

<b>Title</b>	Trident_1-9_complementary_3dPartsBuild_doco (Proposed future filename)
<b>File name</b>	Voron_1.9_3dprinting_guide.pdf (You put . In a filename?)
<b>Date</b>	2021-12-31 (Unofficial version number)
<b>Status</b>	<b>Ongoing</b> - Document being added to as I build my Trident
<b>Copy-rite</b>	None. Free domain. Be free. Fly my pretties. FLY!
<b>Warranty</b>	None. Use at own risk. For entertainment purposes only.
<b>Authors</b>	Stephen George, Claudermilk (Major proof read and error checking)

### **Introduction**

Use this guide to print the parts as you need them, possibly the night before.

### **Latest version?**

I tend to rush the first draft out. To get the latest V. Goto URL below and check the date.

[https://github.com/LesserSpottedAustralianSquirrel/voron\\_trident\\_pics/blob/main/Voron\\_1.9\\_trident\\_3dprinting\\_guide.pdf](https://github.com/LesserSpottedAustralianSquirrel/voron_trident_pics/blob/main/Voron_1.9_trident_3dprinting_guide.pdf)

### **Print parameters** (More details on page 4 of official Trident manual)

Material ABS, Infill gyroid, Infill 40% Layer\_height 0.2mm, Wall\_count 4, Top/bottom layers 5, Nossle/Nozzle 0.4mm

**My prints:** (for Prusa mini): Brim yes 5mm, Ironing yes, first layer 10 mm/s, infill grid  
NB: Many of the Voron parts “mate” together. I found that a light sand papering helped allow these parts to mate. Another idea: enable “ironing” in your slicer. (update :“oh yeah”).  
NB: I used a Prusa mini (bed flinger) to print parts & had to use a plumbers deburring tool (from hardware shop) & sometimes a craft knife, to remove the elephants foot like effect and brim.

### **The Rules**

The first time a picture of a part is shown in the official instructions it's added to the list. After that it's ignored as you should have already printed it.

### **The Machine the parts are for**

Building Formbot kit, 250 x 250, Direct feed, Dragon High Flow, 3 hole cable chain.

### **Keeping track**

The Printed ☐ tick box, under the picture, allows you to print out this pdf and tick off the parts as they come off the printer. Anyone know how to make them PDF tick able? So we don't have to print doco out, but can just tick and save the electronic PDF to keep track?

### **Future Improvements to this doc**

3) Add time of print using a Prusa mini as a guide.


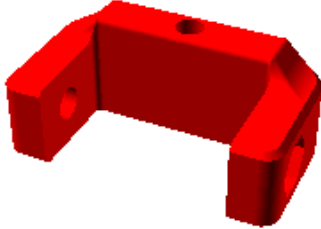
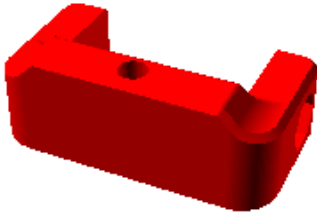
4) Add AA (anti-aliasing) to images using gimp and scripts

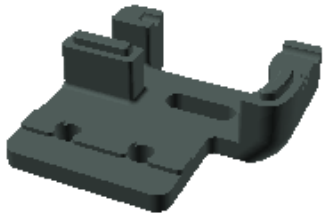
Thanks for all the great ideas. Even if I have not had time (yet) to implement them all.

[https://old.reddit.com/r/VORONDesign/comments/rc8wcb/voron\\_trident\\_printing\\_guide\\_very\\_very\\_draft\\_and/](https://old.reddit.com/r/VORONDesign/comments/rc8wcb/voron_trident_printing_guide_very_very_draft_and/)

### **Notes**

This is fan base documentation. The official document take precedence in any conflict of information or technical detail.

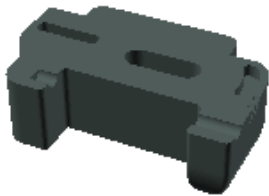
Picture	Details	Comment
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/AB_Drive_Units</p> <p><b>Filename</b> a_drive_frame_upper</p> <p><b>Page Number</b> 26</p>	<p>And so it begins</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ Front_Idlers</p> <p><b>Filename</b> [a]_tensioner_left</p> <p><b>Page number</b> 27</p>	<p>NB Page 27 “Look for asterix next to the part. It indicates that this is an accent part.”</p> <p>Except * is not a good character in a file name, so they changed it to Files starting with [a]</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ Front_Idlers</p> <p><b>Filename</b> [a]_tensioner_right</p> <p><b>Page number</b> 27</p>	<p>Joke alert Don't print part rm *</p> <p>If you have no idea what I am talking about please ignore this note</p>
	<p><b>Directory</b> STLs/Gantry/ Front_Idlers</p> <p><b>Filename</b> front_idler_a_x2</p>	<p>x2</p>



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**Page number**  
28



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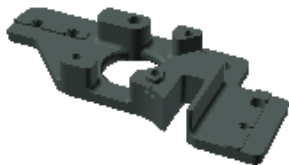
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**Directory**  
STLs/Gantry/  
Front\_Idlers

**Filename**  
front\_idler\_b\_x2

**Page number**  
28

x2



Printed?

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**Directory**  
STLs/Gantry/AB\_Drive\_Units

**Filename**  
a\_drive\_frame\_lower

**Page number**  
34



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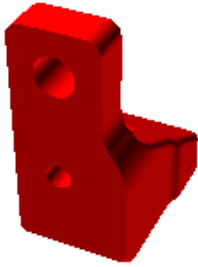
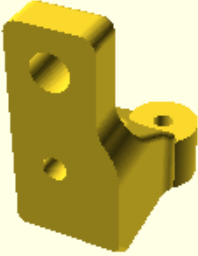
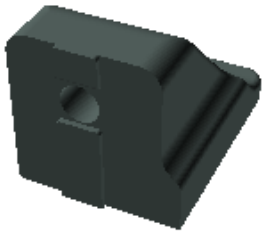
**Directory**  
STLs/Tools

**Filename**  
AB\_pulley\_jig

**Page number**  
35

Tool

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/AB_Drive_Units</p> <p><b>Filename</b> b_drive_frame_lower</p> <p><b>Page number</b> 37</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/AB_Drive_Units</p> <p><b>Filename</b> b_drive_frame_upper</p> <p><b>Page number</b> 38</p>	
	<p>T-Nuts M5 AKA “Roll in” T nuts</p> <p><b>Page number</b> 44</p>	<p>They don't have to go into the end.</p> <p>They can be “rolled in”.</p> <p>No need to disassemble frame.</p>
	<p>Warning Lone M3 on page.</p> <p>Pretending to be M5</p> <p><b>Page number</b> 44</p>	<p>Beware Of of the lone lone M3 T-nut.</p> <p>Which I read as an M5 and had to get it back out.</p>

 <p>Printed?</p> <input type="checkbox"/>	<p><b>Directory</b> STLs/Gantry/AB_Drive_Units</p> <p><b>Filename</b> [a]_y_endstop_bumper</p> <p><b>Page number</b> 50</p> <p>Used for microswitches or magnets/hall effect endstop</p>	<p>Formbot kit came with magnets not microswitches</p> <p>Issue the tab is suppose to be removed to insert magnet. I failed to print it well enough to do this.</p>
 <p>Non Stock part</p>	<p><b>Non stock part to fit magnet</b></p> <p>Repository (all files) <a href="https://github.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder">https://github.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder</a></p> <p>The Model <a href="https://github.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder/blob/main/endstop2.stl">https://github.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder/blob/main/endstop2.stl</a></p> <p>Installation picture <a href="https://raw.githubusercontent.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder/main/ViceMagnetInsert.jpg">https://raw.githubusercontent.com/LesserSpottedAustralianSquirel/Trident1p9EndstopXYMagnetHolder/main/ViceMagnetInsert.jpg</a></p> <p>All disclaimers – use at own risk</p>	<p>Notes</p> <p>The magnet can be squeezed in using a vice.</p> <p>The Small hole should allow the removal of magnet to push it out. (untested)</p> <p>If magnet is loose an Iron M3/5M bolt can be threaded from the back to stick it to. (untested)</p>
 <p>Printed?</p> <input type="checkbox"/>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_rear_extrusionbracket_left</p> <p><b>Page number</b> 53</p>	



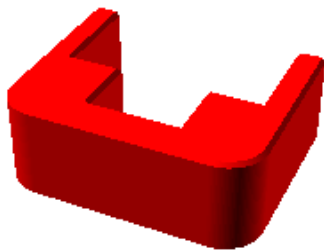
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**Directory**  
STLs/Z\_Assembly

**Filename**  
z\_rear\_extrusionbracket\_right

**Page number**  
55



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**Directory**  
STLs/Tools

**Filename**  
MGN9\_rail\_guide\_x2

**Page number**  
58

x2



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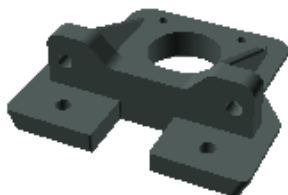
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**Directory**  
STLs/Z\_Assembly

**Filename**  
z\_carriage\_rear\_3hole

**Page number**  
64

Check directory for  
2 hole version if  
required  
on cable chain



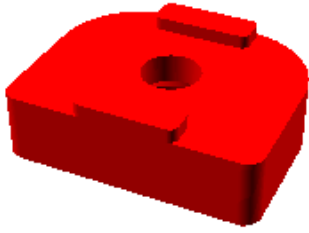
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STLs/Z\_Assembly

**Filename**  
z\_stepper\_rear

**Page number**  
65



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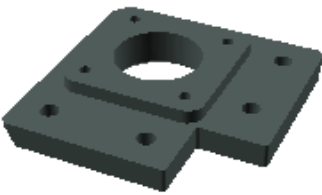
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**Directory**  
STLs/Z\_Assembly

**Filename**  
[a]\_z\_rail\_stop\_x3

**Page number**  
68

x3



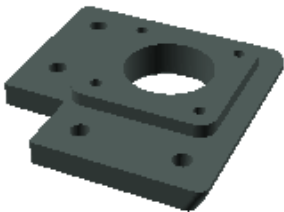
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**Directory**  
STLs/Z\_Assembly

**Filename**  
z\_stepper\_left

**Page number**  
69



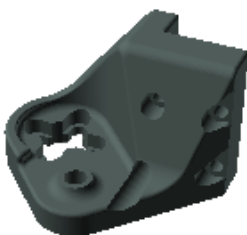
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**Directory**  
STLs/Z\_Assembly

**Filename**  
z\_stepper\_right

**Page number**  
73





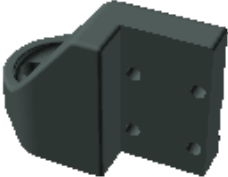
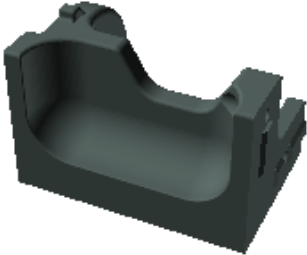
Printed?

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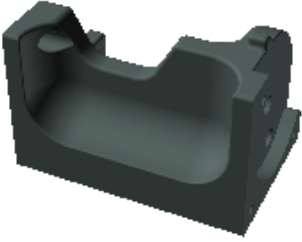



**Directory**  
STLs/Z\_Assembly

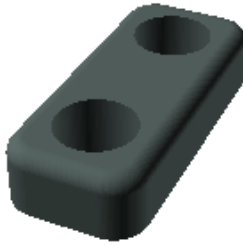
**Filename**  
z\_carriage\_left

**Page number**  
77

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> [a]_z_carriage_left</p> <p><b>Page number</b> 77</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> [a]_z_carriage_right</p> <p><b>Page number</b> 79</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_carriage_right</p> <p><b>Page number</b> 79</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> corner_a_x2</p> <p><b>Page number</b> 90</p>	<p>x2</p>



 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> corner_b_x2</p> <p><b>Page number</b> 90</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_corner_baseplate_a_x2</p> <p><b>Page number</b> 90</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_corner_baseplate_b_x2</p> <p><b>Page number</b> 90</p>	<p>x2</p>
	<p>Page 99 has been ignored for the purposes of this doco . It is an overview or copy of the pic on 98. Also it has way too many parts on it. Normal service to resume</p>	<p>Page ignored</p>



Printed?



NB 2 variants

**Directory**  
STLs/Gantry/  
X\_Axis/X\_Carriage

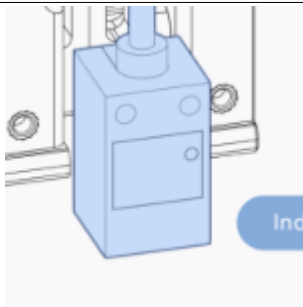
**Filename**  
probe\_retainer\_bracket

**Page number**  
100

Note: There are two similar shapes. The one displayed and the 9mm one.

probe\_retainer\_bracket\_9mm.stl

But which one?  
See below



### Which probe\_retainer\_bracket?

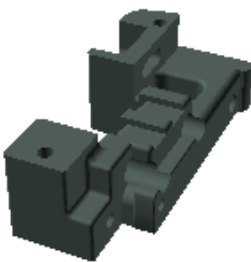
This all depends on your probe  
see page 111

After putting my X carriage  
together on page 110, my probe  
was flush with the X carriage.

I decided to go with the standard  
probe\_retainer\_bracket.  
It seem to work fine.

My probe from the  
formbot kit was a  
Omron TL-  
Q5MMC2-Z

It was flush with  
the X carriage  
when it was  
assembled



Printed?

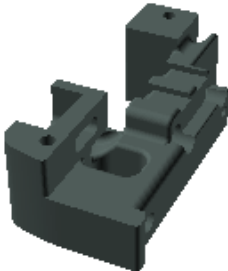
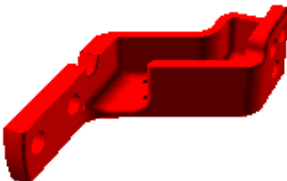
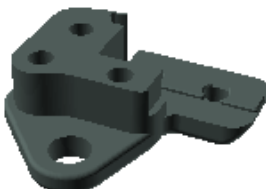
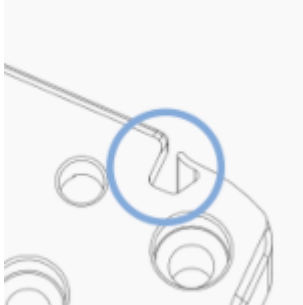


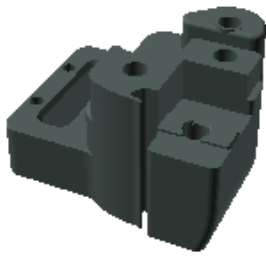
**Directory**  
STLs/Gantry/  
X\_Axis/X\_Carriage

**Filename**  
x\_carriage\_frame\_left

**Page number**  
100

I had to gently  
sand the top of this  
part so it would  
mate properly

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage</p> <p><b>Filename</b> x_carriage_frame_right</p> <p><b>Page number</b> 100</p>	<p>I had to gently sand the top of this part so it would mate properly</p>
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/XY_Joints</p> <p><b>Filename</b> [a]_xy_joint_cable_bridge_3hole</p> <p><b>Page number</b> 100</p>	<p>Note: Check directory for 2 hole version if required for cable chain</p> <p>Mine's a 3 hole</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/XY_Joints</p> <p><b>Filename</b> xy_joint_right_upper_MGN12</p> <p><b>Page number</b> 101</p>	<p>NB if you are using a brim to prevent ABS warping you may have to remove it round the crevice outlined below</p>
	<p>Notes</p> <p>Crevice outlined in blue on Right XY Joint. May need to be "cleaned out" with a craft knife if you have printed with a brim.</p>	



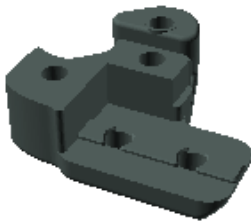
Printed?

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**Directory**  
STLs/Gantry/  
X\_Axis/XY\_Joints

**Filename**  
xy\_joint\_right\_lower\_MGN12

**Page number**  
102



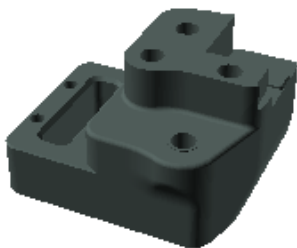
Printed?

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**Directory**  
STLs/Gantry/  
X\_Axis/XY\_Joints

**Filename**  
xy\_joint\_left\_upper\_MGN12

**Page number**  
105



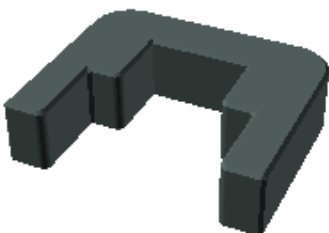
Printed?

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**Directory**  
STLs/Gantry/  
X\_Axis/XY\_Joints

**Filename**  
xy\_joint\_left\_lower\_MGN12

**Page number**  
106



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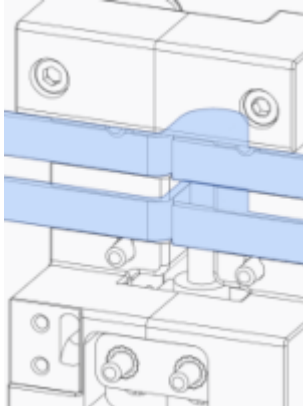
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**Directory**  
STLs/Tools


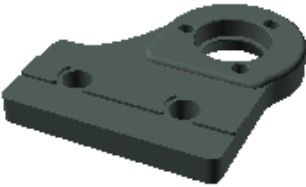
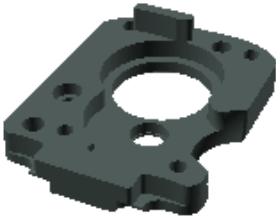
**Filename**  
MGN12\_rail\_guide\_x2

**Page number**  
113

x2

<p><b>MISSING SOME SCREWS?</b> The other two screws will be installed later.</p>	<p>Page 116</p> <p>Missing screws. To be installed later.</p> <p>They are installed on Page 204 when you put the XY end stops in.</p>	<p>Decided to install anyway after de-racking to keep it all secure. Will remove when I need to later.</p>
	<p><b><u>Installing the belt (page124)</u></b></p> <p>The manual has you putting the belt on a single x_carriage_frame (from page 100).</p> <p>The Youtube video however secured both belts with x_carriage_frame_left. The belts are then threaded through the machine and then secured with the x_carriage_frame_right.</p> <p>Only then are the x_carriage_frame_left and x_carriage_frame_right are then bolted together.</p>	<p>To my mind the Youtube way makes much more sense as you break the problem down into smaller tasks and you are not left holding 4 belt ends and screwing bolts in at the same time.</p> <p>I however did it the official way before stumbling onto the youtube method.</p>
<p>The side edges were easy to line up but I started with a lip ie too soon and only found out once I have put the rest of the magnet at the end. Just thought I would mention it so you don't make the same mistake.</p>	<p><b><u>Installing magnetic sheet.</u></b></p> <p>But which side? The aluminium sheet has V holes cut into it for the V head of the screws. The manual seems to suggest. That side. Looks like I will have to drill from the other side to get the hole and then cut it out manually with a craft knife. I will update if this is wrong.</p> <p><b>Page number</b> 127</p>	<p>Note: My magnetic sheet and aluminium sheet was a slight rectangle. If yours is to, make sure the long side of the magnetic sheet is matched to the long side of the aluminium sheet.</p>
	<p>Non printable part. Thermal fuse</p>	<p>Please skip. Non printable part.</p>

	<p><b>Page number</b> 129</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> nozzle_probe</p> <p><b>Page number</b> 130</p>	
	<p><b>Page number</b> 130</p> <p>I put the bottle opener in a vice and then used a long 3mm bolt in the in the GT2 for leverage and it just popped off.</p>	<p>“Apply the required force to fully seat the pulley in the printed part”</p> <p>Right okay. Obviously your related to he-man. In the end I used a vice to get it in parallel.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_bed_left</p> <p><b>Page number</b> 134</p>	
	<p><b>Page number</b> 134</p> <p>Snap fit for the GE5C bearing? I found a 8mm Roller skate bearing went nicely over the top of the</p>	

	GE5C bearing and protected the middle while I used a vice to push it in. Not recommending this, but it worked for me. Could an M8 bolt do the same job?	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_bed_rear</p> <p><b>Page number</b> 136</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_bed_right</p> <p><b>Page number</b> 138</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p><b>Filename</b> extruder_motor_plate</p> <p><b>Page number</b> 146</p>	



Printed?



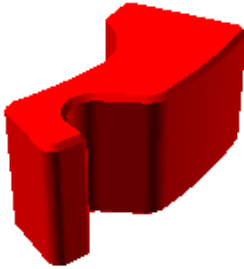
NB 2 variants

**Directory**  
STLs/Gantry/  
X\_Axis/X\_Carriage/  
Direct Feed

**Filename**  
chain\_anchor\_3hole

**Page number**  
146

Check directory for  
2 hole version if  
required



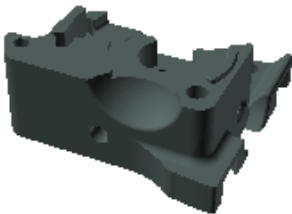
Printed?



**Directory**  
STLs/Gantry/  
X\_Axis/X\_Carriage/  
Direct Feed

**Filename**  
[a]\_latch\_shuttle

**Page number**  
146



Printed?



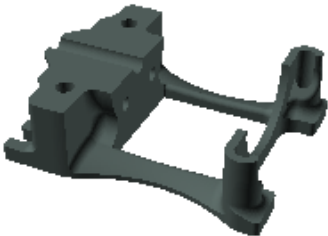


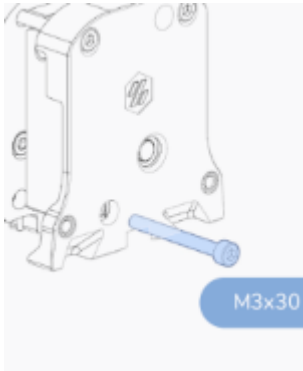
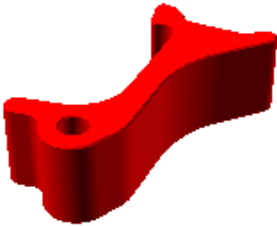
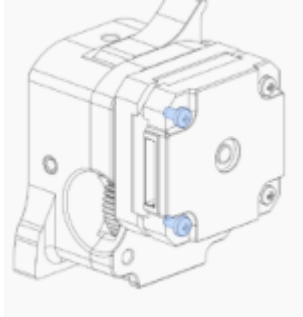
**Directory**  
STLs/Gantry/  
X\_Axis/X\_Carriage/  
Direct Feed

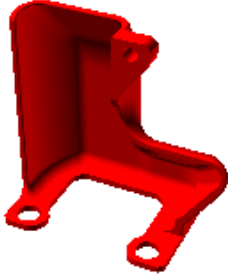
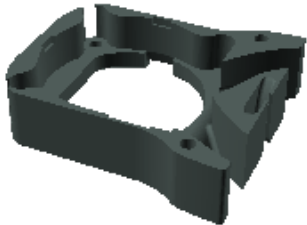
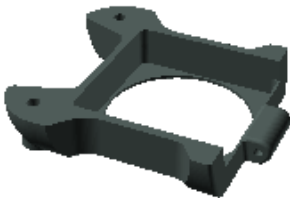
**Filename**  
extruder\_body

**Page number**  
147


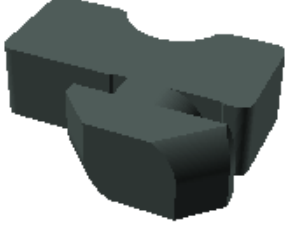



 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/X_Axis/X_Carriage/ Toolheads/Dragon</p> <p><b>Filename</b> printhead_front_dragon</p> <p><b>Page number</b> 148</p>	<p>DRAGON mount DO YOU HAVE A DRAGON hot end?</p> <p>The fixing screws for a dragon HF to a trident standard tool head are 4 x M2.5 length 10mm or 8mm</p> <p>The M2.5x12mm are too long and the current advice is to cut them down to 9mm.</p>
	<p>What are these highlighted marks on page 152 with regards to the tool head? They are holes that you can put zip ties through. Which in turn can be used to secure the heater and temperature wires from the extruder.</p>	<p>The zip tie holes might need to be cleaned out with a craft knife before use.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage/Toolheads/ Dragon</p> <p><b>Filename</b> printhead_rear_dragon</p> <p><b>Page number</b> 149</p>	<p>DRAGON mount DO YOU HAVE A DRAGON hot end?</p>
	<p>PTFE from formbot was marked 4x2</p>	<p>Marked 4x2 PTFE and was cut as per manual.</p>




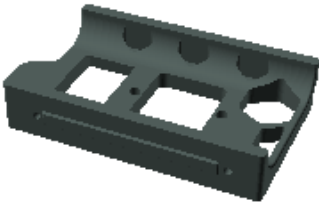
	<p><b>Page 161</b></p> <p>M3x30 SHCS in manual replaced with M3x25 SHCS as the 30s stick out the back of the extruder and seemed wrong.</p> <p>Will report if this causes problems down the line.</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p><b>Filename</b> [a]_latch</p> <p><b>Page number</b> 161</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p><b>Filename</b> [a]_guidler</p> <p><b>Page number</b> 161</p>	
	<p><b>Page 162</b></p> <p>The manual says “Carefully remove the screws from the left side of the motor”.</p> <p>NB I suggest you start with taking a screw out of the <b>RIGHT side</b> and then put it straight back in. If it comes out fine, cool. Now do the left as per instructions.</p>	<p>If however you stuff the screw head up completely because you have used the wrong screw driver. Eg Phillips vs Posix. Now you have a chance to go and</p>


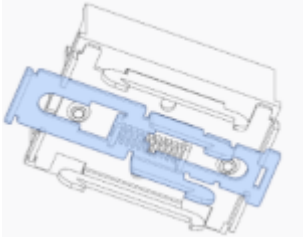
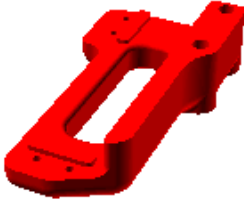
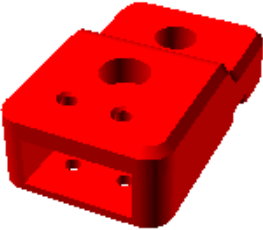
		get the right tool and can start again on a fresh screw head which you actually do need to take out.
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p><b>Filename</b> [a]_connector_cover</p> <p><b>Page number</b> 163</p>	This is a side cover that hides the wires. I got fed up putting it on and off and so left it off until the end.
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage</p> <p><b>Filename</b> blower_housing_rear</p> <p><b>Page number</b> 166</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage</p> <p><b>Filename</b> hotend_fan_mount</p> <p><b>Page number</b> 166</p>	

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/X_Carriage</p> <p><b>Filename</b> [a]_blower_housing_front</p> <p><b>Page number</b> 167</p>	
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p><b>Directory</b> STLs/Z_Assembly</p> <p><b>Filename</b> z_cable_chain_mount_3hole</p> <p><b>Page number</b> 173</p>	<p>Check directory for 2 hole version if required</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> wire_corner_left</p> <p><b>Page number</b> 175</p>	


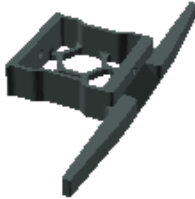
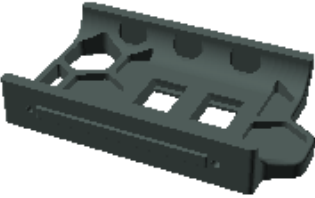
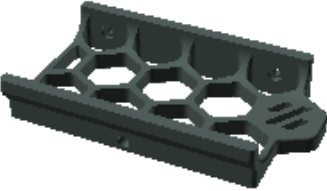
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> wire_corner_right</p> <p><b>Page number</b> 176</p>	
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> deck_support_3mm_x8</p> <p><b>Page number</b> 178</p> <p>NB they twist only one way. Check the model up close. If the short end is more applicable to your situation. Try twisting it in the opposite direction of the manual.</p>	<p>X 8</p> <p>NB there are two variants 4mm and 3mm</p> <p>deck_support_4mm_x8</p> <p>NB Such a small part so I switched brims off.</p> <p>Update. To get this part to work I had to use a thin file to round the edges a bit.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> DIN_center_support_x2</p> <p><b>Page number</b> 181</p>	<p>x2</p>

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> DIN_frame_mount_x4</p> <p><b>Page number</b> 181</p>	<p>x4</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> cable_frame_anchor_x6</p> <p><b>Page number</b> 185</p>	<p>X6</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> pcb_din_clip_v2_x5</p> <p><b>Page number</b> 189</p>	<p>X5</p> <p>If you printed with a brim ensure the triangle on the side has been cleaned up and the clips can flex.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> raspberrypi_bracket</p> <p><b>Page number</b> 189</p>	

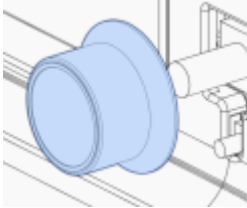
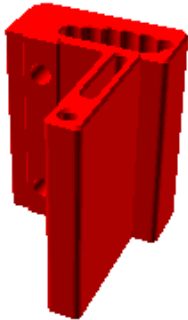
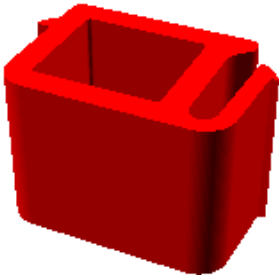

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> rs25_psu_bracket</p> <p><b>Page number</b> 191</p>	<p>Used for the little silver box.</p> <p>If you printed with a brim ensure the triangle on the side has been cleaned up and the clips can flex.</p>
	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> lrs_psu_bracket_x2.stl</p> <p><b>Page number</b> 192</p>	<p>Used for the big silver box</p> <p>x2</p> <p>If you printed with a brim ensure the triangle on the side has been cleaned up and the clips can flex.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay/ Controller_Mounts</p> <p><b>Filename</b> Octopus_bracket_2pc</p> <p><b>Page number</b> 193</p>	<p>Note: do you have a Octopus? Other mounts in this directory include Duet, GTR,SKR,Spider etc</p>
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> power_inlet_filtered</p> <p><b>Page number</b> 195</p>	<p>Warning.</p> <p>There is a second power inlet part. Check out which one you need and print the right one.</p> <p>power_inlet_adam stech.stl</p>

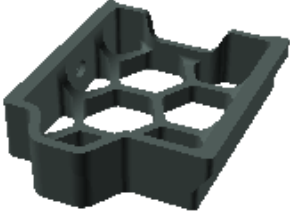
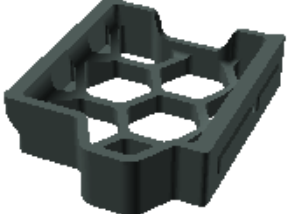
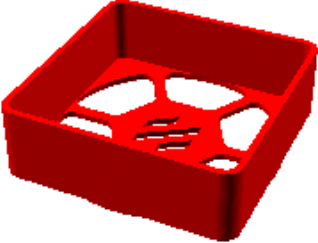
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/ElectronicsBay</p> <p><b>Filename</b> PSU_stabilizer_50mm</p> <p><b>Page number</b> 198</p>	
	<p>Not a printed part.</p> <p>Skip</p> <p><b>Page number</b> 199</p>	<p>Not printed part. Skip</p> <p>I used 2x M4x6 BHCS to fix SSR mounting</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ X_Axis/XY_Joints</p> <p><b>Filename</b> [a]_endstop_pod_microswitch</p> <p><b>Page number</b> 203</p>	<p>NB this part has a hall effect upgrade if you are using magnets rather than microswitches [a]_endstop_pod_h all_effect.stl</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ AB_Drive_Units</p> <p><b>Filename</b> [a]_y_endstop_housing</p> <p><b>Page number</b> Page not found</p>	<p>Warning</p> <p>We could not find this part in the official manual but it's in the STLs.</p> <p>Additionally, the Y endstop is held within the [a]_endstop_pod_ microswitch part</p>

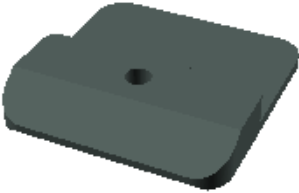
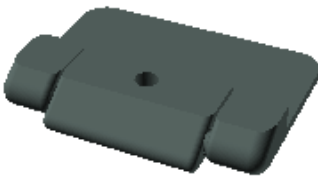

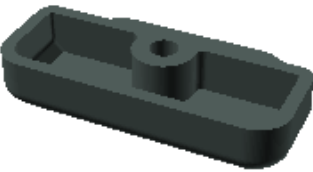


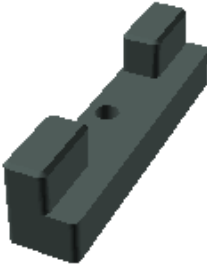
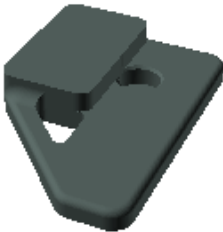
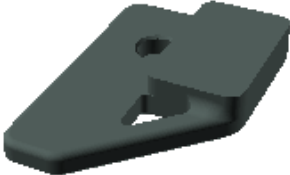
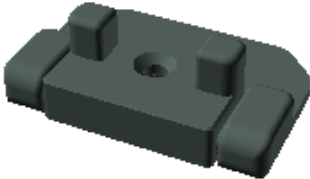
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Gantry/ AB_Drive_Units</p> <p><b>Filename</b> [a]_wire_cover</p> <p><b>Page number</b> 225</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> side_fan_support_x2</p> <p><b>Page number</b> 233</p>	x2
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> keystone_panel</p> <p><b>Page number</b> 233</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt/250</p> <p><b>Filename</b> front_skirt_a_250</p> <p><b>Page number</b> 233</p>	<p>WARNING</p> <p>250mm x 250mm</p> <p>do you have this bed size?</p>



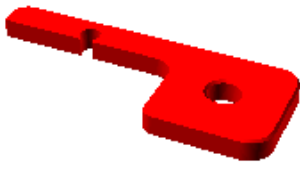

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 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_mini12864_case_ front_insert</p> <p><b>Page number</b> 234</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> mini12864_case_front</p> <p><b>Page number</b> 234</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> mini12864_case_rear</p> <p><b>Page number</b> 235</p>	

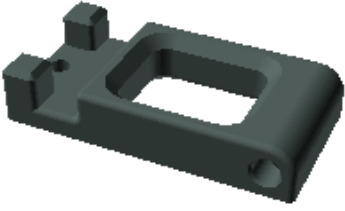
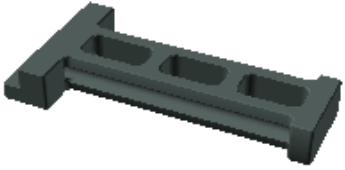



	<p><b>Warning: Joke detected</b></p> <p>Can't find the round thing, You make my heart sing, Wild thing. You make everything groovie. ABS mainly.</p> <p><b>Page number</b> 235</p>	<p>Not stl part</p> <p>Please skip.</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_mini12864_case_hinge</p> <p><b>Page number</b> 236</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_keystone_blank_insert_x2</p> <p><b>Page number</b> 237</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_skirt_logo_x2</p> <p><b>Page number</b> 237</p>	<p>X2</p>

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> rear_center_skirt_250</p> <p><b>Page number</b> 241</p>	<p>WARNING</p> <p>250mm x 250mm</p> <p>do you have this bed size?</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt/250</p> <p><b>Filename</b> side_skirt_a_250_x2</p> <p><b>Page number</b> 242</p>	<p>WARNING</p> <p>250mm x 250mm</p> <p>do you have this bed size?</p> <p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt/250</p> <p><b>Filename</b> side_skirt_b_250_x2</p> <p><b>Page number</b> 242</p>	<p>WARNING</p> <p>250mm x 250mm</p> <p>do you have this bed size?</p> <p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Skirt</p> <p><b>Filename</b> [a]_60mm_fan_blank_ insert_x2</p> <p><b>Page number</b> 244</p>	<p>x2</p>


 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> bottom_panel_clip_x4</p> <p><b>Page number</b> 250</p>	<p>x4</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> bottom_panel_hinge_x2</p> <p><b>Page number</b> 250</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> corner_panel_clip_4mm_x8</p> <p><b>Page number</b> 254</p>	<p>Warning 4mm or 6mm part?</p> <p>x8</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels</p> <p><b>Filename</b> midspan_panel_clip_4mm_x7</p> <p><b>Page number</b> 254</p>	<p>Warning 4mm or 6mm part?</p> <p>x7</p>

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels/ Front_Doors</p> <p><b>Filename</b> latch_x2</p> <p><b>Page number</b> 263</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels/ Front_Doors</p> <p><b>Filename</b> handle_a_x2</p> <p><b>Page number</b> 263</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels/ Front_Doors</p> <p><b>Filename</b> handle_b_x2</p> <p><b>Page number</b> 263</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Panels/ Front_Doors</p> <p><b>Filename</b> door_hinge_x6</p> <p><b>Page number</b> 265</p>	<p>x6</p>

 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> exhaust_filter_housing</p> <p><b>Page number</b> 268</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> [a]_filter_access_cover</p> <p><b>Page number</b> 270</p>	
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> [a]_exhaust_filter_mount_x2</p> <p><b>Page number</b> 272</p>	x2
 <p>Printed? <input type="checkbox"/></p>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> exhaust_filter_grill</p> <p><b>Page number</b> 272</p>	

 <p>Printed?</p> <input type="checkbox"/>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> bowen_retainer</p> <p><b>Page number</b> 275</p>	
 <p>Printed?</p> <input type="checkbox"/>	<p><b>Directory</b> STLs/Exhaust_Filter</p> <p><b>Filename</b> spool_holder</p> <p><b>Page number</b> 276</p>	
 <p>Printed?</p> <input type="checkbox"/>	<p>Steve</p> <p>(Team member and person who “drove the bus home on the Trident project”)</p> <p><b>Page number</b> 280</p>	<p>Man in the red shirt. Well reddish.</p> <p>It's in that spectrum</p>
 <p>Printed?</p> <input type="checkbox"/>	<p>Eddie (Team member)</p> <p><b>Page number</b> 280</p>	<p>This is not a red shirt.</p>
 <p>Printed?</p>	<p>Dunar (Team member)</p> <p><b>Page number</b> 280</p>	<p>Support structure may be required for the beard.</p>



<input type="checkbox"/>		
<div><p>Printed?</p><input type="checkbox"/></div>	<p>Maks Zolin AKA [a]_RussianCatFood</p> <p>Glorious and fearless leader</p> <p><b>Page number</b> 281</p>	<p>May require multiple materials to print.</p>



Done!

I have one question for you.

Did you print the tool on page 58 in the accent colour?

- ☐ Yes, because it's cool
- ☐ No, Mr George, Because I am on to you

Place ✓ above

Note: I spent far too much time on this doco. I can only imagine the hard work that the Voron team has put into actually making the printer itself. So from a personal point of view I would like to say thanks to the official team here.

## Voron Links

[https://github.com/  
LesserSpottedAustralianSquirrel/  
voron\\_trident\\_pics/blob/main/  
Voron\\_1.9\\_trident\\_3dprinting\\_guide.pdf](https://github.com/LesserSpottedAustralianSquirrel/voron_trident_pics/blob/main/Voron_1.9_trident_3dprinting_guide.pdf)

This pdf.  
With such an easy to remember link

[https://github.com/  
LesserSpottedAustralianSquirrel/  
Trident1p9EndstopXYMagnetHolder](https://github.com/LesserSpottedAustralianSquirrel/Trident1p9EndstopXYMagnetHolder)

My solution for a endstop magnet  
problem.

[https://github.com/VoronDesign/  
VoronUsers](https://github.com/VoronDesign/VoronUsers)

Mods and tricks for your Voron

[https://www.reddit.com/r/  
VORONDesign/](https://www.reddit.com/r/VORONDesign/)

Reddit.com chat about Vorons

<https://vorondesign.com/>

Official manual

### Credits list

I suddenly realised that a lot of people had commented and given great suggestions to improve this doco and I had not given them their due credit. If I missed you, then opps. My bad. In my defence I fully expected this project to be ignored, So without further ado here is the list.

Credit	Condensed Request	Response
<a href="#">mapsedge</a>	Bigger font please. I am getting older and the text is hard to read	I may have over compensated. Done as requested.
Claudermilk	Here are some things I would change	I think you have written more than me. Done as requested.
<a href="#">Appropriate_Rice3348</a>	4mm nossil? That's a big nozzle. Should mounds" be "mounts"?	Updated to 0.4mm nossle. Updated spelling.
<a href="#">imawsm_</a>	anti-aliasing	Added to things to do
<a href="#">jpgadbois</a>	I initially thought this was a guide to setting up printing parameters on a Trident rather than how to print parts for a Trident	Good point. Will update file name in git when (and If) I do the upcoming 1.10 Super trident.
<a href="#">mvrckcompany</a>	What about removing the background from each of the part pictures? Add in some shadows to make it pop.	Background gone. Unfortunately adding shadow is beyond my limited knowledge
<a href="#">Leang</a>	Color the accent parts differently in the thumbnails for easy visual difference.	Done as requested
<a href="#">imoftendisgruntled</a>	I also think the manual could use a page at the front of every section that has a "For this section you will need:" header followed by pictures and filenames of the STLs along with the hardware bits from the BOM.	Good point. However I am simply following the official manual. But good point.
<a href="#">Castorreddit</a>	Best way of doing this is not on reddit, but on github.	Thanks and done.
<a href="#">TheSerialHobbyist</a>	I'm <i>pretty</i> sure that it is the 3mm version (on that page). That is what I used	Changed from 4mm to the 3mm version on page 178.
<a href="#">Interesting-Tough640</a>	Dragon bolts 9mm. I measured the gap and cut it down to 9mm and it worked perfectly.	Will try 10mm to see if they work.  Updated from 12mm

And Cut.