

# Rules & Regulations (NATIONAL FINALS 2025)

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This document covers eligibility, race format, and event specific rules for the 2025 Tamiya Championship Series National Finals race event. Furthermore, this document supersedes class specific rules as it relates to the "TICKET TO JAPAN" ESC and Motor Rules. Please read carefully if you intend to take part in the 2025 TCS National Finals.

\* NOTE: Ticket to Japan motor wind and RPM ESC limits subject to change.

## Article 20: DRIVER ELIGIBILITY-How to Qualify for the TCS FINALS

The below TCS National Finals Eligibility requirements are taken from ARTICLE 20 of the TCS REGIONAL RULES DOCUMENT. This is a refresher!

After the end of each TCS season, there is a TCS Championship Final. There are various race class categories in which participants compete for a National Championship title. Three of these class categories have a grand prize at stake. A "Ticket-to-Japan", a paid travel expense prize that's awarded to 1<sup>st</sup> place championship winners. Furthermore, these 3 class winners move onto the Tamiya World Championships, where they compete for a Tamiya World Title. The Tamiya World Championships are held every October/November at Tamiya's headquarters, found in Shizuoka, Japan.

- 20.1 In order to take part in the <u>TCS Finals</u>, all participants competing in a Tamiya World Championship (TICKET to JAPAN) class <u>must be legal citizens and permanent residents of the United States of America</u>. All other regions are currently excluded.
- 20.2 In order to enter a "<u>Ticket to Japan</u>" class for the 2025 National Finals, you must have competed in that class anytime during the 2023-2025 regional seasons. In other words, you must have taken part in any regional race in that class from the 2023, 2024, or 2025 season to be eligible to compete at the TCS 2025 Finals in a "Ticket to Japan" class.
- 20.3 For all other classes, (race classes that are not competing for a Ticket to Japan), TCS racers finishing in the top ten, automatically qualify for the Tamiya TCS Finals. Racers who did not finish in the top ten are given priority as "walk-ins" on a first come basis.
- 20.4 Entry EXCEPTIONS include: GT SPEC Novice & Euro Truck. If you are new to TCS, you may enter GT Spec Novice or Euro Truck.
- 20.5 TICKET TO JAPAN CLASSES: The 2025 TCS Finals "Ticket to Japan" classes are: GT-2, GT-PRO SPEC and M-Chassis (NOTE: Could change depending on participation conditions during 2025)
- 20.6 RULES GOVERNING FORMER TCS "TICKET TO JAPAN WINNERS: \*Former TCS champions, who have won a "Ticket to Japan", are eligible to compete at the TCS Finals with the following stipulations: A. If you choose to enter a "Ticket to Japan" class again, it must be in a class that you have NEVER won a "Ticket to Japan". EXAMPLE: If you are a TCS M-Chassis Champion, which went to Japan, you may only enter GT-2, or GT-PRO SPEC for the 2025 event. B. They sat out the required 2-year wait period defined in article 21.1 C. Former "Ticket to Japan" champions may enter any class that is not a "Ticket to Japan" class. Example: The F1, EURO TRUCK, GT-E, and GT-1 classes may be entered for a NATIONAL title by former champions for the 2025 National Finals.

# Article 21: Former TCS Champion Eligibility

- 21.1 Former TCS "Ticket to Japan" winners must sit out competing in another "Ticket to Japan" class for 2 years before competing again in a "Ticket to Japan" class. Example: 2024 "Ticket to Japan" winners are eligible to compete again in 2027. 2024 "Ticket to Japan" winners are free to race in any other non "Ticket to Japan" class during the 2-year wait period.
- 21.2 Former "Ticket to Japan" champions MUST compete in a 2025 TCS regional race to be eligible for the 2025 TCS Finals.

## Article 22: Tamiya 2025 World Championship Notice & Information

- 22.1 The Tamiya World Championships will be held in November 2025.
- 22.2 Tamiya America covers airfare and accommodations to the Tamiya World Championships, for all tripwinning classes. This includes meal tickets vouchers provided by Tamiya Inc. for dining at the host hotel. Meals outside of the hotel are not covered by Tamiya.
- 22.3 TCS Finals champions, who win the trip to Japan, must have a valid U.S. passport, and any other travel documents needed, 8 weeks prior to the Tamiya World Event. Signed waivers, racer information, and questionnaires must be given to the TCS director 6 weeks prior to the trip.
- 22.4 Due to translation timelines, and last-minute changes, the 2025 rules and regulations may not be given to the TCS trip winners until 3 weeks prior to the event.
- 22.5 Trip winners must buy spec batteries, spec tires, and motors, either from Tamiya America, or Tamiya Japan. These items must be used for the Tamiya World Championship race.
- 22.6 Notice to "Ticket to Japan" National Champion winners: A parent, or legal guardian must accompany a TCS "Ticket to Japan" winner, who is under the age of 18, or legally dependent. Tamiya America Inc. does not cover airfare, transportation, lodging, and food for the legal parent, or guardian. Tamiya America will supply an estimated cost to the parent/guardian, for approval before booking travel. Final costs will be billed to the parent/guardian after all invoices are collected from the trip. Due to the coordination, and scheduling, during the Tamiya World Championships, added friends, and/or family are not allowed to go with winners to Japan.
- 22.7 In the event that a "Ticket to Japan" winner is unable to attend the Tamiya World Championships, for any reason beyond the control of Tamiya America Inc., an alternate will <u>NOT</u> substitute. The class champion is considered a "Past Champion" in all future TCS events and must compete accordingly as such.
- 22.8 The 2025 TCS National Finals will follow the same regulations and class structure as the regional rules but will incorporate dynamic tweaks to the "Ticket to Japan" classes to tighten up fairness and bring something fun to one of the classes. Specifics will be published in November 2024.

# Article 23: Differences from Regional Race Rules & Structure

- 23.1 Ticket to Japan classes must use a Spec ESC and Motor as outlined in their respective Article Rules.
- 23.2 The Ticket to Japan classes that use the Hobbywing Justock ESC will have an RPM limit and a specific "Blinky" sequence.
- 23.3 The GT Pro Spec class will use a one-make manufacture body (Porsche 911 GT3 992 & 992 GT3 R), and the TT-02 must be configured to the 251mm (Short-size wheelbase spec). \*NOTE: The class will use the 17.5 HW motor due to the fixed gearing rules and long straight away at Scor Raceway.

## Article 3: GENERAL RULES APPLYING TO All VEHICLES

Make sure to read class category specific rules for any restrictions/exceptions from the general rules.

## **Vehicle Chassis**

- 3.1 All Tamiya chassis platforms must be assembled per the factory instruction manual. Altering the chassis assembly structure and design is not allowed.
- 3.2 All Tamiya vehicles must use Tamiya parts only. No parts from other manufacturers are allowed, unless specified within this document.
- 3.3 Any Tamiya Hop-Up Option and spare part is allowed, if it's used in the way it was designed and installed on the vehicle it was designed for.
- 3.4 It is forbidden to re-engineer, or alter the car, in any way other than with Tamiya Hop-Ups, or kit supplied accessories.
- 3.5 It is forbidden to re-engineer, or alter the stock, or Hop-Up-Option parts.
- 3.6 Tamiya suspension springs must keep the factory paint/coating. It is prohibited to remove the paint/coating or color code from the springs.
- 3.7 Chassis lightweight modifications, by milling parts, is prohibited in all TCS classes.
- 3.8 Lightweight screws, and adjustable turnbuckles that are made from aluminum, steel, or Titanium, made by aftermarket manufacturers, are allowed. (EXCEPT IN THE EURO TRUCK SPEC CLASS) (Be aware! If you win the Ticket to Japan national title, all screws and turnbuckles must be TAMIYA made, when competing at the Tamiya World Championships!)
- 3.9 The use of shims, available at most hobby stores and made available by Tamiya, to remove the freeplay in suspension arms, steering bell-cranks, and wheel axles, is allowed in all vehicles, except in the Euro Truck SPEC class. Shimming the components of the car, in a way that alters the geometry of the car, or its basic geometry design is prohibited.
- 3.10 Changing the camber-link positions on the car, other than the way it was intended per the instruction manual, or the "chassis setting sheet", is prohibited. NOTE: The Tamiya chassis setting sheet for your car is a good guide on what you can and cannot tune on your chassis.
- 3.11 Camber links must be positioned in the existing bulkhead mounting holes. Drilling new camber link holes is prohibited.
- 3.12 Steering tie-rod linkages, on all chassis platforms, must be attached to the steering knuckle, per the instruction manual. Drilling new holes to change "Ackerman" is not allowed. Raising and lowering the steering tie-rods with shims, on the steering knuckle itself, to change bump steer is not allowed, unless specified in the chassis manual, set-up sheet, or Hop-Up-Option instruction.
- 3.13 You may alter the car in any way called out in the "car instruction manual", or "chassis setting sheet". If the "chassis setting sheet" calls out the adjustment, then it's legal to make the change to your car.
- 3.14 Any manufacturer ball bearing may be used as a Hop-Up.
- 3.15 All cars must use TAMIYA servo savers, or Tamiya Direct Servo Horns if not using the kit supplied servo horn/saver. (items 50473, 51000, 54893, 42248, 42249)
- 3.16 Internal Drive Gears: You must use the internal drive gears called out in the chassis assembly manual. The internal drive gears of ANY chassis platform may not be altered, changed, or modified, unless it is done with the Tamiya Hop-Up Options designed for that specific purpose. Using different Pulley, Ring, and Pinion gears, from different chassis platforms, to create a hybrid internal drive ratio is not allowed.

Furthermore, you are not allowed to file, machine, or <u>Dremel</u> the gear drive line to squeeze in a bigger pinion, and spur gear combination.

- 3.17 Spur & Pinion Gears: You may use any brand-make spur and pinion gear in the following classes: GT-1, GT-2, GTE, and F1. All other classes must use TAMIYA spur and pinion gears designed for the vehicles used in those classes.
- 3.18 Any modification on a car, not called out specifically in these rules, is prohibited.
- 3.19 If a driver finds a loophole within the rules, the *exploitation* will be considered illegal at the discretion of the race director.

## **Article 4: ELECTRONICS**

- 4.1 Any brand of radio system may be used.
- 4.2 Personal My Laps/AMB-it transponders are preferred for time keeping purposes, at Tamiya TCS events. For more information about these transponders please visit <a href="https://www.mylaps.com/timing-solutions-motorized/rc-drone/">https://www.mylaps.com/timing-solutions-motorized/rc-drone/</a> Some host sites may have "house" loaner transponders for your use.
- 4.3 The use of electronic driving aids is strictly prohibited. Examples: Gyroscopes connected to steering servos that control steering input, and traction control devices connected to Electronic Speed Controls. (Item #54417 Tamiya Active Steering Assist Unit TGU-01 is not legal for any TCS event in the United States).
- 4.4 Any class that uses a Brushless Motor must use an ESC (electronic speed control) that is ROAR approved. The list of ROAR legal ESC's may be found here: <a href="http://www.roarracing.com/approved\_non\_timing\_escs.php">http://www.roarracing.com/approved\_non\_timing\_escs.php</a> NOTE: TAMIYA ESC's may be used.
- 4.5 Electronics must be mounted in the general chassis locations outlined in the instruction manual of your car, especially STEERING SERVOS. You may move around receivers, and ESCs in alternate positions, if room in the main chassis allows. In cases where a "Shorty" battery pack is being used, where chassis space is freed up, the ESC, or Receiver may be repositioned.

#### Article 5: BATTERIES

- 5.1 Any ROAR approved Lithium-Polymer (Li-Po) battery may be used, for any TCS class. Check the ROAR approved Lithium-Polymer (Li-Po) battery list here: <a href="http://www.roarracing.com/approved\_lipo\_batteries.php">http://www.roarracing.com/approved\_lipo\_batteries.php</a>
- 5.2 Sport Ni-Cd and Ni-MH batteries are legal, for TCS racing. These batteries do not need ROAR approval.
- 5.3 TCS legal Lithium-Polymer (Li-Po) must be 7.4/7.6 volts, 2S-2P specification.

  NOTE: Despite the ROAR approved list, Sport Packs (round HARD case Lithium-Polymer (Li-Po) batteries) may be used on Tamiya models where only a round case battery will fit. This type of battery does not need to be ROAR approved.
- 5.4 LIPO Battery TECH rules: In the interest of safety, and fairness, all LIPO batteries will be volt metered during TECH Inspection. LiPo batteries exceeding 8.44 volts (2S packs) will not be allowed to race on the track, until they have been discharged to meet the 8.44 rule.
- 5.5 All battery packs may not exceed 10 degrees above ambient temperature. You will not be allowed to race with "HOT" battery packs.
- 5.6 All LiPo batteries must be charged in a LiPo sack, at all TCS events!
- 5.7 Any type of battery connector is allowed to be installed on your battery pack.

## Article 6: CAR BODY RULES

- 6.1 All car bodies must be painted and must be cut along the molded trim lines outlined in the instruction manual. NOTE: Various Tamiya body sets have alternate trim lines. You may cut along those lines if the manual has a call out for the alternate.
- 6.2 Removing material beyond/above the trim line is prohibited.
- 6.3 Leaving extra material below the trim lines of the body is prohibited.
- 6.4 You are not allowed to create vent holes, for the purpose of ventilation, or performance enhancement.
- 6.5 All car bodies must use the wings that are supplied in the kit, or they may be fitted with any <u>TAMIYA</u> <u>Hop-Up Option Wing Set</u>, if the body has dimple marks molded for the optional Tamiya wing sets.
- 6.6 Mixing and matching the included ABS plastic wings, between different body styles, is prohibited.

## Article 7: MOTOR RULES

- 7.1 Any motor connector, or direct hard wiring to the motor, is allowed. NOTE: Except for the Euro Truck Spec class! You must use the "bullet connectors" that are pre-installed on the motor.
- 7.2 Bolt-on, off-brand, after-market heat sinks, that bolt around the motor circumference, are not allowed.
- 7.3 It is forbidden to freeze the motor, prior to qualifying, or racing.
- 7.4 ALL CLASSES: The use of any manufacturer's cooling fan is legal. However, the fan must be no larger than 1.5 in. X 1.5 in., or 40mm square, and must run off the receiver, or direct from the main battery pack. It is PROHIBITED to have secondary battery power the fan. TWO fans, in total, are allowed in a vehicle. This includes the speed control fan.
- 7.5 It is forbidden to crank the physical timing, mechanically, or by using rare earth magnets. This rule applies to all the classes that use the Tamiya 540-J/Mabuchi, or Torque Tuned silver-can motor.
- 7.6 It is FORBIDDEN to "COOK" brushless motor rotors, which weaken magnet strength.
- 7.7 All Silver-CAN Johnson 540-J, & RS-540 Torque-Tuned motors are limited to 23,500 RPM, maximum. This rule applies to classes that use items 53689-Tamiya 540-J motor, and 54358-RS-540 Torque-Tuned Motor. Measurement method: 23,500 RPM limit. Measured once, soon after the qualifying, or main race, using the Tamiya, Much More, or Peak Racing, motor checker in "step mode" (7.2V) for 22 seconds. The top 3 of each race will have their motors' MAX RPM checked at the discretion of the race director. The car cannot be taken back to the pits when selected for motor rules conformity. If the motors' MAX RPM exceeds the set limits, penalties such as disqualification of times will be given. Please note: The motor will be hot after running and will thus have 200-300 higher RPM. Adjust your break-in methods accordingly to conform to the rules, and measurement method!!
- 7.8 Brushless motor classes: See class category specific rules for the legal motors that may be used for your entry.
- 7.9 Brushless motor rules: Tuning Rotors are legal in classes where a specific "spec" motor is not used. (Formula One is the only open brushless motor class) However, the tuning rotor must be one that is readily available by the manufacturer that makes the motor. Hybrid construction motors are not allowed. Mod rotors, or mod tuning rotors, are not legal for TCS. In addition, you may not create a hybrid motor using one manufactures rotor, or stack, and another manufacture CAN. The motor used must be built per the specification of the manufacture.

- 7.10 Hobbywing (FTM) Fixed Timing Motor: New for the 2025 TCS National Finals! The Hobbywing FTM G2.1 (FIXED TIMING MOTOR) is the motor that must be used for GT-2 and GT Pro Spec (Ticket to Japan Classes). See Motor Matrix table below.
- 7.11 SPEC ESC: The <u>Hobbywing Justock ESC G3/G3S</u> is the ESC that must be used for the "Ticket to Japan" classes. See ESC matrix below.

## Brushless Motor Turn Matrix (TCS NATIONAL FINALS SPECIFIC)

The classes listed in the matrix chart below must use the specified brushless motor for the TCS Finals.

GT2 (TICKET To Japan)	GT PRO-SPEC (TICKET To Japan)	M-Chassis (TICKET To Japan)
HW JS6 21.5 G2.1 ONLY	HW JS5 17.5 G2.1 ONLY	REEDY FT 21.5 ONLY
GT-E	GT-1	Formula 1
HW JS5 21.5 G2.1 & REEDY 21.5	HW JS5 17.5 G2.1 & REEDY 17.5	ROAR 25.5

## Spec ESC (Electronic Speed Control) Matrix

The classes listed in the matrix chart below must use the specified SPEC ESC.

GT2/GT Pro Spec/M Chassis	GT-1/GTE/Formula One
HW XR10 Justock G3/G3S ONLY	ROAR LEGAL BLINKY
RPM LIMIT (ESC): TBD ESC Light Sequence: TBD	
M-Chassis: TBD	
GT-2: TBD	
GT-Pro Spec: TBD	

## Article 8: TIRE & WHEEL RULES

- 8.1 Tire conditioners are allowed but may be restricted to certain TCS venues. (Select TCS host sites do not allow additives due to air ventilation issues)
- 8.2 Tires may not enter the TECH inspection area in wet condition. (Tires additives must be wiped off prior to technical inspection)
- 8.3 Tire warmers are not allowed in the tech inspection area. They may be used after the car has passed technical inspection, or before entering the tech inspection area.
- 8.4 It is not allowed to drill extra wheel vent holes for the purpose of altering the performance and grip level of the tire. Enlarging the existing vent hole is also prohibited.
- 8.5 Any tire insert may be used in classes that have OPEN Tamiya tire rules.
- 8.6 Spec pre-mounted rubber tire classes may not remove the installed tire insert.
- 8.7 It's prohibited to apply super glue on the horizontal surface of the tire, for the purpose of altering traction characteristics. Exceptions: In the *Euro Truck* and *M-Chassis* class, you are allowed to glue up to the first horizontal groove/tread of the tire, from the outside edge only.
- 8.8 TCS National Finals Tire Rules: The following classes will utilize the chosen "HOUSE" spec tire selected by TAMIYA AMERIC: GT-2, GT-1, GT-Pro Spec & GT-E See Matrix Table Below for Specifics.
- 8.9 M-Chassis, Euro Truck, and GT Novice must use the specified Tamiya branded tires called out in the class specific rules. See class specific rules.
- 8.10 F-1 class: The F1 class must use FXOTEK RACING tires and wheels.

#### SPEC TIRE MATRIX

GT-1, GT-2, GT-Pro Spec, GT-E	M-Chassis, Euro Truck, Novice	F1
RUSH VR3 36X 7-Spoke RU0869	TAMIYA	EXOTEK RACING-ANY Compound

## CLASS SPECIFIC REGULATIONS-TCS NATIONAL FINALS 2025

The following pages describe CLASS regulation specific rules to the TCS National Finals. The class specifics outline exceptions, and recommendations that are otherwise not noted in the General Rules. The General Rules as it concerns chassis legality are no different than REGIONAL General Rules. Furthermore, with regards to the "Ticket to Japan" classes, these classes will use a SPEC Hobbywing ESC and motor which will have a mandated RPM motor limit enabled with a specific BLINKY sequence.

## Article 10: GT Spec Novice

This class is perfect for inexperienced drivers that have little to no experience and are just getting into R/C racing. Intermediate, Advanced, and Expert drivers are not allowed in this class category. The GT Spec Novice class is for beginner drivers only.

Recommended Skill Level: Novice Only

- 10.1 Legal chassis platforms: TT-01, TT-01R, TT-01E, TT-01R-Type E, TT-02, TT02S, TT-02SR, TT-02R, TT-02RR, TT-02SRX (ANY TT Series)
- 10.2 The GT Spec Novice class may use any Tamiya Hop-Up-Option designed specifically for the platforms allowed above. Recommended: Ball Bearing set, Speed Tuned Gear Set, Aluminum motor mount, and Oilfilled dampers. These 4 Hop-Up-Options are all you really need.
- 10.3 Motor: You must use the kit supplied motor. (Mabuchi/Johnson) 540-J and RS 540 Torque Tuned motor (items 54358 & 53689) respectively. They come with all TT kits. See General Rules for Motor RPM limits. Article 7.7
- 10.4 Tires: Any TAMIYA rubber tire, and wheel, may be used. 24mm, and 26mm width wheels/tires, are allowed.
- 10.5 Legal race bodies: Any Tamiya 190mm GT, or Sports car body is allowed.
- 10.6 Minimum weight: NONE

## Article 11: GT-2 "TICKET TO JAPAN"

This class is the perfect stage to compete against experienced, and skilled drivers, but with the lower cost of Tamiya "Plastic Composite" chassis models. Professional and Sponsored individuals are not allowed to race in this class.

Recommended Skill Level: Advanced to Expert

- 11.1 Legal chassis platforms: Any plastic composite TUB-Type chassis; XV-01-02, TT-01, TT-02, TA-01, 02, 03, 04, 05, 06, 07, 08 and TB-03, TB-04, and TB-05 variants.
- 11.2 Recommended chassis platform: TA-07, TA-08, or TB-05. These three platforms are the latest that Tamiya has to offer, and the current fastest machines in the class.
- 11.3 SPEC Motor rules: Participants in this class must use the HOBBYWING HW JS6 21.5 G2.1 FTM motor. (FIXED TIMING MOTOR) HW Item# 30408012
- 11.4 SPEC ESC rules: Participants in this class must use the HOBBYWING XERUN XR10 JUSTOCK G3S ESC HW item# 30112005 or 30112003.
- 11.5 ESC MOTOR RPM LIMIT: The Hobbywing ESC RPM LIMIT must be set to XX,000. The LED BLINKY sequence for this RPM limit is GREEN X? RED X?
- 11.6 Minimum weight: 1375 grams.
- 11.7 Legal race bodies: Any currently available Tamiya 190mm GT, or Sports car body, is permitted.
- 11.8 Tires: TCS National Spec Tire (RUSH VR3 36X). These tires must be purchased at the event venue.

#### Article 12: GT-1

This is the premiere TAMIYA touring car class. The class features the use of any Tamiya touring car variant, driven by VERY experienced, and skilled drivers.

Recommended Skill Level: Advanced to Expert

- 12.1 Legal chassis platforms: Any variant TRF 414-421, TB EVO 1-8, and any variant XV-01-XV-02, TA-05, TA-06, TA-07, TA-08, TB-03, TB-04, and TB-05.
- 12.2 Recommended chassis platform: TRF419-421, series, or TA-07MS/X. These three platforms are the latest that Tamiya has to offer, and the current fastest machines in the class.
- 12.3 Spec Motor Rules: Participants in this class must use one of the following SPEC Fixed Timing Motors. Option 1: REEDY SONIC FT 17.5. Item #293. Option 2: HOBBYWING HW JS6 17.5 G2.1 FTM. (FIXED TIMING MOTOR) HW Item#30408011
- 12.4 No BOOST ESC (Electronic Speed Control) rules: Any ROAR legal, and approved ESC may be used, capable of "Blinky-Mode". These ESC's must not use electronic timing (boost). See General Rules for ROAR approved "blinky" ESC list.
- 12.5 Minimum Weight: 1375 grams
- 12.6 Legal race bodies: Any Tamiya 190mm GT, or Sports car body, is permitted.
- 12.7 Tires: TCS National Spec Tire (RUSH VR3 36X). These tires must be bought at the event venue.

#### Article 13: M-Chassis "TICKET TO JAPAN"

M-Chassis is one of the most popular classes at TCS events. The M-Chassis class features low cost, fun, and competitive racing with mid-sized FWD, and RWD machines. Professional and Sponsored individuals are not allowed to race in this class.

Recommended Skill Level: Intermediate to Advanced

- 13.1 Legal chassis platforms: M-07, M-08 platforms only. (Older platforms may be used, but will be at a gear ratio disadvantage)
- 13.2 Spec Motor Rules: Participants in this class must use the REEDY SONIC FT fixed timing, 21.5 motor. Item #297.
- 13.3 SPEC ESC rules: Participants in this class must use the HOBBYWING XERUN XR10 JUSTOCK G3S ESC HW item# 30112005.
- 13.4 ESC MOTOR RPM LIMIT: The Hobbywing ESC RPM LIMIT must be set to XX,000. The LED BLINKY sequence for this RPM limit is GREEN X? RED X?
- 13.5 Minimum weight: 1300 grams.
- 13.6 Legal race bodies: Any Tamiya M-chassis body.
- 13.7 Tires: Two TAMIYA types of M-Chassis tires are allowed.
  - Item 54995 RC 60D Super Radial Tires/Soft 2pcs-with Any Tamiya M-chassis wheel & insert.
  - Item 54999 RC 60D Super Radial Tires/Hard 2pcs-with Any Tamiya M-chassis wheel & insert.
  - NOTE: Assembled tires with inserts may not exceed 60mm in diameter. Overstuffing is prohibited.
- 13.7 Gearing: 24-tooth maximum pinion-M-07/08. 20T for all other chassis variants.

#### Article 14: F1 Rubber Tire

Open wheel racing is at its best with rear-wheel-drive cars, and rubber tires.

Recommended Skill Level: Advanced to Expert

- 14.1 Legal chassis platform: F104 Version I&II, Pro II, F104GP (must use F104 front suspension), TRF101/102/103/104 & TRF101W (must use any F104/101 narrow front-end)
- 14.2 Motor Rules: Any ROAR Legal 25.5 Motor may be used.
- 14.3 Must use a No BOOST ESC (Electronic Speed Control): Any ROAR legal, and approved ESC may be used, capable of "Blinky-Mode". These ESC's must not use electronic timing (boost). See General Rules for ROAR approved "blinky" ESC list.
- 14.4 Tires: Any EXOTEK RACING brand F1 tire compound may only be used.
- 14.5 Legal race bodies: Tamiya F104 bodies only. Mixing Tamiya bodies, and Tamiya wings is <u>NOT</u> allowed. You must use wings that match the body set. Tamiya Driver figure must be used.
- 14.6 Minimum weight: NONE

# Article 15: GT PRO Spec – Porsche Cup "Ticket to Japan"

For the 2025 TCS National Finals, the GT PRO Spec class converts to a one-make manufacture body! All participants in the GT-Pro Spec class are required to use either the Porsche 911 GT3 (992) (Item 51705) or Porsche 911 GT3 R (992) (item 51752) body. Additionally, the TT-02 chassis must be configured to 251mm (Short-size wheelbase spec).

Recommended Minimum Skill level: Intermediate to Advanced.

- 15.1 Legal chassis platform: TT-02, TT-02R, TT-02RR kits only. Note: TT-02 Type S kits are not legal for this class, nor TT-02 Type S specific suspension Hop-Ups.

  Any TT-02 Hop-Up Option is allowed with the 2 exceptions listed in RED: A. No aluminum body shocks. B. No carbon shock towers.
- 15.2 Shocks: The only Hop-Up Option shock allowed is the Tamiya CVA plastic shock unit. (Item 50746)
- 15.3 Springs: You may only use the kit supplied, 5 coil, or 7 coil, chrome spring in the CVA shock unit set, and item <u>53440 RC On-Road Spring Set (Hard)</u>. These springs are color coded blue, red, yellow, and white, in the package for easy identification.
- 15.4 Spur Gears allowed: Tamiya TT-02 stock, and TT-02 Tamiya speed-tuned spur gears are allowed. TT-02 Gears: Stock-70T, Speed-Tuned-68T, and 64T. (64-tooth item 51356)
- 15.5 Pinion Gears allowed: Pinion gear ratio options shown in the TT-02 kit, and the speed-tuned gear set motor mount chart. Finding ways to exceed the maximum gear ratio, shown in the manual charts, is not allowed. Maximum gear ratio from the speed tuned gear set: 5.74:1 (64T Spur-29T Pinion)
- 15.6 Tires: TCS National Spec Tire (RUSH VR3 36X). These tires must be bought at the event venue.
- 15.7 SPEC Motor rules: Participants in this class must use the HOBBYWING HW JS6 17.5 G2.1 FTM motor. (FIXED TIMING MOTOR) HW Item# 30408011 (NOTE: Motor wind FINALIZED July 16, 2025)
- 15.8 SPEC ESC rules: Participants in this class must use the HOBBYWING XERUN XR10 JUSTOCK G3S ESC HW item# 30112005
- 15.9 ESC MOTOR RPM LIMIT: The Hobbywing ESC-RPM LIMIT must be set to XX,000. The LED BLINKY sequence for this RPM limit is GREEN X? RED X?
- 15.10 Body: The GT Pro Spec body that must be used is the 911 GT3 (992) (Item 51705) or Porsche 911 GT3 R (992) (item 51752)
- 15.11 Wings: You may use the stock wing from the body set, or you may use Hop-Up-Option wing; item 22015 Racing Wing Set 3 Carbon Pattern This is the only optional wing allowed. Note: Tamiya Aluminum Hop-Up-Option wing mounts are permitted. Items: 54773 RC Aluminum Wing Stay 2, and 54510 RC Aluminum Wing Stay
- 15.12 Wheel hubs: 4mm, 5mm and 6mm wheel hex hubs only. TT-02 kits include 9mm plastic hex hubs. They are not allowed.
- 15.13 Minimum weight: 1400 grams.
- 15.14 Recommended Hop-Up-Options: Various Hop-Up Option may be used, but you only really need to consider the following:
  - Ball Bearing set: (item 54476) highly recommended.
  - Speed Tuned Gear Set: (item 54500) highly recommended.
  - Aluminum motor mount: (item 54558) highly recommended.
  - Plastic Oil-filled dampers: (items 50746) highly recommended
  - Aluminum Prop-shaft: (item 54501)
  - TT02 Alum Propeller Joint (item 54502 or 22066)

- Steering Turn Buckle set: (item 53662).
- Toe-In Rear-Uprights (TT-02 item 54549/2.5 degree & 54733/3.0 degree)
- RC On-Road Spring Set (Hard) (item 53440)
- Oil Gear Differential Unit (item 54875) or Oil Gear Differential Unit (item 22049)
- Universal drive shaft set (item 53792 for Oil Differential Unit 54875)
- Universal drive shaft set (item 51700, 51444, and 54623 for Oil Differential Unit 22049)
- Adjustable Upper Arm Set (item 54874)

## Article 16: Euro Semi-Truck GT

This is a Euro-Truck SPEC stock class open to any skill level hobbyist.

Recommended Minimum Skill level: Novice, Intermediate to Advanced

- 16.1 Legal kits: Item 58632 Team Hahn Racing MAN TGS, 58642 Team Reinert Racing MAN TGS, 58661 Buggyra Racing Fat Fox, and 58683 Tankpool24 Mercedes Actros
- 16.2 The kit must be built **EXACTLY** per the instruction manual.
- 16.3 Hop-Up-Options: The ONLY Hop-Op Options allowed are: Ball Bearings (ANY BRAND), Tamiya CVA Mini Shock Unit Set 4 pcs. Item #53619, and any Tamiya servo saver. Note: TAMIYA CVA oil filled dampers must use the kit supplied springs from the Euro Truck Kit. Any silicone shock oil may be used for the dampers.
- 16.4 Gearing: Must use the stock pinion and spur gear. (61-Tooth Spur, item <u>51004</u>, 19-Tooth Pinion, item <u>50355</u>)
- 16.5 ESC: Must use the kit supplied Tamiya TBLE-02S/TBLE-04S ESC or THW-1060 Brushed Motor ESC (2-3S) Hobbywing OEM-Same as QUICRUN 1060 BRUSHED ESC (2-3S).
- 16.6 MOTOR: Must use the kit supplied motor. (item <u>54358</u> RS-540 Torque-Tuned Motor)
- 16.7 Battery connector on ESC may be changed to DEANS T-Type or XT-60.
- 16.8 The Bullet Connectors may not be removed from the ESC or motor.
- 16.9 The ESC & Motor wires may not be shortened or removed!
- 16.10 All polycarbonate body parts must be used.
- 16.11 All parts attachment screws in the kit must be used. You may not omit screws to change the handling of the truck. NOTE: The plastic motor cover, (part D8) directly over the motor, does not need to be used. It's optional.
- 16.12 Minimum weight: NONE. Also, NO weights, of ANY KIND, may be put on the truck for ballast.
- 16.13 Adding FOAM material to the kit foam bumper is allowed. You may also use TAMIYA <u>item 54819</u> <u>Urethane Bumper XL</u> in place of the stock size bumper.
- 16.14 Tires: Must use kit type tires, and wheels. Note: TIRE INSERTS OF ANY KIND ARE NOT PERMITTED.
- 16.15 LUBRICATION: Any GREASE, or LUBRICANT may be used to lubricate gears, or moving parts.
- 16.16 Gear Diff Tuning Rules: Both front & rear gear diffs MUST rotate in the opposite direction when physically turning opposing wheels. TEST METHOD: When holding the main center drive shaft, connecting the front and rear gearboxes, stationery, the wheel on the opposite side of the one being rotated must rotate in the opposite direction. The diff will be considered locked if opposing wheels turn in the same direction, therefore considered not legal to race on track. Locking the diff with putty, ear plugs or HIGH viscosity grease is not allowed.

- 16.17 It's allowed to mix & match front/rear wheel position on the truck for durability.
- 16.18 Battery: Any stick-pack type, hard round case LiPo, NiCD, or Ni-MH is allowed. Examples: Reedy Wolf-Pack, Peak Racing, <u>Protek RC</u>, and Powermax batteries.

### Article 17: GT-E

This class celebrates racing cars on the forefront of electric power, and hybrid technology using the TC-01 chassis.

Recommended Minimum Skill level: Intermediate to Advanced

- 17.1 Legal chassis platform: TC-01
- 17.2 SPEC Motor rules: Participants in this class must use one of the following SPEC Fixed Timing Motors. Option 1: REEDY SONIC FT 21.5. Item #'s297. Option 2: HOBBYWING HW JS6 21.5 G2.1 FTM. (FIXED TIMING MOTOR) HW Item# 30408012
- 17.3 No BOOST ESC (Electronic Speed Control) rules: Any ROAR legal, and approved ESC may be used capable of "Blinky-Mode". These ESC's must not use electronic timing (boost). See General Rules for ROAR approved "blinky" ESC list.
- 17.4 Minimum weight: 1500 grams.
- 17.5 Legal race bodies: FIA Formula E, Toyota Gazoo Racing TS050 Hybrid, and Mercedes CLK-GTR.
- 17.6 Tires: TCS National Spec Tire (RUSH VR3 36X). These tires must be bought at the event venue.

#### Article 18: TCS National Finals RACE EVENT FORMAT

- 18.1 There must be at least 5 participants, in each respective class, for the class to be run at the FINALS.
- 18.2 5-minute qualifying heats.
- 18.3 8-minute Triple A-main events for the "Ticket to Japan" classes, 6-minute single mains for all other classes.
- 18.4 Three (minimum) to four (maximum) qualifying heat rounds. (Weather and time permitting)
- 18.5 IFMAR qualifying format. All cars run on individual clocks under this format.
- 18.6 QUAL POINT SYSTEM decides main event qualification order.
- 18.7 All Main races are heads-up starts.

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