

Part	Type	Notes	Quantity Needed	Per-Machine Price	Pack Quantity	Pack Price	Price Per Part	Packs Needed	extra part quantt	Purchase Price	Purchase Link
Conveyor Belt Hardware											
Shaft collar	8mm	For front of drive roller	1	\$0.90	10	\$8.99	\$0.90	1	0	\$8.99	https://smile.amazon.com/gp/product/B0741FRZS2/ref=spx_vo_dt_b_asin_title_c00_s007ie=UTF8&psc=1
8mm shaft, 210mm	hardened steel	drive roller - cut into 183mm	1	\$7.20	2	\$14.39	\$7.20	5	0	\$71.95	https://smile.amazon.com/cmac-Motor-FRYBRNX-Hardened-Printer-Drum-B08SD3QZYH/ref=sr_1_1_spa?dchild=1&keywords=8mm+shaft+400mm&qid=1619380221&sr=8-1-spons&spc=1&spL=ZW5pcmludG9vUXVhbGlnaWVwPUEuOTQ2XmU4
8mm shaft, 100mm	hardened steel	idler - cut down from the 400	0	\$0.00	2	\$14.39	\$7.20	0	0	\$0.00	
flanged bushings	8mm	drive roller guides	2	\$6.88	1	\$3.44	\$3.44	20	0	\$68.80	https://www.mcmaster.com/544872/
M3 Hex Standoffs, 10mm long	4.5 or 5mm hex	lift the bed up	6	\$6.30	1	\$1.05	\$1.05	60	0	\$63.00	https://www.mcmaster.com/94868A156/
M3 screw, 8mm	flat head	replace the bed screws - ea	9	\$1.60	50	\$9.10	\$0.18	2	10	\$18.20	https://www.mcmaster.com/91304A101/
M5 screws, 25mm	button head	tension the idler	2	\$0.31	50	\$7.86	\$0.16	1	30	\$7.86	https://www.mcmaster.com/91306A669/
M5 nuts	hex	tension the idler	2	\$0.04	100	\$1.76	\$0.02	1	80	\$1.76	https://www.mcmaster.com/90592A095/
Ejector Hardware											
F606ZZ flanged ball bearings	6x22x7		2	\$2.74	10	\$13.69	\$1.37	2	0	\$27.38	https://smile.amazon.com/gp/product/B07662N7N2/ref=spx_vo_dt_b_asin_title_c00_s007ie=UTF8&psc=1
flexible shaft coupling	8mm to 8mm	Link the belt and the motor	1	\$6.50	2	\$12.99	\$6.50	5	0	\$64.95	https://smile.amazon.com/gp/product/B08QVKMDC6/ref=spx_vo_dt_b_asin_title_c00_s017ie=UTF8&psc=1
40T GT2 pulley	8mm bore	Attach to belt	1	\$4.00	2	\$7.99	\$4.00	5	0	\$39.95	https://smile.amazon.com/gp/product/B0766BL4K/ref=spx_vo_dt_b_asin_title_c00_s017ie=UTF8&psc=1
20T GT2 pulley	6mm bore	Attach to motor	1	\$1.60	5	\$7.99	\$1.60	2	0	\$15.98	https://smile.amazon.com/gp/product/B08P8KY773/ref=spx_vo_dt_b_asin_title_c08_s007ie=UTF8&psc=1
GT2 continuous belt	79 teeth	connect the pulleys	1	\$11.19	10	\$11.88	\$1.19	1	0	\$11.88	https://smile.amazon.com/gp/product/B014QK6H26/ref=spx_vo_dt_b_asin_title_s007_s007ie=UTF8&psc=1
24v motor	200PM	ejector motor	1	\$13.99	1	\$13.99	\$13.99	10	0	\$139.90	https://smile.amazon.com/gp/product/B08P8BACZ87/ref=spx_vo_dt_b_search_asin_title?ie=UTF8&psc=1
8mm dowel pin	40mm long	ejector drive shaft	1	\$0.96	10	\$9.60	\$0.96	1	0	\$9.60	https://www.mcmaster.com/91595A573/
M3 screws, 12mm	socket head	Mount the motor	2	\$0.10	100	\$5.19	\$0.05	1	80	\$5.19	https://www.mcmaster.com/91292A114/
M5 screws, 100mm	socket head	Rear standoff for the motor	2	\$1.53	10	\$7.66	\$0.77	2	0	\$15.32	https://www.mcmaster.com/91502A159/
M3 screws, 300mm	socket head	mount the switch	2	\$0.42	50	\$10.51	\$0.21	1	30	\$10.51	https://www.mcmaster.com/91290A130/
3030 T-Nuts, M3	post-assembly	mount the switch	2	\$0.46	50	\$11.57	\$0.23	1	30	\$11.57	https://smile.amazon.com/gp/product/B07GVJFZVB/ref=spx_vo_dt_b_search_asin_title?ie=UTF8&psc=1
SV-166-1C25 microswitch	long hinge roller	ejector activator	1	\$0.55	20	\$10.99	\$0.55	1	10	\$10.99	https://smile.amazon.com/SV-166-1C25-Industrial-Switches-Terminals-Momentary-SPST-B067F119M2/ref=sr_1_2_spa?dchild=1&keywords=SV-166-1C25&qid=1619362620&sr=industrial&sr=1-2-spons&spc=1&spL=ZW5pcmludG9vUXVhbGlnaWVwPUEuOTQ2XmU4
Ring Terminal	M3, 22-16AWG	w/ power the ejector	1	\$0.07	150	\$9.99	\$0.07	1	140	\$9.99	https://smile.amazon.com/gp/assess-Insulated-Electrical-Connectors-Accessory-Set-B08D128230/ref=sr_1_3?dchild=1&keywords=43xinsulated+Ring+Crimp+Terminals&qid=1619362910&sr=industrial&sr=1-3
Spade connectors	22-16AWG	wire in the switch	2	\$0.50	80	\$19.98	\$0.25	1	60	\$19.98	https://smile.amazon.com/gp/product/B07GP96JSS/ref=spx_vo_dt_b_search_asin_image?ie=UTF8&psc=1
Wire Nuts	gray, 2"22awg term wire up the switch		2	\$0.04	1000	\$17.99	\$0.02	1	980	\$17.99	https://smile.amazon.com/Maxxima-Electrical-Connector-Screw-Terminal-tp/B077P8K6G/ref=sr_1_18?dchild=1&keywords=wire%2Bnut&qid=1619363075&sr=industrial&sr=1_18&pf_rd_p=1
22awg wire	Need about 2 meter wire it all up		0.5	\$1.41	6	\$16.95	\$2.83	1	1	\$16.95	https://smile.amazon.com/gp/product/B07743YYVG/ref=spx_vo_dt_b_search_asin_title?ie=UTF8&psc=1
Belt Material											
225mm Polyamide Film (Kapton)	225x320x1m	The belt is 155mm wide by 1m long	2	\$8.14	6	\$24.41	\$4.07	4	4	\$97.64	https://www.aliexpress.com/item/6500473438004.html?spm=a2g0a.9542311.0.041376c46FRWN0U
Powdercoating Tape	polyester film + silicone adhesive, .001" thick, 2"		1	\$11.98	1	\$11.98	\$11.98	10	0	\$119.80	https://www.mcmaster.com/75304296/
Kapton Tape	2" wide, Polyimide film + silicone adhesive, .002"		1	\$15.97	1	\$15.97	\$15.97	10	0	\$159.70	https://smile.amazon.com/Heat-Resistant-Tape-Sublimation-Temperature-tp/B07XOXT1Y8/ref=sr_1_1_spa?dchild=1&keywords=kapton+tape&qid=1619363075&sr=industrial&sr=1-1_spons&spc=1&spL=ZW5pcmludG9vUXVhbGlnaWVwPUEuOTQ2XmU4
Painter's Tape	2" wide		1	\$4.79	6	\$28.75	\$4.79	2	2	\$57.50	https://smile.amazon.com/ScotchBlue-2090-48A-CP-Painters-Polypropylene-Backing-tp/B000A3DQGW/ref=sr_1_5?oid=PRRDS7M1150H&dchild=1&keywords=painter%27s+tape+2+inch&qid=1620781150&sr=prefix&spc=1&spL=ZW5pcmludG9vUXVhbGlnaWVwPUEuOTQ2XmU4
Raspberry Pi Parts											
Back Converter Module	USB-C	power the Raspberry Pi	1	\$14.99	1	\$14.99	\$14.99	10	0	\$149.90	https://smile.amazon.com/gp/product/B07ZQB6S3L/ref=spx_vo_dt_b_asin_title_c05_s007ie=UTF8&psc=1
USB-Micro/USB cable	1ft	connect pi to the prusa mini	1	\$7.99	1	\$7.99	\$7.99	10	0	\$79.90	https://smile.amazon.com/gp/product/B07FZFQD9V/ref=spx_vo_dt_b_asin_title_c05_s007ie=UTF8&psc=1
Pi Camera Cable	30cm	connect up pi camera	1	\$1.33	6	\$7.99	\$1.33	2	2	\$15.98	https://smile.amazon.com/gp/product/B08VLCBB93/ref=spx_vo_dt_b_asin_title_c04_s007ie=UTF8&pf_rd_p=1
Arducam		cheaper Pi Camera	1	\$9.99	1	\$9.99	\$9.99	10	0	\$99.90	https://smile.amazon.com/gp/product/B012V1HEP4/ref=spx_vo_dt_b_asin_title_c04_s007ie=UTF8&psc=1
Raspberry Pi 4	2GB	No need for more ram, but i	1	\$34.99	1	\$34.99	\$34.99	10	0	\$349.90	https://www.microcenter.com/product/621439/raspberry-pi-4-model-b-2gb-64g
2.5mm screws, 35mm long	socket head		3	\$1.44	25	\$12.03	\$0.48	2	20	\$24.06	https://www.mcmaster.com/91292A313/
2.5mm nuts	hex		3	\$0.22	50	\$3.69	\$0.07	1	20	\$3.69	https://www.mcmaster.com/94150A110/
Optional Parts											
Collection Tray			1	\$2.66	3	\$7.99	\$2.66	4	2	\$31.96	https://smile.amazon.com/gp/product/B086XYMQD/ref=spx_vo_dt_b_asin_title_c05_s007ie=UTF8&psc=1
TOTAL PRICE											
Per Machine, perfect:				\$173.81						\$1,858.62	
Per Machine, in quantity:				\$165.86							
Total for				10	\$1,658.62						
Price without Pi or Optional Parts											
Per Machine, perfect:				\$100.19							
Per Machine, in quantity:				\$110.33							
Total for				10	\$1,103.33						

