

Title Trident_1-9_complementary_3dPartsBuild_doco (Proposed future filename)
File name Voron_1.9_3dprinting_guide.pdf (You put . In a filename?)
Date 2021-12-23 (Unofficial version number)
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Warranty None. Use at own risk. For entertainment purposes only.
Authors 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/](https://github.com/LesserSpottedAustralianSquirrel/voron_trident_pics/blob/main/Voron_1.9_trident_3dprinting_guide.pdf)

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.


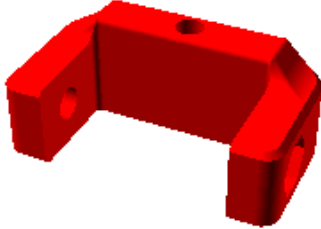
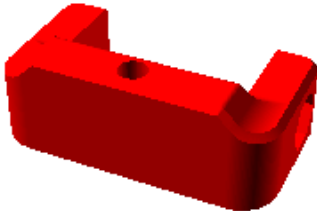
4) Add AA (anti-aliasing) to images using gimp and scripts

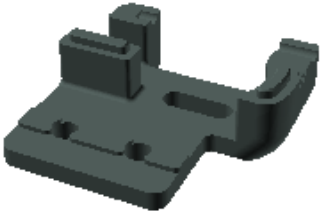
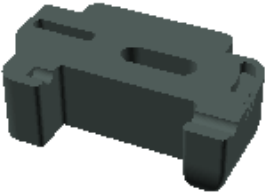

Thanks for all the great ideas. Even if I have not had time (yet) to implement them all.

https://old.reddit.com/r/VORONDesign/comments/rc8wcb/voron_trident_printing_guide_very_very_draft_and/

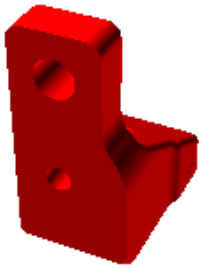
Notes

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>Directory STLs/Gantry/AB_Drive_Units</p> <p>Filename a_drive_frame_upper</p> <p>Page Number 26</p>	<p>And so it begins</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ Front_Idlers</p> <p>Filename [a]_tensioner_left</p> <p>Page number 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>Directory STLs/Gantry/ Front_Idlers</p> <p>Filename [a]_tensioner_right</p> <p>Page number 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>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ Front_Idlers</p> <p>Filename front_idler_a_x2</p> <p>Page number 28</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ Front_Idlers</p> <p>Filename front_idler_b_x2</p> <p>Page number 28</p>	<p>x2</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/AB_Drive_Units</p> <p>Filename a_drive_frame_lower</p> <p>Page number 34</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Tools</p> <p>Filename AB_pulley_jig</p> <p>Page number 35</p>	<p>Tool</p>

 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/AB_Drive_Units</p> <p>Filename b_drive_frame_lower</p> <p>Page number 37</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/AB_Drive_Units</p> <p>Filename b_drive_frame_upper</p> <p>Page number 38</p>	
	<p>T-Nuts M5 AKA “Roll in” T nuts</p> <p>Page number 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>Page number 44</p>	<p>Beware Of of the lone lone M3 T-nut. Which I read as an M5 and had to get it back out.</p>



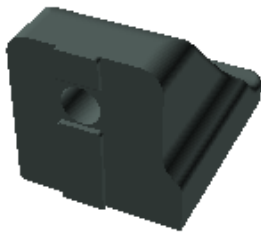
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Directory
STLs/Gantry/AB_Drive_Units

Filename
[a]_y_endstop_bumper

Page number
50



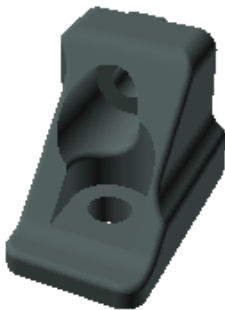
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Directory
STLs/Z_Assembly

Filename
z_rear_extrusionbracket_left

Page number
53



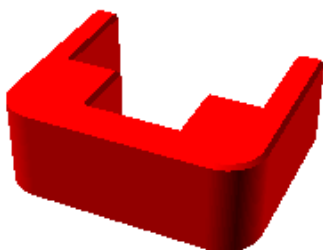
Printed?

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Directory
STLs/Z_Assembly

Filename
z_rear_extrusionbracket_right

Page number
55



Printed?

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Directory
STLs/Tools

Filename
MGN9_rail_guide_x2

Page number
58

x2



Printed?

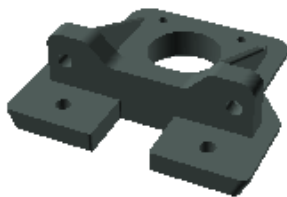
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Directory
STLs/Z_Assembly

Filename
z_carriage_rear_3hole

Page number
64

Check directory for
2 hole version if
required
on cable chain



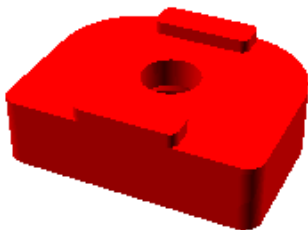
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Directory
STLs/Z_Assembly

Filename
z_stepper_rear

Page number
65



Printed?

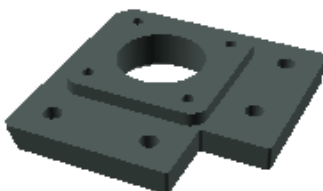
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Directory
STLs/Z_Assembly

Filename
[a]_z_rail_stop_x3

Page number
68

x3



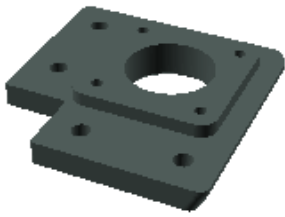
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Directory
STLs/Z_Assembly

Filename
z_stepper_left

Page number
69



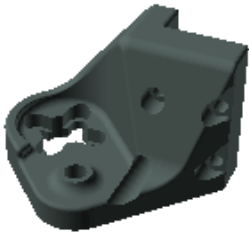
Printed?

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Directory
STLs/Z_Assembly

Filename
z_stepper_right

Page number
73



Printed?

☐

Directory
STLs/Z_Assembly

Filename
z_carriage_left

Page number
77



Printed?

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Directory
STLs/Z_Assembly

Filename
[a]_z_carriage_left

Page number
77



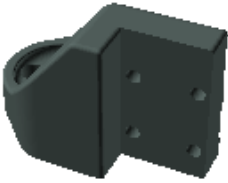
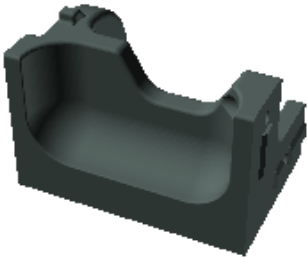
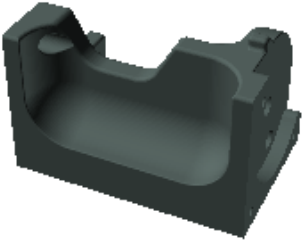

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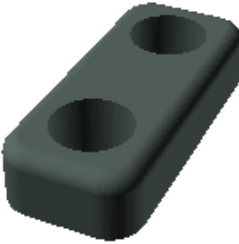
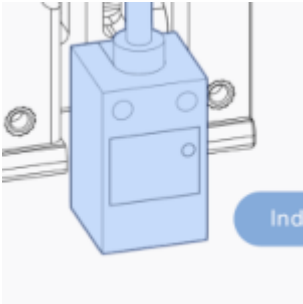
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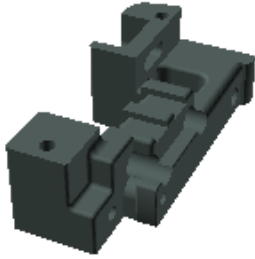
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STLs/Z_Assembly

Filename
[a]_z_carriage_right

Page number
79

 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Z_Assembly</p> <p>Filename z_carriage_right</p> <p>Page number 79</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename corner_a_x2</p> <p>Page number 90</p>	x2
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename corner_b_x2</p> <p>Page number 90</p>	x2
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename [a]_corner_baseplate_a_x2</p> <p>Page number 90</p>	x2

 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename [a]_corner_baseplate_b_x2</p> <p>Page number 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>
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage</p> <p>Filename probe_retainer_bracket</p> <p>Page number 100</p>	<p>Note: There are two similar shapes. The one displayed and the 9mm one.</p> <p>probe_retainer_bracket_9mm.st</p> <p>But which one? See below</p>
	<p>Which probe_retainer_bracket?</p> <p>This all depends on your probe see page 111</p> <p>After putting my X carriage together on page 110, my probe was flush with the X carriage.</p> <p>I decided to go with the standard probe_retainer_bracket. It seem to work fine.</p>	<p>My probe from the formbot kit was a Omron TL-Q5MMC2-Z</p> <p>It was flush with the X carriage when it was assembled</p>



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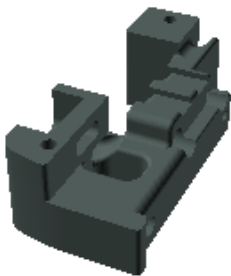
☐

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



Printed?

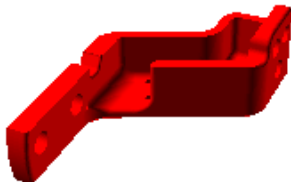
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Directory
STLs/Gantry/
X_Axis/X_Carriage

Filename
x_carriage_frame_right

Page number
100

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



Printed?

☐

NB 2 variants

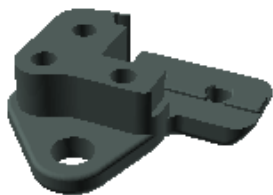
Directory
STLs/Gantry/
X_Axis/XY_Joints

Filename
[a]_xy_joint_cable_bridge_
3hole

Page number
100

Note: Check directory for 2 hole version if required for cable chain

Mine's a 3 hole



Printed?

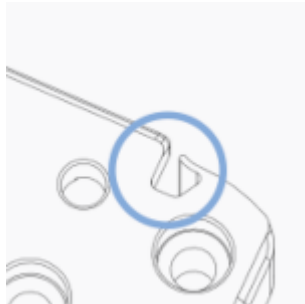
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Directory
STLs/Gantry/
X_Axis/XY_Joints

Filename
xy_joint_right_upper_MGN12

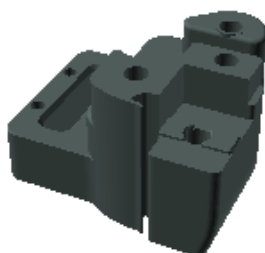
Page number
101

NB if you are using
a brim to prevent
ABS warping you
may have to
remove it round
the crevice
outlined below



Notes

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.



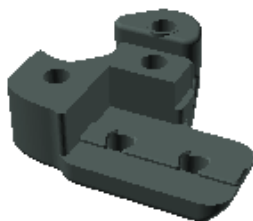
Printed?

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Directory
STLs/Gantry/
X_Axis/XY_Joints

Filename
xy_joint_right_lower_MGN12

Page number
102



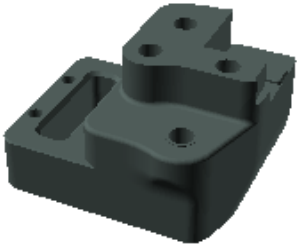
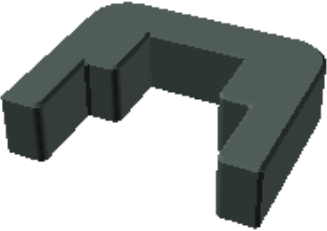
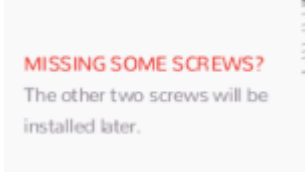
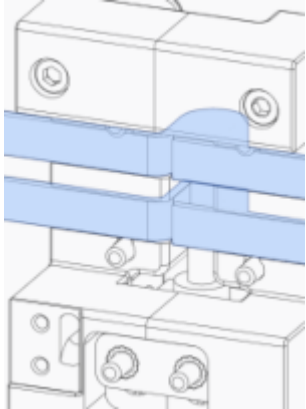
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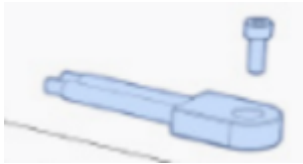
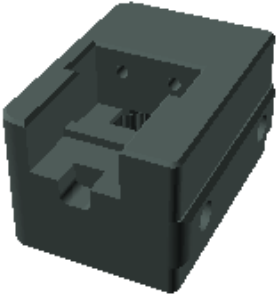
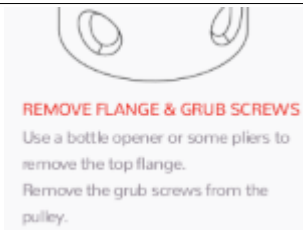
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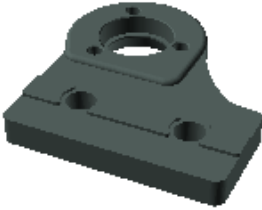


Directory
STLs/Gantry/
X_Axis/XY_Joints

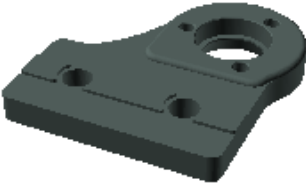


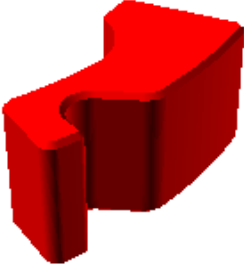
Filename
xy_joint_left_upper_MGN12

Page number
105

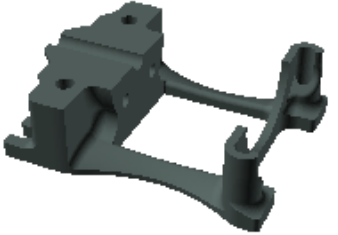

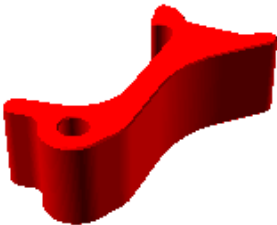
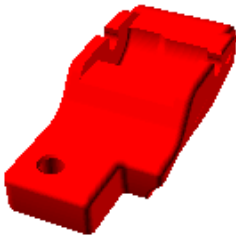
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/XY_Joints</p> <p>Filename xy_joint_left_lower_MGN12</p> <p>Page number 106</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Tools</p> <p>Filename MGN12_rail_guide_x2</p> <p>Page number 113</p>	x2
	<p>Page 116</p> <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><u>Installing the belt (page124)</u></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>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</p>

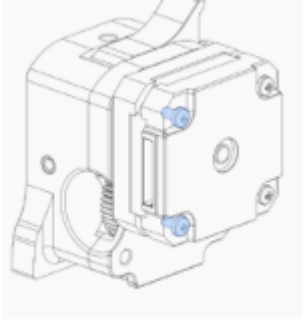
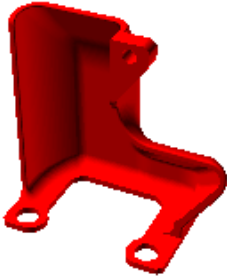
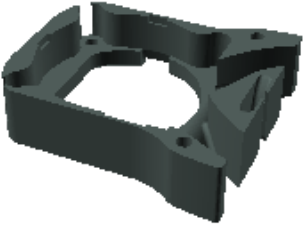
	<p>Only then are the x_carriage_frame_left and x_carriage_frame_right are then bolted together.</p>	<p>stumbling onto the youtube method.</p>
<p>The side edges were easy to line up but I started with a lip ie too soon and only found out once I have put the rest of the magnet at the end. Just thought I would mention it so you don't make the same mistake.</p>	<p><u>Installing magnetic sheet.</u></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>Page number 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>Page number 129</p>	<p>Please skip. Non printable part.</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Z_Assembly</p> <p>Filename nozzle_probe</p> <p>Page number 130</p>	
	<p>Page number 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.</p>

		In the end I used a vice to get it in parallel.
 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Z_Assembly</p> <p>Filename z_bed_left</p> <p>Page number 134</p>	
	<p>Page number 134</p> <p>Snap fit for the GE5C bearing? I found a 8mm Roller skate bearing went nicely over the top of the 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>	
 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Z_Assembly</p> <p>Filename z_bed_rear</p> <p>Page number 136</p>	


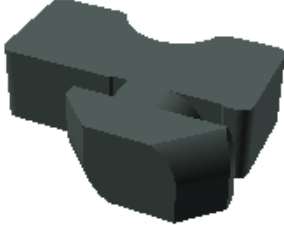
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 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p>Filename extruder_motor_plate</p> <p>Page number 146</p>	
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/ Direct Feed</p> <p>Filename chain_anchor_3hole</p> <p>Page number 146</p>	<p>Check directory for 2 hole version if required</p>
 <p>Printed?</p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/ Direct Feed</p> <p>Filename [a]_latch_shuttle</p> <p>Page number</p>	

<input type="checkbox"/>	146	
 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/ Direct Feed</p> <p>Filename extruder_body</p> <p>Page number 147</p>	
 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Gantry/X_Axis/X_Carriage/ Toolheads/Dragon</p> <p>Filename printhead_front_dragon</p> <p>Page number 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>


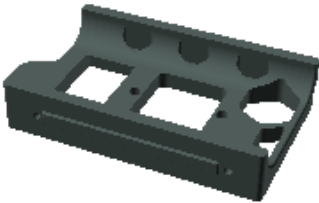
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/Toolheads/ Dragon</p> <p>Filename printhead_rear_dragon</p> <p>Page number 149</p>	<p>DRAGON mount DO YOU HAVE A DRAGON hot end?</p>
	<p>PTFE from formbot was marked 4x2</p>	<p>Marked 4x2 PTFE and was cut as per manual.</p>
	<p>Page 161 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>Directory STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p>Filename [a]_latch</p> <p>Page number 161</p>	
 <p>Printed?</p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p>Filename [a]_guidler</p> <p>Page number 161</p>	


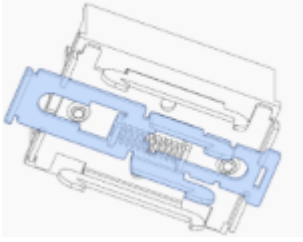
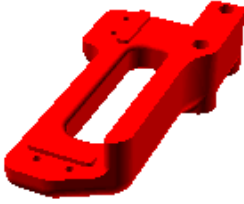
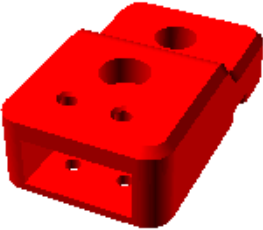
<input type="checkbox"/>		
	<p style="text-align: center;">Page 162</p> <p style="text-align: center;">The manual says “Carefully remove the screws from the left side of the motor”.</p> <p>NB I suggest you start with taking a screw out of the RIGHT side and then put it straight back in. If it comes out 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 get the right tool and can start again on a fresh screw head which you actually do need to take out.</p>
 <p>Printed? <input type="checkbox"/></p>	<p style="text-align: center;">Directory STLs/Gantry/ X_Axis/X_Carriage/Direct Feed</p> <p style="text-align: center;">Filename [a]_connector_cover</p> <p style="text-align: center;">Page number 163</p>	<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>
 <p>Printed? <input type="checkbox"/></p>	<p style="text-align: center;">Directory STLs/Gantry/ X_Axis/X_Carriage</p> <p style="text-align: center;">Filename blower_housing_rear</p> <p style="text-align: center;">Page number 166</p>	


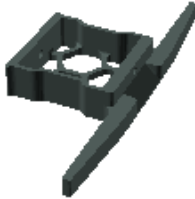
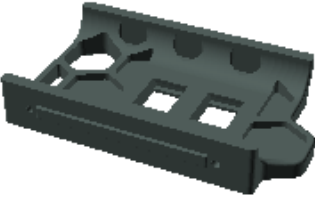
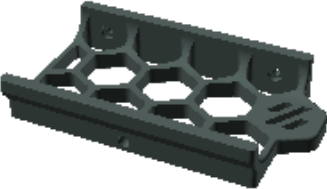
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage</p> <p>Filename hotend_fan_mount</p> <p>Page number 166</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/X_Carriage</p> <p>Filename [a]_blower_housing_front</p> <p>Page number 167</p>	
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p>Directory STLs/Z_Assembly</p> <p>Filename z_cable_chain_mount_3hole</p> <p>Page number 173</p>	<p>Check directory for 2 hole version if required</p>
 <p>Printed?</p>	<p>Directory STLs/Panels</p> <p>Filename wire_corner_left</p> <p>Page number 175</p>	

<input type="checkbox"/>		
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Panels</p> <p>Filename wire_corner_right</p> <p>Page number 176</p>	
 <p>Printed? <input type="checkbox"/></p> <p>NB 2 variants</p>	<p>Directory STLs/Panels</p> <p>Filename deck_support_3mm_x8</p> <p>Page number 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>Directory STLs/ElectronicsBay</p> <p>Filename DIN_center_support_x2</p> <p>Page number 181</p>	<p>x2</p>

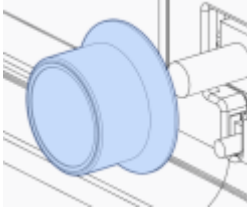
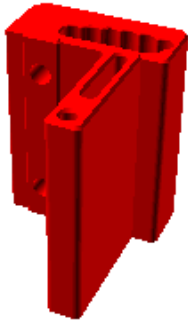
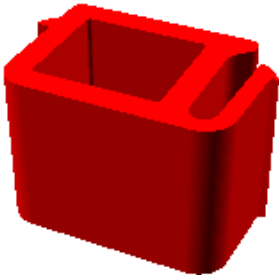

 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/ElectronicsBay</p> <p>Filename DIN_frame_mount_x4</p> <p>Page number 181</p>	<p>x4</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/ElectronicsBay</p> <p>Filename cable_frame_anchor_x6</p> <p>Page number 185</p>	<p>X6</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/ElectronicsBay</p> <p>Filename pcb_din_clip_v2_x5</p> <p>Page number 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>Directory STLs/ElectronicsBay</p> <p>Filename raspberrypi_bracket</p> <p>Page number 189</p>	

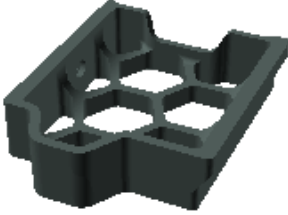
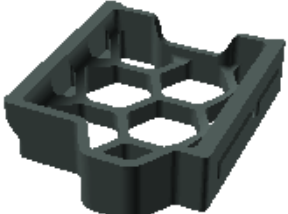
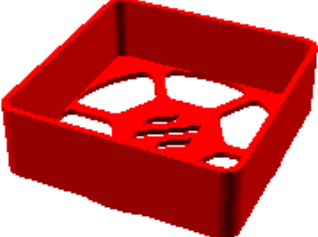
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/ElectronicsBay</p> <p>Filename rs25_psu_bracket</p> <p>Page number 191</p>	<p>Used for the little silver box.</p> <p>If you printed with a brim ensure the triangle on the side has been cleaned up and the clips can flex.</p>
	<p>Directory STLs/ElectronicsBay</p> <p>Filename lrs_psu_bracket_x2.stl</p> <p>Page number 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>Directory STLs/ElectronicsBay/ Controller_Mounts</p> <p>Filename Octopus_bracket_2pc</p> <p>Page number 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>Directory STLs/Skirt</p> <p>Filename power_inlet_filtered</p> <p>Page number 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_adamstech.stl</p>

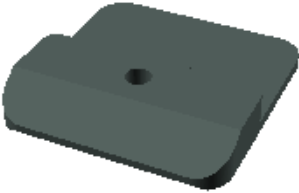
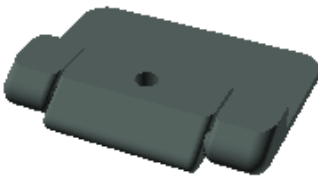

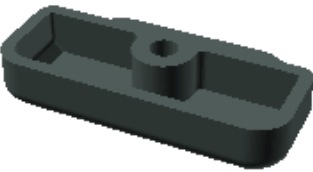
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/ElectronicsBay</p> <p>Filename PSU_stabilizer_50mm</p> <p>Page number 198</p>	
	<p>Not a printed part.</p> <p>Skip</p> <p>Page number 199</p>	<p>Not printed part. Skip</p> <p>I used 2x M4x6 BHCS to fix SSR mounting</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ X_Axis/XY_Joints</p> <p>Filename [a]_endstop_pod_microswitch</p> <p>Page number 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>Directory STLs/Gantry/ AB_Drive_Units</p> <p>Filename [a]_y_endstop_housing</p> <p>Page number 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>

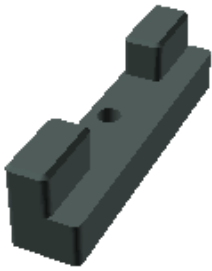
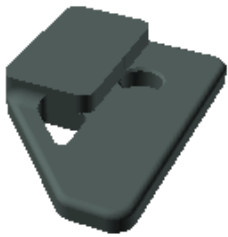
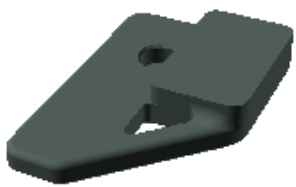
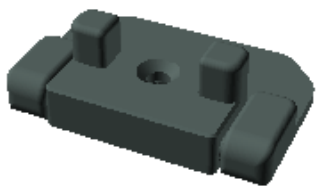
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Gantry/ AB_Drive_Units</p> <p>Filename [a]_wire_cover</p> <p>Page number 225</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename side_fan_support_x2</p> <p>Page number 233</p>	x2
 <p>Printed? <input type="checkbox"/>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



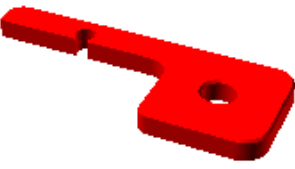

 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt/250</p> <p>Filename front_skirt_b_250</p> <p>Page number 233</p>	<p>WARNING</p> <p>250mm x 250mm</p> <p>do you have this bed size?</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename [a]_mini12864_case_ front_insert</p> <p>Page number 234</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename mini12864_case_front</p> <p>Page number 234</p>	
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename mini12864_case_rear</p> <p>Page number 235</p>	

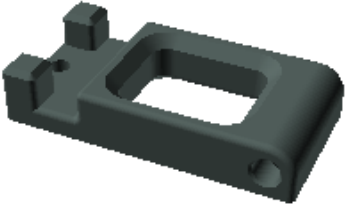
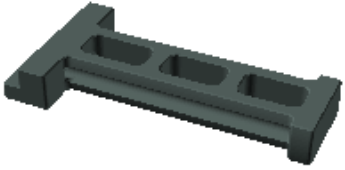



	<p>Warning: Joke detected</p> <p>Can't find the round thing, You make my heart sing, Wild thing. You make everything groovie. ABS mainly.</p> <p>Page number 235</p>	<p>Not stl part</p> <p>Please skip.</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename [a]_mini12864_case_hinge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


 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Skirt</p> <p>Filename rear_center_skirt_250</p> <p>Page number 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>Directory STLs/Skirt/250</p> <p>Filename side_skirt_a_250_x2</p> <p>Page number 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>Directory STLs/Skirt/250</p> <p>Filename side_skirt_b_250_x2</p> <p>Page number 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>Directory STLs/Skirt</p> <p>Filename [a]_60mm_fan_blank_ insert_x2</p> <p>Page number 244</p>	<p>x2</p>

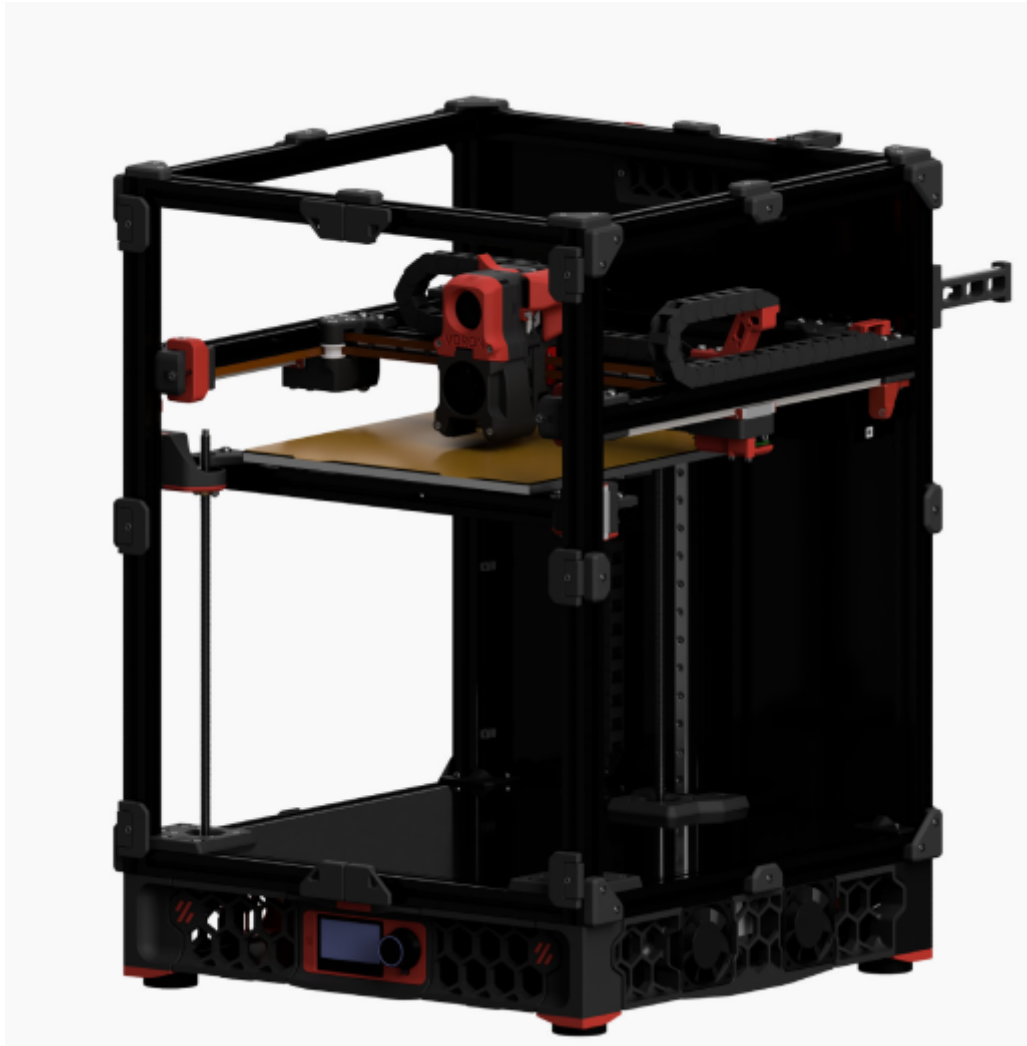
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Panels</p> <p>Filename bottom_panel_clip_x4</p> <p>Page number 250</p>	<p>x4</p>
 <p>Printed? <input type="checkbox"/></p>	<p>Directory STLs/Panels</p> <p>Filename bottom_panel_hinge_x2</p> <p>Page number 250</p>	<p>x2</p>
 <p>Printed? <input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

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

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

 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Exhaust_Filter</p> <p>Filename bowen_retainer</p> <p>Page number 275</p>	
 <p>Printed?</p> <input type="checkbox"/>	<p>Directory STLs/Exhaust_Filter</p> <p>Filename spool_holder</p> <p>Page number 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>Page number 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>Page number 280</p>	<p>This is not a red shirt.</p>
 <p>Printed?</p>	<p>Dunar (Team member)</p> <p>Page number 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>Page number 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/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
mapsedge	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.
Appropriate_Rice3348	4mm nossil? That's a big nozzle. Should mounds" be "mounts"?	Updated to 0.4mm nossle. Updated spelling.
imawsm_	anti-aliasing	Added to things to do
jpgadbois	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.
mvrckcompany	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
Leang	Color the accent parts differently in the thumbnails for easy visual difference.	Done as requested
imoftendisgruntled	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.
Castorreddit	Best way of doing this is not on reddit, but on github.	Thanks and done.
TheSerialHobbyist	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.
Interesting-Tough640	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.