

Part No.	Part Name	Description (enter as a web search term when online shopping)	Category	Book Section Used	Quantity
1	Arduino power jack	5.5mm outer / 2.1mm inner barrel type male power connector	Electronics		1
2	Arduino uno microcontroller	MEGA328P-AU ATMEGA16U2 for Arduino	Electronics		1
3	Battery	ExpertPower EXP1245 12V 4.5 Amp Sealed Lead Acid Rechargeable Battery	Electronics		1
4	Battery charger	12 volt lead acid battery charger, UPG D1724	Electronics		1
5	Battery connectors	CES 10 Gauge 2 Pin Quick Disconnect Harness	Electronics		2
6	Camera trigger wire	2.5mm pin jack - SC-E3 Connecting Cable Canon Shutter DSLR	Electronics		1
7	CNC V3 shield	A4988 Stepper motor shield for Arduino 3D Printer CNC	Electronics		1
8	Electronic breadboard	Small solderable PCB breadboard 2 inch square	Electronics		2
9	Endstop micro switch	Mechanical endstop switch, wired to be N.O.	Electronics		1
10	Ethernet cable	6 ft ethernet cable	Electronics		1
11	Ethernet wall plug	Ethernet wall mount 'biscuit' - 8 pin with internal screw down lugs	Electronics		1
12	Female crimp connector pins	Female Dupont servo crimp wire jumper pins - pack of 100	Electronics		1
13	Four buttons pad	1" 4 membrane keypad	Electronics		1
14	Fuse	3A automotive blade fuse, 3cm size.	Electronics		1
15	Fuse Holder	Automotive audio inline blade fuse holder - black red DC 12V	Electronics		1
16	LCD module	IIC/I2C/TWI 1602 Serial LCD Module Display	Electronics		1
17	Optocoupler chip	Fairchild Semiconductor 4N35 optocoupler, for camera trigger.	Electronics		1
18	Pin Connectors, 2 pin	Dupont jumper wire cable housing female connector, 2.54 pitch	Electronics		5
19	Pin Connectors, 4 pin	Dupont jumper wire cable housing female connector, 2.54 pitch	Electronics		2
20	Rectifier Diode	100V 5A Small Signal Gleichrichter Schottky Rectifier Diodes	Electronics		2
21	Resistors	1K ohm	Electronics		7
22	Shrink Wrap	1/4" shrink tube - 4 inches of tubing	Electronics		1
23	Spade connectors for battery	16 to 14 gauge female spade crimp connector	Electronics		2
24	Step Driver	5 pieces of A4988 step driver board	Electronics		1
25	Stepper Motor	Stepper Motor Nema 17 Bipolar 40mm 64oz.in(45Ncm)	Electronics		1
26	Wire for power hookup	18 gage speaker wire pair, 3 ft.	Electronics		1
27	EMT	10 ft section, 1/2-in EMT	Hardware		2
28	Feet	Waxman 5/8 in, Item # 66943 Model # 4656295N	Hardware		4
29	Fittings	1/2-in EMT connector, Item # 20346 Model # 49250	Hardware		8
30	Small Box	Raco 1-Gang	Hardware		1
31	Spring	1/2" O.D. x 1-1/2" Long x .05" Wire Diameter extension spring or similar	Hardware		1
32	Square Box	Raco 2-Gang Gray	Hardware		1
33	Square Box cover	Raco 2-Gang Square Metal Electrical Box Cover	Hardware		1
34	Steel hose clamps	3/4" screw tighten steel hose clamps	Hardware		4
35	Beaded Chain	6 ft of #6 Gage beaded chain; 1/8" (3.2mm) balls	Misc		1
36	Double sided foam tape	Pealable foam tape in rectangular sections	Misc		1
37	Electrical Tape	Vinyl electrical tape, black.	Misc		1
38	Heavy Cloth tape	Gaffer tape or Gorilla tape	Misc		1
39	Silicone Grease	Dielectric silicone grease, is compatible with ABS plastic from 3D printer	Misc		1
40	Small tin box for mints	Tin usually sold with mints, measures 3/4" x 2 1/4" x 3 3/4" (2 cm x 9.5 cm x 8.5 cm)	Misc		1
41	Wire Anchors	self adhesive wire anchors	Misc		3
42	Wood block	block cut from 1 x 4 wooden board, 3 1/2" x 3 1/4" x 3/4" (9 cm x 8.5 cm x 2 cm)	Misc		1
43	Zip ties	6" zip ties for wire management	Misc		50
44	Chain mount screw	1" deck screw	Nuts & Bolts		1
45	Nails for idler pulley shaft	1/8" roofing nails, cut to short lengths used as shaft for idler pulley	Nuts & Bolts		1
46	Screws - camera ball mount	1/4-20 x 2 inch tapered head screws	Nuts & Bolts		3
47	Screws - camera screw	1/4-20 x 2 inch pan head screw	Nuts & Bolts		1
48	Stepper motor screws	M3 x 8mm	Nuts & Bolts		6
49	Threaded inserts for wood	1/4"-20 brass inserts	Nuts & Bolts		3