Parts for Sandwich the Line Follower and Printed Circuit Board

Part Description	Parts for Sandwich the Line Follower and Printed Circuit Board							
Electronics February Februa	Part Description	Source	Part #	Unit	Quantity	Total	·	
Vellow LED's Electronics Express OBL53YD \$0.08 7 \$0.56 Purchased in quantities of 100-9					,			
Green LED's Electronics Express O8LSGD \$0.07 4 \$0.28 Purchased in quantities of 104-5000 mod White LED's Electronics Express O8LCHW5 \$0.80 5 \$4.00 Purchased in quantities of 104-5000 mod White LED's Compared to the	Electronics:							
500 mod White LED's Electronics Express 08LCHW5 \$0.90 5 \$4.00 Purchased in quantities of 10-9 1NS617 Schoty Diode Jameco 177949 \$0.14 2 82.8 Purchased in quantities of 10-99 1S0 Ohm Resistor Electronics Express 13.55150 \$0.03 4 \$0.12 Purchased in quantities of 200-999 1K Ohm Resistor Electronics Express 13.551K \$0.03 2 \$0.06 Purchased in quantities of 200-999 1K Ohm Resistor Soloth Solot	Yellow LED's	Electronics Express	08L53YD	\$0.08	7	\$0.56	Purchased in quantities of 100+	
5000 mod White LED's Electronics Express ORL-HW5 \$0.00 5 \$4.00 Purchased in quantities of 10-9	Green LED's	·	08L53GD	\$0.07	4	\$0.28	·	
150 Ohm Resistor Electronics Express 13.55150 \$0.03 4 \$0.12 Purchased in quantities of 200-999 1k Ohm Resistor Electronics Express 13.551K \$0.03 2 \$0.06 Purchased in quantities of 200-999 25k Ohm Tripot w/ Shaft Electronics Express 185TS25K \$0.80 2 \$1.50 Purchased in quantities of 10-99 Photoresistors Sensors Jameco 120299 \$1.59 4 \$6.36 Purchased in quantities of 10-99 25k Ohm Tripot w/ Shaft Electronics Express 185TS25K \$0.80 2 \$1.50 Purchased in quantities of 10-99 22841 \$1.49 1 \$1.49 Purchased in quantities of 10-99 228207A Transistors Jameco 176520 \$0.05 2 \$0.10 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 176520 \$0.05 2 \$0.10 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 176520 \$0.05 2 \$0.10 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 24281 \$0.22 1 \$0.13 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 24281 \$0.22 1 \$0.13 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 24281 \$0.22 1 \$0.13 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 24281 \$0.22 1 \$0.13 Purchased in quantities of 10-99 3k-10 228207A Transistors Jameco 24281 \$0.22 1 \$0.13 Purchased in quantities of 10-99 24281 24280 24281 24280 24281 24280 24281 24280 24281 24280 24280 24281 24280 24280 24281 24280 2428	5000 mcd White LED's	Electronics Express	08LCHW5	\$0.80	5	\$4.00	Purchased in quantities of 10+	
14 Chm Resistor Electronics Express 13.551K \$0.03 2 \$0.06 Purchased in quantities of 10-99	1N5817 Schotty Diode	Jameco	177949	\$0.14	2	\$0.28	Purchased in quantities of 10-99	
Electronics Express	150 Ohm Resistor	Electronics Express	13.55150	\$0.03	4	\$0.12	Purchased in quanities of 200-999	
Photoresistors Sensors Jameco 120299 \$1.59 4 \$6.36 Purchased in quantities of 10-99	1k Ohm Resistor	Electronics Express	13.551K	\$0.03	2	\$0.06	Purchased in quanities of 200-999	
DPDT Switch Jameco 22841 \$1.49 1 \$1.49 Purchased in quantities of 1-9 Power Switch Radioshack 275-693 \$3.19 1 \$3.19 2 \$3.10 Zh2907A Transistors Jameco 118206 \$0.13 1 \$0.13 Purchased in quantities of 10-99 8-Pin DIP Socket Jameco 112206 \$0.13 1 \$0.13 Purchased in quantities of 10-99 LM393N Compartor Jameco 24281 \$0.25 1 \$0.25 Purchased in quantities of 10-99 Printed Circuit Board Solarbotics SandPCB \$12.00 1 \$12.00 Purchased in Sed in quantities of 1-9 1/8" Heat Shrink Tubing, Green Digi-Key FP332-Y-5-ND \$0.35 1 \$0.35 Purchased in Sed in Sengths 3/32" Heat Shrink Tubing, Black Digi-Key FP332-Y-5-ND \$0.35 1 \$0.35 Purchased in Sed in Sengths 3/32" Heat Shrink Tubing, White Digi-Key WM4200-ND \$0.1276 \$0.96 Purchased in Sengths \$0.35 Purchased in Sengths	25k Ohm Tripot w/ Shaft	Electronics Express	18STS25K	\$0.80	2	\$1.60	Purchased in quantities of 10-99	
Power Switch Radioshack 275-693 \$3.19 1 \$3.19 2N2907A Transistors Jameco 178520 \$0.05 2 \$0.10 Purchased in quantities of 10-99 Pin DIP Socket Jameco 24281 \$0.22 1 \$0.25 LM393N Comparator Jameco 24281 \$0.22 1 \$1.20 Purchased in quantities of 10-99 Purchased in quantities of 1-9 Purchased in Quantities of 1-9 Purchased in Quantities of 1-9 Purchased in Selengths Purchased in Quantities of 25-4 Purchased in Quantities of 10-99 Purchased in Quantit	Photoresistors Sensors	Jameco	120299	\$1.59	4	\$6.36	Purchased in quantities of 10-99	
2N2907A Transistors	DPDT Switch	Jameco	22841	\$1.49	1	\$1.49	Purchased in quantities of 1-9	
8-Pin DIP Socket Jameco 112206 \$0.13 1 \$0.13 Purchased in quantities of 10-99 LM393N Comparator Jameco 24281 \$0.22 1 \$0.25 Purchased in quantities of 1-9 Printed Circuit Board Solarbotics SandPCB \$12.00 1 \$12.00 1/8* Heat Shrink Tubing, Reen Digi-Key FP332-Y-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32* Heat Shrink Tubing, Red Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32* Heat Shrink Tubing, Black Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32* Heat Shrink Tubing, Black Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32* Heat Shrink Tubing, Withe Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32* Heat Shrink Tubing, Black Digi-Key WM4200-ND \$0.1928 5 \$0.64 Purchased in Quantities of 25+ Molex KK Tov-Pin Headers	Power Switch	Radioshack	275-693	\$3.19	1	\$3.19	•	
LM393N Comparator	2N2907A Transistors	Jameco	178520	\$0.05	2	\$0.10	Purchased in quantities of 10-99	
Printed Circuit Board	8-Pin DIP Socket	Jameco	112206	\$0.13	1	\$0.13	Purchased in quantities of 10-99	
1/8" Heat Shrink Tubing, Yellow Digi-Key FP332-Y-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Green Digi-Key FP332-R-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key WM4200-ND \$0.1928 \$0.08 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key WM4200-ND \$0.1928 \$0.60 Purchased in 5' lengths 4 Molex KK Four-Pin Header Digi-Key WM2002-ND \$0.1944 \$0.33 Purchased in quantities of 25+ Molex KK Cr	LM393N Comparator	Jameco	24281	\$0.22	1	\$0.25	Purchased in quantities of 1-9	
3/32" Heat Shrink Tubing, Green Digi-Key FP332-G-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Red Digi-Key FP332-R-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key WM200-ND \$0.1928 5 \$0.96 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key WM200-ND \$0.1928 5 \$0.96 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key WM200-ND \$0.1928 5 \$0.96 Purchased in 5' lengths 4 Molex KK Crur-Pin Header Digi-Key WM200-ND \$0.1924 1 \$0.1924 \$0.1924 </td <td>Printed Circuit Board</td> <td>Solarbotics</td> <td>SandPCB</td> <td>\$12.00</td> <td>1</td> <td>\$12.00</td> <td>•</td>	Printed Circuit Board	Solarbotics	SandPCB	\$12.00	1	\$12.00	•	
3/32" Heat Shrink Tubing, Red Digi-Key FP332-R-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, Black Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths \$0.32" Heat Shrink Tubing, White Digi-Key WM4200-ND \$0.1928 5 \$0.96 Purchased in quantities of 25+ \$0.64 Purchased in quantities of 25+ \$0.65 Purchased in quantities of 25+ \$0.65 Purchased in quantities of 25+ \$0.65 Purchased in quantities of 100-249 \$0.65 Purchased in quantities of 100-249 \$0.65 Purchased in quantities of 100-249 \$0.65 Purchased in quantities of 10-99 \$0.05 Purchased in quantities of 100 Purchased in quantities o	1/8" Heat Shrink Tubing, Yellow	Digi-Key	FP332-Y-5-ND	\$0.35	1	\$0.35	Purchased in 5' lengths	
3/32" Heat Shrink Tubing, Black Digi-Key FP332-K-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths 3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths Molex KK Two-Pin Headers Digi-Key WM2000-ND \$0.1276 5 \$0.64 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.3288 1 \$0.33 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.3288 1 \$0.33 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM2002-ND \$0.1944 1 \$0.19 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wife ## # ** Motors** Apaco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99	3/32" Heat Shrink Tubing, Green	Digi-Key	FP332-G-5-ND	\$0.35	1	\$0.35	Purchased in 5' lengths	
3/32" Heat Shrink Tubing, White Digi-Key FP332-W-5-ND \$0.35 1 \$0.35 Purchased in 5' lengths	3/32" Heat Shrink Tubing, Red	Digi-Key	FP332-R-5-ND	\$0.35	1	\$0.35	Purchased in 5' lengths	
Molex KK Two-Pin Headers Digi-Key WM4200-ND \$0.1928 5 \$0.96 Purchased in quantities of 25+ Molex KK Two-Pin Housings Digi-Key WM2000-ND \$0.1276 5 \$0.64 Purchased in quantities of 25+ Molex KK Four-Pin Header Digi-Key WM2002-ND \$0.3288 1 \$0.33 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.1944 1 \$0.19 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Wire, #22 AWG Poligi-Key WM1114-ND \$0.32 \$0.32 \$0.90 \$0.90 <t< td=""><td>3/32" Heat Shrink Tubing, Black</td><td>Digi-Key</td><td>FP332-K-5-ND</td><td>\$0.35</td><td>1</td><td>\$0.35</td><td>Purchased in 5' lengths</td></t<>	3/32" Heat Shrink Tubing, Black	Digi-Key	FP332-K-5-ND	\$0.35	1	\$0.35	Purchased in 5' lengths	
Molex KK Two-Pin Housings Digi-Key WM2000-ND \$0.1276 5 \$0.64 Purchased in quantities of 25+ Molex KK Four-Pin Header Digi-Key WM4202-ND \$0.3288 1 \$0.33 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.1944 1 \$0.19 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wire, #22 AWG - - - - - Not included in unit costs 9 Volt Battery Snap Jameco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardwar	3/32" Heat Shrink Tubing, White	Digi-Key	FP332-W-5-ND	\$0.35	1	\$0.35	Purchased in 5' lengths	
Molex KK Four-Pin Header Digi-Key WM4202-ND \$0.3288 1 \$0.33 Purchased in quantities of 25+ Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.1944 1 \$0.19 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wire, #22 AWG - - - - Not included in unit costs 9 Volt Battery Snap Jameco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$0.60 1 \$0.60 Purchased in quantities of 5-24	Molex KK Two-Pin Headers	Digi-Key	WM4200-ND	\$0.1928	5	\$0.96	Purchased in quantities of 25+	
Molex KK Four-Pin Housings Digi-Key WM2002-ND \$0.1944 1 \$0.19 Purchased in quantities of 25+ Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wire, #22 AWG - - - Not included in unit costs 9 Volt Battery Snap Jameco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5-24 Malman Long Candy Tube	Molex KK Two-Pin Housings	Digi-Key	WM2000-ND	\$0.1276	5	\$0.64	Purchased in quantities of 25+	
Molex KK Crimp Terminals Digi-Key WM1114-ND \$0.0940 20 \$1.88 Purchased in quantities of 100-249 Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wire, #22 AWG - - - - Not included in unit costs 9 Volt Battery Snap Jameco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store 3 1/8 Cup \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 \$0.35 \$0.24	Molex KK Four-Pin Header	Digi-Key	WM4202-ND	\$0.3288	1	\$0.33	Purchased in quantities of 25+	
Crimping Tool Digi-Key WM9999-ND \$50.75 1 - Not included in unit costs Wire, #22 AWG Not included in unit costs 9 Volt Battery Snap Jameco 216452 \$0.32 3 \$0.96 Purchased in quantities of 10-99 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 50 W6-5tud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 W970614 \$0.050 1 \$0.050 1 \$0.050 Purchased in quantities of 50 W970614 \$0.050 1 \$0.050 Purchased in quantities of 50 W970614	Molex KK Four-Pin Housings	Digi-Key	WM2002-ND	\$0.1944	1	\$0.19	Purchased in quantities of 25+	
Wire, #22 AWG 9 Volt Battery Snap 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 10-99 9 Volt Battery Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 S15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Gladware Container M&Ms with 150mm Long Candy Tube Grocery Store 105794 S0.60 1 1 50.60 9 Volt Battery Clip Fix 1 Long Nylon Round Spacer Small Parts B000FN3R1Q M2.5 Kainless Steel Screw Small Parts B000FN3R1Q M2.5 Sylon Flat Washer Small Parts B000FN5VKG M2.5 Nylon Flat Washer Wheels, Large Lawn Tire & Hub Pitsco Wheel Couplings 1/2" Aluminum Stock Winemade on Lathe - Not included in unit costs 90.96 Purchased in quantities of 10-99 90.32 3 80.96 Purchased in quantities of 5-24 815.95 2 \$31.90 Purchased in quantities of 5-24 80.60 Purchased in quantities of 5 80.35 Purchased in quantities of 1-9 80.656 5 \$3.28 Purchased in quantities of 100 80.656 80.0556 8	Molex KK Crimp Terminals	Digi-Key	WM1114-ND	\$0.0940	20	\$1.88	Purchased in quantities of 100-249	
9 Volt Battery Snap 9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 10-99 9 Volt Battery Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 S15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Gladware Container M&Ms with 150mm Long Candy Tube Grocery Store 105794 9 Volt Battery Clip Jameco 105794 \$0.60 1 \$0.60 Purchased in quantities of 5 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #66/32 Nylon Insert Nut Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #66/32 Nylon Insert Nut Small Parts B000FN3R1Q \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels,Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 Purchased in quantities of 50 Purchased in quantities of 100 Purchased in quantitie	Crimping Tool	Digi-Key	WM9999-ND	\$50.75	1	-	Not included in unit costs	
9 Volt Battery Home Depot - \$3.60 4 \$14.40 Purchased in quantities of 25+ Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	Wire, #22 AWG		-	-	-	-	Not included in unit costs	
Motors: Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts B000FN3FNG \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0556 5 \$0.28 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50	9 Volt Battery Snap	Jameco	216452	\$0.32	3	\$0.96	Purchased in quantities of 10-99	
Gearhead Motor, HNGH12-1324Y-R Jameco 162191 \$15.95 2 \$31.90 Purchased in quantities of 5-24 Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71	9 Volt Battery	Home Depot	-	\$3.60	4	\$14.40	Purchased in quantities of 25+	
Body & Hardware: Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1 "Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts B000FN5VKG \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0556 5 \$0.28 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 <	Motors:						•	
Gladware Container Grocery Store 3 1/8 Cup \$0.60 1 \$0.60 Purchased in quantities of 5 M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6.22 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.55 Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 Wheel Couplings 1/2" Aluminum Stock	Gearhead Motor, HNGH12-1324Y-R	Jameco	162191	\$15.95	2	\$31.90	Purchased in quantities of 5-24	
M&Ms with 150mm Long Candy Tube Grocery Store - \$1.29 1 \$1.29 9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x66mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock	Body & Hardware:							
9 Volt Battery Clip Jameco 105794 \$0.35 1 \$0.35 Purchased in quantities of 1-9 #6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels,Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	Gladware Container	Grocery Store	3 1/8 Cup	\$0.60	1	\$0.60	Purchased in quantities of 5	
#6 x 1" Long Nylon Round Spacer Small Parts RSN-06/16 \$0.656 5 \$3.28 Purchased in quantities of 100 #6 x 1 3/8" Stainless Steel Screw Small Parts B000FN3R1Q \$0.0882 5 \$0.44 Purchased in quantities of 100 #6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50	M&Ms with 150mm Long Candy Tube	Grocery Store	-	\$1.29	1	\$1.29		
#6 x 1 3/8" Stainless Steel Screw	9 Volt Battery Clip	Jameco	105794	\$0.35	1	\$0.35	Purchased in quantities of 1-9	
#6/32 Nylon Insert Nut Small Parts HLNX-0632-C \$0.0702 5 \$0.35 Purchased in quantities of 100 M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels,Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 50 W970614 \$0.50 2 \$1.00 Purchased in quantities of 100 W970614 \$0.50 2 \$1.00 Purchased in quantities of 100 W970614 \$0.50 2 \$1.00 Purchased in quantities of 100 W970614 \$0.50 2 \$1.00 Purchased in quantities of 100 W970614 \$1.00 Purchased in quantities of 100 W970614 \$0.50 2 \$1.00 Purchased in quantities of 100 W970614 \$1.00 Purchased in quantities of 100 Purchased in qu	#6 x 1" Long Nylon Round Spacer	Small Parts	RSN-06/16	\$0.656	5	\$3.28	Purchased in quantities of 100	
M2.5x6mm S/S Machine Screw Small Parts B000FN5VKG \$0.0556 5 \$0.28 Purchased in quantities of 100 M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	#6 x 1 3/8" Stainless Steel Screw	Small Parts	B000FN3R1Q	\$0.0882	5	\$0.44	Purchased in quantities of 100	
M2.5 Nylon Flat Washer Small Parts B000FN15H4 \$0.0713 10 \$0.71 Purchased in quantities of 100 Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	#6/32 Nylon Insert Nut	Small Parts	HLNX-0632-C	\$0.0702	5	\$0.35	Purchased in quantities of 100	
Wheels,Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	M2.5x6mm S/S Machine Screw	Small Parts	B000FN5VKG	\$0.0556	5	\$0.28	Purchased in quantities of 100	
Wheels, Large Lawn Tire & Hub Pitsco Discontinued \$2.50 2 \$5.00 #6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe \$0.50 2 \$1.00	M2.5 Nylon Flat Washer	Small Parts	B000FN15H4	\$0.0713	10	\$0.71	Purchased in quantities of 100	
#6-Stud Axle Pitsco W970614 \$0.20 1 \$0.20 Purchased in quantities of 50 Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00	Wheels,Large Lawn Tire & Hub	Pitsco	Discontinued	\$2.50	2	\$5.00	·	
Wheel Couplings 1/2" Aluminum Stock Homemade on Lathe - \$0.50 2 \$1.00		Pitsco	W970614	\$0.20	1	\$0.20	Purchased in quantities of 50	
Total	Wheel Couplings 1/2" Aluminum Stock	Homemade on Lathe	-	\$0.50	2	\$1.00	•	
10tal: \$96.94 Costs exclude snipping & sales tax	Total:					\$96.94	Costs exclude shipping & sales tax	

Source List:

Vendor Name	Website	Telephone	Notes:
Digi-Key	digikey.com	800-344-4539	\$5 Handling fee on orders < \$25
Electronics Express	elexp.com	800-972-2225	\$20.00 Minimum order
Jameco	jameco.com	800-831-4242	\$20.00 Minimum order over phone
Pitsco	legoeducation.com	800-358-4983	No Minimum
RadioShack	radioshack.com	800-843-7422	No Minimum
Small Parts	amazonsupply.com	800-220-4242	\$20.00 Minimum order over phone
Solarbotics	solarbotics.com	866-276-2687	No Minimum