

GENERALLY TOURING CAR TECHNICAL REGULATIONS

2018-01-01

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1. Introduction

1. Generally Touring Car Technical Regulations (GTC TR) is a code of rules for carmakers who want create own car for Generally Competitions
2. The target of this regulations is invitation to creating cars by more Generally players
3. GTC TR contains two classes – GTC1 and GTC2
4. GTC class is free to use on every competitions.
5. Specification may be base for unification classes on Generally competitions

2. General Conditions

2.1. GTC1

1. Carmakers have to follow below rules
2. Registration car to GRTCC is permission to using this on competition
3. Not compatible cars won't be allow to season
4. All cars require asking his author before use
5. GTC1 car must be released on Generally International Forum and must be identical like version registered in championship
6. Car users may paint polygons color, but only painted 0 or 4 color
7. Carmakers have to provide identical car for all teams
8. All controversial issues will be solved by competition organiser

2.2. GTC2

1. GTC2 generals are same as GTC1, but may be changed by competition owner

3. Model

3.1. General

1. Car dimensions:

Length:

GTC1: 4,0 – 4,6

GTC2: 3,8 – 4,2

Width: **1,9**

Height: Model **1,1** + ride height **0,2** (1,3 total)

2. Lights and screens must have color 90 on Careditor
3. All roof polygons must be painted 0 color on Careditor
4. Ride height is 0,2
5. Car must be **centered to coordinate system**. **Extreme parts** must be **same absolute value** on all side
6. Car brightness should be set to normal
7. Possible types cars for GTC1:
 - sedan
 - hatchback
 - liftback
 - combi
 - coupe
 - fastback
8. Possible types cars for GTC2:
 - hatchback
9. Model must contain shadow. His surface must be same as car on top view

3.2. Rear wing

1. Dimensions:

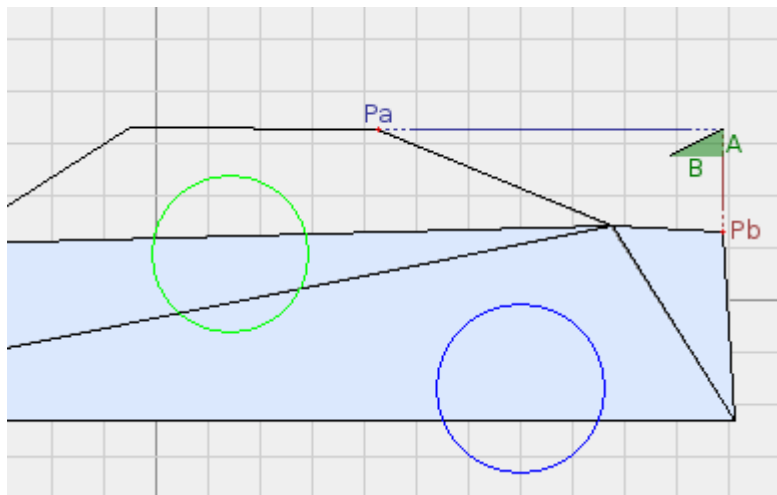
Length: 0,2

Width: like width in **Pb** point (look screen 1.)

Height: 0,1

2. Position:

Wing can not be higher than **Pa** point (screen 1.) and can not be placed behind **Pb** point



Screen 1: Rear wing

3.3. Wheels

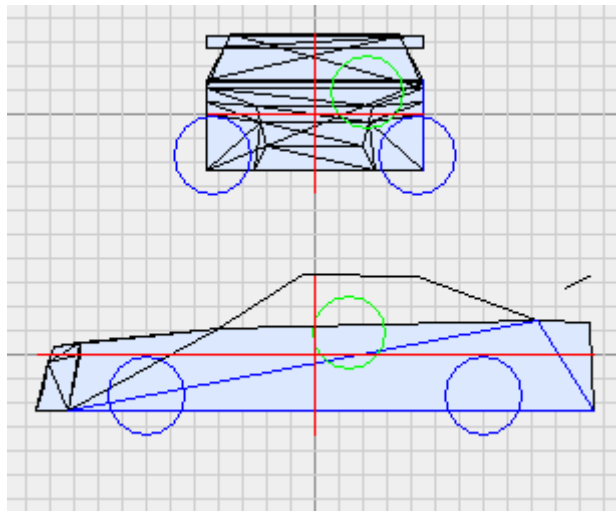
1. Wheels size: **0,325**
2. Wheels position (X axis) must be ranging from **0,85** to **0,95**
3. Wheelbase must be smaller by **1,6** than car length
4. Wheels center point can't be outside the model

4. Bounding box

„**Bounding boxes** (or **Bounding volumes**) are most often a 2D rectangle or 3D **cuboid**, but other shapes are possible. The bounding diamond, the minimum bounding parallelogram, the convex hull, the bounding circle or bounding ball, and the bounding ellipse have all been tried, but bounding boxes remain the most popular due to their simplicity. Bounding boxes are typically used in the early (pruning) stage of collision detection, so that only objects with overlapping bounding boxes need be compared in detail. ”

Read more on [collision detection](#) and [bounding volume](#)

1. Bounding box must be high as car model with wheels
2. Box width and length must be same like car model
3. Too small and too big box is not allowed



Screen 2 Bounding box

5. Base Physics

5.1. GTC1

		Oil	0,3	Oil	0,1
		Tarmac	1,8	Tarmac	0
		Tarmac 2	1,8	Tarmac 2	0
		Grass	1,2	Grass	0,2
		Mud	1,2	Mud	1,5
		Gravel	1,3	Gravel	0,8
Air Resistance	1	Gravel 2	1,3	Gravel 2	0,8
Downforce	170	Sand	1,2	Sand	1,2
Power	330	Sand 2	1,2	Sand 2	1,2
Top Speed	100	Snow	0,8	Snow	0,6
Sliding	0	Ice	0,6	Ice	0,2
Mass	415	Kerb	1,6	Kerb	0
Balance	0,6	Kerb 2	1,6	Kerb 2	0
AI Value	9	Loose gravel	1,6	Loose gravel	0,1

(green values is possible to edit)

5.2. GTC2

		Oil	0,3	Oil	0,1
		Tarmac	1,8	Tarmac	0
		Tarmac 2	1,8	Tarmac 2	0
		Grass	1,2	Grass	0,2
		Mud	1,2	Mud	1,5
		Gravel	1,3	Gravel	0,8
Air Resistance	1	Gravel 2	1,3	Gravel 2	0,8
Downforce	170	Sand	1,2	Sand	1,2
Power	300	Sand 2	1,2	Sand 2	1,2
Top Speed	100	Snow	0,8	Snow	0,6
Sliding	0	Ice	0,6	Ice	0,2
Mass	415	Kerb	1,6	Kerb	0
Balance	0,6	Kerb 2	1,6	Kerb 2	0
AI Value	9	Loose gravel	1,6	Loose gravel	0,1

6. Extra points

1. Producers may change downforce and power on GTC1 cars
2. Producers have 10 points for upgrade car
3. One point is equal +1,00 downforce or +2,00 power