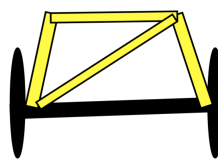
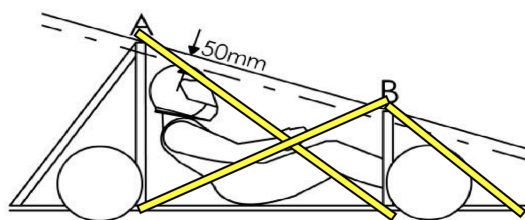




Race #	Team Name	School	Class	Bike/Kart

Scrutineer Name	Inspection Date	ECU #	Overall Result	
			P	F

Status	#	Check	Comments
ALL	1	General	
P F	1.1	Vehicle is a new build or had major modifications since the previous entry.	
P F	1.2	Race numbers are fitted on the front and sides and visible at 15m distance.	
ALL	2	Chassis and Construction	
P F	2.1	Chassis is robust with adequate materials and joining techniques. Load bearing joints are strong.	
P F	2.2	The cockpit is free of sharp edges and protrusions with all tubing plugged.	
P F	2.3	Barriers are in place to prevent limbs or feet contacting the ground or vehicle moving parts.	
P F	2.4	Vehicle is sufficiently stable and not prone to tipping over.	
P F	2.5	Seat is sturdy, supports the driver and the driver remains in the seat when driving.	
KART	3	Safety Cell	
P F	3.1	Head restraint is present and is sufficient to protect the driver's head from whiplash in an accident.	
P F	3.2	Safety cell (front and rear roll hoop + side cross bracing) is sturdy and would survive an impact/crash, protecting the driver.	
P F	3.3	The roll hoop must be taller than the drivers' helmet, such that there is 50mm of space between the top of the drivers' helmet and the ground in a rollover event (measured below the line A-B as shown). <u>Vehicles that do not meet the requirements in the rules document will not be allowed to race.</u>	



Lateral triangulation

ALL	4	Steering
P	F	4.1 Steering systems are safe, reliable, and have minimal play in joints.
P	F	4.2 Steering systems must provide adequate stability and control of the vehicle at racing speeds. Scrutineers will check that the vehicle does not tip easily.
P	F	4.3 Fasteners used in critical parts of the steering system must use Nyloc nuts, standard lock nuts, or an equivalent anti-loosening nut.
ALL	5	Brakes
P	F	5.1 Brakes can lock wheels when pushed from a standstill with the driver in the vehicle.
P	F	5.2 Operating the brakes does not compromise vehicle control.
ALL	6	Wheels and Tyres
P	F	6.1 All wheel bearings are smooth and free running.
P	F	6.2 Tyres in adequate condition (no canvas lining visible) and pumped to an appropriate pressure.
ALL	7	Chain and Drivetrain
P	F	7.1 All moving parts of the drivetrain are covered, preventing hands/fingers/clothing from getting caught. Chain guard must also prevent driver injury in the event that the chain breaks.
ALL	8	Powertrain and Wiring
P	F	8.1 Motor and batteries are securely mounted and would not come loose during a roll-over
P	F	8.2 Motor controller can dissipate heat appropriately.
P	F	8.3 [Standard] Motor and controller are EVolocity standard issue (no modification, ≤350W motor and controller).
P	F	8.4 [Open] Motor controller is ≤2000W.
P	F	8.5 Appropriately sized fuse installed and is placed immediately after the



		batteries (or between Standard Class 12V batteries).
P	F	8.6 Kill switch is mounted after the fuse and before the motor controller.
P	F	8.7 Kill switch is appropriately rated for the DC voltage and current and is clearly labelled "KILL SWITCH".
P	F	8.8 Throttle reliably returns to zero when released.
P	F	8.9 Wires and terminals on the vehicle must be neatly run, secured and unable to chafe, be protected from moving parts, and be sized appropriately given the installed fuse size.
ALL	9	Batteries (general)
P	F	9.1 [Standard] Standard 2 x 12V lead-acid batteries used.
P	F	9.2 [Open] Voltage $\leq 60V$ fully charged and are either lead-acid, Li-ion, LiPo, or LiFePo4.
P	F	9.3 Batteries must be well ventilated.
OPEN	10	Lithium Batteries (skip if lead-acid used)
P	F	10.1 BMS present or balance charger used. Cells balanced to within 0.1V (highest charged to lowest charged cell).
P	F	10.2 Low voltage indicator present and in working condition. Team is aware of the individual cell and total pack lowest voltage and has a multimeter to measure it in the pits.
P	F	10.3 Battery temperature monitoring present and indicator light working. Measurement probe has a good thermal connection with the cell's alert trigger set at $<60^{\circ}C$.
P	F	10.4 An adequate firewall is present to protect the driver incase of battery thermal runaway or fire.
ALL	11	Energy Monitor
P	F	11.1 Appropriate connectors to plug in the Energy Monitor are present and the team understands how to install it.
P	F	11.2 Location/mounting for the energy monitor is accessible and secure.
ALL	12	Driver Gear
P	F	12.1 Drivers have (must have all): Full face helmet, gloves, long sleeved clothing, sturdy closed toe shoes and long hair tied back.