Tools

Item	Quantity	Price	Link	Desc
Center Drill Bit	1	L :	13.99 <u>Amazon.com</u>	Used for counter sinking the Lazy Susan
				Used for getting the correct amount of ballast in the S2S and
Small Level	1	L	6.99 Amazon.com	front/rear balancers
Metal File	1	L	4.7 Amazon.com	Used to file down the edges of certain 3D printed parts.
Total		:	20.98	3

Hardware

Item	Quantity	Price	Link	Desc
				A majority of screws used in this build are M3 so I
M3 Allen Bolt and Nut Kit		1	10.99 Amazon.com	recommend this kit
				The remaining majority of screws are M4. Note in the manual
				I used 8-32 because that's what I already had on had from
M4 Allen Long Bolts		1	10.99 Amazon.com	other projects, but I recommend the M4.
M4 Lock Nuts		1	7.99 Amazon.com	Used with the M4 Allen bolts
M4 Washers		1	6.29 Amazon.com	Used with the M4 Allen bolts
				One is used under the flywheel for the S2S Balancer; you can
				use a normal nut instead to save a few bucks but these are a
M3 Insert		1	5.99 Amazon.com	bit nicer.
				Used underneath the Susan to allow clearance for the
M4 Flat Screws		1	9.99 Amazon.com	flywheel
				The screw that goes under the S2S motor from the flywheel. I
M3 Flat Screws		1	12.99 Amazon.com	used a 6-32 but M3 would be better.
Total			65.23	7

Misc

Item	Quantity	Price	Link	Desc

			Use this on all threads facing vertically, ie the ones holding
Blue Locktite	1	5.99 <u>Amazon.com</u>	the battery and ones holding the Susan to the A-frames
			I just bought some at my local Home Depot. Also 12" would
14" Zip Ties	1	7.52 <u>Amazon.com</u>	probably be okay.
Total		13.51	2

Electrical

Item	Quantity	Price	Link	Desc
62/36/2 Silver Solder		1	24.49 Amazon.com	The best solder to use, hands down.
Flux Paste		1	7.95 Amazon.com	Really helps with soldering the nickel strips to the battery
				Note: search "16 awg PTFE" on ebay as this link will probably
				change frequently. This is a kit of 6 colors 5 feet each. You
16 awg (gauge) PTFE wire		1	17.99 Amazon.com	could get by with 4 wires @ 5 feet each.
				I highly recommend a kit with lots of sizes as this comes in
Heat shrink		1	9.49 Amazon.com	handy for lots of projects.
Total			59.92	4

Power Switch Holder - CHOOSE ONE (or omit)

Simple

Item	Quantity	Price	<u>Link</u>	Desc
				Main power switch. I actually used an illuminated one from
				Ace hardware that I had in my parts bin but this seems to be
				the same size. If you want an illuminated one, there's a good
				option here:
				https://www.amazon.com/gp/product/B081CTDM9X/ref=as
Rocker Power Switch		1 7.	.99 <u>Amazon.com</u>	k_ql_qh_dp_hza

Total		30.84	3
22 or 24 AWG PTFE Wire	1	14.95 <u>Ebay.com</u>	like the seller NavShips.
			This link will probably get old. Search 24 AWG PTFE on eBay. I
Switchcraft 2.1mm Charge Port	1	7.9 <u>Amazon.com</u>	jump starter already uses it on their charger).
			Accepts the male 2.1mm barrell jack for charging (portable

Voltage

Item	Quantity	Price	<u>Link</u>	Desc
				Main power switch. I actually used an illuminated one from
				Ace hardware that I had in my parts bin but this seems to be
				the same size. If you want an illuminated one, there's a good
				option here:
				https://www.amazon.com/gp/product/B081CTDM9X/ref=as
Rocker Power Switch		1	7.99 <u>Amazon.com</u>	k_ql_qh_dp_hza
				Accepts the male 2.1mm barrell jack for charging (portable
Switchcraft 2.1mm Charge Port		1	7.9 <u>Amazon.com</u>	jump starter already uses it on their charger).
				This link will probably get old. Search 24 AWG PTFE on eBay. I
22 or 24 AWG PTFE Wire		1	14.95 <u>Ebay.com</u>	like the seller NavShips.
				AV (Anti-vandal). I actually used an illuminated one (had it
				from another project) but putting a non-illuminated one here
12mm Momentary AV switch		1	7.98 Amazon.com	for simplicity.
				Used to thread the 3D Voltage Adapter part. You can use
M3 tap		1	7.69 Amazon.com	sheet metal screws instead.
				Very important to get this exact one; if not you'd need to
Bayite 0-30v Mini Voltmeter		1	12.98 Amazon.com	make a new adapter.
Total			59.49	6

Battery - CHOOSE ONE

21700 Pack

|--|

Total		67.98	3
Nickel Strip	1	12.99 Amazon.com	so the 100mm is much easier to work with.
			and save some money but you have to piece two together,
			For soldering the battery pack. Note: you can get the 50mm
40amp BMS	1	9.99 Amazon.com	from the 6 21700 cells
			Needed to manage the 3S2P battery pack that is constructed
21700 4000mAh Samsung Battery	6	7.5 <u>Illumn.com</u>	5000mAh version
			discharge. Performs better (from research) than the
			Rockstar battery that performs even at a 20amp continuous

Portable Jump Starter

Item	Quantity	Price	Link	Desc
				This replaces the Suoaki that is no longer avialble. I'm
DB Power 800 Amp 18000mAh	:	1	69.99 Amazon.com	confident this will work but haven't tested it.
				Wire this to your drive's main power and hook to the
EC5 Connector		1	9.99 Amazon.com	portable jump starter
				I actually used one that had no leads, but this is probably
2.1mm Male Barrell Jack		1	5.99 <u>Amazon.com</u>	easier for most
				I have this stuff left over from shipping; the amount you need
1/16" Foam Sheet for packing		1	12.99 Amazon.com	is very small.
Total			92.97	4

Portable Jump TOTAL	252.61
21700 Pack TOTAL	227.62
Simple Power Switch	30.84
Power Switch Voltmeter	59.49

NOTE: Please check parts carefully as you might have a lot of the hardware already from Joe's build