2025 Mechanical Inspection Sheet

Car No University

MECH 1 - READY TO RACE STATE WITH TALLEST DRIVER

The teams shall start M1 with the tallest driver inside and securely strapped in a ready to race state.

!ONLY FOR CV! NO FUEL IN THE FUEL TANK! IF YES, EMPTY AT THE PIT

!ONLY FOR EV! CHECK IF THE TEAM HAS THE ACCUMULATOR INSPECTION STICKER! IF NOT THE ACCUMULATOR MAY NOT BE PRESENT!

VEHICLE EQUIPMENT						
No.	Checkpoint	Rule No	Checkbo x	Comments		
16	PUSH BAR Colored red Clearly visible UNI name written on a high contrast backgound Push bar handle behind rear axle Fire extinguisher easily accessible HV gloves protected in a box, 2 pairs (EV Only) Multimeter (EV Only) 4mm banana plug test lead (EV only)	T13.1				
17	 One or two removable devices (jacks) that hold the vehicle, so that all driven wheels are at least 100mm off the ground Safe positioning of the device (not reaching under the vehicle) Vehicle is adequately supported In the lifted position the vehicle must stand securely and stable It must be safe for a driver to enter and exit the vehicle The device(s) must not extend out of the area defined by the footprint of the four tires On both sides of the vehicle the devices pickup points must be indicated by orange triangles. The quick jack must be locked and secured. This must function without the support of a person or additional weights. 	T13.2				
18	Clearly visible UNI name written on a high contrast backgound DOCUMENTS PRESENT SES present IAD present Laminate/test samples present	IN5.1.1				
	VEHICLE IDENTIFICATION (T12)					
No.	Checkpoint	Rule No	Checkbo x	Comments		
19	Main scrutineering sticker	IN1.3				

	VEHICLE NUMBER			
20	 Placed on front and both sides Height: at least 150mm high Stroke width and spacing between numbers: at least 20mm Color: Either white numbers on a black background or black numbers on a white background Background shape: The number background must be one of the following: round, oval, square or rectangular. There must be at least 25mm between the edge of the numbers and the edge of the background Clear: The numbers must not be obscured by parts of the vehicle 	T12.1		
21	Clear: The numbers must not be obscured by parts of the vehicle UNIVERSITY NAME must be written fully, accepted abreviations: University: Uni Technical University:TU University of Applied Sciences: UAS Berufsakademie: BA If the university officially uses an abbreviation in their proper name, this abbreviation is accepted at least 50mm high on both sides of the vehicle on a high contrast	T12.3		
DRIV	hackgound VER RESTRAINT SYSTEM (T5) with TALLEST drive	r seated (re	adv to ra	ace state)
No.	Checkpoint	Rule No	Checkbo x	Comments
22	Car in ready to race condition and clean	IN5.1.1		
23	Check bracelet for tallest driver	IN5.1.1		
24	GROUND CLEARANCE (EV - WITH ACCUMULATOR STICKER AND ACCUMULATOR INSIDE) • clearance + 30mm	T2.2.1		
25	SUSPENSION (EV - WITH ACCUMULATOR STICKER AND ACCUMULATOR INSIDE) The vehicle must be equipped with fully operational front and rear suspension systems including shock absorbers and a usable wheel travel of at least 50mm and a minimum jounce of 25mm with driver seated.	T2.5.1		
26	A six or seven point harness is installed with the one of the following certifications: • SFI Specification 16.1, SFI Specification 16.5 • or FIA specification 8853/98. • or FIA specification 8853/2016. Date on belts must be valid: SFI spec harnesses must be replaced following December 31st of the	T5.2		

27	DRIVING POSITION		
	Note reclined or upright driving position: upright position – Position with a seat back angled at 30° or less from the vertical		
	reclined position – Position with a seat back angled at more than 30° from the vertical		
	10° max. 20° max. Seat Back	T5.1.3 T5.1.4	
	LAP BELT		
	Securely attached to Primary Structure		
28	Upright: between 45° & 60° from horizontal	T5.4	
	• Reclined: between 60° & 80° from horizontal	10.4	
	From anchor point straight to drivers body		
	• In side view it must be capable of pivoting freely SHOULDER HARNESS		
	• Width: Without HANS Device: 75mm, With HANS Device: 50mm (T5.2.1)		
	180-230 mm apart measured center to center		
29	Between -20° & +10° from horizontal	T5.5	
	Tilt lock adjuster		
	From anchor point straight to drivers body		
	Must not pass through the firewall ANTI-SUBMARINE BELT		
00	• With the belts going vertically down from the groin, or angled up to 20° rearwards. The anchorage points should be approximately 100 mm apart.	Tr. 0	
30	Anchorage points must be on the primary structure at or near the lap belt anchorages	T5.6	
	can use the same attachment point as the lap belts		
31	Harnesses, belts and straps must not pass through a firewall, i.e. all harness attachment points must be on the driver's side of any firewall.	T5.3.2	
32	The lap belts and anti submarine belts must not be routed over the sides of the seat.		
	Where the belts or harness pass through a hole in the seat, the seat must be rolled	T5.3.3	
	or grommeted to prevent chafing of the belts.		

No.	SAFETY CHECKS with TALLEST driver seated Checkpoint	Rule No	Checkbo	
INO.	· ·	Rule No	X	Comments
	HEAD RESTRAINT - PADDING		1	
33	Be vertical or near vertical in side view.			
34	Minimum thickness of 40mm			
	Be padded with an energy absorbing material: the transfer with a CFL 45 Contamination.			
35	-that meets either the SFI 45.2 standard			
	-or is listed in the FIA technical list n°17 as a type B material for			
	• Have a minimum width of 150 mm			
36	Have a minimum height of 150 mm			
	Thave a minimum fleight of 100 min	T5.7.2		
	Be located so that for each driver:			
	- The restraint is no more than 25mm away from the back of the			
37	driver's helmet, with the driver in their normal driving position.			
	- The contact point of the back of the driver's helmet on the head			
	restraint is no less than 50mm from any edge of the head restraint.			
	-			
38	• The head restraint and its mounting must withstand a force of	T5.7.3		
	890N applied in the rearward direction at any point on its surface.			
	Roll bar or bracing that could be hit by driver's helmet must be covered	T5.8.1		
	with 12 mm thick padding;			
	• SFI spec 45.1 or FIA 8857-2001			
39				
00	Gently move the driver's head to make sure that any object that comes in			
	contact with it is covered by padding, or has sufficient clearance.			
	Pay attention to the connections of the shuttdown buttons mounted on			
	the Main Hoop.			
	VEHICLE CONTROLS			
40	All vehicle controls must be operated from inside the cockpit without any	T4.9.1		
	part of the driver, e.g. hands, arms or elbows, being outside the vertical			
	planes tangent to the outermost surface of the side impact structure. FIELD VIEW			
	LIELD AIEAA			
41	Minimum of 100 deg. field view either side. Head rotation allowed or	T4.10		
	mirrors. If mirrors, must be firmly installed and adjusted			

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	MAIN HOOP & FRONT HOOP HEIGHTS			
	When seated normally and restrained by the driver's restraint system, the helmet of the tallest driver must:			
	Be a minimum of 50mm away from the straight line drawn from the top of the main hoop to the top of the front hoop.			
42	• Be a minimum of 50mm away from the straight line drawn from the top of the main hoop to the lower end of the main hoop bracing if the bracing extends rearwards.	T4.3.1		
	Be no further rearwards than the rear surface of the main hoop if the main hoop bracing extends forwards			
	Helmet must be forward of this Line			
	DRIVER'S FOOT PROTECTION			
43	The feet of the driver must within the primary structure in all views when touching the pedals			
	SHUTDOWN BUTTONS			
44	One shutdown button serves as a cockpit-mounted shutdown button and must • have a minimum diameter of 24mm • be located in easy reach of a belted-in driver • be alongside of the steering wheel and unobstructed by the steering wheel or any other part of the vehicle • the international electrical symbol consisting of a red spark on a white-edged blue triangle must be affixed in close proximity	T11.4.4		
45	CAMERA MOUNTS The body of any video/photographic camera which is not exclusively used as sensor for the AS unit must be secured at a minimum of two points on different sides of the camera body. If a tether is used to restrain the camera, the tether length must be limited so that the camera cannot contact the driver.	T11.11		
46	Wheelbase has to be a minimum of 1525 mm	T2.9.1		
	APPROVAL STATUS		gid=0	
MECH 1	Approval (Control box) (DON'T CHANGE MANUALLY)		ONWAAR	