

2012 Mondello Time Attack “PRO-SERIES” Championship 2012 Technical Regulations (PSTF-2012)

Competitors entering events in the Mondello Park Time Attack Championship must adhere to the technical regulations of the Championship as defined below. These regulations have been formulated to ensure that all competitor’s equipment and vehicles are maintained to a high standard and comply with Motorsport safety requirements to a level appropriate to this discipline of the sport. All points listed will be policed and checked in safety scrutineering prior to each event. Any vehicle or driver failing to comply with the regulations can be excluded from the event as per section 14 of the Sporting Regulations-TASF2012-1. These rules and regulations apply to all Mondello Time Attack Pro Series rounds and events.

The ethos of the Pro Class is to allow significant modifications to the vehicles, but competitors should be mindful that if it doesn’t specifically say in these regulations that something is permitted, it should be assumed it is not! If you are unsure if your vehicle meets these requirements then it is your responsibility to clarify any issue prior to an event. Please address technical questions directly to one of Mondello Park’s Time Attack Technical & Safety Scrutineers, or the Technical Advisor who can be contacted as follows;

Technical & Safety Scrutineers (Neil Wilson: 086 2769037 or Jimmy Wolverson: 087 7957148)

Championship Coordinator & Technical Advisor:(Keith Quille: 085 7153391 / timeattack@mondellopark.ie)

Please note that any vehicle not conforming to the technical regulations will result in a penalty for the competitor in question as per section 14 of the Championship Sporting Regulations (TASF2012-1). Mondello Park reserves the right to amend these regulations as necessary and any such amendments will be notified to registered competitors in bulletin format and posted on the Time Attack section of the Mondello Park website.

1. DEFINITIONS: Where these regulations refer to the passenger compartment, or driver compartment, this refers to the whole of the interior of the vehicle – including the rear passenger area.

2.0. ELIGIBLE VEHICLES:

2.1. Vehicles must be constructed by a major vehicle manufacturer and be currently or previously available as a factory OEM vehicle. No tube frame/ space frame vehicles or tube frame chassis extensions are permissible.

2.2. Vehicles of any manufacturer are permitted, as long as they meet conditions **2.1** and retain the original unmodified chassis legs, floor pan & bulk head. Sub Frames/Cross Members are free but must comply with the suspension pick up point regulation **6.4**. FWD, RWD or 4WD drivelines are permitted. The boot floor and the passenger compartment metal floor must remain intact and complete with the exception that the rear spare wheel well may be replaced by a flat metal sheet of minimum thickness 1mm and must be secured down by either welding, rivet or bolting. This must also be sealed to prevent liquids passing through. The bulk head may be only modified in the case to allow a large tunnel on RWD and 4WD vehicles. This may only be done for fitment of a different transmission and not be an advantage in weight saving.

2.3. It is permitted to fit additional triangulation and bracing of suspension turret/mounting points, as long as the modifications do not alter the appearance of the vehicle.

2.4. Vehicles must retain their original VIN (chassis number) and original plate (when fitted), which must be clearly visible and readable. The VIN must be valid for the chassis it is attached to.

2.5. Convertible vehicles are allowed but the additional following requirements must be adhered to:

- (i) No dash dodger roll cages allowed.
- (ii) X bar in the roof of the roll cage
- (iii) FIA seat securely mounted (no adjustable seat rails)
- (iv) Wrist straps (must not allow arms to move outside of roll cage fitment)

(v) In the case of a glass roof / sunroof safety film must be added to the glass.

2.6. Vehicles appearance must remain similar to that of the original vehicle.

3.0. PRO- SERIES CLASSES:

3.1. There are two sub-classes of cars within the Pro-Series determined by the drive train and these are as follows;

3.2. Class C: 4wd cars

3.3. Class D: 2wd cars

4.0. ENGINE, TRANSMISSION & DRIVETRAIN:

4.1. Engine / Transmissions and drive trains are free but must remain in the original layout and there is no restriction on maximum power. The engine mounts can be moved up to 25mm from the original mounting points. The engine may be located anywhere in the original compartment as long as the above mounting points are as described and the engine is in the same orientation as the original (i.e. transverse stays transverse etc). The engine must be from the same vehicle manufacturer.

4.2. Use of power aids, such as Turbo/s and/or Superchargers, is permitted but no Nitrous Oxide systems are allowed.

4.3. Catch tanks for oil and water must be installed and securely fastened with the contents easily visible on inspection.

4.4. The throttle mechanism must be in good condition and have an effective return spring. It is recommended to fit an additional return spring to the throttle mechanism.

4.5. Vehicles must retain an exhaust system, complete with a silencer, which must be capable of passing a static 105db noise test, with the engine running at 2/3rd of the maximum rpm of the engine. Mondello Park may introduce a drive by noise limit if deemed necessary.

4.6. Dry sump and pressurised systems are permitted but all reservoirs/tanks must be fire-walled and all hoses/pipes must be of the braided variety.

5.0. FUEL & FUEL SYSTEM

5.1. Vehicles must run on unleaded fuel. It is permitted to use a higher octane rated fuel, or raise the octane rating of pump fuel by the addition of octane booster.

5.2. All fuel lines must be securely fastened at intervals on no more than 100mm throughout its length.

5.3. No part of the fuel system, other than the fuel line may be in the drivers compartment. The fuel-line can be run through the car, but it must be a continuous (unbroken) metal pipe or braided hose and must be fitted on the passenger side of the vehicle. All other parts of the fuel system must have a firewall between the driver and equipment. The firewall must be sealed to prevent passage of fluids and fire.

5.4. All fuel lines and filling devices must be clean and sealed after vehicles are fuelled to ensure no fuel can escape.

5.5. The original OEM fuel tank is permitted, but it is also permissible to change this to an approved racing fuel tank. Dry break and bobble breathing systems from recognised manufacturers are permitted.

5.6. The fuel tank filler neck should have a spillage collector that drains to the outside of the car.

6.0. SUSPENSION, STEERING & BRAKES

6.1. All suspension parts and wheel bearings must be in good condition.

6.2. Shocks, springs and suspension bushings are free.

6.3. It is permitted to replace suspension arms and wishbones, but where any load bearing arm is replaced the component used should be constructed to a given standard. In all cases the Scrutineers must be advised and they will have final sign off.

6.4. It is permitted to change the suspension mounting points. But the mounting points may be no further than 25mm from the original.

6.5. All steering components are free

6.6. Steering wheel is free but must be of continuous construction. No C shaped steering wheels are permitted.

6.7. The vehicle steering lock mechanism must be deactivated.

6.8. All brakes components are free with the exception of carbon discs and/or pads which may not be used.

6.9. The brake systems must be in good serviceable condition and no leaks of any kind are permitted.

6.10. An effective handbrake must be present, but the operating mechanism is free.

7.0. TYRES & WHEELS

7.1. Mondello Park reserves the right to introduce a "Control Tyre" for the Championship. In the absence of a Control Tyre, tyres used must be readily available for road use in their country of origin/supply and be readily available for sale over the counter as a 'walk-in/general public' purchaser. Specific 'Race/Rally/Competition' tyres including slicks and cut slicks are not allowed. Tyres marked "for racing/rallying or competition use", or "not for highway use are not permitted". Tyres displaying signs of tampered sidewall markings may be deemed illegal. The final decision rests with the Organisers. Tyres must also carry the 'E' mark symbol.

7.2. No tampering with the tyre surface or buffing of tyres is permitted.

7.3. Tyre Warmers are not permitted.

7.4. Wheel size and construction is free, but when fitted the complete wheel/tyre assembly should not protrude beyond the bodywork of the car.

7.5. No aluminium wheel studs are allowed

8.0. BODYWORK, WINDOWS & INTERIOR

8.1. It is permitted to replace original outer bolt off body panels with GRP and/or Carbon Fibre materials, but the replacement panels must mirror the originals and not compromise the structural rigidity of the vehicle. If in doubt the Scrutineers should be consulted. If the panel does not bolt off it may not be replaced. It can however have additions placed over the original panels. Cutting of the wheel arches and rear quarters may be carried out to allow fitment of larger wheels and tyres but must not be excessive to allow an advantage due to weight loss.

8.2. With the exception of the front windscreen which must be laminated glass, all other windows may be replaced with lexan materials. Where lexan is used the window must be held in place using screws and/or bolts.

8.3. It is permitted to remove the dashboard and replace it with a bespoke design dash.

8.4. It is permitted to modify, lighten or exchange the doors for GRP and/or Carbon Fibre units. In such a scenario regulation 11.6 applies.

8.5. Any additional equipment inside or outside the vehicle including electrical equipment must be securely mounted in place. In car cameras can only be used after permission has been granted by Mondello Park and cameras must be mounted securely. Any such additional equipment must be fitted before scrutineering.

8.6. All doors, boot lids, bonnets and exterior openings must be serviceable from the outside, door handles and locking systems must be operational at all times from the exterior of the vehicle.

8.7. It is permitted to fit additional aerodynamic devices such as splitters and/or rear spoilers and these should not extend significantly, beyond the width of the original bodywork. Wheel arches may not extend more than 100mm past the original.

8.8. All bodywork must be secure and attached to the vehicle. Bonnets and boot lids made of GRP and/or Carbon Fibre must have bonnet pins fitted to secure them in position. These pins are in addition to/or replacing the standard catch.

8.9. The drivers side window can be lowered, but by no more than 2". The passenger window can be lowered.

9.0. ELECTRICAL SYSTEM

9.1. Headlights, indicators, brake and hazard lights and front wipers must be fitted and in good working condition. Headlight glass must be protected against breakage by tape or security film.

9.2. Vehicles must have battery isolators installed, which must be capable of being activated in the driver's compartment, by the driver when normally seated. In addition, the isolator must be capable of being operated remotely from the front window splash panel (on the passenger side of a RHD Car) and clearly marked with an official sticker.

9.3. Batteries must be securely mounted and all connections must be in a serviceable and clean condition. Positive terminals should be insulated. Negative leads should be braided or have yellow identifying marking. Batteries housed in the drivers compartment, must be securely mounted in a sealed and insulated box.

10.0. FIREWALLS

10.1. There must be a firewall between the engine bay and the passenger compartment capable of preventing the passage of fire or liquid. Larger holes should be covered by metal plates or fibreglass. Smaller holes can be fitted with bolts, rivets or fireproof mastic. If the standard bulkhead has no unfilled holes in it, then it is deemed a satisfactory firewall.

10.2. If the boot contains any of the fuel system then it must be separated from the passenger compartment with a firewall

11. VEHICLE & DRIVER SAFETY

11.1. ROLL CAGE

11.2. A minimum six point roll cage is mandatory.

11.3. Bolt-in or fully welded Cages must be manufactured from seamless T45 or cold drawn steel tubing. All cages regardless of material should be constructed from 45x2.5mm, 50x2mm tube minimum. A manufacturing tolerance of 0.1mm in tube diameter will be allowed.

11.4. All roll cages must be either welded or bolted to the body of the vehicle. Each body/tube securing plate should be of the following specifications (for bolt in cages a plate either side of the body is required): 5 square inch (13cm) plate with a minimum 3mm thickness. A minimum of 3 bolts per plate is required on the front and main hoops. The rear plates can have a minimum of 2 bolts. All bolts must be high tensile, ISO 8.8 or higher and a minimum bolt size of 8mm. Roll Cages must be constructed to the design in (Fig A) as a minimum. The front cage uprights may not be bent in towards the driver to avoid the dashboard (see Fig B).

11.5. Parts of the roll cage surrounding the driver's helmet should be fitted with shock absorbent padding.

11.6. Cars with doors modified, lightened and/or replaced with GRP / Carbon Fibre, must have an X bar, or two door bars installed as part of their roll cage layout as illustrated in Fig C and Fig D below.

11.7. Cars that retain the original door with OEM side impact protection require only 1 side impact protection bar as per Fig A below.

Fig A.

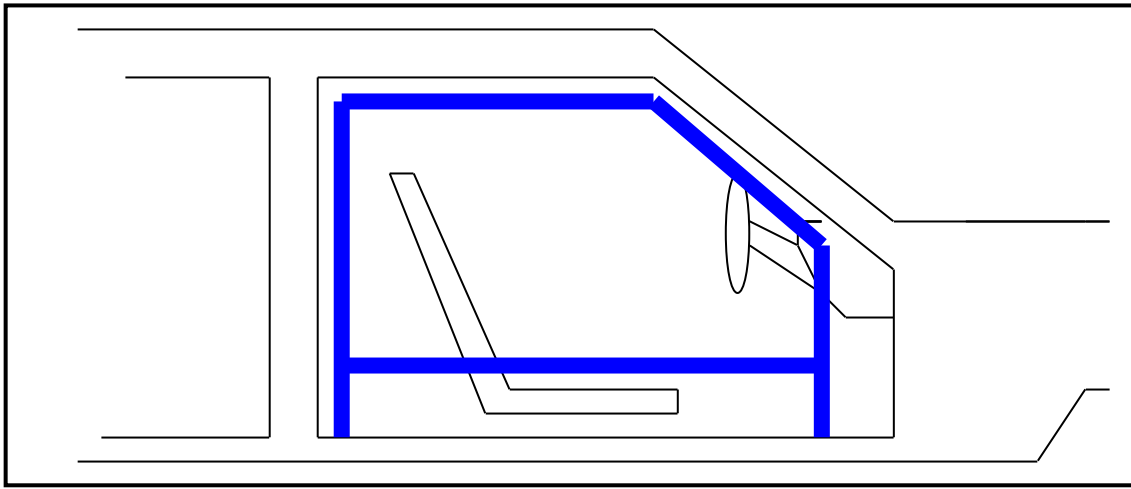


Fig B.

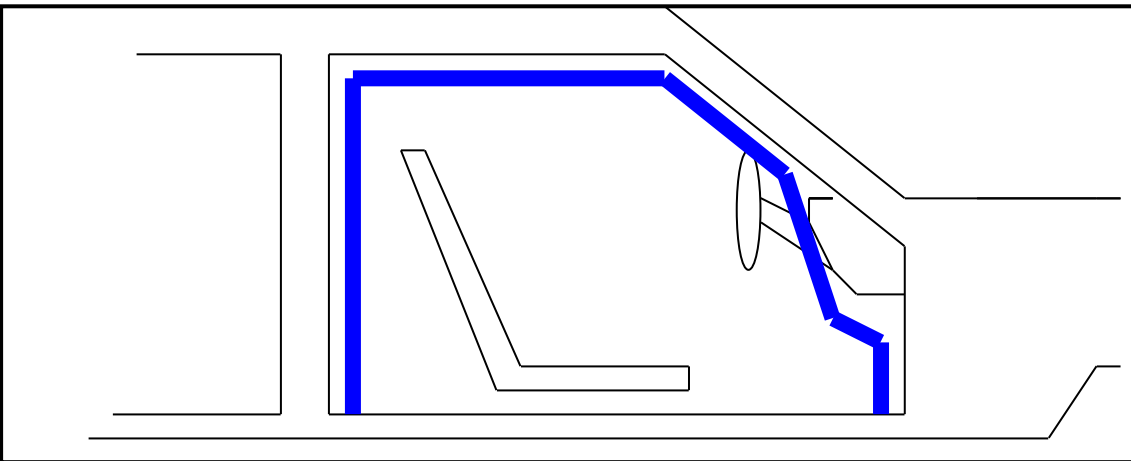


Fig C.

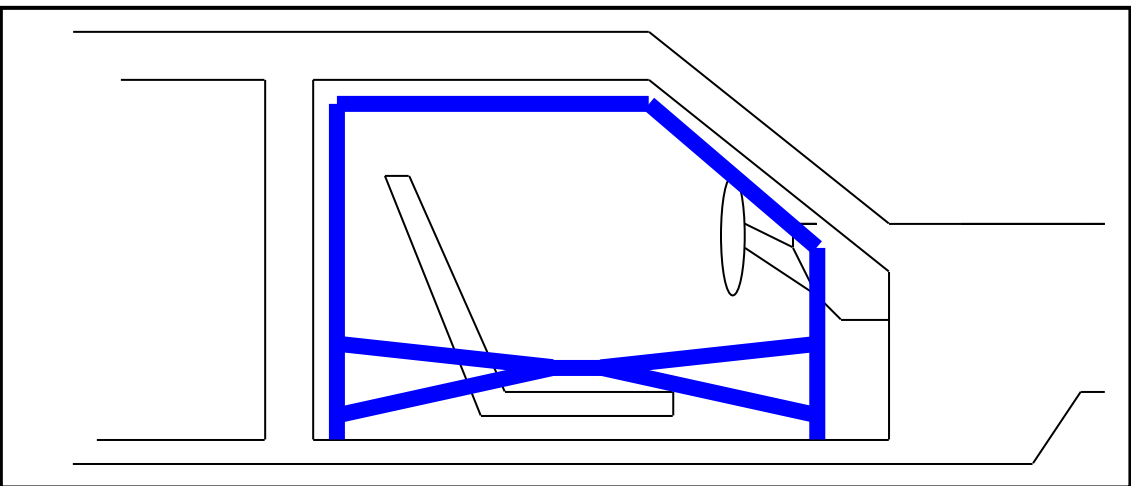
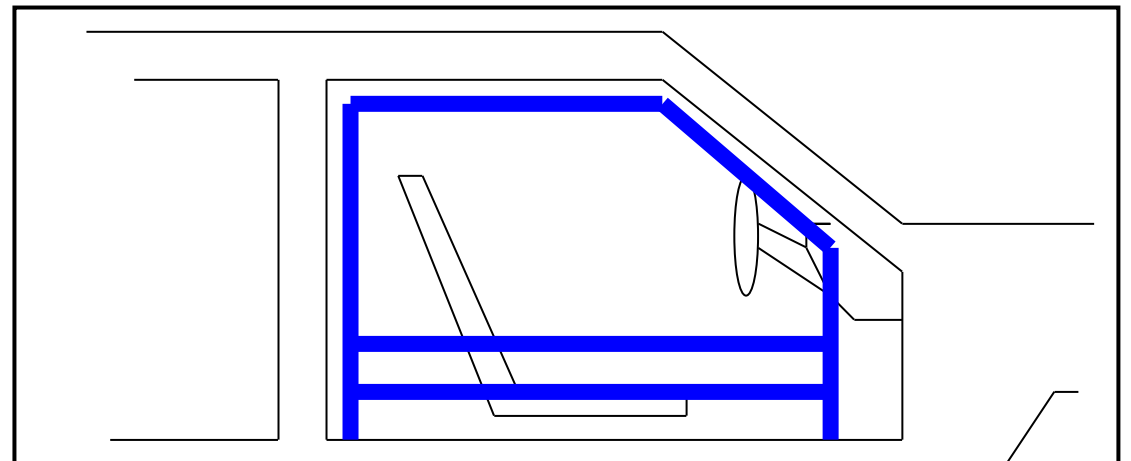


Fig D



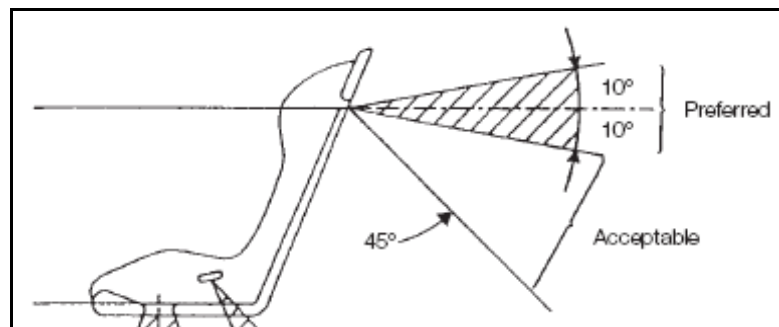
Please note: The drawings above are for indication purposes only. Any roll cage outside of the parameters as listed in 11.2 – 11.7 can only be used if it has been approved by one of the Time Attack Technical & Safety Scrutineers directly, whose decision shall be final.

12.0. DRIVERS SEAT & SAFETY HARNESS

12.1. Cars must have an FIA approved racing seat for the driver which will be subject to a visual inspection at each event.

12.2. A minimum of four fixing point FIA approved safety harnesses with 3inch shoulder straps must be used. This must be securely attached to the vehicles body and/or roll cage behind the drivers seat. The straps from the shoulders should be mounted as near to horizontal as possible (see Fig E. below) – not on the floor immediately behind the seat and fixed using a minimum of four 8mm bolts (ISO 8.8 or better) and 5 square inch spreader plates. The harness will be subject to examination during safety scrutiny at each event.

Fig E.



13.0. FIRE EXTINGUISHERS

13.1. Vehicles must have a serviceable hand held or a plumbed in fire extinguisher system. This should be of a minimum capacity of 2.25 litres each. Contents permissible are; AFFF, Zero 2000 / Zero 360, Vero 3, Powder or DuPont FE-36.

13.2. The plumbed in system must be securely mounted on the floor and be capable of being activated by the driver, when normally seated. Fire heads must be a minimum of one inside the driver's compartment and one in the engine bay, directed at the engine – at the area most likely to cause fire.

13.3. A hand held Fire Extinguisher must be securely mounted and be capable of withstanding a significant deceleration. Two quick-release metal straps should hold the extinguisher to the floor, in a position accessible by the driver when seated in the normal position.

13.4. In either a hand held or plumbed in scenario, the system must be "armed" (switch on and safety pin removed) at all times before going on circuit.

14.0. COMPETITOR CLOTHING

14.1. Drivers must wear a correctly fitting crash helmets bearing one of the following standards: FIA8860-2004, SNELL SA2005, SNELL SA2000, BS Standard helmet either Blue or Red label. NO other helmet standard is permitted. Helmet can be open or full face although full face is recommended. Helmets must be unmarked and in good condition and will be subject to examination at safety scrutiny.

14.2. Drivers must wear racing overalls conforming to one of the following standards: FIA1986, FIA8856-2000, EN533:1995 index 3, BSEN533 or BS6249 Part 1 index A or B (NOT index C). Competitors are recommended to also wear fire proof undergarments, but this is not compulsory. Under no circumstances should any competitor wear any man made fibre garments under their race suit, as these will melt to your skin in a fire. These will be subject to examination during safety scrutiny at each event.

14.3. Racing boots, gloves and balaclava are also mandatory and will be subject to examination during safety scrutiny at each event.

15.0. SUPPLEMENTARY VEHICLE SAFETY

15.1. No fluid leaks of any kind from the vehicle are permitted; any such leaks will render the car void for the competition.

15.2. All vehicles must be equipped with towing eyes, one at the front and one at the rear and these must be installed prior to any the vehicle going out on circuit. They should be brightly coloured and clearly visible and have an arrow or 'tow' decal on the car, directing sight to the towing eye.

15.3. No audio communication system is permitted between pits to car, either by radio communications or mobile phone.

15.4. Rear view and side mirrors must remain.

15.5. General vehicle appearance and roadworthiness must be in a good serviceable condition. Mondello Park reserve the right to refuse any vehicle a competition entry if this is in question.

16.0. SCRUTINEERING

16.1. Each vehicle will attend safety scrutiny at each round of the competition. The scrutiny time will be based on the running schedule of each vehicle and will be advised to competitors in the Final Instructions for the event.

16.2. Scrutiny takes place in the scrutiny bay and the driver and vehicle must attend at the appointed time as directed in the Final Instructions. The competitor is responsible for ensuring the car fully complies with the regulations. It must be noted that passing safety scrutiny is not a guarantee that the car is fault free. The driver must also bring their helmet and safety equipment to scrutiny for inspection at the same time.

16.3. Each car must have its own transponder for triggering the timing system. The transponder required is an AMB TX 260 unit, either battery powered or hard wired and these are available from MST Timing in the UK (www.msttiming.com or 0044 1827 68010). Mondello Park will have a small number of Transponders for hire at events and these must be booked in advance.

16.4. On successful completion of scrutiny the competitor will be issued with a signed scrutiny sheet, which they must then return to the event secretary's office. Once signed on, the event secretary will issue an official passed scrutiny sticker which should be attached to driver's side rear window (RHD Car). Pit lane officials will only allow cars with the appropriate stickers out on circuit.

16.5. In the event of an accident / damage to the vehicle, the organisers reserve the right to re-inspect the vehicle before it is allowed back out on circuit.