

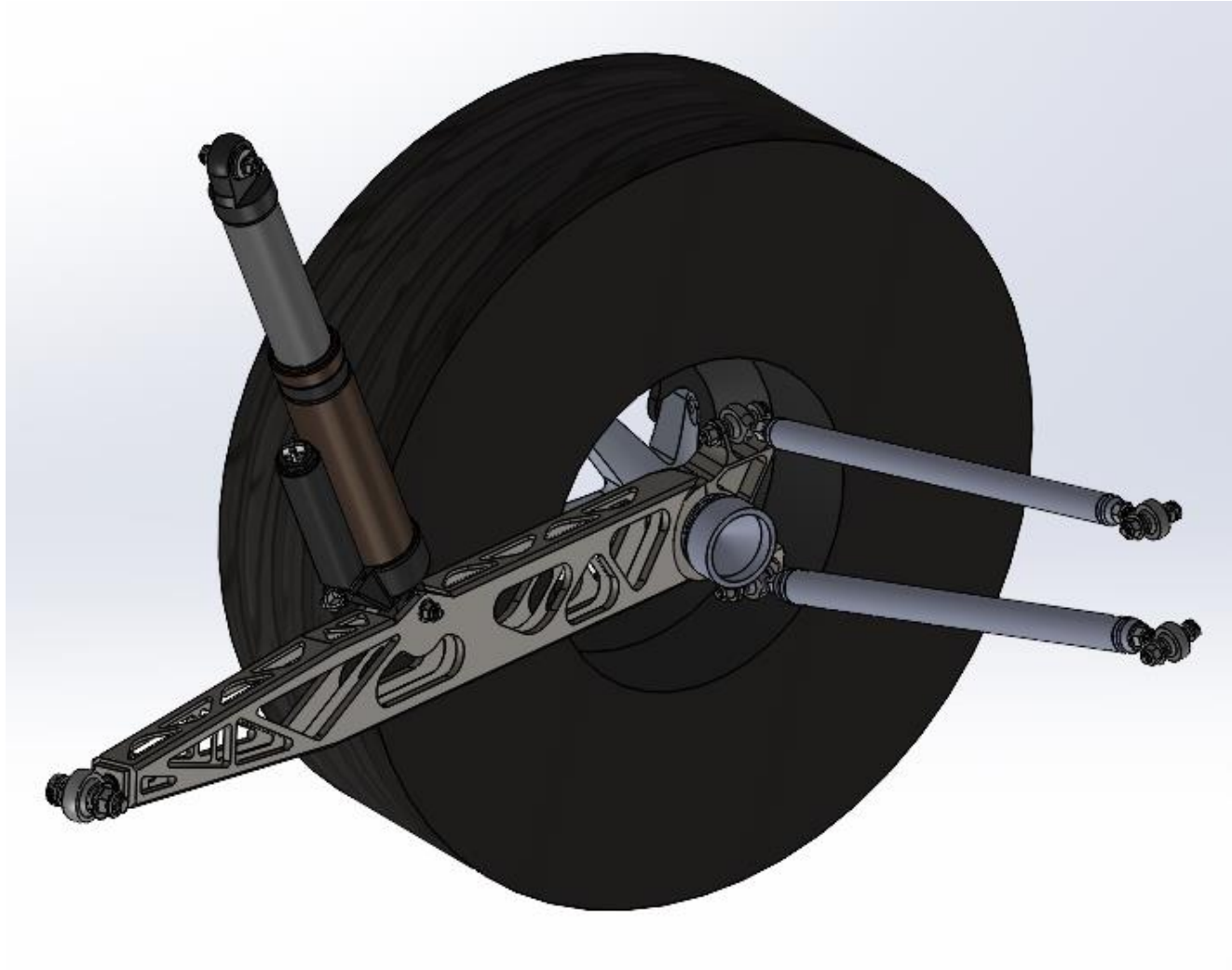
# **SAE Baja '24**

## **Rear End**

**33% Hardware Check**

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# Design Efforts



# Purchasing Plan

Part Name	Quantity	Cost	Total Cost	Material	Purchase/Made	Vender	Vender Part Number	Manufacturer (if not vender)
Trailing Link Laser Cut	10	N/A	N/A	1/4" A36 Steel Plate	Sponsored	VROOM	N/A	same as vender
Trailing Link Weld	2	N/A	N/A	1/4" A36 Steel Plate	Made	NAU SAE Baja	N/A	
Trailing Link Rod End Spacer	4	N/A	N/A	6061-T6 Aluminum	Made	NAU SAE Baja	N/A	
Trailing Link Rod End Insert	2	N/A	N/A	A36 Steel	Made	NAU SAE Baja	N/A	
Shock Spacer	8	N/A	N/A	6061-T6 Aluminum	Made	NAU SAE Baja	N/A	
Float 3 EVOL RC2 Shock	2	N/A	N/A	Magnesium	Own	NAU SAE Baja	N/A	
Wheel	2	N/A	N/A	Steel	Own	NAU SAE Baja	N/A	
Tire	2	N/A	N/A	Rubber	Own	NAU SAE Baja	N/A	
Yamaha Grizzly 350 CV	2	115	230	Steel	Own	Ebay	YFM350FGI	Yamaha
SKF Deep Groove Bearing	4	13.88	55.52	Steel	Purchase	Amazon	800L5DC82E	SKF
Wheel Hub Spacer	2	N/A	N/A	6061-T6 Aluminum	Made	NAU SAE Baja	N/A	
Rear Wheel Hub	2	N/A	N/A	6061-T6 Aluminum	Made	NAU SAE Baja	N/A	
Yamaha Grizzly 350 Wheel Hub	2	24.56	49.12	Steel	Own	Ebay	5FU-F5377-11-00	Yamaha
Rear Knuckle	2	N/A	N/A	4130 Steel	Made	NAU SAE Baja	N/A	
5/8" Ball Joint Rod End with Nut - RH	2	14.78	29.56	Zinc-Plated Carbon Steel	Purchase	McMaster-Carr	4237N107	same as vender
3/8" Super-Swivel Ball Joint Rod End - LH	4	13.74	54.96	Zinc-Plated Carbon Steel	Own	McMaster-Carr	6960T23	same as vender
3/8" Super-Swivel Ball Joint Rod End - RH	4	13.74	54.96	Zinc-Plated Carbon Steel	Own	McMaster-Carr	6960T23	same as vender
5/8"-1.25" Shoulder Screws	2	N/A	N/A	Alloy Steel	Sponsored	Copper State	10STCP-0630150	same as vender
3/8"-1.25" Shoulder Screws	6	N/A	N/A	Alloy Steel	Sponsored	Copper State	10STCP-0380125	same as vender
3/8"-1.5" Shoulder Screws	6	N/A	N/A	Alloy Steel	Sponsored	Copper State	10STCP-0380150	same as vender
5/16"-18 Nylon-Insert Flange Locknut	12	N/A	N/A	Grade 8 Steel	Sponsored	Copper State	08N8CY-031	same as vender
1/2"-13 Nylon-Insert Flange Locknut	2	N/A	N/A	Grade 8 Steel	Sponsored	Copper State	08N8CY-050	same as vender
Steel Camber Link Insert	4	N/A	N/A	A36 Steel	Made	NAU SAE Baja	N/A	
Steel Camber Link	2	11	22	1" x 0.035" 4130 Steel Pipe	Purchase	Bike Fabrication Supply	TBE-25-.4-.9-1200-4130	same as vender
Steel Camber Link Weld	2	N/A	N/A	Welding Wire	Made	NAU SAE Baja	N/A	
Carbon Fiber Camber Link Insert	4	N/A	N/A	6061-T6 Aluminum	Made	NAU SAE Baja	N/A	
Carbon Fiber Camber Link	2	20.95	41.9	Roll Wrapped Carbon Fiber	Purchase	Amazon	B0791XDV7W	Abester Composite Materials
Epoxy	1							
Carbon Fiber Camber Link Glue	2	N/A	N/A	Roll Wrapped Carbon Fiber	Made	NAU SAE Baja	N/A	
Wheel Stud and Lugnuts	2	38.95	77.89	Titanium	Purchase	Ti64	366	same as vender

Designed Percent	100
Total Purchased Parts	68
Complete parts purchased	14
Purchased percent	20.6
On Hand percent:	26.5
Manufactured Parts:	34
Total Manufacturing Time:	89.5
Completed Manufacturing time:	21
Manufactured Percent:	23.5

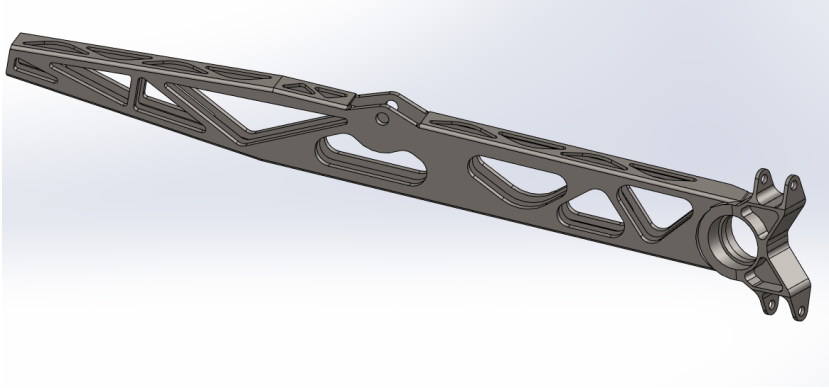
## What needs to be purchased

- Wheel Studs & Nuts
- Shoulder bolts and nuts
- 2 Ball Joints
- Steel Camber link tubing

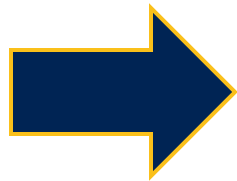
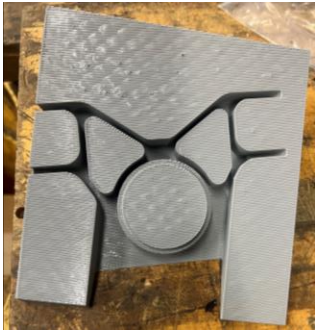
## What's been purchased

- Trailing arm plates
- CV axles
- Hub splines
- Bearings
- Epoxy
- CF camber link tubing

# Manufacturing Plan



Welding knuckle to arm



# Current Rear Assembly Progress



# Gantt Chart Updates

TASK	ASSIGNED TO	PROGRESS	START	END
<b>Trailing Arm / shock</b>				
Trailing link	Larz	70%	1/16/24	2/25/24
Shock absorbers	Larz	33%	1/31/24	2/14/24
Shock	Larz	95%	1/31/24	1/31/24
Trailing rod end spacers	Larz	0%	2/15/24	2/29/24
Trailing rod end inserts	Larz	33%	2/5/24	2/14/24
Trailing rod ends	Larz	33%	2/5/24	2/19/24
Trailing arm jig	Seth	50%	1/31/24	2/10/24
<b>Camber Links</b>				
Camber link	Jaey	50%	1/31/24	2/14/24
Camber rod end spacers	Jaey	0%	2/14/24	2/23/24
Camber rod end inserts	Jaey	33%	2/19/24	2/23/24
Camber rod ends	Jaey	95%	2/1/24	2/5/24
Pivot Hardware	Jaey/Seth	65%	2/19/24	3/1/24
<b>CV Shaft / Hardware / Spacer, Miscellaneous</b>				
Knuckle	Team	66%	1/31/24	2/11/24
CV bearing	Seth	75%	1/31/24	2/16/24
Hub	Seth	75%	1/31/24	2/16/24
Wheel/Tire	Seth	95%	1/31/24	2/1/24
Wheelnut/tracer	Seth	33%	1/31/24	2/25/24
CV hardware	Seth	0%	2/25/24	3/4/24

