

**Team 506 - Corning Plugger Pallet Short Part Stabilization**

**Bill of Materials**

**Revision Number:** 3

**Date Revised:** 3/30/2023

**Project Maturity (%)** 70.00

Item Number	Name	Part Number	Description	Vendor	Pack Cost(\$)
1	Multipurpose 6061 Aluminum Sheets and Bars	9246K425	Multipurpose 6061 Aluminum, 1/4" Thick, 12" x 48"	McMaster-Carr	109.41
2	Multipurpose 6061 Aluminum Sheets and Bars	9246K13	Multipurpose 6061 Aluminum, 1/4" Thick x 12" Wide, 1 Foot Long	McMaster-Carr	35.61
3	Slippery UHMW Polyethylene Sheets, Bars, and Strips	8752K841	Slippery White UHMW Polyethylene Sheet, 6" x 6" x 1/16"	McMaster-Carr	4.35
4	Slippery UHMW Polyethylene Sheets, Bars, and Strips	4296A38	Slippery Black UHMW Sheet, 12" x 24" x 1/4"	McMaster-Carr	28.31
5	Low Profile Shoulder Screws	94328A923	Black Oxide Alloy Steel Low-Profile Shoulder Screw, 1/4" Shoulder Diameter, 3/4" Shoulder Length, 10-24 Thread	McMaster-Carr	4.68
6	Alloy Steel Shoulder Screws	91259A542	Alloy Steel Shoulder Screw, 1/4" Shoulder Diameter, 1" Shoulder Length, 10-24 Thread	McMaster-Carr	1.39
7	Aluminum Nylon-Insert Locknuts	95856A225	Aluminum Nylon-Insert Locknut, 10-24 Thread Size	McMaster-Carr	4.82
8	Multipurpose 6061 Aluminum Sheets and Bars	9246K491	Multipurpose 6061 Aluminum, 1/2" Thick, 2" x 48"	McMaster-Carr	39.51
9	Slippery UHMW Polyethylene Sheets, Bars, and Strips	8752K121	Slippery White UHMW Polyethylene Sheet, 12" x 12" x 1/16"	McMaster-Carr	9.90
10	Low-Profile Shoulder Screws	94328A917	Black Oxide Alloy Steel Low-Profile Shoulder Screw, 1/4" Shoulder Diameter, 1/2" Shoulder Length, 10-24 Thread	McMaster-Carr	5.17
11	Alloy Steel Low-Profile Socket Head Screws	92220A145	Alloy Steel Low-Profile Socket Head Screw Hex Drive, Black Oxide, 6-32 Thread Size, 3/4" Long	McMaster-Carr	11.26
12	Alloy Steel Low-Profile Socket Head Screws	92220A146	Alloy Steel Low-Profile Socket Head Screw Hex Drive, Black Oxide, 6-32 Thread Size, 1" Long	McMaster-Carr	8.30
13	Alloy Steel Hex Drive Flat Head Screws	91253A146	Black-Oxide Alloy Steel Hex Drive Flat Head Screw 6-32 Thread Size, 3/8" Long	McMaster-Carr	12.27
14	Alloy Steel Hex Drive Flat Head Screws	91253A148	Black-Oxide Alloy Steel Hex Drive Flat Head Screw 6-32 Thread Size, 1/2" Long	McMaster-Carr	13.21
15	High-Strength Multipurpose Neoprene Rubber Sheets, Bars, and Strips	1290N15	High-Strength Multipurpose Neoprene Sheet with Certificate, 6" x 6", 1/8"	McMaster-Carr	14.64
16	Extension Springs with Loop Ends	8594N103	Steel Extension Spring with Loop Ends, 1.75" Long, 0.24" OD, 0.018"	McMaster-Carr	4.37
17	Multipurpose 6061 Aluminum Sheets and Bars	8975K526	Multipurpose 6061 Aluminum, 1" Thick x 1-1/4" Wide X 1/2 FT Length	McMaster-Carr	10.93
18	Multipurpose 6061 Aluminum Sheets and Bars	9246K491	Multipurpose 6061 Aluminum, 1/2" Thick, 2" x 48"	McMaster-Carr	39.51
19	Alloy Steel Cup-Point Set Screws	91375A144	Alloy Steel Cup-Point Set Screw, Black Oxide, 6-32 Thread, 1/4" Long	McMaster-Carr	14.43
20	Alloy Steel Socket Head Screws	90044A112	Black-Oxide Alloy Steel Socket Head Screw, 6-32 Thread Size, 1-1/4" Long, Fully Threaded	McMaster-Carr	11.98
21	Nema 23 CNC Stepper Motor 425oz-in Bipolar 1.8deg 4.2A Stepping Motor for Extruder CNC 3D Printer DIY Milling Lathe Router	B081MVR76N	High Torque Stepper Motor Nema 23 Bipolar 4.2A 425oz-in 4-lead with 11.81" Cable for Extruder 3D Printer Milling CNC Machinery	Amazon	36.99
22	4 Pack TB6600 4A 9-42V Stepper Motor Driver CNC Controller, Stepper Motor Driver Nema tb6600 Single Axes Two Phase Hybrid Stepper Motor for CNC	B07RRB6BGQ	9V-42V DC power supply, H bridge bipolar constant phase flow drive. The maximum 4.0A of the eight kinds of output current. The largest 32 subdivision of the 6 models are optional.	Amazon	33.99
23	HiLetgo 6pcs SYB-170 Mini Breadboard Colorful Breadboard Small Plates	B071KCZZ4K	6pcs SYB-170 Mini Breadboard Colorful Breadboard Small Plates	Amazon	6.49

24	BBLIFE Silk Pearlescent Shining Sapphire Blue PLA Filament, 1kg 2.2lbs 1.75mm 3D Printing Material, Widely Support for FDM 3D Printer, Easy to Print	B094PKGB95	Color: Blue, Material: Polylactic, Plastic Silk Shiny Glossy Surface: The Finished 3D Printing Item with Shiny Silk Smooth Appearance; It's Shiny Eye-popping Glossy Outstanding Print Shiny Surface. Perfect for 3D Design, 3D Craft, 3D Modeling Projects	Amazon	23.99
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\*\*Project Maturity is the item maturities summed and divided by the amount of items, once everything is received, this will be 100%

\*\*Item Maturity will be increased by 7.69% for every cell filled, it will be at 100%

Unit Cost(\$)	Shipping Cost(\$)	Total Cost(\$)	Order Quantity	Machine Hours	Date Order Placed	Estimated Arrival	Date Order Received	Item Maturity(%)	** MATURITY CALCULATIONS IN SECTION BELOW, DO N
109.41	6.46	115.87	1	2	1/26/2023	1/27/2023	2/1/2023	100.00	
35.61	6.46	42.07	1	2	1/26/2023	1/27/2023	2/1/2023	100.00	
4.35	6.46	10.81	1	2	1/26/2023	1/27/2023	2/1/2023	100.00	
28.31	6.46	28.31	1	2	1/26/2023	1/27/2023	2/1/2023	100.00	
4.68	6.46	62.62	12	0	1/26/2023	1/27/2023	2/1/2023	100.00	
1.39	6.46	17.58	8	0	1/26/2023	1/27/2023	2/1/2023	100.00	
0.1928	6.46	11.28	1	0	1/26/2023	1/27/2023	2/1/2023	100.00	
39.51	2.86	42.37	1	2	2/14/2023	2/15/2023	2/15/2023	100.00	
9.90	2.86	12.76	1	2	2/14/2023	2/15/2023	2/15/2023	100.00	
5.17	2.86	23.54	4	0	2/14/2023	2/15/2023	2/15/2023	100.00	
0.45	2.86	14.12	1	0	2/14/2023	2/15/2023	2/15/2023	100.00	
0.83	2.86	11.16	1	0	2/14/2023	2/15/2023	2/15/2023	100.00	
0.12	2.86	15.13	1	0	2/14/2023	2/15/2023	2/15/2023	100.00	
0.13	2.86	16.07	1	0	2/14/2023	2/15/2023	2/15/2023	100.00	
14.64	7.67	22.31	1	1	3/8/2023	3/9/2023	3/9/2023	100.00	
2.19	7.67	16.41	2	0	3/8/2023	3/9/2023	3/9/2023	100.00	
10.93	7.67	18.60	1	2	3/8/2023	3/9/2023	3/9/2023	100.00	
39.51	7.67	47.18	1	2	3/8/2023	3/9/2023	3/9/2023	100.00	
0.14	7.67	22.10	1	0	3/8/2023	3/9/2023	3/9/2023	100.00	
1.20	7.67	19.65	1	0	3/8/2023	3/9/2023	3/9/2023	100.00	
36.99	0.00	147.96	4	0	3/9/2023	3/16/2023	3/16/2023	100.00	
33.99	0.00	33.99	1	0	3/9/2023	3/16/2023	3/21/2023	100.00	
6.49	0.00	6.49	1	0	3/9/2023	3/16/2023	3/21/2023	100.00	

23.99	0.00	23.99	1	0	3/9/2023	3/16/2023	3/16/2023	100.00
0.00		0.00						15.38
0.00		0.00						15.38
0.00		0.00						15.38
0.00		0.00						15.38
0.00		0.00						15.38
0.00		0.00						15.38
<b>TOTAL COST</b>		782.40						



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