

## Marysville High School Robotic - Parts Wish List for 2017

Item	Vendor	Product Code	Price	Quantity	Total Cost
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### Amazon

CanaKit Raspberry Pi 3 Complete Starter Kit - 32 GB Edition	Amazon	LYSB01C6Q2GSY-ELECTRNCS	\$74.99	10	\$749.90
SunFounder Mega 2560 R3 Project Super Starter Kit For Arduino UNO R3 Mega2560 Mega328 Nano - Including 73 Page Instructions Book	Amazon	DE SuperMega	\$55.99	5	\$279.95

### AndyMark

NI roboRIO	AndyMark	am-3000	\$435.00	3	\$1,305.00
Power Distribution Panel	AndyMark	am-2856	\$200.00	2	\$400.00
Pneumatic Control Module	AndyMark	am-2858	\$90.00	4	\$360.00
Voltage Regulator Module	AndyMark	am-2857	\$46.00	4	\$184.00
120 Amp Breaker	AndyMark	am-0282	\$30.00	4	\$120.00
CIM Motors 2.5"	AndyMark	am-0255	\$28.00	8	\$224.00
Open-Mesh OM5P-AC Dual Band 1.17 Gbps Access Point	AndyMark	am-3205	\$135.00	4	\$540.00
Logitech Gamepad F310	AndyMark	am-2064	\$26.00	4	\$104.00
40 Amp Snap Action Breaker	AndyMark	am-0288	\$7.00	20	\$140.00
30 Amp Snap Action Breaker	AndyMark	am-0290	\$6.00	20	\$120.00
20 Amp Snap Action Breaker	AndyMark	am-0289	\$6.00	20	\$120.00
5 Amp Snap Action Breaker	AndyMark	am-2096	\$6.00	5	\$30.00
10 Amp Snap Action Breaker	AndyMark	am-2097	\$6.00	10	\$60.00
Blue Bumper Material, 161in x 19.5in (+/- 0.25in)	AndyMark	am-2676	\$18.00	2	\$36.00
Red Bumper Material, 161in x 19.5in (+/- 0.25in)	AndyMark	am-2675	\$18.00	2	\$36.00
Left Triangle Bumper Bracket	AndyMark	am-3210L	\$4.20	12	\$50.40
Right Triangle Bumper Bracket	AndyMark	am-3210R	\$4.20	12	\$50.40
AM14U3 Bumper Corner Bracket	AndyMark	am-3233	\$4.00	12	\$48.00
Targeting Light with Color Filters	AndyMark	am-3428	\$30.00	2	\$60.00
Microsoft Lifecam HD-3000 Camera	AndyMark	am-3025	\$32.00	4	\$128.00
Set of 2 Batteries: MK ES17-12	AndyMark	am-0844	\$89.00	2	\$178.00
Bracket for Plastic Air Tank	AndyMark	am-2008	\$2.00	12	\$24.00
Norgren Regulator and Bracket	AndyMark	am-2020	\$28.00	2	\$56.00
Norgren relief valve	AndyMark	am-2002	\$40.00	3	\$120.00
Nason Pressure Switch	AndyMark	am-2006	\$29.00	3	\$87.00

## Robotic Parts Needed for 2017 (Wish List)

Item	Vendor	Product Code	Price	Quantity	Total Cost
Pneumatic fitting, union tee, 1/4" tube	AndyMark	am-2015	\$3.00	20	\$60.00
Pneumatic fitting, straight, 1/4" tube, press-in, 1/8" NPT male	AndyMark	am-2011	\$2.00	16	\$32.00
Pneumatic fitting, elbow, 1/4" tube, press-in, 1/8" NPT male	AndyMark	am-2039	\$2.50	16	\$40.00
Double Solenoid Valve, Mead, 1/8 NPT	AndyMark	am-3324	\$52.00	5	\$260.00
Single Solenoid Valve, Mead, 1/8 NPT	AndyMark	am-3323	\$39.00	5	\$195.00
20 meters of Pneumatic tubing, 1/4" od, polyurethane, black	AndyMark	am-2137	\$18.00	2	\$36.00
Clippard Air Tank, 574 ml, plastic, with Push Connect Fittings	AndyMark	am-2649	\$14.00	10	\$140.00
Air compressor, 12 volt, 0.88 cfm	AndyMark	am-2005	\$69.00	2	\$138.00
Bracket for Plastic Air Tank	AndyMark	am-2008	\$2.00	20	\$40.00
Clippard Air Tank, 574 ml, plastic, with Push Connect Fittings	AndyMark	am-2649	\$14.00	10	\$140.00

### VexPro

Victor SP Motor Controllers	VexPro	217-9090	\$59.99	10	\$599.90
Mini CIM Motors 2.0"	VexPro	217-3371	\$24.99	10	\$249.90
VersaPlanetary Ring Gear Add-on Kit	VexPro	217-2816	\$9.99	10	\$99.90
VersaPlanetary 3:1 Gear Kit	VexPro	217-2817	\$14.99	6	\$89.94
VersaPlanetary 4:1 Gear Kit	VexPro	217-2818	\$14.99	6	\$89.94
VersaPlanetary 5:1 Gear Kit	VexPro	217-2819	\$14.99	6	\$89.94
VersaPlanetary 7:1 Gear Kit	VexPro	217-3102	\$14.99	6	\$89.94
VersaPlanetary 9:1 Gear Kit	VexPro	217-3106	\$14.99	6	\$89.94
VersaPlanetary 10:1 Gear Kit	VexPro	217-2820	\$14.99	6	\$89.94
VersaPlanetary 1/2" Hex Output Shaft Kit	VexPro	217-2897	\$7.99	10	\$79.90
VersaPlanetary 3/8" Hex Output Shaft Kit	VexPro	217-2894	\$4.99	10	\$49.90
VersaPlanetary 1/2" with 1/8" Keyway Output Shaft Kit	VexPro	217-2895	\$4.99	5	\$24.95
VersaPlanetary CIM Motor Output Shaft Kit	VexPro	217-2893	\$4.99	10	\$49.90
VersaPlanetary Motor Mounting Hardware Kit	VexPro	217-4649	\$5.99	10	\$59.90
VersaPlanetary Motor Mounting Plates with Pilot	VexPro	217-3564	\$5.99	10	\$59.90
VersaPlanetary Dual Motor Input	VexPro	217-3141	\$14.98	10	\$149.80
VersaPlanetary Dual Motor Input Housing Kit	VexPro	217-3254	\$4.99	10	\$49.90
VersaPlanetary Dual Motor Input Hardware Kit	VexPro	217-3272	\$9.99	10	\$99.90
2mm Key (5-pack)	VexPro	217-2761	\$2.99	10	\$29.90
Base VersaPlanetary 1:1 with 1/2" with 1/8" Keyway Round Output	VexPro	217-3562	\$34.99	7	\$244.93
12t CIM Motor Gear with Mounting Hardware	VexPro	217-2614	\$6.99	10	\$69.90
Single Reduction Clamping Gearbox	VexPro	217-4156	\$9.99	10	\$99.90
VersaHub (1/2" Hex)	VexPro	217-2592	\$8.99	15	\$134.85

## Robotic Parts Needed for 2017 (Wish List)

Item	Vendor	Product Code	Price	Quantity	Total Cost
VersaHub (1.125" Bearing Pilot, 1/2" Thick, w/ Plate Sprocket Mount)	VexPro	217-2591	\$2.99	10	\$29.90
VersaHub (1.125" Bearing Pilot, 1/4" Thick, w/ Plate Sprocket Mount)	VexPro	217-3234	\$2.99	10	\$29.90
Colson Performa (1.625" x 0.875", 1/2" Hex bore)	VexPro	217-4045	\$4.99	4	\$19.96
Colson Performa (2.5" x 1.25", 1/2" Hex bore)	VexPro	217-4046	\$5.99	4	\$23.96
Colson Performa (3" x 0.875", 1/2" Hex bore)	VexPro	217-4047	\$5.99	4	\$23.96
Colson Performa (3.5" x 1.25", 1/2" Hex bore)	VexPro	217-4048	\$9.99	4	\$39.96
Colson Performa (3" x 1.5", 1/2" Hex bore)	VexPro	217-4050	\$12.99	4	\$51.96
Colson Performa (4" x 0.875", 1/2" Hex bore)	VexPro	217-4049	\$9.99	4	\$39.96
Colson Performa (4" x 1.5", 1/2" Hex bore)	VexPro	217-4052	\$12.99	4	\$51.96
Colson Performa (4" x 2", 1/2" Hex bore)	VexPro	217-4054	\$14.99	4	\$59.96
Colson Performa (4" x 1.5", 1.1875" bore)	VexPro	217-4051	\$9.99	4	\$39.96
Colson Performa (4" x 2", 1.1875" bore)	VexPro	217-4053	\$9.99	4	\$39.96
Plastic Clamping Bearing Block	VexPro	217-4155	\$7.99	10	\$79.90
High Strength Clamping Shaft Collar - 1/2" Hex ID	VexPro	217-4106	\$4.99	30	\$149.70
Flanged Bearing - 13.75mm (1/2" ThunderHex) x 1.125" x 0.313"	VexPro	217-4006	\$3.99	30	\$119.70
Radial Bearing - 13.75mm (1/2" ThunderHex) x 1.125in x 0.313in	VexPro	217-4270	\$3.99	15	\$59.85
1/2" ThunderHex Stock (3 feet)	VexPro	217-4017	\$13.99	10	\$139.90

### TOOLS

DEWALT 20-Volt Max Lithium Ion (Li-ion) 1/2-in Cordless Drill with Battery and Charger	Lowes		\$149.00	3	\$447.00
5 in. x 6 in. Horizontal and Vertical Metalworking Bandsaw (any horizontal band saw is welcome)	Home Depot		\$549.00	1	\$549.00

### Safety Materials:

Safety Goggles  
 Trash Cans  
 Fire Extinguishers  
 Baking Soda  
 Work Gloves  
 Aprons

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	Specific Vendor	Specific Vendor	Specific Vendor	Specific Vendor
<b>OVERALL COST:</b>	<b>Amazon</b>	<b>AndyMark</b>	<b>VexPRO</b>	<b>Lowes</b>
<b>\$11,380.97</b>	\$1,029.85	\$5,661.80	\$3,693.32	\$996.00