



2017 HYDROMOBILE - TECHNICAL INSPECTION FORM (TEAM COPY)

University		Attempt (Note the time)			Vehicle #
Team		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
		4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	

PENALTY

	Subject	Missing/Violation	Before Race	After the Race	Conclusion
Penalty	Domestic Components				
	<i>(Example: wiper, seat, headlight etc.)</i>				

PHYSICAL SPECIFICATION & HARDWARE

		Value	Compatibility		NOTES
			✓	X	
Functional Test	Vehicle dynamic testing	Time			
	Driver knows the race rules	Will be asked about the rules			
	Speedometer	(Functional)			
Physical Specification	Vehicle height	(At least 1 m above ground level)			
	Minimum height	Height of the vehicle from the ground must be a minimum of 10 cm			
	Vehicle measurements	Should fit within the lines drawn at the technical inspection			
		Technical drawing should be provided with a separate page			
	Cockpit (for driver and passenger)	A minimum height of 85 cm			
		A minimum width of 65 cm			
	Vehicle body	From the top view: no open regions, the wheels inside the body			
		Fragile windows / sharp ends / protruding edges etc.			
	Door	50 cm x 80 cm frame can pass through the door			
	Door mechanism	Fixed to the body with a safe connecting element			
Can be opened from outside/no possibility of unintended opening					
Wheel width	A minimum of 70 mm				
Flag	(A minimum of 20 x 30 cm)				
Hardware	Brake system	(Dual-circuit hydraulic)			
	Windscreen	Transparent windows that do not shatter during collisions			
	Wiper	Working properly			
	Rearview mirrors	On both sides of the cockpit			
		(with a minimum reflection area of 50 cm ²) Driver can see the text shown			
	Horn	(Able to sound 3 second continuously)			
	Headlights	2 headlights (Seen from a distance of 25 m)			
Safety Hardware	Fire extinguishers	(1x2kg or 2x1kg)			
	Roll bars Roll cages	One roll bar in the front and one roll bar at the rear			
		A minimum yield strength of 200 MPa			
		Roll bar perpendicular to the bottom of the vehicle			
		The front roll bar starts at least 3 cm above the steering wheel			
		The rear roll bar starts at least 5 cm above the helmet			
	Tow bars	Closed and rolled pipe or box profiles			
		Independent from the chassis			
		Welding/bolts used according to specified rules.			
	Steering wheel	One in the front and one at the rear			
With a minimum internal diameter of 20 mm, made of steel					
Safety Belts	(Fixed at four or five points, compatible with FIA standards)				
Driver outfit and equipment	Compatible with FIA standards				
Seat	Driver seat is compatible with FIA standards, fixed to the chassis				
	Passenger seat is compatible with FIA standards, fixed to the chassis				
	Makes an angle of at most 30 degrees with the normal axis of the chassis				

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TEAM: _____

ELECTRICAL SAFETY & BATTERY

	Value	Compatibility		NOTES
		✓	✗	
Electrical Safety	Electrical cable connections (No bare cable/proper insulation)			
	Emergency stop button (2 buttons, one inside and one outside the vehicle)			
	Overcurrent breaker (In the power conditioner circuit, on main power line, and with proper rated values)			
	Motor nameplate (Available/NOT)			
	Joule meter connection (No extra battery apart from the main battery package) (No bypass connection)			
	Joule meter connector (Installed/NOT)			
Battery	Battery type (Li-Ion, Li-Polimer)			
	Battery temperature measurement (Flasher, buzzer and temperature indicator)			
	Battery datasheet (Must be presented) (All the data should be available)			
	Battery box (Proper material) (Proper design)			
	Fixing battery box (Fixed properly with bolts and nuts, grade 8.8 and a min. diameter of 8 mm)			
	Safety wall (Proper material)			
Test	Brake lights (At least 1 brake light)			
	Brake test (Seen from a distance of 25 m) Functional			
	Emergency Evacuation (driver and reserve driver) (No longer than 20 seconds, without help)			

HYDROGEN SYSTEM SPECIFICATIONS

Fuel Cell/Hydrogen	Fuel cell (A maximum output power of 3 kW)				
	Pressure safety valve (At least 1 valve, enough to evacuate all gases)				
	Gas flow safety valve (Follows the output of the metal hydride hydrogen cylinders)				
	Thermocouple (On the surface of the metal hydride cylinders)				
	Flasher (A minimum diameter of 4 cm) (A minimum height of 5 cm) (Red and rotating with a reflector)				
		Temperature indicator (Electrically connected to flasher) (Alert when the temperature is 10 °C above operating temperature)			
		Metal hydride cylinders (Outside the cockpit) (With a protective shield) (With resistant belts or clamps)			
	Hydrogen line (Not passing through the cockpit) (Proper valves, fittings brass and pipes used)				
	Globe valve (On the hydrogen cylinders-fuel battery line) (A stainless steel or brass, of 316 quality)				
		Hydrogen sensors (In the driver cabin) (Alert in the event of 2% hydrogen presence in volume)			

DOMESTIC PRODUCTS & TECHNICAL DESIGN REPORT

	Sub-Component	NOTES
Report	Domestic sub-components	4 mandatory sub-components
	Optional sub-component	
Other report notes		
Final Evaluation Notes		

Academic advisor signature

Jury signature