

HR 2 BREAKDOWN

TEAM: **19F14** (Drew Stringer, Shamlan Albahar, LeAlan Kinlecheenie, Fahad Alhowaidi, and Andres Parra)

Due Date:

Friday, March 6, 2020 at 11:59pm

Provide several pics of the current state of your completed system thus far here:

ITEM	DESCRIPTION	QTY	PRICE	TOTAL
10MZ	WaterJet cut Marzee supplied 1" 6061 Alum cut per Dwg NAU EBaja Trailing Arm Revised	2	60.00	120.00
25MZ	Order will be processed for a 4 to 6 business day finish upon receipt of PO or written notice to proceed and the delivery of material (if applicable).		0.00	0.00
	Tax Retail Sales Phoenix		10.32	10.32

ALL PRICES SUBJECT TO REVIEW AFTER 15 DAYS
Request for material certification must be made during the quoting process.

TOTAL	\$130.32
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Figure 1. Trailing Arm Quote

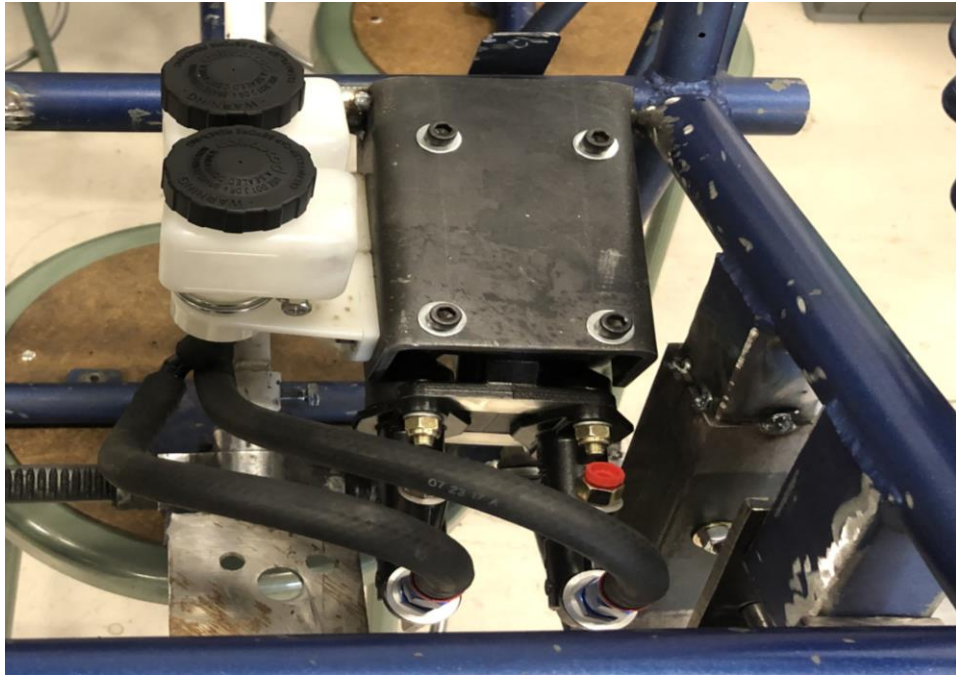


Figure 2. Mounted Brakes



Figure 3. Tapped arm for the new joints



Figure 4. Frame welded



Figure 5. Final assembly for front suspension

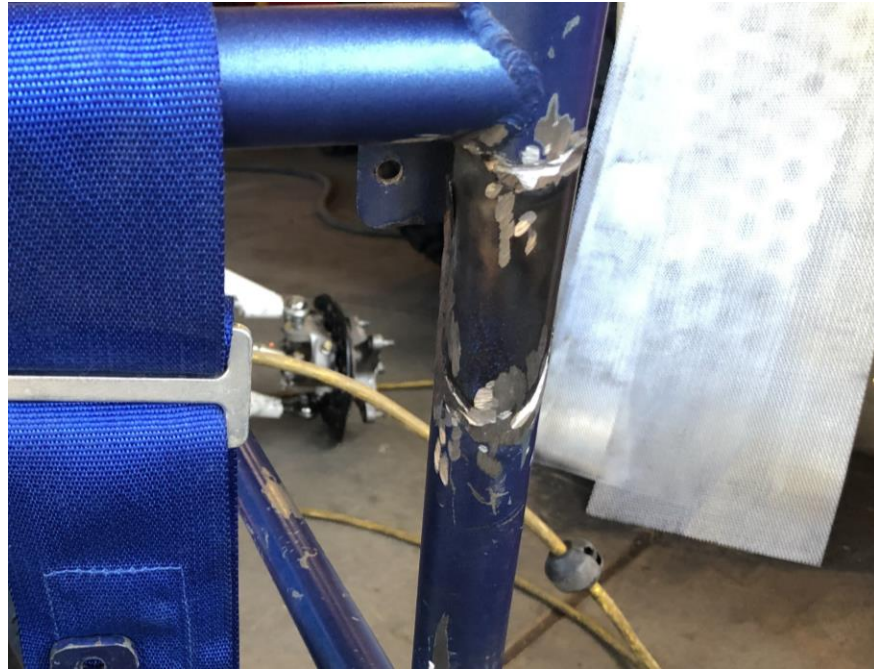


Figure 6. Grinding off rear shock mount



Figure 7. Grinding off trailing arm mount



Figure 8. Front suspension welds



Figure 9. Front suspension welds



Figure 10. Front knuckle

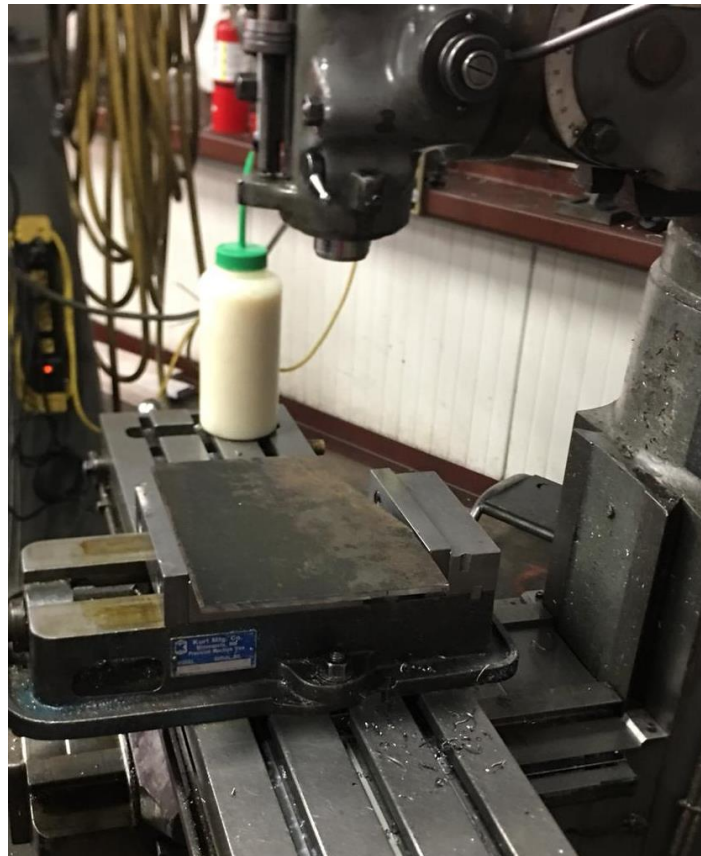


Figure 11. Rear suspension link manufacturing



Figure 12. Unaligned front suspension

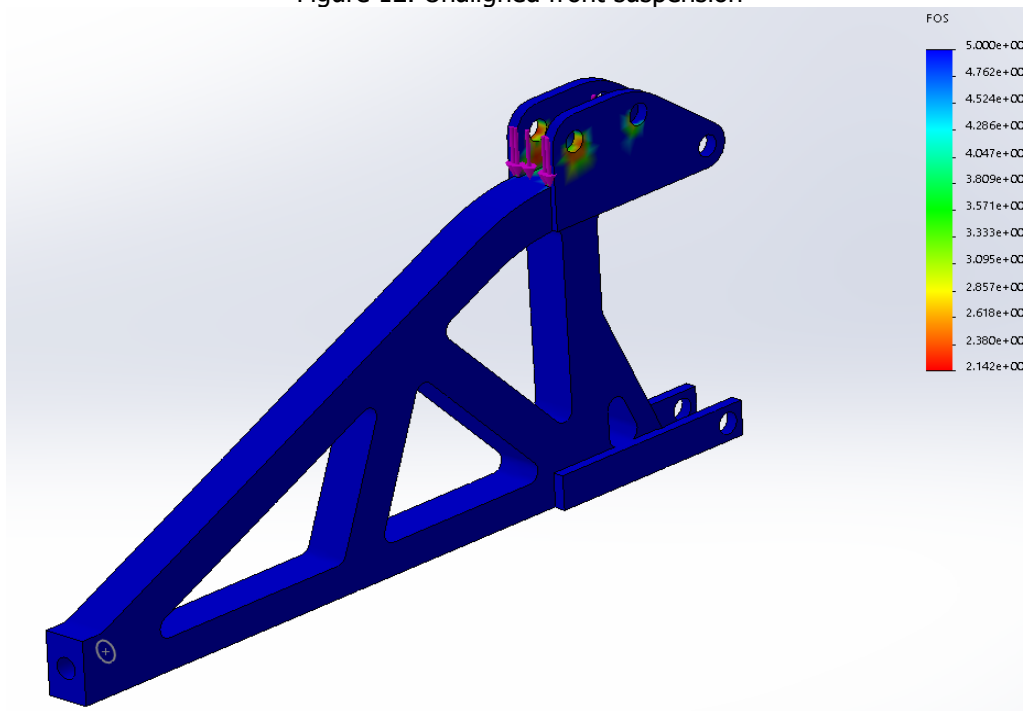


Figure 13. Rear Suspension FEA



Figure 14. Clear skid plate addition



Figure 15. Better alignment minus driver's right shock

The following are the Action Items each person completed between Hardware Review 1 and Hardware Review 2:

Team Member: **Drew Stringer**

Action Item	Date Completed	Result/Proof of Completion
Car disassembly	2/10/20	Figure 6, 7
Brake Mounting	2/28/20	Figure 2
Front Suspension Mount Welding	3/5/20	Figure 8, 9

Team Member: Shamlan Albahar

Action Item	Date Completed	Result/Proof of Completion
Finalized rear suspension system design and approved by client and got it ordered.	02/27/2020	Figure 1, 13
Cut previous rear suspension welds and grinded the surface.	03/02/2020	Figure 6, 7
Drilled holes and tapped the knuckle	03/02/2020	Figure 8, 9, 10

Team Member: LeAlan Kinlecheenie

Action Item	Date Completed	Result/Proof of Completion
Cut material for steering links	2/27/20	Figure 10

Drill holes to mount steering links to steering knuckle	2/28/20	Figure 10
Cut material for rear links	3/3/20	Figure 11

Team Member: Fahad Alhowaidi

Action Item	Date Completed	Result/Proof of Completion
Drilling holes for the new heim joints and tapping the arms	2/21	Figure 3
Grinding the frame to start welding	2/28	Figure 4
Assembling the front suspension	3/3	Figure 5

Team Member: Andres Parra

Action Item	Date Completed	Result/Proof of Completion
Front Suspension Alignment	3/6/20	Figure 12, 15
Skid Plate Addition	3/5/20	Figure 14
Rear Suspension Corrections	2/28/20	Figure 1, 13

The following are the Action Items for each team member between HR 2 and the Final Product presentation:

Team Member	Action Items	Date Due
Drew Stringer	<ol style="list-style-type: none"> 1. Manufacture/mount Gearbox parts 2. Mount electronic components 	<ol style="list-style-type: none"> 1. 3/27/20 2. 3/27/20
Shamlan Albahar	<ol style="list-style-type: none"> 1. Create mounts for rear suspension. 2. Install the rear suspension. 	<ol style="list-style-type: none"> 1. 3/11/2020 2. 03/27/2020
LeAlan Kinlecheenie	<ol style="list-style-type: none"> 1. Mill mounts for rear suspension 2. Create rear suspension links 	<ol style="list-style-type: none"> 1. 03/11/2020 2. 03/11/2020
Fahad Alhowaidi	<ol style="list-style-type: none"> 1. Installing parts to make the car roll 2. Finishing up the fire wall 	<ol style="list-style-type: none"> 1. 03/11/2020 2. 03/24/2020
Andres Parra	<ol style="list-style-type: none"> 1. Design mounts for rear suspension 2. Retrieve and attach firewall 	<ol style="list-style-type: none"> 3. 03/11/2020 4. 03/11/2020