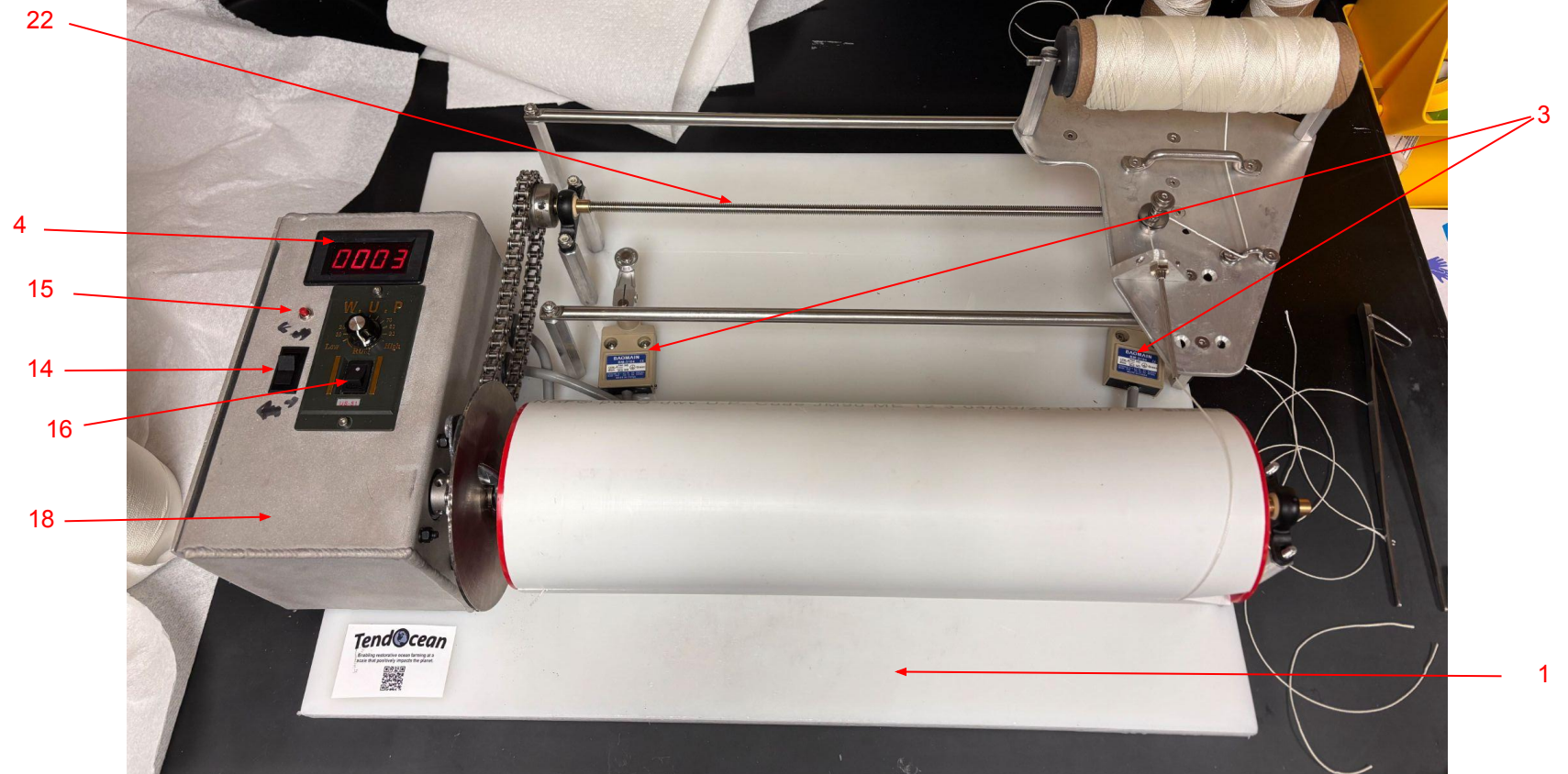


Kelp Seed Spool Winder

Mechanical Drawings and Parts List

Designed by Cliff Goudey, Tend Ocean
With Support from a Southeast Conference Kelp Seed Quality Improvement Grant

Parts List



Parts List

48

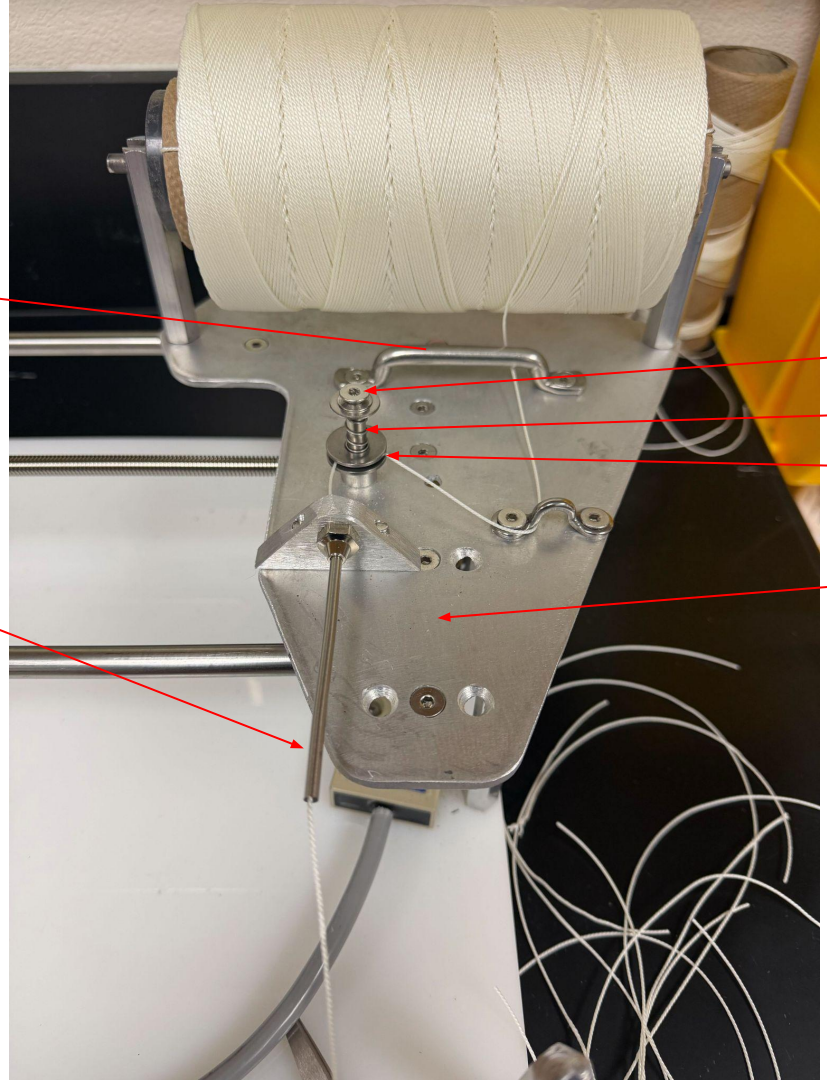
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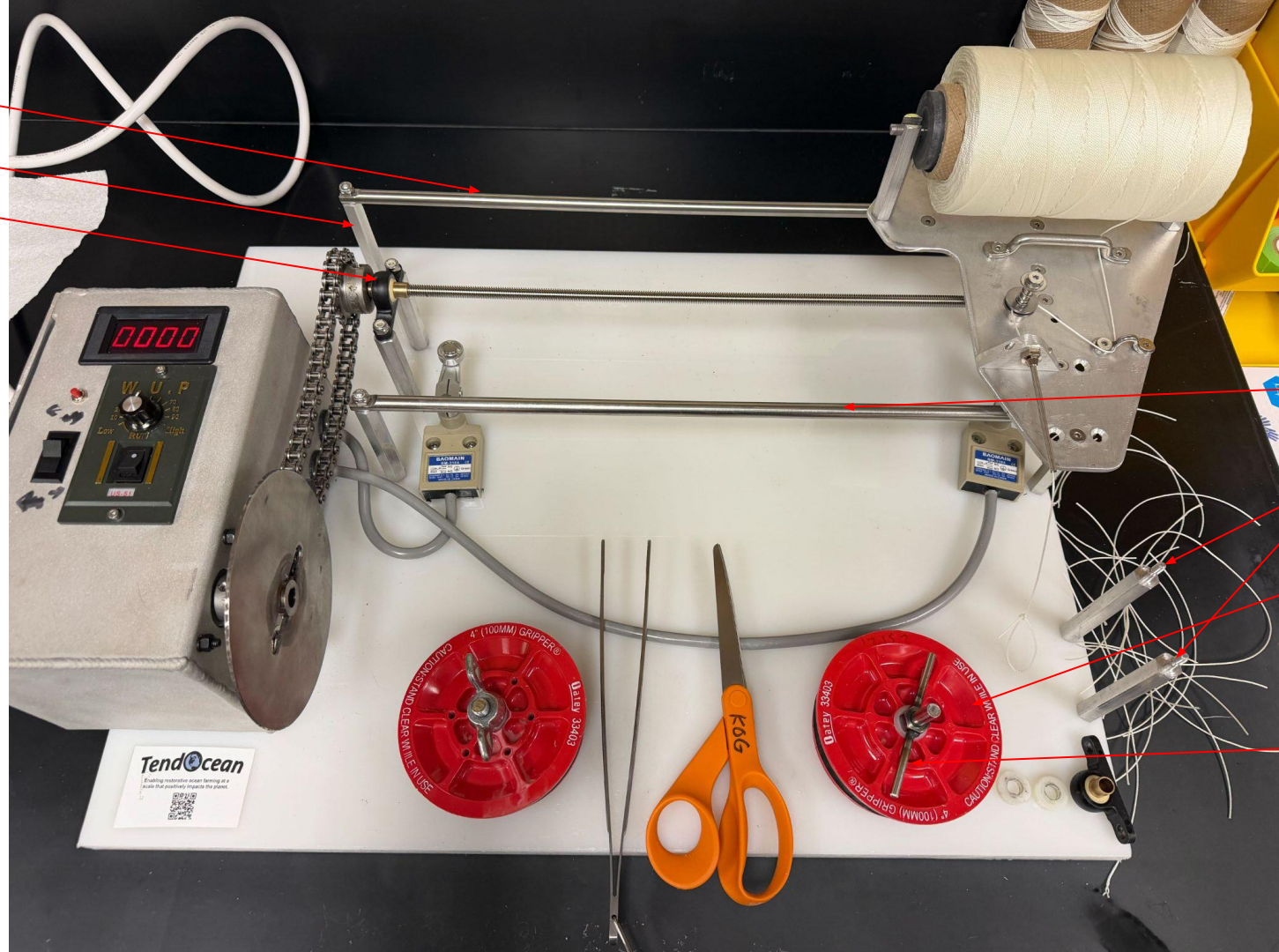
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Parts List



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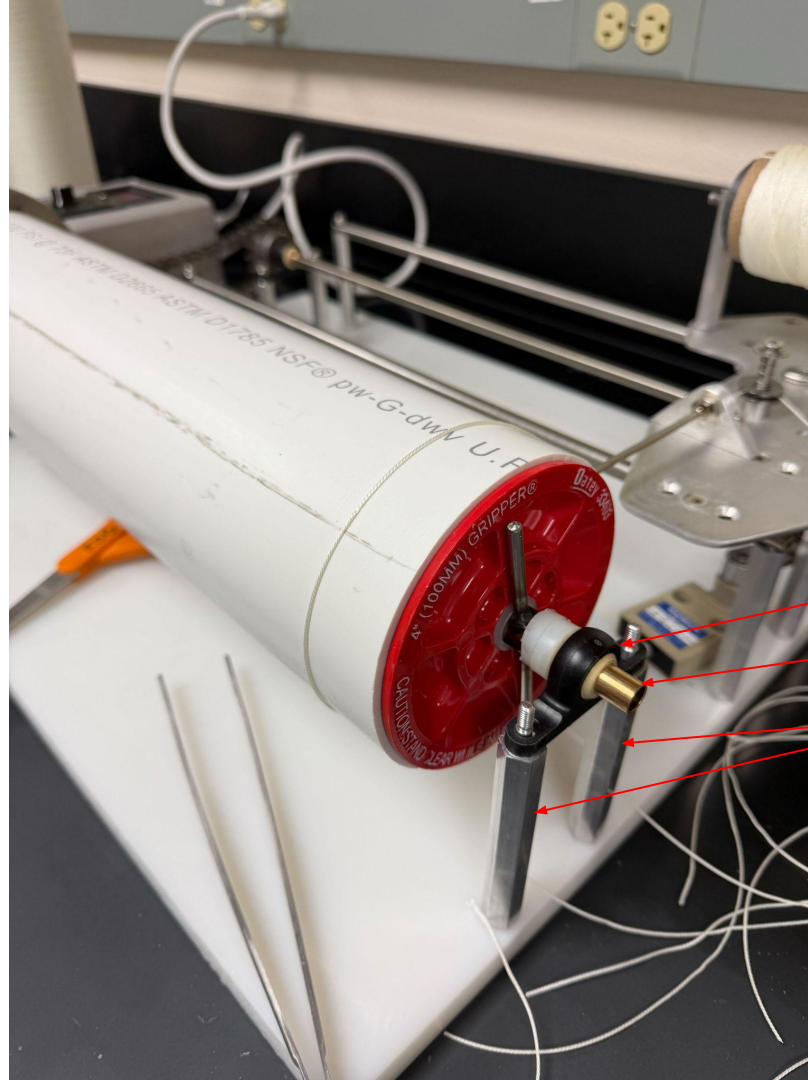
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Parts List

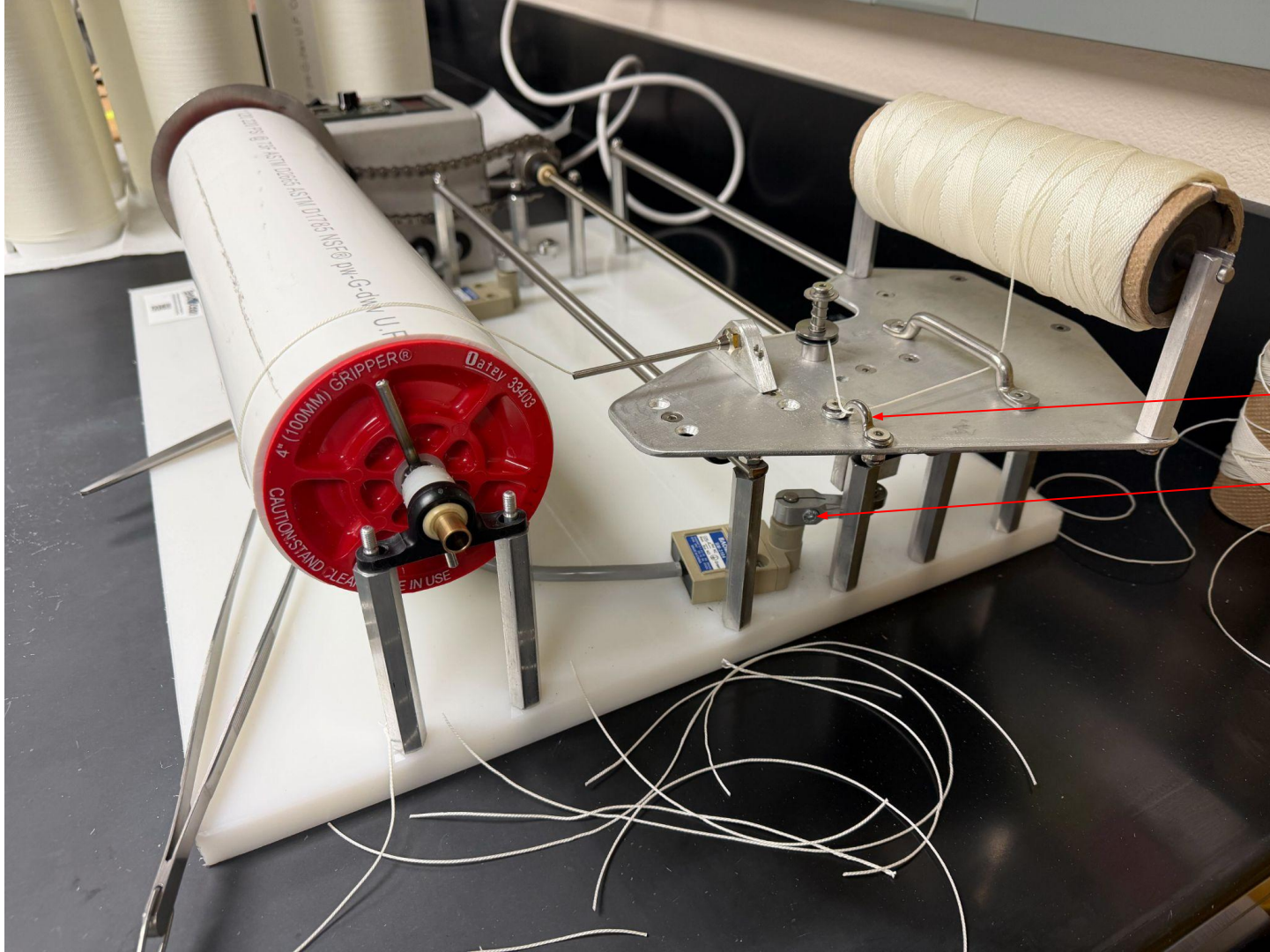


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[Parts List](#)



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Spool Winder Component Parts List

Component Number	Item	Quantity	Material	Description	Length	Role	Vendor	Part Number	Unit cost	Total Cost
1	base	1	PE	24x 18 WEBstaurantStore		base	Regency	24x18	\$57.46	\$57.46
2	tube	1	SS	needle		3 dispenser	McMaster-Carr	5446K71	\$6.89	\$6.89
3	switch	2		limit Amazon		drive	Baomain	BM-3104	\$19.99	\$39.98
4	counter	1		Amazon counter and prox		drive	Digiten	DC 12V 4	\$16.99	\$16.99
5	power	1		110 AC to 12 V dc Amazon		drive	Houhui	12VDC	\$6.99	\$6.99
6	chain	1	SS	3/8"		drive	McMaster-Carr	6264K84	\$37.58	\$37.58
7	coupling	1	SS	10mm		1 drive	McMaster-Carr	5395T314	\$62.18	\$62.18
8	grommet	3		cord protect		drive	McMaster-Carr	9600K97	\$1.62	\$4.87
9	sprocket	2	SS	9 tooth		drive	McMaster-Carr	2345K111	\$90.81	\$181.62
10	sprocket	1	SS	10 tooth		drive	McMaster-Carr	2345K121	\$90.52	\$90.52
11	sprocket	1	SS	11 tooth		drive	McMaster-Carr	2345K131	\$101.79	\$101.79
12	sprocket	1	SS	12 tooth		drive	McMaster-Carr	2345K141	\$97.85	\$97.85
13	sprocket	1	SS	13 tooth		drive	McMaster-Carr	2345K151	\$104.38	\$104.38
14	switch	1		toggle		drive	McMaster-Carr	7395K12	\$2.93	\$2.93
15	switch	1		push button		drive	McMaster-Carr	7397K112	\$5.31	\$5.31
16	motor	1		AC 110V 15 W 1:5 gearbox		drive	TBVECHI	15W 1:5	\$54.00	\$54.00
17	tab	1	SS	1/4 x 2 x 3/4		drive	Wilson Welding	custom	\$60.00	\$60.00
18	enclosure	1	Aluminum	1/8" sheet		drive	Viking Welding	custom	\$200.00	\$200.00
19	rail	1	SS	10mm rod	18.25	front rail	McMaster-Carr	1272T39	\$44.87	\$44.87
20	standoff	2	Aluminum	1/2" hex 10-32		4 front rail	McMaster-Carr	93505A682	\$9.52	\$19.04
21	guide	1	SS	1" wide		guide	McMaster-Carr	8860T91	\$1.52	\$1.52
22	lead screw	1	SS	8 x 1.5 x 500 mm	20	lead screw	Igus	PTGSG8X1.5R-E	\$15.09	\$15.09
23	bearing	2	Plastic	2" x 10mm		lead screw	McMaster-Carr	14	\$12.76	\$25.52
24	Bush	3	brass	10mm OD		1 lead screw	McMaster-Carr		\$8.70	\$26.10
25	collar	2	SS	10mm		lead screw	McMaster-Carr	6058N18	\$6.91	\$13.82
26	screw	6	SS	#8	0.75	limit switch	McMaster-Carr	92470A197	\$0.10	\$0.57
27	pipe plug	2	Plastic	2" Oatey		pipe support	Lowes	23508	\$7.54	\$15.08
28	pipe plug	2	Plastic	3" Oatey		pipe support	Lowes	23519	\$7.34	\$14.68
29	pipe plug	2	Plastic	4" Oatey		pipe support	Lowes	23521	\$8.95	\$17.90
30	lead nut	1	Plastic	Igus		platform	Igus	TR-JFRM036	\$21.50	\$21.50
31	Bearing	3	Plastic	2" x 10mm		platform	McMaster-Carr	687K34	\$12.76	\$38.28
32	screw	2	SS	10-32 flat socket	1.5	platform	McMaster-Carr	92210A303	\$0.10	\$0.21
33	Plate	1	Aluminum	10" x 8.5 x 1/8"		platform	Wilson Welding	custom	\$120.00	\$120.00
34	tab	1	Aluminum	1.5 x 1.5 x 3/8		platform	Wilson Welding	custom	\$25.00	\$25.00
35	rail	1	SS	10mm rod	19.5	rear rail	McMaster-Carr	1272T39	\$44.87	\$44.87
36	screw	12	SS	10-32 flat socket		1 rear rail	McMaster-Carr	90585A992	\$0.40	\$4.78
37	standoff	4	Aluminum	1/2" hex 10-32	3.5	rear rail	McMaster-Carr	93505A682	\$9.52	\$38.08
38	axle	2	SS	1/4"		2 spool support	McMaster-Carr	89325K91	\$1.11	\$2.22
39	core	1	PVC	1.75" dia		7 spool support	McMaster-Carr	8745K24	\$6.92	\$6.92
40	nut	18	SS	10-32" locking		spool support	McMaster-Carr	93505A038	\$0.12	\$2.10
41	standoff	6	Aluminum	1/2" hex 10-32 thread		3 spool support	McMaster-Carr	93505A038	\$7.65	\$45.90
42	mount	1	Aluminum	3/8" x 1.75" x .875		support	Wilson Welding	custom	\$25.00	\$25.00

43	Post	1	SS	1/4" dia x 1.25" standoff	1	tensioner	McMaster-Carr	91125A464	\$4.32	\$4.32
44	screw	12	SS	10-32 flat socket	0.625	tensioner	McMaster-Carr	92210A303	\$0.10	\$1.24
45	spacer	1	Aluminum	1/2" x 3/8" tall		tensioner	McMaster-Carr	92510A744	\$1.97	\$1.97
46	spring	1	SS	1/4" x 1"		tensioner	McMaster-Carr	1986K78	\$0.68	\$0.68
47	washer	4	SS	1" bellville		tensioner	McMaster-Carr	9713K413	\$1.50	\$5.99
48	guide	1	SS	2"x1/4"	2	Twine guide	McMaster-Carr	8030T18	\$5.18	\$5.18