Parts list Voron Trident 5-axis

Base

Aluminium Extrusion 2020	*Lenght 410mm*	**2**
Aluminium Extrusion 2020	*Lenght 180mm*	**2**
90 Degree corners	*For Aluminium profile 2020*	**12**
Screw	*M5 x 10mm*	**24**
Screw	*M5 x 20mm*	**12**
T nuts	*M5*	**36**
Heat insert	*M3 x 5mm*	**2**
Screw SHCS	*M3 x 8mm*	**6**
High precision Bearing	*608ZZ*	**4**
Spacer M8 x 1mm		**2**
Spacer M3 x 0.7 mm		**4**
Shaft 8mm Left	*lenght 57 mm*	**1**
Shaft 8mm Right	*lenght 79 mm*	**1**
Nema 17 stepper motor	*48mm 0.9deg, optimal 2.0Amp*	**1**
optical switch sensor for 3D printer		**1**	https://www.amazon.com/MakerHawk-Optical-Endstop-Photoelectric-Control/dp/B07PMW2QMT/ref=sr_1_1?keywords=Optical+Endstop&qid=1700156544&sr=8-1
Closed loop GT2 belt 6mm	*lenght 302 or 303 mm*	**1**
Pulley GT2	*80 tooth 8mm bore*	**1**
Pulley GT2	*16 tooth 5mm bore*	**1**

Table

Heat insert	*M3 x 5mm*	**40**
Heat insert	*M3 x 7mm*	**6**
Screw SHCS	*M3 x 8mm*	**52**
Screw SHCS	*M3 x 10mm*	**20**
Screw SHCS	*M3 x 12mm*	**1**
Screw SHCS	*M3 x 20mm*	**6**
Screw FHCS	*M3 x 22mm*	**6**
Spacer M3 x 0.7 mm		**7**
NEMA_17_20mm 1.8deg		**1**
Pulley GT2	*20 tooth 5mm bore*	**1**
Slip Ring	*Dia 22mm 4CH 10A*	**1** https://www.amazon.com/s?k=slip+ring+4+wire&crid=2COT7GQJ0ZHZ7&sprefix=slip+ring+4+wire%2Caps%2C217&ref=nb_sb_noss_1
IGUS ring	*PRT_04_30 Diameter 90mm*	**1** https://www.igus.ch/product/iglidur_PRT_04?artnr=PRT-04-30
High precision Bearing	*608ZZ*	**2**
Closed loop GT2 belt 6mm	*lenght 330mm*	**1**
Pololu Hub 8mm	*The six M3 holes needs to be drilled with 3.2mm drill*	**2**
Round Heated bed round for kossel 220mm 24V		**1**
Round Magnetic sheet 220mm		**1**
Round PEI sheet 220mm	*for kossel*	**1**
Bed spring	*ID 3mm OD 6mm Lenght 15mm*	**6**

Z - axis Hotend with Extruder plus touch screen and blower fan

Heat insert	M3 x 5mm	27
Heat insert	M2 x 4mm	13
Screw SHCS	M2 x 6mm	17
Screw SHCS	M3 x 8mm	18
Screw SHCS	M3 x 10mm	6
Screw SHCS	M3 x 12mm	6
Screw SHCS	M3 x 14mm	8
Screw SHCS	M3 x 16mm	3
Screw FHCS stainless steel !!!	M3 x 8mm	4
Screw FHCS	M3 x 22mm	2
Screw FHCS	M3 x 6mm	6
Screw BHCS	M5 x 10mm	5
Screw BHCS	M5 x 25mm	3
T nuts	M5	5
Hex nut	M3	4
Spacer M5 x 1mm		1
Spacer M2 x 0.5 mm wide	to fit the mouting hole	4
neodymium magnets	6 x 3 mm	4
Self taping Screw	M2 size for micro switch	2

Item	Spec	Qty	Link	Link 2
MGN7 - H Linear Rail	*Lenght 200mm*	**1**		
NEMA_17_20mm 1.8deg	*can be used from the voron kit*	**1**		
Small Shaft 5mm	*Lenght 45mm*	**1**		
Shaft Collar 5mm		**1**		
High precision Bearing	*625 ZZ*	**2**		
Pulley GT2	*20 tooth 5mm bore*	**2**		
GT2 belt 6mm	*Lenght 500mm*	**1**		
Micro switch for 3d printer		**1**		
Nonplanar nozzle	*0.4mm*	**1**	https://www.nonplanar.xyz/nozzles	
24V Ceramic Heating Core	*CHC*	**1**	https://imprimante-3d-service.com/gb/553-trianglelab-chc-v6-24v-115w-ceramic-heater.html	
Heat Break For 1.75mm Filament M6	*for V6 Hotend*	**1**		
Chain link 10x11	*0.5m*	**1**		
PTFE Tube OD 4mm ID 2.5mm	*1.0 M then cut it tio required lenght*	**1**		
PTFE Tube OD 4mm ID 2.0mm	*200mm then cut it tio required length in between hot end and extruder*	**1**		
24V Blower Fan 120x120x32mm		**1**		
24V Fan 30x30x10mm		**1**		
Zip ties		**100**		
Indicator Finger Clock for bed and axis calibration	*0.01mm sensitivity*	**1**	https://en.wikipedia.org/wiki/Indicator_(distance_amplifying_instrument)	https://rdbarrett.co.uk/product/dial-test-indicator-horizontal-type-08mm-001mm-mitutoyo-finger-clock/

DM1 OMG V2S Extruder kit with stepper motor and M6 to M10 adapter	*with M6 to M10 adapter and stepper motor*	1	https://www.omgextrd.com/product-page/omgextrd-omg-	https://store.dremc.com.au/products/omg-v2s-all-metal-direct-extruder-
V6 HeatSink Extruder Radiator 3D Printer	*bottom, top 1/8 or M10mm thread*	1		

Z - axis Hotend with Extruder plus touch screen and blower fan

PTFE Tube OD 4mm ID 2.0mm	*1M then cut it tio required length in between hot end and extruder*	1		
V6 pro adapter in between nozzle and heat element CHC	*M6 thread*	1	https://meltbro.de/v6-pro-adapter-ersetzt-volcano-hotend-fuer-v6-nozzle-duese-aus-vernickeltem-	https://3do.eu/spare-parts/672-v6-pro-adapter-to-increase-super-flow-of-v6-rapidohot-end.html
Phaetus x Voron Dragon Standard Flow or Highflow Hotend		1	https://www.3dmensionals.de/phaetus-x-voron-dragon-hotend-st-2069#attr=9949,9951,22290	https://www.phaetus.com/products/phaetus-x-voron-hotend-st

Extruder for 1.75mm filament (for exmple BondTech) mounted at back of the frame of the printer	*BMG mounted with bracket on 2020 aluminium profile near to filamnet spool holder*	1	https://www.bondtech.se/product/bmg-extruder/
Pneumatic Coupler PC4-M10 With Collar	*PC4 - M10*	1	https://www.whambamsystems.com/products/metal-coupler-pc4-m10

Controls

Duet 6HC board		1	https://www.duet3d.com/duet3mainboard6hc
Power supply output 24V	*350W min.*	1	
Paneldue touch screen 5"		1	https://docs.duet3d.com/Duet3D_hardware/Accessories/PanelDue
Rj-45 cable, 0.5m	*male to female*	1	
Optional	*Raspberry Pi4*	1	