

Ready Made Parts									
External									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor	Label Name	Checks / ToDo	Notes
Air Filter	Airmex AM 03 / 6001	1	€499.00	€499.00	€0.00	link	Air Filter	Power Plug: Attach filter adapter w/ silicon	
Water Chiller	Cw-3000	1	€100.00	€100.00	€0.00	link	Water Chiller	Power Plug: Accessories	about price
Air Compressor	ACO-318	1	€31.80	€31.80	€0.00	link	Air Compressor	Power Plug: Brass Adapter	
Hose Clamps	10x80mm	3	€0.89	€2.67	€0.00	link	Hose Clamps		
Exhaust Hose	Diameter 80mm Lenght 1500mm meters	2	€2.75	€5.50	€7.00	link	Exhaust Hose		
Teflon Tape	Teflon Tape 12mm	1	€0.80	€0.80	€0.00	link	Teflon Tape	Remove Final Part Metal Wire	
Radial Fan	150mm 533m3/h	1	€60.00	€60.00	€0.00	link	Radial Fan	Attach 2xRadial Fan Connector (if without Power Plug: attach it)	better find one with smaller diameter and more power
Double-sided Tape	Double side tape, TESA Extra Strong for Bed Lamella, in meters	3	€0.60	€1.80	€0.00	link	Double-sided Tape		easy to find at hardware market
Cable Ties	Cable Ties Package 2.5x140mm 100 pieces	1	€4.00	€4.00	€0.00	link	Cable Ties		
Red Dot Stickers		4					Red Dot Stickers		

Electrics / Electronics									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
Emergency Button	Emergency button with key AS22-B142	1	€5.99	€5.99	€4.90	link	Emergency Button		
USB Cable Inside	Panel mount USB B	1	€2.59	€2.59	€2.49	link	USB Cable Inside	Attach 2 Plastic Screws M3-8	
USB Cable	3m shielded, 90 connector	1	€2.19	€2.19	€0.00	link	USB Cable		
Laser Power Supply	40W CO2 Power Supply	1	€35.00	€35.00	€0.00	link	Laser Power Supply	Remove Right Most Connector; Attach Crimp @ end of red cable	about price, also at 35€
Laser Controller	MKS Sbase	1	€35.00	€35.00	€0.00	link	Laser Controller	Upload Firmware; remove jumper	about price, best from China
Motor Driver	TB6600	2	€7.00	€14.00	€0.00	link	Motor Driver	Check all connectors are present	about price, best from China
Relay	single channel	1	€2.00	€2.00	€1.65	link	Relay	Test it	about price, best from China
Motor Power Supply	24V 15A	1	€20.00	€20.00	€0.00	link	Motor Power Supply	Check internal label for correctness	about price, best from China
Window Switch	V-156-1C25	1	€2.79	€2.79	€1.99	link	Window Switch	Test it with the cable	
Window Sensor	PS-3150	3	€3.00	€8.99	€0.00	link	Window Sensor	Test it with the cable	
Window Magnet	PS-3150						Window Magnet		
Y-endstop Sensor	PS-3150						Y-endstop Sensor + X-endstop Sensor + Endstop Cable	Test it with cable	about price, best from China
X-endstop Sensor	PS-3150						X-endstop Magnet		
X-endstop Magnet	PS-3150						Y-endstop Magnet	check visually	
Cable Wrapper	1m 4mm+	1	€0.60	€0.60	€0.00	link	Cable Wrapper		about price, best from China
Foot Switch	240V Eco Line Comfort Switch Adapter	1	€11.13	€11.13	€2.99	link	Foot Switch		
Terminal Block	4 Positions, minimum 1.5-2.5mm2	2	€0.89	€1.78	€0.00	link	Terminal Block	Check that the terminal block fits to the bottom panel; add extra	
Laser Attachments	Terminal Block + heat shrinking tubes	10	€0.10	€1.00	€0.00		Laser Attachments	fits to the laser tube	about price
Power Cable	PC Power Cable	1	€4.50	€4.50	€0.00	link	Power Cable		
Power Plug	Main Power Plug Inlet+Power switch, 1.5 or 2mm panel spacing	1	€2.50	€2.50	€2.99	link	Power Plug + Mains Cable + Earth Cable	check connections	
Chain	Cable Chain 8x8-R18 1000mm	1	€8.99	€8.99	€4.90	link	Chain		
Fuse	6.3A 5x20mm	2	€0.29	€0.57	€0.00	link	Fuse	Add extra	
Resistor	1K resistor 1/4W trough hole	1	€0.02	€0.02	€0.00	link		Attach laser logic cable~check connections	
LED Strip	2 x 30cm 5730, meters	1	€3.00	€3.00	€0.00	link	LED Strip	Test it with the cable	about price, best from china

Water / Air									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
Water Connector Inside	Water Connector Inside 3/8 9mm Screw Inlet	2	€1.75	€3.50		link	Water Connector Inside	check visually	
Water Connector Outside	Water Connector Outside 3/8 9mm Screw	2	€1.00	€2.00		link	Water Connector Outside	check visually	
Air Connector Inside	Air Connector Inside 3/8 6mm Screw Inlet	1	€1.75	€1.75	€5.00	link	Air Connector Inside	check visually	
Air Connector Outside	Air Connector Outside 3/8 9mm Screw	1	€1.00	€1.00		link	Air Connector Outside	check visually	
Water Flow Connector	1/2 9mm	2	€2.90	€5.80		link	Water Flow Connector	check visually	
Water Flow Sensor	Water Flow Sensor K40 replacement	1	€8.00	€8.00	€0.00	link	Water Flow Sensor	Test it with the cable	about price, best from China
Air Tube Outside	10x7mm 200cm Silicone	4	€2.50	€10.00	€2.10	link	Air Tube Outside	Clean inside if dirty	
Water Outlet Tube Inside	10x7mm 50cm Silicone						Water Outlet Tube Inside	Clean inside if dirty	
Water Inlet Tube Inside	10x7mm 100cm Silicone, roughly divided in 2						Water Inlet Tube Inside	Clean inside if dirty	
Water Tube Outside	9x1.5mm 200cm PVC not bendable easily, meters	4	€0.52	€2.08	€3.90	link	Water Tube Outside	Clean inside if dirty	
Air Tube Inside	5x7mm PVC 4 meters	1	€1.00	€1.00	€4.00	link	Air Tube Inside	Clean inside if dirty	

Mechanics									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
Linear Guide Y	Linear Rail Y MGN12 500mm + MGN12H	2	€30.00	€60.00	€0.00	link	Linear Guide Y	check block carriage	about price
Linear Guide X	Linear Rail X MGN12 700mm + MGN12H/MGN12C	1	€45.00	€45.00	€0.00	link	Linear Guide X	check block carriage	about price
X-belt	GT2 10mm 2m	1	€13.00	€13.00		€0.00	X-belt		
Y-belt	GT2 10mm 2m	2	€13.00	€26.00			Y-belt		
Window Piston Left	40N	1	€1.59	€1.59	€5.00	link	Window Piston Left	Attach 2xPiston Attacher	
Window Piston Right	50N	1	€1.59	€1.59			Window Piston Right	Attach 2xPiston Attacher	
Profile 3060-770	Aluminum Profile 3060 Nut 8 770mm	2	€10.00	€20.00	€10.00	link	Profile 3060-770		
Profile 20-660	Aluminum Profile 2020 Nut 6 660mm	4	€3.36	€13.44			Profile 20-660		
Profile 20-700	Aluminum Profile 2020 Nut 6 700mm	1	€3.36	€3.36			Profile 20-700		
Profile 20-350	Aluminum Profile 2020 Nut 6 350mm	2	€1.92	€3.84			Profile 20-350		
Profile Fillet	Aluminum Profile Fillet 3030 Nut 8 860mm	1	€9.90	€9.90			Profile Fillet	cut smoothly on the side	
Profile 30-800	Aluminum Profile 3030 Nut 8 800mm	5	€5.44	€27.20			Profile 30-800		
Profile 30-860	Aluminum Profile 3030 Nut 8 860mm	1	€6.12	€6.12			Profile 30-860		
Profile 30-770	Aluminum Profile 3030 Nut 8 770mm	3	€5.44	€16.32			Profile 30-770		
Profile 30-600	Aluminum Profile 3030 Nut 6 600mm	2	€4.08	€8.16			Profile 30-600	Do M6 Tappings	
Profile 30-400	Aluminum Profile 3030 Nut 6 400mm	2	€2.72	€5.44			Profile 30-400	Do M6 Tappings	
Profile 30-350	Aluminum Profile 3030 Nut 8 350mm	2	€2.72	€5.44		link	Profile 30-350		
Profile 30-380	Aluminum Profile 3030 Nut 8 380mm	2	€2.72	€5.44			Profile 30-380		
Profile 30-150	Aluminum Profile 3030 Nut 8 150mm	2	€1.38	€2.72			Profile 30-150		
Bracket 30	30x30 Nut 6/8	30					Bracket 30	Add 2 extra	
Bracket 20	20x20 Nut 5/6	4					Bracket 20		
Bed Connector 20	20x20 Nut 5/6 removed alignments	4	€1.00	€8.00			Bed Connector 20	remove sides to fit	
Y-motor	Nema 17 48mm dual shaft ATC 17HS5425B	1	€10.70	€10.70	€6.00	link	Y-motor	Crimp ends; Label the ends of the wires	
X-motor	Nema 17 48mm	1	€9.29	€9.29		link	X-motor	Attach label ends	
Coupler	Coupler 8mm - 5mm	2	€1.99	€3.98	€0.00	link	Coupler	Check that the holes fit	
Y-shaft 350	Y 8mm Shaft 350mm	1	€4.90	€4.90	€6.00	link	Y-shaft 350		
Y-shaft 400	Y 8mm Shaft 400mm	1	€5.60	€5.60			Y-shaft 400		
Y-pulley Back	Y Pulley GT2 10mm 36T Hole 8mm	2	€4.29	€8.58	€3.00	link	Y-pulley Back	check shafts fit	2 pulleys have to be bored to 10mm
Y-pulley Front	Y Pulley GT2 10mm 36T Hole 10mm	2	€4.29	€8.58			Y-pulley Front	Insert Y-Bearing Front; cut side	in general pulleys can be 5mm and then bored
X-pulley	X Pulley GT2 10mm 36T Hole 5	1	€4.29	€4.29			X-pulley	check that fits the motor	
Y-bearing Back	Y Back Bearing 628	2	€0.88	€1.76	€0.00	link			
Y-bearing Front	Y Back Bearing MR106	10	€0.66	€6.60	€0.00	link			
X-bearing	636Z	1	€1.00	€1.00	€0.10	link	X-bearing		
Handle	Window Handler Hole distance 128mm	1	€2.10	€2.10	€3.97	link	Handle	check that fits the window	
Hinge	DIN 7954 C 60x60mm	2	€1.50	€3.00	€4.95	link	Hinge	Enlarge holes to M6	

Laser									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
Laser Tube Holder	Laser Tube Holders 50-130mm	2	€10.00	€20.00	€0.00	link	Laser Tube Holder	Check screws and plastics are present	about price, best order from China
Laser Tube	40W CO2 50x720mm	1	€85.00	€85.00	€0.00	link	Laser Tube	Check the tube is intact	about price, best order from China
Lens	Laser Lens 18mm, 50,8 focal length	1	€30.00	€30.00	€0.00	link	Lens		about price, best order from China
Mirror 20	Mo/Si Mirror 20mm	2	€2.50	€4.50		link	Mirror 20		about price, best order from China
Mirror 25	Mo/Si Mirror 25mm	1				link	Mirror 25		about price, best order from China
Mirror Holder 25	For 25mm mirror	1	€14.00	€14.00	€30.00		Mirror Holder 25	Cut base and make new holes; glue base	about price, best order from China
Mirror Holder 20	For 20mm mirror	1	€25.00	€25.00			Mirror Holder 20	Prolongue vertical screw slider; cut the top	about price, best order from China, needs to be cnc milled
Laser Head	For 18mm lens	1				link	Laser Head	Drill laser exit 4.5	about price, best order from China
Rubber Ring	18mm outer diameter, 1/1.5mm thickness	4					Rubber Ring		

Fasteners									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
B-screw M6-10	ISO 7380-2 M6 10mm Black	16	€0.21	€3.36	€0.00	link	B-screw M6-10		check if possible from marth0331 ebay instead of worth
B-screw M6-12	ISO 7380-2 M6 12mm Black	132	€0.05	€6.47		link	B-screw M6-12		
B-screw M6-16	ISO 7380-2 M6 16mm Black	71	€0.05	€3.48	€6.80	link	B-screw M6-16		
B-screw M6-20	ISO 7380-2 M6 20mm Black	22	€0.05	€1.08		link	B-screw M6-20		
T-nut M4	T-Nut 6 M4 Ball	4	€0.27	€1.08		link	T-nut M4		
T-nut M6	T-Nut 6 M6 Ball	175	€0.27	€47.08			T-nut M6		
T-nut M3	T-Nut 6 M3 Ball	25	€0.27	€6.73	€3.90		T-nut M3		
Hammer Nut M3	Hammer Nut 6 M3 Rotation	16	€0.08	€1.20		link	Hammer Nut M3		
Hammer Nut M5	Hammer Nut 6 M5 Rotation	4	€0.08	€0.30	€2.00		Hammer Nut M5		
Hammer Nut M4	Hammer Nut 6 M4 Rotation	12	€0.08	€0.90			Hammer Nut M4		
Flat Nut M6	Flatnut M6	22	€0.25	€5.50	€6.90	link	Flat Nut M6		
Washer M6	DIN 125 M6	50	€0.01	€0.60		link	Washer M6		
Washer M5	DIN 125 M5	8	€0.01	€0.10			Washer M5		
Washer M8 Big	DIN 9021 M8	2	€0.02	€0.04			Washer M8 Big		

Lock Nut M6	DIN 985 M6	48	€0.01	€0.48	€5.00	link	Lock Nut M6		
Lock Nut M5	DIN 985 M5	8	€0.01	€0.08			Lock Nut M5		
Lock Nut M4	DIN 985 M4	8	€0.01	€0.08			Lock Nut M4		
Lock Nut M3	DIN 985 M3	16	€0.01	€0.16			Lock Nut M3		
Nut M6	DIN 934 M6	10	€0.01	€0.10			Nut M6		
B-screw M3-8	ISO 7380-2 M3 8mm	5					B-screw M3-8		
C-screw M3-8	DIN 912 M3 8mm	20	€0.02	€0.30			C-screw M3-8		
C-screw M3-10	DIN 912 M3 10mm	12	€0.02	€0.18			C-screw M3-10		
C-screw M3-12	DIN 912 M3 12mm	31	€0.02	€0.47			C-screw M3-12		
C-screw M3-16	DIN 912 M3 16mm	10	€0.02	€0.15			C-screw M3-16		recheck price once back in stock
C-screw M3-20	DIN 912 M3 20mm	10	€0.02	€0.15	C-screw M3-20				
C-screw M3-30	DIN 912 M3 30mm	2	€0.02	€0.03	C-screw M3-30				
C-screw M4-8	DIN 912 M4 8mm	20	€0.01	€0.28	link	C-screw M4-8			
C-screw M4-12	DIN 912 M4 12mm	10	€0.01	€0.14		C-screw M4-12			
C-screw M5-12	DIN 912 M5 12mm	4	€0.02	€0.06	link	C-screw M5-12			
C-screw M5-20	DIN 912 M5 20mm	8	€0.02	€0.12		C-screw M5-20			
C-screw M6-10	DIN 912 M6 10mm	3	€0.02	€0.07	link	C-screw M6-10			
C-screw M6-20	DIN 912 M6 20mm	2	€0.03	€0.07		C-screw M6-20			
Hexagon screw M6-30	DIN 912 M6 30mm	1	€0.03	€0.03		Hexagon screw M6-30			
C-screw M6-35	DIN 912 M6 35mm	1	€0.04	€0.04		C-screw M6-35			
C-screw M6-40	DIN 912 M6 40mm	2	€0.05	€0.10		C-screw M6-40		recheck price once back in stock	
Hexagon screw M6-60	DIN 912 M6 60mm	1	€0.07	€0.07	Hexagon screw M6-60				
Standoff	Plastic Spacer M3 15mm	16	€0.25	€4.00	€1.95	link	Standoff		
Plastic-screw M3-8	Plastic Screw M3 8mm DIN7985 or similar	30	€0.13	€3.90	€0.00	link	Plastic-screw M3-8		best from China, much cheaper there
Bed Leg	Threaded Rod M6 120mm	4	€0.60	€2.40	€0.00	link	Bed Leg		

Manually produced parts								
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name	Notes
Lamella	Bed Lamella, 20x30mm, 400mm length	30	€2.18	€65.40	€6.95	link	Lamella	Smooth them
Mains Cable	AC 3x1.5/2mm 40 cm	3	€0.51	€1.53		link	Emergency Button Cable *	
Emergency Button Cable *	AC 2x1/1.5mm 110cm						Laser + Motor Power Cable	Join them together
Laser Power Cable	AC 3x1.5/2mm 30cm							
Motor Power Cable	AC 3x1.5/2mm 45cm							
LED Cable *	DC 2x1mm 150cm x 2	5	€0.90	€4.50		link		
X-driver Power Cable	DC 2x1mm 35cm						X-driver Power Cable	
Y-driver Power Cable	DC 2x1mm 35cm						Y-driver Power Cable	
Controller Power Cable	DC 2x1mm 65cm						Controller Power Cable	
X-motor Cable *	DC 4x0.5mm 150cm	3	€1.06	€3.18		link		Motor Cables Must be labeled with A- A+ B- B+
Y-motor Cable *								
X-driver Logic Cable	DC 4x0.5mm 45cm						X-driver Logic Cable	
Y-driver Logic Cable	DC 4x0.5mm 45cm						Y-driver Logic Cable	
Switch Cable *	DC 2x0.25mm 120cm	8	€1.00	€8.00		link		
Endstop Cable *	DC 2x0.25mm 140cm							
	DC 2x0.25mm 280cm							
Water Flow Sensor Cable *	DC 2x0.25mm 50cm							
Laser Logic Cable	DC 2x0.25mm 100cm	2	€0.49	€0.98		link	Laser Logic Cable + Resistor	Attach resistor
Laser (-) Cable *	1x1.5mm 75cm black						Laser (-) Cable *	
Laser (+) Cable								
Relay Jumper Cable	jumper cable M-M 20 or 10cm orange!						Relay Jumper Cable	
Laser Jumper Cable	10cm	40	€0.08	€3.08	€1.99	link	Laser Jumper Cable	
Earth Cable	1x1/1.5mm 25cm							
Jumper Cable	40 jumper cable M-F 30cm, 5 M-M 30cm						Jumper Cable	
Window Sensor Cable *	DC 2x0.25mm 160cm	1						

3D Printed parts								
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name	Notes
Exhaust	White/Black PETG+PLA Predator 3D cura profile	1	€14.00	€42.00	€0.00	Link	Exhaust	check parts are smooth;
Bed Adjuster		4					Bed Adjuster	glue nut M6 inside
Piston Support Right		1					Piston Support Right	check parts are smooth;
Piston Support Left		1					Piston Support Left	check parts are smooth;
Front Bracket		2					Front Bracket	check parts are smooth;
Switch Holder		1					Switch Holder	check parts are smooth;
Window Magnet Holder		1					Window Magnet Holder	check parts are smooth;
Y-motor Holder		1					Y-motor Holder	check parts are smooth;
Window Sensor Holder		1					Window Sensor Holder	check parts are smooth;
X-Endstop Holder		1					X-Endstop Holder	check parts are smooth;
Front Spacer Right		1					Front Spacer Right	check parts are smooth;
Front Spacer Left		1					Front Spacer Left	check parts are smooth;
Window Holder		1					Window Holder	check parts are smooth;
Wire Fixer		25					Wire Fixer	check parts are smooth;
Air Filter Connector *		1						
Radial Fan Connector		2						
Emergency Button Cover		1					Cover	check parts are smooth

Laser Cut parts								
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name	Notes
Chain Support	POM 6mm 400x50mm	1	€5.00	€5.00	€4.90	link	Chain Support	
X-belt Attacher		1					X-belt Attacher	about price
Y-endstop Holder		1					Y-endstop Holder	
Piston Attacher		4					Piston Attacher	
X-wire Fixer	Acrylic 3mm	1	€2.00	€2.00	€6.00	link	X-wire Fixer	add extra
X-wire Inserter		1					X-wire Inserter	add extra
Window		1					Window	indicate top and bottom
Focus Tool	Poplar Wood 5-6mm	3	€1.00	€2.00	€0.00	-	Focus Tool	
Template 1		2					Template 1	
Template 2		2					Template 2	about price, buy from local stores like OBI

CNC Parts									
Manual name	Specifications	Amount	Price	Total	Shipping	Vendor1	Label Name		Notes
Converter PCB	FR1/2 with Logic converter Attiny45/85	1	€10.00	€10.00	€0.00	-	Converter PCB	program and test it	selfmade, may be possible to produce it
Laser Head Holder	CNC grade Aluminum 50x50x100mm	1	€34.00	€34.00	€0.00	link	Laser Head Holder	smooth	from Schneiders CNC
Front Pulley Holder	CNC grade Aluminum flat 6mm AlMg3	2	€21.00	€21.00	€5.90	link	Front Pulley Holder	smooth; tapping and position marking	single place 500/400x200mm is sufficient
Back Bearing Holder	CNC grade Aluminum flat 6mm AlMg3	2					Back Bearing Holder	Insert Y-Bearing Back; rub edges	
Chain End Holder	CNC grade Aluminum flat 6mm AlMg3	1					Chain End Holder	smooth	
X-holder Right	CNC grade Aluminum flat 6mm AlMg3	1					X-holder Right	smooth	
X-holder Left	CNC grade Aluminum flat 6mm AlMg3	1				link	X-holder Left	smooth	about prices, 2/3 of a plate are used
Back Panel	Dibond 3mm Black matte, 2 plates 1000x1500mm	1					Back Panel	attach or engrave labels; smooth	
Front Panel							Front Panel	attach writings	
Top Back Panel							Top Back Panel	smooth	
Top Front Panel							Top Front Panel	smooth	
Laser Panel							Laser Panel	smooth	
Sub Panel Right							Sub Panel Right	smooth	
Sub Panel Left							Sub Panel Left	smooth	
Sub Panel Front							Sub Panel Front	smooth	
Spacer Panel Right							Spacer Panel Right	smooth	
Spacer Panel Left							Spacer Panel Left	smooth	
Right Panel							Right Panel	smooth	
Left Panel							Left Panel	smooth	
Air Panel							Air Panel	smooth	
Bottom Panel	Dibond 3mm Gray matte RAL 9006	1	€30.00	€30.00		link	Bottom Panel		
Separator Panel							Separator Panel		