

Appendix 42

ASK Supercar Technical Regulations

1. Introduction

- The following Technical regulations are set out in accordance with the specified format. It should be clearly understood that if the following does not clearly specify that you can do it you should work on the principle that you cannot.

2. General Description

- The ASK Racing Supercar Championship is for competitors participating in vehicles as designed by SHP Engineering Limited and built expressly to comply with these Championship Regulations.

3. Safety Requirements

- **3.1** As per current Motorsport Ireland Yearbook, Appendix 2

4. General technical requirements & exceptions

- **4.1** Fuel tank will be free but must comply with M.I/F.I.A safety regulations.
- **4.2** Batteries must be confined to within the wheel base of the vehicle.
- **4.3** An alternator must be fitted to the engine and must be operational at all times.
- **4.4** Instrumentation and data logging systems are acceptable including lap timers.
- **4.5** The car must be fitted with the Original working front headlights and indicator lamps as fitted by S.H.P on all cars. It must also be fitted with two working rear light clusters as fitted to S.H.P cars. The front lights and the rear lights must run on one switch, brake lights must be working. The rain light may be on the rear lamp cluster or inside the rear window.
- **4.6** The engines can be a 2.0 Ford Duratec ~~as supplied~~ to the Original T car series internal specification with cam upgrade kit approved by ASK Racing and Throttle bodies or Zetec as used in previous RT2000 or Supercar spec cars but cannot produce more than 240 B.H.P Measured at the flywheel on Westward Engineering Rolling road...
 - The engine and electronic control unit will be sealed and any tampering with seals or units will deem them to be illegal and will carry the

appropriate penalties, Exclusion and loss of all championship points for the competitor.

- The ECU should be mounted for easy access and examination, All ECU's are to be made available for random distribution at the request of the Eligibility Scrutineer, Class Organiser/Co-ordinator or Clerk of the Course.
- **4.7** Competitors and teams have to submit components and specification changes in writing to the eligibility scrutineer prior to them being used. They will or will not give authorisation as they see fit. The class scrutineer has the right at any time to exchange any part or item on the car that is of a controlled unit with a replacement. This will be done to check the authenticity or specification of the original item concerned. The parts or item may not be returned.

5. Chassis

- **5.1** The only chassis permitted to be used is that supplied under licence from SHP Engineering Ltd. The vehicle concept or design must not be changed in any way or form. No material may be added or removed. All relevant brackets must be retained in their original positions with no extension or adapters to allow for different applications. The brackets are to be used as originally intended.
- **5.2** A sump guard may be fitted under the sump only. It must be fitted tightly to the chassis rails and have no gaps. No aerodynamic devices may be fitted to the vehicle what so ever. This includes any areas under the line of the chassis rails.
- It is not permitted to drill or cut any type of holes into any parts of the chassis or bracketing systems nor any components that are supplied under contract by the licensed supplier for any reason especially lightening, acid dipping, bead and sand blasting of any component is not allowed.

6. Bodywork

- **6.1** The only body kits allowed are as per Original S.H.P T car or RT 2000/Supercar as supplied originally by S.H.P Engineering LTD or ASK Racing.
- **6.2** The body panels may not be bonded or modified in any way
- **6.3** Cooling ducts are fitted into the front panels. Radiator air duct Part no CR27. Front and rear brake cooling ducts are allowed using the original apertures provided in the original front bumper and rear side panel as supplied by S.H.P/ ASK racing. These are the only one allowed. No other ducts, apertures or holes are permitted in any other panels. It is permitted to fit openings in the windows for cooling and releasing air pressure within the car.

- **6.4** The rear wing and brackets must be fitted as supplied but additional holes may be drilled to facilitate adjustment.
- **6.5** At all times the presentation of the car must be to a high standard.
- **6.6** All cars must be fitted with towing eyes on the front and rear of the car which must not protrude outside the lines of the body panels, the towing eyes **MUST** be bright in colour and clearly defined. They must be connected to the main chassis and be of suitable strength to stand a full weight tow of the vehicle.

7. Engine/Gearbox mountings

- **7.1** The engines and gearbox mountings are fitted by the licence chassis constructor. These positions must be maintained.
- **7.2** Induction system
- Air filters type must be used at all times, no forced induction permitted but ducting cool air from the original grille intake is permitted.

8. Exhaust Systems

- Must exit at the rear of the car as per original design by S.H.P engineering ltd / ASK Racing and noise level must be below 105 db .

9. Suspensions

- **9.1** All suspension has to be used as supplied by the licensed chassis constructor. The suspension components, including axle configuration, pick up points, mounting brackets and the design of the parts cannot be modified in any way or form except for Rose joints which may be substituted for an exact copy but in a different material specification. Reproduction parts must not be used. Lock nuts and suspension rubber bushes must remain a standard size, rear suspension arm bushes part no. Powerflex PFR19-111 must be used. No Rose joint or metal bushes allowed. Rear sub frame camber and track eccentric bolts are permitted.
- **9.2** The only permitted shock absorbers are those supplied by S.H.P Engineering ltd or ASK Racing. A controlled unit built to supercar or T car specification These must not be re-valued, restroked, have the oil changed or be modified in any way or form.
- **9.3** The maximum front track width is 1760mm. The Maximum rear track width is 1725mm.

The total wheel base, centre to centre is 2413mm – this measurement is read from the side wall of the tyre at the point of contact to the ground.

10. Transmission

- **10.1** The only gearbox's permitted are the Quaife six speed sequential gearbox or the Drenth dg350 6 speed sequential but the ratios must be as listed below, Quaife sierra 5 speed manual type 9 with Ratios as per Original T car Regulations. The casing can be made of either aluminium or cast iron. The ratio specification is:
 - 1st 2.647 Type 9 1ST 2.390 to 1
 - 2nd 2.010 2ND 1.5406 to 1
 - 3rd 1.618 3RD 1.2148 to 1
 - 4th 1.337 4TH 1.1
 - 5th 1.151 5TH 0.8715
 - 6th 1.0 REVERSE no figures for reverse

Drenth dg350
Constant 1.042
1st 2.605
2nd 2.015
3rd 1.620
4th 1.354
5th 1.15
6th 1.0

The prop shaft must be one piece, steel type with a minimum of 2.5" diameter and appropriate universal joints to suit.

- **10.1** The clutch unit will come fitted to the control engine. This can be replaced with an uprated unit once it remains a single plate type and conforms to the dimensions of the original.
- **10.2** No other additional electronics may be fitted within the engine management system, which would facilitate the engine to operate traction control.

11. Drive

- **11.1** The only rear axle permitted is a 7 inch as fitted to a Ford Sierra. The axle must be located by the original links and pick ups. It is permitted to insert a removable section in the rear axle beam to facilitate propshaft removal. Limited slip differentials are permitted, but no drop gear type differentials are permitted. The permitted final drive ratio is 3.92:1 for RT/Supercars. The Diff ratio is free for T Cars with Ford Duratec 2.0 Engines and Manual Gearboxes.

- The material content and the sizes of the differential splines of the half shafts is free but must be a direct replacement not changing the original design or characterises of its operations.

12. Brakes

- **12.1** The only permitted brakes are as produced either T Car or Rt/Supercar .
Part Numbers:
 - Front brake calliper is Willwood 4 pot superlite
 - Rear brake calliper is Willwood dynalite or Willwood Powerlite
 - It is permitted to fit 10cm thick support brackets to the rear callipers.
 - Rear brake disc – Lockheed Part no BG 2376-Apex DSK 123. Solid disc or Replacement unit supplied by ASK Racing no lightening of the brake disc allowed.
- **12.2** The brake pads must be manufactured by Ferodo and Supplied by ASK Racing.
- **12.3** No form of handbrake is permitted on the vehicle.

13. Wheel/Steering

- **13.1** The only permitted wheels for the RT/Supercars are those manufactured by Compomotive Wheels and specifically designed. The part number is MO1570-D/MO1571-D and the Team Dynamics wheel supplied by ASK Racing.
- **13.2** The dimension of the Compomotive wheels are 7" wide by 15" Diameter

The dimensions for the Team Dynamics wheels are 7" or 8" wide by 15" diameter.

- **13.3** It is permitted to fit a wheel spacer to the rear wheels up to a 10mm in size.

13.4 Track

- The maximum track permitted is 1760mm on the front and 1725mm on the rear.

14. Steering

- The only steering system permitted is that supplied as original equipment, there may not be any additions made to it or any modifications other than shim spacers between the rack mounting blocks and the chassis mounting. The type of quick release steering wheel assembly is free and collapsible column spacers are acceptable.

- The fitting of steering wheels of different types, sizes, off sets is allowed as is collapsible column adaptation. Steering Column may be raised or lowered in car by means of spacers or shims.

15. Tyres

- **15.1** The maximum number of slick tyres allowed per season is ~~12~~ and only **four** for first event and a maximum of two new tyres per each subsequent event . Permitted tyres must be supplied by ASK Racing.
- **15.2** These may not be cut or altered in any way from that supplied by the manufacturer unless approved and controlled by ASK Racing, No tyre may be buffed, re-trimmed, faced or by any mechanical or hand held device what so ever. Tyre warmers, space heaters or any similar devices for heating or softening the tyre compound are not permitted at any time. The use of any chemical mixture that is placed in the vicinity of or applied to the tyre that would restructure the compound of the tyre is also prohibited.
- **15.3** Test tyres are limited to 4 tyres per season.
- **15.4** Each competitor is allowed to nominate 2 new tyres for each event. If a competitor does not participate in an event the tyre allocation for that event is lost. Any logged tyres are freed to be used when chosen. Please refer to Article 15.6 regarding the use of replacement tyres. A used tyre is defined as a tyre which has been nominated on a tyre nomination form at a previous round. For the first round this will be under the discretion of the Championship Coordinators or Scrutineers. All other tyres are deemed to be new tyres.
- **15.5** Each competitor must nominate, on the form provided by the class coordinator and the manufactures numbers of the tyres for use at the event. This form must be handed to the Scrutineers prior to the start of the first qualifying session.
- The nomination of tyres is specific to the driver. If the driver changes team, or cars in a team then he/she must use the tyres previously declared for his/her use, plus any new tyres up to the maximum permitted by these regulations.
- **15.6** The replacement of tyres is subject to the prior agreement of the Series Eligibility/Safety Scrutineer.

16 Weights

- **16.1** The minimum weight of an ask supercar is 965 kgs with driver.
- The organizers/Class Coordinator/Eligibility Scrutineer reserve the right at all times to introduce success ballast to balance car performance.

- **16.2** The weight of the car can be checked at any time during a race meeting, practice or post race scrutineering at which time no fluids or materials may be added or taken away. Where ballast has to be added to bring the car to a regulation minimum weight this must be fitted and secured to M.I safety standards with the class Eligibility Scrutineers Approval.
- **16.3** All competitors must declare the BHP of the car registered and this is subject to verification on Westward Engineering Rolling road at the competitor's expense and risk. If the Organizers/Coordinator or Scrutineer requests that a car be kept under Parc Ferme conditions at any stage during or after an event or race to verify the B.H.P output it will be transported to and tested on the Nominated Rolling road at the owners/ competitors risk and failure to comply will result in Exclusion and loss of all championship points to date.

17. Numbers & Series Decals

- **17.1** Competition numbers must be fitted in accordance with the MI Regulations . The drivers name must appear on the rear side windows and the class sponsors name will appear on the top of the front window screen and any other area nominated by the class Organizers. The class organizers reserve the right to fit additional sponsor's decals if required. No other advertising decals can be fitted unless approved by Class coordinator.
- **17.2** No advertising, colouring or obstructions may be added to any clear areas or glass other than those specified.

18. Eligibility

- **18.1** Application of the Technical Regulations shall be made in accordance with the MI Technical and General Regulations and the instructions and directions of the Scrutineers responsible for the Championship. The onus is always on the competitors to ensure that his or her car complies with the Technical Regulations.
- Any competitor who car is found to be ineligible at any event will forfeit championship points as per Appendix 15 of the current MI yearbook.

19 Appendices

- **19.1** Class Coordinator - Alan Kessie
- **Class principal Alan Kessie**
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- Ph 00353861738437