

JUDGING SUB CATEGORY	SPECIFICATIONS	TEAM ID	
PRIMARY EVIDENCE	CARS A & B	TEAM NAME	
SECONDARY EVIDENCE	ENGINEERING DRAWINGS	SCHOOL	
CRITERIA	1	COMPETITION CLASS	

For clarification on individual regulations, refer to the 2017 Australian Technical Regulations.

Regulation	Regulation Overview	Quick Guide	Penalty	Car 1	Car 2	Judge 1	Judge 2	Deduction	Remarks	Rectification	
ARTICLE T2 – GENERAL PRINCIPLES										Pass/Fail	Pass/Fail
T2.4	Safe Construction	Visual Check	-10								
ARTICLE T3 – GENERAL CAR REGULATIONS										Pass/Fail	Pass/Fail
T3.1.1	Designed and engineered using CAD / CAM	Check Portfolio	-10								
T3.1.2	Body manufactured using CNC only.	Check Portfolio	-10								
T3.1.3	Car A & B - Identical Components	Visual Check	-10								
T3.2.1	Leading Features Min Width – Foremost Extremity (FE)	3mm or R1.5mm	-4								
T3.2.2	Leading Features Min Width – 6mm back from FE	6mm	-4								
T3.3.3	Hand Finishing permitted. Max variation to CAD Model.	3mm	-10								
T3.3.4	Hand Created Features – not permitted	Visual Check	10								
T3.4.2	REA Corporate Logo Decals (REA, F1, Autodesk, Jetta)	Visual Check	-2 ea								
T3.4.3.1	REA Corporate Logo Decals Minimum Dimensions	30mm x 15mm	-2 ea								
T3.4.3.2	Positioning of F1iS A & B Decals on Side Pods	Visual Check	-2 ea								
T3.4.3.2	Positioning of other Corp. Decals visible in top or side view	Visual Check	-2 ea								
T3.5	Undefined features	Check T1.6	-4								
T3.6	Centre of gravity remains between the axles	Visual Check	-4								
T3.7	Overall length	Min:170mm Max:210mm	-4								
T3.8	Width	Min: 60mm	-4								
								Points Penalty Page Total	-	Time Penalties Page Total	. s

LEGEND  Eligibility Regulations/Possible Disqualification

 Critical Regulations/Time Penalty (0.05s ea)

For clarification on individual regulations, refer to the 2017 Australian Technical Regulations.

Regulation	Regulation Overview	Quick Guide	Penalty	Car A	Car B	Judge 1	Judge 2	Deduction	Remarks	Rectification	
T3.9	Total Mass	T1.4.3 / Min: 52g	-4								
T3.10	Track clearance	Min: 2mm	-4								
T3.11.2	Balsa or foam for all non-rotating components	Visual & Drawing Check	-4								
T3.11.2	Balsa/Foam Thickness	Min 3mm	-1								
T3.12	Status during racing – no parts removed/added for racing	Visual check	-2								
T3.13	Replacement Components – identical to those fitted	Visual check	N/A								
ARTICLE T4 – BODY & SIDE POD REGULATIONS										Pass/Fail	
T4.1	Body construction – single continuous balsa/foam between axles	Visual & Drawing Check	-4								
T4.2	Implants, foreign objects & voids not permitted	Visual & Drawing Check	-4								
T4.3	Width of side pod	Min 50mm	-1								
T4.4	Side pod projected surface	Min 30mm x 15mm	-1								
T4.5	Virtual cargo – between centre line of front & rear axles	T4.5	-4								
T4.6	Virtual cargo identification on Engineering Drawings	Check Drawings	-1								
T4.7	Exclusion zones behind front wheels	Min 15mm	-4								
ARTICLE T5 – NOSECONE RULES										Pass/Fail	
T5.1	Nosecone/parts metallic material prohibited	Visual & Drawing Check	-10								
T5.2	Nose cone non-metallic material not behind front axle centre line	Visual & Drawing Check	-1								
ARTICLE T6 – WING REGULATIONS										Pass/Fail	
T6.1	Top surfaces must be 100% visible	Visual Check	-1								
T6.2	Wing surfaces clearly identified in Engineering Drawings	Drawing Check	-1								
T6.3.1	Front wing clear airspace	Min 3mm	-4								
T6.3.2	Rear wing clear airspace	Min 3mm	-4								
T6.4	Front wing/support structure in front of centre line of axle	Visual Check	-1								
Points Penalty Page Total								-	Time Penalties Page Total		. s

LEGEND Eligibility Regulations/Possible Disqualification

Critical Regulations/Time Penalty (0.05s ea)

For clarification on individual regulations, refer to the 2017 Australian Technical Regulations.

Regulation	Regulation Overview	Quick Guide	Penalty	Car A	Car B	Judge 1	Judge 2	Deduction	Remarks	Rectification	
T6.5	Wing construction must remain rigid during racing	Visual Check	-2								
T6.6	Visibility of front wing unobstructed viewed from front	Visual Check	-1								
T6.7	Front wing/support structure-no-metallic material	Visual & Drawing Check	-10								
T6.8	Front wing/support structure-connect with nosecone only	Visual & Drawing Check	-1								
T6.9.1	Front wing span	Balsa/Foam: Min 34mm Other: Min 40mm	-4								
T6.9.2	Rear wing span	Balsa/Foam: Min 34mm Other: Min 40mm	-4								
T6.11.1	Front wing chord	Min 15mm	-2								
T6.11.2	Rear wing chord	Min 15mm	-2								
T6.12.1	Front wing thickness	Balsa/Foam: Min 3.5mm Max: 9mm Other: Min 1.5mm Max 9mm	-2								
T6.12.2	Rear wing thickness	Balsa/Foam: Min 3.5mm Max: 9mm Other: Min 1.5mm Max 9mm	-2								
T6.13	Rear wing positioning behind centre line of rear axle	Visual Check	-1								
T6.14	Rear wing height measured normal to bottom surface	> 34mm	-4								
T6.16	Rear wing non-metallic support structure behind rear axle centre line	Check Drawings	-4								
ARTICLE T7 – WHEEL REGULATIONS										Pass/Fail	Pass/Fail
T7.1	Number and location, common shared centreline	4, 2 x2	-4								
T7.3.1	Team manufactured wheels – front wheel diameter	Min 26mm	-4								
T7.3.2	Team manufactured wheels – rear wheel diameter	Min 26mm	-4								
T7.4.1	Track contact width – front wheel	Min 15mm	-4								
T7.4.2	Track contact width – rear wheel	Min 15mm	-4								
T7.5	Full contact width with race track – no camber	80gsm paper	-2								
								Points Penalty Page Total	-	Time Penalties Page Total	. s

LEGEND Eligibility Regulations/Possible Disqualification

Critical Regulations/Time Penalty (0.05s ea)

For clarification on individual regulations, refer to the 2017 Australian Technical Regulations.

Regulation	Regulation Overview	Quick Guide	Penalty	Car A	Car B	Judge 1	Judge 2	Deduction	Remarks	Rectification	
T7.6	No tyre tread – consistent diameter & circumference	Visual Check	-2								
T7.7	Freely rotating wheels – forward rolling motion	Reasonably minimal effort	-4								
T7.8	Visibility in front view – permitted height of obstruction	Max 15mm	-4								
T7.9	Visibility from top, bottom & side. No obstruction	Min 1mm exclusion zone	-4								
ARTICLE T8 – WHEEL SUPPORT REGULATIONS										Pass/Fail	
T8.1	Contained within projected cylinder volume	Visual Check	-2								
T8.2	Not integrated with wing support systems	Visual Check	-2								
ARTICLE T9 – TETHER LINE GUIDE REGULATIONS										Pass/Fail	
T9.1	2 guides firmly secured, front and rear underside of car	Visual Check	-1								
T9.2	Longitudinal separation measured outside edges of guides	Min 120mm	-1								
T9.3	Inside diameter of guide (hole size)	Min 3mm	-2								
T9.4.1	Guides must be closed for racing	Visual Check	-4								
T9.4.2	No sharp edges	Visual Check	-4								
T9.4.3	Adequate strength & fixing	200g mass	-4								
ARTICLE T10 – POWER PLANT PROVISIONS REGULATIONS										Pass/Fail	
T10.1	Cylinder must interface with launch pod	Visual Check	-20								
T10.2	CO ₂ cylinder chamber diameter	19mm	-1								
T10.3	Depth of chamber	Min 50mm Max 60mm	-1								
T10.4	Height of lowest point of chamber above track surface	Min 20mm	-4								
T10.5	CO ₂ cylinder chamber completely surrounded by balsa	Min 3mm	-4								
T10.6	Paint & other materials not present in CO ₂ cylinder chamber	Visual Check	-1								
T10.7	CO ₂ cylinder inserted & withdrawn – no removal of car parts	Visual Check	-4								
								Points Penalty Page Total	-	Points Grand Total	/80
								Time Penalties Page Total	. s	Time Penalty Grand Total	. s

LEGEND  Eligibility Regulations/Possible Disqualification

 Critical Regulations/Time Penalty (0.05s ea)