

2010 FIRST Robotics Competition

Inspection Bill of Materials for : Peachtree Regionals

Team: Robo-Lions

Team #: 1261
City: Suwanee

Date: Feb. 22 2010
State: Georgia

Item	Description	Raw Mat'l	Source	Qty	Unit Price (\$)	Total Price	Weight (lbs)	Total Weight
Subsystem 1:								
Victor PWM motor controller	Motor Controller	N/A	KOP	6	\$ 0.00	\$ 0.00		0.00
Linksys wireless gaming adapter	Wireless Adapter	N/A	KOP	1	\$ 0.00	\$ 0.00		
High amp switch	Power Switch	N/A	KOP	1	\$ 0.00	\$ 0.00		
CRIO	Part of Control System	N/A	KOP	1	\$ 0.00	\$ 0.00		
Power Distribution Board	Distributes Battery Power	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' BLK 10GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' RED 18GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' BLK 12GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' BLK 14GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' BLK 18GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' RED 12GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' RED 10GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
10' RED 14GA Wire	Wire	N/A	KOP	1	\$ 0.00	\$ 0.00		
Digital Side Card	Handles Digital Output	N/A	KOP	1	\$ 0.00	\$ 0.00		
PWM Cables	Cables for the motors	N/A	KOP	17	\$ 0.00	\$ 0.00		
Camera	Axis Camera	N/A	KOP	1	\$ 0.00	\$ 0.00		
Cross Over Cable	For connecting Camera	N/A	KOP	1	\$ 0.00	\$ 0.00		
Ethernet Cable	For connecting Wireless Adapter	N/A	KOP	1	\$ 0.00	\$ 0.00		
Optical Shaft Encoder	Distance Keeping Device	N/A	KOP	3	\$ 0.00	\$ 0.00		
Air Compressor	Used for pneumatics	N/A	KOP	1	\$ 0.00	\$ 0.00		
Bimba Pistons	Pneumatic Pistons	N/A	KOP	2	\$ 0.00	\$ 0.00		0.00
						Subtotals:	\$0.00	0.00
Subsystem 2:								
Cubes Gusset 1 x 1	Structural Component	N/A	8020.net	8	\$ 15.00	\$ 120.00		
Corner Gus	Structural Component	N/A	8020.net	65	\$ 3.95	\$ 256.75		
L Gusset	Structural Component	N/A	8020.net	8	\$ 4.95	\$ 39.60		
Collars .5"	Keeps Shafts in place	N/A	KOP	4	\$ 2.30	\$ 9.20		
Bearing Block .5"	Allows Shafts to rotate	N/A	McMaster Carr	2	\$ 7.00	\$ 14.00		
Andy Mark Tough Box	Gear Box	N/A	KOP	2	\$ 0.00	\$ 0.00		
AM Shifter	Shifting for Kicker	N/A	Andy Mark	1	\$ 360.00	\$ 360.00	4.00	4.00
CIMS	Motor Module	N/A	KOP	4	\$ 28.00	\$ 112.00		
Omni Wheels 6"	Omni Directional Wheel	N/A	Andy Mark	4	\$ 36.00	\$ 144.00		
Plaction Wheels 6"	Plastic + Traction Wheel	N/A	Andy Mark	4	\$ 29.00	\$ 116.00		
2 Stage Planetary Gearbox	Transmission for the roller	N/A	Andy Mark	1	\$ 120.00	\$ 120.00		
Rope Clutch	Used for keeping the rope Taught	N/A	West Marine	1	\$ 57.00	\$ 57.00		
Sprocket 32 Teeth	Chain	N/A	KOP	6	\$ 14.00	\$ 84.00		
Sprocket 16 Teeth	Roller	Aluminum	Andy Mark	1	\$ 11.00	\$ 11.00		
Sprocket 60 Teeth	Window Motor	Aluminum	Andy Mark	1	\$ 15.00	\$ 15.00		
Sprocket 22 Teeth	Chain	N/A	KOP	2	\$ 11.00	\$ 22.00		
Small air canisters	Stores are for pistons	N/A	KOP	2	\$ 0.00	\$ 0.00		
Custom made Wheel extensions	Custom made from Aluminum	Aluminum	Home Depot	8	\$ 1.34	\$ 10.72		
Air pressure system	Includes meters for measuring and adjusting air pressure	N/A	KOP	1	\$ 0.00	\$ 0.00		
Large orange light	Lets user know robot state	N/A	KOP	1	\$ 0.00	\$ 0.00		
Cable Tie Pack	Keeps cables neat	N/A	KOP	1	\$ 3.00	\$ 3.00		
Surgical tubing 20 ft	Stores potential energy	N/A	KOP	4	\$ 0.00	\$ 0.00		
pneumatic tubing 20 ft	Circulates air for pneumatics	N/A	KOP	1	\$ 0.00	\$ 0.00		
Unobtanium 14"	...	N/A	KOP	1	\$ 22.23	\$ 22.23		
Air flow modulator	Dictates piston usage	N/A	KOP	1	\$ 0.00	\$ 0.00		
SPIKE	Dicates piston airflow	N/A	KOP	1	\$ 0.00	\$ 0.00		
Fisher Price Motor	Used for Winch	N/A	KOP	1	\$ -	\$ -		
Window Motor	Used for roller	N/A	KOP	1	\$ 0.00	\$ 0.00		
Size 25 chain 20 ft	Drivetrain	N/A	Andy Mark	1.5	\$ 94.54	\$ 141.81		
AM Drivetrain Gus	Keeps gearbox in place	N/A	KOP	2	\$ 0.00	\$ 0.00		
Nylon rope 5ft	Keeps Kicker in place	N/A	West Marine	1	\$ 5.35	\$ 5.35		
Air pressure gauge	Meters for measuring air pressure	N/A	KOP	2	\$ 0.00	\$ 0.00		
Ribbon cable 1 ft	Connects	N/A	KOP	1	\$ 0.00	\$ 0.00		
80/20 caps	Dullens 80/20 sharpness	N/A	8020.net	2	\$ 0.80	\$ 1.60		
1/8 x 20 keps nuts	Keeps nuts	N/A	Home Depot	15	\$ 0.75	\$ 11.25		
PVC .75"	Used to make spacers	N/A	Home Depot	6	\$ 1.00	\$ 6.00		
1/4 x 20 8020 screws	Holds frame together	N/A		436	\$ 0.10	\$ 43.60		
1/4 x 20 Lock Nuts		N/A		243	\$ 0.80	\$ 194.40		
T Nuts Dropins	Holds frame together	N/A	8020.net	372	\$ 1.52	\$ 565.44		
5 " zinc coated hardened bolt	Used for axles	N/A	KOP	4	\$ 0.00	\$ 0.00		
3" Aluminum Shaft	Used for rotational implement	N/A	KOP	4	\$ 0.00	\$ 0.00		
Custom Battery Holster	Made of aluminum/holds battery	Aluminum		1	\$ 10.00	\$ 10.00		
VEX Bump Sensors	Used to stop ball and kicker	N/A	VEX Robotics	2	\$ 12.99	\$ 25.98		
6" Aluminum Shaft	Used for rotation implement	N/A	KOP	1	\$ 0.00	\$ 0.00		
2" Aluminum Shaft	Used for rotational implement	N/A	KOP	1	\$ 0.00	\$ 0.00		
40 amp circuit Breaker	Electronics	N/A	KOP	6	\$ 0.00	\$ 0.00		
20 amp circuit breaker	Electronics	N/A	KOP	4	\$ 0.00	\$ 1.02		
040.5-DP Bimba Air Cylinder	Used in Shifter	N/A	Andy Mark	1	\$ 23.00	\$ 23.00		
Plastic Coating	Make bottom bar sticky.	Rubber	Howard's Hardware	1	\$ 8.00	\$ 8.00		
3/8" Aluminum Shaft(13")	Shaft for Backing	Aluminum	McMaster Carr	1	\$ 5.00	\$ 5.00		
1/2" Steel Shaft (20")	Iddler Shaft for Kicker	Steel	McMaster Carr	1	\$ 8.00	\$ 8.00		
1/2" Aluminum Keyed Shaft (25")	Shaft for roller	Aluminum	McMaster Carr	1	\$ 10.00	\$ 10.00		
1/4" Plexiglass(10" x 6")	Backing for Ball Possesion	Plexiglass	Home Depot	1	\$ 3.00	\$ 3.00		
Sq. Ft. Polycarbonate	Keeps Electronics together	N/A	Home Depot	3	\$ 1.02	\$ 3.06		
						Subtotals:	\$2,583.01	4.00
Subsystem 3:								
8' 80/20	4 Structural Component	Aluminum	8020.net	4.5	\$ 6.00	\$27.00	16.97	76.37
						Subtotals:	\$27.00	76.37
						Totals:	\$2,610.01	80.37