Template & Example

Monday, January 23, 2023 2:31 PM

EnD

PRIORITY
Low
Medium
High

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*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	HIGH	In Progress	- Fuel tank mounted in main static - Scheduled meeting **01/23** for update

Manufacturing

Project	*manufacturer*	*Item/part*	*Quantity*	*Stock (YES/NO)*	*Drawing complete? (CAD)*	*Machine type*	*Machined/ Obtained (YES/NO)*	*Assembled? (YES/NO)*	*Completed (on the car) (YES/NO)*	*Notes*
Fuel Tank	John	Filler neck	1	Yes	Yes	Cut and weld	No	No	No	

Teal - ready to be made

Green - machined/obtained

Orange- waiting for stock arrival

Yellow - need designer input

Magenta - needs Water Jet

COTS

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*
Fuel Tank	Brenden								

Composites

Monday, January 23, 2023 1:58 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
EV Firewall	Grayson Legg/Composites	☑ **Waterjet Aluminum** ☑ **Create jigs** ☑ **Bond fiber glass hinges** ☑ **Cut Nomex** ☑ **Bond Nomex to Aluminum** ☑ **Water jet tabs** ☑ **Bend tabs** ☑ **Weld tabs** ☑ **Insert push pins to firewall** ☑ **Install**	HIgh	Finished	
EV Body	Composites	☑ Sand out breather ☑ Patch dry spots ☑ **Sand out resin creasing** ☑ **Sand down** ☑ **Clearcoat** ☑ Release from mold ☑ Cut to fit ☑ **Weld tabs** ☑ **Install pushpins** ☑ **Buff and polish** ☑ **Install**	HIGH	Finished	
EV Endplates	Composites	☑ Water jet to size ☑ Clean ☑ Buff and polish ☑ Install	MEDIUM	Ready for assembly	
EV Floorpan	Hamza Jaafar/Composites	☑ Cut holes in samples for tabs ☑ Acquire fish scale ☑ Test tear out ☑ Cut old floorpan ☑ Layup extension ☑ Trim ☑ Cut holes ☑ Weld tabs ☑ Buff and polish ☑ Install	HIGH	Finished	

Manufacturing

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

COTS

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*

Aero

Monday, January 23, 2023 2:00 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
Swan neck	aj	- Cad - PPs - Wj plates - Wj tabs - Inserts - Jig&weld inserts - Jig&weld mount	LOW	Not started	

Manufacturing

Project	*Assigned to*	*Item/part*	*Quantity*	*Stock*	*Drawing complete? (CAD)*	*Machine type*	*Machined/Obtained*	*Assembled?*	*Completed (on the car)*	*Notes*
Swan neck	***aj***	***plates***	***2***	***y***		***wj***	***n***			
		tabs	***4***	***y***		***wj***	***n***			
		inserts	***2***	***y***	***n***	***lathe***	***n***			
		assembly				***welder***		***n***	***n***	

COTS

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*
Swan neck	aj	bolts	4	n	n	n	n	n	

Cooling System

Monday, January 23, 2023 2:00 PM

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

System	*Project*	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
ALL	GENERAL TODO		☑ CAD softlines ☑ Make list of all fittings & tube needed ☑ Check stock of current fittings & line (main & in dyno) ☑ Double check CAD for lines & mounts of items ☑ Order any needed items ☑ Make mounts ☑ Install lines ☑ Wire up pump ☑ Fill lines and test			

Radiator	Mounts	Bray???	☑ CAD mounts
			☑ Mount on car
			☑ Add brace to mounts to reduce wobble
			  ☑ Designed
			  ☑ Cut
			  ☑ Needs to be welded on
			☐ Change alum. Rod bc rules duh
				Medium	In progress	Need to do, made some but then remembered the covering rule so tuff. Made some new chunky ones that moved it back some though. New mounts made & cut, need to be welded on

Pump	Mount	Alejandro	☑ CAD water pump ☑ CAD mounts ☑ Move further to the rear ☑ Manufacture mounts ☑ Mount on car	Medium	Done	Need to do, was going to use EBP40 as already in cad but no money so use free EWP150 from Clemson, hence need for new cad. CAD is in, but no idea on the actual mounting holes and stuff. Mounts have been made, need to see if we're gonna use the ewp80 but either way they use the same mounting pattern. Picked up pump, just need to finish CAD for mounts. Finished CAD, just needs to be made and welded on the car
Motor	Fittings	Casey	☑ Find CAD? There is the old one sitting near the inverter in the shop ☑ Make CAD & Drawing ☑ Give to manufacturing	Medium	Done	Not immediate priority but needs to be done, find thread size for motor in manual, made cad for that thread to 6an straight & have manufactured. They are made and in the shop

Inverter	Fittings	Alejandro	☑ Check the fitment between inverter & lid, only 2in of clearance
			☑ See if a regular -6 an 90degree fitting will clear between this area
			  ☑ If so, then we good and add those to the list
			  ☑ If not, uh, we gotta figure something else out then
			  ☑ A short swivel 90 to straight?
				High	Done	Pls check fitment as it's close in cad (we think a swivel will work). Checked fitment, a swivel 90an to straight should clear, can also connect lines then screw inverter down to give clearance. We will screw/unscrew the inverter to attach the coolant lines as needed.

All	Softline routing		☐ Using diagram of coolant flow in onenote, CAD softline routing)	Low	Assigned	Low priority, it's really just 3d sketches and sweeps but our time is better spent elsewhere atm probably

All	List of fittings need	Alejandro	☑ Make list of fittings under cooling in onenote against CAD and make sure they are the ones we need
			  ☑ Check fittings in cooling bucket near firesafe cabinet to see what we have already
			  ☑ There may be some on the old cooling loop as well
			  ☑ Also ask Brenden, he found a few
			  ☑ Let lead know if we need to order fittings
			☑ Make diagram of tube lengths & how much we will need/eyeball it
			  ☑ Multiply lengths by 1.5 to ensure we have enough, or check by hand against the routing in the car
			  ☑ Check dyno & main for -6an hose we have already
			  ☑ Let lead know if we need to order hose
			  ☑ We will be reusing -6an hose we already have (should be enough)
			☑ Waiting on 2 pump fittings to come in
			☑ Waiting on 2 motor fittings to be manufactured
				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.

Pump	Test old pump	Anyone	☑ Dunk the old water pump in a tub of water to see if it's really fucked or not ☑ Seems to work so like yea	Low	Done	Would be good just to know what the status is, video of pump taken and it seems fine, so ye

All	Softline manufacturing	Cornman	☑ Make AN lines & route throughout the car
			  ☑ Not in cad, so do the best possible
			  ☑ See EV\Cooling loop planning for details on flow path
				Medium	Done	

Radiator	Cap/catch can	Cornman	☑ Need a way to fill & bleed the loop- not accounted for in the design
			  ☑ Radiator cap welded to the rad?
			☐ Catch cans
			  ☐ We may not need them, but need to double check and make backup plan
				High	Nearly complete	Radiator bung and AN6 cap installed. System is sealed and does not vent/will not need to vent. No catch can required, but HYTECH runs one- need to make this backup plan

			☐ Find fitting to screw in ☐ Get tube ☐ Get mount for catch can ☐ Get catch can			
All	Fixing up lines	Cornman	☐ Trim up the two lines ☐ Rad to pump inlet ☐ Pump to motor ☐ Order new straight 6an fitting?	Low	Assigned	Just fit and finish and the one mismatched colored line

Manufacturing

System	*Project*	*Assigned to*	*Item/part*	*Quantity*	*Stock*	*Drawing complete? (CAD)*	*Machine type*	*Machined/Obtained*	*Assembled?*	*Completed (on the car)*	*Notes*
Radiator	*Mounts*		*Cooling loop radiator tabs*	*2*	*Y*	*Y*	*WJ*	*Y*	*Y*	*Y*	
Pump	*Mounts*		*Cooling bracket for pump*	*1*	*Y*	*Y*	*WJ*	*Y*	*Y*	*Y*	
Radiator	*Brace*		*Steel tab*	*1*	*Y*	*Y*	*WJ*	*Y*			
Radiator	*Brace*		*Aluminum bar*	*1*	*Y*	*Y*	*WJ*	*Y*			

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*
Pump	*Fittings*		*ORB -16an to -6an*	2	Yes	Lmao	Lmao	N		BJ bought them for us

EV Powertrain System

Monday, January 23, 2023 2:03 PM

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

PRIORITY
Low
Medium
High

System	Project	Assigned to	Task list	Priority	Status	Notes
Phase leads	Y connection covers	Steven	☑ 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 proper ones ☑ Checking them tonight	Low	Done	3D printed most likely, really so we don't have to use kapton and electrical tape on the ring terminals again lol. Tested fitment and should be decent, maybe shorten a lil bit or make thinner? Will print test bit in PETG
Phase leads	HV Wire path	Anyone/John	☑ 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	Done	Diagram is in onenote under HV Path Diagrams, 2 have been done but we need to do one more
Lid to Inverter	HV Wire path	Anyone	☑ 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 connectors ☑ Measure lengths ☑ Cut wire ☑ Crimp ☑ Assemble	High	Done	Will try to get sponsorship one last time, gathering information from steven and others on the email situation. Not happening lol so we are using the old connectors but it'll be good. Need to cut and crimp inverter side
Powertrain	Motor vinyl	Vinyl subgroup □	☑ Yellow vinyl on outside of motor	Medium	Done	
Powertrain	Motor install	Patrick	☑ Remove motor from car ☑ Remove old vinyl ☑ Give to vinyl subgroup ☑ Reinstall motor in car ☑ Safety wire bolts ☑ Put chain on	High	Done	Someone do it, justin was working on it yesterday and patty but like just get dat done
Powertrain	Motor spin		☑ Path out rear harness ☑ Check charge on bmw packs ☑ Adapt vcu wires ☑ **Check mounts of motor** ☑ Reinstall phase leads ☑ **Pedal sensors**	High	Done	
Inverter	Bracket for when the ACC is out	Tyler/Amar	☐ CAD bracket to hold inverter ☐ Manufacture (water jet I imagine pls)	High	Needs to be assigned	Inverter hangs out in the car when acc is out, need to make a bracket or sling or somethin to keep inverter in place while acc comes in and out
Motor/ inverter	Phase connection cover directly on the motor	Needs to be assigned	☐ Tyler	Mid	Needs to be assigned	A 3d printed part to cover the bolted connections to the motor.

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

Teal - ready to be made

Green - machined/obtained

Orange- waiting for stock arrival

Yellow - need designer input

Magenta - needs Water Jet

ACC System

Monday, January 23, 2023 2:03 PM

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

System	Project	Assigned to	Task list	Priority	Status	Notes
Modules	HV Wiring between modules	Eddy, Herbie & Richard	☑ 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	Done	John will probably grab a freshman & knock it out, the lengths and sample piece is already done, need to find sample piece but it's done for the actual bits
Modules	HV Wiring to endline connections (the pole mount which goes to the lid)	Anyone (John/Brenden will print the PETG part but not needed for making the HV wires	☑ Check fitment of CAD model by mounting PLA piece in Acc ☑ Determine if endline holder needs to be PETG or sheet metal part ☑ Print a PETG one and see if it feels nice, if so then keep PETG ☑ PETG looks good ☑ Install it	High	Done	We've printed a PLA one and will be printing a PETG one. The mounting points `will stay the same however, so the blue PLA one can be used to mock up and make the wires. Printed and looks good, so just need to install it
Modules	Assembly of packs	Anyone	☑ 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 TRANSFERRED ☑ Module #1 DONE ☑ Module #2 TRANSFERRED ☑ Module #2 DONE ☑ Module #3 TRANSFERRED ☑ Module #3 DONE ☑ Module #4 TRANSFERRED ☑ Module #4 DONE ☑ Module #5 TRANSFERRED ☑ Module #5 DONE ☑ Module #6 TRANSFERRED ☑ Module #6 DONE ☑ Module #EXAMPLE DONE ☑ Raise cell to 4.2	High	Done	Module disassembly complete, batteries transferred w/ voltage tap harness & busbars, waiting on temp harness and boards to finalize modules. Need to balance the voltages (drain to 3.5?) NEED POLE COVERS
Lid	New AIRS/Contactors	Bales/Jonathan	☑ Ordering new contactors as designed in cad ☑ No money so ☑ Check emails ☑ Need to call Sensata ☑ Gave us GIGAVAC number ☑ Bailey called them and left voicemail 2/7/23 with no response ☑ Will plan to reuse old AIRS unless we get a call back	High	Stopped	Will continue to call gigavac but most likely will be using the old AIRs from here on out, hence project below, lol gigavac is ded
Lid	Reusing old AIRS/Contactors	Abri	☑ Make mounting bracket to position old AIRS vertically as they will not fit otherwise ☑ Manufacture bracket ☑ Test fitment of bracket & install in LID ☑ Add piece between top of airs to space out bracket (actually fix the bracket too either) ☑ Add tape/foam to bottom of airs to prevent rattling ☑ Make new busbars to connect old AIRS		Done	Design is complete, manufacturing is complete, needs assembly and fitment. See notes about the bracket

			☑ Manufacture busbars ☑ Test fitment of busbars & install in LID ☑ Rethread airs ☑ Heatshrink bars? ☑ Energy meter mockup			
Lid	HV Wire path from endline holder	Eddy	☑ Check the above "HV Wiring to endline connections" project, need the part mounted in ACC to do this ☑ Mount end line holder into acc ☑ Mount correct degree surlocks into the endline holder ☑ Using installed modules, run a strip of wire from both ends of the battery pack (the far + end and the close - end) to obtain the lengths needed and determine appropriate pathing ☑ Cut each wire to length ☑ Remove the outside shielding ☑ Remove the inner shielding for the amount which will be crimped (same as the module wires) ☑ Insert wire into surlocks & crimp ☑ Crimp the ring terminal & surlock	High	Done	Done and in acc. Both wires attached to blue mount endline holder
Lid	Polycarb cover for lid cover	Abri	☐ ~~Gasket for poly carb~~ ☐ ~~Skipped for now~~ ☐ ~~Cut grove for rubber seal~~ ☐ ~~Post engineer holes to fix looseness?~~ ☐ ~~Maybe fix CAD & cut a new one?~~ ☐ ~~Silicone before comp~~	Low	Delayed till later	Not a priority atm, will be once car is running
Box	G10 cover plate	Abri	☑ Check CAD ☑ Manufacture ☑ Install in acc and test fitment ☑ Done	Medium	Done	Done and in the acc
Box	Cooling fans on the outside of acc	Abri	☑ Fans ☑ Order the fans ☑ Receive the fans ☐ Fan mount ☑ There is a fan mount in CAD ☑ It does not fit on our printers ☑ Figure out a solution to print it, cut it in half? Glue? Turn into sheet metal? Bray's printer? ☑ Sent STLs to bray to see if they'll fit ☑ Check the hole size in cad compared to #10 32 heat set inserts ☑ Figure out fan wire routing ☐ print ☑ Get orange/black petg for new fan mount ☐ Probably glue to walls & have cover ☐ Check if can probe through into HV stuff, EV rules	Medium	Delayed till later	Would be best to keep current design if possible to avoid changing stuff, but sheet metal welded on would not be a bad idea (except warping). Will glue 3D printed mount on it. Part is too close to tubes, need to revisit design so rip gonna do it later
Charger upgrades	Charger fans and Lv Supply	Marco/Ed,Edd,Eddy, Bryce	☐ **Reset button** ☐ **12v power to acc** ☐ **Fix spoogody** ☐ **Diagram** ☐ **Fix HV mess** ☐ **Fix glass door** ☐ **Recrimp & fix the cable going to the charger, solder to charger?**	High	Assigned	Starting working on it tues, wiring diagram is in rapid harness, just needs final review and checking over before it can be wired up Bale's notes: • Lose DC outs • Clean reset button up • Labels
Box	Leak testing	Anyone	☐ Test the box's ability to repel/keep water out	Low	Needs to be assigned	Low priority, get done like way later
Modules	Pole module covers	Anyone	☑ UNCLOG THE 3D PRINTER IN THE SHOP & PRINT EM, FILE IS ALREADY ON SD CARD IN PRINTER ☑ Sad, we unclogged it but now print warped, will need to reprint better later ☑ Yay they printed	Medium	Done	Just 3d printer stuff
Box	Weld length	Welders	☑ Lengthen the welds on the outside to >1in	Medium	Done	F.10.2.3 The accepted methods of joining walls to walls and walls to floor are: a. Welding • Welds may be continuous or interrupted. • If interrupted, the weld/space ratio must be 1:1 or greater • All weld lengths must be greater than 25 mm Need to do soon, whenever someone who can weld aluminum is free (and not
Box	Battery nomex covers aginst inside walls	Abri	☐	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	Boards are touching walls of lid lol, some has been completed but putting some all inside the lid is a good idea...
Box	Bolt down modules		☐ Safety wire the handles for each module ☐ Safety wire the bottom of the modules	High	Needs to be assigned	duh
Lid	Bolt down acc lid		☑ Bolt lid down	High	Done	Double duh
Lid	Shielding AIRS		☑ ACC - TS cover for AIRs as they are exposed and close to each other ☑ Contactors - GLV for the coil, needs seperation & kapton	Medium	Done	Stuff is too close. Might need covers/walls, 3d printed maybe... or something else The nomex walls that are now on there
Lid	Interlock		☐ Put proper connector we got in on?	Low	Needs to be assigned	It's soldered rn

Manufacturing

System	*Project*	*Assigned to*	*Item/part*	*Quantity*	*Stock*	*Drawing complete? (CAD)*	*Machine type*	*Machined/ Obtained*	*Assembled?*	*Completed (on the car)*	*Notes*
Lid	*Busbars*		*HV_POS_1*	*1*	*Yes*	*Yes*	*WJ*	***Yes***	***Yes***	***Y***	
Lid	*Busbars*		*HV_POS_2*	*1*	*Yes*	*Yes*	*WJ*	***Yes***	***Yes***	***Y***	
Lid	*Busbars*		*HV_NEG_1*	*1*	*Yes*	*Yes*	*WJ*	***Yes***	***Yes***	***Y***	
Lid	*Busbars*		*HV_NEG_2*	*1*	*Yes*	*Yes*	*WJ*	***Yes***	***Yes***	***Y***	
Lid	*Busbars*		*HV_NEG_3*	*1*	*Yes*	*Yes*	*WJ*	***Yes***	***Yes***	***Y***	
Modules	*Pole module covers*		*Pole covers*	*12*	*No*	*No*	*3D Printer*	***Y***	***Y***	***Y***	***Printed***
Box	*HV Wiring to end of line connections*		*HV Surlock holders (Pole module holder)*	*1*	*No*	*Yes (STL)*	*3D Printer*	***Y***	***Y***	***Y***	
Lid	*Reusing old AIRs*		*AIRS_Mount*	*1*	*Yes*	*Yes*	*WJ*	***Y***	***Y***	***Y***	

Lid	*Reusing old AIRs*		*AIRS_NEG-bus*	*1*	*Yes*	*Yes*	*WJ*	***Y***	***Y***	***Y***	
Lid	*Reusing old AIRs*		*AIRS_POS-bus*	*1*	*Yes*	*Yes*	*WJ*	***Y***	***Y***	***Y***	
Box	*Fans*		*3 Fan mount*	*1*	*Yes*	*Yes*	*3D Printer*				
Box	*Fans*		*2 Fan mount*	*1*	*Yes*	*Yes*	*3D Printer*				

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***
Box	Cooling fans		Cooling fans	5	Yes			No		

PRIORITY
Low
Medium
High

Teal - ready to be made

Green - machined/obtained

Orange- waiting for stock arrival

Yellow - need designer input

Magenta - needs Water Jet

LV

Monday, January 23, 2023 2:04 PM

Project	Assigned to	Task list	Priority	Status	Notes
Rear EV wiring	val		Yes yes	done	bascally
Switch panel wire	Grayson	☑ Find all buttons/connectors (2 master, 3 tsmp, 1 reset) ☑ Mount on switch panel ☑ Create plate to strain relief tsmp wires on ☑ A welded plate with holes in it? ☑ Make harness ☑ ROUTE TSMPS	Medium	Just need to wire the TSMPs and put the orange tube on them	After lid testing instal
EV Dash	Marco Grayson Marks- Code it	☑ Box ☑ Install missing components ☑ Normalcy check ☑ Code ☑ Get IMD, ☐ BSPD, and ☐ AMS fault lights to work ☑ Communication with VCU ☑ RTD button triggering	HIGH	Ready to drive button does trigger	The basic functions listed is rules required from it
Resolver wire	Anyone who can shield	☑ Motor side. ☑ To inverter		Done	Brenden can ~~not~~ do this
KS6e VCU box	stPhen	☑ Documentation ☑ reviewed ☑ Re-Printed (thanks to a certain welder) ☑ Top plate jetted ☐ ~~On car~~		done	Not using any
Ks6e VCU Board	Val	☑ Missing LM393DT From <https://www.digikey.com/ordering/shoppingcart>	Not proritey anymore	Done but not using	Not using this vcu anymore
Finish front harness	val	☑ Sheath ☑ Instal ☑ Connectors ☑ Shock sensor ☑ Brake light ☑ BOTS ☑ Estop ☑ RTD button ☑ VCU ☑ RTD Buzzer ☑ Main Bulkhead ☑ Dash		done	
ACU	Val	populated Needs a normalacy Move on to code now		Done	
Precharge	Val/Jothan	populated Needs a normalacy.		Done	
HV tap	Val			Done	
ACU code	Poor jotanathan	☑ Normalcy check ☑ Coding/code bring up ☑ Old code does not really carry over ☑ Got barebones working ☐ **Fix temp/canbus** ☐ **Fix fan control** ☐ **Do testing in the lid**		In progress	Old code needs changes lol, really needs to be recoded from the ground up. Got it functioning for the bare minimum, but need to fix canbus/cell temp sensing for rules legality later
VCU code	John	**Using the old VCU and modifying the code for what we need**		Done	
MDB code	Grayson mark	☑ **Look at old code for Mux reference** ☑ **Look at code of how to do initialize the CAN chip** ☐ **Humid and temp sensor EXAMPLE code in LV MDB section**			See if Ben can walk me thu how to code this board 1hz for readin temp Look in the MDB page in one note theres a flow chart
Precharge Discharge	Jonathan	☑ Normalcy ☑ Code initial bring up ☑ V-F calibration curve ☑ Testing functionality with BMW packs		DOne	Ye we loaded the code on the teensy and it all seems to work, didn't have to change any pins either- needs to be tested with actual voltage and stuff tho
Tsal control board	VAL	☑ Check values for with the schematic ☑ C1 ☑ R6 ☑ R9 ☑ Added new cap from digi ☑ Test tho ☑ Finish populating new one ☑ Make sure it blinks!! ☑ One car		DONE!!	Tsal no blink now Got enugh componetns to populae a new one
Economizer board	Val	☑ Update scmatic In altium ☑ Change the PCB lay out ☐ Jlcpcb check ☐ Maek componetn list ☐ Put in order ☐ ordered			It's a simple curit but its having issues. Its for the AIRS
Avi board	Marco	☑ Waiting on resistor ☑ Instal ☑ Test ☑ STUFF WAS STILL GETTING Hot needs to be reevelated ☑ **Make new board** ☐ **populated** ☑ **Test again** ☑ **Hook up to avi light to ACC** ☑ **Test again** ☑ **Install avi board into hv tap board** ☑ **Test with**		Ordered new comonents to make a new one Componets Getting here by Monday Components arrived Get it done by Wednesday. Hmmmm Done	Needs 5v isolated. Just a though: get external battery the supply the board.
Temp harness	Some one needs to fix the 4 other connectors	☑ Cut and label to the example harness ☑ Strip and crimp ☑ Install into 24 pin connector ☑ Check continuity ☑ Connect into modules ☑ Route the wires neatly		Done	
Bulkhead connector	val	☑ Pin the front harness to the BH ☑ In rear side of connector ☑ Make connector exist in		done	Fire wall pls :point_right: :point_left:

- ☑ -Rear to wire
- ☑ Motor controller
- ☑ Re4r5
- ☑ Pdu power
- ☑ Pdu outs
- ☑ Resolver
- ☑ Fire wall BH connector
- ☑ Acc in conn
- ☑ Switch panel conn
- ☑ Estops
- ☑ Batt wire
- ☑ Brake light
- ☑ Fans
- ☑ Pump
- ☑ Rad fan?
- ☑ Inverter pinout

		firewall			
Energy meter conn (harness used to check)	Ethan	☑ Diagram ☑ Make ☐ Sheath ☐ check			Find here (tech inspecton-> electric vehicles -> Engery meter resources -> manual) https://www.fsaeonline.com/cdsweb/gen/DocumentResources.aspx
Charger + harness	Ed ed and Eddie + bryce and Marco leadin the charge	☐ **Diagram** ☑ **Add fans** ☑ **Add a 12 vot supply that powers the car** ☑ **Instal the reset button on to charger** ☑ **Remover the AC outout** ☐ **Make** ☐ **Sheath** ☐ **Check** ☐			To charge for the moment need to just place the pins on to the main connector with kapton tape Need to order main IO connector
MDB	Val	All made Needs normalcy checks for each ☑ 1 ☑ 2 ☑ 3 ☑ 4 ☑ 5 ☑ 6 ☑ Example module Needs contunity testing for each harness. Temo and harneso ☑ 1 ☑ 2 ☑ 3 ☑ 4 ☑ 5 ☑ 6 ☑ Example module ☑ Needs conformal coating ☑ Take off r4 & R3 on board 6 ☑ Put it on board 3 ☑ Make #2 the example mod. Put the example mod on 2 ☐ **Dam code**	TOP		☐ ★ Check on where **MAX14878AWE+ From the mouser order is.** From <https://www.mouser.com/ProductDetail/700-MAX14878AWE%2b> ☐ Code semi works, did bodges, need to finish bodges and get other boards fixed
GLV Car main fuse	Pls make better		Low		Not the acc main fuse
VCU adaptor plate Inertia switch	Mihai	☑ Cad based on old VCU mount ☑ Jet ☑ instal ☑ Find switch ☑ Wire switch ☑ Mount switch		done	Use VCU box hoels Make plastic plate to adapt to old vcu
Need to remove DT & DTMs off old Harnesses	Heily Anyone	IC harnesses EV hanresses		Done	
Break light	Val/Mihai	☑ Pined ☑ Sheithed ☑ Pined on car ☑ Needs bracket ☑ Make Tabs ☑ Need Waterjetted pls ☑ Fully on car	yes	DONE	☐ Takw ic break light mount nake it Ev spacial
RTD Buzzer	Needs welder	☑ Cad tabs ☑ Jet tabs ☑ Mount buzzer ☑ Put the buzzer on after body tabs are full welded ☑ Wire buzzer	mid	Done	
PDU v2	justin	☐ ***Check path*** ☐ ***Make sure placement makes sence*** ☐ ***Make sure theres an overcurrent protection*** ☐ ***Revers Polarity poroection*** ☐ ***Make sure traces are rated for the current/voltage*** ☐ ***Mounting holes*** ☐ ***Rounded cornors*** ☐ ***Make sure print mask is big enuf*** ☐ ***Jut the JLJLJLJLJL on the board*** ☐ ***Make order list*** ☐ ***Submit order*** ☐ ***Put together*** ☐ ***Normaliy check*** ☐ ***Test.*** ☐ ***done***		In progress	This isnt a prority for the 31st this is later project. I made this list for just thinking on what I need to check for when justin and I sit down and work thu it.
Pedal box connections	This is just vals list	APPS1 APPS2 BSE breaklingt		Done	The connections are already made and put together just needs to be pluged up to brays pedals when complete and in car
☑ Wire Standard ☑ Conector standard ☐ Ziptie spacing ☑ Specific Wire Color designantion					For design
LV battery connection		☑ Fix shorting bc wires touched		Done	
Change tsal PDU PWR location		☐ Currently under fans, needs to be moved to all time power for LV ☐ Documented ☐	mid		
Route inside of lid to comply with spacing			mid		
Untilt the tsal light	welder	☐ Cut off mounts ☐ Weld tab back on (but straight!)	low		After invitational
Fix tsal light		☐ Repin the molex going into the board so it doesn't need to be held at a angle ☐ Compare schematic to old TSAL, figure out issues and get board working ☐ Pot or glue the tsal led board itself, cable is pulling/fatiguing molex	high		See notes, but yea
LV battery edge protection		☐ Pick material ☐ Attach to battery	mid		
Need to calibrate BSPD		☐ Pull out vcu from case ☐ Calibrate BSPD properly	high		
Cut tsmp and add orange heat shrink to it		☐	mid		
Add heat shrink to gnd		☐	mid		Needs heat shrink bought

sheathing					
Ev dash carbon plate		☐ carbon plate to be the front of the dash.	Low		Pearly looks. Not important to run. Would be neat to put diffusion layer in there too?
Need to talk about if invitional is gonna rain, must rain proof	Convo between Val and Johnathan	☑ tuff			Lol it didn't rain
Lora logger		☑ Board ☐ Antenna extension? Placement? ☑ code	mid		https://github.com/KSU-MS/ks5eLoraLogger the guy datalogs on a sd card now, but need to fix telemetry tbh
Data logging		☐ Board ☐ code	mid		https://github.com/KSU-MS/KS5e-Data-Logging
Add blue can chip tranciever to MDB boards	val			Done	Lol it's a bodge
Add proper can chip tranciever to MDB boards??		☐ See if it's worth time to put proper can chips on (code) ☐ Change the code & get one working on bench ☐ Redo the boards and get them talking in code	low		Hmmmm, one pad is gone maybe? See if it's good and worth the time to do so

Need to learn the motor calbration

Can BUSS FOR FEED BACK AND CAN TO mdb BOARDS

BSPD
Need to run fell active
AMS Temp side if false data
AMS bspd is fine
Lid interlocks are bye passed.
Need to get into RTD

COTS

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*

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
TSMP conn		Pin in to conn separate			
Shutdown loop		Main DC out In from HV kill In from other			
AVI light					
Energy meter		Pin Check outer harness			
Hall sensor					
Bottom wires					
Mod boards wire					
BMS					

Code:
ADD a heart beat for all the boards

VCU
- [ ] Using the old VCU and modifying the code for what we need

ACU
- [ ] Load up old code see if it will work and change to what we need
- [ ]

MDB (this one is completely new)
- [ ] Look at old code for Mux reference
- [ ] Look at code of how to do initialize the CAN chip
- [ ] Humid and temp sensor EXAMPLE code in LV MDB section
- [ ]

Ev Dash

- [ ] See what's in GitHub(don't completely trust tho)
- [ ] Led pulling hig but needs to be pulled low
- [ ] Load and debug what needs to do
- [ ]

Recharge discharge

- [ ] It works? Need to acctually ready values out of it
- [ ]

Ic dash

- [ ]
- [ ] Led driver code ting?
- [ ] Parcer

Vehicle Dynamics

Monday, January 23, 2023 2:03 PM

Project	*Assigned to*	*Task list*	*Priority*	*Status*	*Notes*
Pedal Box	Bray	☑ • **Welding tabs for rear end of master cylinder** ☑ • **Custom reservoir pieces need to be sized and made** ☑ • **Potentiometers can be attached** ☑ • **Brakes can be bled**	A	In Progress	
Head rest		☑ Cut carbon tube ☑ Machine Tube Inserts ☑ Bond insert into tube (Done 9:32 am 03/09/2023) ☑ Weld Steel mount to chassis ☑ Bolt in to tube	A	Complete	
Floor Pan		☐ **Install after pedal box complete**			
Anti Intrusion Plate		☑ **Weld** ☑ **Weld**			
Impact Attenuator		☐ **Prep Plate** ☐ **Bond ton AIP**			
Driver Leg Protection	sam	☐ **Protect inside cock pit leg room with foam from sharp edges**			
Seat Belts		☐ **Tabs need to be tacked and welded** ☐ **Belts need to be run through on ECar**			
Steering Column Spacer	Emil	☑ Dimensions ☑ CAD ☑ Manufactured			
Bell Crank Bushing and Spacer	Emil	☐ Dimensions ☐ CAD ☐ Manufactured			

Manufacturing

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

					complete? (CAD)	***type***	***Obtained***			
Pedal Box										

COTS

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***