EV PP Tracking

Thursday, December 21, 2023 10:42 AM

Meetings: Thursdays @7
*** Project will only be presented if all the following are true:

- Project is submitted a day prior to meeting
- Project is reviewed by the lead of the project AND chiefs
- Project is relevant to car goals
- For stage four of design process () will only be approved if information under “Assembly Process/Materials” are inputted into the Cost excel sheet by lead.

Structure:
Projects will be presented in priority order.
If presenter has more than one design step completed, they may continue presenting IF they are approved to do so
***As projects get approved leads should begin compiling proposals to aid in design and build upon it w/ information presented in Design Presentation. (Can also begin compiling pictures, logs, sims, etc. As project is progressing) (Design Binder 2024 Pinned in teams)
*** Feedback will be written in red text
*** People who have passed their proposals will be in a list that will be sent out in chat after the meeting

- Tracking will be updated every Design meeting
- If parts need to be machined COMMUNICATE (DM, meeting, etc.) with Manufacturing Lead… will be tracked
- If parts need to be ordered COMMUNICATE (DM, meeting, etc.) with Lead, Prez, VP… will be put in master list if approved

*** if machining needed go to "manufacturing" tab >>> Machining Tracking& talk to manufacturing lead
*** once project has gone through ALL of PP system if items need to be ordered LEADS must go to COTS tracking and fill out table to track order status of items

Template

Monday, June 26, 2023 9:09 PM

Project (engineer)	***Priority Class***	***Status***	***Estimated time of Project completion (PP 1)***	***Project Proposal 1***	***Project Proposal 2***	***Project Proposal 3***	***Project Proposal 4***	***Has info been inputted into COST STATIC EVENT excel? (Y/N)***	***Completed***	***Notes***

Aero

Monday, July 10, 2023 3:22 PM

Project (engineer)	*Priority Class*	*Estimated time of Project completion (PP 1)*	*Project Proposal 1*	*Project Proposal 2*	*Project Proposal 3*	*Project Proposal 4*	*Has info been inputted into COST STATIC EVENT excel? (Y/N)*	*Completed*	*Notes*
Undertray Mounting AJ	*B*		***COMPLETE***	***COMPLETE***	***COMPLETE***	***Revising***			***- Plans to present 10/05*** ***- Need drawings*** ***- Messaged 11/06***
Jacking Bar (Shrey)	***A***		***COMPLETE***	***COMPLETE***	***COMPLETE***	***COMPLETE***			***-needs to add a flange to inserts and update drawings***
EV Firewall Grayson	***B***	***11/02***	***COMPLETE***	***COMPLETE***	***COMPLETE***	***Revising***			-currently cad -and drawings -put flat on firewall -needs to insert in main static -firewall wil just be .04 alum

Composites

Monday, July 10, 2023 3:22 PM

Project (engineer)	Priority Class	Status	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
Seat Rebuild Matt Neace	B	In Progress	10/09/2023	COMPLETE	COMPLETE	COMPLETE	COMPLETE			-decrystalizing resin to create samples 09/27 Samples 10/30
Seat/firewall Grounding Eliab	B	COMPLETE		COMPLETE	COMPLETE	COMPLETE	COMPLETE			- Revising again - Pp3 will change stock thickness to 0.05
Floorpan Grayson	B	Revising		COMPLETE	COMPLETE	COMPLETE	Revising			-relocate tabs.

EV Powertrain

Monday, July 10, 2023 3:22 PM

Project (engineer)	Priority Class	Status	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
Acc chassis tab Abri	B	COMPLETE	20 days 12/18	COMPLETE	COMPLETE	COMPLETE	COMPLETE	N/A		
Acc mount Abri	B	COMPLETE	31 days 12/20	COMPLETE	COMPLETE	COMPLETE	COMPLETE	...		
Acc Lid Jonathan	A	COMPLETE	70 days 9/16	COMPLETE	COMPLETE	COMPLETE	COMPLETE			- Will present 3 09/21 - ~~Need drawing and subassembly drawings~~ - Indexing feature, redoing flat patterns
Battery Cooling Bales	B	In progress	11/21/2023	COMPLETE	COMPLETE	COMPLETE	Revising			- Will present 1 & 2 09/21 - Cad for mounts tests and feas - needs to add fan harness to scope Acc
Busbars Abri	B	COMPLETE	10/10/2023	COMPLETE	COMPLETE	COMPLETE	COMPLETE			-will present 1 09/21 -needs to make test pp
Regen Bales										
RAD Mounting Sofie	A	COMPLETE	11/02/2023	COMPLETE	COMPLETE	COMPLETE	COMPLETE			-

LV

Monday, July 10, 2023 3:22 PM

TO apply any changes to it must save the excel before closing it

LV- tracking

Project	Engineer	Priority Class	Disapproved or approved?	Status	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
MDB	Val	B	Approved	DONE	9/25/2023 (finished 8/10/2023)	Presented	Presented	Presented	Presented	Y	Y	DONE
AVI	Marco	B	Approved	DONE	9/12/2023	Presented	Presented	Presented	Presented	N	Y	DONE
TSAL Controller	Bray	B	Approved	DONE	9/10/2023	Presented	Presented	Presented	Presented	N	N	planning to present 3 & 4 pps 10/12/2023
Economizer	Bray	C	Not Presented	Not Started		Not Submited	Not Submited	Not Submited	Not Submited	N	N	work on after pit
PDU	Justin	B	Approved	DONE	10/16/2023	Presented	Presented	Presented	Presented	N	Y	finishing 3-4 to present
EV Dash & EV Lights/Buttons	Justin	B	Approved	2		Presented				N	N	Need to talk about the project
VCU	mathew	B	Approved	2	10/17/2023	Presented	Currently Working On			N	N	
EV Lunch Control TP	Jonathan	B	Approved	DONE	2/14/2024	Presented	Presented	Presented	Presented	N/A	N	DONE
Power Conditioner TP	Mathew	B	Approved	2		Presented	Currently Working On			N	N	
PDU Box	Justin	B	Approved	DONE		Presented	Presented	Presented	Presented	N	N	finsihing 2 maybe 3 to present after pit
Switch Pannel		A	Approved	2	9/8/2023	Presented	Currently Working On			N	N	Dose not need a proposal anymore
Smaller Wire TP	Abri	C	Not Presented	Not Started		Currently Working On				N	N	Dose not need a proposal anymore
Regen Controls	N/A	B	Not Presented	Not Started						N	N	
Phumatic Shifter PCB	Bray	B	Approved	2	10-Oct	Presented	Presented			N	N	
Main relay PCB	N/A	C	Not Presented	Not Started						N	N	
IC Dash	Grayson Marks	B	Approved	DONE	9/25/2023	Presented	Presented	Presented	Presented	N	N	
IC Dashboard Shape and Cover	Seth Cornman	B	Approved	DONE	9/18/2023	Presented	Presented	Presented	Presented	N	N	
IC Lunch Control		C	Not Presented	Not Started						N	N	
EV Dash mounting & cover	reassigning	C	Not Presented	1		Presented						
TSAL light	Val	A	Approved	DONE	9/12/2023	Presented	Presented	Presented	Presented			DONE
EV Logger	Chance	C	Approved	DONE		Presented	Presented	Presented	Presented			Is not a priority for design deadllines, was told because its not a vital thing to the cars manufacuting timeline it can be done sequentily on the side
EV logger case	Val	C	Approved	DONE	10/25/2023	Presented	Presented	Presented	Presented			
VCU Box	Steven	C	Approved	DONE	10/18/2023	Presented	Presented	Presented	Presented			

VD

Monday, July 10, 2023 3:22 PM

Project (engineer)	*Priority Class*	*Status*	*Estimated time of Project completion (PP 1)*	*Project Proposal 1*	*Project Proposal 2*	*Project Proposal 3*	*Project Proposal 4*	*Has info been inputted into COST STATIC EVENT excel? (Y/N)*	*Completed*	*Notes*

IC PP Tracking

Thursday, December 21, 2023 10:43 AM

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Template

Monday, June 26, 2023 8:58 PM

Project (engineer)	*Priority Class*	*Status*	*Estimated time of Project completion (PP 1)*	*Project Proposal 1*	*Project Proposal 2*	*Project Proposal 3*	*Project Proposal 4*	*Has info been inputted into COST STATIC EVENT excel? (Y/N)*	*Completed*	*Notes*

Aero

Monday, July 10, 2023 3:22 PM

Project (engineer)	Priority Class	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
RW Mount Seth	B		COMPLETE	COMPLETE	COMPLETE	COMPLETE			- Invalid calcs & pics need to be added - Rerun FEA on rib/spar
Aero Package Nate	A	2/14 (435 days)	COMPLETE	COMPLETE	COMPLETE	COMPLETE			- Plan to present structures 10/12
Aero Structures Nate	A		COMPLETE	COMPLETE	COMPLETE	COMPELTE			
FW Mount Bray	B		COMPLETE	COMPLETE	COMPLETE	COMPLETE			- If bray does not present pp 3 &4 this week 10/12/2023, nathan will be take over project - Currently fea fails
Flow Visualtions Joey	C		COMPLETE	COMPLETE	COMPLETE	COMPLETE			- Will present pp4 10/05
IC firewall Matt	A		COMPLETE	COMPLETE	COMPLETE	Revising			-~~need drawings~~ -add a flat to seat belt holder

Composites

Monday, July 10, 2023 3:22 PM

Project (engineer)	*Priority Class*	*Status*	*Estimated time of Project completion (PP 1)*	*Project Proposal 1*	*Project Proposal 2*	*Project Proposal 3*	*Project Proposal 4*	*Has info been inputted into COST STATIC EVENT excel? (Y/N)*	*Completed*	*Notes*
ECU Mount William	*C*	*COMPLETE*		*COMPLETE*	*COMPLETE*	*COMPLETE*	*COMPLETE*			
Pushrods Keagan	*C*	*COMPLETE*		*COMPLETE*	*COMPLETE*	*COMPLETE*	*COMPLETE*			-need drawings for inserts

EnD

Monday, July 10, 2023 3:22 PM

Project (engineer)	Priority Class	Status	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
ETS Pete	B	COMPLETE		COMPLETE	COMPLETE	COMPLETE	COMPLETE			- PP 1 needs revisions - Project will be reassigned
Headers Brenden	A	COMPLETE		COMPLETE	COMPLETE	COMPLETE	COMPLETE			-willl add star sim for design -need to add flanges for mounting to motor in main static and bungs
Diff Carriers Alex	B	COMPLETE		COMPLETE	COMPLETE	COMPLETE	COMPLETE			-do patty calc -09/21: fix cad(edit bearing holder), needs to do a mesh study, - Have all four pps done 10/12 -Brackets have been redone need to redo the bearing carriers and do the proper fea once that's done can do part 4 and present next week - Drawing and need to put in pdm - Needs to drop diffs down
Throttle Bracket Carter	C	COMPLETE	10/31/2023	COMPLETE	COMPLETE	COMPLETE	COMPLETE			
Axle End Caps Tyler	C	COMPLETE	10/17/2023	COMPLETE	COMPLETE	COMPLETE	COMPLETE			
EV Spool Elizabeth	B	COMPLETE		COMPLETE	COMPLETE	COMPLETE	COMPLETE			-need FEA -needs a complete CAD -need to insert tension cap
Individual Per Cylinder Tuning Dean	C	COMPLETE		Complete	COMPLETE	COMPLETE	COMPLETE			

VD

Monday, July 10, 2023 3:22 PM

Project (engineer)	Priority Class	Status	Estimated time of Project completion (PP 1)	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Has info been inputted into COST STATIC EVENT excel? (Y/N)	Completed	Notes
Wheel insert Seth		Not pursing								
Alignment Emil	C	COMPLETE	10/16 32 days	COMPLETE	COMPLETE	COMPLETE	COMPLETE			-cad for jigs -drawings -needs to redesign
Front & Rear Uprights Sam	A	In progress	11/08/23	COMPLETE	COMPLETE	COMPLETE	Revising			10/05/2023- will walk through upright pps -needs to make toe pickup thicker
Chassis (Ev & IC) Mihai	A	COMPLETE	11/05	COMPLETE	COMPLETE	COMPLETE	COMPLETE			-CAD is done -doing ordering sheet -need torsion sims -
Adjustable Pedal Box Bray	C	In Progress	11/10/23	Revising						- Editing project scope and force goals - Will present 10/19

Extention request tracking

Thursday, December 21, 2023 11:04 AM

Request Tracking

Thursday, November 2, 2023 11:58 PM

Subgroup	**Project**	**Approved or Disapproved**
Composites	EV Firewall	Approved
Composites	Floorpan	Approved

Test Proposal Tracking

Thursday, December 21, 2023 10:44 AM

Template

Monday, July 10, 2023 1:42 PM

Project (engineer)	*Priority Class*	*Status*	*Estimated time of Project completion*	*Project Proposal 1*	*Project Proposal 2*	*Project Proposal 3*	*Project Proposal 4*	*Completed*	*Notes*
Intake Testing ***Patty***		In progress		***COMPLETE***	***COMPLETE***	***In progress***			
BSFC ***Heily***				***COMPLETE***	***In progress***				

PP Testing

Monday, July 31, 2023 12:23 PM

Project (engineer)	Priority Class	Status	Estimated time of Project completion	Project Proposal 1	Project Proposal 2	Project Proposal 3	Project Proposal 4	Project Proposal 5	Complete	Notes
BSFC Testing Heily	C	In progress		COMPLETE	COMPLETE	COMPLETE	COMPLETE	In progress		-waiting for headers to be done to conduct test
Cooling Iteration Emil	B	In progress		COMPLETE	COMPLETE	COMPLETE	COMPLETE	In progress		-ready to conduct test
On & Off Aero David	C	In progress		COMPLETE	COMPLETE	COMPLETE	Revising			

Order Tracking

Thursday, December 21, 2023 11:13 AM

Template

Monday, July 10, 2023 3:21 PM

COTS

Project	***Assigned to***	***Order list submitted by lead?***	***Order list submitted to Lousie?***	***Order list submitted by Louise?***	***Obtained***	***Notes***
Fuel Tank	Brenden					

Aero

Monday, July 10, 2023 3:22 PM

Composites

Monday, July 10, 2023 3:22 PM

EnD

Monday, July 10, 2023 3:22 PM

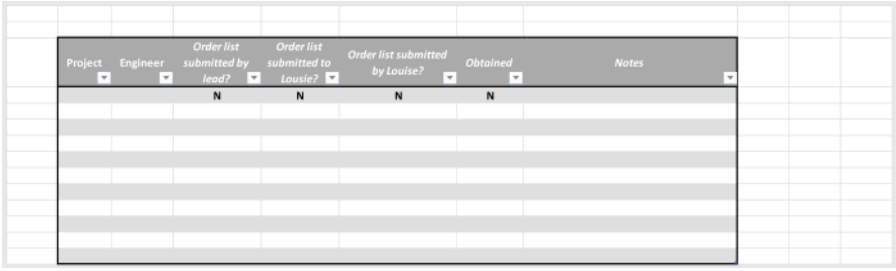
EV Powertrain

Monday, July 10, 2023 3:22 PM

LV

Monday, July 10, 2023 3:22 PM

LV - COTS



Project	Engineer	Order list submitted by lead?	Order list submitted to Lousie?	Order list submitted by Louise?	Obtained	Notes
		N	N	N	N	

VD

Monday, July 10, 2023 3:22 PM

IC Project Tracking

Thursday, December 21, 2023 10:45 AM

- Will be meeting with leads 2x a week for progress checks
- If machining is needed either to build a project or a failed part communicate with Manufacturing lead…

Template

Monday, June 26, 2023 8:58 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
ECU Mount	William/Composites	☑ - Mold CAD ☐ - 3D-print ☐ - Bondo ☐ - Sand uniformly ☐ - Poly coat	Low	In Progress		
Firewall	Matt/Composites					

If you hit a failure point during or after the build process, FILL OUT step 5 of proposals "Failure Analysis"

Aero

Monday, July 10, 2023 3:22 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Fuel tank	Brenden	☑ - CAD ☑ - Water Jet ☑ - Weld ☑ - Tubing ☑ - Cap and flange ☑ - Cut neck ☑ - Turn neck ☑ - Make cap? ☑ - Get wire pass thru ☑ - Add drainplug ☑ - Order neck parts ☑ - tube	HIGH	In Progress		- Fuel tank mounted in main static - Scheduled meeting **01/23** for update

Composites

Monday, July 10, 2023 3:22 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
ECU Mount						

EnD

Monday, July 10, 2023 3:22 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Axel Endcaps	Britton	☑ - Source PETG ☑ - Source 3D Printer ☑ - Print PLA Test ☑ - Test In Axel ☑ - Print Radius .4 ☐ - Print Radius .45 ☐ - Print Radius .5		In Progress		The CAD does not match real life
Throttle Bracket	Carter	☐ Source Parts ☑ • 4-40 Nuts ☐ • 4-40 Bolts ☑ • 1/8 aluminum sheet metal ☐ Source Waterjet ☑ 3D print throttle Bracket ☐ Source Sheet Metal Bender ☐ Waterjet Part ☐ Bend Part ☐ Tap Holes ☐ Test fitment				Possibly can bend with a vise if necessary
Headers	Brenden,	☐ Print Jigs ☑ Primary 1 ☑ Primary 2 ☑ Primary 3 ☑ Primary 4 ☐ Collector Jig ☐ Engine Jig ☐ Collector to primary jig ☑ Order Form ☑ Need Primary Pipe ☑ Need titanium ☑ Need stainless V-band ☐ Collector ☐ ~~Print Paper Guides~~ ☐ ~~Glue Paper Guides~~ ☐ Cut to guides ☐ Source bandsaw ☐ Assemble using jig ☐ Tac using jig ☐ Full weld ☐ Well to primary's ☐ Bungs ☑ Source stock for bungs ☐ Collect the cad ☐ Create the CAM ☐ Mill the Part ☐ Weld to primary's using the jig ☐ Flanges ☐ Create DXF of Flange ☐ Waterjet the flanges ☐ Install on Primarys BEFORE welding the bungs ☐ Primary's x4 ☐ Create Piecut jig ☐ Grind and place the piecuts in the jigs ☐ Tac together ☐ Full weld ☐ Full Assembly		In Progress		Marco has mentioned a sponsor has offered to provide a chop saw for pie cuts
EV - Spool	Liz	☑ Source 5in round stock 7075 ☑ Run FEA with Jesse Impulse Load ☐ Put new fea in PP ☐ Order C-Clip ☐ CAM Spool ☐ Machine Spool		In progress		
IC Diff Carriers	Alex	☑ Jet right diff carrier ☑ Jet left carrier ☑ Jet right bearing carrier ☑ Jet left bearing carrier ☐ Mill holes ☐ Press bearings ☐ Test fit				
IC Heatshield	Pete, anyone	☑ Double Check Fitment ☐ Waterjet the profile ☐ Bend to shape ☐ Need to do a drawing				
ETS		☐ Anchor Dyno ☐ Find Anchor ☑ Finish Welding				

		☐ Clean wiring ☐ Jet the engine Mount ☐ Test Fit engine ☐ Drill holes in stand ☐ Cut out sprocket carriers and mount arms ☐ Order sprocket				
Cooling Test						
BSFC Test	Heily, brenden, paddy					
Engine Rebuild		☑ Organize Tools and parts ☐ Source a good torque wrench, bore gauge, plastigauge, and micrometers ☐ Clean engine parts ☐ Figure out where which piston goes where. ☐ Measure bore in 3 locations ☐ Measure piston ☐ Calculate bore piston clearance ☐ ☐ Measure the crank bore with new bearings in ☐ Torque plate installed with plastigauge ☐ Measure crank seat ☐ Measure piston bearing ☐ Calculate bearing clearances ☐ Reassemble the engine				

CAD (update as needed)

Project	Assigned to	Task list	Priority	Status	Failure Analysis (Y or N)	Notes
Oil System	Alexander and paddy and Pete	☑ Oil Cooler Water Lines ☑ Check for correct Oil pan ☐ Check for correct Oil Pickup(Optional) ☑ Scavenge Sections? ☐ -Add Plug where scavenge sections was	Low			
Cooling System	Pete/paddy, Britton, and brenden	☑ Finalize water pump position ☑ Radiator hoses -Check fitment ☑ Water pump bracket - brenden ☑ Need hoses for overflow ☑ Other Hoses ☑ Flanges ☑ Bolts ☑ Radiator Position? ☑ Radiator Mount Cutouts	High	In progress		
Intake	Paddy and Carter and Pete	☑ Need Bolts into engine ☑ Need proper throttle wheel ☑ Need Proper throttle bracket ☑ Fix Positioning relative to head restraint	Low			
Fuel System	Britton and Matthew and James and Pete	☑ Add fuel pressure regulator ☑ Add return line from fuel reg ☑ Missing Baffle on one side ☑ Old fuel pump still in there ☑ Get rid of suppressed bullshit	Low	In progress		
Exhaust	Brenden Peter	☑ Add in header bungs ☑ Heat shield interfering battery box ☑ Refine sheet metal layout for Heat Shield ☑ Muffler mounting tube bolt	High			
Pneumatic Shifting	Brenden and mihai	☐	High			
IC Driveline	Brenden and dean	☐ Hardware on sprocket ☑ Axel Position? ☑ Unconstrained assembly ☑ Adjust chain guard? ☐ Hardware on whole assembly	High			
EV Driveline	Liz	☑ Mate front sprocket ☑ Add spool carrier bearings ☑ Fix axle misalignment ☐ Mate everything correctly	High	In progress		

		☐ Update folders/organize ☐ Check fitment in Main Static (especially axle position)				
Instruments and wiring	Pete	☑ Fix head restraint assembly ☑ Make head restraint EV config ☑ Check position of battery box ☑ ECU Mounts ☑ Seat ☐ Pedal Box updates (pending) ☑ PDU (working with Justin) ☑ Missing hardware				
Powertrain	Petey	☑ Need inter-assembly hardware ☑ Header Flanges ☑ Intake Flanges ☑ Gas Tank ☑ Motor Mounts ☑ Thermostat Housing ☑ Coolant inlet ☑ Oil Pan bolts ☑ Water Pump				
Aero	Pete	☑ Finish support rod mounts geometry				

LV

Monday, July 10, 2023 3:22 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
IC Dash	Grayson marks	☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☑ Ordered ☑ Some Parts Arrived ☑ Parts Arrived ☑ Normalcy check / Assembling ☐ Code				
IC Dahs Case	Seth	☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Printed ☑ Tabs in Manu list ☑ Old dash tabs in manu list ☑ Parts ordered? ☐ Assembled ☐ Tabs welded ☐ On car				
Ic front harness	Crawford	Done .				
IC rear harness						
IC GUI	Chance	☑ Concept ☐				Done around January First
IC front rapdharness						

21qVD

Monday, July 10, 2023 3:22 PM

Project	*12Q*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Alignment	Emil	☑ Design considerations ☑ Order stock for alignment platforms + hub stand (may vary in order depending on cost and time) ☑ Manufacture Alignment platform and hub stands ☑ At 2 sets verify alignment can be done or if any fitment or design changes need to be made	^ does not need to be completed right now	working	n/a	
Pedal Box	Bray	☐ Order necessary sheet metal (if any) ☑ Put final CAD assembly into PDM ☐ Manufacturing ☐ look into options for manufacturing (waterjet here, sendcutsend, sponsor, etc.) ☐ Jigs? if necessary would only be for side rails welded to chassis ☐ Weld and manufacture assembly ☐ test fit into cars ☐ verify passes tech inspection	^ because of recycling components the assembly can get done around February (not accounting for any manufacturing delays)	in progress	Y	somewhere in the middle we either need to remanufacture the same or get new pedal faces
Upright	Sam	☑ final CAD ☑ Drawings + tolerances ☐ manufacturing ☑ method: in house, sponsored, outsource, etc. (should ideally be done with drawings and final CAD in hand) ☐ manufacture ☐ Test fit one corner of front and rear for fitment ☐ verify camber gradient in real world (camber deg per shim added)	need to get done super early	yes	Y	

EV Project Tracking

Thursday, December 21, 2023 10:46 AM

Template

Monday, June 26, 2023 9:09 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Fuel tank	Brenden	☑ - CAD ☑ - Water Jet ☑ - Weld ☑ - Tubing ☑ - Cap and flange ☑ - Cut neck ☑ - Turn neck ☑ - Make cap? ☑ - Get wire pass thru ☑ - Add drainplug ☑ - Order neck parts ☑ - tube	HIGH	In Progress		- Fuel tank mounted in main static - Scheduled meeting **01/23** for update

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Aero

Monday, July 10, 2023 3:22 PM

Composites

Monday, July 10, 2023 3:22 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Carbon Grounding						
Firewall						
Floor Pan Rear Back						
Floor Pan Rear Front						
Ev Seat		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW MP Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo) ☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☑ Sand to 400 grit ☑ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat				

		☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW MP Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo) ☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW MP Spar		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3				

		☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E2 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo) ☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☑ Sand to 400 grit ☑ Polyurethane coat 3 ☑ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E2 Bottom		☑ Design Part				

		☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo) ☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☑ Sand to 400 grit ☑ Polyurethane coat 3 ☑ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E3 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup				

		☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E3 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E4 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo)				

		☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW E4 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat				

		☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW Endplate Right		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW Endplate Left		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
RW Gurney Flap		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3				

		☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW MP Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW MP Bottom		☑ Design Part				

		☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E2 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup				

		☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E2 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E3 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo)				

		☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E3 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat				

		☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E4 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW E4 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2				

		☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW Endplate Outer		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW Endplate Inner		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right SW Joint		☑ Design Part				

		☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW MP Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup				

		☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW MP Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW E2 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit)				

		☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW E2 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand				

		☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW E3 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW E3 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit				

		☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW E4 Top		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly				

		☐ Apply vinyl				
Left SW E4 Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW Outer Endplate		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW Inner Endplate		☑ Design Part				

		☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left SW Joint		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW MP Top		☑ Design Part ☑ Design Mold				

		☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW MP Bottom		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo) ☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☑ Sand to 400 grit ☑ Polyurethane coat 3 ☑ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect				

		☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW MP Spar		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW E2 Right		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo				

		☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW E2 Left		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish				

		☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW E3 Right		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW E3 Left		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3				

		☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Endplate Right		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Endplate Left		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Inner Endplate Left		☑ Design Part ☐ Cut materials for layup				

		☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Outer Endplate Left		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Inner Endplate Right		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Outer Endplate Right		☑ Design Part ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish				

		☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Vortex Generator Right		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
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		☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Endplate Gurney Flap Right		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Endplate Gurney Flap Left		☑ Design Part				

		☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
FW Winglet Right		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup				

		☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
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Undertray		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☑ Sand high spots (low grit) ☑ Fill Low spots (Bondo)				

		☑ Sand excess bondo ☑ Sand to 400 grit ☑ Polyurethane coat 1 ☑ Sand to 400 grit ☑ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right Outer Strake		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat				

		☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Right Inner Strake		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Middle Strake		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2				

		☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				
Left Inner Strake		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				

Left outer Strake		☑ Design Part ☑ Design Mold ☑ CAM ☑ CNC ☐ Sand high spots (low grit) ☐ Fill Low spots (Bondo) ☐ Sand excess bondo ☐ Sand to 400 grit ☐ Polyurethane coat 1 ☐ Sand to 400 grit ☐ Polyurethane coat 2 ☐ Sand to 400 grit ☐ Polyurethane coat 3 ☐ Sand surface to 800 grit at least ☐ Apply mold wax ☐ Spray PVA ☐ Cut materials for layup ☐ Wet Layup ☐ Remove bagging and inspect ☐ Release from mold ☐ Trim ☐ Fine sand ☐ Clear coat ☐ Buff and polish ☐ Set up for assembly to counterpart ☐ Adhere two skins with ribs and spars ☐ Bolt together with wing assembly ☐ Apply vinyl				

If you hit a failure point during or after the build process, FILL OUT step 5 of proposals "Failure Analysis"

Undertray and strakes are foam = NO

EV Powertrain

Monday, July 10, 2023 3:22 PM

PRIORITY
Low
Medium
High

Key:
Waiting to be assigned (someone grab it!)
In progress (assigned, and being worked on)
Completed (done)
Delayed/Stopped (revisit later)

Powertrain

System	*Project*	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
Phase leads	Y connection covers		✓ Cover for the y connection to the motor (goal is to cover up and protect the ring terminal connection so it doesn't look sketch) ✓ CAD a solution (probably 3D printed) ✓ Print a test piece Revise the part Print the new copies	Low	Waiting to be assigned	Now have straight connection! Just need to cover the straight ring terminals
Phase leads	HV Wire path		✓ Layout a diagram for the connections (in onenote) Mount motor in chassis Mount Acc & inverter in chassis Mount the Y terminal side Mock up the wire routing/lengths between the y junction & inverter ✓ Figure out where to ground shielding (I assume inverter?) ✓ Double check with someone before cutting Cut wire to length Crimp ring terminal ✓ Crimp inverter side Connect wires!	High	Waiting to be assigned	Diagram is in onenote under HV Path Diagrams, just need to shorten the current wires for the inverter placement
Lid to Inverter	HV Wire path		✓ New connectors from TE? ✓ Sponsorship? Emails are somewhere, steven has been doing some emailing back and forth but has been getting ghosted ✓ Want: ✓ Straight pigtail to the inverter ✓ Double-sided connector for acc to charger Reusing old connector Measure lengths Cut wire Crimp Assemble	High	Waiting to be assigned	Current wires are longer than needed. Will need to trim down and recrimp inverter side fittings. We have the needed crimps and tools. Care needs to be taken when trimming lengths, as too short will place stress on inverter/connectors or at worst not fit, but too long will also push on the inverter
Powertrain	Motor vinyl	Vinyl subgroup ▯	Yellow vinyl on outside of motor	Medium	Waiting to be assigned	Refresh for this year
Powertrain	Motor install		Give to vinyl subgroup for protective vinyl install motor in car Safety wire bolts Put chain on	High	Waiting to be assigned	

Manufacturing

System	*Project*	*Assigned to*	*Item/part*	*Quantity*	*Stock*	*Drawing complete? (CAD)*	*Machine type*	*Machined/Obtained*	*Assembled?*	*Completed? (on the car)*	*Notes*

COTS

System	*Project*	*Assigned to*	*Item/part*	*Quantity*	*Order list submitted by lead?*	*Order list submitted to Lousie?*	*Order list submitted by Louise?*	*On KS5? (being transferred)*	*Obtained*	*Notes*

Accumulator

System	*Project*	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
Modules	HV Wiring between modules		✓ Cut sample piece of wire ✓ Check bend radius ✓ Remove sheathing ✓ Check bend radius again ✓ Decide between shielding or no shielding ✓ Figure out lengths ✓ Put measurements in onenote ✓ Save sample piece of wire & shielding in safe spot for comp ✓ Assembling wires ✓ Cut wire to lengths specified in onenote (6") ✓ Remove outer layer of shielding Remove inner layer of shielding for exposed wire to go into crimp (3/4"-7/8") ✓ Lay out surlocks in the correct order (see onenote, with the certain 180 and 90 degree ones) ✓ Insert wire into surlocks & crimp ✓ Repeat above	High	Completed	Will be reusing the previous year's wires
Modules	HV Wiring to endline connections (the wires that go to the lid)		Have assembled bottom end and lid Cut wire to appropriate length Remove outer layer of shielding Remove inner layer of shielding for exposed wire to go into crimp (3/4"-7/8") Lay out surlocks in the correct order (see onenote, with the certain 180 and 90 degree ones) Insert wire into surlocks & crimp Repeat above for other wire	High	Waiting to be assigned	
Modules	Assembly of modules		✓ Obtain new module frames ✓ Heat thread inserts ✓ Glue top cover ✓ Fiberglass standoffs drilling and tapping ✓ Shave handles & modules for fitment ✓ Number modules Obtain busbars Have manufacturing cut busbars Test fitment on example module Check drawer on EV table for the busbars for each Obtain the nyloc screws for busbars Obtain the washers for busbars ✓ Obtain the voltage tap harness (LV) ✓ Obtain the temp harness (LV) ✓ Begin module assembly ✓ Remove each module from old acc ✓ Start tear down on old modules- 1 at a time ✓ Bag & label all removed components from modules ✓ **BEFORE REMOVING BATTERIES** ✓ Label the order with (module #)-(cell #) starting with - first (to retain the order of cells when placed into new acc ✓ Carefully transfer the cells to the new, appropriate module Install busbars with voltage tap harness on one side of each busbar- (LV) check with Val on this **HEAT SHRINK? (later)** **Poles only keep module together** ✓ Install temp harness (LV) ✓ Conformal coat boards ✓ Put on teensy Install cover/handles Install surlocks ✓ Install board & connect harness (LV) Install completed module into Acc after inspection by others **Repeat for each module & check off below** Module #1 DONE Module #2 DONE Module #3 DONE Module #4 DONE Module #5 DONE Module #6 DONE Module #EXAMPLE DONE	High	Waiting to be assigned	Modules are mostly built. Each module needs the new LV boards, new busbars,
Lid	AIRS/Contactors		✓ Make new busbars to connect old AIRS Manufacture busbars Test fitment of busbars & install in LID Heatshrink bars? Energy meter mockup		Waiting to be assigned	Design is complete, manufacturing needs to be done for busbars
Lid	Polycarb cover for lid cover		Covers Manufacture clear & metal ones Install Gasket for Covers Laser cut Install	Low	Waiting to be assigned	
Box	Cooling fans on the outside of acc		✓ Fans ✓ Order the fans ✓ Receive the fans Fan mount ✓ There is a fan mount in CAD print ✓ Get orange/black petg for new fan mount ✓ Check if can probe through into HV stuff, EV rules	Medium	Waiting to be assigned	Needs printing and assembling, as well as figuring out the harnessing
Charger upgrades	Fix 12v supply		12v power to acc	High	Waiting to be assigned	Need to fix 12v Supply
Modules	Pole module covers		Revise design possibly? ✓ Obtain orange PETG for it Print them	Medium	Waiting to be assigned	Could reuse some of the older ones, fitment isn't great though
Box	Battery nomex covers against inside walls		✓ Already done	Medium	Done	EV.6.2.2 EV.6.2.3 In EV toolbox drawer if we need
Lid	Add nomex to inside of lid border walls		Measure and design the pieces to cover the walls Laser cut pieces Glue into lid	Low	Needs to be assigned	Should coat the inside of the lid again

Cooling System

System	*Project*	*Assigned to*	*Task list*
ALL	GENERAL TODO		✓ CAD softlines ✓ Make list of all fittings & tube neede ✓ Check stock of current fittings & line & in dyno) ✓ Double check CAD for lines & moun items ✓ Order any needed items Make mounts Install lines Wire up pump Fill lines and test
Radiator	Mounts		✓ CAD mounts Manufacture Mount on car
Pump	Mount		✓ CAD water pump ✓ CAD mounts ✓ Move further to the rear Manufacture mounts Mount on car
Motor	Fittings		✓ Find CAD? There is the old one sittin the inverter in the shop ✓ Make CAD & Drawing ✓ Give to manufacturing
Inverter	Fittings		✓ Check the fitment between inverter only 2in of clearance ✓ See if a regular -6 an 90degree fittin clear between this area ✓ If so, then we good and add th to the list ✓ If not, uh, we gotta figure something else out then ✓ A short swivel 90 to stra
All	List of fittings need		✓ Make list of fittings under cooling in onenote against CAD and make sure are the ones we need ✓ Check fittings in cooling bucke firesafe cabinet to see what w have already ✓ There may be some on the old cooling loop as well ✓ Also ask Brenden, he found a ✓ Let lead know if we need to or fittings ✓ Make diagram of tube lengths & ho much we will need/eyeball it ✓ Multiply lengths by 1.5 to ens have enough, or check by han against the routing in the car ✓ Check dyno & main for -6an h we have already ✓ Let lead know if we need to or hose ✓ We will be reusing -6an hose already have (should be enou ✓ Waiting on 2 pump fittings to come ✓ Waiting on 2 motor fittings to be manufactured
All	Softline manufacturing		Make AN lines & route throughout Not in cad, so do the best pos See EV\Cooling loop planning details on flow path
Radiator	Cap/catch can		✓ Need a way to fill & bleed the lo not accounted for in the design ✓ Radiator cap welded to the ✓ Catch cans ✓ Find fitting to screw in ✓ Get tube Get mount for catch can Get catch can

	Priority	Status	Notes
d (main s of		Waiting to be assigned	System should be completely reused, shouldn't need any major changes.
	Medium	Waiting to be assigned	Need to manufacture
	Medium	Waiting to be assigned	Need to just cut a new mount and weld on
g near	Medium	Done	Reusing fittings from last year
& lid, g will ose ight?	High	Done	Reusing fittings
they t near e ew der v re we d ose der we (h) n	High	Done	This is top priority as we need to know if we need to order fittings or lines, but it's been done. No money tho so fittings may not be ordered. Found 2 boxes of fittings in the shop and updated the fittings list in EV\Cooling planning, we have everything BUT the 2x ORB -16an to -6an fittings that goes to the pump.
he car sible for	Medium	Waiting to be assigned	Probably can reuse lines, may need slight trimming to fit better but should be good
p - rad?	Medium	Waiting to be assigned	Need mount made and welded on, can reuse catch can

Teal - ready to be made

Green - machined/obtained

Orange- waiting for stock arrival

Yellow - need designer input

Magenta - needs Water Jet

LV

Monday, July 10, 2023 3:22 PM

If you hit a failure point during or after the build process, FILL OUT step 5 of proposals "Failure Analysis"

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Failure Analysis (Y or N)*	*Notes*
Module Cell taps Harnesses Temapture Harnesses	Val,,	☑ Neeed to order ☐ Make new harnsses for the larger connector ☐ Replace/ add illigal lengths with an inoine fuse before 150mm on each modules ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ Measuere each tempature connection from each cell to the MDB temp connector				Housing https://www.digikey.com/en/products/detail/jst-sales-america-inc/XHP-2/555485 Crimps https://www.digikey.com/en/products/detail/jst-sales-america-inc/SXH-001T-P0-6N/7041446 Not gonna do but have the stuff to fix ones that break
Prechage Discharge		☐ Fill out rest of KS6E PP KS6E-Precharge Discharge.docx ☐ Part 3 ☐ Part 4 ☐ Part 5 ☐ Update Altium with correct resistor values and copastors ☐ Create an accurate Digi order ☐ Order parts for 2 spare ? ☐ Put into an Order form ☐ Ordered ☐ Parts Arrived ☐ Normalcy check / Assembling ☐ Spare 1 ☐ Spare 2?				Need this done to order the correct components for a spare baord and for documentation
ACU		☐ Fill out rest of KS6E PP KS6E-ACU.docx ☐ Part 5 ☐ Update Altium with correct resistor values and copastors ☐ Create an accurate Digi order ☐ Order parts for 1 spare board ☐ Put into an Order form ☐ Ordered ☐ Parts Arrived ☐ Normalcy check / Assembling ☐ Spare 1?				Need this done to order the correct components for a spare baord and for documentation
TSAL Conroller		☑ Fill out PP5 for KS6E TSAL controller KS6E Tsal Controller.docx ☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☑ Ordered ☑ Parts Arrived ☑ Normalcy check / Assembling ☑ Board 1 ☐ Spare			**Y**	Need to do part 5
AVI	Marco	☑ Fill out PP5 for KS6E AVI KS6E AVI Step 5.docx ☑ Design phase ☑ Pp1			**N**	

		☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☑ Ordered ☑ Parts Arrived ☑ Normalcy check / Assembling ☑ Board 1 ☐ Spare				
MDB	Val	☑ Fill out PP5 for KS6E MDB KS6E-MDB.docx ☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☑ Ordered ☑ Parts Arrived ☑ Normalcy check / Assembling ☑ Board 1 ☑ Board 2 ☑ Board 3 ☑ Board 4 ☑ Board 5 ☑ Board 6 ☑ Board 7 (Example Module) ☑ Board 8 (Spare) ☐ Board 9 (Spare/BMS testing) ☑ Board 10 (BMS testing) ☑ Intall in to modules			**N**	
MDB Code	Gaysonnnn	☑ CAN chip ☐ Temp /humid sensor ☑ make the ACU forward all the temps				• https://github.com/KSU-MS/KS6e-MDB • isolated CAN chip • non-Isolated CAN chip • Temp / humid sensor
ESF Opens Sep 22 DUE December 4th		☑ Over View ☑ Data Sheets ☑ TS Schematics ☑ Accumulator ☑ PrechargeDischarge ☑ Charging ☑ Shutdown Circuit ☑ Torque Security ☑ Other	SSS			• Should be easy this year havent chaged the curites of the ACU or Precharge • Modules also havent chaged • Need to up date the things that were flaged and update data sheets need be
Tasl Light	val	☑ Fill out rest of KS6E PP ☑ Part 5 KS6E TSAL light .docx ☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☑ Ordered ☑ Parts Arrived ☐ Normalcy check / Assembling				
PDU PCB	Justin	☑ Design phase ☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☑ Put into an Order form ☐ Ordered ☐ Parts Arrived ☐ Normalcy check / Assembling			**Y**	
PDU box	Justin	☑ Design phase				

		☑ Pp1 ☑ Pp2 ☑ Pp3 ☑ Pp4 ☐ Printing ☐				
VCU KS6	Mathew	☐ Fill out rest of KS6E PP Vehicle Control Unit ☐ 3 ☐ 4 ☐ 5 Failure Analysis ☐ Fixing/investing ☑ Im not doing a failure analysis cuz I don't think it failed, I think there was a skill issue when it was made and it should be taken up with whoever assembled the board ☑ Ordered ☑ Parts Arrived ☑ Normalcy check / Assembling ☑ Starting bring up ☑ Test on car ☑ Will car pass a full active			**Y**	
Ev Dash	Needs assigmnet	☑ Dash Single digit code ☑ Working on bodge ☑ Need to tir oin to GND and edit code ☐			**Y**	https://github.com/KSU-MS/KS6e_dashboard_fw/pull/4/files#diff-34d21af3c614ea3cee120df276c9c4ae95053830d7f1d3deaf009a4625409ad2 I just pushed a commit to this branch which should turn on the single seven segment on the dash and display the number 4, if anyone would like to take a look i did not get to actually try it on the dash so if anyone wants to do that and then if it works go fully implement the method to display the torque mode from the VCU though its not really useful at all right now i am really just trying to see if it works for my own vindication
GPS breakout board	Chance / Charlie	☑ Get it working with a teensy 4.0 ☑ Works with the GPS ultiment, accetry isnt great, got sponsored a much better one, waiting on that				The How to https://learn.adafruit.com/adafruit-ultimate-gps/overview
EV front harness	val, & anyone intrestred	☑ Removing pedalbox PCB ☑ Editing /ckening up Dash area . ☑ Add Can connecotors ☑ 1 ☑ 2 ☑ 3 ☐ Add wire going to rear for wheel spedd				
EV rear Harn	val, & anyone intrestred	☐ Clean up area where Emeter was added in ☐ Add emeter cnnetion to main io as well as BSPD test onnecoter				
Acc harnessing	VAL & jonathan	☐ Make mock leid board ☐ Start laying out wires ☐ Add fuses in for 150mm				
Daq testing board (wood block)	Carter, Britten, Chance	☐ Sensors mounted ☐ Shock pots ☐ Wheelspeed ☐ Tire temp ☐ Stearing ☐ Gps ☐ Accel.gyro ☐ Tlemerty				

		☐ logger ☐ Sensors reading/working ☐ Shock pots ☐ Wheelspeed ☐ Tire temp ☐ Stearing ☐ Gps ☐ Accel.gyro ☐ Tlemerty ☐ logger				
Logger	Chance	☑ Assembled ☑ Normalcy ☑ Get people to look over changes ☐ Reorder board ☐ Reassemble ☐ Recheck ☐ Stores/loggs data ☑ Update Logger code to receive Vectornave Accel and gyro data				
DRS	Charliey with aero peeps					
Telemetry	Chance	☐ Can parse old logs ☐ Can give live view of some data ☐ Can be easily setup and ran by anyone				
DAQ platform "user testing"	Chance , Mathew	★ **Ready for user testing Feb 26th** ☐ "add your step/targets to hit in here " ☐				
Parser user testing	Mat	☐ Backend tasks: ☑ Error handling for if no dbc is found in dbc-files folder ☑ Error handling for msg decoding ☑ Error logging ☐ Front end tasks: ☐ ~~Mock up GUI and get feedback~~ Users said No Gui is fine ☐ ☐ Deployment tasks: ☐ Optimize executable file size ☑ Test executable on github actions (check if build works) ☐ Set up				
Cornor Node	Chance then to Charles	☑ Test Conrnode Code. ☐ Write assembly doc ☐ Hand off the charlie ☐ Assemble 3 more nodes "if supplies last" ☐ Test Code and make sure it new nodes work ☐				

VD

Monday, July 10, 2023 3:22 PM

Manufacturing Tracking

Thursday, December 21, 2023 11:18 AM

Link to the tracking exel

Manufacturing Tracker.xlsm

DXFs/ Drawings Tracking

Wednesday, December 13, 2023 7:04 PM

Project	Engineer	DXF File Created	Drawing Complete (Y/N)	In PDM (Y/N)	Notes
		Part: ☐ DXF Part: ☐ DXF			
		Part: ☐ DXF Part: ☐ DXF			
		Part: ☐ DXF Part: ☐ DXF			
		Part: ☐ DXF Part: ☐ DXF			
		Part: ☐ DXF Part: ☐ DXF			
		Part: ☐ DXF Part: ☐ DXF			