



# **World Time Attack Challenge**

TECHNICAL REGULATIONS FOR TUNER CLASS

Version 3

2025

## **TECHNICAL REGULATIONS - 2025**

### **GENERAL REGULATIONS**

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If you have any questions, please contact technical@worldtimeattack.com and allow up to 48 hours for a response.

The regulations of the World Time Attack Challenge (WTAC) are designed to ensure the highest level of safety. Each driver and vehicle must comply with all written and oral directions of the event promoters and/or event officials. Failure to comply may result in immediate exclusion from the event, with no refund of entry fees.

#### 1. PREAMBLE

- 1.1 Each vehicle must remain in compliance with all provisions of the regulations contained herein and relevant MOTORSPORT AUSTRALIA regulations at all times during the event. Vehicles may be checked for compliance at any time throughout the event, refusal to comply will result in a penalty up to exclusion in conjunction with the Stewards.
- 1.2 Any aspect relating to the construction, modification and/or preparation of each vehicle that is not specifically authorised in these regulations or the relevant MOTORSPORT AUSTRALIA regulations is not permitted.
- 1.3 The Promoter reserves the right to invite vehicles to participate in the event that may not fully comply with the event regulations or technical regulations. Such entries will be at the sole discretion of the Promotor and may be subject to additional conditions as deemed necessary.

#### 1.4 Professional drivers, as outlined in DEFINITIONS 17.1, are not permitted to compete in Tuner Class.

#### 2. VEHICLES

- 1. Each vehicle must be a recognised model from a vehicle manufacturer (see definitions).
- 2. A vehicle defined as an Open Wheel vehicle, Clubman, Kit Car or centre-steered vehicle are NOT permitted, as determined by the event promoter.
- 3. Each vehicle must have only four (4) wheels with the steering acting on the front wheels only unless rear wheel steering is originally fitted, in which case the original system may remain.
- 4. Each vehicle may only contain one conventional internal combustion engine, save for a Pro Class vehicle which may be fitted with a KERS or electric power type device.
- 5. Each vehicle must comply with the WTAC Safety Regulations.
- 6. Standard EV configuration
  - a. A Series Production EV is permitted to compete in a Competition as detailed in the Electric Vehicle Appendix Standing Regulations subject to:
    - i. the EV system/s being unmodified from that as produced by the original manufacturer for that Automobile; and compliance with each regulation for the classification/category under which it is entered, except that:

- ii. where such regulation refers to an internal combustion engine (ICE), certain items (e.g. exhaust system, fuel system) are not applicable to an EV. However, it is noted that alternative EV requirements may be added.
- iii. where such regulation permits a modification or a change to a component that if undertaken to a Series Production EV would require an EV system to be modified (e.g. a brake system for an EV with regenerative braking incorporated to its EV system) then that modification or change to a component is prohibited.

#### 3. VEHICLE SIGNS

- 7. Each compulsory event sponsor and event promotor decal, including numbers, as supplied by the event promoter must be placed on the vehicle as per instructions provided, by the event promoter. A vehicle found to be on track without each compulsory decal may be excluded from results.
- 8. Other than the event tyre supplier, no signage or livery of any tyre company larger than 500mm long by 200mm high and no more than four individual signs per vehicle is to be displayed on any competing vehicle.

#### 4. GRANDFATHER CLAUSE

9. In certain and restricted circumstances the event promoter may allow a vehicle of significant WTAC competition history to compete under the previous WTAC regulations. This will be at the sole discretion of the event promoter and any vehicle approved may be subject to a penalty as determined by the event promoter. This penalty may include the addition of weight over the minimum required, a tyre restriction or other penalty as determined and advised by the event promoter.

### SAFETY REGULATIONS

#### 1. DRIVER SAFETY APPAREL

- 1.1 As a minimum, each driver is required to wear the following which must be presented for inspection at pre-event scrutiny:
  - (a) a Helmet complying with the requirements for a National Speed Event and the use of a Frontal Head Restraint in accordance with MOTORSPORT AUSTRALIA Manual; Technical Appendix Schedule D. If using a Frontal Head Restraint (FHR), then the helmet must be compliant for use of a FHR;
  - (b) a Frontal Head Restraint (FHR) in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix Schedule D.
  - (c) footwear, socks and gloves each complaint with FIA 8856-2000 or 8856-2018 standard; and
  - (d) in an open car, goggles or a visor with a lens material other than glass to a minimum of AS1609-1981 standard are mandatory.

#### 2. APPAREL FOR WTAC TUNER CLASS

- 2.1 For WTAC Tuner Class, in addition to Article 1 Driver Safety Apparel, as a minimum each driver shall be required to wear the following which may be inspected at any time during the event:
  - (a) non-flammable clothing extending from neck to wrist to ankles (apparel of nylon or similar material is forbidden).

#### 2.2 The following is highly recommended for Tuner Class:

(a) The use of apparel, such as a Race suit, underwear, balaclava etc. of a higher standard.

#### 3. VEHICLE SAFETY

## Each vehicle must comply, as a minimum, with MOTORSPORT AUSTRALIA Manual; Technical Appendix Schedule A and B. The following is also required for WTAC Tuner Class:

(a) a minimum of one (1) hand held fire extinguisher with a minimum capacity of 900g, compliant with MOTORSPORT AUSTRALIA Manual; Technical Appendix - Schedule H, with a minimum capacity of 900g.

It is **HIGHLY RECOMMENDED** to fit an on-board and plumbed in fire extinguisher system (fire bomb) of a minimum of 2.4litre capacity and recommended to comply with the FIA requirements;

- (b) a convertible type vehicle must be equipped with a hard top or a roll cage that complies with MOTORSPORT AUSTRALIA regulations, and/or meets the approval of the Chief Scrutineer;
- (c) a minimum of a 5/6 point Safety Harness in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix Schedule I;
- (d) a seat for the driver that as a minimum is suited to the use and fitment of a 5/6 point Safety Harness. The use of a motorsport seat compliant with FIA standard 8855-1999 or 8855-2021 or 8862-2009 as a minimum, is highly recommended;
- (e) a battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine, is highly recommended;
- (f) original brake lights fitted which must operate when the brake is applied; and
- (g) be fitted with a minimum of two functional rear vison mirrors.
- (h) The use of any fluid coating on any bodywork (i.e. aerodynamic effect identifying fluid) is prohibited.

NOTE: The Motorsport Australia Technical Appendix is available online at: <u>https://www.motorsport.org.au/regulations/manual/technical-appendix</u>

WTAC Competitors are reminded to check the Technical Appendix for updates.

#### 4. ROLLOVER PROTECTION

Each vehicle must be fitted as a minimum with a Type 2 Safety Cage (half cage) in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix – Schedule J.

#### 5. PRE EVENT SCRUTINY REQUIREMENTS

- 5.1 Each vehicle must present for scrutiny in a clean, tidy and ready to start condition. Scrutiny must be completed before the vehicle shall be permitted to take part in the competition or an on-track activity.
- 5.2 Each vehicle that holds a MOTORSPORT AUSTRALIA Log Book must present the log book at scrutiny.
- 5.3 Following Scrutiny each vehicle will be fitted with a sticker confirming that the vehicle has passed scrutineering prior to it being able to compete.
- 5.4 The event promoter will be the sole judge of eligibility for each vehicle in each WTAC class, in conjunction with the Chief Scrutineer.
- 5.5 The following details further requirements for each vehicle, in accordance with the MOTORSPORT AUSTRALIA Manual:
  - (a) ensure all loose objects are removed from the vehicle;
  - (b) have each battery firmly clamped and the battery location identified by a blue triangle;
  - (c) be fitted with two separate fastening systems on any bonnet or other panel where the leading edge can be raised;
  - (d) be fitted with a visible towing point (capable of accepting a 40mm OD cylindrical test object) fitted forward of the front axle and rearward of the rear axle and capable of towing the automobile on a sealed surface with its wheels locked. Where a tow point is obscured, each tow point shall be marked with the word "TOW" of a contrasting colour marking the location of each tow point;
  - (e) have fitted an adhesive cover to any forward-facing glass components, save for the windscreen;
  - (f) have the engine compartment sealed completely from the cockpit;
  - (g) be constructed to minimize the entry of foreign matter into the driving compartment from the road or road wheels;
  - (h) have any propeller shaft and/or universal joint, if passing through the cockpit, fitted in a fixed casing;

- (i) be fitted with a device or devices that shall protect any longitudinal propeller shaft from striking the ground in the event of a component failure;
- (j) have any driving chain effectively guarded;
- (k) have any container within the cockpit which can hold more than 500mL of hot liquid (other than a series heater core) enclosed in a sealed compartment isolating it from the cockpit;
- (I) have each fuel tank vented externally to the bodywork;
- (m) be fitted with a bulkhead constructed from a flame and liquid-proof material. This bulkhead shall effectively seal the cockpit from any fuel tank, fuel system pumps/collectors or refuelling system. If the material is constructed from a polycarbonate material it shall be a minimum of 6mm thick;
- (n) if fitted with any crankcase breather discharging to the atmosphere, each breather be vented into a catch tank of minimum capacity of two litres for engines up to a swept volume of 2000cc or three litres for over a swept volume of 2000cc;
- (o) if fitted with any engine radiator coolant vent discharging to the atmosphere, each coolant vent be vented to a catch tank of a minimum capacity of one litre;
- (p) each window or windscreen fitted made from a material which is clear or, if tinted compliant with Australian Standards AS2080;
- (q) if fitted with rigid brake pipes have such pipes made of steel bundy tubing or equivalent. The installation must be such to protect the pipes against vibration and damage;
- (r) if fitted with any camera/video recorder attached to the vehicle it must be securely mounted and approved by the Chief Scrutineer. Suction cup mounts will not be permitted to be fitted to the external surfaces of the vehicle without the addition of a secondary tether secured to the vehicle;
- (s) be fitted with a return mechanism which, in the event of any throttle linkage failure, will close each throttle;
- (t) be fitted with a driver-operable reverse gear; and
- (u) be fitted with a steering wheel not incorporating any wood, unless such is the original component of the vehicle.

#### 6. DURING EVENT SCRUTINY

## Each vehicle may be required, at the request of a scrutineer, to undergo any further check or inspection at any time during the event, and:

- (a) any vehicle found to be leaking oil or fluids whilst competing will be suspended from the event until the Chief Scrutineer / Clerk of the Course is satisfied that action has been taken to rectify the leak;
- (b) any vehicle involved in any on track incident, including fluid leaks, component failure or any form of accident must have the vehicle checked and cleared by the Chief Scrutineer before it will be allowed to continue to compete in the event. Failure to do so may result in exclusion from the event;
- (c) should there be a further reoccurrence of any on track incident whilst competing then that vehicle will be deemed in breach of the regulations and may be applied a further penalty that may include exclusion from the event.
- (d) each tyre for use must be marked and recorded for each vehicle before use in the WTAC competition by the appointed tyre scrutineer.

### PERMITTED VEHICLE MODIFICATIONS

## Each vehicle must be presented as per the OEM vehicle (see definitions) apart from the freedoms allowed in these regulations. FURTHER NOTE:

A vehicle that does not meet the regulations, requirements or definitions listed will need to be considered on a case-by-case basis. If your vehicle does not have shock towers, frame rails, or any other items listed or you are unclear (for example a vehicle which came equipped with push rod suspension) you must submit your vehicle modifications for approval prior to the event. Any approval granted will be at the discretion of the event promoter.

#### 1. BODY

- (a) Bonnet vents are allowed solely for the purpose of engine bay cooling and provided they do not change the shape of the bonnet. Where a bonnet is integrated with the front fenders the area that covers the complete front wheel and tyre must remain unmodified except where permitted for control tyre fitment (refer below).
- (b) Wheel arch modifications of OEM fenders to allow fitment of the control tyre are permitted.
- (c) Alternative materials are permitted for front and rear flares.
- (d) Wheel arch modifications of OEM fenders to allow fitment of the control tyre are permitted.
- (e) OEM fenders must be of original material however flare extensions are permitted to cover the control tyre.
- (f) Each wheel and tyre must be fitted so that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the automobile when viewed vertically from above, see Drawing 1.

#### Drawing 1:



- (g) The remainder of the vehicle body must remain as per OEM.
- (h) Headlight assembly must remain as per OEM and be fully operational.

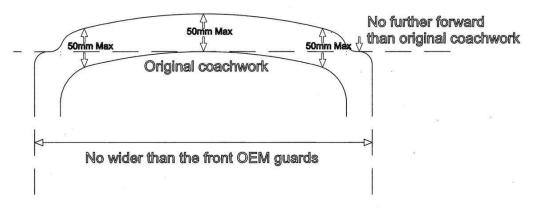
#### 3. MINIMUM VEHICLE WEIGHTS

Minimum weight will be deemed to include all liquid tanks at normal levels and with a maximum of 5 litres of fuel. All weights are without driver. All vehicle weights must be based on a "production vehicle status" and not a "factory special" with a minimum of 500 of the vehicle produced worldwide. Minimum weights for vehicles is detailed in Appendix A - Vehicle Weights Table. Minimum weight for Tuner Class will be determined by the manufacturer's original specifications for the lightest version of that particular model of vehicle, minus 1%.

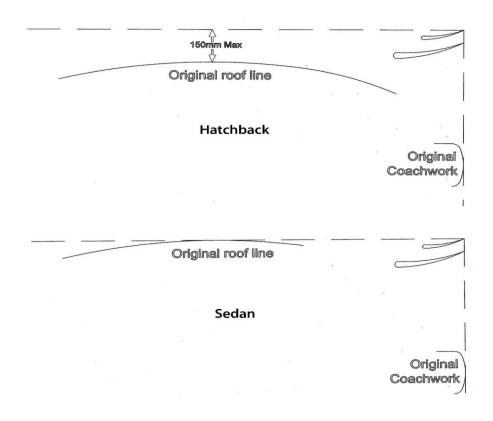
#### 4. AERODYNAMIC AIDS

- 4.1 Strength and method of aero component fastening will be checked thoroughly at scrutineering and if found to be unsuitable the vehicle will not be permitted to start until improvements are made to meet approval of the Chief Scrutineer.
- 4.2 Active aero including any hydraulically or electronically actuated or movable components are not permitted in any class.
- 4.3 All measurements have a tolerance of +/-3mm to allow for inaccuracy of hand measurement and thermal expansion.
- 4.4 The following is permitted for Tuner Class:
  - (a) A Front under tray/splitter which must follow completely the outline of the OEM front bar and may extend 50mm ahead of the vehicle OEM bodywork, no further rearward than the front axle and no wider than the original front guards, see Drawing 2.
  - (b) Canards are not permitted unless OEM.
  - (c) An OEM rear wing or an aftermarket rear wing with a single element may be used in an unmodified form. The width of the wing must not exceed the widest part of the body. Only one aftermarket wing per vehicle is permitted.
  - (d) The rear wing must be fitted as such to be over the body or boot in plan view. No portion of the wing can be higher than a horizontal line from the highest point of the roof sheet metal except in the case of a hatchback where the wing can be no higher than 150mm from the highest point of the wing to the roofline and must be on the rear portion of the roof.
  - (e) No part of the rear wing may not extend any further rearwards than the most rearward point of the rear bumper, see Drawing 3.
  - (f) Aftermarket side mirrors are permitted.

#### Drawing 2:



#### Drawing 3:



#### 5. ENGINE

- 5.1 Each vehicle must use a Commercial Fuel, E85 or Unleaded Racing Fuel in accordance with MOTORSPORT AUSTRALIA Manual; Technical Appendix Schedule G.
- 5.2 Engine changes during the event are permitted subject to the approval of the Chief Scrutineer.

#### 5.4 For Tuner Class:

- (a) Engine modifications are free except that the vehicle must retain the OEM engine for that make and model of vehicle.
- (b) Billet Blocks are not permitted.
- (c) The use of a turbocharger or supercharger as an addition to an OEM engine is permitted.

#### 6. COOLING SYSTEM

- (a) Each cooling system hose and clamping system may be replaced with an alternate hose, pipe and/or clamping system.
- (b) The engine coolant radiator may be replaced with an alternate radiator of free design and size in accordance with the following:
  - (1) A replacement radiator shall be fitted in the same location.

- (c) A turbocharger/supercharger intercooler may be replaced or fitted of free design. Each intercooler must be fitted within the vehicles OEM bodywork. It is permitted to modify the bodywork only for the addition of fasteners and for the passage of intercooler pipe work and/or hoses only within the location of the pipework and/or hoses.
- (d) It is permitted to add an oil cooler for the engine, and/or transmission/differential and/or a power steering fluid cooler. The location of an oil cooler is free provided each oil cooler is fitted within the original bodywork. It is permitted to modify the bodywork only for the addition of fasteners and for the passage of oil cooler pipe work and/or hoses only within the location of the oil cooler pipework and/or hoses.
- (e) Additional ducting for cooling systems may be fitted provided no modification is undertaken to the original bodywork, save for the addition of fasteners for duct mounting. Any additional ducting must be contained within the bodywork.

#### 7. FUEL SYSTEM

- 7.1 All fuel systems must comply with all safety regulations required in these regulations, including those specific to the protection of the cockpit and driver from fuel system components.
  - (a) Fuel pumps, fuel regulators and fuel lines are free.
  - (b) One additional tank may be installed with a maximum capacity of 5 litres.
  - (c) Fuel tank foam and internal baffling of fuel tank permitted.

#### 8. ELECTRICAL SYSTEM

- (a) Replacement Engine Control Modules permitted.
- (b) Modification of the OEM wiring harness to fit non factory ECU permitted.

#### 9. EXHAUST

- 9.1 The complete exhaust system for Tuner Class may be modified or replaced in accordance with the following:
  - (a) It must comply with 95db @ 30m noise restrictions.
  - (b) The exhaust must exit within 100mm of the original location and shall not protrude more than 100mm beyond the rear most portion of the bodywork.

#### 10. TRANSMISSION, DIFFERENTIAL AND DRIVELINE

- (a) Clutch/s and flywheel/flex plate are free.
- (b) Transmission and differential must use original housing.
- (c) Internal components of transmission and differential are free.
- (d) Automatic or DSG transmissions permitted provided it is an option by the OEM for that model.
- (e) Transmission gear change operation is per OEM.

#### 11. SUSPENSION

- 11.1 Each measurement will have a tolerance of +/-3mm to allow for inaccuracy of hand measurement and thermal expansion.
- 11.2 Minimum ride height for Tuner Class is 80mm: Each fully sprung part of the vehicle, except for the exhaust system, must be at least the specified height above the ground when measured at any point within the wheelbase. The vehicle ride height will be measured without the driver and tyre pressures at a minimum of 20psi.

#### 11.3 For Tuner Class:

(a) Each spring and damper/shock absorber may be replaced however the number of each component per vehicle must remain as OEM.

- (b) Each suspension bush is free.
- (c) Each sway bar is free.
- (d) Aftermarket uprights and subframes not permitted.

#### 12. BRAKES

- 12.1 With the exception of computer controlled diagonal or transverse braking systems, which are not permitted in any class unless originally fitted, the complete braking system is free except for:
  - (a) Original mounting points must be used.
  - (b) Aftermarket ABS is not permitted.

#### 13. TYRES

#### 13.1 Tyre restrictions will apply to all competition classes as follows:

- (a) Each tyre must be marked by the organisers at scrutineering.
- (b) The use of any tyre softening chemical or treatment on tyres is strictly prohibited and will result in immediate exclusion from the event.
- (c) Random tyre checking will be conducted throughout the event, failure to comply will result in a penalty up to exclusion.
- (d) Tyre sizes are defined by width(mm)/aspect ratio(profile)/diameter(inch).

#### 13.2 Tyres for Tuner:

- (a) Must use Yokohama Advan Neova AD09 tyre.
- (b) There is a limit of six (6) tyres that may be used throughout the event.
- (c) Each tyre on a four (4) wheel drive vehicle must be no wider than 265 unless specified larger by the OEM for that particular vehicle in which case the tyre must match the OEM size specification.
- (d) Each tyre on a two (2) wheel drive vehicle must be no wider than 295 unless specified larger by the OEM in which case the tyre must match the OEM specification.
- (e) If the tyre is not available in the Advan size range, then the vehicle must use the OEM specification tyre or a similar tyre deemed appropriate which must be checked and approved by the organisers prior to competing.
- (f) Any vehicles over 1800kg may use up to a 325 tyre.

#### 14. WHEELS

- (a) Each wheel is free and size is unrestricted but must be suited to the tyre size used.
- (b) Each wheel must fit under the OEM body.

#### 15. INTERIOR

Interior is free save for the following exceptions:

- (a) Local modification to the interior for fitment of a roll cage is allowed.
- (b) Complete original dash must be retained; additional switches and gauges may be added.
- (c) Original door trims must be retained.
- (d) After market steering wheels are permitted.

#### 16. VEHICLE SUPERCAR LIST (INELIGIBLE FOR TUNER CLASS):

Audi R8 Ferrari - All Lamborghini - All Nissan GTR (R35) Porsche - All except 924/928/944 Chevrolet C6 Zo6, ZR1 Corvette Dodge Viper Aston Martin – All Lotus - All Mercedes SLS or any Black series McLaren - All Lexus LFA TVR - All Ford GT

Or any vehicle deemed a Hyper Car or Supercar at the promotor's discretion.

#### 17. DEFINITIONS

- (a) Alternative Materials Materials of suitable and acceptable strength and construction for use in motor vehicle parts and panels.
- (b) **Body work** Refers to the exterior body of a motor vehicle as the entirely suspended part of the motor vehicle licked by the airstream.
- (c) MOTORSPORT AUSTRALIA Confederation of Australian Motor Sport trading as Motorsport Australia
- (d) MOTORSPORT AUSTRALIA Manual As currently published by MOTORSPORT AUSTRALIA.
- (e) Chassis Rail Box section part of the vehicle floor structure that extends from the front of the vehicle to rear section.
- (f) **Dashboard** A dashboard (also called dash, instrument panel, or fascia) is a control panel placed in front of the driver in a vehicle, housing instrumentation and controls for operation of the vehicle.
- (g) Drive Types:
  - (i) **4WD:** Four wheel drive, includes all wheel drive, any vehicle that has drive to both the front and rear wheels.
  - (ii) **RWD**: Rear wheel drive, any vehicle with drive only to the rear wheels.
  - (iii) **FWD:** Front wheel drive, any vehicle with drive only to the front wheels.
- (h) Engine Control Module Any electronic device that controls engine operation.

- (i) **Firewall** A firewall is a fire proof barrier that separates the engine from the driver and passengers.
- (j) Frame Rails Two primary boxed sections running fore to aft on the vehicle.
- (k) **OEM** Original Equipment Manufacture is the original manufacture of the vehicle and/or any component which is the one originally fitted when manufactured.
- (I) Recognised Model A model which the organisers, at their sole discretion, recognise as a model of vehicle produced by a manufacturer to a given specification.
- (m) Standard Specification As originally supplied from the manufacturer, including allowable production tolerances.
- (n) Shock Towers The original manufacturer upper mounting points for the suspension shock absorber (i.e. Macpherson Strut)
- (0) Sub Frame A structural component of a vehicle that uses an additional separate structure to carry certain components, such as the engine, drivetrain, or suspension. The sub frame is bolted to the original integral monocoque, chassis or frame rails of the vehicle and may be equipped with rubber bushings to dampen vibration.
- (p) Suspension Pick-Up Point A bracket, lug or similar mechanical component attached to, or integral with, the fully sprung part of a vehicle, to which is attached a partially unsprung suspension component, and about which such suspension component moves through an arc or solid angle consequential to normal suspension travel.

#### (q) Suspension Upright and Hub:

- (i) **Upright** the component that carries the hub and is connected directly to the suspension/steering control arms. The upright may carry brake components or other components as necessary.
- (ii) **Hub** the component which directly attaches to the wheel and is carried by the upright, via a bearing assembly. The hub, and bearing/s, may be integral to the upright or fixed to the upright and may carry the drive to the wheel.
- (r) Vehicle A land vehicle propelled by its own means, running on at least four wheels not aligned, which are designed to be in contact with the ground. The steering must be controlled by at least two of the wheels, and the propulsion by at least two of the wheels.
- (s) **WTAC** World Time Attack Challenge.

#### 17.1 PROFESSIONAL DRIVERS

A professional driver is someone who has been paid a salary or income to drive in or recognised as having won a World or National Championship/Series motorsport category in Australia or overseas as deemed by Superlap Australia:

These may include:

- (i) V8 Supercar
- (ii) TCR
- (iii) GT Racing
- (iv) WEC Including LMP1, LMP2, LM GTE
- (v) Super GT
- (vi) Porsche Supercup
- (vii) IMSA
- (viii) Indy Car
- (ix) Nascar
- (x) Formula 1 or Formula 2
- (xi) International level Formula 3
- (xii) WRC

And any other motorsport competition as determined by Superlap.

If you have received a salary or income in any of these categories for driving duties in a competition, you are ineligible to compete in any WTAC class that does not allow Pro Drivers

A "self-funded" drive in any of these categories does not immediately mean you are ineligible; you will need to provide evidence of such if requested by the promotor that you have not drawn "direct income" from a driving activity in actual competition thereby indicating a "professional driver".

WTAC aims to attract the highest level of driver across all classes and therefore driver trainers and persons competing in other forms of motorsport who have NOT received income from actual competition are NOT deemed professional drivers for the purpose of entry into WTAC.