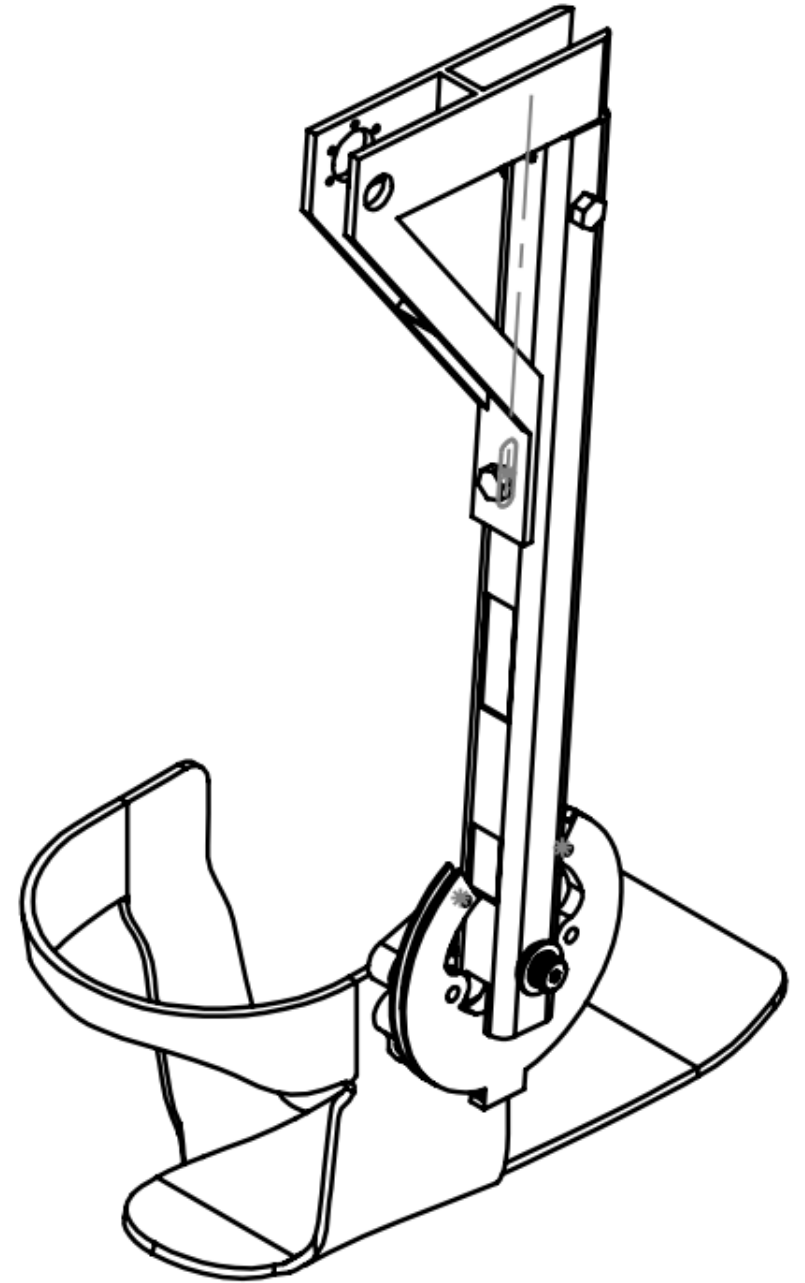


33% Build Presentation

By: Diego Avila, Emma De Korte, Joscelyn Green

Design Efforts

- Implemented New motor Mount and Pulley to our Design
- Redesigned Rod for New Motor Mount and Pulley
- Design a Cover of Chain to Pulley system as Requested by Lerner



Design Efforts New Designs



Purchasing Plan

Current Bill of Materials											Lead Times	
Part	Number in Category	Manufacturer/Source	Quantity Per Unit	Cost Per Unit	Quantity Needed	Item Number	Link	How it will be acquired	Part Status	Who will Manufacture	Start Date	Estimated End Date
Footplate	1	Provided by Lerner	1	-	2			Provided				
Torque Sensors	2	Provided by Lerner	1	-	2			Provided				
Computer Chip and Electronic Components	3	Provided by Lerner	1	-				Provided				
M5-.8 X 35 mm Phillip Screws	4	Home Depot	1	\$1.25	1		Link	Purchased	Aquired			
Chain (1ft, 05B, 8mm Pitch)	5	McMaster-Carr	1	\$9.00	2.00	6027k91	Link	Purchased	Aquired			
M4-.7 30mm Bolt	6	Home Depot	1	\$1.25	1.00		Link	Purchased	Aquired			
M4-.7 Hex Nut	7	Home Depot	4	\$1.25	1		Link	Purchased	Aquired			
M4.7 Washer	8	Home Depot	4	\$1.25	1		Link	Purchased	Aquired			
Stainless Steel Ball bearing	9	Mcmaster-Carr	1	\$13.17	2.00	57155k585	Link	Purchased	Aquired			
Stainless Steel Ball bearing 5mm	10	Mcmaster-Carr	1	\$9.20	4	7804k138	Link	Purchased	Aquired			
Stainless Steel Shoulder Screw	11	Mcmaster-Carr	1	\$6.31	2	91273A392	Link	Purchased	Aquired			
Steel Hex Nuts	12	Mcmaster-Carr	100	\$0.05	1	90592A095	Link	Purchased	Aquired			

Purchasing Plan

M2 x .04mm Phillip Screws	13	Mcmaster-Carr	100	\$0.08	1	92000A015	Link	Purchased	Aquired			
Steel Cable 2mm diameter + Clamps	14	Amazon	1	\$12	1		Link	Purchased	Aquired			
PLA Material	15	Amazon	1	\$18	1		Link	Purchased	Aquired			
M5 x 0.80 mm Thread, 35mm Long	16	McMaster-Carr	10	\$10.36	1	90116A267	Link	Purchased	Aquired			
M4 x 0.70 mm Thread, 30mm Long	17	McMaster-Carr	50	\$16.24	1	90116A225	Link	Purchased	Aquired			
800cc Onyx Filament Spool	18	MarkForged	1	\$190	1	F-MF-0001	Link	Purchased	Purchased			
50cc Carbon Fiber CFF Spool	19	MarkForged	1	\$150	1	CF-BA-50	Link	Purchased	Purchased			
Sprocket (05B, 8 Teeth)	20	McMaster-Carr	1	\$13.05	2	2302K79	Link	Will Purchase			23-Jan	28-Jan
Motor	21	Maxon	1	\$715.13	2	323218	Link	Will Purchase				
Gearbox	22	Maxon	1	\$294.65	2.00	370782	Link	Will Purchase				

Percent Purchased

- Total Parts counting parts provided by Lerner-32
- Parts Purchased-22-68.7%
- Parts on Hand-20-62%



Manufacturing Plan



Current Bill of Materials											Lead Times	
Part	Number in Category	Manufacturer/Source	Quantity Per Unit	Cost Per Unit	Quantity Purchased	Item Number	Link	How it will be aquired	Part Status	Who will Manufacture	Start Date	Estimated End Date
LL-Spark Plug Motor Mount Mod1	1	ProtoLabs	1	\$500.14	1.00	1471-8919-003	Link	Manufactured	Currently Being Manufactured	ProtoLabs	5-Feb	9-Feb
Spark Plug Motor Mount Mod1	2	ProtoLabs	2	\$422.72	2.00	1125-8486-002	Link	Manufactured	Currently Being Manufactured	ProtoLabs	5-Feb	9-Feb
3" Pulley (Most likely 3D printed)	3	Idea Lab	2					Manufactured	Needs To Be Manufactured	NAU Idea Lab	Unknown	Unknown
Carbon Fiber Tubing	4s	Rockwests composite	2	\$55.30	2	225483-L12	Link	Manufactured	Needs To Be Manufactured	TBD from Lerner	Unknown	Unknown

Percent Manufactured

- 7 Total Manufactured Parts Needed
- 3 parts currently being manufactured and will be completed and delivered on the 2/9/24



Demonstration of Purchased Parts



Gnatt Chart

