Bill of Materials

Product: Bend & Snip, Automated Jumper Wire Cutter			Date: Dec 20, 2024			
Assembly: Full Machine Assembly						
Item #	**Part #**	**Qty**	**Name**	**Material**	**Source**	**Cost (per unit)**
1	B0D1KQZHKL	2	Threaded Rod Lead Screw	304 Stainless Steel	Amazon	$4.50
2	B0D1KQZHKL	2	Lead Screw Nut	304 Stainless Steel	Amazon	Included with Item #1
3	B08ZJ854Z6	2	5 mm to 8 mm Shaft Coupling	Aluminum Alloy	Amazon	$4.27
4	B00161GBDW	2	Knipex Replacement Blade	Alloy Steel	Amazon	$10.74
5	B09K1CNP6L	1	Boden Dual Gear Extruder	Stainless Steel	Amazon	$47.50
6	B08ZK8BTNN	1	3D Printer Tube	PTFE	Amazon	$8.99
7	1528-1743-ND	5	Hook-Up 22 AWG Solid Wire	Copper, PVC	Digikey	$3.19
8	1528-1743-ND	1	Wooden Dowel Rod	Wood	Digikey	Included with Item #7
9	9	2, 16.33 g each	Spool Holder Mount	Dual Color PLA	Amazon, Bambu Lab X1C	$0.41

10	10	1, 38.74 g	Extruder Motor Mount	Dual Color PLA	Amazon, Bambu Lab X1C	$0.98
11	11	1, 2.77 g	Extruder Motor Knob	Dual Color PLA	Amazon, Bambu Lab X1C	$0.07
12	12	1, 59.76 g	Bottom Blade Motor Mount	Dual Color PLA	Amazon, Bambu Lab X1C	$1.52
13	13	1, 12.70 g	Top Blade Mount	Dual Color PLA	Amazon, Bambu Lab X1C	$0.32
14	14	1, 4.48 g	Lead Screws Holder	Dual Color PLA	Amazon, Bambu Lab X1C	$0.11
15	15	1, 38.98 g	Bender Motor Mount	Dual Color PLA	Amazon, Bambu Lab X1C	$0.99
16	16	1, 4.56 g	Bender Arm	Dual Color PLA	Amazon, Bambu Lab X1C	$0.12
17	17	1, 42.23 g	Slide	Dual Color PLA	Amazon, Bambu Lab X1C	$1.10
18	18	1, 16.14 g	Bucket	Dual Color PLA	Amazon, Bambu Lab X1C	$0.41
19	B0046AMGW0	1	Arduino Mega 2560	Fiberglass, Copper, Semiconductors	Amazon	$48.35
20	1528-1062-ND	4	Nema 17 Stepper Motor	Steel, Copper, Magnets	Digikey	$14.00
21	B0C5JCF5RS	3	L298N Motor Driver	Fiberglass, Copper, Semiconductors	Amazon	$2.50

22	ECPB_M_Multi_6P	2	Prototype Board Solderable Breadboard	Fiberglass, Copper	Amazon	$1.17
23	B0B2L66ZFM	8	Breadboard Jumper Wires	Copper Clad Aluminum, PVC	Amazon	$0.06
24	B019K5X53O	1	LCD Display Module	Liquid Crystals, Fiberglass, Copper, Semiconductors	Amazon	$9.99
25	B00P7QBGD2	1	Joystick Sensor	Plastic, Fiberglass, Copper, Semiconductors	Amazon	$6.99
26	B072R1H185	2	Arcade Button	Plastic, Fiberglass, Copper, Semiconductors	Amazon	$1.36
27	27	1	Electronics Mounting Plate	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75
28	28	1	Front Screen Panel	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75
29	29	1	Side Port Panel	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75
30	30	1	Divider Panel	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75
31	31	1	Back Vent Panel	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75

32	32	2	Front/Back Enclosure Panel	Clear Acrylic	Makerstock, Universal VLS 3.60	$4.48
33	33	2	Sides Enclosure Panel	Clear Acrylic	Makerstock, Universal VLS 3.60	$4.48
34	34	1	Top Enclosure Panel	Clear Acrylic	Makerstock, Universal VLS 3.60	$8.95
35	B0BSDNPTL8	4	Acrylic Corner Brackets	Clear Acrylic	Amazon	$1.28
36	B0BSDNPTL8	12	Acrylic Corner Bracket Bolts	Clear Acrylic	Amazon	Included with Item #35
37	B0BSDNPTL8	12	Acrylic Corner Bracket Nuts	Clear Acrylic	Amazon	Included with Item #35
38	38	4	Aluminum Extrusion 315.6 mm	Silver Anodized Aluminum	McMaster-Carr	$2.84
39	39	4	Aluminum Extrusion 177.8 mm	Silver Anodized Aluminum	McMaster-Carr	$2.84
40	40	4	Aluminum Extrusion 101.6 mm	Silver Anodized Aluminum	McMaster-Carr	$2.84
41	B0855V2JV3	20	Aluminum Extrusion Corner Bracket	Aluminum	Amazon	$0.95
43	3136N409	55	M5 x 0.8 mm 10 mm Long Socket Button Head Bolt	Zinc-Plated Steel	McMaster-Carr	$0.77
44	3136N409	55	M5 x 0.8 mm Aluminum Extrusion Nut	Zinc-Plated Steel	McMaster-Carr	$0.77
45	91290A124	8	M3 x 0.5 mm 22 mm Long	Black Oxide Class	McMaster-Carr	$0.13

			Socket Head Cap Bolt	12.9 Alloy Steel		
46	91290A119	2	M3 x 0.5 mm 14 mm Long Socket Head CapBolt	Black Oxide Class 12.9 Alloy Steel	McMaster-Carr	$0.15
47	91290A115	44	M3 x 0.5 mm 10 mm Long Socket Head Cap Bolt	Black Oxide Class 12.9 Alloy Steel	McMaster-Carr	$0.13
48	91290A109	12	M3 x 0.5 mm 4 mm Long Socket HeadCap Bolt	Black Oxide Class 12.9 Alloy Steel	McMaster-Carr	$0.13
49	90591A250	66	M3 x 0.5 mm Hex Nut	Zinc-Plated Steel	McMaster-Carr	$0.03
50	91290A049	4	M2 x 0.4 mm 20 mm Long Socket Head Bolt	Black Oxide Class 12.9 Alloy Steel	McMaster-Carr	$0.15
51	90128A181	4	M2 x 0.4 mm 10 mm Long Socket Head Cap Bolt	Zinc-Plated Class 12.9 Alloy Steel	McMaster-Carr	$0.13
52	90128A179	9	M2 x 0.4 mm 8 mm Long Socket Head Cap Bolt	Zinc-Plated Class 12.9 Alloy Steel	McMaster-Carr	$0.13
53	09591A265	17	M2 Hex Nut	Zinc-Plated Steel	McMaster-Carr	$0.02
54	54	1	Assembly Mounting Plate	Matte Black Acrylic	Makerstock, Universal VLS 3.60	$7.75
55	B07DC5VFZ7	2	10 mm LED	Copper, Semiconductors	Amazon	$0.40
56	B0C8141GB1	2	L Bracket	Stainless Steel	Amazon	$0.15

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