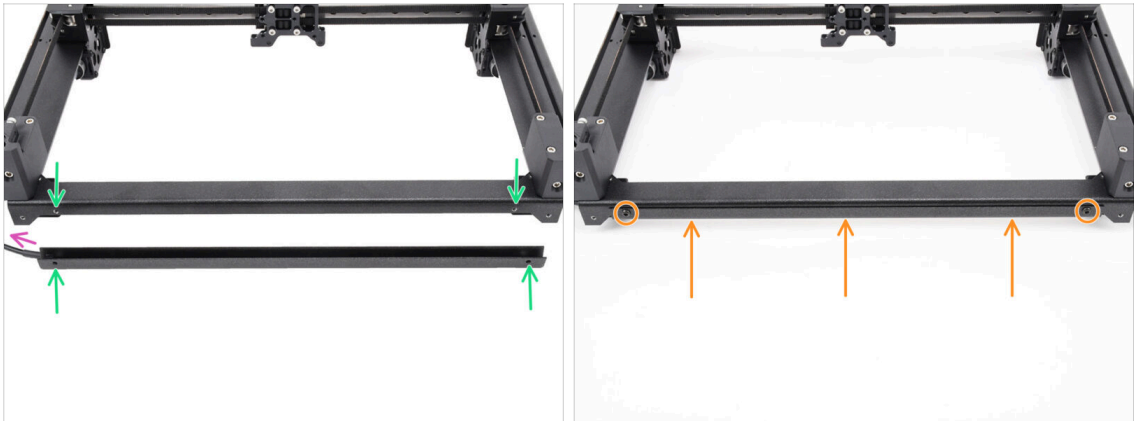
● Position the White LED strip near the CoreXY strut to check alignment, but **do not attach it yet**.

⚠ Note the rectangular cutout on the strut, orient the strip cable to the same side.

● Stick the White LED strip evenly to the strut - on the side with the rectangular cutout.

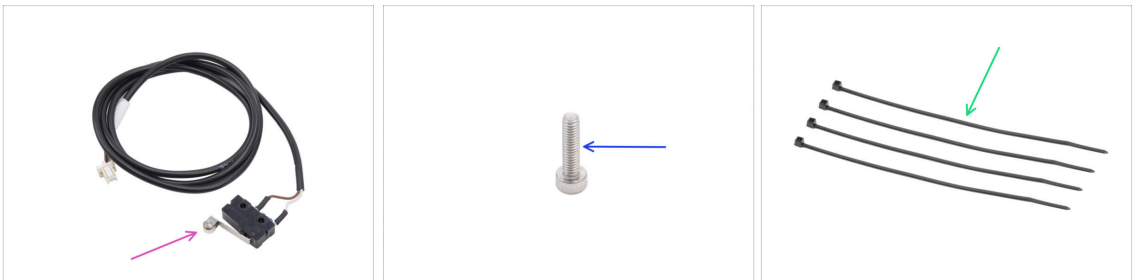
● After sticking, press lightly on the blank areas of the strip to ensure adhesion. **Do not touch LEDs and resistors!**

## PASO 66 Installing the white LED assembly



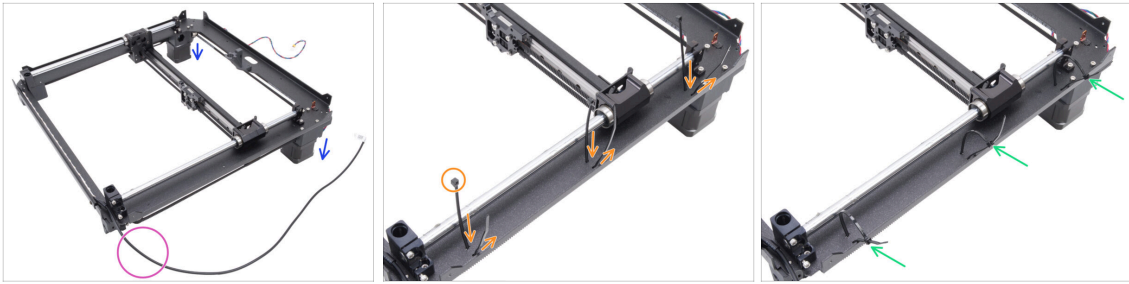
- Take the white LED assembly and attach it to the front of the CoreXY assembly. Align the holes of both parts.
- **The white LED strip cable must point to the left.**
- Attach the LED assembly to the CoreXY plate and secure it with two M3x4rT screws.

## PASO 67 Door sensor & White LED strip: parts preparation



- **For the following steps, please prepare:**
- Door sensor (1x) *found in the Cables 1/3 box located inside the Electronics and Fasteners box.*
- M2.5x10 screw (1x) *silver*
- Zip tie (4x)

## PASO 68 Inserting the zip ties



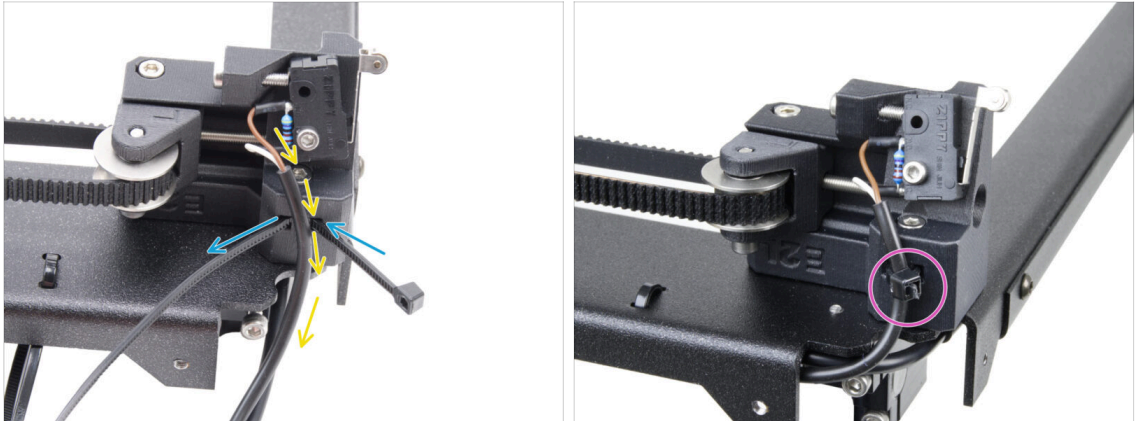
- ◆ Flip the CoreXY assembly upside down and rest it on the motors.
- ◆ Position it with the white LED strip cable facing toward you.
- ◆ Thread three zip ties through the CoreXY plate, ensuring the zip tie heads point inward. **Make sure that the zip ties do not catch the belts from the other side.**
- ◆ Partially tighten the zip ties—just enough to catch the first few teeth.
- ⚠ **Do not fully secure them yet, as we will route cables through them later.**
- ◆ Flip the assembly back with the motors facing upwards.

## PASO 69 Installing the door sensor



- ◆ Place the door sensor on the left belt tensioner. The lever of the door sensor must face forward.
- ◆ Secure the door sensor with the M2.5x10 screw.
- ◆ Tighten the bolt fully and then loosen 1/4 turn. The sensor must be allowed to move.
- ◆ From the rear of the belt tensioner, tighten the M3x12 screw so that it touches the door sensor.

## PASO 70 Securing the door sensor cable



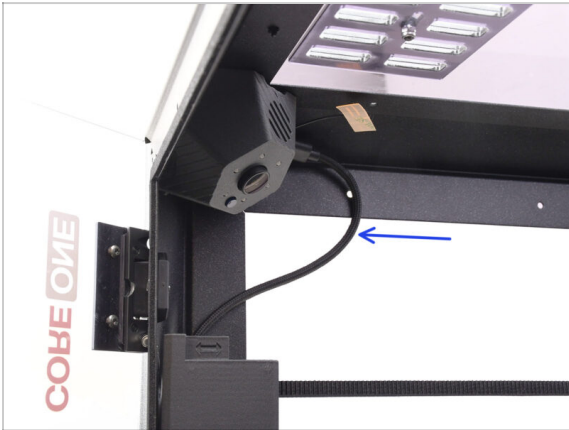
- ◆ Push the zip tie through the hole in the left belt tensioner.
- ◆ Guide the door sensor cable through the zip tie.
- ◆ Tighten the zip tie to secure the door sensor cable. Cut off the excess.

## PASO 71 Guiding the cables: LED and door sensor



- ◆ Prepare a cardboard box. You can use any box from the kit. *The box used in the picture is for illustrative purposes only.*
- ◆ Flip the CoreXY assembly upside down, positioning the smooth rods on top.
- ◆ Slightly lift and support the front side of the CoreXY assembly with the cardboard box.
- ⚠ **Be careful not to damage the door sensor.**
- ◆ Route the white LED strip cable and the door sensor cable through the zip ties.
- ◆ Tighten all the zip ties to secure the cables. Cut off the excess zip ties.
- ⓘ **If you plan on adding the Buddy camera, do not tighten the zip ties all the way.** As you will be adding another USB-C cable to the zip ties soon.
- ◆ **Cables must be slightly taut and straight.** Excess slack or bends may cause collisions with the Y-axis and lead to damage.

## PASO 72 Buddy3D Camera Note



- For future Buddy3D Camera users only. **Skip this step if you are not planning to install the Buddy3D Camera.**

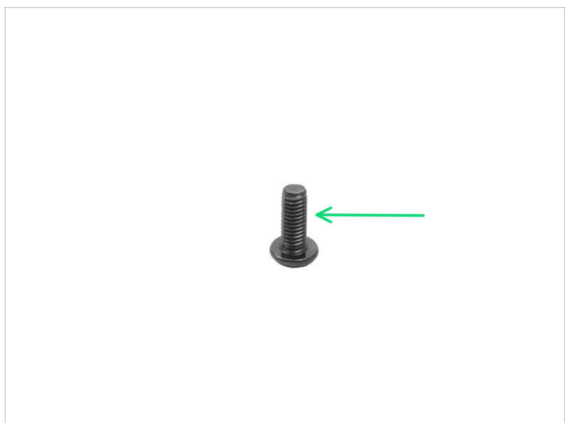
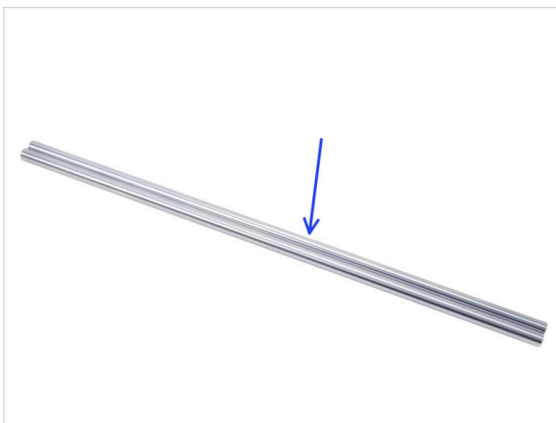
**⚠ Disclaimer:** Typically, the printer must be fully assembled and tested before any add-ons can be installed. Choosing to install the Buddy3D Camera USB cable now will save you time later on.



For detailed information on cable placement, refer to the separate guide.

- The above-mentioned guide on how to install the Buddy3D Camera shows the printer in a further stage of assembly.
- For now, use the guide to make sure that the cable is installed correctly and tighten the zipties.
- i** We will let you know later on when to return to the guide and finish the Buddy camera installation.

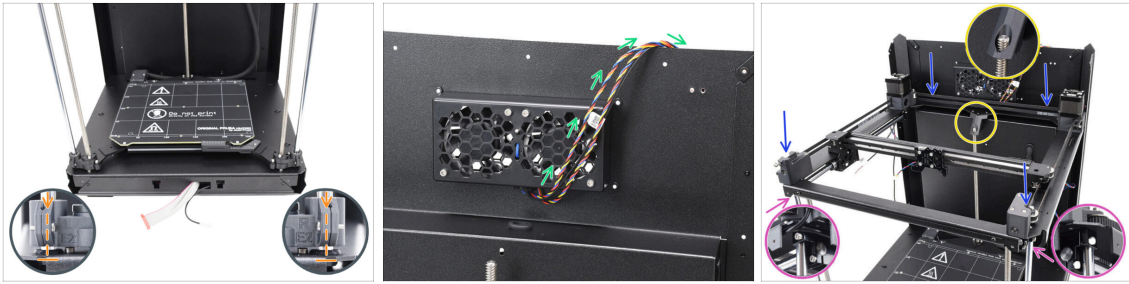
## PASO 73 Smooth rods: parts preparation



- For the following steps, please prepare:**
  - Smooth rod 330 x 8 mm (2x) *found in the Rods box*
  - M3x8rT screw (1x)

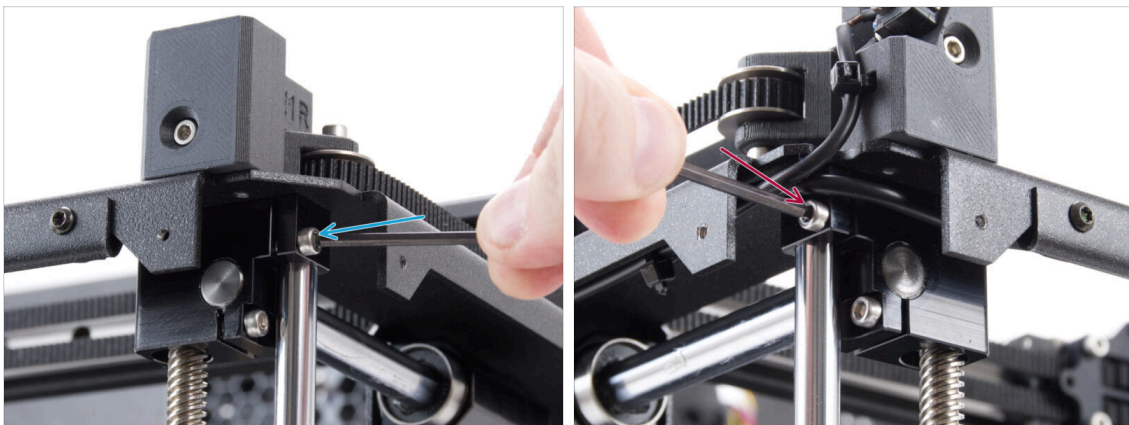


## PASO 74 Installing the CoreXY assembly



- ❖ Carefully insert both smooth rods through the heatbed assembly bearings and into the rod mount part in the base assembly.
  - ⚠ **It is a requirement to insert the smooth rod in the axis with the bearing very slowly to prevent the balls from shooting out of the bearing.**
- ❖ Temporarily hang the cables from the cooling fans over the rear panel. **There must be a space between the cables and the back panel pocket.**
- ❖ Exercise extreme caution when placing the assembly on the smooth rods and back panel assembly.
  - ⚠ **Ensure that no cables are pinched.**
    - ❖ Ensure both smooth rods are properly seated in the rod holders.
    - ❖ The threaded rod of the rear Z motor must pass through the bed-stop-rear part.
- ⚠ **WARNING: When handling the printer, DO NOT lift it by the CoreXY assembly. Always lift it by the base of the entire assembly.**

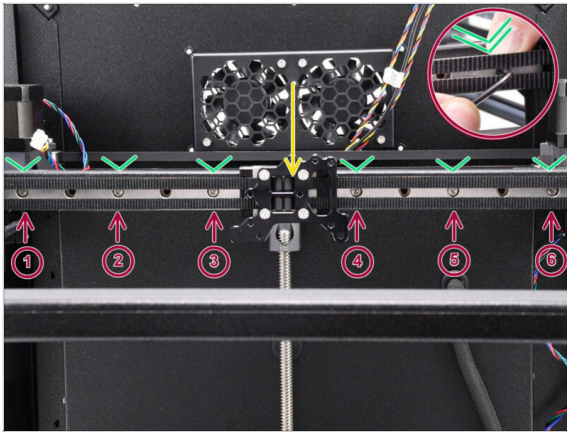
## PASO 75 Securing the smooth rods



- ⚠ Check that both smooth rods are seated correctly in the holders. **The smooth rods have to be inserted into the holder all the way.**
  - ❖ If you are not sure, you can **gently** and **carefully** insert a flat screwdriver into the slit and widen it to ensure that the rods are in all the way.
- ❖ Firmly tighten the right M3x10 screw to secure the smooth rod.
- ❖ Firmly tighten the left M3x10 screw to secure the smooth rod.

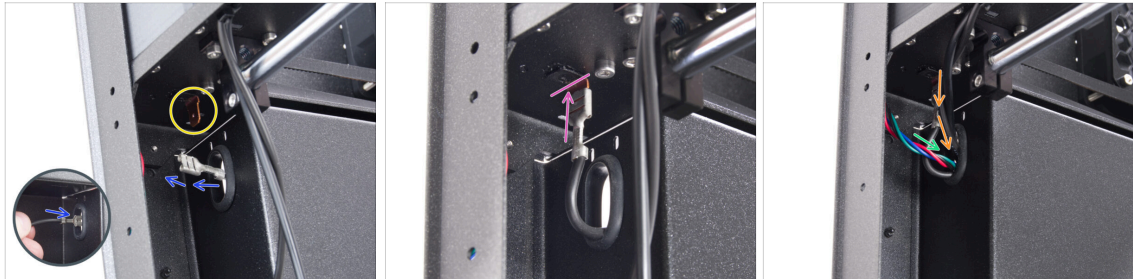


## PASO 76 Aligning the linear rail



- ✦ Move the linear rail carriage to the center.
- ⚠️ **Firmly tighten all screws in the order shown in the picture.**
- ✦ Push the linear rail down while tightening.

## PASO 77 Guiding the corexy cables



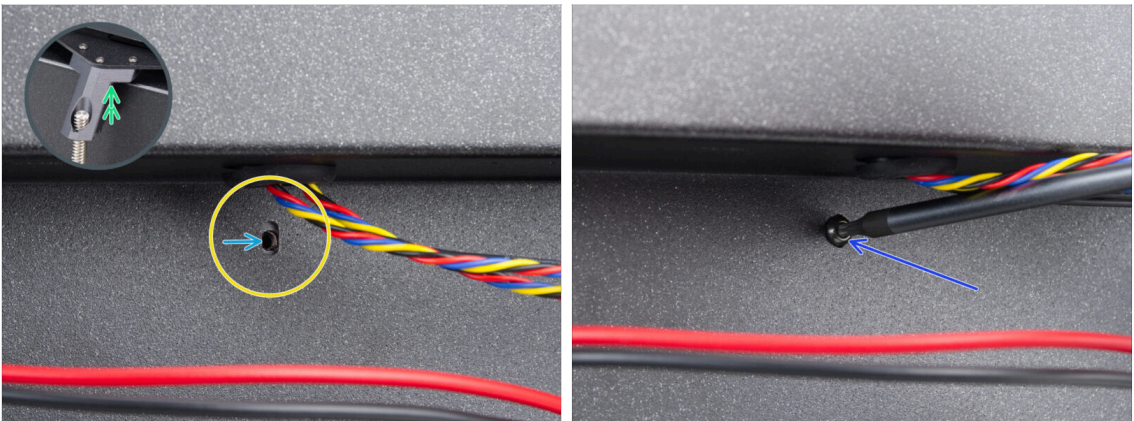
- ✦ From the back of the printer, push the FE connector through the oval hole.
- ✦ Locate the FE cable connector (number 5) in the rear left corner - under the CoreXY assembly.
- ✦ Plug the FE connector onto the Faston on the underside of the CoreXY plate.
- ✦ On the same side, push the X motor cable through the oval hole in the back panel.
- ✦ Push the White LED strip and Door sensor cables through the oval hole in the back panel.

## PASO 78 Guiding the cooling fan cables



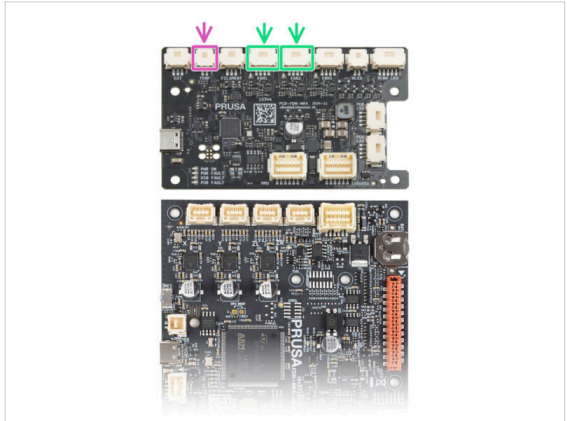
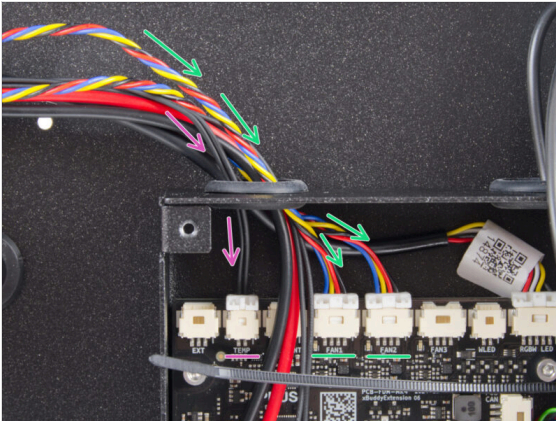
- Push the cooling fan and thermistor cables through the oval hole in the back panel.
- On the right back corner, locate the Y motor cable and push it through the upper oval hole in the back panel.

## PASO 79 Fixing the bed-stop



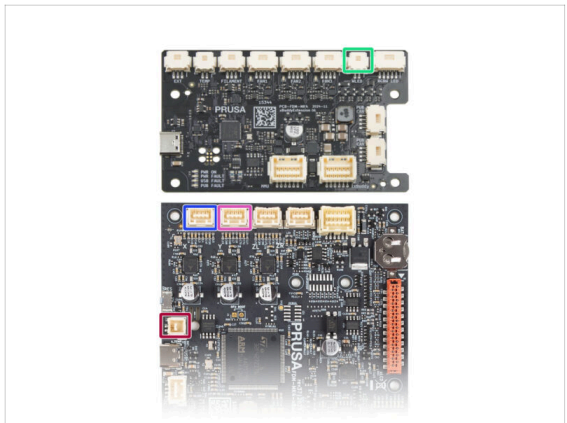
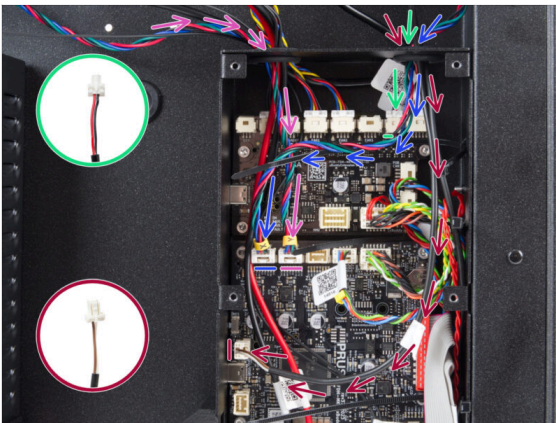
- From the back side, locate the oval screw hole under the cooling fans.
- The oval hole must be flush with the hole in the bed-stop part on the opposite side.
- To compensate, slightly raise the rear of the CoreXY assembly - just a few millimeters.
- After aligning the holes, secure them with an M3x8rT screw.

## PASO 80 Connecting the cooling fans cables



- Route the cooling fan cables through the left hole in the xBuddy box and plug them into the fourth and fifth slots on the xBuddy extension board labeled FAN 1 and FAN 2.
- ❗ The connection order does not matter, both cables are the same.
- Guide the chamber thermistor cable together with the cooling fan cables.
- Connect it to the second slot from the left on the xBuddy extension board labeled TEMP.

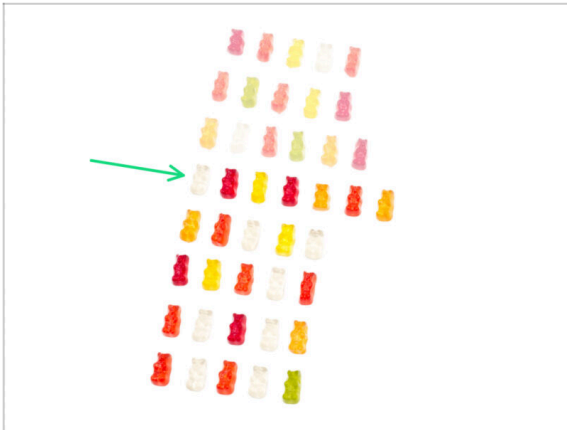
## PASO 81 Connecting the corexy cables



- Guide the X motor cable through the right hole in the xBuddy box. Connect it to the first slot from the left on the xBuddy board.
- Guide the door sensor cable through the right hole in the xBuddy box. Connect it to the lower slot on the left side of the xBuddy board.
- Guide the white LED strip cable through the right hole in the xBuddy box. Connect it to the second slot from the right on the xBuddy extension board.
- Guide the Y motor cable through the left hole in the xBuddy box. Connect it to the second slot from the left on the xBuddy board.



## PASO 82 Haribo time



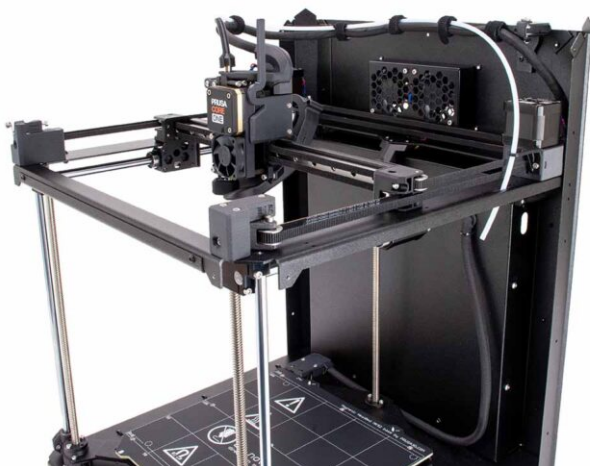
- You deserve to eat the whole bag, but please practice restraint. Eat just the fourth row.

## PASO 83 Done

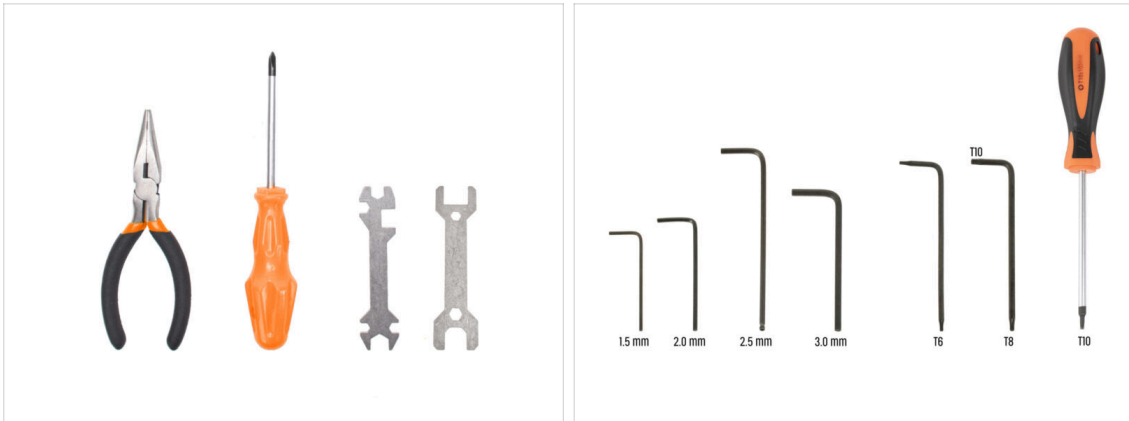


- Congratulations! You have just assembled and installed the CoreXY assembly.
- Let's go to the next chapter.

## 6. Montaje Nextruder



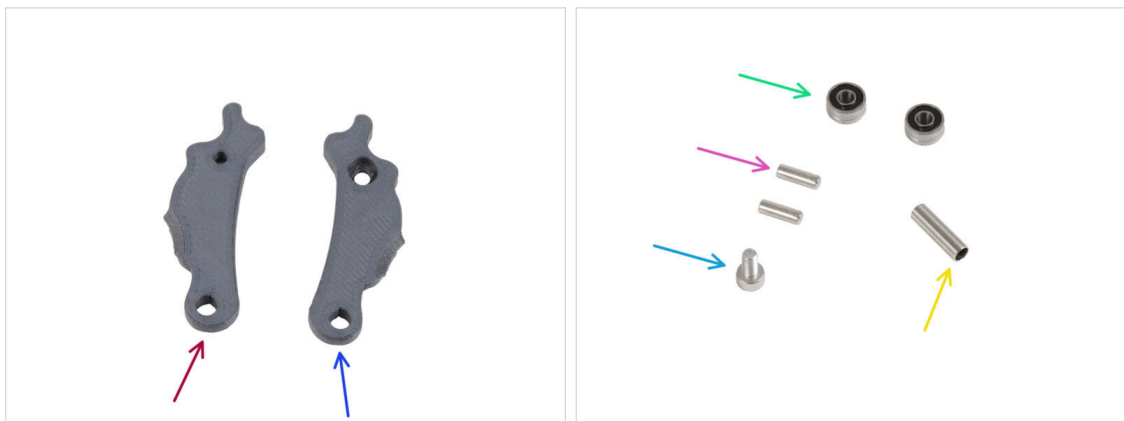
## PASO 1 Tool necessary for this chapter



- **For this chapter, please prepare:**
- Llave universal
- Llave Allen de 1.5mm
- Llave Allen 2.5mm
- Llave Torx T6
- T10 torx key / T10 torx screwdriver



## PASO 2 Nextruder idler assembly: parts preparation



● **For the following steps, please prepare:**

- Idler-lever-a (1x) *found in the Nextruder assembly bag located inside the Electronics box.*
- Idler-lever-b (1x) *found in the Nextruder assembly bag located inside the Electronics box.*
- Bearing 693 2RS (2x) *found in the Electronics package*
- Pin 2.9x8.5 (2x) *found in the Electronics package*
- Tornillo M3x6 (1x)
- Tubular spacer 13.2x3.8x0.35 (1x) *found in the Electronics package*

### PASO 3 Assembling the extruder idler



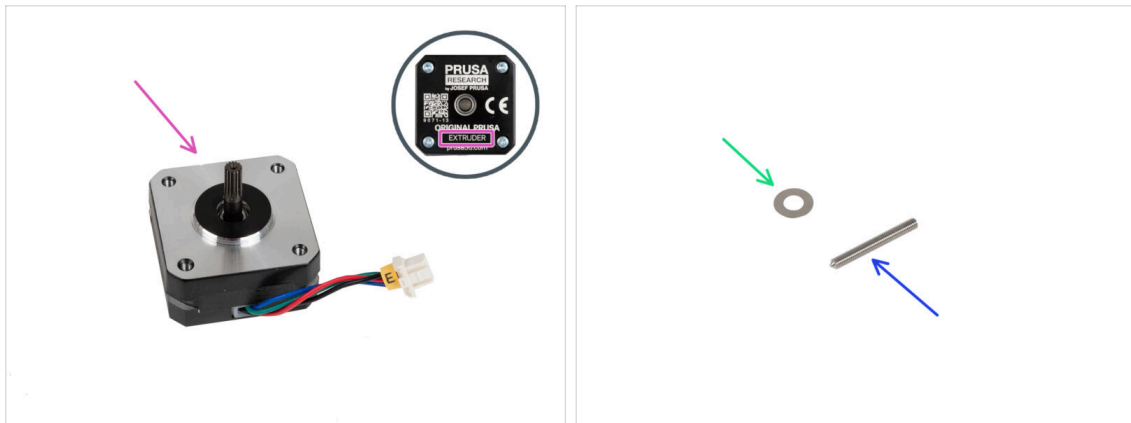
- Place both bearings into the Idler-lever-a.
- Insert the pin 2.9x8.5 into each bearing 693 2RS, as seen in the picture.
- Close it up with the Idler-lever-b part and secure it with the M3x6 screw. **Do not overtighten the screw.** Both bearings must be able to rotate without significant resistance.
- From the same side, push the tubular spacer into the assembly. The "bottom" of the tubular spacer must be flush with the bottom part of the Idler assembly.

### PASO 4 Assembling the extruder: parts preparation I.



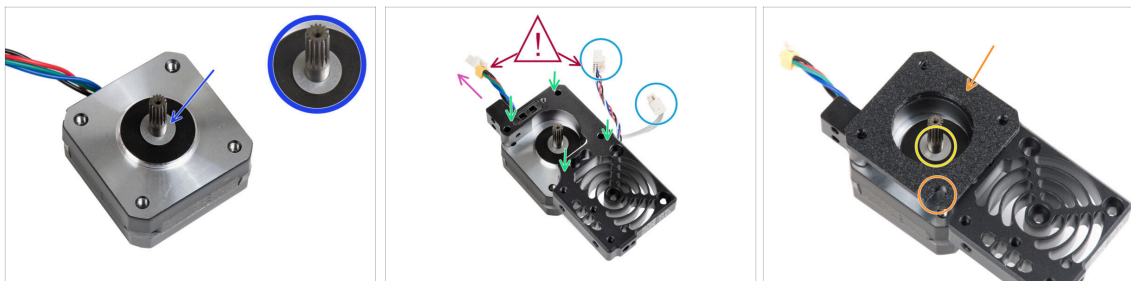
- **For the following steps, please prepare:**
- PG-assembly (1x) *found in the Electronics package*
- Heatsink assembly (1x) *found in the Electronics package*
- Main-plate (1x) *found in the Electronics package*
- PG-ring (1x) *found in the Electronics package*
- PG-assembly-adaptor (1x) *found in the Electronics package*
- ① The list continues in the next step...

## PASO 5 Assembling the extruder: parts preparation II.



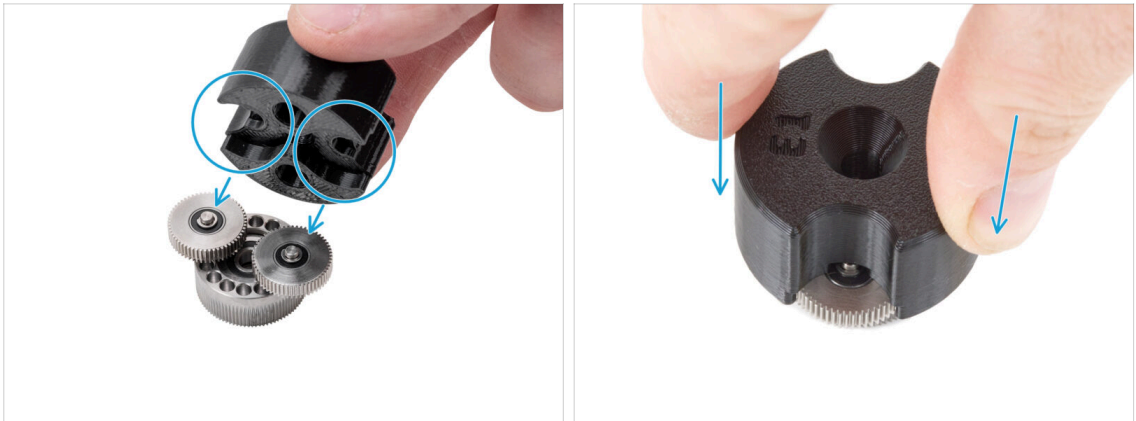
- ◆ Extruder motor (1x) *found in the Motors package*
- ◆ Spacer 5x10x0.1 mm (1x) *found in the Nextruder bag located in the Electronics package*
- ◆ Socket set screw M3x25 (1x) *found in the Electronics & Fasteners package*

## PASO 6 Ensamblando el extrusor



- ◆ Place the 5x10x0.1 spacer over the shaft on the extruder motor.
- ◆ Place the heatsink on the extruder motor. Note the orientation of both parts.
  - ◆ The motor cable must be facing "up".
  - ◆ The heatsink cables must be on the right side.
- ⚠ **Double-check that the motor cable and the heatsink cables are oriented as shown in the photo!**
- ◆ Place the main-plate on the heatsink. Note the orientation of the part. Use the cutout as a guide.
- ◆ Before proceeding to the next step, **make sure that the 5x10x0.1 spacer is placed on the extruder motor.**

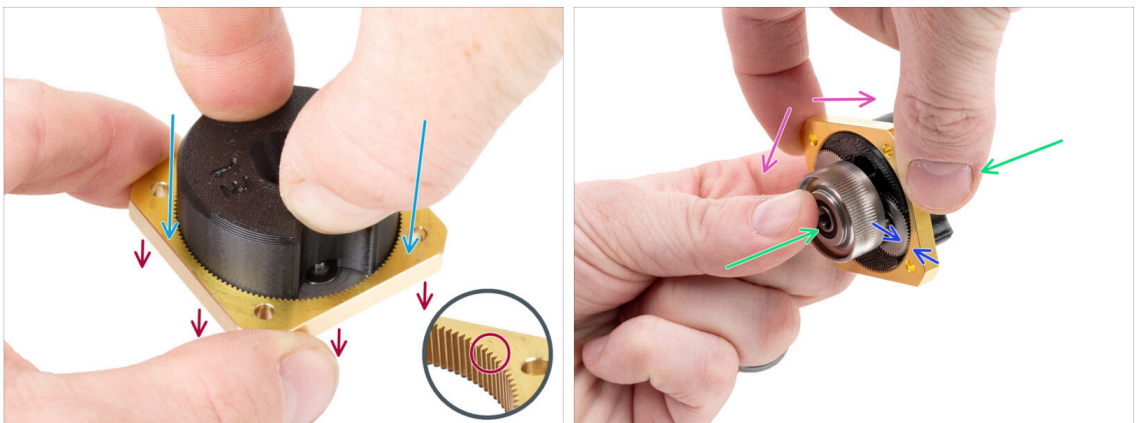
## PASO 7 Montando la caja de engranajes



**i** The following instructions need to be done correctly and carefully. Achieve better understanding and successful assembly by watching the video alongside the guide: [prusa.io/PG-assembly](https://prusa.io/PG-assembly)

- After watching the video, follow the steps in this guide.
- Attach the PG-assembly-adapter on the PG-assembly. Note the pockets for the gears in the adapter.

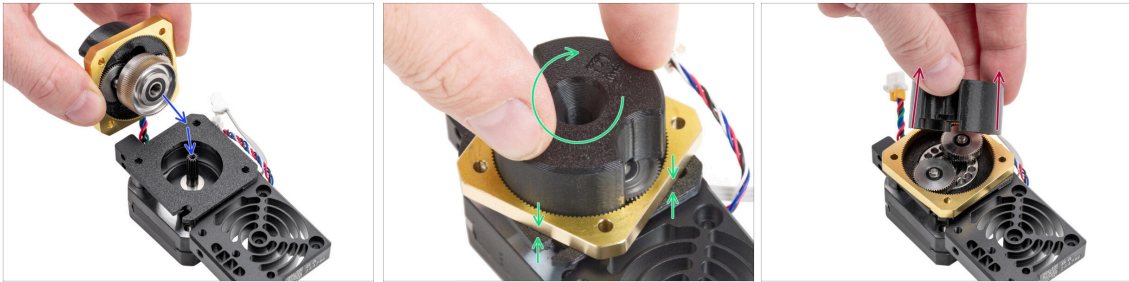
## PASO 8 Montando el PG-ring



**⚠ Do not assemble the gearbox without the PG-assembly-adapter. This tool is intended to ensure that the gears are correctly fit together.**

- Slide the PG-ring onto the adapter.
- Note there is a chamfer on one side of the PG-ring teeth. This side must be facing down (to the PG-assembly).
- Grasp the entire assembly in one hand so that it can be rotated with the PG-ring.
- With the other hand, slide the PG-ring onto the PG assembly in a wobbling motion (move the PG-ring left and right repeatedly) - a quarter turn is enough.
- Stop when the surfaces of the gears are approximately flush with the surface of the PG ring.

## PASO 9 Montando el PG-assembly



 **Proceed very carefully in this step.**

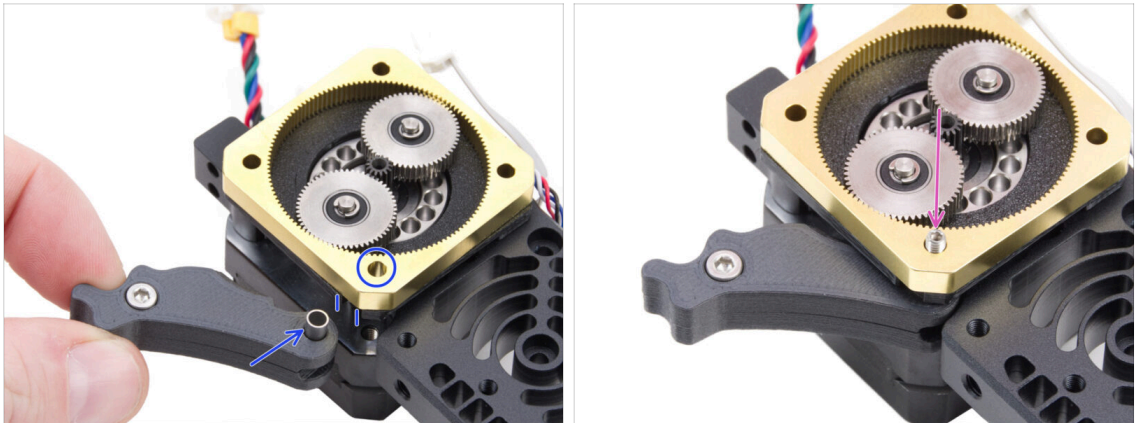
-  Maintain the position of the PG-assembly and attach it on to extruder motor shaft.
-  Very gently and freely rotate with the whole PG assembly (PG-assembly-adapter, PG-assembly and PG-ring) until it drops down so that there is no gap between the assembly and the main-plate. **Do not push on the assembly.**
-  Retira el PG-assembly-adapter.

## PASO 10 Comprobando el PG-assembly



-  Attach the PG-assembly-adapter back on the PG-assembly again to verify that all parts are properly seated.
-  Rotate with the PG-assembly-adapter. **The PG assembly must be easy to rotate without having to exert much force.**
-  Remove the PG-adapter. You will no longer need it during assembly. We recommend keeping it for maintenance.
-  Ensure that the PG-assembly is not sticking out above the PG-ring. It should be positioned lower than the level of the PG-ring's surface or at the same level as the ring.
-  Ensure that the gap between the PG-ring and the Main-plate is minimal. If a significant gap is observed, disassemble the planetary gear assembly and reposition it.

## PASO 11 Assembling the Nextruder idler



- Insert the idler assembly between the PG-ring and the extruder motor. There is a cutout for the spacer in the main-plate. Line up the idler spacer with the hole in the PG-ring.
- Secure both parts with the socket set screw 3x25. **Do not overtighten the screw! The screw protrudes from the PG-ring after tightening.**

## PASO 12 Gear lubrication: parts preparation



- **For the following steps, please prepare:**
- Front Case (1x) *found in the Printed parts package*
  - ① The logo on the Nextruder front case will remain as **PRUSA CORE ONE**.
- Tornillo M3x25 (3x)
- Lubricant (1x) *found in the Electronics & Fasteners package*
- Several paper towels to wipe grease from your hands.

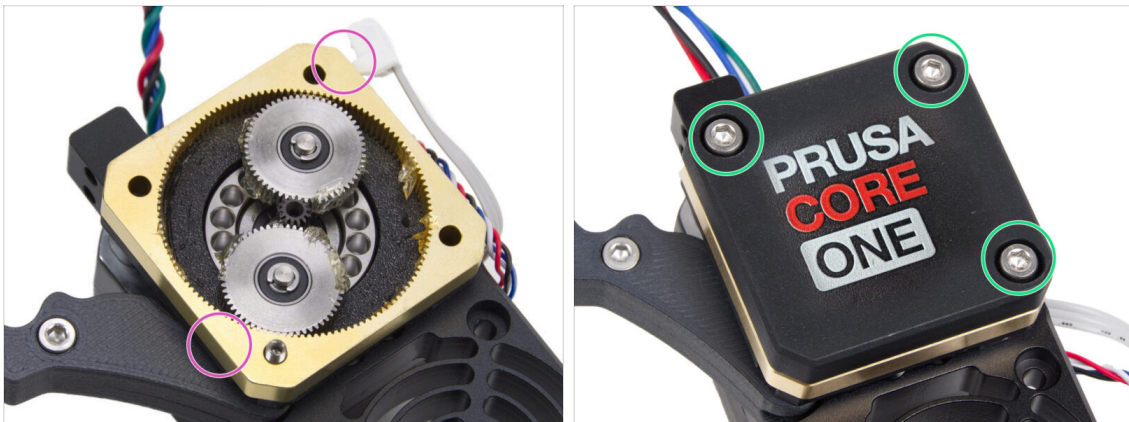


## PASO 13 Lubricando el engranaje



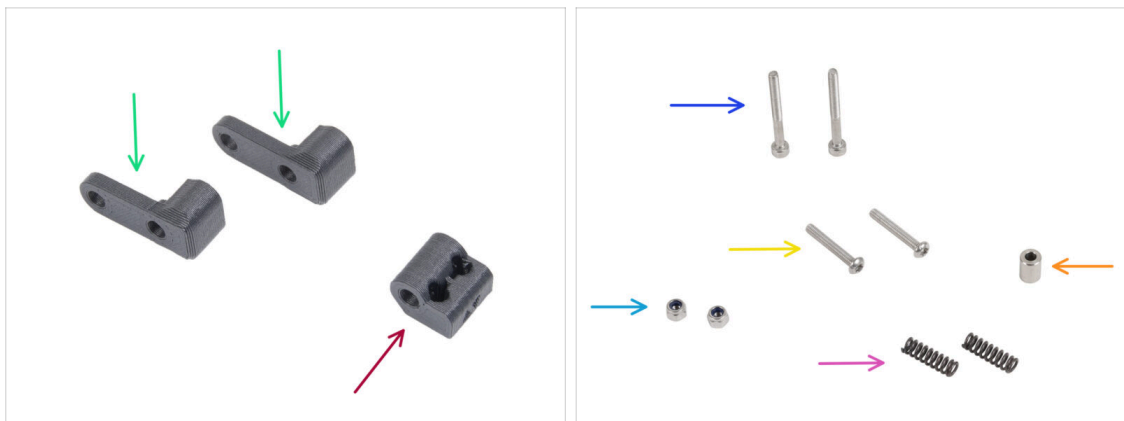
- Remove the cap from the lube. Use the spike on the opposite side of the cap to pierce a hole in the lube tube opening.
- Aplica una pequeña cantidad de lubricante en la punta de la brida y, a continuación, extiéndelo sobre los engranajes.
- Apply a small amount of Prusa Lubricant **all around** the PG-ring and PG-assembly teeth.
- Close the lubricant; it is no longer needed for the assembly.

## PASO 14 Covering the planetary gear



- Using the paper towel, wipe off the lubricant residue from the face surface of the PG-ring.
- Place the front case onto the gearbox and secure it with three M3x25 screws. **Do not tighten them completely** at this moment.
- ① The screws on the front case will be completely tightened during the self-test in the final chapter.

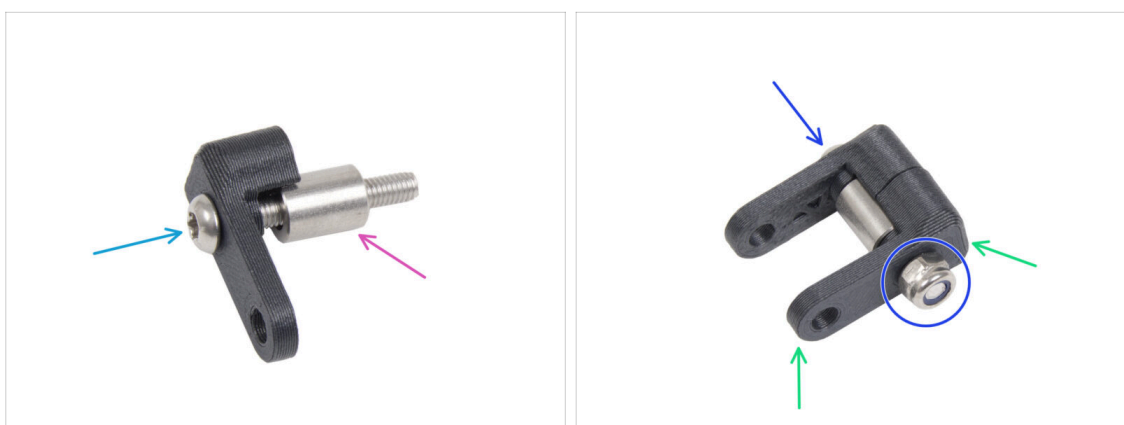
## PASO 15 Assembling the Idler-swivel: parts preparation



⬢ For the following steps, please prepare:

- 🟢 Idler-swivel (2x) found in the Electronics package
- 🔴 Idler-nut (1x) found in the Electronics package
- 🟡 Tornillo M3x30 (2x)
- 🟡 Tornillo M3x20rT (2x)
- 🟢 Tuerca M3nN (2x)
- 🟡 Spring 15x5 (2x) found in the Electronics package
- 🟠 Spacer 6x3.1x8 (1x) found in the Electronics package

## PASO 16 Montaje del Idler-swivel



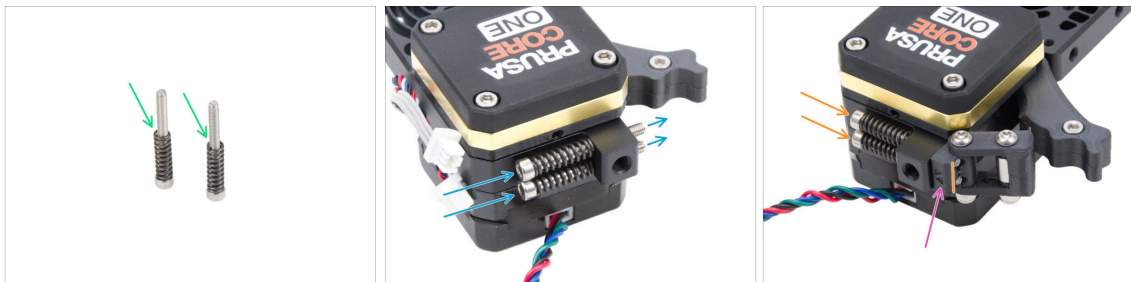
- 🟢 Push the M3x20rT screw all the way through one of the idler-swivel.
- 🟡 Slide the spacer onto the screw.
- 🟢 Place the second idler-swivel from the opposite side on the screw.
- 🟡 From the other side, attach the M3nN nut onto the screw. Hold the nut using the universal wrench and tighten the screw. **Tighten just lightly!** The spacer must rotate freely.

## PASO 17 Montaje de la Idler-nut



- Insert the Idler-nut into the Idler-swivel assembly. Make sure that both parts are oriented correctly according to the picture.
- Secure both parts together by inserting the M3x20rT screw from the same side, like the first screw.
- Secure the screw with M3nN nut. **Do not overtighten the nut.** It must be possible to move with the Idler-swivel on the Idler-nut.

## PASO 18 Mounting the Idler-swivel assembly



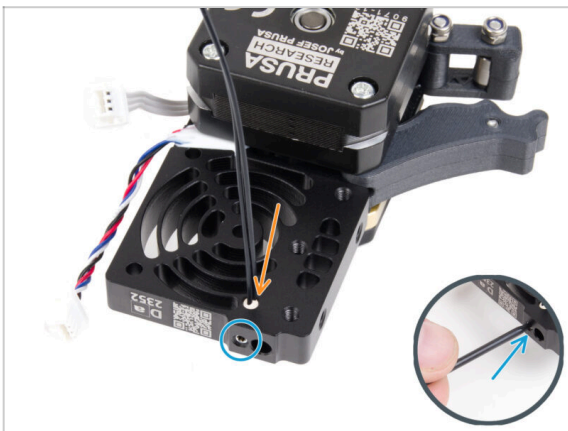
- Attach the spring 15x5 on both M3x30 screws.
- Push the two screws with the springs through the holes in the protrusion on the heatsink. There are no threads inside.
- Attach the Idler-swivel assembly on the screws. See the correct orientation of the Idler-nut. The side with version marking must be visible. See the picture.
- Tighten both screws. **Stop tightening as soon as the screw tips reach the front face of the idler nut.**

## PASO 19 NTC thermistor: parts preparation



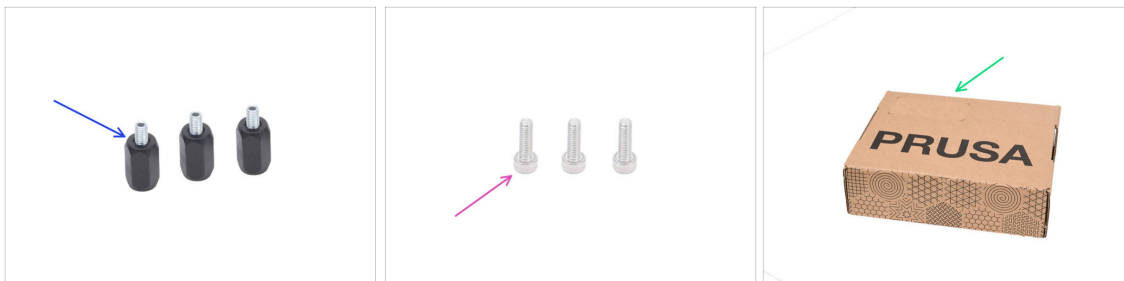
- For the following steps, please prepare:
- NTC thermistor 90 mm (1x) found in the Nextruder box+Heatbed heatsink box located inside the Electronics box.
- M3x4T grub screw (1x)

## PASO 20 Assembling the NTC thermistor



- On the **extruder motor side**, insert the NTC thermistor into the hole in the heatsink.
- Secure it with the M3x4T grub screw. Screw it all the way in. **Tighten gently, but firmly** using two fingers and the short side of the T6 Torx key. Applying more force may cause permanent damage to the thread.

## PASO 21 Mounting the Nextruder: parts preparation

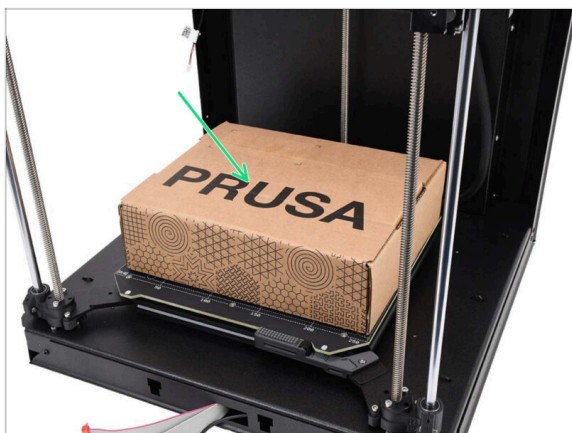


◆ **For the following steps, please prepare:**

- ◆ Nextruder spacer (3x) *found in the Small parts & fasteners bag located inside the Electronics & Fasteners box.*
- ◆ Tornillo M3x10 (3x)
- ◆ Cardboard box (1x) *used as temporary heatbed protection*

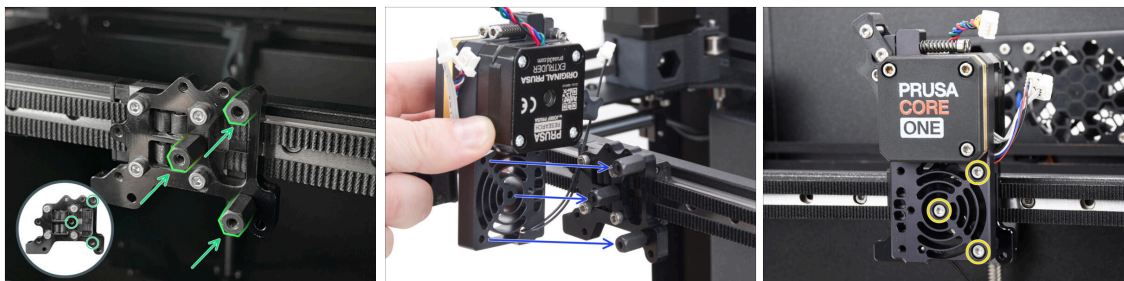
ⓘ Hint: You can use any cardboard box from the kit package.

## PASO 22 Protegiendo la base calefactable



- ◆ Place an empty cardboard box on the heatbed, ensuring it covers as much of the surface as possible.
- ⓘ This will protect the heatbed from falling parts.

## PASO 23 Montando el Nextruder



- 🟢 Screw three Nextruder spacers to the Nextruder holder. Tighten the spacers firmly.
- 🟡 Place the Nextruder assembly on the spacers.
- 🟡 Align the holes in the Nextruder with the spacers and secure it with three M3x10 screws. **Do not overtighten the screws.**

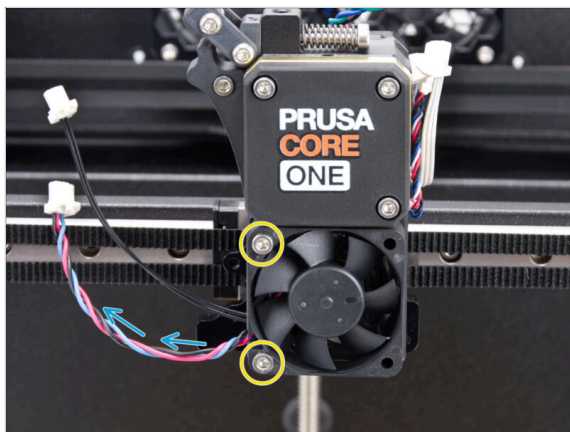
## PASO 24 Hotend fan: parts preparation



- ⬛ **For the following steps, please prepare:**
- 🟡 Hotend fan (1x) *found in the Electronics package*
- 🟡 Hotend-cable-clip (1x) *found in the Printed parts package*
- 🔴 Tornillo M3x4rT (2x)
- 🟢 Tornillo M3x18 (2x)



## PASO 25 Installing the Hotend fan

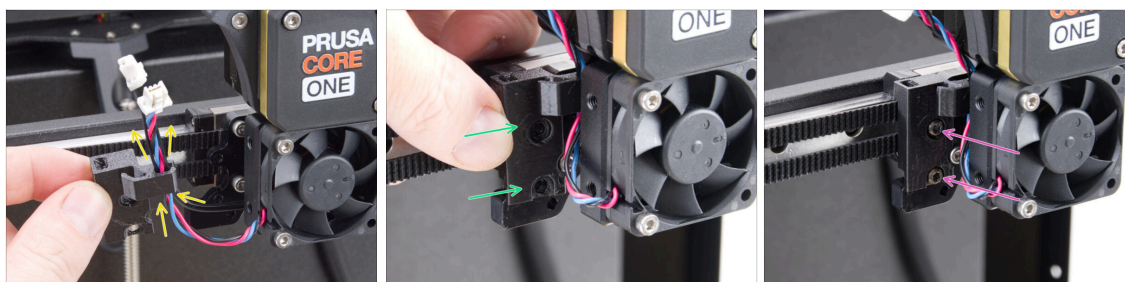


- Attach the hotend fan onto the heatsink with two M3x18 screws on the left side. **Tighten the screw gently, but firmly, otherwise the plastic housing may crack.**

⚠ There is a sticker on the hotend fan, the sticker must be on the rear side of the fan - not visible.

- The cable must be pointing towards the lower-left corner.

## PASO 26 Guiding the Hotend fan cables



- Take the Hotend-cable-clip in the same position as shown and guide the **heatsink fan cable** together with the **NTC thermistor cable** through the right cable hook.
- Attach the Hotend-cable-clip to the Nextruder holder.
- Secure it using two M3x4rT screws.

## PASO 27 LoveBoard: parts preparation I.



● **For the following steps, please prepare:**

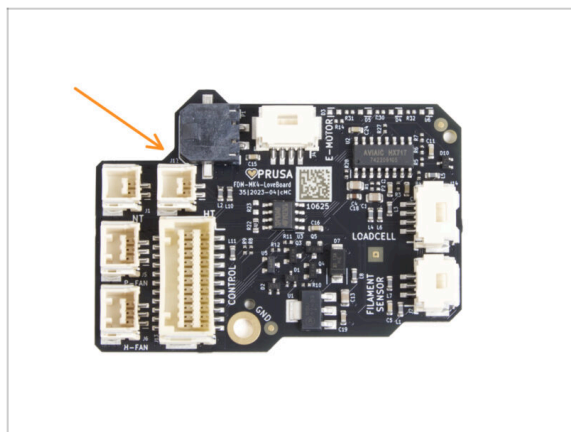
- Printhead-cover (1x) *found in the Printed parts package*
- Loveboard-mount (1x) *found in the Printed parts package*
- Main cable (1x) *found in the Electronics & Fasteners package*

ⓘ Note: Cable color may vary depending on the batch. This does not affect the procedure.

- Tornillo M3x10 (4x)
- Tornillo M3x8rT (1x)
- Tuerca M3nS (5x)

ⓘ The list continues in the next step...

## PASO 28 LoveBoard: parts preparation II.



● **For the following steps, please prepare:**

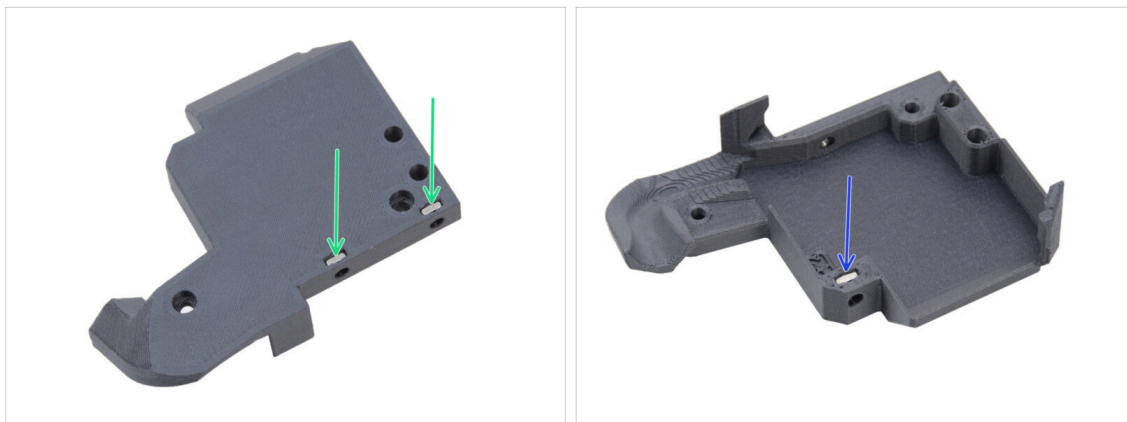
- LoveBoard (1x) *found in the Electronics package*

## PASO 29 Ensamblaje de la Loveboard-mount



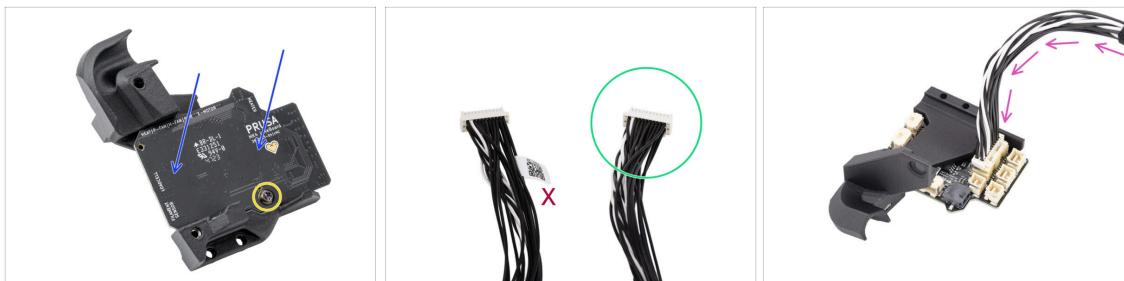
- 🟠 Locate the U-shaped cable channel on the Loveboard-mount and insert an M3nS nut into the nearby hole.
- ⬛ Use a 2.5mm Allen key to push the nut all the way in.
- 🟡 On the opposite side of the part, insert an M3nS nut and push it into place.

## PASO 30 Ensamblando la Printhead-cover



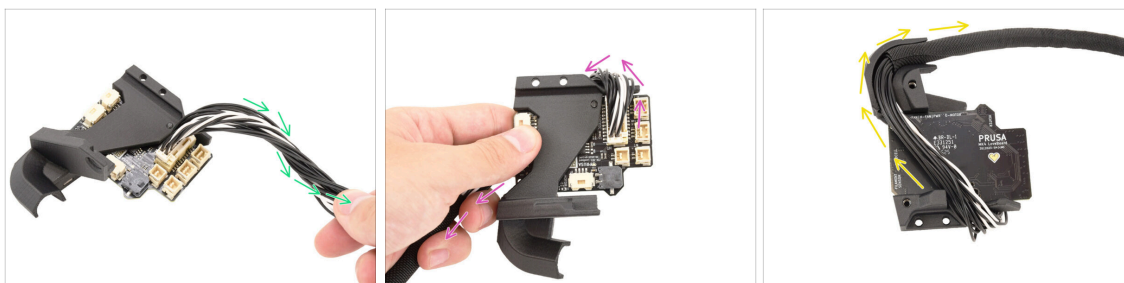
- 🟢 From the back of the printhead-cover, insert two M3nS nuts into the part.
- 🟡 From the other side of the printhead-cover, insert one M3nS nut into the part.

## PASO 31 Ensamblaje de la LoveBoard



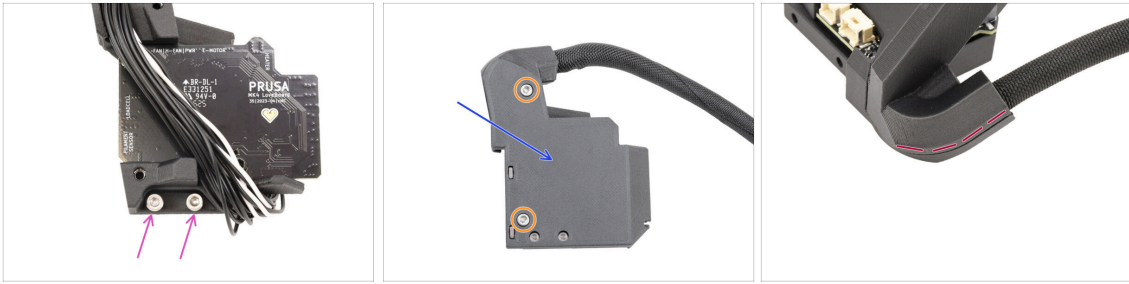
- Place the LoveBoard to the Loveboard-mount. Note the correct orientation - the connectors must be facing downwards.
- Align the holes with both parts and secure the board with the M3x8rT screw. **Do not overtighten it**, it might damage the part.
- Take the end of the extruder main cable without the white label.
- Turn the Loveboard-mount upside down and connect the Main cable to the LoveBoard.

## PASO 32 Guiding the main cable



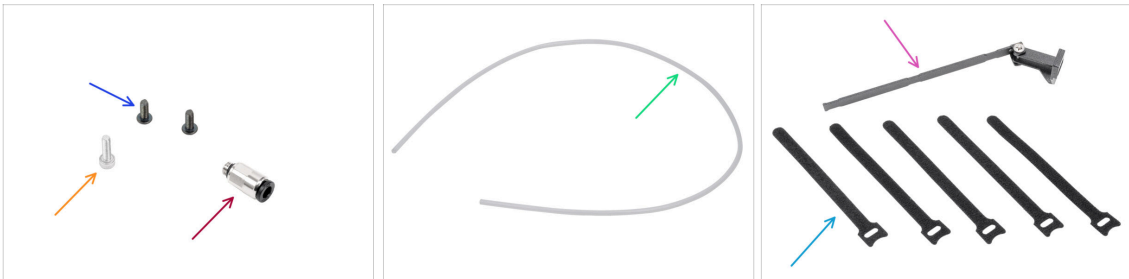
- Twist the main cable half a turn.
- Fold the main cable over the LoveBoard to its opposite side.
- Turn the LoveBoard assembly upside down.
- Guide the main cable over the LoveBoard through the cable channel in the Loveboard-mount.

## PASO 33 Cubriendo la LoveBoard



- ✦ Insert two M3x10 screws into the Loveboard-holder.
  - ⚠ Ensure you insert the screws from the correct side. Use the LoveBoard logo on the board as a reference.
- ✦ Cover the LoveBoard with the Printhead-cover.
  - ⚠ Avoid pinching any wires in the main cable.
- ✦ Fix both parts together using two M3x10 screws.
- ✦ Check that there is no large gap or pinched textile sleeve between the parts.

## PASO 34 Swingarm: parts preparation I.



- ✦ **For the following steps, please prepare:**
  - ✦ Tornillo M3x8rT (2x)
  - ✦ Tornillo M3x10 (1x)
  - ✦ Fitting M5-4 (1x) found in the Small parts & fasteners bag located inside the Electronics & Fasteners package.
  - ✦ PTFE tube 710 x 4 x 2.5 (1x) *found in the CoreXY parts + Hinges set package*
  - ✦ Swingarm assembly (1x) *found in the Metal parts 3/3 package*
  - ✦ Cable tie (5x) *found in the Seals & Ties bag located inside the Electronics & Fasteners package*
- ⓘ Packed in a stack and must be separated.
- ⓘ The list continues in the next step...

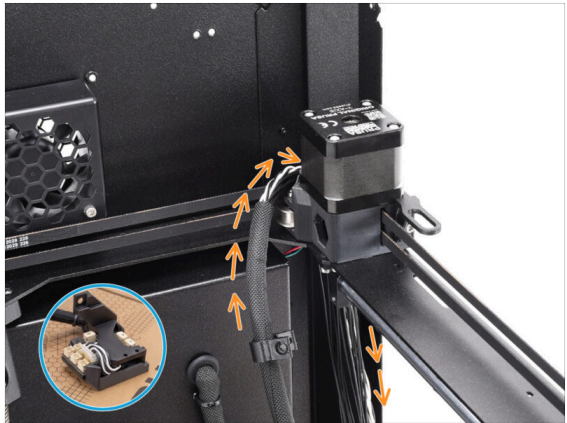
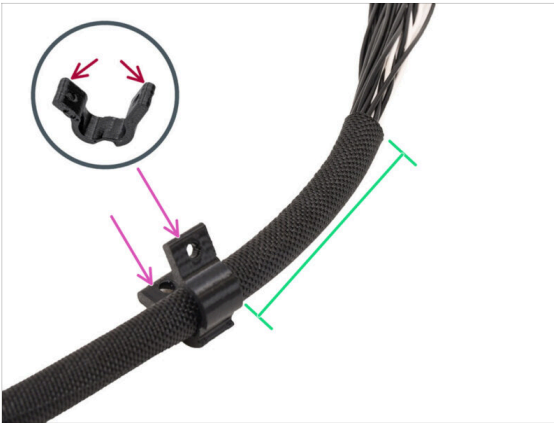
## PASO 35 Swingarm: parts preparation II.



● For the following steps, please prepare:

- ◆ Bowden-bend (1x) *found in the Printed parts package*
- ◆ Main-cable-clip (1x) *found in the Printed parts package*

## PASO 36 Guiding the main cable



- Carefully open the Main-cable-clip. Be careful not to crack the part.
- ◆ Insert the main cable into the Main-cable-clip. **Note the clip orientation in the photo.** The clip is not symmetrical; make sure to attach it as shown.
- ◆ Place the Main-cable-clip approximately 5 - 15 cm (2 - 6 in) from the end of the textile sleeve and close the clip.
- ⓘ Do not move the cable clip to the edge of the textile sleeve as shown in the second photo. Keep it in the same position from the last step.
- ◆ Place the LoveBoard assembly on the cardboard box on the heatbed.
- ◆ Push the main cable behind the CoreXY assembly in the right rear corner.

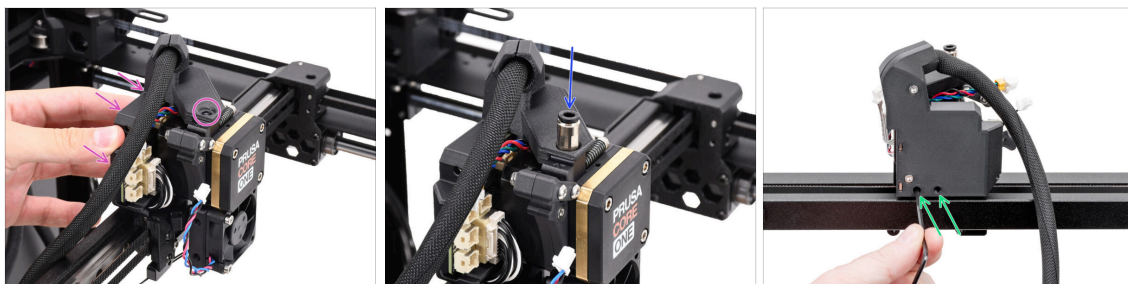


### PASO 37 Mounting the main cable



- In the right corner of the printer on the Y motor assembly, locate the hole in the plastic part and align it with the main-cable-clip.
- Fix the main-cable-clip with the cable to the hole using the M3x10 screw.

### PASO 38 Attaching the LoveBoard assembly



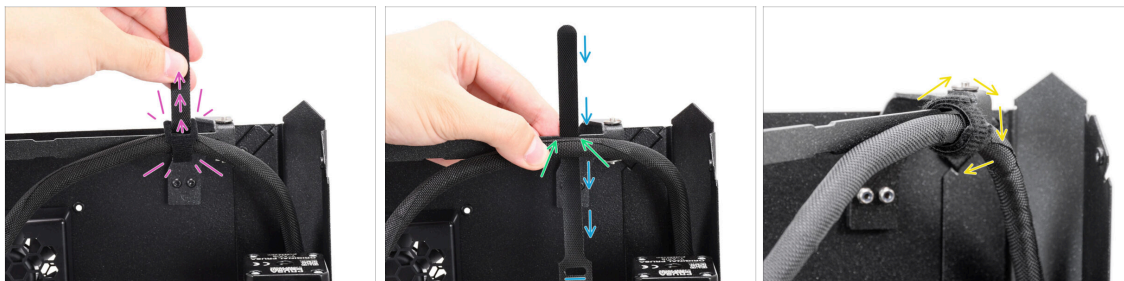
- From the back of the Nextruder, attach the LoveBoard assembly to the Nextruder.
- Align the hole in the Loveboard-mount with the threaded hole in the top of the heatsink (Nextruder).
- Insert and tighten the fitting M5-4 to the heatsink. Use the universal wrench.
- From the back of the Nextruder, tighten the two M3x10 screws to secure the LoveBoard assembly.

### PASO 39 Montando el brazo oscilante



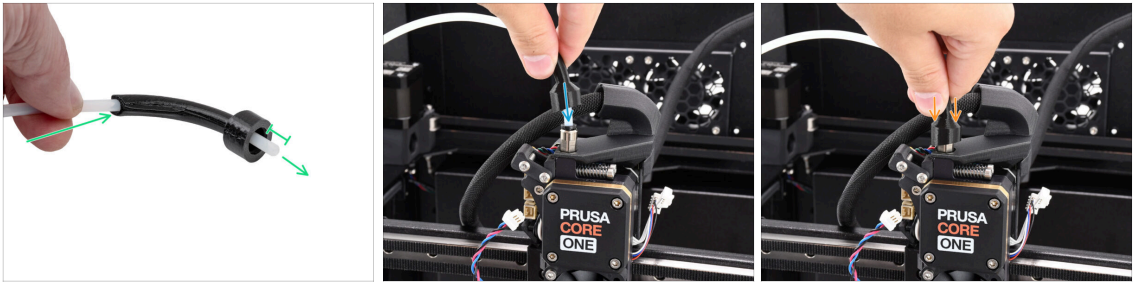
- ✦ Attach the swingarm assembly to the pair of threaded holes on the back panel near the top right corner.
- ✦ Secure it with two M3x8rT screws.
- ⚠ Do not overtighten the screws, as this may strip the threads.

### PASO 40 Attaching the main cable



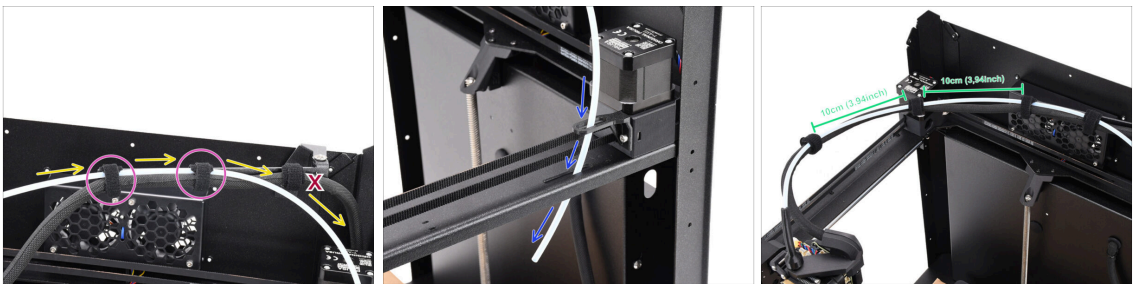
- ✦ Notice the cutouts on the swingarm.
- ✦ Position the main cable at the first cutout on the swingarm.
- ✦ Place one cable tie behind the first cutout on the swingarm, ensuring the correct orientation of the zip strip.
- ✦ Thread the cable tie through its eyelet, wrapping it around the swingarm and main cable.
- ✦ Tighten the cable tie as much as possible.
- ✦ Wrap the cable tie around.

## PASO 41 Inserting the PTFE tube



- Push one end of the PTFE tube through the bowden-bend and keep protruding at least 1 cm (0.39 in) of the tube.
- Insert the PTFE tube into the fitting M5-4 on the Nextruder. Push it all the way down.
- Slide bowden-bend down to cover the fitting M5-4.

## PASO 42 Securing the PTFE tube



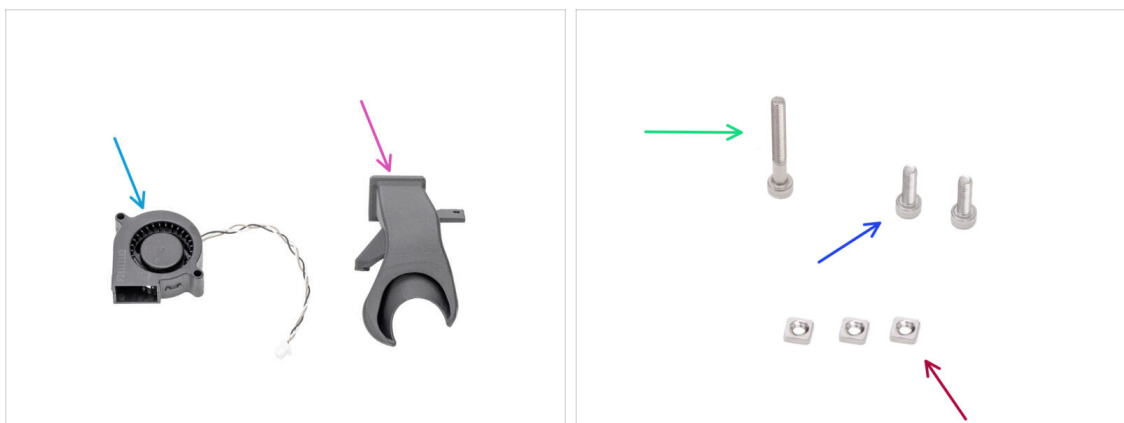
- Route the PTFE tube in parallel with the main cable, ensuring the PTFE tube stays above the main cable.
- Secure the PTFE tube and main-cable to the swingarm using two cable ties to the remaining cutouts.
- ⚠ Do not pass the PTFE tube through the first cable tie on the swingarm.
- Push the free end of the PTFE tube through the Bowden guide and CoreXY plate downward. Leave the end hanging freely.
- Merge the PTFE tube and main-cable with the remaining two cable ties, leaving a 10 cm (3.94 in) distance between them.

## PASO 43 Comprobando el movimiento



- Manually move the XY axes to their end positions several times and ensure that:
  - The main cable is not too tight and does not pull the Nextruder backward.
  - The main cable does not form an excessively large arc.
  - If the cable is too tight or forms a large arc, slightly loosen the screw on the main cable clip and pull the cable upward or downward by a few millimeters. Then, tighten the screw and test again.

## PASO 44 Print fan: parts preparation



- **For the following steps, please prepare:**
  - Print fan (1x) *found in the Electronics package*
  - Fan-shroud (1x) *found in the Printed parts package*
  - Tornillo M3x25 (1x)
  - Tornillo M3x10 (2x)
  - Tuerca M3nS (3x)



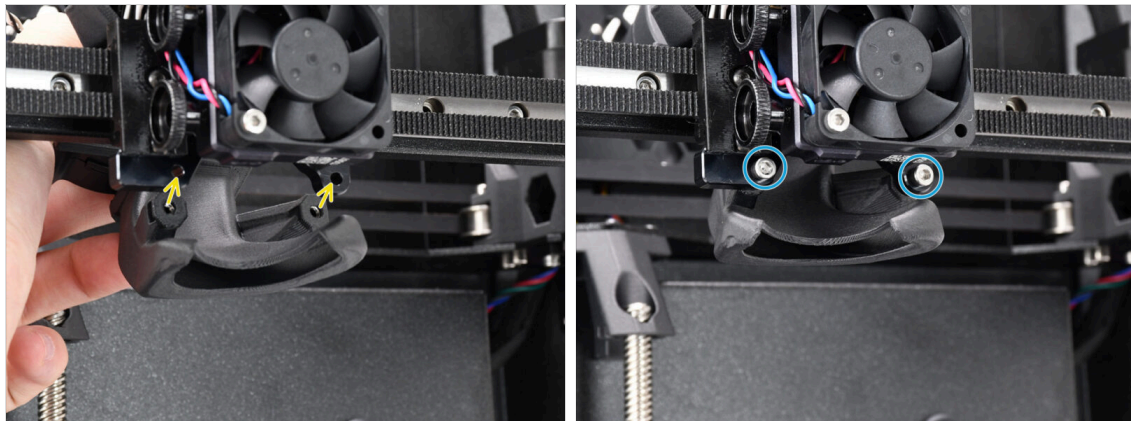
## PASO 45 Montaje del fan-shroud



- Insert two M3nS nuts from one side into the fan-shroud.
- From the other side, insert one M3nS nut into the fan-shroud.
- Insert the print fan into the fan-shroud as shown. See the correct orientation of the parts.
- Secure both parts together with one M3x25 screw.

⚠ Do not overtighten the screws to avoid damaging the fan housing.

## PASO 46 Installing the print fan assembly



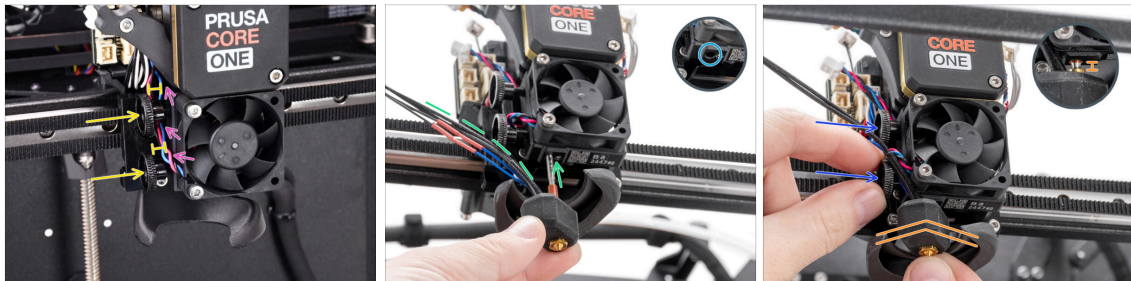
- Attach the print fan assembly to the back of the Nextruder.
- Align the holes in the Nextruder bracket with the holes in the fan-shroud.
- Secure the fan-shroud to the Nextruder holder using two M3x10 screws.

## PASO 47 Hotend: preparación de las piezas



- For the following steps, please prepare:
- Thumb screw (2x) found in the Electronics package
- Prusa Hotend assembly (1x) found in the Electronics package

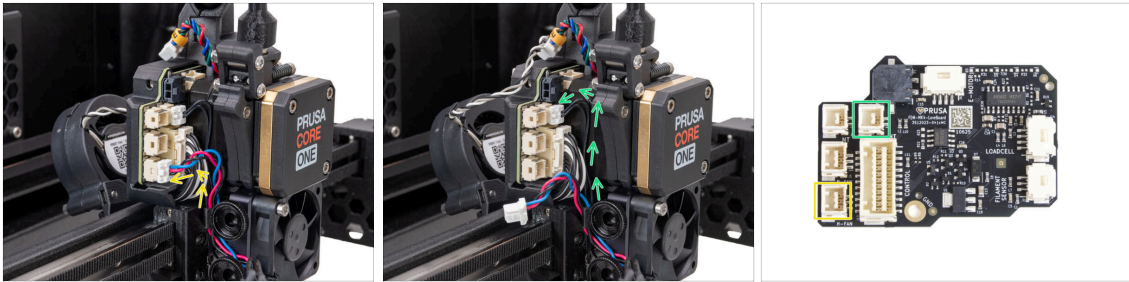
## PASO 48 Instalando el hotend



- Insert two thumb screws into the heatsink. **Do not tighten them completely.** Two turns are enough for now.
  - Route the heatsink fan cable above the first threaded hole in the heatsink.
  - Look closely at the underside of the heatsink and find the hole for the hotend assembly.
  - Insert the hotend assembly tube in the hole and slide the whole thing into the heatsink.
  - Point the cables to the left according to the photo.
  - Push the hotend assembly all the way into the heatsink. There should be approximately a 2 mm (0.08 in) gap between the heatsink and the brass part of the nozzle.
  - While pushing the hotend assembly in, **firmly tighten both thumb screws.**
- ⚠ **Avoid pinching any cable between the screws and the heatsink!**

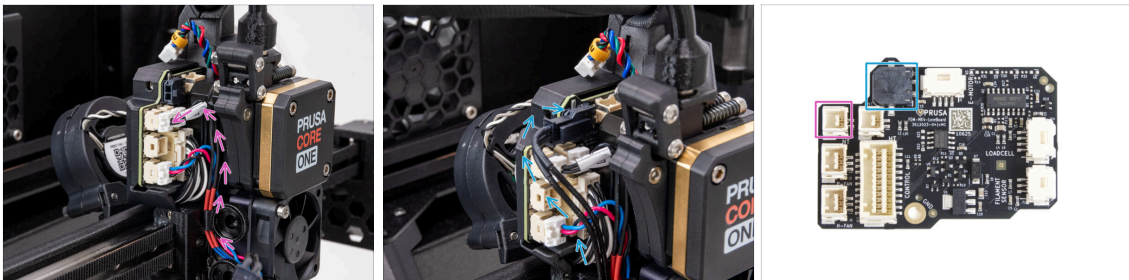


## PASO 49 Connecting the heatsink cables



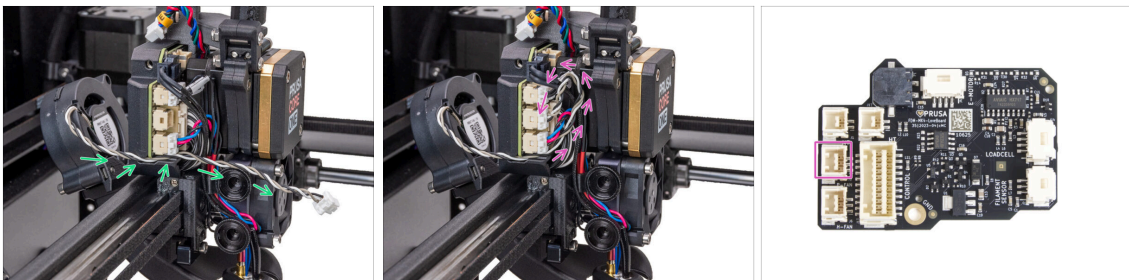
- Enchufa el cable del termistor del disipador en el conector situado encima del cable principal de la LoveBoard.
- Plug the Hotend fan cable into the lower connector in the left row of the LoveBoard.

## PASO 50 Connecting the hotend cables



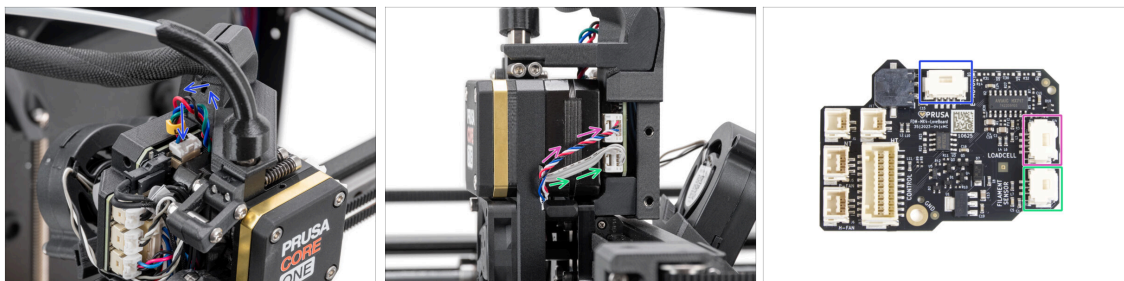
- Guía el termistor de la boquilla a través del cable-clip del Nextruder y conéctelo a la LoveBoard.
- Guide the hotend heater through the cable-clip on the Nextruder and connect it to the LoveBoard.

## PASO 51 Connecting the print fan cable



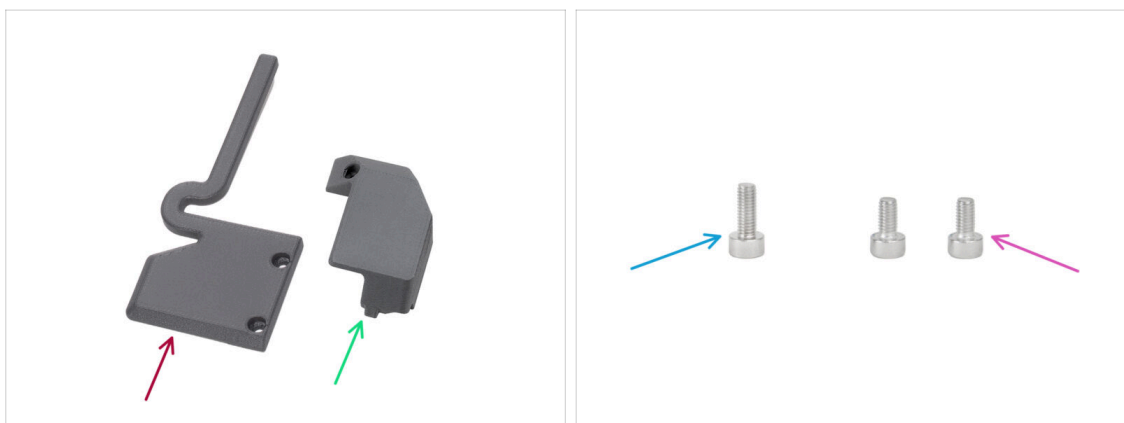
- Guide the print fan cable through the channel in the plastic cover.
- Create a loop with the print fan cable in the cable area and plug it into the middle connector in the LoveBoard.

## PASO 52 Conecta el cable del E-motor



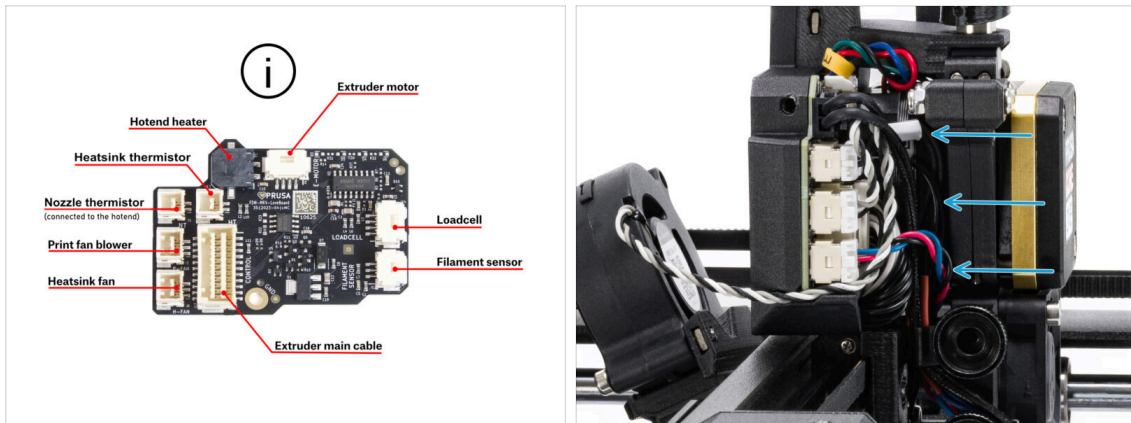
- Plug the Nextruder motor (labeled E) to the top-facing connector.
- Plug the loadcell cable (lower cable) to the upper connector on the right side of the Nextruder.
- Plug the filament sensor (upper cable) to the lower connector.

## PASO 53 LoveBoard covers: parts preparation



- **For the following steps, please prepare:**
- Print-head-cover-right-lever (1x) *found in the Printed parts package*
- Printhead-cover-left (1x)
- Tornillo M3x10 (1x)
- Tornillo M3x6 (2x)

## PASO 54 LoveBoard: Comprobación del cableado



 **Before covering the electronics, check the connection of all cables.**

 Click on the picture to open it in the high-resolution preview.

-  Squeeze the wiring harness as far inward to the LoveBoard as possible so that it does not protrude out and interfere with the fitting of the cover.

## PASO 55 Cubriendo la LoveBoard



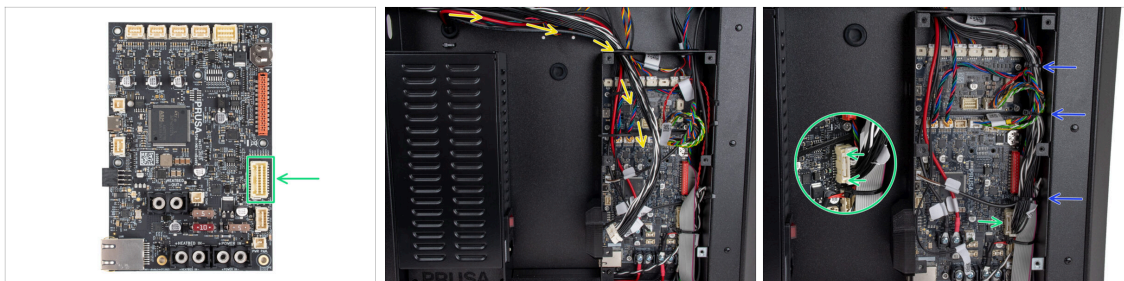
-  Attach the Print-head-cover-left on the left side of the Nextruder.
-  Secure the cover with one M3x10 screw.
-  Place the Printhead-cover-right-lever on the right side of the Nextruder.

 **Do not pinch the cables!**

-  Secure the cover with two M3x6 screws.
-  Guide the main-cable through the upper hole on the right side of the back panel assembly.

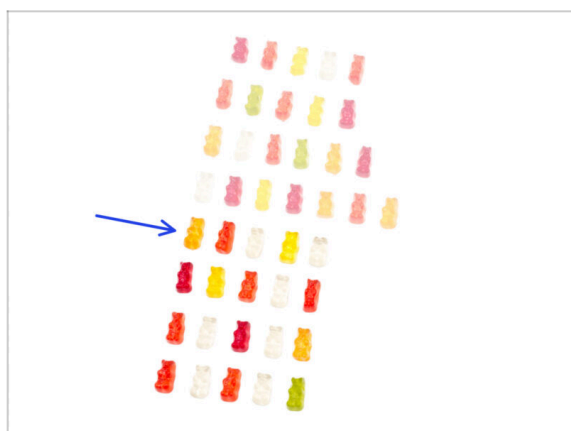
**Leave the end of the cable hanging freely for now.**

## PASO 56 Conectando el cable principal



- Rotate the printer so that the backside faces you.
- Route the main cable through the left hole into the xBuddy box.
- Plug the main-cable to the slot on the right side of the xBuddy board.
- ① Si el cable no llega hasta el conector o queda demasiado tenso, vuelve al paso **Guiando el cable principal** y tira ligeramente del cable hacia abajo desde la main-cable-clip.
- Secure the cables with the pre-threaded zip ties in the xBuddy box. Carefully cut the excess, **avoiding cutting the cables**.

## PASO 57 Momento Haribo



- Power up and push forward!
- Eat the fifth row.

## PASO 58 Listo



- ◆ Congratulations! You just successfully assembled the Nextruder.
- ◆ Let's move to the next chapter.

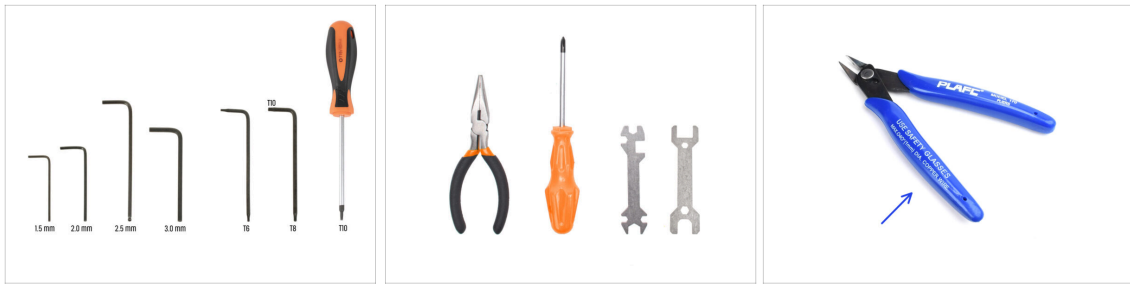


## 7. Estructura y Electrónica





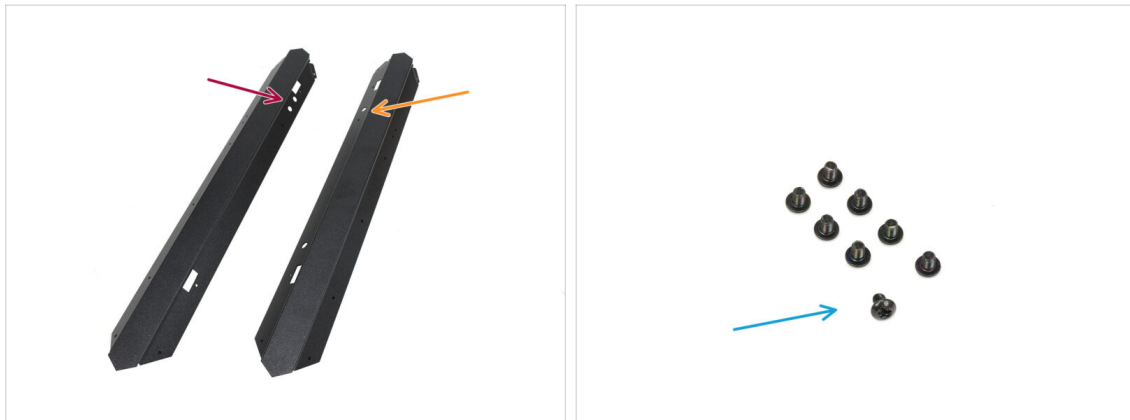
## PASO 1 Tools necessary for this chapter



● For the following steps, please prepare:

- Llave Allen de 2.5mm
- Llave Allen de 1.5mm
- Llave Torx T10
- Alicates de punta fina
- Alicates de Corte Plano (Opcional)

## PASO 2 Front profiles: parts preparation



● For the following steps, please prepare:

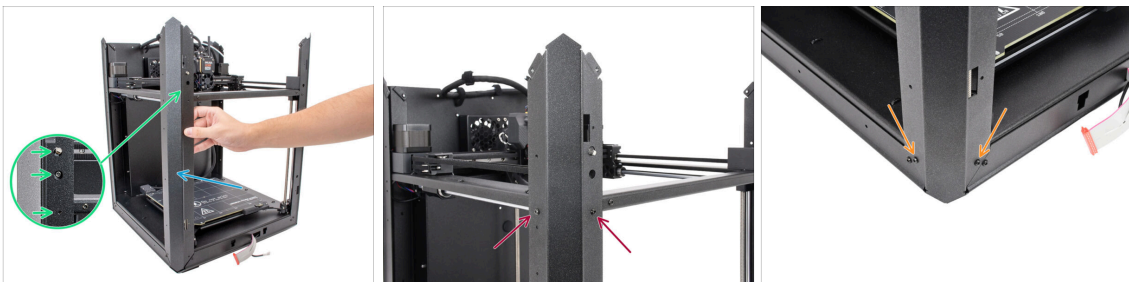
- Front Left Profile (1x) *found in the Metal parts 1/3 package*
  - ① The one with the two circular openings on top.
- Front Right Profile (1x) *found in the Metal parts 1/3 package*
  - ① The one with one circular opening on top.
- Tornillo M3x4rT (8x)

### PASO 3 Installing the front right profile



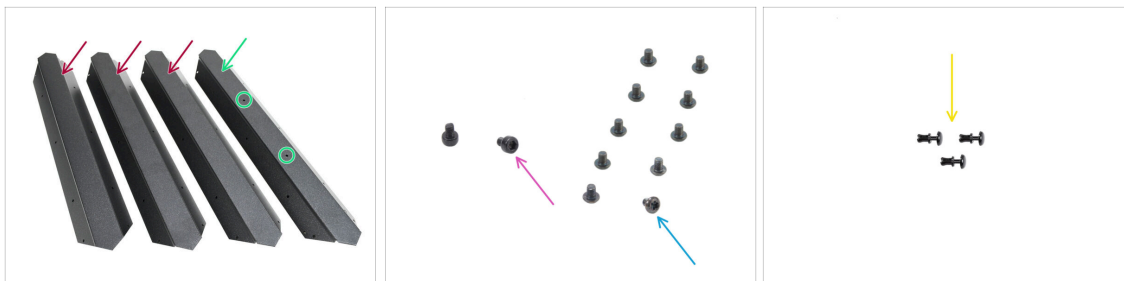
- Attach the Front Right Profile to the printer.
  - i Ensure you are using the correct profile—it should have **one large round opening** for the belt tensioning screw.
  - Align the profile so that the calibration screw opening and the smaller bolt opening line up with the thread.
  - Secure the profile to the CoreXY assembly using two M3x4rT screw
  - Fix the profile at the bottom using the two M3x4rT screws.
  - i En caso de que los orificios no coincidan, asegúrate de que las varillas lisas estén introducidas hasta el fondo en las piezas de montaje de las varillas del conjunto de la base y en el conjunto XY de la parte superior.

### PASO 4 Instalando el perfil delantero izquierdo



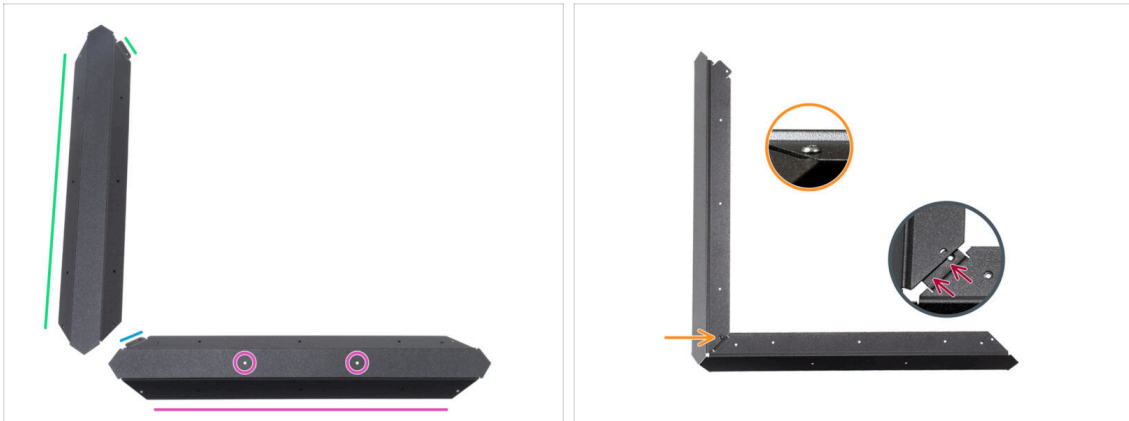
- Attach the Front Left Profile to the printer.
  - i Ensure you are using the correct profile—it should have **two large round openings** for the door sensor and the belt tensioning screw.
  - Align the profile so that the openings match. **Be careful not to bend the door sensor lever!**
  - Secure the profile to the CoreXY assembly using two M3x4rT screw
  - Fix the profile at the bottom using the two M3x4rT screws.

## PASO 5 Perfiles superiores: preparación de las piezas



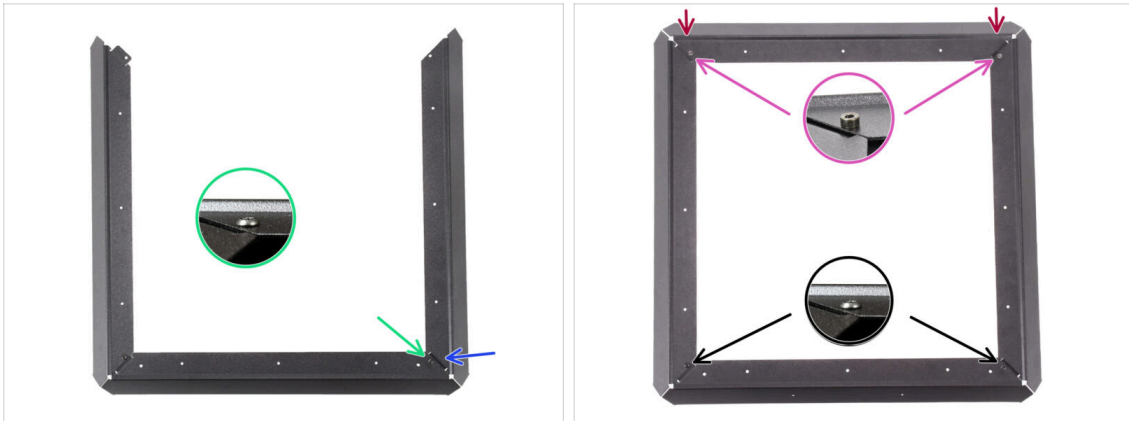
- Top Profile (3x) *found in the Metal parts 1/3 package*
- Top rear profile (1x) found in the Metal parts 1/3 package - note the two holes in the part.
- Tornillo M3x4rT (10x)
- Tornillo M3x4 (2x) *con el tipo de cabeza diferente*
- Remache de nylon (3x)

## PASO 6 Montaje de los perfiles superiores I.



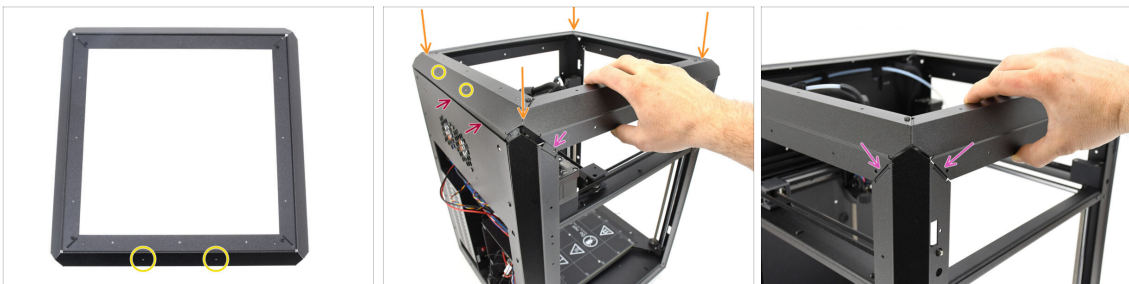
- ⚠ Be very careful when handling sharp sheet metal parts to avoid injury or damage.
- ➡ According to the picture, place the top profile with two holes on the flat side.
  - ➡ Orient the part according to the picture. **Use the flange as a guide.**
- ➡ Place any other of the top profiles on the left side. Orient the part according to the picture. **Use the flange as a guide.**
- ➡ Attach the two profiles together.
  - ⚠ The flange of the front plate (blue arrow) must be inserted **under** the left universal profile (green arrow), not on top of it.
- ➡ Alinea los orificios de ambas piezas y únelas con el tornillo **M3x4rT**.
  - ⚠ **¡Comprueba bien el tipo de tornillo! Asegúrate de utilizar el adecuado para cada orificio.**
- ➡ Using the same procedure, join the other two profiles to form a corner, securing them with an M3x4 screw.

## PASO 7 Montaje de los perfiles superiores II.



- Siguiendo el mismo procedimiento, une otro perfil al perfil superior mediante los dos orificios situados en el lado plano.
- ⚠ Ensure the flanges are positioned **underneath** the profiles.
- Une los perfiles con tornillos M3x4rT.
- ⚠ ¡Comprueba bien el tipo de tornillo! Asegúrate de utilizar el adecuado para cada orificio.
- Une el último perfil siguiendo el mismo procedimiento. **Asegúrate de utilizar el tipo de tornillo adecuado.**
- Une los perfiles con un tornillo M3x4. **Asegúrate de utilizar el tipo de tornillo adecuado.**

## PASO 8 Alineando los perfiles superiores



- Find the profile with **two openings in the middle**—this part should be positioned at the **rear of the printer**.
- Add the top profile assembly onto the printer, making sure the two openings are facing the back.
- The protruding part of the rear profile must be positioned behind the back sheet metal plate.
- On the sides and front, the profiles must sit on top of the tabs with threaded openings.

## PASO 9 Instalando los perfiles superiores



- Once all the top profiles are properly aligned, fix them in place using the remaining 8 M3x4rT screws in the corners.
- Attach the back panel to the top profile with three nylon rivets.

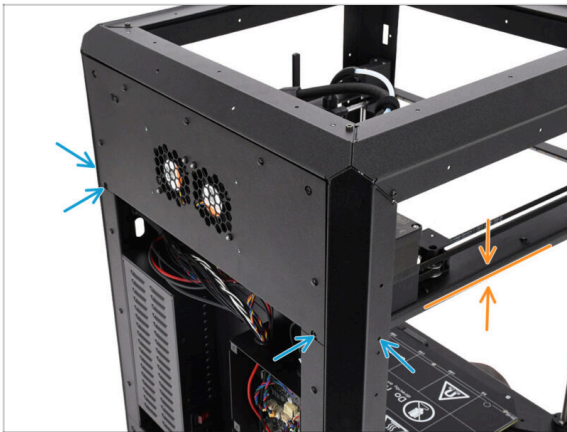
## PASO 10 CoreXY fixing screws: parts preparation



- For the following steps, please prepare:
- Tornillo M3x4rT (4x)



## PASO 11 Fixing the CoreXY assembly



- Align the CoreXY assembly so the threaded holes match the screw openings in the rear profiles. You may need to push the assembly upward to align the holes.
- Fix the CoreXY assembly using the four M3x4rT screws in the marked openings.

## PASO 12 Side sensor base: parts preparation



- **For the following steps, please prepare:**
- Filament-sensor-body (1x) *found in the Printed parts package.*
- Filament-sensor-lever (1x) *found in the Printed parts package.*
- Filament-sensor-switch (1x) *found in the Printed parts package.*
- Tornillo M3x10 (1x)
- 10x6x2mm magnet (2x) *found in the Electronics & Fasteners package*
- 7mm Ferromagnetic Ball (1x) *found in the Electronics & Fasteners package*
- Arandela M3w (1x)

## PASO 13 Assembling the side sensor base



- Insert one of the magnets into the dedicated opening in the Lever.
- Insert the ball into the corresponding opening on the inside of the sensor base.
- Insert the lever with the magnet into the Base.

**i** The part with the magnet should be positioned next to the ball.

Note that the ball will be attracted to the magnet—ensure it stays securely in place.

- Fix the lever in place using the M3w washer and M3x10 screw. Tighten it just a few turns for now—enough to hold it in place.

**!** **Do not fully tighten the screw. Otherwise, the lever will not move and the sensor will not work!**

## PASO 14 Probando la palanca



- Verify the lever is able to move freely.
- If the lever does not move freely or cannot move at all, loosen the screw by a quarter turn and test the movement again.

**!** The screw **must not be fully tightened**; otherwise, the lever will not be able to move freely.

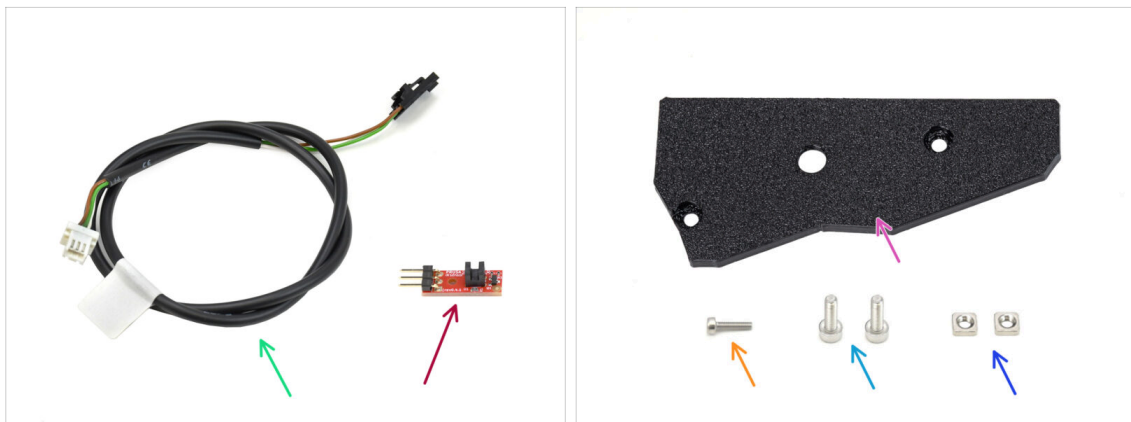
## PASO 15 Montaje del interruptor



Lee todas las partes de este paso antes de empezar.

- Insert the second 10x6x2 magnet into the filament-sensor-switch.
- Install the filament-sensor-switch into the filament-sensor-body.
- Move the filament-sensor-switch to the left end position so the magnets face each other.
- Make sure **the magnets repel** - they should push away from one another.
- **If they attract** - pull toward each other: remove the magnet from the filament-sensor switch and flip its polarity. Then check it again.
- i *Pro tip: Use one of the thin hex keys or Torx keys to remove the magnet from the filament-sensor-switch.*

## PASO 16 IR Sensor: parts preparation



- **For the following steps, please prepare:**
- Side Filament Sensor Cable (1x) *found in the Electronics & Fasteners package*
- IR Filament Sensor (1x) *found in the Electronics & Chamber parts package*
- Side Filament Sensor Cover (1x) *found in the Printed package*
- Tornillo M2x8 (1x)
- Tornillo M3x10 (2x)
- Tuerca M3nS (2x)

## PASO 17 Connecting the IR sensor



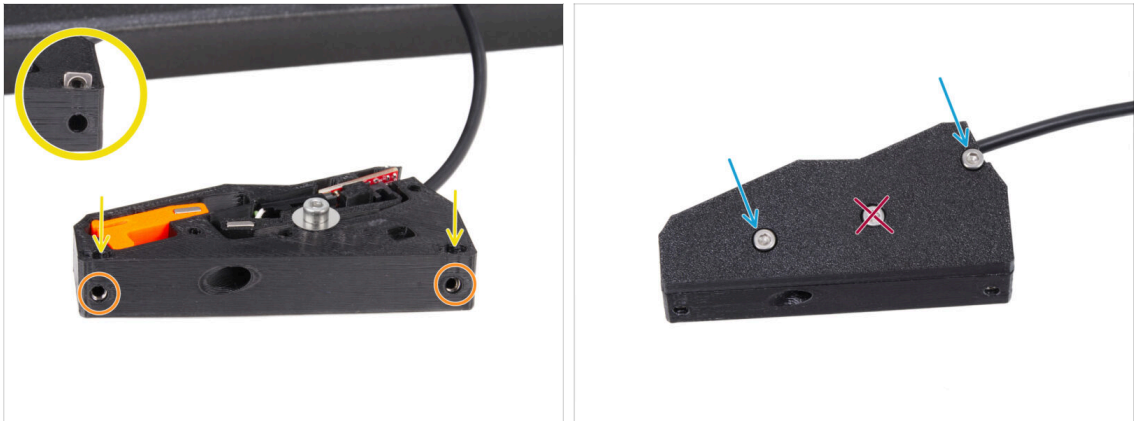
- Plug the cable into the IR filament sensor.
- ⚠ Ensure the connector is oriented correctly before plugging it in!
- On CORE One, the brown cable must connect to the +5V pin.
- The white cable connects to the GND pin.

## PASO 18 Installing the IR sensor



- First, insert the cable into the groove. The black connector should be approximately in the middle of the sensor base.
- Insert the IR sensor itself into the dedicated groove.
- The lever must fit into the optical gate part of the sensor.
- Make sure neither the connector nor the cables touch the lever, as this could prevent the sensor from functioning correctly.
- Using the 1.5mm Allen key, fix the sensor in place with the M2x8 screw.

## PASO 19 Installing the side sensor cover



- ✦ Insert the two M3nS nuts into the designated openings. Use a 1.5mm Allen key to **push them all the way in.**
  - ✦ Look from the side to ensure the threads in the nuts align with the openings.
  - ✦ Add the cover part onto the assembly.
  - ✦ Fix the cover in place using two M3x10 screws on the sides.
- ⚠ **Do not tighten the screw in the middle!** Otherwise, the sensor would stop working.

## PASO 20 Side filament sensor: parts preparation



- ✦ **For the following steps, please prepare:**
- ✦ Side Filament Sensor Assembly (1x) *you assembled earlier*
- ✦ Collet (1x) *found in the Electronics & Fasteners package*
- ✦ Abrazadera (3x)

## PASO 21 Installing the side filament sensor



-  Install one zip-tie into the marked openings. We will use it to attach a cable underneath the metal profile.
  -  Insert the collet into the marked opening on the sensor assembly.
  -  Attach the sensor assembly onto the PTFE tube in the printer.
-  **Make sure to push the tube all the way in!**

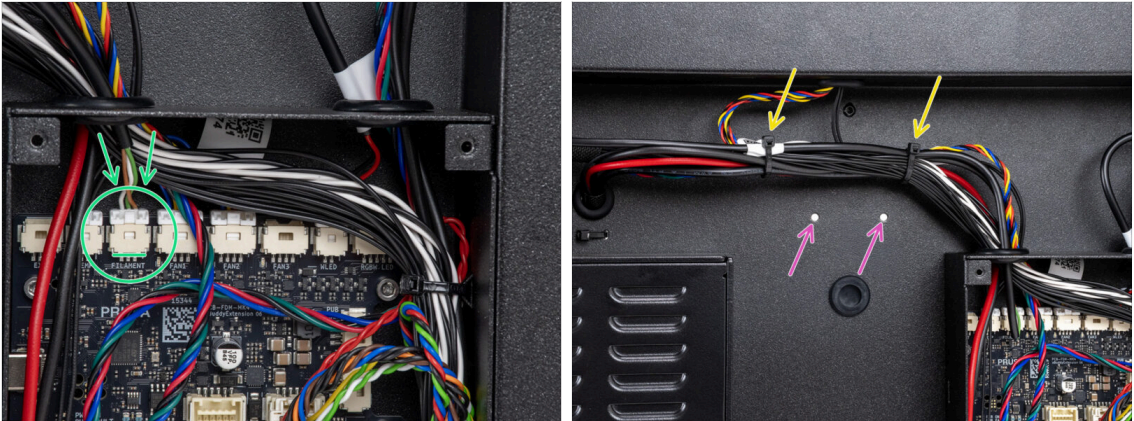
## PASO 22 Guide the filament sensor cable



-  Move the sensor assembly up, roughly to the middle of the printer's frame, to align the cable properly.
-  Once in position, secure the cable underneath the metal profile using a zip-tie. Tighten the zip-tie lightly, allowing for cable adjustments if needed later. Cut off the excess zip-tie.
-  Guide the sensor cable through the dedicated opening to the back of the printer.
-  On the back of the printer, guide the cable into the xBuddy box. Leave it hanging loosely for now.

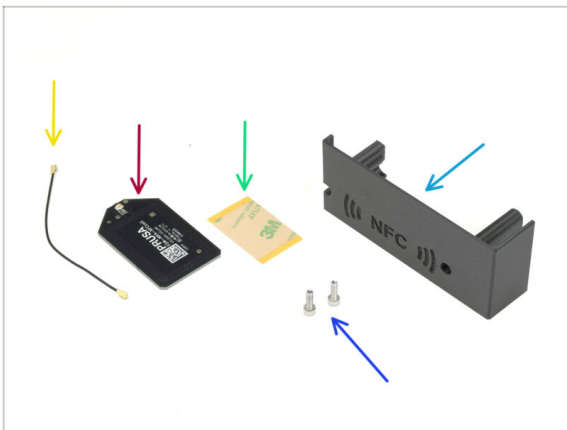


## PASO 23 Connecting the side filament sensor



- ◆ Connect the Side Filament Sensor cable into the connector labeled FILAMENT on top of the xBuddy extension board.
  - i You can use needle-nose pliers to assist you, but be careful not to damage the cables.
- ◆ Use two zip-ties to clamp the cable bundle together in the marked area.
  - ◆ Secure the cables in the **highest possible position** to ensure they clear the two openings on the sheet metal below.
- ⚠ Do not over-tighten the zip ties or strain the cables too much!

## PASO 24 NFC Antenna: parts preparation



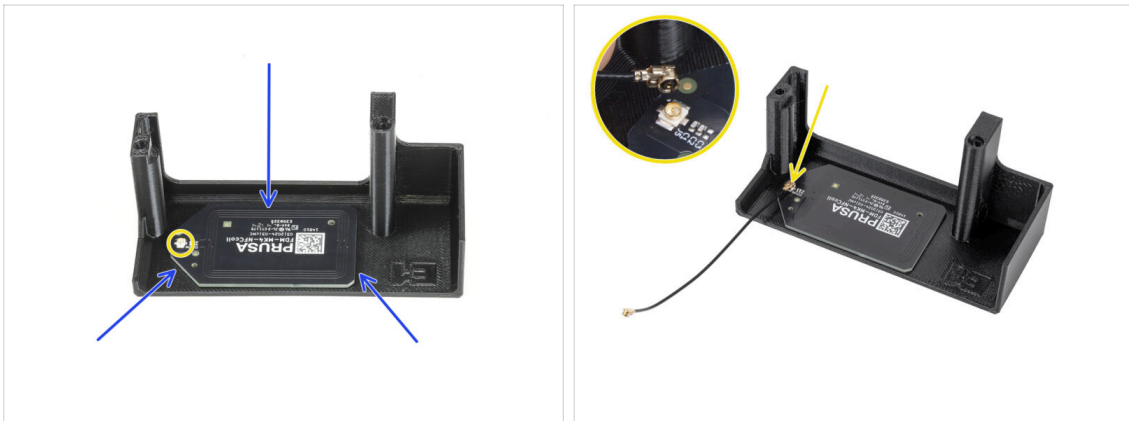
- ◆ For the following steps, please prepare:
  - ◆ El-box-cover (1x) found in the Printed parts package
  - ◆ Tornillo M3x10 (2x)
  - ◆ NFCcoil (1x) found in the Electronics & Chamber parts package
  - ◆ Adhesive film 32 x 25 mm (1x) found in the Electronics & Chamber parts package
  - ◆ NFC coil cable (1x) found in the Electronics & Chamber parts package

## PASO 25 Applying the adhesive film



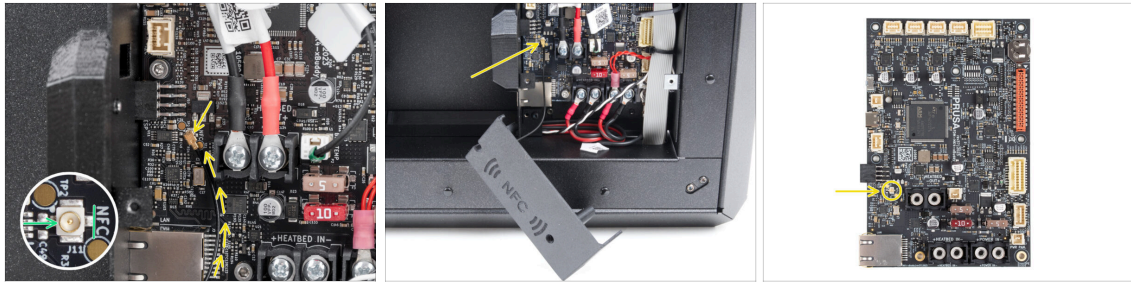
- Peel off the yellow protective film from the adhesive tape.
- Apply the film to the flat side of the NFC coil, ensuring it adheres properly.
- Peel of the remaining protective layer from the NFC coil.

## PASO 26 Installing the NFC Coil



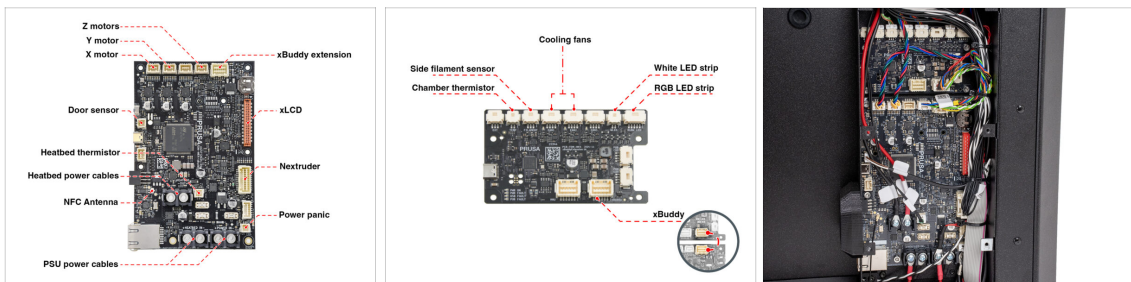
- Stick the NFC coil onto the inner side of the EI-box cover, approximately as shown in the picture.
- ⓘ The small round connector should be positioned closer to the edge of the cover.
- Connect the cable to the board by aligning the connectors and pressing lightly until you feel a click, ensuring a secure connection.
- ⚠ **Be careful when connecting the NFC coil cable. Misalignment or excessive pressure can cause irreversible damage.**
- ⓘ Make sure to apply equal pressure and do not use flat metal tools to push the NF cable connector in.

## PASO 27 Connecting the NFC Coil



- 🟢 Locate the small round connector labeled NFC on the bottom left side of the xBuddy board.
- 🟡 Connect the NFC coil cable to the board by aligning the connectors and pressing lightly until you feel a click.

## PASO 28 Comprobación del cableado



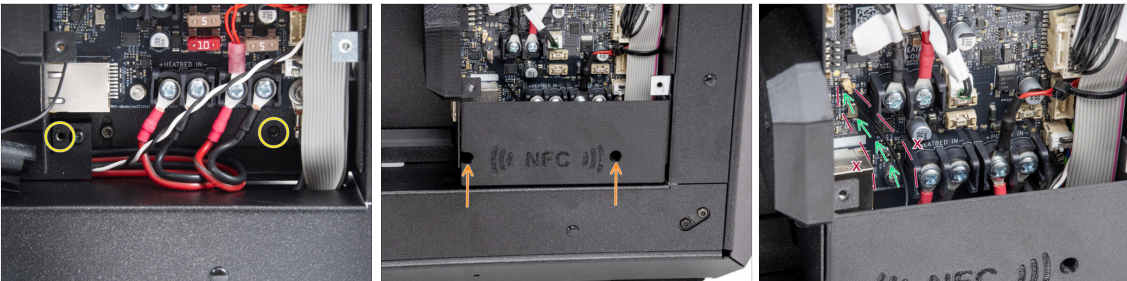
- ⬛ Use the pictures as a reference to verify your electronics connections.
- ⚠️ Make sure that all connectors are fully inserted and PSU cables properly tightened. Otherwise, there is a risk of damage to the printer!

## PASO 29 Preparing the electronics cover



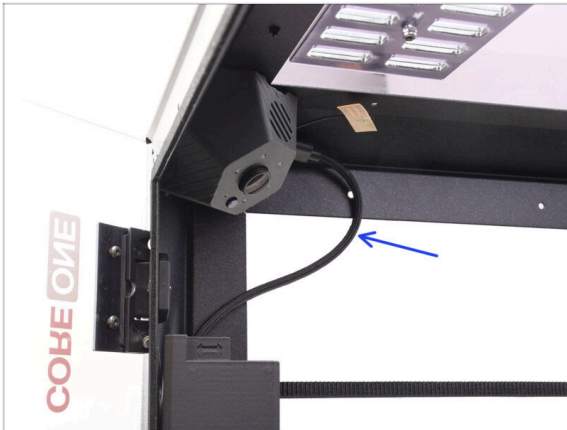
- Push two M3x10 screws through the EI-box-cover.

## PASO 30 Installing the electronics cover



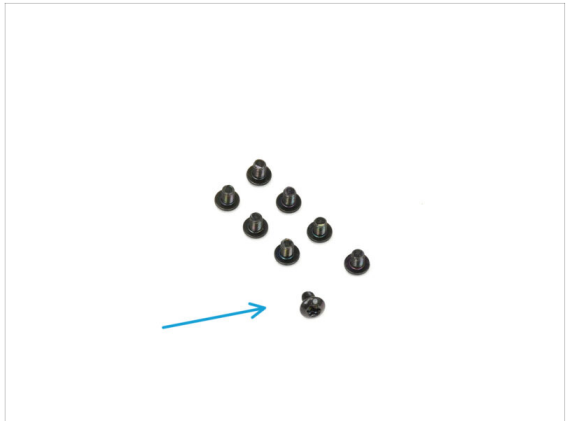
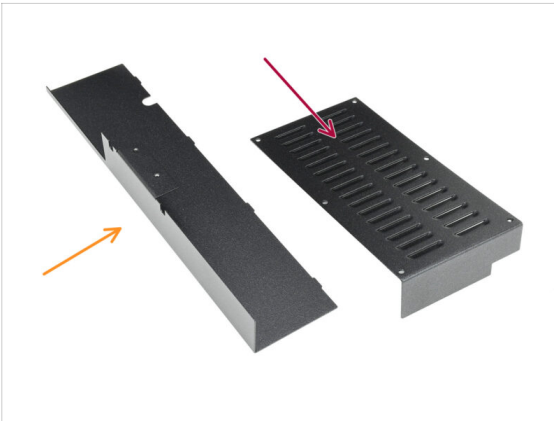
- Ensure the threaded holes on the bottom of the xBuddy box are not obstructed by cables.
  - If so, rearrange the cables to allow clear access.
  - Align the cover with the opening in the xBuddy box and fix it in place by tightening the screws.
  - Route the NFC cable through the space between the Ethernet connector and the PSU power cables.
- ⚠️ Avoid running it through the Ethernet connector or the power cables. The cable may be damaged when covering the xBuddy box.**

## PASO 31 Nota Cámara Buddy3D



- i** For future Buddy3D Camera users:
- If you plan to use the Buddy3D Camera, you have the USB cable installed already.
  -  For detailed information on how to mount and connect the Buddy3D camera, return to this guide: **Buddy3D Camera for CORE One Installation**

## PASO 32 xBuddy cover: parts preparation



- For the following steps, please prepare:**
- Sheet metal back cover (1x) *found in the Metal parts 2/3 package*
  - xBuddy cover (1x) *found in the Metal parts 3/3 package*
  - Tornillo M3x4rT (8x)



### PASO 33 Installing the xBuddy cover



- Arrange the cables inside the xBuddy box as shown in the picture.
- Carefully cover the xBuddy box by first sliding the bent part of the cover into the box.
- ⚠ **Avoid pinching the cables and make sure to insert the cover perpendicular to the xBuddyboard.**  
Double-check the NFC coil cable position.
- Secure the xBuddy box cover using the six M3x4rT screws.

### PASO 34 Installing the rear cover



- Align the rear sheet metal cover so that the cables can run through the "tray".
- Place the rear sheet metal cover into the recess. Push it toward the printer, then move it upward to engage it.
- There are four tabs that should engage into the printer's chassis.
- Secure the rear cover in place using two M3x4rT screws from inside the printer.



## PASO 35 Right side: parts preparation



For the following steps, please prepare:

Right side sheet metal (1x) found in the Metal parts 2/3 package

 The correct **right-side** piece can be easily identified by the screw openings in the middle.

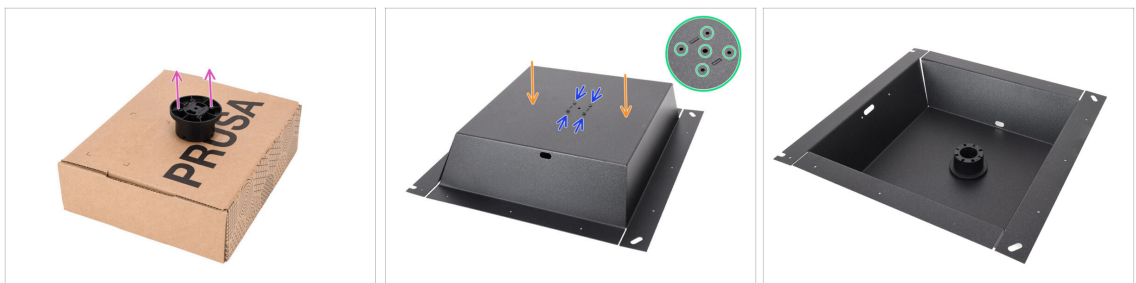
M3x8rT screw (4x) found in the Electronics & fasteners package

Puck-universal (1x)

Any cardboard box (1x)

 Tip: A Prusament box works well.

## PASO 36 Instalando el Puck-universal



Coloca el Puck-universal sobre la caja de cartón de manera que los orificios para los tornillos queden hacia arriba.

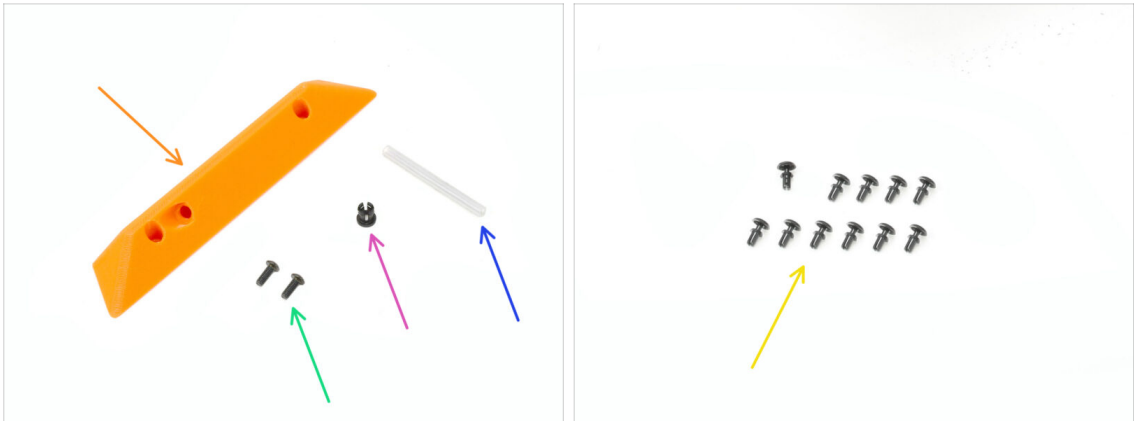
Coloca con cuidado el panel derecho sobre el Puck-universal, situándolo en el centro de la caja.

Alinea los orificios del Puck-universal con los orificios del panel derecho.

Fija el Puck-universal con cuatro tornillos M3x8rT.

 Screws may feel resistant when tightening, as they cut their own thread inside the part.

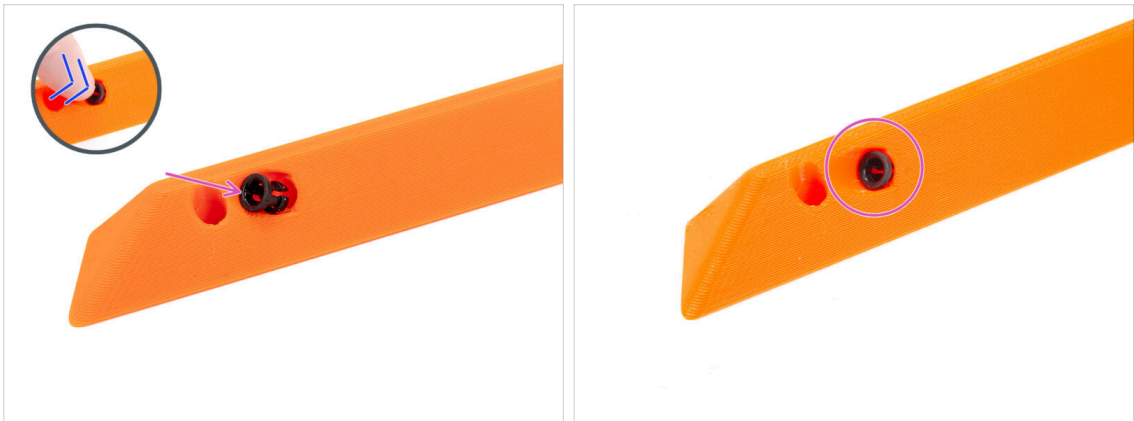
## PASO 37 Right handle: parts preparation



### For the following steps, prepare:

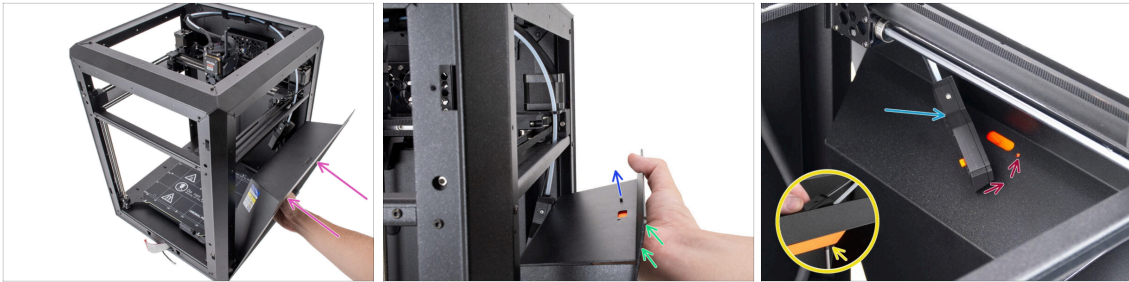
- Side Handle (1x) *found in the Printed parts package*
- Tornillo M3x8rT (2x)
- Collet (1x) *found in the Electronics & Fasteners package*
- PTFE Tube 4 x 2.5 x 45 mm (1x) *found in the CoreXY parts + Hinges set package (together with hinges parts)*
- Remache de nylon (11x)

## PASO 38 Instalando la presilla



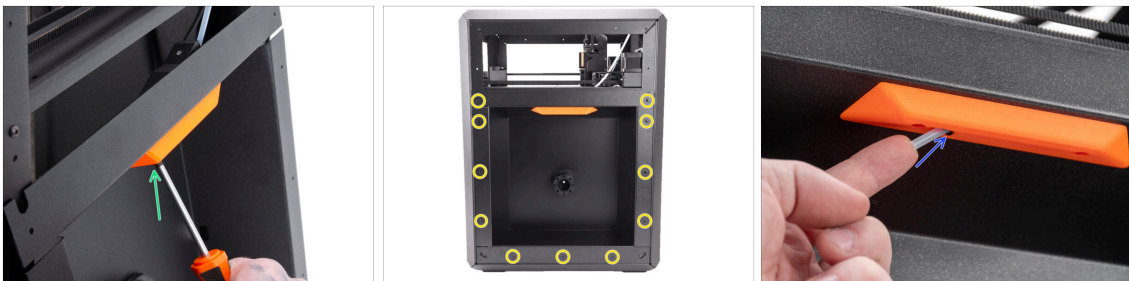
- Insert the collet into the handle.
- Push it all the way in.

## PASO 39 Montando el asa



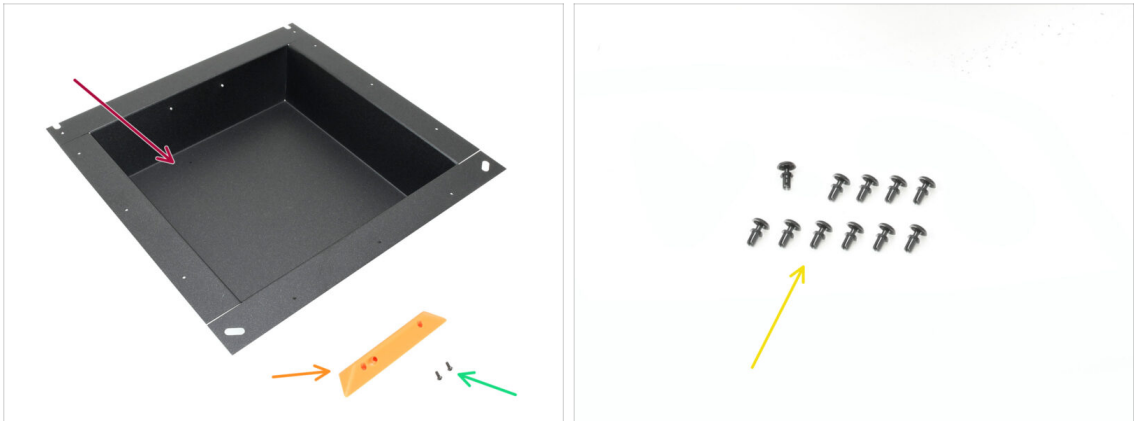
- ✦ Place the right-side metal sheet assembly on the right side of the printer. Ensure the U-shaped cutouts are facing upwards.
- ✦ Attach the right handle to the right metal sheet.
- ✦ Push one M3x8rT screw through the rear hole in the handle and the metal sheet.
- ✦ Attach the side filament sensor assembly on the screw.
- ⚠ **Do not pull the side sensor assembly too far; bring the right side metal sheet as close as possible.**
- ✦ Tighten the screw just slightly—the nut must remain free to move.
- ✦ Align the side filament sensor with the front screw hole in the metal sheet and the handle.

## PASO 40 Fixing the right side



- ✦ Using the second M3x8rT screw, secure the right handle and the side filament sensor to the right metal sheet.
- ✦ Secure the side sheet metal to the printer using the 11 Nylon rivets.
- ✦ Insert the short PTFE tube 4 x 2.5 x 45 into the collet. Push it all the way in.
- ⓘ Part of the PTFE tube will remain protruding from the handle.

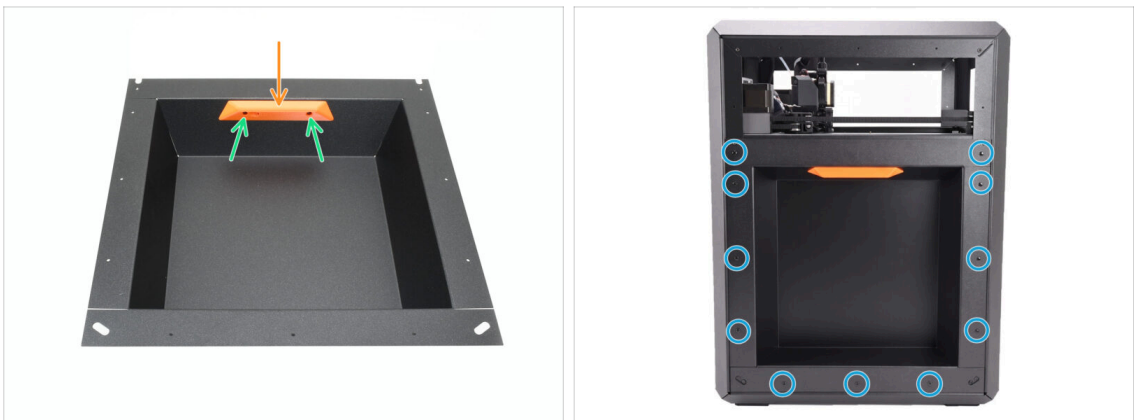
## PASO 41 Left side: parts preparation



● **For the following steps, prepare:**

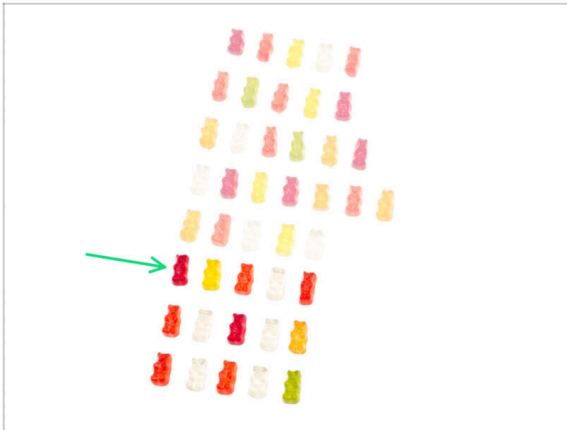
- Left side sheet metal (1x) *found in the Metal parts 2/3 package*
- Side Handle (1x) *found in the Printed parts package*
- Tornillo M3x5rT (2x)
- Remache de nylon (11x)

## PASO 42 Installing the left side



- Align the handle with the threaded openings in the sheet metal.
- Attach the handle using the two M3x5rT screws.
- Secure the side sheet metal to the printer using 11 nylon rivets.

## PASO 43 Momento Haribo



- Well done—fuel up for the next challenge!
- Eat the sixth row of gummy bears.
- We are getting close to the finish line! But **hands off those last gummies!**

## PASO 44 Listo



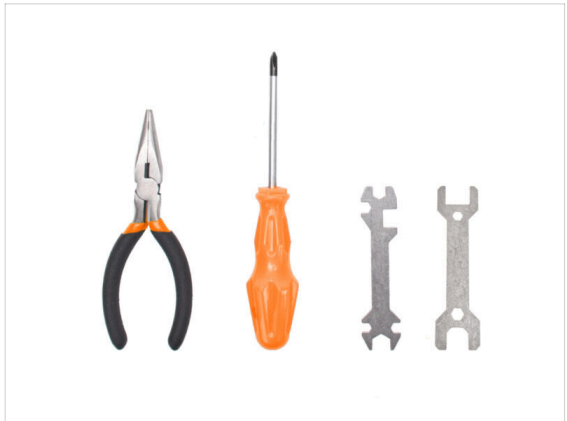
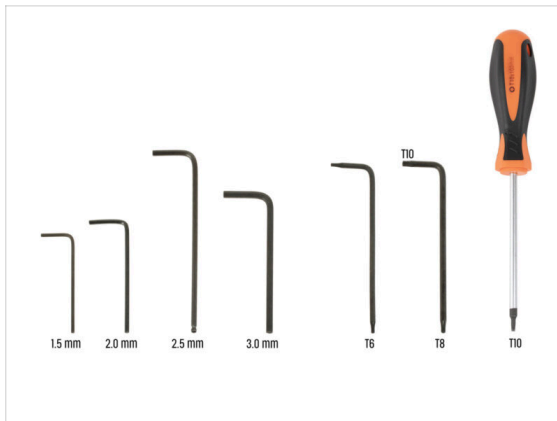
- Congratulations! You've successfully assembled the entire body.
- Let's move to the next chapter.

## 8. Trim, Door & xLCD





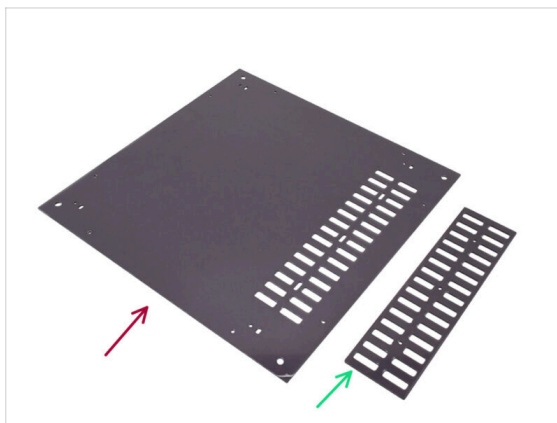
## PASO 1 Tools necessary for this chapter



● **For the following steps, prepare:**

- 2.5mm Allen Key
- T10 Torx Key
- Needle-nose pliers

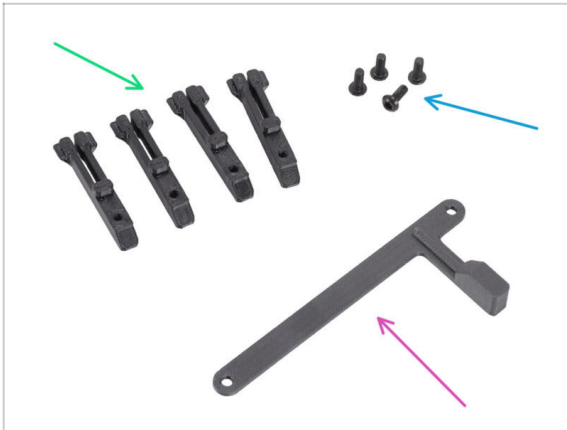
## PASO 2 Top cover: parts preparation I.



● **For the following steps, prepare:**

- Top cover (1x) *found in the Plexi set package*
- Vent cover (1x) *found in the Plexi set package*
- M3nN nut (3x)
- Insulating insert (3x) *found in the Electronics & Fasteners package*
- **i** This part may come in either gray or black. However, the shape is identical, and it does not affect the procedure.
- M3x12rT screw (3x)

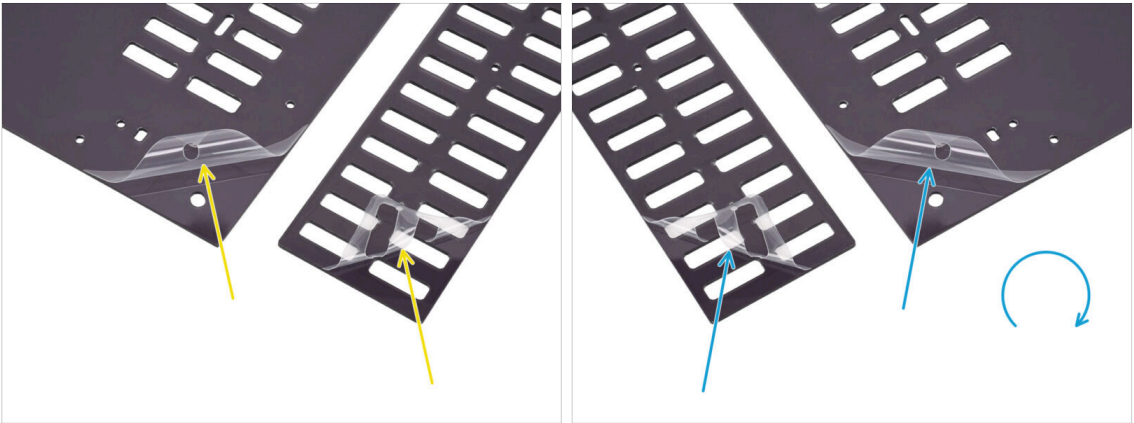
### PASO 3 Top cover: parts preparation II.



For the following steps, prepare:

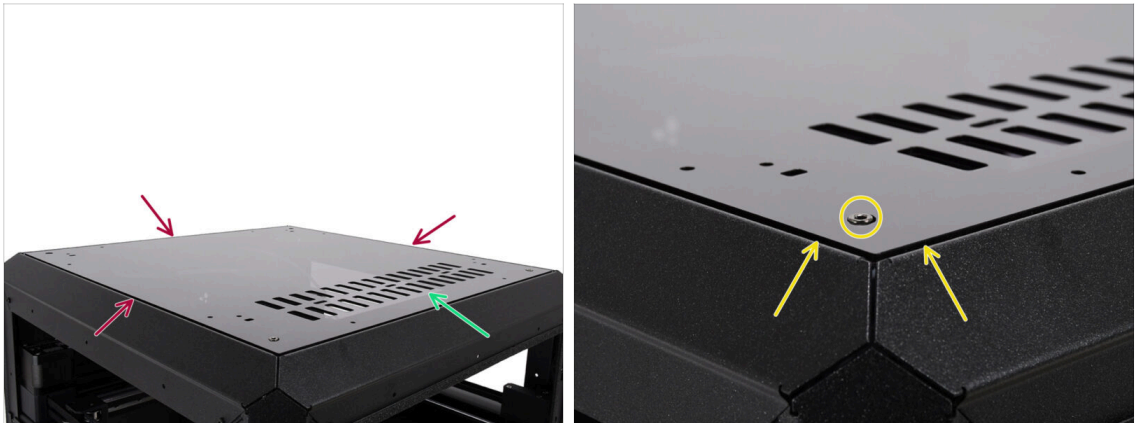
- Top cover latch (4x)
- Vent block (1x)
- M3x8rT screw (4x)

### PASO 4 Removing the foil



- First, remove the protection foil from both the plastic sheets.
- Flip the parts around and remove the protective foil from the other sides.

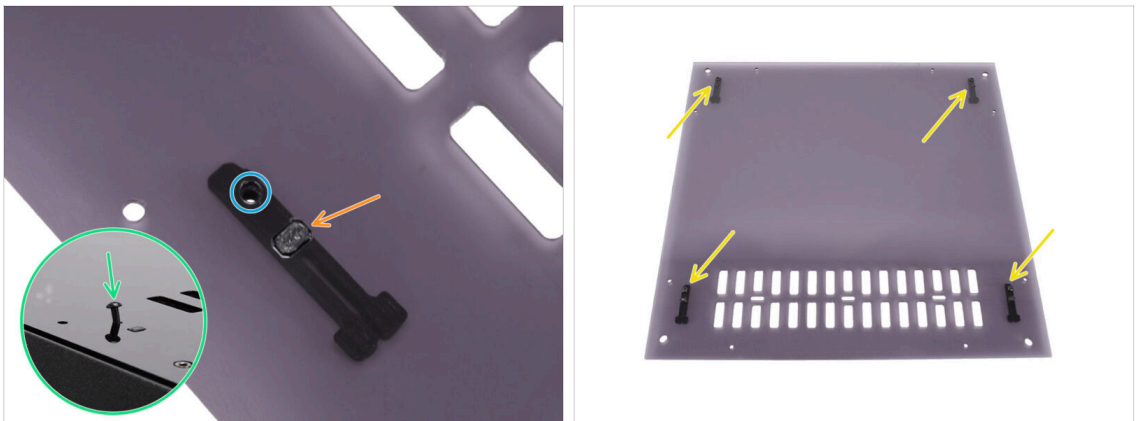
## PASO 5 Test-fitting the top cover



- 🔴 Lay down the top cover onto the printer.
- 🟢 The part with the vent openings should be oriented towards the front of the printer.
- 🟡 If oriented correctly, the cover will align with the recess, and the bolt heads in the corners will fit into the cutouts.
- 📄 ⓘ If the bolt openings don't align, flip the cover.

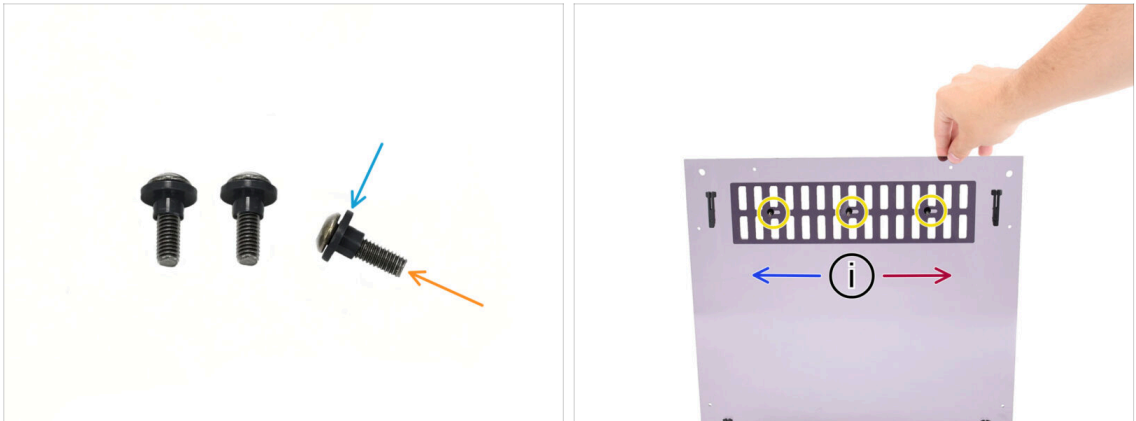
Spoiler alert: The cover isn't symmetrical!

## PASO 6 Assembling the top cover I.



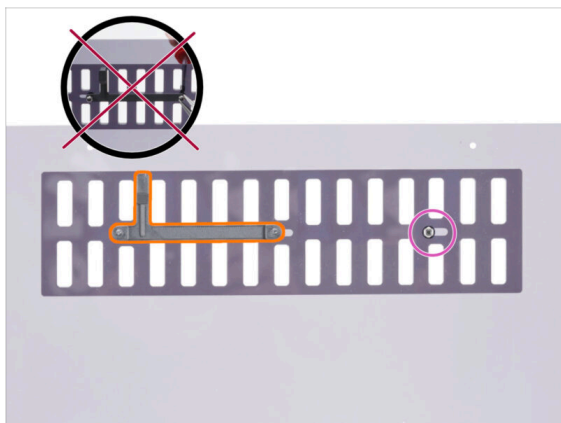
- 🟠 Push the Top cover latch notch through the designated hole.
- 🔵 Make sure it is orientated correctly so the holes align.
- 🟢 Tighten with a M3x8rT screw.
- 🟡 Repeat on all four corners

## PASO 7 Assembling the top cover II.



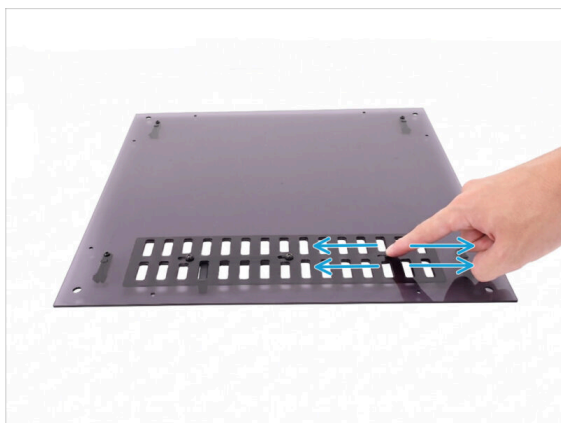
- Run all three M3x12rT screws through the insulating inserts.
- Make sure the flanged part of the insert is oriented toward the screw head.
- Insert the screws with the inserts through the three slot openings in the vent and align the vent cover.
- ⓘ Note that the vent cover is not symmetrical; **ensure that it is positioned as shown in the photos.**
  - Sliding the vent cover to the left will open it.
  - Sliding the vent cover to the right will close it.

## PASO 8 Assembling the top cover III.



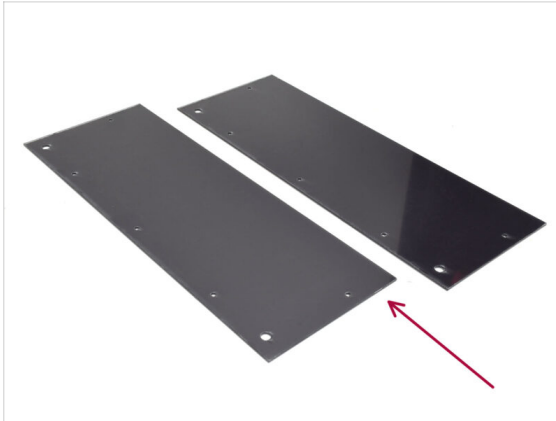
- ✦ Hand-tighten the rightmost M3xN nut onto the M3x12rT screw to fix the cover in place. Do not tighten it fully.
- ✦ Attach the Upg-vent-block to the ventilation cover. Make sure that it is positioned correctly. Ensure that the vent block never overlaps with the opened vent.
- ❗ The Upg-vent-block lever will face inside the printer so that the printhead can open and close the vent cover.
- ✦ Secure the Upg-vent-block on the ventilation cover with M3xN nuts. Use the needle-nose pliers or universal wrench to hold the nuts while tightening the screws.
- ⚠ The screw must be just tight enough to remove the slack. It must remain loose, or the ventilation cover can not open and close properly.

## PASO 9 Installing the top cover



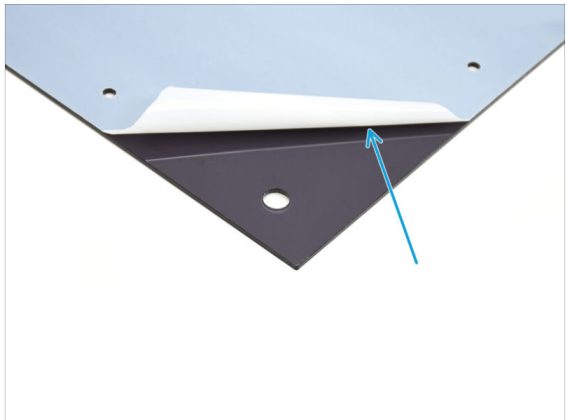
- ✦ Try moving one of the three screws with your hand.
- ❗ The vent openings must open and close smoothly without effort.
- ⚠ If movement is difficult, loosen the screw that is restricting it.
- ✦ Align the cover with the recess on the printer, ensuring the vent points forward.
- ❗ Some force is required for the Top cover latches to snap onto the frame.

## PASO 10 Side covers: parts preparation



- For the following steps, prepare:
- Side Cover (2x) *found in the Plexi set package*
- Nylon Rivet (10x)

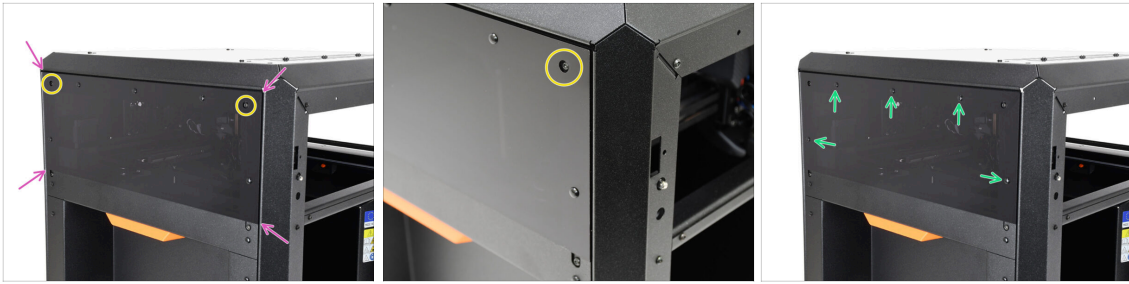
## PASO 11 Removing the foil



- Remove the protective foil from both the side covers.
- Remove the protective foil from the other sides of both the side covers.



## PASO 12 Covering the left side



- Align the cover with the recess on the left side of the printer.
- The protruding screws on the printer must align with the larger openings in the cover.
- Secure the cover to the frame using five nylon rivets in the marked openings.

## PASO 13 Covering the right side



- Align the other cover with the recess on the right side of the printer.
- Secure the cover to the frame using five nylon rivets in the marked openings.

## PASO 14 xLCD: parts preparation



- **For the following steps, prepare:**
- xLCD (1x) found in the *Electronics package*
  - xLCD Front Cover (1x) found in the *Printed parts package*
  - xLCD Display-mount (1x) found in the *Printed parts package*
  - Knob (1x) found in the *Printed parts package*
  - 3x8sT Screw (4x)
  - Faston connector (1x) found in the *Electronics package*

## PASO 15 Assembling the xLCD I.



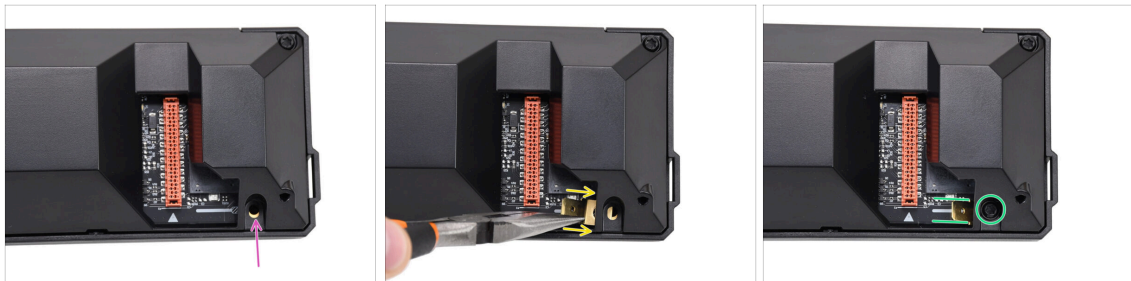
- We recommend placing the front cover face down on a cardboard box edge or desk to create space for the encoder knob.
- Remove the protective foil from the xLCD.
- Insert the xLCD into the front cover.

## PASO 16 Assembling the xLCD II.



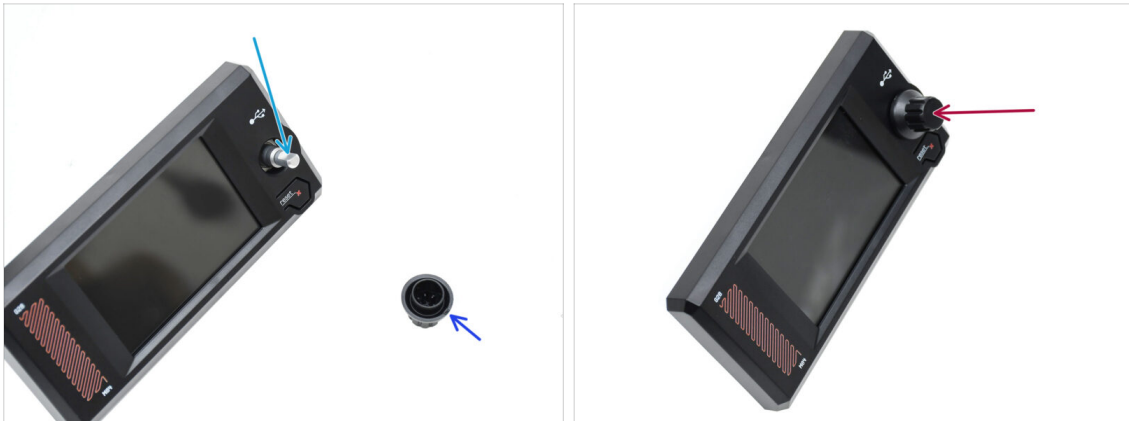
- Cover the assembly with the rear part.
  - If you have an older version of the printed rear cover, it must hook by the xLCD itself in the corner. With the up-to-date version, the rear part can be simply laid down.
- Fix the parts together using **JUST THREE** 3x8sT screws in the marked openings.
  - ⚠ Do not insert the screw into the fourth opening next to the long slot for the xLCD connector, visible through the cutout. Leave it empty for now.

## PASO 17 Installing the FE Faston connector



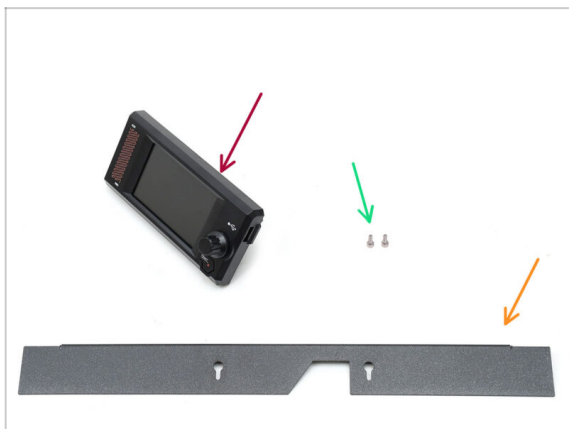
- Let's move on to the fourth screw opening—this is where we will attach the grounding faston connector.
  - Using needle-nose pliers, carefully maneuver the grounding faston connector over the screw opening, ensuring the holes line up.
  - Secure the connector in place using one 3x8sT screw, making sure it stays lined up as indicated.
  - ⚠ To prevent damaging some of the surrounding electronic components, be careful and make sure the connector doesn't spin, while tightening it.

## PASO 18 Installing the LCD knob



- There is a flat part on the encoder shaft. Rotate the encoder so that the flat part is facing up.
- There is a small gate scar on the injection-molded knob, which can serve as an orientation mark.
- Attach the knob onto the shaft, making sure the mark on the knob is facing up.

## PASO 19 xLCD bezel: parts preparation



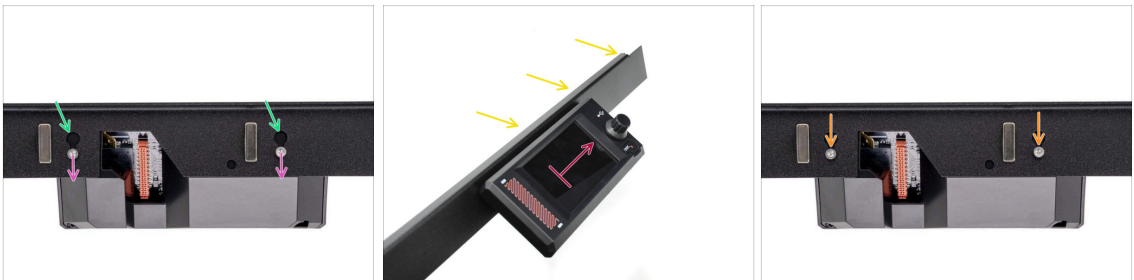
- **For the following steps, prepare:**
- xLCD (1x) *found in the Electronics package*
- M3x6 screw (2x)
- Bezel (1x) *found in the Metal parts 2/3 package*

## PASO 20 Mounting the xLCD I.



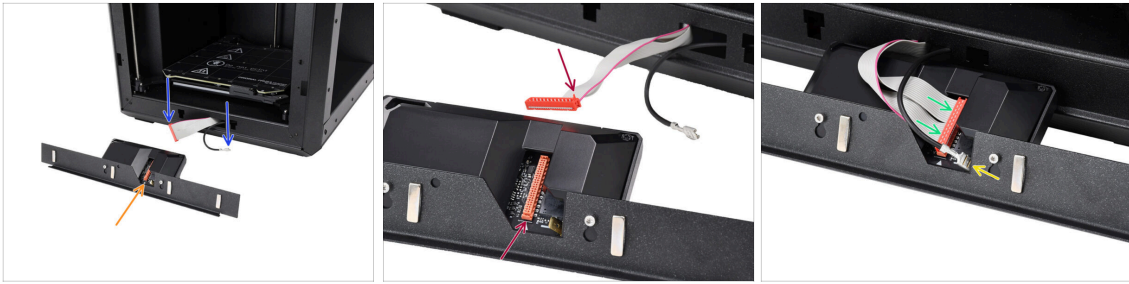
- Attach two M3x6 screws into the openings. Do not screw them all the way in.
- ① Screws thread directly into the plastic, so **slight resistance is normal**.
- Leave a gap of at least 3 mm under the screw heads.

## PASO 21 Mounting the xLCD II.



- Hook up the xLCD assembly onto the Bezel.
- Insert the screw heads into the keyhole openings.
- Slide the xLCD assembly so that the screw heads engage into the narrower parts of the keyholes.
- If assembled correctly, the LCD should be pointing up...
- ...While the bent lip on the Bezel is on top.
- Push the screws all the way into the narrow part of the keyhole on both sides. Then, tighten the screws.

## PASO 22 Installing the xLCD assembly



- Put the xLCD assembly in front of the printer, as pictured.
- Pull the appropriate cables out from the front of the printer to make connecting them easier.
- There is a small red tab on the main connector. This tab must be oriented towards the triangle symbol on the PCB.
- Connect the main connector into the xLCD.
- Connect the grounding faston connector.

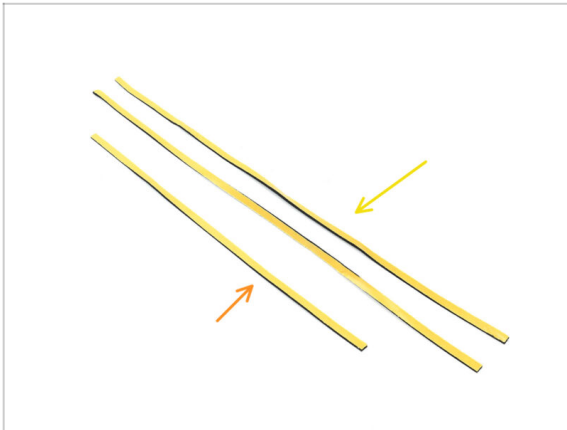
## PASO 23 Securing the xLCD assembly



- Gently lift the xLCD assembly into the upward position.
- ⚠ Proceed carefully to ensure none of the cables get pinched or disconnected.**
- Hook the tiny tab on the left side of the bezel behind the left vertical profile of the printer.
- Gently lift the bottom part of the xLCD assembly to allow for smoother tab engagement and extra wiggle room.
- Hook the tab on the right side into the printer's right profile.



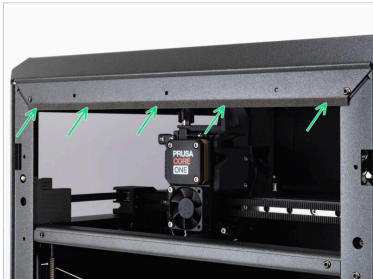
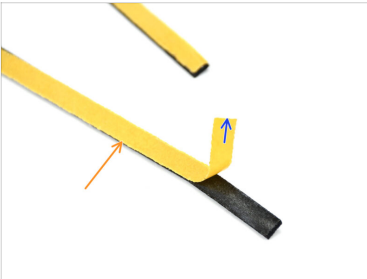
## PASO 24 Door seal: parts preparation



### For the following steps, prepare:

- Side door seal (2x), longer ones found in the *Electronics & Fasteners* package
- Top door seal (1x), a shorter one found in the *Electronics & Fasteners* package
- i The color of the protective layer may vary.

## PASO 25 Attaching the top seal



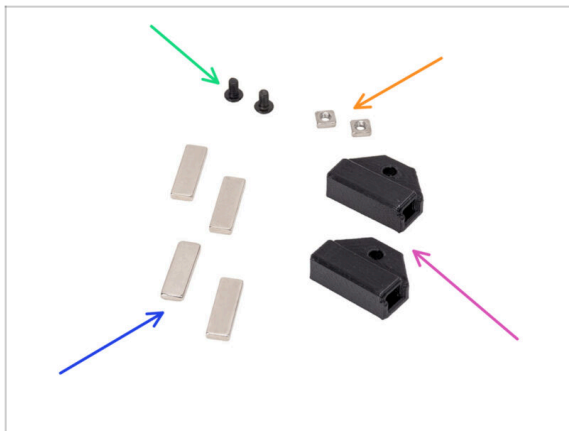
- Take the **SHORTER** seal.
- Peel off the start of the protective foil. No need to remove it entirely yet.
  - i No need to remove it entirely yet. For easier installation, you can peel it off gradually as you go.
- Start applying the seal along the top edge of the printer's frame.
  - Begin offset from the corner by a distance equal to the seal thickness.
- Apply the seal along the top edge, leaving the end offset from the corner, just like on the other side.

## PASO 26 Attaching the side seals



- Apply the longer door seal, starting from the end of the seal on top.
- Work your way from the top down.
- ① Use the needle-nose pliers to trim any excess seal that overlaps with the LCD panel at the bottom.
- Using the same technique, apply the remaining long seal along the left edge of the printer's frame.

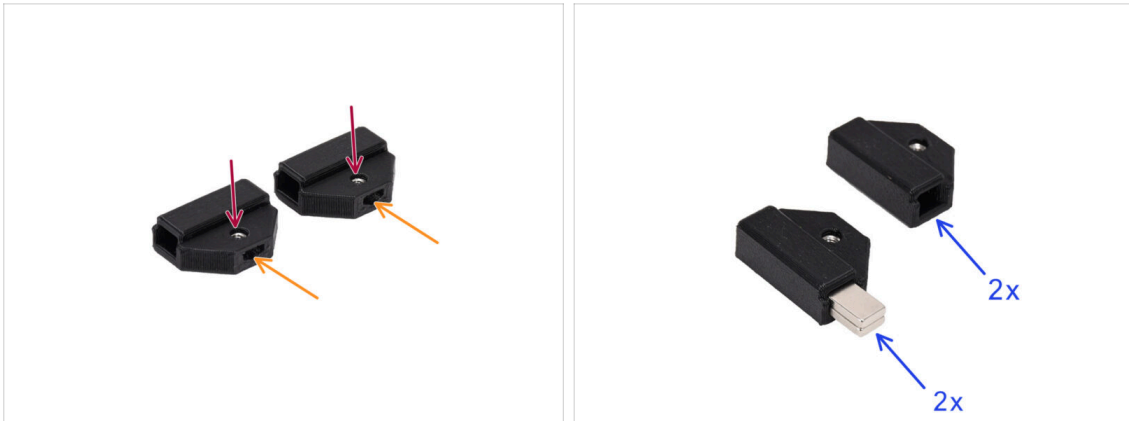
## PASO 27 Magnet holders: parts preparation



● For the following steps, prepare:

- M3x5rT screw (2x)
- M3nS nut (2x)
- 20x6x2 Magnet (4x) found in the Electronics & Fasteners package
- ⚠ **Keep the magnets apart at a sufficient distance. They can break each other!**
- Magnet Holder (2x) found in the Printed parts package

## PASO 28 Assembling the magnet holders



- ✚ Insert the M3nS nuts into the corresponding openings in the magnet holders.
- 🔴 Push the nuts all the way in, until the thread aligns with the screw opening.
- 🔵 Insert **two magnets** stacked on each other into the corresponding pockets in the holders. Push them all the way in.
- 📘 The orientation of the magnets does not matter.

## PASO 29 Installing the magnet holders



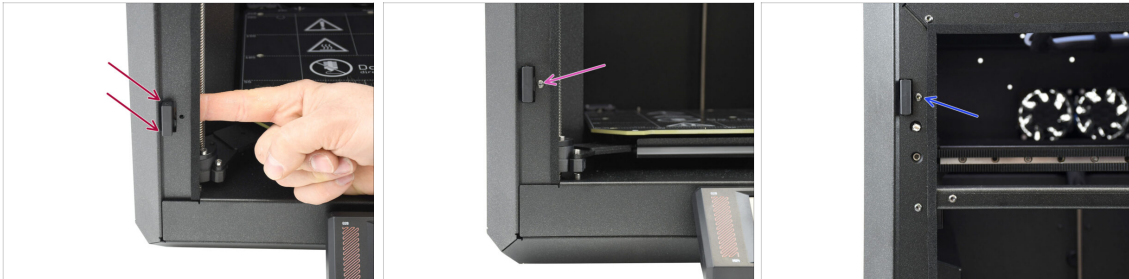
- 🟡 From the inside of the printer, insert the magnet holder assembly into the corresponding bottom opening in the right-side metal profile.
- ⚠️ Ensure the protruding rectangular pocket fits into the cutout.
- 🟢 Secure the assembly in place using the M3x5rT screw.
- 🔵 Using the same technique, install the other magnet holder into the top opening on the right side.

## PASO 30 Hinges: parts preparation



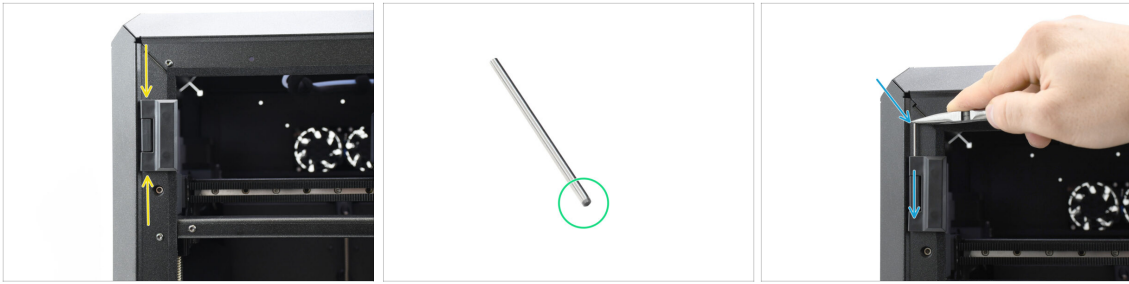
- For the following steps, prepare:
- Door-hinge-in (2x) found in the CoreXY + Hinges set package
  - Door-hinge-out (2x) found in the CoreXY + Hinges set package
  - Hinge Pin 2 x 40 mm (2x) found in the Electronics & Fasteners package
  - M3x5rT screw (2x)

## PASO 31 Installing the door-hinge-in parts



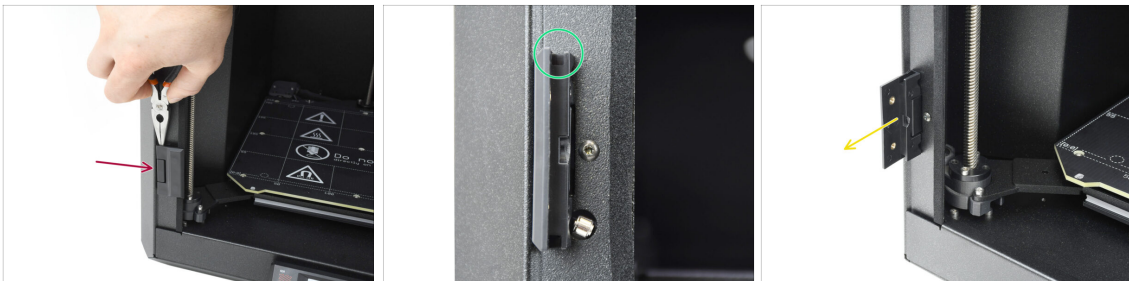
- From the inside of the printer, insert the door-hinge-in into the bottom rectangular opening in the left-side profile. The protruding part should pass through to the front.
- Fix the door-hinge-in in place using the M3x5rT screw.
- Using the same technique, install the other door-hinge-in into the opening on top.

### PASO 32 Installing the door-hinge-out I.



- ✦ Align the door-hinge-out with the door-hinge-in.
- ✦ The chamfered end of the hinge pin should be inserted first to make assembly easier.
- ✦ Insert the pin from the top of the door-hinge-out, guiding it through the door-hinge-in until it is fully inserted.
- ❗ Use the tip of needle-nose pliers to press the pin in securely.

### PASO 33 Installing the door-hinge-out II.



- ✦ Using the same technique, install the bottom door-hinge-out to complete the hinge assembly.
  - ✦ Look into the grooves on the door-hinge-out parts and verify that the pins are fully inserted.
- No part of the pin should be visible above the bottom surface in the groove.
- ✦ Open up both the hinges.

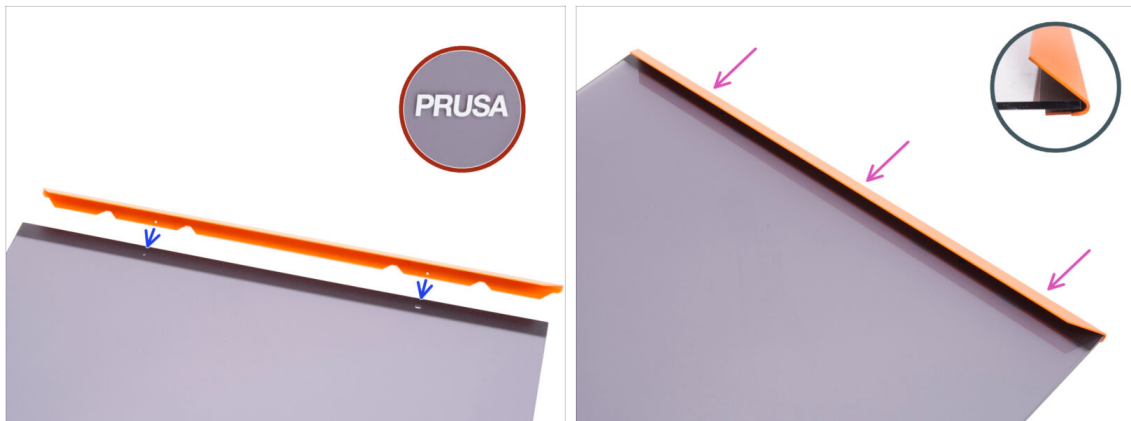
## PASO 34 Door panel: parts preparation



### For the following steps, prepare:

- Door (1x) found in the Plexi set package
- ❗ The door panel is pre-labeled **CORE ONE+**. Do not worry, **this is intended!** You will apply the Gen 2 upgrade + decal as the final step.
- Door handle (1x) found in the Metal parts 2/3 package
- M3x5rT screw (4x)
- Door handle plate (1x) found in the Metal parts 2/3 package
- M3x8rT screw (2x)

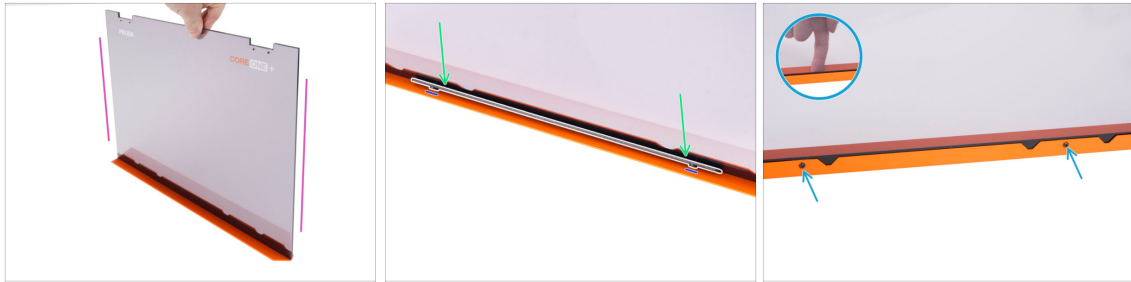
## PASO 35 Installing the door handle



- Place the door handle next to the door panel, as shown in the picture.
- ⚠ **Make sure the Prusa logo is now on the top side.**
- Align the holes in the door handle with the holes in the door panel.
- Slide the door handle onto the panel.



## PASO 36 Securing the handle



- ✿ Lift the door panel into a vertical position and hold it steady.
- ✿ Insert the door handle plate into the grip side of the handle (the outward-tilting side).
- ✿ Make sure the threaded columns on the plate face **away from the panel**.
- ✿ Align these columns with the screw holes in the door panel and the door handle. Secure the handle with two M3x8rT screws. Tighten firmly, but gently.

## PASO 37 Installing the door panel



- ✿ Align the door with the hinges. The cutouts on the door should fit into the grooves on top and bottom of the leaves.
- ✿ Make sure the door is oriented so that the signs on the door are pointing outward.
- ✿ Slide the door all the way into both the hinges.
- ✿ Fix the door to the hinges using four M3x5rT screws. Start with the top one. Then, do the bottom.

### PASO 38 Attaching the sticker: Parts preparation



● For the following step, prepare:

- CORE One+ plexi sticker

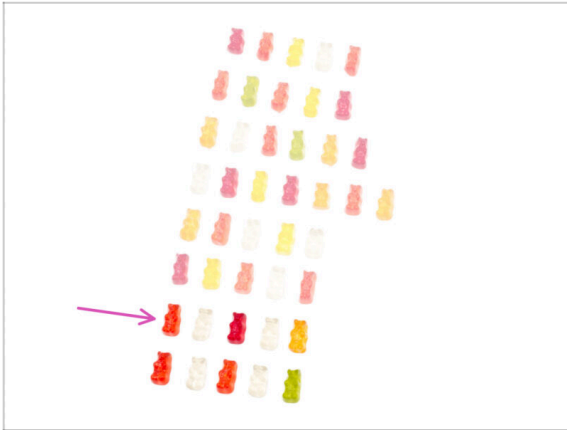
### PASO 39 Attaching the sticker



- Remove the sticker from the blue base.
- Align the sticker with the **ONE** and gently but firmly apply pressure on the sticker.
- Carefully peel off the transparent layer and make sure that + is not peeling off.

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## PASO 40 Haribo time



- Hard work deserves sweet results!
- Eat the seventh row.
- ⚠ But do not eat the rest yet.

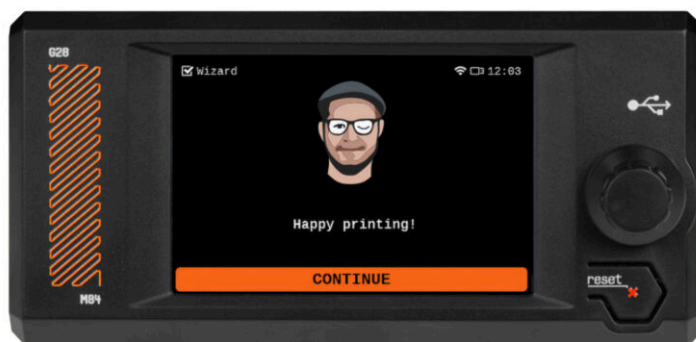
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## PASO 41 Done

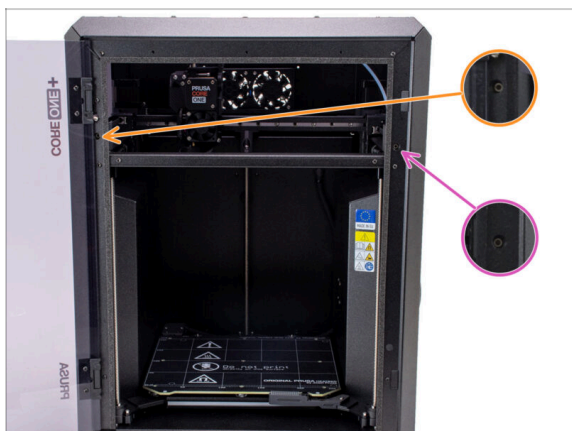


- Congratulations! You have successfully assembled your Prusa CORE One+ Gen 2.
- Let's move to the final chapter.

## 9. Calibration & First run



## PASO 1 Belt tensioning



**i** This chapter will guide you through calibrating and preparing the printer for its first run. Starting with tensioning the belts:

🟡 The left screw adjusts the upper belt.

🟣 The right screw adjusts the lower belt.

⬛ Double-check that the **M3x30 screws in the belt tensioners were lubricated** during assembly.

**⚠️ WARNING: Incorrect procedure may result in damage to plastic parts or seizing of screws. Before adjusting the belt tension, read the dedicated article:**

⬛ **Adjusting belt tension (CORE One family)**

📌 Do not forget to come back here after adjusting the belts.

## PASO 2 Installing the spoolholder: Parts preparation



⬛ For the next step, prepare:

🟡 O-ring

🟢 Spoolholder handle

**i** The spool holder and the O-ring are in the same bag.

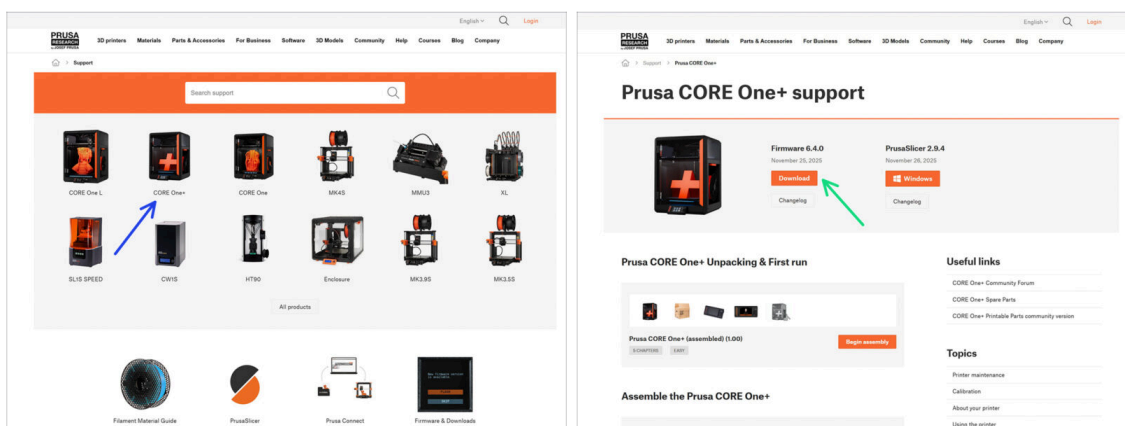
## PASO 3 Attaching the print sheet and spoolholder



**⚠ Make sure there is nothing on the heatbed.** The heatbed must be clean. Any dirt can damage the surface of both the heatbed and the print sheet.

- **Attach the sheet by first aligning the rear cutout with the locking pins on the back of the heated bed.** Hold the sheet by the front two corners and slowly lay it down onto the heated bed - **watch your fingers!**
  - Keep the print sheet clean for optimum performance.
  - #1 cause of prints detaching from the print surface is a greasy print sheet. Use IPA (Isopropyl alcohol) to degrease it if you have touched its surface before.
- Put the O-ring onto the Spoolholder handle
- Push the Spoolholder handle into the Spoolholder puck dock and lock it in by turning it clockwise.

## PASO 4 Firmware update



- i** All printers come with a USB drive containing the latest firmware. However, it is recommended to check and possibly upgrade the firmware version every few weeks.
- Visit the [help.prusa3d.com](https://help.prusa3d.com) page.
  - Navigate to the Prusa CORE One+ page.
  - Download the latest firmware version.
  - Save the firmware file (*.bbf*) onto the *bundled USB drive*.

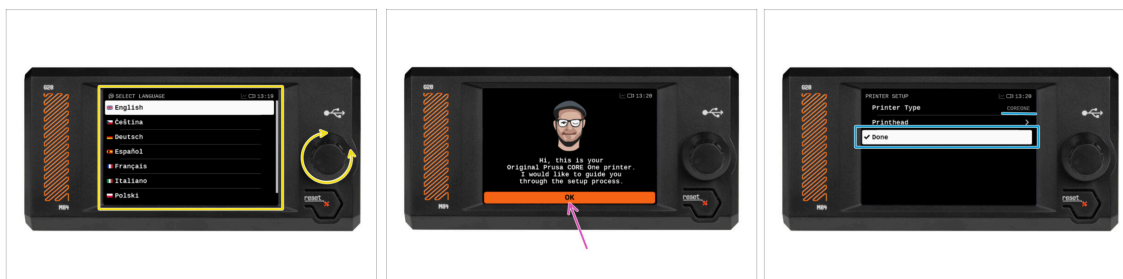


## PASO 5 Turning on the printer



- ✿ Insert the USB drive included in your kit into your printer.
- ❗ The included USB drive contains the latest firmware file.
- ✿ Connect the power cable and plug the printer into a wall outlet.
- ✿ Turn the printer on using the switch on the back.
- ❗ The printer will now detect if a new firmware file is available on the USB drive.
- ✿ If the "New firmware available" screen appears, hit **FLASH** by pressing the rotary knob to upgrade to the latest firmware.
- ✿ If no such message appears, the printer is running the latest firmware already. Proceed to the next step.

## PASO 6 Setting up the printer: Intro



- ✿ The printer displays on the screen a prompt to select your language. Use the control knob or touchscreen to set your preference.
- ✿ After selecting your language, the printer will display the welcome screen. Hit **OK** to continue through the setup process.
- ✿ The next screen will prompt you to select your printer model COREONE. Hit **Done** to continue.

## PASO 7 Setting up the printer: Network setup



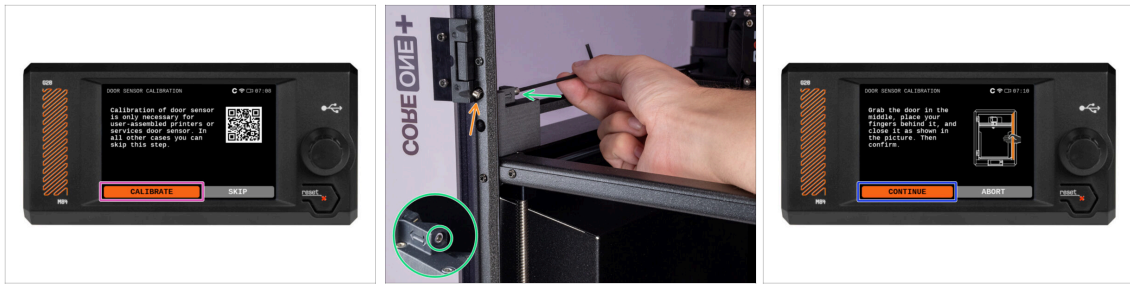
- The Network Setup screen will ask you to connect to a Wi-Fi network using our official Prusa mobile app.
- ① Read more on [prusa.io/app](https://prusa.io/app).
- If you select **No**, the printer will show alternative ways to connect to Wi-Fi. This step is optional and can be done later.
- ① You can skip this screen and set up the network connection later.

## PASO 8 Wizard: Intro



- ① The printer will prompt you to run self-tests and calibrations for all important components. The entire process takes a few minutes, with some parts requiring direct user interaction.
- Hit **YES** to begin the self-test and follow the instructions on screen.
- ⚠ During the self-test, **keep the door closed** until you are prompted. Opening the door will interrupt the process.
- There are **HOT** and moving parts inside during the self-test.
- The printer will begin by testing all the fans. **Be aware—it can get quite noisy for a while!**

## PASO 9 Wizard: Door Sensor Calibration



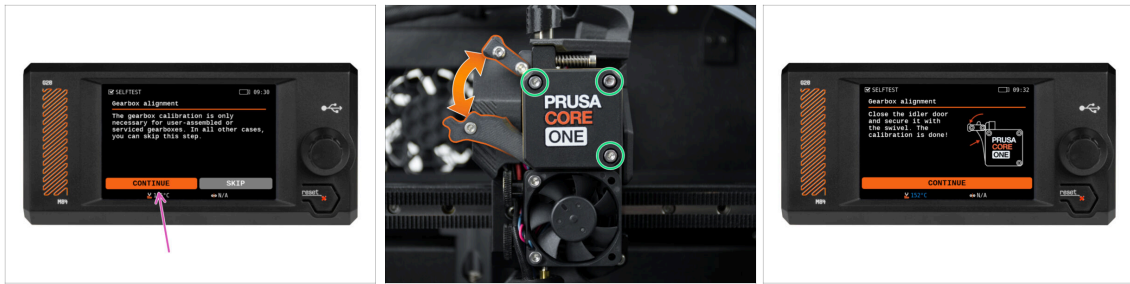
- ✿ The first part that requires your interaction is the door sensor calibration. To begin, hit **Calibrate** and follow the on-screen instructions.
- ✿ You'll be prompted to gradually tighten the sensor tension screw from its default loose position - usually in half-turn steps, possibly several times during calibration.
  - ✿ After each adjustment, observe the door sensor switch emerging from the front profile hole.
- ✿ Repeat the procedure until the door sensor is correctly adjusted - meaning it switches at a hand-gap distance. Then hit **Continue**.
- ❗ Once the sensor is properly calibrated, you should hear an audible click from the door sensor area when opening and closing the door.

## PASO 10 Wizard: Loadcell Test



- ✿ The next step of the wizard will prompt you to touch the nozzle to test and calibrate the Loadcell. During this procedure, the **parts of the printer are not heated up** so that you can touch them. Hit **Continue**.
- ❗ Loadcell calibration requires the door to be open, as you must interact directly inside the printer.
  - ✿ Do not touch the nozzle yet, wait until prompted by the **Tap nozzle NOW** message.
  - ✿ Tap the nozzle from below. In case the Loadcell does not detect the touch, you will be prompted to repeat the step. Otherwise, you will see **Loadcell test passed OK** when it succeeds.
  - ✿ To allow the printer to continue with the Wizard, **close the door**.

## PASO 11 Wizard: Gearbox Alignment



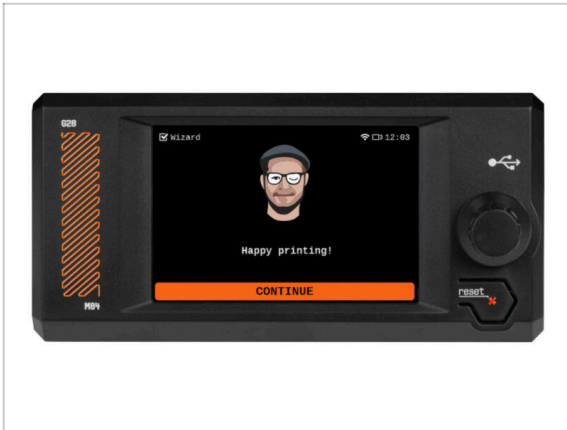
- ✦ Once you get to the Gearbox Alignment part, select **Continue** and follow the on-screen instructions.
- ✦ Make sure the idler lock (swivel) is unlocked from the idler door.
- ✦ Loosen the three screws on the front of the gearbox by 1.5 turns.
- ❗ The printer will go through the automatic gearbox alignment. This process can't be seen from the outside.
- ⬛ Once prompted, tighten the three screws in the pattern indicated on the screen.

## PASO 12 Wizard: Filament Sensor Calibration



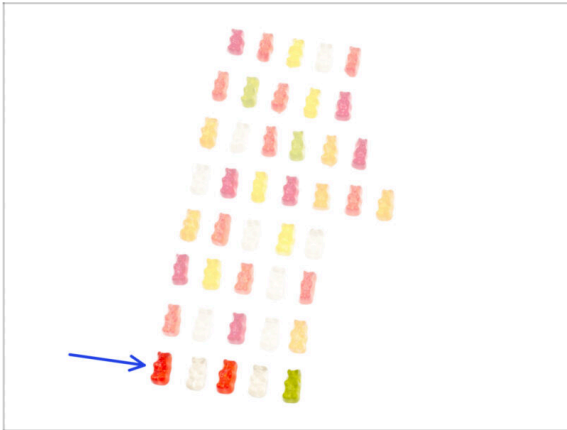
- ✦ Check the manual switch on the filament sensor. **Make sure that it is ON.**
- ✦ During the filament sensor calibration, you will need to use a short piece of filament. Prepare the filament and select **Continue**.
- ❗ There should be no filament inside the extruder before the calibration process starts.
- ✦ Place a spool of filament onto the spool holder on the right side of the printer.
- ✦ When prompted, begin inserting the filament into the PTFE tube located beneath the right handle.
- ⬛ Remove the filament after the calibration finishes.

## PASO 13 Wizard complete



- Congratulations! The Wizard is complete. Now it's time to test some prints.

## PASO 14 Haribo time



- Victory tastes like gummy bears!
- Enjoy the rest. You've earned this.

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## PASO 15 Handbook



- Read the **3D Printing Handbook** dedicated to your printer and follow the instructions to set up the printer and prepare it for your first print.



The latest version is always available at [help.prusa3d.com](https://help.prusa3d.com).



**Read the Disclaimer and Safety instructions chapters.**

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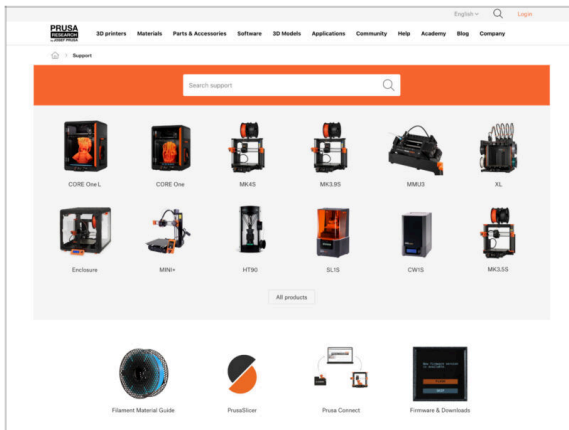
## PASO 16 Give us feedback



- We know you're eager to start printing, but we'd really appreciate it if you could take 3–4 minutes to **share your thoughts** on this manual: how clear it was, how easy it was to follow, and any ideas to improve it.
  - ① This feedback is a little different from the usual comments you might leave on individual steps.
- **Share your feedback here.**
- Thank you for helping us make our manuals even better!



### PASO 17 Prusa knowledge base

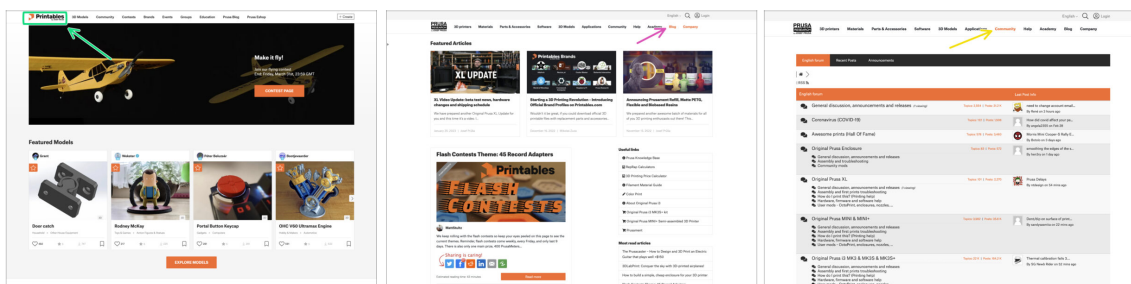


If you encounter any problems at all, don't forget you can always check out our knowledge base at [help.prusa3d.com](https://help.prusa3d.com)



We're adding new topics every day!

### PASO 18 Join Printables!



-  Don't forget to join the biggest Prusa community! Download the latest models in STL or G-code tailored for your printer. Register at [Printables.com](https://printables.com)
-  Looking for inspiration on new projects? Check our blog for weekly updates.
-  If you need help with the build, check out our forum with a great community :-)
-  All Prusa services share one user account.

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## This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a guide for handwriting or typing. The background is a clean, solid white color. There are no margins, text, or other markings present on the page.



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