

Vehicle Setup Parameter Options

No.	Parameter	Entry 1		Entry 2		Entry 3		Entry 4	
		Value	Effect	Value	Effect	Value	Effect	Value	Effect
1	Chassis Material	1	Steel Mass=15kg Reliability 100%	2	Aluminum Mass=14kg Reliability 98% Repair time=30 sec	3	Aluminum Mass=12 kg Reliability 94% Repair time=45sec	4	Aluminum Mass=10 kg Reliability 90% Repair time=pit+30sec
2	Outerbody Shape/size	1	Baseline body Cd=0.45 A=1.4 Mass=7kg Driver change delay=0sec	2	Smaller body Cd=0.45 A=0.1.3 Mass=6.5kg Driver change delay=30sec				
3	Canopy	1	None	2	Front Half Cd = -0.03 A = +0.2 Mass = +1.3 kg Driver change delay=0sec	3	Full Cd = -0.08 A = +0.2 Mass = +2.5 kg Driver change delay=30sec		
4	Drive System	1	Wheel motor Torque-speed envelope 1 Tire outer diamter=16" Reliability=100% Repair time=N/A	2	Inboard motor/sprocket/chain Torque-speed envelope 2 Tire outer diamter=20" Chain Reliability=95% Repair time=30sec				
5	Motor sprocket Applies to option 4.2	1	Main sprocket=60 teeth Motor sprocket=15 teeth	2	Main sprocket=60 teeth Motor sprocket=18 teeth				
6	Rear tire	1	Default 16" for 4.1 20" for 4.2	2	Larger tire 18" for 4.1 22" for 4.2				
7	Front Wheel	1	Spoked Mass for 2=7kg Reliability 90% RR = 0.018	2	Solid Aluminum Mass for 2=10kg Reliability 100% RR increase=0.017				
8	Battery	1	Single pack 1 pack, 4 batteries Energy capacity=26AH Mass=8kg/battery (x4)	2	Double pack 2 packs, 4 batteries/pack Energy capacity=12AH Mass=3.7kg/battery (x4)				